

KINTEK's main long-term target is the improvement of the services and products offered to the customers, in order to increase their satisfaction and the commercial activity in the various national and international markets.

In order to achieve these targets, **KINTEK** must pursue, ensure and improve the following:

- The observance of the law and technical requirements about the supplied products (with a staff's constant updating through exhibitions and company courses);
- The satisfaction of the customer's explicit requests (by means of a commercial office for the foreign and Italian market, with high competence and stronger and stronger experience in the field of mechanical tooling);
- The satisfaction of the customer's implicit requests (considering the received orders or the sent offers critically, checking periodically and frequently the observance of deliveries to the customer, also visiting the customer directly);
- The service provided by the staff's experience;
- The management of claims and possible faulty products (for both manufactured goods and internal industrial processes);
- The constant updating in the technical and computer field.

These activities are based on the following principles:

- Internal and external staff's involvement in quality;
- Identification of the industrial processes that condition the customer's satisfaction and definition of the ways to perform and check these processes;
- Research development in the field of quality of service and/or manufactured goods;
- Constant analysis and control of the processes in order to find the margins of improvement.

The above mentioned principles will be developed according to the following operating procedures:

- Planning and implementation of a Quality System certified according to the UNI EN ISO 9001:2000 Norms

Arrangement, in this system, for specific control and improvement of the processes that determine the customer's satisfaction.

L'obiettivo che la **KINTEK** intende perseguire e garantire nel tempo è il miglioramento dei servizi e dei prodotti offerti al cliente per aumentare la soddisfazione del cliente stesso e aumentare la copertura commerciale nei vari mercati nazionali ed internazionali.

La **KINTEK** per raggiungere ciò, si impone di perseguire, garantire e migliorare:

- Il rispetto dei requisiti sia di legge che tecnici relativi ai prodotti forniti (mediante un continuo aggiornamento del proprio personale ottenuto tramite partecipazione a fiere, e a corsi interni);
- Il rispetto delle richieste esplicite del cliente (mettendo a disposizione un ufficio commerciale per il mercato estero e Italia, di elevata professionalità e con un'esperienza che è sempre più consolidata nel settore della utensileria meccanica);
- Il rispetto delle richieste implicite del cliente (mediante un'analisi critica degli ordini ricevuti o dell'offerte inviate, mediante un controllo periodico e frequente sul rispetto delle consegne al cliente, mediante visite dirette presso il cliente);
- Il servizio attraverso l'esperienza del proprio personale;
- La gestione dei reclami e delle eventuali non conformità riscontrate (sia relative al prodotto finito che ai propri processi aziendali);
- Il continuo aggiornamento in campo tecnico e informatico.

Tali attività si fondano sui seguenti principi:

- Coinvolgimento di tutto il personale aziendale interno ed esterno verso la qualità;
- Individuazione dei processi aziendali che influenzano la soddisfazione del Cliente e definizione delle modalità di esecuzione e controllo di tali processi;
- Sviluppo delle attività di ricerca finalizzate alla gestione dei processi che influenzano la qualità del servizio e/o prodotto fornito;
- Analisi e monitoraggio continuo dei processi allo scopo di identificare i margini di miglioramento.

I principi individuati saranno sviluppati attraverso le seguenti modalità operative:

- Progettazione ed Implementazione di un Sistema di Gestione per la Qualità certificabile ai sensi delle Norme UNI EN ISO 9001:2000

Predisposizione, nell'ambito del sistema, di specifiche attività di monitoraggio e miglioramento dei processi che influenzano la soddisfazione del Cliente.





DET NORSKE VERITAS

QUALITY MANAGEMENT SYSTEM CERTIFICATE

Certificato No. / Certificate No. **CERT-15223-2004-AQ-TRI-SINCERT**

Si attesta che / This certifies that

IL SISTEMA DI GESTIONE PER LA QUALITÀ DI / THE QUALITY MANAGEMENT SYSTEM OF

KINTEK S.r.l.

Strada del Fornacino, 167 - 10040 Leini (TO) - Italy

È CONFORME AI REQUISITI DELLA NORMA PER I SISTEMI DI GESTIONE PER LA QUALITÀ
CONFORMS TO THE QUALITY MANAGEMENT SYSTEMS STANDARD

UNI EN ISO 9001:2000 (ISO 9001:2000)

Questa certificazione è valida per il seguente campo applicativo:

This certificate is valid for the following products or services:

(Ulteriori chiarimenti riguardanti lo scopo e l'applicabilità dei requisiti della normativa si possono ottenere consultando l'organizzazione certificata)
(Further clarifications regarding the scope and the applicability of the requirements of the standard(s) may be obtained by consulting the certified organisation)

**Commercializzazione di portautensili per torni CNC, mandrini (ISO-HSK-Caletamento),
utensili a fissaggio meccanico, utensili con attacco HSK, accessori per macchine utensili
sia in versione standard, sia speciali**

**Marketing of toolholder for CNC lathers Standard and HSK toolholder (shrinklit chuch) turning
tools, HSK holder and toolholders, accessories for N/CMachine**

*Luogo e data
Place and date*

Agrate Brianza, (MI) 2007-09-17

*Data Prima Emissione:
First Issue Date:*

2004-12-10

*per l'Organismo di Certificazione
for the Accredited Unit*

Det Norske Veritas Italia S.r.l.

Lead Auditor: Fausto Cerri

Settore EA: 29a - 17

SINCERT
ACCREDITAMENTO ORGANISMI CERTIFICAZIONE E SPECIE

SGQ Registrazione N. 003A
SQA Registrazione N. 003D
PRD Registrazione N. 003B

Membro degli Accordi di Mutuo Riconoscimento EA e IAF
Signatory of EA and IAF Mutual Recognition Agreements

Vittore Marangon
Management Representative

La validità del presente certificato è subordinata a sorveglianza periodica (ogni 6, 9 o 12 mesi) e al riesame completo del sistema con periodicità triennale
The validity of this certificate is subject to periodical audits (every 6, 9 or 12 months) and the complete re-assessment of the system every three years
Le aziende in possesso di un certificato valido sono presenti nella banca dati sul sito www.dnv.it e sul sito Sincert (www.sincert.it) - All the companies with a valid certificate are online at the following addresses: www.dnv.it and www.sincert.it



STANDARD STEILKEGELAUFNAHMEN, ZUBEHÖR UND KIT
STANDARD TOOLHOLDERS, ACCESSORIES AND KITS

MANDRINS STANDARD, ACCESSOIRES ET KITS
MANDRINI STANDARD, ACCESSORI E KIT

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HSK STEILKEGELAUFNAHMEN UND ZUBEHÖR
HSK TOOLHOLDERS AND ACCESSORIES

MANDRINS HSK ET ACCESSOIRES
MANDRINI CON ATTACCO HSK E ACCESSORI

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SCHRUMPFUTTER
SHRINK FIT CHUCKS

MANDRINS DE FRETTAGE
MANDRINI A CALETTAMENTO

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WERKZEUGHALTER FÜR CNC-DREHEMASCHINEN
TOOLHOLDERS FOR CNC LATHES

PORTE-OUTILS POUR TOURS CNC
PORTAUTENSILI PER TORNI CNC

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SONDER-WERKZEUGHALTER
SPECIAL TOOLHOLDERS

PORTE-OUTILS SPECIAUX
PORTAUTENSILI SPECIALI

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HSK KLEMMHALTER UND WERKZEUGHALTER
HSK HOLDERS AND TOOLHOLDERS

OUTILS ET PORTE-OUTILS AVEC ATTACHEMENT HSK
UTENSILI E PORTAUTENSILI CON ATTACCO HSK

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KLEMMHALTER FÜR AUßENBEARBEITUNG UND
BOHRSTANGEN FÜR INNENBEARBEITUNG
EXTERNAL (O.D.) TURNING TOOLS AND INTERNAL (I.D.) BORING BARS

PORTE-PLAQUETTES EXTERIEURES, INTERIEURES
PORTA INSERTI PER ESTERNI E BARENI PER INTERNI

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KANTER





**STANDARD STEILKEGELAUFNHMEN UND ZUBEHÖR
STANDARD TOOLHOLDERS AND ACCESSORIES
MANDRINS STANDARD ET ACCESSOIRES
MANDRINI STANDARD E ACCESSORI**



- **DIN 2080** PAG. 6-24
- **DIN 69871 A-AD/B** PAG. 25-68
- **JISB6339
MAS 403/BT -AD/B** PAG. 69-116
- **ACCESSORI ACCESSORIES** PAG. 117-163



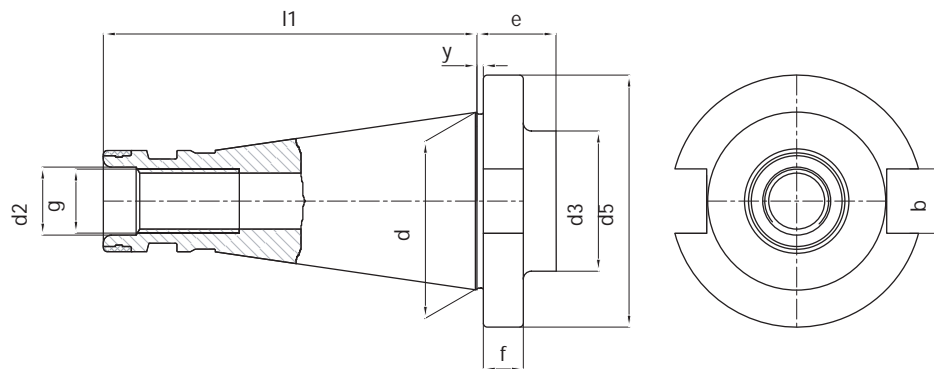
The logo for KAWAIVERK is positioned at the top of the page. It features the word 'KAWAIVERK' in a bold, black, sans-serif font. The letter 'K' is stylized with a large, orange, angular shape integrated into its right side. The background of the entire page is a faded, high-angle photograph of a metal grid structure, possibly a staircase or a walkway, with a circular opening visible in the lower-left quadrant.

KAWAIVERK

DIN 2080



TECHNISCHE DATEN DER STEILKEGELWERKZEUGE DONNEES TECHNIQUES QUEUE D'OUTILS
 TAPER SHANKS DATA SHEET DATI TECNICI CONI D'ATTACCO



ISO	d	l1	d2	g	y	d5	f	d3	e	b
30	31,75	68,4	13	M12	1,6	50	8	36	18,6	16,1
40	44,45	93,4	17	M16	1,6	63	10	50	22,6	16,1
50	69,85	126,8	26	M24	3,2	97,5	12	78	31,2	25,7

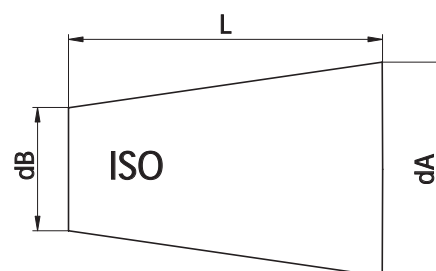


Alle Kintek-Steilkegelaufnahmen werden nach den DIN-Normen angefertigt.

KEGELSCHAFTTOLERANZ

In Klasse AT3 angefertigt.

ISO	L	dA-dB	AT3
30	42	12.250	+0.002
40	59	17.208	+0.003
50	92	26.833	+0.004



RUNDLAUFGENAUIGKEIT DER SPANNZANGENAUFNAHME

Die DIN 6391- Norm schreibt eine Rundlaufgenauigkeit zwischen Aussenkegel und Innenkegel / Spannzangensitz vom 0,016 vor. Unsere Spannzangenfutter weisen einen Rundlauffehler zwischen ISO-Kegelaufnahme und Spannzangensitz, der zwischen 0,003 und 0,010 mm liegt.

AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Kintek- Aufsteckfräsdorne entsprechen der DIN 6358- Norm, die einen höchsten Rundlauffehler zwischen ISO 30- und ISO40- Kegel und den Durchmessern 16-22-27-32-40 vom 0,01 vorsieht. Der mögliche höchste Rundlauffehler für ISO 50 ist 0,015 mm.

WELDON AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Nach der DIN 6359-1-Norm müssen die Weldon- Aufsteckfräsdorne die folgenden Forderungen aufweisen:

Bohrung: Toleranz H5

Rundlaufgenauigkeit: höchster möglicher Rundlauffehler zwischen Kegel und Weldonsitz < 0,01 (für ISO 40)

Die vorgeschriebene Toleranz der Bohrung und eine durchschnittliche Rundlaufgenauigkeit von 0,005 sind verisichert.

KONSTRUKTIONSDATEN

- aus legiertem Einsatzstahl angefertigt
- in der Einsatzhärte tiefe von 0,4-0,5 mm
- gehärtet, angelassen
- Härte HRC58 +-2, Festigkeit 800-1000 N/mm²
- brüniert
- inneres, äußeres Schleifen und am Gewinde der Spannzangenmutter

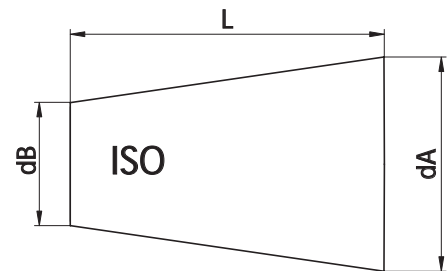


ALL KINTEK TOOLHOLDERS ARE MANUFACTURED ACCORDING TO DIN NORM.

CONE'S TOLERANCE

ACCORDING TO THE CLASS AT3.

ISO	L	dA-dB	AT3
30	42	12.250	+0.002
40	59	17.208	+0.003
50	92	26.833	+0.004



COLLET CHUCK'S RUNOUT ACCURACY

The norm DIN6391 permits a runout error between external cone and internal cone / collet seat of 0.016. Our production has a runout accuracy which is guaranteed to be within 0,003 / 0,010 m at the tool seat.

SHELL END MILL ADAPTOR'S RUNOUT ACCURACY

Our shell end mill adaptors meet the requirements of the norm DIN6358, which prescribes for diameters 16-22-27-32-40 a runout accuracy of: 0, 01 for SK 30/40 0,015 for SK 50.

WELDON END MILL HOLDER'S RUNOUT ACCURACY

According to the norm DIN6359-1 Weldon end mill holders have to meet the following requirements:

Bore: H5 tolerance

Runout accuracy: < 0.01 (for SK 40)

Our end mill adaptors ensure the prescribed holes' tolerance and have a runout accuracy which is normally 0.005

CONSTRUCTIVE FEATURES

- Manufactured with Casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm2
- Black oxided
- Internal and external grinding finished.

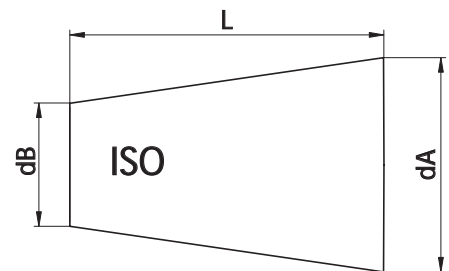


TOUS LES MANDRINS PORTE-OUTILS KINTEK SONT PRODUITS SUIVANT LES SPECIFICATIONS DIN

TOLERANCE DU CONE

EN CLASSE AT3.

ISO	L	dA-dB	AT3
30	42	12.250	+0.002
40	59	17.208	+0.003
50	92	26.833	+0.004



COAXIALITE' PORTE-PINCE

La norme DIN6391 admet une erreur maximum du 0.016 soit pour les porte-pincés DIN6499 soit pour DIN6388. Dans notre production l'écart d'excentricité maximum entre cône ISO et logement de la pince est compris entre: 0,003 et 0,0010 mm.

COAXIALITE' PORTE-FRAISES FIXES ET COMBINES

Les porte-fraises fixes et combinés de notre production suivent la spécification de la norme DIN6358, qui prévoit pour les diamètres 16-22-27-32-40 une concentricité de 0,01 pour ISO 30 et ISO 40 0,015 pour ISO 50

COAXIALITE' PORTE-FRAISES WELDON

Suivant les spécifications DIN 6359-1 les porte-fraises WELDON doivent suivre les conditions suivantes:

Trou : tolérance H5

Coaxialité: écart maximum toléré entre cône et logement du Weldon <0.01 (pour ISO 40).

Nous assurons la tolérance prévue sur le trou et une coaxialité en moyenne de 0.005.

ELEMENTS DE CONSTRUCTION

- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm
- Trempés - Revenus
- Dureté HRC 58 +/- 2 résistance 800-1000 N/ mm²
- Brunis
- Rectification du cône intérieur, extérieur et dans le filetage des écrous qui serrent la pince.

MANDRINI KINTEK CON ATTACCO ISO

DATI TECNICI

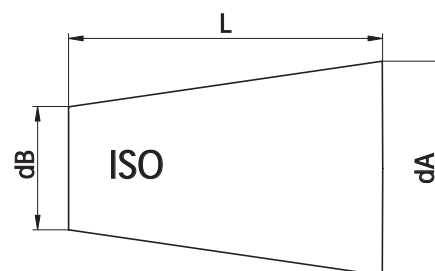
TUTTI I MANDRINI PORTAUTENSILI KINTEK VENGONO PRODOTTI SECONDO LE NORMATIVE DIN



TOLLERANZA DEL CONO

PRODOTTI IN CLASSE AT3.

ISO	L	dA-dB	AT3
30	42	12.250	+0.002
40	59	17.208	+0.003
50	92	26.833	+0.004



COASSIALITÀ PORTAPINZE

La norma DIN6391 ammette un'errore massimo di 0.016 sia per i portapinze DIN6499 che per DIN6388.

La nostra produzione normalmente presenta uno scostamento massimo di eccentricità tra cono ISO e sede pinza compreso tra i 0,003 e 0,010 mm.

COASSIALITÀ PORTAFRESE FISSI E COMBINATI

I portafrese fissi e combinati di nostra produzione rispondono ai criteri prescritti dalla norma DIN6358, la quale prevede un errore massimo di coassialità tra cono ISO 30 e ISO 40 ed i diametri 16-22-27-32-40, di 0,01.

Mentre per ISO 50 è ammesso un errore massimo di 0,015 mm.

COASSIALITÀ PORTAFRESE WELDON-WHISTLE NOTCH

Rispettando la normativa DIN 6359-1 i portafrese WELDON devono rispondere ai seguenti requisiti:

foro: tolleranza H5

coassialità: scostamento massimo consentito tra cono e sede Weldon <0.01 (per ISO 40)

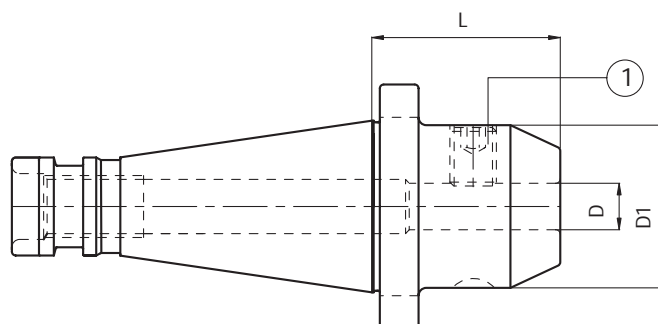
Garantiamo la tolleranza prescritta sul foro e un valore di coassialità mediamente di 0.005.

DATI COSTRUTTIVI

- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +/- 2 resistenza 800-1000 N/ mm²
- Bruniti
- Finitura di rettifica interna, esterna e nelle filettature delle ghiere chiudipinza

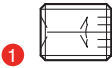
ZYLINDERSCHAFTAUFNAHME WELDON MANDRINS POUR OUTILS TYPE WELDON
 END MILL HOLDERS WELDON MANDRINI PORTAFRESE TIPO WELDON

DIN 1835 B



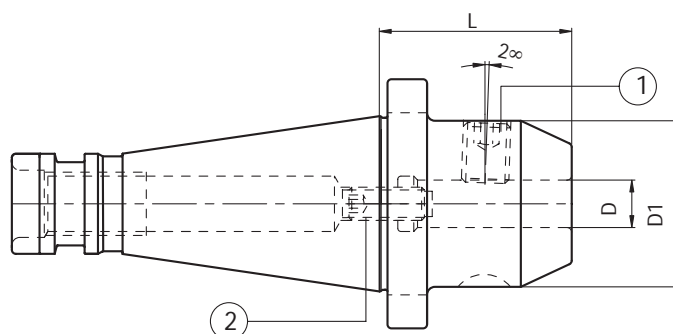
Code N.	Description	ISO	D	L	D1
213-11102	ISO40H50WE06	40	6	50	25
213-11103	ISO40H50WE08	40	8	50	28
213-11104	ISO40H50WE10	40	10	50	35
213-11105	ISO40H50WE12	40	12	50	42
213-11106	ISO40H50WE14	40	14	50	44
213-11107	ISO40H63WE16	40	16	63	48
213-11108	ISO40H63WE18	40	18	63	50
213-11109	ISO40H63WE20	40	20	63	52
213-11110	ISO40H90WE25	40	25	90	65
213-11111	ISO40H90WE32	40	32	90	72
213-11112	ISO50H50WE06	50	6	50	25
213-11113	ISO50H50WE08	50	8	50	28
213-11114	ISO50H63WE10	50	10	63	35
213-11115	ISO50H63WE12	50	12	63	42
213-11116	ISO50H63WE14	50	14	63	44
213-11117	ISO50H63WE16	50	16	63	48
213-11118	ISO50H63WE18	50	18	63	50
213-11119	ISO50H63WE20	50	20	63	52
213-11120	ISO50H80WE25	50	25	80	65
213-11121	ISO50H85WE32	50	32	85	72
213-11122	ISO50H95WE40	50	40	95	78

Ersatzteile • Spare parts • Pièces détachées • Componenti

D	Locking screw	Quantity
		
6	811-106001	1
8	811-106002	1
10	811-106004	1
12	811-106005	1
14	811-106005	1
16	811-106006	1
18	811-106006	1
20	811-106007	1
25	811-106008	2
32	811-106009	2
40	811-106009	2


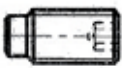
ZYLINDERSCHAFTAUFNAHME WHISTLE NOTCH MANDRINS POUR OUTILS TYPE WHISTLE NOTCH
 END MILL HOLDERS WHISTLE NOTCH MANDRINI PORTAFRESE TIPO WHISTLE NOTCH

DIN 1835 E



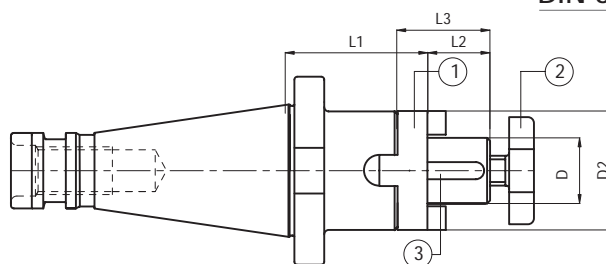
Code N.	Description	ISO	D	L	D1
213-31102	ISO40H50WN06	40	6	50	25
213-31103	ISO40H50WN08	40	8	50	28
213-31104	ISO40H50WN10	40	10	50	35
213-31105	ISO40H50WN12	40	12	50	42
213-31106	ISO40H50WN14	40	14	50	44
213-31107	ISO40H63WN16	40	16	63	48
213-31108	ISO40H63WN18	40	18	63	50
213-31109	ISO40H63WN20	40	20	63	52
213-31110	ISO40H90WN25	40	25	90	65
213-31111	ISO40H90WN32	40	32	90	72
213-31112	ISO50H50WN06	50	6	50	25
213-31113	ISO50H50WN08	50	8	50	28
213-31114	ISO50H63WN10	50	10	63	35
213-31115	ISO50H63WN12	50	12	63	42
213-31116	ISO50H63WN14	50	14	63	44
213-31117	ISO50H63WN16	50	16	63	48
213-31118	ISO50H63WN18	50	18	63	50
213-31119	ISO50H63WN20	50	20	63	52
213-31120	ISO50H80WN25	50	25	80	65
213-31121	ISO50H85WN32	50	32	85	72
213-31122	ISO50H95WN40	50	40	95	78

Ersatzteile • Spare parts • Pièces détachées • Componenti

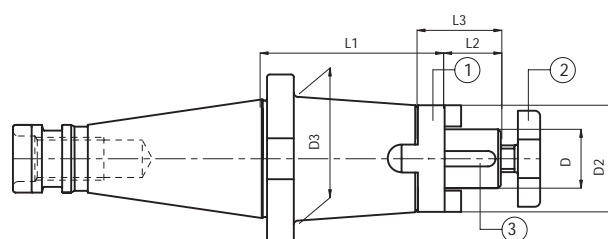
D	Locking screw	Quantity	Stop screw	Quantity
				
	1		2	
6	811-106001	1	811-104008	1
8	811-106002	1	811-104014	1
10	811-106004	1	811-104022	1
12	811-106005	1	811-104030	1
14	811-106005	1	811-104030	1
16	811-106006	1	811-104037	1
18	811-106006	1	811-104037	1
20	811-106007	1	811-104037	1
25	811-106008	2	811-104046	1
32	811-106009	2	811-104046	1
40	811-106009	2	811-104046	1

KOMBI - AUFSTECKFRÄSDORNE MANDRINS PORTE- FRAISES A DOUBLE USAGE
 COMBI-SHELL MILL ADAPTORS MANDRINI PORTAFRESE COMBINATI

DIN 6358



	Code N.	Description	ISO	D	L1	L2	L3	D2
STANDARD	216-11101	ISO40H52D16C	40	16	52	17	27	32
	216-11102	ISO40H52D22C	40	22	52	19	31	40
	216-11103	ISO40H52D27C	40	27	52	21	33	48
	216-11104	ISO40H52D32C	40	32	52	24	38	58
	216-11105	ISO40H52D40C	40	40	52	27	41	70
	216-11106	ISO50H55D16C	50	16	55	17	27	32
	216-11107	ISO50H55D22C	50	22	55	19	31	40
	216-11108	ISO50H55D27C	50	27	55	21	33	48
	216-11109	ISO50H55D32C	50	32	55	24	38	58
	216-11110	ISO50H55D40C	50	40	55	27	41	70



	Code N.	Description	ISO	D	L1	L2	L3	D2	D3
EXTENDED	216-11120	ISO40H90D16C	40	16	90	17	27	32	40
	216-11121	ISO40H90D22C	40	22	90	19	31	40	44
	216-11122	ISO40H90D27C	40	27	90	21	33	48	-
	216-11123	ISO40H100D32C	40	32	100	24	38	58	-
	216-11125	ISO50H100D16C	50	16	100	17	27	32	50
	216-11126	ISO50H100D22C	50	22	100	19	31	40	60
	216-11127	ISO50H100D27C	50	27	100	21	33	48	60
	216-11128	ISO50H100D32C	50	32	100	24	38	58	-
	216-11129	ISO50H100D40C	50	40	100	27	41	70	-

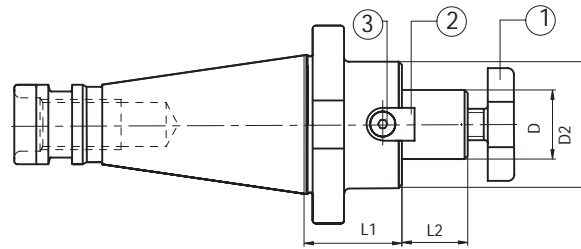
Ersatzteile • Spare parts • Pièces détachées • Componenti

D	Ring	Cross screw	Key	Wrench
16	814-30001	811-107003	814-201010	816-130002
22	814-30002	811-107004	814-201020	816-130003
27	814-30003	811-107005	814-201030	816-130004
32	814-30004	811-107006	814-201040	816-130005
40	814-30005	811-107007	814-201050	816-130006

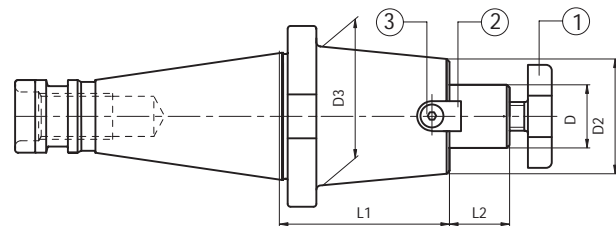
AUFSTECKFRÄSDORNE FÜR FRASER MIT QUERNUT
FACE MILL HOLDERS-TENONS DRIVE

MANDRINS PORTE-FRAISE-ENTRAÎNEMENT PAR TENONS
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO

ISO 3937



	Code N.	Description	ISO	D	L1	L2	D2
STANDARD	216-71105	ISO40H45D16F	40	16	45	17	38
	216-71106	ISO40H45D22F	40	22	45	19	48
	216-71107	ISO40H45D27F	40	27	45	21	58
	216-71108	ISO40H50D32F	40	32	50	24	78
	216-71109	ISO40H55D40F	40	40	55	27	88
	216-71115	ISO50H45D16F	50	16	45	17	38
	216-71116	ISO50H45D22F	50	22	45	19	48
	216-71117	ISO50H45D27F	50	27	45	21	58
	216-71118	ISO50H50D32F	50	32	50	24	78
	216-71119	ISO50H50D40F	50	40	50	27	88



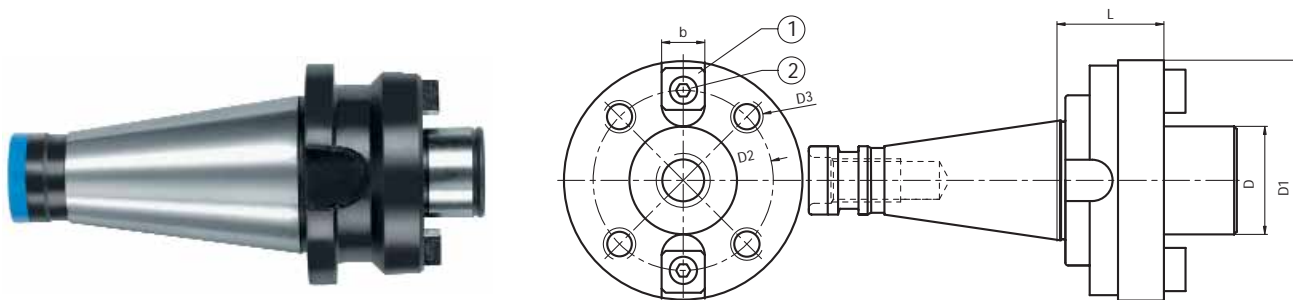
	Code N.	Description	ISO	D	L1	L2	D2	D3
EXTENDED	216-71141	ISO40H120D16F	40	16	120	17	32	39
	216-71142	ISO40H120D22F	40	22	120	19	40	49
	216-71143	ISO40H120D27F	40	27	120	21	48	60
	216-71144	ISO40H120D32F	40	32	120	24	58	62
	216-71145	ISO50H150D16F	50	16	150	17	32	39
	216-71146	ISO50H150D22F	50	22	150	19	40	49
	216-71147	ISO50H150D27F	50	27	150	21	48	75
	216-71148	ISO50H150D32F	50	32	150	24	58	80
	216-71149	ISO50H150D40F	50	40	150	27	70	90

Ersatzteile • Spare parts • Pièces détachées • Componenti

D/D2	Cross screw	Tenon	Screw	Wrench
16/32	811-107003	814-20214	811-101003	816-130002
16/38	811-107003	814-202280	811-101004	816-130002
22/40	811-107004	814-202150	811-101010	816-130003
22/48	811-107004	814-202250	811-101011	816-130003
27/48	811-107005	814-202160	811-101017	816-130004
27/58	811-107005	814-202270	811-101018	816-130004
32/58	811-107006	814-202170	811-101027	816-130005
32/78	811-107006	814-202630	811-101029	816-130005
40/70	811-107007	814-202180	811-101028	816-130006
40/88	811-107007	814-202710	811-101029	816-130006

AUFSTECKFRÄSDORNE FÜR MESSERKÖPFE MIT GRÖßEREM BUNDDURCHMESSER MANDRINS PORTE-FAISE POUR FRAISES A SURFACER
 FACE MILL HOLDER FOR FACE MILLING CUTTERS MANDRINI PORTAFRESE A SPIANARE CON FLANGIA MAGGIORATA

DIN 6357



Code N.	Description	ISO	D	L	D1	D2	D3	b
▲ 216-21101	ISO40H46.6D40	40	40	46.6	89	66.7	M12	15.9
▲ 216-21102	ISO50H53.2D40	50	40	53.2	89	66.7	M12	15.9
216-21104	ISO50H70.2D60	50	60	70.2	129	101.6	M16	25.4

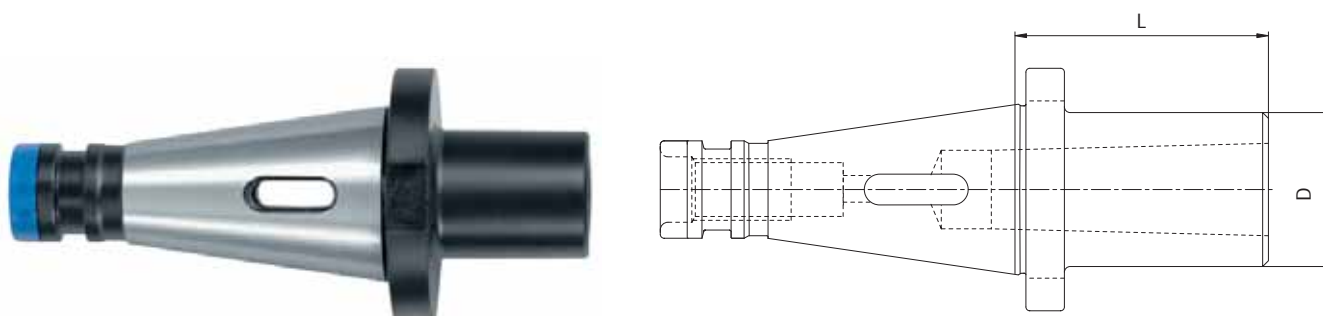
▲ FORNITO CON VITE CENTRALE INCLUSA • SUPPLIED WITH INTERNAL SCREW

Ersatzteile • Spare parts • Pièces detachées • Componenti

D	Tenon	Screw	Cross screw	Wrench
40	814-202080	811-101028	811-107007	816-130006
60	814-202120	811-101063	-	-

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT AUSTREIBBLAPPEN DOUILLES POUR CONE MORSE A TENON
 MORSE TAPER ADAPTORS FOR DRILLS MANDRINI PORTAPUNTE ATTACCO CONO MORSE

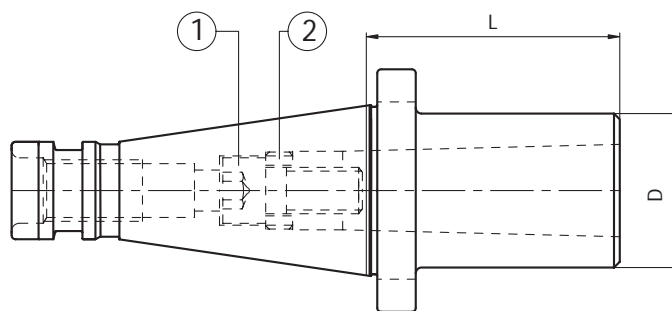
DIN 228-2 FORM D



Code N.	Description	ISO	MORSE	D	L
212-41101	ISO40H50CM1P	40	1	25	50
212-41102	ISO40H50CM2P	40	2	32	50
212-41103	ISO40H65CM3P	40	3	40	65
212-41104	ISO40H95CM4P	40	4	48	95
212-41111	ISO50H45CM1P	50	1	25	45
212-41105	ISO50H60CM2P	50	2	32	60
212-41106	ISO50H65CM3P	50	3	40	65
212-41107	ISO50H70CM4P	50	4	48	70
212-41108	ISO50H105CM5P	50	5	63	105

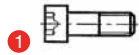

ZWISCHENHÜLSEN FÜR MORESEKEGEL MIT ANZUGSGEWINDE DOUILLES POUR CONE MORSE AVEC TARAUDAGE
 MORSE TAPER ADAPTER WITH THREAD MANDRINI PORTAFRESE ATTACCO CONO MORSE

DIN 228-2 FORM C



Code N.	Description	ISO	MORSE	D	L
212-21101	ISO40H50CM1F	40	1	25	50
212-21102	ISO40H50CM2F	40	2	32	50
212-21103	ISO40H65CM3F	40	3	40	65
212-21104	ISO40H95CM4F	40	4	48	95
212-21111	ISO50H45CM1F	50	1	25	45
212-21105	ISO50H60CM2F	50	2	32	60
212-21106	ISO50H65CM3F	50	3	40	65
212-21107	ISO50H65CM4F	50	4	48	65
212-21108	ISO50H120CM5F	50	5	63	120

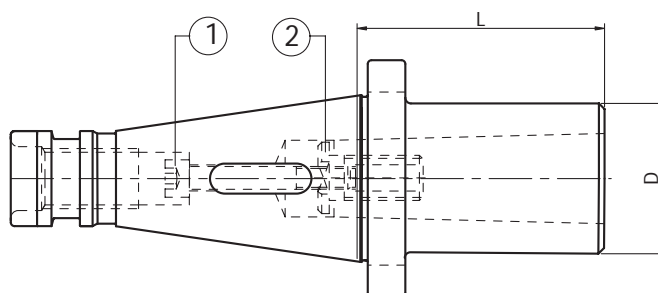
Ersatzteile • Spare parts • Pièces détachées • Componenti

ISO/MORSE	Screw	Ring
		
40/1	811-101029	811-302030
40/2	811-111007	811-302031
40/3	811-101065	811-302032
40/4	811-111005	811-302036
50/1	811-101029	811-302030
50/2	811-101054	811-302032
50/3	811-101065	811-302032
50/4	811-401037	811-302036
50/5	811-101092	811-302034

ZWISCHENHÜSLEN FÜR MORESEKEGEL MIT AUSTREIBBLAPPEN ODER ANZUGSGEWINDE
MORSE TAPER ADAPTORS FOR DRILLS AND MILLS

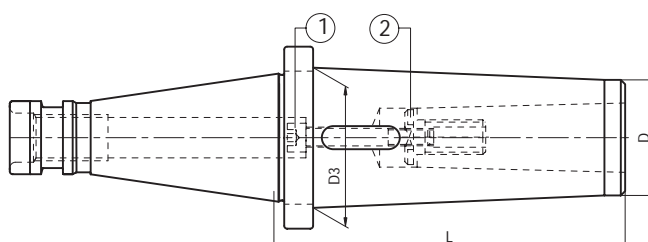
DOUILLES POUR CONE MORSE A TENON ET AVEC TARAUDAGE
MANDRINI PORTAPUNTE-PORTAFRESE ATTACCO CONO MORSE

DIN 228-2 FORM C/D



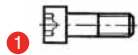
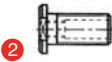
	Code N.	Description	ISO	MORSE	D	L
STANDARD	212-61101	ISO40H50CM1P/F	40	1	25	50
	212-61102	ISO40H50CM2P/F	40	2	32	50
	212-61103	ISO40H65CM3P/F	40	3	40	65
	212-61105	ISO50H45CM1P/F	50	1	25	45
	212-61106	ISO50H60CM2P/F	50	2	30	60
	212-61107	ISO50H65CM3P/F	50	3	36	65
	212-61108	ISO50H65CM4P/F	50	4	48	65
	212-61109	ISO50H100CM5P/F	50	5	63	100

**Kombi
Version**



	Code N.	Description	ISO	MORSE	D	D3	L
EXTENDED	212-61114	ISO40H115CM1P/F	40	1	18	25	115
	212-61115	ISO40H125CM2P/F	40	2	25	32	125
	212-61116	ISO40H140CM3P/F	40	3	33	40	140
	212-61117	ISO50H120CM1P/F	50	1	18	25	120
	212-61118	ISO50H140CM2P/F	50	2	25	32	140
	212-61119	ISO50H150CM3P/F	50	3	33	40	150
	212-61120	ISO50H180CM4P/F	50	4	40	48	180
	212-61121	ISO50H220CM5P/F	50	5	55	63	220

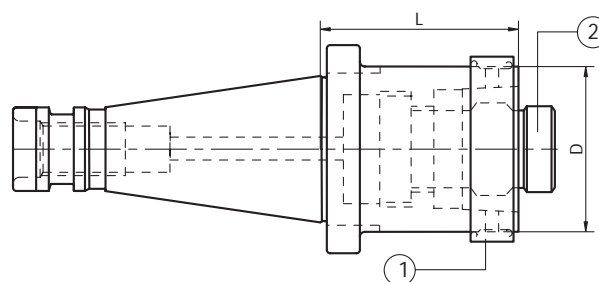
Ersatzteile • Spare parts • Pièces détachées • Componenti

ISO/MORSE	Screw	Ring
		
40/1	811-101033	-
40/2	811-401018	-
40/3	811-101034	811-302006
50/1	811-101033	-
50/2	811-101058	-
50/3	811-101069	-
50/4	811-401016	-
50/5	811-101071	811-302008

**Kombi
Version**

ZWISCHENHÜLSEN SK X HSK • MANUELLES SPANNSYSTEM
 TAPER ADAPTER SA X HSK • MANUAL CLAMPING

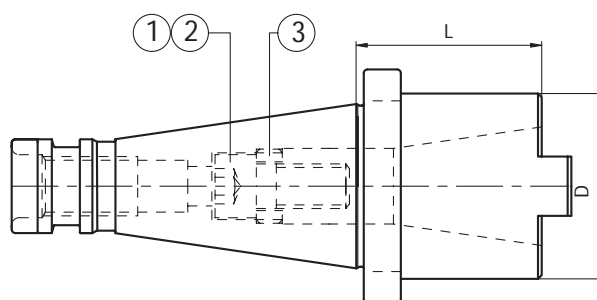
DOUILLES INTERMEDIAIRES SA X HSK • SERRAGE MANUEL
 MANDRINI RIDUZIONE DA ISO A HSK • CHIUSURA MANUALE



Code N.	Description	ISO	HSK	D	L	¹ Ring (complete)	² Locking unit (complete)
212-91106	ISO40H50HSK40A	40	40	40	50	H40A-AN	H40A-UBL
212-91101	ISO40H60HSK50A	40	50	50	60	H50A-AN	H50A-UBL
212-91102	ISO40H80HSK63A	40	63	63	80	H63A-AN	H63A-UBL
212-91103	ISO50H50HSK50A	50	50	50	50	H50A-AN	H50A-UBL
212-91104	ISO50H60HSK63A	50	63	63	60	H63A-AN	H63A-UBL

ZWISCHENHÜLSEN SK X SK
 ISO TAPER ADAPTORS

DOUILLES INTERMEDIAIRES SA X SA
 MANDRINI RIDUZIONE DA DIN2080 A DIN/2080/DIN69871/MAS 403BT



Code N.	Description	ISO	ISO	D	L
212-11102	ISO40H50ISO30/TC30	40	30	50	50
212-11111	ISO40H100ISO40/TC40	40	40	68	100
212-11101	ISO50H63ISO40/TC40	50	40	78	63
212-11112	ISO50H100ISO50/TC50	50	50	100	100

Ersatzteile • Spare parts • Pièces détachées • Componenti

Outside	Inside	Screw (ISO)	Screw (TC)	Ring	Wrench
		¹	²	³	
40	30	811-101065	811-101069	811-302032	816-20206002
40	40	811-111005	811-111023	811-302036	816-20207002
50	40	811-401037	811-401055	811-302036	816-20207002
50	50	811-401052	811-401135	811-302047	816-202090

Verschlußschraube für DIN69871/MAS BT/DIN2080 werden mitgeliefert

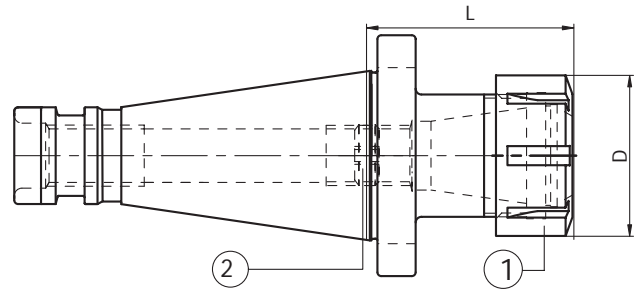
Supplied with a screw DIN69871/MAS BT/DIN2080

Livré avec une vis de serrage DIN69871/MAS BT/DIN2080

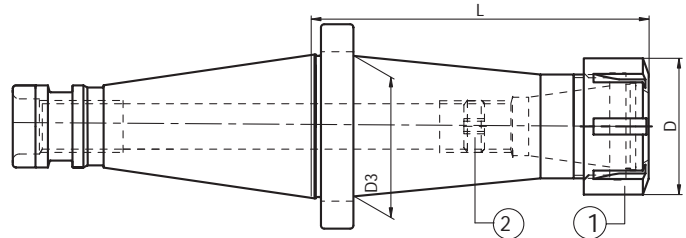
In dotazione vite per chiusura DIN69871/MAS BT/DIN2080

SPANNZANGENFUTTER ER TYP MANDRINS A PINCES TYPE ER
ER COLLET CHUCK MANDRINI PORTAPINZA TIPO ER

DIN 6499



	Code N.	Description	ISO	ER	D	L
STANDARD	214-31105	ISO30H42ER16	30	16	32	42
	214-31106	ISO30H42ER25	30	25	42	42
	214-31107	ISO30H50ER32	30	32	50	50
	214-31152	ISO40H55ER16	40	16	32	55
	214-31101	ISO40H53ER25	40	25	42	53
	214-31102	ISO40H68ER32	40	32	50	68
	214-31114	ISO40H80ER40	40	40	63	80
	214-31137	ISO50H65ER25	50	25	42	65
	214-31103	ISO50H68ER32	50	32	50	68
	214-31104	ISO50H76ER40	50	40	63	76



	Code N.	Description	ISO	ER	D	D3	L
EXTENDED	214-31108	ISO40H110ER25	40	25	42	44	110
	214-31109	ISO40H110ER32	40	32	50	50	110
	214-31138	ISO50H140ER25	50	25	42	44	140
	214-31110	ISO50H140ER32	50	32	50	50	140
	214-31111	ISO50H140ER40	50	40	63	60	140

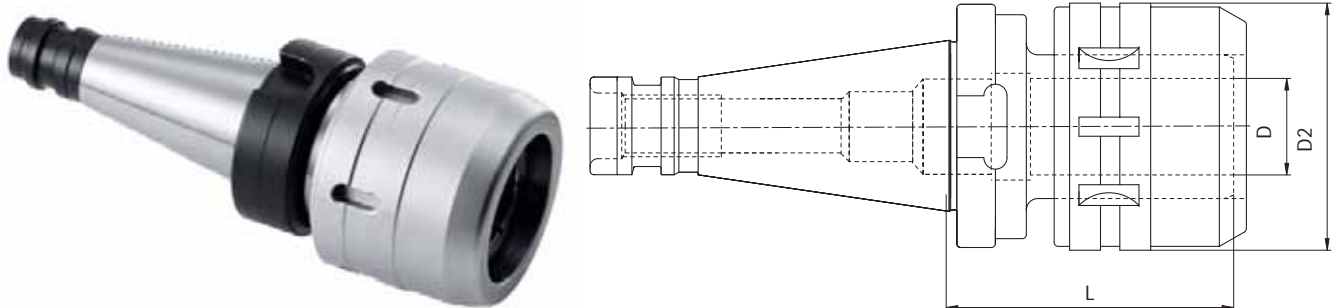
Ersatzteile • Spare parts • Pièces détachées • Componenti

ER	Nut	Stop screw	Stop screw
16	812-203005	811-303119	-
25	812-203001	811-303121	-
ISO30/25	812-203001	-	811-303001
32	812-203002	811-303118	-
ISO30/32	812-203002	-	811-303001
40	812-203003	811-303122	-

Zubehör
Accessories
Accessoires
Accessori



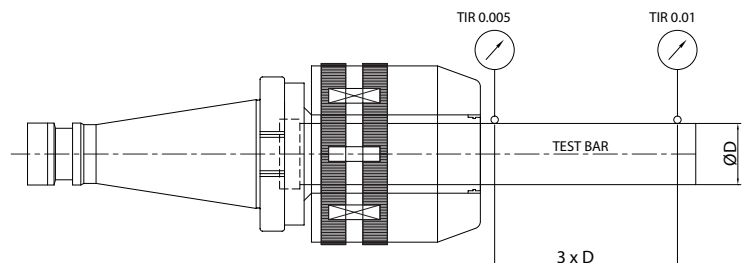
KRAFTSPANNFUTTER MANDRINS A FORT SERRAGE
MILLING CHUCK MANDRINI A FORTE SERRAGGIO



Code N.	Description	ISO	D	D2	L	G6,3 ¹²⁰⁰⁰ RPM
214-01101	ISO40H83C32	40	32	72	83	•
214-01102	ISO50H85C32	50	32	72	85	•

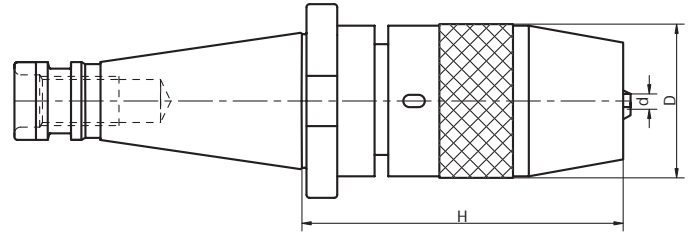
FORNITI CON CHIAVE INCLUSA • SUPPLIED WITH WRENCH

Zubehör
Accessories
Accessoires
Accessori



Milling chuck (diameter)	Specification (DIN)	Tolerance (Taper shank)	Run-out (3xD)	Clamping torque
C32	AT3	ISO40 (0~+0,003) ISO50 (0~+0,004)	0~0,01	3430M.m (350 Kgf.m)

KURZBOHRFUTTER UNIVERSAL DRILL CHUCKS MANDRINS UNIVERSELS DE PERCAGE MANDRINI PORTAPUNTE INTEGRALI



Code N.	Description	ISO	H	D	Clamping capacity	Wrench
252-11101	ISO40H105R1-13	40	105	50	1-13	816-152001
252-11102	ISO40H115R3-16	40	115	57	3-16	816-152002
252-11103	ISO50H105R1-13	50	105	50	1-13	816-152001
252-11104	ISO50H115R3-16	50	115	57	3-16	816-152002

RUNDLAUFGENAUGKEIT 0.04 MM

Zur Erhöhung der Spannkraft werden diese Futter mit Spannschlüssel geliefert.

BEI LINKS LAUFENDEN BEARBEITUNGEN SIND DIESE FUTTER NICHT ZU BENUTZEN.

RUNOUT ACCURACY 0.04 MM T.I.R.

Supplied with spanner wrench to allow the application of supplementary gripping torque.

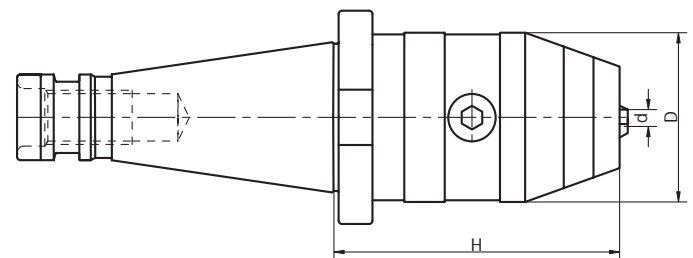
DO NOT USE IN REVOLUTION IN COUNTER-CLOCKWISE DIRECTION.

PRECISIONE DI ROTAZIONE 0.04 MM

Per incrementare la forza di serraggio i mandrini sono forniti con chiave di bloccaggio.

NON DEVONO ESSERE USATI PER LAVORAZIONI CON ROTAZIONE A SINISTRA.

KURZBOHRFUTTER FÜR RECHTS-UND LINKSLAUF UNIVERSAL DRILL CHUCKS FOR LEFT AND RIGHT ROTATION MANDRINS DE PERCAGE POUR ROTATION GAUCHE-DROITE MANDRINI PORTAPUNTE INTEGRALI PER ROTAZIONE DESTRA E SINISTRA



Code N.	Description	ISO	H	D	Clamping capacity	Wrench
252-11105	ISO40H85R1-13X	40	85	50	1-13	816-111024
252-11106	ISO40H90R3-16X	40	90	50	3-16	816-111025
252-11107	ISO50H85R1-13X	50	85	50	1-13	816-111024
252-11108	ISO50H90R3-16X	50	90	50	3-16	816-111025

RUNDLAUFGENAUGKEIT 0.03 MM

Sowohl für rechts- als auch links laufende Bearbeitungen geeignet, mit Höchstgeschwindigkeit von 7000 u/min.

RUNOUT ACCURACY 0.03 MM T.I.R.

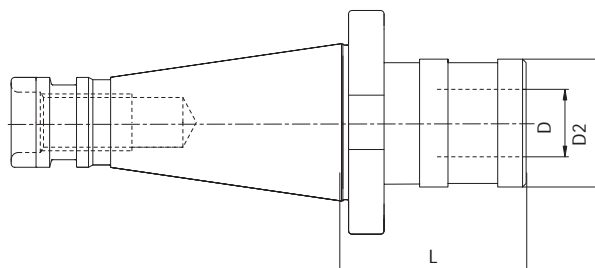
Suitable for right and left rotation up to 7000 rpm.

PRECISIONE DI ROTAZIONE 0.03 MM.

Adatti per rotazione sia destra che sinistra, con velocità max di 7000 g/min.

GEWINDESCHNEID-SCHNELLWECHSELFUTTER
MIT LÄNGENAUSGLEICH
TENSION AND COMPRESSION TAPPING HEAD

MANDRINS DE TARAUDAGE A CHANGEMENT
RAPIDE A DOUBLE USAGE
MASCHIATORI A DOPPIA COMPENSAZIONE



Code N.	Description	ISO	SIZE	Top range	PRESS.	EXT.	D	D2	L
M-1010	ISO30H50GR1DC	30	1	M3-M12	9	9	19	36	50
M-1020	ISO40H52GR1DC	40	1	M3-M12	9	9	19	36	52
M-1120	ISO40H77GR2DC	40	2	M6-M20	15	15	31	53	77
M-1220	ISO40H118GR3DC	40	3	M14-M33	24	24	48	78	118
M-1130	ISO50H79GR2DC	50	2	M6-M20	15	15	31	53	79
M-1230	ISO50H125GR3DC	50	3	M14-M33	24	24	48	78	125

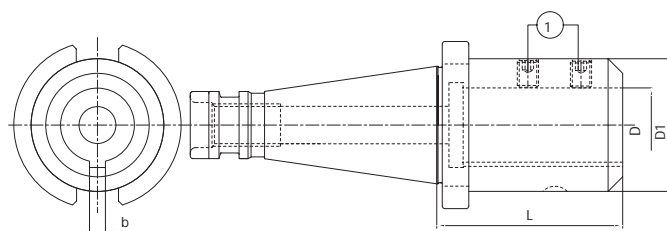
Zubehör
Accessories
Accessoires
Accessori



STELLHÜSENSAUFNAHMEN
MASTER SHANKS FOR ADJUSTABLE ADAPTORS

MANDRINS POUR DOUILLES DE REGLAGE
MANDRINI PER ASTUCCI REGISTRABILI

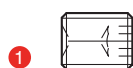
DIN 6327



Code N.	Description	ISO	D	D1	L	b
211-11101	ISO40H100D28TR	40	28	50	100	6
211-11102	ISO40H120D36TR	40	36	63	120	8
211-11103	ISO50H100D28TR	50	28	50	100	6
211-11104	ISO50H100D36TR	50	36	63	100	8

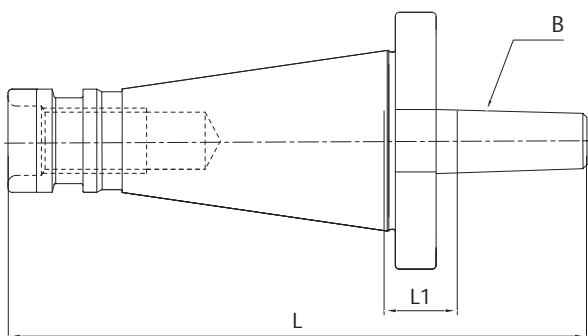
Ersatzteile • Spare parts • Pièces détachées • Componenti

D	Screw
28	811-102027
36	811-102036



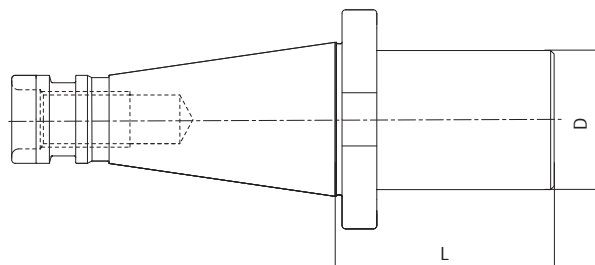
BOHRFUTTERAUFNAHMEN ARBRES POUR MANDRINS DE PERCAGE
ARBORS FOR DRILL CHUCKS ATTACCO PER MANDRINI PORTAPUNTE

DIN 238



Code N.	Description	ISO	B	L	L1
216-31102	ISO40H17B16	40	16	134.4	17
216-31103	ISO40H17B18	40	18	142.4	17
216-31104	ISO50H20B16	50	16	170.8	20
216-31105	ISO50H20B18	50	18	178.8	20

ROHLINGE MIT WEICHEM SCHAFT BARRES D'ALESAGE SEMI-FINIES
BLANK TOOLHOLDER WITH SOFT SHANK MANDRINI SEMILAVORATI A STELO TENERO



Code N.	Description	ISO	D	L
217-41101	ISO40H160D40.5SM	40	40.5	160
217-41102	ISO40H160D63.5SM	40	63.5	160
217-41103	ISO40H250D63.5SM	40	63.5	250
217-41104	ISO50H160D80SM	50	80	160
217-41105	ISO50H200D80SM	50	80	200
217-41106	ISO50H300D80SM	50	80	300

The logo for Kawafel, featuring a stylized 'K' with an orange and grey color scheme, followed by the word 'KAWAFEL' in a bold, black, sans-serif font. The background of the entire page is a faded, high-angle photograph of a metal staircase with a handrail.

KAWAFEL

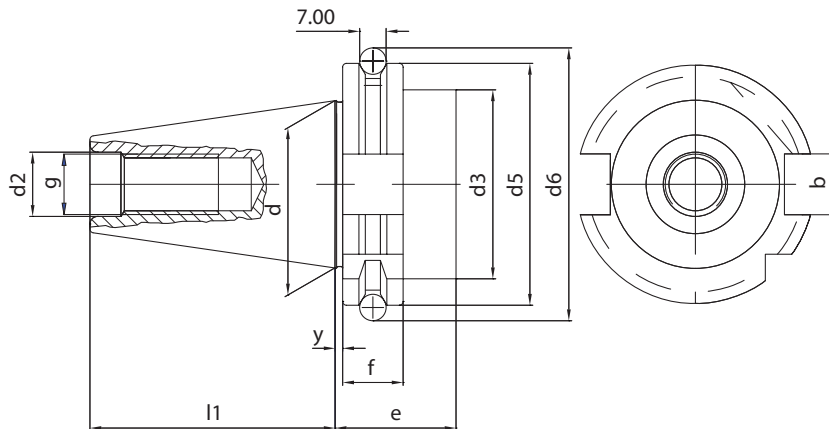
DIN 69871 A-AD/B-AD



DIN 69871 A DIN 69871 AD/B

TECHNISCHE DATEN DER STEILKEGELWERKZEUGE DONNEES TECHNIQUES QUEUE D'OUTILS
TAPER SHANKS DATA SHEET DATI TECNICI CONI D'ATTACCO

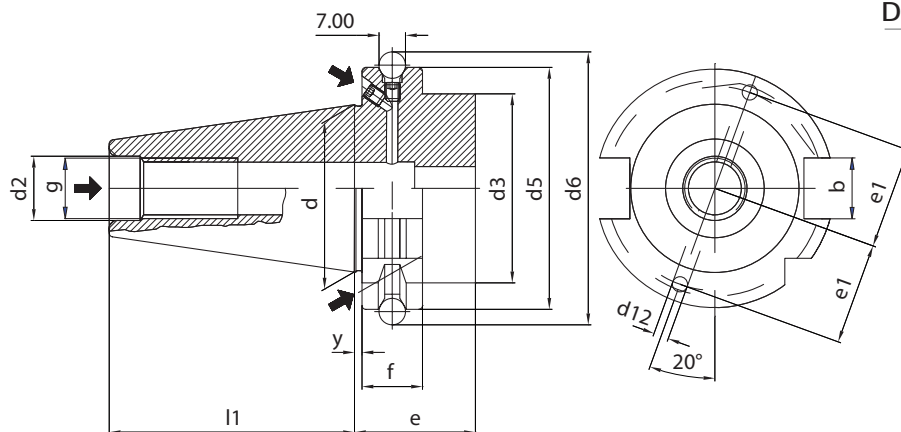
DIN 69871/A



ISO	d	l1	d2	g	y	d5	f	d3	d6	e	b
30	31,75	47,8	13	M12	3,2	50	15,9	45	59,3	35	16,1
40	44,45	68,4	17	M16	3,2	63,55	15,9	50	72,3	35	16,1
50	69,85	101,75	25	M24	3,2	97,5	15,9	80	107,25	35	25,7

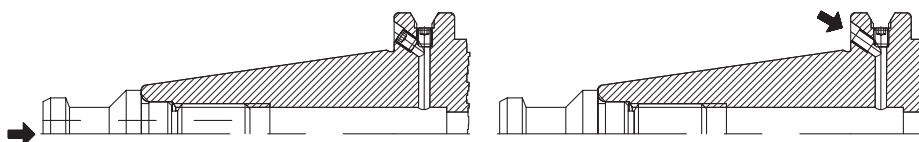
TECHNISCHE DATEN DER STEILKEGELWERKZEUGE DONNEES TECHNIQUES QUEUE D'OUTILS
TAPER SHANKS DATA SHEET DATI TECNICI CONI D'ATTACCO

DIN 69871 AD/B



FORM AD

FORM B



ISO	d	l1	d2	g	y	d5	f	d3	d6	e	b	d12	e1
40	44,45	68,4	17	M16	3,2	63,55	15,9	50	72,3	35	16,1	4	27
50	69,85	101,75	26	M24	3,2	97,5	15,9	80	107,25	35	25,7	5	42

For coolant through V-flange bores (B) or center of toolholders (AD). For central coolant, the V-flange channels are closed by socket screws.

Il lubrificante passa dai fori sulla flangia (B) oppure, chiudendo i fori con le apposite viti, dal centro del mandrino (AD).

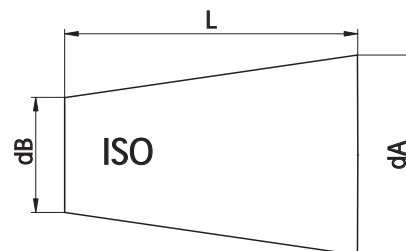


Alle Kintek-Steilkegelaufnahmen werden nach den DIN-Normen angefertigt.

KEGELSCHAFTTOLERANZ

In Klasse AT3 angefertigt.

ISO	L	dA-dB	AT3
30	42	12.250	+0.002
40	59	17.208	+0.003
50	92	26.833	+0.004



SPANNZANGENAUFNAHME RUNDLAUFGENAUIGKEIT

Die DIN 6391- Norm schreibt eine Rundlaufgenauigkeit zwischen Aussenkegel und Innenkegel / Spannzangensitz vom 0,016 vor. Unsere Spannzangenfutter weisen einen Rundlauffehler zwischen ISO-Kegelaufnahme und Spannzangensitz, der zwischen 0,003 und 0,010 mm liegt.

AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Kintek- Aufsteckfräsdorne entsprechen der DIN 6358- Norm, die einen höchsten Rundlauffehler zwischen ISO 30- und ISO40- Kegel und den Durchmessern 16-22-27-32-40 vom 0,01 vorsieht. Der mögliche höchste Rundlauffehler für ISO 50 ist 0,015 mm.

WELDON AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Nach der DIN 6359-1-Norm müssen die Weldon- Aufsteckfräsdorne die folgenden Forderungen aufweisen:

Bohrung: Toleranz H5

Rundlaufgenauigkeit: höchster möglicher Rundlauffehler zwischen Kegel und Weldonsitz < 0,01 (für ISO 40)

Die vorgeschriebene Toleranz der Bohrung und eine durchschnittliche Rundlaufgenauigkeit von 0,005 sind erreicht.

WUCHTUNG

Die meisten Werkzeughalter dieser Gruppe sind in Klasse G6,3 auf 8.000 U/Min -1 vorgewuchtet oder auf 12.000 U/Min -1 gewuchtet.

Neben der Übersichtstabelle der Produkte wird die Wuchtgüte angegeben.

KONSTRUKTIONSDATEN

- aus legiertem Einsatzstahl angefertigt
- in der Einsatzhärte tiefe von 0,4-0,5 mm
- gehärtet, angelassen
- Härte HRC58 +-2, Festigkeit 800-1000 N/mm²
- brüniert
- inneres, äußeres Schleifen und am Gewinde der Spannzangennutter

WUCHTUNG FÜR HÖHERE DREHZAHLN

Die Hochgeschwindigkeit- Steilkegelaufnahmen der neuen Linie werden in Klasse G2,5 auf 25.000 U/Min -1 gewuchtet.

KONSTRUKTIONSDATEN

- aus legiertem Einsatzstahl angefertigt
- in der Einsatzhärte tiefe von 0,4-0,5 mm
- gehärtet, angelassen
- Härte HRC 58 +- 2, Festigkeit 800-1000 N/mm²
- brüniert
- inneres, äußeres Schleifen des Kegels
- Schleifen der Vorderseite und am Gewinde der Spannzangennutter
- 100% durch zertifizierte Meßinstrumente geprüft und mit Wuchtungsprotokoll geliefert

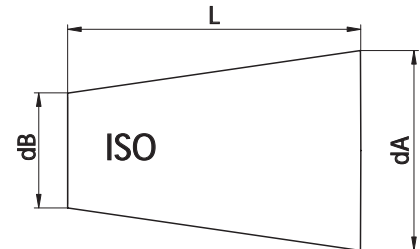


ALL KINTEK TOOLHOLDERS ARE MANUFACTURED ACCORDING TO DIN NORM.

CONE'S TOLERANCE

ACCORDING TO THE CLASS AT3.

ISO	L	dA-dB	AT3
30	42	12.250	+0.002
40	59	17.208	+0.003
50	92	26.833	+0.004



COLLET CHUCK'S RUNOUT ACCURACY

The norm DIN6391 permits a runout error between external cone and internal cone / collet seat of 0.016. Our production has a runout accuracy which is guaranteed to be within 0,003 / 0,010 m at the tool seat.

SHELL END MILL ADAPTOR'S RUNOUT ACCURACY

Our shell end mill adaptors meet the requirements of the norm DIN6358, which prescribes for diameters 16-22-27-32-40 a runout accuracy of: 0, 01 for SK 30/40 0,015 for SK 50.

WELDON END MILL HOLDER'S RUNOUT ACCURACY

According to the norm DIN6359-1 Weldon end mill holders have to meet the following requirements:

Bore: H5 tolerance

Runout accuracy: < 0.01 (for SK 40)

Our end mill adaptors ensure the prescribed holes' tolerance and have a runout accuracy which is normally 0.005

BALANCING

The major part of toolholders of this category can run up to 8000 rpm grade G 6,3 or 12000 rpm. Besides the descriptive and dimensional table of products, you can find the additive balancing grade.

CONSTRUCTIVE FEATURES

- Manufactured with Casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm2
- Black oxidized
- Internal and external grinding finished.

NEW HIGH-SPEED BALANCING TOOLHOLDERS

The new high-speed toolholders are balanced in the Grade G 2,5 at 25000 rpm.

CONSTRUCTIVE FEATURES FOR HIGH-SPEED TOOLHOLDERS

- Manufactured with casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm2
- Black oxidized
- Internal and external grinding finish of the cone
- Grinding finish on the front side and on the thread of collet nuts.
- Tested 100% with certified measuring instruments and supplied with balancing certificate

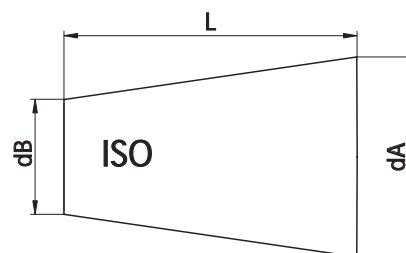


TOUS LES MANDRINS PORTE-OUTILS KINTEK SONT PRODUITS SUIVANT LES SPÉCIFICATIONS DIN

TOLERANCE DU CONE

EN CLASSE AT3.

ISO	L	dA-dB	AT3
30	42	12.250	+0.002
40	59	17.208	+0.003
50	92	26.833	+0.004



COAXIALITE' PORTE-PINCE

La norme DIN6391 admet une erreur maximum du 0.016 soit pour les porte-pinces DIN6499 soit pour DIN6388. Dans notre production l'écart d'excentricité maximum entre cône ISO et logement de la pince est compris entre: 0,003 et 0,0010 mm.

COAXIALITE' PORTE-FRAISES FIXES ET COMBINES

Les porte-fraises fixes et combinés de notre production suivent la spécification de la norme DIN6358, qui prévoit pour les diamètres 16-22-27-32-40 une concentricité de 0,01 pour ISO 30 et ISO 40 0,015 pour ISO 50

COAXIALITE' PORTE-FRAISES WELDON

Suivant les spécifications DIN 6359-1 les porte-fraises WELDON doivent suivre les conditions suivantes:

Trou : tolérance H5

Coaxialité: écart maximum toléré entre cône et logement du Weldon <0.01 (pour ISO 40).

Nous assurons la tolérance prévue sur le trou et une coaxialité en moyenne de 0.005.

EQUILIBRAGE

La plupart des porte-outils sont pré-équilibrés en classe G 6,3 8000 Tr/Min -1. ou équilibrés à 12000 Tr/Min-1. A côté du tableau de description et dimensions des produits il y a l'indication de la valeur d'équilibrage additionnel.

ELEMENTS DE CONSTRUCTION

- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm
- Trempés - Revenus
- Dureté HRC 58 +/- 2 résistance 800-1000 N/ mm2
- Brunis
- Rectification du cône intérieur, extérieur et dans le filetage des écrous qui serrent la pince.

EQUILIBRAGE MANDRINS POUR HAUTE VITESSE

Les mandrins de la nouvelle ligne à haute vitesse sont équilibrés en classe G 2,5 à 25000 Tr/mn-1.

ELEMENTS DE CONSTRUCTION POUR MANDRINS HAUTE VITESSE

- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm
- Trempé - Revenu
- Dureté HRC 58 +/- 2 résistance 800-1000 N/ mm2
- Brunis
- Finition de rectification intérieure, extérieure et du cône
- Rectification du cône intérieur et dans le filetage des écrous qui serrent la pince.
- Contrôlés à 100 % avec des instruments de mesure certifiés et livrés avec un certificat d'équilibrage.

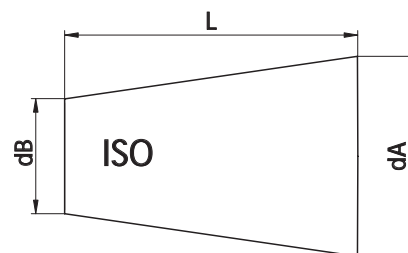


TUTTI I MANDRINI PORTAUTENSILI KINTEK VENGONO PRODOTTI SECONDO LE NORMATIVE DIN

TOLLERANZA DEL CONO

PRODOTTI IN CLASSE AT3.

ISO	L	dA-dB	AT3
30	42	12.250	+0.002
40	59	17.208	+0.003
50	92	26.833	+0.004



COASSIALITÀ PORTAPINZE

La norma DIN6391 ammette un errore massimo di 0.016 sia per i portapinze DIN6499 che per DIN6388. La nostra produzione normalmente presenta uno scostamento massimo di eccentricità tra cono ISO e sede pinza compreso tra i 0,003 e 0,010 mm.

COASSIALITÀ PORTAFRESE FISSI E COMBINATI

I portafrese fissi e combinati di nostra produzione rispondono ai criteri prescritti dalla norma DIN6358, la quale prevede un errore massimo di coassialità tra cono ISO 30 e ISO 40 ed i diametri 16-22-27-32-40, di 0,01. Mentre per ISO 50 è ammesso un errore massimo di 0,015 mm.

COASSIALITÀ PORTAFRESE WELDON - WHISTLE NOTCH

Rispettando la normativa DIN 6359-1 i portafrese WELDON devono rispondere ai seguenti requisiti: foro: tolleranza H5

coassialità: scostamento massimo consentito tra cono e sede Weldon <0.01 (per ISO 40)
Garantiamo la tolleranza prescritta sul foro e un valore di coassialità mediamente di 0.005.

EQUILIBRATURA

La maggior parte dei portautensili presenti in questa categoria sono prebilanciati in classe G 6,3 8000 rpm min⁻¹. o bilanciati a 12000 giri rpm min⁻¹.

A fianco della tabella descrittiva e dimensionale dei prodotti viene elencato il grado di equilibratura aggiuntiva.

DATI COSTRUTTIVI

- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +- 2 resistenza 800-1000 N/ mm2
- Bruniti
- Finitura di rettifica interna, esterna e nelle filettature delle ghiere chiudipinza

EQUILIBRATURA MANDRINI PER ALTE VELOCITÀ

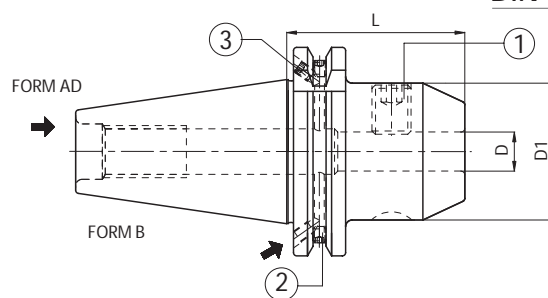
I mandrini presenti nella linea nuova ad alta velocità vengono bilanciati in classe G 2,5 a 25000 rpm min⁻¹.

DATI COSTRUTTIVI MANDRINI PER ALTE VELOCITÀ

- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +- 2 resistenza 800-1000 N/ mm2
- Bruniti
- Finitura di rettifica interna, esterna del cono
- Rettifica parte anteriore e nelle filettature delle ghiere chiudipinza
- Collaudati 100% con strumenti di misura certificati e forniti con certificato di bilanciatura.

ZYLINDERSCHAFTAUFNAHME WELDON MANDRINS POUR OUTILS TYPE WELDON
 END MILL HOLDERS WELDON MANDRINI PORTAFRESE TIPO WELDON




DIN 1835 B



Code N.	Description	ISO	D	L	D1	G2,5 25000 RPM
213-91301	TC40H50WE06 AD+B	40	6	50	25	•
213-91302	TC40H50WE08 AD+B	40	8	50	28	•
213-91303	TC40H50WE10 AD+B	40	10	50	35	•
213-91304	TC40H50WE12 AD+B	40	12	50	42	•
213-91305	TC40H50WE14 AD+B	40	14	50	44	•
213-91306	TC40H63WE16 AD+B	40	16	63	48	•
213-91307	TC40H63WE18 AD+B	40	18	63	50	•
213-91308	TC40H63WE20 AD+B	40	20	63	52	•
213-91309	TC40H100WE25 AD+B	40	25	100	65	•
213-91310	TC40H100WE32 AD+B	40	32	100	72	•
213-91312	TC50H63WE06 AD+B	50	6	63	25	•
213-91313	TC50H63WE08 AD+B	50	8	63	28	•
213-91314	TC50H63WE10 AD+B	50	10	63	35	•
213-91315	TC50H63WE12 AD+B	50	12	63	42	•
213-91316	TC50H63WE14 AD+B	50	14	63	44	•
213-91317	TC50H63WE16 AD+B	50	16	63	48	•
213-91318	TC50H63WE18 AD+B	50	18	63	50	•
213-91319	TC50H63WE20 AD+B	50	20	63	52	•
213-91320	TC50H80WE25 AD+B	50	25	80	65	•
213-91321	TC50H100WE32 AD+B	50	32	100	72	•

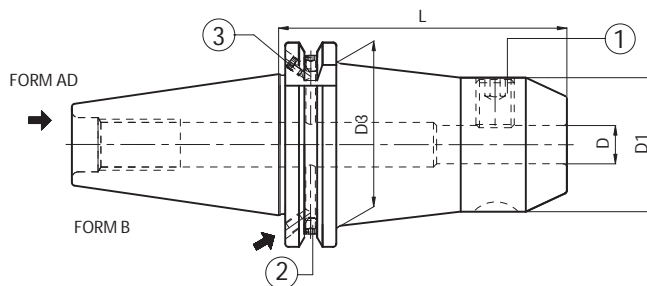
New line High balanced

Ersatzteile • Spare parts • Pièces détachées • Componenti

Tape	Screw	Quantity	Screw	Quantity	D	Locking screw	Quantity
							
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2	6	811-106001	1
ISO 50	811-102001 M4X4	2	811-102010 M5X6	2	8	811-106002	1
					10	811-106004	1
					12,14	811-106005	1
					16,18	811-106006	1
					20	811-106007	1
					25	811-106008	2
					32	811-106009	2

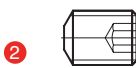
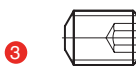
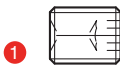
ZYLINDERSCHAFTAUFNAHME WELDON-LANG MANDRINS POUR OUTILS TYPE WELDON-SERIE LONGUE
 END MILL HOLDERS WELDON-LONG PROJECTION TYPE MANDRINI PORTAFRESE TIPO WELDON-SERIE LUNGA

DIN 1835 B



Code N.	Description	ISO	D	L	D1	D3	G2,5 25000 RPM	
H100	213-91324	TC40H100WE06 AD+B	40	6	100	25	35	•
	213-91325	TC40H100WE08 AD+B	40	8	100	28	38	•
	213-91326	TC40H100WE10 AD+B	40	10	100	35	40	•
	213-91327	TC40H100WE12 AD+B	40	12	100	42	-	•
	213-91328	TC40H100WE14 AD+B	40	14	100	44	-	•
	213-91329	TC40H100WE16 AD+B	40	16	100	48	-	•
	213-91330	TC40H100WE18 AD+B	40	18	100	50	-	•
	213-91331	TC40H100WE20 AD+B	40	20	100	50	-	•
	213-91332	TC50H100WE06 AD+B	50	6	100	25	35	•
	213-91333	TC50H100WE08 AD+B	50	8	100	28	38	•
	213-91334	TC50H100WE10 AD+B	50	10	100	35	42	•
	213-91335	TC50H100WE12 AD+B	50	12	100	42	48	•
	213-91336	TC50H100WE14 AD+B	50	14	100	44	50	•
	213-91337	TC50H100WE16 AD+B	50	16	100	48	54	•
	213-91338	TC50H100WE18 AD+B	50	18	100	50	56	•
	213-91339	TC50H100WE20 AD+B	50	20	100	52	59	•
213-91340	TC50H100WE25 AD+B	50	25	100	65	-	•	
H160	213-91341	TC40H160WE06 AD+B	40	6	160	25	35	•
	213-91342	TC40H160WE08 AD+B	40	8	160	28	38	•
	213-91343	TC40H160WE10 AD+B	40	10	160	35	40	•
	213-91344	TC40H160WE12 AD+B	40	12	160	42	-	•
	213-91345	TC40H160WE14 AD+B	40	14	160	44	-	•
	213-91346	TC40H160WE16 AD+B	40	16	160	48	-	•
	213-91347	TC40H160WE18 AD+B	40	18	160	50	-	•
	213-91348	TC40H160WE20 AD+B	40	20	160	50	-	•
	213-91349	TC40H160WE25 AD+B	40	25	160	65	-	•
	213-91350	TC40H160WE32 AD+B	40	32	160	72	-	•

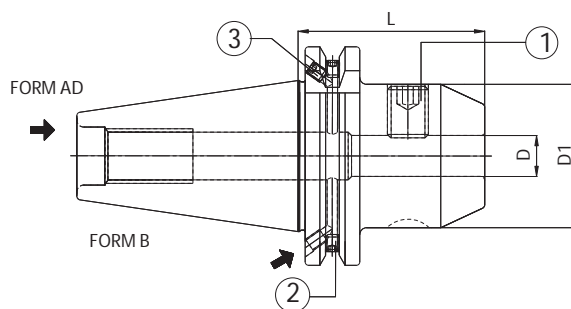
Ersatzteile • Spare parts • Pièces détachées • Componenti

Tappe	Screw	Quantity	Screw	Quantity	D	Locking screw	Quantity
							
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2	6	811-106001	1
ISO 50	811-102001 M4X4	2	811-102010 M5X6	2	8	811-106002	1
					10	811-106004	1
					12,14	811-106005	1
					16,18	811-106006	1
					20	811-106007	1
					25	811-106008	2
					32	811-106009	2

New line
High balanced

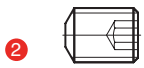
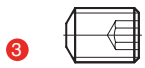
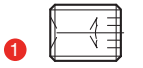
ZYLINDERSCHAFTAUFNAHME WELDON MANDRINS POUR OUTILS TYPE WELDON
 END MILL HOLDERS WELDON MANDRINI PORTAFRESE TIPO WELDON

DIN 1835 B



Code N.	Description	ISO	D	L	D1	G6,3 ¹²⁰⁰⁰ RPM
* 263-11201	TC30H45WE06	30	6	45	25	•
* 263-11202	TC30H45WE08	30	8	45	28	•
* 263-11203	TC30H50WE10	30	10	50	35	•
* 263-11204	TC30H50WE12	30	12	50	42	•
* 263-11205	TC30H70WE16	30	16	70	48	•
* 263-11206	TC30H70WE20	30	20	70	52	•
213-11326	TC40H50WE06 AD+B	40	6	50	25	•
213-11327	TC40H50WE08 AD+B	40	8	50	28	•
213-11328	TC40H50WE10 AD+B	40	10	50	35	•
213-11329	TC40H50WE12 AD+B	40	12	50	42	•
213-11330	TC40H50WE14 AD+B	40	14	50	44	•
213-11324	TC40H63WE16 AD+B	40	16	63	48	•
213-11331	TC40H63WE18 AD+B	40	18	63	50	•
213-11325	TC40H63WE20 AD+B	40	20	63	52	•
213-11323	TC40H100WE25 AD+B	40	25	100	65	•
213-11332	TC40H100WE32 AD+B	40	32	100	72	•
213-11393	TC40H115WE40 AD+B	40	40	115	80	•
213-11333	TC50H63WE06 AD+B	50	6	63	25	•
213-11334	TC50H63WE08 AD+B	50	8	63	28	•
213-11335	TC50H63WE10 AD+B	50	10	63	35	•
213-11336	TC50H63WE12 AD+B	50	12	63	42	•
213-11337	TC50H63WE14 AD+B	50	14	63	44	•
213-11338	TC50H63WE16 AD+B	50	16	63	48	•
213-11339	TC50H63WE18 AD+B	50	18	63	50	•
213-11340	TC50H63WE20 AD+B	50	20	63	52	•
213-11341	TC50H80WE25 AD+B	50	25	80	65	•
213-11342	TC50H100WE32 AD+B	50	32	100	72	•
213-11343	TC50H120WE40 AD+B	50	40	120	80	•
263-11343	TC50H120WE50 AD+B	50	50	120	100	•

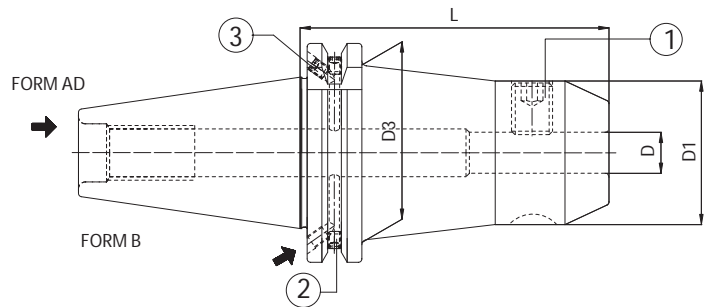
Ersatzteile • Spare parts • Pièces détachées • Componenti

Tape	Screw	Quantity	Screw	Quantity	D	Locking screw	Quantity
							
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2	6	811-106001	1
ISO 50	811-102001 M4X4	2	811-102010 M5X6	2	8	811-106002	1
					10	811-106004	1
					12,14	811-106005	1
					16,18	811-106006	1
					20	811-106007	1
					25	811-106008	2
					32	811-106009	2
					40	811-106009	2
					50	811-106011	2

- * Ausführung Form AD
- * Execution form AD
- * Forme AD
- * Forma AD

ZYLINDERSCHAFTAUFNAHME WELDON-LANG MANDRINS POUR OUTILS TYPE WELDON-SERIE LONGUE
 END MILL HOLDERS WELDON-LONG PROJECTION TYPE MANDRINI PORTAFRESE TIPO WELDON-SERIE LUNGA

DIN 1835 B

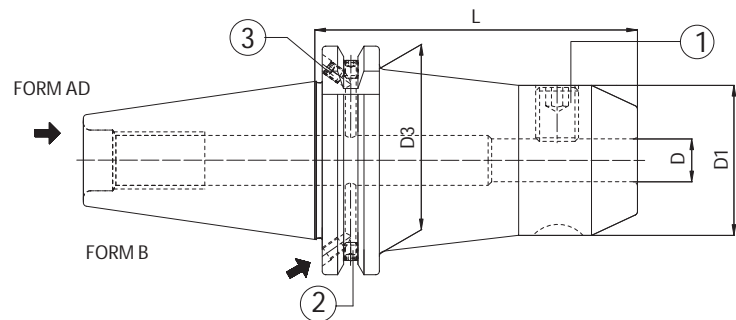


Code N.	Description	ISO	D	L	D1	D3	G6,3 12000 RPM	G6,3 8000 RPM		
H 100	213-11344	TC40H100WE06 AD+B	40	6	100	25	35	•		
	213-11345	TC40H100WE08 AD+B	40	8	100	28	38	•		
	213-11346	TC40H100WE10 AD+B	40	10	100	35	40	•		
	213-11347	TC40H100WE12 AD+B	40	12	100	42	-	•		
	213-11348	TC40H100WE14 AD+B	40	14	100	44	-	•		
	213-11349	TC40H100WE16 AD+B	40	16	100	48	-	•		
	213-11370	TC40H100WE18 AD+B	40	18	100	50	-	•		
	213-11350	TC40H100WE20 AD+B	40	20	100	50	-	•		
	213-11351	TC50H100WE06 AD+B	50	6	100	25	35		•	
	213-11352	TC50H100WE08 AD+B	50	8	100	28	38		•	
	213-11353	TC50H100WE10 AD+B	50	10	100	35	42		•	
	213-11354	TC50H100WE12 AD+B	50	12	100	42	48		•	
	213-11355	TC50H100WE14 AD+B	50	14	100	44	50		•	
	213-11356	TC50H100WE16 AD+B	50	16	100	48	54		•	
	213-11357	TC50H100WE18 AD+B	50	18	100	50	56		•	
	213-11358	TC50H100WE20 AD+B	50	20	100	52	59		•	
	213-11359	TC50H100WE25 AD+B	50	25	100	65	-		•	
	H 160	213-11362	TC40H160WE06 AD+B	40	6	160	25	35	•	
		213-11363	TC40H160WE08 AD+B	40	8	160	28	38	•	
213-11371		TC40H160WE10 AD+B	40	10	160	35	40	•		
213-11372		TC40H160WE12 AD+B	40	12	160	42	-	•		
213-11394		TC40H160WE14 AD+B	40	14	160	44	-	•		
213-11360		TC40H160WE16 AD+B	40	16	160	48	-	•		
213-11395		TC40H160WE18 AD+B	40	18	160	50	-	•		
213-11361		TC40H160WE20 AD+B	40	20	160	50	-	•		
213-11396		TC40H160WE25 AD+B	40	25	160	65	-	•		
213-11397		TC40H160WE32 AD+B	40	32	160	72	-	•		
213-11364		TC50H160WE06 AD+B	50	6	160	25	35		•	
213-11365		TC50H160WE08 AD+B	50	8	160	28	38		•	
213-11366		TC50H160WE10 AD+B	50	10	160	35	42		•	
213-11367		TC50H160WE12 AD+B	50	12	160	42	48		•	
213-11398		TC50H160WE14 AD+B	50	14	160	44	50		•	
213-11368		TC50H160WE16 AD+B	50	16	160	48	54		•	
213-11399		TC50H160WE18 AD+B	50	18	160	50	56		•	
213-11369		TC50H160WE20 AD+B	50	20	160	52	59		•	
263-11301		TC50H160WE25 AD+B	50	25	160	65	70		•	
263-11302		TC50H160WE32 AD+B	50	32	160	72	-		•	

ZYLINDERSCHAFTAUFNAHME WELDON-LANG
END MILL HOLDERS WELDON-LONG PROJECTION TYPE




MANDRINS POUR OUTILS TYPE WELDON-SERIE LONGUE
MANDRINI PORTAFRESE TIPO WELDON-SERIE LUNGA

DIN 1835 B



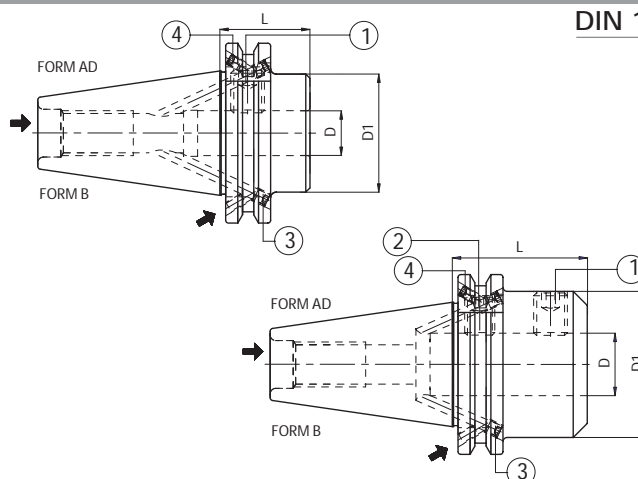
Code N.	Description	ISO	D	L	D1	D3	G6,3 ⁸⁰⁰⁰ RPM	
H 200	263-11303	TC40H200WE06 AD+B	40	6	200	25	38	•
	263-11304	TC40H200WE08 AD+B	40	8	200	28	41	•
	263-11305	TC40H200WE10 AD+B	40	10	200	35	43	•
	263-11306	TC40H200WE12 AD+B	40	12	200	42	48	•
	263-11307	TC40H200WE14 AD+B	40	14	200	44	48	•
	263-11308	TC40H200WE16 AD+B	40	16	200	48	-	•
	263-11309	TC40H200WE18 AD+B	40	18	200	50	-	•
	263-11310	TC40H200WE20 AD+B	40	25	200	50	-	•
	263-11311	TC40H200WE25 AD+B	40	25	200	65	-	•
	263-11312	TC40H200WE32 AD+B	40	32	200	72	-	•
	263-11313	TC50H200WE06 AD+B	50	6	200	25	38	•
	263-11314	TC50H200WE08 AD+B	50	8	200	28	41	•
	263-11315	TC50H200WE10 AD+B	50	10	200	35	45	•
	263-11316	TC50H200WE12 AD+B	50	12	200	42	51	•
	263-11317	TC50H200WE14 AD+B	50	14	200	44	53	•
	263-11318	TC50H200WE16 AD+B	50	16	200	48	57	•
	263-11319	TC50H200WE18 AD+B	50	18	200	50	59	•
	263-11320	TC50H200WE20 AD+B	50	20	200	52	61	•
	263-11321	TC50H200WE25 AD+B	50	25	200	65	72	•
	263-11381	TC50H200WE32 AD+B	50	32	200	72	-	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

Tape	Screw	Quantity	Screw	Quantity	D	Locking screw	Quantity
	 2		 3			 1	
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2	6	811-106001	1
ISO 50	811-102001 M4X4	2	811-102010 M5X6	2	8	811-106002	1
					10	811-106004	1
					12,14	811-106005	1
					16,18	811-106006	1
					20	811-106007	1
					25	811-106008	2
					32	811-106009	2

KURZE ZYLINDERSCHAFTAUFNAHME WELDON MANDRINS COURTS PORTE-FRAISE TYPE WELDON
 SHORT END MILL WELDON HOLDERS MANDRINI CORTI PORTAFRESE TIPO WELDON



DIN 1835 B





Code N.	Description	ISO	D	L	D1	G6,3 ¹²⁰⁰⁰ RPM
263-11322	TC40H35WE16 AD+B	40	16	35	44	•
263-11323	TC40H35WE20 AD+B	40	20	35	44	•
263-11324	TC40H35WE25 AD+B	40	25	35	44	•
263-11325	TC40H60WE25 AD+B	40	25	60	49	•
263-11326	TC40H70WE32 AD+B	40	32	70	72	•
263-11327	TC50H35WE16 AD+B	50	16	35	70	•
263-11328	TC50H35WE20 AD+B	50	20	35	70	•
263-11329	TC50H35WE25 AD+B	50	25	35	70	•
263-11330	TC50H35WE32 AD+B	50	32	35	80	•

Extra short and Rigid Version
 Extra corti e versione rigida

Ersatzteile • Spare parts • Pièces détachées • Componenti

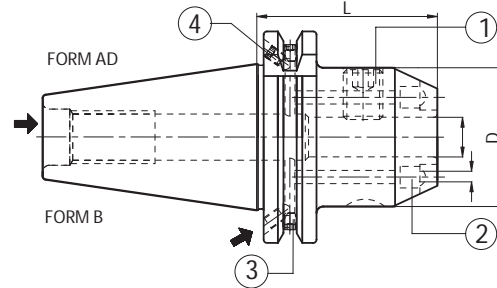
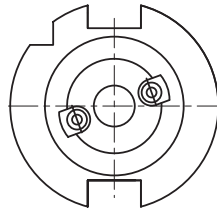
Type	Screw	Quantity	Screw	Quantity
	 3		 4	
ISO40	811-102002 M4X5	2	811-102002 M4X5	2
ISO50	811-102001 M4X4	2	811-102010 M5X6	2

Code N.	Locking screw	Quantity	Locking screw	Quantity
	 1		 2	
263-11322	811-106006	1	-	-
263-11323	811-106007	1	-	-
263-11324	811-106014	1	-	-
263-11325	811-106014	2	-	-
263-11326	811-106009	1	811-106026	1
263-11327	811-106006	1	-	-
263-11328	811-106007	1	-	-
263-11329	811-106008	1	-	-
263-11330	811-106009	1	-	-

ZYLINDERSCHAFTAUFNAHME WELDON MIT SPRITZDÜSEN
END MILL HOLDERS WELDON WITH COOLANT NOOSE FRONT FACE



MANDRINS POUR OUTILS TYPE WELDON AVEC BUSE D'ARROSAGE
MANDRINI PORTAFRESE TIPO WELDON CON SFERE DI LUBRIFICAZIONE



DIN 1835 B



Code N.	Description	ISO	D	L	D1	G2,5 25000 RPM
213-61303	TC40H50WE06-CNFF AD+B	40	6	50	25	•
213-61304	TC40H50WE08-CNFF AD+B	40	8	50	28	•
213-61305	TC40H50WE10-CNFF AD+B	40	10	50	35	•
213-61306	TC40H50WE12-CNFF AD+B	40	12	50	42	•
213-61307	TC40H50WE14-CNFF AD+B	40	14	50	44	•
213-61308	TC40H63WE16-CNFF AD+B	40	16	63	48	•
213-61309	TC40H63WE18-CNFF AD+B	40	18	63	50	•
213-61310	TC40H63WE20-CNFF AD+B	40	20	63	52	•
213-61311	TC40H100WE25-CNFF AD+B	40	25	100	65	•
213-61312	TC40H100WE32-CNFF AD+B	40	32	100	72	•
213-61313	TC40H115WE40-CNFF AD+B	40	40	115	80	•
213-61314	TC50H63WE06-CNFF AD+B	50	6	63	25	•
213-61315	TC50H63WE08-CNFF AD+B	50	8	63	28	•
213-61316	TC50H63WE10-CNFF AD+B	50	10	63	35	•
213-61317	TC50H63WE12-CNFF AD+B	50	12	63	42	•
213-61318	TC50H63WE14-CNFF AD+B	50	14	63	44	•
213-61319	TC50H63WE16-CNFF AD+B	50	16	63	48	•
213-61320	TC50H63WE18-CNFF AD+B	50	18	63	50	•
213-61321	TC50H63WE20-CNFF AD+B	50	20	63	52	•
213-61322	TC50H80WE25-CNFF AD+B	50	25	80	65	•
213-61323	TC50H100WE32-CNFF AD+B	50	32	100	72	•
213-61324	TC50H120WE40-CNFF AD+B	50	40	120	80	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

Type	Screw	Quantity	Screw	Quantity
				
ISO40	811-102002 M4X5	2	811-102002 M4X5	2
ISO50	811-102001 M4X4	2	811-102010 M5X6	2

D	Locking screw	Quantity	Coolant noose	M
				
6	811-106001	1	PWZ1005D6x4.5	D2.5
8	811-106002	1	PWZ1005D6x4.5	D2.5
10	811-106004	1	PWZ1005D6x4.5	D2.5
12,14	811-106005	1	PWZ1005D6x4.5	D2.5
16,18	811-106006	1	PWZ1008D10x7	M4
20	811-106007	1	PWZ1008D10x7	M4
25	811-106008	2	PWZ1012D12x8	M5
32	811-106009	2	PWZ1012D12x8	M5
40	811-106009	2	PWZ1012D12x8	M5

New line High balanced

Ausführung mit Kühlmittelzufuhr zentral und an dem Bund.

Durch die seitlichen Bohrungen und die Kühlmitteldüsen ermöglicht dieses System das Kühlmittel direkt an den Kontaktpunkt des Werkzeuges zu leiten.

Außerdem erfolgt Zentral-Kühlmittelzufuhr, wenn zwei Schrauben die Bohrungen verschliessen.

With central and lateral cooling possibility.

This type of system, thanks to two lateral holes, permits to direct the cooling jet trough the two balls to the connection point of the tool.

Besides, with the application of two screws on the balls, you can have the lubrication trough the centre.

Avec possibilité d'arrosage soit central, soit latéral.

Ce système, avec les trous latéraux, permet, avec les deux billes d'arrosage de diriger le liquide sur le point de contact de l'outil.

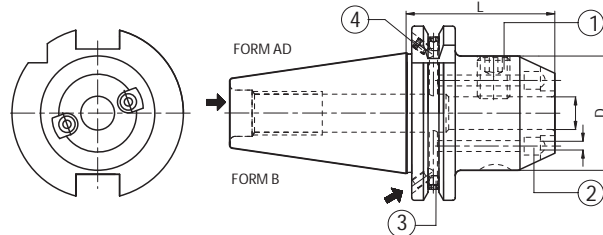
De plus, il est possible d'avoir l'arrosage au centre en bouchant avec des vis les trous des billes.

Con possibilità di refrigerazione sia centrale che laterale.

Questo tipo di sistema grazie ai due fori laterali, permette, mediante le due sfere di dirigere il getto del refrigerante nel punto di contatto dell'utensile. Inoltre, con l'applicazione di due grani sulle sfere si ottiene la lubrificazione attraverso il centro.

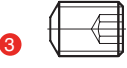
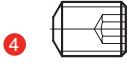
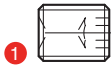
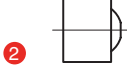
ZYLINDERSCHAFTAUFNAHME WELDON MIT SPRITZDÜSEN / MANDRINS POUR OUTILS TYPE WELDON AVEC BUSE D'ARROSAGE
 END MILL HOLDERS WELDON WITH COOLANT NOOSE FRONT FACE / MANDRINI PORTAFRESE TIPO WELDON CON SFERE DI LUBRIFICAZIONE

DIN 1835 B



Code N.	Description	ISO	D	L	D1	G6,3 12000 RPM
213-11383	TC40H50WE06-CNFF AD+B	40	6	50	25	•
213-11384	TC40H50WE08-CNFF AD+B	40	8	50	28	•
213-11385	TC40H50WE10-CNFF AD+B	40	10	50	35	•
213-11386	TC40H50WE12-CNFF AD+B	40	12	50	42	•
213-11387	TC40H50WE14-CNFF AD+B	40	14	50	44	•
213-11388	TC40H63WE16-CNFF AD+B	40	16	63	48	•
213-11389	TC40H63WE18-CNFF AD+B	40	18	63	50	•
213-11390	TC40H63WE20-CNFF AD+B	40	20	63	52	•
213-11391	TC40H100WE25-CNFF AD+B	40	25	100	65	•
213-11392	TC40H100WE32-CNFF AD+B	40	32	100	72	•
263-11331	TC40H115WE40-CNFF AD+B	40	40	115	80	•
263-11332	TC50H63WE06-CNFF AD+B	50	6	63	25	•
263-11333	TC50H63WE08-CNFF AD+B	50	8	63	28	•
263-11334	TC50H63WE10-CNFF AD+B	50	10	63	35	•
263-11335	TC50H63WE12-CNFF AD+B	50	12	63	42	•
263-11336	TC50H63WE14-CNFF AD+B	50	14	63	44	•
263-11337	TC50H63WE16-CNFF AD+B	50	16	63	48	•
263-11338	TC50H63WE18-CNFF AD+B	50	18	63	50	•
263-11339	TC50H63WE20-CNFF AD+B	50	20	63	52	•
263-11340	TC50H80WE25-CNFF AD+B	50	25	80	65	•
263-11341	TC50H100WE32-CNFF AD+B	50	32	100	72	•
263-11342	TC50H120WE40-CNFF AD+B	50	40	120	80	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

Type	Screw	Quantity	Screw	Quantity
				
ISO40	811-102002 M4X5	2	811-102002 M4X5	2
ISO50	811-102001 M4X4	2	811-102010 M5X6	2
D	Locking screw	Quantity	Coolant noose	M
				
6	811-106001	1	PWZ1005D6x4.5	D2.5
8	811-106002	1	PWZ1005D6x4.5	D2.5
10	811-106004	1	PWZ1005D6x4.5	D2.5
12,14	811-106005	1	PWZ1005D6x4.5	D2.5
16,18	811-106006	1	PWZ1008D10x7	M4
20	811-106007	1	PWZ1008D10x7	M4
25	811-106008	2	PWZ1012D12x8	M5
32	811-106009	2	PWZ1012D12x8	M5
40	811-106009	2	PWZ1012D12x8	M5

Ausführung mit Kühlmittelzufuhr zentral und an dem Bund.

Durch die seitlichen Bohrungen und die Kühlmitteldüsen ermöglicht dieses System das Kühlmittel direkt an den Kontaktpunkt des Werkzeuges zu leiten.

Außerdem erfolgt Zentral-Kühlmittelzufuhr, wenn zwei Schrauben die Bohrungen verschliessen.

With central and lateral cooling possibility.

This type of system, thanks to two lateral holes, permits to direct the cooling jet trough the two balls to the connection point of the tool.

Besides, with the application of two screws on the balls, you can have the lubrication trough the centre.

Avec possibilité d'arrosage soit central, soit latéral.

Ce système, avec les trous latéraux, permet, avec les deux billes d'arrosage de diriger le liquide sur le point de contact de l'outil.

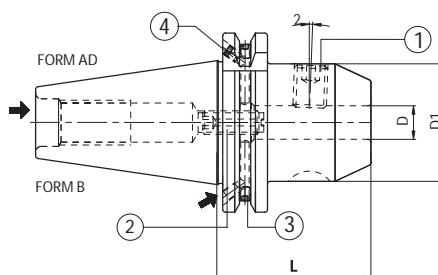
De plus, il est possible d'avoir l'arrosage au centre en bouchant avec des vis les trous des billes.

Con possibilità di refrigerazione sia centrale che laterale.

Questo tipo di sistema grazie ai due fori laterali, permette, mediante le due sfere di dirigere il getto del refrigerante nel punto di contatto dell'utensile. Inoltre, con l'applicazione di due grani sulle sfere si ottiene la lubrificazione attraverso il centro.

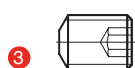


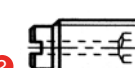
ZYLINDERSCHAFTAUFNAHME WHISTLE NOTCH MANDRINS POUR OUTILS TYPE WHISTLE NOTCH
 END MILL HOLDERS WHISTLE NOTCH MANDRINI PORTAFRESE TIPO WHISTLE NOTCH

DIN 1835 E



Code N.	Description	ISO	D	L	D1	G6,3 ¹²⁰⁰⁰ RPM
213-31317	TC40H50WN06 AD+B	40	6	50	25	•
213-31318	TC40H50WN08 AD+B	40	8	50	28	•
213-31319	TC40H50WN10 AD+B	40	10	50	35	•
213-31320	TC40H50WN12 AD+B	40	12	50	42	•
213-31321	TC40H50WN14 AD+B	40	14	50	44	•
213-31322	TC40H63WN16 AD+B	40	16	63	48	•
213-31323	TC40H63WN18 AD+B	40	18	63	50	•
213-31324	TC40H63WN20 AD+B	40	20	63	52	•
213-31325	TC40H100WN25 AD+B	40	25	100	65	•
213-31326	TC40H100WN32 AD+B	40	32	100	72	•
213-31327	TC40H115WN40 AD+B	40	40	115	80	•
213-31328	TC50H63WN06 AD+B	50	6	63	25	•
213-31329	TC50H63WN08 AD+B	50	8	63	28	•
213-31330	TC50H63WN10 AD+B	50	10	63	35	•
213-31331	TC50H63WN12 AD+B	50	12	63	42	•
213-31332	TC50H63WN14 AD+B	50	14	63	44	•
213-31333	TC50H63WN16 AD+B	50	16	63	48	•
213-31334	TC50H63WN18 AD+B	50	18	63	50	•
213-31335	TC50H63WN20 AD+B	50	20	63	52	•
213-31336	TC50H80WN25 AD+B	50	25	80	65	•
213-31337	TC50H100WN32 AD+B	50	32	100	72	•
213-31338	TC50H120WN40 AD+B	50	40	120	80	•

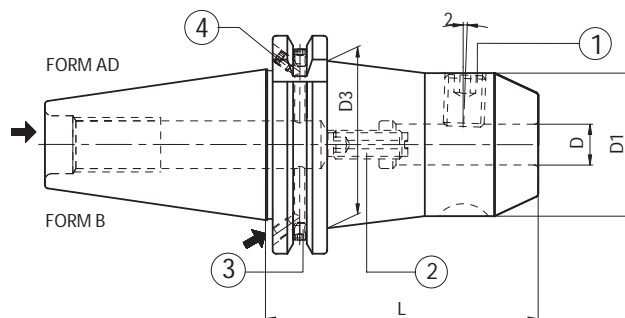
Ersatzteile • Spare parts • Pièces détachées • Componenti

Type	Screw	Quantity	Screw	Quantity
				
ISO40	811-102002 M4X5	2	811-102002 M4X5	2
ISO50	811-102001 M4X4	2	811-102010 M5X6	2
D	Locking screw	Quantity	Stop screw	M
				
6	811-106001	1	811-303043	1
8	811-106002	1	811-303081	1
10	811-106004	1	811-303082	1
12,14	811-106005	1	811-303083	1
16,18	811-106006	1	811-303084	1
20	811-106007	1	811-303084	1
ISO 40/25	811-106008	2	811-303098	1
ISO 50/25	811-106008	2	811-303085	1
ISO 40/32	811-106009	2	811-303098	1
ISO 50/32	811-106009	2	811-303085	1
ISO 40/40	811-106009	2	811-303098	1
ISO 50/40	811-106009	2	811-303085	1

ZYLINDERSCHAFTAUFNAHME WHISTLE NOTCH-LANGE AUSFÜHRUNG
END MILL HOLDERS WHISTLE NOTCH-LONG PROJECTION TYPE

MANDRINS POUR OUTILS TYPE WHISTLE NOTCH-SERIE LONGUE
MANDRINI PORTAFRESE TIPO WHISTLE NOTCH-SERIE LUNGA

DIN 1835 E

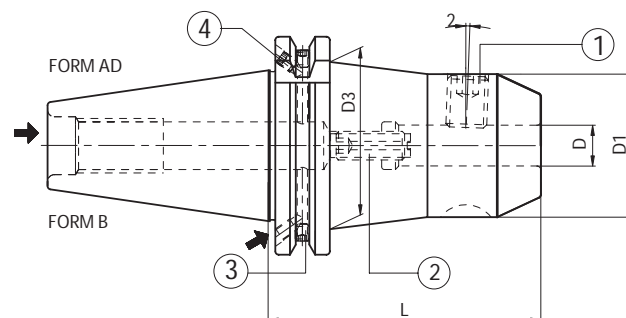


Code N.	Description	ISO	D	L	D1	D3	G6,3 12000 RPM	G6,3 8000 RPM		
H 100	213-31308	TC40H100WN06 AD+B	40	6	100	25	35	•		
	213-31309	TC40H100WN08 AD+B	40	8	100	28	38	•		
	213-31310	TC40H100WN10 AD+B	40	10	100	35	40	•		
	213-31311	TC40H100WN12 AD+B	40	12	100	42	-	•		
	213-31312	TC40H100WN14 AD+B	40	14	100	44	-	•		
	213-31313	TC40H100WN16 AD+B	40	16	100	48	-	•		
	213-31339	TC40H100WN18 AD+B	40	18	100	50	-	•		
	213-31340	TC40H100WN20 AD+B	40	20	100	50	-	•		
	213-31341	TC50H100WN06 AD+B	50	6	100	25	35		•	
	213-31342	TC50H100WN08 AD+B	50	8	100	28	38		•	
	213-31343	TC50H100WN10 AD+B	50	10	100	35	42		•	
	213-31344	TC50H100WN12 AD+B	50	12	100	42	48		•	
	213-31345	TC50H100WN14 AD+B	50	14	100	44	50		•	
	213-31346	TC50H100WN16 AD+B	50	16	100	48	54		•	
	213-31347	TC50H100WN18 AD+B	50	18	100	50	56		•	
	213-31348	TC50H100WN20 AD+B	50	20	100	52	59		•	
	213-31349	TC50H100WN25 AD+B	50	25	100	65	-		•	
	H 160	213-31350	TC40H160WN06 AD+B	40	6	160	25	35	•	
		213-31351	TC40H160WN08 AD+B	40	8	160	28	38	•	
213-31352		TC40H160WN10 AD+B	40	10	160	35	40	•		
213-31353		TC40H160WN12 AD+B	40	12	160	42	-	•		
213-31354		TC40H160WN14 AD+B	40	14	160	44	-	•		
213-31355		TC40H160WN16 AD+B	40	16	160	48	-	•		
213-31356		TC40H160WN18 AD+B	40	18	160	50	-	•		
213-31357		TC40H160WN20 AD+B	40	20	160	50	-	•		
213-31358		TC40H160WN25 AD+B	40	25	160	65	-	•		
213-31359		TC40H160WN32 AD+B	40	32	160	72	-	•		
213-31360		TC50H160WN06 AD+B	50	6	160	25	35		•	
213-31361		TC50H160WN08 AD+B	50	8	160	28	38		•	
213-31362		TC50H160WN10 AD+B	50	10	160	35	42		•	
213-31363		TC50H160WN12 AD+B	50	12	160	42	48		•	
213-31364		TC50H160WN14 AD+B	50	14	160	44	50		•	
213-31365		TC50H160WN16 AD+B	50	16	160	48	54		•	
213-31366		TC50H160WN18 AD+B	50	18	160	50	56		•	
213-31367		TC50H160WN20 AD+B	50	20	160	52	59		•	
263-31368		TC50H160WN25 AD+B	50	25	160	65	70		•	
263-31369	TC50H160WN32 AD+B	50	32	160	72	-		•		

ZYLINDERSCHAFTAUFNAHME WHISTLE NOTCH-LANGE AUSFÜHRUNG
END MILL HOLDERS WHISTLE NOTCH-LONG PROJECTION TYPE

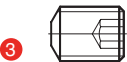
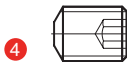
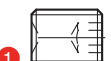

MANDRINS POUR OUTILS TYPE WHISTLE NOTCH-SERIE LONGUE
MANDRINI PORTAFRESE TIPO WHISTLE NOTCH-SERIE LUNGA

DIN 1835 E



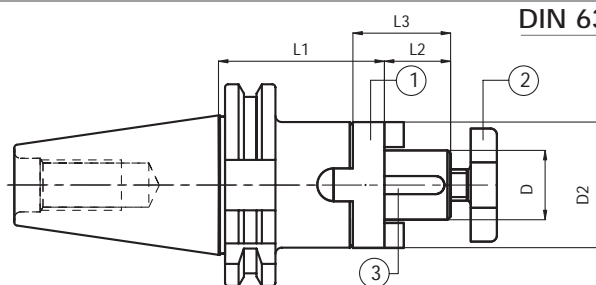
Code N.	Description	ISO	D	L	D1	D3	G6,3 8000 RPM	
H 200	263-31370	TC40H200WN06 AD+B	40	6	200	25	38	•
	263-31371	TC40H200WN08 AD+B	40	8	200	28	41	•
	263-31372	TC40H200WN10 AD+B	40	10	200	35	43	•
	263-31373	TC40H200WN12 AD+B	40	12	200	42	48	•
	263-31374	TC40H200WN14 AD+B	40	14	200	44	48	•
	263-31375	TC40H200WN16 AD+B	40	16	200	48	-	•
	263-31376	TC40H200WN18 AD+B	40	18	200	50	-	•
	263-31377	TC40H200WN20 AD+B	40	20	200	50	-	•
	263-31378	TC40H200WN25 AD+B	40	25	200	65	-	•
	263-31379	TC40H200WN32 AD+B	40	32	200	72	-	•
	263-31380	TC50H200WN06 AD+B	50	6	200	25	38	•
	263-31381	TC50H200WN08 AD+B	50	8	200	28	41	•
	263-31382	TC50H200WN10 AD+B	50	10	200	35	45	•
	263-31383	TC50H200WN12 AD+B	50	12	200	42	51	•
	263-31384	TC50H200WN14 AD+B	50	14	200	44	53	•
	263-31385	TC50H200WN16 AD+B	50	16	200	48	57	•
	263-31386	TC50H200WN18 AD+B	50	18	200	50	59	•
	263-31387	TC50H200WN20 AD+B	50	20	200	52	61	•
	263-31388	TC50H200WN25 AD+B	50	25	200	65	72	•
213-31389	TC50H200WN32 AD+B	50	32	200	72	-	•	

Ersatzteile • Spare parts • Pièces détachées • Componenti

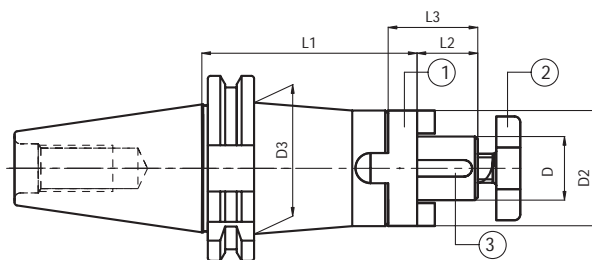
Type	Screw	Quantity	Screw	Quantity
				
ISO40	811-102002 M4X5	2	811-102002 M4X5	2
ISO50	811-102001 M4X4	2	811-102010 M5X6	2
D	Locking screw	Quantity	Stop screw	M
				
6	811-106001	1	811-303043	1
8	811-106002	1	811-303081	1
10	811-106004	1	811-303082	1
12,14	811-106005	1	811-303083	1
16,18	811-106006	1	811-303084	1
20	811-106007	1	811-303084	1
25	811-106008	2	811-303085	1
32	811-106009	2	811-303085	1

KOMBI AUFSTECKFRÄSDORNE MANDRINS PORTE-FRAISES A DOUBLE USAGE
 KOMBI-SHELL MILL ADAPTOR MANDRINI PORTAFRESE COMBINATI

DIN 6358



	Code N.	Description	ISO	D	L1	L2	L3	D2	G6,3 8000 RPM
STANDARD	216-11232	TC30H50D16C	30	16	50	17	27	32	•
	216-11234	TC30H50D22C	30	22	50	19	31	40	•
	216-11236	TC30H55D27C	30	27	55	21	33	48	•
	216-11201	TC40H55D16C	40	16	55	17	27	32	•
	216-11202	TC40H55D22C	40	22	55	19	31	40	•
	216-11203	TC40H55D27C	40	27	55	21	33	48	•
	216-11204	TC40H60D32C	40	32	60	24	38	58	•
	216-11205	TC40H60D40C	40	40	60	27	41	70	•
	216-11206	TC50H55D16C	50	16	55	17	27	32	•
	216-11207	TC50H55D22C	50	22	55	19	31	40	•
	216-11208	TC50H55D27C	50	27	55	21	33	48	•
	216-11209	TC50H55D32C	50	32	55	24	38	58	•
216-11210	TC50H55D40C	50	40	55	27	41	70	•	
216-11211	TC50H70D50C	50	50	70	30	46	90	•	



	Code N.	Description	ISO	D	L1	L2	L3	D2	D3	G6,3 8000 RPM
H100	216-11213	TC40H100D16C	40	16	100	17	27	32	44	•
	216-11214	TC40H100D22C	40	22	100	19	31	40	-	•
	216-11215	TC40H100D27C	40	27	100	21	33	48	-	•
	216-11216	TC40H100D32C	40	32	100	24	38	58	-	•
	216-11217	TC40H100D40C	40	40	100	27	41	70	-	•
	216-11218	TC50H100D16C	50	16	100	17	27	32	50	•
	216-11219	TC50H100D22C	50	22	100	19	31	40	60	•
	216-11220	TC50H100D27C	50	27	100	21	33	48	60	•
	216-11221	TC50H100D32C	50	32	100	24	38	58	-	•
	216-11222	TC50H100D40C	50	40	100	27	41	70	-	•

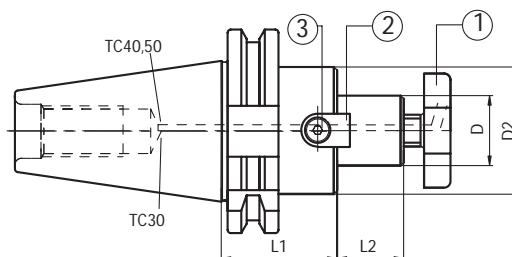
Ersatzteile • Spare parts • Pièces détachées • Componenti

D	Ring	Cross screw	Key	Wrench
16	814-30001	811-107003	814-201010	816-130002
22	814-30002	811-107004	814-201020	816-130003
27	814-30003	811-107005	814-201030	816-130004
32	814-30004	811-107006	814-201040	816-130005
40	814-30005	811-107007	814-201050	816-130006
50	814-30006	811-107009	814-201060	816-130007

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT MIT GRÖßEREM BUND
FACE MILL HOLDERS-TENONS DRIVE WITH BIGGER FLANGE DIAMETER

MANDRINS PORTE-FRAISE-ENTRAÎNEMENT PAR TENONS BRIDE AJOUTÉE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO CON FLANGIA MAGGIORATA

ISO 3937



Code N.	Description	ISO	D	L1	L2	D2	G6,3 ⁸⁰⁰⁰ RPM
216-71201	TC30H35D16F	30	16	35	17	38	•
216-71202	TC30H50D22F	30	22	50	19	48	•
216-71203	TC30H50D27F	30	27	50	21	58	•
216-71204	TC40H45D16F	40	16	45	17	38	•
216-71205	TC40H45D22F	40	22	45	19	48	•
216-71206	TC40H50D27F	40	27	50	21	58	•
216-71207	TC40H55D32F	40	32	55	24	78	•
▲ 216-71208	TC40H55D40F	40	40	55	27	88	•
216-71214	TC50H45D16F	50	16	45	17	38	•
216-71215	TC50H45D22F	50	22	45	19	48	•
216-71216	TC50H45D27F	50	27	45	21	58	•
216-71217	TC50H50D32F	50	32	50	24	78	•
▲ 216-71218	TC50H55D40F	50	40	55	27	88	•

▲ Zur gebohrten Ausführung, sehen Sie bitte Seite 48

▲ For drilled version, please see on page 48

▲ Pour le modèle percé voir à la page 48

▲ Per versione forata vedi pag 48

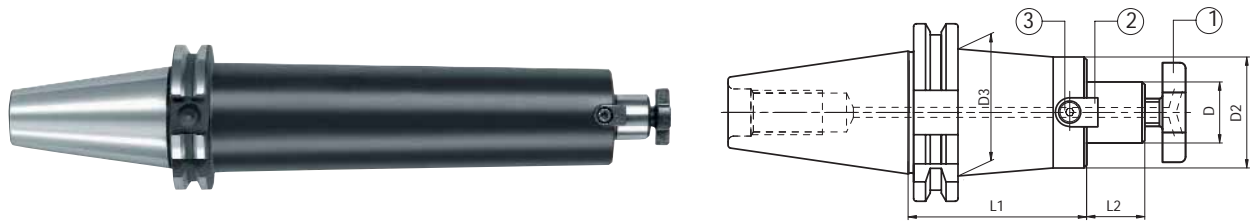
Ersatzteile • Spare parts • Pièces détachées • Componenti

D	Cross screw	Cross screw on enquiry	Tenon	Screw	Wrench
16	811-107003	811-107013	814-202280	811-101004	816-130002
22	811-107004	811-107014	814-202250	811-101011	816-130003
27	811-107005	811-107015	814-202270	811-101018	816-130004
32	811-107006	811-107016	814-202630	811-101029	816-130005
40	811-107007	811-107017	814-202710	811-101029	816-130006

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT-LANGE AUSFÜHRUNG
FACE MILL HOLDERS-TENONS DRIVE-LONG PROJECTION TYPE

MANDRINS PORTE-FRAISE-ENTRAÎNEMENT PAR TENONS-SERIE LONGUE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO-SERIE LUNGA

ISO 3937




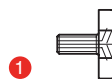

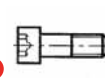
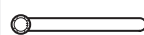
Code N.	Description	ISO	D	L1	L2	D2	D3		G6,3 ⁸⁰⁰⁰ RPM	
H 100	216-71255	TC40H100D16F	40	16	100	17	39	-	-	•
	216-71259	TC40H100D22F	40	22	100	19	46	48	A	•
	266-71273	TC40H100D27F	40	27	100	21	55	-	C	•
	266-71274	TC40H100D32F	40	32	100	24	66	-	-	•
	266-71275	TC40H100D40F	40	40	100	27	70	-	-	•
	266-71233	TC50H100D16F	50	16	100	17	38	-	-	•
	216-71267	TC50H100D22F	50	22	100	19	46	48	A	•
	216-71272	TC50H100D22F	50	22	100	19	50	60	B	•
	216-71277	TC50H100D27F	50	27	100	21	55	78	C	•
	266-71256	TC50H100D32F	50	32	100	24	66	78	-	•
266-71276	TC50H100D40F	50	40	100	27	70	78	-	•	
H 160	216-71256	TC40H160D16F	40	16	160	17	39	-	-	•
	216-71260	TC40H160D22F	40	22	160	19	46	48	A	•
	266-71234	TC50H160D16F	50	16	160	17	38	-	-	•
	216-71268	TC50H160D22F	50	22	160	19	46	48	A	•
	216-71273	TC50H160D22F	50	22	160	19	50	60	B	•
	216-71278	TC50H160D27F	50	27	160	21	55	78	C	•
	266-71257	TC50H160D32F	50	32	160	24	66	78	-	•
266-71287	TC50H160D40F	50	40	160	27	70	78	-	•	
H 200	216-71257	TC40H200D16F	40	16	200	17	39	-	-	•
	216-71261	TC40H200D22F	40	22	200	19	46	48	A	•
	266-71250	TC50H200D16F	50	16	200	17	39	-	-	•
	216-71269	TC50H200D22F	50	22	200	19	46	48	A	•
	216-71274	TC50H200D22F	50	22	200	19	50	60	B	•
	216-71279	TC50H200D27F	50	27	200	21	55	78	C	•
	266-71258	TC50H200D32F	50	32	200	24	66	78	-	•
266-71288	TC50H200D40F	50	40	200	27	70	78	-	•	

A/Für Fräser D50/Suitable for milling cutters D50/ Adaptes pour fraises D50/ Adatti per frese D50

B/Für Fräser D63/Suitable for milling cutters D63/ Adaptes pour fraises D63/ Adatti per frese D63

C/Für Fräser D80/Suitable for milling cutters D80/ Adaptes pour fraises D80/ Adatti per frese D80

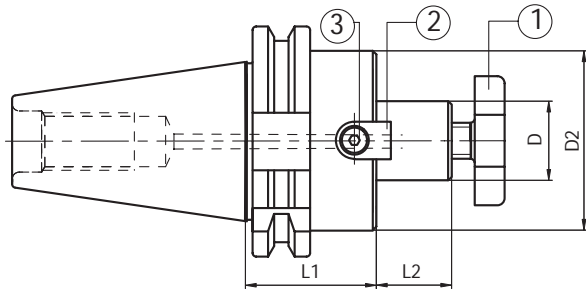
Ersatzteile • Spare parts • Pièces détachées • Componenti

D/D2	Cross Screw	Cross screw on enquiry	Tenon	Screw	Wrench
					
16	811-107003	811-107013	814-202280	811-101004	816-130002
22/46	811-107004	811-107014	814-202250	811-101011	816-130003
22/50	811-107004	811-107014	814-202260	811-101012	816-130003
27	811-107005	811-107015	814-202270	811-101017	816-130004
32	811-107006	811-107016	814-202290	811-101029	816-130005
40	811-107007	811-107017	814-202180	811-101028	816-130006

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT
QUERNUT UND KÜHLMITTELZUFUHR MIT GRÖßEREM BUND
FACE MILL HOLDERS-TENONS DRIVE WITH BIGGER FLANGE DIAMETER

MANDRINS PORTE-FRAISE-ENTRAÎNEMENT PAR TENONS BRIDE AJOUTÉE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO
CON FLANGIA MAGGIORATA

ISO 3937



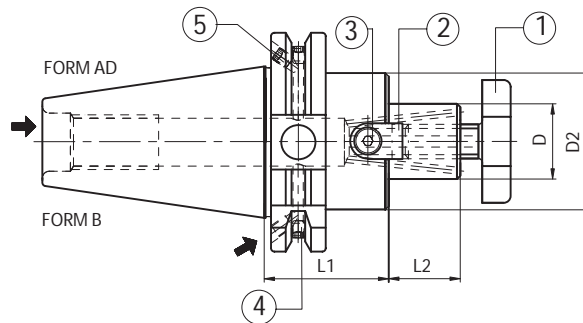
Code N.	Description	ISO	D	L1	L2	D2	G6,3 ⁸⁰⁰⁰ RPM
266-71279	TC40H46D22GX	40	22	46	19	60	•
266-71280	TC40H100D22GX	40	22	100	19	60	•
266-71281	TC50H45D22GX	50	22	45	19	60	•
266-71282	TC50H100D22GX	50	22	100	19	60	•

D	Cross screw	Cross screw on enquiry	Tenon	Screw	Wrench
22	811-107004	811-107014	814-20223	811-101013	816-130003

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT
UND KÜHLMITTELZUFUHR MIT GRÖßEREM BUND
FACE MILL HOLDERS-TENONS DRIVE WITH INTERNAL
COOLANT SUPPLY WITH BIGGER FLANGE DIAMETER



MANDRINS PORTE-FRAISE-ENTRAÎNEMENT PAR TENONS
AVEC ARROSAGE INTERNE BRIDE AJOUTÉE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO CON PASSAGGIO
REFRIGERANTE CON FLANGIA MAGGIORATA





ISO 3937



Code N.	Description	ISO	D	L1	L2	D2	G6,3 8000 RPM
216-71301	TC40H45D16F AD+B	40	16	45	17	38	•
216-71302	TC40H45D22F AD+B	40	22	45	19	48	•
216-71303	TC40H50D27F AD+B	40	27	50	21	58	•
216-71304	TC40H55D32F AD+B	40	32	55	24	78	•
216-71305	TC40H55D40F AD+B	40	40	55	27	88	•
216-71306	TC50H45D16F AD+B	50	16	45	17	38	•
216-71307	TC50H45D22F AD+B	50	22	45	19	48	•
216-71308	TC50H45D27F AD+B	50	27	45	21	58	•
216-71309	TC50H55D32F AD+B	50	32	55	24	78	•
216-71310	TC50H55D40F AD+B	50	40	55	27	88	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

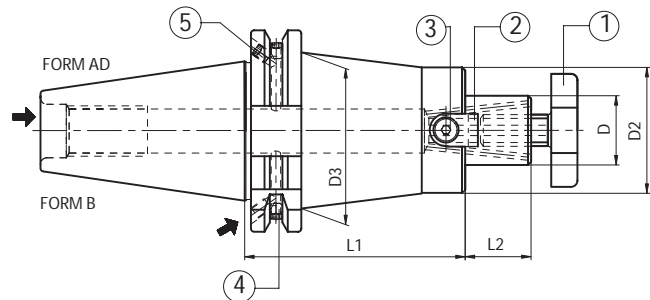
Tape	Screw	Quantity	Screw	Quantity
				
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2
ISO 50	811-102001 M4X4	2	811-102010 M5X6	2

D	Cross screw	Tenon	Screw	Wrench
				
16	811-107003	814-202280	811-101004	816-130002
22	811-107004	814-202250	811-101011	816-130003
27	811-107005	814-202270	811-101018	816-130004
32	811-107006	814-202630	811-101029	816-130005
40	811-107007	814-202710	811-101029	816-130006

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT UND
KÜHLMITTELZUFUHR-LANGE AUSFÜHRUNG
FACE MILL HOLDERS-TENONS DRIVE-WITH INTERNAL
COOLANT SUPPLY-LONG

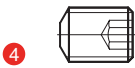
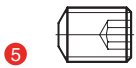
MANDRINS PORTE-FRAISE-ENTRAÎNEMENT PAR TENONS
AVEC ARROSAGE INTERNE-LONGUE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO CON
PASSAGGIO REFRIGERANTE-LUNGA



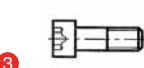

ISO 3937



Code N.	Description	ISO	D	L1	L2	D2	D3	G6,3 ⁸⁰⁰⁰ RPM	
H 100	216-71321	TC40H100D16F AD+B	40	16	100	17	32	42	•
	216-71322	TC40H100D22F AD+B	40	22	100	19	40	49	•
	216-71323	TC40H100D27F AD+B	40	27	100	21	48	-	•
	216-71324	TC40H100D32F AD+B	40	32	100	24	58	-	•
	216-71326	TC40H100D40F AD+B	40	40	100	27	70	-	•
	216-71312	TC50H100D16F AD+B	50	16	100	17	32	42	•
	216-71313	TC50H100D22F AD+B	50	22	100	19	40	55	•
	216-71314	TC50H100D27F AD+B	50	27	100	21	48	60	•
	216-71315	TC50H100D32F AD+B	50	32	100	24	58	68	•
	216-71316	TC50H100D40F AD+B	50	40	100	27	70	-	•

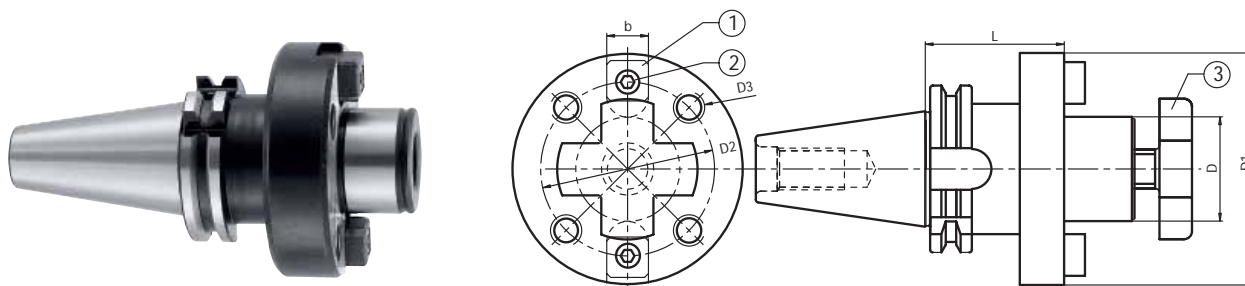
Ersatzteile • Spare parts • Pièces détachées • Componenti

Tape	Screw	Quantity	Screw	Quantity
				
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2
ISO 50	811-102001 M4X4	2	811-102010 M5X6	2

D	Cross screw	Tenon	Screw	Wrench
				
16	811-107003	814-20214	811-101003	816-130002
22	811-107004	814-20215	811-101010	816-130003
27	811-107005	814-20216	811-101017	816-130004
32	811-107006	814-20217	811-101027	816-130005
40	811-107007	814-20218	811-101028	816-130006

AUFSTECKFRÄSERDORNE FÜR MESSERKÖPFE MANDRINS PORTE-FRAISE POUR FRAISES A SURFACER
 FACE MILL HOLDER FOR FACE MILLING CUTTERS MANDRINI PORTAFRESE PER FRESE A SPIANARE




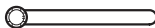
DIN 6357



Code N.	Description	ISO	D	L	D1	D2	D3	b	G6,3 8000 RPM
▲ 216-21201	TC40H60D40	40	40	60	89	66.7	M12	15.9	•
▲ 216-21202	TC50H70D40	50	40	70	89	66.7	M12	15.9	•
216-21203	TC50H70D60	50	60	70	129	101.6	M16	25.4	•

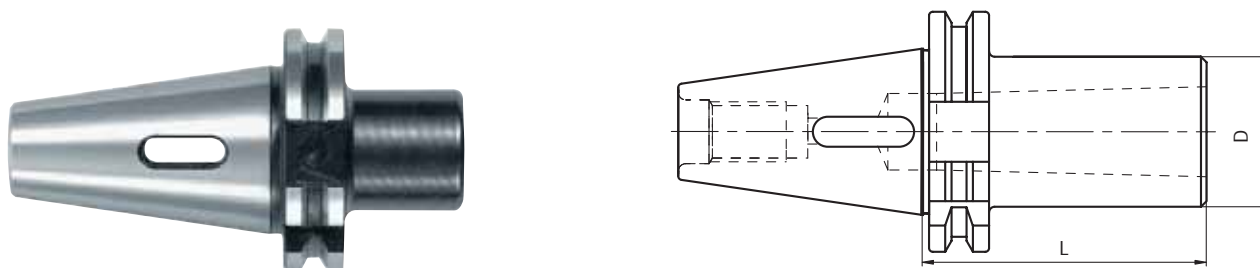
▲ Fornito con vite centrale inclusa • Supplied with internal screw

Ersatzteile • Spare parts • Pièces détachées • Componenti

D	Tenon	Screw	Screw	Wrench
				
40	814-202080	811-101028	811-107007	816-130006
60	814-202120	811-101063	-	-

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT AUSTREIBBLAPPEN DOUILLES POUR CONE MORSE A TENON
 MORSE TAPER ADAPTORS FOR DRILLS MANDRINI PORTAPUNTE ATTACCO CONO MORSE

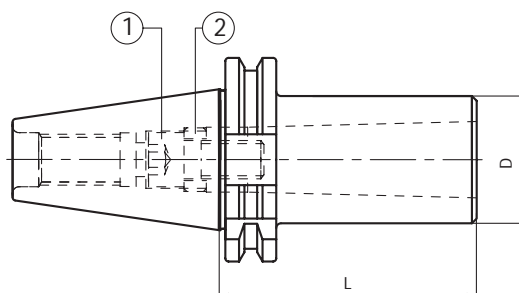
DIN 69871 AD



Code N.	Description	ISO	MORSE	D	L	G6,3 8000 RPM
212-41214	TC30H55CM1P	30	1	25	55	•
212-41215	TC30H60CM2P	30	2	32	60	•
212-41216	TC30H90CM3P	30	3	40	90	•
212-41201	TC40H50CM1P	40	1	25	50	•
212-41202	TC40H50CM2P	40	2	32	50	•
212-41203	TC40H70CM3P	40	3	40	70	•
212-41204	TC40H95CM4P	40	4	48	95	•
212-41205	TC50H50CM1P	50	1	25	50	•
212-41206	TC50H60CM2P	50	2	32	60	•
212-41207	TC50H65CM3P	50	3	40	65	•
212-41208	TC50H95CM4P	50	4	48	95	•
212-41209	TC50H120CM5P	50	5	63	120	•

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT ANZUGSGEWINDE DOUILLES POUR CONE MORSE AVEC TARAUDAGE
 MORSE TAPER ADAPTER WITH THREAD MANDRINI PORTAFRESE ATTACCO CONO MORSE

DIN 228-2 FORM C



Code N.	Description	ISO	MORSE	D	L	G6,3 ⁸⁰⁰⁰ RPM
212-21214	TC30H50CM1F	30	1	25	50	•
212-21215	TC30H60CM2F	30	2	32	60	•
212-21216	TC30H80CM3F	30	3	40	80	•
212-21201	TC40H50CM1F	40	1	25	50	•
212-21202	TC40H50CM2F	40	2	32	50	•
212-21203	TC40H70CM3F	40	3	40	70	•
212-21204	TC40H95CM4F	40	4	48	95	•
212-21205	TC50H45CM1F	50	1	25	45	•
212-21206	TC50H60CM2F	50	2	32	60	•
212-21207	TC50H65CM3F	50	3	40	65	•
212-21208	TC50H95CM4F	50	4	48	95	•
212-21209	TC50H120CM5F	50	5	63	120	•

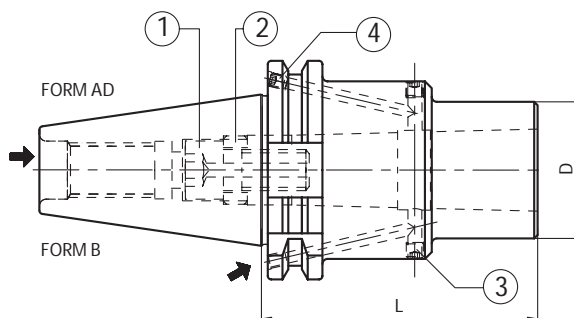
Ersatzteile • Spare parts • Pièces détachées • Componenti

TC/MORSE	Screw (TCA)	On enquiry	Ring
30/1	811-111009	-	811-302037
30/2	811-111007	-	811-302031
30/3	811-111008	-	811-302032
40/1	811-101029	-	811-302030
40/2	811-111007	811-111038	811-302031
40/3	811-111008	811-401098	811-302032
40/4	811-111005	811-401083	811-302036
50/1	811-101029	-	811-302030
50/2	811-101054	811-401084	811-302032
50/3	811-101065	811-401085	811-302032
50/4	811-401037	811-401086	811-302036
50/5	811-101092	811-401087	811-302034

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT ANZUGSGEWINDE
MORSE TAPER ADAPTER WITH THREAD

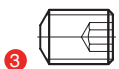
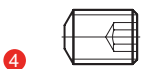
DOUILLES POUR CONE MORSE AVEC TARAUDAGE
MANDRINI PORTAFRESE ATTACCO CONO MORSE

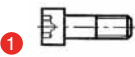
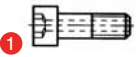

DIN 228-2 FORM C



Code N.	Description	ISO	MORSE	D	L	G6,3 8000 RPM
212-31321	TC40H50CM2F AD+B	40	2	32	50	•
212-31322	TC40H70CM3F AD+B	40	3	40	70	•
212-31323	TC40H95CM4F AD+B	40	4	48	95	•
212-31324	TC50H60CM2F AD+B	50	2	32	60	•
212-31325	TC50H65CM3F AD+B	50	3	40	65	•
212-31326	TC50H95CM4F AD+B	50	4	48	95	•
212-31327	TC50H120CM5F AD+B	50	5	63	120	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

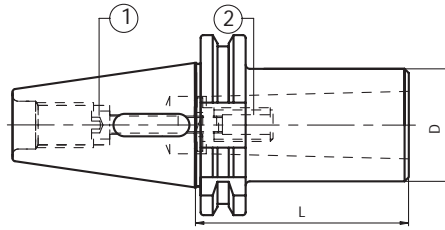
Tape/Morse	Screw	Quantity	Screw	Quantity
				
40/2	811-102002 M4X5	2	811-102002 M4X5	2
40/3,4	-	-	811-102002 M4X5	2
50/2,3	811-102001 M4X4	2	811-102010 M5X6	2
50/4,5	-	-	811-102010 M5X6	2

TC/MORSE	Screw (TCA)	On enquiry	Ring
			
40/2	811-111007	811-111038	811-302031
40/3	811-111008	811-401098	811-302032
40/4	811-111005	811-401083	811-302036
50/2	811-101054	811-401084	811-302032
50/3	811-101065	811-401085	811-302032
50/4	811-401037	811-401086	811-302036
50/5	811-101092	811-401087	811-302034

ZWISCHENHÜSLEN FÜR MORSEKEGEL MIT AUSTREIBLAPPEN ODER ANZUGSGEWINDE
MORSE TAPER ADAPTORS FOR DRILLS AND MILLS

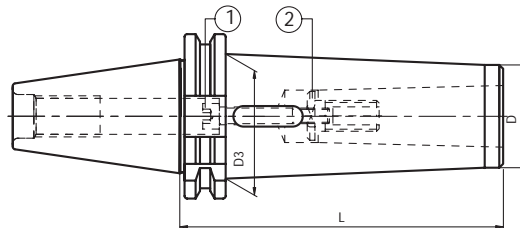
DOUILLES POUR CONE MORSE A TENON ET AVEC TARAUDAGE
MANDRINI PORTAPUNTE-PORTAFRESE ATTACCO CONO MORSE

DIN 228-2 FORM C/D



**Kombi
Version**

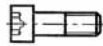

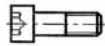

	Code N.	Description	ISO	MORSE	D	L	G6,3 ⁸⁰⁰⁰ RPM
STANDARD	212-61219	TC30H55CM1P/F	30	1	25	55	•
	212-61220	TC30H65CM2P/F	30	2	32	65	•
	212-61221	TC30H90CM3P/F	30	3	40	90	•
	212-61201	TC40H50CM1P/F	40	1	25	50	•
	212-61202	TC40H60CM2P/F	40	2	32	60	•
	212-61203	TC40H75CM3P/F	40	3	40	75	•
	212-61205	TC50H45CM1P/F	50	1	25	45	•
	212-61206	TC50H60CM2P/F	50	2	32	60	•
	212-61207	TC50H65CM3P/F	50	3	40	65	•
	212-61208	TC50H95CM4P/F	50	4	48	95	•
212-61209	TC50H120CM5P/F	50	5	63	120	•	



**Kombi
Version**

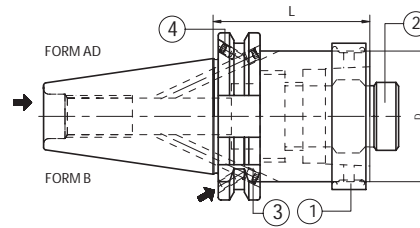
	Code N.	Description	ISO	MORSE	D	D3	L	G6,3 ⁸⁰⁰⁰ RPM
EXTENDED	212-61222	TC30H110CM1P/F	30	1	18	25	110	•
	212-61223	TC30H120CM2P/F	30	2	25	32	120	•
	212-61224	TC30H140CM3P/F	30	3	33	40	140	•
	212-61210	TC40H115CM1P/F	40	1	18	25	115	•
	212-61211	TC40H125CM2P/F	40	2	25	32	125	•
	212-61212	TC40H140CM3P/F	40	3	33	40	140	•
	212-61214	TC50H120CM1P/F	50	1	18	25	120	•
	212-61215	TC50H140CM2P/F	50	2	25	32	140	•
	212-61216	TC50H150CM3P/F	50	3	33	40	150	•
	212-61217	TC50H180CM4P/F	50	4	40	48	180	•
	212-61218	TC50H220CM5P/F	50	5	55	63	220	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

Code N.	Screw	Ring	Code N.	Screw	Ring
					
212-61219	811-101032	-	212-61222	811-101034	-
212-61220	811-101032	811-302010	212-61223	811-101035	811-302010
212-61221	811-101035	811-302006	212-61224	811-101037	811-302006
212-61201	811-101033	-	212-61210	811-101037	-
212-61202	811-401018	-	212-61211	811-401015	-
212-61203	811-101034	811-302006	212-61212	811-101081	811-302006
212-61205	811-101033	-	212-61214	811-101077	-
212-61206	811-101057	-	212-61215	811-101078	-
212-61207	811-101070	-	212-61216	811-101079	-
212-61208	811-401016	-	212-61217	811-401030	-
212-61209	811-101071	811-302008	212-61218	811-101080	811-302008

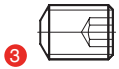

ZWISCHENHÜLSEN SK X HSK - MANUELLES SPANNSYSTEM
TAPER ADAPTER SA X HSK - MANUAL CLAMPING

DOUILLES INTERMEDIAIRES SA X HSK - SERRAGE MANUEL
MANDRINI RIDUZIONE DA TC A HSK - CHIUSURA MANUALE

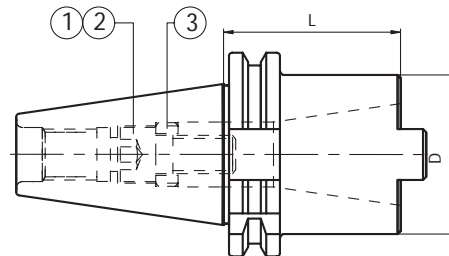


Code N.	Description	ISO	HSK	D	L	¹ Ring (complete)	² Locking unit (complete)
212-91305	TC40H50HSK40 AD+B	40	40	40	50	H40A-AN	H40A-UBL
212-91301	TC40H60HSK50 AD+B	40	50	50	60	H50A-AN	H50A-UBL
212-91302	TC40H80HSK63 AD+B	40	63	63	80	H63A-AN	H63A-UBL
212-91306	TC50H50HSK40 AD+B	50	40	40	50	H40A-AN	H40A-UBL
212-91303	TC50H50HSK50 AD+B	50	50	50	50	H50A-AN	H50A-UBL
212-91304	TC50H60HSK63 AD+B	50	63	63	60	H63A-AN	H63A-UBL

Ersatzteile • Spare parts • Pièces détachées • Componenti

Tape	Screw	Quantity	Screw	Quantity
				
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2
ISO 50	811-102001 M4X4	2	811-102010 M5X6	2

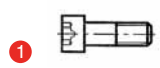
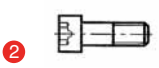

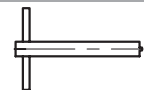
ZWISCHENHÜLSEN SK X SK DOUILLES INTERMEDIAIRES TC X SA
ISO TAPER ADAPTORS MANDRINI RIDUZIONE E PROLUNGHE DA DIN69871 A DIN2080/DIN69871/MAS403BT



DIN 69871 AD

Code N.	Description	ISO	ISO	D	L	G6,3 8000 RPM
212-11204	TC40H60ISO30/TC30	40	30	49	60	•
212-11213	TC40H100ISO40/TC40	40	40	68	100	•
212-11201	TC50H70ISO40/TC40	50	40	68	70	•
212-11214	TC50H120ISO50/TC50	50	50	100	120	•

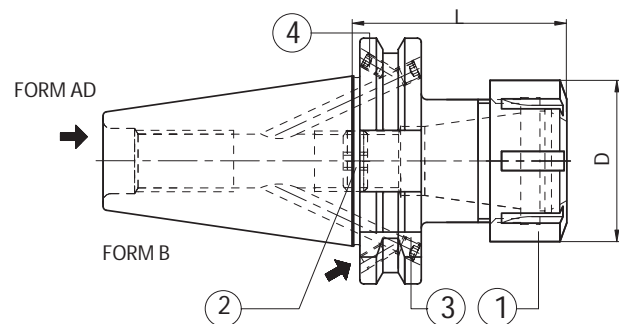
Ersatzteile • Spare parts • Pièces détachées • Componenti

OUTSIDE	INSIDE	Screw (ISO)	Screw (TC)	Ring	Wrench
					
40	30	811-401085	811-401146	811-302032	816-20206002
40	40	811-401147	811-401150	811-302036	816-20207002
50	40	811-401147	811-401150	811-302036	816-20209002
50	50	811-401151	811-401152	811-302047	816-20209002

Verschlusschraube für DIN69871/MAS BT/DIN2080 wird mitgeliefert und ist durchbohrt
Supplied with a bored screw DIN69871/MAS BT/DIN2080
Livré avec une vis de serrage DIN69871/MAS BT/DIN2080 percée
In dotazione vite per chiusura DIN69871/MAS BT/DIN2080 forata

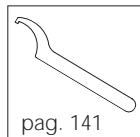
SPANNZANGENFUTTER ER TYP MANDRINS A PINCES TYPE ER
ER COLLET CHUCK MANDRINI PORTAPINZA TIPO ER

DIN 6499







Code N.	Description	ISO	ER	D	L	G2,5 25000 RPM
214-91301	TC40H70ER16 AD+B	40	16	32	70	•
214-91302	TC40H70ER25 AD+B	40	25	42	70	•
214-91303	TC40H70ER32 AD+B	40	32	50	70	•
214-91304	TC40H70ER40 AD+B	40	40	63	70	•
214-91305	TC50H70ER25 AD+B	50	25	42	70	•
214-91306	TC50H70ER32 AD+B	50	32	50	70	•
214-91307	TC50H80ER40 AD+B	50	40	63	80	•

Zubehör
Accessories
Accessoires
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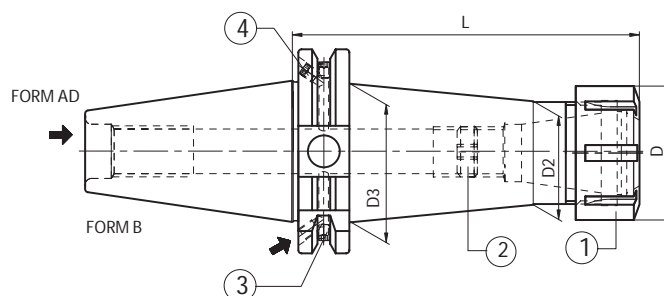
New line High balanced

Ersatzteile • Spare parts • Pièces détachées • Componenti

Tape	Screw	Quantity	Screw	Quantity	ER	Nut	Stop screw
	 3		 4			 1	 2
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2	16	812-203069	811-303119
ISO 50	811-102001 M4X4	2	811-102010 M5X6	2	25	812-203070	811-303121
					32	812-203071	811-303118
					40	812-203072	811-303122

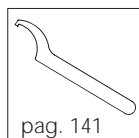
SPANNZANGENFUTTER ER TYP-LANG MANDRINS A PINCES TYPE ER-SERIE LONGUE
ER COLLET CHUCK-LONG MANDRINI PORTAPINZA TIPO ER-SERIE LUNGA

DIN 6499



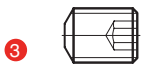
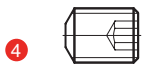
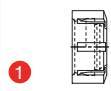
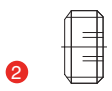
Code N.	Description	ISO	ER	D	L	D2	D3	G2,5 25000 RPM	
H 100	214-91308	TC40H100ER16 AD+B	40	16	32	100	22	32	•
	214-91309	TC40H100ER25 AD+B	40	25	42	100	32	42	•
	214-91310	TC40H100ER32 AD+B	40	32	50	100	40	50	•
	214-91311	TC40H100ER40 AD+B	40	40	63	100	50	50	•
	214-91312	TC50H100ER16 AD+B	50	16	32	100	22	32	•
	214-91313	TC50H100ER25 AD+B	50	25	42	100	32	42	•
	214-91314	TC50H100ER32 AD+B	50	32	50	100	40	50	•
	214-91315	TC50H100ER40 AD+B	50	40	63	100	50	63	•
H 160	214-91316	TC40H160ER16 AD+B	40	16	32	160	22	32	•
	214-91317	TC40H160ER25 AD+B	40	25	42	160	32	42	•
	214-91318	TC40H160ER32 AD+B	40	32	50	160	40	50	•
	214-91319	TC40H160ER40 AD+B	40	40	63	160	50	50	•
	214-91320	TC50H160ER16 AD+B	50	16	32	160	22	32	•
	214-91321	TC50H160ER25 AD+B	50	25	42	160	32	42	•
	214-91322	TC50H160ER32 AD+B	50	32	50	160	40	50	•
	214-91323	TC50H160ER40 AD+B	50	40	63	160	50	63	•

Zubehör
Accessories
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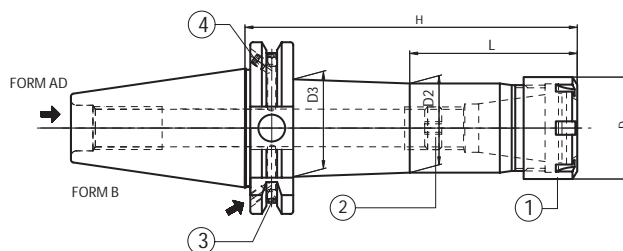
New line High balanced

Ersatzteile • Spare parts • Pièces détachées • Componenti

Tape	Screw	Quantity	Screw	Quantity	ER	Nut	Stop screw
							
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2	16	812-203069	811-303119
ISO 50	811-102001 M4X4	2	811-102010 M5X6	2	25	812-203070	811-303121
					32	812-203071	811-303118
					40	812-203072	811-303122

SPANNZANGENFUTTER ER MINI MANDRINS A PINCES TYPE ER MINI
ER MINI COLLET CHUCK MANDRINI PORTAPINZA TIPO ER MINI EXTRA SOTTILI

DIN 6499







Code N.	Description	ISO	ER	D	H	L	D2	D3	G2,5 25000 RPM
214-91333	TC40H70ER11M AD+B	40	11M	16	70	22	14	20	•
214-91334	TC40H100ER11M AD+B	40	11M	16	100	40	14	21	•
214-91335	TC40H160ER11M AD+B	40	11M	16	160	50	14	29	•
214-91336	TC40H70ER16M AD+B	40	16M	22	70	27	20	26	•
214-91337	TC40H100ER16M AD+B	40	16M	22	100	47	20	27	•
214-91338	TC40H160ER16M AD+B	40	16M	22	160	97	20	27	•
214-91339	TC40H70ER25M AD+B	40	25M	35	70	-	33	-	•
214-91340	TC40H100ER25M AD+B	40	25M	35	100	-	33	-	•
214-91341	TC40H160ER25M AD+B	40	25M	35	160	103	33	36	•
214-91342	TC50H70ER16M AD+B	50	16M	22	70	-	22	-	•
214-91343	TC50H100ER16M AD+B	50	16M	22	100	47	22	28	•
214-91344	TC50H160ER16M AD+B	50	16M	22	160	97	22	30	•
214-91345	TC50H70ER25M AD+B	50	25M	35	70	-	35	-	•
214-91346	TC50H100ER25M AD+B	50	25M	35	100	-	35	-	•
214-91347	TC50H160ER25M AD+B	50	25M	35	160	103	35	42	•

Zubehör
Accessories
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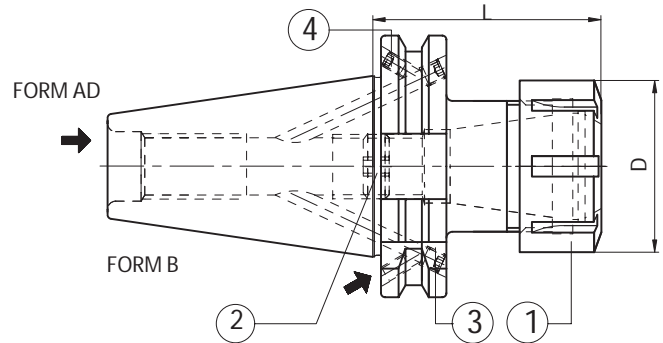
Slim line
High balanced

Ersatzteile • Spare parts • Pièces détachées • Componenti

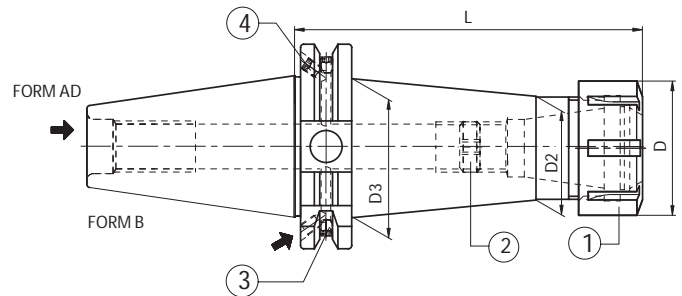
Tape	Screw	Quantity	Screw	Quantity	ER	Nut	Stop screw
							
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2	11M	812-203012	811-303081
ISO 50	811-102001 M4X4	2	811-102010 M5X6	2	16M	812-203013	811-303119
					25M	812-203015	811-303121

SPANNZANGENFUTTER ER TYP MANDRINS A PINCES TYPE ER
ER COLLET CHUCK MANDRINI PORTAPINZA TIPO ER

DIN 6499



	Code N.	Description	ISO	ER	D	L	G6,3 12000 RPM
STANDARD	*214-31211	TC30H55ER16	30	16	32	55	•
	*214-31212	TC30H55ER25	30	25	42	55	•
	*214-31228	TC30H60ER32	30	32	50	60	•
	214-31362	TC40H70ER16 AD+B	40	16	32	70	•
	214-31329	TC40H70ER25 AD+B	40	25	42	70	•
	214-31331	TC40H70ER32 AD+B	40	32	50	70	•
	214-31333	TC40H70ER40 AD+B	40	40	63	70	•
	214-31381	TC50H70ER16 AD+B	50	16	32	70	•
	214-31341	TC50H70ER25 AD+B	50	25	42	70	•
	214-31335	TC50H70ER32 AD+B	50	32	50	70	•
214-31338	TC50H80ER40 AD+B	50	40	63	80	•	



	Code N.	Description	ISO	ER	D	L	D2	D3	G6,3 12000 RPM
H 100	*214-31213	TC30H100ER16	30	16	32	100	22	28	•
	*214-31214	TC30H100ER25	30	25	42	100	32	32	•
	214-31363	TC40H100ER16 AD+B	40	16	32	100	22	32	•
	214-31347	TC40H100ER25 AD+B	40	25	42	100	32	42	•
	214-31348	TC40H100ER32 AD+B	40	32	50	100	40	50	•
	214-31364	TC40H100ER40 AD+B	40	40	63	100	50	50	•
	214-31365	TC50H100ER16 AD+B	50	16	32	100	22	32	•
	214-31342	TC50H100ER25 AD+B	50	25	42	100	32	42	•
	214-31336	TC50H100ER32 AD+B	50	32	50	100	40	50	•
	214-31339	TC50H100ER40 AD+B	50	40	63	100	50	63	•

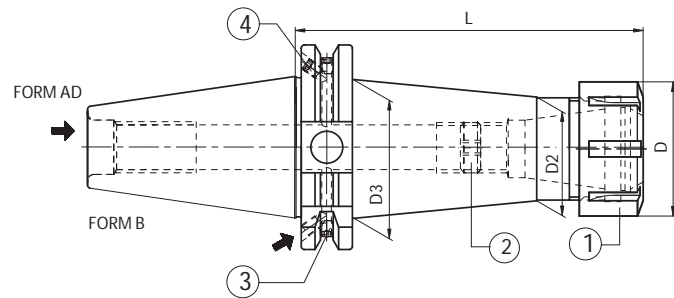
- * Ausführung Form AD
- * Execution form AD
- * Forme AD
- * Forma AD

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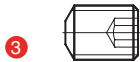
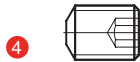
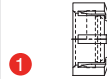
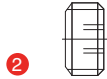
SPANNZANGENFUTTER ER TYP-LÄNGE AUSFÜHRUNG MANDRINS A PINCES TYPE ER-SERIE LONGUE
ER COLLET CHUCK-LONG MANDRINI PORTAPINZA TIPO ER-SERIE LUNGA

DIN 6499



	Code N.	Description	ISO	ER	D	L	D2	D3	G6,3 8000 RPM
H 160	214-31359	TC40H160ER16 AD+B	40	16	32	160	22	32	•
	214-31345	TC40H160ER25 AD+B	40	25	42	160	32	42	•
	214-31346	TC40H160ER32 AD+B	40	32	50	160	40	50	•
	214-31366	TC40H160ER40 AD+B	40	40	63	160	50	50	•
	214-31367	TC50H160ER16 AD+B	50	16	32	160	22	32	•
	214-31368	TC50H160ER25 AD+B	50	25	42	160	32	42	•
	214-31337	TC50H160ER32 AD+B	50	32	50	160	40	50	•
	214-31340	TC50H160ER40 AD+B	50	40	63	160	50	63	•
H 200	214-31369	TC40H200ER16 AD+B	40	16	32	200	22	32	•
	214-31370	TC40H200ER25 AD+B	40	25	42	200	32	42	•
	214-31371	TC40H200ER32 AD+B	40	32	50	200	40	50	•
	214-31372	TC40H200ER40 AD+B	40	40	63	200	50	50	•
	214-31373	TC50H200ER16 AD+B	50	16	32	200	22	32	•
	214-31374	TC50H200ER25 AD+B	50	25	42	200	32	42	•
	214-31375	TC50H200ER32 AD+B	50	32	50	200	40	50	•
	214-31376	TC50H200ER40 AD+B	50	40	63	200	50	63	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

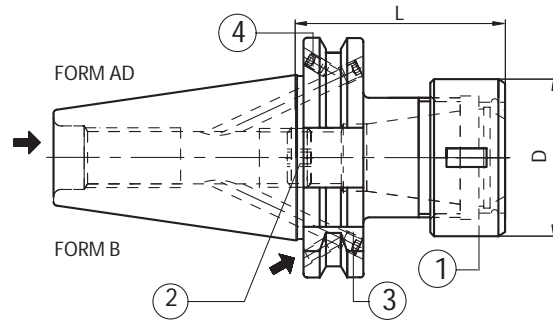
Tape	Screw	Quantity	Screw	Quantity	ER	Nut	Stop screw
							
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2	16	812-203005	811-303119
ISO 50	811-102001 M4X4	2	811-102010 M5X6	2	25	812-203001	811-303121
					32	812-203002	811-303118
					40	812-203003	811-303122

Zubehör
Accessories
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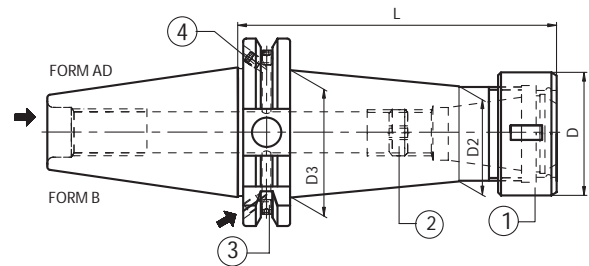


SPANNZANGENFUTTER EOC TYP MANDRINS A PINCES TYPE EOC
ER COLLET CHUCK MANDRINI PORTAPINZA TIPO EOC

DIN 6388

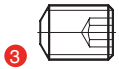
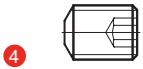


Code N.	Description	ISO	EOC	D	L	G6,3 12000 RPM
214-11320	TC40H70EOC16 AD+B	40	16	43	70	•
214-11321	TC40H70EOC25 AD+B	40	25	60	70	•
214-11322	TC50H70EOC25 AD+B	50	25	60	70	•
214-11323	TC50H80EOC32 AD+B	50	32	72	80	•



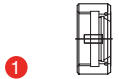

Code N.	Description	ISO	EOC	D	L	D2	D3	G6,3 8000 RPM
214-11324	TC40H130EOC16 AD+B	40	16	43	130	33	40	•
214-11325	TC40H130EOC25 AD+B	40	25	60	130	48	49	•
214-11326	TC50H130EOC25 AD+B	50	25	60	130	48	58	•
214-11327	TC50H130EOC32 AD+B	50	32	72	130	60	62	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

Type	Screw	Quantity	Screw	Quantity
				
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2
ISO 50	811-102001 M4X4	2	811-102010 M5X6	2

Zubehör
Accessories
Accessoires
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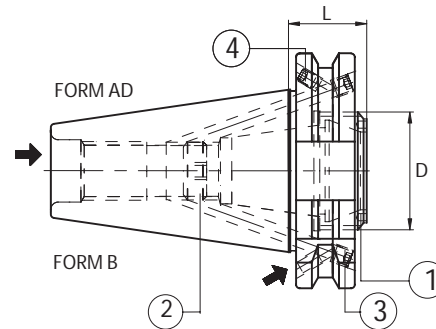


EOC	Nut	Stop screw	Wrench
			
16	GOC16	811-303121	CHEOC16
25	GOC25	811-303123	CHEOC25
32	GOC32	811-303123	CHEOC32

DIN 69871 AD/B



SPANNZANGENFUTTER ER TYP-LÄNGE EXTRAKURZ
ER COLLET CHUCK WITH INSIDE NUT

MANDRINS COURTS A PINCES TYPE ER
MANDRINI PORTAPINZA TIPO ER EXTRACORTI





Code N.	Description	ISO	ER	D	L	G6,3 12000 RPM
214-31377	TC40H21ER25A AD+B	40	25	32	21	•
*264-31215	TC40H21ER32A	40	32	40	21	•
214-31378	TC50H21ER32A AD+B	50	32	40	21	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

Tape	Screw	Quantity	Screw	Quantity
	 3		 4	
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2
ISO 50	811-102063 M5X4	2	811-102010 M5X6	2

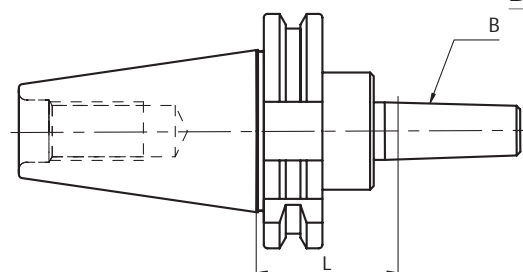
- * Ausführung Form AD
- * Execution form AD
- * Forme AD
- * Forma AD

ER	Nut	Stop screw	Wrench
	 1	 2	
25A	812-203057	811-303121	CHER25EX
32A	812-203032	811-303118	CHER32EX

DIN 69871 A

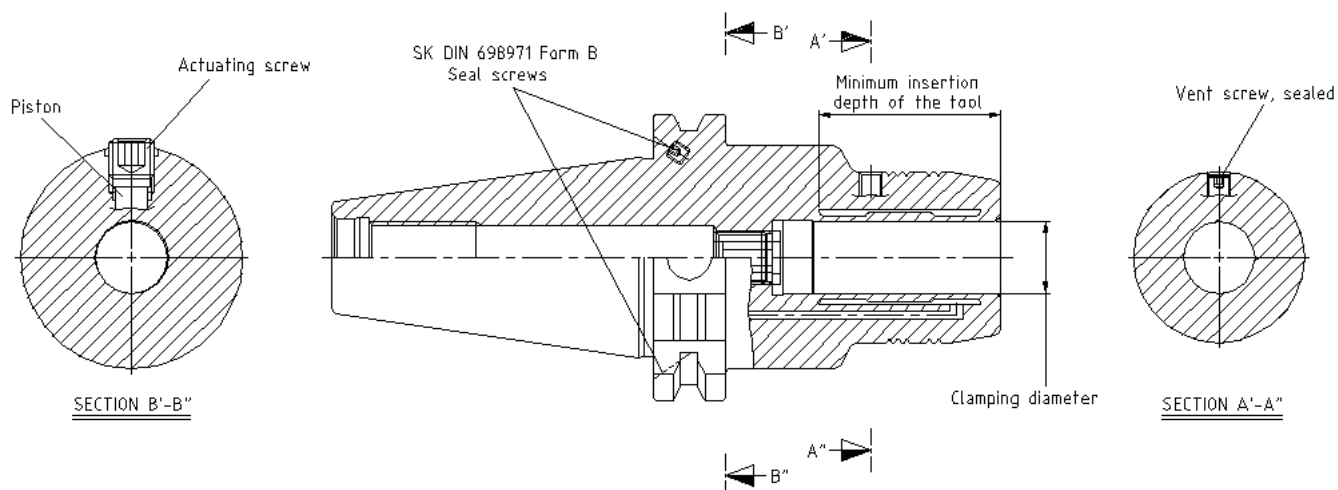
BOHRFUTTERAUFNAHMEN
ARBORS FOR DRILL CHUCKS

ARBRES POUR MANDRINS DE PERÇAGE
ATTACCO PER MANDRINI PORTAPUNTE



DIN 238

Code N.	Description	ISO	B	L	G6,3 8000 RPM
216-31207	TC30H40B12	30	12	40	•
216-31208	TC30H40B16	30	16	40	•
216-31201	TC40H40B16	40	16	40	•
216-31202	TC40H40B18	40	18	40	•
216-31203	TC50H40B16	50	16	40	•
216-31204	TC50H40B18	50	18	40	•



- Raccomandiamo di seguire le nostre istruzioni operative per risparmiare tempo ed evitare problemi / Please follow our operating instruction carefully to save time and avoid problems:

Tabella delle informazioni tecniche/ Chart of technical data:

Chuck Diameter (HC)	Shaft Clamping	Depending on the mounting shank (max RPM)	Minimum clamping length (mm)	Operating temperature	Max coolant pressure (bar)	Moment (Nm)
HC6	6 hb	40.000	27	20-50	80	8 Nm
HC8	8 hb	40.000	27	20-50	80	15 Nm
HC10	10 hb	40.000	32	20-50	80	30 Nm
HC12	12 hb	40.000	37	20-50	80	45 Nm
HC14	14 hb	40.000	37	20-50	80	75 Nm
HC16	16 hb	40.000	42	20-50	80	120 Nm
HC18	18 hb	40.000	42	20-50	80	170 Nm
HC20	20 hb	40.000	42	20-50	80	230 Nm
HC25	25 hb	25.000	48	20-50	80	300 Nm
HC32	32 hb	25.000	55	20-50	80	400 Nm

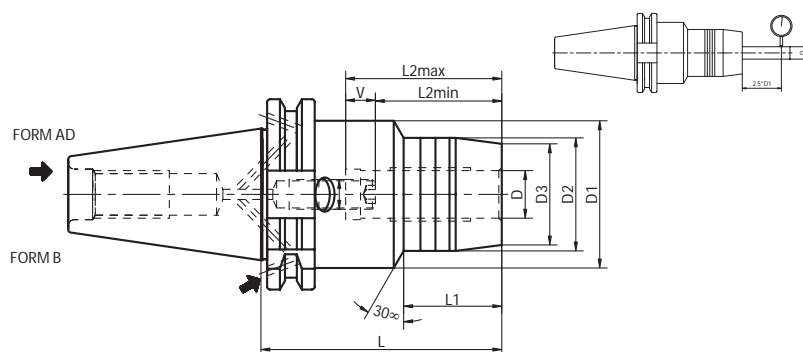
- La verifica della forza di serraggio deve essere fatta periodicamente. Si raccomanda di controllarla prima dell'utilizzo e dopo circa 100 operazioni o ogni 3 mesi / The clamping force must be checked periodically. We recommend to check it before initial use and approximately after 100 operations or every 3 months.

ATTENZIONE / ATTENTION

- Quando si montano gli utensili o le frese nel mandrino idraulico, la superficie interna del mandrino idraulico e quella esterna dell'utensile devono essere pulite da oli, polveri e residui / When tools or endmills are clamped into the hydraulic chucks, be sure that oils and dust are completely removed from the internal surface of the hydraulic chuck and the external surface of the tool.

HYDRO-DEHNSPANNFUTTER FÜR WERKZEUGE MIT ZYLINDERSCHAFT
HYDRO-EXPANSION CHUCKS FOR TOOLS WITH CYLINDRICAL SHANK

MANDRINS HYDRO-EXPANSIBLES POUR OUTILS A QUEUE CYLINDRIQUE
MANDRINI IDRAULICI PER UTENSILI ATTACCO CILINDRICO



Code N.	Description	ISO	D	D1	D2	D3	L	L1	L2 min	L2 max	V	M	G2,5 20000
252-11305	SK40-HC6-80.5	40	6	49,5	26	22	80,5	29,5	27	37	10	M5*0.8	•
252-11306	SK40-HC6-110	40	6	49,5	26	22	110	29,5	27	37	10	M5*5.8	•
252-11307	SK40-HC8-80.5	40	8	49,5	28	24	80,5	30	27	37	10	M6*1.0	•
252-11308	SK40-HC8-110	40	8	49,5	28	24	110	30	27	37	10	M6*1.0	•
252-11309	SK40-HC10-80.5	40	10	49,5	30	26	80,5	31	32	42	10	M8*1.0	•
252-11310	SK40-HC10-110	40	10	49,5	30	26	110	31	32	42	10	M8*1.0	•
252-11311	SK40-HC12-80.5	40	12	49,5	32	28	80,5	31,5	37	47	10	M10*1.0	•
252-11312	SK40-HC12-110	40	12	49,5	32	28	110	31,5	37	47	10	M10*1.0	•
252-11313	SK40-HC16-80.5	40	16	49,5	38	34	80,5	33	42	52	10	M12*1.0	•
252-11314	SK40-HC16-110	40	16	49,5	38	34	110	33	42	52	10	M12*1.0	•
252-11315	SK40-HC20-110	40	20	49,5	42	38	110	34	42	52	10	M16*1.0	•
252-11316	SK40-HC20-110	40	20	49,5	42	38	110	34	42	52	10	M16*1.0	•
252-11317	SK40-HC25-80.5	40	25	66	55	53	80,5	22	48	58	10	M16*1.0	•
252-11318	SK40-HC32-80.5	40	32	80	63	60	80,5	25,5	55	65	10	M16*1.0	•
252-11319	SK50-HC6-80.5	50	6	49,5	26	22	80,5	30	27	37	10	M5*0.8	•
252-11320	SK50-HC8-80.5	50	8	49,5	28	24	80,5	30	27	37	10	M6*1.0	•
252-11321	SK50-HC10-80.5	50	10	49,5	30	26	80,5	32	32	42	10	M8*1.0	•
252-11322	SK50-HC12-80.5	50	12	49,5	32	28	80,5	34	37	47	10	M10*1.0	•
252-11323	SK50-HC16-80.5	50	16	49,5	38	34	80,5	34	42	52	10	M12*1.0	•
252-11324	SK50-HC20-80.5	50	20	49,5	42	38	80,5	34	42	52	10	M16*1.0	•

New line High quality

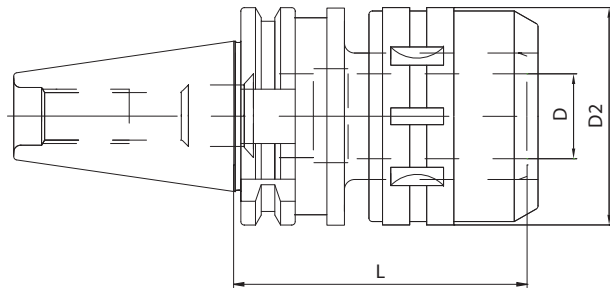
Code N.	Description	ISO	D	D1	D2	D3	L	L1	L2 min	L2 max	V	M	G2,5 20000
252-11325	SK40-G20CS-64.5	40	20	49,5	49,5	37	64,5	-	42	52	10	M16*1.0	•
252-11326	SK50-G32CS-81	50	32	72	72	55	81	-	55	65	10	M16*1.0	•

Zubehör
Accessories
Accessoires
Accessori



New line Short Heavy Design

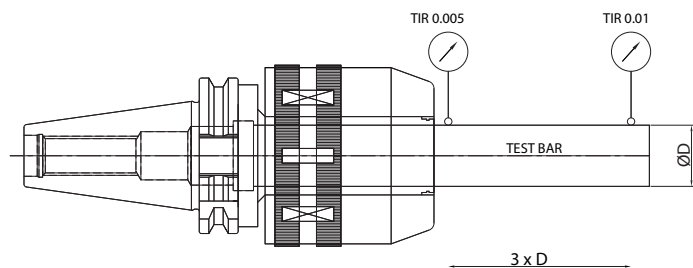
KRAFTSPANNFUTTER MANDRINS A FORT SERRAGE
MILLING CHUCK MANDRINI A FORTE SERRAGGIO



Code N.	Description	ISO	D	D2	L	G6,3 ¹²⁰⁰⁰ RPM
214-01301	TC40H105C20	40	20	54	105	-
214-01302	TC40H105C32	40	32	72	105	-
214-01303	TC40H135C32	40	32	72	135	-
214-01304	TC50H105C20	50	20	54	105	-
214-01305	TC50H105C32	50	32	72	105	-
214-01306	TC50H135C32	50	32	72	135	-

FORNITO CON CHIAVE INCLUSA • SUPPLIED WITH WRENCH

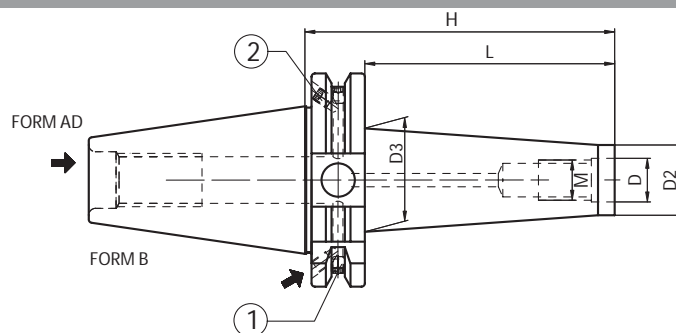
Zubehör
Accessories
Accessoires
Accessori



Milling chuck (diameter)	Specification (DIN)	Tolerance (Taper shank)	Run-out (3xD)	Clamping torque
C20	AT3	TC40 (0~+0,003)	0~0,01	980M.m (100 Kgf.m)
C32		TC50 (0~+0,004)		3430M.m (350 Kgf.m)

SPANFUTTER FÜR EINSCHRAUBFRÄSER
MILLING CUTTER ARBORS FOR SCREW-ON TYPE MILLING CUTTERS



MANDRINS POUR FRAISER A VISSER
MANDRINI PER FRESE CON ATTACCO FILETTATO



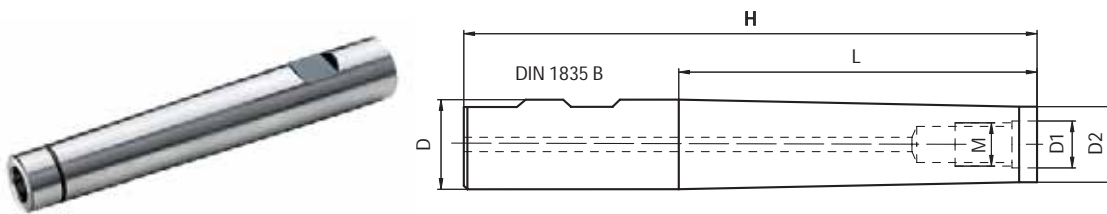
Code N.	Description	ISO	M	D	D2	D3	H	L	G2,5 ²⁵⁰⁰⁰ RPM
217-81301	TC40H69M8AD+B	40	M8	8.5	13	23	69	50	•
217-81302	TC40H94M8AD+B	40	M8	8.5	13	23	94	75	•
217-81303	TC40H119M8AD+B	40	M8	8.5	13	25	119	100	•
217-81304	TC40H69M10AD+B	40	M10	10.5	18	23	69	50	•
217-81305	TC40H94M10AD+B	40	M10	10.5	18	28	94	75	•
217-81306	TC40H119M10AD+B	40	M10	10.5	18	32	119	100	•
217-81307	TC40H69M12AD+B	40	M12	12.5	21	24	69	50	•
217-81308	TC40H94M12AD+B	40	M12	12.5	21	31	94	75	•
217-81309	TC40H119M12AD+B	40	M12	12.5	21	33	119	100	•
217-81310	TC40H69M16AD+B	40	M16	17	29	34	69	50	•
217-81311	TC40H94M16AD+B	40	M16	17	29	34	94	75	•
217-81312	TC40H119M16AD+B	40	M16	17	29	36	119	100	•
217-81313	TC40H144M16AD+B	40	M16	16.5	29	40	144	125	•
217-81314	TC50H69M12AD+B	50	M12	12.5	21	24	69	50	•
217-81315	TC50H119M12AD+B	50	M12	12.5	21	33	119	100	•
217-81316	TC50H169M12AD+B	50	M12	12.5	21	40	169	150	•
217-81317	TC50H69M16AD+B	50	M16	17	29	34	69	50	•
217-81318	TC50H119M16AD+B	50	M16	17	29	36	119	100	•
217-81319	TC50H169M16AD+B	50	M16	17	29	42.5	169	150	•

New line
High balanced

Ersatzteile • Spare parts • Pièces détachées • Componenti

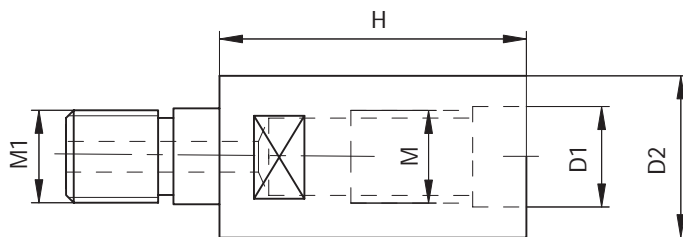
Tappe	Screw	Quantity	Screw	Quantity
				
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2
ISO 50	811-102001 M4X4	2	811-102010 M5X6	2

VERLÄNGERUNG FÜR EINSCHRAUBFRÄSER RALLONGES POUR FRAISES À VISSER
EXTENSION FOR SCREW IN TYPE MILLS PROLUNGHE PER FRESE CON ATTACCO FILETTATO



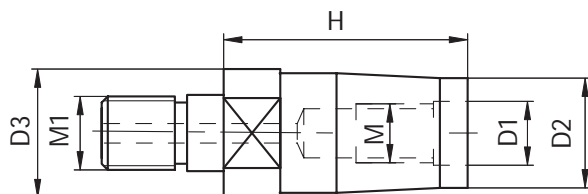
Code N.	Description	D	M	D1	D2	H	L
217-85201	D16H115M8	16	M8	8.5	12.8	115	60
217-85202	D16H160M8	16	M8	8.5	12.8	160	100
217-85203	D20H120M10	20	M10	10.5	17.8	120	60
217-85204	D20H160M10	20	M10	10.5	17.8	160	100
217-85205	D25H160M12	25	M12	12.5	20.8	160	100
217-85206	D32H160M16	32	M16	17	28.8	160	100

VERLÄNGERUNG FÜR EINSCHRAUBFRÄSER RALLONGES POUR FRAISES FILETÉE
EXTENSION FOR SCREW IN END MILLS PROLUNGHE PER FRESE FILETTATE



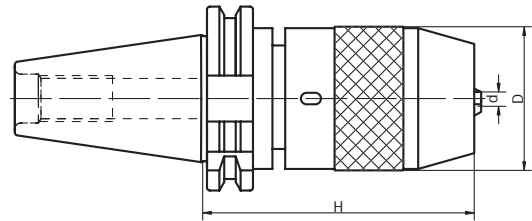
Code N.	Description	M	M1	D1	D2	H
217-85709	M8H30M8	M8	M8	8.5	12.8	30
217-85710	M10H35M10	M10	M10	10.5	17.8	35
217-85711	M12H40M12	M12	M12	12.5	20.8	40
217-85712	M16H40M16	M16	M16	17	28.8	40

VERLÄNGERUNG FÜR EINSCHRAUBFRÄSER RALLONGES POUR FRAISES FILETÉE
EXTENSION FOR SCREW IN END MILLS PROLUNGHE PER FRESE FILETTATE



Code N.	Description	M1	M	D1	D2	D3	H
217-85713	M10H30M8	M10	M8	8.5	12.8	17.8	30
217-85714	M12H40M8	M12	M8	8.5	12.8	20.8	40
217-85715	M12H35M10	M12	M10	10.5	17.8	20.8	35
217-85716	M16H60M10	M16	M10	10.5	17.8	28.8	60
217-85717	M16H40M12	M16	M12	12.5	20.8	28.8	40

NC-BOHRFUTTER MANDRINS UNIVERSELS DE PERCAGE
UNIVERSAL DRILL CHUCKS MANDRINI PORTAPUNTE INTEGRALI



Code N.	Description	ISO	H	D	Clamping capacity	Wrench
252-11211	TC40H95R1-13	40	95	50	1-13	816-152001
252-11212	TC40H115R3-16	40	115	57	3-16	816-152002
252-11213	TC50H85R1-13	50	85	50	1-13	816-152001
252-11214	TC50H95R3-16	50	95	57	3-16	816-152002

RUNDLAUFGENAUIGKEIT 0.04 MM

Zur Erhöhung der Spannkraft werden diese Futter mit Spannschlüssel geliefert.

BEI LINKS LAUFENDEN BEARBEITUNGEN SIND DIESE FUTTER NICHT ZU BENUTZEN.

RUNOUT ACCURACY 0.04 MM T.I.R.

Supplied with spanner wrench to allow the application of supplementary gripping torque.

DO NOT USE IN REVOLUTION IN COUNTER-CLOCKWISE DIRECTION.

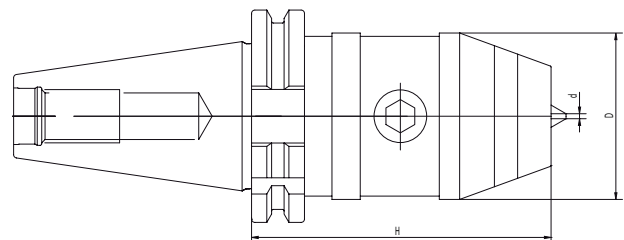
PRECISIONE DI ROTAZIONE 0.04 MM

Per incrementare la forza di serraggio i mandrini sono forniti con chiave di bloccaggio.

NON DEVONO ESSERE USATI PER LAVORAZIONI CON ROTAZIONE A SINISTRA.

NC-BOHRFUTTER FÜR RECHTS-UND LINKSLAUF MANDRIN DE PERCAGE CNC POUR ROTATION GAUCHE-DROITE
NC DRILL CHUCKS FOR LEFT AND RIGHT ROTATION MANDRINI PORTAPUNTE INTEGRALI PER ROTAZIONE DESTRA E SINISTRA

DIN 69871



Code N.	Description	ISO	H	D	Clamping capacity	Wrench
252-11301	TC40H90R1-13X	40	90	50	1-13	816-111024
252-11302	TC40H95R3-16X	40	95	57	3-16	816-111025
252-11303	TC50H90R1-13X	50	90	50	1-13	816-111024
252-11304	TC50H95R3-16X	50	95	57	3-16	816-111025

RUNDLAUFGENAUIGKEIT 0.03 MM

Sowohl für rechts- als auch links laufende Bearbeitungen geeignet, mit Höchstgeschwindigkeit von 7000 u/min.

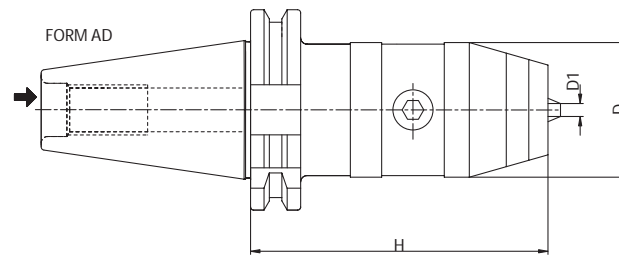
RUNOUT ACCURACY 0.03 MM T.I.R.

Suitable for right and left rotation up to 7000 rpm.

PRECISIONE DI ROTAZIONE 0.03 MM.

Adatti per rotazione sia destra che sinistra, con velocità max di 7000 g/min.

NC-BOHRFUTTER FÜR RECHTS-UND LINKSLAUF MANDRIN DE PERCAGE CNC POUR ROTATION GAUCHE-DROIT
 NC DRILL CHUCKS FOR LEFT AND RIGHT ROTATION MANDRINI PORTAPUNTE INTEGRALI PER ROTAZIONE DESTRA E SINISTRA



Code N.	Description	ISO	H	D	Clamping capacity
252-11215	TC40H90R0,5-13X	40	90	50	0,5-13
252-11216	TC40H95R2,5-16X	40	95	57	2,5-16
252-11217	TC50H106R0,5-13X	50	106	50	0,5-13
252-11218	TC50H111R2,5-16X	50	111	57	2,5-16

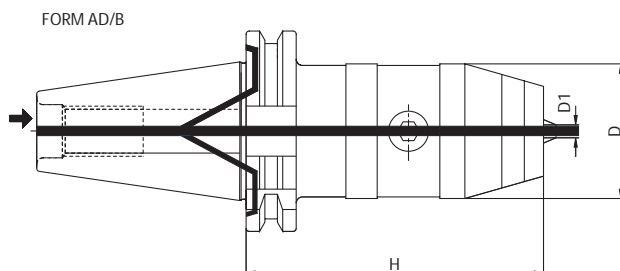
Runout accuracy 0,03 mm T.I.R

Suitable for right and left rotation up to 35000 rpm.

Precisione di rotazione 0,03 mm

Adatti per rotazione sia destra che sinistra, con velocità max di 35000 g/min.

New line High precision



DIN 69871 AD/B

Code N.	Description	ISO	H	D	Clamping capacity
252-11219	TC40H90R0,5-13X ADB	40	90	50	0,5-13
252-11220	TC40H95R2,5-16X ADB	40	95	57	2,5-16
252-11221	TC50H106R0,5-13X ADB	50	106	50	0,5-13
252-11222	TC50H111R2,5-16X ADB	50	111	57	2,5-16

Runout accuracy 0,03 mm T.I.R

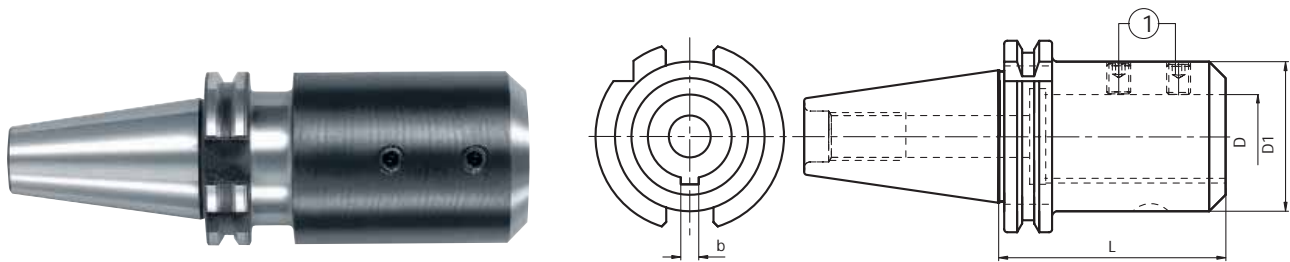
Suitable for right and left rotation up to 35000 rpm.

Precisione di rotazione 0,03 mm

Adatti per rotazione sia destra che sinistra, con velocità max di 35000 g/min.

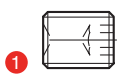
STELLHÜSENSAUFNAHMEN MANDRINS POUR DOUILLES REGLAGE
 MASTER SHANKS FOR ADJUSTABLE ADAPTORS MANDRINI PER ASTUCCI REGISTABILI

DIN 6327



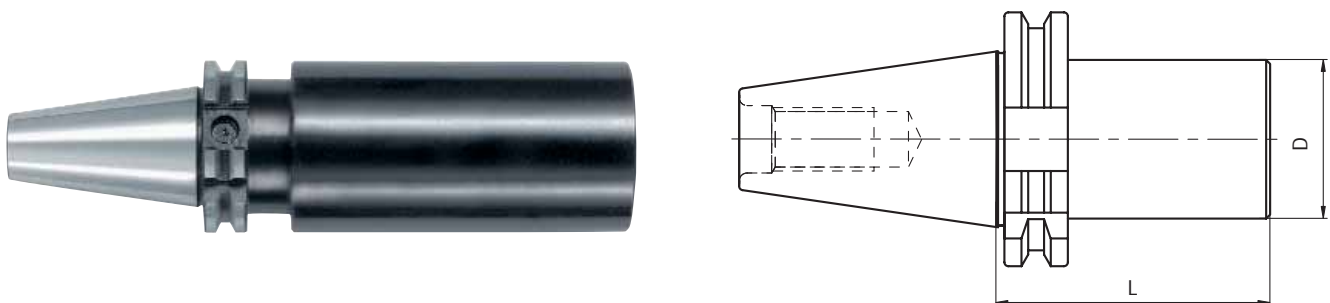
Code N.	Description	ISO	D	D1	L	b	G6,3 ⁸⁰⁰⁰ RPM
211-11201	TC40H70D28TR	40	28	50	70	6	•
211-11202	TC40H120D36TR	40	36	63	120	8	•
211-11203	TC50H100D28TR	50	28	50	100	6	•
211-11204	TC50H100D36TR	50	36	63	100	8	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

D	Screw
	
28	811-102027
36	811-102036

ROHLINGE MIT WEICHEM SCHAFT BARRES D'ALEPAGE SEMI-FINIES
 BLANK TOOLHOLDER WITH SOFT SHANK MANDRINI SEMILAVORATI A STELO TENERO

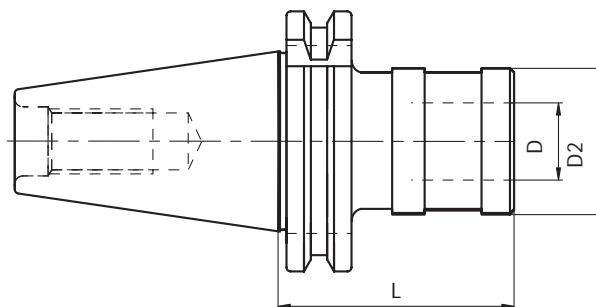
DIN 69871 A



Code N.	Description	ISO	D	L
217-41204	TC40H160D40.5SM	40	40.5	160
217-41205	TC40H160D63.5SM	40	63.5	160
217-41206	TC40H250D63.5SM	40	63.5	250
217-41207	TC50H160D80SM	50	80	160
217-41208	TC50H200D80SM	50	80	200
217-41209	TC50H300D80SM	50	80	300

GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT
LÄNGENAUSGLEICH
TENSION AND COMPRESSION TAPPING HEAD

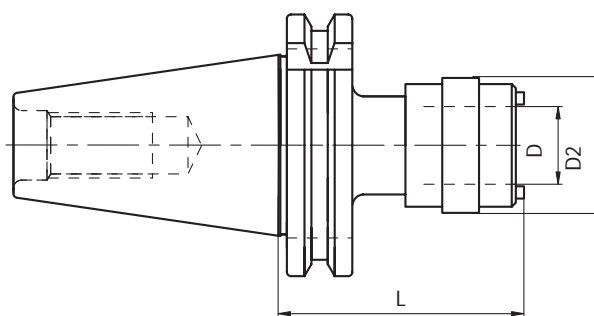
MANDRINS DE TARAUDAGE A CHANGEMENT
RAPIDE A DOUBLE USAGE
MASCHIATORI A DOPPIA COMPENSAZIONE



Code N.	Description	ISO	SIZE	Top range	PRESS.	EXT.	D	D2	L
M3008	TC30H60GR1.DC	30	1	M3-M12	9	9	19	38	60
M3009	TC30H101GR2.DC	30	2	M6-M20	15	15	31	53	101
M3010	TC40H60GR1.DC	40	1	M3-M12	9	9	19	38	60
M3110	TC40H92GR2.DC	40	2	M6-M20	15	15	31	53	92
M3210	TC40H138GR3.DC	40	3	M14-M33	24	24	48	78	138
M3030	TC50H62GR1.DC	50	1	M3-M12	9	9	19	38	62
M3130	TC50H83GR2.DC	50	2	M6-M20	15	15	31	53	83
M3230	TC50H133GR3.DC	50	3	M14-M33	24	24	48	78	133

GEWINDESCHNEID-SCHNELLWECHSELFUTTER
OHNE LÄNGENAUSGLEICH
SOLID TAPPING HEAD

MANDRINS DE TARAUDAGE A CHANGEMENT
RAPIDE SANS COMPENSATION
MASCHIATORI RIGIDI SENZA COMPENSAZIONE



Code N.	Description	ISO	SIZE	Top range	D	D2	L
M5010	TC30H59GR1.SC	30	1	M3-M12	19	33	59
M5030	TC30H82GR2.SC	30	2	M6-M20	31	50	82
M5020	TC40H59GR1.SC	40	1	M3-M12	19	33	59
M5040	TC40H82GR2.SC	40	2	M6-M20	31	50	82

Zubehör
Accessories
Accessoires
Accessori



The logo for KAMATEK, featuring the word "KAMATEK" in a bold, black, sans-serif font. The letter "A" is stylized with an orange and grey geometric shape integrated into it. The logo is positioned in the upper left quadrant of the page.

KAMATEK

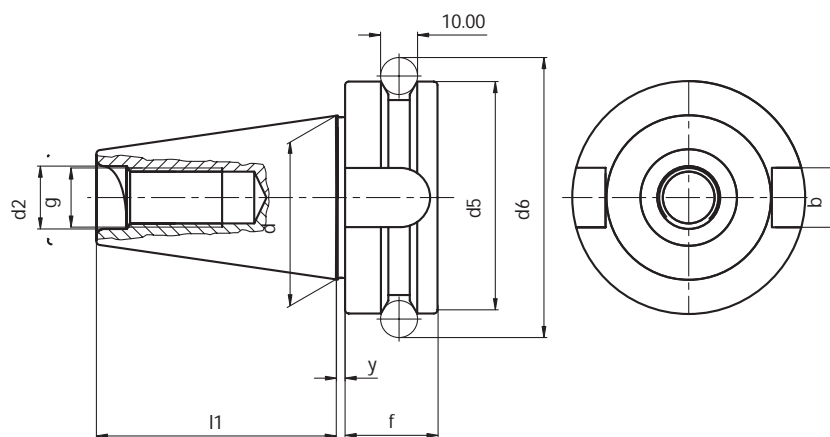
JIS B 6339 (MAS 403BT A-AD/B-AD)



JIS-B 6339 MAS 403/BT A-AD/B

TECHNISCHE DATEN DER STEILKEGELWERKZEUGE DONNEES TECHNIQUES QUEUE D'OUTILS
TAPER SHANKS DATA SHEET DATI TECNICI CONI D'ATTACCO

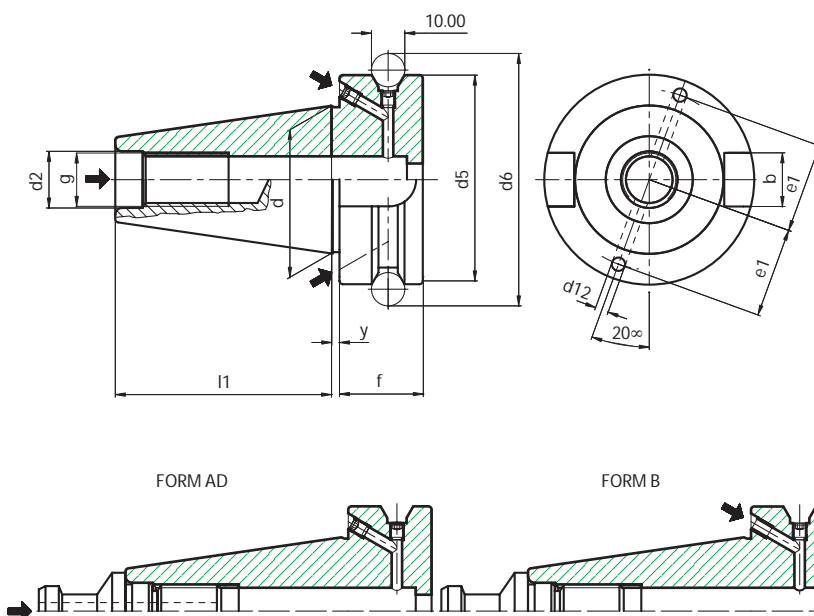
MAS 403/BT A



BT	d	l1	d2	g	y	d5	f	d6	b
30	31,75	48,4	13	M12	2	46	20	56,144	16,1
40	44,45	65,4	17	M16	2	63	25	75,68	16,1
50	69,85	101,8	25	M24	3	100	35	110,02	25,7

TECHNISCHE DATEN DER STEILKEGELWERKZEUGE DONNEES TECHNIQUES QUEUE D'OUTILS
TAPER SHANKS DATA SHEET DATI TECNICI CONI D'ATTACCO

MAS 403/BT AD/B



BT	d	l1	d2	g	y	d5	f	d6	d12	e1	b
40	44,45	65,4	17	M16	2	63	25	75,68	4	27	16,1
50	69,85	101,8	25	M24	3	100	35	110,02	5	42	25,7

For coolant through V-flange bores (B) or center of toolholders (AD). For central coolant, the V-flange channels are closed by socket screws.

Il lubrificante passa dai fori sulla flangia (B) oppure, chiudendo i fori con le apposite viti, dal centro del mandrino (AD).

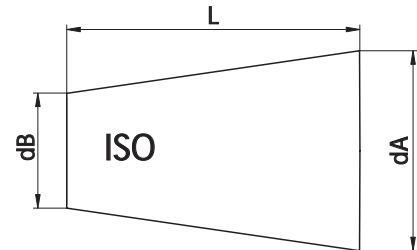


Alle Kintek-Steilkegelaufnahmen werden nach den DIN-Normen angefertigt.

KEGELSCHAFTTOLERANZ

In Klasse AT3 angefertigt.

ISO	L	dA-dB	AT3
30	42	12.250	+0.002
40	59	17.208	+0.003
50	92	26.833	+0.004



SPANNZANGENAUFNAHME RUNDLAUFGENAUIGKEIT

Die DIN 6391- Norm schreibt eine Rundlaufgenauigkeit zwischen Aussenkegel und Innenkegel / Spannzangensitz vom 0,016 vor. Unsere Spannzangenfutter weisen einen Rundlauffehler zwischen ISO-Kegelaufnahme und Spannzangensitz, der zwischen 0,003 und 0,010 mm liegt.

AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Kintek- Aufsteckfräsdorne entsprechen der DIN 6358- Norm, die einen höchsten Rundlauffehler zwischen ISO 30- und ISO40- Kegel und den Durchmessern 16-22-27-32-40 vom 0,01 vorsieht. Der mögliche höchste Rundlauffehler für ISO 50 ist 0,015 mm.

WELDON AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Nach der DIN 6359-1-Norm müssen die Weldon- Aufsteckfräsdorne die folgenden Forderungen aufweisen:
 Bohrung: Toleranz H5
 Rundlaufgenauigkeit: höchster möglicher Rundlauffehler zwischen Kegel und Weldonsitz < 0,01 (für ISO 40)
 Die vorgeschriebene Toleranz der Bohrung und eine durchschnittliche Rundlaufgenauigkeit von 0,005 sind erreicht.

WUCHTUNG

Die meisten Werkzeughalter dieser Gruppe sind in Klasse G6,3 auf 8.000 U/Min -1 vorgewuchtet oder auf 12.000 U/Min -1 gewuchtet. Neben der Übersichtstabelle der Produkte wird die Wuchtgüte angegeben.

KONSTRUKTIONSDATEN

- aus legiertem Einsatzstahl angefertigt
- in der Einsatzhärte tiefe von 0,4 - 0,5 mm
- gehärtet, angelassen
- Härte HRC58 +-2, Festigkeit 800-1000 N/mm²
- brüniert
- inneres, äußeres Schleifen und am Gewinde der Spannzangemutter

WUCHTUNG FÜR HÖHERE DREHZAHLEN

Die Steilkegelaufnahmen der neuen Linie werden in Klasse G2,5 auf 25.000 U/Min -1 gewuchtet.

KONSTRUKTIONSDATEN

- aus legiertem Einsatzstahl angefertigt
- in der Einsatzhärte tiefe von 0,4 - 0,5 mm
- gehärtet, angelassen
- Härte HRC 58 +- 2, Festigkeit 800-1000 N/mm²
- brüniert
- inneres, äußeres Schleifen des Kegels
- Schleifen der Vorderseite und am Gewinde der Spannzangemutter
- 100% durch zertifizierte Meßinstrumente geprüft und mit Wuchtungsprotokoll geliefert

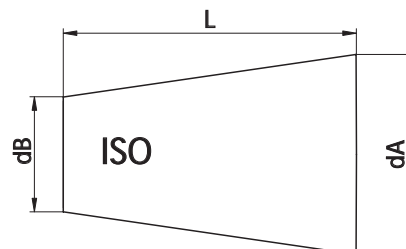


ALL KINTEK TOOLHOLDERS ARE MANUFACTURED ACCORDING TO DIN NORM.

CONE'S TOLERANCE

ACCORDING TO THE CLASS AT3.

ISO	L	dA-dB	AT3
30	42	12.250	+0.002
40	59	17.208	+0.003
50	92	26.833	+0.004



COLLET CHUCK'S RUNOUT ACCURACY

The norm DIN6391 permits a runout error between external cone and internal cone / collet seat of 0.016. Our production has a runout accuracy which is guaranteed to be within 0,003 / 0,010 m at the tool seat.

SHELL END MILL ADAPTOR'S RUNOUT ACCURACY

Our shell end mill adaptors meet the requirements of the norm DIN6358, which prescribes for diameters 16-22-27-32-40 a runout accuracy of: 0, 01 for SK 30/40 0,015 for SK 50.

WELDON END MILL HOLDER'S RUNOUT ACCURACY

According to the norm DIN6359-1 Weldon end mill holders have to meet the following requirements:

Bore: H5 tolerance

Runout accuracy: < 0.01 (for SK 40)

Our end mill adaptors ensure the prescribed holes' tolerance and have a runout accuracy which is normally 0.005

BALANCING

The major part of toolholders of this category can run up to 8000 rpm grade G 6,3 or 12000 rpm. Besides the descriptive and dimensional table of products, you can find the additive balancing grade.

CONSTRUCTIVE FEATURES

- Manufactured with Casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm2
- Black oxidized
- Internal and external grinding finished.

NEW HIGH-SPEED BALANCING TOOLHOLDERS

The new high-speed toolholders are balanced in the Grade G 2,5 at 25000 rpm.

CONSTRUCTIVE FEATURES FOR HIGH-SPEED TOOLHOLDERS

- Manufactured with casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm2
- Black oxidized
- Internal and external grinding finish of the cone
- Grinding finish on the front side and on the thread of collet nuts.
- Tested 100% with certified measuring instruments and supplied with balancing certificate

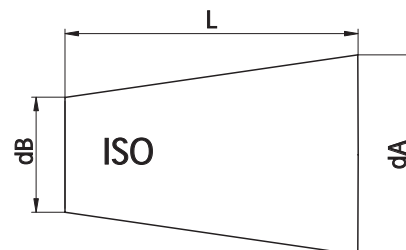


TOUS LES MANDRINS PORTE-OUTILS KINTEK SONT PRODUITS SUIVANT LES SPÉCIFICATIONS DIN

TOLLERANCE DU CONE

EN CLASSE AT3.

ISO	L	dA-dB	AT3
30	42	12.250	+0.002
40	59	17.208	+0.003
50	92	26.833	+0.004



COAXIALITE' PORTE-PINCE

La norme DIN6391 admet une erreur maximum du 0.016 soit pour les porte-pinces DIN6499 soit pour DIN6388. Dans notre production l'écart d'excentricité maximum entre cône ISO et logement de la pince est compris entre: 0,003 et 0,010 mm.

COAXIALITE' PORTE-FRAISES FIXES ET COMBINES

Les porte-fraises fixes et combinés de notre production suivent la spécification de la norme DIN6358, qui prévoit pour les diamètres 16-22-27-32-40 une concentricité de 0,01 pour ISO 30 et ISO 40 0,015 pour ISO 50

COAXIALITE' PORTE-FRAISES WELDON

Suivant les spécifications DIN 6359-1 les porte-fraises WELDON doivent suivre les conditions suivantes:

Trou : tolérance H5

Coaxialité: écart maximum toléré entre cône et logement du Weldon <0.01 (pour ISO 40).

Nous assurons la tolérance prévue sur le trou et une coaxialité en moyenne de 0.005.

EQUILIBRAGE

La plupart des porte-outils sont pré-équilibrés en classe G 6,3 8000 Tr/Min -1. ou équilibrés à 12000 Tr/Min-1. A côté du tableau de description et dimensions des produits il y a l'indication de la valeur d'équilibrage additionnel.

ELEMENTS DE CONSTRUCTION

- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm
- Trempés - Revenus
- Dureté HRC 58 +- 2 résistance 800-1000 N/ mm2
- Brunis
- Rectification du cône intérieur, extérieur et dans le filetage des écrous qui serrent la pince.

EQUILIBRAGE MANDRINS POUR HAUTE VITESSE

Les mandrins de la nouvelle ligne à haute vitesse sont équilibrés en classe G 2,5 à 25000 Tr/mn-1.

ELEMENTS DE CONSTRUCTION POUR MANDRINS HAUTE VITESSE

- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm
- Trempés - Revenus
- Dureté HRC 58 +- 2 résistance 800-1000 N/ mm2
- Brunis
- Finition de rectification intérieure, extérieure et du cône
- Rectification du cône intérieur et dans le filetage des écrous qui serrent la pince.
- Contrôlés à 100 % avec des instruments de mesure certifiés et livrés avec un certificat d'équilibrage.

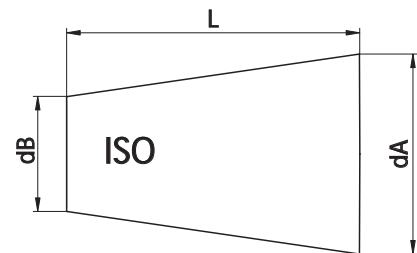


TUTTI I MANDRINI PORTAUTENSILI KINTEK VENGONO PRODOTTI SECONDO LE NORMATIVE DIN

TOLLERANZA DEL CONO

PRODOTTI IN CLASSE AT3.

ISO	L	dA-dB	AT3
30	42	12.250	+0.002
40	59	17.208	+0.003
50	92	26.833	+0.004



COASSIALITÀ PORTAPINZE

La norma DIN6391 ammette un'errore massimo di 0.016 sia per i portapinze DIN6499 che per DIN6388. La nostra produzione normalmente presenta uno scostamento massimo di eccentricità tra cono ISO e sede pinza compreso tra i 0,003 e 0,010 mm.

COASSIALITÀ PORTAFRESE FISSI E COMBINATI

I portafrese fissi e combinati di nostra produzione rispondono ai criteri prescritti dalla norma DIN6358, la quale prevede un errore massimo di coassialità tra cono ISO 30 e ISO 40 ed i diametri 16-22-27-32-40, di 0,01. Mentre per ISO 50 è ammesso un errore massimo di 0,015 mm.

COASSIALITÀ PORTAFRESE WELDON

Rispettando la normativa DIN 6359-1 i portafrese WELDON devono rispondere ai seguenti requisiti:
 foro: tolleranza H5
 coassialità: scostamento massimo consentito tra cono e sede Weldon <0.01 (per ISO 40)
 Garantiamo la tolleranza prescritta sul foro e un valore di coassialità mediamente di 0.005.

EQUILIBRATURA

La maggior parte dei portautensili presenti in questa categoria sono prebilanciati in classe G 6,3 8000 rpm min⁻¹. o bilanciati a 12000 giri rpm min⁻¹. A fianco della tabella descrittiva e dimensionale dei prodotti viene elencato il grado di equilibratura aggiuntiva.

DATI COSTRUTTIVI

- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +- 2 resistenza 800-1000 N/ mm2
- Bruniti
- Finitura di rettifica interna, esterna e nelle filettature delle ghiere chiudipinza

EQUILIBRATURA MANDRINI PER ALTE VELOCITÀ

I mandrini presenti nella linea nuova ad alta velocità vengono bilanciati in classe G 2,5 a 25000 rpm min⁻¹.

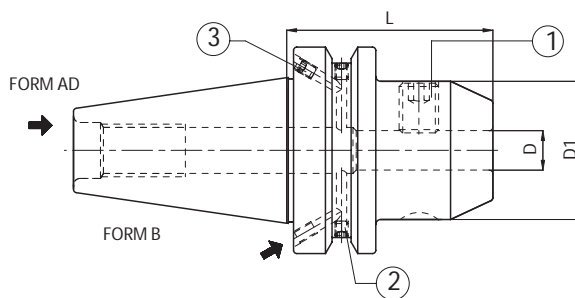
DATI COSTRUTTIVI PER MANDRINI PER ALTE VELOCITÀ

- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +- 2 resistenza 800-1000 N/ mm2
- Bruniti
- Finitura di rettifica interna, esterna del cono
- Rettifica parte anteriore e nelle filettature delle ghiere chiudipinza
- Collaudati 100% con strumenti di misura certificati e forniti con certificato di bilanciatura.

JIS-B 6339 MAS 403/BT AD/B

ZYLINDERSCHAFTAUFNAHME WELDON MANDRINS POUR OUTILS TYPE WELDON
 END MILL HOLDERS WELDON MANDRINI PORTAFRESE TIPO WELDON




DIN 1835 B



Code N.	Description	ISO	D	L	D1	G2,5 25000 RPM
213-91401	BT40H50WE06 AD+B	40	6	50	25	•
213-91402	BT40H50WE08 AD+B	40	8	50	28	•
213-91403	BT40H63WE10 AD+B	40	10	63	35	•
213-91404	BT40H63WE12 AD+B	40	12	63	42	•
213-91405	BT40H63WE14 AD+B	40	14	63	44	•
213-91406	BT40H63WE16 AD+B	40	16	63	48	•
213-91407	BT40H63WE18 AD+B	40	18	63	50	•
213-91408	BT40H63WE20 AD+B	40	20	63	52	•
213-91409	BT40H90WE25 AD+B	40	25	90	65	•
213-91410	BT40H100WE32 AD+B	40	32	100	72	•
213-91412	BT50H63WE06 AD+B	50	6	63	25	•
213-91413	BT50H63WE08 AD+B	50	8	63	28	•
213-91414	BT50H70WE10 AD+B	50	10	70	35	•
213-91415	BT50H80WE12 AD+B	50	12	80	42	•
213-91416	BT50H80WE14 AD+B	50	14	80	44	•
213-91417	BT50H80WE16 AD+B	50	16	80	48	•
213-91418	BT50H80WE18 AD+B	50	18	80	50	•
213-91419	BT50H80WE20 AD+B	50	20	80	52	•
213-91420	BT50H100WE25 AD+B	50	25	100	65	•
213-91421	BT50H105WE32 AD+B	50	32	105	72	•

New line High balanced

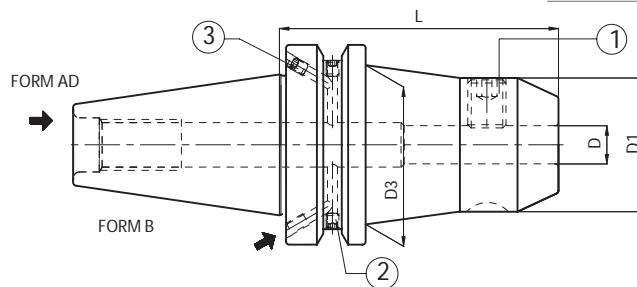
Ersatzteile • Spare parts • Pièces détachées • Componenti

Tape	Screw	Quantity	Screw	Quantity	D	Locking screw	Quantity
							
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2	6	811-106001	1
ISO 50	811-102002 M4X5	2	811-102010 M5X6	2	8	811-106002	1
					10	811-106004	1
					12,14	811-106005	1
					16,18	811-106006	1
					20	811-106007	1
					25	811-106008	2
					32	811-106009	2

JIS-B 6339 MAS 403/BT AD/B

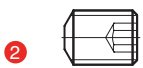
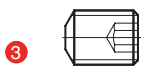
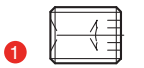
ZYLINDERSCHAFTAUFNAHME WELDON-LANG MANDRINS POUR OUTILS TYPE WELDON-SERIE LONGUE
 END MILL HOLDERS WELDON-LONG PROJECTION TYPE MANDRINI PORTAFRESE TIPO WELDON-SERIE LUNGA

DIN 1835 B



Code N.	Description	ISO	D	L	D1	D3	G2,5 ²⁵⁰⁰⁰ RPM	
H 100	213-91424	BT40H100WE06 AD+B	40	6	100	25	35	•
	213-91425	BT40H100WE08 AD+B	40	8	100	28	38	•
	213-91426	BT40H100WE10 AD+B	40	10	100	35	40	•
	213-91427	BT40H100WE12 AD+B	40	12	100	42	-	•
	213-91428	BT40H100WE14 AD+B	40	14	100	44	-	•
	213-91429	BT40H100WE16 AD+B	40	16	100	48	-	•
	213-91430	BT40H100WE18 AD+B	40	18	100	50	-	•
	213-91431	BT40H100WE20 AD+B	40	20	100	52	-	•
	213-91432	BT50H100WE06 AD+B	50	6	100	25	35	•
	213-91433	BT50H100WE08 AD+B	50	8	100	28	38	•
	213-91434	BT50H100WE10 AD+B	50	10	100	35	42	•
	213-91435	BT50H100WE12 AD+B	50	12	100	42	48	•
	213-91436	BT50H100WE14 AD+B	50	14	100	44	50	•
	213-91437	BT50H100WE16 AD+B	50	16	100	48	54	•
213-91438	BT50H100WE18 AD+B	50	18	100	50	62	•	
213-91439	BT50H100WE20 AD+B	50	20	100	52	66	•	
H 160	213-91440	BT40H160WE06AD+B	40	6	160	25	35	•
	213-91441	BT40H160WE08AD+B	40	8	160	28	38	•
	213-91442	BT40H160WE10AD+B	40	10	160	35	40	•
	213-91443	BT40H160WE12AD+B	40	12	160	42	-	•
	213-91444	BT40H160WE14AD+B	40	14	160	44	-	•
	213-91445	BT40H160WE16AD+B	40	16	160	48	-	•
	213-91446	BT40H160WE18AD+B	40	18	160	50	-	•
	213-91447	BT40H160WE20AD+B	40	20	160	52	-	•
	213-91448	BT40H160WE25AD+B	40	25	160	65	-	•
	213-91449	BT40H160WE32AD+B	40	32	160	72	-	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

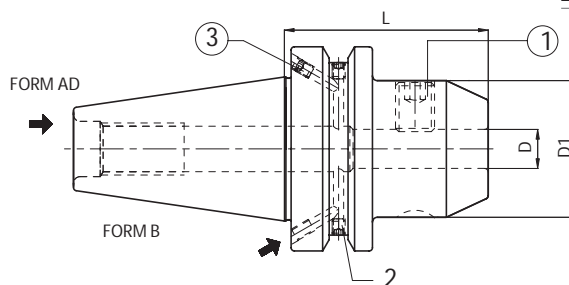
Tape	Screw	Quantity	Screw	Quantity	D	Locking screw	Quantity
							
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2	6	811-106001	1
ISO 50	811-102002 M4X5	2	811-102010 M5X6	2	8	811-106002	1
					10	811-106004	1
					12,14	811-106005	1
					16,18	811-106006	1
					20	811-106007	1
					25	811-106008	2
					32	811-106009	2

New line
High balanced

JIS-B 6339 MAS 403/BT AD/B

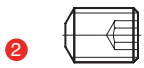
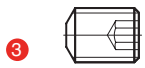
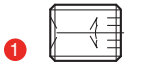
ZYLINDERSCHAFTAUFNAHME WELDON MANDRINS POUR OUTILS TYPE WELDON
END MILL HOLDERS WELDON MANDRINI PORTAFRESE TIPO WELDON

DIN 1835 B



Code N.	Description	ISO	D	L	D1	G6,3 12000 RPM
*263-11501	BT30H50WE06	30	6	50	25	•
*263-11502	BT30H50WE08	30	8	50	28	•
*263-11503	BT30H50WE10	30	10	50	35	•
*263-11504	BT30H55WE12	30	12	55	42	•
*263-11505	BT30H63WE16	30	16	63	48	•
*263-11506	BT30H70WE20	30	20	70	52	•
213-11413	BT40H50WE06 AD+B	40	6	50	25	•
213-11414	BT40H50WE08 AD+B	40	8	50	28	•
213-11415	BT40H63WE10 AD+B	40	10	63	35	•
213-11416	BT40H63WE12 AD+B	40	12	63	42	•
213-11417	BT40H63WE14 AD+B	40	14	63	44	•
213-11418	BT40H63WE16 AD+B	40	16	63	48	•
213-11419	BT40H63WE18 AD+B	40	18	63	50	•
213-11420	BT40H63WE20 AD+B	40	20	63	52	•
213-11421	BT40H90WE25 AD+B	40	25	90	65	•
213-11422	BT40H100WE32 AD+B	40	32	100	72	•
213-11465	BT40H105WE40 AD+B	40	40	105	80	•
213-11423	BT50H63WE06 AD+B	50	6	63	25	•
213-11424	BT50H63WE08 AD+B	50	8	63	28	•
213-11425	BT50H70WE10 AD+B	50	10	70	35	•
213-11426	BT50H80WE12 AD+B	50	12	80	42	•
213-11427	BT50H80WE14 AD+B	50	14	80	44	•
213-11428	BT50H80WE16 AD+B	50	16	80	48	•
213-11429	BT50H80WE18 AD+B	50	18	80	50	•
213-11430	BT50H80WE20 AD+B	50	20	80	52	•
213-11431	BT50H100WE25 AD+B	50	25	100	65	•
213-11432	BT50H105WE32 AD+B	50	32	105	72	•
213-11433	BT50H120WE40 AD+B	50	40	120	80	•
263-11425	BT50H125WE50 AD+B	50	50	125	100	•

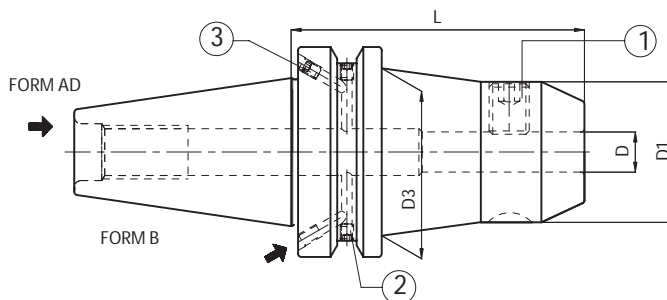
Ersatzteile • Spare parts • Pièces détachées • Componenti

Tape	Screw	Quantity	Screw	Quantity	D	Locking screw	Quantity
							
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2	6	811-106001	1
ISO 50	811-102002 M4X4	2	811-102010 M5X6	2	8	811-106002	1
					10	811-106004	1
					12,14	811-106005	1
					16,18	811-106006	1
					20	811-106007	1
					25	811-106008	2
					32	811-106009	2
					40	811-106009	2
					50	811-106011	2

- * Ausführung Form AD
- * Execution form AD
- * Forme AD
- * Forma AD

ZYLINDERSCHAFTAUFNAHME WELDON-LANG MANDRINS POUR OUTILS TYPE WELDON-SERIE LONGUE
 END MILL HOLDERS WELDON-LONG PROJECTION TYPE MANDRINI PORTAFRESE TIPO WELDON-SERIE LUNGA

DIN 1835 B



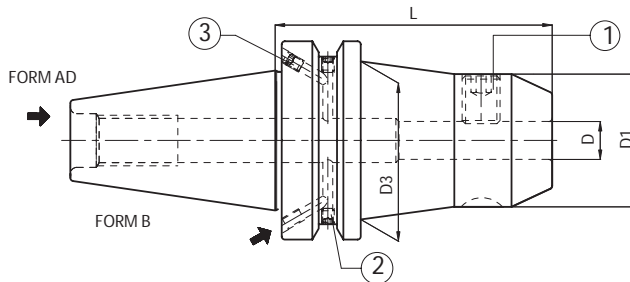
Code N.	Description	ISO	D	L	D1	D3	G6,3 12000 RPM	G6,3 8000 RPM									
H 100																	
									213-11434	BT40H100WE06 AD+B	40	6	100	25	35	•	
									213-11435	BT40H100WE08 AD+B	40	8	100	28	38	•	
									213-11436	BT40H100WE10 AD+B	40	10	100	35	40	•	
									213-11437	BT40H100WE12 AD+B	40	12	100	42	-	•	
									213-11438	BT40H100WE14 AD+B	40	14	100	44	-	•	
									213-11439	BT40H100WE16 AD+B	40	16	100	48	-	•	
									213-11440	BT40H100WE18 AD+B	40	18	100	50	-	•	
									213-11441	BT40H100WE20 AD+B	40	20	100	52	-	•	
									213-11448	BT50H100WE06 AD+B	50	6	100	25	35		•
									213-11449	BT50H100WE08 AD+B	50	8	100	28	38		•
									213-11450	BT50H100WE10 AD+B	50	10	100	35	42		•
									213-11451	BT50H100WE12 AD+B	50	12	100	42	48		•
									213-11452	BT50H100WE14 AD+B	50	14	100	44	50		•
									213-11453	BT50H100WE16 AD+B	50	16	100	48	54		•
213-11454	BT50H100WE18 AD+B	50	18	100	50	62		•									
213-11455	BT50H100WE20 AD+B	50	20	100	52	66		•									
H 160																	
									213-11442	BT40H160WE06 AD+B	40	6	160	25	35	•	
									213-11443	BT40H160WE08 AD+B	40	8	160	28	38	•	
									213-11444	BT40H160WE10 AD+B	40	10	160	35	40	•	
									213-11445	BT40H160WE12 AD+B	40	12	160	42	-	•	
									213-11446	BT40H160WE14 AD+B	40	14	160	44	-	•	
									213-11446	BT40H160WE16 AD+B	40	16	160	48	-	•	
									213-11467	BT40H160WE18 AD+B	40	18	160	50	-	•	
									213-11447	BT40H160WE20 AD+B	40	20	160	52	-	•	
									213-11468	BT40H160WE25 AD+B	40	25	160	65	-	•	
									213-11469	BT40H160WE32 AD+B	40	32	160	72	-	•	
									213-11457	BT50H160WE06 AD+B	50	6	160	25	42		•
									213-11458	BT50H160WE08 AD+B	50	8	160	28	45		•
									213-11459	BT50H160WE10 AD+B	50	10	160	35	49		•
									213-11460	BT50H160WE12 AD+B	50	12	160	42	55		•
									213-11470	BT50H160WE14 AD+B	50	14	160	44	57		•
									213-11461	BT50H160WE16 AD+B	50	16	160	48	60		•
213-11471	BT50H160WE18 AD+B	50	18	160	50	63		•									
213-11462	BT50H160WE20 AD+B	50	20	160	52	69		•									
213-11472	BT50H160WE25 AD+B	50	25	160	65	72		•									
213-11473	BT50H160WE32 AD+B	50	32	160	72	-		•									

JIS-B 6339 MAS 403/BT AD/B

ZYLINDERSCHAFTAUFNAHME WELDON-LANG AUSFÜHRUNG
END MILL HOLDERS WELDON-LONG PROJECTION TYPE




MANDRINS POUR OUTILS TYPE WELDON-SERIE LONGUE
MANDRINI PORTAFRESE TIPO WELDON-SERIE LUNGA

DIN 1835 B



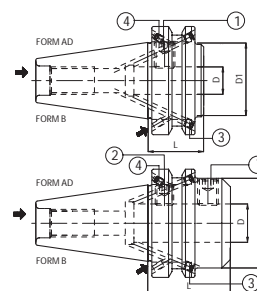
Code N.	Description	ISO	D	L	D1	D3	G6,3 8000 RPM	
H 200	213-11474	BT40H200WE06 AD+B	40	6	200	25	38	•
	213-11475	BT40H200WE08 AD+B	40	8	200	28	41	•
	213-11476	BT40H200WE10 AD+B	40	10	200	35	43	•
	213-11477	BT40H200WE12 AD+B	40	12	200	42	48	•
	213-11478	BT40H200WE14 AD+B	40	14	200	44	48	•
	213-11479	BT40H200WE16 AD+B	40	16	200	48	-	•
	213-11480	BT40H200WE18 AD+B	40	18	200	50	-	•
	213-11481	BT40H200WE20 AD+B	40	20	200	52	-	•
	213-11482	BT40H200WE25 AD+B	40	25	200	65	-	•
	213-11483	BT40H200WE32 AD+B	40	32	200	72	-	•
	213-11484	BT50H200WE06 AD+B	50	6	200	25	42	•
	213-11485	BT50H200WE08 AD+B	50	8	200	28	45	•
	213-11486	BT50H200WE10 AD+B	50	10	200	35	49	•
	213-11487	BT50H200WE12 AD+B	50	12	200	42	55	•
	213-11488	BT50H200WE14 AD+B	50	14	200	44	57	•
	213-11489	BT50H200WE16 AD+B	50	16	200	48	60	•
	213-11490	BT50H200WE18 AD+B	50	18	200	50	63	•
	213-11491	BT50H200WE20 AD+B	50	20	200	52	69	•
	213-11492	BT50H200WE25 AD+B	50	25	200	65	72	•
	213-11463	BT50H200WE32 AD+B	50	32	200	72	-	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

Tape	Screw	Quantity	Screw	Quantity	D	Locking screw	Quantity
	 2		 3			 1	
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2	6	811-106001	1
ISO 50	811-102002 M4X5	2	811-102010 M5X6	2	8	811-106002	1
					10	811-106004	1
					12,14	811-106005	1
					16,18	811-106006	1
					20	811-106007	1
					25	811-106008	2
					32	811-106009	2

KURZE ZYLINDERSCHAFTAUFNAHME WELDON MANDRINS COURTS PORTE-FRAISES TYPE WELDON
 SHORT END MILL WELDON HOLDERS MANDRINI CORTI PORTAFRESE TIPO WELDON

DIN 1835 B



Code N.	Description	ISO	D	L	D1	G6,3 12000
* 263-115600	BT30H35WE06 AD	30	6	35	25	-
* 263-115610	BT30H35WE08 AD	30	8	35	28	-
* 263-115620	BT30H35WE10 AD	30	10	35	35	-
* 263-115630	BT30H35WE12 AD	30	12	35	42	-
* 263-115640	BT30H35WE16 AD	30	16	35	42	-
* 263-115650	BT30H35WE20 AD	30	20	35	43	-
* 263-115660	BT30H35WE25 AD	30	25	35	45,5	-
213-11493	BT40H35WE16 AD+B	40	16	35	44	•
213-11494	BT40H35WE20 AD+B	40	20	35	44	•
213-11495	BT40H35WE25 AD+B	40	25	35	44	•
213-11496	BT40H60WE25 AD+B	40	25	60	49	•
213-11497	BT40H70WE32 AD+B	40	32	70	72	•
213-11498	BT50H44WE16 AD+B	50	16	44	70	•
213-11499	BT50H44WE20 AD+B	50	20	44	70	•
263-11401	BT50H44WE25 AD+B	50	25	44	70	•
263-11402	BT50H44WE32 AD+B	50	32	44	80	•

*Ausführung Form AD





*Execution form AD





*Forme AD

*Forma AD

Extra short and Rigid Version

Ersatzteile • Spare parts • Pièces détachées • Componenti

Type	Screw	Quantity	Screw	Quantity
	 		 	
ISO40	811-102002 M4X5	2	811-102002 M4X5	2
ISO50	811-102002 M4X5	2	811-102010 M5X6	2

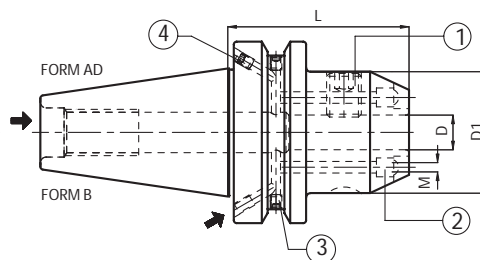
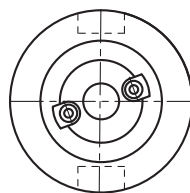
Code N.	Locking screw	Quantity	Locking screw	Quantity
	 		 	
263-115600	811-106001	1		
263-115610	811-106002	1		
263-115620	811-106004	1		
263-115630	811-106013	1		
263-115640	811-106026	1		
263-115650	811-106024	1		
263-115660	811-106026	1		
213-11493	811-106006	1		
213-11494	811-106027	1		
213-11495	811-106027	1		
213-11496	811-106014	1	811-106027	1
213-11497	811-106009	1	811-106046	1
213-11498	811-106006	1	-	
213-11499	811-106007	1	-	
263-11401	811-106008	1	-	
263-11402	811-106009	1	-	

JIS-B 6339 MAS 403/BT AD/B

ZYLINDERSCHAFTAUFNAHME WELDON MIT SPRITZDÜSEN
END MILL HOLDERS WELDON WITH COOLANT NOOSE FRONT FACE

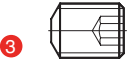
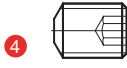
MANDRINS POUR OUTILS TYPE WELDON AVEC BUSE D'ARROSAGE
MANDRINI PORTAFRESE TIPO WELDON CON SFERE DI LUBRIFICAZIONE

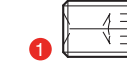
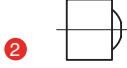
DIN 1835 B



Code N.	Description	ISO	D	L	D1	G2,5 25000 RPM
213-61401	BT40H50WE06-CNFF AD+B	40	6	50	25	•
213-61402	BT40H50WE08-CNFF AD+B	40	8	50	28	•
213-61403	BT40H63WE10-CNFF AD+B	40	10	63	35	•
213-61404	BT40H63WE12-CNFF AD+B	40	12	63	42	•
213-61405	BT40H63WE14-CNFF AD+B	40	14	63	44	•
213-61406	BT40H63WE16-CNFF AD+B	40	16	63	48	•
213-61407	BT40H63WE18-CNFF AD+B	40	18	63	50	•
213-61408	BT40H63WE20-CNFF AD+B	40	20	63	52	•
213-61409	BT40H90WE25-CNFF AD+B	40	25	90	65	•
213-61410	BT40H100WE32-CNFF AD+B	40	32	100	72	•
213-61411	BT40H105WE40-CNFF AD+B	40	40	105	80	•
213-61412	BT50H63WE06-CNFF AD+B	50	6	63	25	•
213-61413	BT50H63WE08-CNFF AD+B	50	8	63	28	•
213-61414	BT50H70WE10-CNFF AD+B	50	10	70	35	•
213-61415	BT50H80WE12-CNFF AD+B	50	12	80	42	•
213-61416	BT50H80WE14-CNFF AD+B	50	14	80	44	•
213-61417	BT50H80WE16-CNFF AD+B	50	16	80	48	•
213-61418	BT50H80WE18-CNFF AD+B	50	18	80	50	•
213-61419	BT50H80WE20-CNFF AD+B	50	20	80	52	•
213-61420	BT50H100WE25-CNFF AD+B	50	25	100	65	•
213-61421	BT50H105WE32-CNFF AD+B	50	32	105	72	•
213-61422	BT50H120WE40-CNFF AD+B	50	40	120	80	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

Type	Screw	Quantity	Screw	Quantity
				
ISO40	811-102002 M4X5	2	811-102002 M4X5	2
ISO50	811-102002 M4X5	2	811-102010 M5X6	2

D	Locking screw	Quantity	Coolant noose	M
				
6	811-106001	1	PWZ1005D6x4.5	D2.5
8	811-106002	1	PWZ1005D6x4.5	D2.5
10	811-106004	1	PWZ1005D6x4.5	D2.5
12,14	811-106005	1	PWZ1005D6x4.5	D2.5
16,18	811-106006	1	PWZ1008D10x7	M4
20	811-106007	1	PWZ1008D10x7	M4
25	811-106008	2	PWZ1012D12x8	M5
32	811-106009	2	PWZ1012D12x8	M5
40	811-106009	2	PWZ1012D12x8	M5

New line High balanced

Ausführung mit Kühlmittelzufuhr zentral und an dem Bund.

Durch die seitlichen Bohrungen und die Kühlmitteldüsen ermöglicht dieses System das Kühlmittel direkt an den Kontaktpunkt des Werkzeuges zu leiten.

Außerdem erfolgt Zentral-Kühlmittelzufuhr, wenn zwei Schrauben die Bohrungen verschliessen.

With central and lateral cooling possibility.

This type of system, thanks to two lateral holes, permits to direct the cooling jet through the two balls to the connection point of the tool.

Besides, with the application of two screws on the balls, you can have the lubrication through the centre.

Avec possibilité d'arrosage soit central, soit latéral.

Ce système, avec les trous latéraux, permet, avec les deux billes d'arrosage de diriger le liquide sur le point de contact de l'outil.

De plus, il est possible d'avoir l'arrosage au centre en bouchant avec des vis les trous des billes.

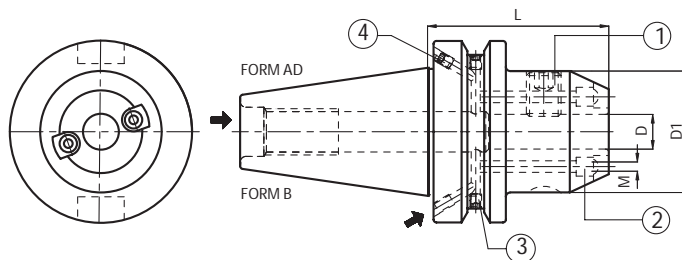
Con possibilità di refrigerazione sia centrale che laterale.

Questo tipo di sistema grazie ai due fori laterali, permette, mediante le due sfere di dirigere il getto del refrigerante nel punto di contatto dell'utensile. Inoltre, con l'applicazione di due grani sulle sfere si ottiene la lubrificazione attraverso il centro.

JIS-B 6339 MAS 403/BT AD/B

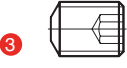
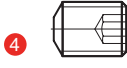
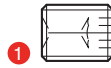
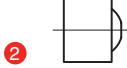
ZYLINDERSCHAFTAUFNAHME WELDON MIT SPRITZDÜSEN MANDRINS POUR OUTILS TYPE WELDON AVEC BUSE D'ARROSAGE
 END MILL HOLDERS WELDON WITH COOLANT NOOSE FRONT FACE MANDRINI PORTAFRESE TIPO WELDON CON SFERE DI LUBRIFICAZIONE

DIN 1835 B



Code N.	Description	ISO	D	L	D1	G6,3 12000 RPM
263-11403	BT40H50WE06-CNFF AD+B	40	6	50	25	•
263-11404	BT40H50WE08-CNFF AD+B	40	8	50	28	•
263-11405	BT40H63WE10-CNFF AD+B	40	10	63	35	•
263-11406	BT40H63WE12-CNFF AD+B	40	12	63	42	•
263-11407	BT40H63WE14-CNFF AD+B	40	14	63	44	•
263-11408	BT40H63WE16-CNFF AD+B	40	16	63	48	•
263-11409	BT40H63WE18-CNFF AD+B	40	18	63	50	•
263-11410	BT40H63WE20-CNFF AD+B	40	20	63	52	•
263-11411	BT40H90WE25-CNFF AD+B	40	25	90	65	•
263-11412	BT40H100WE32-CNFF AD+B	40	32	100	72	•
263-11413	BT40H105WE40-CNFF AD+B	40	40	105	80	•
263-11414	BT50H63WE06-CNFF AD+B	50	6	63	25	•
263-11415	BT50H63WE08-CNFF AD+B	50	8	63	28	•
263-11416	BT50H70WE10-CNFF AD+B	50	10	70	35	•
263-11417	BT50H80WE12-CNFF AD+B	50	12	80	42	•
263-11418	BT50H80WE14-CNFF AD+B	50	14	80	44	•
263-11419	BT50H80WE16-CNFF AD+B	50	16	80	48	•
263-11420	BT50H80WE18-CNFF AD+B	50	18	80	50	•
263-11421	BT50H80WE20-CNFF AD+B	50	20	80	52	•
263-11422	BT50H100WE25-CNFF AD+B	50	25	100	65	•
263-11423	BT50H105WE32-CNFF AD+B	50	32	105	72	•
263-11424	BT50H120WE40-CNFF AD+B	50	40	120	80	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

Type	Screw	Quantity	Screw	Quantity
				
ISO40	811-102002 M4X5	2	811-102002 M4X5	2
ISO50	811-102002 M4X5	2	811-102010 M5X6	2
D	Locking screw	Quantity	Coolant noose	M
				
6	811-106001	1	PWZ1005D6x4.5	D2.5
8	811-106002	1	PWZ1005D6x4.5	D2.5
10	811-106004	1	PWZ1005D6x4.5	D2.5
12,14	811-106005	1	PWZ1005D6x4.5	D2.5
16,18	811-106006	1	PWZ1008D10x7	M4
20	811-106007	1	PWZ1008D10x7	M4
25	811-106008	2	PWZ1012D12x8	M5
32	811-106009	2	PWZ1012D12x8	M5
40	811-106009	2	PWZ1012D12x8	M5

Ausführung mit Kühlmittelzufuhr zentral und an dem Bund.

Durch die seitlichen Bohrungen und die Kühlmitteldüsen ermöglicht dieses System das Kühlmittel direkt an den Kontaktpunkt des Werkzeuges zu leiten.

Außerdem erfolgt Zentral-Kühlmittelzufuhr, wenn zwei Schrauben die Bohrungen verschliessen.

With central and lateral cooling possibility.

This type of system, thanks to two lateral holes, permits to direct the cooling jet through the two balls to the connection point of the tool.

Besides, with the application of two screws on the balls, you can have the lubrication trough the centre.

Avec possibilité d'arrosage soit central, soit latéral.

Ce système, avec les trous latéraux, permet, avec les deux billes d'arrosage de diriger le liquide sur le point de contact de l'outil.

De plus, il est possible d'avoir l'arrosage au centre en bouchant avec des vis les trous des billes.

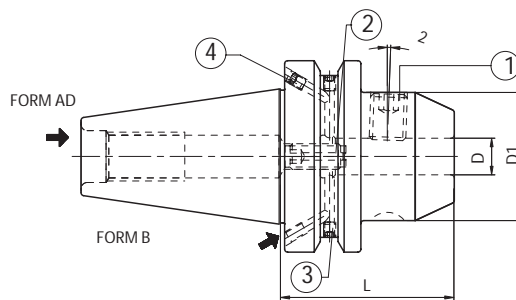
Con possibilità di refrigerazione sia centrale che laterale.

Questo tipo di sistema grazie ai due fori laterali, permette, mediante le due sfere di dirigere il getto del refrigerante nel punto di contatto dell'utensile. Inoltre, con l'applicazione di due grani sulle sfere si ottiene la lubrificazione attraverso il centro.

JIS-B 6339 MAS 403/BT AD/B

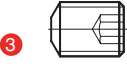
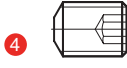
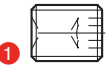
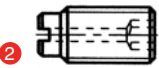
ZYLINDERSCHAFTAUFNAHME WHISTLE NOTCH MANDRINS POUR OUTILS TYPE WHISTLE NOTCH
 END MILL HOLDERS WHISTLE NOTCH MANDRINI PORTAFRESE TIPO WHISTLE NOTCH

DIN 1835 E



Code N.	Description	ISO	D	L	D1	G6,3 12000 RPM
213-31412	BT40H50WN06 AD+B	40	6	50	25	•
213-31413	BT40H50WN08 AD+B	40	8	50	28	•
213-31414	BT40H63WN10 AD+B	40	10	63	35	•
213-31415	BT40H63WN12 AD+B	40	12	63	42	•
213-31416	BT40H63WN14 AD+B	40	14	63	44	•
213-31417	BT40H63WN16 AD+B	40	16	63	48	•
213-31418	BT40H63WN18 AD+B	40	18	63	50	•
213-31419	BT40H63WN20 AD+B	40	20	63	52	•
213-31420	BT40H90WN25 AD+B	40	25	90	65	•
213-31421	BT40H100WN32 AD+B	40	32	100	72	•
213-31422	BT40H105WN40 AD+B	40	40	105	80	•
213-31423	BT50H63WN06 AD+B	50	6	63	25	•
213-31424	BT50H63WN08 AD+B	50	8	63	28	•
213-31425	BT50H70WN10 AD+B	50	10	70	35	•
213-31426	BT50H80WN12 AD+B	50	12	80	42	•
213-31427	BT50H80WN14 AD+B	50	14	80	44	•
213-31428	BT50H80WN16 AD+B	50	16	80	48	•
213-31429	BT50H80WN18 AD+B	50	18	80	50	•
213-31430	BT50H80WN20 AD+B	50	20	80	52	•
213-31431	BT50H100WN25 AD+B	50	25	100	65	•
213-31432	BT50H105WN32 AD+B	50	32	105	72	•
213-31433	BT50H120WN40 AD+B	50	40	120	80	•

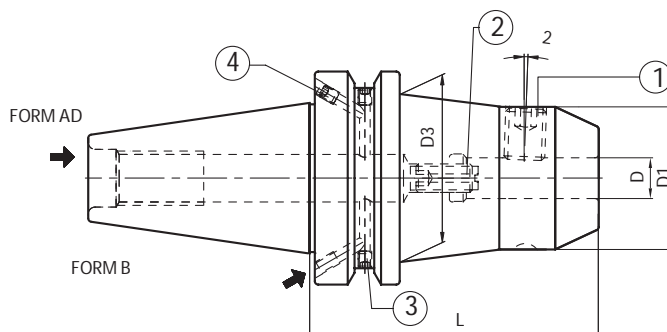
Ersatzteile • Spare parts • Pièces détachées • Componenti

Type	Screw	Quantity	Screw	Quantity
				
ISO40	811-102002 M4X5	2	811-102002 M4X5	2
ISO50	811-102002 M4X5	2	811-102010 M5X6	2
D	Locking screw	Quantity	Stop screw	M
				
6	811-106001	1	811-303043	1
8	811-106002	1	811-303081	1
10	811-106004	1	811-303082	1
12,14	811-106005	1	811-303083	1
16,18	811-106006	1	811-303084	1
20	811-106007	1	811-303084	1
25	811-106008	2	811-303085	1
32	811-106009	2	811-303085	1
40	811-106009	2	811-303085	1

JIS-B 6339 MAS 403/BT AD/B

ZYLINDERSCHAFTAUFNAHME WHISTLE NOTCH-LANGE AUSFÜHRUNG MANDRINS POUR OUTILS TYPE WHISTLE NOTCH-SERIE LONGUE
 END MILL HOLDERS WHISTLE NOTCH-LONG PROJECTION TYPE MANDRINI PORTAFRESE TIPO WHISTLE NOTCH-SERIE LUNGA

DIN 1835 E



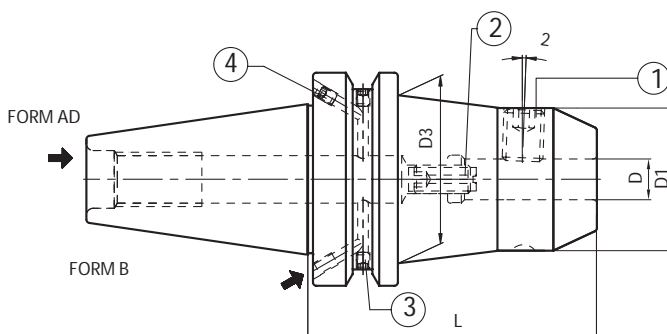
Code N.	Description	ISO	D	L	D1	D3	G6,3 12000 RPM	G6,3 8000 RPM	
H 100	213-31434	BT40H100WN06 AD+B	40	6	100	25	35	•	
	213-31435	BT40H100WN08 AD+B	40	8	100	28	38	•	
	213-31436	BT40H100WN10 AD+B	40	10	100	35	40	•	
	213-31437	BT40H100WN12 AD+B	40	12	100	42	-	•	
	213-31438	BT40H100WN14 AD+B	40	14	100	44	-	•	
	213-31439	BT40H100WN16 AD+B	40	16	100	48	-	•	
	213-31440	BT40H100WN18 AD+B	40	18	100	50	-	•	
	213-31441	BT40H100WN20 AD+B	40	20	100	52	-	•	
	213-31442	BT50H100WN06 AD+B	50	6	100	25	35		•
	213-31443	BT50H100WN08 AD+B	50	8	100	28	38		•
	213-31444	BT50H100WN10 AD+B	50	10	100	35	42		•
	213-31445	BT50H100WN12 AD+B	50	12	100	42	48		•
	213-31446	BT50H100WN14 AD+B	50	14	100	44	50		•
	213-31447	BT50H100WN16 AD+B	50	16	100	48	54		•
213-31448	BT50H100WN18 AD+B	50	18	100	50	62		•	
213-31449	BT50H100WN20 AD+B	50	20	100	52	66		•	
H 160	213-31450	BT40H160WN06 AD+B	40	6	160	25	35	•	
	213-31451	BT40H160WN08 AD+B	40	8	160	28	38	•	
	213-31452	BT40H160WN10 AD+B	40	10	160	35	40	•	
	213-31453	BT40H160WN12 AD+B	40	12	160	42	-	•	
	213-31454	BT40H160WN14 AD+B	40	14	160	44	-	•	
	213-31455	BT40H160WN16 AD+B	40	16	160	48	-	•	
	213-31456	BT40H160WN18 AD+B	40	18	160	50	-	•	
	213-31457	BT40H160WN20 AD+B	40	20	160	52	-	•	
	213-31458	BT40H160WN25 AD+B	40	25	160	65	-	•	
	213-31459	BT40H160WN32 AD+B	40	32	160	72	-	•	
	213-31460	BT50H160WN06 AD+B	50	6	160	25	42		•
	213-31461	BT50H160WN08 AD+B	50	8	160	28	45		•
	213-31462	BT50H160WN10 AD+B	50	10	160	35	49		•
	213-31463	BT50H160WN12 AD+B	50	12	160	42	55		•
	213-31464	BT50H160WN14 AD+B	50	14	160	44	57		•
	213-31465	BT50H160WN16 AD+B	50	16	160	48	60		•
	213-31466	BT50H160WN18 AD+B	50	18	160	50	63		•
	213-31467	BT50H160WN20 AD+B	50	20	160	52	69		•
	213-31468	BT50H160WN25 AD+B	50	25	160	65	72		•
213-31469	BT50H160WN32 AD+B	50	32	160	72	-		•	

JIS-B 6339 MAS 403/BT AD/B

ZYLINDERSCHAFTAUFNAHME WHISTLE NOTCH-LANGE AUSFÜHRUNG
END MILL HOLDERS WHISTLE NOTCH-LONG PROJECTION TYPE

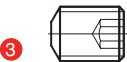
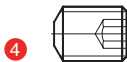


MANDRINS POUR OUTILS TYPE WHISTLE NOTCH-SERIE LONGUE
MANDRINI PORTAFRESE TIPO WHISTLE NOTCH-SERIE LUNGA

DIN 1835 E



Code N.	Description	ISO	D	L	D1	D3	G6,3 ⁸⁰⁰⁰ RPM
213-31470	BT40H200WN06 AD+B	40	6	200	25	38	•
213-31471	BT40H200WN08 AD+B	40	8	200	28	41	•
213-31472	BT40H200WN10 AD+B	40	10	200	35	43	•
213-31473	BT40H200WN12 AD+B	40	12	200	42	48	•
213-31474	BT40H200WN14 AD+B	40	14	200	44	48	•
213-31475	BT40H200WN16 AD+B	40	16	200	48	-	•
213-31476	BT40H200WN18 AD+B	40	18	200	50	-	•
213-31477	BT40H200WN20 AD+B	40	20	200	52	-	•
213-31478	BT40H200WN25 AD+B	40	25	200	65	-	•
213-31479	BT40H200WN32 AD+B	40	32	200	72	-	•
213-31480	BT50H200WN06 AD+B	50	6	200	25	42	•
213-31481	BT50H200WN08 AD+B	50	8	200	28	45	•
213-31482	BT50H200WN10 AD+B	50	10	200	35	49	•
213-31483	BT50H200WN12 AD+B	50	12	200	42	55	•
213-31484	BT50H200WN14 AD+B	50	14	200	44	57	•
213-31485	BT50H200WN16 AD+B	50	16	200	48	60	•
213-31486	BT50H200WN18 AD+B	50	18	200	50	63	•
213-31487	BT50H200WN20 AD+B	50	20	200	52	69	•
213-31488	BT50H200WN25 AD+B	50	25	200	65	72	•
213-31489	BT50H200WN32 AD+B	50	32	200	72	-	•

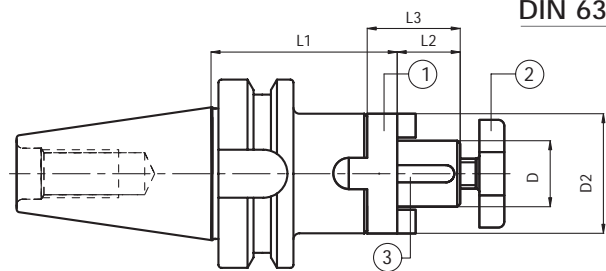
Ersatzteile • Spare parts • Pièces détachées • Componenti

Type	Screw	Quantity	Screw	Quantity
				
ISO40	811-102002 M4X5	2	811-102002 M4X5	2
ISO50	811-102002 M4X5	2	811-102010 M5X6	2
D	Locking screw	Quantity	Stop screw	M
				
6	811-106001	1	811-303043	1
8	811-106002	1	811-303081	1
10	811-106004	1	811-303082	1
12,14	811-106005	1	811-303083	1
16,18	811-106006	1	811-303084	1
20	811-106007	1	811-303084	1
25	811-106008	2	811-303085	1
32	811-106009	2	811-303085	1

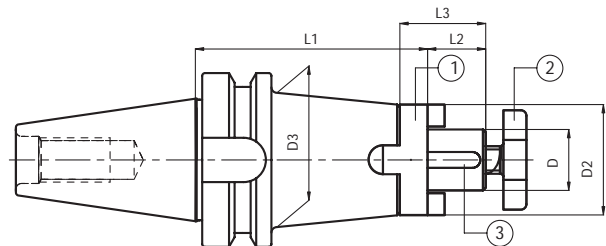
JIS-B 6339 MAS 403/BT A

KOMBI AUFSTECKFRÄSDORNE MANDRINS PORTE-FRAISES A DOUBLE USAGE
KOMBI-SHELL MILL ADAPTOR MANDRINI PORTAFRESE COMBINATI

DIN 6358



Code N.	Description	ISO	D	L1	L2	L3	D2	G6,3 8000 RPM
216-11527	BT30H50D16C	30	16	50	17	27	32	•
216-11528	BT30H50D22C	30	22	50	19	31	40	•
216-11529	BT30H55D27C	30	27	55	21	33	48	•
216-11501	BT40H55D16C	40	16	55	17	27	32	•
216-11502	BT40H55D22C	40	22	55	19	31	40	•
216-11503	BT40H55D27C	40	27	55	21	33	48	•
216-11504	BT40H60D32C	40	32	60	24	38	58	•
216-11505	BT40H60D40C	40	40	60	27	41	70	•
216-11507	BT50H70D16C	50	16	70	17	27	32	•
216-11508	BT50H70D22C	50	22	70	19	31	40	•
216-11509	BT50H70D27C	50	27	70	21	33	48	•
216-11510	BT50H70D32C	50	32	70	24	38	58	•
216-11511	BT50H70D40C	50	40	70	27	41	70	•



Code N.	Description	ISO	D	L1	L2	L3	D2	D3	G6,3 8000 RPM
216-11536	BT30H100D16C	30	16	100	17	27	32	-	•
216-11537	BT30H100D22C	30	22	100	19	31	40	-	•
216-11538	BT30H100D27C	30	27	100	21	33	48	-	•
216-11517	BT40H100D16C	40	16	100	17	27	32	44	•
216-11518	BT40H100D22C	40	22	100	19	31	40	-	•
216-11519	BT40H100D27C	40	27	100	21	33	48	-	•
216-11520	BT40H100D32C	40	32	100	24	38	58	-	•
216-11521	BT40H100D40C	40	40	100	27	41	70	-	•
216-11522	BT50H100D16C	50	16	100	17	27	32	44	•
216-11523	BT50H100D22C	50	22	100	19	31	40	50	•
216-11524	BT50H100D27C	50	27	100	21	33	48	60	•
216-11525	BT50H100D32C	50	32	100	24	38	58	-	•
216-11526	BT50H100D40C	50	40	100	27	41	70	-	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

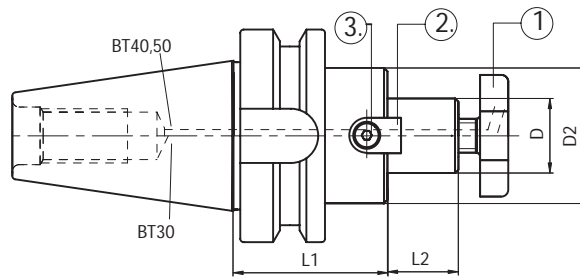
D	Ring	Cross screw	Key	Wrench
16	814-30001	811-107003	814-201010	816-130002
22	814-30002	811-107004	814-201020	816-130003
27	814-30003	811-107005	814-201030	816-130004
32	814-30004	811-107006	814-211040	816-130005
40	814-30005	811-107007	814-201050	816-130006

JIS-B 6339 MAS 403/BT AD

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT MIT GRÖßEREM BUND
FACE MILL HOLDERS-TENONS DRIVE WITH BIGGER FLANGE DIAMETER

MANDRINS PORTE-FRAISE-ENTRAÎNEMENT PAR TENONS BRIDE AJOUTÉE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO CON FLANGIA MAGGIORATA

ISO 3937



Code N.	Description	ISO	D	L1	L2	D2	G6,3 8000 RPM
216-71501	BT30H35D16F	30	16	35	17	38	•
216-71502	BT30H40D22F	30	22	40	19	48	•
216-71503	BT30H40D27F	30	27	40	21	58	•
216-71507	BT40H45D16F	40	16	45	17	38	•
216-71508	BT40H45D22F	40	22	45	19	48	•
216-71509	BT40H45D27F	40	27	45	21	58	•
216-71510	BT40H50D32F	40	32	50	24	78	•
▲ 216-71511	BT40H55D40F	40	40	55	27	88	•
216-71517	BT50H60D16F	50	16	60	17	38	•
216-71518	BT50H60D22F	50	22	60	19	48	•
216-71519	BT50H60D27F	50	27	60	21	58	•
216-71520	BT50H60D32F	50	32	60	24	78	•
▲ 216-71521	BT50H60D40F	50	40	60	27	88	•


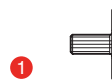


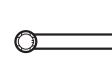
▲ Zur gebohrten Ausführung, sehen Sie bitte Seite 92

▲ For drilled version, please see on page 492

▲ Pour le modèle percé voir à la page 92

▲ Per versione forata vedi pag 92

Ersatzteile • Spare parts • Pièces détachées • Componenti

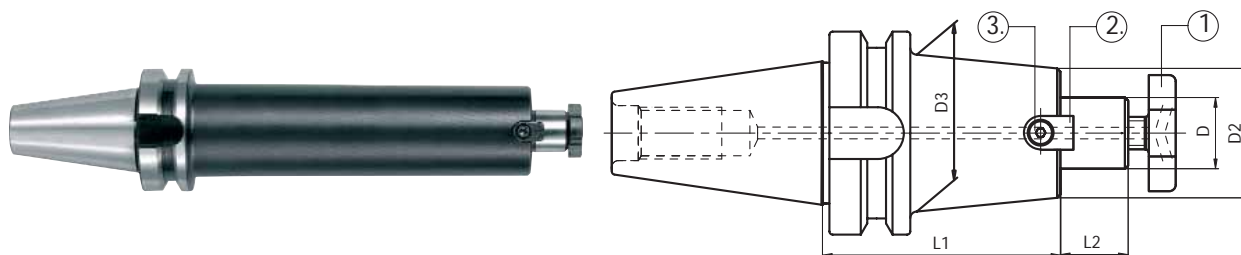
D	Cross screw	Cross screw on enquiry	Tenon	Screw	Wrench
					
16	811-107003	811-107013	814-202280	811-101004	816-130002
22	811-107004	811-107014	814-202250	811-101011	816-130003
27	811-107005	811-107015	814-202270	811-101018	816-130004
32	811-107006	811-107016	814-202630	811-101029	816-130005
40	811-107007	811-107017	814-202710	811-101029	816-130006

JIS-B 6339 MAS 403/BT AD

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT-LANGE AUSFÜHRUNG
FACE MILL HOLDERS-TENONS DRIVE-LONG PROJECTION TYPE

MANDRINS PORTE-FRAISE-ENTRAÎNEMENT PAR TENONS-SERIE LONGUE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO-SERIE LUNGA

ISO 3937



Code N.	Description	ISO	D	L1	L2	D2	D3		G6,3 8000 RPM	
H 100	216-71522	BT40H100D16F	40	16	100	17	39	-	-	•
	216-71526	BT40H100D22F	40	22	100	19	46	48	A	•
	216-71530	BT40H100D22F	40	22	100	19	50	59	B	•
	216-71599	BT40H100D27F	40	27	100	21	55	-	C	•
	266-71501	BT40H100D32F	40	32	100	24	66	-	-	•
	266-71502	BT40H100D40F	40	40	100	27	70	-	-	•
	216-71589	BT50H100D16F	50	16	100	17	39	-	-	•
	216-71534	BT50H100D22F	50	22	100	19	46	49	A	•
	216-71539	BT50H100D22F	50	22	100	19	50	60	B	•
	216-71544	BT50H100D27F	50	27	100	21	55	78	C	•
	216-71590	BT50H100D32F	50	32	100	24	66	78	-	•
	266-71503	BT50H100D40F	50	40	100	27	70	78	-	•
	H 160	216-71523	BT40H160D16F	40	16	160	17	39	-	-
216-71527		BT40H160D22F	40	22	160	19	46	48	A	•
216-71531		BT40H160D22F	40	22	160	19	50	59	B	•
216-71591		BT50H160D16F	50	16	160	17	39	-	-	•
216-71535		BT50H160D22F	50	22	160	19	46	49	A	•
216-71540		BT50H160D22F	50	22	160	19	50	60	B	•
216-71545		BT50H160D27F	50	27	160	21	55	78	C	•
216-71592		BT50H160D32F	50	32	160	24	66	78	-	•
266-71511		BT50H160D40F	50	40	160	27	70	78	-	•
H 200	216-71524	BT40H200D16F	40	16	200	17	39	-	-	•
	216-71528	BT40H200D22F	40	22	200	19	46	48	A	•
	216-71532	BT40H200D22F	40	22	200	19	50	59	B	•
	216-71593	BT50H200D16F	50	16	200	17	39	-	-	•
	216-71536	BT50H200D22F	50	22	200	19	46	49	A	•
	216-71541	BT50H200D22F	50	22	200	19	50	60	B	•
	216-71546	BT50H200D27F	50	27	200	21	55	78	C	•
	216-71594	BT50H200D32F	50	32	200	24	66	78	-	•
	266-71512	BT50H200D40F	50	40	200	27	70	78	-	•

A/Für Fräser D50/Suitable for milling cutters D50/ Adaptes pour fraises D50/ Adatti per frese D50

B/Für Fräser D63/Suitable for milling cutters D63/ Adaptes pour fraises D63/ Adatti per frese D63

C/Für Fräser D80/Suitable for milling cutters D80/ Adaptes pour fraises D80/ Adatti per frese D80

Ersatzteile • Spare parts • Pièces détachées • Componenti

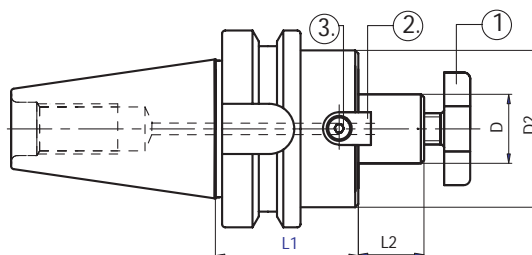
D/D2	Cross screw	Cross screw on enquiry	Tenon	Screw	Wrench
16	811-107003	811-107013	814-202280	811-101004	816-130002
22/46	811-107004	811-107014	814-202250	811-101011	816-130003
22/50	811-107004	811-107014	814-202260	811-101012	816-130003
27	811-107005	811-107015	814-202270	811-101017	816-130004
32	811-107006	811-107016	814-202290	811-101029	816-130005
40	811-107007	811-107017	814-202180	811-101028	816-130006

JIS-B 6339 MAS 403/BT AD

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT MIT GRÖßEREM BUND
FACE MILL HOLDERS-TENONS DRIVE WITH BIGGER FLANGE DIAMETER

MANDRINS PORTE-FRAISE-ENTRAÎNEMENT PAR TENONS BRIDE AJOUTÉE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO CON FLANGIA MAGGIORATA

ISO 3937



Code N.	Description	ISO	D	L1	L2	D2	G6,3 8000 RPM
266-71504	BT40H45D22 GX	40	22	45	19	60	•
266-71505	BT40H100D22 GX	40	22	100	19	60	•
266-71506	BT50H60D22 GX	50	22	60	19	60	•
266-71507	BT50H100D22 GX	50	22	100	19	60	•

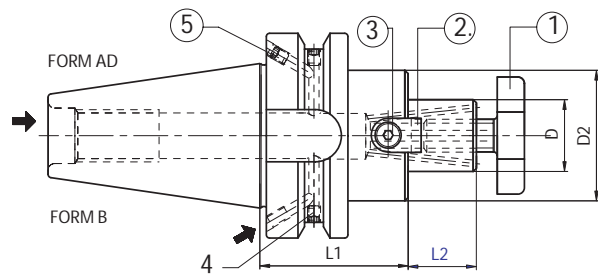
D	Cross screw	Tenon	Screw	Wrench
22	811-107004	814-202230	811-101013	816-130003

JIS-B 6339 MAS 403/BT AD/B

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT UND KÜHLMITTELZUFUHR MIT GRÖßEREM BUND
FACE MILL HOLDERS-TENONS DRIVE-WITH INTERNAL COOLANT SUPPLY WITH BIGGER DIAMETER



MANDRINS PORTE-FRAISE-ENTRAÎNEMENT PAR TENONS AVEC ARROSAGE INTERNE BRIDE A JOUËE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO CON PASSAGGIO REFRIGERANTE CON FLANGIA MAGGIORATA





ISO 3937



Code N.	Description	ISO	D	L1	L2	D2	G6,3 8000 RPM
216-71401	BT40H45D16F AD+B	40	16	45	17	38	•
216-71402	BT40H45D22F AD+B	40	22	45	19	48	•
216-71403	BT40H45D27F AD+B	40	27	45	21	58	•
216-71404	BT40H50D32F AD+B	40	32	50	24	78	•
216-71405	BT40H55D40F AD+B	40	40	55	27	88	•
216-71406	BT50H60D16F AD+B	50	16	60	17	38	•
216-71407	BT50H60D22F AD+B	50	22	60	19	48	•
216-71408	BT50H60D27F AD+B	50	27	60	21	58	•
216-71409	BT50H60D32F AD+B	50	32	60	24	78	•
216-71410	BT50H60D40F AD+B	50	40	60	27	88	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

Tape	Screw	Quantity	Screw	Quantity
				
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2
ISO 50	811-102002 M4X5	2	811-102010 M5X6	2

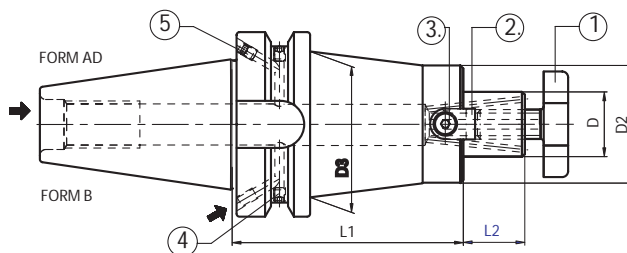
D	Cross screw	Tenon	Screw	Wrench
				
16	811-107003	814-202280	811-101004	816-130002
22	811-107004	814-202250	811-101011	816-130003
27	811-107005	814-202270	811-101018	816-130004
32	811-107006	814-202630	811-101029	816-130005
40	811-107007	814-202710	811-101029	816-130006

JIS-B 6339 MAS 403/BT AD/B

AUFSTECKFRÄSDORNE FÜR FRÄSER UND QUERNUT MIT
KÜHLMITTELZUFUHR-LANGE AUSFÜHRUNG
FACE MILL HOLDERS-TENONS DRIVE-WITH INTERNAL
COOLANT SUPPLY-LONG

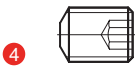
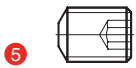
MANDRINS PORTE-FRAISE-ENTRAINEMENT PAR TENONS
AVEC ARROSAGE INTERNE-LONGUE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO CON
PASSAGGIO REFRIGERANTE-LUNGA



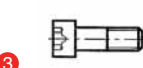

ISO 3937



Code N.	Description	ISO	D	L1	L2	D2	D3	G6,3 8000 RPM	
H 100	216-71411	BT40H100D16F AD+B	40	16	100	17	32	40	•
	216-71412	BT40H100D22F AD+B	40	22	100	19	40	48	•
	216-71413	BT40H100D27F AD+B	40	27	100	21	48	-	•
	216-71414	BT40H100D32F AD+B	40	32	100	24	58	-	•
	216-71425	BT40H100D40F AD+B	40	40	100	27	70	-	•
	216-71415	BT50H100D16F AD+B	50	16	100	17	32	40	•
	216-71416	BT50H100D22F AD+B	50	22	100	19	40	52	•
	216-71417	BT50H100D27F AD+B	50	27	100	21	48	55	•
	216-71418	BT50H100D32F AD+B	50	32	100	24	58	65	•
216-71419	BT50H100D40F AD+B	50	40	100	27	70	-	•	

Ersatzteile • Spare parts • Pièces détachées • Componenti

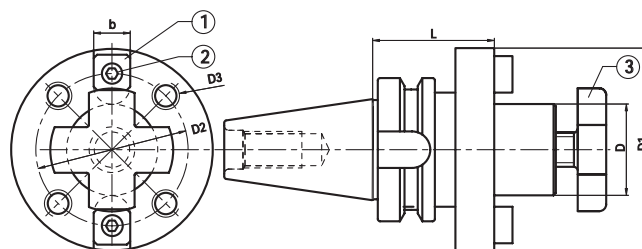
Tape	Screw	Quantity	Screw	Quantity
				
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2
ISO 50	811-102002 M4X5	2	811-102010 M5X6	2

D	Cross screw	Tenon	Screw	Wrench
				
16	811-107003	814-20214	811-101003	816-130002
22	811-107004	814-20215	811-101010	816-130003
27	811-107005	814-20216	811-101017	816-130004
32	811-107006	814-20217	811-101027	816-130005
40	811-107007	814-20218	811-101028	816-130006

JIS-B 6339 MAS 403/BT A

AUFSTECKFRÄSERDORNE FÜR MESSERKÖPFE MANDRINS PORTE-FRAISE POUR FRAISES A SURFACER
 FACE MILL HOLDER FOR FACE MILLING CUTTERS MANDRINI PORTAFRESE PER FRESE A SPIANARE


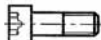

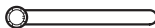
DIN 6357



Code N.	Description	ISO	D	L	D1	D2	D3	b	G6,3 8000 RPM
▲ 216-21501	BT40H60D40	40	40	60	89	66.7	M12	15.9	•
▲ 216-21502	BT50H70D40	50	40	70	89	66.7	M12	15.9	•
216-21503	BT50H80D60	50	60	80	129	101.6	M16	25.4	•

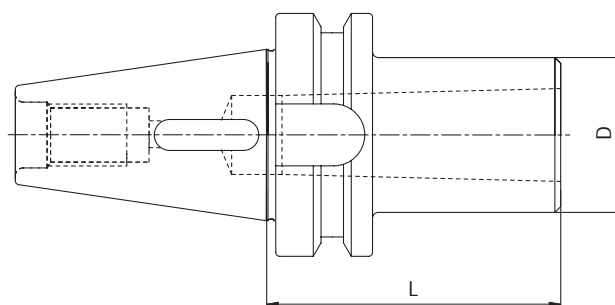
▲ Fornito con vite centrale inclusa • Supplied with internal screw

Ersatzteile • Spare parts • Pièces détachées • Componenti

D	Tenon	Screw	Cross screw	Wrench
				
40	814-202080	811-101028	811-107007	816-130006
60	814-202120	811-101063	-	-

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT AUSTREIBBLAPPEN DOUILLES POUR CONE MORSE A TENON
 MORSE TAPER ADAPTORS FOR DRILLS MANDRINI PORTAPUNTE ATTACCO CONO MORSE

DIN 228-2 FORM D



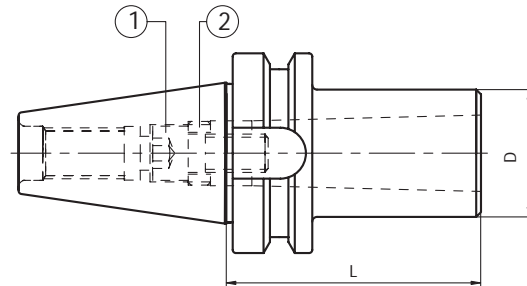
Code N.	Description	ISO	MORSE	D	L	G6,3 8000 RPM
212-41512	BT30H50CM1P	30	1	25	50	•
212-41513	BT30H60CM2P	30	2	32	60	•
212-41518	BT30H79CM3P	30	3	40	79	•
212-41501	BT40H50CM1P	40	1	25	50	•
212-41502	BT40H50CM2P	40	2	32	50	•
212-41503	BT40H70CM3P	40	3	40	70	•
212-41504	BT40H95CM4P	40	4	48	95	•
212-41519	BT50H45CM1P	50	1	25	45	•
212-41505	BT50H60CM2P	50	2	32	60	•
212-41506	BT50H65CM3P	50	3	40	65	•
212-41507	BT50H70CM4P	50	4	48	70	•
212-41508	BT50H105CM5P	50	5	63	105	•

JIS-B 6339 MAS 403/BT A

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT ANZUGSGEWINDE
MORSE TAPER ADAPTER WITH THREAD

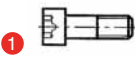
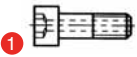

DOUILLES POUR CONE MORSE AVEC TARAUDAGE
MANDRINI PORTAFRESE ATTACCO CONO MORSE

DIN 228-2 FORM C



Code N.	Description	ISO	MORSE	D	L	G6,3 ⁸⁰⁰⁰ RPM
212-21512	BT30H50CM1F	30	1	25	50	•
212-21513	BT30H60CM2F	30	2	32	60	•
212-21518	BT30H80CM3F	30	3	40	80	•
212-21501	BT40H50CM1F	40	1	25	50	•
212-21502	BT40H50CM2F	40	2	32	50	•
212-21503	BT40H70CM3F	40	3	40	70	•
212-21504	BT40H95CM4F	40	4	48	95	•
212-21519	BT50H45CM1F	50	1	25	45	•
212-21505	BT50H60CM2F	50	2	32	60	•
212-21506	BT50H65CM3F	50	3	40	65	•
212-21507	BT50H90CM4F	50	4	48	90	•
212-21508	BT50H118CM5F	50	5	63	118	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

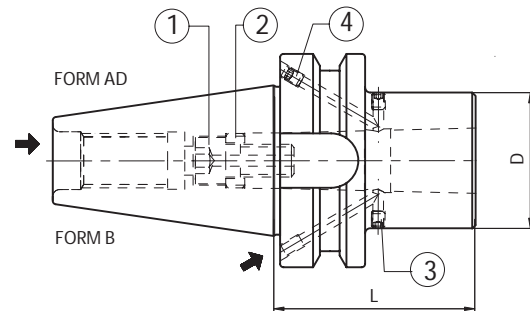
BT/MORSE	Screw (BTA)	On enquiry	Ring
			
30/1	811-111009	-	811-302037
30/2	811-111007	-	811-302031
30/3	811-111008	-	811-302032
40/1	811-101029	-	811-302030
40/2	811-111007	811-111038	811-302031
40/3	811-111008	811-401098	811-302032
40/4	811-111005	811-401083	811-302036
50/1	811-101031	-	811-302030
50/2	811-101054	811-401084	811-302032
50/3	811-101065	811-401085	811-302032
50/4	811-401037	811-401086	811-302036
50/5	811-101092	811-401087	811-302034

JIS-B 6339 MAS 403/BT AD/B

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT ANZUGSGEWINDE
MORSE TAPER ADAPTER WITH THREAD

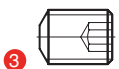
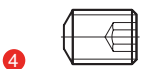
DOUILLES POUR CONE MORSE AVEC TARAUDAGE
MANDRINI PORTAFRESE ATTACCO CONO MORSE

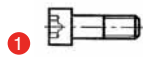
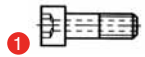

DIN 228-2 FORM C



Code N.	Description	ISO	MORSE	D	L	G6,3 ⁸⁰⁰⁰ RPM
212-31405	BT40H50CM2F AD+B	40	2	32	50	•
212-31406	BT40H75CM3F AD+B	40	3	40	75	•
212-31407	BT40H95CM4F AD+B	40	4	48	95	•
212-31408	BT50H60CM2F AD+B	50	2	32	60	•
212-31409	BT50H65CM3F AD+B	50	3	40	65	•
212-31410	BT50H95CM4F AD+B	50	4	48	95	•
212-31411	BT50H120CM5F AD+B	50	5	63	120	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

Tape/Morse	Screw	Quantity	Screw	Quantity
				
40/2	811-102002 M4X5	2	811-102002 M4X5	2
40/3:4	-	-	811-102002 M4X5	2
50/2:3:4	811-102002 M4X5	2	811-102010 M5X6	2
50/5	-	-	811-102010 M5X6	2

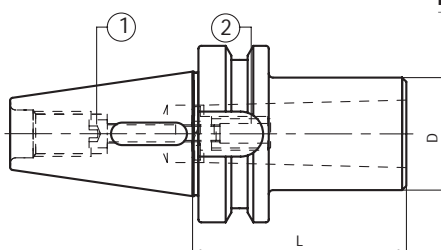
BT/MORSE	Screw (BTA)	On enquiry	Ring
			
40/2	811-111007	811-111038	811-302031
40/3	811-111008	811-401098	811-302032
40/4	811-111005	811-401083	811-302036
50/2	811-101054	811-401084	811-302032
50/3	811-101065	811-401085	811-302032
50/4	811-401037	811-401086	811-302036
50/5	811-101092	811-401087	811-302034

JIS-B 6339 MAS 403/BT A

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT AUSTREIBLAPPEN ODER ANZUGSGEWINDE
MORSE TAPER ADAPTORS FOR DRILLS AND MILLS

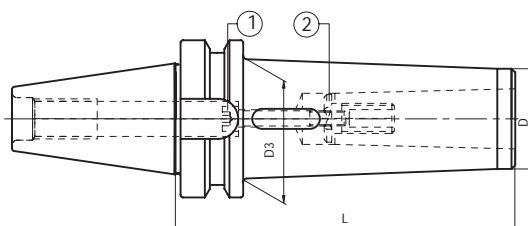
DOUILLES POUR CONE MORSE A TENON ET AVEC TARAUDAGE
MANDRINI PORTAPUNTE-PORTAFRESE ATTACCO CONO MORSE

DIN 228-2 FORM C/D



**Kombi
Version**

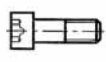



	Code N.	Description	ISO	MORSE	D	L	G6,3 8000 RPM
STANDARD	212-61512	BT30H52CM1P/F	30	1	25	52	•
	212-61513	BT30H63CM2P/F	30	2	32	63	•
	212-61514	BT30H90CM3P/F	30	3	40	90	•
	212-61518	BT40H50CM1P/F	40	1	25	50	•
	212-61519	BT40H60CM2P/F	40	2	32	60	•
	212-61520	BT40H76CM3P/F	40	3	40	76	•
	212-61522	BT50H45CM1P/F	50	1	25	45	•
	212-61523	BT50H60CM2P/F	50	2	32	60	•
	212-61524	BT50H65CM3P/F	50	3	40	65	•
	212-61525	BT50H95CM4P/F	50	4	48	95	•
212-61526	BT50H120CM5P/F	50	5	63	120	•	



**Kombi
Version**

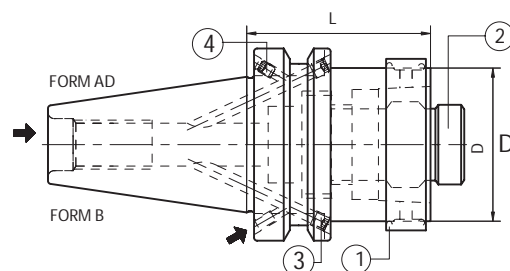
	Code N.	Description	ISO	MORSE	D	D3	L	G6,3 8000 RPM
EXTENDED	212-61527	BT30H110CM1P/F	30	1	18	25	110	•
	212-61528	BT30H120CM2P/F	30	2	25	32	120	•
	212-61529	BT30H140CM3P/F	30	3	33	40	140	•
	212-61501	BT40H115CM1P/F	40	1	18	25	115	•
	212-61502	BT40H125CM2P/F	40	2	25	32	125	•
	212-61503	BT40H140CM3P/F	40	3	33	40	140	•
	212-61505	BT50H120CM1P/F	50	1	18	25	120	•
	212-61506	BT50H140CM2P/F	50	2	25	32	140	•
	212-61507	BT50H150CM3P/F	50	3	33	40	150	•
	212-61508	BT50H180CM4P/F	50	4	40	48	180	•
	212-61509	BT50H220CM5P/F	50	5	55	63	220	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

	Code N.	Screw	Ring		Code N.	Screw	Ring
STANDARD				EXTENDED			
	212-61512	811-111026	-		212-61527	811-101034	-
	212-61513	811-111026	811-302010		212-61528	811-101035	811-302010
	212-61514	811-101035	811-302006		212-61529	811-101037	811-302006
	212-61518	811-101033	-		212-61501	811-101037	-
	212-61519	811-401018	-		212-61502	811-401015	-
	212-61520	811-101034	811-302006		212-61503	811-101081	811-302006
	212-61522	811-101033	-		212-61505	811-101077	-
	212-61523	811-101057	-		212-61506	811-101078	-
	212-61524	811-101071	-		212-61507	811-101079	-
	212-61525	811-401016	-		212-61508	811-401030	-
	212-61526	811-101071	811-302008		212-61509	811-101080	811-302008

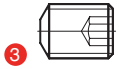
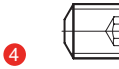
JIS-B 6339 MAS 403/BT AD/B

ZWISCHENHÜSLEN BT X HSK - MANUELLES SPANNSYSTEM DOUILLES INTERMEDIAIRES BT X HSK - SERRAGE MANUEL
 TAPER ADAPTER BT X HSK - MANUAL CLAMPING MANDRINI RIDUZIONE DA BT A HSK - CHIUSURA MANUALE



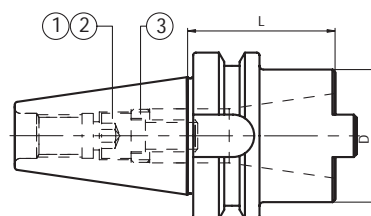
Code N.	Description	ISO	HSK	D	L	¹ Ring (complete)	² Locking unit (complete)
212-91401	BT40H60HSK50 AD+B	40	50	50	60	H50A-AN	H50A-UBL
212-91402	BT40H80HSK63 AD+B	40	63	63	80	H63A-AN	H63A-UBL
212-91403	BT50H65HSK50 AD+B	50	50	50	65	H50A-AN	H50A-UBL
212-91404	BT50H70HSK63 AD+B	50	63	63	70	H63A-AN	H63A-UBL

Ersatzteile • Spare parts • Pièces détachées • Componenti

Tape	Screw	Quantity	Screw	Quantity
				
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2
ISO 50	811-102010 M5X6	2	811-102010 M5X6	2

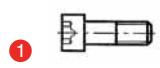
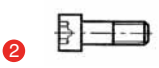

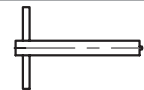
ZWISCHENHÜSLEN BT X SK DOUILLES INTERMEDIAIRES BT X SA
 ISO TAPER ADAPTORS MANDRINI RIDUZIONE E PROLUNGHE DA MS403/BT A DIN2080/DIN69871/MAS403BT

MAS403BT-AD



Code N.	Description	ISO	ISO	D	L
212-11504	BT40H63ISO30/TC30	40	30	52	63
212-11508	BT40H100ISO40/TC40	40	40	68	100
212-11507	BT50H70ISO40/TC40	50	40	78	70
212-11509	BT50H120ISO50/TC50	50	50	100	120

Ersatzteile • Spare parts • Pièces détachées • Componenti

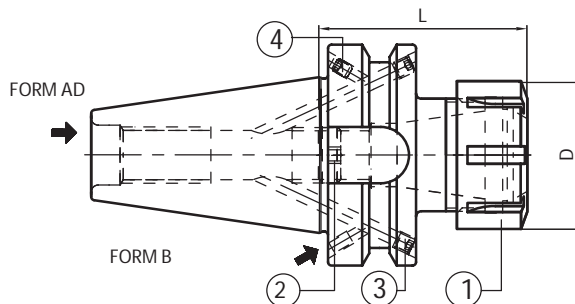
OUTSIDE	INSIDE	Screw (ISO)	Screw (TC)	Ring	Wrench
					
40	30	811-401098	811-401145	811-302032	816-20206002
40	40	811-401147	811-401150	811-302036	816-20207002
50	40	811-401147	811-401150	811-302036	816-20207002
50	50	811-401151	811-401152	811-302047	816-202090

Verschlusschraube für DIN69871/MAS BT/DIN2080 wird mitgeliefert
 Supplied with a screw DIN69871/MAS BT/DIN2080
 Livré avec une vis de serrage DIN69871/MAS BT/DIN2080
 In dotazione vite per chiusura DIN69871/MAS BT/DIN2080

JIS-B 6339 MAS 403/BT AD/B

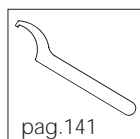
SPANNZANGENFUTTER ER TYP MANDRINS A PINCES TYPE ER
ER COLLET CHUCK MANDRINI PORTAPINZA TIPO ER

DIN 6499







Code N.	Description	ISO	ER	D	L	G2,5 25000 RPM
214-91401	BT40H70ER16 AD+B	40	16	32	70	•
214-91402	BT40H70ER25 AD+B	40	25	42	70	•
214-91403	BT40H70ER32 AD+B	40	32	50	70	•
214-91404	BT40H70ER40 AD+B	40	40	63	70	•
214-91405	BT50H80ER25 AD+B	50	25	42	80	•
214-91406	BT50H80ER32 AD+B	50	32	50	80	•
214-91407	BT50H80ER40 AD+B	50	40	63	80	•

Zubehör
Accessories
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New line
High balanced

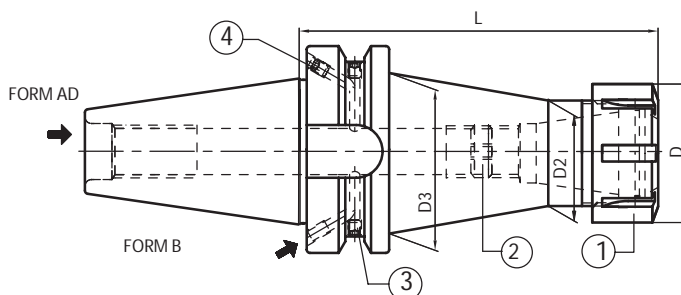
Ersatzteile • Spare parts • Pièces détachées • Componenti

Tape	Screw	Quantity	Screw	Quantity	ER	Nut	Stop screw
							
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2	16	812-203069	811-303119
ISO 50	811-102002 M4X5	2	811-102010 M5X6	2	25	812-203070	811-303121
					32	812-203071	811-303118
					40	812-203072	811-303122

JIS-B 6339 MAS 403/BT AD/B

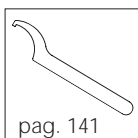
SPANNZANGENFUTTER ER TYP-LANG MANDRINS A PINCES TYPE ER-SERIE LONGUE
ER COLLET CHUCK-LONG MANDRINI PORTAPINZA TIPO ER-SERIE LUNGA

DIN 6499



Code N.	Description	ISO	ER	D	L	D2	D3	G2,5 25000 RPM	
H 100	214-91408	BT40H100ER16 AD+B	40	16	32	100	22	32	•
	214-91409	BT40H100ER25 AD+B	40	25	42	100	32	42	•
	214-91410	BT40H100ER32 AD+B	40	32	50	100	40	50	•
	214-91411	BT40H100ER40 AD+B	40	40	63	100	50	50	•
	214-91412	BT50H100ER16 AD+B	50	16	32	100	22	32	•
	214-91413	BT50H100ER25 AD+B	50	25	42	100	32	42	•
	214-91414	BT50H100ER32 AD+B	50	32	50	100	40	50	•
	214-91415	BT50H100ER40 AD+B	50	40	63	100	50	63	•
H 160	214-91416	BT40H160ER16 AD+B	40	16	32	160	22	32	•
	214-91417	BT40H160ER25 AD+B	40	25	42	160	32	42	•
	214-91418	BT40H160ER32 AD+B	40	32	50	160	40	50	•
	214-91419	BT40H160ER40 AD+B	40	40	63	160	50	50	•
	214-91420	BT50H160ER16 AD+B	50	16	32	160	22	32	•
	214-91421	BT50H160ER25 AD+B	50	25	42	160	32	42	•
	214-91422	BT50H160ER32 AD+B	50	32	50	160	40	50	•
	214-91423	BT50H160ER40 AD+B	50	40	63	160	50	63	•

Zubehör
Accessories
Accessoires
Accessori



New line
High balanced

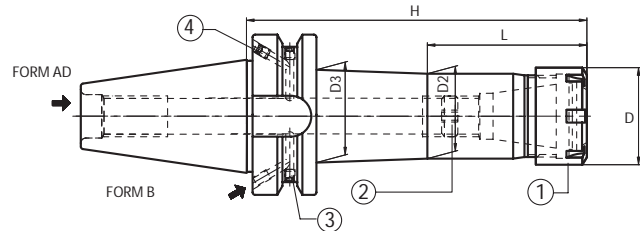
Ersatzteile • Spare parts • Pièces détachées • Componenti

Tap	Screw	Quantity	Screw	Quantity	ER	Nut	Stop screw
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2	16	812-203069	811-303119
ISO 50	811-102002 M4X5	2	811-102010 M5X6	2	25	812-203070	811-303121
					32	812-203071	811-303118
					40	812-203072	811-303122

JIS-B 6339 MAS 403/BT AD/B

SPANNZANGENFUTTER ER MINI MANDRINS A PINCES TYPE ER MINI
ER MINI COLLET CHUCK MANDRINI PORTAPINZA TIPO ER MINI EXTRA SOTTILI

DIN 6499



Code N.	Description	ISO	ER	D	H	L	D2	D3	G2,5 25000 RPM
214-91448*	BT30H70ER11M	30	11M	16	70	20	14	19	•
214-91449*	BT30H100ER11M	30	11M	16	100	20	14	20	•
214-91433	BT40H70ER11M AD+B	40	11M	16	70	20	14	19	•
214-91434	BT40H100ER11M AD+B	40	11M	16	100	40	14	20	•
214-91435	BT40H160ER11M AD+B	40	11M	16	160	50	14	28	•
214-91436	BT40H70ER16M AD+B	40	16M	22	70	27	20	25	•
214-91437	BT40H100ER16M AD+B	40	16M	22	100	47	20	26	•
214-91438	BT40H160ER16M AD+B	40	16M	22	160	97	20	26	•
214-91439	BT40H70ER25M AD+B	40	25M	35	70	-	33	-	•
214-91440	BT40H100ER25M AD+B	40	25M	35	100	-	33	-	•
214-91441	BT40H160ER25M AD+B	40	25M	35	160	103	33	35	•
214-91442	BT50H70ER16M AD+B	50	16M	22	70	-	22	-	•
214-91443	BT50H100ER16M AD+B	50	16M	22	100	47	22	26	•
214-91444	BT50H160ER16M AD+B	50	16M	22	160	97	22	28	•
214-91445	BT50H70ER25M AD+B	50	25M	35	70	-	35	-	•
214-91446	BT50H100ER25M AD+B	50	25M	35	100	-	35	-	•
214-91447	BT50H160ER25M AD+B	50	25M	35	160	103	35	40	•

* BT30 solo versione AD
* BT30 only AD version



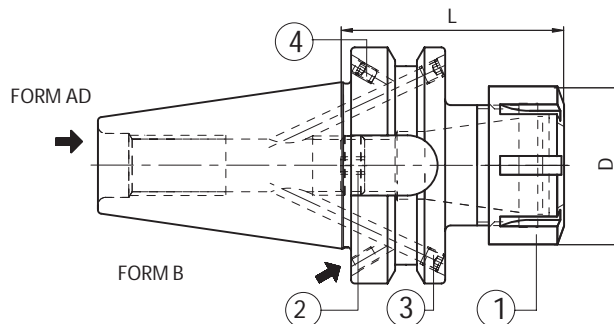
Slim line
High balanced

Ersatzteile • Spare parts • Pièces détachées • Componenti

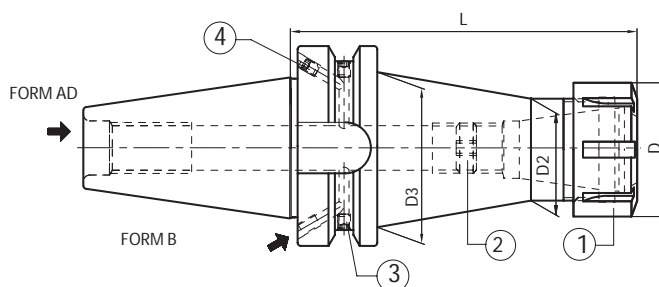
Tape	Screw	Quantity	Screw	Quantity	ER	Nut	Stop screw
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2	11M	812-203012	811-303081
ISO 50	811-102002 M4X5	2	811-102010 M5X6	2	16M	812-203013	811-303119
					25M	812-203015	811-303121

SPANNZANGENFUTTER ER TYP MANDRINS A PINCES TYPE ER
ER COLLET CHUCK MANDRINI PORTAPINZA TIPO ER

DIN 6499



Code N.	Description	ISO	ER	D	L	G6,3 12000 RPM
*214-31511	BT30H55ER16	30	16	32	55	•
*214-31512	BT30H55ER25	30	25	42	55	•
*214-31525	BT30H60ER32	30	32	50	60	•
STANDARD 214-31447	BT40H70ER16 AD+B	40	16	32	70	•
214-31422	BT40H70ER25 AD+B	40	25	42	70	•
214-31423	BT40H70ER32 AD+B	40	32	50	70	•
214-31424	BT40H70ER40 AD+B	40	40	63	70	•
214-31469	BT50H80ER16 AD+B	50	16	32	80	•
214-31429	BT50H80ER25 AD+B	50	25	42	80	•
214-31430	BT50H80ER32 AD+B	50	32	50	80	•
214-31431	BT50H80ER40 AD+B	50	40	63	80	•



Code N.	Description	ISO	ER	D	L	D2	D3	G6,3 12000 RPM
*214-31520	BT30H100ER16	30	16	32	100	22	24	•
*214-31538	BT30H100ER25	30	25	42	100	32	40	•
H 100 214-31448	BT40H100ER16 AD+B	40	16	32	100	22	32	•
214-31439	BT40H100ER25 AD+B	40	25	42	100	32	42	•
214-31440	BT40H100ER32 AD+B	40	32	50	100	40	50	•
214-31449	BT40H100ER40 AD+B	40	40	63	100	50	50	•
214-31450	BT50H100ER16 AD+B	50	16	32	100	22	32	•
214-31438	BT50H100ER25 AD+B	50	25	42	100	32	42	•
214-31434	BT50H100ER32 AD+B	50	32	50	100	40	50	•
214-31436	BT50H100ER40 AD+B	50	40	63	100	50	63	•

- * Ausführung Form AD
- * Execution form AD
- * Forme AD
- * Forma AD

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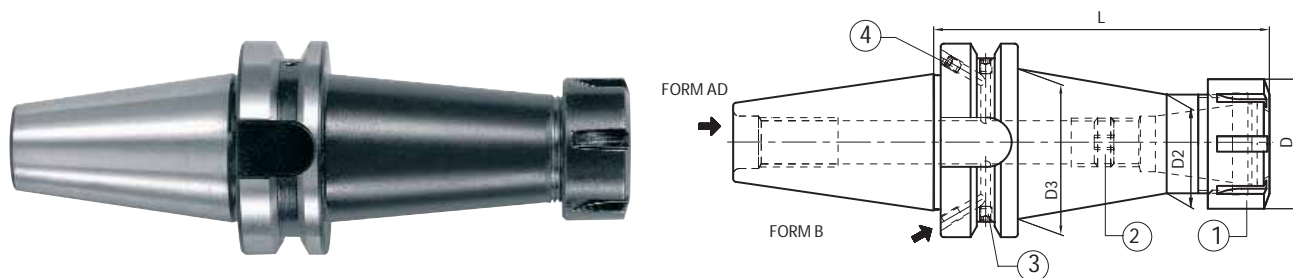


JIS-B 6339 MAS 403/BT AD/B

SPANNZANGENFUTTER ER TYP-LANGE AUSFÜHRUNG
ER COLLET CHUCK-LONG

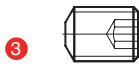
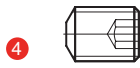
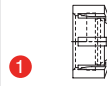

MANDRINS A PINCES TYPE ER-SERIE LONGUE
MANDRINI PORTAPINZA TIPO ER-SERIE LUNGA

DIN 6499



	Code N.	Description	ISO	ER	D	L	D2	D3	G6,3 8000 RPM
H 160	214-31442	BT40H160ER16 AD+B	40	16	32	160	22	32	•
	214-31432	BT40H160ER25 AD+B	40	25	42	160	32	42	•
	214-31433	BT40H160ER32 AD+B	40	32	50	160	40	50	•
	214-31451	BT40H160ER40 AD+B	40	40	63	160	50	50	•
	214-31452	BT50H160ER16 AD+B	50	16	32	160	22	32	•
	214-31453	BT50H160ER25 AD+B	50	25	42	160	32	42	•
	214-31435	BT50H160ER32 AD+B	50	32	50	160	40	50	•
	214-31437	BT50H160ER40 AD+B	50	40	63	160	50	63	•
H 200	214-31454	BT40H200ER16 AD+B	40	16	32	200	22	32	•
	214-31455	BT40H200ER25 AD+B	40	25	42	200	32	42	•
	214-31456	BT40H200ER32 AD+B	40	32	50	200	40	50	•
	214-31457	BT40H200ER40 AD+B	40	40	63	200	50	50	•
	214-31458	BT50H200ER16 AD+B	50	16	32	200	22	32	•
	214-31459	BT50H200ER25 AD+B	50	25	42	200	32	42	•
	214-31460	BT50H200ER32 AD+B	50	32	50	200	40	50	•
	214-31461	BT50H200ER40 AD+B	50	40	63	200	50	63	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

Tap	Screw	Quantity	Screw	Quantity	ER	Nut	Stop screw
	 3		 4			 1	 2
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2	16	812-203005	811-303119
ISO 50	811-102002 M4X5	2	811-102010 M5X6	2	25	812-203001	811-303121
					32	812-203002	811-303118
					40	812-203003	811-303122

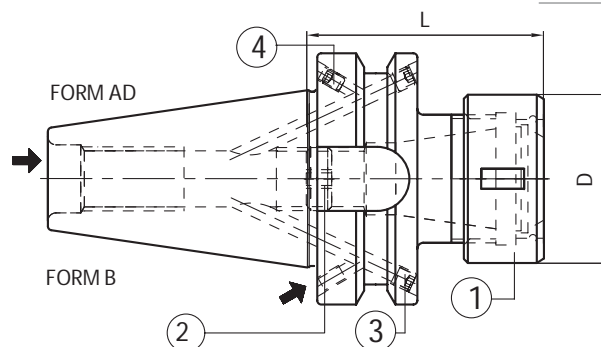
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Accessories
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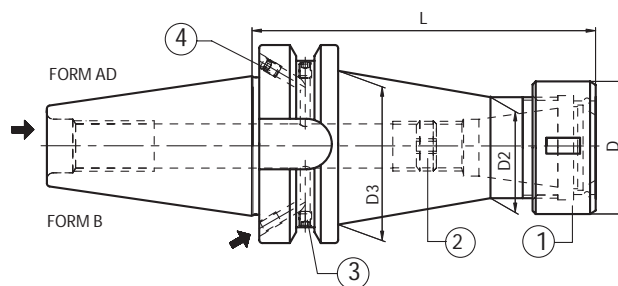
JIS-B 6339 MAS 403/BT AD/B

SPANNZANGENFUTTER EOC TYP MANDRINS A PINCES TYPE EOC
ER COLLET CHUCK MANDRINI PORTAPINZA TIPO EOC

DIN 6388

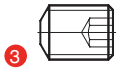
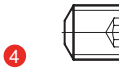


Code N.	Description	ISO	EOC	D	L	G6,3 12000 RPM
214-11401	BT40H70EOC16 AD+B	40	16	43	70	•
214-11402	BT40H70EOC25 AD+B	40	25	60	70	•
214-11403	BT50H85EOC25 AD+B	50	25	60	85	•
214-11404	BT50H90EOC32 AD+B	50	32	72	90	•



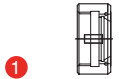

Code N.	Description	ISO	EOC	D	L	D2	D3	G6,3 8000 RPM	
H130	214-11405	BT40H130EOC16 AD+B	40	16	43	130	33	42	•
	214-11406	BT40H130EOC25 AD+B	40	25	60	130	48	48	•
	214-11408	BT50H130EOC25 AD+B	50	25	60	130	48	48	•
	214-11409	BT50H130EOC32 AD+B	50	32	72	130	60	60	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

Type	Screw	Quantity	Screw	Quantity
				
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2
ISO 50	811-102002 M4X5	2	811-102010 M5X6	2

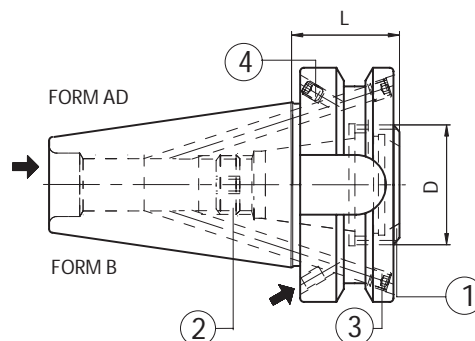
Zubehör
Accessories
Accessoires
Accessori



EOC	Nut	Stop screw	Wrench
			
16	GOC16	811-303121	CHEOC16
25	GOC25	811-303123	CHEOC25
32	GOC32	811-303123	CHEOC32



JIS-B 6339 MAS 403/BT AD/B

SPANNZANGENFUTTER ER TYP-LÄNGE EXTRAKURZ MANDRINS COURTS A PINCES TYPE ER
ER COLLET CHUCK WITH INSIDE NUT MANDRINI PORTAPINZA TIPO ER EXTRACORTI





Code N.	Description	ISO	ER	D	L	G6,3 12000 RPM
*214-31580	BT30H22ER25A	30	25A	32	22	•
214-31462	BT40H29ER25A AD+B	40	25A	32	29	•
*214-31571	BT40H29ER32A	40	32A	40	29	•
214-31463	BT50H40ER32A AD+B	50	32A	40	40	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

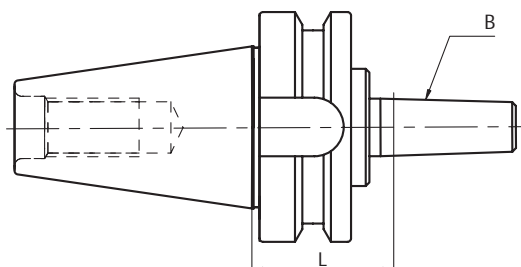
Tape	Screw	Quantity	Screw	Quantity
				
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2
ISO 50	811-102010 M5X6	2	811-102010 M5X6	2

- * Ausführung Form AD
- * Execution form AD
- * Forme AD
- * Forma AD

ER	Nut	Stop screw	Wrench
			
25A	812-203057	811-303121	CHER25EX
32A	812-203032	811-303118	CHER32EX

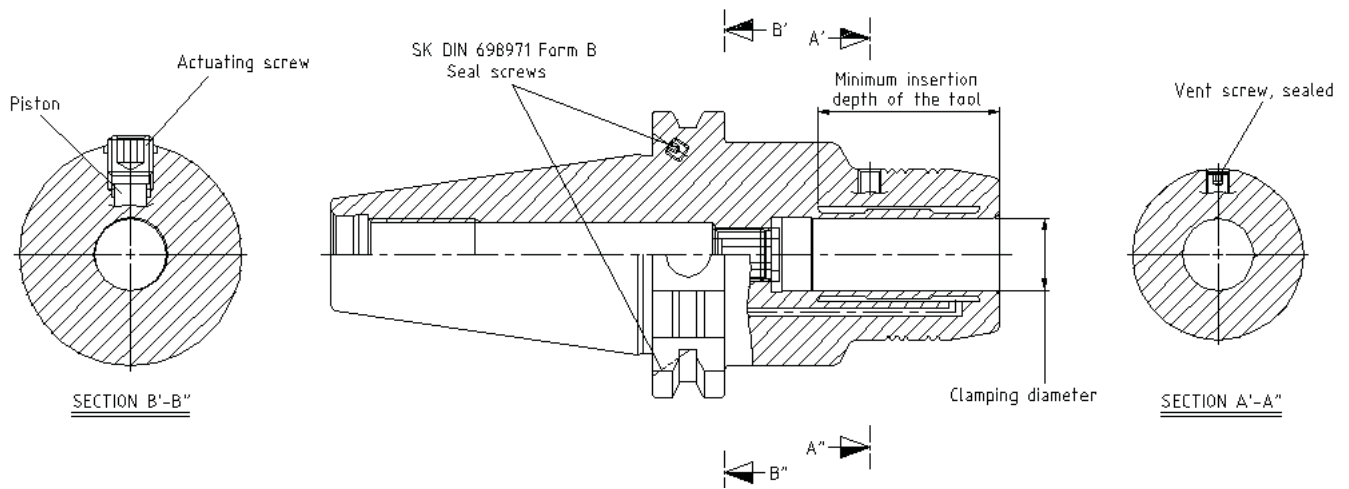
MAS 403/BT A

BOHRFUTTERAUFNAHMEN ARBRES POUR MANDRINS DE PERCAGE
ARBORS FOR DRILL CHUCKS ATTACCO PER MANDRINI PORTAPUNTE



DIN 238

Code N.	Description	ISO	B	L	G6,3 8000 RPM
216-31510	BT30H40B12	30	12	40	•
216-31511	BT30H40B16	30	16	40	•
216-31502	BT40H40B16	40	16	40	•
216-31503	BT40H40B18	40	18	40	•
216-31505	BT50H50B16	50	16	50	•
216-31506	BT50H50B18	50	18	50	•



- Raccomandiamo di seguire le nostre istruzioni operative per risparmiare tempo ed evitare problemi / Please follow our operating instruction carefully to save time and avoid problems:

Tabella delle informazioni tecniche/ Chart of technical data:

Chuck Diameter (HC)	Shaft Clamping	Depending on the mounting shank (max RPM)	Minimum clamping length (mm)	Operating temperature	Max coolant pressure (bar)	Moment (Nm)
HC6	6 hb	40.000	27	20-50	80	8 Nm
HC8	8 hb	40.000	27	20-50	80	15 Nm
HC10	10 hb	40.000	32	20-50	80	30 Nm
HC12	12 hb	40.000	37	20-50	80	45 Nm
HC14	14 hb	40.000	37	20-50	80	75 Nm
HC16	16 hb	40.000	42	20-50	80	120 Nm
HC18	18 hb	40.000	42	20-50	80	170 Nm
HC20	20 hb	40.000	42	20-50	80	230 Nm
HC25	25 hb	25.000	48	20-50	80	300 Nm
HC32	32 hb	25.000	55	20-50	80	400 Nm

- La verifica della forza di serraggio deve essere fatta periodicamente. Si raccomanda di controllarla prima dell'utilizzo e dopo circa 100 operazioni o ogni 3 mesi / The clamping force must be checked periodically. We recommend to check it before initial use and approximately after 100 operations or every 3 months.

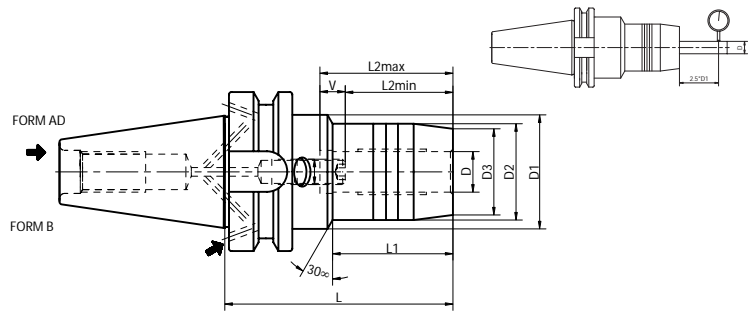
ATTENZIONE / ATTENTION

- Quando si montano gli utensili o le frese nel mandrino idraulico, la superficie interna del mandrino idraulico e quella esterna dell'utensile devono essere pulite da oli, polveri e residui / When tools or endmills are clamped into the hydraulic chucks, be sure that oils and dust are completely removed from the internal surface of the hydraulic chuck and the external surface of the tool.

JIS-B 6339 MAS 403/BT A

HYDRO-DEHNSPANNFUTTER FÜR WERKZEUGE MIT ZYLINDERSCHAFT
HYDRO-EXPANSION CHUCKS FOR TOOLS WITH CYLINDRICAL SHANK

MANDRINS HYDRO-EXPANSIBLES POUR OUTILS A QUEUE CYLINDRIQUE
MANDRINI IDRAULICI PER UTENSILI ATTACCO CILINDRICO



Code N.	Description	ISO	D	D1	D2	D3	L	L1	L2 min	L2 max	V	M	G2,5 20000
252-11414	BT30-HC6-70	30	6	44,5	26	22	70	29,5	27	37	10	M5*0.8	•
252-11415	BT30-HC8-70	30	8	44,5	28	24	70	30	27	37	10	M6*1.0	•
252-11416	BT30-HC10-75	30	10	44,5	30	26	75	31	32	42	10	M8*1.0	•
252-11417	BT30-HC12-85	30	12	44,5	32	28	85	40	37	47	10	M10*1.0	•
252-11418	BT30-HC14-85	30	14	44,5	34	30	85	40	37	47	10	M10*1.0	•
252-11419	BT30-HC16-90	30	16	44,5	38	34	90	45	42	52	10	M12*1.0	•
252-11420	BT30-HC18-90	30	18	44,5	40	36	90	45	42	52	10	M12*1.0	•
252-11421	BT30-HC20-90	30	20	44,5	42	38	90	45	42	52	10	M16*1.0	•
252-11422	BT40-HC6-90	40	6	44,5	26	22	90	43	27	37	10	M5*1.0	•
252-11423	BT40-HC8-90	40	8	44,5	28	24	90	44,5	27	37	10	M6*1.0	•
252-11424	BT40-HC10-90	40	10	44,5	30	26	90	44,5	32	42	10	M8*1.0	•
252-11425	BT40-HC12-90	40	12	44,5	32	28	90	44,5	37	47	10	M10*1.0	•
252-11426	BT40-HC14-90	40	14	44,5	34	30	90	44,5	37	47	10	M10*1.0	•
252-11427	BT40-HC16-90	40	16	44,5	38	34	90	47,5	42	52	10	M12*1.0	•
252-11428	BT40-HC18-90	40	18	44,5	40	36	90	47,5	42	52	10	M12*1.0	•
252-11429	BT40-HC20-90	40	20	49,5	42	38	90	47,5	42	52	10	M16*1.0	•
252-11430	BT40-HC25-90	40	25	60	50	46	90	47,5	48	58	10	M16*1.0	•
252-11431	BT40-HC32-115	40	32	80	63	60	115	25,5	55	65	10	M16*1.0	•
252-11432	BT50-HC6-90	50	6	44,5	26	22	90	30	27	37	10	M5*0.8	•
252-11433	BT50-HC8-90	50	8	44,5	28	24	90	30	27	37	10	M6*1.0	•
252-11434	BT50-HC10-90	50	10	44,5	30	26	90	32	32	42	10	M8*1.0	•
252-11435	BT50-HC12-90	50	12	44,5	32	28	90	34	37	47	10	M10*1.0	•
252-11436	BT50-HC14-90	50	14	44,5	34	30	90	34	37	47	10	M10*1.0	•
252-11437	BT50-HC16-90	50	16	44,5	38	34	90	34	42	52	10	M12*1.0	•
252-11438	BT50-HC18-90	50	18	44,5	40	36	90	34	42	52	10	M12*1.0	•
252-11439	BT50-HC20-90	50	20	44,5	42	38	90	34	42	52	10	M16*1.0	•
252-11440	BT50-HC25-105	50	25	60	50	46	105	47,5	48	58	10	M16*1.0	•
252-11441	BT50-HC32-115	50	32	60	60	55	115	-	55	65	10	M16*1.0	•

**New line
High quality**

Code N.	Description	ISO	D	D1	D2	D3	L	L1	L2 min	L2 max	V	M
252-11442	BT30G20CS-85	30	20	44	44	41	85	-	42	52	10	M10*1,0
252-11443	BT40G20CS-72,5	40	20	49,5	49,5	37	72,5	-	42	52	10	M16*1,0
252-11444	BT50G32CS-90	50	32	72	72	55	115	-	55	65	10	M16*1,1

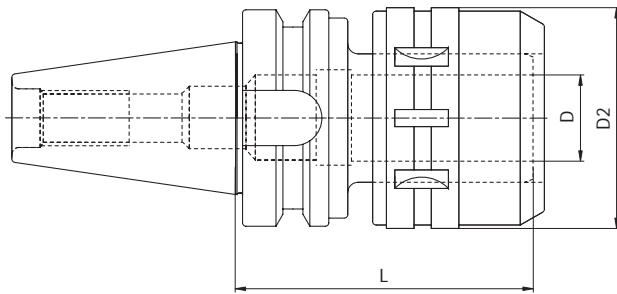
**New line
Short Heavy Design**

Zubehör
Accessories
Accessoires
Accessori



JIS-B 6339 MAS 403/BT AD

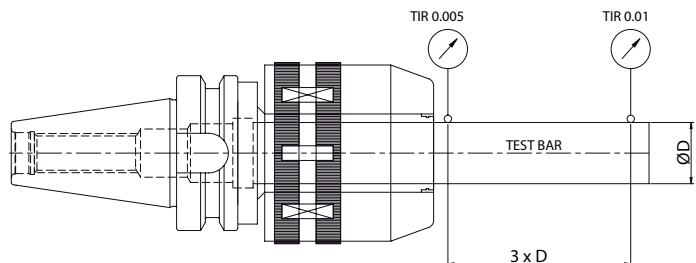
KRAFTSPANNFUTTER MANDRINS A FORT SERRAGE
MILLING CHUCK MANDRINI A FORTE SERRAGGIO



Code N.	Description	ISO	D	D2	L	G6,3 12000 RPM
214-01501	BT40H105C20	40	20	54	105	•
214-01502	BT40H105C32	40	32	72	105	•
214-01503	BT40H135C32	40	32	72	135	•
214-01504	BT50H105C20	50	20	54	105	•
214-01505	BT50H105C32	50	32	72	105	•
214-01506	BT50H135C32	50	32	72	135	•

▲ Fornito con chiave inclusa • Supplied with wrench

Zubehör
Accessories
Accessoires
Accessori

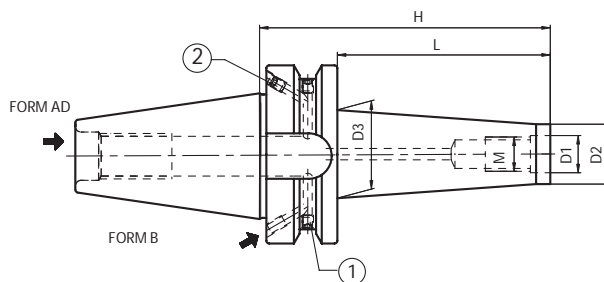


Milling chuck (diameter)	Specification (DIN)	Tolerance (Taper shank)	Run-out (3xD)	Clamping torque
C20	AT3	BT40 (0~+0,003)	0~0,01	980M.m (100 Kgf.m)
C32		BT50 (0~+0,004)		

JIS-B16339 MAS 403/BT AD/B

SPANNFUTTER FÜR EIN SCHRAUBFRÄSER
MILLING CUTTER ARBORS FOR SCREW-ON TYPE MILLING CUTTERS

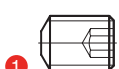

MANDRINS POUR FRAISER A VISSER
MANDRINI PER FRESE CON ATTACCO FILETTATO



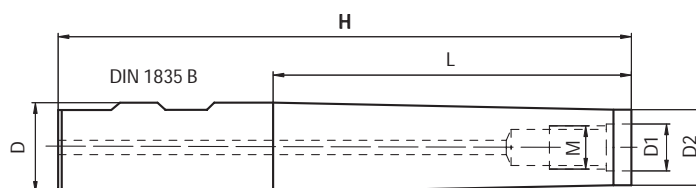
Code N.	Description	ISO	M	D1	D2	D3	H	L	G2,5 ²⁵⁰⁰⁰ RPM
217-81401	BT40H77M8	40	M8	8.5	13	23	77	50	•
217-81402	BT40H102M8	40	M8	8.5	13	23	102	75	•
217-81403	BT40H127M8	40	M8	8.5	13	25	127	100	•
217-81404	BT40H77M10	40	M10	10.5	18	23	77	50	•
217-81405	BT40H102M10	40	M10	10.5	18	28	102	75	•
217-81406	BT40H127M10	40	M10	10.5	18	32	127	100	•
217-81407	BT40H77M12	40	M12	12.5	21	24	77	50	•
217-81408	BT40H102M12	40	M12	12.5	21	31	102	75	•
217-81409	BT40H127M12	40	M12	12.5	21	33	127	100	•
217-81410	BT40H77M16	40	M16	17	29	34	77	50	•
217-81411	BT40H102M16	40	M16	17	29	34	102	75	•
217-81412	BT40H127M16	40	M16	17	29	36	127	100	•
217-81413	BT40H152M16	40	M16	16.5	29	40	152	125	•
217-81414	BT50H88M12	50	M12	12.5	21	24	88	50	•
217-81415	BT50H138M12	50	M12	12.5	21	33	138	100	•
217-81416	BT50H188M12	50	M12	12.5	21	40	188	150	•
217-81417	BT50H88M16	50	M16	17	29	34	88	50	•
217-81418	BT50H138M16	50	M16	17	29	36	138	100	•
217-81419	BT50H188M16	50	M16	17	29	42.5	188	150	•

New line
High balanced

Ersatzteile • Spare parts • Pièces détachées • Componenti

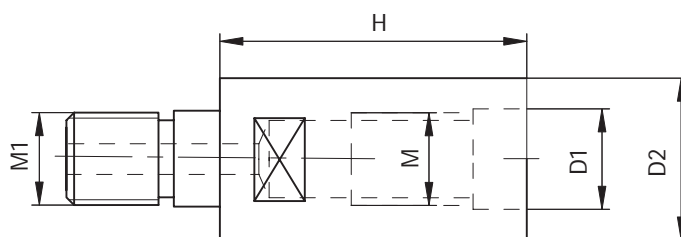
Type	Screw	Quantity	Screw	Quantity
				
ISO 40	811-102002 M4X5	2	811-102002 M4X5	2
ISO 50	811-102002 M4X5	2	811-102010 M5X6	2

VERLÄNGERUNG FÜR EINSCHRAUBFRÄSER RALLONGES POUR FRAISES À VISSER
EXTENSION FOR SCREW IN TYPE MILLS PROLUNGHE PER FRESE CON ATTACCO FILETTATO



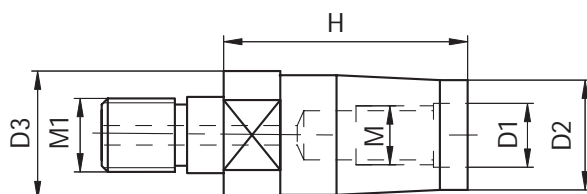
Code N.	Description	D	M	D1	D2	H	L
217-85201	D16H115M8	16	M8	8.5	12.8	115	60
217-85202	D16H160M8	16	M8	8.5	12.8	160	100
217-85203	D20H120M10	20	M10	10.5	17.8	120	60
217-85204	D20H160M10	20	M10	10.5	17.8	160	100
217-85205	D25H160M12	25	M12	12.5	20.8	160	100
217-85206	D32H160M16	32	M16	17	28.8	160	100

VERLÄNGERUNG FÜR EINSCHRAUBFRÄSER RALLONGES POUR FRAISES FILETEES
EXTENSION FOR SCREW IN END MILLS PROLUNGHE PER FRESE FILETTATE



Code N.	Description	M	M1	D1	D2	H
217-85709	M8H30M8	M8	M8	8.5	12.8	30
217-85710	M10H35M10	M10	M10	10.5	17.8	35
217-85711	M12H40M12	M12	M12	12.5	20.8	40
217-85712	M16H40M16	M16	M16	17	28.8	40

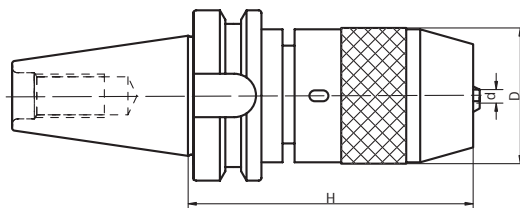
VERLÄNGERUNG FÜR EINSCHRAUBFRÄSER RALLONGES POUR FRAISES FILETEES
EXTENSION FOR SCREW IN END MILLS PROLUNGHE PER FRESE FILETTATE



Code N.	Description	M1	M	D1	D2	D3	H
217-85713	M10H30M8	M10	M8	8.5	12.8	17.8	30
217-85714	M12H40M8	M12	M8	8.5	12.8	20.8	40
217-85715	M12H35M10	M12	M10	10.5	17.8	20.8	35
217-85716	M16H60M10	M16	M10	10.5	17.8	28.8	60
217-85717	M16H40M12	M16	M12	12.5	20.8	28.8	40

JIS-B 6339 MAS 403/BT A

NC-BOHRFUTTER UNIVERSAL DRILL CHUCKS
MANDRINS UNIVERSELS DE PERCAGE
MANDRINI PORTAPUNTE INTEGRALI



Code N.	Description	ISO	H	D	Clamping capacity	Wrench
252-11501	BT40H105R1-13	40	105	50	1-13	816-152001
252-11502	BT40H115R3-16	40	115	57	3-16	816-152002
252-11503	BT50H105R1-13	50	105	50	1-13	816-152001
252-11504	BT50H115R3-16	50	115	57	3-16	816-152002

RUNDLAUFGENAUGIGKEIT 0.04 MM

Zur Erhöhung der Spannkraft werden diese Futter mit Spannschlüssel geliefert.

BEI LINKS LAUFENDEN BEARBEITUNGEN SIND DIESE FUTTER NICHT ZU BENUTZEN.

RUNOUT ACCURACY 0.04 MM T.I.R.

Supplied with spanner wrench to allow the application of supplementary gripping torque.

DO NOT USE IN REVOLUTION IN COUNTER-CLOCKWISE DIRECTION.

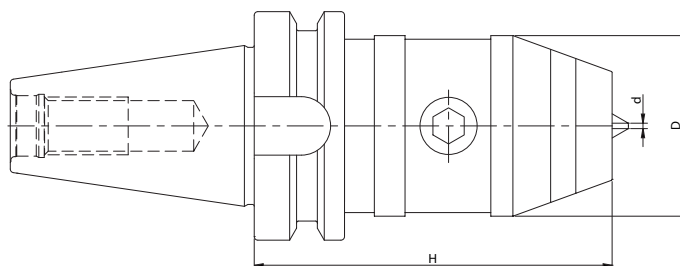
PRECISIONE DI ROTAZIONE 0.04 MM

Per incrementare la forza di serraggio i mandrini sono forniti con chiave di bloccaggio.

NON DEVONO ESSERE USATI PER LAVORAZIONI CON ROTAZIONE A SINISTRA.

MAS 403BT

NC-BOHRFUTTER FÜR RECHTS-UND LINKSLAUF NC DRILL CHUCKS FOR LEFT AND RIGHT ROTATION
MANDRIN DE PERCAGE CNC POUR ROTATION GAUCHE-DROITE
MANDRINI PORTAPUNTE INTEGRALI PER ROTAZIONE DESTRA E SINISTRA



Code N.	Description	ISO	H	D	Clamping capacity	Wrench
252-11410	BT40H98R0.5-13X	40	98	50	0.5-13	816-111024
252-11411	BT40H103R2.5-16X	40	103	57	2.5-16	816-111025
252-11412	BT50H110R0.5-13X	50	110	50	0.5-13	816-111024
252-11413	BT50H115R2.5-16X	50	115	57	2.5-16	816-111025

RUNDLAUFGENAUGIGKEIT 0.03 MM

Sowohl für rechts-als auch links laufende Bearbeitungen geeignet, mit Höchstgeschwindigkeit von 7000 u/min.

RUNOUT ACCURACY 0.03 MM T.I.R.

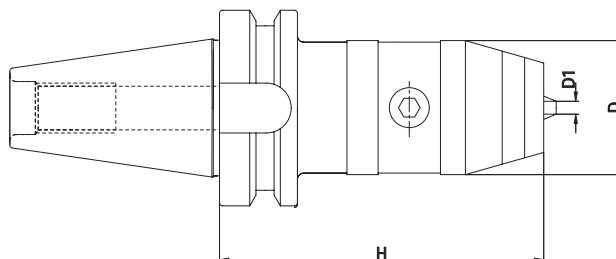
Suitable for right and left rotation up to 7000 rpm.

PRECISIONE DI ROTAZIONE 0.03 MM.

Adatti per rotazione sia destra che sinistra, con velocità max di 7000 g/min.

JIS-B 6339 MAS 403/BT A

NC-BOHRFUTTER FÜR RECHTS-UND LINKSLAUF MANDRIN DE PERCAGE CNC POUR ROTATION GAUCHE/DROITE
 NC DRILL CHUCKS FOR LEFT AND RIGHT ROTATION MANDRINI PORTAPUNTE INTEGRALI PER ROTAZIONE DESTRA E SINISTRA



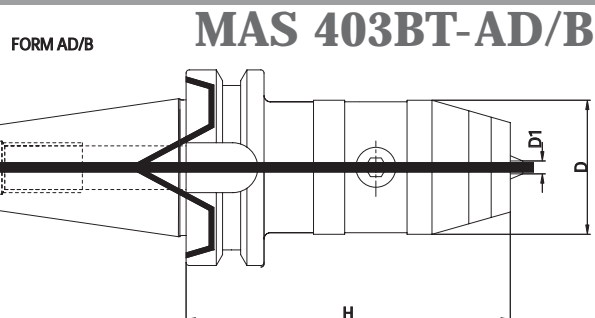
Code N.	Description	ISO	H	D	Clamping capacity
252-11446	BT40H98R0,5-13X-	40	98	50	0,5-13
252-11447	BT40H103R2,5-16X-	40	103	57	2,5-16
252-11448	BT50H110R0,5-13X	50	110	50	0,5-13
252-11449	BT50H115R2,5-16X	50	115	57	2,5-16

RUNOUT ACCURACY 0.03 MM T.I.R.
 Suitable for right and left rotation up to 35000 rpm.

PRECISIONE DI ROTAZIONE 0.03 MM
 Adatti per rotazione sia destra che sinistra, con velocità max di 35000 g/min.

New line High precision

NC-BOHRFUTTER FÜR RECHTS-UND LINKSLAUF MANDRIN DE PERCAGE CNC POUR ROTATION GAUCHE-DROITE
 NC DRILL CHUCKS FOR LEFT AND RIGHT ROTATION MANDRINI PORTAPUNTE INTEGRALI PER ROTAZIONE DESTRA E SINISTRA



Code N.	Description	ISO	H	D	Clamping capacity
252-11450	BT40H98R0,5-13X-AD/B	40	98	50	0,5-13
252-11451	BT40H103R2,5-16X-AD/B	40	103	57	2,5-16
252-11452	BT50H110R0,5-13X-AD/B	50	110	50	0,5-13
252-11453	BT50H115R2,5-16X-AD/B	50	115	57	2,5-16

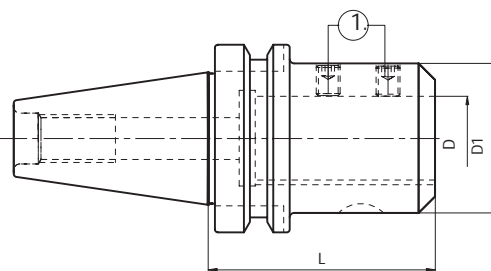
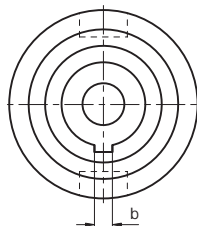
RUNOUT ACCURACY 0.03 MM T.I.R.
 Suitable for right and left rotation up to 35000 rpm.

PRECISIONE DI ROTAZIONE 0.03 MM
 Adatti per rotazione sia destra che sinistra, con velocità max di 35000 g/min.

JIS-B 6339 MAS 403/BT AD

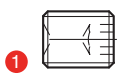
STELLHÜSENSAUFNAHMEN MANDRINS POUR DOUILLES REGLAGE
 MASTER SHANKS FOR ADJUSTABLE ADAPTORS MANDRINI PER ASTUCCI REGISTABILI

DIN 6327



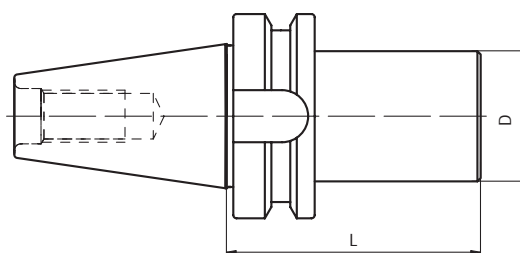
Code N.	Description	ISO	D	D1	L	b	G6,3 8000 RPM
211-11501	BT40H70D28TR	40	28	50	70	6	•
211-11502	BT40H120D36TR	40	36	63	120	8	•
211-11503	BT50H100D28TR	50	28	50	100	6	•
211-11504	BT50H100D36TR	50	36	63	100	8	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

D	Screw
	
28	811-102027
36	811-102036

ROHLINGE MIT WEICHEM SCHAFT BARRES D'ALEPAGE SEMI-FINIES
 BLANK TOOLHOLDER WITH SOFT SHANK MANDRINI SEMILAVORATI A STELO TENERO

MAS 403BT-AD/B

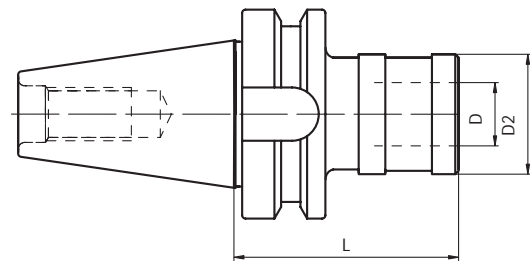


Code N.	Description	ISO	D	L
217-41502	BT40H160D40.5SM	40	40.5	160
217-41503	BT40H160D63.5SM	40	63.5	160
217-41504	BT40H250D63.5SM	40	63.5	250
217-41505	BT50H160D80SM	50	80	160
217-41506	BT50H200D80SM	50	80	200
217-41507	BT50H300D80SM	50	80	300

JIS-B 6339 MAS 403/BT A

GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT
LÄNGENAUSGLEICH
TENSION AND COMPRESSION TAPPING HEAD

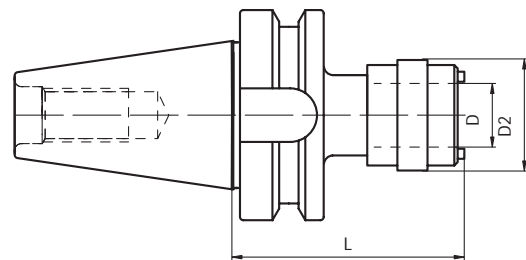
MANDRINS DE TARAUDAGE A CHANGEMENT
RAPIDE A DOUBLE USAGE
MASCHIATORI A DOPPIA COMPENSAZIONE



Code N.	Description	ISO	SIZE	Top range	PRESS.	EXT.	D	D2	L
M-3310	BT40H67GR1.DC	40	1	M3-M12	9	9	19	38	67
M-3410	BT40H93GR2.DC	40	2	M6-M20	15	15	31	53	93
M-3510	BT40H138GR3.DC	40	3	M14-M33	24	24	48	78	138
M-3320	BT50H81GR1.DC	50	1	M3-M12	9	9	19	38	80
M-3430	BT50H102GR2.DC	50	2	M6-M20	15	15	31	53	102
M-3530	BT50H135GR3.DC	50	3	M14-M33	24	24	48	78	135

GEWINDESCHNEID-SCHNELLWECHSELFUTTER
OHNE LÄNGENAUSGLEICH
SOLID TAPPING HEAD

MANDRINS DE TARAUDAGE A CHANGEMENT
RAPIDE SANS COMPENSATION
MASCHIATORI RIGIDI SENZA COMPENSAZIONE



Code N.	Description	ISO	SIZE	Top range	D	D2	L
M6010	BT40H67GR1.SC	40	1	M3-M12	19	33	67
M6020	BT40H90GR2.SC	40	2	M6-M20	31	50	90

Zubehör
Accessories
Accessoires
Accessori



GREIFER FÜR WERKZEUGMAGAZIN

Dank unserer intensiven und engen Zusammenarbeit mit den berühmtesten Maschinenherstellern Europas haben wir eine sehr gute Erfahrung auch in dem Bereich Magazinkassetten entwickelt. Gerne bieten wir Ihnen folgende Ausführungen: für ISO, HSK, und alle andere, nach Ihrem Wunsch.

CLAMPING FINGERS FOR TOOL MAGAZINES

Thanks to our constant and exhaustive co-operation with the most famous machine tool makers we developed a very good experience into the manufacturing of high precision clamping fingers for tool magazines. Our range includes clampers for the most popular attachments: ISO CONES, HSK, but of course we are open to any new version, according to the customer's drawing.

PINCES DE LOGEMENT POUR LE MAGASIN DES MACHINES OUTILS

Grâce à notre constante et intensive collaboration avec les plus célèbres constructeurs des machines outils, nous avons développé une bonne expérience pour la production de pinces de logement pour le magasin des machines outils. Dans notre gamme il y a attachements: ISO, HSK et autres. Naturellement nous sommes ouverts à construire autres types de pinces suite aux différents plans du client.



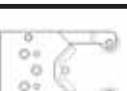






PINZE ALLOGGIAMENTO PORTAUTENSILI PER MAGAZZINI MACCHINE UTENSILI

Grazie alla nostra costante ed intensa collaborazione con i più famosi costruttori di macchine utensili, abbiamo sviluppato una buona esperienza nella produzione di Pinze ad alta precisione per l'alloggiamento nei magazzini di macchine utensili.

Nella nostra gamma sono presenti attacchi: ISO, HSK ed altri, e naturalmente siamo aperti ad altre versioni secondo disegno del cliente.



Pinze / Clamping fingers

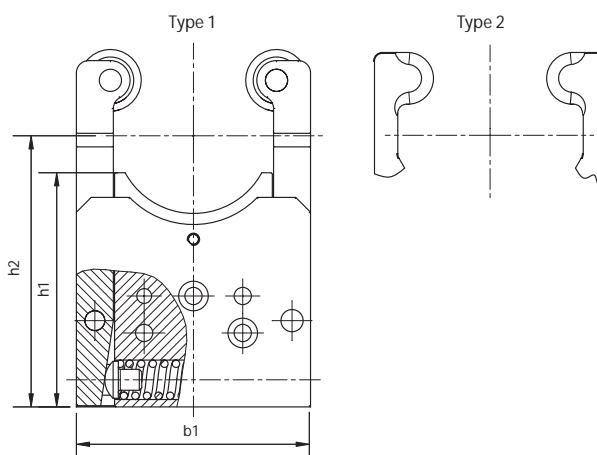
		Codice/Code	Peso del mandrino / Toolholder 's weight			Lunghezza del mandrino (mm) Tool's length (mm)	Molla/Spring	
			Max. Load in vertical Pos .(kg)	Max. Load in upper Pos .(kg)	Max. Load in lower Pos .(kg)			
CAS-HSK63A		832-018030	14,6	7,8	4,1	250	SN 2540-16-76	A
		832-018470	21	11,2	5,9	250	SN 2560-16-76	B
CAS-HSK100A		832-018020	40	20,5	11	400	SDF600-20x102	A
		832-018480	80	50	27	400	SDF700-20x102	B
CAS-C6		832-007940	15,6	8,3	4,4	250	SN 2540-16-76	A
		832-018490	22,3	11,9	6,3	250	SN 2560-16-76	B
CAS-C8		832-018050	18,2	10,5	5,1	250	SDF600-16x89	A
		832-018500	29	16,7	8,2	250	SDF700-16x89	B
CAS-KM 63-2		832-007980	14,4	7,7	4	250	SN 2540-16-76	A
		832-018510	20,5	10,9	5,8	250	SN 2560-16-76	B
CAS-TC 40		832-018520	14,6	7,8	4,1	250	SN 2540-16-76	A
		832-018530	21	11,2	5,9	250	SN 2560-16-76	B
CAS-TC50		832-018360	25	13	7	400	SDF500-20x102	C
		832-018210	40	27	15	400	SDF600-20x102	A
CAS-BT 40		832-018540	14,6	7,8	4,1	250	SN 2540-16-76	A
		832-018550	21	11,2	5,9	250	SN 2560-16-76	B
CAS-BT 50		832-018370	25	13	7	400	SDF500-20x102	C
		832-018200	61	31	17	400	SDF600-20x102	A

A- Molla Forza Media/Middle Strength Spring

B- Molla Rinforzata/Stiffened Spring

C- Molla Normale/Normal Spring

GREIFER FÜR WERKZEUGMAGAZIN PINCES DE LOGEMENT POUR LE MAGASIN DES MACHINES OUTILS
CLAMPING FINGERS PINZE PER MAGAZZINI UTENSILI



Code N.	Tool	b1	h1	h2	Type	Type spring
832-018030	HSK 63A	95	95	110	1	A
832-018470	HSK 63A	95	95	110	1	B
832-018020	HSK 100A	135	118	139	2	A
832-018480	HSK 100A	135	118	139	2	B
832-007940	CAPTO 6	95	91	110	1	A
832-018490	CAPTO 6	95	91	110	1	B
832-018050	CAPTO 8	105	85	110	1	A
832-018500	CAPTO 8	105	85	110	1	B
832-007980	KM 63	95	100	110	2	A
832-018510	KM 63	95	100	110	2	B
832-018520	TC 40	95	95	110	1	A
832-018530	TC 40	95	95	110	1	B
832-018360	TC 50	135	118	139	2	C
832-018210	TC 50	135	118	139	2	A
832-018540	BT 40	95	95	110	1	A
832-018550	BT 40	95	95	110	1	B
832-018370	BT 50	135	118	139	2	C
832-018200	BT 50	135	118	139	2	A

A- Molla Forza Media/Middle Strength Spring

B- Molla Rinforzata/Stiffened Spring

C- Molla Normale/Normal Spring

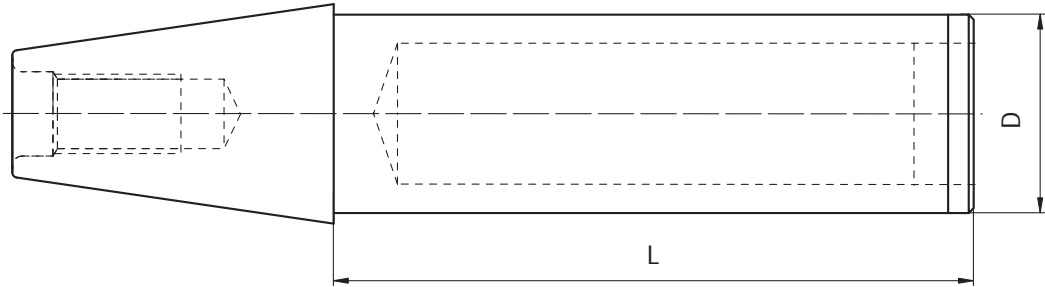


The logo for KAWAII is positioned at the top of the page. It features the word "KAWAII" in a bold, black, sans-serif font. The letter "K" is stylized with a large, orange, arrow-like shape pointing to the right, which is integrated into the letter's structure. The background of the entire page is a faded, high-angle photograph of a white metal grid, likely a shower tray or a similar bathroom fixture, with a white toilet seat visible in the lower-left quadrant.

KAWAII

**ACCESSORI E KIT
ACCESSORIES AND KIT**





Code N.	Description	ISO	D	L
217-71201	TC40H300D40BC	40	40	300
217-71202	TC50H350D50BC	50	50	350

IM HOLZKASTEN UND MIT MESSPROTOKOLL GELIEFERT
 SUPPLIED IN WOODEN BOXES AND WITH TEST CERTIFICATE
 FOURNIES EN BOÎTES DE BOIS ET AVEC CERTIFICAT DE CONTROLE
 FORNITE IN CASSETTA DI LEGNO E CON CERTIFICATO DI COLLAUDO



ISO - PRÜFDORNE

TECHNISCHE DATEN



KEGELSCHAFTTOLERANZEN

IN KLASSE AT3 ANGEFERTIGT

PRÜFDORNTOLERANZEN

Durchmesser	Rundlaufgenauigkeit	Zylindrizität
+/-0.05	0.005	0.003

KONSTRUKTIONSDATEN

- aus Einsatzstahl zertifiziert und legiert angefertigt
- in der Einsatztiefe von 0,4-0,5 mm
- Gehärtet, angelassen, brüniert
- Härte HRC58 +-2, Festigkeit 800-1000 N/ mm2
- Außengeschliffen
- 100% durch zertifizierte Meßinstrumente geprüft

Für DIN 2080 - DIN 69871 - MAS BT geeignet

ISO CONTROL PINS

TECHNICAL FEATURES



CONE'S TOLERANCE

ACCORDING TO THE CLASS AT3.

PIN'S TOLERANCE

Diameter	Runout accuracy	Cilindricity
+/-0.05	0.005	0.003

CONSTRUCTIVE FEATURES

- Manufactured with casehardening Steel
- Casehardened with depth 0,8 - 1mm
- Hardened - Tempered - Black oxidized
- Hardness HRC 58+-2, Strength 800-100 N/mm2
- External grinding finish
- Tested 100% with certified measuring instruments

Suitable for DIN 2080 - DIN 69871 - MAS BT

BARRES DE CONTROLE ISO

DONNEES TECHNIQUES



TOLERANCE DU CONE

FABRIQUEES EN CLASSE AT3

TOLERANCE DE LA BARRE

Diamètre	Coaxialité	Cylindricité
+/-0.05	0.005	0.003

ELEMENTS DE CÔNSTRUCTION

- Produites en acier cémenté certifié et allié au Ni.Cr.Mo.
- Cémentées avec profondeur 0,8 - 1mm
- Trempées - Revenues - Brunies
- Dureté HRC 58 +- 2 résistance 800-1000 N/ mm2
- Finition de rectification extérieure
- Contrôlées à 100% avec des instruments de mesure certifiés

Utilisable pour DIN 2080 - DIN 69871 - MAS BT

BARRE DI CONTROLLO ISO

DATI TECNICI



TOLLERANZA DEL CONO

PRODOTTI IN CLASSE AT3.

TOLLERANZE DELLA BARRA

Diametro	Coassialità	Cilindricità
+/-0.05	0.005	0.003

DATI COSTRUTTIVI

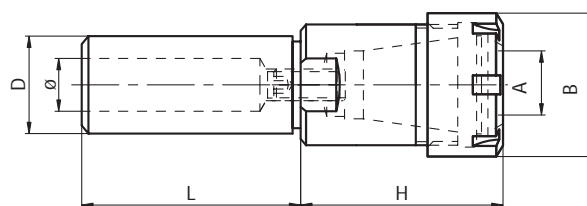
- Costruite in acciaio da cementazione certificato e legato
- Cementate con profondità 0,4 - 0,5 mm
- Temprate-rinvenute-brunite
- Durezza HRC 58 +- 2 resistenza 800-1000 N/ mm2
- Finitura di rettifica esterna
- Collaudate 100% con strumenti di misura certificati

Utilizzabile per DIN 2080 - DIN 69871 - MAS BT

SPANNFUTTER MIT ZYLINDERSCHAFT MIT MINI SPANNMUTTER
CYLINDRICAL COLLET CHUCKS WITH MINI NUT

PORTE PINCES QUEUE CYLINDRIQUE AVEC ECROU MINI
PORTAPINZA GAMBO CILINDRICO CON GHIERA MINI

DIN 6499



Code N.	Description	Dh6	L	H	B	Clamping capacity	Nut	Description
264-35114	D5L45ER8M	5	45	24	12	0,5÷5	812-203011	ER8M
214-35101	D6L45ER8M	6	45	24	12	0,5÷5	812-203011	ER8M
214-35139	D6L45ER11M	6	45	25	16	0,5÷7	812-203012	ER11M
264-35115	D7L45ER11M	7	45	25	16	0,5÷7	812-203012	ER11M
214-35102	D8L55ER8M	8	55	24	12	0,5÷5	812-203011	ER8M
214-35108	D8L80ER8M	8	80	24	12	0,5÷5	812-203011	ER8M
214-35109	D8L55ER11M	8	55	25	16	0,5÷7	812-203012	ER11M
264-35116	D8L100ER11M	8	100	25	16	0,5÷7	812-203012	ER11M
264-35117	D10L55ER8M	10	55	24	12	0,5÷5	812-203011	ER8M
264-35118	D10L100ER8M	10	100	24	12	0,5÷5	812-203011	ER8M
214-35110	D10L55ER11M	10	55	25	16	0,5÷7	812-203012	ER11M
264-35119	D10L100ER11M	10	100	25	16	0,5÷7	812-203012	ER11M
214-35113	D10L60ER16M	10	60	37	22	0,5÷10	812-203013	ER16M
264-35120	D10L100ER16M	10	100	37	22	0,5÷10	812-203013	ER16M
214-35140	D12L100ER8M	12	100	15	12	0,5÷5	812-203011	ER8M
264-35121	D12L140ER8M	12	140	15	12	0,5÷5	812-203011	ER8M
264-35122	D12L55ER11M	12	55	25	16	0,5÷7	812-203012	ER11M
214-35141	D12L70ER11M	12	70	25	16	0,5÷7	812-203012	ER11M
214-35142	D12L100ER11M	12	100	25	16	0,5÷7	812-203012	ER11M
214-35143	D12L140ER11M	12	140	25	16	0,5÷7	812-203012	ER11M
264-35123	D12L55ER16M	12	55	37	22	0,5÷10	812-203013	ER16M
214-35114	D12L80ER16M	12	80	37	22	0,5÷10	812-203013	ER16M
264-35124	D12L120ER16M	12	120	37	22	0,5÷10	812-203013	ER16M
264-35125	D15L100ER20M	15	100	41	28	0,5÷13	812-203014	ER20M
264-35126	D16L40ER11M	16	40	22	16	0,5÷7	812-203012	ER11M
264-35127	D16L80ER11M	16	80	22	16	0,5÷7	812-203012	ER11M
264-35128	D16L100ER11M	16	100	22	16	0,5÷7	812-203012	ER11M
264-35129	D16L130ER11M	16	130	22	16	0,5÷7	812-203012	ER11M
264-35130	D16L160ER11M	16	160	22	16	0,5÷7	812-203012	ER11M
264-35131	D16L35ER16M	16	35	37	22	0,5÷10	812-203013	ER16M
264-35132	D16L60ER16M	16	60	37	22	0,5÷10	812-203013	ER16M
214-35115	D16L80ER16M	16	80	37	22	0,5÷10	812-203013	ER16M
214-35145	D16L100ER16M	16	100	37	22	0,5÷10	812-203013	ER16M
214-35146	D16L125ER16M	16	125	37	22	0,5÷10	812-203013	ER16M
214-35147	D16L160ER16M	16	160	37	22	0,5÷10	812-203013	ER16M
264-35133	D16L55ER20M	16	55	38	28	0,5÷13	812-203014	ER20M
214-35148	D16L100ER20M	16	100	38	28	0,5÷13	812-203014	ER20M
264-35134	D16L130ER20M	16	130	38	28	0,5÷13	812-203014	ER20M
264-35135	D16L160ER20M	16	160	38	28	0,5÷13	812-203014	ER20M

D5÷D16 Zylinderschaft • Shank without flat • Queue cylindrique • Stelo senza piano

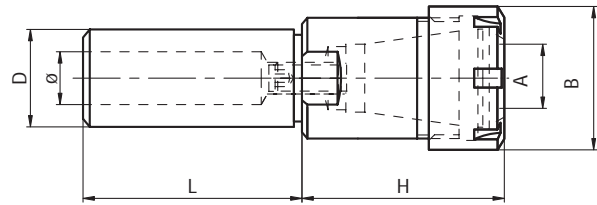
Ohne Schlüssel • Without wrench • Sans clés • La chiave non è inclusa

Von Ø10 bis Ø50 mit zentrale Kühlmittelzufuhr • From Ø10 to Ø50 supplied with internal coolant
De Ø10 a Ø50 avec arrosage central • Dal Ø10 al Ø50 forniti con passaggio refrigerante interno

SPANNFUTTER MIT WELDON SCHAFT MIT MINI SPANNMUTTER
CYLINDRICAL COLLET CHUCKS WITH MINI NUT

PORTE PINCES QUEUE WELDON AVEC ECROU MINI
PORTAPINZA GAMBO WELDON CON GHIERA MINI

DIN 6499



Code N.	Description	Dh6	L	H	B	Clamping capacity	Nut	Description
264-35136	D20L50ER11M	20	50	22	16	0,5÷7	812-203120	ER11M
264-35137	D20L100ER11M	20	100	22	16	0,5÷7	812-203120	ER11M
214-35149	D20L60ER16M	20	60	30	22	0,5÷10	812-203130	ER16M
214-35150	D20L100ER16M	20	100	30	22	0,5÷10	812-203130	ER16M
264-35138	D20L130ER16M	20	130	30	22	0,5÷10	812-203130	ER16M
214-35151	D20L160ER16M	20	160	30	22	0,5÷10	812-203130	ER16M
264-35139	D20L200ER16M	20	200	30	22	0,5÷10	812-203130	ER16M
264-35140	D20L46ER20M	20	46	37	28	0,5÷13	812-203140	ER20M
214-35152	D20L60ER20M	20	60	37	28	0,5÷13	812-203140	ER20M
214-35111	D20L100ER20M	20	100	37	28	0,5÷13	812-203140	ER20M
214-35153	D20L120ER20M	20	120	37	28	0,5÷13	812-203140	ER20M
214-35154	D20L160ER20M	20	160	37	28	0,5÷13	812-203140	ER20M
264-35141	D20L200ER20M	20	200	37	28	0,5÷13	812-203140	ER20M
264-35142	D20L46ER25M	20	46	46	35	0,5÷16	812-203150	ER25M
214-35155	D20L60ER25M	20	60	46	35	0,5÷16	812-203150	ER25M
214-35116	D20L100ER25M	20	100	46	35	0,5÷16	812-203150	ER25M
214-35156	D20L130ER25M	20	130	46	35	0,5÷16	812-203150	ER25M
264-35143	D25L100ER11M	25	100	18	16	0,5÷7	812-203120	ER11M
264-35144	D25L60ER16M	25	60	27	22	0,5÷10	812-203130	ER16M
214-35157	D25L100ER16M	25	100	27	22	0,5÷10	812-203130	ER16M
264-35145	D25L130ER16M	25	130	27	22	0,5÷10	812-203130	ER16M
264-35146	D25L160ER16M	25	160	27	22	0,5÷10	812-203130	ER16M
214-35158	D25L60ER20M	25	60	28	28	0,5÷13	812-203140	ER20M
214-35159	D25L100ER20M	25	100	28	28	0,5÷13	812-203140	ER20M
264-35147	D25L130ER20M	25	130	28	28	0,5÷13	812-203140	ER20M
214-35160	D25L160ER20M	25	160	28	28	0,5÷13	812-203140	ER20M
264-35148	D25L50ER25M	25	50	32	35	0,5÷16	812-203150	ER25M
214-35161	D25L70ER25M	25	70	32	35	0,5÷16	812-203150	ER25M
264-35149	D25L100ER25M	25	100	32	35	0,5÷16	812-203150	ER25M
214-35162	D25L120ER25M	25	120	32	35	0,5÷16	812-203150	ER25M
264-35150	D25L160ER25M	25	160	32	35	0,5÷16	812-203150	ER25M
264-35151	D32L90ER16M	32	90	30	22	0,5÷10	812-203130	ER16M
214-35163	D32L90ER20M	32	90	27	28	0,5÷13	812-203140	ER20M

D20÷D32 Zylinderschaft mit Fläche • Shank with flat • Queue cylindrique avec plat • Stelo con piano

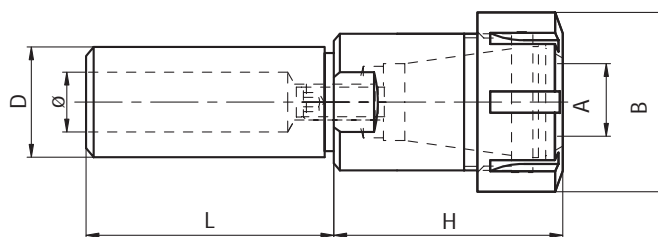
Ohne Schlüssel • Without wrench • Sans clés • La chiave non è inclusa

Von Ø10 bis Ø50 mit zentrale Kühlmittelzufuhr • From Ø10 to Ø50 supplied with internal coolant
De Ø10 a Ø50 avec arrosage central • Dal Ø10 al Ø50 forniti con passaggio refrigerante interno

SPANNFUTTER MIT ZYLINDERSCHAFT MIT STANDARD SPANNMUTTER
CYLINDRICAL COLLET CHUCKS WITH STANDARD NUT

PORTE PINCES QUEUE CYLINDRIQUE AVEC ECROU STANDARD
PORTAPINZA GAMBO CILINDRICO CON GHIERA STANDARD

DIN 6499



Code N.	Description	Dh6	L	H	B	Clamping capacity	Nut	Description
264-35152	D14L60ER16	14	60	36	32	0,5÷10	812-203005	ER16
214-35144	D16L60ER16	16	60	36	32	0,5÷10	812-203005	ER16
214-35126	D16L100ER16	16	100	36	32	0,5÷10	812-203005	ER16
264-35153	D16L60ER20	16	60	40	35	0,5÷13	812-203006	ER20
264-35154	D16L35ER25	16	35	46	42	0,5÷16	812-203001	ER25
264-35155	D16L70ER25	16	70	46	42	0,5÷16	812-203001	ER25
264-35156	D20L50ER16	20	50	31	32	0,5÷10	812-203005	ER16
214-35127	D20L100ER16	20	100	31	32	0,5÷10	812-203005	ER16
264-35157	D20L160ER16	20	160	31	32	0,5÷10	812-203005	ER16
264-35158	D20L46ER20	20	46	36	35	0,5÷13	812-203006	ER20
264-35159	D20L60ER20	20	60	36	35	0,5÷13	812-203006	ER20
264-35160	D20L100ER20	20	100	36	35	0,5÷13	812-203006	ER20
214-35119	D20L50ER25	20	50	46	42	0,5÷16	812-203001	ER25
214-35128	D20L100ER25	20	100	46	42	0,5÷16	812-203001	ER25
264-35161	D20L130ER25	20	130	46	42	0,5÷16	812-203001	ER25
264-35162	D20L160ER25	20	160	46	42	0,5÷16	812-203001	ER25
264-35163	D20L50ER32	20	50	54	50	2÷20	812-203002	ER32
214-35129	D20L100ER32	20	100	54	50	2÷20	812-203002	ER32
264-35164	D20L130ER32	20	130	54	50	2÷20	812-203002	ER32
264-35165	D20L160ER32	20	160	54	50	2÷20	812-203002	ER32
264-35166	D22L80ER16	22	80	26	32	0,5÷10	812-203005	ER16
264-35167	D22L80ER20	22	80	36	35	0,5÷13	812-203006	ER20
264-35168	D22L50ER25	22	50	42	42	0,5÷16	812-203001	ER25
264-35169	D22L80ER25	22	80	42	42	0,5÷16	812-203001	ER25
264-35170	D22L50ER32	22	50	53	50	2÷20	812-203002	ER32
264-35171	D25L60ER20	25	60	28	35	0,5÷13	812-203006	ER20
264-35172	D25L100ER20	25	100	28	35	0,5÷13	812-203006	ER20
214-35120	D25L50ER25	25	50	32	42	0,5÷16	812-203001	ER25
214-35130	D25L100ER25	25	100	32	42	0,5÷16	812-203001	ER25
264-35173	D25L130ER25	25	130	32	42	0,5÷16	812-203001	ER25
264-35174	D25L160ER25	25	160	32	42	0,5÷16	812-203001	ER25
264-35175	D25L50ER32	25	50	54	50	2÷20	812-203002	ER32
264-35176	D25L70ER32	25	70	54	50	2÷20	812-203002	ER32
214-35131	D25L100ER32	25	100	54	50	2÷20	812-203002	ER32
264-35177	D25L130ER32	25	130	54	50	2÷20	812-203002	ER32
264-35178	D25L160ER32	25	160	54	50	2÷20	812-203002	ER32
264-35179	D25L50ER40	25	50	60	63	3÷30	812-203003	ER40
264-35180	D25L100ER40	25	100	60	63	3÷30	812-203003	ER40

D14÷D16 Zylinderschaft • Shank without flat • Queue cylindrique • Stelo senza piano

D20÷D25 Zylinderschaft mit Fläche • Shank with flat • Queue cylindrique avec plat • Stelo con piano

Ohne Schlüssel • Without wrench • Sans clés • La chiave non è inclusa

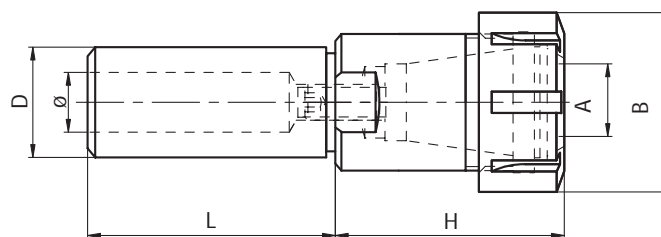
Von Ø10 bis Ø50 mit zentrale Kühlmittelzufuhr • From Ø10 to Ø50 supplied with internal coolant

De Ø10 a Ø50 avec arrosage central • Dal Ø10 al Ø50 forniti con passaggio refrigerante interno

SPANNFUTTER MIT ZYLINDERSCHAFT UND STANDARD SPANNMUTTER
CYLINDRICAL COLLET CHUCKS WITH STANDARD NUT

PORTE PINCES QUEUE CYLINDRIQUE AVEC ECROU STANDARD
PORTAPINZA GAMBO CILINDRICO CON GHIERA STANDARD

DIN 6499



Code N.	Description	Dh6	L	H	B	Clamping capacity	Nut	Description
264-35181	D30L50ER25	30	50	45	42	0,5÷16	812-203001	ER25
264-35182	D30L50ER32	30	50	53	50	2÷20	812-203002	ER32
264-35183	D30L50ER40	30	50	60	63	3÷30	812-203003	ER40
214-35132	D32L70ER25	32	70	28	42	0,5÷16	812-203001	ER25
264-35184	D32L120ER25	32	120	28	42	0,5÷16	812-203001	ER25
264-35185	D32L50ER32	32	50	38	50	2÷20	812-203002	ER32
214-35117	D32L70ER32	32	70	38	50	2÷20	812-203002	ER32
264-35186	D32L100ER32	32	100	38	50	2÷20	812-203002	ER32
214-35133	D32L120ER32	32	120	38	50	2÷20	812-203002	ER32
214-35134	D32L150ER32	32	150	38	50	2÷20	812-203002	ER32
264-35187	D32L50ER40	32	50	60	63	3÷30	812-203003	ER40
264-35188	D32L70ER40	32	70	60	63	3÷30	812-203003	ER40
264-35189	D40L70ER25	40	70	42	42	0,5÷16	812-203001	ER25
214-35135	D40L120ER25	40	120	42	42	0,5÷16	812-203001	ER25
214-35136	D40L70ER32	40	70	30	50	2÷20	812-203002	ER32
214-35137	D40L130ER32	40	130	30	50	2÷20	812-203002	ER32
264-35190	D40L50ER40	40	50	60	63	3÷30	812-203003	ER40
214-35138	D40L80ER40	40	80	60	63	3÷30	812-203003	ER40
264-35191	D40L130ER40	40	130	60	63	3÷30	812-203003	ER40
264-35192	D50L125ER32	50	125	32	50	2÷20	812-203002	ER32
264-35193	D50L155ER32	50	155	32	50	2÷20	812-203002	ER32
264-35194	D50L160ER40	50	160	37	63	3÷30	812-203003	ER40

D30÷D50 Zylinderschaft mit Fläche • Shank with flat • Queue cylindrique avec plat • Stelo con piano

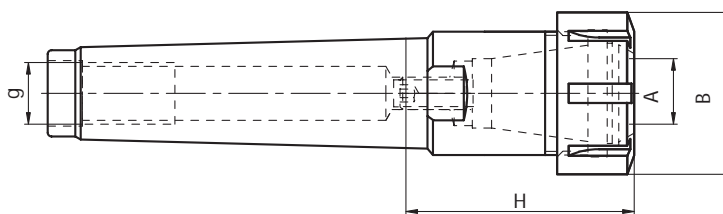
Ohne Schlüssel • Without wrench • Sans clés • La chiave non è inclusa

Von Ø10 bis Ø50 mit zentrale Kühlmittelzufuhr • From Ø10 to Ø50 supplied with internal coolant
De Ø10 a Ø50 avec arrosage central • Dal Ø10 al Ø50 forniti con passaggio refrigerante interno

SPANNZANGENAUFNAHME MIT MORSEKEGEL UND ANZUGSGEWINDE
COLLET CHUCKS WITH MORSE TAPER

PORTE-OUTIL POUR SERRAGE PAR PINCE MK
PORTAPINZA CON ATTACCO CONO MORSE

DIN 6499

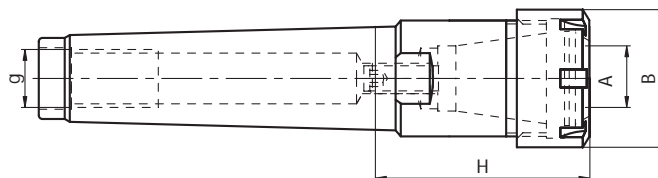


Code N.	Description	MK Morse	H	g	B	Clamping capacity	Nut	Description
214-33102	CM1H40ER16	1	40	M6	32	0,5÷10	812-203005	ER16
214-33103	CM2H42ER16	2	42	M10	32	0,5÷10	812-203005	ER16
214-33104	CM2H50ER20	2	50	M10	35	0,5÷13	812-203006	ER20
214-33106	CM3H53ER25	3	53	M12	42	0,5÷16	812-203001	ER25
214-33107	CM3H70ER32	3	70	M12	50	2÷20	812-203002	ER32
214-33109	CM4H60ER32	4	60	M16	50	2÷20	812-203002	ER32
214-33110	CM4H81ER40	4	81	M16	63	3÷30	812-203003	ER40

SPANNZANGENAUFNAHME MIT MORSEKEGEL,
ANZUGSGEWINDE UND MINI MUTTER
COLLET CHUCKS WITH MORSE TAPER,
WITH MINI NUT

PORTE-OUTIL POUR SERRAGE PAR PINCE MK,
AVEC ECROU MINI
PORTAPINZA CON ATTACCO CONO MORSE,
CON GHIERA MINI

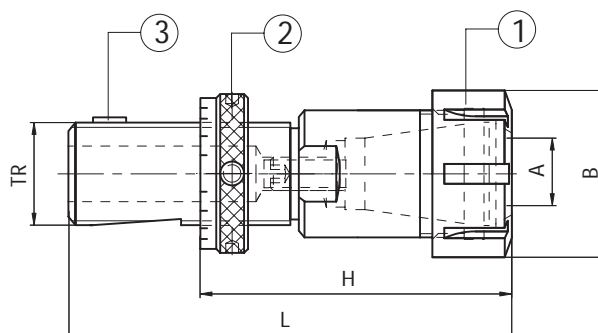
DIN 6499



Code N.	Description	MK Morse	H	g	B	Clamping capacity	Nut	Description
214-33119	CM1H25ER11M	1	25	M6	16	0,5÷7	812-203012	ER11M
214-33120	CM1H40ER16M	1	40	M6	22	0,5÷10	812-203013	ER16M
214-33121	CM2H42ER16M	2	42	M10	22	0,5÷10	812-203013	ER16M
214-33122	CM2H50ER20M	2	50	M10	28	0,5÷13	812-203014	ER20M
214-33123	CM2H54ER25M	2	54	M10	35	0,5÷16	812-203015	ER25M
214-33124	CM3H43ER16M	3	43	M12	22	0,5÷10	812-203013	ER16M
214-33125	CM3H47ER20M	3	47	M12	28	0,5÷13	812-203014	ER20M
214-33126	CM3H58ER25M	3	58	M12	35	0,5÷16	812-203015	ER25M




SPANNZANGENFUTTER DIN 6327 MANDRIN A PINCES DIN 6327
COLLET CHUCK DIN 6327 PORTAPINZE ATTACCO DIN 6327

DIN 6499



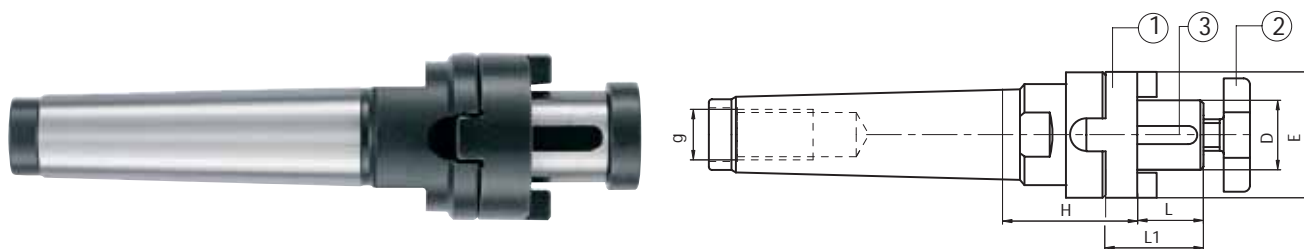
Code N.	Description	Tr	H min.	L	B	Clamping capacity	Type
214-34302	TR16X1.5L122ER16	16x1,5	46	122	28	0,5÷10	ER16
214-34303	TR20X2L128ER16	20x2	55	128	28	0,5÷10	ER16
214-34304	TR20X2L135ER20	20x2	62	135	34	0,5÷13	ER20
214-34306	TR28X2L140ER20	28x2	61	140	34	0,5÷13	ER20
214-34307	TR28X2L140ER25	28x2	61	140	42	0,5÷16	ER25
214-34308	TR28X2L147ER32	28x2	68	147	50	2÷20	ER32
214-34310	TR36X2L165ER32	36x2	65	165	50	2÷20	ER32
214-34311	TR36X2L186ER40	36x2	86	186	63	3÷30	ER40

Ersatzteile • Spare parts • Pièces détachées • Componenti

Code N.	Nut	Nut	Tenon
			
214-34302	812-203005	812-204030	814-20279
214-34303	812-203005	812-204040	814-20279
214-34304	812-203006	812-204040	814-20279
214-34306	812-203006	812-204010	814-20281
214-34307	812-203001	812-204010	814-20281
214-34308	812-203002	812-204010	814-20282
214-34310	812-203002	812-204020	814-20283
214-34311	812-203003	812-204020	814-20283

KOMBI-AUFSTECKFRÄSDORNE MIT MORSEKEGEL MANDRINS PORTE-FRAISES A DOUBLE USAGE MK
 COMBI-SHELL MILL ADAPTORS WITH MORSE TAPER PORTAFRESE COMBINATI CON ATTACCO CONO MORSE

DIN 6358



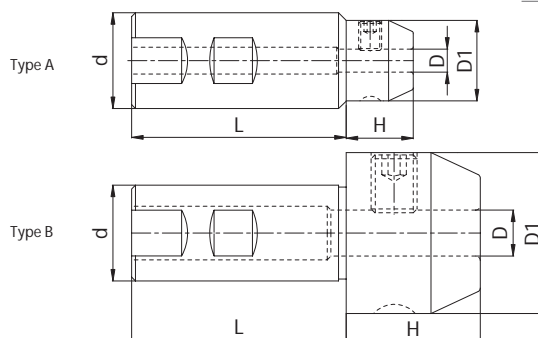
Code N.	Description	MK Morse	D	H	L1	L	E	g
216-13118	CM2H37D16C	2	16	37	27	17	32	M10
216-13119	CM2H42D22C	2	22	42	31	19	40	M10
216-13120	CM3H37D16C	3	16	37	27	17	32	M12
216-13121	CM3H42D22C	3	22	42	31	19	40	M12
216-13122	CM3H42D27C	3	27	42	33	21	48	M12
216-13123	CM3H63D32C	3	32	63	38	24	58	M12
216-13124	CM4H55D16C	4	16	55	27	17	32	M16
216-13125	CM4H55D22C	4	22	55	31	19	40	M16
216-13126	CM4H55D27C	4	27	55	33	21	48	M16
216-13127	CM4H55D32C	4	32	55	38	24	58	M16
216-13128	CM5H75D22C	5	22	75	31	19	40	M20
216-13129	CM5H75D27C	5	27	75	33	21	48	M20
216-13130	CM5H75D32C	5	32	75	38	24	58	M20
216-13131	CM5H75D40C	5	40	75	41	27	70	M20

Ersatzteile • Spare parts • Pièces détachées • Componenti

D	Ring	Screw	Key	Wrench
16	814-30001	811-107003	814-201010	816-130002
22	814-30002	811-107004	814-201020	816-130003
27	814-30003	811-107005	814-201030	816-130004
32	814-30004	811-107006	814-201040	816-130005
40	814-30005	811-107007	814-201050	816-130006

WELDON REDUZIERHÜLSEN DOUILLES DE REDUCTION WELDON
 WELDON REDUCTION SLEEVES BUSSOLE DI RIDUZIONE WELDON

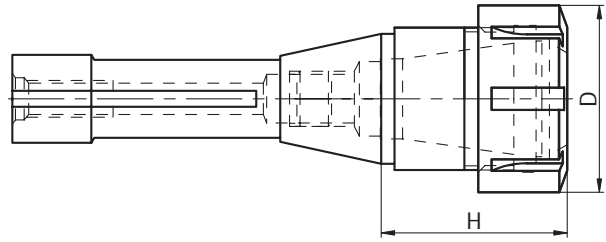
DIN 1835 B



Code N.	Description	d	D	H	L	DI	Type
213-15203	WE20H30WE06	20	6	30	50	25	B
213-15204	WE20H30WE08	20	8	30	50	28	B
213-15205	WE20H30WE10	20	10	30	50	35	B
213-15206	WE20H35WE12	20	12	35	50	42	B
213-15207	WE20H35WE14	20	14	35	50	44	B
213-15208	WE20H60WE16	20	16	60	50	48	B
213-15209	WE25H25WE06	25	6	25	56	25	A
213-15210	WE25H30WE08	25	8	30	56	28	B
213-15211	WE25H30WE10	25	10	30	56	35	B
213-15212	WE25H35WE12	25	12	35	56	42	B
213-15213	WE25H35WE14	25	14	35	56	44	B
213-15214	WE25H40WE16	25	16	40	56	48	B
213-15215	WE32H30WE06	32	6	30	60	25	A
213-15216	WE32H30WE08	32	8	30	60	28	A
213-15217	WE32H30WE10	32	10	30	60	35	B
213-15218	WE32H35WE12	32	12	35	60	42	B
213-15219	WE32H35WE14	32	14	35	60	44	B
213-15220	WE32H40WE16	32	16	40	60	48	B
213-15221	WE32H40WE18	32	18	40	60	50	B
213-15222	WE32H40WE20	32	20	40	60	52	B
213-15223	WE32H65WE25	32	25	65	60	65	B

SPANNZANGENFUTTER BRIDGEPORT R8 MANDRINS A PINCES BRIDGEPORT R8
COLLET CHUCK BRIDGEPORT R8 PORTAPINZE ATTACCO BRIDGEPORT R8

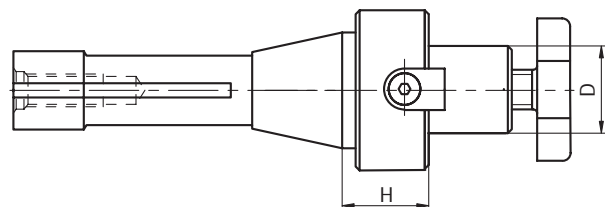
DIN 6499



Code N.	Description	H	D	Clamping capacity	Type	Nut
214-36401	R8H40ER32	40	50	2÷20	ER32	812-203002
214-36402	R8H73ER40	73	63	3÷30	ER40	812-203003

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT BRIDGEPORT R8 PORTE-FRAISE-ENTRAÎNEMENT PAR TENONS BRIDGEPORT R8
MILL HOLDERS-TENONS DRIVE BRIDGEPORT R8 PORTAFRESE A TRASCINAMENTO FISSO BRIDGEPORT R8

ISO 3937



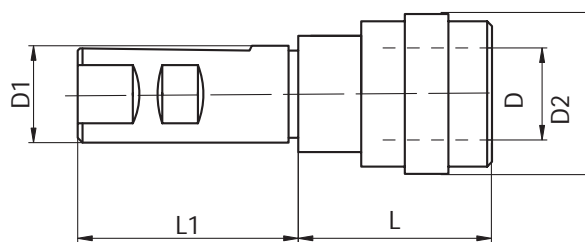
Ersatzteile • Spare parts • Pièces détachées • Componenti

Code N.	Description	D	H
216-76401	R8H19D16F	16	19
216-76402	R8H23D22F	22	23
216-76403	R8H23D27F	27	23
216-76404	R8H24D32F	32	24

GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT LÄNGENAUSGLEICH MIT ZYLINDERSCHAFT
CYLINDRICAL TAP CHUCKS

MANDRIN DE TARAUDAGE AVEC QUEUE CYLINDRIQUE
MASCHIATORE A DOPPIA COMPENSAZIONE CON CODOLO CILINDRICO

DIN 1835 B+E

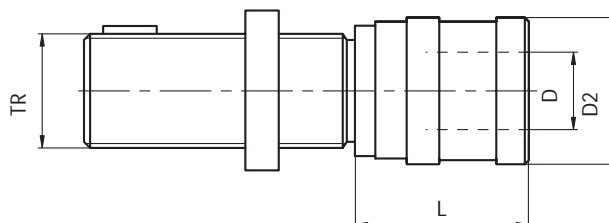


Code N.	Description	D1	Size	Top range	D	D2	L	L1	Comp	Ext
M401020	M3-M12CIL.D20GR1	20	1	M3÷M12	19	38	41	50	9	9
M401025	M3-M12CIL.D25GR1	25	1	M3÷M12	19	38	41	56	9	9
M401032	M3-M12CIL.D32GR1	32	1	M3÷M12	19	38	41	61	9	9
M401040	M3-M12CIL.D40GR1	40	1	M3÷M12	19	38	41	72	9	9
M402020	M6-M20CIL.D20GR2	20	2	M6÷M20	31	53	63	50	15	15
M402025	M6-M20CIL.D25GR2	25	2	M6÷M20	31	53	63	56	15	15
M402032	M6-M20CIL.D32GR2	32	2	M6÷M20	31	53	63	61	15	15
M402040	M6-M20CIL.D40GR2	40	2	M6÷M20	31	53	63	72	15	15
M403032	M14-M33CIL.D32GR3	32	3	M14÷M33	48	79	97	61	24	24
M403040	M14-M33CIL.D40GR3	40	3	M14÷M33	48	79	97	72	24	24

GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT LÄNGENAUSGLEICH MIT STELLHÜSENSCHAFT
COLLET CHUCKS WITH MORSE TAPER,
WITH AUTOMOTIVE SHANK

MANDRIN DE TARAUDAGE A CHANGEMENT RAPIDE AVEC QUEUE FILETEE
MASCHIATORE A DOPPIA COMPENSAZIONE CON GAMBO FILETTATO

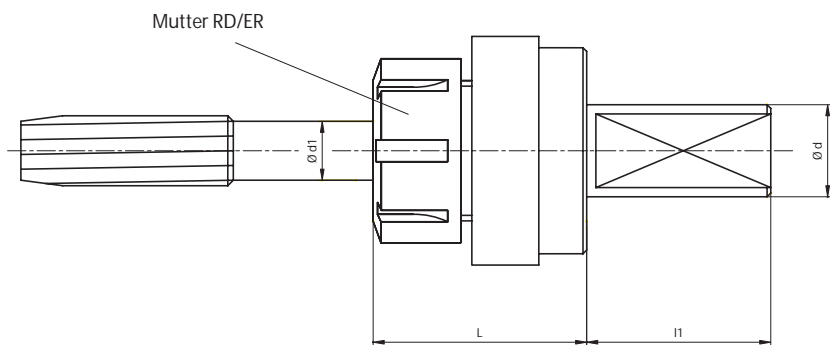
DIN 6327



Code N.	Description	Size	Top range	Press	Ext	TR	D	D2	L	Nut	Tenon
M-1430	M3-M12TR28X2GR1	1	M3÷M12	9	9	28x2	19	36	53	812-204010	814-20281
M-1440	M3-M12TR36X2GR1	1	M3÷M12	9	9	36x2	19	36	55	812-204020	814-20282
M-1530	M6-M20TR28X2GR2	2	M6÷M20	15	15	28x2	31	53	75	812-204010	814-20281
M-1540	M6-M20TR36X2GR2	2	M6÷M20	15	15	36x2	31	53	77	812-204020	814-20282
M-1630	M14-M33TR36X2GR3	3	M14÷M33	24	24	36x2	48	78	111	812-204020	814-20282
M-1640	M14-M33TR48X2GR3	3	M14÷M33	24	24	48x2	48	78	115	812-204080	814-20283



PENDELHALTER PORTE-OUTILS FLOTTANTS A PINCES RD/ER
 FLOATING TOOLHOLDERS FOR RD/ER COLLETS PORTA ALESATORI OSCILLANTE



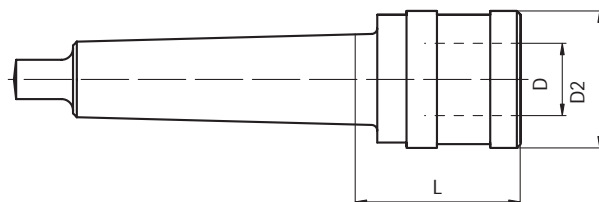
Code N.	d	l1	L	d1	ER
832-021184	16	46	40	2-7	ER11
832-021185	25	46	48	2-13	ER20
832-021186	25	46	50	2-16	ER25
832-021187	25	50	58	3-20	ER32



GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT
LÄNGENAUSGLEICH UND MORSEKEGELSCHAFT
QUICK CHANGE TAP HOLDER
WITH MORSE TAPER SHANK

MANDRIN DE TARAUDAGE CONE MORSE A
CHANGEMENT RAPIDE
MASCHIATORE A DOPPIA COMPENSAZIONE
ATTACCO CONO MORSE

DIN 228-B

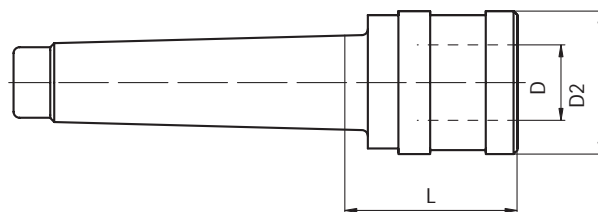


Code N.	Description	Size	Top range	Press	Ext	Mk Morse	D	D2	L
M-1810	M3-M12CM2BGR1	1	M3÷M12	9	9	2	19	36	46
M-1820	M3-M12CM3BGR1	1	M3÷M12	9	9	3	19	36	46
M-1920	M6-M20CM3BGR2	2	M6÷M20	15	15	3	31	53	68
M-1930	M6-M20CM4BGR2	2	M6÷M20	15	15	4	31	53	70
M-2030	M14-M33CM4BGR3	3	M14÷M33	24	24	4	48	78	108
M-2040	M14-M33CM5BGR3	3	M14÷M33	24	24	5	48	78	103

GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT
LÄNGENAUSGLEICH UND MORSEKEGELSCHAFT
QUICK CHANGE TAP HOLDER WITH MT SHANK

MANDRIN DE TARAUDAGE CONE MORSE A
CHANGEMENT RAPIDE
MASCHIATORE A DOPPIA COMPENSAZIONE
ATTACCO CONO MORSE

DIN 228-A

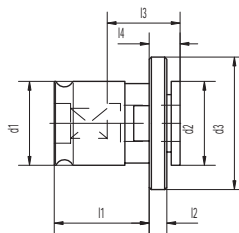


Code N.	Description	Size	Top range	Press	Ext	Mk Morse	D	D2	L
M-2210	M3-M12CM2AGR1	1	M3÷M12	9	9	2	19	36	46
M-2220	M3-M12CM3AGR1	1	M3÷M12	9	9	3	19	36	46
M-2320	M6-M20CM3AGR2	2	M6÷M20	15	15	3	31	53	68
M-2330	M6-M20CM4AGR2	2	M6÷M20	15	15	4	31	53	70
M-2430	M14-M33CM4AGR3	3	M14÷M33	24	24	4	48	78	108
M-2440	M14-M33CM5AGR3	3	M14÷M33	24	24	5	48	78	103

SCHELLWECHSELEINSÄTZE OHNE SICHERHEITSKUPPLUNG
QUICK CHANGE TAPPING ADAPTERS WITHOUT SAFETY COUPLING

ADAPTEURS A CHANGEMENT RAPIDE SANS COUPLAGE DE SECURITE
BUSSOLA PER MASCHIARE SENZA FRIZIONE

IBC

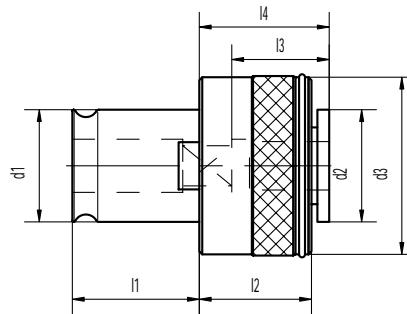


Code N.	Top shank	∇	Size	l1	l2	l3	l4	d1	d2	d3	
IBC 1	IBC1-2,80	2,8	2,1	1	21,5	4	17	7	19	19	30
	IBC1-3,15	3,15	2,5	1	21,5	4	17	7	19	19	30
	IBC1-3,50	3,5	2,7	1	21,5	4	17	7	19	19	30
	IBC1-3,55	3,55	2,8	1	21,5	4	17	7	19	19	30
	IBC1-4,0	4	3	1	21,5	4	17	7	19	19	30
	IBC1-4,0	4	3,15	1	21,5	4	17	7	19	19	30
	IBC1-4,0	5	3,15	1	21,5	4	17	7	19	19	30
	IBC1-4,5	4,5	3,4	1	21,5	4	17	7	19	19	30
	IBC1-4,5	4,5	3,55	1	21,5	4	17	7	19	19	30
	IBC1-5,0	5	4	1	21,5	4	17	7	19	19	30
	IBC1-5,5	5,5	4,3	1	21,5	4	17	7	19	19	30
	IBC1-5,6	5,6	4,5	1	21,5	4	17	7	19	19	30
	IBC1-6,0	6	4,9	1	21,5	4	17	7	19	19	30
	IBC1-6,3	6,3	5	1	21,5	4	17	7	19	19	30
	IBC1-7,0	7	5,5	1	21,5	4	17	7	19	19	30
	IBC1-7,1	7,1	5,6	1	21,5	4	17	7	19	19	30
	IBC1-8,0	8	6,2	1	21,5	4	17	7	19	19	30
	IBC1-8,0	8	6,3	1	21,5	4	17	7	19	19	30
IBC1-9,0	9	7	1	21,5	4	17	7	19	19	30	
IBC1-9,0	9	7,1	1	21,5	4	17	7	19	19	30	
IBC1-10	10	8	1	21,5	4	17	7	19	19	30	
IBC1-11	11	9	1	21,5	4	17	7	19	19	30	
IBC1-11,2	11,2	9	1	21,5	4	17	7	19	19	30	
IBC1-12	12	9	1	21,5	4	17	7	19	19	30	
IBC 2	IBC2-6,0	6	4,9	2	35	5	30	11	31	30	48
	IBC2-6,5	6,3	5	2	35	5	30	11	31	30	48
	IBC2-7,0	7	5,5	2	35	5	30	11	31	30	48
	IBC2-8,0	8	6,2	2	35	5	30	11	31	30	48
	IBC2-9,0	9	7	2	35	5	30	11	31	30	48
	IBC2-9,0	9	7,1	2	35	5	30	11	31	30	48
	IBC2-10	10	8	2	35	5	30	11	31	30	48
	IBC2-11	11	9	2	35	5	30	11	31	30	48
	IBC2-11,2	11,2	9	2	35	5	30	11	31	30	48
	IBC2-12	12	9	2	35	5	30	11	31	30	48
	IBC2-12,5	12,5	10	2	35	5	30	11	31	30	48
	IBC2-14	14	11	2	35	5	30	11	31	30	48
	IBC2-14	14	11,2	2	35	5	30	11	31	30	48
	IBC2-16	16	12	2	35	5	30	11	31	30	48
IBC2-16	16	12,5	2	35	5	30	11	31	30	48	
IBC2-18	18	14,5	2	35	5	30	11	31	30	48	
IBC2-20	20	16	2	35	5	30	11	31	30	48	
IBC 3	IBC3-11	11	9	3	55,5	6	44	14	48	48	70
	IBC3-12	12	9	3	55,5	6	44	14	48	48	70
	IBC3-12,5	12,5	10	3	55,5	6	44	14	48	48	70
	IBC3-14	14	11	3	55,5	6	44	14	48	48	70
	IBC3-16	16	12	3	55,5	6	44	14	48	48	70
	IBC3-18	18	14	3	55,5	6	44	14	48	48	70
	IBC3-18	18	14,5	3	55,5	6	44	14	31	30	70
	IBC3-20	20	16	3	55,5	6	44	14	48	48	70
	IBC3-22	22	18	3	55,5	6	44	14	48	48	70
	IBC3-25	25	20	3	55,5	6	44	14	48	48	70
IBC3-28	28	22	3	55,5	6	44	14	48	48	70	
IBC3-32	32	24	3	55,5	6	44	14	48	48	70	
IBC3-36	36	29	3	55,5	6	44	14	48	48	70	

SCHNELLWECHSELEINSÄTZE MIT SICHERHEITSKUPPLUNG
 QUICK CHANGE TAPPING ADAPTERS WITH SAFETY COUPLING

ADAPTEURS A CHANGEMENT RAPIDE AVEC COUPLAGE DE SECURITE
 BUSSOLA PER MASCHIARE CON FRIZIONE

IBS



	Code N.	Top shank	∠	Size	l1	l2	l3	l4	d1	d2	d3
IBS 1	IBS1-3,5	3,5	2,7	1	21,5	25	17	25	19	19	32
	IBS1-4,5	4,5	3,4	1	21,5	25	17	25	19	19	32
	IBS1-5,5	5,5	4,3	1	21,5	25	17	25	19	19	32
	IBS1-6	6	4,9	1	21,5	25	17	25	19	19	32
	IBS1-7	7	5,5	1	21,5	25	17	25	19	19	32
	IBS1-8	8	6,2	1	21,5	25	17	25	19	19	32
	IBS1-9	9	7	1	21,5	25	17	25	19	19	32
	IBS1-10	10	8	1	21,5	25	17	25	19	19	32
	IBS1-11	11	9	1	21,5	25	17	25	19	19	32
	IBS 2	IBS2-6	6	4,9	2	35	31	30	34	31	30
IBS2-7		7	5,5	2	35	31	30	34	31	30	50
IBS2-8		8	6,2	2	35	31	30	34	31	30	50
IBS2-9		9	7	2	35	31	30	34	31	30	50
IBS2-10		10	8	2	35	31	30	34	31	30	50
IBS2-11		11	9	2	35	31	30	34	31	30	50
IBS2-12		12	9	2	35	31	30	34	31	30	50
IBS2-14		14	11	2	35	31	30	34	31	30	50
IBS2-16		16	12	2	35	31	30	34	31	30	50
IBS2-18		18	14,6	2	35	31	30	34	31	30	50
IBS 3	IBS3-11	11	9	3	55,5	41	44	45	48	48	72
	IBS3-12	12	9	3	55,5	41	44	45	48	48	72
	IBS3-14	14	11	3	55,5	41	44	45	48	48	72
	IBS3-16	16	12	3	55,5	41	44	45	48	48	72
	IBS3-18	18	14,6	3	55,5	41	44	45	48	48	72
	IBS3-20	20	16	3	55,5	41	44	45	48	48	72
	IBS3-22	22	18	3	55,5	41	44	45	48	48	72
	IBS3-25	25	20	3	55,5	41	44	45	48	48	72
IBS3-28	28	22	3	55,5	41	44	45	48	48	72	

TECHNICAL INFORMATIONS / INFORMAZIONI TECNICHE

Tap Shank Dimension ISO 529 - 1975

Dimension Dia. x Square	Metric		UNC		UNF		BSW		BSF		BA	
		Shank dia. enlarged		Shank dia. enlarged		Shank dia. enlarged		Shank dia. enlarged		Shank dia. enlarged		Shank dia. enlarged
3.15 x 2.5	M4	M3	-	No. 4-40	-	No. 4-48	-	-	-	-	-	No. 5
	-	-	No. 8-32	No. 5-40	No. 8-36	No. 5-44	-	-	-	-	No. 3	-
3.55 x 2.8	M 4.5	M 3.5	No. 10-24	No. 6-32	No. 10-32	No. 6-40	3/16"-24	-	3/16"-32	-	No. 2	No. 4
	M 5	M 4	No. 12-24	-	No. 12-28	-	-	-	7/32"-28	-	No. 1	-
4.5 x 3.55	M 6	-	1/4"-20	No. 8-32	1/4"-28	No. 3-36	1/4"-20	-	1/4"-26	-	No. 0	No. 3
	5 x 4	M 5	-	No. 10-24	-	No. 10-32	-	3/16"-24	-	3/16"-32	-	No. 2
5.6 x 4.5	-	-	-	No. 12-24	-	No. 12-28	-	-	9/32"-26	7/32"-28	-	No. 1
	6.3 x 5	M 8	M 6	5/16"-18	1/4"-20	5/16"-24	1/4"-28	5/16"-18	1/4"-20	5/16"-22	1/4"-26	-
7.1 x 5.6	-	-	3/8"-16	-	3/8"-24	-	3/8"-16	-	3/8"-20	9/32"-36	-	-
	8 x 6.3	M 10	M 8	7/16"-14	5/16"-18	7/16"-20	-	7/16"-14	5/16"-18	7/16"-18	5/16"-22	-
9 x 7.1	M 12	-	1/2"-13	-	1/2"-20	-	1/2"-12	-	1/2"-12	-	-	-
	10 x 8	M 10	-	3/8"-16	-	3/8"-24	-	3/8"-16	-	3/8"-20	-	-
11.2 x 9	M 14	-	9/16"-12	-	9/16"-18	-	9/16"-12	-	9/16"-16	-	-	-
	M 16	-	5/8"-11	-	5/8"-18	-	5/8"-11	-	3/8"-14	-	-	-
14 x 11.2	M 18	-	3/4"-10	-	3/4"-16	-	11/16"-11	-	11/16"-14	-	-	-
	M 20	-	-	-	-	-	3/4"-10	-	3/4"-12	-	-	-
16 x 12.5	M 22	-	7/8"-9	-	7/8"-14	-	7/8"-9	-	7/8"-11	-	-	-
	M 24	-	1"-8	-	1"-12	-	1"-8	-	1"-10	-	-	-
18 x 14	M 27	-	1 1/8"-7	-	1 1/8"-12	-	1 1/8"-7	-	1 1/8"-9	-	-	-
	M 30	-	-	-	-	-	-	-	-	-	-	-
22.4 x 18	M 33	-	1 1/2"-4	-	1 1/2"-12	-	1 1/2"-7	-	1 1/2"-9	-	-	-
	M 36	-	1 3/8"-6	-	1 3/8"-12	-	-	-	1 3/8"-8	-	-	-
25 x 20	M 39	-	1 1/2"-6	-	1 1/2"-12	-	1 1/2"-6	-	1 1/2"-8	-	-	-
	M 42	-	-	-	-	-	-	-	1 5/8"-8	-	-	-
28 x 22.4	M 45	-	1 3/4"-5	-	-	-	1 3/4"-5	-	1 3/4"-7	-	-	-
	M 48	-	-	-	-	-	-	-	-	-	-	-

Tap Shank Dimension DIN

Dimension Dia. x Square	DIN 352	DIN 353	DIN 371	DIN 374	DIN 376	DIN 2182	DIN 2183
3.5 x 2.7	M 3	-	M 3	M 6	M 5	1/8"	-
4 x 3	M 4	-	M 3.5	-	-	-	-
4.5 x 3.4	M 4	-	M 4	M 6	M 6	5/32"	1/4"
	M 5	-	M 5	-	-	7/32"	-
6 x 4.9	M 6	-	M 6	-	-	-	-
	M 8	-	-	M 8	M 8	-	-
7 x 5.5	M 10	G 1/8"	-	M 10	M 10	1/4"	3/8"
8 x 6.2	-	-	M 8	-	-	5/16"	7/16"
9 x 7	M 12	-	-	M 12	M 12	3/8"	1/2"
10 x 8	-	-	M 10	-	-	-	-
11 x 9	M 14	G 1/4"	-	M 14	M 14	-	9/16"
12 x 9	M 16	G 3/8"	-	M 16	M 16	-	5/8"
14 x 11	M 18	-	-	M 18	M 18	-	11/16"
16 x 12	M 20	G 1/2"	-	M 20	M 20	-	13/16"
18 x 14.5	M 22	G 5/8"	-	M 22	M 22	-	7/8"
	M 24	-	-	M 24	M 24	-	15/16"
20 x 16	M 27	G 3/4"	-	M 27	M 27	-	1"
22 x 18	M 30	G 7/8"	-	M 30	M 30	-	1 1/8"
25 x 20	M 33	G 1"	-	M 33	M 33	-	1 1/2"
28 x 22	M 36	G 1 1/8"	-	M 36	M 36	-	1 3/8"
32 x 24	M 39	G 1 1/4"	-	M 39	M 39	-	1 1/2"
	M 42	-	-	M 42	M 42	-	1 5/8"
36 x 29	M 45	G 3/4"	-	M 45	M 45	-	1 3/4"
	M 48	G 1 1/2"	-	M 48	M 48	-	1 7/8"
-	-	G 1 3/4"	-	-	-	-	-
-	-	G 2"	-	-	-	-	-

Tap Shank Dimensions ANSI (US Standards)

Tap Shank Dimensions (JIS Standards)

Dimension in Inch. Dia. x Square		Metric Conversions		Tap Size	Dimension in Inch. Dia. x Square		Metric Conversions		Tap Size	Dimension in mm. Dia. x Square		Tap Size
0.141	0.110	3.59	2.80	1/8" No. 6	0.590	0.442	14.99	11.23	3/4"	4.0	3.0	M 3 & M 3.5
0.168	0.131	4.27	3.33	5/32" No. 8	0.652	0.489	16.57	12.43	M 20	5.0	4.0	M 4 & M 4.5
0.194	0.152	4.93	3.87	3/16" No. 10	0.688	0.515	17.47	13.09	1/2" Ps	5.5	4.5	M 5
0.220	0.165	5.59	4.20	No. 12	0.697	0.523	17.71	13.29	7/8"	6.0	4.5	M 6
0.255	0.191	6.48	4.86	1/4" No. 14	0.700	0.531	17.78	13.49	3/8" Ps	6.2	5.0	M 7 & M 8
0.312	0.234	7.94	5.95	1/16" Ps 1/8" Ps	0.760	0.570	19.31	14.48	M 24	7.0	5.5	M 9 & M 10
0.318	0.238	8.08	6.05	5/16" 3/8"	0.800	0.600	20.32	15.24	1"	8.0	6.2	M 11
0.323	0.242	8.21	6.15	5/16" 7/16"	0.896	0.672	22.76	17.07	1 1/8"	8.5	6.5	M 12
0.367	0.275	9.33	6.99	1/2"	0.906	0.679	23.02	17.25	3/4" P	10.5	8.0	M 14
0.381	0.286	9.68	7.27	3/8"	1.021	0.766	25.94	19.46	1 1/2"	12.5	10.0	M 16
0.429	0.322	10.90	8.18	9/16"	1.108	0.833	28.15	21.11	1 3/8"	14.0	11.0	M 18
0.438	0.328	11.12	8.34	1/8" Ps	1.125	0.843	28.58	21.42	1" P	15.0	12.0	M 20
0.480	0.360	12.20	9.15	5/8"	1.233	0.925	31.32	23.60	1 1/2"	17.0	13.0	M 22
0.542	0.406	13.77	10.31	11/16"	1.132	0.984	33.34	25.00	1 1/4" P	19.0	15.0	M 24
0.563	0.421	14.29	10.70	1/4" Ps	1.430	1.072	36.33	27.23	1 3/4"	20.0	15.0	M 27
										23.0	23.17	M 30

TECHNICAL INFORMATIONS / INFORMAZIONI TECNICHE

For material upto 1000 N/mm²

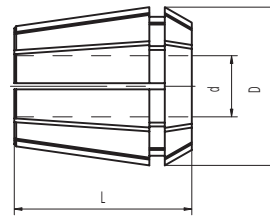
Torque Setting Nm	Threads										Torque Setting Nm
	Metric	Whitworth BSW	BSP Whitworth Pipe	BSF	RSP Taper	BA	PG	NPT Taper	UNC	UNF	
0.5	M3	-	-	-	-	No. 7	-	-	-	-	0.5
0.6	-	-	-	-	-	No. 6	-	-	No. 3	No. 4	0.6
0.8	M 3.5	-	-	-	-	No. 5	-	-	No. 4	No. 5	0.8
1.0	-	1/8"	-	-	-	-	-	-	No. 5	-	1.0
1.2	-	-	-	-	-	No. 4	-	-	-	No. 6	1.2
1.6	M4	-	-	-	-	-	-	-	No. 6	No. 8	1.6
2.0	-	5/32"	-	-	-	No. 3	-	-	No. 8	-	2.0
2.5	M5	-	-	3/16"	-	No. 2	-	-	-	No. 10	2.5
3.0	-	-	-	-	-	-	-	-	-	No. 12	3.0
4.0	-	3/16"	-	7/32"	-	No. 1	-	-	No. 10	1/4"	4.0
5.0	M6	7/32"	-	1/4"	-	No. 0	-	-	No. 12	-	5.0
6.0	-	-	G 1/8"	9/32"	-	-	-	-	-	5/16"	6.0
8.0	-	1/4"	-	5/16"	-	-	-	-	1/4"	3/8"	8.0
10	M8	-	-	-	-	-	-	-	-	-	10
12	-	5/16"	-	3/8"	-	-	PG 7	-	5/16"	7/16"	12
16	-	-	-	-	-	-	-	-	-	1/2"	16
18	M10	3/8"	G 1/4"	7/16"	1/8"	-	-	-	3/8"	-	18
20	-	-	-	-	-	-	PG9	1/8"	-	-	20
22	-	-	-	-	-	-	PG11	-	-	9/16"	22
25	-	-	-	1/2"	-	-	PG 13.6	-	-	5/8"	25
28	M 12	7/16"	G 3/8"	-	-	-	PG 16	-	7/16"	-	28
32	-	-	-	9/16"	-	-	-	-	-	-	32
36	-	-	-	-	-	-	-	-	-	3/4"	36
40	-	-	-	5/8"	-	-	-	-	1/2"	-	40
45	M 14	1/2"	-	11/16"	-	-	PG 21	-	-	-	45
50	M 16	-	G 1/2"	-	1/4"	-	-	-	9/16"	-	50
56	-	-	G 5/8"	-	-	-	-	1/4"	-	7/8"	56
63	-	5/8"	-	-	3/8"	-	PG 29	-	5/8"	-	63
70	-	-	G 3/4"	3/4"	-0	-	-	3/8"	-	-	70
80	M 18	-	G 7/8"	13/16"	-	-	PG 36	-	-	-	80
90	M 20	3/4"	-	7/8"	-	-	PG 42	-	3/4"	1"	90
100	M22	-	-	-	-	-	PG 48	-	-	1 1/8"	100
110	-	-	-	-	-	-	-	-	-	1 1/4"	110
125	-	7/8"	-	1"	-	-	-	-	7/8"	1 3/8"	125
140	-	-	G 1"	-	-	-	-	-	-	1 1/2"	140
160	M24	-	G 1 1/8"	-	1/2"	-	-	1/2"	-	-	160
180	M 27	-	G 1 1/4"	1 1/8"	-	-	-	-	-	-	180
200	-	1"	G 1 3/8"	1 1/4"	3/4"	-	-	3/4"	1"	-	200
220	-	-	G 1 1/2"	-	-	-	-	-	-	-	220
240	-	-	G 1 3/4"	-	-	-	-	-	-	-	240
260	-	-	G 2"	1 3/8"	-	-	-	-	-	-	260
280	M 30	1 1/8"	-	-	-	-	-	-	1 1/8"	-	280
300	-	-	G 2 1/4"	1 1/2"	-	-	-	-	-	-	300
320	M 33	1 1/2"	-	1 5/8"	-	-	-	-	1 1/2"	-	320
340	-	-	G 2 1/2"	-	1"	-	-	1"	-	-	340
360	-	-	G 2 3/4"	-	-	-	-	-	-	-	360
400	-	-	G 3"	-	-	-	-	-	-	-	400
420	M 36	-	G 3 1/2"	-	-	-	-	-	-	-	420
450	-	-	G 3 1/2"	1 3/4"	1 1/4"	-	-	1 1/4"	-	-	450
480	M 39	1 3/8"	G 3 3/4"	-	-	-	-	-	1 3/8"	-	480
500	-	1 1/2"	G 4"	2"	-	-	-	-	1 1/2"	-	500
560	-	-	-	-	1 1/2"	-	-	1 1/2"	-	-	560
630	M 42	-	-	-	-	-	-	-	-	-	630
710	M 45	-	-	2 1/4"	2"	-	-	2"	-	-	710
800	-	1 5/8"	-	2 1/2"	-	-	-	-	-	-	800
900	M 48	1 3/4"	-	2 3/4"	-	-	-	-	1 3/4"	-	900

ER - SPANNZANGENSATZ JEUX DE PINCES TYPE ER
ER COLLET SETS SERIE PINZE TIPO ER



Type	Number of collets	Clamping capacity
SERIE-ER8	(1 ÷ 5) 9 collets	Ø 1-1,5-2-2,5-3-3,5-4-4,5-5
SERIE-ER11	(1 ÷ 7) 13 collets	Ø 1-1,5-2-2,5-3-3,5-4-4,5-5-5,5-6-6,5-7
SERIE-ER16	(1 ÷ 10) 10 collets	Ø 1-2-3-4-5-6-7-8-9-10
SERIE-ER20	(2 ÷ 13) 12 collets	Ø 2-3-4-5-6-7-8-9-10-11-12-13
SERIE-ER25	(2 ÷ 16) 15 collets	Ø 2-3-4-5-6-7-8-9-10-11-12-13-14-15-16
SERIE-ER32	(3 ÷ 20) 18 collets	Ø 3-4-5-6-7-8-9-10-11-12-13-14-15-16-17-18-19-20
SERIE-ER40	(4 ÷ 26) 23 collets	Ø 4-5-6-7-8-9-10-11-12-13-14-15-16-18-20-21-22-23-24-25-26
SERIE-ER40C	(3 ÷ 30) 26 collets	Ø 3-4-5-6-7-8-9-10-11-12-13-14-15-16-18-20-21-22-23-24-25-26-27-28-29-30

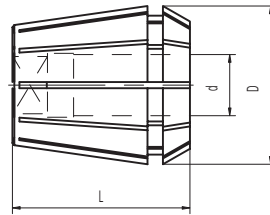
ER TYP SPANNZANGEN PINCES TYPE ER
COLLETS ER TYPE PINZE TIPO ER



DIN 6499/R

Type	D	L	Clamping capacity	Clamping range	DIN
ER8D..	8.5	13.5	1÷5	mm 0,5	4004E
ER11D..	11.5	18	1÷7	mm 0,5	4008E
ER16D..	17	27.5	1÷3 4÷10	mm 0,5 mm 1,0	426E
ER20D..	21	31,5 4÷13	1÷3 mm 1,0	mm 0,5	428E
ER25D..	26	34,5 4÷16	1÷3 mm 1,0	mm 0,5	430E
ER32D..	33	40	2÷20	mm 1,0	470E
ER40D..	41	46	3÷30	mm 1,0	472E
ER50D..	52	60	6÷34	mm 2,0	477E

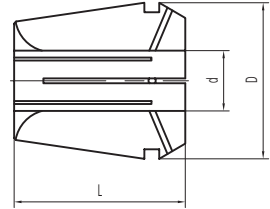
ER TYP SPANNZANGEN MIT INNENVERIANT PINCES DE TARAUDAGE
ER TAPPING COLLETS WITH SQUARE PINZE ER CON QUADRO PER MASCHIATURA



DIN 6499/A

Type	D	L	Clamping capacity
ER16MD..	17	27.5	3.5÷8
ER20MD..	21	31.5	3.5÷10
ER25MD..	26	34	3.5÷12
ER32MD..	33	40	3.5÷16
ER40MD..	41	46	4.5÷20

PRÄZISION ER-SPANNZANGEN ABGEDICHTET PINCES ER ETANCHES
WATERTIGHT ER COLLETS PINZE ER A TENUTA STAGNA



DIN 6499/A

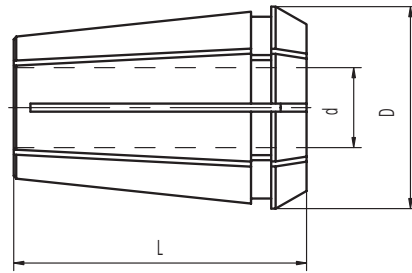
Type	D	L	Clamping capacity
ER11VGD..	11.5	18	3÷7
ER16VGD..	17	27	3÷10
ER20VGD..	21	31.5	3÷13
ER25VGD..	26	34	3÷16
ER32VGD..	33	40	3÷20
ER40VGD..	41	46	4÷26

Collets with neoprene insertions.
Those collets clamp only nominal diameter.
0.005÷0.01 runout accuracy.

Pinze con inserti in neoprene.
Bloccano solo il diametro nominale.
Concentricità : 0.005÷0.01

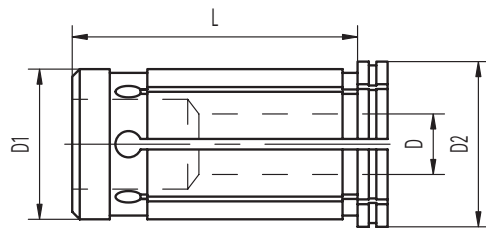
EOC TYP SPANNZANGEN PINCES TYPE EOC
COLLETS EOC TYPE PINZE TIPO EOC

DIN 6388/B



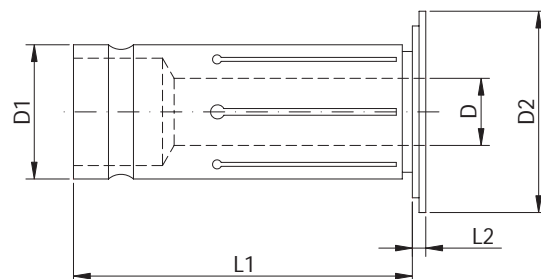
Type	D	L	Clamplng capacity	DIN	Progressione
EOC16D..	25,50	40	2÷16	415E	mm 0,5
EOC20D..	30,00	40	2÷20	415E	mm 0,5
EOC25D..	35,05	52	2÷25	462E	mm 0,5
EOC32D..	40,00	60	3÷32	467E	mm 0,5

SPANNZANGEN FÜR KRAFTSPANNFUTTER PINCES POUR MANDRINS A FORT SERRAGE
COLLETS FOR MILLING CHUCK PINZE PER MANDRINI A FORTE SERRAGGIO



Type	D1	D2	L	D hole size
K20D..	20	25	50	6;8;10;12;16
K32D..	32	37	60	6;8;10;12;16;20;25

ABGEDICHTETE SPANNZANGEN FÜR HYDRODEHNSPANNFUTTER PINCES POUR MANDRINS HYDRAULIQUES
COLLETS FOR HYDRAULIC CHUCKS PINZE PER MANDRINI IDRAULICI

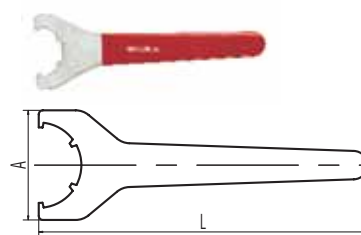


Type	D1	D2	L1	L2	D hole size
GX12D..	12	20	47	2	3;4;5;6;8
GX20D..	20	30	52.5	2	3;4;5;6;8;10;12;14;16
GX32D..	32	40	63.5	3	6;8;10;12;14;16;18;20;25

**SPANNSCHLÜSSEL FÜR STANDARD SPANNMUTTER
WRENCHES FOR STANDARD NUT**

**CLES DE SERRAGE POUR ECROU STANDARD
CHIAVI PER GHIERA STANDARD**

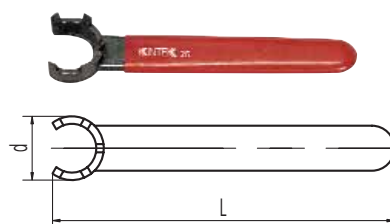
Code N.	ER	A	L
816-203004	16	54	165
816-203005	20	60	180
816-203001	25	70	200
816-203002	32	80	250
816-203003	40	95	280



**SPANNSCHLÜSSEL FÜR MINI SPANNMUTTER
WRENCHES FOR MINI NUT**

**CLES DE SERRAGE POUR ECROU MINI
CHIAVI PER GHIERA MINI**

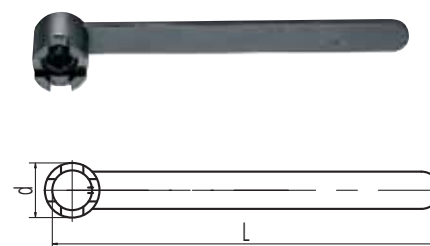
Code N.	ER	d	L
816-203007	8M	12,4	70
816-203008	11M	16,8	90
816-203009	16M	22,5	110
816-203010	20M	29	120
816-203011	25M	36	130



**SPANNSCHLÜSSEL FÜR FRÄSERANZUGSSCHRAUBEN
WRENCHES FOR TOOLS RETAINING SCREW**

**CLE A VIS A CROSSE
CHIAVE PER VITE TESTA A CROCE**

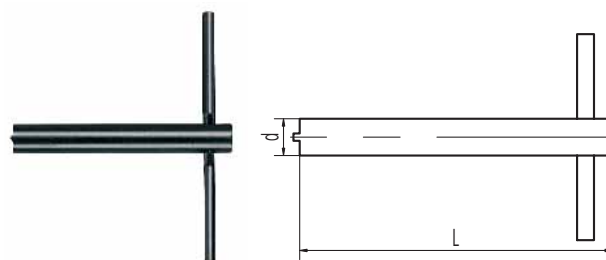
Code N.	Size	d	L
816-130002	16/MB	22	180
816-130003	22/M10	28	200
816-130004	27/M12	35	225
816-130005	32/M16	42	250
816-130006	40/M20	52	280
816-130007	50/M24	63	315



**SPANNSCHLÜSSEL FÜR ÜBERWURFMUTTERN
WRENCHES FOR LOCKNUT**

**CLES POUR COLLIERE D'ETANCHEITE
CHIAVI PER GHIERA DI TENUTA**

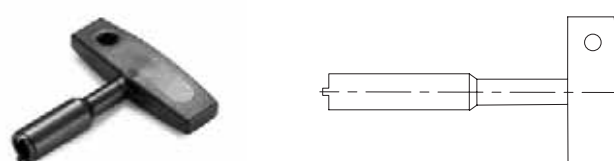
Code N.	Size	d	L
816-20204002	M10/MK1	9,9	85
816-20205002	M15/MK2	14,8	110
816-20206002	M20/MK3	19,2	115
816-20207002	M24/MK4	23	140
816-20208002	M36/MK5	37	172



**SPANNSCHLÜSSEL FÜR KÜHLMITTELÜBERGABESATZ
KEY FOR COOLANT SUPPLY UNIT**

**CLES POUR LE DISPOSITIF DE TRANSFERT DE LIQUIDE DE LUBRIFICATION
CHIAVE PER ADDUTTORE REFRIGERANTE**

HSK	Code N.
32	816-204021
40	816-204022
50	816-204023
63	816-204024
100	816-204025



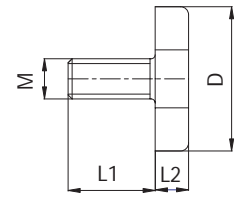
KREUZKOPFSCHRAUBEN FÜR AUFSTECKFRASDORNE UND KOMBI-AUFSTECKFRASDORNE
CROSS HEAD SCREW FOR FACE MILL HOLDERS AND COMBI-SHELL MILL ADAPTORS

VIS CRUCIFORMES POUR PORTE-FRAISES FIXES ET COMBINES
VITI TESTA CROCE PER PORTAFRESE FISSI E COMBINATI

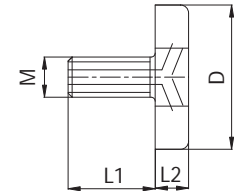
Code N.	M	D	L1	L2	Type
811-107003	M8	20	16	6	A
811-107004	M10	28	18	7	A
811-107005	M12	35	22	8	A
811-107006	M16	42	26	9	A
811-107007	M20	52	30	10	A
811-107009	M24	63	36	12	A
811-107013	M8	20	16	6	B
811-107014	M10	28	18	7	B
811-107015	M12	35	22	8	B
811-107016	M16	42	26	9	B
811-107017	M20	52	30	10	B
811-107027	M24	63	36	12	B



Type A



Type B



GEWUCHTETE SPANNMUTTER
BALANCED NUT

ECROU EQUILIBRE
GHIERA BILANCIATA STANDARD

DIN 6499

Code N.	ER	D	L	M
812-203005	16	32	18	M22X1,5
812-203006	20	35	19	M25X1,5
812-203001	25	42	20	M32X1,5
812-203002	32	50	22.5	M40X1,5
812-203003	40	63	25.5	M50X1,5



SPANNSCHLÜSSEL
WRENCHES FOR BALANCED NUTS

CLES DE SERRAGE
CHIAVI PER GHIERE BILANCIATE

Code N.	Type	Dimension
816-203031	ER16	30/32
816-203032	ER25	40/42
816-203033	ER32	45/50
816-203034	ER40	58/62



MINI SPANNMUTTER ECROU MINI
MINI NUT GHIERA MINI

DIN 6499

Code N.	ER	D	L	M
812-203011	8M	12	11	M10X0,75
812-203012	11M	16	12	M13X0,75
812-203013	16M	22	18	M19X1
812-203014	20M	28	19	M24X1
812-203015	25M	35	20	M30X1



EOC SPANNMUTTER ECROU EOC
EOC NUT GHIERA EOC

DIN 6388

Code N.	EOC	D	L	M
GOC16	16	43	24	M33X1,5
GOC20	20	50	28	M42X2
GOC25	25	60	30	M48X2
GOC32	32	72	34	M60X2,5



GEWUCHTETE SPANNMUTTER ECROU EQUILBRÉ
BALANCED NUT GHIERA BILANCIATA

DIN 6499

Code N.	ER	D	L	M
812-203069	16	32	18	M22x1,5
812-203070	25	42	20	M32x1,5
812-203071	32	50	22,5	M40x1,5
812-203072	40	63	25,5	M50x1,5



* Per mandrini bilanciati in classe G2,5 25000 RPM

* For balanced toolholders, G2,5 25000 RPM





KEGELWISCHER CONES DE NETTOYAGE
TAPER WIPERS PULITORI PER CONI



Code N.	
832-021100	HSK40
832-021101	HSK50
832-021102	HSK63
832-021099	HSK100



Code N.	
832-021103	MK1
832-021104	MK2
832-021105	MK3
832-021106	MK4
832-021107	MK5

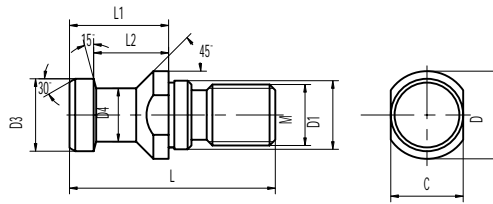


Code N.	
832-021108	SK30
832-021109	SK40
832-021110	SK50

SPANNBOLZEN DIN 69872 TIRETTES DIN 69872
DIN 69872 PULL STUDS CODOLI DI AGGANCIO DIN 69872

DIN 69872

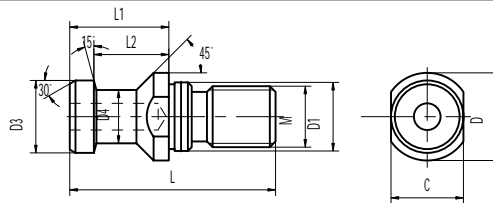
Ohne Bohrung • *Not drilled* • Non Percée • Non forato



DIN 69872 B

Code N.	ISO	M	D	D1	D3	D4	L	L1	L2	C
217-21206	30	M12	17	13	13	9	44	24	19	14
217-21207	40	M16	23	17	19	14	54	26	20	19
217-21208	50	M24	36	25	28	21	74	34	25	30

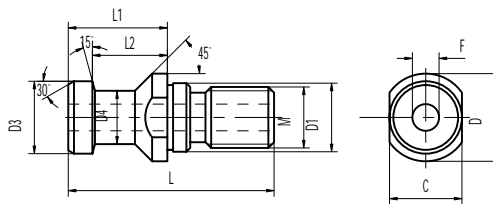
Ohne Bohrung • *Not drilled* • Non Percée • Non forato
Mit O'Ring • *With O'ring* • Avec joint torique • *Con OR di tenuta*



DIN 69872 B

Code N.	ISO	M	D	D1	D3	D4	L	L1	L2	C
217-21301	40	M16	23	17	19	14	54	26	20	19
217-21302	50	M24	36	25	28	21	74	34	25	30

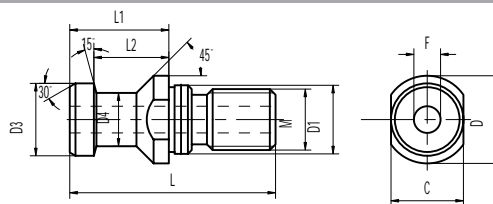
Gebohrt • *Drilled* • Percée • Forato



DIN 69872 A

Code N.	ISO	M	D	D1	D3	D4	L	L1	L2	C	f
217-21201	40	M16	23	17	19	14	54	26	20	19	7
217-21202	50	M24	36	25	28	21	74	34	25	30	11,5

Gebohrt • *Drilled* • Percée • Forato
Mit O'Ring • *With O'ring* • Avec joint torique • *Con OR di tenuta*



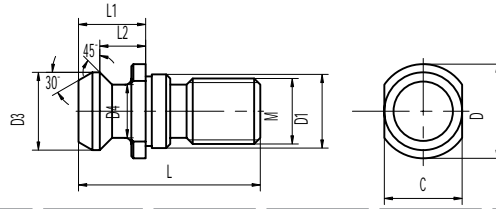
DIN 69872 A

Code N.	ISO	M	D	D1	D3	D4	L	L1	L2	C	f
217-21305	40	M16	23	17	19	14	54	26	20	19	7
217-21306	50	M24	36	25	28	21	74	34	25	30	11,5

SPANNBOLZEN ISO 7388/2-B TIRETTES ISO 7388/2-B
ISO 7388/2-B PULL STUDS CODOLI DI AGGANCIO ISO 7388/2-B

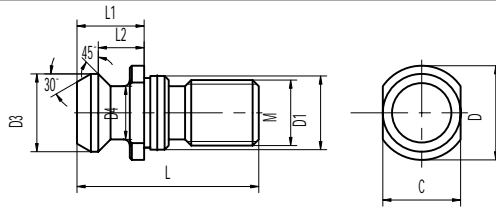
ISO 7388/2-B

Ohne Bohrung • Not drilled • Non Percée • Non forato



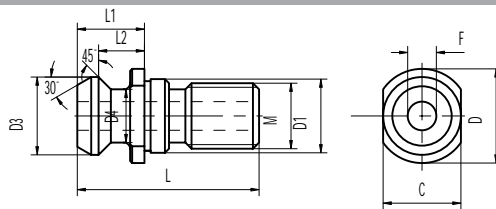
Code N.	ISO	M	D	D1	D3	D4	L	L1	L2	C
217-21607	30	M12	17	12,5	13,3	9,3	34	11,8	8,1	14
217-21608	40	M16	22,5	17	18,9	12,9	44,5	16,4	11,2	18
217-21609	50	M24	37	25	29,1	19,6	65,5	25,5	17,9	30

Ohne Bohrung • Not drilled • Non Percée • Non forato
Mit O'Ring • With O'ring • Avec joint torique • Con OR di tenuta



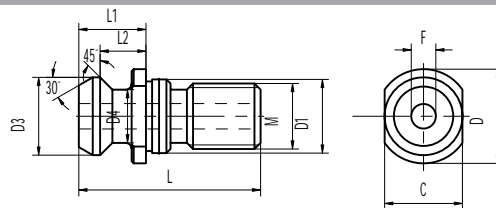
Code N.	ISO	M	D	D1	D3	D4	L	L1	L2	C
217-21611	40	M16	22,5	17	18,9	12,9	44,5	16,4	11,2	18
217-21612	50	M24	37	25	29,1	19,6	65,5	25,5	17,9	30

Gebohrt • Drilled • Percée • Forato



Code N.	ISO	M	D	D1	D3	D4	L	L1	L2	C	f
217-21601	40	M16	22,5	17	18,9	12,9	44,5	16,4	11,2	18	7,3
217-21602	50	M24	37	25	29,1	19,6	65,5	25,5	17,9	30	11,5

Gebohrt • Drilled • Percée • Forato
Mit O'Ring • With O'ring • Avec joint torique • Con OR di tenuta

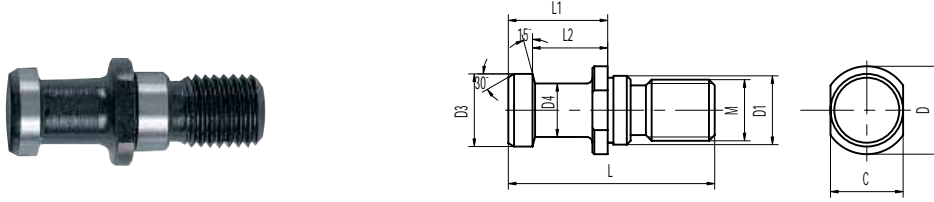


Code N.	ISO	M	D	D1	D3	D4	L	L1	L2	C	f
217-21621	40	M16	22,5	17	18,9	12,9	44,5	16,4	11,2	18	7,3
217-21622	50	M24	37	25	29,1	19,6	65,5	25,5	17,9	30	11,5

SPANNBOLZEN ISO 7388/2-A TIRETTES ISO 7388/2-A
 ISO 7388/2-A PULL STUDS CODOLI DI AGGANCIO ISO 7388/2-A

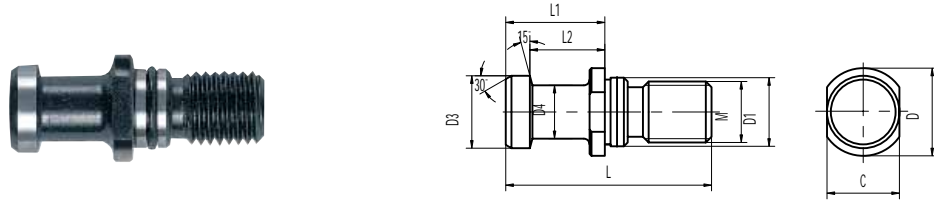
ISO 7388/2-A

Ohne Bohrung • *Not drilled* • Non Percée • Non forato



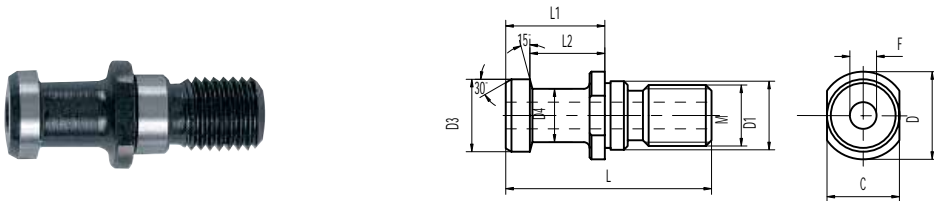
Code N.	ISO	M	D	D1	D3	D4	L	L1	L2	C
217-21616	30	M12	16	13	12	8	44	24	19	14
217-21617	40	M16	23	17	19	14	54	26	20	19
217-21618	50	M24	36	25	28	21	74	34	25	30

Ohne Bohrung • *Not drilled* • Non Percée • Non forato
 Mit O'Ring • *With O'ring* • Avec joint torique • *Con OR di tenuta*



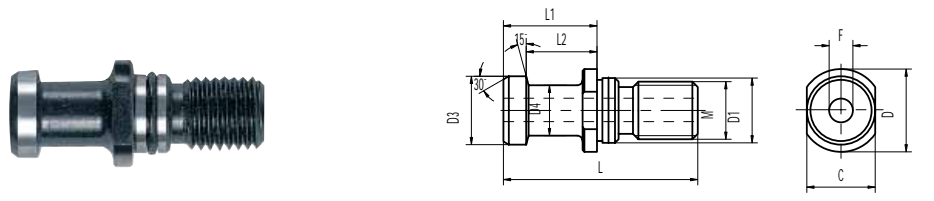
Code N.	ISO	M	D	D1	D3	D4	L	L1	L2	C
217-21619	40	M16	23	17	19	14	54	26	20	19
217-21620	50	M24	36	25	28	21	74	34	25	30

Gebohrt • *Drilled* • Percée • *Forato*



Code N.	ISO	M	D	D1	D3	D4	L	L1	L2	C	f
217-21614	40	M16	23	17	19	14	54	26	20	19	7
217-21615	50	M24	36	25	28	21	74	34	25	30	11

Gebohrt • *Drilled* • Percée • *Forato*
 Mit O'Ring • *With O'ring* • Avec joint torique • *Con OR di tenuta*

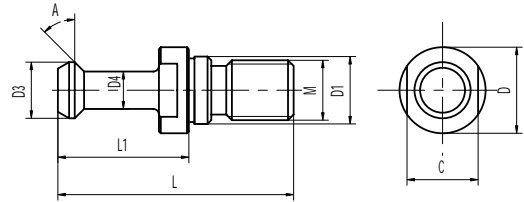


Code N.	ISO	M	D	D1	D3	D4	L	L1	L2	C	f
217-21623	40	M16	23	17	19	14	54	26	20	19	7
217-21624	50	M24	36	25	28	21	74	34	25	30	11,5

SPANNBOLZEN ISO MAS-BT TIRETTES MAS-BT
 MAS-BT PULL STUDS CODOLI DI AGGANCIAMENTO MAS-BT

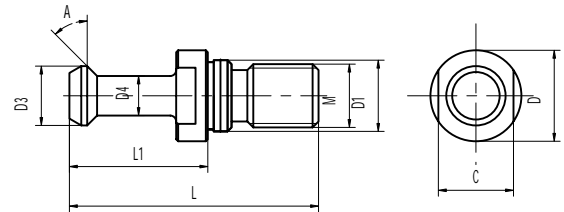
MAS-BT

Ohne Bohrung • *Not drilled* • Non Percée • *Non forato*



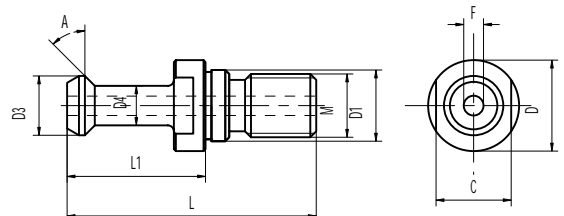
Code N.	ISO	A	M	L1	L	D	D1	D3	D4	C
217-21508	30	30°	M12	23	43	16	12,5	11	7	13
217-21507	30	45°	M12	23	43	16	12,5	11	7	13
217-21502	40	30°	M16	35	60	23	17	15	10	19
217-21501	40	45°	M16	35	60	23	17	15	10	19
217-21503	40	90°	M16	35	60	23	17	15	10	19
217-21505	50	30°	M24	45	85	38	25	23	17	30
217-21504	50	45°	M24	45	85	38	25	23	17	30
217-21506	50	90°	M24	45	85	38	25	23	17	30

Ohne Bohrung • *Not drilled* • Non Percée • *Non forato*
 Mit O'Ring • *With O'ring* • Avec joint torique • *Con OR di tenuta*



Code N.	ISO	A	M	L1	L	D	D1	D3	D4	C
217-21401	40	30°	M16	35	60	23	17	15	10	19
217-21402	40	45°	M16	35	60	23	17	15	10	19
217-21403	40	90°	M16	35	60	23	17	15	10	19
217-21404	50	30°	M24	45	85	38	25	23	17	30
217-21405	50	45°	M24	45	85	38	25	23	17	30
217-21406	50	90°	M24	45	85	38	25	23	17	30

Geböhrt • *Drilled* • Percée • *Forato*

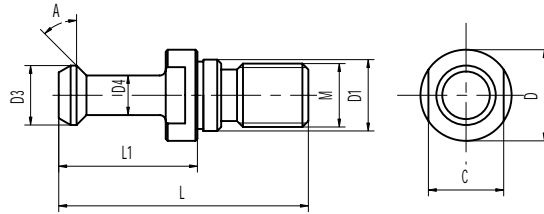


Code N.	ISO	A	M	L1	L	D	D1	D3	D4	C	F
217-22206	40	30°	M16	35	60	23	17	15	10	19	4
217-22207	40	45°	M16	35	60	23	17	15	10	19	4
217-22208	40	90°	M16	35	60	23	17	15	10	19	4
217-22209	50	30°	M24	45	85	38	25	23	17	30	6
217-22210	50	45°	M24	45	85	38	25	23	17	30	6
217-22211	50	90°	M24	45	85	38	25	23	17	30	6

SPANNBOLZEN MAS-BT->DIN 69871 TIRETTES MAS-BT->DIN 69871
 MAS-BT->DIN 69871 PULL STUDS CODOLI DI AGGANCIO MAS-BT->DIN 69871

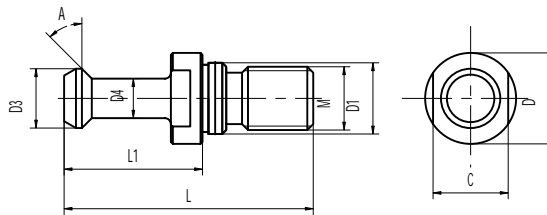
MAS-BT->DIN 69871

Ohne Bohrung • *Not drilled* • Non Percée • Non forato



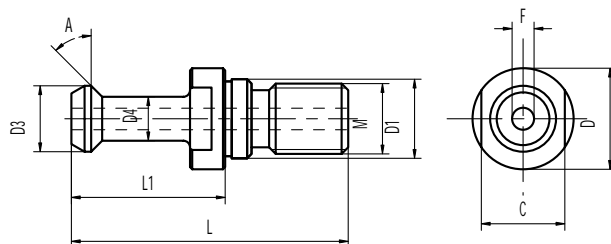
Code N.	ISO	A	M	L1	L	D	D1	D3	D4	C
217-22060	40	30°	M16	32	57	23	17	15	10	19
217-22090	40	45°	M16	32	57	23	17	15	10	19
217-22027	40	90°	M16	32	57	23	17	15	10	19

Ohne Bohrung • *Not drilled* • Non Percée • Non forato
 Mit O'Ring • *With O'ring* • Avec joint torique • *Con OR di tenuta*



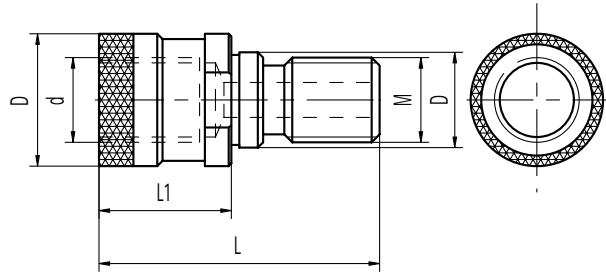
Code N.	ISO	A	M	L1	L	D	D1	D3	D4	C
217-21407	40	30°	M16	32	57	23	17	15	10	19
217-21408	40	45°	M16	32	57	23	17	15	10	19
217-21409	40	90°	M16	32	57	23	17	15	10	19

Gebohrt • *Drilled* • Percée • Forato



Code N.	ISO	A	M	L1	L	D	D1	D3	D4	C	F
217-22212	40	30°	M16	32	57	23	17	15	10	19	4
217-22213	40	45°	M16	32	57	23	17	15	10	19	4
217-22214	40	90°	M16	32	57	23	17	15	10	19	4

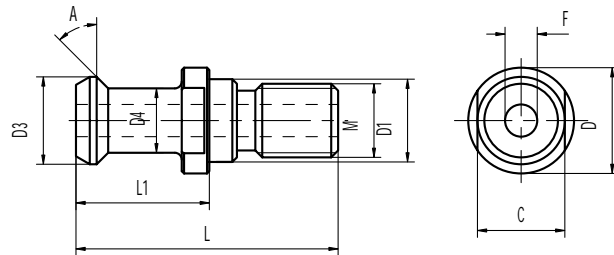
SPANNBOLZEN MIT RINGNUT NACH DIN 2080 ADAPTATION SUIVANT DIN 2080
 ADAPTOR PULL STUDS ACCORDING TO DIN 2080 CODOLO ADATTATORE DIN 2080



Code N.	ISO	M	d	D	D1	L	L1
217-22025	TC40	M16	M16	25.3	17	53	25
217-22040	BT40	M16	M16	25.3	17	56	28
217-22024	50	M24	M24	39,6	25	65	25

SPANNBOLZEN JIS. B6339 TIRETTE JIS. B6339
 JIS. B6339 PULL STUD CODOLO DI AGGANCIIO JIS. B6339

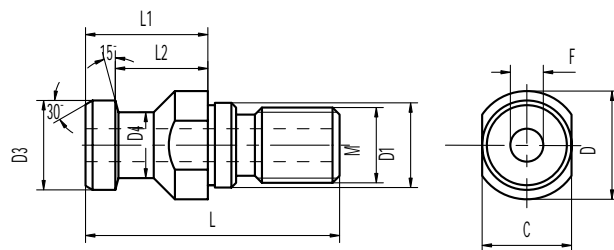
JIS. B6339



Code N.	ISO	A	M	D	D1	D3	D4	L	L1	C	F
217-22134	40	15°	M16	23	17	19	14	54	29	19	7

SPANNBOLZEN BRIDGEPORT TIRETTE BRIDGEPORT
 BRIDGEPORT PULL STUD CODOLO DI AGGANCIIO BRIDGEPORT

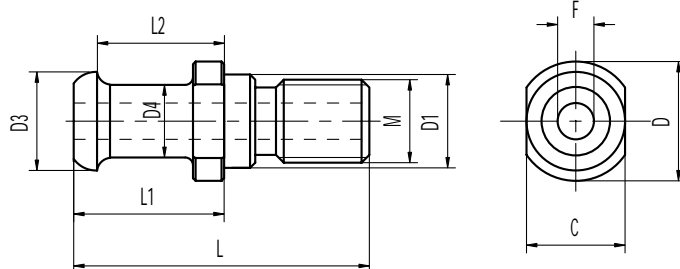
BRIDGEPORT



Code N.	ISO	M	D	D1	D3	D4	L	L1	L2	C	F
217-22253	40	M16	23	17	19	14	54	29	23	19	7

SPANNBOLZEN CB FERRARI TIRETTE CB FERRARI
 CB FERRARI PULL STUD CODOLO DI AGGANCIO CB FERRARI

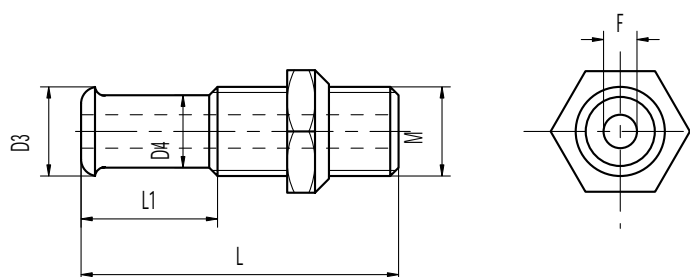
CB FERRARI



Code N.	ISO	M	D	D1	D3	D4	L	L1	L2	C	F
217-22017	40	M16	23	17	19	15	54	26	20,31	19	5

SPANNBOLZEN CB FERRARI WITH NUT PULL STUD TIRETTE CB FERRARI AVEC ECROU
 JIS. B6339 PULL STUD CODOLO DI AGGANCIO CB FERRARI

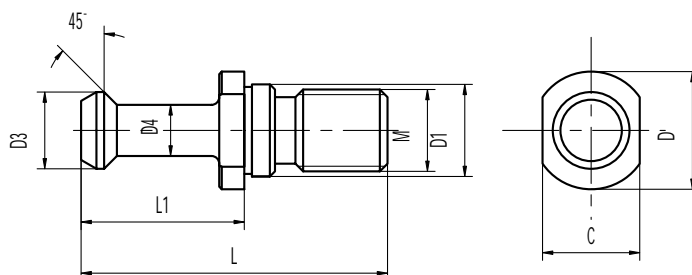
CB FERRARI



Code N.	ISO	M	D3	D4	L	L1	F
217-22046	40	M16	16	12	57	23	5

SPANNBOLZEN CHIRON TIRETTE CHIRON
 CHIRON PULL STUD CODOLO DI AGGANCIO CHIRON

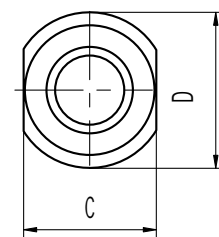
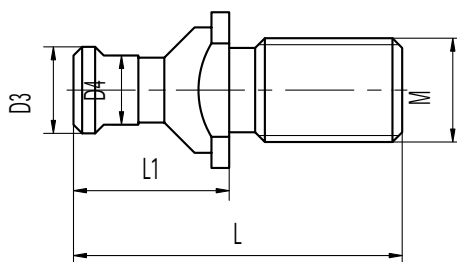
CHIRON



Code N.	ISO	M	D	D1	D3	D4	L	L1	C
217-22048	30	M12	16	13	10	6	36	20	14

SPANNBOLZEN CORREA TIRETTE CORREA
CORREA PULL STUD CODOLO DI AGGANCIAMENTO CORREA

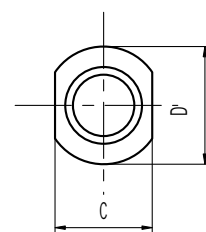
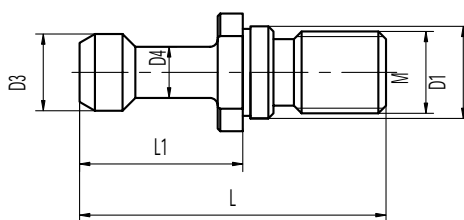
CORREA



Code N.	ISO	M	D	D3	D4	L	L1	C
217-22135	50	M24	36	20	16	76	36	20

SPANNBOLZEN CORTINI TIRETTE CORTINI
CORTINI PULL STUD CODOLO DI AGGANCIAMENTO CORTINI

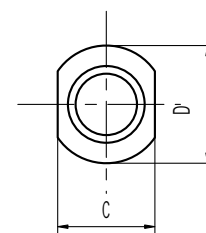
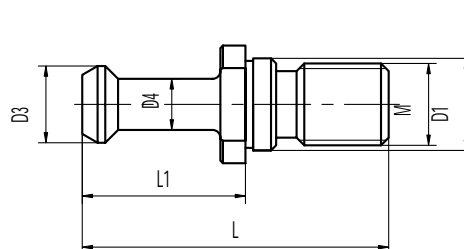
CORTINI



Code N.	ISO	M	D	D1	D3	D4	L	L1	C
217-22254	30	M12	16	13	10	7	39	21	14

SPANNBOLZEN TYP FAMUP TIRETTES TYPE FAMUP
FAMUP TYPE PULL STUDS CODOLI DI AGGANCIAMENTO TIPO FAMUP

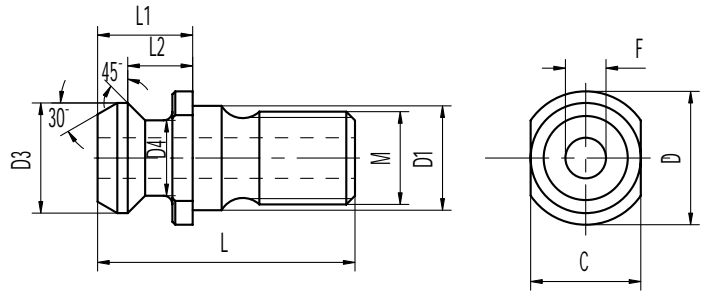
FAMUP



Code N.	ISO	M	D	D1	D3	D4	L	L1	C
217-22137	30	M12	16	13	9,8	5,8	40	20	14
217-22051	40	M16	23	17	13,8	9,8	55	27	19
217-22052	40	M16	23	17	13,8	9,8	58	30	19

SPANNBOLZEN TYP MAZAK TIRETTES TYPE MAZAK
MAZAK TYPE PULL STUDS CODOLI DI AGGANCIO TIPO MAZAK

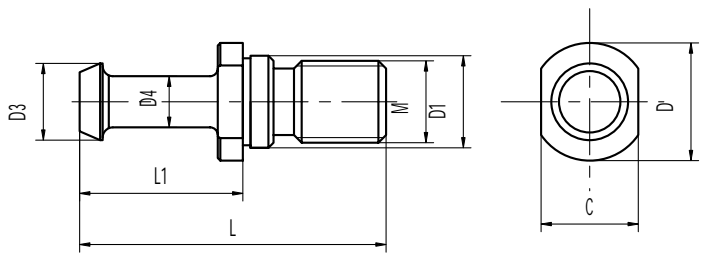
MAZAK



Code N.	ISO	M	D	D1	D3	D4	L	L1	L2	C	F
217-22003	40	M16	21,8	17	18,79	12,44	41,25	16,25	11,17	19	7
217-22047	40	M16	22	17	18,79	12,44	44,10	19,1	14,02	19	7
217-22187	50	M24	35,5	25	28,95	20,8	65,4	25,4	17,78	30	10

SPANNBOLZEN OLIVETTI OCN TIRETTE OLIVETTI OCN
OLIVETTI OCN PULL STUD CODOLO DI AGGANCIO OLIVETTI OCN

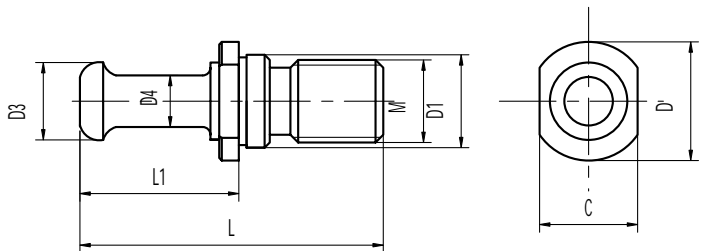
OLIVETTI OCN



Code N.	ISO	M	D	D1	D3	D4	L	L1	C
217-22136	40	M16	23	17	14,3	10	58	33	19

SPANNBOLZEN TYP RAMBAUDI TIRETTES TYPE RAMBAUDI
RAMBAUDI TYPE PULL STUDS CODOLO DI AGGANCIO TIPO RAMBAUDI

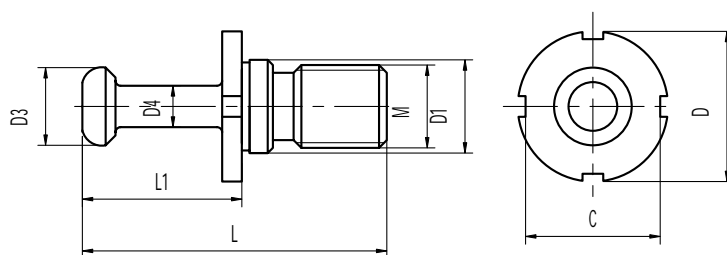
RAMBAUDI



Code N.	ISO	M	D	D1	D3	D4	L	L1	C
217-22049	40	M16	24	17	14,6	10	52	27	19
217-22050	50	M24	35,8	25	20	16	79,5	39,5	30

SPANNBOLZEN SECMU TIRETTE SECMU
SECMU PULL STUD CODOLO DI AGGANCIO SECMU

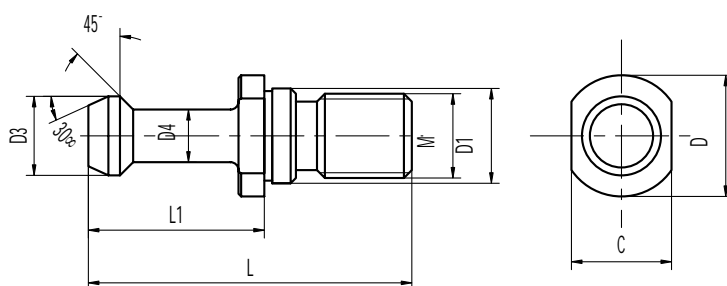
SECMU



Code N.	ISO	M	D	D1	D3	D4	L	L1	C
217-22138	50	M24	40	25	17,5	9,8	64	29	36

SPANNBOLZEN CINCINNATI TIRETTE CINCINNATI
CINCINNATI PULL STUD CODOLO DI AGGANCIO CINCINNATI

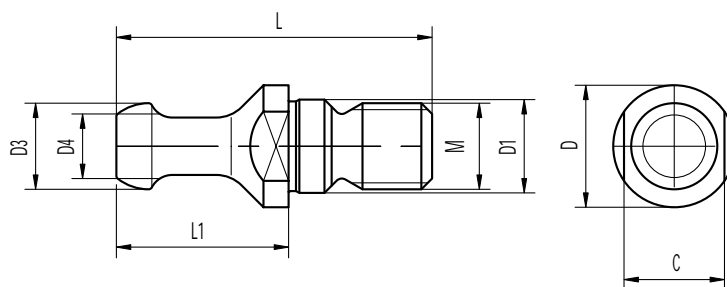
CINCINNATI



Code N.	ISO	M	D	D1	D3	D4	L	L1	C
217-22010	40	M16	22,2	17	15	10,3	67,3	39,4	19
217-22030	40	M16	22,2	17	15	10,3	67,3	36,6	18

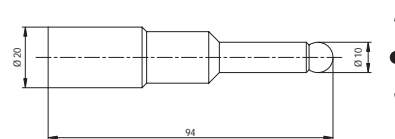
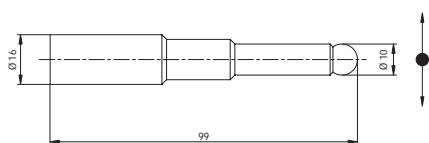
SPANNBOLZEN BIESSE TIRETTE BIESSE
BIESSE PULL STUD CODOLO DI AGGANCIO BIESSE

BIESSE



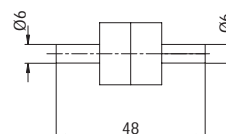
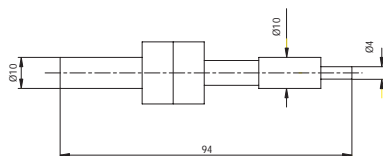
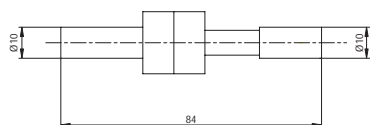
Code N.	ISO	M	D	D1	D3	D4	L	L1	C
217-22158	30	M12	17	13	12	8	44	24	14

KANTENTASTER ELEKTRONISCH 2D PINULE DE CENTRAGE ELECTRONIQUE 2D
 ELECTRONIC TOUCH POINT SENSOR 2D RILEVATORE DI POSIZIONE LUMINOSO 2D



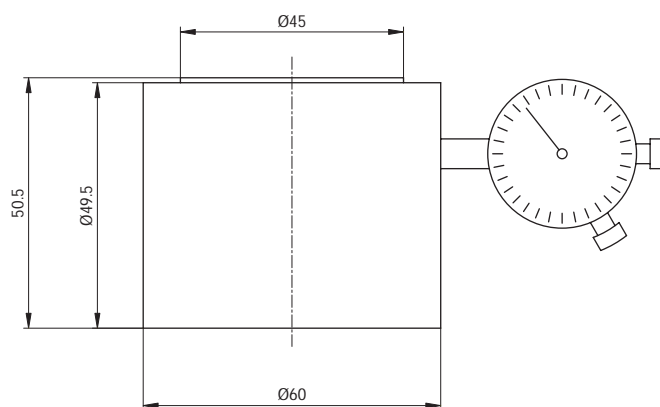
Code N.		L	D
832-021111	D = 16	99	10
832-021112	D = 20	94	10

KANTENTASTER MECHANISCH PINULE DE CENTRAGE MECANIQUE
 EDGE FINDER MECHANICAL TASTATORE MECCANICO



Code N.		L	D
832-021113	10 x 10	84	10
832-021114	10 x 4	94	4
832-021115	6 x 6	48	10

NULLSTELLER JAUGE DE MESURE VERTICALE
 HEIGHT PRESETTER GAUGES MISURATORE DI ALTEZZE



Code	D	d	L-1
832-021116	60	45	50,50 - 49,50

Code N.	ISO	Attack
237-32110	30	DIN 2080
237-32310	40	DIN 2080
237-32510	50	DIN 2080
237-32120	30	DIN 69871
237-32320	40	DIN 69871
237-32520	50	DIN 69871
237-32130	30	MAS 403/BT
237-32330	40	MAS 403/BT
237-32530	50	MAS 403/BT



Alle horizontale Flansche
sind auswechselbar

*Removable horizontal
flange*

Bride horizontal
démontable

*Flangia orizzontale
smontabile*

Code N.	Description
237-32111	DIN 2080 SK30
237-32311	DIN 2080 SK40
237-32511	DIN 2080 SK50
237-32121	DIN 69871 SK30
237-32321	DIN 69871 SK40
237-32521	DIN 69871 SK50
237-32131	MAS 203 BT 30
237-32331	MAS 203 BT 40
237-32531	MAS 203 BT 50

Dieses unkompliziertes System erlaubt die schnelle und sichere Montage und Demontage von Steilkegelaufnahmen in horizontaler und vertikaler Lage. Das Risiko der Werkzeugbeschädigung ist ausgeschlossen. Dieses einfache und sichere System eignet sich für alle Steilkegelaufnahmen.

It is very useful for all assembly and disassembly operations of the tools on the toolholders, either in horizontal or in vertical position. This process is carried out without any risk to damage casually the tool or the toolholder.

It is a very simple system suitable for monolithic toolholders.

Il permet de effectuer toutes les opérations de montage / assemblage / démontage des outils sur les mandrins. Ces proces se déroulent avec rationalité, sureté, vitesse et sans aucun risque d'endommagement accidentel du mandrin ou de l'outil. C'est un système qui offre la plus haute simplicité d'usage et il est bien indiqué pour les mandrin monolithiques.

Consente di effettuare tutte le operazioni di montaggio e smontaggio degli utensili sui mandrini, sia in orizzontale che in verticale. Questi procedimenti avvengono con razionalità, sicurezza, rapidità e senza alcun rischio di danneggiare il mandrino o l'utensile.

È il sistema che offre la massima semplicità d'uso per i mandrini monolitici.

MONTAGEBLOCK SUPPORT D'ASSEMBLAGE
ASSEMBLY SUPPORT ECONOMIC VERSION SUPPORTO DI MONTAGGIO VERSIONE ECONOMICA



Code N.	ISO	Attack
268-30001	40	DIN 2080/DIN 69871 MAS 403BT / ANSI B5.50 CAT / HSK63A-B-C-D-E
268-30002	50	DIN 2080/DIN 69871 MAS 403BT / ANSI B5.50 CAT / HSK 100A-B-C-D-E

**Economic
Version**

KIT MANDRINI • TOOL HOLDERS KIT



ISO 40

CODE DIN 69871	CODE MAS 403/BT	CODE DIN 2080	DESCRIZIONE DESCRIPTION
KIT MAN TC 40	KIT MAN BT 40	KIT MAN ISO 40	N°2 portapinze ER25
			N°5 portapinze ER32
			N°1 portafrese fisso D16
			N°1 portafrese fisso D22
			N°1 portafrese fisso D27
			N°1 portafrese weldon Ø16
			N°1 portafrese weldon Ø20
			N°1 portafrese weldon Ø25
			N°1 portapunte/frese CM2
			N°1 portapunte/frese CM3
			N°1 maschiatore M3-M12
			N°5 bussole portamaschi (Ø4,5-6-8-9-10)
			N°10 pinze ER25 (Ø2 3 4 5 6 10 12 14 16)
			N°10 pinze ER32 (Ø3 4 6 8 10 12 14 16 18 20)
			N°1 chiave per ER25
			N°1 chiave per ER32
N°2 collet chucks ER25			
N°5 collet chucks ER32			
N°1 milling arbor D16			
N°1 milling arbor D22			
N°1 milling arbor D27			
N°1 side lock holder Ø16			
N°1 side lock holder Ø20			
N°1 side lock holder Ø25			
N°1 adaptor mills/drills MT2			
N°1 adaptor mills/drills MT3			
N°1 tap holder M3-M12			
N°5 tap adaptors (Ø4,5-6-8-9-10)			
N°10 collets ER25 (Ø2 3 4 5 6 10 12 14 16)			
N°10 collets ER32 (Ø3 4 6 8 10 12 14 16 18 20)			
N°1 wrench ER25			
N°1 wrench ER32			



ISO 50

CODE DIN 69871	CODE MAS 403/BT	CODE DIN 2080	DESCRIZIONE DESCRIPTION
KIT MAN TC 50	KIT MAN BT 50	KIT MAN ISO 50	N°1 portapinze ER25
			N°1 portapinze ER25 prolungato
			N°3 portapinze ER32
			N°1 portapinze ER32 prolungato
			N°1 portafrese fisso D22
			N°1 portafrese fisso D27
			N°1 portafrese fisso D32
			N°1 portafrese weldon Ø16
			N°1 portafrese weldon Ø20
			N°1 portafrese weldon Ø25
			N°1 portafrese weldon Ø32
			N°1 portapunte/frese CM2
			N°1 portapunte/frese CM3
			N°1 maschiatore M6-M20
			N°5 bussole portamaschi (Ø6 8 10 12 16)
			N°10 pinze ER25 (Ø2 3 4 5 6 8 10 12 14 16)
N°10 pinze ER32 (Ø3 4 6 8 10 12 14 16 18 20)			
N°1 chiave per ER25			
N°1 chiave per ER32			
N°1 collet chuck ER25			
N°1 collet chuck ER25 extended			
N°3 collet chucks ER32			
N°1 collet chuck ER32 extended			
N°1 milling arbor D22			
N°1 milling arbor D27			
N°1 milling arbor D32			
N°1 side lock holder Ø16			
N°1 side lock holder Ø20			
N°1 side lock holder Ø25			
N°1 side lock holder Ø32			
N°1 adaptor mills/drills MT2			
N°1 adaptor mills/drills MT3			
N°1 tap holder M6-M20			
N°5 tap adaptors (Ø6 8 10 12 16)			
N°10 collets ER25 (Ø2 3 4 5 6 8 10 12 14 16)			
N°10 collets ER32 (Ø3 4 6 8 10 12 14 16 18 20)			
N°1 wrench ER25			
N°1 wrench ER32			

KIT PORTAPINZE • COLLET CHUCK KITS

DIN 6499



	CODE DIN 2080	CODE DIN 69871	CODE MAS 403 BT	DESCRIZIONE - DESCRIPTION
ISO 30	KIT ISO30ER25	KIT TC30ER25	KIT BT30ER25	N°1 portapinze + 10 pinze ER25 + chiave N°1 collet chuck + 10 collets ER25 + wrench (ER25 Ø 2-3-4-5-6-8-10-12-14-16)
	KIT ISO30ER32	KIT TC30ER32	KIT BT30ER32	N°1 portapinze + 10 pinze ER32 + chiave N°1 collet chuck + 10 collets ER32 + wrench (ER32 Ø 3-4-6-8-10-12-14-16-18-20)
ISO 40	KIT ISO40ER25	KIT TC40ER25	KIT BT40ER25	N°1 portapinze + 10 pinze ER25 + chiave N°1 collet chuck + 10 collets ER25 + wrench (ER25 Ø 2-3-4-5-6-8-10-12-14-16)
	KIT ISO40ER32	KIT TC40ER32	KIT BT40ER32	N°1 portapinze + 10 pinze ER32 + chiave N°1 collet chuck + 10 collets ER32 + wrench (ER32 Ø 3-4-6-8-10-12-14-16-18-20)
	KIT ISO40ER40	KIT TC40ER40	KIT BT40ER40	N°1 portapinze + 10 pinze ER40 + chiave N°1 collet chuck + 10 collets ER40 + wrench (ER40 Ø 5-6-8-10-12-16-20-22-24-26)
ISO 50	KIT ISO50ER25	KIT TC50ER25	KIT BT50ER25	N°1 portapinze + 10 pinze ER25 + chiave N°1 collet chuck + 10 collets ER25 + wrench (ER25 Ø 2-3-4-5-6-8-10-12-14-16)
	KIT ISO50ER32	KIT TC50ER32	KIT BT50ER32	N°1 portapinze + 10 pinze ER32 + chiave N°1 collet chuck + 10 collets ER32 + wrench (ER32 Ø 3-4-6-8-10-12-14-16-18-20)
	KIT ISO50ER40	KIT TC50ER40	KIT BT50ER40	N°1 portapinze + 10 pinze ER40 + chiave N°1 collet chuck + 10 collets ER40 + wrench (ER40 Ø 5-6-8-10-12-16-20-22-24-26)

KIT PORTAPINZE CILINDRICI • EXTENSION COLLET CHUCKS KITS



CODICE CODE	DESCRIZIONE DESCRIPTION
KIT PPC-ER16M	<p>N°1 portapinze cilindrici Ø 12x80 ER16M N°1 portapinze cilindrici Ø 16x125 ER16M N°1 portapinze cilindrici Ø 20x160 ER16M N°10 pinze ER16 (Ø 1 2 3 4 5 6 7 8 9 10) N°1 chiave per ER16M</p> <p><i>N°1 extension collet chuck Ø 12x80 ER16M N°1 extension collet chuck Ø 16x125 ER16M N°1 extension collet chuck Ø 20x160 ER16M N°10 collets ER16 (Ø 1 2 3 4 5 6 7 8 9 10) N°1 wrench ER16M</i></p>
KIT PPC-ER20M	<p>N°1 portapinze cilindrici Ø 16x100 ER20M N°1 portapinze cilindrici Ø 20x120 ER20M N°1 portapinze cilindrici Ø 25x160 ER20M N°10 pinze ER20 (Ø 3 4 5 6 7 8 9 10 12 13) N°1 chiave per ER20M</p> <p><i>N°1 extension collet chuck Ø 16x100 ER20M N°1 extension collet chuck Ø 20x120 ER20M N°1 extension collet chuck Ø 25x160 ER20M N°10 collets ER20 (Ø 3 4 5 6 7 8 9 10 12 13) N°1 wrench ER20M</i></p>
KIT PPC-ER25M	<p>N°1 portapinze cilindrici Ø 20x100 ER25M N°1 portapinze cilindrici Ø 25x70 ER25M N°1 portapinze cilindrici Ø 25x120 ER25M N°10 pinze ER25 (Ø 2 3 4 5 6 8 10 12 14 16) N°1 chiave per ER25M</p> <p><i>N°1 extension collet chuck Ø 20x100 ER25M N°1 extension collet chuck Ø 25x70 ER25M N°1 extension collet chuck Ø 25x120 ER25M N°10 collets ER25 (Ø 2 3 4 5 6 8 10 12 14 16) N°1 wrench ER25M</i></p>

KIT FORTE SERRAGGIO • MILLING CHUCK KIT

Cassetta Corredo: 1 mandrino forte serraggio + 1 serie pinze + 1 chiave
 Kit Box: 1 milling chuck + 1 collets kit + 1 wrench



	CODICE ORDINAZIONE <i>Order Code</i>	COMPOSIZIONE <i>Composition</i>
ISO 40	KIT BT40 C20	N°1 BT40 L105 C20 + n°5 pinze K20: Ø6,8,10,12,16
	KIT BT40 C32	N°1 BT40 L105 C32 + n°7 pinze K32: Ø6,8,10,12,16,20,25
	KIT TC40 C20	N°1 TC 40 L105 C20 + n°5 pinze K20: Ø6,8,10,12,16
	KIT TC40 C32	N°1 TC 40 L105 C32 + n°7 pinze K32: Ø6,8,10,12,16,20,25
	KIT ISO40 C32	N°1 ISO 40 L83 C32 + n°7 pinze K32: Ø6,8,10,12,16,20,25
ISO 50	KIT BT50 C20	N°1 BT 50 L105 C20 + n°5 pinze K20: Ø6,8,10,12,16
	KIT BT50 C32	N°1 BT 50 L105 C32 + n°7 pinze K32: Ø6,8,10,12,16,20,25
	KIT TC50 C20	N°1 TC 50 L105 C20 + n°5 pinze K20: Ø6,8,10,12,16
	KIT TC50 C32	N°1 TC 50 L105 C32 + n°7 pinze K32: Ø6,8,10,12,16,20,25
	KIT ISO50 C32	N°1 ISO 50 L85 C32 + n°7 pinze K32: Ø6,8,10,12,16,20,25

KIT IDRAULICO • HYDRAULIC KIT

Cassetta Corredo: 1 mandrino "idraulico" + 1 serie pinze + 1 chiave

Kit Box: 1 hydraulic chuck + 1 collets kit + 1 wrench



	CODICE ORDINAZIONE <i>Order Code</i>	COMPOSIZIONE <i>Composition</i>
ISO 40	KIT BT40 G20	N°1 BT40 H90 G20-WO + n°5 pinze GX20: Ø6,8,10,12,16
	KIT BT40 G32	N°1 BT40 H105 G32-WO + n°7 pinze GX32: Ø10,12,14,16,18,20,25
	KIT TC40 G20	N°1 TC40 H80,5 G20-WO + n°5 pinze GX20: Ø6,8,10,12,16
	KIT TC40 G32	N°1 TC40 H110 G32-WO + n°7 pinze GX32: Ø10,12,14,16,18,20,25
ISO 50	KIT BT50 G20	N°1 BT50 H90 G20-WO + n°5 pinze GX20: Ø6,8,10,12,16
	KIT TC50 G20	N°1 TC50 H80,5 G20-WO + n°5 pinze GX20: Ø6,8,10,12,16

KANTER





HSK STEILKEGELAUFNHMEN UND ZUBEHÖR
HSK TOOLHOLDER AND ACCESSORIES
MANDRINS HSK ET ACCESSOIRES
MANDRINI HSK E ACCESSORI



- **DIN 69893 A+C** PAG. 166-202
- **DIN 69893 B+D** PAG. 203-214
- **DIN 69893 E** PAG. 215-227
- **DIN 69893 F** PAG. 228-242
- **ACCESSORI ACCESSORIES** PAG. 243-248
- **KIT** PAG. 249-251



The logo for Kawafel, featuring the word "KAWAFEL" in a bold, black, sans-serif font. The letter "K" is stylized with an orange and grey geometric shape integrated into its left side. The background of the entire page is a faded, high-angle photograph of a metal grid structure, possibly a staircase or a walkway, with a white circular object visible in the lower-left quadrant.

KAWAFEL

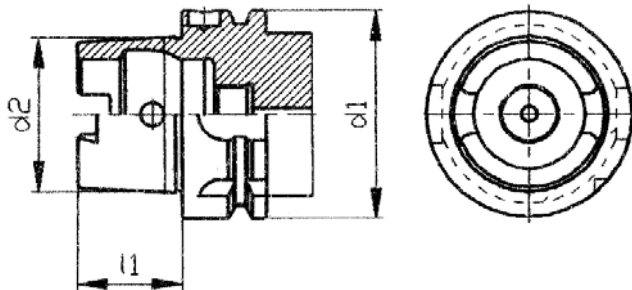
DIN 69893 A+C



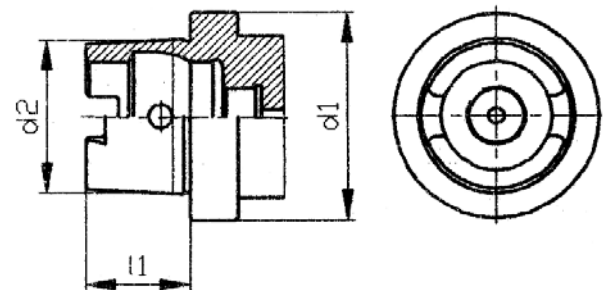
TABELLE DER ABMESSUNGEN UND DER
FORMEN NACH DIN 69893
TABLE OF DIMENSIONS ACCORDING TO
DIN 69893 STANDARD

TABLE DE DIMENSIONS SUIVANT
DIN 69893
TAVOLA RIASSUNTIVA DELLE GRANDEZZE
E DELLE FORME SECONDO DIN 69893

HSK A



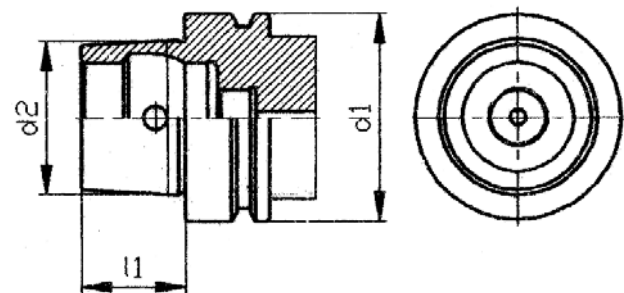
HSK C



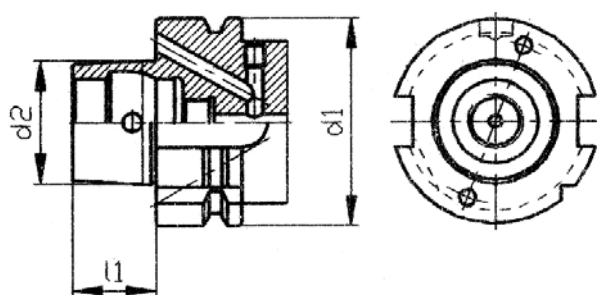
HSK A / C / E

d1 Nominal dia.	d2 Taper dia.	l1 Taper length
32	24	16
40	30	20
50	38	25
63	48	32
100	75	50

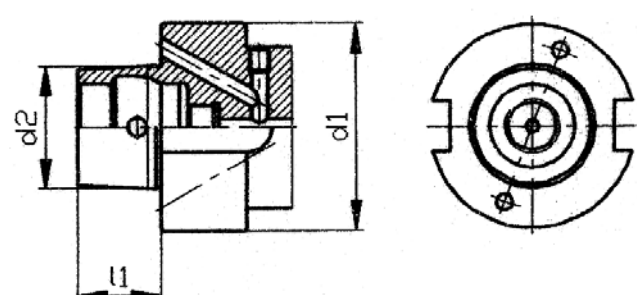
HSK E



HSK B



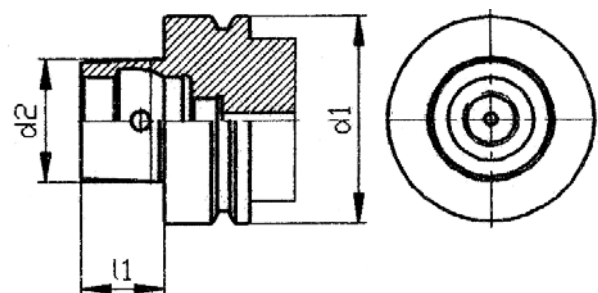
HSK D

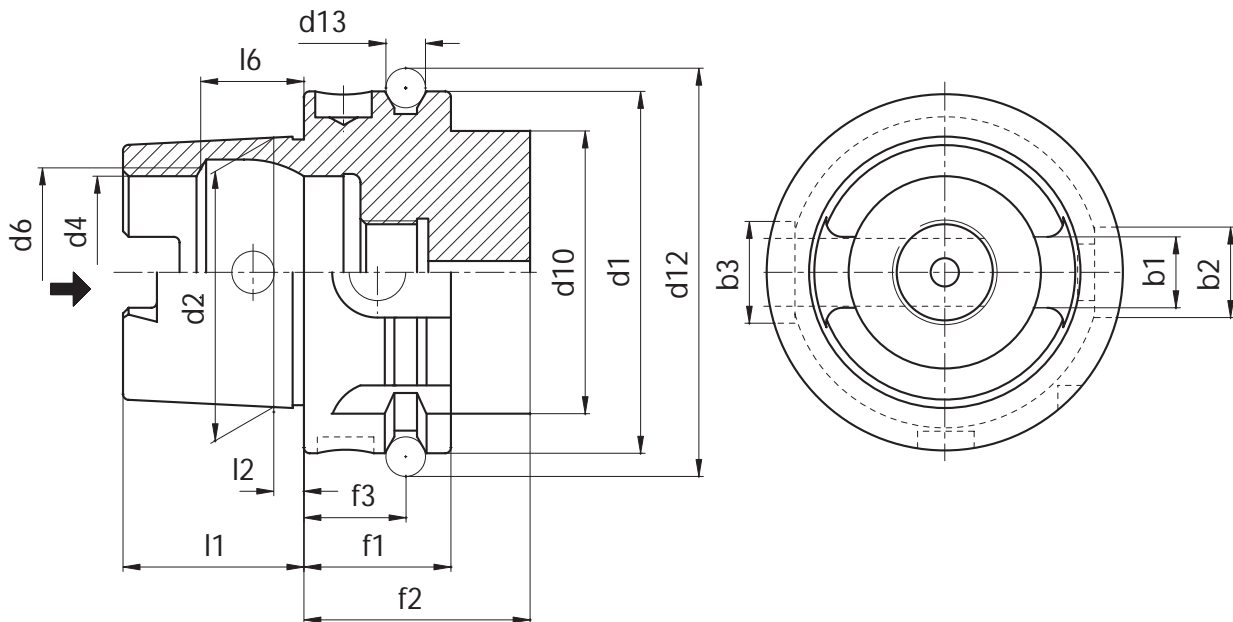


HSK B / D / F

d1 Nominal dia.	d2 Taper dia.	l1 Taper length
40	24	16
50	30	20
63	38	25
100	60	40

HSK F





	HSK 32	HSK 40	HSK 50	HSK 63	HSK 100
b1	7,05	8,05	10,54	12,54	20,02
b2	7	9	12	16	20
b3	9	11	14	18	22
d1	32	40	50	63	100
d2	24	30	38	48	75
d4	17	21	26	34	53
d6	19	23	29	37	58
d10	26	34	42	53	85
d12	37	45	59,3	72,3	109,75
d13	4	4	7	7	7
f1	20	20	26	26	29
f2	35	35	42	42	45
f3	16	16	18	18	20
l1	16	20	25	32	50
l2	3,2	4	5	6,3	10
l6	8,92	11,42	14,13	18,13	28,56



Forma A

- Usato su centri di lavoro, fresatrici e macchine speciali con cambio utensili automatico.
- Adduzione refrigerante centrale.
- Coppia trasmessa con due chiavette al fondo della sede conica.
- Tacche di riferimento sulla flangia per riferimento posizione tagliente. Foro di predisposizione al sistema di riconoscimento a norme DIN 69873 sull'esterno flangia.



Form A

- Anwendung für Bearbeitungszentren, Fräsmaschinen, Drehmaschinen, Sondermaschinen mit automatischem Werkzeugwechsel.
- Zentrale, axiale Kühlmittelzufuhr über Kühlmittelrohr.
- Drehmomentübertragung über zwei Mitnehmernuten am Kegelumlauf.
- Zwei Bundnuten für Werkzeugmagazin, Positionskerbe. Bohrung für Datenträger DIN 69873 im Bund.
- Balluffchip



Forma A

- Used on machining centres, milling machines, turning machines, special machines with automatic tool change.
- Central, axial coolant supply through coolant tube.
- Torque transmission via two key slots at end of taper.
- Two slots on collar for tool magazine, location edge. Hole for data carrier DIN 69873 in collar.



Forme A

- Utilisation sur les centres d'usinage, les fraiseuses, les machines spéciales à changement d'outils automatique.
- Alimentation centrale, axiale du liquide de lubrification par tube d'arrosage.
- Transmission du couple par deux gorges d'entraînement à l'extrémité du cône.
- Deux gorges magasin à outils, entaille de positionnement, perçage pour support de données DIN 69873 dans l'épaulement.

STIELGEKELAUFNAHMEN HSK

TECHNISCHE DATEN

ALLE KINTEK - STEILGEKELAUFNAHMEN WERDEN NACH DEN DIN - NORMEN ANGEFERTIGT.
(DIESE NORMEN SEHEN DIE GLEICHEN TOLERANZKLASSEN FÜR DIE DIN 69893 A+C, B+D, E, F AUFNAHMEN VOR)



KEGELSCHAFTTOLERANZEN

HSK	L1	L2	D.A.		D.B.		B (uniquement type A+C)
32 A+C	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	7.05 +/- 0.04
40 A+C+E	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	8.05 +/- 0.04
40 B+D	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	-
50 A+C+E	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	10.54 +/- 0.04
50 B+D+F	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	-
63 A+C+E	6,3	14,7	48	+0.007 +0.011	46,53	+0.003 +0.007	12.54 +/- 0.04
63 B+D+F	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	-
100 A+C	10	24	75	+0.009 +0.015	72,6	+0.003 +0.009	20.02 +/- 0.04
100 B+D	8	19	60	+0.008 +0.013	58,1	+0.003 +0.008	-

SPANNZANGENAUFNAHME RUNDLAUFGENAUIGKEIT

Die DIN69882-6 Norm schreibt eine Rundlaufgenauigkeit zwischen Aussenkegel und Innenkegel / Spannanzensitz für die DIN 6499- Spannanzenaufnahmen von 0,005 vor.

AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Kintek-Aufsteckfräsdorne entsprechen der DIN 69882-2 Norm, die für die \varnothing 16,22,27,32 eine Rundlaufgenauigkeit von 0,01 vorsieht.

WELDON - AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Nach der DIN 69882-4 Norm muß der Weldon- Aufsteckfräsdorn die folgenden Forderungen aufweisen:

Bohrung: H5

Rundlaufgenauigkeit: 0.005.

WUCHTUNG

Alle Steilkegelauflnahmen dieser Gruppe sind in Klasse G6,3 auf 8.000 U/Min. -1 vorgewuchtet oder auf 15.000 U/Min -1 gewuchtet.. Neben der Übersichtstabelle der Produkte wird das Wuchtgüte angegeben.

KONSTRUKTIONSDATEN

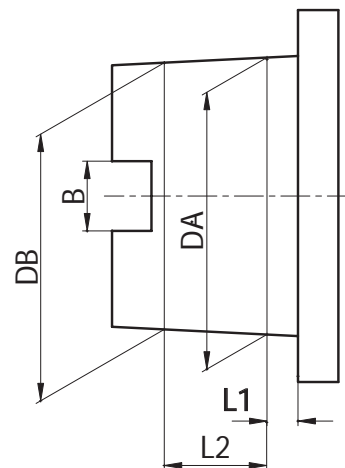
- aus Einsatzstahl angefertigt
- in der Einsatzhärte tiefe von 0,4-0,5 mm
- gehärtet, angelassen
- Härte HRC58 +-2, Festigkeit 800-1000 N/mm²
- brüniert
- inneres, äußeres Schleifen und am Gewinde der Spannanzengmutter
- 100% durch zertifizierte Meßinstrumente geprüft.

WUCHTUNG MIT HOCHGESCHWINDIGKEIT

Die Hochgeschwindigkeit- Steilkegelauflnahmen der neuen Linie werden in Klasse G2,5 auf 25.000 U/Min -1 gewuchtet.

KONSTRUKTIONSDATEN

- aus Einsatzstahl angefertigt
- in der Einsatzhärte tiefe von 0,4-0,5 mm
- gehärtet, angelassen
- Härte HRC 58 +- 2, Festigkeit 800-1000 N/mm²
- brüniert
- inneres, äußeres Schleifen des Kegels
- Schleifen der Vorderseite und am Gewinde der Spannanzengmutter
- 100% durch zertifizierte Meßinstrumente geprüft und mit Wuchtungsprotokoll geliefert



ALL KINTEK TOOLHOLDERS ARE MANUFACTURED ACCORDING TO DIN NORMS.
(THESE NORMS PROVIDE THE SAME CLASSES OF TOLERANCE FOR THE ATTACHMENT DIN69893 A+C, B+D, E, F)



CONE'S TOLERANCE

HSK	L1	L2	D.A.		D.B.		B (only type A+C)
32 A+C	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	7.05 +/- 0.04
40 A+C+E	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	8.05 +/- 0.04
40 B+D	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	-
50 A+C+E	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	10.54 +/- 0.04
50 B+D+F	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	-
63 A+C+E	6,3	14,7	48	+0.007 +0.011	46,53	+0.003 +0.007	12.54 +/- 0.04
63 B+D+F	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	-
100 A+C	10	24	75	+0.009 +0.015	72,6	+0.003 +0.009	20.02 +/- 0.04
100 B+D	8	19	60	+0.008 +0.013	58,1	+0.003 +0.008	-

COLLET CHUCK'S RUNOUT ACCURACY

The norm DIN 69882-6 permits a runout error of 0,005 mm. for DIN 6499 collet chucks.

SHELL END MILL ADAPTOR'S RUNOUT ACCURACY

Our shell end mill adaptors meet the requirements of the norm DIN 69882-2, which prescribes for diameters Ø 16,22,27,32 a runout accuracy of 0,01

WELDON END MILL HOLDER'S RUNOUT ACCURACY

According to norm DIN 69882-4 Weldon end mill holders have to meet the following requirements:

Bore: H5

Runout accuracy: 0.005.

BALANCING

All our toolholders of this category are pre-balanced in grade G6.3 at 8000 rpm or balanced at 15000 rpm. Besides the descriptive and dimensional table of products you can find the additive balancing grade.

CONSTRUCTIVE FEATURES

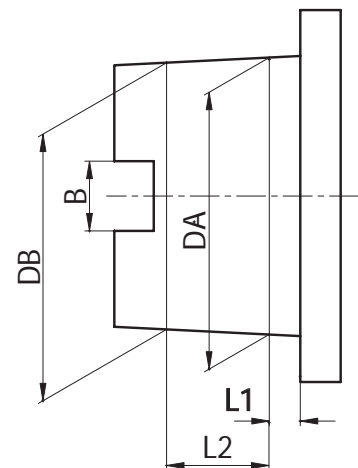
- Manufactured with Casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm2
- Black oxidized
- Thread of collet nuts, internal and external diameters are completely grinding finished
- Tested 100% with certified measuring instruments.

NEW HIGH-SPEED TOOL HOLDERS BALANCING

The new high-speed toolholders are balanced in the Grade G 2,5 at 25000 rpm.

CONSTRUCTIVE FEATURES

- Manufactured with casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm2
- Black oxidized
- Internal and external grinding finish of the cone
- Grinding finish on the front side and on the thread of collet nuts.
- Tested 100% with certified measuring instruments and supplied with balancing certificate



MANDRINS KINTEK HSK

DONNEES TECHNIQUES

Tous les mandrins porte-outils KINTEK sont fabriqués selon les normes DIN (qui prévoient les mêmes classes de tolérance pour les attachement DIN69893 A+C, B+D, E, F)



TOLERANCE DU CONE

HSK	L1	L2	D.A.		D.B.		B (uniquement type A+C)
32 A+C	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	7.05 +/- 0.04
40 A+C+E	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	8.05 +/- 0.04
40 B+D	3,2	7,3	24	+0.005 +0.007	23,7	+0.003 +0.005	-
50 A+C+E	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	10.54 +/- 0.04
50 B+D+F	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	-
63 A+C+E	6,3	14.07	48	+0.007 +0.0011	46,53	+0.003 +0.007	12.54 +/- 0.04
63 B+D+F	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	-
100 A+C	10	24	75	+0.009 +0.0015	72,6	+0.003 +0.009	20.02 +/- 0.04
100 B+D	8	19	60	+0.008 +0.0013	58,1	+0.003 +0.008	-

COAXIALITE' PORTE-PINCE

La norme DIN 69882-6 permet une erreur de 0,005 mm. Maximum pour les porte-pinces DIN 6499

COAXIALITE' PORTE-FRAISES FIXES ET COMBINES

Les porte-fraises fixes et combinés suivent les spécifications de la norme DIN 69882-2 qui prévoit pour les diamètres Ø 16,22,27,32 une coaxialité de 0,01

COAXIALITE' PORTE-FRAISES WELDON

Suivant les spécifications DIN 69882-4 les porte-fraises WELDON doivent suivre les conditions suivantes:

Trou: H5

Coaxialité: 0.005.

EQUILIBRAGE

La plupart des porte-outils sont pré-équilibrés en classe G 6,3 8000 Tr/Min -1. ou équilibrés à 15000 Tr/Min-1. A côté du tableau de description et dimensions des produits il y a indiqué la valeur d'équilibrage additionnelle.

ELEMENTS DE CONSTRUCTION

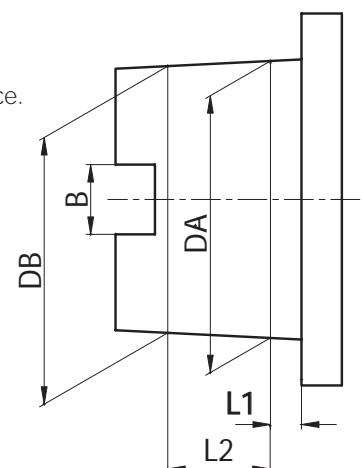
- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm
- Trempés - Revenus
- Dureté HRC 58 +- 2 résistance 800-1000 N/ mm2
- Brunis
- Rectification du cône intérieur, extérieur et dans le filetage des écrous qui serrent la pince.
- Contrôlés à 100 % avec des instruments de mesure certifiés.

EQUILIBRAGE MANDRINS POUR HAUTE VITESSE

Les mandrins de la nouvelle ligne à haute vitesse sont équilibrés en classe G 2,5 à 25000 Tr/mn-1.

ELEMENTS DE CONSTRUCTION

- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm
- Trempés - Revenus
- Dureté HRC 58 +- 2 résistance 800-1000 N/ mm2
- Brunis
- Finition de rectification intérieure, extérieure et du cône
- Rectification du cône intérieur et dans le filetage des écrous qui serrent la pince.
- Contrôlés à 100 % avec des instruments de mesure certifiés et livrés avec un certificat d'équilibrage.



MANDRINI KINTEK CON ATTACCO HSK

DATI TECNICI

TUTTI I MANDRINI PORTAUTENSILI KINTEK VENGONO PRODOTTI SECONDO LE NORMATIVE DIN
(DETTE NORMATIVE PREVEDONO LE STESSA CLASSI DI TOLLERANZA PER GLI ATTACCHI DIN69893 A+C, B+D, E, F)



TOLLERANZA DEL CONO

HSK	L1	L2	D.A.		D.B.		B (only type A+C)
32 A+C	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	7.05 +/- 0.04
40 A+C+E	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	8.05 +/- 0.04
40 B+D	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	-
50 A+C+E	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	10.54 +/- 0.04
50 B+D+F	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	-
63 A+C+E	6,3	14,7	48	+0.007 +0.011	46,53	+0.003 +0.007	12.54 +/- 0.04
63 B+D+F	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	-
100 A+C	10	24	75	+0.009 +0.015	72,6	+0.003 +0.009	20.02 +/- 0.04
100 B+D	8	19	60	+0.008 +0.013	58,1	+0.003 +0.008	-

COASSIALITÀ PORTAPINZA

La normativa DIN 69882-6. ammette un'errore massimo di 0,005 mm. per i portapinze DIN 6499

COASSIALITÀ PORTAFRESE FISSI E COMBINATI

I portafrese fissi e combinati rispondono ai criteri prescritti dalla norma DIN 69882-2 la quale prevede per i Ø 16,22,27,32 una coassialità di 0,01

COASSIALITÀ PORTAFRESE WELDON

Secondo la normativa DIN 69882-4 il portafrese WELDON deve rispondere ai seguenti requisiti:

Foro: H5

Coassialità: 0.005.

EQUILIBRATURA

Tutti i nostri mandrini presenti in questa categoria sono prebilanciati in classe G6.3 a 8000 rpm min-1 o bilanciati a 15000 giri rpm min-1.

A fianco della tabella descrittiva e dimensionale dei prodotti viene elencato il grado di equilibratura aggiuntiva

DATI COSTRUTTIVI

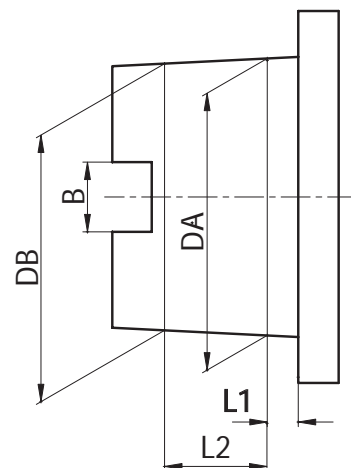
- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +- 2 resistenza 800-1000 N/ mm2
- Bruniti
- Finitura di rettifica interna, esterna e nelle filettature delle ghiere chiudipinza
- Collaudati 100% con strumenti di misura certificati

EQUILIBRATURA MANDRINI PER ALTA VELOCITÀ

I mandrini presenti nella linea nuova ad alta velocità vengono bilanciati in classe G 2,5 a 25000 rpm min - 1.

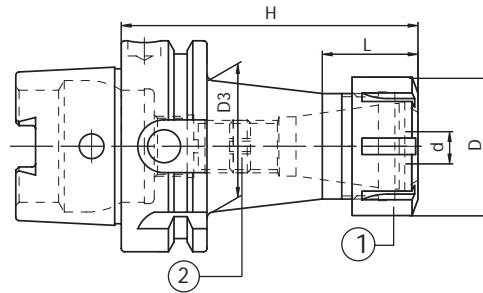
DATI COSTRUTTIVI

- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +- 2 resistenza 800-1000 N/ mm2
- Bruniti
- Finitura di rettifica interna, esterna del cono
- Rettifica parte anteriore e nelle filettature delle ghiere chiudipinza
- Collaudati 100% con strumenti di misura certificati e forniti con certificato di bilanciatura.

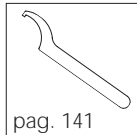


SPANNZANGENFUTTER ER TYP MANDRINS A PINCES TYPE ER
ER COLLET CHUCK MANDRINI PORTAPINZA TIPO ER

DIN 6499





HSK	Code N.	Description	H	d	D	ER	L	D3	G2,5 25000
63	214-91701	HSK63AH90ER16M	90	0,5÷10	22	16M	-	-	•
63	214-91702	HSK63AH90ER25	90	1÷16	42	25	-	-	•
63	214-91703	HSK63AH100ER32	100	2÷20	50	32	-	-	•
63	214-91704	HSK63AH120ER40	120	3÷30	63	40	-	-	•
63	214-91708	HSK63AH160ER16M	160	0,5÷10	22	16M	57	35	•
63	214-91709	HSK63AH160ER25M	160	1÷16	35	25M	68	46	•
63	214-91710	HSK63AH160ER32	160	2÷20	50	32	-	-	•
63	214-91711	HSK63AH160ER40	160	3÷30	63	40	-	-	•
100	214-91705	HSK100AH100ER25	100	1÷16	42	25	37	40	•
100	214-91706	HSK100AH100ER32	100	2÷20	50	32	38	48	•
100	214-91707	HSK100AH120ER40	120	3÷30	63	40	37	60	•



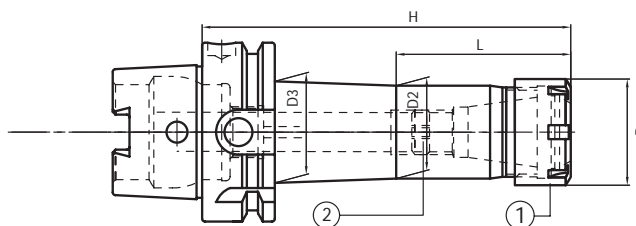
New line High balanced

Ersatzteile • Spare parts • Pièces détachées • Componenti

ER	Nut	Stop screw
		
16M	812-203013	811-303119
25M	812-203015	811-303121
25	812-203070	811-303121
32	812-203071	811-303118
40	812-203072	811-303122

SPANNZANGENFUTTER ER MINI TYP MANDRINS A PINCES TYPE ER MINI
ER MINI COLLET CHUCK MANDRINI PORTAPINZA TIPO ER MINI EXTRA SOTTILI

DIN 6499





HSK	Code N.	Description	ER	D	H	L	D2	D3	G2,5 25000 RPM
40	214-91723	HSK40AH70ER11M	11M	16	70	20	14	19	•
40	214-91724	HSK40AH100ER11M	11M	16	100	40	14	20	•
40	214-91725	HSK40AH160ER11M	11M	16	160	50	14	26	•
63	214-91715	HSK63AH100ER11M	11M	16	100	40	14	20	•
63	214-91720	HSK63AH100ER16M	16M	22	100	42	20	25	•
63	214-91717	HSK63AH100ER25M	25M	35	100	-	33	-	•
63	214-91716	HSK63AH160ER11M	11M	16	160	50	14	28	•
63	214-91721	HSK63AH160ER16M	16M	22	160	97	20	26	•
63	214-91722	HSK63AH160ER25M	25M	35	160	103	33	35	•
100	214-91718	HSK100AH100ER16M	16M	22	100	47	22	26	•
100	214-91719	HSK100AH160ER25M	25M	35	160	95	35	42	•



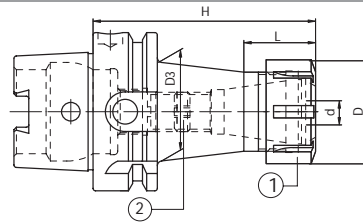
Slim line
High balanced

Ersatzteile • Spare parts • Pièces détachées • Componenti

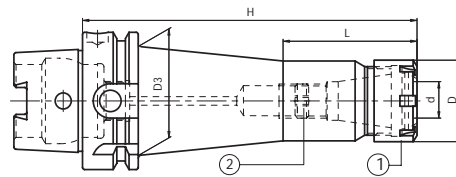
ER	Nut	Stop screw
		
11M	812-203012	811-303081
16M	812-203013	811-303119
25M	812-203015	811-303121

SPANNZANGENFUTTER ER TYP MANDRINS A PINCES TYPE ER
ER COLLET CHUCKS MANDRINI PORTAPINZA TIPO ER

DIN 6499





HSK	Code N.	Description	H	d	D	ER	L	D3	G6,3 15000 RPM	
STANDARD	32	214-31740	HSK32AH65ER16M	65	0,5÷10	22	16M	-	-	•
	32	214-31741	HSK32AH70ER25M	70	1÷16	35	25M	-	-	•
	40	214-31745	HSK40AH60ER16M	60	0,5÷10	22	16M	-	-	•
	40	214-31722	HSK40AH70ER16M	70	0,5÷10	22	16M	-	-	•
	40	214-31746	HSK40AH65ER25	65	1÷16	42	25	-	-	•
	40	214-31702	HSK40AH80ER25	80	1÷16	42	25	-	-	•
	40	214-31747	HSK40AH65ER32	65	1÷20	50	32	-	-	•
	40	214-31703	HSK40AH100ER32	100	1÷20	50	32	-	-	•
	50	214-31723	HSK50AH80ER16M	80	0,5÷10	22	16M	-	-	•
	50	214-31705	HSK50AH95ER25	95	1÷16	42	25	-	-	•
	50	214-31706	HSK50AH100ER32	100	2÷20	50	32	-	-	•
	63	214-31724	HSK63AH90ER16M	90	0,5÷10	22	16M	-	-	•
	63	214-31707	HSK63AH90ER25	90	1÷16	42	25	-	-	•
	63	214-31708	HSK63AH100ER32	100	2÷20	50	32	-	-	•
	63	214-31709	HSK63AH120ER40	120	3÷30	63	40	-	-	•
	100	214-31777	HSK100AH100ER25	100	1÷16	42	25	37	40	•
	100	214-31725	HSK100AH100ER32	100	2÷20	50	32	38	48	•
100	214-31731	HSK100AH120ER40	120	3÷30	63	40	37	60	•	



HSK	Code N.	Description	H	d	D	ER	L	D3	G6,3 15000 RPM	
EXTENDED	32	214-31742	HSK32AH90ER16M	90	0,5÷10	22	16M	-	-	•
	40	214-31732	HSK40AH120ER16M	120	0,5÷10	22	16M	47	29	•
	40	214-31733	HSK40AH120ER25M	120	1÷16	35	25M	-	-	•
	40	214-31714	HSK40AH160ER25	160	1÷16	42	ER25	-	-	•
	40	214-31715	HSK40AH160ER32	160	2÷20	50	ER32	-	-	•
	50	214-31734	HSK50AH150ER16M	150	0,5÷10	22	16M	57	33	•
	50	214-31735	HSK50AH150ER25M	150	1÷16	35	25M	68	41	•
	50	214-31718	HSK50AH160ER32	160	2÷20	50	32	-	-	•
	63	214-31736	HSK63AH160ER16M	160	0,5÷10	22	16M	57	35	•
	63	214-31737	HSK63AH160ER25M	160	1÷16	35	25M	68	46	•
	63	214-31720	HSK63AH160ER32	160	2÷20	50	32	-	-	•
	63	214-31721	HSK63AH160ER40	160	3÷30	63	40	-	-	•
	100	214-31772	HSK100AH160ER16M	160	0,5÷10	22	16M	57	35	•
	100	214-31773	HSK100AH160ER25M	160	1÷16	35	25M	68	46	•
	100	214-31752	HSK100AH160ER25	160	1÷16	42	25	37	45	•
	100	214-31738	HSK100AH160ER32	160	2÷20	50	32	38	53	•
	100	214-31739	HSK100AH160ER40	160	3÷30	63	40	40	63	•

Ersatzteile • Spare parts • Pièces détachées • Component

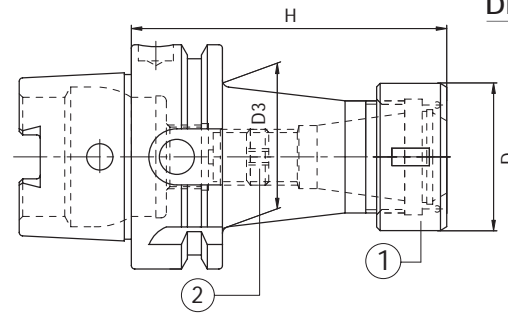
ER	Nut	Stop screw
		
16M	812-203013	811-303119
25M	812-203015	811-303121
25	812-203001	811-303121
32	812-203002	811-303118
40	812-203003	811-303122

Zubehör
Accessories
Accessoires
Accessori





SPANNZANGENFUTTER EOC TYP MANDRINS A PINCES TYPE EOC
EOC COLLET CHUCK MANDRINI PORTAPINZA TIPO EOC

DIN 6388



HSK	Code N.	Description	H	d	D	EOC	D3	G6,3 15000 RPM
50	214-11707	HSK50AH100EOC16	100	2÷16	43	16	-	•
50	214-11708	HSK50AH100EOC25	100	2÷25	60	25	-	•
63	214-11709	HSK63AH100EOC16	100	2÷16	43	16	-	•
63	214-11710	HSK63AH100EOC25	100	2÷25	60	25	-	•
63	214-11711	HSK63AH120EOC32	120	3÷32	72	32	-	•
100	214-11712	HSK100AH110EOC16	110	2÷16	43	16	40	•
100	214-11713	HSK100AH120EOC25	120	2÷25	60	25	-	•
100	214-11714	HSK100AH130EOC32	130	3÷32	72	32	-	•

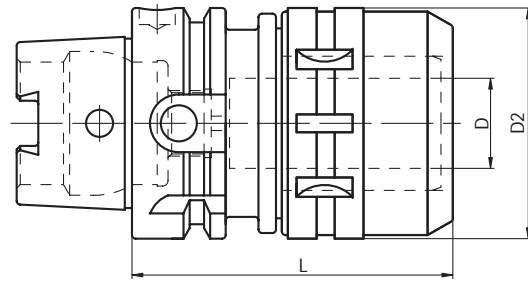
Ersatzteile • Spare parts • Pièces détachées • Componenti

EOC	Nut	Stop screw	Wrench
			
/16	GOC16	811-303121	CHEOC16
50;63/25	GOC25	-	CHEOC25
100/25	GOC25	811-303123	CHEOC25
/32	GOC32	811-303123	CHEOC32

Zubehör
Accessories
Accessoires
Accessori



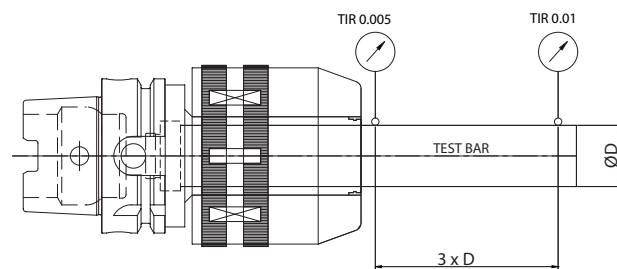
KRAFTSPANNFUTTER MANDRINS A FORT SERRAGE
MILLING CHUCK MANDRINI FORTE SERRAGGIO



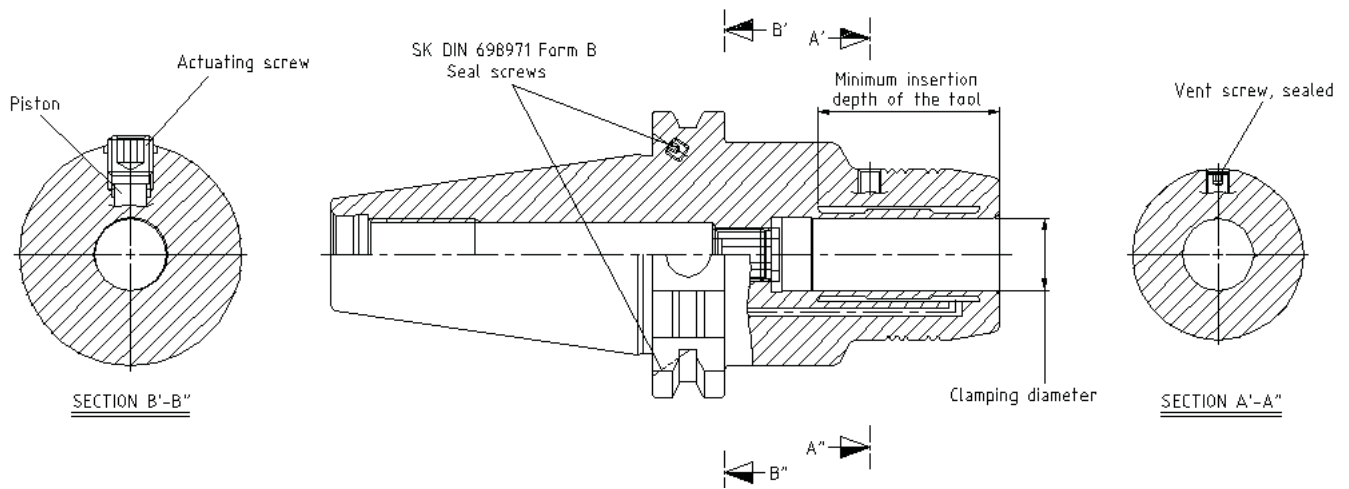
HSK	Code N.	Description	D	D2	L	G6,3 12000
40	214-01703	HSK40AH100C20	20	54	100	•
50	214-01704	HSK50AH107C20	20	54	107	•
63	214-01701	HSK63AH107C20	20	54	107	•
63	214-01702	HSK63AH120C32	32	72	120	•
100	214-01705	HSK100AH110C20	20	54	110	•
100	214-01706	HSK100AH123C32	32	72	123	•

FORNITI CON CHIAVE INCLUSA • SUPPLIED WITH WRENCH

Zubehör
Accessories
Accessoires
Accessori



Milling chuck (diameter)	Specification (DIN)	Run-out (3xD)	Clamping torque
C20 C32	DIN 69893 A HSK40A HSK50A HSK63A HSK100A	0~0,01	980M.m (100 Kgf.m) 3430M.m (350 Kgf.m)



- Raccomandiamo di seguire le nostre istruzioni operative per risparmiare tempo ed evitare problemi / Please follow our operating instructions carefully to save time and avoid problems:

Tabella delle informazioni tecniche/ Chart of technical data:

Chuck Diameter (HC)	Shaft Clamping	Depending on the mounting shank (max RPM)	Minimum clamping length (mm)	Operating temperature	Max coolant pressure (bar)	Moment (Nm)
HC6	6 hb	40.000	27	20-50	80	8 Nm
HC8	8 hb	40.000	27	20-50	80	15 Nm
HC10	10 hb	40.000	32	20-50	80	30 Nm
HC12	12 hb	40.000	37	20-50	80	45 Nm
HC14	14 hb	40.000	37	20-50	80	75 Nm
HC16	16 hb	40.000	42	20-50	80	120 Nm
HC18	18 hb	40.000	42	20-50	80	170 Nm
HC20	20 hb	40.000	42	20-50	80	230 Nm
HC25	25 hb	25.000	48	20-50	80	300 Nm
HC32	32 hb	25.000	55	20-50	80	400 Nm

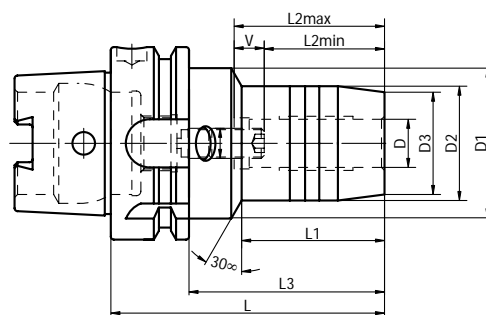
- La verifica della forza di serraggio deve essere fatta periodicamente. Si raccomanda di controllarla prima dell'utilizzo e dopo circa 100 operazioni o ogni 3 mesi / The clamping force must be checked periodically. We recommend to check it before initial use and approximately after 100 operations or every 3 months.

ATTENZIONE / ATTENTION

- Quando si montano gli utensili o le frese nel mandrino idraulico, la superficie interna del mandrino idraulico e quella esterna dell'utensile devono essere pulite da oli, polveri e residui / When tools or endmills are clamped into the hydraulic chucks, be sure that oils and dust are completely removed from the internal surface of the hydraulic chuck and the external surface of the tool.

HYDRO-DEHNSPANNFUTTER FÜR WERKZEUGE
MIT ZYLINDERSCHAFT
HYDRO-EXPANSION CHUCKS FOR TOOLS WITH
CYLINDRICAL SHANK

MANDRINS HYDRO-EXPANSIBLES POUR OUTILS A
QUEUE CYLINDRIQUE
MANDRINI IDRAULICI PER UTENSILI ATTACCO
CILINDRICO



Code N.	Description	HSK	D	D1	D2	D3	L	L1	L2 min	L2 max	V	M	G2,5 20000
252-11737	HSK63A-HC6-70	63	6	50	26	22	70	24	27	37	10	M5*0.8	•
252-11738	HSK63A-HC8-70	63	8	50	28	24	70	24	27	37	10	M6*1.0	•
252-11739	HSK63A-HC10-80	63	10	50	30	26	80	35	32	42	10	M8*1.0	•
252-11740	HSK63A-HC12-85	63	12	50	32	28	85	40	37	47	10	M10*1.0	•
252-11741	HSK63A-HC14-85	63	14	50	34	30	85	40	37	47	10	M10*1.0	•
252-11742	HSK63A-HC16-90	63	16	50	38	34	90	46	42	52	10	M12*1.0	•
252-11743	HSK63A-HC18-90	63	18	50	40	36	90	46	42	52	10	M12*1.0	•
252-11744	HSK63A-HC20-90	63	20	50	42	38	90	48	42	52	10	M16*1.0	•
252-11745	HSK63A-HC25-120	63	25	63	57	53	120	59	48	58	10	M16*1.0	•
252-11746	HSK63A-HC32-125	63	32	75	64	40	125	63	55	65	10	M16*1.0	•

Suitable only for clamping the tools with cylindrical shank DIN 1835A.
Do not clamp end mills with shank whistle-notch (DIN 1835E).
Do not carry out clamping action without the tool.

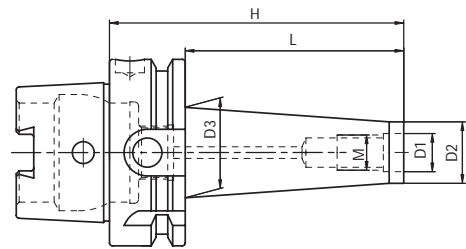
Adatti solo per utensili con gambo cilindrico DIN 1835A.
Non bloccare le frese con attacco whistle-notch (DIN 1835E).
Evitare la chiusura del mandrino, senza l'utensile nel foro.

Zubehör
Accessories
Accessoires
Accessori



SPANFUTTER FÜR EINSCHRAUBFRÄSER
MILLING CUTTER ARBORS FOR SCREW-ON TYPE MILLING CUTTERS

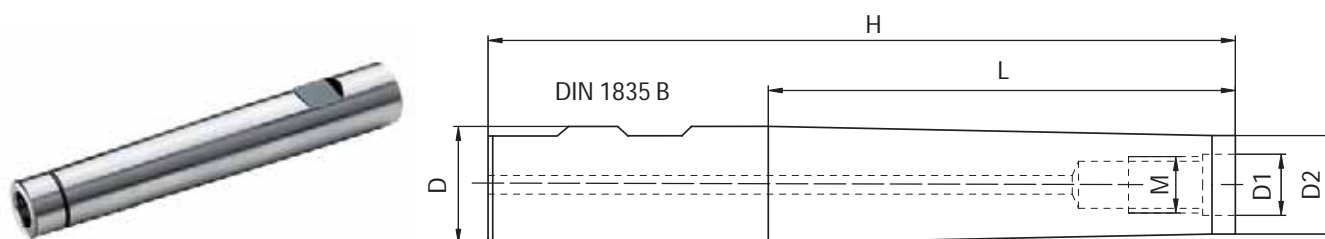
MANDRINS POUR FRAISES A VISSER
MANDRINI PER FRESE CON ATTACCO FILETTATO



HSK	Code N.	Description	M	D1	D2	D3	H	L	G2,5 25000
63	217-81779	HSK63AH76M8	M8	8.5	13	23	76	50	•
63	217-81780	HSK63AH101M8	M8	8.5	13	23	101	75	•
63	217-81781	HSK63AH126M8	M8	8.5	13	26	126	100	•
63	217-81790	HSK63AH76M10	M10	10.5	18	23	76	50	•
63	217-81782	HSK63AH101M10	M10	10.5	18	28	101	75	•
63	217-81783	HSK63AH126M10	M10	10.5	18	32	126	100	•
63	217-81784	HSK63AH76M12	M12	12.5	21	24	76	50	•
63	217-81785	HSK63AH101M12	M12	12.5	21	31	101	75	•
63	217-81786	HSK63AH126M12	M12	12.5	21	33	126	100	•
63	217-81787	HSK63AH76M16	M16	17	29	34	76	50	•
63	217-81788	HSK63AH101M16	M16	17	29	34	101	75	•
63	217-81789	HSK63AH126M16	M16	17	29	36	126	100	•

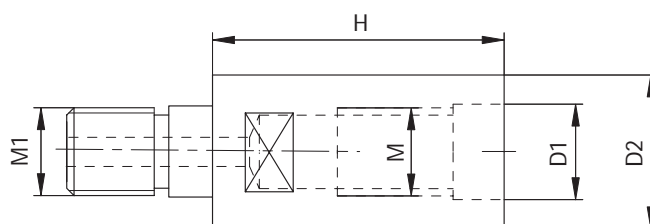
New line
High balanced

VERLÄNGERUNG FÜR EINSCHRAUBFRÄSER RALLONGES POUR FRAISES À VISSER
EXTENSION FOR SCREW IN TYPE MILLS PROLUNGHE PER FRESE CON ATTACCO FILETTATO



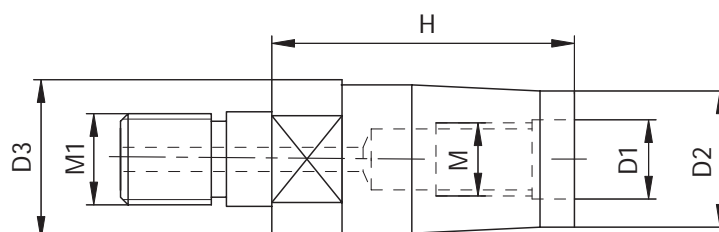
Code N.	Description	D	M	D1	D2	H	L
217-85201	D16H115M8	16	M8	8.5	12.8	115	60
217-85202	D16H160M8	16	M8	8.5	12.8	160	100
217-85203	D20H120M10	20	M10	10.5	17.8	120	60
217-85204	D20H160M10	20	M10	10.5	17.8	160	100
217-85205	D25H160M12	25	M12	12.5	20.8	160	100
217-85206	D32H160M16	32	M16	17	28.8	160	100

VERLÄNGERUNG FÜR EINSCHRAUBFRÄSER RALLONGES POUR FRAISES FILETEES
EXTENSION FOR SCREW IN END MILLS PROLUNGHE PER FRESE FILETTATE



Code N.	Description	M	M1	D1	D2	H
217-85709	M8H30M8	M8	M8	8.5	12.8	30
217-85710	M10H35M10	M10	M10	10.5	17.8	35
217-85711	M12H40M12	M12	M12	12.5	20.8	40
217-85712	M16H40M16	M16	M16	17	28.8	40

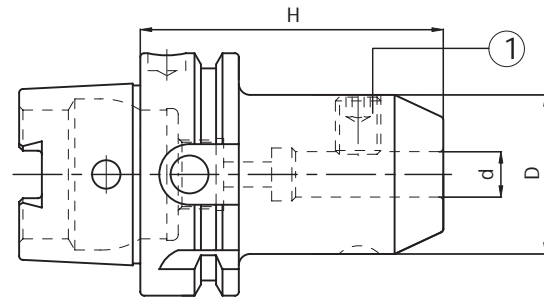
VERLÄNGERUNG FÜR EINSCHRAUBFRÄSER RALLONGES POUR FRAISES FILETEES
EXTENSION FOR SCREW IN END MILLS PROLUNGHE PER FRESE FILETTATE



Code N.	Description	M1	M	D1	D2	D3	H
217-85713	M10H30M8	M10	M8	8.5	12.8	17.8	30
217-85714	M12H40M8	M12	M8	8.5	12.8	20.8	40
217-85715	M12H35M10	M12	M10	10.5	17.8	20.8	35
217-85716	M16H60M10	M16	M10	10.5	17.8	28.8	60
217-85717	M16H40M12	M16	M12	12.5	20.8	28.8	40

ZYLINDERSCHAFTAUFNAHME WELDON MANDRINS POUR OUTILS TYPE WELDON
 END MILL HOLDERS WELDON MANDRINI PORTAFRESE TIPO WELDON

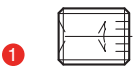
DIN 1835/B



Code N.	Description	H	d	D	G2,5 25000 RPM
213-91701	HSK63AH65WE06	65	6	25	•
213-91702	HSK63AH65WE08	65	8	28	•
213-91703	HSK63AH65WE10	65	10	35	•
213-91704	HSK63AH80WE12	80	12	42	•
213-91705	HSK63AH80WE14	80	14	44	•
213-91706	HSK63AH80WE16	80	16	48	•
213-91707	HSK63AH80WE18	80	18	50	•
213-91708	HSK63AH80WE20	80	20	52	•
213-91709	HSK63AH110WE25	110	25	65	•
213-91710	HSK63AH110WE32	110	32	72	•

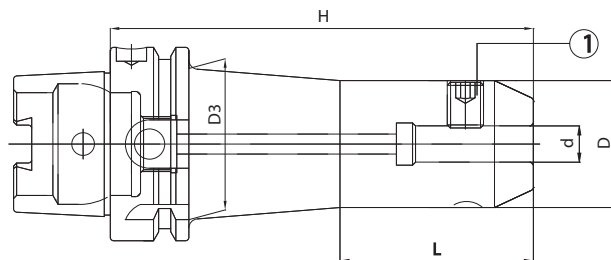
New line
High balanced

Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Locking screw	Quantity
		
6	811-106001	1
8	811-106002	1
10	811-106004	1
12;14	811-106005	1
16;18	811-106006	1
20	811-106007	1
25	811-106008	2
32	811-106009	2

ZYLINDERSCHAFTAUFNAHME WELDON LANG
END MILL HOLDERS WELDON LONG

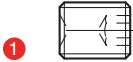
MANDRINS POUR OUTILS TYPE WELDON, SERIE LONGUE
MANDRINI PORTAFRESE TIPO WELDON, PROLUNGATI



Code N.	Description	H	d	D	D3	L	G2,5 ²⁵⁰⁰⁰ RPM	
H 100	213-91722	HSK63AH100WE06	100	6	18	26	50	•
	213-91723	HSK63AH100WE08	100	8	22	30	50	•
	213-91724	HSK63AH100WE10	100	10	30	-	-	•
	213-91725	HSK63AH100WE12	100	12	34	-	-	•
	213-91726	HSK63AH100WE14	100	14	36	-	-	•
	213-91727	HSK63AH100WE16	100	16	42	-	-	•
	213-91728	HSK63AH100WE18	100	18	44	-	-	•
	213-91729	HSK63AH100WE20	100	20	45	-	-	•
H 160	213-91730	HSK63AH160WE06	160	6	18	34	50	•
	213-91731	HSK63AH160WE08	160	8	22	38	50	•
	213-91732	HSK63AH160WE10	160	10	30	46	65	•
	213-91733	HSK63AH160WE12	160	12	34	50	70	•
	213-91734	HSK63AH160WE14	160	14	36	46	70	•
	213-91735	HSK63AH160WE16	160	16	42	50	70	•
	213-91736	HSK63AH160WE18	160	18	44	52	70	•
	213-91737	HSK63AH160WE20	160	20	45	53	70	•
	213-91747	HSK63AH160WE25	160	25	45	53	70	•

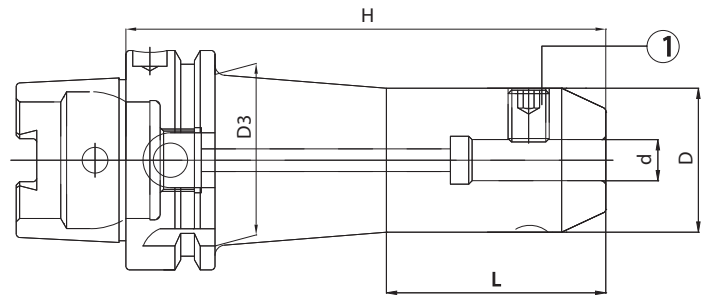
New line High balanced

Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Locking screw	Quantity
		
6	811-106015	1
8	811-106036	1
10	811-106003	1
12;14	811-106013	1
16;18	811-106027	1
20	811-106032	1
25	811-106014	2

ZYLINDERSCHAFTAUFNAHME WELDON MANDRINS POUR OUTILS TYPE WELDON
 END MILL HOLDERS WELDON MANDRINI PORTAFRESE TIPO WELDON



DIN 1835/B



Code N.	Description	H	d	D	D3	L	G2,5 25000 RPM
213-91711	HSK100AH90WE06	90	6	25			•
213-91712	HSK100AH90WE08	90	8	28			•
213-91713	HSK100AH90WE10	90	10	35			•
213-91714	HSK100AH100WE12	100	12	42			•
213-91715	HSK100AH100WE14	100	14	44			•
213-91716	HSK100AH100WE16	100	16	48			•
213-91717	HSK100AH100WE18	100	18	50			•
213-91718	HSK100AH110WE20	110	20	52			•
213-91719	HSK100AH120WE25	120	25	65			•
213-91720	HSK100AH120WE32	120	32	72			•
H 160							
213-91738	HSK100AH160WE06	160	6	18	46	50	•
213-91739	HSK100AH160WE08	160	8	22	50	50	•
213-91740	HSK100AH160WE10	160	10	30	48	65	•
213-91741	HSK100AH160WE12	160	12	34	51	70	•
213-91742	HSK100AH160WE14	160	14	36	50	70	•
213-91743	HSK100AH160WE16	160	16	42	59	70	•
213-91744	HSK100AH160WE18	160	18	44	58	70	•
213-91745	HSK100AH160WE20	160	20	45	55	70	•
213-91746	HSK100AH160WE25	160	25	55	66	80	•

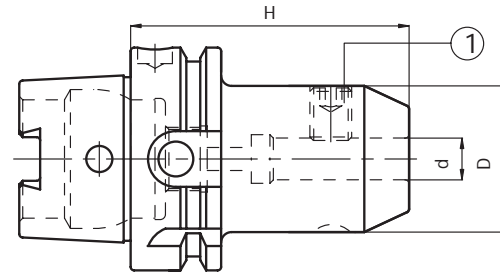
New line High balanced

Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Locking screw	Locking screw H160	Quantity
			
6	811-106001	811-106150	1
8	811-106002	811-106360	1
10	811-106004	811-106030	1
12;14	811-106005	811-106130	1
16;18	811-106006	811-106270	1
20	811-106007	811-106320	1
25	811-106008	811-106420	2
32	811-106009		2

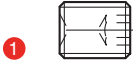
ZYLINDERSCHAFTAUFNAHME WELDON MANDRINS POUR OUTILS TYPE WELDON
 END MILL HOLDERS WELDON MANDRINI PORTAFRESE TIPO WELDON

DIN 1835/B



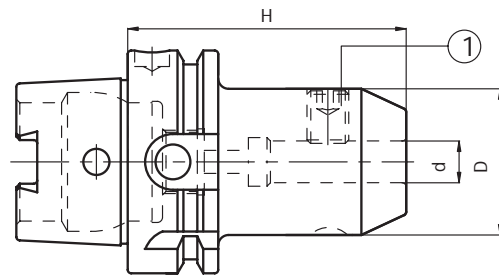
HSK	Code N.	Description	H	d	D	G6,3 ¹⁵⁰⁰⁰ RPM
32	213-11787	HSK32AH60WE06	60	6	25	•
32	213-11788	HSK32AH60WE08	60	8	28	•
32	213-11789	HSK32AH65WE10	65	10	35	•
32	213-11790	HSK32AH75WE12	75	12	42	•
32	213-11791	HSK32AH75WE14	75	14	44	•
32	213-11792	HSK32AH75WE16	75	16	48	•
40	213-11701	HSK40AH60WE06	60	6	25	•
40	213-11702	HSK40AH60WE08	60	8	28	•
40	213-11703	HSK40AH65WE10	65	10	35	•
40	213-11704	HSK40AH70WE12	70	12	42	•
40	213-11705	HSK40AH70WE14	70	14	44	•
40	213-11706	HSK40AH80WE16	80	16	48	•
40	213-11735	HSK40AH80WE18	80	18	50	•
40	213-11736	HSK40AH80WE20	80	20	52	•
50	213-11707	HSK50AH65WE06	65	6	25	•
50	213-11708	HSK50AH65WE08	65	8	28	•
50	213-11709	HSK50AH65WE10	65	10	35	•
50	213-11710	HSK50AH80WE12	80	12	42	•
50	213-11711	HSK50AH80WE14	80	14	44	•
50	213-11712	HSK50AH80WE16	80	16	48	•
50	213-11713	HSK50AH80WE18	80	18	50	•
50	213-11714	HSK50AH80WE20	80	20	52	•
50	213-11737	HSK50AH105WE25	105	25	65	•
50	263-11732	HSK50AH120WE32	120	32	72	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Locking screw	Quantity
		
6	811-106001	1
8	811-106002	1
10	811-106004	1
12;14	811-106005	1
16;18	811-106006	1
20	811-106007	1
25	811-106008	2
32;40	811-106009	2

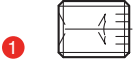
ZYLINDERSCHAFTAUFNAHME WELDON MANDRINS POUR OUTILS TYPE WELDON
 END MILL HOLDERS WELDON MANDRINI PORTAFRESE TIPO WELDON

DIN 1835/B



HSK	Code N.	Description	H	d	D	G6,3 15000 RPM
63	213-11715	HSK63AH65WE06	65	6	25	•
63	213-11716	HSK63AH65WE08	65	8	28	•
63	213-11717	HSK63AH65WE10	65	10	35	•
63	213-11718	HSK63AH80WE12	80	12	42	•
63	213-11719	HSK63AH80WE14	80	14	44	•
63	213-11720	HSK63AH80WE16	80	16	48	•
63	213-11721	HSK63AH80WE18	80	18	50	•
63	213-11722	HSK63AH80WE20	80	20	52	•
63	213-11723	HSK63AH110WE25	110	25	65	•
63	213-11724	HSK63AH110WE32	110	32	72	•
63	263-11780	HSK63AH120WE40	120	40	80	•
100	213-11738	HSK100AH90WE06	90	6	25	•
100	213-11739	HSK100AH90WE08	90	8	28	•
100	213-11740	HSK100AH90WE10	90	10	35	•
100	213-11741	HSK100AH100WE12	100	12	42	•
100	213-11742	HSK100AH100WE14	100	14	44	•
100	213-11743	HSK100AH100WE16	100	16	48	•
100	213-11744	HSK100AH100WE18	100	18	50	•
100	213-11745	HSK100AH110WE20	110	20	52	•
100	213-11746	HSK100AH120WE25	120	25	65	•
100	213-11747	HSK100AH120WE32	120	32	72	•
100	213-11748	HSK100AH120WE40	120	40	80	•
100	263-11733	HSK100AH130WE50	130	50	100	•

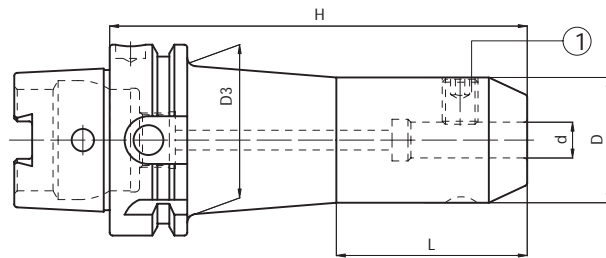
Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Locking screw	Quantity
		
6	811-106001	1
8	811-106002	1
10	811-106004	1
12;14	811-106005	1
16;18	811-106006	1
20	811-106007	1
25	811-106008	2
32;40	811-106009	2
50	811-106011	2

ZYLINDERSCHAFTAUFNAHME WELDON LANG
END MILL HOLDERS WELDON LONG

MANDRINS POUR OUTILS TYPE WELDON, SERIE LONGUE
MANDRINI PORTAFRESE TIPO WELDON, PROLUNGATI

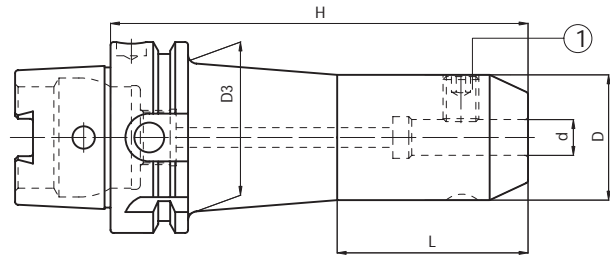
DIN 6388



HSK	Code N.	Description	H	d	D	L	D3	G6,3 15000 RPM
32	263-11734	HSK32AH100WE06	100	6	18	50	25	•
32	263-11735	HSK32AH100WE08	100	8	22	50	25	•
32	263-11736	HSK32AH100WE10	100	10	30	-	-	•
40	263-11737	HSK40AH100WE06	100	6	18	50	24	•
40	263-11738	HSK40AH100WE08	100	8	22	50	28	•
40	263-11739	HSK40AH100WE10	100	10	30	-	-	•
40	263-11740	HSK40AH100WE12	100	12	34	-	-	•
40	263-11741	HSK40AH160WE06	160	6	18	50	28	•
40	263-11742	HSK40AH160WE08	160	8	22	50	30	•
40	263-11743	HSK40AH160WE10	160	10	30	65	34	•
40	263-11744	HSK40AH160WE12	160	12	34	-	-	•
50	263-11745	HSK50AH100WE06	100	6	18	50	23	•
50	263-11746	HSK50AH100WE08	100	8	22	50	27	•
50	263-11747	HSK50AH100WE10	100	10	30	-	-	•
50	263-11748	HSK50AH100WE12	100	12	34	-	-	•
50	263-11749	HSK50AH100WE14	100	14	36	-	-	•
50	263-11750	HSK50AH100WE16	100	16	42	-	-	•
50	263-11751	HSK50AH160WE06	160	6	18	50	25	•
50	263-11752	HSK50AH160WE08	160	8	22	50	30	•
50	263-11753	HSK50AH160WE10	160	10	30	65	36	•
50	263-11754	HSK50AH160WE12	160	12	34	70	38	•
50	263-11755	HSK50AH160WE14	160	14	36	70	40	•
50	263-11756	HSK50AH160WE16	160	16	42	-	-	•

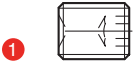
ZYLINDERSCHAFTAUFNAHME WELDON LANG MANDRINS POUR OUTILS TYPE WELDON, SERIE LONGUE
 END MILL HOLDERS WELDON LONG MANDRINI PORTAFRESE TIPO WELDON, PROLUNGATI

DIN 6388



HSK	Code N.	Description	H	d	D	L	D3	G6,3 15000 RPM
63	263-11757	HSK63AH100WE06	100	6	18	50	26	•
63	263-11758	HSK63AH100WE08	100	8	22	50	30	•
63	263-11759	HSK63AH100WE10	100	10	30	-	-	•
63	263-11760	HSK63AH100WE12	100	12	34	-	-	•
63	263-11761	HSK63AH100WE14	100	14	36	-	-	•
63	263-11762	HSK63AH100WE16	100	16	42	-	-	•
63	263-11763	HSK63AH100WE18	100	18	44	-	-	•
63	263-11764	HSK63AH100WE20	100	20	45	-	-	•
63	263-11765	HSK63AH160WE06	160	6	18	50	34	•
63	263-11766	HSK63AH160WE08	160	8	22	50	38	•
63	263-11767	HSK63AH160WE10	160	10	30	65	46	•
63	263-11768	HSK63AH160WE12	160	12	34	70	50	•
63	263-11769	HSK63AH160WE14	160	14	36	70	46	•
63	263-11770	HSK63AH160WE16	160	16	42	70	50	•
63	263-11771	HSK63AH160WE18	160	18	44	70	52	•
63	263-11772	HSK63AH160WE20	160	20	45	70	53	•
63	263-11778	HSK63AH160WE25	160	25	45	70	53	•
100	213-11781	HSK100AH160WE06	160	6	18	50	46	•
100	213-11782	HSK100AH160WE08	160	8	22	50	50	•
100	213-11783	HSK100AH160WE10	160	10	30	65	48	•
100	213-11784	HSK100AH160WE12	160	12	34	70	51	•
100	263-11773	HSK100AH160WE14	160	14	36	70	50	•
100	213-11785	HSK100AH160WE16	160	16	42	70	59	•
100	263-11774	HSK100AH160WE18	160	18	44	70	58	•
100	213-11786	HSK100AH160WE20	160	20	45	70	55	•
100	263-11775	HSK100AH160WE25	160	25	55	80	66	•

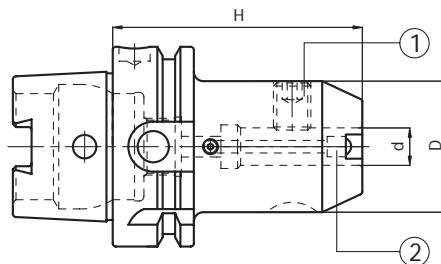
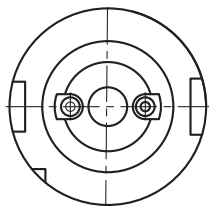
Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Locking screw	Quantity
		
6	811-106015	1
8	811-106036	1
10	811-106003	1
12;14	811-106013	1
16;18	811-106027	1
20	811-106032	1
HSK63/25	811-106014	2
HSK100/25	811-106042	2

ZYLINDERSCHAFTAUFNAHME WELDON MIT SPRITZDÜSE
END MILL HOLDERS WELDON WITH COOLANT NOOSE FRONT FACE

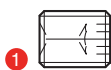
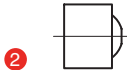
MANDRINS POUR OUTILS TYPE WELDON AVEC BUSE D'ARROSAGE
MANDRINI PORTAFRESE TIPO WELDON CON SFERE DI LUBRIFICAZIONE

DIN 1835 B



HSK	Code N.	Description	H	d	D	G2,5 25000 RPM
63	213-61737	HSK63AH65WE06-CNFF	65	6	25	•
63	213-61738	HSK63AH65WE08-CNFF	65	8	28	•
63	213-61739	HSK63AH65WE10-CNFF	65	10	35	•
63	213-61740	HSK63AH80WE12-CNFF	80	12	42	•
63	213-61741	HSK63AH80WE14-CNFF	80	14	44	•
63	213-61742	HSK63AH80WE16-CNFF	80	16	48	•
63	213-61743	HSK63AH80WE18-CNFF	80	18	50	•
63	213-61744	HSK63AH80WE20-CNFF	80	20	52	•
63	213-61745	HSK63AH110WE25-CNFF	110	25	65	•
63	213-61746	HSK63AH110WE32-CNFF	110	32	72	•
100	213-61747	HSK100AH90WE06-CNFF	90	6	25	•
100	213-61748	HSK100AH90WE08-CNFF	90	8	28	•
100	213-61749	HSK100AH90WE10-CNFF	90	10	35	•
100	213-61750	HSK100AH100WE12-CNFF	100	12	42	•
100	213-61751	HSK100AH100WE14-CNFF	100	14	44	•
100	213-61752	HSK100AH100WE16-CNFF	100	16	48	•
100	213-61753	HSK100AH100WE18-CNFF	100	18	50	•
100	213-61754	HSK100AH110WE20-CNFF	110	20	52	•
100	213-61755	HSK100AH120WE25-CNFF	120	25	65	•
100	213-61756	HSK100AH120WE32-CNFF	120	32	72	•
100	213-61757	HSK100AH120WE40-CNFF	120	40	80	•

New line High balanced

d	Locking screw	Quantity	Coolant noose	M
				
6	811-106001	1	PWZ1005D6x4.5	D2.5
8	811-106002	1	PWZ1005D6x4.5	D2.5
10	811-106004	1	PWZ1005D6x4.5	D2.5
12;14	811-106005	1	PWZ1005D6x4.5	D2.5
16;18	811-106006	1	PWZ1008D10x7	M4
20	811-106007	1	PWZ1008D10x7	M4
25	811-106008	2	PWZ1012D12x8	M5
32;40	811-106009	2	PWZ1012D12x8	M5

Ausführung mit Kühlmittelzufuhr zentral und an dem Bund.

Durch die seitlichen Bohrungen und die Kühlmitteldüsen ermöglicht dieses System das Kühlmittel direkt an den Kontaktpunkt des Werkzeuges zu leiten.

Außerdem erfolgt Zentral-Kühlmittelzufuhr, wenn zwei Schrauben die Bohrungen verschliessen.

With central and lateral cooling possibility.

This type of system, thanks to two lateral holes, permits to direct the cooling jet through the two balls to the connection point of the tool.

Besides, with the application of two screws on the balls, you can have the lubrication trough the centre.

Avec possibilité d'arrosage soit central, soit latéral.

Ce système, avec les trous latéraux, permet, avec les deux billes d'arrosage de diriger le liquide sur le point de contact de l'outil.

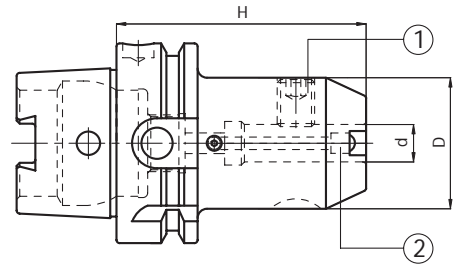
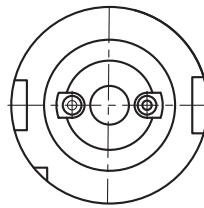
De plus, il est possible d'avoir l'arrosage au centre en bouchant avec des vis les trous des billes.

Con possibilità di refrigerazione sia centrale che laterale.



Questo tipo di sistema grazie ai due fori laterali, permette, mediante le due sfere di dirigere il getto del refrigerante nel punto di contatto dell'utensile. Inoltre, con l'applicazione di due grani sulle sfere si ottiene la lubrificazione attraverso il centro.

ZYLINDERSCHAFTAUFNAHME WELDON MIT SPRITZDÜSE MANDRINS POUR OUTILS TYPE WELDON AVEC BUSE D'ARROSAGE
 END MILL HOLDERS WELDON WITH COOLANT NOOSE FRONT FACE MANDRINI PORTAFRESE TIPO WELDON CON SFERE DI LUBRIFICAZIONE

DIN 1835 B



HSK	Code N.	Description	H	d	D	G6,3 15000 RPM
63	263-11721	HSK63AH65WE06-CNFF	65	6	25	•
63	263-11722	HSK63AH65WE08-CNFF	65	8	28	•
63	263-11723	HSK63AH65WE10-CNFF	65	10	35	•
63	263-11724	HSK63AH80WE12-CNFF	80	12	42	•
63	263-11725	HSK63AH80WE14-CNFF	80	14	44	•
63	263-11726	HSK63AH80WE16-CNFF	80	16	48	•
63	263-11727	HSK63AH80WE18-CNFF	80	18	50	•
63	263-11728	HSK63AH80WE20-CNFF	80	20	52	•
63	263-11729	HSK63AH110WE25-CNFF	110	25	65	•
63	263-11730	HSK63AH110WE32-CNFF	110	32	72	•
100	213-61725	HSK100AH90WE06-CNFF	90	6	25	•
100	213-61726	HSK100AH90WE08-CNFF	90	8	28	•
100	213-61727	HSK100AH90WE10-CNFF	90	10	35	•
100	213-61728	HSK100AH100WE12-CNFF	100	12	42	•
100	213-61729	HSK100AH100WE14-CNFF	100	14	44	•
100	213-61730	HSK100AH100WE16-CNFF	100	16	48	•
100	213-61731	HSK100AH100WE18-CNFF	100	18	50	•
100	213-61732	HSK100AH110WE20-CNFF	110	20	52	•
100	213-61733	HSK100AH120WE25-CNFF	120	25	65	•
100	213-61734	HSK100AH120WE32-CNFF	120	32	72	•
100	213-61735	HSK100AH120WE40-CNFF	120	40	80	•
100	213-61736	HSK100AH130WE50-CNFF	130	50	100	•

d	Locking screw	Quantity	Coolant noose	M
				
6	811-106001	1	PWZ1005D6x4.5	D2.5
8	811-106002	1	PWZ1005D6x4.5	D2.5
10	811-106004	1	PWZ1005D6x4.5	D2.5
12;14	811-106005	1	PWZ1005D6x4.5	D2.5
16;18	811-106006	1	PWZ1008D10x7	M4
20	811-106007	1	PWZ1008D10x7	M4
25	811-106008	2	PWZ1012D12x8	M5
32;40	811-106009	2	PWZ1012D12x8	M5
50	811-106011	2	PWZ1012D12x8	M5

Ausführung mit Kühlmittelzufuhr zentral und an dem Bund.

Durch die seitlichen Bohrungen und die Kühlmitteldüsen ermöglicht dieses System das Kühlmittel direkt an den Kontaktpunkt des Werkzeuges zu leiten.

Außerdem erfolgt Zentral-Kühlmittelzufuhr, wenn zwei Schrauben die Bohrungen verschliessen.

With central and lateral cooling possibility.

This type of system, thanks to two lateral holes, permits to direct the cooling jet through the two balls to the connection point of the tool.

Besides, with the application of two screws on the balls, you can have the lubrication trough the centre.

Avec possibilité d'arrosage soit central, soit latéral.

Ce système, avec les trous latéraux, permet, avec les deux billes d'arrosage de diriger le liquide sur le point de contact de l'outil.

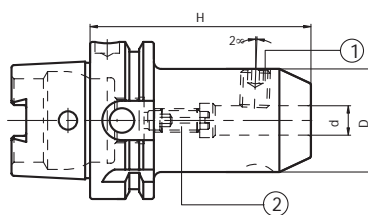
De plus, il est possible d'avoir l'arrosage au centre en bouchant avec des vis les trous des billes.

Con possibilità di refrigerazione sia centrale che laterale.

Questo tipo di sistema grazie ai due fori laterali, permette, mediante le due sfere di dirigere il getto del refrigerante nel punto di contatto dell'utensile. Inoltre, con l'applicazione di due grani sulle sfere si ottiene la lubrificazione attraverso il centro.

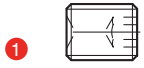
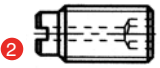
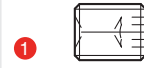
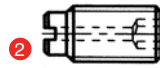
ZYLINDERSCHAFTAUFNAHME WHISTLE NOTCH MANDRINS POUR OUTILS TYPE WHISTLE NOTCH
 END MILL HOLDERS WHISTLE NOTCH MANDRINI PORTAFRESE TIPO WHISTLE NOTCH

DIN 1835 E



HSK	Code N.	Description	H	d	D	G6,3 15000 RPM
40	213-31701	HSK40AH80WN06	80	6	25	•
40	213-31702	HSK40AH80WN08	80	8	28	•
40	213-31703	HSK40AH80WN10	80	10	35	•
40	213-31704	HSK40AH90WN12	90	12	42	•
40	213-31705	HSK40AH90WN14	90	14	44	•
40	213-31706	HSK40AH100WN16	100	16	48	•
40	213-31736	HSK40AH100WN18	100	18	50	•
40	213-31737	HSK40AH100WN20	100	20	52	•
50	213-31707	HSK50AH80WN06	80	6	25	•
50	213-31708	HSK50AH80WN08	80	8	28	•
50	213-31709	HSK50AH80WN10	80	10	35	•
50	213-31710	HSK50AH90WN12	90	12	42	•
50	213-31711	HSK50AH90WN14	90	14	44	•
50	213-31712	HSK50AH100WN16	100	16	48	•
50	213-31713	HSK50AH100WN18	100	18	50	•
50	213-31714	HSK50AH100WN20	100	20	52	•
50	213-31738	HSK50AH110WN25	110	25	65	•
50	213-31739	HSK50AH120WN32	120	32	72	•
63	213-31715	HSK63AH80WN06	80	6	25	•
63	213-31716	HSK63AH80WN08	80	8	28	•
63	213-31717	HSK63AH80WN10	80	10	35	•
63	213-31718	HSK63AH90WN12	90	12	42	•
63	213-31719	HSK63AH90WN14	90	14	44	•
63	213-31720	HSK63AH100WN16	100	16	48	•
63	213-31721	HSK63AH100WN18	100	18	50	•
63	213-31722	HSK63AH100WN20	100	20	52	•
63	213-31723	HSK63AH110WN25	110	25	65	•
63	213-31724	HSK63AH115WN32	115	32	72	•
100	213-31740	HSK100AH90WN06	90	6	25	•
100	213-31741	HSK100AH90WN08	90	8	28	•
100	213-31742	HSK100AH90WN10	90	10	35	•
100	213-31743	HSK100AH100WN12	100	12	42	•
100	213-31744	HSK100AH100WN14	100	14	44	•
100	213-31745	HSK100AH100WN16	100	16	48	•
100	213-31746	HSK100AH100WN18	100	18	50	•
100	213-31747	HSK100AH110WN20	110	20	52	•
100	213-31748	HSK100AH120WN25	120	25	65	•
100	213-31749	HSK100AH120WN32	120	32	72	•
100	213-31750	HSK100AH130WN40	130	40	80	•

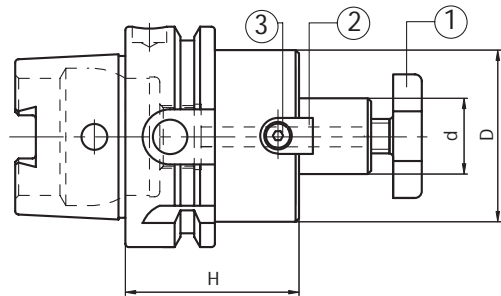
Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Locking screw	Quantity	Stop screw	d	Locking screw	Quantity	Stop screw
							
6	811-106001	1	811-303043	A100/14	811-106005	1	811-303094
8	811-106002	1	811-303081	16	811-106006	1	811-303091
10	811-106004	1	811-303089	18	811-106006	1	811-303091
A100/10	811-106004	1	811-303093	20	811-106007	1	811-303091
12	811-106005	1	811-303090	25	811-106008	2	811-303092
A100/12	811-106005	1	811-303094	32	811-106009	2	811-303092
14	811-106005	1	811-303090	40	811-106009	2	811-303092

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT MIT GRÖßEREM BUND
FACE MILL HOLDERS-TENONS DRIVE WITH BIGGER FLANGE DIAMETER

MANDRINS PORTE-FRAISE-ENTRAÎNEMENT PAR TENONS BRIDE AJOUTÉE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO CON FLANGIA MAGGIORATA

ISO 3937



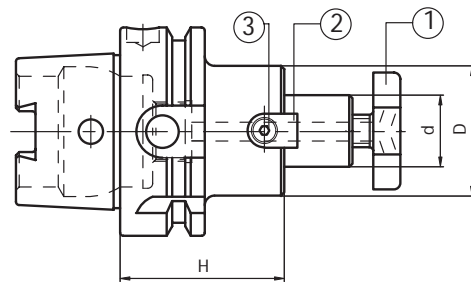
HSK	Code N.	Description	H	d	D	G6,3 15000 RPM
63	266-71714	HSK63AH53D22 GX	53	22	60	•
63	266-71715	HSK63AH100D22 GX	100	22	60	•
100	266-71716	HSK100AH55D22 GX	55	22	60	•
100	266-71717	HSK100AH100D22 GX	100	22	60	•

d	Cross screw	Tenon	Screw	Wrench
22	811-107004	814-202230	811-101013	816-130003

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT
FACE MILL HOLDERS-TENONS DRIVE





MANDRINS PORTE-FRAISE-ENTRAÎNEMENT PAR TENONS
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO

ISO 3937



HSK	Code N.	Description	H	d	D	G6,3 15000 RPM	
STANDARD	32	216-71748	HSK32AH45D16F	45	16	38	•
	32	216-71749	HSK32AH50D22F	50	22	48	•
	40	216-71701	HSK40AH45D16F	45	16	38	•
	40	216-71702	HSK40AH50D22F	50	22	48	•
	40	216-71703	HSK40AH55D27F	55	27	58	•
	50	216-71704	HSK50AH45D16F	45	16	38	•
	50	216-71705	HSK50AH55D22F	55	22	48	•
	50	216-71706	HSK50AH55D27F	55	27	58	•
	50	216-71707	HSK50AH60D32F	60	32	78	•
	63	216-71708	HSK63AH45D16F	45	16	38	•
	63	216-71709	HSK63AH50D22F	50	22	48	•
	63	216-71710	HSK63AH55D27F	55	27	58	•
	63	216-71711	HSK63AH60D32F	60	32	78	•
	63	216-71750	HSK63AH65D40F	65	40	88	•
	100	216-71712	HSK100AH55D16F	55	16	38	•
	100	216-71713	HSK100AH55D22F	55	22	48	•
	100	216-71714	HSK100AH55D27F	55	27	58	•
	100	216-71715	HSK100AH60D32F	60	32	78	•
100	216-71716	HSK100AH65D40F	65	40	88	•	

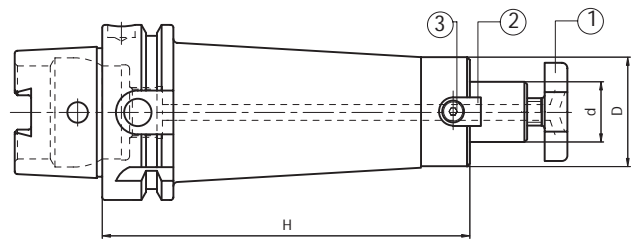
Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Cross screw	Cross screw on enquiry	Dog	Screw
				
16	811-107003	811-107013	814-202280	811-101004
22	811-107004	811-107014	814-202250	811-101011
27	811-107005	811-107015	814-202270	811-101018
32	811-107006	811-107016	814-202630	811-101029
40	811-107007	811-107017	814-202710	811-101029

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT
FACE MILL HOLDERS-TENONS DRIVE

MANDRINS PORTE-FRAISE-ENTRAÎNEMENT PAR TENONS
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO

ISO 3937



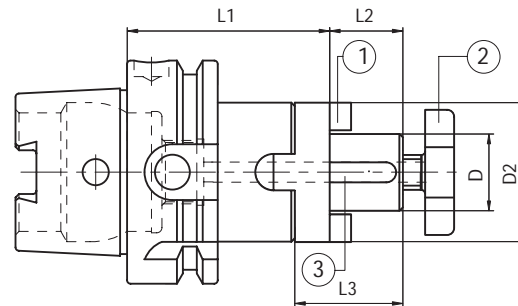
HSK	Code N.	Description	H	d	D	D3	G6,3 15000	
H 100	63	216-71791	HSK63AH100D16F	100	16	38	40	•
	63	216-71792	HSK63AH100D22F	100	22	48	-	•
	63	216-71793	HSK63AH100D27F	100	27	58	-	•
	63	216-71794	HSK63AH100D32F	100	32	78	-	•
	63	216-71795	HSK63AH100D40F	100	40	88	-	•
	100	216-71796	HSK100AH100D16F	100	16	38	40	•
	100	216-71797	HSK100AH100D22F	100	22	48	50	•
	100	216-71798	HSK100AH100D27F	100	27	58	60	•
	100	216-71799	HSK100AH100D32F	100	32	78	80	•
	100	266-71701	HSK100AH100D40F	100	40	88	-	•
H 160	63	216-71717	HSK63AH160D16F	160	16	32	38	•
	63	216-71718	HSK63AH160D22F	160	22	40	48	•
	63	216-71719	HSK63AH160D27F	160	27	48	50	•
	63	216-71720	HSK63AH160D32F	160	32	58	-	•
	63	216-71721	HSK63AH160D40F	160	40	70	-	•
	100	216-71722	HSK100AH160D16F	160	16	32	42	•
	100	216-71723	HSK100AH160D22F	160	22	40	50	•
	100	216-71724	HSK100AH160D27F	160	27	48	68	•
	100	216-71725	HSK100AH160D32F	160	32	58	76	•
	100	216-71726	HSK100AH160D40F	160	40	70	84	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Cross screw	Cross screw on enquiry	Dog H100	Screw H100	Dog H160	Screw H160	Wrench
16	811-107003	811-107013	814-202280	811-101004	814-20214	811-101003	816-13002
22	811-107004	811-107014	814-202250	811-101011	814-202150	811-101010	816-13003
27	811-107005	811-107015	814-202270	811-101018	814-202160	811-101017	816-13004
32	811-107006	811-107016	814-202630	811-101029	814-202170	811-101027	816-13005
40	811-107007	811-107017	814-202710	811-101029	814-202180	811-101028	816-13006



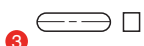
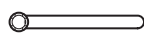
KOMBI - AUFSTECKFRÄSDORNE MANDRINS PORTE- FRAISES A DOUBLE USAGE
COMBI-SHELL MILL ADAPTORS MANDRINI PORTAFRESE COMBINATI

DIN 6538



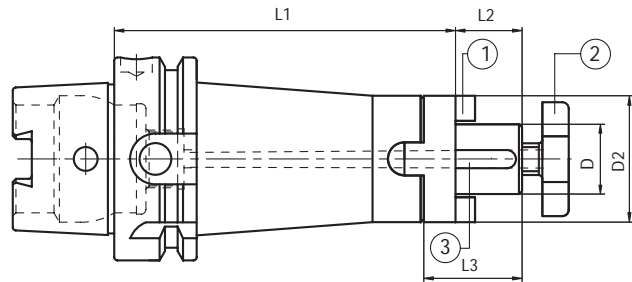
HSK	Code N.	Description	D	L1	L2	L3	D2	G6,3 ⁸⁰⁰⁰ RPM
40	216-11701	HSK40AH45D16C	16	45	17	27	32	•
40	216-11702	HSK40AH55D22C	22	55	19	31	40	•
40	216-11776	HSK40AH65D27C	27	65	21	33	48	•
50	216-11704	HSK50AH50D16C	16	50	17	27	32	•
50	216-11705	HSK50AH55D22C	22	55	19	31	40	•
50	216-11706	HSK50AH65D27C	27	65	21	33	48	•
50	216-11707	HSK50AH65D32C	32	65	24	38	58	•
63	216-11708	HSK63AH60D16C	16	60	17	27	32	•
63	216-11709	HSK63AH60D22C	22	60	19	31	40	•
63	216-11710	HSK63AH60D27C	27	60	21	33	48	•
63	216-11711	HSK63AH65D32C	32	65	24	38	58	•
63	216-11712	HSK63AH70D40C	40	70	27	41	70	•
100	216-11719	HSK100AH65D16C	16	65	17	27	32	•
100	216-11720	HSK100AH65D22C	22	65	19	31	40	•
100	216-11721	HSK100AH65D27C	27	65	21	33	48	•
100	216-11722	HSK100AH70D32C	32	70	24	38	58	•
100	216-11723	HSK100AH70D40C	40	70	27	41	70	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

D	Ring	Cross screw	Key	Wrench
				
16	814-30001	811-107003	814-201010	816-130002
22	814-30002	811-107004	814-201020	816-130003
27	814-30003	811-107005	814-201030	816-130004
32	814-30004	811-107006	814-201040	816-130005
40	814-30005	811-107007	814-201050	816-130006

KOMBI - AUFSTECKFRÄSDORNE LANG MANDRINS PORTE- FRAISES A DOUBLE USAGE, SERIE LONGUE
 COMBI-SHELL MILL ADAPTORS LONG MANDRINI PORTAFRESE COMBINATI, SERIE LUNGA

DIN 6358



HSK	Code N.	Description	D	L1	L2	L3	D2	D3	G6,3 8000 RPM
63	216-11777	HSK63AH100D16C	16	100	17	27	32	40	•
63	216-11728	HSK63AH100D22C	22	100	19	31	40	-	•
63	216-11736	HSK63AH100D27C	27	100	21	33	48	-	•
63	216-11778	HSK63AH100D32C	32	100	24	38	58	-	•
63	216-11779	HSK63AH100D40C	40	100	27	41	70	-	•
63	216-11769	HSK63AH160D16C	16	160	17	27	32	42	•
63	216-11770	HSK63AH160D22C	22	160	19	31	40	50	•
63	216-11771	HSK63AH160D27C	27	160	21	33	48	-	•
63	216-11772	HSK63AH160D32C	32	160	24	38	58	-	•
63	216-11735	HSK63AH160D40C	40	160	27	41	70	-	•
100	216-11754	HSK100AH100D16C	16	100	17	27	32	38	•
100	216-11755	HSK100AH100D22C	22	100	19	31	40	46	•
100	216-11756	HSK100AH100D27C	27	100	21	33	48	54	•
100	216-11757	HSK100AH100D32C	32	100	24	38	58	64	•
100	216-11758	HSK100AH100D40C	40	100	27	41	70	76	•
100	216-11738	HSK100AH160D16C	16	160	17	27	32	42	•
100	216-11739	HSK100AH160D22C	22	160	19	31	40	50	•
100	216-11740	HSK100AH160D27C	27	160	21	33	48	56	•
100	216-11741	HSK100AH160D32C	32	160	24	38	58	68	•
100	216-11742	HSK100AH160D40C	40	160	27	41	70	76	•

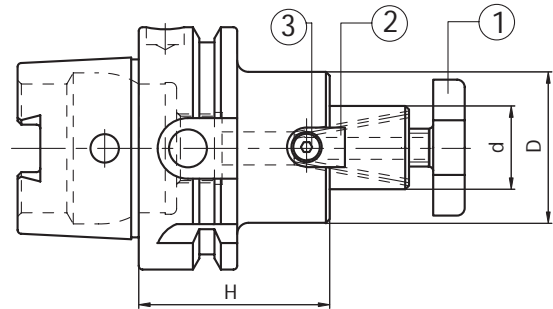
Ersatzteile • Spare parts • Pièces détachées • Componenti

D	Ring	Cross screw	Key	Wrench
16	814-30001	811-107003	814-201010	816-130002
22	814-30002	811-107004	814-201020	816-130003
27	814-30003	811-107005	814-201030	816-130004
32	814-30004	811-107006	814-201040	816-130005
40	814-30005	811-107007	814-201050	816-130006

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT UND KÜHLMITTELZUFUHR
FACE MILL HOLDERS-TENONS DRIVE-WITH INTERNAL COOLANT SUPPLY

MANDRINS PORTE-FRAISE-ENTRAÎNEMENT PAR TENONS AVEC ARROSSAGE INTERNE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO CON PASSAGGIO REFRIGERANTE

ISO 3937



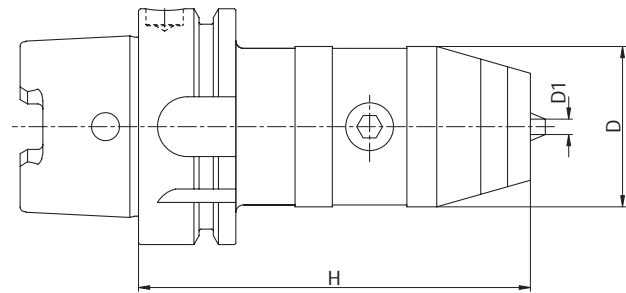
HSK	Code N.	Description	H	d	D	G6,3 15000 RPM
40	216-71732	HSK40AH45D16F-L	45	16	38	•
40	216-71733	HSK40AH50D22F-L	50	22	48	•
40	216-71734	HSK40AH55D27F-L	55	27	58	•
50	216-71735	HSK50AH45D16F-L	45	16	38	•
50	216-71736	HSK50AH55D22F-L	55	22	48	•
50	216-71737	HSK50AH55D27F-L	55	27	58	•
50	216-71738	HSK50AH60D32F-L	60	32	78	•
63	216-71739	HSK63AH45D16F-L	45	16	38	•
63	216-71740	HSK63AH50D22F-L	50	22	48	•
63	216-71741	HSK63AH55D27F-L	55	27	58	•
63	216-71742	HSK63AH60D32F-L	60	32	78	•
63	216-71770	HSK63AH65D40F-L	65	40	88	•
100	216-71743	HSK100AH55D16F-L	55	16	38	•
100	216-71744	HSK100AH55D22F-L	55	22	48	•
100	216-71745	HSK100AH55D27F-L	55	27	58	•
100	216-71746	HSK100AH60D32F-L	60	32	78	•
100	216-71747	HSK100AH65D40F-L	65	40	88	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Cross screw	Dog	Screw	Wrench
16	811-107003	814-202280	811-101004	816-130002
22	811-107004	814-20225 0	811-101011	816-130003
27	811-107005	814-202270	811-101018	816-130004
32	811-107006	814-202630	811-101029	816-130005
40	811-107007	814-202710	811-101029	816-130006

NC-BOHRFUTTER FÜR RECHTS- UND LINKSLAUF
NC-DRILL CHUCKS FOR LEFT AND RIGHT ROTATION

MANDRINS DE PERCAGE CNC POUR ROTATION GAUCHE-DROITE
MANDRINI PORTAPUNTE INTEGRALI PER ROTAZIONE DESTRA E SINISTRA



HSK	Code N.	Description	H	D	Clamping capacity
63	252-11751	HSK63AH104R0,5-13X	104	50	0,5-13
63	252-11752	HSK63AH109R2,5-16X	109	57	2,5-16
100	252-11753	HSK100AH111R0,5-13X	111	50	0,5-13
100	252-11754	HSK100AH116R2,5-16X	116	57	2,5-16

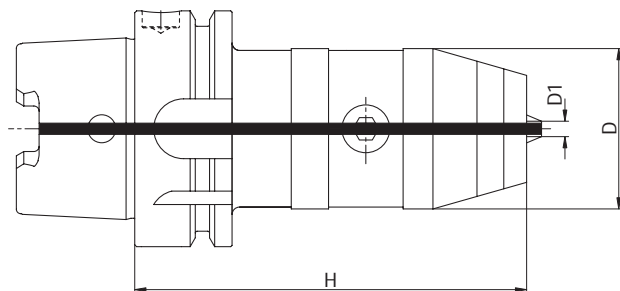
RUNOUT ACCURACY 0.03 MM T.I.R.
Suitable for right and left rotation up to 35000 rpm.

PRECISIONE DI ROTAZIONE 0.03 MM.
Adatti per rotazione sia destra che sinistra, con velocità max di 35000 g/min.

New line High precision

NC-BOHRFUTTER FÜR RECHTS-UND LINKSLAUF
MIT ZENTRALEM KÜHLMITTELLOCH
NC-DRILL CHUCKS FOR LEFT AND RIGHT
ROTATION WITH INTERNAL COOLANT SUPPLY

MANDRINS DE PERCAGE CNC POUR ROTATION
GAUCHE-DROITE AVEC ARROSAGE INTERNE
MANDRINI PORTAPUNTE INTEGRALI PER ROTAZIONE DESTRA
E SINISTRA CON FORO PASSAGGIO REFRIGERANTE CENTRALE



HSK	Code N.	Description	H	D	Clamping capacity
63	252-11747	HSK63AH104R0,5-13X	104	50	0,5-13
63	252-11748	HSK63AH109R2,5-16X	109	57	2,5-16
100	252-11749	HSK100AH111R0,5-13X	111	50	0,5-13
100	252-11750	HSK100AH116R2,5-16X	116	57	2,5-16

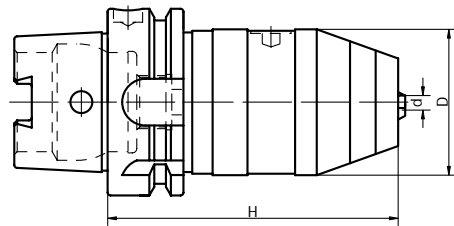
RUNOUT ACCURACY 0.03 MM T.I.R.
Suitable for right and left rotation up to 35000 rpm.

PRECISIONE DI ROTAZIONE 0.03 MM.
Adatti per rotazione sia destra che sinistra, con velocità max di 35000 g/min.

New line High precision

NC-BOHRFUTTER FÜR RECHTS- UND LINKSLAUF
NC-DRILL CHUCKS FOR LEFT AND RIGHT ROTATION

MANDRINS DE PERCAGE CNC POUR ROTATION GAUCHE-DROITE
MANDRINI PORTAPUNTE INTEGRALI PER ROTAZIONE DESTRA E SINISTRA



HSK	Code N.	Description	H	D	Clamping capacity	Wrench
63 *	252-11733	HSK63AH100R1-13X	100	50	1-13	816-111024
63 *	252-11734	HSK63AH105R3-16X	105	57	3-16	816-111025
100 *	252-11735	HSK100AH108R1-13X	108	50	1-13	816-111024
100 *	252-11736	HSK100AH113R3-16X	113	57	3-16	816-111025

* WITH INTERNAL COOLANT

RUNDLAUFGENAUIGKEIT 0.03 MM

Sowohl für rechts - als auch links laufende Bearbeitungen geeignet, mit Höchstgeschwindigkeit von 8000 u/min.

RUNOUT ACCURACY 0.03 MM T.I.R.

Suitable for right and left rotation up to 8000 rpm. O With fine balancing and extra price.

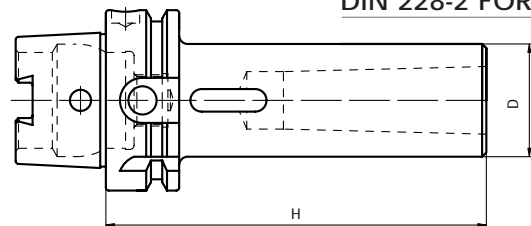
PRECISIONE DI ROTAZIONE 0.03 MM.

Adatti per rotazione sia destra che sinistra, con velocità max di 8000 g/min.

ZWISCHENHÜSEN FÜR MORSEKEGEL MIT AUSTREIBBLAPPEN
MORSE TAPER ADAPTORS FOR DRILLS

DOUILLES POUR CONE MORSE A TENON
MANDRINI PORTAPUNTE ATTACCO CONO MORSE

DIN 228-2 FORM D

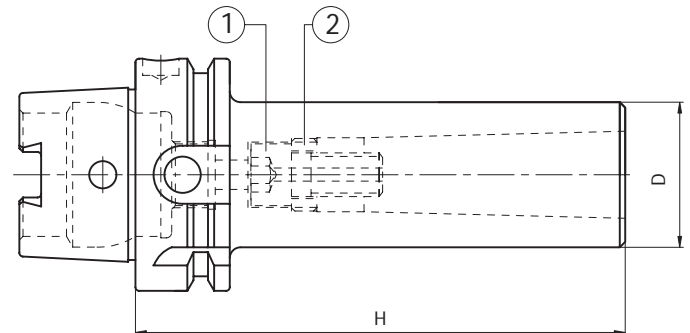


HSK	Code N.	Description	Morse	H	D	G6,3 8000 RPM
40	212-41701	HSK40AH95CM1P	1	95	25	•
40	212-41702	HSK40AH110CM2P	2	110	32	•
40	212-41715	HSK40AH135CM3P	3	135	38	•
50	212-41703	HSK50AH100CM1P	1	100	25	•
50	212-41704	HSK50AH115CM2P	2	115	32	•
50	212-41705	HSK50AH135CM3P	3	135	40	•
63	212-41706	HSK63AH100CM1P	1	100	25	•
63	212-41707	HSK63AH115CM2P	2	115	32	•
63	212-41708	HSK63AH135CM3P	3	135	40	•
63	212-41709	HSK63AH160CM4P	4	160	48	•
100	212-41720	HSK100AH120CM1P	1	120	25	•
100	212-41716	HSK100AH120CM2P	2	120	32	•
100	212-41717	HSK100AH150CM3P	3	150	40	•
100	212-41718	HSK100AH170CM4P	4	170	48	•
100	212-41719	HSK100AH205CM5P	5	205	63	•

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT
ZENTRALER KÜHLMITTELZUFUHR
MORSE TAPER MILL ADAPTERS
WITH INTERNAL COOLANT



DOUILLES POUR CONE MORSE
AVEC ABROSAGE
MANDRINI PORTAFRESE CON ATTACCO CONO MORSE
CON REFRIGERAMENTO INTERNO

DIN 228-2 FORM C

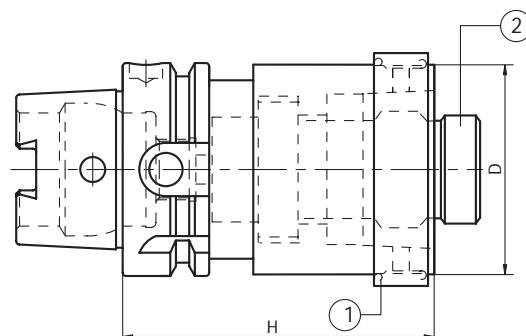


HSK	Code N.	Description	Morse	H	D	G6,3 8000 RPM
40	212-21701	HSK40AH95CM1F	1	95	25	•
40	212-21702	HSK40AH110CM2F	2	110	32	•
40	212-21703	HSK40AH135CM3F	3	135	38	•
50	212-21704	HSK50AH100CM1F	1	100	25	•
50	212-21705	HSK50AH115CM2F	2	115	32	•
50	212-21706	HSK50AH135CM3F	3	135	40	•
63	212-21708	HSK63AH100CM1F	1	100	25	•
63	212-21709	HSK63AH115CM2F	2	115	32	•
63	212-21710	HSK63AH135CM3F	3	135	40	•
63	212-21711	HSK63AH160CM4F	4	160	48	•
100	212-21714	HSK100AH120CM2F	2	120	32	•
100	212-21715	HSK100AH150CM3F	3	150	40	•
100	212-21716	HSK100AH170CM4F	4	170	48	•
100	212-21727	HSK100AH200CM5F	5	200	63	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

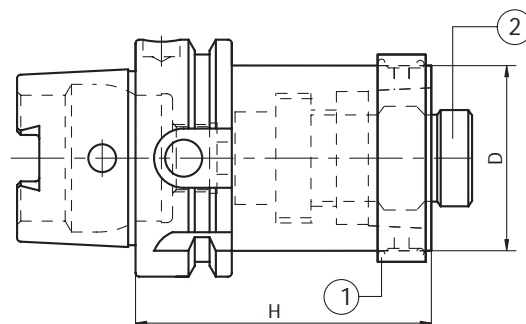
HSK/MORSE	Screw	Ring
		
40/1	811-401100	811-302037
40/2	811-401079	811-302031
40/3	811-401089	811-302032
50/1	811-401100	811-302037
50/2	811-401066	811-302031
50/3	811-401067	811-302032
63/1	811-401100	811-302037
63/2	811-401099	811-302031
63/3	811-401078	811-302032
63/4	811-401091	811-302036
100/2	811-401099	811-302031
100/3	811-401098	811-302032
100/4	811-401092	811-302036
100/5	811-401136	811-302034

VERLÄNGERUNGEN HSK A+C RALLONGES D'OUTILS HSK A+C HSK
 TOOL EXTENSIONS HSK A+C PROLUNGHE HSK A+C



HSK	Code N.	Description	D	H	¹ Ring (complete)	² Locking unit (complete)
50	212-91701	HSK50AH80HSK50	50	80	H50A-AN	H50A-UBL
50	212-91702	HSK50AH100HSK50	50	100	H63A-AN	H63A-UBL
63	212-91703	HSK63AH100HSK63	63	100	H100A-AN	H100A-UBL
63	212-91704	HSK63AH140HSK63	63	140		
100	212-91705	HSK100AH140HSK100	100	140		
100	212-91706	HSK100AH200HSK100	100	200		

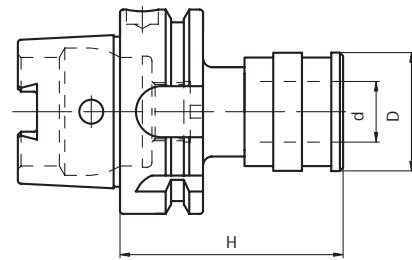
REDUZIERUNGEN HSK A+C PIECES DE REDUCTION HSK A+C
 REDUCERS HSK A+C RIDUZIONI HSK A+C



HSK	Code N.	Description	D	H	¹ Ring (complete)	² Locking unit (complete)
50	212-91707	HSK50AH60HSK32	32	60	H32A-AN	H32A-UBL
50	212-91708	HSK50AH70HSK40	40	70	H40A-AN	H40A-UBL
63	212-91709	HSK63AH70HSK32	32	70	H50A-AN	H50A-UBL
63	212-91710	HSK63AH70HSK40	40	70	H63A-AN	H63A-UBL
63	212-91711	HSK63AH80HSK50	50	80		
100	212-91712	HSK100AH90HSK50	50	90		
100	212-91713	HSK100AH100HSK63	63	100		

GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT LÄNGENAUSGLEICH
TENSION AND COMPRESSION TAPPING HEADS

MANDRINS DE TARAUDAGE A CHANGEMENT RAPIDE A DOUBLE USAGE
MASCHIATORI A DOPPIA COMPENSAZIONE



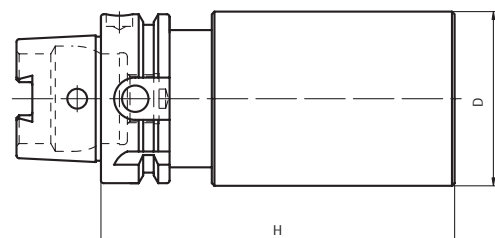
HSK	Code N.	Description	SIZE	Top range	PRESS.	EXT.	d	D	H
40	M801040	HSK40AH80GR1	1	M3÷M12	7.5	7.5	19	41	80
40	M802040	HSK40AH103GR2	2	M6÷M20	10	10	31	60	103
50	M801050	HSK50AH72GR1	1	M3-M12	7.5	7.5	19	48	72
50	M802050	HSK50AH110GR2	2	M6-M20	12.5	12.5	31	60	110
63	M801063	HSK63AH72GR1	1	M3-M12	7.5	7.5	19	48	72
63	M802063	HSK63AH110GR2	2	M6-M20	10	10	31	60	110
100	M801100	HSK100AH80GR1	1	M3÷M12	7.5	7.5	19	48	80
100	M802100	HSK100AH100GR2	2	M6÷M20	10	10	31	60	100
100	M803100	HSK100AH144GR3	3	M14÷M33	17.5	17.5	48	79	144

Zubehör
Accessories
Accessoires
Accessori



ROHLINGE MIT WEICHEM SCHAFT
BLANK TOOLHOLDERS WITH SOFT SHANK

BARRE D'ALEPAGE SEMI-FINIES
MANDRINI SEMILAVORATI A STELO TENERO

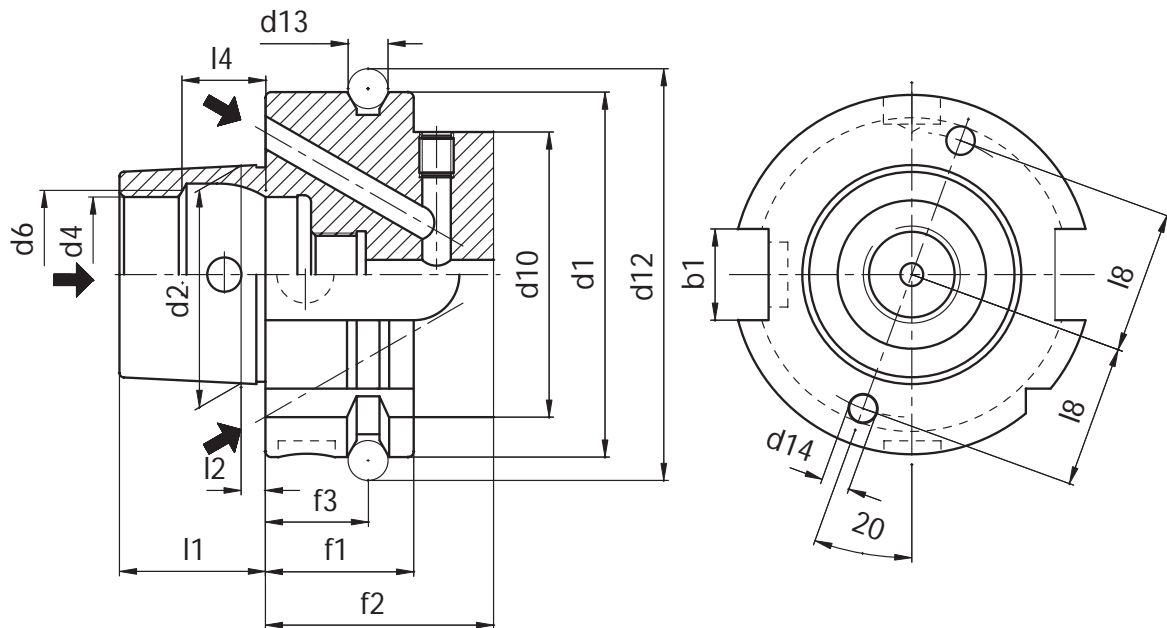


HSK	Code N.	Description	H	D
32	217-11712	HSK32AH150D35SM	150	35
40	217-11701	HSK40AH150D40SM	150	40
40	217-11702	HSK40AH200D52SM	200	52
50	217-11703	HSK50AH200D52SM	200	52
50	217-11704	HSK50AH200D63SM	200	63
63	217-11705	HSK63AH250D63SM	250	63
63	217-11706	HSK63AH250D80SM	250	80
100	217-11709	HSK100AH200D63SM	200	63
100	217-11710	HSK100AH250D80SM	250	80
100	217-11711	HSK100AH300D90SM	300	90

KAMATEK

DIN 69893 B+D





	HSK 40	HSK 50	HSK 63	HSK 100
b1	10	12	16	20
d1	40	50	63	100
d2	24	30	38	60
d4	17	21	26	42
d6	19	23	29	46
d10	34	42	53	88
d12	45	59,3	72,3	109.75
d13	4	7	7	7
d14	3	3,5	5	7
f1	20	26	26	29
f2	35	42	42	45
f3	16	18	18	20
l1	16	20	25	40
l2	3.2	4	5	8
l4	8.92	11,42	14,13	22.85
l8	16	20	25	40



Forma B

- Usato su centri di lavoro tornitura su macchine speciali per applicazioni pesanti.
- Flangia maggiorata.
- Adduzione refrigerante dal centro o dalla flangia.
- Coppia trasmessa con due chiavette sulla flangia.
- Foro di predisposizione al sistema di riconoscimento a norme DIN 69873 sull'esterno flangia.



Form B

- Anwendung für Bearbeitungszentren, Fräsmaschinen für Schwerzespannung, Drehmaschinen.
- Mit vergrößertem Bund.
- Dezentrale Kühlmittelzufuhr über den Bund oder zentrale über Kühlmittelrohr.
- Drehmomentübertragung über zwei Bundnuten.
- Bohrung für Datenträger DIN 69873 im Bund.



Form B

- Used on machining centres, milling machines for heavy-duty cutting, turning machines.
- Enlarged collar.
- Off-centre coolant supply through collar or central supply through coolant tube.
- Torque transmission via two slots on collar.
- Hole for data carrier DIN 69873 in collar.



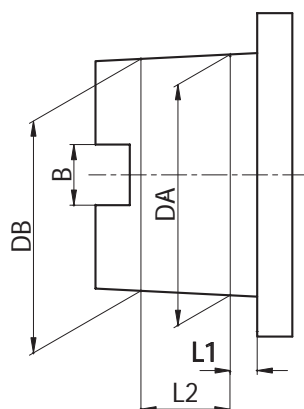
Forme B

- Utilisation sur les centres d'usinage, les fraiseuses, pour usinage difficile, les tours.
- Avec épaulement agrandi.
- Alimentation décentralisée du liquide de lubrification par l'épaulement ou centrale par tube d'arrosage.
- Transmission du couple par deux gorges.
- Percage pour support de données DIN 69873 dans l'épaulement.

ALLE KINTEK - STIELGEKELAUFNAHMEN WERDEN NACH DEN DIN - NORMEN ANGEFERTIGT.
(DIESE NORMEN SEHEN DIE GLEICHEN TOLERANZKLASSEN FÜR DIE DIN 69893 A+C, B+D, E, F AUFNAHMEN VOR)



KEGELSCHAFTTOLERANZEN



HSK	L1	L2	D.A.	D.B.	B (uniquement type A+C)
32 A+C	3,2	7,3	24 +0.005 +0.007	23,27 +0.003 +0.005	7.05 +/- 0.04
40 A+C+E	4	9,5	30 +0.005 +0.007	29,05 +0.003 +0.005	8.05 +/- 0.04
40 B+D	3,2	7,3	24 +0.005 +0.007	23,27 +0.003 +0.005	-
50 A+C+E	5	11	38 +0.006 +0.009	36,9 +0.003 +0.006	10.54 +/- 0.04
50 B+D+F	4	9,5	30 +0.005 +0.007	29,05 +0.003 +0.005	-
63 A+C+E	6,3	14,7	48 +0.007 +0.011	46,53 +0.003 +0.007	12.54 +/- 0.04
63 B+D+F	5	11	38 +0.006 +0.009	36,9 +0.003 +0.006	-
100 A+C	10	24	75 +0.009 +0.015	72,6 +0.003 +0.009	20.02 +/- 0.04
100 B+D	8	19	60 +0.008 +0.013	58,1 +0.003 +0.008	-

RUNDLAUFGENAUIGKEIT DER SPANNZANGENAUFNAHME

Die DIN69882-6 Norm schreibt eine Rundlaufgenauigkeit zwischen Aussenkegel und Innenkegel / Spannzangensitz für die DIN 6499- Spannzangenaufnahmen von 0,005 vor.

AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Kintek-Aufsteckfräsdorne entsprechen der DIN 69882-2 Norm, die für die Ø 16,22,27,32 eine Rundlaufgenauigkeit von 0,01 vorsieht.

WELDON - AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Nach der DIN 69882-4 Norm muß der Weldon- Aufsteckfräsdorn die folgenden Forderungen aufweisen:

Bohrung: H5

Rundlaufgenauigkeit: 0.005.

WUCHTUNG

Alle Steilkegelaufnahmen dieser Gruppe sind in Klasse G6,3 auf 8.000 U/Min. -1 vorgewuchtet oder auf 15.000 U/Min -1 gewuchtet.. Neben der Übersichtstabelle der Produkte wird das Wuchtgüte angegeben.

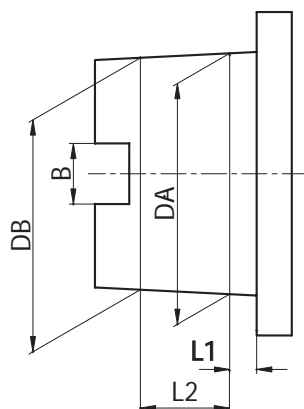
KONSTRUKTIONSDATEN

- aus legiertem Einsatzstahl angefertigt
- in der Einsatzhärte tiefe von 0,4 - 0,5 mm
- gehärtet, angelassen
- Härte HRC58 +-2, Festigkeit 800-1000 N/mm2
- brüniert
- inneres, äußeres Schleifen und am Gewinde der Spannzangennutter
- 100% durch zertifizierte Meßinstrumente geprüft.

ALL KINTEK TOOLHOLDERS ARE MANUFACTURED ACCORDING TO DIN NORMS.
(THESE NORMS PROVIDE THE SAME CLASSES OF TOLERANCE FOR THE ATTACHMENT DIN69893 A+C, B+D, E, F)



CONE'S TOLERANCE



HSK	L1	L2	D.A.		D.B.		B (only type A+C)
32 A+C	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	7.05 +/- 0.04
40 A+C+E	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	8.05 +/- 0.04
40 B+D	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	-
50 A+C+E	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	10.54 +/- 0.04
50 B+D+F	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	-
63 A+C+E	6,3	14,7	48	+0.007 +0.011	46,53	+0.003 +0.007	12.54 +/- 0.04
63 B+D+F	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	-
100 A+C	10	24	75	+0.009 +0.015	72,6	+0.003 +0.009	20.02 +/- 0.04
100 B+D	8	19	60	+0.008 +0.013	58,1	+0.003 +0.008	-

COLLET CHUCK'S RUNOUT ACCURACY

The norm DIN 69882-6 permits a runout error of 0,005 mm. for DIN 6499 collet chucks.

SHELL END MILL ADAPTOR'S RUNOUT ACCURACY

Our shell end mill adaptors meet the requirements of the norm DIN 69882-2, which prescribes for diameters Ø 16,22,27,32 a runout accuracy of 0,01

WELDON END MILL HOLDER'S RUNOUT ACCURACY

According to norm DIN 69882-4 Weldon end mill holders have to meet the following requirements:

Bore: H5

Runout accuracy: 0.005.

BALANCING

All our toolholders of this category are pre-balanced in grade G6.3 at 8000 rpm or balanced at 15000 rpm. Besides the descriptive and dimensional table of products you can find the additive balancing grade.

CONSTRUCTIVE FEATURES

- Manufactured with Casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm2
- Black oxidized
- Thread of collet nuts, internal and external diameters are completely grinding finished
- Tested 100% with certified measuring instruments.

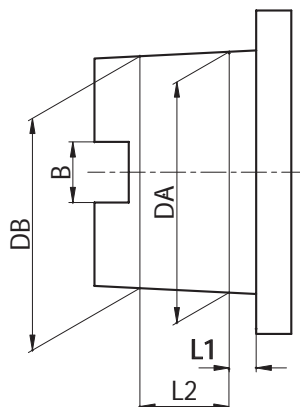
MANDRINS KINTEK HSK

DONNEES TECHNIQUES

TOUS LES MANDRINS PORTE-OUTILS KINTEK SONT FABRIQUÉS SELON LES LES NORMES DIN
(QUI PRÉVOIENT LES MÊMES CLASSES DE TOLÉRANCE POUR LES ATTACHEMENT DIN69893 A+C, B+D, E, F)



TOLERANCE DU CONE



HSK	L1	L2	D.A.	D.B.	B (uniquement type A+C)
32 A+C	3,2	7,3	24 +0.005 +0.007	23,27 +0.003 +0.005	7.05 +/- 0.04
40 A+C+E	4	9,5	30 +0.005 +0.007	29,05 +0.003 +0.005	8.05 +/- 0.04
40 B+D	3,2	7,3	24 +0.005 +0.007	23,27 +0.003 +0.005	-
50 A+C+E	5	11	38 +0.006 +0.009	36,9 +0.003 +0.006	10.54 +/- 0.04
50 B+D+F	4	9,5	30 +0.005 +0.007	29,05 +0.003 +0.005	-
63 A+C+E	6,3	14,7	48 +0.007 +0.011	46,53 +0.003 +0.007	12.54 +/- 0.04
63 B+D+F	5	11	38 +0.006 +0.009	36,9 +0.003 +0.006	-
100 A+C	10	24	75 +0.009 +0.015	72,6 +0.003 +0.009	20.02 +/- 0.04
100 B+D	8	19	60 +0.008 +0.013	58,1 +0.003 +0.008	-

COAXIALITE' PORTE-PINCES

La norme DIN 69882-6 permet une erreur de 0,005 mm. Maximum pour les porte-pinces DIN 6499

COAXIALITE' PORTE-FRAISES FIXES ET COMBINES

Les porte-fraises fixes et combinés suivent les spécifications de la norme DIN 69882-2 qui prévoit pour les diamètres Ø 16,22,27,32 une coaxialité de 0,01

COAXIALITE' PORTE-FRAISES WELDON

Suivant les spécifications DIN 69882-4 les porte-fraises WELDON doivent suivre les conditions suivantes:

Trou: H5

Coaxialité: 0.005.

EQUILIBRAGE

La plupart des porte-outils sont pré-équilibrés en classe G 6,3 8000 Tr/Min -1. ou équilibrés à 15000 Tr/Min-1.
A côté du tableau de description et dimensions des produits il y a indiqué la valeur d'équilibrage additionnelle.

ELEMENTS DE CONSTRUCTION

- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm
- Trempés - Revenus
- Dureté HRC 58 +/- 2 résistance 800-1000 N/ mm2
- Brunis
- Rectification du cône intérieur, extérieur et dans le filetage des écrous qui serrent la pince.
- Contrôlés à 100 % avec des instruments de mesure certifiés.

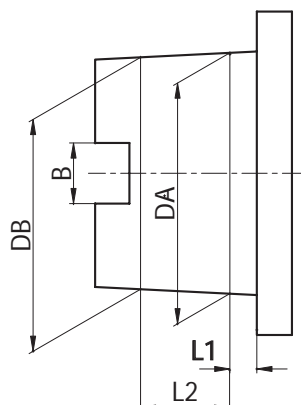
MANDRINI KINTEK CON ATTACCO HSK

DATI TECNICI

TUTTI I MANDRINI PORTAUTENSILI KINTEK VENGONO PRODOTTI SECONDO LE NORMATIVE DIN
(DETE NORMATIVE PREVEDONO LE STESSA CLASSI DI TOLLERANZA PER GLI ATTACCHI DIN69893 A+C, B+D, E, F)



TOLLERANZA DEL CONO



HSK	L1	L2	D.A.		D.B.		B (only type A+C)
32 A+C	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	7.05 +/- 0.04
40 A+C+E	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	8.05 +/- 0.04
40 B+D	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	-
50 A+C+E	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	10.54 +/- 0.04
50 B+D+F	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	-
63 A+C+E	6,3	14,7	48	+0.007 +0.011	46,53	+0.003 +0.007	12.54 +/- 0.04
63 B+D+F	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	-
100 A+C	10	24	75	+0.009 +0.015	72,6	+0.003 +0.009	20.02 +/- 0.04
100 B+D	8	19	60	+0.008 +0.013	58,1	+0.003 +0.008	-

COASSIALITÀ PORTAPINZA

La normativa DIN 69882-6. ammette un'errore massimo di 0,005 mm. per i portapinze DIN 6499

COASSIALITÀ PORTAFRESE FISSI E COMBINATI

I portafrese fissi e combinati rispondono ai criteri prescritti dalla norma DIN 69882-2 la quale prevede per i Ø 16,22,27,32 una coassialità di 0,01

COASSIALITÀ PORTAFRESE WELDON

Secondo la normativa DIN 69882-4 il portafrese WELDON deve rispondere ai seguenti requisiti:

Foro: H5

Coassialità: 0.005.

EQUILIBRATURA

Tutti i nostri mandrini presenti in questa categoria sono prebilanciati in classe G6.3 a 8000 rpm min-1 o bilanciati a 15000 giri rpm min-1.

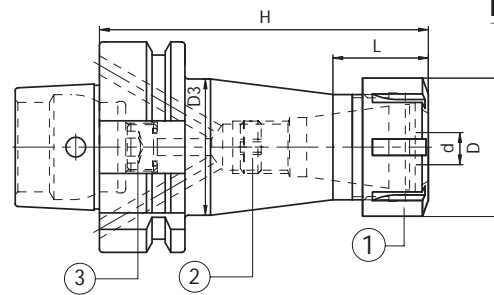
A fianco della tabella descrittiva e dimensionale dei prodotti viene elencato il grado di equilibratura aggiuntiva

DATI COSTRUTTIVI

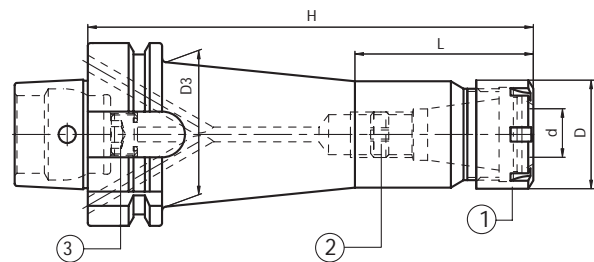
- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +/- 2 resistenza 800-1000 N/ mm2
- Bruniti
- Finitura di rettifica interna, esterna e nelle filettature delle ghiere chiudipinza
- Collaudati 100% con strumenti di misura certificati.

SPANNZANGENFUTTER ER TYPE MANDRINS A PINCES TYPE ER
ER COLLET CHUCKS MANDRINI PORTAPINZA TIPO ER

DIN 6499






	HSK	Code N.	Description	H	d	D	ER	L	D3	G6,3 15000 RPM
	STANDARD	40	214-31829	HSK40BH80ER16M	80	0,5÷10	22	16M	-	-
40		214-31830	HSK40BH80ER25M	80	1÷16	35	25M	-	-	•
50		214-31819	HSK50BH100ER16M	100	0,5÷10	22	16M	-	-	•
50		214-31802	HSK50BH100ER25	100	1÷16	42	25	-	-	•
50		214-31820	HSK50BH100ER32	100	2÷20	50	32	-	-	•
63		214-31821	HSK63BH100ER16M	100	0,5÷10	22	16M	25	34	•
63		214-31805	HSK63BH100ER25	100	1÷16	42	25	20	36	•
63		214-31822	HSK63BH120ER32	120	2÷20	50	32	35	46	•
63		214-31823	HSK63BH130ER40	130	3÷30	63	40	-	-	•
100		214-31831	HSK100BH125ER32	125	2÷20	50	32	38	50	•
100		214-31832	HSK100BH130ER40	130	3÷30	63	40	37	63	•



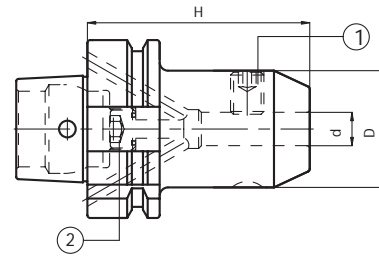
	HSK	Code N.	Description	H	d	D	ER	L	D3	G6,3 15000 RPM
	EXTENDED	40	214-31833	HSK40BH130ER16M	130	0,5÷10	22	16M	47	30
50		214-31824	HSK50BH150ER16M	150	0,5÷10	22	16M	57	33	•
50		214-31826	HSK50BH150ER25M	150	1÷16	35	25M	68	41	•
63		214-31827	HSK63BH160ER16M	160	0,5÷10	22	16M	57	35	•
63		214-31828	HSK63BH160ER25M	160	1÷16	35	25M	78	42	•
63		214-31815	HSK63BH160ER32	160	2÷20	50	32	35	47	•

Ersatzteile • Spare parts • Pieces detachees • Componenti

ER	Nut	Stop screw	HSK	Screw
				
16M	812-203013	811-303119	40	811-302049
25M	812-203015	811-303121	50	811-302050
25	812-203001	811-303121	63	811-302051
32	812-203002	811-303118	100	811-302053
40	812-203003	811-303122		

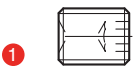

ZYLINDERSCHAFTAUFNAHME WELDON MANDRINS POUR OUTILS TYPE WELDON
 END MILL HOLDERS WELDON MANDRINI PORTAFRESE TIPO WELDON

DIN 1835/B



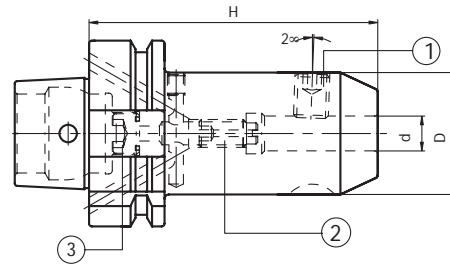
HSK	Code N.	Description	H	d	D	G6,3 15000 RPM
40	213-11836	HSK40BH60WE06	60	6	25	•
40	213-11837	HSK40BH60WE08	60	8	28	•
40	213-11838	HSK40BH65WE10	65	10	35	•
40	213-11839	HSK40BH70WE12	70	12	42	•
40	213-11840	HSK40BH70WE14	70	14	44	•
40	213-11841	HSK40BH70WE16	70	16	48	•
50	213-11801	HSK50BH65WE06	65	6	25	•
50	213-11802	HSK50BH65WE08	65	8	28	•
50	213-11803	HSK50BH70WE10	70	10	35	•
50	213-11804	HSK50BH80WE12	80	12	42	•
50	213-11805	HSK50BH80WE14	80	14	44	•
50	213-11806	HSK50BH80WE16	80	16	48	•
50	213-11854	HSK50BH80WE18	80	18	50	•
50	213-11825	HSK50BH85WE20	85	20	52	•
63	213-11826	HSK63BH75WE06	75	6	25	•
63	213-11827	HSK63BH75WE08	75	8	28	•
63	213-11828	HSK63BH75WE10	75	10	35	•
63	213-11810	HSK63BH80WE12	80	12	42	•
63	213-11811	HSK63BH80WE14	80	14	44	•
63	213-11812	HSK63BH80WE16	80	16	48	•
63	213-11813	HSK63BH80WE18	80	18	50	•
63	213-11814	HSK63BH85WE20	85	20	52	•
63	213-11829	HSK63BH110WE25	110	25	65	•
63	213-11830	HSK63BH110WE32	110	32	72	•
100	213-11842	HSK100BH95WE06	95	6	25	•
100	213-11843	HSK100BH95WE08	95	8	28	•
100	213-11844	HSK100BH95WE10	95	10	35	•
100	213-11845	HSK100BH100WE12	100	12	42	•
100	213-11846	HSK100BH100WE14	100	14	44	•
100	213-11847	HSK100BH100WE16	100	16	48	•
100	213-11848	HSK100BH100WE18	100	18	50	•
100	213-11849	HSK100BH110WE20	110	20	52	•
100	213-11850	HSK100BH125WE25	125	25	65	•
100	213-11851	HSK100BH130WE32	130	32	72	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Locking screw	Quantity	HSK	Screw
				
6	811-106001	1	40	811-302049
8	811-106002	1	50	811-302050
10	811-106004	1	63	811-302051
12;14	811-106005	1	100	811-302053
16;18	811-106006	1		
20	811-106007	1		
25	811-106008	2		
32	811-106009	2		

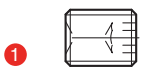


ZYLINDERSCHAFTAUFNAHME WHISTLE NOTCH MANDRINS POUR OUTILS TYPE WHISTLE NOTCH
 END MILL HOLDERS WHISTLE NOTCH MANDRINI PORTAFRESE TIPO WHISTLE NOTCH

DIN 1835/E



HSK	Code N.	Description	H	d	D	G6,3 15000 RPM
40	213-31825	HSK40BH85WN06	85	6	25	•
40	213-31826	HSK40BH85WN08	85	8	28	•
40	213-31827	HSK40BH85WN10	85	10	35	•
40	213-31828	HSK40BH90WN12	90	12	42	•
40	213-31840	HSK40BH90WN14	90	14	44	•
40	213-31829	HSK40BH100WN16	100	16	48	•
50	213-31801	HSK50BH90WN06	90	6	25	•
50	213-31802	HSK50BH90WN08	90	8	28	•
50	213-31803	HSK50BH90WN10	90	10	35	•
50	213-31804	HSK50BH100WN12	100	12	42	•
50	213-31805	HSK50BH100WN14	100	14	44	•
50	213-31806	HSK50BH110WN16	110	16	48	•
50	213-31841	HSK50BH110WN18	110	18	50	•
50	213-31830	HSK50BH110WN20	110	20	52	•
63	213-31807	HSK63BH90WN06	90	6	25	•
63	213-31808	HSK63BH90WN08	90	8	28	•
63	213-31809	HSK63BH90WN10	90	10	35	•
63	213-31810	HSK63BH100WN12	100	12	42	•
63	213-31811	HSK63BH100WN14	100	14	44	•
63	213-31812	HSK63BH110WN16	110	16	48	•
63	213-31813	HSK63BH110WN18	110	18	50	•
63	213-31814	HSK63BH110WN20	110	20	52	•
63	213-31831	HSK63BH120WN25	120	25	65	•
63	213-31832	HSK63BH135WN32	135	32	72	•
100	213-31833	HSK100BH110WN10	110	10	35	•
100	213-31834	HSK100BH120WN12	120	12	42	•
100	213-31842	HSK100BH120WN14	120	14	44	•
100	213-31835	HSK100BH130WN16	130	16	48	•
100	213-31843	HSK100BH130WN18	130	18	50	•
100	213-31836	HSK100BH140WN20	140	20	52	•
100	213-31837	HSK100BH140WN25	140	25	65	•
100	213-31838	HSK100BH155WN32	155	32	72	•

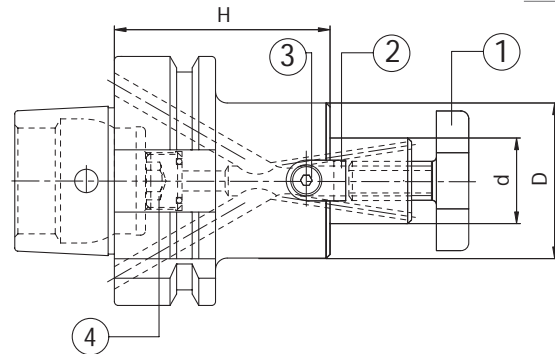
Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Locking screw	Quantity	Stop screw	HSK	Screw
					
6	811-106001	1	811-303043	40	811-302049
8	811-106002	1	811-303081	50	811-302050
10	811-106004	1	811-303089	63	811-302051
B100/10	811-106004	1	811-303093	100	811-302053
12;14	811-106005	1	811-303090		
B100/12;14	811-106005	1	811-303094		
16;18	811-106006	1	811-303091		
20	811-106007	1	811-303091		
25	811-106008	2	811-303092		
32	811-106009	2	811-303092		

AUFSTECKFRÄSDORNE FÜR FRÄSER UND QUERNUT MIT KÜHLMITTELZUFUHR
FACE MILL HOLDERS-TENONS DRIVE-WITH INTERNAL COOLANT SUPPLY

MANDRINS PORTE-FRAISE-ENTRAÎNEMENT PAR TENONS AVEC ARROSAGE INTERNE
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO CON PASSAGGIO REFRIGERANTE

ISO 3937



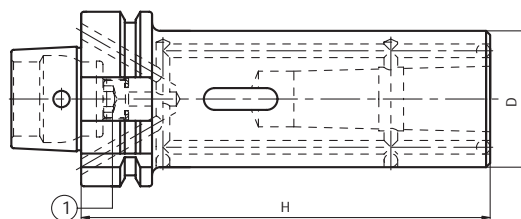
HSK	Code N.	Description	H	d	D	G6,3 15000 RPM
40	216-71808	HSK40BH45D16F-L	45	16	38	•
40	216-71809	HSK40BH50D22F-L	50	22	48	•
50	216-71801	HSK50BH45D16F-L	45	16	38	•
50	216-71802	HSK50BH55D22F-L	55	22	48	•
50	216-71803	HSK50BH55D27F-L	55	27	58	•
63	216-71804	HSK63BH55D16F-L	55	16	38	•
63	216-71805	HSK63BH55D22F-L	55	22	48	•
63	216-71806	HSK63BH55D27F-L	55	27	58	•
63	216-71807	HSK63BH60D32F-L	60	32	78	•
100	216-71810	HSK100BH60D22F-L	60	22	48	•
100	216-71811	HSK100BH60D27F-L	60	27	58	•
100	216-71812	HSK100BH65D32F-L	65	32	78	•
100	216-71813	HSK100BH70D40F-L	70	40	88	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Cross screw	Dog	Screw	Wrench	HSK	Screw
16	811-107003	814-202280	811-101004	816-130002	40	811-302049
22	811-107004	814-202250	811-101011	816-130003	50	811-302050
27	811-107005	814-202270	811-101018	816-130004	63	811-302051
32	811-107006	814-202630	811-101029	816-130005	100	811-302053
40	811-107007	814-202710	811-101029	816-130006		

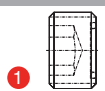
ZWISCHENHÜSEN FÜR MORSEKEGEL MIT
AUSTREIBLAPPEN UND KÜHLMITTELZUFUHR
MORSE TAPE ADAPTER FOR DRILLS WITH INTERNAL
COOLANT SUPPLY

DOUILLES POUR CONE MORSE A TENON AVEC
ARROSAGE INTERNE
MANDRINI PORTAPUNTE ATTACCO CONO MORSE CON
PASSAGGIO REFRIGERANTE



HSK	Code N.	Description	Morse	H	D	G6,3 8000 RPM
40	212-51817	HSK40BH110CM1P	1	110	40	•
40	212-51818	HSK40BH120CM2P	2	120	45	•
50	212-51801	HSK50BH115CM1P	1	115	40	•
50	212-51802	HSK50BH125CM2P	2	125	45	•
50	212-51815	HSK50BH150CM3P	3	150	50	•
63	212-51803	HSK63BH115CM1P	1	115	40	•
63	212-51804	HSK63BH125CM2P	2	125	45	•
63	212-51805	HSK63BH150CM3P	3	150	50	•
63	212-51816	HSK63BH175CM4P	4	175	60	•

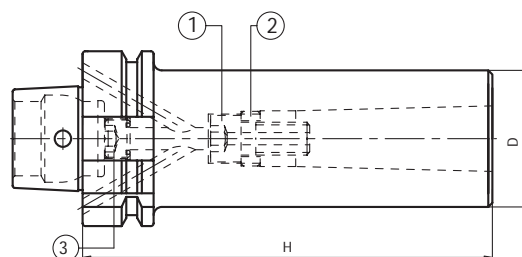
Ersatzteile • Spare parts • Pièces détachées • Componenti

HSK	Screw
	
40	811-302049
50	811-302050
63	811-302051

ZWISCHENHÜSLEN FÜR MORSEKEGEL MIT ANZUGSGEWINDE
MORSE TAPER ADAPTER WITH THREAD WITH INTERNAL COOLANT

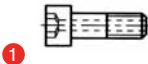


DOUILLES POUR CONE MORSE AVEC TARAUDAGE
MANDRINI PORTAFRESE ATTACCO CONO MORSE CON REFRIGERAMENTO INTERNO

DIN 228-2 C

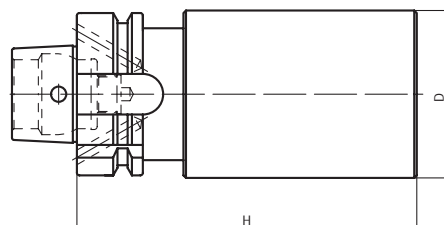


HSK	Code N.	Description	Morse	H	D	G6,3 ⁸⁰⁰⁰ RPM
40	212-31811	HSK40BH105CM1F	1	105	25	•
40	212-31812	HSK40BH115CM2F	2	115	32	•
50	212-31801	HSK50BH110CM1F	1	110	25	•
50	212-31802	HSK50BH120CM2F	2	120	32	•
50	212-31809	HSK50BH150CM3F	3	150	40	•
63	212-31803	HSK63BH110CM1F	1	110	25	•
63	212-31804	HSK63BH120CM2F	2	120	32	•
63	212-31805	HSK63BH150CM3F	3	150	40	•
63	212-31810	HSK63BH170CM4F	4	170	48	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

HSK/MORSE	Screw	Ring	HSK	Screw
				
40/1	811-401101	811-302037	40	811-302049
40/2	811-401102	811-302031	50	811-302050
50/1	811-401100	811-302037	63	811-302051
50/2	811-401079	811-302031		
50/3	811-401089	811-302032		
63/1	811-401100	811-302037		
63/2	811-401099	811-302031		
63/3	811-401078	811-302032		
63/4	811-401096	811-302036		

ROHLINGE MIT WEICHEM SCHAFT BARRES D'ALEPAGE SEMI-FINIES BLANK TOOLHOLDERS WITH SOFT SHANK MANDRINI SEMILAVORATI A STELO TENERO

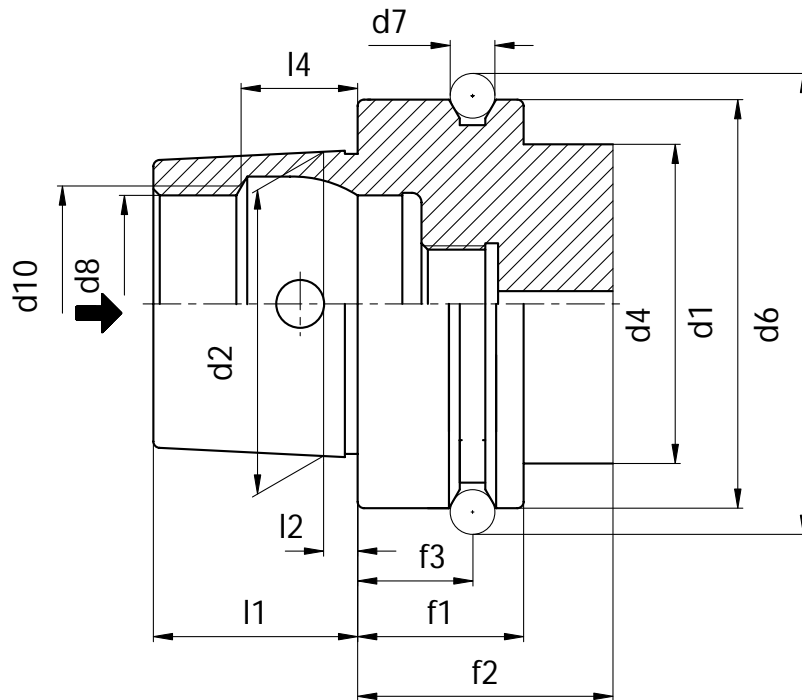


HSK	Code N.	Description	H	D
40	217-11807	HSK40BH150D50SM	150	50
50	217-11801	HSK50BH150D50SM	150	50
50	217-11802	HSK50BH200D63SM	200	63
63	217-11803	HSK63BH200D63SM	200	63
63	217-11804	HSK63BH200D80SM	200	80

KAMATEK

DIN 69893 E





	HSK 40	HSK 50	HSK 63
d1	40	50	63
d2	30	38	48
d4	34	42	53
d6	45	59,3	72,3
d7	4	7	7
d8	21	26	34
d10	23	29	37
f1	20	26	26
f2	35	42	42
f3	16	18	18
l1	20	25	32
l2	4	5	6,3
l4	11,42	14,13	18,13



Forma E

- Usato su elettromandri e su macchine per il legno.
- Rotazione simmetrica senza chiavette di trascinamento.
- Coppia trasmessa solo per attrito tra le superfici.
- Aduzione refrigerante dal centro.



Form E

- Anwendung für Hochfrequenzspindeln, Holzbearbeitungsmaschinen.
- Rotationssymmetrisch, ohne Mitnehmernuten.
- Drehmomentübertragung über Reibschluss.
- Zentrale Kühlmittelzufuhr über Kühlmittelrohr möglich.



Form E

- Used for high frequency spindles and wood machining.
- Rotationally symmetrical, without key slots.
- Torque transmission via friction resistance.
- Central coolant supply possible through coolant tube.



Forme E

- Utilisation pour des broches à hautes fréquences, les machines à usiner le bois.
- Symétrie de rotation, sans gorges d'entraînement.
- Transmission du couple par friction.
- Possibilité d'alimentation centrale du liquide de lubrification par tube d'arrosage.

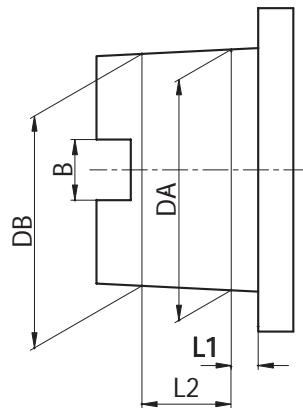
STEILKEGELAUFNAHMEN KINTEK HSK

TECHNISCHE DATEN

ALLE KINTEK - STEILKEGELAUFNAHMEN WERDEN NACH DEN DIN - NORMEN ANGEFERTIGT.
 (DIESE NORMEN SEHEN DIE GLEICHEN TOLERANZKLASSEN FÜR DIE DIN 69893 A+C, B+D, E, F AUFNAHMEN VOR)



KEGELSCHAFTTOLERANZEN



HSK	L1	L2	D.A.	D.B.	B (uniquement type A+C)
32 A+C	3,2	7,3	24 +0.005 +0.007	23,27 +0.003 +0.005	7.05 +/- 0.04
40 A+C+E	4	9,5	30 +0.005 +0.007	29,05 +0.003 +0.005	8.05 +/- 0.04
40 B+D	3,2	7,3	24 +0.005 +0.007	23,27 +0.003 +0.005	-
50 A+C+E	5	11	38 +0.006 +0.009	36,9 +0.003 +0.006	10.54 +/- 0.04
50 B+D+F	4	9,5	30 +0.005 +0.007	29,05 +0.003 +0.005	-
63 A+C+E	6,3	14,7	48 +0.007 +0.011	46,53 +0.003 +0.007	12.54 +/- 0.04
63 B+D+F	5	11	38 +0.006 +0.009	36,9 +0.003 +0.006	-
100 A+C	10	24	75 +0.009 +0.015	72,6 +0.003 +0.009	20.02 +/- 0.04
100 B+D	8	19	60 +0.008 +0.013	58,1 +0.003 +0.008	-

SPANNZANGENAUFNAHME RUNDLAUFGENAUIGKEIT

Die DIN69882-6 Norm schreibt eine Rundlaufgenauigkeit zwischen Aussenkegel und Innenkegel / Spannanzengensitz für die DIN 6499- Spannanzenaufnahmen von 0,005 vor.

AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Kintek-Aufsteckfräsdorne entsprechen der DIN 69882-2 Norm, die für die Ø 16,22,27,32 eine Rundlaufgenauigkeit von 0,01 vorsieht.

WELDON - AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Nach der DIN 69882-4 Norm muß der Weldon- Aufsteckfräsdorn die folgenden Forderungen aufweisen:

Bohrung: H5

Rundlaufgenauigkeit: 0.005.

WUCHTUNG

Alle Steilkegelaufnahmen dieser Gruppe sind in Klasse G6,3 auf 8.000 U/Min. -1 vorgewuchtet oder G2,5 auf 20.000 U/Min -1 gewuchtet.. Neben der Übersichtstabelle der Produkte wird das Wuchtgüte angegeben.

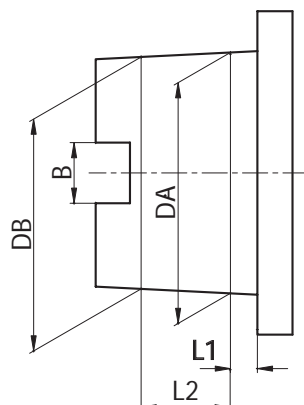
KONSTRUKTIONSDATEN

- aus legiertem Einsatzstahl angefertigt
- in der Einsatzhärte tiefe von 0,4 - 0,5 mm
- gehärtet, angelassen
- Härte HRC58 +-2, Festigkeit 800-1000 N/mm2
- brüniert
- inneres, äußeres Schleifen und am Gewinde der Spannanzengemutter
- 100% durch zertifizierte Meßinstrumente geprüft.

ALL KINTEK TOOLHOLDERS ARE MANUFACTURED ACCORDING TO DIN NORMS.
(THESE NORMS PROVIDE THE SAME CLASSES OF TOLERANCE FOR THE ATTACHMENT DIN69893 A+C, B+D, E, F)



CONE'S TOLERANCE



HSK	L1	L2	D.A.		D.B.		B (only type A+C)
32 A+C	3,2	7.03	24	+0.005 +0.007	23,27	+0.003 +0.005	7.05 +/- 0.04
40 A+C+E	4	9.05	30	+0.005 +0.007	29,05	+0.003 +0.005	8.05 +/- 0.04
40 B+D	3,2	7.03	24	+0.005 +0.007	23,27	+0.003 +0.005	-
50 A+C+E	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	10.54 +/- 0.04
50 B+D+F	4	9.05	30	+0.005 +0.007	29,05	+0.003 +0.005	-
63 A+C+E	6,3	14.07	48	+0.007 +0.011	46,53	+0.003 +0.007	12.54 +/- 0.04
63 B+D+F	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	-
100 A+C	10	24	75	+0.009 +0.015	72,6	+0.003 +0.009	20.02 +/- 0.04
100 B+D	8	19	60	+0.008 +0.013	58,1	+0.003 +0.008	-

COLLET CHUCK'S RUNOUT ACCURACY

The norm DIN 69882-6 permits a runout error of 0,005 mm. for DIN 6499 collet chucks.

SHELL END MILL ADAPTOR'S RUNOUT ACCURACY

Our shell end mill adaptors meet the requirements of the norm DIN 69882-2, which prescribes for diameters Ø 16,22,27,32 a runout accuracy of 0,01

WELDON END MILL HOLDER'S RUNOUT ACCURACY

According to norm DIN 69882-4 Weldon end mill holders have to meet the following requirements:

Bore: H5

Runout accuracy: 0.005.

BALANCING

All our toolholders of this category are pre-balanced in grade G6.3 at 8000 rpm or balanced G2,5 at 20000 rpm. Besides the descriptive and dimensional table of products you can find the additive balancing grade.

CONSTRUCTIVE FEATURES

- Manufactured with Casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm2
- Black oxidized
- Thread of collet nuts, internal and external diameters are completely grinding finished
- Tested 100% with certified measuring instruments.

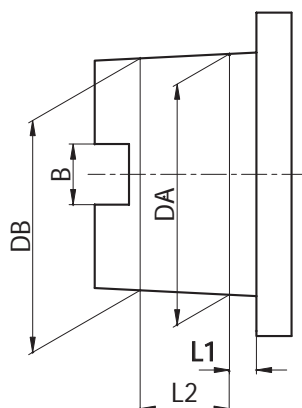
MANDRINS KINTEK HSK

DONNEES TECHNIQUES

TOUS LES MANDRINS PORTE-OUTILS KINTEK SONT FABRIQUÉS SELON LES LES NORMES DIN
(QUI PRÉVOIENT LES MÊMES CLASSES DE TOLÉRANCE POUR LES ATTACHEMENT DIN69893 A+C, B+D, E, F)



TOLERANCE DU CONE



HSK	L1	L2	D.A.	D.B.	B (uniquement type A+C)
32 A+C	3,2	7,3	24 +0.005 +0.007	23,27 +0.003 +0.005	7.05 +/- 0.04
40 A+C+E	4	9,5	30 +0.005 +0.007	29,05 +0.003 +0.005	8.05 +/- 0.04
40 B+D	3,2	7,3	24 +0.005 +0.007	23,27 +0.003 +0.005	-
50 A+C+E	5	11	38 +0.006 +0.009	36,9 +0.003 +0.006	10.54 +/- 0.04
50 B+D+F	4	9,5	30 +0.005 +0.007	29,05 +0.003 +0.005	-
63 A+C+E	6,3	14,7	48 +0.007 +0.011	46,53 +0.003 +0.007	12.54 +/- 0.04
63 B+D+F	5	11	38 +0.006 +0.009	36,9 +0.003 +0.006	-
100 A+C	10	24	75 +0.009 +0.015	72,6 +0.003 +0.009	20.02 +/- 0.04
100 B+D	8	19	60 +0.008 +0.013	58,1 +0.003 +0.008	-

COAXIALITE' PORTE-PINCE

La norme DIN 69882-6 permet une erreur de 0,005 mm. Maximum pour les porte-pinces DIN 6499

COAXIALITE' PORTE-FRAISES FIXES ET COMBINES

Les porte-fraises fixes et combinés suivent les spécifications de la norme DIN 69882-2 qui prévoit pour les diamètres Ø 16,22,27,32 une coaxialité de 0,01

COAXIALITE' PORTE-FRAISES WELDON

Suivant les spécifications DIN 69882-4 les porte-fraises WELDON doivent suivre les conditions suivantes:

Trou: H5

Coaxialité: 0.005.

EQUILIBRAGE

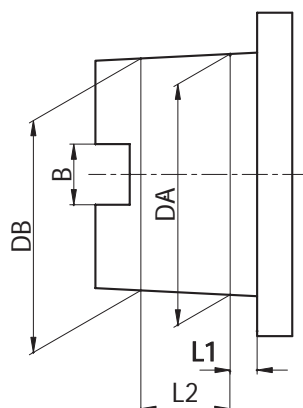
La plupart des porte-outils sont pré-équilibrés en classe G 6,3 8000 Tr/Min -1. ou équilibrés à G2,5 20000 Tr/Min-1. A côté du tableau de description et dimensions des produits il y a indiqué la valeur d'équilibrage additionnelle.

ELEMENTS DE CONSTRUCTION

- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm
- Trempés - Revenus
- Dureté HRC 58 +/- 2 résistance 800-1000 N/ mm²
- Brunis
- Rectification du cône intérieur, extérieur et dans le filetage des écrous qui serrent la pince.
- Contrôlés à 100 % avec des instruments de mesure certifiés.

MANDRINI KINTEK CON ATTACCO HSK
DATI TECNICI

TUTTI I MANDRINI PORTAUTENSILI KINTEK VENGONO PRODOTTI SECONDO LE NORMATIVE DIN
(DETTE NORMATIVE PREVEDONO LE STESSA CLASSI DI TOLLERANZA PER GLI ATTACCHI DIN69893 A+C, B+D, E, F)


TOLLERANZA DEL CONO


HSK	L1	L2	D.A.		D.B.		B (only type A+C)
32 A+C	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	7.05 +/- 0.04
40 A+C+E	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	8.05 +/- 0.04
40 B+D	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	-
50 A+C+E	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	10.54 +/- 0.04
50 B+D+F	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	-
63 A+C+E	6,3	14,7	48	+0.007 +0.011	46,53	+0.003 +0.007	12.54 +/- 0.04
63 B+D+F	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	-
100 A+C	10	24	75	+0.009 +0.015	72,6	+0.003 +0.009	20.02 +/- 0.04
100 B+D	8	19	60	+0.008 +0.013	58,1	+0.003 +0.008	-

COASSIALITÀ PORTAPINZA

La normativa DIN 69882-6. ammette un'errore massimo di 0,005 mm. per i portapinze DIN 6499

COASSIALITÀ PORTAFRESE FISSI E COMBINATI

I portafrese fissi e combinati rispondono ai criteri prescritti dalla norma DIN 69882-2 la quale prevede per i Ø 16,22,27,32 una coassialità di 0,01

COASSIALITÀ PORTAFRESE WELDON

Secondo la normativa DIN 69882-4 il portafrese WELDON deve rispondere ai seguenti requisiti:

Foro: H5

Coassialità: 0.005.

EQUILIBRATURA

Tutti i nostri mandrini presenti in questa categoria sono prebilanciati in classe G6.3 a 8000 rpm min-1 o bilanciati a G2,5 20000 giri rpm min-1.

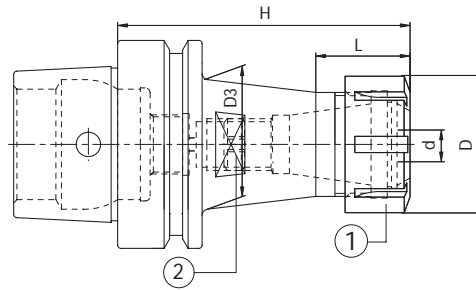
A fianco della tabella descrittiva e dimensionale dei prodotti viene elencato il grado di equilibratura aggiuntiva

DATI COSTRUTTIVI

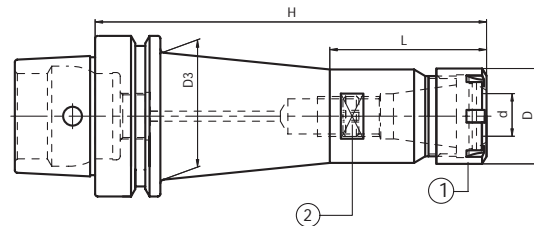
- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +/- 2 resistenza 800-1000 N/ mm2
- Bruniti
- Finitura di rettifica interna, esterna e nelle filettature delle ghiere chiudipinza
- Collaudati 100% con strumenti di misura certificati.

SPANNZANGENFUTTER ER TYPE MANDRINS A PINCES TYPE ER
ER COLLET CHUCKS MANDRINI PORTAPINZA TIPO ER

DIN 6499






HSK	Code N.	Description	H	d	D	ER	L	D3	G2,5 20000 RPM
STANDARD	40	214-37301	70	0,5÷10	22	16M	-	-	•
	40	214-37302	80	1÷16	35	25M	-	-	•
	50	214-37303	80	0,5÷10	22	16M	-	-	•
	50	214-37304	95	1÷16	42	25	32	40	•
	50	214-37305	100	2÷20	50	32	33	42	•
	63	214-37306	90	0,5÷10	22	16M	-	-	•
	63	214-37307	90	1÷16	42	25	31	39	•
	63	214-37308	100	2÷20	50	32	35	48	•
	63	214-37309	80	3÷30	63	40	-	-	•
	63	214-37310	120	3÷30	63	40	40	53	•



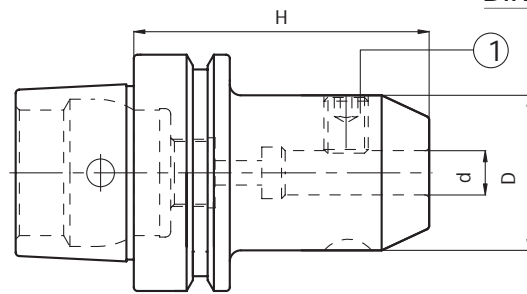
HSK	Code N.	Description	H	d	D	ER	L	D3	G2,5 20000 RPM
EXTENDED	40	214-37311	120	0,5÷10	22	16M	47	29	•
	40	214-37312	120	1÷16	35	25M	-	-	•
	50	214-37313	150	0,5÷10	22	16M	47	40	•
	50	214-37314	150	1÷16	35	25M	33	40	•
	50	214-37315	150	2÷20	50	32	33	42	•
	63	214-37316	160	0,5÷10	22	16M	47	39	•
	63	214-37317	160	1÷16	35	25M	68	41	•
	63	214-37318	160	2÷20	50	32	78	48	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

ER	Nut	Stop screw	Wrench
			
	1	2	
16M	812-203013	811-303119	816-203009
25M	812-203015	811-303121	816-203011
25	812-203001	811-303121	816-203001
32	812-203002	811-303118	816-203002
40/H120	812-203003	811-303122	816-203003
40/H80	812-203003	-	816-203003

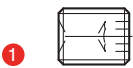
ZYLINDERSCHAFTAUFNAHME WELDON MANDRINS POUR OUTILS TYPE WELDON
 END MILL HOLDERS WELDON MANDRINI PORTAFRESE TIPO WELDON

DIN 1835/B



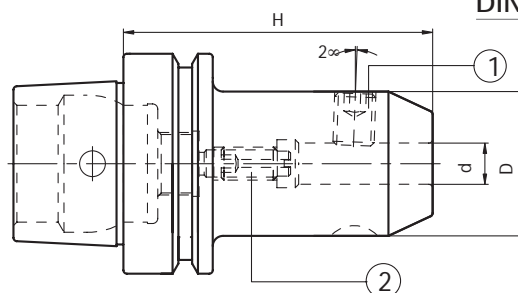
HSK	Code N.	Description	H	d	D	G2,5 20000 RPM
40	213-17301	HSK40EH60WE06	60	6	25	•
40	213-17302	HSK40EH60WE08	60	8	28	•
40	213-17303	HSK40EH65WE10	65	10	35	•
40	213-17304	HSK40EH70WE12	70	12	42	•
40	213-17331	HSK40EH70WE14	70	14	44	•
40	213-17305	HSK40EH70WE16	70	16	48	•
40	213-17332	HSK40EH70WE18	70	18	50	•
40	213-17306	HSK40EH80WE20	80	20	52	•
50	213-17307	HSK50EH65WE06	65	6	25	•
50	213-17308	HSK50EH65WE08	65	8	28	•
50	213-17309	HSK50EH70WE10	70	10	35	•
50	213-17310	HSK50EH80WE12	80	12	42	•
50	213-17333	HSK50EH80WE14	80	14	44	•
50	213-17311	HSK50EH80WE16	80	16	48	•
50	213-17334	HSK50EH80WE18	80	18	50	•
50	213-17312	HSK50EH85WE20	85	20	52	•
50	213-17313	HSK50EH105WE25	105	25	65	•
63	213-17314	HSK63EH65WE06	65	6	25	•
63	213-17315	HSK63EH65WE08	65	8	28	•
63	213-17316	HSK63EH70WE10	70	10	35	•
63	213-17321	HSK63EH80WE12	80	12	42	•
63	213-17335	HSK63EH80WE14	80	14	44	•
63	213-17317	HSK63EH80WE16	80	16	48	•
63	213-17336	HSK63EH80WE18	80	18	50	•
63	213-17318	HSK63EH85WE20	85	20	52	•
63	213-17319	HSK63EH105WE25	105	25	65	•
63	213-17323	HSK63EH110WE32	110	32	72	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Locking screw	Quantity
		
6	811-106001	1
8	811-106002	1
10	811-106004	1
12;14	811-106005	1
16;18	811-106006	1
20	811-106007	1
25	811-106008	2
32	811-106009	2


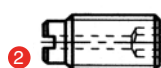
ZYLINDERSCHAFTAUFNAHME WHISTLE NOTCH MANDRINS POUR OUTILS TYPE WHISTLE NOTCH
 END MILL HOLDERS WHISTLE NOTCH MANDRINI PORTAFRESE TIPO WHISTLE NOTCH

DIN 1835/E



HSK	Code N.	Description	H	d	D	G2,5 20000 RPM
40	213-37301	HSK40EH80WN06	80	6	25	•
40	213-37302	HSK40EH80WN08	80	8	28	•
40	213-37303	HSK40EH80WN10	80	10	35	•
40	213-37304	HSK40EH90WN12	90	12	42	•
40	213-37305	HSK40EH90WN14	90	14	44	•
40	213-37306	HSK40EH100WN16	100	16	48	•
40	213-37307	HSK40EH100WN18	100	18	50	•
40	213-37308	HSK40EH100WN20	100	20	52	•
50	213-37309	HSK50EH80WN06	80	6	25	•
50	213-37310	HSK50EH80WN08	80	8	28	•
50	213-37311	HSK50EH80WN10	80	10	35	•
50	213-37312	HSK50EH90WN12	90	12	42	•
50	213-37313	HSK50EH90WN14	90	14	44	•
50	213-37314	HSK50EH100WN16	100	16	48	•
50	213-37315	HSK50EH100WN18	100	18	50	•
50	213-37316	HSK50EH100WN20	100	20	52	•
50	213-37317	HSK50EH110WN25	110	25	65	•
50	213-37318	HSK50EH120WN32	120	32	72	•
63	213-37319	HSK63EH80WN06	80	6	25	•
63	213-37320	HSK63EH80WN08	80	8	28	•
63	213-37321	HSK63EH80WN10	80	10	35	•
63	213-37322	HSK63EH90WN12	90	12	42	•
63	213-37323	HSK63EH90WN14	90	14	44	•
63	213-37324	HSK63EH100WN16	100	16	48	•
63	213-37325	HSK63EH100WN18	100	18	50	•
63	213-37326	HSK63EH100WN20	100	20	52	•
63	213-37327	HSK63EH110WN25	110	25	65	•
63	213-37328	HSK63EH120WN32	120	32	72	•

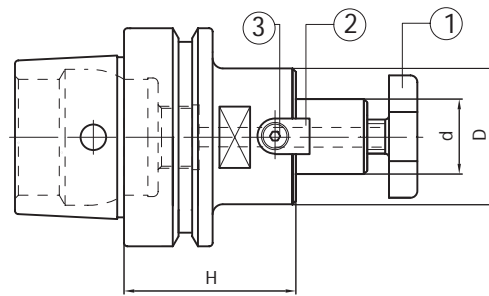
Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Locking screw	Quantity	Stop screw
			
6	811-106001	1	811-303043
8	811-106002	1	811-303081
10	811-106004	1	811-303089
12;14	811-106005	1	811-303090
16;18	811-106006	1	811-303091
20	811-106007	1	811-303091
25	811-106008	2	811-303091
32	811-106009	2	811-303091

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT
FACE MILL HOLDERS-TENONS DRIVE

MANDRINS PORTE-FRAISE-ENTRAINEMENT PAR TENONS
MANDRINI PORTAFRESE A TRASCINAMENTO FISSO

ISO 3937



HSK	Code N.	Description	H	d	D	G2,5 20000 RPM
40	216-77301	HSK40EH45D16F	45	16	38	•
40	216-77302	HSK40EH50D22F	50	22	48	•
40	216-77303	HSK40EH55D27F	55	27	58	•
50	216-77304	HSK50EH45D16F	45	16	38	•
50	216-77305	HSK50EH55D22F	55	22	48	•
50	216-77306	HSK50EH55D27F	55	27	58	•
50	216-77307	HSK50EH60D32F	60	32	78	•
63	216-77308	HSK63EH45D16F	45	16	38	•
63	216-77309	HSK63EH50D22F	50	22	48	•
63	216-77310	HSK63EH55D27F	55	27	58	•
63	216-77311	HSK63EH60D32F	60	32	78	•
63	216-77313	HSK63EH65D40F	65	40	88	•

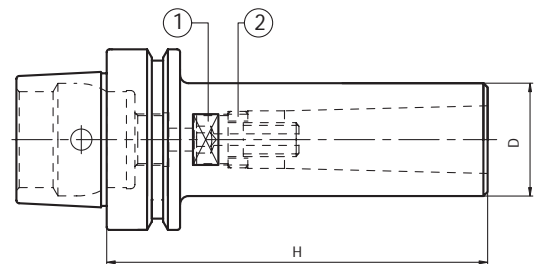
Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Cross screw	Cross screw on enquiry	Dog	Screw	Wrench
16	811-107003	811-107013	814-202280	811-101004	816-130002
22	811-107004	811-107014	814-202250	811-101011	816-130003
27	811-107005	811-107015	814-202270	811-101018	816-130004
32	811-107006	811-107016	814-202630	811-101029	816-130005
40	811-107007	811-107017	814-202710	811-101029	816-130006

ZWISCHENHÜSLEN FÜR MORSEKEGEL MIT ANZUGSGEWINDE MIT ZENTRALER KÜHLMITTELZUFUHR
MORSE TAPE ADAPTERS WITH THREAD WITH INTERNAL COOLANT



DOUILLES POUR CONES MORSES AVEC TARAUDAGE ARROSAGE INTERNE
MANDRINI PORTAPUNTE ATTACCO CONO MORSE CON REFRIGERAMENTO INTERNO

DIN 228-2 C



HSK	Code N.	Description	Morse	H	D	G6,3 8000 RPM
40	212-27301	HSK40EH100CM1F	1	100	25	•
40	212-27302	HSK40EH115CM2F	2	115	32	•
50	212-27303	HSK50EH100CM1F	1	100	25	•
50	212-27304	HSK50EH115CM2F	2	115	32	•
50	212-27305	HSK50EH140CM3F	3	140	40	•
63	212-27306	HSK63EH100CM1F	1	100	25	•
63	212-27307	HSK63EH125CM2F	2	125	32	•
63	212-27308	HSK63EH145CM3F	3	145	40	•
63	212-27309	HSK63EH165CM4F	4	165	48	•

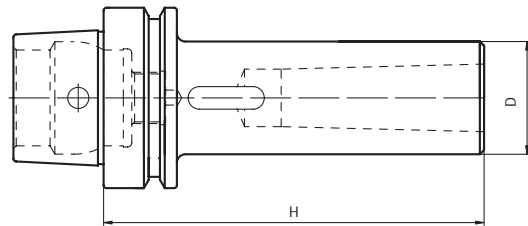
Ersatzteile • Spare parts • Pièces détachées • Componenti

HSK/MORSE	Screw	Ring
		
40/1	811-401100	811-302037
40/2	811-401079	811-302031
50/1	811-401100	811-302037
50/2	811-401066	811-302031
50/3	811-401067	811-302032
63/1	811-401100	811-302037
63/2	811-401099	811-302031
63/3	811-401078	811-302032
63/4	811-401091	811-302036

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT AUSTREIBLAPPEN
MORSE TAPER ADAPTORS FOR DRILLS

DOUILLES POUR CONES MORSES A TENON
MANDRINI PORTAPUNTE ATTACCO CONO MORSE

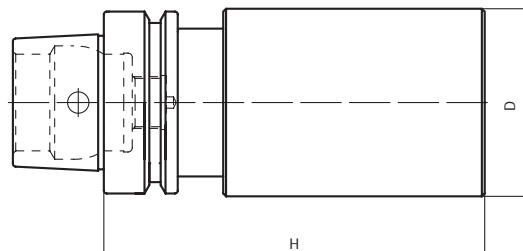
DIN 228-2 D



HSK	Code N.	Description	Morse	H	D	G6,3 ⁸⁰⁰⁰ RPM
40	212-47301	HSK40EH110CM1P	1	110	25	•
40	212-47302	HSK40EH120CM2P	2	120	32	•
50	212-47303	HSK50EH115CM1P	1	115	25	•
50	212-47304	HSK50EH130CM2P	2	130	32	•
50	212-47305	HSK50EH150CM3P	3	150	40	•
63	212-47306	HSK63EH105CM1P	1	105	25	•
63	212-47307	HSK63EH120CM2P	2	120	32	•
63	212-47308	HSK63EH140CM3P	3	140	40	•
63	212-47309	HSK63EH165CM4P	4	165	48	•

ROHLINGE MIT WEICHEM SCHAFT
BLANK TOOLHOLDERS WITH SOFT SHANK

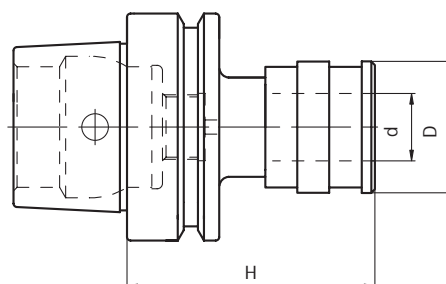
BARRES D'ALEPAGE SEMI-FINIES
MANDRINI SEMILAVORATI A STELO TENERO



HSK	Code N.	Description	H	D
40	217-17301	HSK40EH150D50SM	150	50
50	217-17302	HSK50EH200D63SM	200	63
63	217-17303	HSK63EH200D63SM	200	63

GEWINDESCHNEID-SCHNELLWECHSELFUTTER MIT
LÄNGENAUSGLEICH
TENSION AND COMPRESSION TAPPING HEADS

MANDRINS DE TARAUDAGE A CHANGEMENT
RAPIDE A DOUBLE USAGE
MASCHIATORI A DOPPIA COMPENSAZIONE



HSK	Code N.	Description	SIZE	Top range	PRESS.	EXT.	d	D	H
40	MEH1040	HSK40EH80GR1	1	M3÷M12	7.5	7.5	19	41	80
40	MEH2040	HSK40EH103GR2	2	M6÷M20	10	10	31	60	103
50	MEH1050	HSK50EH72GR1	1	M3-M12	7.5	7.5	19	41	72
50	MEH2050	HSK50EH110GR2	2	M6-M20	10	10	31	60	110
63	MEH1063	HSK63EH72GR1	1	M3-M12	7.5	7.5	19	41	72
63	MEH2063	HSK63EH110GR2	2	M6-M20	10	10	31	60	110

Zubehör
Accessories
Accessoires
Accessori

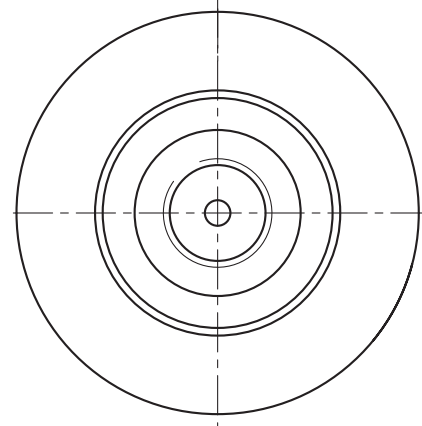
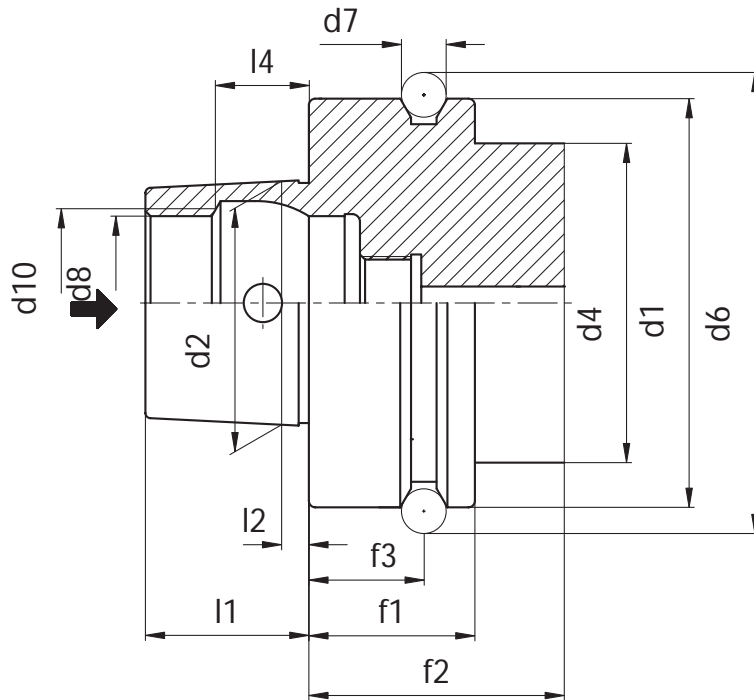


The logo for Kawafel, featuring the word "KAWAFEL" in a bold, black, sans-serif font. The letter "K" is stylized with an orange and grey geometric shape integrated into its left side. The background of the entire page is a faded, high-angle photograph of a metal grid structure, possibly a staircase or a walkway, with a person's legs visible in the lower right corner.

KAWAFEL

DIN 69893 F





	HSK 50	HSK 63
d1	50	63
d2	30	38
d4	42	53
d6	59,3	72,3
d7	7	7
d8	21	26
d10	23	29
f1	26	26
f2	42	42
f3	18	18
l1	20	25
l2	4	5
l4	11,42	14,13



Forma F

- Usato su elettromandrini e su macchine per il legno.
- Con flangia maggiorata.
- Adduzione refrigerante al centro.



Form F

- Anwendung für Hochfrequenzspindeln, Holzbearbeitungsmaschinen.
- Mit vergrößertem Bund.
- Zentrale Kühlmittelzufuhr über Kühlmittelrohr möglich.



Form F

- Used for high frequency spindles and wood machining.
- With larger collar.
- Central coolant supply possible trough coolant hose.



Forme F

- Utilisation pour des broches à hautes fréquences, les machines à usiner le bois.
- Avec épaulement agrandi.
- Possibilité d'alimentation centrale du liquide de lubrification par tube d'arrosage.

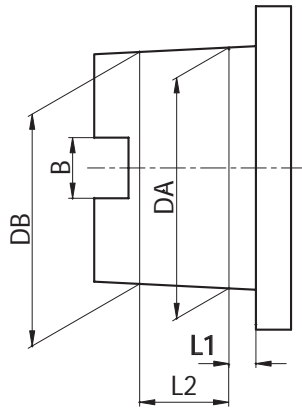
STEILGEKELAUFNAHMEN KINTEK HSK

TECHNISCHE DATEN

ALLE KINTEK - STEILGEKELAUFNAHMEN WERDEN NACH DEN DIN - NORMEN ANGEFERTIGT.
(DIESE NORMEN SEHEN DIE GLEICHEN TOLERANZKLASSEN FÜR DIE DIN 69893 A+C, B+D, E, F AUFNAHMEN VOR)



KEGELSCHAFTTOLERANZEN



HSK	L1	L2	D.A.		D.B.		B (uniquement type A+C)
32 A+C	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	7.05 +/- 0.04
40 A+C+E	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	8.05 +/- 0.04
40 B+D	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	-
50 A+C+E	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	10.54 +/- 0.04
50 B+D+F	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	-
63 A+C+E	6,3	14,7	48	+0.007 +0.011	46,53	+0.003 +0.007	12.54 +/- 0.04
63 B+D+F	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	-
100 A+C	10	24	75	+0.009 +0.015	72,6	+0.003 +0.009	20.02 +/- 0.04
100 B+D	8	19	60	+0.008 +0.013	58,1	+0.003 +0.008	-

SPANZANGENAUFNAHME RUNDLAUFGENAUIGKEIT

Die DIN69882-6 Norm schreibt eine Rundlaufgenauigkeit zwischen Aussenkegel und Innenkegel / Spannzangensitz für die DIN 6499- Spannzangenaufnahmen von 0,005 vor.

AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Kintek-Aufsteckfräsdorne entsprechen der DIN 69882-2 Norm, die für die Ø 16,22,27,32 eine Rundlaufgenauigkeit von 0,01 vorsieht.

WELDON - AUFSTECKFRÄSDORNE - RUNDLAUFGENAUIGKEIT

Nach der DIN 69882-4 Norm muß der Weldon- Aufsteckfräsdorn die folgenden Forderungen aufweisen:

Bohrung: H5

Rundlaufgenauigkeit: 0.005.

WUCHTUNG

Alle Steilkegelauflnahmen dieser Gruppe sind in Klasse G6,3 auf 8.000 U/Min. -1 vorgewuchtet oder G2,5 auf 20.000 U/Min -1 gewuchtet. Neben der Übersichtstabelle der Produkte wird das Wuchtgüte angegeben.

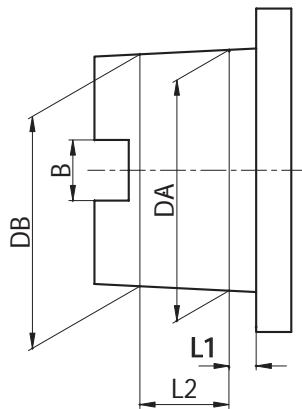
KONSTRUKTIONSDATEN

- aus legiertem Einsatzstahl angefertigt
- in der Einsatzhärte tiefe von 0,4 - 0,5 mm zementiert
- gehärtet, angelassen
- Härte HRC58 +-2, Festigkeit 800-1000 N/mm2
- brüniert
- inneres, äußeres Schleifen und am Gewinde der Spannzangemutter
- 100% durch zertifizierte Meßinstrumente geprüft.

ALL KINTEK TOOLHOLDERS ARE MANUFACTURED ACCORDING TO DIN NORMS.
(THESE NORMS PROVIDE THE SAME CLASSES OF TOLERANCE FOR THE ATTACHMENT DIN69893 A+C, B+D, E, F)



CONE'S TOLERANCE



HSK	L1	L2	D.A.	D.B.	B (only type A+C)
32 A+C	3,2	7,3	24 +0.005 +0.007	23,27 +0.003 +0.005	7.05 +/- 0.04
40 A+C+E	4	9,5	30 +0.005 +0.007	29,05 +0.003 +0.005	8.05 +/- 0.04
40 B+D	3,2	7,3	24 +0.005 +0.007	23,27 +0.003 +0.005	-
50 A+C+E	5	11	38 +0.006 +0.009	36,9 +0.003 +0.006	10.54 +/- 0.04
50 B+D+F	4	9,5	30 +0.005 +0.007	29,05 +0.003 +0.005	-
63 A+C+E	6,3	14,7	48 +0.007 +0.011	46,53 +0.003 +0.007	12.54 +/- 0.04
63 B+D+F	5	11	38 +0.006 +0.009	36,9 +0.003 +0.006	-
100 A+C	10	24	75 +0.009 +0.015	72,6 +0.003 +0.009	20.02 +/- 0.04
100 B+D	8	19	60 +0.008 +0.013	58,1 +0.003 +0.008	-

COLLET CHUCK'S RUNOUT ACCURACY

The norm DIN 69882-6 permits a runout error of 0,005 mm. for DIN 6499 collet chucks.

SHELL END MILL ADAPTOR'S RUNOUT ACCURACY

Our shell end mill adaptors meet the requirements of the norm DIN 69882-2, which prescribes for diameters Ø 16,22,27,32 a runout accuracy of 0,01

WELDON END MILL HOLDER'S RUNOUT ACCURACY

According to norm DIN 69882-4 Weldon end mill holders have to meet the following requirements:

Bore: H5

Runout accuracy: 0.005.

BALANCING

All our toolholders of this category are pre-balanced in grade G6.3 at 8000 rpm or balanced G2,5 at 20000 rpm. Besides the descriptive and dimensional table of products you can find the additive balancing grade.

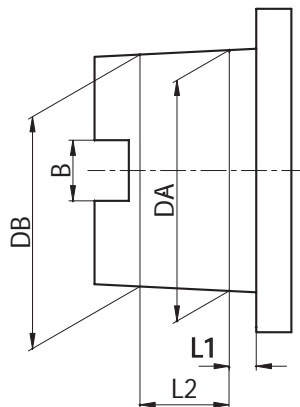
CONSTRUCTIVE FEATURES

- Manufactured with Casehardening Steel.
- Casehardened with depth 0,4 - 0,5 mm
- Hardened-Tempered
- Hardness HRC 58+-2, Strength 800-1000 N/mm2
- Black oxided
- Thread of collet nuts, internal and external diameters are completely grinding finished
- Tested 100% with certified measuring instruments.

TOUS LES MANDRINS PORTE-OUTILS KINTEK SONT FABRIQUÉS SELON LES LES NORMES DIN
(QUI PRÉVOIENT LES MÊMES CLASSES DE TOLÉRANCE POUR LES ATTACHEMENT DIN69893 A+C, B+D, E, F)



TOLERANCE DU CONE



HSK	L1	L2	D.A.		D.B.		B (uniquement type A+C)
32 A+C	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	7.05 +/- 0.04
40 A+C+E	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	8.05 +/- 0.04
40 B+D	3,2	7,3	24	+0.005 +0.007	23,27	+0.003 +0.005	-
50 A+C+E	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	10.54 +/- 0.04
50 B+D+F	4	9,5	30	+0.005 +0.007	29,05	+0.003 +0.005	-
63 A+C+E	6,3	14,7	48	+0.007 +0.011	46,53	+0.003 +0.007	12.54 +/- 0.04
63 B+D+F	5	11	38	+0.006 +0.009	36,9	+0.003 +0.006	-
100 A+C	10	24	75	+0.009 +0.015	72,6	+0.003 +0.009	20.02 +/- 0.04
100 B+D	8	19	60	+0.008 +0.013	58,1	+0.003 +0.008	-

COAXIALITE' PORTE-PINCE

La norme DIN 69882-6 permet une erreur de 0,005 mm. Maximum pour les porte-pinces DIN 6499

COAXIALITE' PORTE-FRAISES FIXES ET COMBINES

Les porte-fraises fixes et combinés suivent les spécifications de la norme DIN 69882-2 qui prévoit pour les diamètres Ø 16,22,27,32 une coaxialité de 0,01

COAXIALITE' PORTE-FRAISES WELDON

Suivant les spécifications DIN 69882-4 les porte-fraises WELDON doivent suivre les conditions suivantes:

Trou: H5

Coaxialité: 0.005.

EQUILIBRAGE

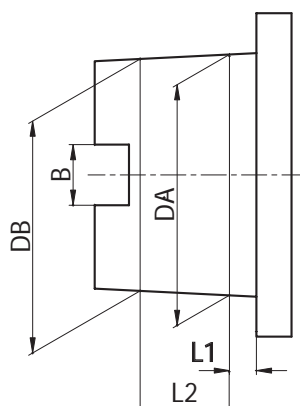
La plupart des porte-outils sont pré-équilibrés en classe G 6,3 8000 Tr/Min -1. ou équilibrés G2,5 à 20000 Tr/Min-1. A côté du tableau de description et dimensions des produits il y a indiqué la valeur d'équilibrage additionnelle.

ELEMENTS DE CONSTRUCTION

- Produits en acier cémenté allié.
- Cémentés avec une profondeur 0,4 - 0,5 mm
- Trempés - Revenus
- Dureté HRC 58 +/- 2 résistance 800-1000 N/ mm2
- Brunis
- Rectification du cône intérieur, extérieur et dans le filetage des écrous qui serrent la pince.
- Contrôlés à 100 % avec des instruments de mesure certifiés.

MANDRINI KINTEK CON ATTACCO HSK
DATI TECNICI

TUTTI I MANDRINI PORTAUTENSILI KINTEK VENGONO PRODOTTI SECONDO LE NORMATIVE DIN
(DETE NORMATIVE PREVEDONO LE STESSA CLASSI DI TOLLERANZA PER GLI ATTACCHI DIN69893 A+C, B+D, E, F)


TOLLERANZA DEL CONO


HSK	L1	L2	D.A.	D.B.	B (only type A+C)
32 A+C	3,2	7,3	24 +0.005 +0.007	23,27 +0.003 +0.005	7.05 +/- 0.04
40 A+C+E	4	9,5	30 +0.005 +0.007	29,05 +0.003 +0.005	8.05 +/- 0.04
40 B+D	3,2	7,3	24 +0.005 +0.007	23,27 +0.003 +0.005	-
50 A+C+E	5	11	38 +0.006 +0.009	36,9 +0.003 +0.006	10.54 +/- 0.04
50 B+D+F	4	9,5	30 +0.005 +0.007	29,05 +0.003 +0.005	-
63 A+C+E	6,3	14,7	48 +0.007 +0.011	46,53 +0.003 +0.007	12.54 +/- 0.04
63 B+D+F	5	11	38 +0.006 +0.009	36,9 +0.003 +0.006	-
100 A+C	10	24	75 +0.009 +0.015	72,6 +0.003 +0.009	20.02 +/- 0.04
100 B+D	8	19	60 +0.008 +0.013	58,1 +0.003 +0.008	-

COASSIALITÀ PORTAPINZA

La normativa DIN 69882-6. ammette un'errore massimo di 0,005 mm. per i portapinze DIN 6499

COASSIALITÀ PORTAFRESE FISSI E COMBINATI

I portafrese fissi e combinati rispondono ai criteri prescritti dalla norma DIN 69882-2 la quale prevede per i Ø 16,22,27,32 una coassialità di 0,01

COASSIALITÀ PORTAFRESE WELDON

Secondo la normativa DIN 69882-4 il portafrese WELDON deve rispondere ai seguenti requisiti:

Foro: H5

Coassialità: 0.005.

EQUILIBRATURA

Tutti i nostri mandrini presenti in questa categoria sono prebilanciati in classe G6.3 a 8000 rpm min-1 o bilanciati G2,5 a 20000 giri rpm min-1.

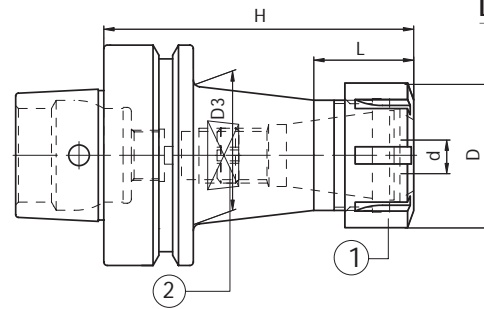
A fianco della tabella descrittiva e dimensionale dei prodotti viene elencato il grado di equilibratura aggiuntiva

DATI COSTRUTTIVI

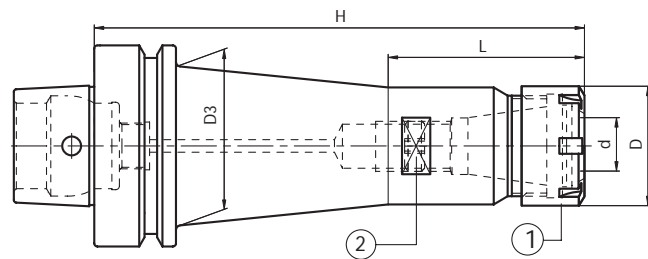
- Costruiti in acciaio da cementazione legato.
- Cementati con profondità 0,4 - 0,5 mm
- Temprati-rinvenuti
- Durezza HRC 58 +/- 2 resistenza 800-1000 N/ mm2
- Bruniti
- Finitura di rettifica interna, esterna e nelle filettature delle ghiera chiudipinza
- Collaudati 100% con strumenti di misura certificati.

SPANNZANGENFUTTER ER TYPE MANDRINS A PINCES TYPE ER
ER COLLET CHUCKS MANDRINI PORTAPINZA TIPO ER

DIN 6499



HSK	Code N.	Description	H	d	D	ER	L	D3	G2,5 20000 RPM	
STANDARD	50	214-37401	HSK50FH80ER16M	80	0,5÷10	22	16M	-	-	•
	50	214-37402	HSK50FH80ER25	80	1÷16	42	25	-	-	•
	50	214-37403	HSK50FH100ER32	100	2÷20	50	32	-	-	•
	50	214-37433	HSK50FH68ER40	68	3÷30	63	40	-	-	•
	63	214-37404	HSK63FH100ER16M	100	0,5÷10	22	16M	47	26	•
	63	214-37405	HSK63FH100ER25	100	1÷16	42	25	32	41	•
	63	214-37406	HSK63FH100ER32	100	2÷20	50	32	35	46	•
	63	214-37407	HSK63FH80ER40	80	3÷30	63	40	-	-	•
	63	214-37408	HSK63FH120ER40	120	3÷30	63	40	-	-	•



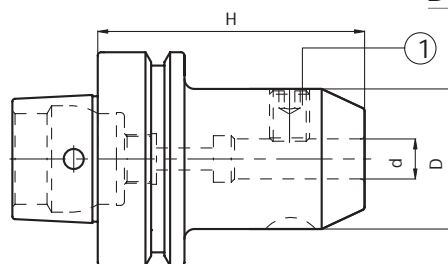
HSK	Code N.	Description	H	d	D	ER	L	D3	G2,5 20000 RPM	
EXTENDED	50	214-37409	HSK50FH150ER16M	150	0,5÷10	22	16M	57	33	•
	50	214-37410	HSK50FH150ER25M	150	1÷16	35	25M	68	39	•
	63	214-37411	HSK63FH160ER16M	160	0,5÷10	22	16M	57	35	•
	63	214-37412	HSK63FH160ER25M	160	1÷16	35	25M	68	41	•
	63	214-37413	HSK63FH160ER32	160	2÷20	50	32	78	48	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

ER	Nut	Stop screw	Wrench
16M	812-203013	811-303119	816-203009
25M	812-203015	811-303121	816-203011
25	812-203001	811-303121	816-203001
32	812-203002	811-303118	816-203002
40/H120	812-203003	811-303122	816-203003
40/H68:80	812-203003	-	816-203003

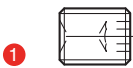
ZYLINDERSCHAFTAUFNAHME WELDON MANDRINS POUR OUTILS TYPE WELDON
 END MILL HOLDERS WELDON MANDRINI PORTAFRESE TIPO WELDON

DIN 1835/B



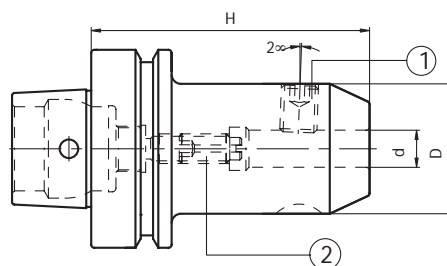
HSK	Code N.	Description	H	d	D	G2,5 20000 RPM
50	213-17401	HSK50FH65WE06	65	6	25	•
50	213-17402	HSK50FH65WE08	65	8	28	•
50	213-17403	HSK50FH70WE10	70	10	35	•
50	213-17404	HSK50FH80WE12	80	12	42	•
50	213-17405	HSK50FH80WE16	80	16	48	•
50	213-17406	HSK50FH85WE20	85	20	52	•
63	213-17407	HSK63FH75WE06	75	6	25	•
63	213-17408	HSK63FH75WE08	75	8	28	•
63	213-17409	HSK63FH75WE10	75	10	35	•
63	213-17410	HSK63FH80WE12	80	12	42	•
63	213-17411	HSK63FH80WE16	80	16	48	•
63	213-17412	HSK63FH85WE20	85	20	52	•
63	213-17413	HSK63FH110WE25	110	25	65	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Locking screw	Quantity
		
6	811-106001	1
8	811-106002	1
10	811-106004	1
12	811-106005	1
16	811-106006	1
20	811-106007	1
25	811-106008	2

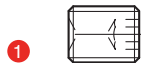
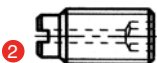
ZYLINDERSCHAFTAUFNAHME WHISTLE NOTCH MANDRINS POUR OUTILS TYPE WHISTLE NOTCH
 END MILL HOLDERS WHISTLE NOTCH MANDRINI PORTAFRESE TIPO WHISTLE NOTCH

DIN 1835/E



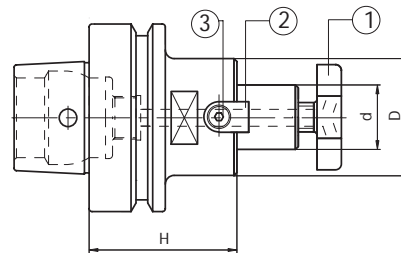
HSK	Code N.	Description	H	d	D	G2,5 20000 RPM
50	213-37401	HSK50FH80WN06	80	6	25	•
50	213-37402	HSK50FH80WN08	80	8	28	•
50	213-37403	HSK50FH80WN10	80	10	35	•
50	213-37404	HSK50FH90WN12	90	12	42	•
50	213-37406	HSK50FH100WN16	100	16	48	•
50	213-37408	HSK50FH100WN20	100	20	52	•
50	213-37409	HSK50FH110WN25	110	25	65	•
63	213-37410	HSK63FH80WN06	80	6	25	•
63	213-37411	HSK63FH80WN08	80	8	28	•
63	213-37412	HSK63FH80WN10	80	10	35	•
63	213-37413	HSK63FH90WN12	90	12	42	•
63	213-37415	HSK63FH100WN16	100	16	48	•
63	213-37417	HSK63FH100WN20	100	20	52	•
63	213-37418	HSK63FH110WN25	110	25	65	•
63	213-37419	HSK63FH115WN32	115	32	72	•

Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Locking screw	Quantity	Stop screw
			
6	811-106001	1	811-303043
8	811-106002	1	811-303081
10	811-106004	1	811-303089
12	811-106005	1	811-303090
16	811-106006	1	811-303091
20	811-106007	1	811-303091
25	811-106008	2	811-303091
32	811-106009	2	811-303091

AUFSTECKFRÄSDORNE FÜR FRÄSER MIT QUERNUT MANDRINS PORTE-FRAISES-ENTRAÎNEMENT PAR TENONS
 FACE MILL HOLDERS-TENONS DRIVE MANDRINI PORTAFRESE A TRASCINAMENTO FISSO

ISO 3937



HSK	Code N.	Description	H	d	D	G2,5 20000 RPM
50	216-77401	HSK50FH45D16F	45	16	38	•
50	216-77402	HSK50FH55D22F	55	22	48	•
50	216-77403	HSK50FH55D27F	55	27	58	•
63	216-77404	HSK63FH45D16F	45	16	38	•
63	216-77405	HSK63FH50D22F	50	22	48	•
63	216-77406	HSK63FH55D27F	55	27	58	•
63	216-77407	HSK63FH60D32F	60	32	78	•
63	216-77408	HSK63FH65D40F	65	40	88	•

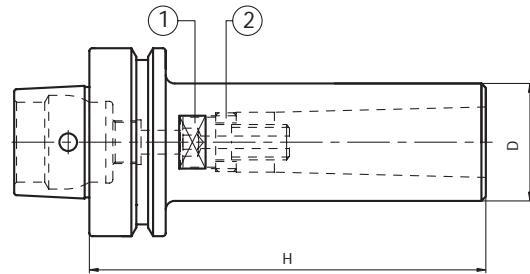
Ersatzteile • Spare parts • Pièces détachées • Componenti

d	Cross screw	Cross screw on enquiry	Dog	Screw	Wrench
16	811-107003	811-107013	814-202280	811-101004	816-130002
22	811-107004	811-107014	814-202250	811-101011	816-130003
27	811-107005	811-107015	814-202270	811-101018	816-130004
32	811-107006	811-107016	814-202630	811-101029	816-130005
40	811-107007	811-107017	814-202710	811-101029	816-130006

ZWISCHENHÜSLEN FÜR MORSEKEGEL MIT ANZUGSGEWINDE MIT ZENTRALER KÜHLMITTELZUFUHR
MORSE TAPER ADAPTERS WITH THREAD AND INTERNAL COOLANT

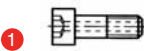

DOUILLES POUR CONE MORSE AVEC TARAUDAGE ARROSAGE INTERNE
MANDRINI PORTAFRESE ATTACCO CONO MORSE CON REFRIGERAMENTO INTERNO

DIN 228-2 C



HSK	Code N.	Description	Morse	H	D	G6,3 8000 RPM
50	212-27401	HSK50FH90CM1F	1	90	25	•
50	212-27402	HSK50FH115CM2F	2	115	32	•
50	212-27403	HSK50FH140CM3F	3	140	40	•
63	212-27404	HSK63FH100CM1F	1	100	25	•
63	212-27405	HSK63FH125CM2F	2	125	32	•
63	212-27406	HSK63FH145CM3F	3	145	40	•
63	212-27407	HSK63FH165CM4F	4	165	48	•

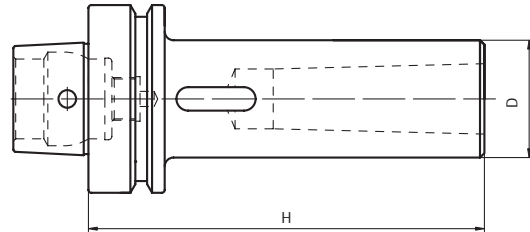
Ersatzteile • Spare parts • Pièces détachées • Componenti

HSK/MORSE	Screw	Ring
		
50/1	811-401100	811-302037
50/2	811-401066	811-302031
50/3	811-401067	811-302032
63/1	811-401100	811-302037
63/2	811-401066	811-302031
63/3	811-401067	811-302032
63/4	811-401096	811-302036

ZWISCHENHÜLSEN FÜR MORSEKEGEL MIT AUSTREIBBLAPPEN
MORSE TAPER ADAPTERS FOR DRILLS

DOUILLES POUR CONE MORSE A TENON
MANDRINI PORTAPUNTE ATTACCO CONO MORSE

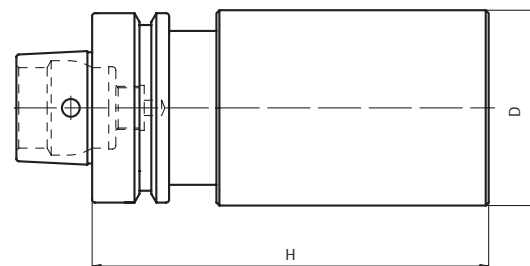
DIN 228-2 D



HSK	Code N.	Description	Morse	H	D	G6,3 8000 RPM
50	212-47401	HSK50FH115CM1P	1	115	25	•
50	212-47402	HSK50FH130CM2P	2	130	32	•
50	212-47403	HSK50FH150CM3P	3	150	40	•
63	212-47404	HSK63FH105CM1P	1	105	25	•
63	212-47405	HSK63FH120CM2P	2	120	32	•
63	212-47406	HSK63FH140CM3P	3	140	40	•
63	212-47407	HSK63FH165CM4P	4	165	48	•

ROHLINGE MIT WEICHEM SCHAFT
BLANK TOOLHOLDERS WITH SOFT SHANK

EBAUCHE
MANDRINI SEMILAVORATI A STELO TENERO



HSK	Code N.	Description	H	D
50	217-17401	HSK50FH200D63SM	200	63
63	217-17402	HSK63FH200D63SM	200	63

GREIFER FÜR WERKZEUGMAGAZIN

Dank unserer intensiven und engen Zusammenarbeit mit den berühmtesten Maschinenherstellern Europas haben wir eine sehr gute Erfahrung auch in dem Bereich Magazinkassetten entwickelt. Gerne bieten wir Ihnen folgende Ausführungen: für ISO, HSK und alle andere, nach Ihrem Wunsch.

CLAMPING FINGERS FOR TOOL MAGAZINES

Thanks to our constant and exhaustive co-operation with the most famous machine tool makers we develop a very good experience into the manufacturing of high precision clamping fingers for toolmagazines. Our range includes clampers for the most popular attachments: ISO CONES, HSK Holders but of course we are open to any new version, according to the customer's drawing.

PINCES DE LOGEMENT POUR LE MAGASIN DES MACHINES OUTILS

Grâce a notre constante et intensive collaboration avec les plus célèbres constructeurs des machine outils, nous avons développé une bonne expérience pour la production de pinces des logement pour le magasin des machines outils. Dans notre gamme il y a attachements: ISO, HSK et autres. Naturellement nous sommes ouverts à construire autres types de pinces suite aux differents plans du client.

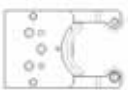




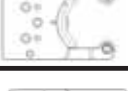



PINZE ALLOGGIAMENTO PORTAUTENSILI PER MAGAZZINI MACCHINE UTENSILI

Grazie alla nostra costante ed intensa collaborazione con i più famosi costruttori di macchine utensili, abbiamo sviluppato una buona esperienza nella produzione di Pinze ad alta precisione per l'alloggiamento nei magazzini di macchine utensili.

Nella nostra gamma sono presenti attacchi: ISO, HSK ed altri, e naturalmente siamo aperti ad altre versioni secondo disegno del cliente.



Pinze - Clamping fingers

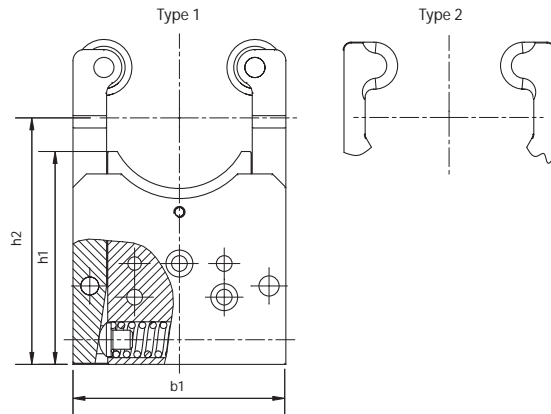
		Codice/Code	Peso del mandrino / Toolholder 's weight			Lunghezza del mandrino (mm) Tool's length (mm)	Molla/Spring	
			Max. Load in vertical Pos .(kg)	Max. Load in upper Pos .(kg)	Max. Load in lower Pos .(kg)			
CAS- HSK63A		832-018030	14,6	7,8	4,1	250	SN 2540-16-76	A
		832-018470	21	11,2	5,9	250	SN 2560-16-76	B
CAS- HSK100A		832-018020	40	20,5	11	400	SDF600-20x102	A
		832-018480	80	50	27	400	SDF700-20x102	B
CAS-C6		832-007940	15,6	8,3	4,4	250	SN 2540-16-76	A
		832-018490	22,3	11,9	6,3	250	SN 2560-16-76	B
CAS-C8		832-018050	18,2	10,5	5,1	250	SDF600-16x89	A
		832-018500	29	16,7	8,2	250	SDF700-16x89	B
CAS-KM 63-2		832-007980	14,4	7,7	4	250	SN 2540-16-76	A
		832-018510	20,5	10,9	5,8	250	SN 2560-16-76	B
CAS-TC 40		832-018520	14,6	7,8	4,1	250	SN 2540-16-76	A
		832-018530	21	11,2	5,9	250	SN 2560-16-76	B
CAS- TC50		832-018360	25	13	7	400	SDF500-20x102	C
		832-018210	40	27	15	400	SDF600-20x102	A
CAS-BT 40		832-018540	14,6	7,8	4,1	250	SN 2540-16-76	A
		832-018550	21	11,2	5,9	250	SN 2560-16-76	B
CAS-BT 50		832-018370	25	13	7	400	SDF500-20x102	C
		832-018200	61	31	17	400	SDF600-20x102	A

A- Molla Forza Media/Middle Strength Spring

B- Molla Rinforzata/Stiffened Spring

C- Molla Normale/Normal Spring

GREIFER FÜR WERKZEUGMAGAZIN PINCES DE LOGEMENT POUR LE MAGASIN DES MACHINES OUTILS
 CLAMPING FINGERS PINZE PER MAGAZZINI UTENSILI



Code N.	Tool	b1	h1	h2	Type	Type spring
832-018030	HSK 63A	95	95	110	1	A
832-018470	HSK 63A	95	95	110	1	B
832-018020	HSK 100A	135	118	139	2	A
832-018480	HSK 100A	135	118	139	2	B
832-007940	CAPTO 6	95	91	110	1	A
832-018490	CAPTO 6	95	91	110	1	B
832-018050	CAPTO 8	105	85	110	1	A
832-018500	CAPTO 8	105	85	110	1	B
832-007980	KM 63	95	100	110	2	A
832-018510	KM 63	95	100	110	2	B
832-018520	TC 40	95	95	110	1	A
832-018530	TC 40	95	95	110	1	B
832-018360	TC 50	135	118	139	2	C
832-018210	TC 50	135	118	139	2	A
832-018540	BT 40	95	95	110	1	A
832-018550	BT 40	95	95	110	1	B
832-018370	BT 50	135	118	139	2	C
832-018200	BT 50	135	118	139	2	A

A - Molla Forza Media/Middle Strength Spring
 B - Molla Rinforzata/Stiffened Spring
 C - Molla Normale/Normal Spring

The logo for KAMATEK, featuring the word "KAMATEK" in a bold, sans-serif font. The letter "A" is stylized with an orange and black geometric shape. The background of the entire page is a faded, high-angle photograph of a metal grid structure, possibly a conveyor belt or a large industrial component.

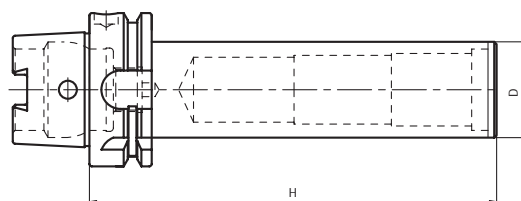
KAMATEK

**ACCESSORI HSK
HSK ACCESSORIES**



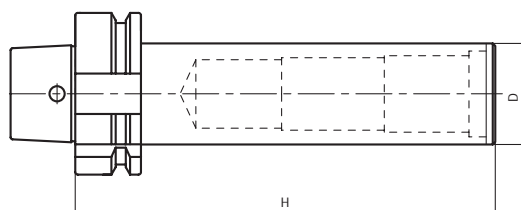
DIN 69893 A+C

HSK	Code N.	Description	D	H
32	217-71701	HSK32AH300D32BC	32	300
40	217-71702	HSK40AH300D32BC	32	300
50	217-71703	HSK50AH300D40BC	40	300
63	217-71704	HSK63AH380D40BC	40	380
100	217-71705	HSK100AH350D40BC	40	350



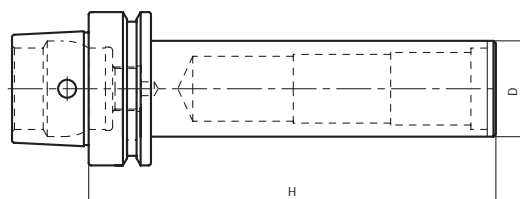
DIN 69893 B+D

HSK	Code N.	Description	D	H
40	217-71801	HSK40BH300D32BC	32	300
50	217-71802	HSK50BH300D40BC	40	300
63	217-71803	HSK63BH380D40BC	40	380
100	217-71804	HSK100BH400D40BC	40	400



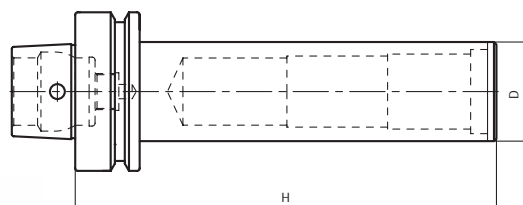
DIN 69893 E

HSK	Code N.	Description	D	H
40	217-77301	HSK40EH300D32BC	32	300
50	217-77302	HSK50EH300D40BC	40	300
63	217-77303	HSK63EH390D40BC	40	390



DIN 69893 F

HSK	Code N.	Description	D	H
50	217-77401	HSK50FH300D40BC	40	300
63	217-77402	HSK63FH380D40BC	40	380



IM HOLZKASTEN UND MIT MESSPROTOKOLL GELIEFERT
SUPPLIED IN WOODEN BOXES AND WITH TEST CERTIFICATE
FOURNIES EN BOÎTES DE BOIS ET AVEC CERTIFICAT DE CONTROLE
FORNITE IN CASSETTA DI LEGNO E CON CERTIFICATO DI COLLAUDO

HSK - PRÜFDORNE

TECHNISCHE DATEN


KEGELSCHAFTTOLERANZEN

NACH DIN 69893 ANGEFERTIGT

PRÜFDORNTOLERANZEN

Durchmesser	Rundlaufgenauigkeit	Zylindrizität
+/-0.05	0.005	0.003

KONSTRUKTIONSDATEN

- aus legiertem Einsatzstahl angefertigt
- in der Einsatzhärtetiefe von 0,4 - 0,5 mm zementiert 
- Gehärtet, angelassen, brüniert
- Härte HRC58 +/- 2, Festigkeit 800-1000 N/mm²
- Inneres, äußeres Schleifen
- 100% durch zertifizierte Meßinstrumente geprüft

HSK CONTROL PINS

TECHNICAL FEATURES

CONE'S TOLERANCE

ACCORDING TO DIN 69893

PIN'S TOLERANCE

Diameter	Runout accuracy	Cilindricity
+/-0.05	0.005	0.003

CONSTRUCTIVE FEATURES

- Manufactured with casehardening Steel
- Casehardened with depth 0,4 - 0,5 mm
- Hardened - Tempered - Black oxidized
- Hardness HRC 58+/-2, Strength 800-1000 N/mm²
- Internal and external grinding finish
- Tested 100% with certified measuring instruments

BARRES DE CONTROLE HSK

DONNEES TECHNIQUES

TOLERANCE DU CONE

FABRIQUES SELON DIN 69893

TOLERANCE DE LA BARRE

Diamètre	Coaxialité	Cylindricité
+/-0.05	0.005	0.003

ELEMENTS DE CÔNSTRUCTION

- Produites en acier cémenté certifié et allié au Ni.Cr.Mo.
- Cémentés avec profondeur 0,4 - 0,5 mm
- Trempés - Revenues - Brunies
- Dureté HRC 58 +/- 2 résistance 800-1000 N/mm²
- Finition de rectification intérieure, extérieure
- Contrôlées à 100% avec des instruments de mesure certifiés

BARRE DI CONTROLLO HSK

DATI TECNICI

TOLLERANZA DEL CONO

PRODOTTI SECONDO DIN 69893

TOLLERANZE DELLA BARRA

Diametro	Coassialità	Cilindricità
+/-0.05	0.005	0.003

DATI COSTRUTTIVI

- Costruite in acciaio da cementazione certificati e legati
- Cementate con profondità 0,4 - 0,5 mm
- Temprate-rinvenute-brunite
- Durezza HRC 58 +/- 2 resistenza 800-1000 N/mm²
- Finitura di rettifica interna, esterna
- Collaudate 100% con strumenti di misura certificati

MONTAGEBLOCK SUPPORTS D'ASSEMBLAGE
ASSEMBLY SUPPORTS SUPPORTO DI MONTAGGIO

HSK	Code N
A+C 32	237-32150
A+C 40	237-32250
A+C 50	237-32350
A+C 63	237-32450
A+C 100	237-32650
B+D 40	237-32260
B+D 50	237-32360
B+D 63	237-32460
B+D 100	237-32660
E40	237-32270
E50,F50	237-32370
E63,F63	237-32470

Alle horizontale Flansche
sind auswechselbar

*Removable horizontal
flange*

Bride horizontal
démontable

*Flangia orizzontale
smontabile*



Code	Description
237-32151	DIN 69893 HSK32
237-32251	DIN 69893 HSK40
237-32351	DIN 69893 HSK50
237-32451	DIN 69893 HSK63
237-32651	DIN 69893 HSK100

Dieses unkompliziertes System erlaubt die schnelle und sichere Montage und Demontage von Steilkegelaufnahmen in horizontaler und vertikaler Lage. Das Risiko der Werkzeugbeschädigung ist ausgeschlossen. Es eignet sich natürlich auch für modulare HSK-Aufnahmen.

It is very useful for all assembly and disassembly operations of the tools on the toolholders, either in horizontal or in vertical position. This process is carried out without any risk to damage casually the tool or the toolholder.

It is a very simple system suitable for HSK toolholders.

Il permet d'effectuer toutes les opérations de montage / assemblage / démontage des outils sur les mandrins. Ces proces se déroulent avec rationalité, sûreté, vitesse et sans aucun risque d'endommagement accidentel du mandrin ou de l'outil. C'est un système qui offre la plus haute simplicité d'usage et il est bien indiqué pour les HSK mandrin.

Consente di effettuare tutte le operazioni di montaggio e smontaggio degli utensili sui mandrini, sia in orizzontale che in verticale. Questi procedimenti avvengono con razionalità, sicurezza, rapidità e senza alcun rischio di danneggiare il mandrino o l'utensile.

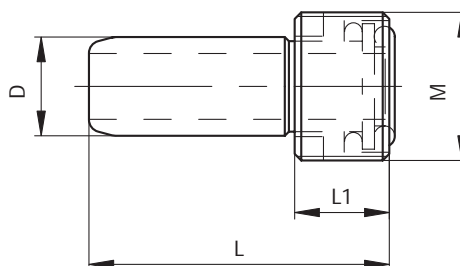
È il sistema che offre la massima semplicità d'uso per i mandrini HSK.



**Economic
Version**

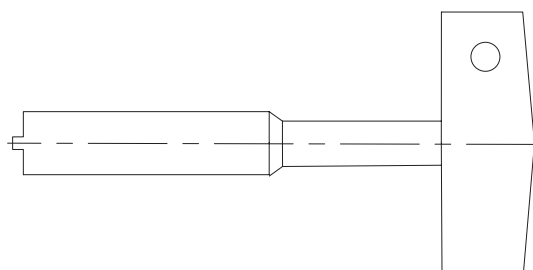
Code N.	Attack
268-30001	HSK 63A-B-C-D-E
268-30002	HSK 100A-B-C-D-E

KÜHLMITTELÜBERGABEROHR DISPOSITIF DE TRANSFERT DE LIQUIDE DE LUBRIFICATION
 COOLANT SUPPLY UNIT SET ADDUZIONE REFRIGERANTE



HSK	Code N.	M	D	L	L1
A+C32,B+D40	832-016010	M10x1	6	26	5.5
A+C40,B+D50,E40,F50	832-016020	M12x1	8	29.3	7.5
A+C50,B+D63,E50,F63	832-016030	M16x1	10	33	9.5
A+C63,E63	832-016040	M18x1	12	36.6	11.5
B+D100-80A	832-016050	M20x1.5	14	40	13.5
A+C100	832-016060	M24x1.5	16	44	15.5

SCHLÜSSEL FÜR KÜHLMITTELÜBERGABESATZ CLE POUR LE DISPOSITIF DE TRANSFERT DE LIQUIDE DE LUBRIFICATION
 KEY FOR COOLANT SUPPLY UNIT CHIAVE PER ADDUTTORE REFRIGERANTE



HSK	Code N.
32	816-204021
40	816-204022
50	816-204023
63	816-204024
100	816-204025



HSK63	Description
KITHSK63ER25	N° 1 portapinze + 10 pinze ER25 + chiave N° 1 collet chuck + 10 collets ER25 + wrench (ER25 Ø 2-3-4-5-6-8-10-12-14-16)
KITHSK63ER32	N° 1 portapinze + 10 pinze ER32 + chiave N° 1 collet chuck + 10 collets ER32 + wrench (ER32 Ø 3-4-6-8-10-12-14-16-18-20)
KITHSK63ER40	N° 1 portapinze + 10 pinze ER40 + chiave N° 1 collet chuck + 10 collets ER40 + wrench (ER40 Ø 5-6-8-10-12-16-20-22-24-26)

MILLING CHUCK KITS KIT FORTE SERRAGGIO

DIN 69893

Cassetta Corredo: 1 mandrino forte serraggio + 1 serie pinze + 1 chiave
 Kit Box: 1 milling chuck + 1 collets kit + 1 wrench



Order Code	Composition
KIT HSK63A C20	N° HSK63AH107C20 + n°5 pinze K20: Ø6,8,10,12,16 + chiave N° HSK63AH107C20 + 5 collets K20: Ø6,8,10,12,16 + wrench
KIT HSK63A C32	N° HSK63AH120C32 + n°7 pinze K32: Ø6,8,10,12,16,20,25 + chiave N° HSK63AH120C32 + 7 collets K32: Ø6,8,10,12,16,20,25 + wrench



KANTER





**SCHRUMPFUTTER
SHRINK FIT CHUCKS
MANDRINS DE FRETTAGE
MANDRINI A CALETTAMENTO**

- DIN 69893 PAG. 256-264
- DIN 69871 PAG. 265-269
- MAS 403/BT PAG. 270-275





SCHRUMPFPROGRAMM - Die Vorteile der Schrumpftechnik

- Ideale zur HSC-Bearbeitung
- Sehr schnelle Montage und Demontage des Werkzeuges in der Aufnahme
- Sehr hohe Präzision: Rundlaufgenauigkeit bis 0,003 mm.
- Höchste radial- und axiale Halterkraft, auch bei sehr hohen Geschwindigkeit
- Übertragbares Drehmoment wesentlich höher als bei allen anderen Systemen
- Vielfältige Anwendungsmöglichkeiten: Für Hartmetall und HSS Werkzeuge
- Optimale Oberflächengüte
- Hohe Lebensdauer des Werkzeuges und der Aufnahme

UNSERE SCHRUMPFPUTTER

- Aus hochlegiertem Sonderstahl, mit sehr hoher Dehnrate und Hitzebeständigkeit, spezifisch für Induktion
- Höchste Rundlaufgenauigkeit, max. Rundlauffehler 0.003 mm.
- Für HSC Bearbeitungen, feingewuchtet bis 15000 U/min in Klasse G6.3
- Für HSS und HM Werkzeuge (Schaft des Werkzeuges muß h6 sein)
- Sehr umfangreiches Programm: von MAS BT30/HSK32 bis SK50/HSK100



SHRINK TO FIT - Advantages of the Shrink-To.Fit Technology

- Particularly suitable for High Speed Machining
- Very quick assembling of the tools into the toolholders
- Extremely high precision, runout accuracy under the 0,003 mm.
- High radial and axial clamping force also by a very high speed
- The transferable torque is much higher than any other system
- Wide spread of applications: for HSS and carbide tools
- Excellent surface's quality
- Longer cutting edge's and holder's life

OUR SHRINK TO FIT CHUCKS

- High-alloy steel, very high temperature resistant, specific for Induction.
- High runout accuracy, max error 0.003 mm.
- For High Speed Machining, fine balanced up to 15000 rpm in class G6.3
- For HSS und carbide tools (with shank in h6)
- Very wide range: from MAS BT30/HSK32 to SK50/HSK100



FRETTAGE - Les avantages du système

- Idéal pour travailler à haute vitesse.
- Montage et démontage d'outil rapide
- Grande précision, couplage d'outil et porte outil inférieur à 0,003 mm.
- Avec grande vitesse on a une grande force de serrage soit axial que radial
- Couple de serrage supérieur à tous les autres systèmes
- Vaste possibilité d'usage: pour outil en carbure et en HSS
- Excellent finissage superficiel
- Supérieure dureté d'outil et du mandrin

NOS PORTE-OUTILS DE FRETTAGE

- En acier spécial pour travailler à hautes températures, spécifique pour le frettage à induction.
- Maximum concentricité, erreur de coaxialité maximum: 0.003 mm.
- Pour haute vitesse, ils sont équilibrés à 15000 T/min en classe G6.3
- Pour outils en carbure et en HSS avec tolérance de la queue h6
- Large gamme: de Mas BT 30/HSK32 à ISO50/HSK100



CALETTAMENTO A CALDO - I vantaggi del sistema

- Ideale per le lavorazioni ad alta velocità
- Rapido inserimento ed estrazione dell'utensile
- Altissima precisione, accoppiamento utensile portautensile con coassialità inferiore a 0,003 mm.
- Elevata forza di bloccaggio assiale e radiale anche ad altissime velocità
- Momento torcente di molto superiore a qualsiasi altro sistema
- Vasta possibilità d'impiego: per utensili in metallo duro e in HSS
- Ottima finitura superficiale
- Maggiore durata dell'utensile e del mandrino

I NOSTRI PORTAUTENSILI A CALDO

- In acciaio speciale per lavorazione ad elevate temperature, specifico per il calettamento ad induzione
- Massima concentricità, errore di coassialità massimo: 0.003 mm.
- Per alta velocità, equilibrati a 15000 rpm in classe G6.3
- Per utensili in metallo duro e HSS con tolleranza del gambo h6
- Vastissima gamma: da Mas BT 30/HSK32 a ISO50/HSK100

SCHRUMPFUTTER HSK 32 DIN 69893 Form A • SHRINK FIT CHUCKS HSK 32 DIN69893 TYPE A
MANDRINS DE FRETTAGE TYPE HSK 32 DIN 69893 A • MANDRINI A CALETTAMENTO HSK 32 DIN 69893 tipo A



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SCHRUMPFUTTER HSK 32 DIN 69893 Form E • SHRINK FIT CHUCKS HSK 32 DIN69893 TYPE E
MANDRINS DE FRETTAGE TYPE HSK 32 DIN 69893 E • MANDRINI A CALETTAMENTO HSK 32 DIN 69893 tipo E



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SCHRUMPFUTTER HSK 40 DIN 69893 Form A • SHRINK FIT CHUCKS HSK 40 DIN69893 TYPE A
MANDRINS DE FRETTAGE TYPE HSK 40 DIN 69893 A • MANDRINI A CALETTAMENTO HSK 40 DIN 69893 tipo A



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SCHRUMPFUTTER HSK 40 DIN 69893 Form E • SHRINK FIT CHUCKS HSK 40 DIN69893 TYPE E
MANDRINS DE FRETTAGE TYPE HSK 40 DIN 69893 E • MANDRINI A CALETTAMENTO HSK 40 DIN 69893 tipo E



PAG. 258

SCHRUMPFUTTER HSK 50 DIN 69893 Form A • SHRINK FIT CHUCKS HSK 50 DIN69893 TYPE A
MANDRINS DE FRETTAGE TYPE HSK 50 DIN 69893 A • MANDRINI A CALETTAMENTO HSK 50 DIN 69893 tipo A



PAG. 259

SCHRUMPFUTTER HSK 50 DIN 69893 Form E • SHRINK FIT CHUCKS HSK 50 DIN69893 TYPE E
MANDRINS DE FRETTAGE TYPE HSK 50 DIN 69893 E • MANDRINI A CALETTAMENTO HSK 50 DIN 69893 tipo E



PAG. 260

SCHRUMPFUTTER HSK 63 DIN 69893 Form A • SHRINK FIT CHUCKS HSK 63 DIN69893 TYPE A
MANDRINS DE FRETTAGE TYPE HSK 63 DIN 69893 A • MANDRINI A CALETTAMENTO HSK 63 DIN 69893 tipo A



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SCHRUMPFUTTER HSK 63 DIN 69893 Form A • SHRINK FIT CHUCKS HSK 63 DIN69893 TYPE A
MANDRINS DE FRETTAGE TYPE HSK 63 DIN 69893 A • MANDRINI A CALETTAMENTO HSK 63 DIN 69893 tipo A



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SCHRUMPFUTTER HSK 63 DIN 69893 Form E • SHRINK FIT CHUCKS HSK 63 DIN69893 TYPE E
MANDRINS DE FRETTAGE TYPE HSK 63 DIN 69893 E • MANDRINI A CALETTAMENTO HSK 63 DIN 69893 tipo E



PAG. 263

SCHRUMPFUTTER HSK 100 DIN 69893 Form A • SHRINK FIT CHUCKS HSK 100 DIN69893 TYPE A
MANDRINS DE FRETTAGE TYPE HSK 100 DIN 69893 A • MANDRINI A CALETTAMENTO HSK 100 DIN 69893 tipo A



PAG. 264

SCHRUMPFUTTER ISO 40 DIN 69871 AD • SHRINK FIT CHUCKS ISO 40 DIN 69871 AD
MANDRINS DE FRETTAGE TYPE ISO 40 DIN 69871 AD • MANDRINI A CALETTAMENTO ISO 40 DIN 69871 AD



PAG. 266

SCHRUMPFUTTER ISO 30 DIN 69871 AD • SHRINK FIT CHUCKS ISO 30 DIN 69871 AD
MANDRINS DE FRETTAGE TYPE ISO 30 DIN 69871 AD • MANDRINI A CALETTAMENTO ISO 30 DIN 69871 AD



PAG. 267

SCHRUMPFUTTER ISO 40 DIN 69871 AD/B • SHRINK FIT CHUCKS ISO 40 DIN 69871 AD/B
MANDRINS DE FRETTAGE TYPE ISO 40 DIN 69871 AD/B • MANDRINI A CALETTAMENTO ISO 40 DIN 69871 AD/B



PAG. 268

SCHRUMPFUTTER ISO 50 DIN 69871 AD/B • SHRINK FIT CHUCKS ISO 50 DIN 69871 AD/B
MANDRINS DE FRETTAGE TYPE ISO 50 DIN 69871 AD/B • MANDRINI A CALETTAMENTO ISO 50 DIN 69871 AD/B



PAG. 269

SCHRUMPFUTTER MAS BT-30 Form AD • SHRINK FIT CHUCKS MAS BT-30 type AD
MANDRINS DE FRETTAGE TYPE MAS BT-30 AD • MANDRINI A CALETTAMENTO MAS BT-30 tipo AD



PAG. 271

SCHRUMPFUTTER MAS BT-40 Form AD/B • SHRINK FIT CHUCKS MAS BT-40 type AD/B
MANDRINS DE FRETTAGE TYPE MAS BT-40 type AD/B • MANDRINI A CALETTAMENTO MAS BT-40 tipo AD/B



PAG. 272

SCHRUMPFUTTER MAS BT-50 Form AD/B • SHRINK FIT CHUCKS MAS BT-50 type AD/B
MANDRINS DE FRETTAGE TYPE MAS BT-50 AD/B • MANDRINI A CALETTAMENTO MAS BT-50 tipo AD/B



PAG. 273

SCHRUMPFVERLÄNGERUNGEN • SHRINKING EXTENSIONS
RALLONGES DE FRETTAGE • PROLUNGHE PER CALETTAMENTO



PAG. 274

The logo for Kawafel, featuring the word "KAWAFEL" in a stylized, bold, black font. The letter "K" is significantly larger and more prominent than the others. The letters are set against a background of a white metal grid, which is part of a shopping cart. The grid lines are slightly blurred, creating a sense of depth and perspective. The overall color palette is muted, with greys and whites, accented by the orange and black of the logo.

KAWAFEL

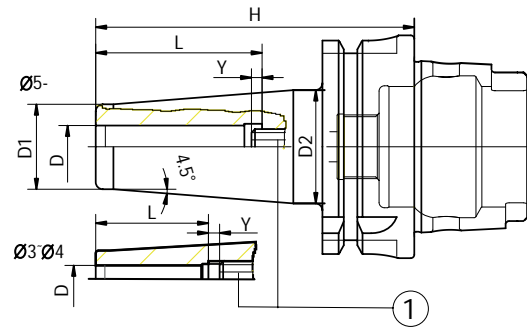
DIN 69893



SCHRUMPFUTTER HSK 32 DIN 69893 Form A
SHRINK FIT CHUCKS HSK 32 DIN69893 TYPE A

MANDRINS DE FRETTAGE TYPE HSK 32 DIN 69893 A
MANDRINI A CALETTAMENTO HSK 32 DIN 69893 tipo A

HSK 32A

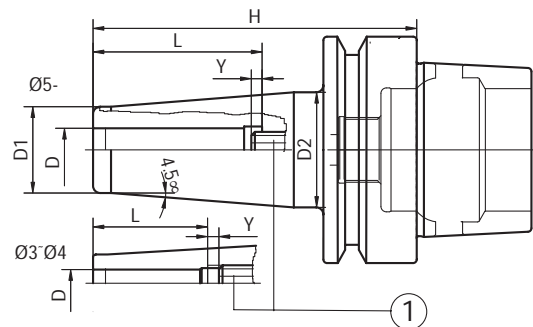


	Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000
STANDARD	251-11792	HSK32AH60K03-HTT	3	60	22	10	10	16	•
	251-11793	HSK32AH60K04-HTT	4	60	26	10	10	16	•
	251-11794	HSK32AH60K05-HTT	5	60	30	10	10	16	•
	251-11795	HSK32AH70K06-HTT	6	70	36	10	21	25	•
	251-11796	HSK32AH70K08-HTT	8	70	36	10	21	25	•
	251-11797	HSK32AH75K10-HTT	10	75	41	10	24	29	•
	251-11798	HSK32AH80K12-HTT	12	80	47	10	24	29	•

SCHRUMPFUTTER HSK 32 DIN 69893 Form E
SHRINK FIT CHUCKS HSK 32 DIN69893 TYPE E

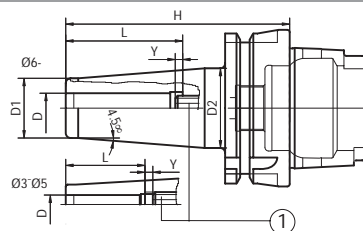
MANDRINS DE FRETTAGE TYPE HSK 32 DIN 69893 E
MANDRINI A CALETTAMENTO HSK 32 DIN 69893 tipo E

HSK 32E



	Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000
STANDARD	251-27315	HSK32EH60K03-HTT	3	60	22	10	10	16	•
	251-27316	HSK32EH60K04-HTT	4	60	26	10	10	16	•
	251-27317	HSK32EH60K05-HTT	5	60	30	10	10	16	•
	251-27307	HSK32EH70K06-HTT	6	70	36	10	21	25	•
	251-27308	HSK32EH70K08-HTT	8	70	36	10	21	25	•
	251-27309	HSK32EH75K10-HTT	10	75	41	10	24	29	•
	251-27318	HSK32EH80K12-HTT	12	80	47	10	24	29	•

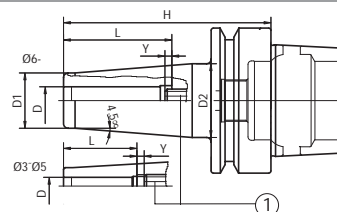
SCHRUMPFUTTER HSK 40 DIN 69893 Form A MANDRINS DE FRETTAGE TYPE HSK 40 DIN 69893 A
 SHRINK FIT CHUCKS HSK 40 DIN69893 TYPE A MANDRINI A CALETTAMENTO HSK 40 DIN 69893 tipo A



HSK 40A

Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000	
STANDARD	251-11740	HSK40AH60K03-HTT	3	60	22	10	10	16	•
	251-11741	HSK40AH60K04-HTT	4	60	26	10	10	16	•
	251-11742	HSK40AH60K05-HTT	5	60	30	10	10	16	•
	251-11743	HSK40AH80K06-HTT	6	80	36	10	21	27	•
	251-11744	HSK40AH80K08-HTT	8	80	36	10	21	27	•
	251-11745	HSK40AH80K10-HTT	10	80	41	10	24	32	•
	251-21707	HSK40AH90K12-HTT	12	90	47	10	24	32	•
	251-11747	HSK40AH90K14-HTT	14	90	47	10	27	34	•
	251-21708	HSK40AH90K16-HTT	16	90	50	10	27	34	•
H120	251-21709	HSK40AH120K03-HTT	3	120	22	10	10	20	•
	251-21710	HSK40AH120K04-HTT	4	120	26	10	15	22	•
	251-21711	HSK40AH120K05-HTT	5	120	30	10	15	22	•
	251-21712	HSK40AH120K06-HTT	6	120	36	10	21	27	•
	251-21713	HSK40AH120K08-HTT	8	120	36	10	21	27	•
	251-21714	HSK40AH120K10-HTT	10	120	42	10	24	32	•
	251-21715	HSK40AH120K12-HTT	12	120	47	10	24	32	•
	251-21778	HSK40AH120K14-HTT	14	120	50	10	27	34	•
	251-21779	HSK40AH120K16-HTT	16	120	50	10	27	34	•

SCHRUMPFUTTER HSK 40 DIN 69893 Form E MANDRINS DE FRETTAGE TYPE HSK 40 DIN 69893 E
 SHRINK FIT CHUCKS HSK 40 DIN69893 TYPE E MANDRINI A CALETTAMENTO HSK 40 DIN 69893 tipo E



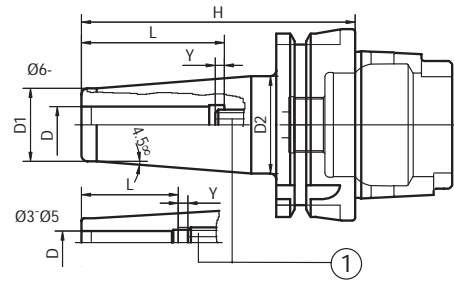
HSK 40E

Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000	
STANDARD	251-17374	HSK40EH60K03-HTT	3	60	22	10	10	16	•
	251-17375	HSK40EH60K04-HTT	4	60	26	10	10	16	•
	251-17376	HSK40EH60K05-HTT	5	60	30	10	10	16	•
	251-17333	HSK40EH80K06-HTT	6	80	36	10	21	27	•
	251-17334	HSK40EH80K08-HTT	8	80	36	10	21	27	•
	251-17335	HSK40EH80K10-HTT	10	80	41	10	24	32	•
	251-27322	HSK40EH90K12-HTT	12	90	47	10	24	32	•
	251-17378	HSK40EH90K14-HTT	14	90	47	10	27	34	•
	251-27323	HSK40EH90K16-HTT	16	90	50	10	27	34	•
H120	251-17380	HSK40EH120K03-HTT	3	120	22	10	10	20	•
	251-17381	HSK40EH120K04-HTT	4	120	26	10	15	22	•
	251-17382	HSK40EH120K05-HTT	5	120	30	10	15	22	•
	251-17383	HSK40EH120K06-HTT	6	120	36	10	21	27	•
	251-17384	HSK40EH120K08-HTT	8	120	36	10	21	27	•
	251-17385	HSK40EH120K10-HTT	10	120	42	10	24	32	•
	251-17386	HSK40EH120K12-HTT	12	120	47	10	24	32	•
	251-27348	HSK40EH120K14-HTT	14	120	50	10	27	34	•
	251-27349	HSK40EH120K16-HTT	16	120	50	10	27	34	•

SCHRUMPFUTTER HSK 50 DIN 69893 Form A
SHRINK FIT CHUCKS HSK 50 DIN69893 TYPE A

MANDRINS DE FRETTAGE TYPE HSK 50 DIN 69893 A
MANDRINI A CALETTAMENTO HSK 50 DIN 69893 tipo A

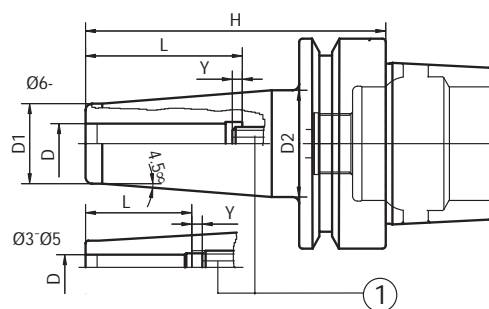
HSK 50A



	Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000
STANDARD	251-21716	HSK50AH80K03-HTT	3	80	19	10	10	18	•
	251-21717	HSK50AH80K04-HTT	4	80	22	10	10	18	•
	251-21718	HSK50AH80K05-HTT	5	80	28	10	10	20	•
	251-21719	HSK50AH80K06-HTT	6	80	36	10	21	27	•
	251-21720	HSK50AH80K08-HTT	8	80	36	10	21	27	•
	251-21721	HSK50AH85K10-HTT	10	85	42	10	24	32	•
	251-11704	HSK50AH90K12-HTT	12	90	47	10	24	32	•
	251-11705	HSK50AH90K14-HTT	14	90	47	10	27	34	•
	251-11706	HSK50AH95K16-HTT	16	95	50	10	27	34	•
	251-11715	HSK50AH95K18-HTT	18	95	50	10	33	42	•
	251-11716	HSK50AH100K20-HTT	20	100	52	10	33	42	•
H120	251-21722	HSK50AH120K03-HTT	3	120	19	10	10	22	•
	251-21723	HSK50AH120K04-HTT	4	120	22	10	10	22	•
	251-21724	HSK50AH120K05-HTT	5	120	28	10	10	24	•
	251-11717	HSK50AH120K06-HTT	6	120	36	10	21	27	•
	251-11718	HSK50AH120K08-HTT	8	120	36	10	21	27	•
	251-11719	HSK50AH120K10-HTT	10	120	42	10	24	32	•
	251-11720	HSK50AH120K12-HTT	12	120	47	10	24	32	•
	251-11721	HSK50AH120K14-HTT	14	120	47	10	27	34	•
	251-11722	HSK50AH120K16-HTT	16	120	50	10	27	34	•
	251-21780	HSK50AH120K18-HTT	18	120	50	10	33	42	•
	251-21781	HSK50AH120K20-HTT	20	120	52	10	33	42	•

SCHRUMPFUTTER HSK 50 DIN 69893 Form E MANDRINS DE FRETTAGE TYPE HSK 50 DIN 69893 E
 SHRINK FIT CHUCKS HSK 50 DIN69893 TYPE E MANDRINI A CALETTAMENTO HSK 50 DIN 69893 tipo E

HSK 50E

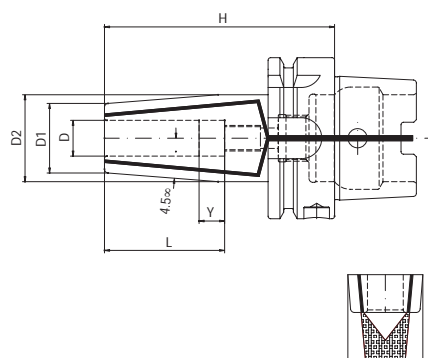


	Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000
STANDARD	251-27324	HSK50EH80K03-HTT	3	80	22	10	10	18	•
	251-27325	HSK50EH80K04-HTT	4	80	26	10	15	18	•
	251-27326	HSK50EH80K05-HTT	5	80	30	10	15	20	•
	251-27327	HSK50EH80K06-HTT	6	80	36	10	21	27	•
	251-27328	HSK50EH80K08-HTT	8	80	36	10	21	27	•
	251-27329	HSK50EH85K10-HTT	10	85	41	10	24	36	•
	251-17304	HSK50EH90K12-HTT	12	90	47	10	24	32	•
	251-17305	HSK50EH90K14-HTT	14	90	47	10	27	34	•
	251-17306	HSK50EH95K16-HTT	16	95	50	10	27	34	•
	251-17315	HSK50EH95K18-HTT	18	95	50	10	33	42	•
	251-17316	HSK50EH100K20-HTT	20	100	52	10	33	42	•
H120	251-27330	HSK50EH120K03-HTT	3	120	22	10	10	20	•
	251-27331	HSK50EH120K04-HTT	4	120	26	10	15	22	•
	251-27332	HSK50EH120K05-HTT	5	120	30	10	15	22	•
	251-17317	HSK50EH120K06-HTT	6	120	36	10	21	27	•
	251-17318	HSK50EH120K08-HTT	8	120	36	10	21	27	•
	251-17319	HSK50EH120K10-HTT	10	120	41	10	24	32	•
	251-17320	HSK50EH120K12-HTT	12	120	47	10	24	32	•
	251-17321	HSK50EH120K14-HTT	14	120	47	10	27	34	•
	251-17322	HSK50EH120K16-HTT	16	120	50	10	27	34	•
	251-27350	HSK50EH120K18-HTT	18	120	50	10	33	42	•
	251-27351	HSK50EH120K20-HTT	20	120	52	10	33	42	•

SCHRUMPFUTTER HSK 63 DIN 69893 Form A
SHRINK FIT CHUCKS HSK 63 DIN69893 TYPE A

MANDRINS DE FRETTAGE TYPE HSK 63 DIN 69893 A
MANDRINI A CALETTAMENTO HSK 63 DIN 69893 tipo A

HSK 63A

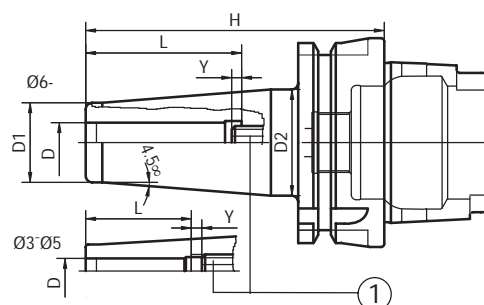


Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000	
STANDARD	251-21765	HSK63AH80K03-HTT	3	80	22	10	10	15	•
	251-21766	HSK63AH80K04-HTT	4	80	26	10	15	22	•
	251-21767	HSK63AH80K05-HTT	5	80	10	10	15	22	•
	251-21768	HSK63AH80K06-HTT	6	80	36	10	21	27	•
	251-21769	HSK63AH80K08-HTT	8	80	36	10	21	27	•
	251-21770	HSK63AH85K10-HTT	10	85	41	10	24	32	•
	251-21771	HSK63AH90K12-HTT	12	90	47	10	24	32	•
	251-21772	HSK63AH90K14-HTT	14	90	47	10	27	34	•
	251-21773	HSK63AH95K16-HTT	16	95	50	10	27	34	•
	251-21774	HSK63AH95K18-HTT	18	95	50	10	33	42	•
	251-21775	HSK63AH100K20-HTT	20	100	52	10	33	42	•
	251-21776	HSK63AH115K25-HTT	25	115	58	10	44	53	•
	251-21777	HSK63AH120K32-HTT	32	120	62	10	44	53	•

With cooling through collar
Con passaggio refrigerante interno

SCHRUMPFUTTER HSK 63 DIN 69893 Form A MANDRINS DE FRETTAGE TYPE HSK 63 DIN 69893 A
 SHRINK FIT CHUCKS HSK 63 DIN 69893 TYPE A MANDRINI A CALETTAMENTO HSK 63 DIN 69893 tipo A

HSK 63A

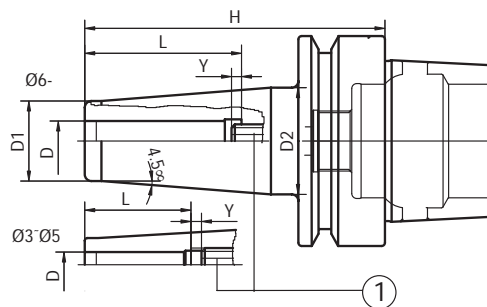


	Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000
STANDARD	251-21725	HSK63AH80K03-HTT	3	80	14	10	10	18	•
	251-21726	HSK63AH80K04-HTT	4	80	18	10	10	18	•
	251-21727	HSK63AH80K05-HTT	5	80	22	10	10	18	•
	251-21728	HSK63AH80K06-HTT	6	80	36	10	21	27	•
	251-21729	HSK63AH80K08-HTT	8	80	36	10	21	27	•
	251-21730	HSK63AH85K10-HTT	10	85	42	10	24	32	•
	251-11710	HSK63AH90K12-HTT	12	90	47	10	24	32	•
	251-11711	HSK63AH90K14-HTT	14	90	47	10	27	34	•
	251-11712	HSK63AH95K16-HTT	16	95	50	10	27	34	•
	251-11713	HSK63AH95K18-HTT	18	95	50	10	33	42	•
	251-11714	HSK63AH100K20-HTT	20	100	52	10	33	42	•
	251-21731	HSK63AH115K25-HTT	25	115	58	10	44	53	•
	251-21782	HSK63AH120K32-HTT	32	120	62	10	44	53	•
	H120	251-21732	HSK63AH120K03-HTT	3	120	22	10	10	20
251-21733		HSK63AH120K04-HTT	4	120	26	10	15	22	•
251-21734		HSK63AH120K05-HTT	5	120	30	10	15	22	•
251-11725		HSK63AH120K06-HTT	6	120	36	10	21	27	•
251-11726		HSK63AH120K08-HTT	8	120	36	10	21	27	•
251-11727		HSK63AH120K10-HTT	10	120	41	10	24	32	•
251-11728		HSK63AH120K12-HTT	12	120	47	10	24	32	•
251-11729		HSK63AH120K14-HTT	14	120	47	10	27	34	•
251-11730		HSK63AH120K16-HTT	16	120	50	10	27	34	•
251-21783		HSK63AH120K18-HTT	18	120	50	10	33	42	•
251-21784		HSK63AH120K20-HTT	20	120	52	10	33	42	•
251-21785	HSK63AH120K25-HTT	25	120	58	10	44	53	•	
H160	251-21786	HSK63AH160K03-HTT	3	160	22	10	10	20	•
	251-21787	HSK63AH160K04-HTT	4	160	26	10	15	22	•
	251-21788	HSK63AH160K05-HTT	5	160	30	10	15	22	•
	251-21789	HSK63AH160K06-HTT	6	160	36	10	21	27	•
	251-21790	HSK63AH160K08-HTT	8	160	36	10	21	27	•
	251-21791	HSK63AH160K10-HTT	10	160	41	10	24	32	•
	251-21792	HSK63AH160K12-HTT	12	160	47	10	24	32	•
	251-21793	HSK63AH160K14-HTT	14	160	47	10	27	34	•
	251-21794	HSK63AH160K16-HTT	16	160	50	10	27	34	•
	251-21795	HSK63AH160K18-HTT	18	160	50	10	33	42	•
	251-21796	HSK63AH160K20-HTT	20	160	52	10	33	42	•
	251-21797	HSK63AH160K25-HTT	25	160	62	10	44	53	•
	251-21798	HSK63AH160K32-HTT	32	160	62	10	44	53	•

SCHRUMPFUTTER HSK 63 DIN 69893 Form E
SHRINK FIT CHUCKS HSK 63 DIN69893 TYPE E

MANDRINS DE FRETTAGE TYPE HSK 63 DIN 69893 E
MANDRINI A CALETTAMENTO HSK 63 DIN 69893 tipo E

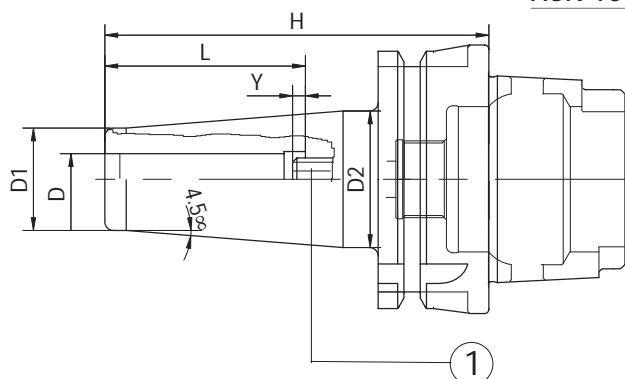
HSK 63E



	Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000
STANDARD	251-27333	HSK63EH80K03-HTT	3	80	22	10	10	15	•
	251-27334	HSK63EH80K04-HTT	4	80	26	10	15	22	•
	251-27335	HSK63EH80K05-HTT	5	80	30	10	15	22	•
	251-27336	HSK63EH80K06-HTT	6	80	36	10	21	27	•
	251-27337	HSK63EH80K08-HTT	8	80	36	10	21	27	•
	251-27338	HSK63EH85K10-HTT	10	85	41	10	24	32	•
	251-17310	HSK63EH90K12-HTT	12	90	47	10	24	32	•
	251-17311	HSK63EH90K14-HTT	14	90	47	10	27	34	•
	251-17312	HSK63EH95K16-HTT	16	95	50	10	27	34	•
	251-17313	HSK63EH95K18-HTT	18	95	50	10	33	42	•
	251-17314	HSK63EH100K20-HTT	20	100	52	10	33	42	•
	251-27339	HSK63EH115K25-HTT	25	115	58	10	44	53	•
	251-27356	HSK63EH115K32-HTT	32	120	62	10	44	53	•
H120	251-27340	HSK63EH120K03-HTT	3	120	19	10	10	20	•
	251-27341	HSK63EH120K04-HTT	4	120	26	10	15	22	•
	251-27342	HSK63EH120K05-HTT	5	120	30	10	15	22	•
	251-17325	HSK63EH120K06-HTT	6	120	36	10	21	27	•
	251-17326	HSK63EH120K08-HTT	8	120	36	10	21	27	•
	251-17327	HSK63EH120K10-HTT	10	120	41	10	24	32	•
	251-17328	HSK63EH120K12-HTT	12	120	47	10	24	32	•
	251-17329	HSK63EH120K14-HTT	14	120	47	10	27	34	•
	251-17330	HSK63EH120K16-HTT	16	120	50	10	27	34	•
	251-27352	HSK63EH120K18-HTT	18	120	50	10	33	42	•
	251-27353	HSK63EH120K20-HTT	20	120	52	10	33	42	•
	251-27354	HSK63EH120K25-HTT	25	120	58	10	44	53	•
	251-27355	HSK63EH120K32-HTT	32	120	62	10	44	53	•

SCHRUMPFUTTER HSK 100 DIN 69893 Form A MANDRINS DE FRETTAGE TYPE HSK 100 DIN 69893 A
 SHRINK FIT CHUCKS HSK 100 DIN 69893 TYPE A MANDRINI A CALETTAMENTO HSK 100 DIN 69893 tipo A

HSK 100A



Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000
STANDARD	251-21735	6	85	36	10	21	27	•
	251-21736	8	85	36	10	21	27	•
	251-21737	10	90	41	10	24	32	•
	251-21738	12	95	47	10	24	32	•
	251-21739	14	95	47	10	27	34	•
	251-21740	16	100	50	10	27	34	•
	251-21741	18	100	50	10	33	42	•
	251-21742	20	105	52	10	33	42	•
	251-21743	25	115	58	10	44	53	•
	251-21799	32	120	62	10	44	53	•
EXTENDED	251-21744	6	120	36	10	21	27	•
	251-21745	8	120	36	10	21	27	•
	251-21746	10	120	41	10	24	32	•
	251-21747	12	120	47	10	24	32	•
	251-21748	14	120	47	10	27	34	•
	251-21749	16	120	50	10	27	34	•
	251-21750	18	120	50	10	33	42	•
	251-21751	20	120	52	10	33	42	•
	251-31701	25	160	58	10	44	53	•
	251-31702	32	160	62	10	44	53	•

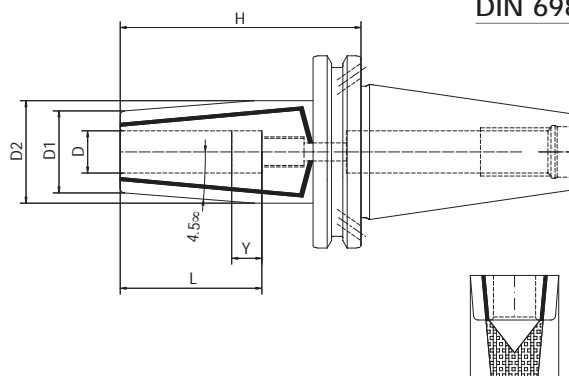
KAMATEK

DIN 6987 I



SCHRUMPFUTTER ISO 40 DIN 69871 AD MANDRINS DE FRETTAGE TYPE ISO 40 DIN 69871 AD
 SHRINK FIT CHUCKS ISO 40 DIN 69871 AD MANDRINI A CALETTAMENTO ISO 40 DIN 69871 AD

DIN 69871 AD

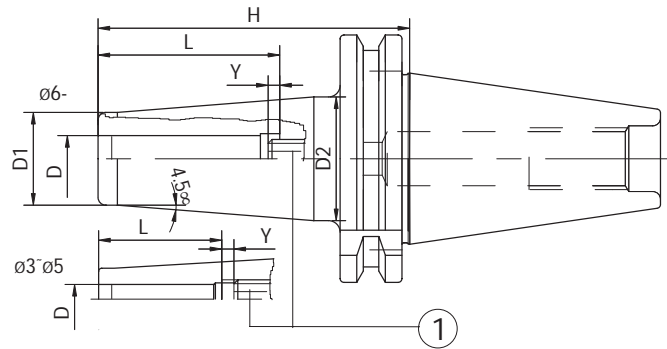


Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000
251-21218	TC40H80K03-HTT	3	80	22	10	10	20	•
251-21219	TC40H80K04-HTT	4	80	26	10	15	25	•
251-21220	TC40H80K05-HTT	5	80	30	10	15	25	•
251-21221	TC40H80K06-HTT	6	80	36	10	21	27	•
251-21222	TC40H80K08-HTT	8	80	36	10	21	27	•
251-21223	TC40H80K10-HTT	10	80	41	10	24	32	•
251-21224	TC40H80K12-HTT	12	80	47	10	24	32	•
251-21225	TC40H80K14-HTT	14	80	47	10	27	34	•
251-21226	TC40H80K16-HTT	16	80	50	10	27	34	•
215-21227	TC40H80K18-HTT	18	80	50	10	33	42	•
251-21228	TC40H80K20-HTT	20	80	52	10	33	42	•
251-21229	TC40H100K25-HTT	25	100	58	10	44	53	•
251-21230	TC40H100K32-HTT	32	100	62	10	44	53	•

With cooling through collar
Con passaggio refrigerante interno

SCHRUMPFUTTER ISO 30 DIN 69871 AD MANDRINS DE FRETTAGE TYPE ISO 30 DIN 69871 AD
 SHRINK FIT CHUCKS ISO 30 DIN 69871 AD MANDRINI A CALETTAMENTO ISO 30 DIN 69871 AD

DIN 69871 AD



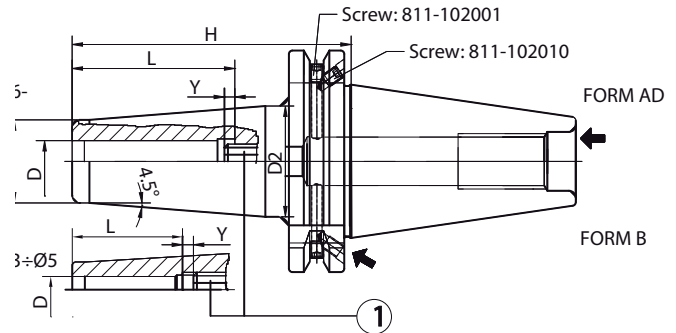
Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000
251-11279	TC30H80K03-HTT	3	80	14	10	10	19	•
251-11280	TC30H80K04-HTT	4	80	18	10	10	19	•
251-11281	TC30H80K05-HTT	5	80	22	10	10	19	•
251-11282	TC30H80K06-HTT	6	80	36	10	21	27	•
251-11283	TC30H80K08-HTT	8	80	36	10	21	27	•
251-11284	TC30H80K10-HTT	10	80	42	10	24	32	•
251-11285	TC30H80K12-HTT	12	80	47	10	24	32	•
251-11286	TC30H80K14-HTT	14	80	47	10	27	34	•
251-11287	TC30H80K16-HTT	16	80	50	10	27	34	•
251-21231	TC30H80K18-HTT	18	80	50	10	33	42	•
251-21232	TC30H80K20-HTT	20	80	52	10	33	42	•

STANDARD

SCHRUMPFUTTER ISO 40 DIN 69871 AD/B
SHRINK FIT CHUCKS ISO 40 DIN 69871 AD/B

MANDRINS DE FRETTAGE TYPE ISO 40 DIN 69871 AD/B
MANDRINI A CALETTAMENTO ISO 40 DIN 69871 AD/B

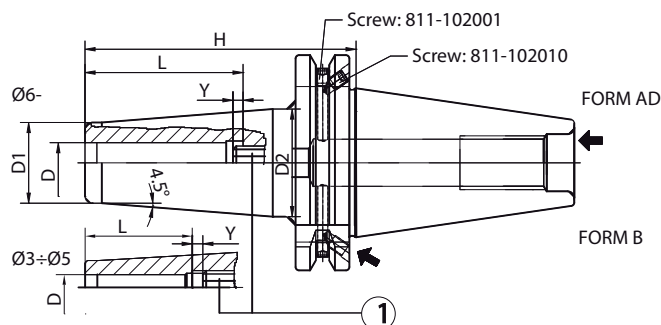
DIN 69871 AD/B



	Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000
STANDARD	251-11232	TC40H80K03-HTT	3	80	22	10	10	17	•
	251-11225	TC40H80K04-HTT	4	80	26	10	15	22	•
	251-11233	TC40H80K05-HTT	5	80	30	10	15	22	•
	251-11201	TC40H80K06-HTT	6	80	36	10	21	27	•
	251-11202	TC40H80K08-HTT	8	80	36	10	21	27	•
	251-11203	TC40H80K10-HTT	10	80	41	10	24	32	•
	251-11204	TC40H80K12-HTT	12	80	47	10	24	32	•
	251-11206	TC40H80K14-HTT	14	80	47	10	27	34	•
	251-11205	TC40H80K16-HTT	16	80	50	10	27	34	•
	251-11207	TC40H80K18-HTT	18	80	50	10	33	42	•
	251-11208	TC40H80K20-HTT	20	80	52	10	33	42	•
	251-11218	TC40H100K25-HTT	25	100	58	10	44	53	•
251-21233	TC40H100K32-HTT	32	100	62	10	44	53	•	
H 120	251-11295	TC40H120K03-HTT	3	120	22	10	10	20	•
	251-11296	TC40H120K04-HTT	4	120	26	10	15	22	•
	251-11297	TC40H120K05-HTT	5	120	30	10	15	22	•
	251-11209	TC40H120K06-HTT	6	120	36	10	21	27	•
	251-11210	TC40H120K08-HTT	8	120	36	10	21	27	•
	251-11211	TC40H120K10-HTT	10	120	41	10	24	32	•
	251-11212	TC40H120K12-HTT	12	120	47	10	24	32	•
	251-21201	TC40H120K14-HTT	14	120	47	10	27	34	•
	251-11298	TC40H120K16-HTT	16	120	50	10	27	34	•
	251-21234	TC40H120K18-HTT	18	120	50	10	33	42	•
	251-21235	TC40H120K20-HTT	20	120	52	10	33	42	•
	251-21236	TC40H120K25-HTT	25	120	58	10	44	53	•
251-21237	TC40H120K32-HTT	32	120	62	10	44	53	•	
H 160	251-21238	TC40H160K03-HTT	3	160	22	10	10	20	•
	251-21239	TC40H160K04-HTT	4	160	26	10	15	22	•
	251-21240	TC40H160K05-HTT	5	160	30	10	15	22	•
	251-21241	TC40H160K06-HTT	6	160	36	10	21	27	•
	251-21242	TC40H160K08-HTT	8	160	36	10	21	27	•
	251-21243	TC40H160K10-HTT	10	160	41	10	24	32	•
	251-21244	TC40H160K12-HTT	12	160	47	10	24	32	•
	251-21245	TC40H160K14-HTT	14	160	47	10	27	34	•
	251-21246	TC40H160K16-HTT	16	160	50	10	27	34	•
	251-21247	TC40H160K18-HTT	18	160	50	10	33	42	•
	251-21248	TC40H160K20-HTT	20	160	52	10	33	42	•
	251-21249	TC40H160K25-HTT	25	160	62	10	44	53	•
251-21250	TC40H160K32-HTT	32	160	62	10	44	53	•	

SCHRUMPFUTTER ISO 50 DIN 69871 AD/B MANDRINS DE FRETTAGE TYPE ISO 50 DIN 69871 AD/B
 SHRINK FIT CHUCKS ISO 50 DIN 69871 AD/B MANDRINI A CALETTAMENTO ISO 50 DIN 69871 AD/B

DIN 69871 AD/B



	Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000
STANDARD	251-21251	TC50H80K03-HTT	3	80	-	-	10	20	•
	251-21252	TC50H80K04-HTT	4	80	-	-	15	25	•
	251-21253	TC50H80K05-HTT	5	80	-	-	15	25	•
	251-11234	TC50H80K06-HTT	6	80	36	10	21	27	•
	251-11235	TC50H80K08-HTT	8	80	36	10	21	27	•
	251-11236	TC50H80K10-HTT	10	80	41	10	24	32	•
	251-11237	TC50H80K12-HTT	12	80	47	10	24	32	•
	251-11238	TC50H80K14-HTT	14	80	47	10	27	34	•
	251-11224	TC50H80K16-HTT	16	80	50	10	27	34	•
	251-11239	TC50H80K18-HTT	18	80	50	10	33	42	•
	251-11240	TC50H80K20-HTT	20	80	52	10	33	42	•
	251-11241	TC50H100K25-HTT	25	100	58	10	44	53	•
251-21254	TC50H100K32-HTT	32	100	62	10	44	53	•	
H120	251-21255	TC50H120K03-HTT	3	120	-	10	10	20	•
	251-21256	TC50H120K04-HTT	4	120	-	10	15	22	•
	251-21257	TC50H120K05-HTT	5	120	-	10	15	22	•
	251-11242	TC50H120K06-HTT	6	120	36	10	21	27	•
	251-11243	TC50H120K08-HTT	8	120	36	10	21	27	•
	251-11244	TC50H120K10-HTT	10	120	41	10	24	32	•
	251-11245	TC50H120K12-HTT	12	120	47	10	24	32	•
	251-11246	TC50H120K14-HTT	14	120	47	10	27	34	•
	251-11247	TC50H120K16-HTT	16	120	50	10	27	34	•
	251-11248	TC50H120K18-HTT	18	120	50	10	33	42	•
	251-11249	TC50H120K20-HTT	20	120	52	10	33	42	•
	251-21258	TC50H120K25-HTT	25	120	58	10	44	53	•
251-21259	TC50H120K32-HTT	32	120	62	10	44	53	•	
H160	251-21260	TC50H160K03-HTT	3	160	-	10	10	20	•
	251-21261	TC50H160K04-HTT	4	160	-	10	15	22	•
	251-21262	TC50H160K05-HTT	5	160	-	10	15	22	•
	251-21263	TC50H160K06-HTT	6	160	36	10	21	27	•
	251-21264	TC50H160K08-HTT	8	160	36	10	21	27	•
	251-21265	TC50H160K10-HTT	10	160	41	10	24	32	•
	251-21266	TC50H160K12-HTT	12	160	47	10	24	32	•
	251-21267	TC50H160K14-HTT	14	160	47	10	27	34	•
	251-21268	TC50H160K16-HTT	16	160	50	10	27	34	•
	251-21269	TC50H160K18-HTT	18	160	50	10	33	42	•
	251-21270	TC50H160K20-HTT	20	160	52	10	33	42	•
	251-21271	TC50H160K25-HTT	25	160	58	10	44	53	•
251-21272	TC50H160K32-HTT	32	160	62	10	44	53	•	



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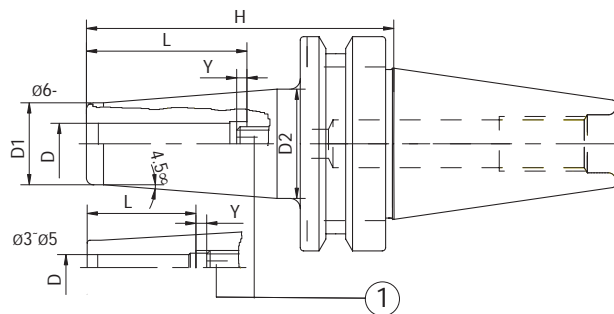
MAS 403/BT



SCHRUMPFUTTER MAS BT-30 Form AD
SHRINK FIT CHUCKS MAS BT-30 Form AD

MANDRINS DE FRETTAGE TYPE MAS BT-30 Form AD
MANDRINI A CALETTAMENTO MAS BT-30 Form AD

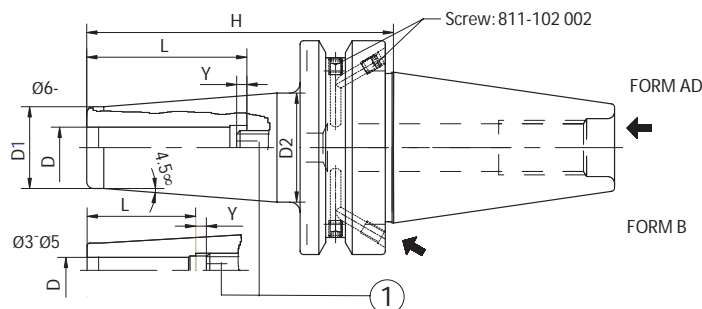
MAS BT-AD



Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000
251-11564	BT30H85K03-HTT	3	85	22	10	10	20	•
251-11565	BT30H85K04-HTT	4	85	26	10	15	25	•
251-11566	BT30H85K05-HTT	5	85	30	10	15	25	•
251-11567	BT30H85K06-HTT	6	85	36	10	21	27	•
251-11568	BT30H85K08-HTT	8	85	36	10	21	27	•
251-11569	BT30H85K10-HTT	10	85	41	10	24	32	•
251-11570	BT30H85K12-HTT	12	85	47	10	24	32	•
251-11571	BT30H85K14-HTT	14	85	47	10	27	34	•
251-11572	BT30H85K16-HTT	16	85	50	10	27	34	•

SCHRUMPFUTTER MAS BT40 FORM AD/B MANDRINS DE FRETTAGE MAS BT40 TYPE AD/B
 SHRINK FIT CHUCKS MAS BT40 AD/B MANDRINI A CALETTAMENTO MAS BT40 TIPO AD/B

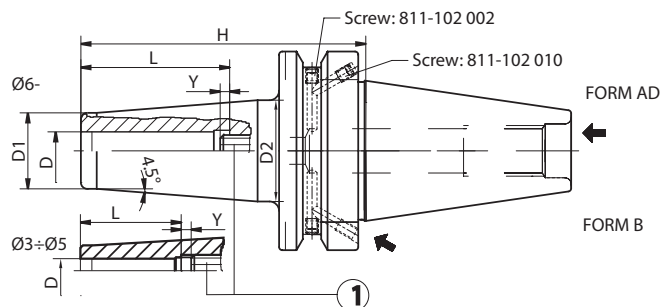
MAS BT AD/B



	Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000
STANDARD	251-11580	BT40H90K03-HTT	3	90	22	10	10	17	•
	251-11581	BT40H90K04-HTT	4	90	26	10	15	22	•
	251-11582	BT40H90K05-HTT	5	90	30	10	15	22	•
	251-11501	BT40H90K06-HTT	6	90	36	10	21	27	•
	251-11502	BT40H90K08-HTT	8	90	36	10	21	27	•
	251-11503	BT40H90K10-HTT	10	90	41	10	24	32	•
	251-11504	BT40H90K12-HTT	12	90	47	10	24	32	•
	251-11505	BT40H90K14-HTT	14	90	47	10	27	34	•
	251-11506	BT40H90K16-HTT	16	90	50	10	27	34	•
	251-11507	BT40H90K18-HTT	18	90	50	10	33	42	•
	251-11508	BT40H90K20-HTT	20	90	52	10	33	42	•
	251-11547	BT40H100K25-HTT	25	100	58	10	44	53	•
	251-21504	BT40H100K32-HTT	32	100	62	10	44	53	•
H120	251-11583	BT40H120K03-HTT	3	120	22	10	10	20	•
	251-11584	BT40H120K04-HTT	4	120	26	10	15	22	•
	251-11585	BT40H120K05-HTT	5	120	30	10	15	22	•
	251-11509	BT40H120K06-HTT	6	120	36	10	21	27	•
	251-11510	BT40H120K08-HTT	8	120	36	10	21	27	•
	251-11511	BT40H120K10-HTT	10	120	41	10	24	32	•
	251-11512	BT40H120K12-HTT	12	120	47	10	24	32	•
	251-11587	BT40H120K14-HTT	14	120	47	10	27	34	•
	251-11586	BT40H120K16-HTT	16	120	50	10	27	34	•
	251-21505	BT40H120K18-HTT	18	120	50	10	33	42	•
	251-21506	BT40H120K20-HTT	20	120	52	10	33	42	•
	251-21507	BT40H120K25-HTT	25	120	58	10	44	53	•
	251-21508	BT40H120K32-HTT	32	120	62	10	44	53	•
H160	251-21509	BT40H160K03-HTT	3	160	22	10	10	20	•
	251-21510	BT40H160K04-HTT	4	160	26	10	15	22	•
	251-21511	BT40H160K05-HTT	5	160	30	10	15	22	•
	251-21512	BT40H160K06-HTT	6	160	36	10	21	27	•
	251-21513	BT40H160K08-HTT	8	160	36	10	21	27	•
	251-21514	BT40H160K10-HTT	10	160	41	10	24	32	•
	251-21515	BT40H160K12-HTT	12	160	47	10	24	32	•
	251-21516	BT40H160K14-HTT	14	160	47	10	27	34	•
	251-21517	BT40H160K16-HTT	16	160	50	10	27	34	•
	251-21518	BT40H160K18-HTT	18	160	50	10	33	42	•
	251-21519	BT40H160K20-HTT	20	160	52	10	33	42	•
	251-21520	BT40H160K25-HTT	25	160	58	10	44	53	•
	251-21521	BT40H160K32-HTT	32	160	62	10	44	53	•

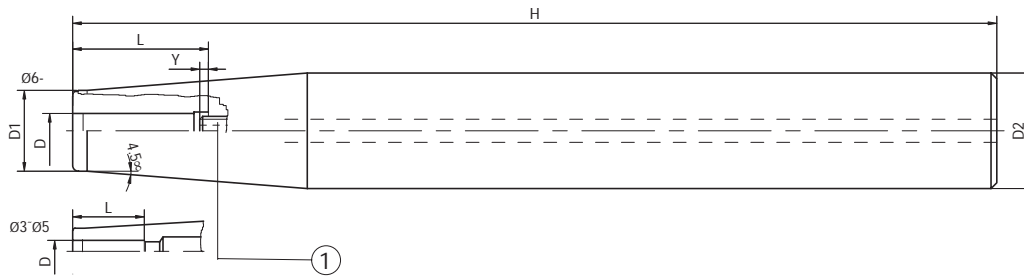
SCHRUMPFUTTER MAS BT50 FORM AD/B MANDRINS DE FRETTAGE MAS BT50 TYPE AD/B
SHRINK FIT CHUCKS MAS BT50 AD/B MANDRINI A CALETTAMENTO MAS BT50 TIPO AD/B

MAS BT AD/B



	Code N.	Description	D	H	L	Ymax	D1	D2	G6,3 15000
STANDARD	251-21522	BT50H100K03-HTT	3	100	-	-	10	20	•
	251-21523	BT50H100K04-HTT	4	100	-	-	15	25	•
	251-21524	BT50H100K05-HTT	5	100	-	-	15	25	•
	251-11548	BT50H100K06-HTT	6	100	36	10	21	27	•
	251-11549	BT50H100K08-HTT	8	100	36	10	21	27	•
	251-11550	BT50H100K10-HTT	10	100	41	10	24	32	•
	251-11517	BT50H100K12-HTT	12	100	47	10	24	32	•
	251-11551	BT50H100K14-HTT	14	100	47	10	27	34	•
	251-11552	BT50H100K16-HTT	16	100	50	10	27	42	•
	251-11553	BT50H100K18-HTT	18	100	50	10	33	42	•
	251-11554	BT50H110K20-HTT	20	100	52	10	33	42	•
	251-11555	BT50H110K25-HTT	25	110	58	10	44	53	•
251-21525	BT50H110K32-HTT	32	110	62	10	44	53	•	
H120	251-21526	BT50H120K03-HTT	3	120	-	-	10	20	•
	251-21527	BT50H120K04-HTT	4	120	-	-	15	25	•
	251-21528	BT50H120K05-HTT	5	120	-	-	15	25	•
	251-11556	BT50H120K06-HTT	6	120	36	10	21	27	•
	251-11557	BT50H120K08-HTT	8	120	36	10	21	27	•
	251-11558	BT50H120K10-HTT	10	120	41	10	24	32	•
	251-11559	BT50H120K12-HTT	12	120	47	10	24	32	•
	251-11560	BT50H120K14-HTT	14	120	47	10	27	34	•
	251-11561	BT50H120K16-HTT	16	120	50	10	27	34	•
	251-11562	BT50H120K18-HTT	18	120	50	10	33	42	•
	251-11563	BT50H120K20-HTT	20	120	52	10	33	42	•
	251-21529	BT50H120K25-HTT	25	120	58	10	44	53	•
251-21530	BT50H120K32-HTT	32	120	62	10	33	53	•	
H160	251-21531	BT50H160K03-HTT	3	160	-	-	10	20	•
	251-21532	BT50H160K04-HTT	4	160	-	-	15	25	•
	251-21533	BT50H160K05-HTT	5	160	-	-	15	25	•
	251-21534	BT50H160K06-HTT	6	160	36	10	21	27	•
	251-21535	BT50H160K08-HTT	8	160	36	10	21	27	•
	251-21536	BT50H160K10-HTT	10	160	41	10	24	32	•
	251-21537	BT50H160K12-HTT	12	160	47	10	24	32	•
	251-21538	BT50H160K14-HTT	14	160	47	10	27	34	•
	251-21539	BT50H160K16-HTT	16	160	50	10	27	34	•
	251-21540	BT50H160K18-HTT	18	160	50	10	33	42	•
	251-21541	BT50H160K20-HTT	20	160	52	10	33	42	•
	251-21542	BT50H160K25-HTT	25	160	58	10	44	53	•
251-21543	BT50H160K32-HTT	32	160	62	10	33	53	•	

SCHRUMPFVERLÄNGERUNGEN RALLONGES DE FRETTAGE
SHRINKING EXTENSIONS PROLUNGHE PER CALETTAMENTO

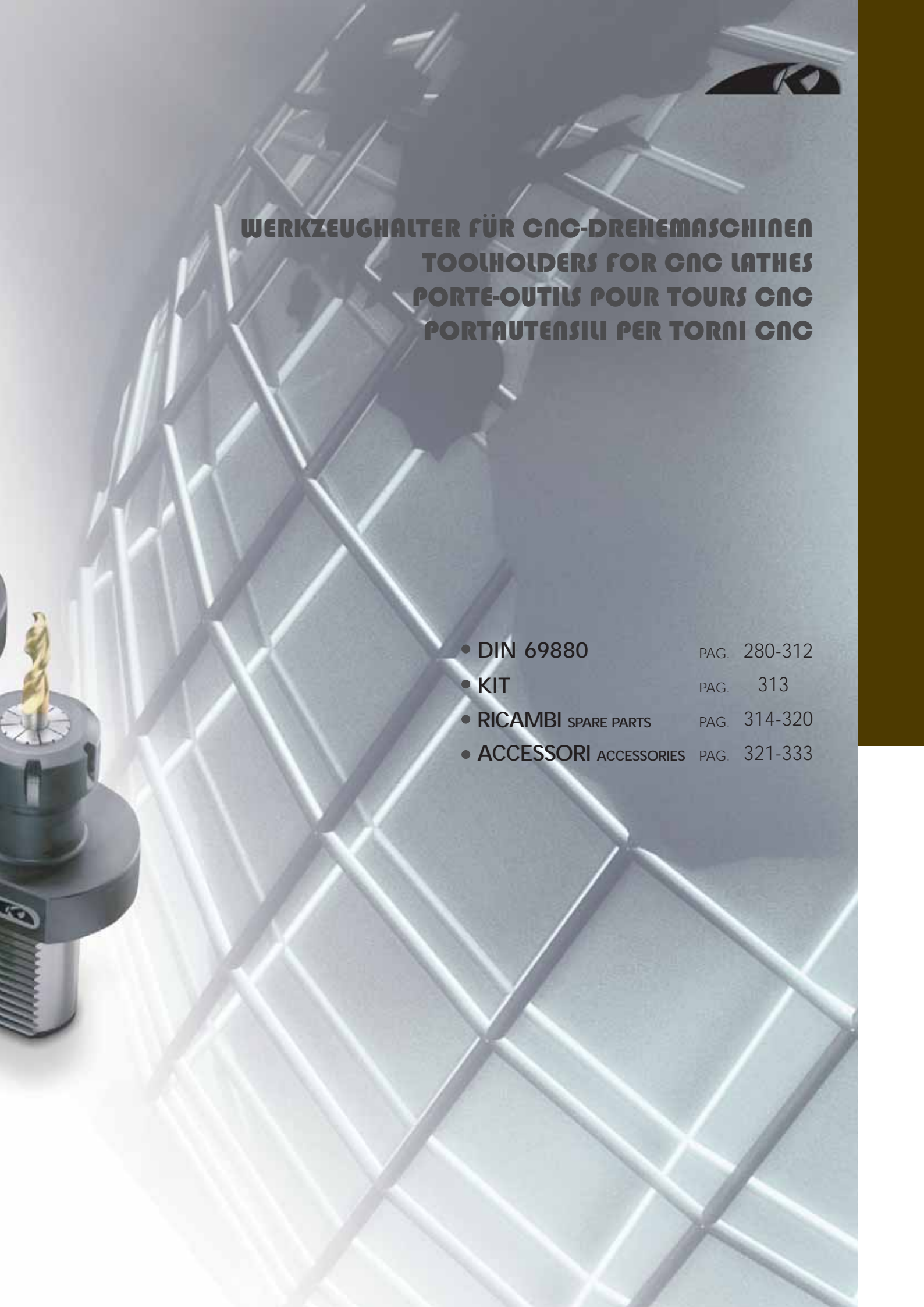


Code N.	Description	D	H	L	Ymax	D1	D2
251-15110	D12H150K03-HTT	3	150	-	-	8	12
251-15111	D12H150K04-HTT	4	150	-	-	8	12
251-15133	D12H150K05-HTT	5	150	-	-	10	12
251-15134	D12H150K06-HTT	6	150	36	10	10	12
251-15112	D16H150K03-HTT	3	150	-	-	10	16
251-15113	D16H150K04-HTT	4	150	-	-	10	16
251-15114	D16H150K05-HTT	5	150	-	-	10	16
251-15115	D16H150K06-HTT	6	150	36	10	10	16
251-15139	D16H150K08-HTT	8	150	36	10	12	16
251-15140	D20H150K03-HTT	3	150	-	-	10	20
251-15141	D20H150K04-HTT	4	150	-	-	10	20
251-15116	D20H150K05-HTT	5	150	-	-	10	20
251-15117	D20H150K06-HTT	6	150	36	10	10	20
251-15118	D20H150K08-HTT	8	150	36	10	12	20
251-15145	D20H150K10-HTT	10	150	42	10	14	20
251-15146	D20H150K12-HTT	12	150	47	10	16	20
251-15147	D25H150K03-HTT	3	150	-	-	10	25
251-15148	D25H150K04-HTT	4	150	-	-	10	25
251-15149	D25H150K05-HTT	5	150	-	-	15	25
251-15150	D25H150K06-HTT	6	150	36	10	20	25
251-15119	D25H150K08-HTT	8	150	36	10	20	25
251-15120	D25H150K10-HTT	10	150	42	10	20	25
251-15121	D25H150K12-HTT	12	150	47	10	20	25
251-15122	D25H150K14-HTT	14	150	47	10	20	25
251-15123	D25H150K16-HTT	16	150	50	10	22	25
251-15156	D32H150K06-HTT	6	150	36	10	20	32
251-15157	D32H150K08-HTT	8	150	36	10	20	32
251-15124	D32H150K10-HTT	10	150	42	10	24	32
251-15125	D32H150K12-HTT	12	150	47	10	24	32
251-15126	D32H150K14-HTT	14	150	47	10	27	32
251-15127	D32H150K16-HTT	16	150	50	10	27	32
251-15162	D32H150K18-HTT	18	150	50	10	27	32
251-15128	D32H150K20-HTT	20	150	52	10	27	32



KANTER





WERKZEUGHALTER FÜR CNC-DREHEMASCHINEN
TOOLHOLDERS FOR CNC LATHES
PORTE-OUTILS POUR TOURS CNC
PORTAUTENSILI PER TORNI CNC

- **DIN 69880** PAG. 280-312
- **KIT** PAG. 313
- **RICAMBI** SPARE PARTS PAG. 314-320
- **ACCESSORI** ACCESSORIES PAG. 321-333

DIN 69880



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D1 **D2** Pag. 294



MW **MW-AM** Pag. 305



B1 **B2** Pag. 287



E1 Pag. 295-296



KS1 **KS2** Pag. 306



B3 **B4** Pag. 288



E2 Pag. 297-298



KH1 **M** Pag. 307-308



B5 **B6** Pag. 289



E3 Pag. 299



AR **AL** Pag. 309



B7 **B8** Pag. 290



E2-TAG Pag. 300-301



ARU **ALU** Pag. 310



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E4 Pag. 302



PU1 Pag. 311



C1-S **C2-S** Pag. 292



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PU2 Pag. 312



C3 **C4** Pag. 293



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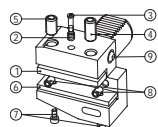


KIT VDI Pag. 313

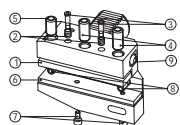
**RICAMBI
SPARE PARTS**



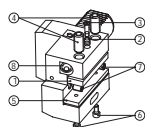
PWZ Pag. 316



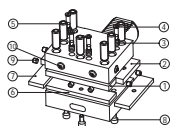
B1-B2-B3-B4 Pag. 317



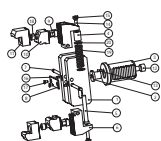
B5-B6-B7-B8 Pag. 318



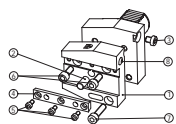
C1-C2-C3-C4 Pag. 319



D1-D2 Pag. 320



HK1 Pag. 321



AR-AL-ARU-ALU Pag. 322

ACCESSORI / ACCESSORIES



BC Pag. 324-325



ASSEMBLY SUPPORT Pag. 333



E2-1 Pag. 326



E2-3 114 Pag. 327



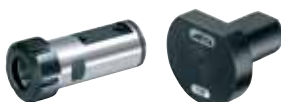
115 Pag. 328



RZ Pag. 329



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NC Z2 Pag. 331



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INDICE
SOMMAIRE
INHALTSVERZEICHNIS

KANDEL

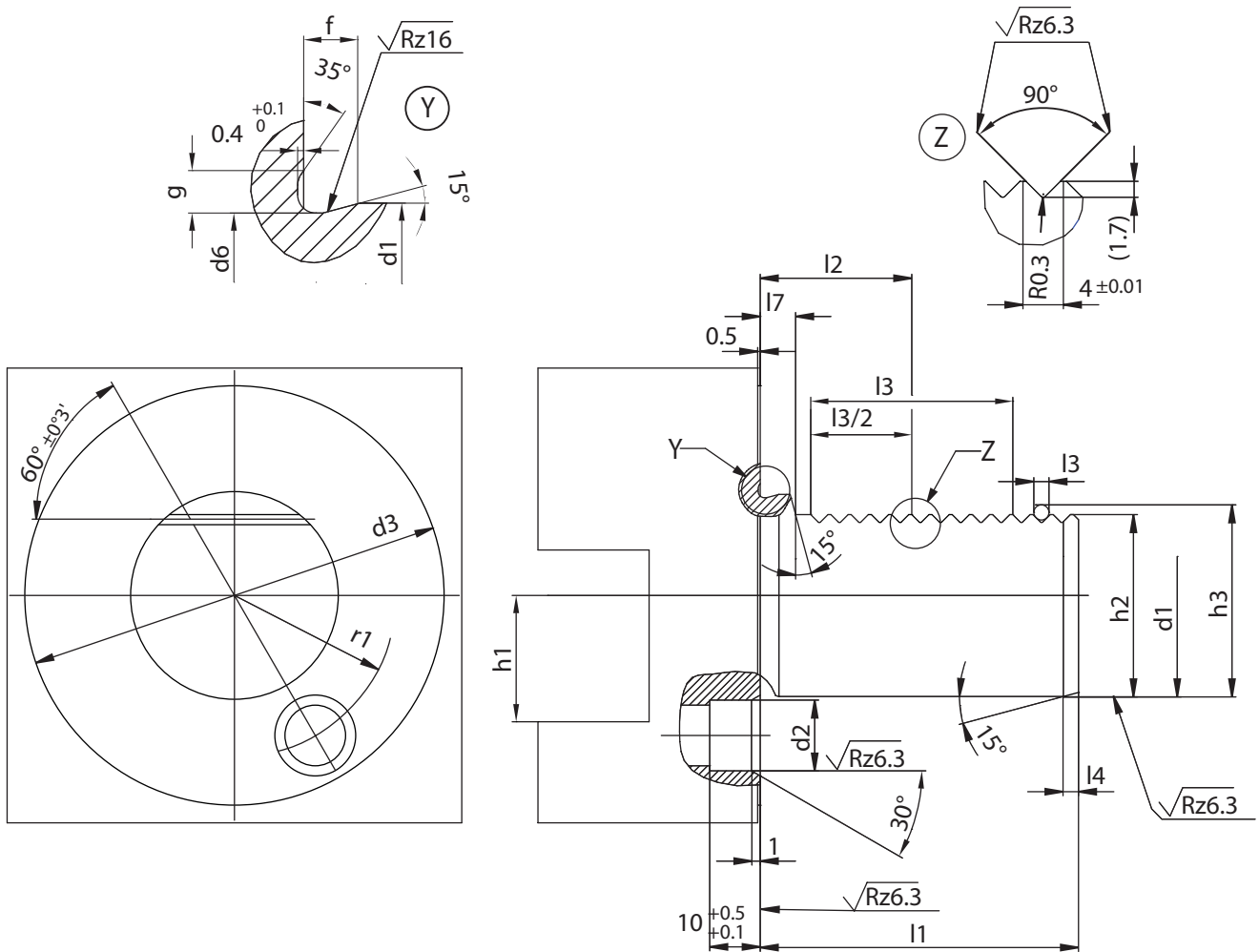
DIN 69880



WERKZEUGHALTER, ZYLINDERSCHAFT,
TECHNISCHE HINWEISE
TOOL HOLDER WITH PARALLEL SHANK,
TECHNICAL SPECIFICATIONS

PORTE-OUTIL AVEC QUEUE CYLINDRIQUE
SPECIFICATIONS TECHNIQUES
PORTAUTENSILI CON CODOLO CILINDRICO
SPECIFICHE TECNICHE

DIN 69880



d1	l1	d2	d3	d6	f	g	h1	h2	h3	l2	l3	l4	l7	r1	o-ring
h6	±0.3			-0.1			max.	±0.1	±0.1	±0.05	min.	+1		±0.02	
16	32	8 H6	40	15.4	2.0	1.7	12	15	16.92	12.7	16	2	3.5	14.5	15x1,5
20	40	10 H6	50	19.1	2.4	2	16	18	19.92	21.7	24	2	7	18	18,77x1,78
25	48	10 H6	58	24.1	2.4	2	16	23.5	25.42	21.7	24	2	7	21	23,52x1,78
30	55	14 H8	68	29.1	2.4	2	20	27	28.92	29.7	40	2	7	25	28,3x1,78
40	63	14 H8	83	38.7	3.7	2.8	25	36	37.92	29.7	40	3	7	32	37,77x2,62
50	78	16 H8	98	48.7	3.7	2.8	32	45	46.92	35.7	48	3	8	37	47,29x2,62
60	94	16 H8	123	58.7	4.3	3.7	32	55	56.92	43.7	56	4	10	48	56,74x3,53
80	124	20 H8	158	78.7	4.3	3.7	40	72	73.92	59.7	80	4	10	65	75,79x3,53

O-ring included in radial VDI - O-ring incluso nei VDI radiali

STEILKEGELAUFNAHMEN MIT VDI-ZYLINDRISCHEM SCHAFT

TECHNISCHE DATEN

ALLE KINTEK-STEILKEGELAUFNAHMEN WERDEN NACH DEN DIN 69880-NORMEN ANGEFERTIGT.



TOLERANZEN VOM ZYLINDRISCHEN SCHAFT

IN KLASSE IT6 (H6) ANGEFERTIGT.

RUNDLAUFGENAUIGKEIT DER SPANNZANGENGENAUFNAHME

DIE DIN 69880-6 NORM SCHREIBT EINE RUNDLAUFGENAUIGKEIT ZWISCHEN AUSSENKEGEL UND INNENKEGEL/SPANNZANGENSITZ VON 0,02 VOR

- Aus Stahl mit Härte HRC 58 +-2, Festigkeit 800-1000 N/mm² angefertigt
- inneres, äußeres Schleifen, auch an der Verzahnung und am Gewinde der Spannzangenmutter



TOOLHOLDERS WITH CYLINDRICAL SHANK VDI

TECHNICAL FEATURES

ALL KINTEK TOOLHOLDERS ARE MANUFACTURED ACCORDING TO DIN 69880.

CYLINDRICAL SHANK'S TOLERANCE

ACCORDING TO THE CLASS IT6 (H6)

COLLET CHUCK'S RUNOUT ACCURACY

- The norm DIN 69880-6 permits a runout error of 0,02 for DIN 6499 and DIN 6388 collet chucks
- Manufactured with casehardening steel with hardness HRC 58+-2, strenght 800-1000 N/mm²
- Internal diameters, shank and toothing are completely grinding finished



PORTE-OUTILS AVEC TIRETTE CILINDRIQUE VDI

DONNEES TECHNIQUES

TOUS LES PORTE-OUTILS KINTEK SONT FABRIQUÉS SELON LES NORMES DIN (QUI PREVOIENT LES MEMES CLASSES DE TOLÉRANCE POUR LES ATTACHEMENTS DIN 69880).

TOLERANCE DE LA QUEUE CILINDRIQUE

FABRIQUÉS EN CLASSE IT6 (H6)

COAXIALITÉ PORTE-PINCE

- La norme DIN 69880-6 admet une erreur de 0,02 maximum soit pour les porte-pinces DIN6499 que DIN6388
- Produits en acier cémenté allié avec dureté HRC 58+-2 résistance 800-1000 N/mm²
- Finition de rectification intérieur, extérieur, denture



PORTAUTENSILI CON CODOLO CILINDRICO VDI

DATI TECNICI

TUTTI I PORTAUTENSILI KINTEK VENGONO PRODOTTI SECONDO LE NORMATIVE DIN 69880

TOLLERANZA DEL GAMBO CILINDRICO - PRODOTTI IN CLASSE IT6 (H6)

COASSIALITÀ PORTAPINZA

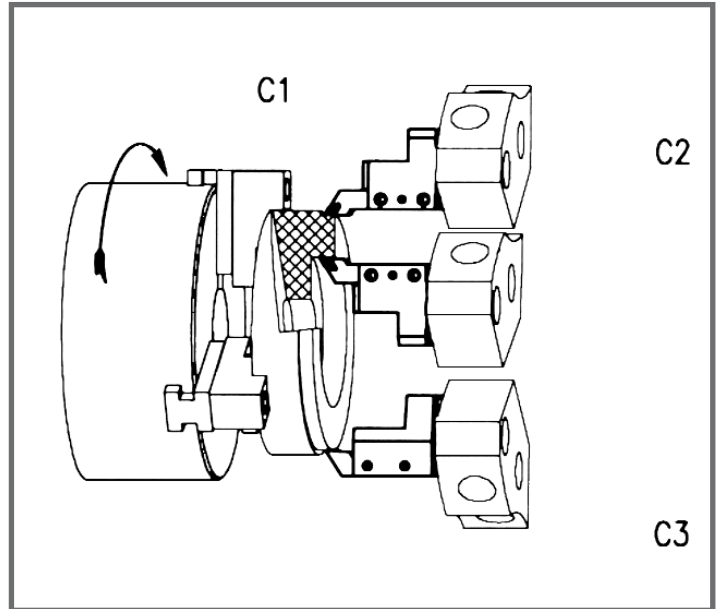
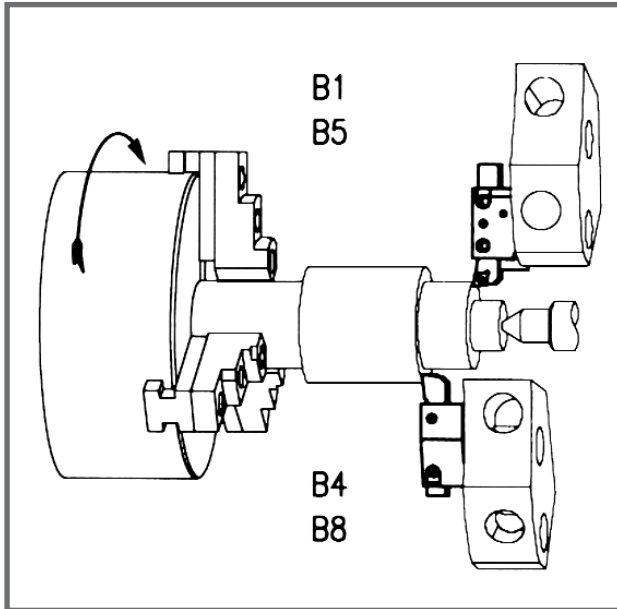
LA NORMATIVA DIN 69880-6 AMMETTE UN ERRORE MASSIMO DI 0,02 SIA PER I PORTAPINZE DIN6499 CHE DIN 6388

- Costruiti in acciaio con durezza HRC 58+-2 resistenza 800-1000 N/ mm²
- Finitura di rettifica, interna, esterna, dentatura e nelle filettature delle ghiere chiudipinza

ANWENDUNG VON WERKZEUGHALTERN MIT
RECHTSLAUF
USE OF TOOLHOLDERS WITH CLOCKWISE
SPINDLE ROTATION

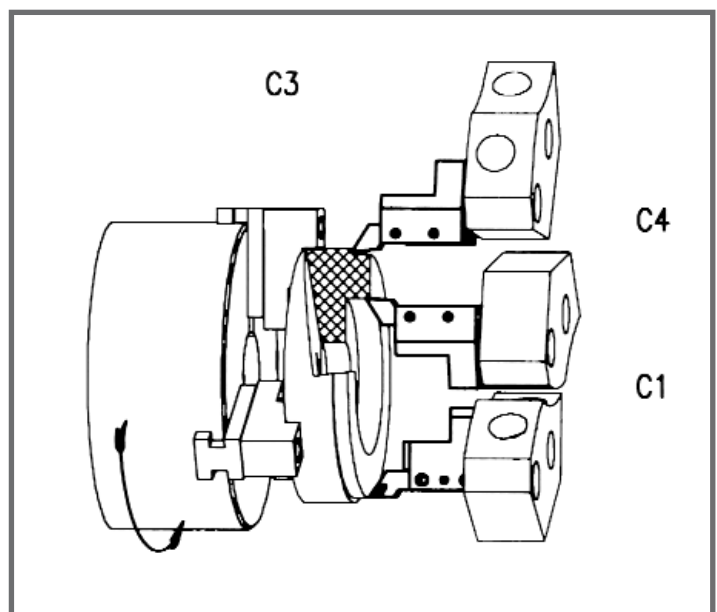
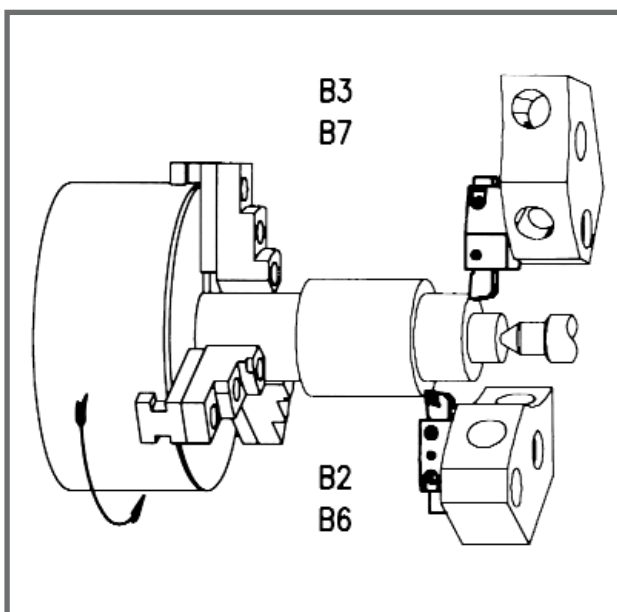
EMPLOI DE PORTE-OUTILS AVEC ROTATION
HORAIRE DE LA BROCHE
IMPIEGO DI PORTAUTENSILI CON ROTAZIONE
ORARIA DEL MANDRINO

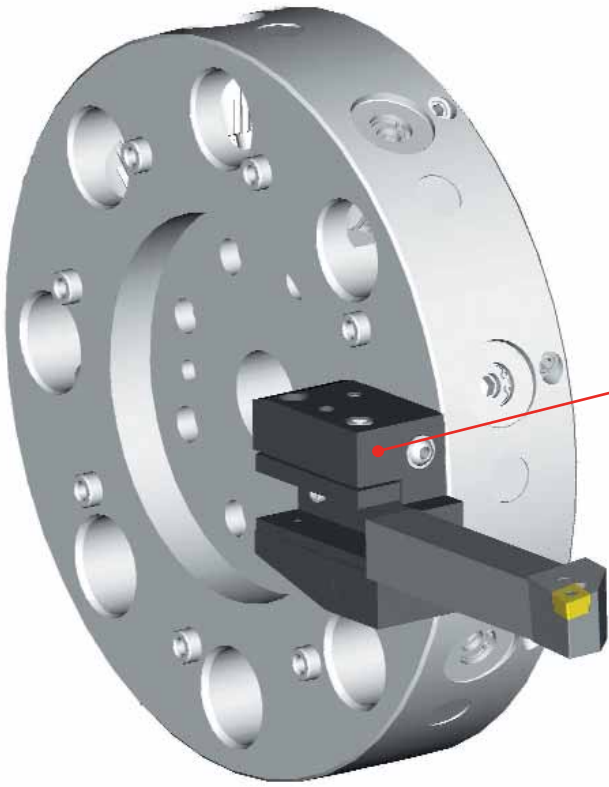
DIN 69880



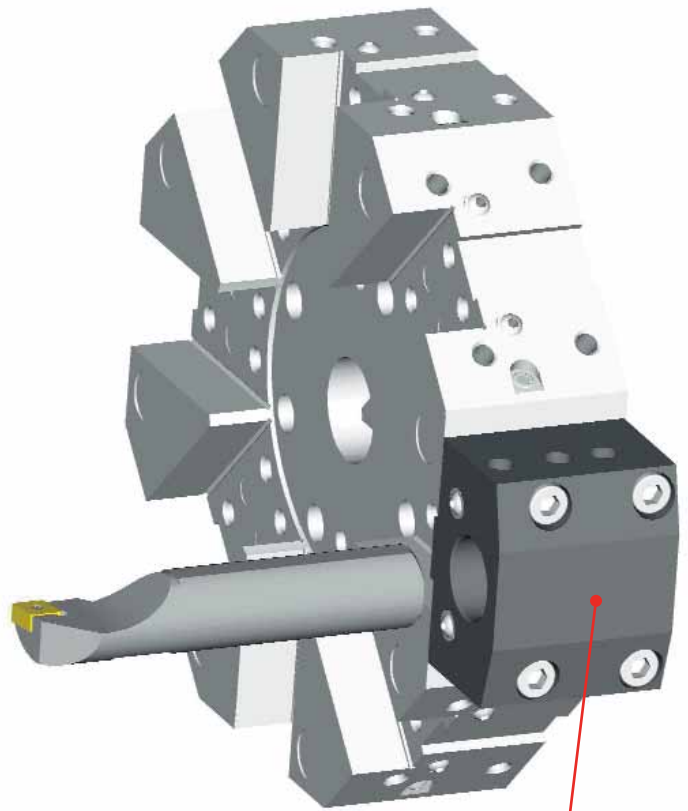
ANWENDUNG VON WERKZEUGHALTERN MIT
LINKSLAUF
USE OF TOOLHOLDERS WITH COUNTERCLOCKWISE
SPINDLE ROTATION

EMPLOI DE PORTE-OUTILS AVEC ROTATION
ANTI-HORAIRE DE LA BROCHE
IMPIEGO DI PORTAUTENSILI CON ROTAZIONE
ANTIORARIA DEL MANDRINO

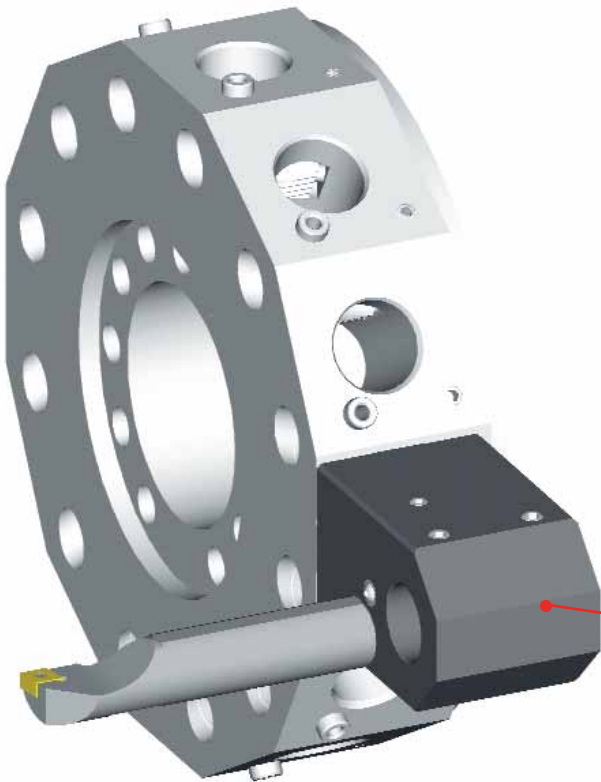




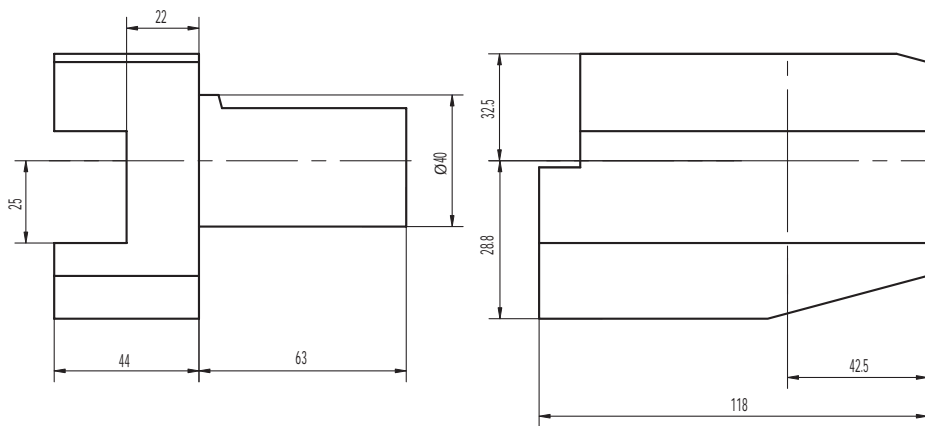
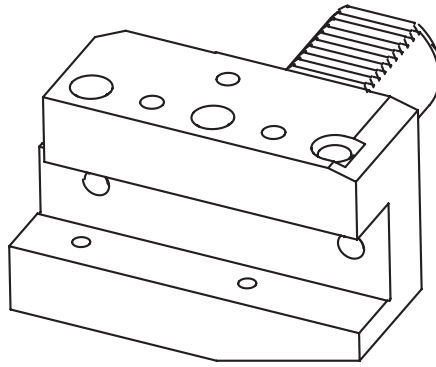
B1-40X25X44



PU1-25X32



115-54061



Auf Anfrage sind Dispositionszeichnungen im dxf-Format mit entsprechenden Massen verfügbar.

On request we can send you general layouts in dxf format with the relative dimensions.

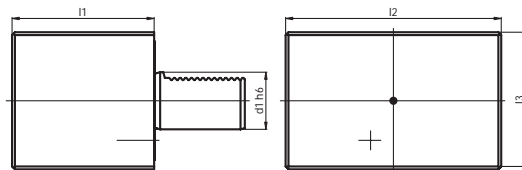
Sur demande les dessins d'avant-projet en format dxf sont disponibles avec les relatives cotes.

Sono disponibili a richiesta i disegni di massima in formato dxf con relative quote di ingombro.

VIERKANT-ROHLING FÜR SONDERAUSFÜHRUNGEN
RECTANGULAR BLANK FOR SPECIAL VERSIONS

EBAUCHE RECTANGULAIRE POUR VERSIONS SPECIALES
PORTAUTENSILE PER VERSIONI SPECIALI RETTANGOLARE

A1

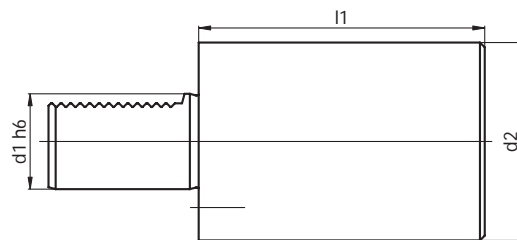


Code N.	d1	l1	l2	l3
A1-16x44	16	44	78	44
A1-20x65	20	65	100	60
A1-25x75	25	75	100	60
A1-30x85	30	85	130	76
A1-40x100	40	100	151	96
A1-50x125	50	125	160	120
A1-60x160	60	160	165	125
A1-80x200	80	200	220	160

ZYLINDER-ROHLING FÜR SONDERAUSFÜHRUNGEN
ROUND BLANK FOR SPECIAL VERSIONS

EBAUCHE CYLINDRIQUE POUR VERSIONS SPECIALES
PORTAUTENSILE PER VERSIONI SPECIALI ROTONDO

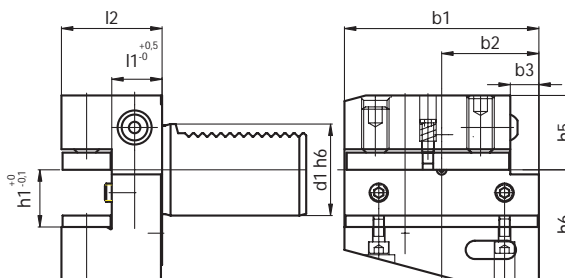
A2



Code N.	d1	d2	l1
A2-16x60	16	40	60
A2-20x70	20	50	70
A2-25x80	25	58	80
A2-25x200	25	58	200
A2-30x100	30	68	100
A2-30x240	30	68	240
A2-40x120	40	83	120
A2-40x320	40	83	320
A2-50x135	50	98	135
A2-50x400	50	98	400
A2-60x150	60	123	150
A2-60x480	60	123	480
A2-80x500	80	158	500

RADIAL WERKZEUGHALTER, RECHTS, KURZ PORTE-OUTIL RADIAL DROIT, COURT
RADIAL HOLDER, RH, SHORT PORTAUTENSILE CON SEDE TRASVERSALE RETTANGOLARE, DX CORTO

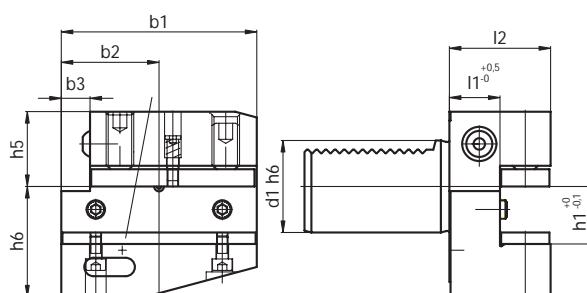
B1



Code N.	d1	b1	b2	b3	h1	h5	h6	l1	l2
B1-16x12x24	16	42	23	5	12	20	22	13	24
B1-16x12x34	16	42	23	5	12	20	22	23	34
B1-20x16x30	20	55	30	7	16/12	25	30	16	30
B1-20x16x40	20	55	30	7	16/12	25	30	26	40
B1-25x16x30	25	55	30	7	16/12	25	30	16	30
B1-25x16x40	25	55	30	7	16/12	25	30	26	40
B1-30x20x40	30	70	35	10	20/16	28	38	22	40
B1-30x20x60	30	70	35	10	20/16	28	38	42	60
B1-40x25x44	40	85	42.5	12.5	25/20	32.5	48	22	44
B1-50x32x55	50	100	50	16	32/25	35	60	30	55
B1-60x32x60	60	125	62.5	16	32/25	42.5	62.5	30	60
B1-80x40x75	80	160	80	20	40/32	55	80	40	75

RADIAL WERKZEUGHALTER, LINKS, KURZ PORTE-OUTIL RADIAL GAUCHE, COURT
RADIAL HOLDER, LH, SHORT PORTAUTENSILE CON SEDE TRASVERSALE RETTANGOLARE, SX CORTO

B2

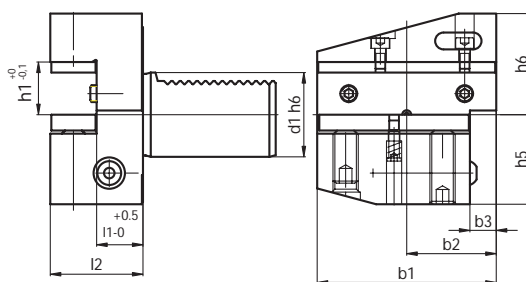


Code N.	d1	b1	b2	b3	h1	h5	h6	l1	l2
B2-16x12x24	16	42	23	5	12	20	22	13	24
B2-16x12x34	16	42	23	5	12	20	22	23	34
B2-20x16x30	20	55	30	7	16/12	25	30	16	30
B2-20x16x40	20	55	30	7	16/12	25	30	26	40
B2-25x16x30	25	55	30	7	16/12	25	30	16	30
B2-25x16x40	25	55	30	7	16/12	25	30	26	40
B2-30x20x40	30	70	35	10	20/16	28	38	22	40
B2-30x20x60	30	70	35	10	20/16	28	38	42	60
B2-40x25x44	40	85	42.5	12.5	25/20	32.5	48	22	44
B2-50x32x55	50	100	50	16	32/25	35	60	30	55
B2-60x32x60	60	125	62.5	16	32/25	42.5	62.5	30	60
B2-80x40x75	80	160	80	20	40/32	55	80	40	75

Spare parts on page 319 - Vedi ricambi a pag. 319

RADIAL WERKZEUGHALTER, ÜBERKOPF LINKS, KURZ
 RADIAL HOLDER, UPSIDE-DOWN, RH, SHORT
 PORTE-OUTIL RADIAL RENVERSE, DROIT, COURT
 PORTAUTENSILE CON SEDE TRASVERSALE
 RETTANGOLARE, ROVESCIATO DX CORTO

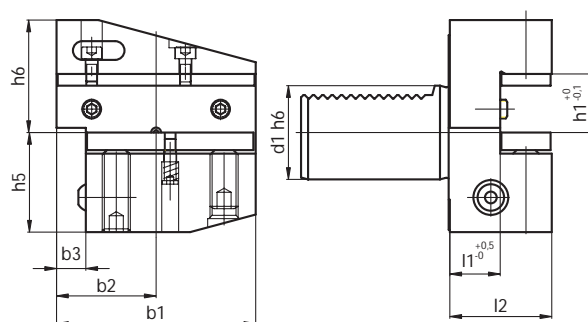
B3



Code N.	d1	b1	b2	b3	h1	h5	h6	l1	l2
B3-16x12x24	16	42	23	5	12	20	22	13	24
B3-16x12x34	16	42	23	5	12	20	22	23	34
B3-20x16x30	20	55	30	7	16/12	25	30	16	30
B3-20x16x40	20	55	30	7	16/12	25	30	26	40
B3-25x16x30	25	55	30	7	16/12	25	30	16	30
B3-25x16x40	25	55	30	7	16/12	25	30	26	40
B3-30x20x40	30	70	35	10	20/16	35	38	22	40
B3-30x20x60	30	70	35	10	20/16	35	38	42	60
B3-40x25x44	40	85	42.5	12.5	25/20	42.5	48	22	44
B3-50x32x55	50	100	50	16	32/25	50	60	30	55
B3-60x32x60	60	125	62.5	16	32/25	62.5	62.5	30	60
B3-80x40x75	80	160	80	20	40/32	80	80	40	75

RADIAL WERKZEUGHALTER, ÜBERKOPF LINKS, KURZ
 RADIAL HOLDER, UPSIDE-DOWN, LH, SHORT
 PORTE-OUTIL RADIAL RENVERSE, GAUCHE, COURT
 PORTAUTENSILE CON SEDE TRASVERSALE
 RETTANGOLARE, ROVESCIATO SX CORTO

B4

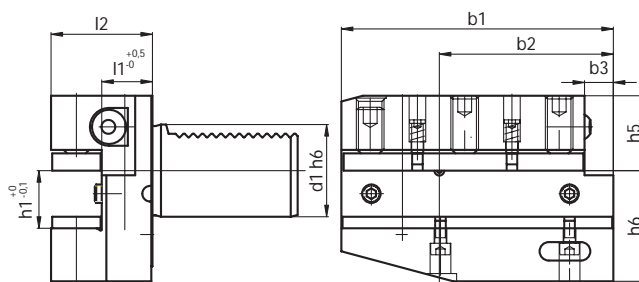


Code N.	d1	b1	b2	b3	h1	h5	h6	l1	l2
B4-16x12x24	16	42	23	5	12	20	22	13	24
B4-16x12x34	16	42	23	5	12	20	22	23	34
B4-20x16x30	20	55	30	7	16/12	25	30	16	30
B4-20x16x40	20	55	30	7	16/12	25	30	26	40
B4-25x16x30	25	55	30	7	16/12	25	30	16	30
B4-25x16x40	25	55	30	7	16/12	25	30	26	40
B4-30x20x40	30	70	35	10	20/16	35	38	22	40
B4-30x20x60	30	70	35	10	20/16	35	38	42	60
B4-40x25x44	40	85	42.5	12.5	25/20	42.5	48	22	44
B4-50x32x55	50	100	50	16	32/25	50	60	30	55
B4-60x32x60	60	125	62.5	16	32/25	62.5	62.5	30	60
B4-80x40x75	80	160	80	20	40/32	80	80	40	75

Spare parts on page 319 - Vedi ricambi a pag. 319

RADIAL WERKZEUGHALTER, RECHTS, LANG **PORTE-OUTIL RADIAL, DROIT, LONG**
RADIAL HOLDER, RH, LONG **PORTAUTENSILE CON SEDE TRASVERSALE RETTANGOLARE, DX LUNGO**

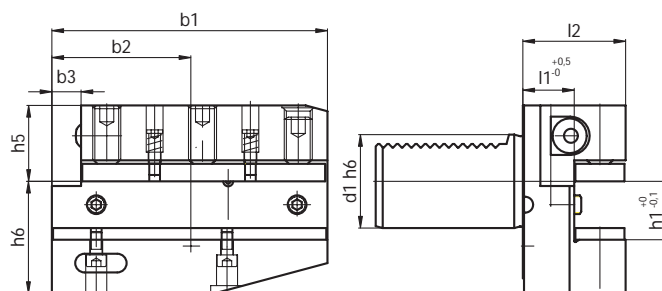
B5



Code N.	d1	b1	b2	b3	h1	h5	h6	l1	l2
B5-16x12x24	16	58	39	5	12	20	22	13	24
B5-16x12x34	16	58	39	5	12	20	22	23	34
B5-20x16x30	20	75	50	7	16/12	25	30	16	30
B5-20x16x40	20	75	50	7	16/12	25	30	26	40
B5-25x16x30	25	75	50	7	16/12	25	30	16	30
B5-25x16x40	25	75	50	7	16/12	25	30	26	40
B5-30x20x40	30	100	65	10	20/16	28	38	22	40
B5-30x20x60	30	100	65	10	20/16	28	38	42	60
B5-40x25x44	40	118	75.5	12.5	25/20	32.5	48	22	44
B5-50x32x55	50	130	80	16	32/25	35	60	30	55
B5-60x32x60	60	145	82.5	16	32/25	42.5	62.5	30	60
B5-80x40x75	80	190	110	20	40/32	55	80	40	75

RADIAL WERKZEUGHALTER, LINKS, LANG **PORTE-OUTIL RADIAL, GAUCHE, LONG**
RADIAL HOLDER, LH, LONG **PORTAUTENSILE CON SEDE TRASVERSALE RETTANGOLARE, SX LUNGO**

B6

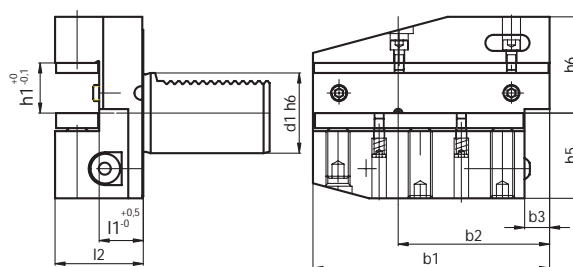


Code N.	d1	b1	b2	b3	h1	h5	h6	l1	l2
B6-16x12x24	16	58	39	5	12	20	22	13	24
B6-16x12x34	16	58	39	5	12	20	22	23	34
B6-20x16x30	20	75	50	7	16/12	25	30	16	30
B6-20x16x40	20	75	50	7	16/12	25	30	26	40
B6-25x16x30	25	75	50	7	16/12	25	30	16	30
B6-25x16x40	25	75	50	7	16/12	25	30	26	40
B6-30x20x40	30	100	65	10	20/16	28	38	22	40
B6-30x20x60	30	100	65	10	20/16	28	38	42	60
B6-40x25x44	40	118	75.5	12.5	25/20	32.5	48	22	44
B6-50x32x55	50	130	80	16	32/25	35	60	30	55
B6-60x32x60	60	145	82.5	16	32/25	42.5	62.5	30	60
B6-80x40x75	80	190	110	20	40/32	55	80	40	75

Spare parts on page 320 - Vedi ricambi a pag. 320

RADIAL WERKZEUGHALTER, ÜBERKOPF RECHTS, LANG
 RADIAL HOLDER, UPSIDE-DOWN, RH, LONG
 PORTE-OUTIL RADIAL RENVERSE, DROIT, LONG
 PORTAUTENSILE CON SEDE TRASVERSALE RETTANGOLARE, ROVESCIO DX LUNGO

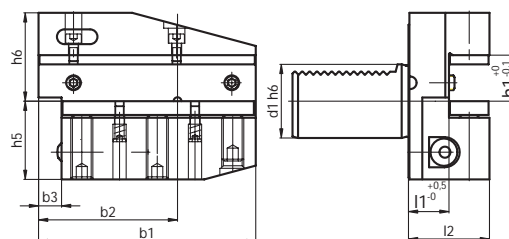
B7



Code N.	d1	b1	b2	b3	h1	h5	h6	l1	l2
B7-16x12x24	16	58	39	5	12	20	22	13	24
B7-16x12x34	16	58	39	5	12	20	22	23	34
B7-20x16x30	20	75	50	7	16/12	25	30	16	30
B7-20x16x40	20	75	50	7	16/12	25	30	26	40
B7-25x16x30	25	75	50	7	16/12	25	30	16	30
B7-25x16x40	25	75	50	7	16/12	25	30	26	40
B7-30x20x40	30	100	65	10	20/16	35	38	22	40
B7-30x20x60	30	100	65	10	20/16	35	38	42	60
B7-40x25x44	40	118	75.5	12.5	25/20	42.5	48	22	44
B7-50x32x55	50	130	80	16	32/25	50	60	30	55
B7-60x32x60	60	145	82.5	16	32/25	62.5	62.5	30	60
B7-80x40x75	80	190	110	20	40/32	80	80	40	75

RADIAL WERKZEUGHALTER, ÜBERKOPF LINKS, LANG
 RADIAL HOLDER, UPSIDE-DOWN, LH, SHORT
 PORTE-OUTIL RADIAL RENVERSE, GAUCHE, LONG
 PORTAUTENSILE CON SEDE TRASVERSALE RETTANGOLARE, ROVESCIO SX LUNGO

B8

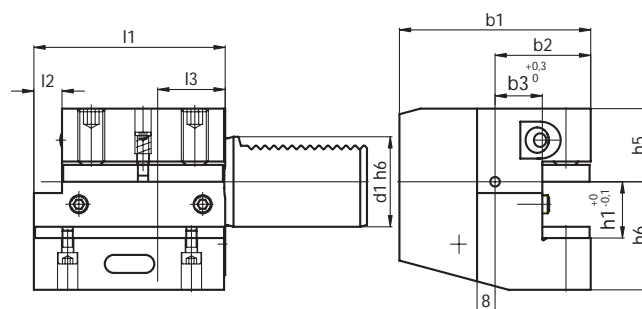


Code N.	d1	b1	b2	b3	h1	h5	h6	l1	l2
B8-16x12x24	16	58	39	5	12	20	22	13	24
B8-16x12x34	16	58	39	5	12	20	22	23	34
B8-20x16x30	20	75	50	7	16/12	25	30	16	30
B8-20x16x40	20	75	50	7	16/12	25	30	26	40
B8-25x16x30	25	75	50	7	16/12	25	30	16	30
B8-25x16x40	25	75	50	7	16/12	25	30	26	40
B8-30x20x40	30	100	65	10	20/16	35	38	22	40
B8-30x20x60	30	100	65	10	20/16	35	38	42	60
B8-40x25x44	40	118	75.5	12.5	25/20	42.5	48	22	44
B8-50x32x55	50	130	80	16	32/25	50	60	30	55
B8-60x32x60	60	145	82.5	16	32/25	62.5	62.5	30	60
B8-80x40x75	80	190	110	20	40/32	80	80	40	75

Spare parts on page 320 - Vedi ricambi a pag. 320

AXIAL WERKZEUGHALTER, RECHTS PORTE-OUTIL AXIAL, DROIT
 AXIAL HOLDER, RH PORTAUTENSILE CON SEDE LONGITUDINALE RETTANGOLARE, DESTRO

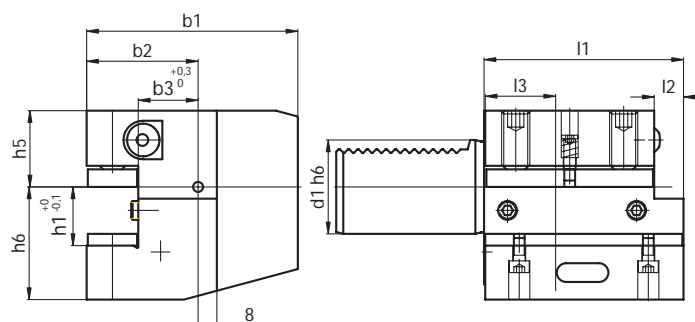
C1



Code N.	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
C1-16x12x44	16	43	24	13	12	20	22	44	5	20
C1-20x16x50	20	65	40	26	16/12	25	30	50	-	30
C1-20x16x55	20	52	27	13	16/12	25	30	55	7	30
C1-25x16x55	25	58	33	19	16/12	25	30	55	7	20
C1-30x20x70	30	70	35	17	20/16	28	38	70	10	30
C1-40x25x85	40	85	42.5	21	25/20	32.5	48	85	12.5	30
C1-50x32x100	50	100	50	26	32/25	35	60	100	16	40
C1-60x32x125	60	125	62.5	33	32/25	42.5	62.5	125	16	40
C1-80x40x160	80	160	80	42	40/32	55	80	160	20	40

AXIAL WERKZEUGHALTER, LINKS PORTE-OUTIL AXIAL, GAUCHE
 AXIAL HOLDER, LH PORTAUTENSILE CON SEDE LONGITUDINALE RETTANGOLARE, SINISTRO

C2

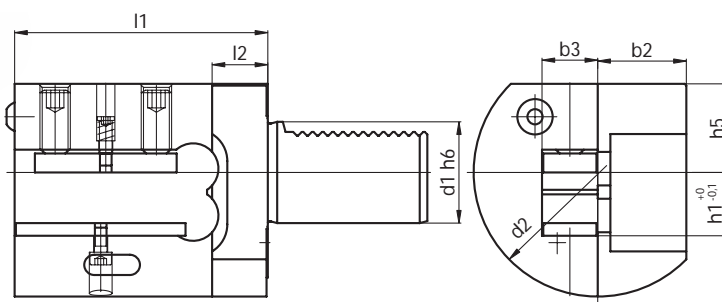


Code N.	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
C2-16x12x44	16	43	24	13	12	20	22	44	5	20
C2-20x16x50	20	65	40	26	16/12	25	30	50	-	30
C2-25x16x55	25	58	33	19	16/12	25	30	55	7	20
C2-30x20x70	30	76	41	23	20/16	28	38	70	10	30
C2-40x25x85	40	90	47.5	25.5	25/20	32.5	48	85	12.5	30
C2-50x32x100	50	105	55	30.5	32/25	35	60	100	16	40
C2-60x32x125	60	125	62.5	33	32/25	42.5	62.5	125	16	40
C2-80x40x160	80	160	78	42	40/32	55	80	160	20	40

Spare parts on page 321 - Vedi ricambi a pag. 321

AXIAL WERKZEUGHALTER, RECHTS, SPEZIAL PORTE-OUTIL AXIAL, DROIT, SPECIAL
 AXIAL HOLDER, RH, SPECIAL PORTAUTENSILE CON SEDE LONGITUDINALE RETTANGOLARE, DX, SPECIALE

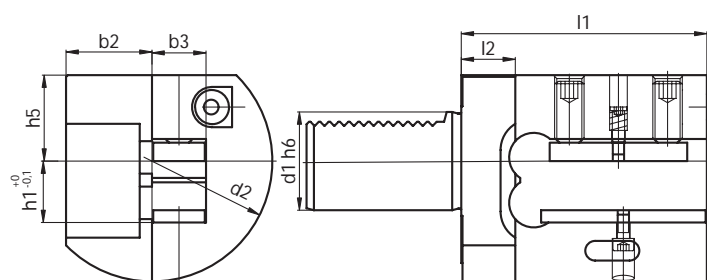
C1-S



Code N.	d1	d2	b2	b3	h1	h5	l1	l2
C1-S 30x20/16	30	83	28	18	20/16	28	70	18
C1-S 40x25/20	40	98	35	22	25/20	35	100	22
C1-S 50x32/25	50	115	35	25	32/25	42.5	120	22
C1-S 60x32	60	123	42.5	32	32	42.5	135	25
C1-S 80x40	80	158	55	40	40	55	140	30

AXIAL WERKZEUGHALTER, LINKS, SPEZIAL PORTE-OUTIL AXIAL, GAUCHE, SPECIAL
 AXIAL HOLDER, LH, SPECIAL PORTAUTENSILE CON SEDE LONGITUDINALE RETTANGOLARE, SX, SPECIALE

C2-S



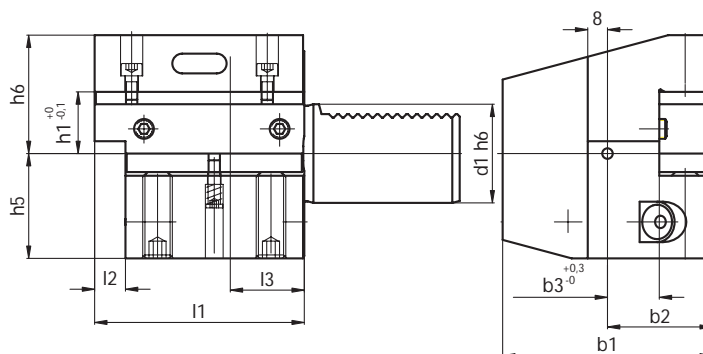
Code N.	d1	d2	b2	b3	h1	h5	l1	l2
C2-S 30x20/16	30	83	28	18	20/16	28	70	18
C2-S 40x25/20	40	98	35	22	25/20	35	100	22
C2-S 50x32/25	50	115	35	25	32/25	42.5	120	22
C2-S 60x32	60	123	42.5	32	32	42.5	135	25
C2-S 80x40	80	158	55	40	40	55	140	30

Spare parts on page 321 - Vedi ricambi a pag. 321

RADIAL WERKZEUGHALTER, ÜBERKOPF, RECHTS
AXIAL HOLDER, UPSIDE-DOWN, RH

PORTE-OUTIL AXIAL, RENVERSE, DROIT
PORTAUTENSILE CON SEDE LONGITUDINALE RETTANG. ROVESCiato, DX

C3

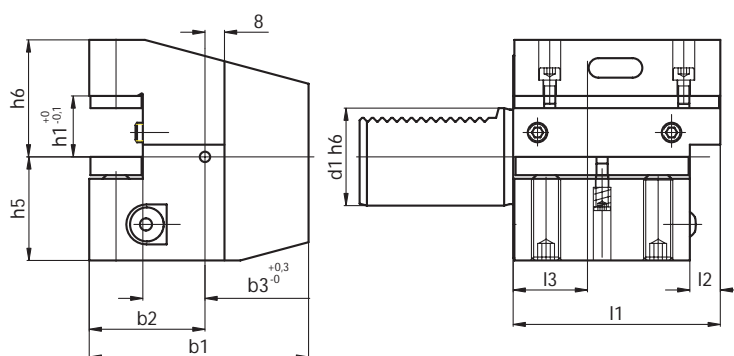


Code N.	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
C3-16x12x44	16	43	24	13	12	20	22	44	5	20
C3-20x16x50	20	65	40	26	16/12	25	30	50	-	30
C3-20x16x55	20	52	27	13	16/12	25	30	55	7	30
C3-25x16x55	25	58	33	19	16/12	25	30	55	7	20
C3-30x20x70	30	70	35	17	20/16	35	38	70	10	30
C3-40x25x85	40	85	42.5	21	25/20	42.5	48	85	12.5	30
C3-50x32x100	50	100	50	26	32/25	50	60	100	16	40
C3-60x32x125	60	125	62.5	33	32/25	62.5	62.5	125	16	40
C3-80x40x160	80	160	80	42	40/32	80	80	160	20	40

RADIAL WERKZEUGHALTER, ÜBERKOPF, LINKS
AXIAL HOLDER, UPSIDE-DOWN LH

PORTE-OUTIL AXIAL, RENVERSE, GAUCHE
PORTAUTENSILE CON SEDE LONGITUDINALE RETTANG. ROVESCiato, SX

C4

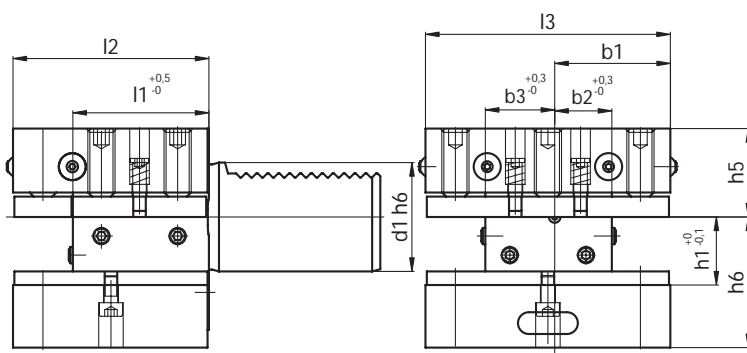


Code N.	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
C4-16x12x44	16	43	24	13	12	20	22	44	5	20
C4-20x16x50	20	65	40	26	16/12	25	30	50	-	30
C4-25x16x55	25	58	33	19	16/12	25	30	55	7	20
C4-30x20x70	30	76	41	23	20/16	35	38	70	10	30
C4-40x25x85	40	90	47.5	25.5	25/20	42.5	48	85	12.5	30
C4-50x32x100	50	105	55	30.5	32/25	50	60	100	16	40
C4-60x32x125	60	125	62.5	33	32/25	62.5	62.5	125	16	40
C4-80x40x160	80	160	78	42	40/32	80	80	160	20	40

Spare parts on page 321 - Vedi ricambi a pag. 321

WERKZEUGHALTER MIT MEHRFACHAUFNAHME PORTE-OUTIL A SIEGES MULTIPLES
 TOOLHOLDER WITH MULTIPLE SEATS PORTAUTENSILE A PIU' SEDI RETTANGOLARI

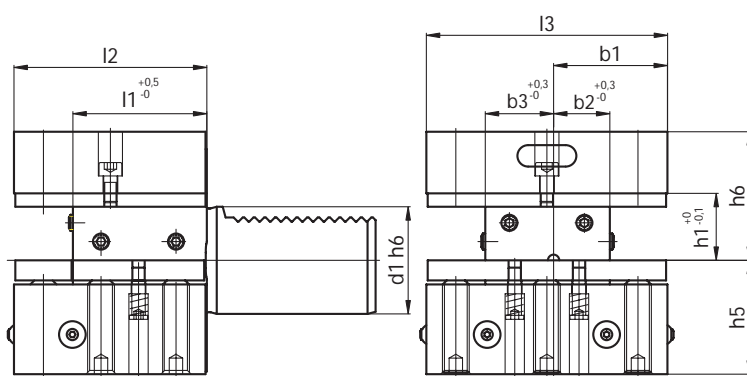
D1



Code N.	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
D1-25x16x48	25	33	19	19	16/12	25	30	34	48	66
D1-30x20x60	30	35	17	23	20/16	28	38	42	60	76
D1-40x25x72	40	42.5	21	25.5	25/20	32.5	48	50	72	90
D1-50x32x85	50	50	26	30.5	32/25	35	60	60	85	105
D1-60x32x110	60	57.5	33	33	32/25	42.5	62.5	85	110	115
D1-80x40x140	80	76	42	42	40/32	55	80	105	140	152

WERKZEUGHALTER MIT MEHRFACHAUFNAHME, ÜBERKOPF PORTE-OUTIL A SIEGES MULTIPLES, RENVERSE
 TOOLHOLDER WITH MULTIPLE SEATS UPSIDE DOWN PORTAUTENSILE A PIU' SEDI RETTANGOLARI, ROVESCIAIO

D2



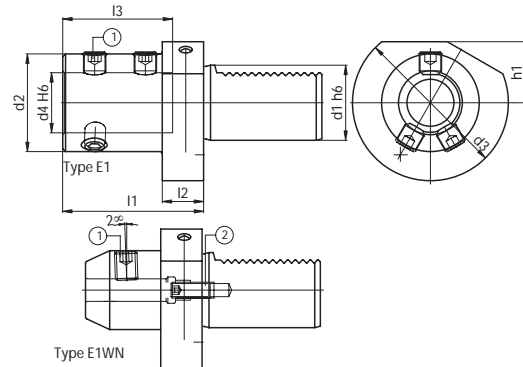
Code N.	d1	b1	b2	b3	h1	h5	h6	l1	l2	l3
D2-25x16x48	25	33	19	19	16/12	25	30	34	48	66
D2-30x20x60	30	35	17	23	20/16	35	38	42	60	76
D2-40x25x72	40	42.5	21	25.5	25/20	42.5	48	50	72	90
D2-50x32x85	50	50	26	30.5	32/25	50	60	60	85	105
D2-60x32x110	60	57.5	33	33	32/25	62.5	62.5	85	110	115
D2-80x40x140	80	76	42	42	40/32	80	80	105	140	152

Spare parts on page 322 - Vedi ricambi a pag. 322

WERKZEUGHALTER FÜR WENDEPLATTENBOHRER
MIT INNERER KÜHLMITTELZUFUHR
HOLDER FOR INDEXABLE INSERT DRILLS WITH
INTERNAL COOLANT SUPPLY

PORTE-OUTIL POUR FORETS A PLAQUETTES AVEC
ALIMENTATION INTERNE DU LIQUIDE D'ARROSAGE
PORTAUTENSILE PER PUNTE AD INSERTI CON
PASSAGGIO REFRIGERANTE INTERNO

E1



Code N.	d1	d2	d3	d4	h1	l1	l2	l3	Locking screw	Qt.	Stop screw
									①		②
E1-20x06-WN	20	25	50	6	-	50	18	36	811-106001	1	811-402068
E1-20x08-WN	20	28	50	8	-	50	18	36	811-106002	1	811-402066
E1-20x10-WN	20	35	50	10	-	54	18	40	811-106004	1	811-402069
E1-20x12-WN	20	42	50	12	-	59	18	45	811-106005	1	811-402070
E1-20x16	20	36	50	16	-	67	18	54	811-402003	4	-
E1-20x20	20	40	50	20	-	67	18	54	811-402003	4	-
E1-20x25	20	45	50	25	-	71	18	58	811-402005	4	-
E1-25x16	25	36	58	16	25	67	18	54	811-402003	4	-
E1-25x20	25	40	58	20	25	67	18	54	811-402003	4	-
E1-25x25	25	45	58	25	25	71	18	59	811-402005	4	-
E1-25x32	25	52	58	32	25	75	18	63	811-402005	4	-
E1-30x06-WN	30	25	68	6	28	50	22	36	811-106001	1	811-402068
E1-30x08-WN	30	28	68	8	28	50	22	36	811-106002	1	811-402066
E1-30x10-WN	30	35	68	10	28	54	22	40	811-106004	1	811-402069
E1-30x12-WN	30	42	68	12	28	59	22	45	811-106005	1	811-402070
E1-30x16	30	36	68	16	28	67	22	54	811-402003	4	-
E1-30x20	30	40	68	20	28	67	22	54	811-402003	4	-
E1-30x25	30	45	68	25	28	71	22	58	811-402005	4	-
E1-30x32	30	52	68	32	28	75	22	61	811-402005	4	-
E1-30x40	30	65	68	40	28	90	22	72	811-402007	4	-
E1-40x06-WN	40	25	83	6	32.5	50	22	36	811-106001	1	811-402068
E1-40x08-WN	40	28	83	8	32.5	50	22	36	811-106002	1	811-402066
E1-40x10-WN	40	35	83	10	32.5	54	22	40	811-106004	1	811-402069
E1-40x12-WN	40	42	83	12	32.5	58	22	45	811-106005	1	811-402070
E1-40x16	40	36	83	16	32.5	67	22	54	811-402003	4	-
E1-40x20	40	40	83	20	32.5	67	22	54	811-402003	4	-
E1-40x25	40	45	83	25	32.5	75	22	59	811-402005	4	-
E1-40x32	40	52	83	32	32.5	75	22	61	811-402005	4	-
E1-40x40	40	65	83	40	32.5	90	22	73	811-402007	4	-
E1-40x50	40	70	83	50	32.5	100	22	83	811-402007	4	-

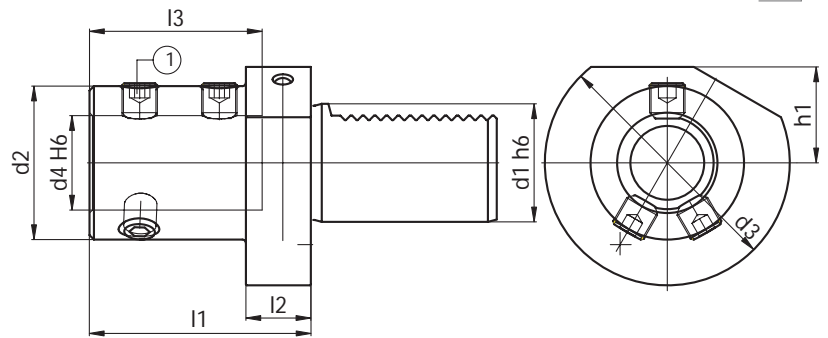
WN: Wistle Notch

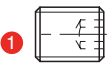
...segue



WERKZEUGHALTER FÜR WENDEPLATTENBOHRER MIT INNERER KÜLMITTELZUFUHR
 HOLDER FOR INDEXABLE INSERT DRILLS WITH INTERNAL COOLANT SUPPLY
 PORTE-OUTIL POUR FORETS A PLAQUETTES AVEC ALIMENTATION INTERNE DU LIQUIDE D'ARROSAGE
 PORTAUTENSILE PER PUNTE AD INSERTI CON PASSAGGIO REFRIGERANTE INTERNO

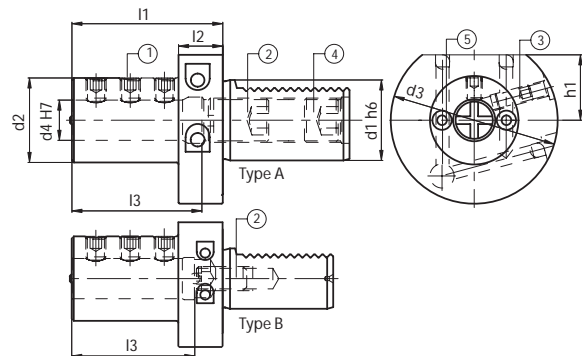
E1

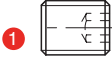
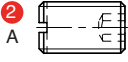
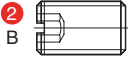
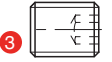

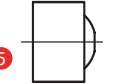


Code N.	d1	d2	d3	d4	h1	l1	l2	l3	Locking screw
									
E1-50x16	50	36	98	16	35	80	30	54	811-402003
E1-50x20	50	40	98	20	35	80	30	54	811-402003
E1-50x25	50	45	98	25	35	80	30	59	811-402005
E1-50x32	50	52	98	32	35	80	30	63	811-402005
E1-50x40	50	65	98	40	35	90	30	73	811-402007
E1-50x50	50	75	98	50	35	100	30	83	811-402007
E1-60x16	60	36	123	16	42.5	80	30	54	811-402003
E1-60x20	60	40	123	20	42.5	80	30	54	811-402003
E1-60x25	60	45	123	25	42.5	80	30	59	811-402005
E1-60x32	60	52	123	32	42.5	80	30	63	811-402005
E1-60x40	60	65	123	40	42.5	90	30	73	811-402007
E1-60x50	60	75	123	50	42.5	100	30	83	811-402007
E1-80x20	80	40	158	20	55	80	30	54	811-402003
E1-80x25	80	45	158	25	55	80	30	59	811-402005
E1-80x32	80	52	158	32	55	80	30	63	811-402005
E1-80x40	80	65	158	40	55	90	30	73	811-402007
E1-80x50	80	75	158	50	55	100	30	83	811-402007

BOHRSTANGENHALTER PORTE-OUTIL POUR BARRES D'ALEPAGE BORING BAR HOLDER PORTAUTENSILE PER BARENI

E2

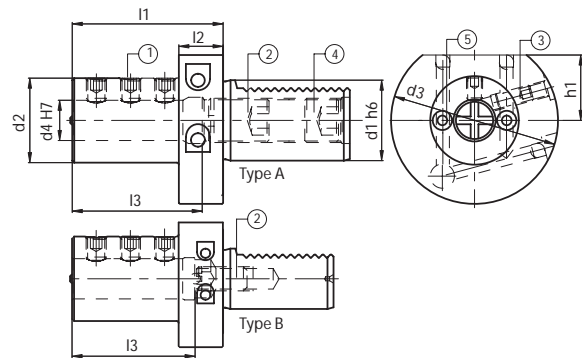


Code N.	d1	d2	d3	d4	h1	l1	l2	l3	T	Locking screw	Qt.	Stop screw	Screw	Screw	Coolant noose
												 			
E2-16x6	16	32	40	6	18	44	13	34	B	811-102020	3	811-102014	811-102011	-	PWZ1005D6X4.5
E2-16x8	16	32	40	8	18	44	13	34	B	811-102020	3	811-102021	811-102011	-	PWZ1005D6X4.5
E2-16x10	16	32	40	10	18	44	13	34	B	811-102020	3	811-102021	811-102011	-	PWZ1005D6X4.5
E2-16x12	16	40	40	12	18	44	13	34	B	811-102028	3	811-402065	811-102011	-	PWZ1005D6X4.5
E2-16x16	16	40	40	16	18	44	13	34	B	811-102028	3	811-402065	811-102011	-	PWZ1005D6X4.5
E2-20x6	20	40	50	6	23	50	18	42	B	811-102021	2	811-102015	-	-	PWZ1008D10X7
E2-20x8	20	40	50	8	23	50	18	42	B	811-102021	2	811-102023	-	-	PWZ1008D10X7
E2-20x10	20	40	50	10	23	50	18	42	B	811-102029	2	811-102023	-	-	PWZ1008D10X7
E2-20x12	20	40	50	12	23	50	18	42	B	811-102029	2	811-402066	-	-	PWZ1008D10X7
E2-20x16	20	42	50	16	23	50	18	42	B	811-102028	2	811-402066	-	-	PWZ1008D10X7
E2-20x20	20	49	50	20	23	50	18	42	B	811-102028	2	811-402066	-	-	PWZ1008D10X7
E2-20x25	20	49	50	25	23	60	18	52	B	811-102027	2	811-402066	-	-	PWZ1008D10X7
E2-25x8	25	40	58	8	25	50	18	41	A	811-102021	3	811-402067	811-102020	811-402020	PWZ1008D10X7
E2-25x10	25	40	58	10	25	50	18	41	A	811-102021	3	811-402030	811-102020	811-102070	PWZ1008D10X7
E2-25x12	25	40	58	12	25	50	18	41	A	811-102028	3	811-402030	811-102020	811-102070	PWZ1008D10X7
E2-25x16	25	40	58	16	25	50	18	41	B	811-102028	3	811-402067	811-102020	-	PWZ1008D8X06
E2-25x20	25	58	58	20	25	50	18	41	B	811-102029	3	811-402067	811-102020	-	PWZ1008D10X7
E2-25x25	25	58	58	25	25	60	18	51	B	811-102028	3	811-402067	811-102020	-	PWZ1008D10X7
E2-25x32	25	58	58	32	25	75	18	62	B	811-102027	3	811-402067	-	-	PWZ1008D10X7
E2-30x6	30	55	68	6	28	60	22	43	A	811-102022	3	811-402030	811-102029	811-102070	PWZ1012D12X8
E2-30x8	30	55	68	8	28	60	22	43	A	811-102022	3	811-402030	811-102029	811-102070	PWZ1012D12X8
E2-30x10	30	55	68	10	28	60	22	43	A	811-102022	3	811-402030	811-102029	811-102070	PWZ1012D12X8
E2-30x12	30	55	68	12	28	60	22	43	A	811-102030	3	811-402030	811-102029	811-102070	PWZ1012D12X8
E2-30x16	30	55	68	16	28	60	22	55	A	811-102030	3	811-402071	811-102029	811-402072	PWZ1012D12X8
E2-30x20	30	55	68	20	28	60	22	54	B	811-102029	3	811-402028	811-102029	-	PWZ1012D12X8
E2-30x25	30	55	68	25	28	60	22	54	B	811-102029	3	811-402028	811-102029	-	PWZ1012D12X8
E2-30x30	30	67	68	30	28	75	22	61	B	811-102029	3	811-402029	811-102029	-	PWZ1012D12X8
E2-30x32	30	67	68	32	28	75	22	61	B	811-102029	3	811-402029	811-102029	-	PWZ1012D12X8
E2-30x40	30	67	68	40	28	75	22	66	B	811-102029	3	811-402029	811-102019	-	PWZ1008D10X7

...segue
→

BOHRSTANGENHALTER PORTE-OUTIL POUR BARRES D'ALEPAGE BORING BAR HOLDER PORTAUTENSILE PER BARENI

E2

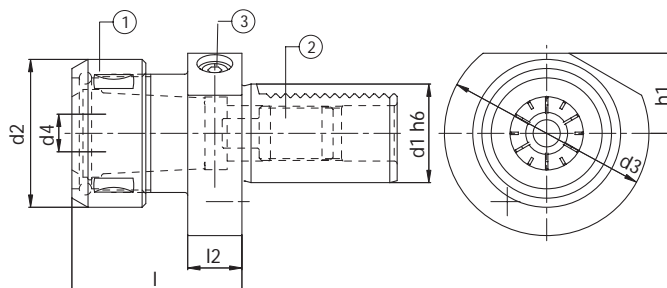


Code N.	d1	d2	d3	d4	h1	l1	l2	l3	T	Locking screw	Qt.	Stop screw	Screw	Screw	Coolant noose
E2-40x6	40	55	83	6	32.5	75	22	43	A	811-102022	2	811-402030	811-102029	811-102070	PWZ1012D12X8
E2-40x8	40	55	83	8	32.5	75	22	43	A	811-102030	2	811-402030	811-102029	811-102070	PWZ1012D12X8
E2-40x10	40	55	83	10	32.5	75	22	43	A	811-102030	2	811-402030	811-102029	811-102070	PWZ1012D12X8
E2-40x12	40	55	83	12	32.5	75	22	58	A	811-102030	3	811-402030	811-102029	811-102070	PWZ1012D12X8
E2-40x16	40	55	83	16	32.5	75	22	61	A	811-102038	3	811-402071	811-102029	811-402072	PWZ1012D12X8
E2-40x20	40	55	83	20	32.5	75	22	61	A	811-102037	3	811-402064	811-102029	811-402073	PWZ1012D12X8
E2-40x25	40	55	83	25	32.5	75	22	61	B	811-102038	3	811-402028	811-102029	-	PWZ1012D12X8
E2-40x30	40	82	83	30	32.5	75	22	61	B	811-102037	3	811-402029	811-102029	-	PWZ1012D12X8
E2-40x32	40	82	83	32	32.5	75	22	61	B	811-102038	3	811-402029	811-102029	-	PWZ1012D12X8
E2-40x40	40	82	83	40	32.5	90	22	76	B	811-102037	3	811-402029	811-102029	-	PWZ1012D12X8
E2-40x50	40	98	98	50	35	100	-	86	B	811-102064	3	811-402028	811-102029	-	PWZ1012D12X8
E2-50x12	50	68	98	12	35	90	30	71	A	811-102031	3	811-402030	811-102029	811-102070	PWZ1012D12X8
E2-50x16	50	68	98	16	35	90	30	76	A	811-102039	3	811-402071	811-102029	811-402072	PWZ1012D12X8
E2-50x20	50	68	98	20	35	90	30	76	A	811-102045	3	811-402064	811-102029	811-402073	PWZ1012D12X8
E2-50x25	50	68	98	25	35	90	30	76	A	811-102045	3	811-402074	811-102029	811-402075	PWZ1012D12X8
E2-50x30	50	69	98	30	35	90	30	76	B	811-102044	3	811-402028	811-102029	-	PWZ1012D12X8
E2-50x32	50	69	98	32	35	90	30	76	B	811-102044	3	811-402028	811-102029	-	PWZ1012D12X8
E2-50x40	50	98	98	40	35	90	-	76	B	811-102043	3	811-402028	811-102029	-	PWZ1012D12X8
E2-50x50	50	98	98	50	35	100	-	86	B	811-102064	3	811-402028	811-102029	-	PWZ1012D12X8
E2-60x16	60	68	123	16	42.5	90	30	76	A	811-102039	3	811-402071	811-102030	811-402072	PWZ1012D12X8
E2-60x20	60	68	123	20	42.5	90	30	76	A	811-102045	3	811-402064	811-102030	811-402073	PWZ1012D12X8
E2-60x25	60	68	123	25	42.5	90	30	76	A	811-102045	3	811-402074	811-102030	811-402075	PWZ1012D12X8
E2-60x30	60	68	123	30	42.5	90	30	76	A	811-102044	3	811-402076	811-102030	811-402077	PWZ1012D12X8
E2-60x32	60	68	123	32	42.5	90	30	76	A	811-102044	3	811-402076	811-102030	811-402077	PWZ1012D12X8
E2-60x40	60	98	123	40	42.5	90	30	76	B	811-102044	3	811-402029	811-102030	-	PWZ1012D12X8
E2-60x50	60	98	123	50	42.5	100	30	86	B	811-102043	3	811-402029	811-102030	-	PWZ1012D12X8
E2-80x20	80	68	158	20	55	100	30	86	A	811-102045	3	811-402064	811-102030	811-402073	PWZ1012D12X8
E2-80x25	80	68	158	25	55	100	30	86	A	811-102044	3	811-402074	811-102030	811-402075	PWZ1012D12X8
E2-80x32	80	68	158	32	55	100	30	86	A	811-102044	3	811-402076	811-102030	811-402077	PWZ1012D12X8
E2-80x40	80	98	158	40	55	100	30	86	A	811-102046	3	811-402078	811-102030	811-402079	PWZ1012D12X8
E2-80x50	80	98	158	50	55	100	30	92	B	811-102045	3	811-402029	811-102030	-	PWZ1012D12X8
E2-80x60	80	98	158	60	55	100	30	92	B	811-102045	3	811-402029	811-102030	-	PWZ1012D12X8

SPANNZANGENAUFNAHME FÜR SPANNZANGEN
NACH DIN 6388, TYP EOC
COLLET CHUCK FOR COLLETS
ACCORDING TO DIN 6388, EOC TYPE

PORTE-PINCE POUR PINCES SELON
DIN 6388, TYPE EOC
PORTAPINZA PER PINZE SECONDO DIN 6388,
TIPO EOC

E3



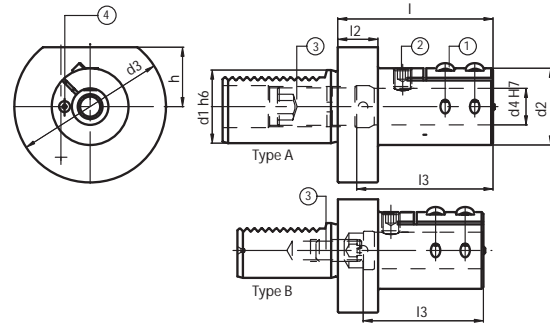
Code N.	Description	d1	d2	d3	d4	h1	l1	l2	Nut	Stop screw	Screw
E3-16x16	VDI16.L57.EOC16	16	43	40	2-16	-	57	13	812-202050	811-104015	811-302011
E3-20x16	VDI20.L57.EOC16	20	43	50	2-16	-	57	18	812-202050	811-303001	811-302011
E3-20x20	VDI20.L62.EOC20	20	52	50	2-20	-	62	18	812-202060	811-303001	811-302011
E3-25x16	VDI25.L57.EOC16	25	43	58	2-16	25	57	18	812-202050	811-303001	811-302011
E3-25x20	VDI25.L62.EOC20	25	52	58	2-20	25	62	18	812-202060	811-303001	811-302011
E3-30x16	VDI30.L57.EOC16	30	43	68	2-16	28	57	22	812-202050	811-303014	811-302011
E3-30x20	VDI30.L62.EOC20	30	52	68	2-20	28	62	22	812-202060	811-303014	811-302011
E3-30x25	VDI30.L75.EOC25	30	60	68	2-25	28	75	22	812-202070	811-303014	811-302011
E3-30x32	VDI30.L90.EOC32	30	72	68	2-32	28	90	22	812-202080	811-303014	811-302106
E3-40x16	VDI40.L57.EOC16	40	43	83	2-16	32.5	57	22	812-202050	811-303003	811-302011
E3-40x20	VDI40.L62.EOC20	40	52	83	2-20	32.5	62	22	812-202060	811-303004	811-302011
E3-40x25	VDI40.L75.EOC25	40	60	83	2-25	32.5	75	22	812-202070	811-303004	811-302106
E3-40x32	VDI40.L90.EOC32	40	72	83	4-32	32.5	90	22	812-202080	811-303004	811-302106
E3-50x20	VDI50.L70.EOC20	50	52	98	2-20	35	70	30	812-202060	811-303004	811-302011
E3-50x25	VDI50.L75.EOC25	50	60	98	2-25	35	75	30	812-202070	811-303004	811-302106
E3-50x32	VDI50.L90.EOC32	50	72	98	4-32	35	90	30	812-202080	811-303005	811-302106
E3-60x25	VDI60.L75.EOC25	60	60	123	2-25	42.5	75	30	812-202070	811-303004	811-302106
E3-60x32	VDI60.L90.EOC32	60	72	123	4-32	42.5	90	30	812-202080	811-303005	811-302106
E3-80x25	VDI80.L85.EOC25	80	60	158	2-25	55	85	40	812-202070	811-303004	811-302106
E3-80x32	VDI80.L95.EOC32	80	72	158	4-32	55	95	40	812-202080	811-303005	811-302106



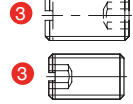
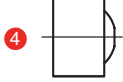
• Coolant supply unit not included.

• Adduttore refrigerante non incluso.

BOHRSTANGENHALTER PORTE-OUTIL POUR BARRES D'ALEPAGE BORING BAR HOLDER PORTAUTENSILE PER BARENI

E2-TAG



Code N.	d1	d2	d3	d4	h1	l1	l2	l3	T	Locking screw	Locking screw	Stop screw	Coolant noose
													
E2-30x6-TAG	30	32	68	6	28	75	22	65	A	811-101028	811-102020	811-402030	PWZ1005D6X4,5
E2-30x8-TAG	30	34	68	8	28	75	22	65	A	811-101028	811-102020	811-402030	PWZ1005D6X4,5
E2-30x10-TAG	30	38	68	10	28	75	22	65	A	811-101028	811-102028	811-402030	PWZ1005D6X4,5
E2-30x12-TAG	30	38	68	12	28	75	22	65	A	811-101028	811-102028	811-402030	PWZ1005D6X4,5
E2-30x16-TAG	30	42	68	16	28	75	22	70	A	811-101028	811-102036	811-402071	PWZ1008D8X6
E2-30x20-TAG	30	42	68	20	28	75	22	66	B	811-101028	811-102036	811-402028	PWZ1008D8X6
E2-30x25-TAG	30	48	68	25	28	75	22	66	B	811-101028	811-102036	811-402028	PWZ1008D8X6
E2-30x32-TAG	30	56	68	32	28	75	22	65	B	811-101029	811-102036	811-402028	PWZ1008D10X7
E2-30x40-TAG	30	65	68	40	28	75	22	67	B	811-101029	811-102069	811-402028	PWZ1008D10X7
E2-40x6-TAG	40	32	83	6	32,5	75	22	65	A	811-101028	811-102020	811-402030	PWZ1005D6X4,5
E2-40x8-TAG	40	34	83	8	32,5	75	22	65	A	811-101028	811-102020	811-402030	PWZ1005D6X4,5
E2-40x10-TAG	40	38	83	10	32,5	75	22	65	A	811-101028	811-102028	811-402030	PWZ1005D6X4,5
E2-40x12-TAG	40	38	83	12	32,5	75	22	65	A	811-101028	811-102028	811-402030	PWZ1005D6X4,5
E2-40x16-TAG	40	42	83	16	32,5	75	22	68	A	811-101028	811-102036	811-402064	PWZ1008D8X6
E2-40x20-TAG	40	42	83	20	32,5	85	22	80	A	811-101028	811-102036	811-402064	PWZ1008D8X6
E2-40x25-TAG	40	48	83	25	32,5	85	22	76	B	811-101028	811-102036	811-402028	PWZ1008D8X6
E2-40x32-TAG	40	56	83	32	32,5	85	22	76	B	811-101029	811-102036	811-402028	PWZ1008D10X7
E2-40x40-TAG	40	65	83	40	32,5	97	22	90	B	811-101029	811-102069	811-402029	PWZ1008D10X7
E2-50x16-TAG	50	42	98	16	35	93	30	85	A	811-101028	811-102036	811-402064	PWZ1008D8X6
E2-50x20-TAG	50	42	98	20	35	93	30	85	A	811-101028	811-102036	811-402064	PWZ1008D8X6
E2-50x25-TAG	50	48	98	25	35	98	30	90	A	811-101028	811-102036	811-402074	PWZ1008D8X6
E2-50x32-TAG	50	56	98	32	35	98	30	90	B	811-101029	811-102036	811-402029	PWZ1008D10X7
E2-50x40-TAG	50	65	98	40	35	115	30	105	B	811-101029	811-102069	811-402029	PWZ1008D10X7
E2-50x50-TAG	50	76	98	50	35	125	30	112	B	811-101030	811-102069	811-402029	PWZ1008D10X7
E2-60x25-TAG	60	48	123	25	42,5	98	30	90	A	811-101028	811-102036	811-402074	PWZ1008D8X6
E2-60x32-TAG	60	56	123	32	42,5	98	30	90	A	811-101029	811-102036	811-402076	PWZ1008D10X7
E2-60x40-TAG	60	65	123	40	42,5	115	30	105	B	811-101029	811-102069	811-402029	PWZ1008D10X7
E2-60x50-TAG	60	76	123	50	42,5	125	30	112	B	811-101030	811-102069	811-402029	PWZ1008D10X7

**Technische Besonderheiten :**

- 1) Schwingungsdämpfende Aufnahme. Besonders gut daher geeignet für VHM-Bohrstangen und alle schwingungsdämpfenden Bohrstangen dank der sehr langen Umschließung und tiefer Spannmöglichkeit.
- 2) Die besonders lange Vollumschließung der Bohrstange beim Spannen verbunden mit der geschlitzten Ausführung ermöglicht längere Auskraglängen für alle Arten von Bohrstangen und größere Schnittgeschwindigkeiten ohne Vibrationen oder störende Geräusche.
- 3) Die Befestigung erfolgt durch zwei Schrauben; eine dritte Schraube, die auf der Bohrstange senkrecht steht, dient zur Justierung der Wendeplatte auf Mitte.
- 4) Für zylindrischen Bohrstangen ohne Spannfläche ist vorne am Werkzeughalter eine senkrechte Markierung vorhanden um Bohrstangen mit Längsrille exakt mittig zu spannen.
- 5) Es gibt zwei Typen von Werkzeughaltern:
Typ a) Der VDI-Schaft ist aufgebohrt. Die Bohrstange kann in den Schaft eingeführt werden ohne sie zu kürzen.
Typ b) Der VDI-Schaft ist nicht aufgebohrt, und hat eine Längeneinstellschraube am Ende der Bohrung.
- 6) Alle VDI-Aufnahmen sind gemäß DIN 69880 gefertigt.

**Technical notes:**

- 1) Particularly suitable for vibration-damping- boring bars with HM-shank.
- 2) The particular elastic gripping allows a uniform tool-clamping and reduces vibrations when the tool is working with big projections.
- 3) Fixing occurs by two screws. A third screw, which is perpendicular to the tool, positions the tool itself, resting on the face, on the boring bar shank.
- 4) For completely cylindrical tools there is a reference mark engraved on the front side of the toolholder. It is useful to position the tool.
- 5) There are two kinds of toolholders:
 - a) The VDI- shank is completely drilled. The tool can be positioned through the shank without having to cut it, in case it is too long for machining.
 - b) The VDI- shank is not drilled and has only one adjusting screw at the end of the hole where the tool is placed.
- 6) The VDI- attachment is produced according to the DIN 69880- norms.

**Renseignements techniques**

- 1) Utilisation préconisée pour les barres d'alesage avec la queue en carbure monobloc.
- 2) La fermeture élastique assure un blocage uniforme de l'outil en réduisant remaquablement les vibrations quand on travaille avec des passes profondes.
- 3) La fixation se fait par vis, une troisième vis perpendiculaire à l'outil sert à l'orientation de celui-ci, en s'appuyant sur la queue de la barre l'alesage.
- 4) Pour les outils cylindrique un repère gravé sert de ligne de référence, ce qui permet l'orientation de l'outil.
- 5) Il y a deux sortes de port-outils:
 - a) La queue Vdi est complètement percée au diamètre de l'outil. L'outil peut alors être utilisé sans être coupé au cas où il soit trop long.
 - b) La queue Vdi n'est pas percée et est placé au fond de l'alesage destiné à l'outil.
- 6) Dans les deux cas l'attachement Vdi est fabriqué selon les normes Din69880.

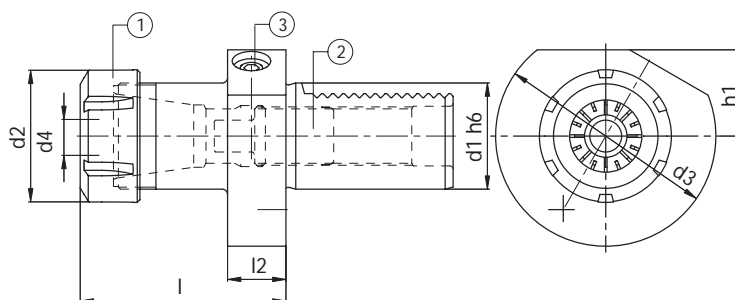
**Nozioni tecniche**


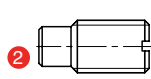
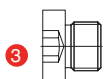
- 1) Particolarmente idonei per bareni antivibranti con stelo in metallo duro.
- 2) La particolare chiusura elastica rende uniforme il bloccaggio dell'utensile riducendo notevolmente le vibrazioni quando si lavora con grandi sporgenze.
- 3) Il fissaggio avviene mediante 2 viti, mentre una terza perpendicolare all'utensile inserito serve per l'orientamento dello stesso, appoggiandosi al classico piano di riferimento sullo stelo del barenò.
- 4) In caso di utilizzo di utensili totalmente cilindrici sulla parte frontale del portautensile si trova incisa una riga di riferimento che permette l'orientamento dell'utensile.
- 5) Esistono due tipologie di portautensile:
 - a) Il gambo Vdi è totalmente forato e permette l'inserimento dell'utensile attraverso lo stesso senza bisogno di un eventuale taglio nel caso si presentasse troppo lungo per le lavorazioni da effettuare.
 - b) Il gambo Vdi non è forato e presenta solo una vite di registro sul fondo del foro dove viene inserito l'utensile
- 6) L'attacco Vdi viene costruito seguendo correttamente le prescrizioni date dalle normative Din69880.

SPANNZANGENAUFNAHME FÜR SPANNZANGEN
NACH DIN 6499/B, TYP ER
COLLET CHUCK FOR COLLETS
ACCORDING TO DIN 6499/B, ER TYPE

PORTE-PINC POUR PINCES SELON
DIN 6499/B, TYPE ER
PORTAPINZA PER PINZE SECONDO DIN
6499/B, TIPO ER

E4



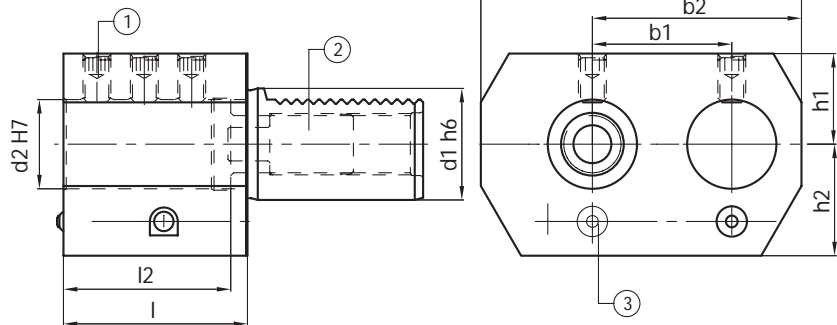
Code N.	Description	d1	d2	d3	d4	h1	l1	l2	Nut	Stop screw	Screw
											
E4-16x16	VDI16.L44.ER16	16	32	40	1-10	18	44	13	812-203005	811-104015	811-302011
E4-16x20	VDI16.L44.ER20	16	35	40	1-13	18	44	13	812-203006	811-104015	811-302011
E4-20x16	VDI20.L44.ER16	20	32	50	1-10	-	44	18	812-203005	811-104022	811-302011
E4-20x20	VDI20.L59.ER20	20	35	50	1-13	-	59	18	812-203006	811-303001	811-302106
E4-20x25	VDI20.L65.ER25	20	42	50	2-16	-	65	18	812-203001	811-303001	811-302106
E4-20x32	VDI20.L67.ER32	20	50	50	2-20	-	67	18	812-203002	811-303001	811-302106
E4-25x16	VDI25.L44.ER16	25	32	58	1-10	25	44	18	812-203005	811-104022	811-302106
E4-25x25	VDI25.L58.ER25	25	42	58	2-16	25	58	18	812-203001	811-303001	811-302106
E4-25x32	VDI25.L63.ER32	25	50	58	2-20	25	63	18	812-203002	811-303001	811-302106
E4-30x16	VDI30.L48.ER16	30	32	68	1-10	28	48	22	812-203005	811-303001	811-302106
E4-30x20	VDI30.L59.ER20	30	35	68	1-13	28	59	22	812-203006	811-303014	811-302106
E4-30x25	VDI30.L57.ER25	30	42	68	2-16	28	57	22	812-203001	811-303014	811-302106
E4-30x32	VDI30.L78.ER32	30	50	68	2-20	28	78	22	812-203002	811-303014	811-302106
E4-30x40	VDI30.L80.ER40	30	63	68	3-30	28	80	22	812-203003	811-303014	811-302106
E4-40x20	VDI40.L59.ER20	40	35	83	1-13	32.5	59	22	812-203006	811-303003	811-302106
E4-40x25	VDI40.L57.ER25	40	42	83	2-16	32.5	57	22	812-203001	811-303003	811-302106
E4-40x32	VDI40.L78.ER32	40	50	83	2-20	32.5	78	22	812-203002	811-303004	811-302106
E4-40x40	VDI40.L80.ER40	40	63	83	3-30	32.5	80	22	812-203003	811-303004	811-302106
E4-50x25	VDI50.L67.ER25	50	42	98	2-16	35	67	30	812-203001	811-303003	811-302106
E4-50x32	VDI50.L92.ER32	50	50	98	2-20	35	92	30	812-203002	811-303004	811-302106
E4-50x40	VDI50.L80.ER40	50	63	98	3-30	35	80	30	812-203003	811-303004	811-302106
E4-60x32	VDI60.L78.ER32	60	50	123	2-20	42.5	78	30	812-203002	811-303004	811-302106
E4-60x40	VDI60.L80.ER40	60	63	123	3-30	42.5	80	30	812-203003	811-303004	811-302106
E4-80x40	VDI80.L100.ER40	80	63	158	3-30	55	100	40	812-203003	811-303004	811-302106

• Coolant supply unit not included.

• Adduttore refrigerante non incluso.

WERKZEUGHALTER MIT ZWEI BOHRUNGEN RECHTS PORTE-OUTIL DOUBLE DROIT DOUBLE BORING BAR HOLDER, RIGHT PORTABARENO DOPPIO DESTRO

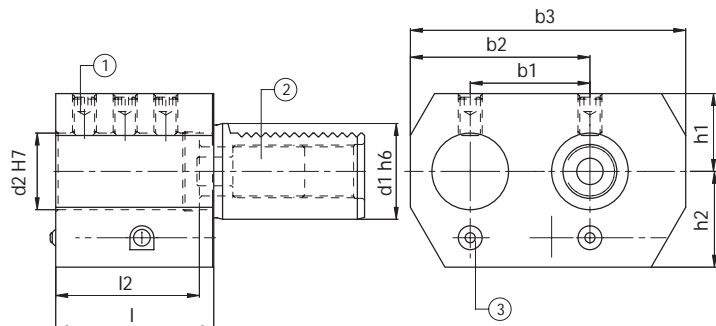
E7



Code N.	d1	d2	h1	h2	l1	l2	b1	b2	b3	Locking screw	Qt.	Stop screw	Coolant noose
E7-20x16	20	16	25	25	45	42	32	51	76	811-102029	4	811-303001	PWZ1008D10x7
E7-20x20	20	20	25	25	45	42	32	51	76	811-102029	4	811-303001	PWZ1008D10x7
E7-30x25	30	25	28	32	56	52	45	65	95	811-102029	6	811-303003	PWZ1008D10x7
E7-40x32	40	32	32.5	40	66	60	50	75	115	811-102037	6	811-303004	PWZ1008D10x7
E7-50x32	50	32	32.5	47,5	66	60	50	75	115	811-102037	6	811-303004	PWZ1008D10x7
E7-50x50	50	50	35	49	90	80	68	103	152	811-102064	6	811-303005	PWZ1012D12x8

WERKZEUGHALTER MIT ZWEI BOHRUNGEN LINKS PORTE-OUTIL DOUBLE GAUCHE DOUBLE BORING BAR HOLDER, LEFT PORTABARENO DOPPIO SINISTRO

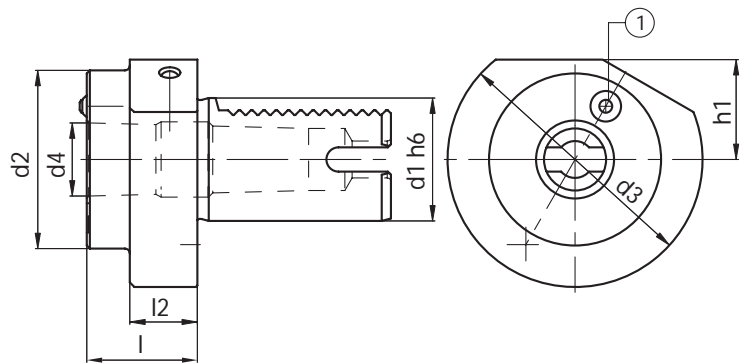
E8



Code N.	d1	d2	h1	h2	l1	l2	b1	b2	b3	Locking screw	Qt.	Stop screw	Coolant noose
E8-20x16	20	16	25	25	45	42	32	51	76	811-102029	4	811-303001	PWZ1008D10x7
E8-20x20	20	20	25	25	45	42	32	51	76	811-102029	4	811-303001	PWZ1008D10x7
E8-30x25	30	25	28	32	56	52	45	65	95	811-102029	6	811-303003	PWZ1008D10x7
E8-40x32	40	32	32.5	40	66	60	50	75	115	811-102037	6	811-303004	PWZ1008D10x7
E8-50x32	50	32	32.5	47,5	66	60	50	75	115	811-102037	6	811-303004	PWZ1008D10x7
E8-50x50	50	50	35	49	90	80	68	103	152	811-102064	6	811-303005	PWZ1012D12x8

MORSEKEGEL-AUFNAHME MORSE TAPER HOLDER
 PORTE-OUTIL POUR CONE MORSE PORTAUTENSILE CON SEDE CONO MORSE

F

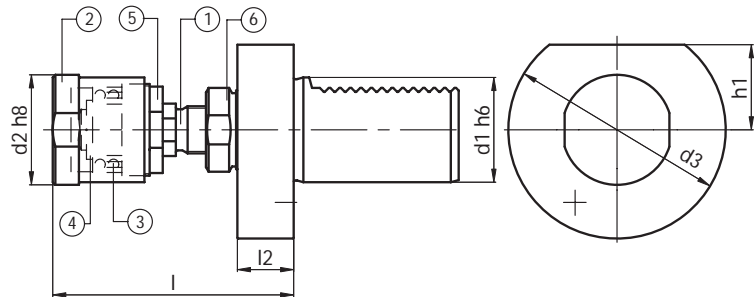


Code N.	d1	d2	d3	MK	d4	h1	l1	l2	Coolant noose
F16-MKD1	16	-	42	1	12.065	-	31.5	-	PWZ1008D8X06
F16-MKD2	16	-	42	2	17.780	-	72	-	PWZ1008D8X06
F20-MKD1	20	-	50	1	12.065	-	23	-	PWZ1008D10X7
● F20-MKD2	20	45	50	2	17.780	-	41	22	PWZ1008D10X7
F25-MKD1	25	45	58	1	12.065	25	23	18	PWZ1008D8X06
F25-MKD2	25	45	58	2	17.780	25	34	18	PWZ1008D8X06
F25-MKD3	25	50	58	3	23.825	25	90	62	PWZ1008D8X06
F30-MKD1	30	-	68	1	12.065	28	27	-	PWZ1008D10X7
F30-MKD2	30	55	68	2	17.780	28	36	27	PWZ1008D10X7
F30-MKD3	30	55	68	3	23.825	28	66	41	PWZ1008D10X7
F40-MKD1	40	55	83	1	12.065	32.5	23	22	PWZ1008D10X7
F40-MKD2	40	55	83	2	17.780	32.5	36	22	PWZ1008D10X7
F40-MKD3	40	58	83	3	23.825	32.5	36	22	PWZ1008D10X7
F40-MKD4	40	68	83	4	31.267	32.5	80	22	PWZ1008D10X7
F50-MKD2	50	55	98	2	17.780	35	36	30	PWZ1008D10X7
F50-MKD3	50	58	98	3	23.825	35	45	30	PWZ1008D10X7
F50-MKD4	50	68	98	4	31.267	35	55	30	PWZ1008D10X7
● F50-MKD5	50	75	98	5	44.399	35	72	30	PWZ1008D10X7
F60-MKD2	60	55	123	2	17.780	42.5	35	30	PWZ1008D10X7
F60-MKD3	60	58	123	3	23.825	42.5	45	30	PWZ1008D10X7
F60-MKD4	60	68	123	4	31.267	42.5	55	30	PWZ1008D10X7
F60-MKD5	60	98	123	5	44.399	42.5	64	30	PWZ1008D10X7
F80-MKD4	80	68	158	4	31.267	55	55	40	PWZ1008D10X7
F80-MKD5	80	88	158	5	44.399	55	68	40	PWZ1008D12X8

- Ohne Verzahnung!
- Without VDI shank!
- Sans denture VDI!
- Senza dentatura VDI!

WERKSTOFFANSCHLAG LÄNGENEINSTELLBAR PORTE-OUTIL VDI A BUTEE REGLABLE
 VDI ADJUSTABLE, STOP BAR FERMOBARRA VDI, REGOLABILE

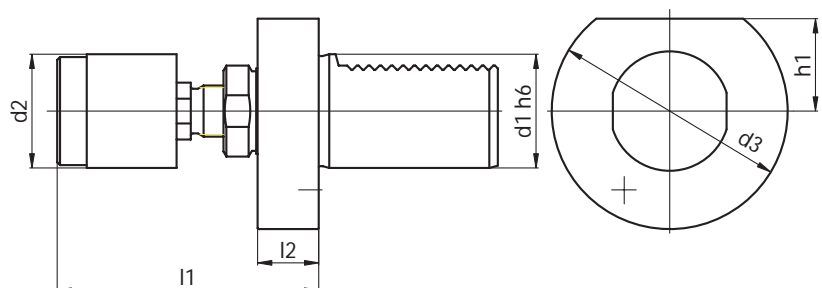
MW



Code N.	d1	d2	d3	h1	l1	l2	Screw	Head	Bearings	Ring	Nut	Stop nut
MW-2026	20	26	50	23	60-85	18	118-320012	118-320013	821-112001	822-103010	812-205010	812-206010
MW-2032	20	32	50	23	60-85	18	118-320012	118-320023	821-112001	822-103010	812-205010	812-206010
MW-2042	20	42	50	23	60-85	18	118-320012	118-320033	821-112001	822-103010	812-205010	812-206010
MW-3032	30	32	68	28	84-102	22	118-320032	118-320023	821-112001	822-103010	812-205020	812-206020
MW-3042	30	42	68	28	84-102	22	118-320042	118-320043	821-112002	822-103020	812-205030	812-206020
MW-3058	30	58	68	28	84-102	22	118-320042	118-320053	821-112002	822-103020	812-205030	812-206020
MW-4032	40	32	83	32.5	84-102	22	118-320032	118-320023	821-112001	822-103010	812-205020	812-206020
MW-4042	40	42	83	32.5	84-102	22	118-320042	118-320043	821-112002	822-103020	812-205030	812-206020
MW-4058	40	58	83	32.5	84-102	22	118-320042	118-320053	821-112002	822-103020	812-205030	812-206020

WERKSTOFFANSCHLAG, VESTELLBAR, GEDÄMPFT PORTE-OUTIL VDI A BUTEE REGLABLE, AMORTI
 VDI DAMPED, ADJUSTABLE, STOP BAR FERMOBARRA VDI, REGOLABILE AMMORTIZZATO

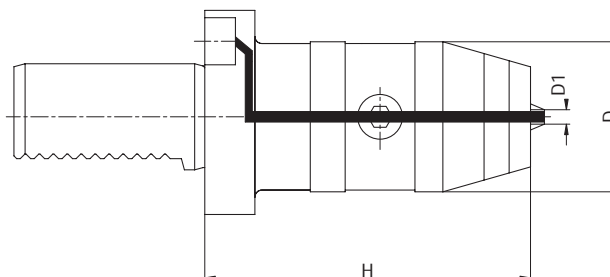
MW-AM



Code N.	d1	d2	d3	h1	l1	l2
MW-2042-AM	20	42	50	23	62-97	16
MW-3042-AM	30	42	68	28	62-97	16
MW-4042-AM	40	42	83	32.5	62-97	22
MW-5042-AM	50	42	98	35	62-97	30

ZWISCHENHÜLSEN MIT ZENTRALEM KUHLMITTELLOCH DOUILLES AVEC ARROSAGE INTERNE
 ADAPTORS FOR DRILLS WITH INTERNAL COOLANT SUPPLY MANDRINO PORTAPUNTE CON PASS. REFRIGERANTE CENTRALE

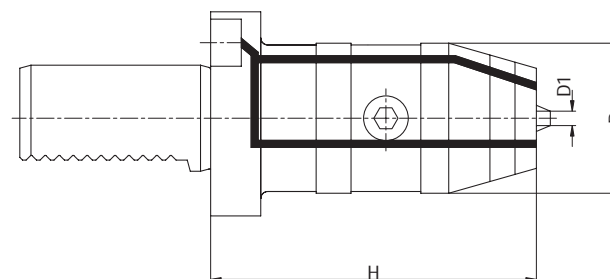
KS1



Code N.	Description	H	D	Clamping Capacity
KS1-30-13	VDI30x55 0,5-13	90	50	0,5-13
KS1-30-16	VDI30x55 2,5-16	90	50	2,5-16
KS1-40-13	VDI40x63 0,5-13	90	50	0,5-13
KS1-40-16	VDI40x63 2,5-16	90	50	2,5-16
KS1-50-13	VDI50x78 0,5-13	90	50	0,5-13
KS1-50-16	VDI50x78 2,5-16	90	50	2,5-16

ZWISCHENHÜLSEN MIT SEITLICHEM KUHLMITTELLOCH DOUILLES AVEC ARROSAGE LATÉRALE
 ADAPTORS FOR DRILLS WITH LATERAL COOLANT SUPPLY MANDRINO PORTAPUNTE CON PASS. REFRIGERANTE LATÉRALE

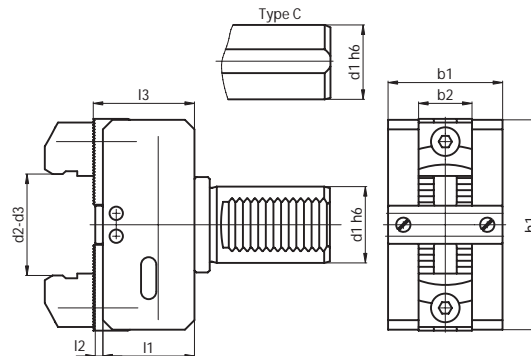
KS2



Code N.	Description	H	D	Clamping Capacity
KS2-30-13	VDI30x55 0,5-13	82	57	0,5-13
KS2-30-16	VDI30x55 2,5-16	82	57	2,5-16
KS2-40-13	VDI40x63 0,5-13	85	57	0,5-13
KS2-40-16	VDI40x63 2,5-16	85	57	2,5-16
KS2-50-13	VDI50x78 0,5-13	85	57	0,5-13
KS2-50-16	VDI50x78 2,5-16	85	57	2,5-16

STANGENGREIFER SERRE BARRE BAR PULLER STRINGIBARRA

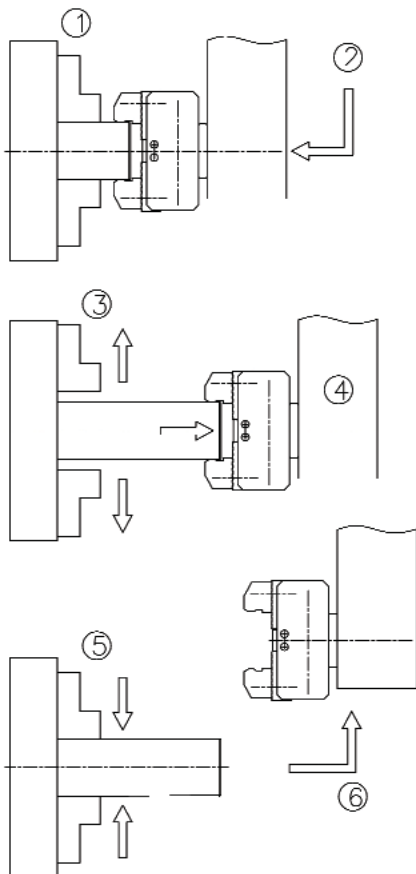
HK1



Code N.	d1	d2 (short)	d3 (long)	b1	b2	h1	l1	l2	l3
H116K	16	6-56	54-110	50	28	72	46	4	51
H120K	20	6-56	54-110	50	28	72	46	4	51
H125K	25	6-56	54-110	50	28	72	46	4	51
H125KC	25	6-56	54-110	50	28	72	46	4	51
H130K	30	6-56	54-110	50	28	72	46	4	51
H132KC	32	6-56	54-110	50	28	72	46	4	51
H140K	40	6-66	54-110	60	28	110	48	4	53
H140KC	40	6-66	54-110	60	28	110	48	4	53
H150K	50	10-75	62-125	65	28	130	67	5	73
H150KC	50	10-75	62-125	65	28	130	67	5	73
H160K	60	10-75	62-125	65	28	130	67	5	73

Spare parts on page 323 - Vedi ricambi a pag. 323

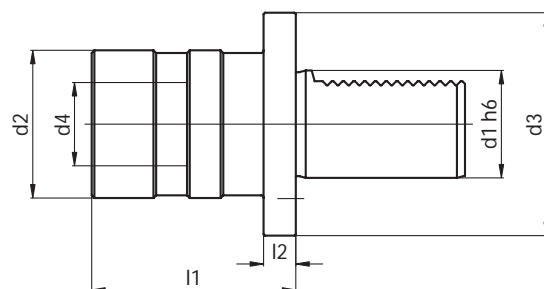
Manuale di utilizzo per gli stringibarra • Operating manual for bar puller



- 1) Il mandrino autocentrante si ferma.
The self-centering chuck stops.
La broche et son mandrin à centrage automatique s'arrêtent.
Das selbstzentrierende Backenfutter bleibt geschlossen.
- 2) Dopo aver regolato le griffe di chiusura di 3-5mm in meno del diametro della barra da tirare, andare a prendere il pezzo.
After positioning the jaws 3-5mm less than the measure of the bar diameter, clamp the bar.
Après avoir réglé les griffes de fermeture de 3-5mm inférieur au diamètre de la barre à tirer, princer la barre.
Nachdem die Spannbacken des Stangengreifers um 3-5mm kleiner als der Durchmesser der zu greifenden Stange eingestellt worden sind, das Stück greifen.
- 3) L'autocentrante si apre.
The self-centering chuck opens.
Le mandrin à centrage automatique s'ouvre.
Das selbstzentrierende Backenfutter öffnet sich.
- 4) Lo stringibarra tira il pezzo/barra.
The bar puller pulls the bar.
Le serre-barre tire la barre.
Der Stangengreifer zieht das Stück/die Stange auf die gewünschte Länge.
- 5) L'autocentrante blocca il pezzo.
The self-centering chuck clamps the bar.
Le mandrin à centrage automatique se referme sur la barre.
Das selbstzentrierende Backenfutter wird geschlossen.
- 6) Lo stringibarra lascia/molla il pezzo.
The bar puller releases the bar.
Le serre-barre relâche la barre.
Der Stangengreifer geht zurück und die Backen öffnen sich selbständig.
- 7) Continua la lavorazione.
The work goes on.
Le cycle d'usinage peut alors continuer.
Die Bearbeitung geht weiter.

GEWINDESCHNEID-SCHNELLWECSSELFUTTER MIT LÄNGENAUSGLEICH TENSION AND COMPRESSION TAPPING HEAD
 MANDRINS DE TARAUDAGE A CHANGEMENT RAPIDE A DOUBLE USAGE
 MASCHIATORI A DOPPIA COMPENSAZIONE

M



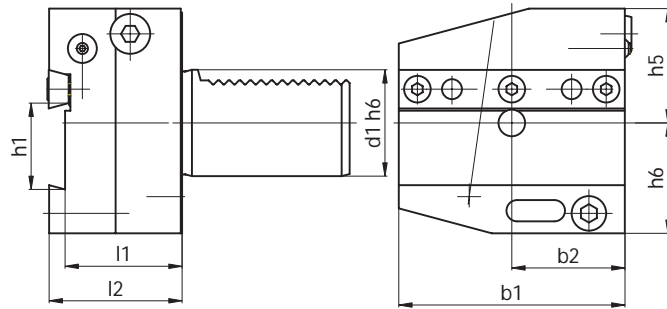
Code N.	d1	Top range	Size	Ext.	Pres.	d2	d3	d4	l1	l2
M2710	20	M3-M12	1	9	9	38	50	19	55	12
M2715	25	M3-M12	1	9	9	38	58	19	55	12
M2720	30	M3-M12	1	9	9	38	68	19	55	12
M2730	40	M3-M12	1	9	9	38	83	19	55	12
M2810	20	M6-M20	2	15	15	55	50	31	77	12
M2815	25	M6-M20	2	15	15	55	58	31	77	12
M2820	30	M6-M20	2	15	15	55	68	31	77	12
M2830	40	M6-M20	2	15	15	55	83	31	77	12
M2930	40	M14-M33	3	24	24	79	83	48	110	12
M2940	50	M14-M33	3	24	24	79	98	48	110	12

Coolant supply unit included - *Aduttore refrigerante incluso*

ABSTECHMEISSELHALTER,
HÖHENEINSTELLBAR, RECHTS
TOOLHOLDER FOR CUT OFF TOOLS
ADJUSTABLE IN HEIGHT, RIGHT

PORTE-OUTIL DE TRONCONNAGE AVEC REGLAGE
EN HAUTEUR, A DROITE
PORTAUTENSILE REGOLABILE CON SEDE PER
LAMA DA TAGLIO, DESTRO

AR

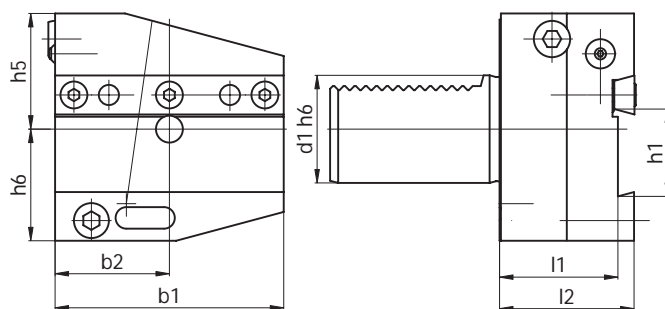


Code N.	d1	b1	b2	h1	h5	h6	l1	l2
AR2026	20	60	30	26	28	36	44	50
AR2526	25	60	30	26	28	36	44	50
AR3026	30	70	35	26	32	39	44	50
AR4026	40	85	42.5	26	43	41.5	44	50
AR4032	40	85	42.5	32	43	41.5	44	50
AR5026	50	100	50	26	43	45	44	50
AR5032	50	100	50	32	43	45	44	50
AR6032	60	125	62.5	32	48	55	44	50

ABSTECHMEISSELHALTER,
HÖHENEINSTELLBAR, LINKS
TOOLHOLDER FOR CUT OFF TOOLS
ADJUSTABLE IN HEIGHT, LEFT

PORTE-OUTIL DE TRONCONNAGE AVEC REGLAGE
EN HAUTEUR, A GAUCHE
PORTAUTENSILE REGOLABILE CON SEDE PER
LAMA DA TAGLIO, SINISTRO

AL



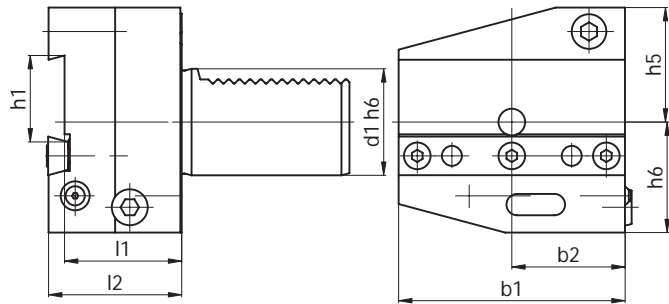
Code N.	d1	b1	b2	h1	h5	h6	l1	l2
AL2026	20	60	30	26	28	36	44	50
AL2526	25	60	30	26	32	36	44	50
AL3026	30	70	35	26	32	39	44	50
AL4026	40	85	42.5	26	43	41.5	44	50
AL4032	40	85	42.5	32	43	41.5	44	50
AL5026	50	100	50	26	43	45	44	50
AL5032	50	100	50	32	43	45	44	50
AL6032	60	125	62.5	32	48	55	44	50

Spare parts on page 324 - Vedi ricambi a pag. 324

ABSTECHMEISSELHALTER,
HÖHENEINSTELLBAR, ÜBERKOPF RECHTS
TOOLHOLDER FOR CUT OFF TOOLS
ADJUSTABLE IN HEIGHT, UPSIDE-DOWN, RIGHT

PORTE-OUTIL DE TRONCONNAGE AVEC REGLAGE
EN HAUTEUR, RENVERSE, DROITE
PORTAUTENSILE REGOLABILE CON SEDE PER
LAMA DA TAGLIO ROVESCiato, DESTRO

ARU

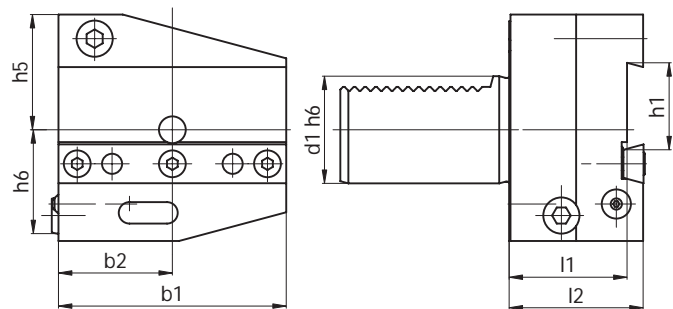


Code N.	d1	b1	b2	h1	h5	h6	l1	l2
ARU2526	25	60	30	26	36	28	44	50
ARU3026	30	70	35	26	38	35	44	50
ARU4026	40	85	42.5	26	43	41.5	44	50
ARU4032	40	85	42.5	32	43	41.5	44	50
ARU5026	50	100	50	26	43	45	44	50
ARU5032	50	100	50	32	43	45	44	50
ARU6032	60	125	62.5	32	48	55	44	50

ABSTECHMEISSELHALTER,
HÖHENEINSTELLBAR, ÜBERKOPF LINKS
TOOLHOLDER FOR CUT OFF TOOLS
ADJUSTABLE IN HEIGHT, UPSIDE-DOWN, LEFT

PORTE-OUTIL DE TRONCONNAGE AVEC REGLAGE
EN HAUTEUR, RENVERSE, GOUCHE
PORTAUTENSILE REGOLABILE CON SEDE PER
LAMA DA TAGLIO ROVESCiato, SINISTRO

ALU

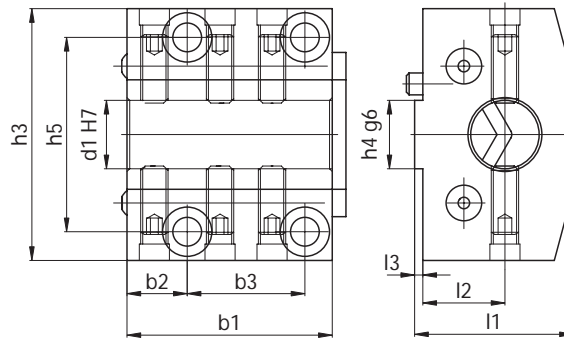


Code N.	d1	b1	b2	h1	h5	h6	l1	l2
ALU2526	25	60	30	26	36	28	44	50
ALU3026	30	70	35	26	38	35	44	50
ALU4026	40	85	42.5	26	43	41.5	44	50
ALU4032	40	85	42.5	32	43	41.5	44	50
ALU5026	50	100	50	26	43	45	44	50
ALU5032	50	100	50	32	43	45	44	50
ALU6032	60	125	62.5	32	48	55	44	50

Spare parts on page324 - Vedi ricambi a pag.324

LÄNGSWERKZEUGHALTER FÜR BOHRSTANGEN FÜR STERNREVOLVER
 LONGITUDINAL TOOLHOLDER FOR BORING BARS
 PORTE-OUTIL LONGITUDINAL POUR OUTILS A ALESER
 PORTAUTENSILE LONGITUDINALE PER BARENI, PER TORRETTA RADIALE

PU1

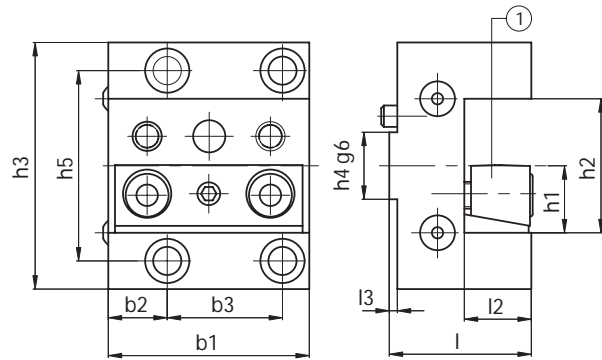


Code N.	d1	h3	h4	h5	b1	b2	b3	l1	l2	l3
PU1-12-12	12	48	12	36	40	12	21.5	36	20	3
PU1-12-16	16	48	12	36	40	12	21.5	36	20	3
PU1-12-20	20	48	12	36	40	12	21.5	36	20	3
PU1-12-25	25	48	12	36	40	12	21.5	43	23	3
PU1-16-16	16	61	16	46.5	50	14.5	28	43	23	3
PU1-16-20	20	61	16	46.5	50	14.5	28	43	23	3
PU1-16-25	25	61	16	46.5	50	14.5	28	43	23	3
PU1-16-32	32	61	16	46.5	50	14.5	28	53	30	3
PU1-20-20	20	74	20	57	60	17.5	34	48	25	3
PU1-20-25	25	74	20	57	60	17.5	34	48	25	3
PU1-20-32	32	74	20	57	60	17.5	34	48	25	3
PU1-20-40	40	74	20	57	60	17.5	34	60	32	3
PU1-25-20	20	92	25	71	75	22	43	58	30	3
PU1-25-25	25	92	25	71	75	22	43	58	30	3
PU1-25-32	32	92	25	71	75	22	43	58	30	3
PU1-25-40	40	92	25	71	75	22	43	58	30	3
PU1-25-50	50	92	25	71	75	22	43	73	38	3
PU1-32-25	25	115	32	90	95	26	57	73	35	3
PU1-32-32	32	115	32	90	95	26	57	73	35	3
PU1-32-40	40	115	32	90	95	26	57	73	35	3
PU1-32-50	50	115	32	90	95	26	57	73	35	3
PU1-32-60	60	115	32	90	95	26	57	83	40	3
PU1-40-32	32	142	40	111	125	33	77	85	40	5
PU1-40-40	40	142	40	111	125	33	77	85	40	5
PU1-40-50	50	142	40	111	125	33	77	85	40	5
PU1-40-60	60	142	40	111	125	33	77	85	40	5

• With internal coolant / con passaggio refrigerante interno

LÄNGSWERKZEUGHALTER MIT VIERKANTAUFNAHME FÜR STERNREVOLVER
 LONGITUDINAL TOOLHOLDER WITH REVERSIBLE SQUARE SEAT
 PORTE-OUTIL LONGITUDINAL AVEC SIEGE CARREE, REVERSIBLE
 PORTAUTENSILE A SEDE QUADRA, REVERSIBLE
 LONGITUDINALE PER TORRETTA RADIALE

PU2



Code N.	h1	h2	h3	h4	h5	b1	b2	b3	l1	l2	l3	Clamping plate
PU2-12-12	12	24	48	12	36	40	12	21.5	28	12	3	832-018990
PU2-16-16	16	32	61	16	46.5	50	14.5	28	38	16	3	832-018870
PU2-20-20	20	40	74	20	57	60	17.5	34	43	20	3	832-007160
PU2-25-25	25	50	92	25	71	75	22	43	53	25	3	832-007010
PU2-32-32	32	64	115	32	90	95	26	57	63	32	3	832-007170
PU2-40-40	40	80	142	40	111	125	33	77	75	40	5	832-020010



**KIT PORTA UTENSILI
KIT VDI TOOL HOLDERS**



CODE DIN 69880	DESCRIZIONE DESCRIPTION
KIT VDI 30 DX	N°4 portaut.trasver.dx. (B1) <i>N°4 turning RH short (B1)</i>
	N°1 portaut.trasv.rov.dx. (B3) <i>N°1 turning RH overhead (B3)</i>
	N°1 portaut.longit.dx. (C1) <i>N°1 axial holder RH (C1)</i>
	N°1 portapunte inserti Ø20 (E1) <i>N°1 U drill holder Ø20 (E1)</i>
	N°1 portabareno Ø25 (E2) <i>N°1 boring bar holder Ø25 (E2)</i>
	N°1 portabareno Ø20 (E2) <i>N°1 boring bar holder Ø20 (E2)</i>
	N°1 portabareno Ø16 (E2) <i>N°1 boring bar holder Ø16 (E2)</i>
	N°2 portapince ER32 (E4) <i>N°2 collet chucks ER32 (E4)</i>
	N°1 bussola di riduzione Ø25-10 <i>N°1 reduction Ø25-10</i>
	N°1 bussola di riduzione Ø25-12 <i>N°1 reduction Ø25-12</i>
	N°10 pinze ER32 (Ø3 4 6 8 10 12 14 16 18 20) <i>N°10 collets ER32 (Ø3 4 6 8 10 12 14 16 18 20)</i>
	N°1 chiave per ER32 <i>N°1 wrench ER32</i>

Lo stesso Kit può essere fornito con portautensili radiali e longitudinali in versione SINISTRA con codice

The same Kit can be supplied with LEFT radial and axial toolholders with code n°

KITVDI30SX



CODE DIN 69880	DESCRIZIONE DESCRIPTION
KIT VDI 40 DX	N°4 portaut.trasver.dx. (B1) <i>N°4 turning RH short (B1)</i>
	N°1 portaut.trasv.rov.dx. (B3) <i>N°1 turning RH overhead (B3)</i>
	N°1 portaut.longit.dx. (C1) <i>N°1 axial holder RH (C1)</i>
	N°1 portapunte inserti Ø32 (E1) <i>N°1 U drill holder Ø32 (E1)</i>
	N°1 portabareno Ø16 (E2) <i>N°1 boring bar holder Ø16 (E2)</i>
	N°1 portabareno Ø25 (E2) <i>N°1 boring bar holder Ø25 (E2)</i>
	N°1 portabareno Ø32 (E2) <i>N°1 boring bar holder Ø32 (E2)</i>
	N°2 portapince ER32 (E4) <i>N°2 collet chucks ER32 (E4)</i>
	N°1 bussola di riduzione Ø32-12 <i>N°1 reduction Ø32-12</i>
	N°1 bussola di riduzione Ø32-20 <i>N°1 reduction Ø32-20</i>
	N°1 bussola CM3 <i>N°1 reduction MT3</i>
	N°10 pinze ER32 (Ø3 4 6 8 10 12 14 16 18 20) <i>N°10 collets ER32 (Ø3 4 6 8 10 12 14 16 18 20)</i>
N°1 chiave per ER32 <i>N°1 wrench ER32</i>	

Lo stesso Kit può essere fornito con portautensili radiali e longitudinali in versione SINISTRA con codice

The same Kit can be supplied with LEFT radial and axial toolholders with code n°

KITVDI40SX

KANTEL

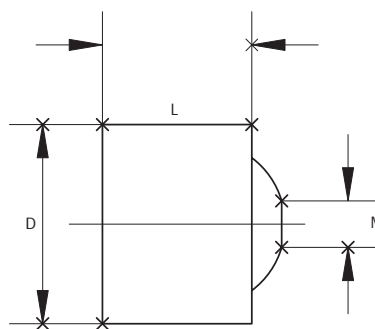


The Kawasaki logo is positioned at the top of the page. It features the word "KAWASAKI" in a bold, black, sans-serif font. The letter "K" is stylized with an orange and grey geometric shape integrated into its structure. The background of the entire page is a faded, high-angle photograph of a metal mesh structure, likely a washing machine drum, with a circular opening visible in the lower half.

RICAMBI / SPARE PARTS

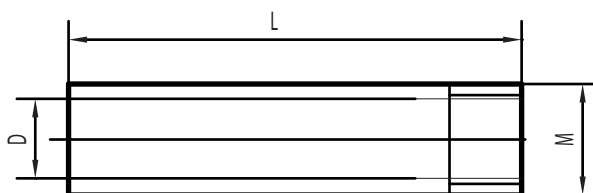
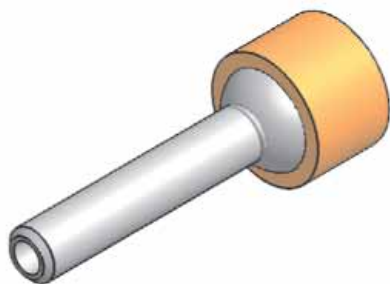


SPRITZDÜSEN BUSE D'ARROSAGE
COOLANT NOZZLES UGELLO REFRIGERANTE



Code N.	D	L	M
PWZ1005D6x4,5	6	5	M 2,5
PWZ1008D8x6	8	6	M 4
PWZ1008D10x7	10	7	M 5
PWZ1012D12x8	12	8	M 6
PWZ1012D14x10	14	9	M 8
PWZ1014D16x12	16	10	M 10

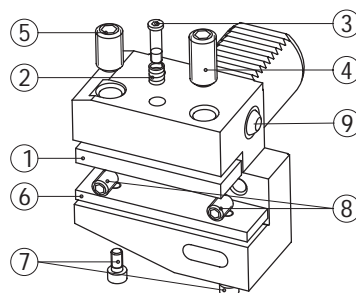
SPRITZROHR RALLONGE POUR BUSE D'ARROSAGE
EXTENSION FOR COOLANT NOZZLES PROLUNGHE UGELLO REFRIGERANTE

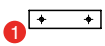

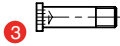
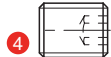
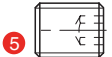




Code N.	M	D	L
833-00150	M 3	1,5	25
833-00151	M 4	1	30
833-00152	M 4	2	30
833-00153	M 5	2	30
833-00154	M 5	3	40
833-00155	M 6	2	35
833-00156	M 6	3	35
833-00157	M 6	4	50
833-00158	M 8	2	40
833-00159	M 8	3	40
833-00160	M 8	4	40
833-00161	M 8	5	50
833-00162	M 10	2	40
833-00163	M 10	4	40
833-00164	M 10	6	50
833-00165	M 10	8	50

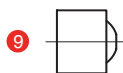
ERSATZTEILE PIECES DETACHEES SPARE PARTS COMPONENTI

B1- B2 - B3 - B4



Code N.	Tool clamp plate	Spring	Q	Screw	Q	Locking screw	Q	Locking screw short	Shim plate	Screw	Q	Stop screw
												
B..-16x12x...	832-002084	824-101010	1	811-302009	1	811-402047	1	811-102019	-	-	-	811-102020
B..-20x16x...	832-002003	824-101010	1	811-302004	1	811-102030	1	811-102029	832-003003	811-101016	1	811-102020
B..-25x16x...	832-002003	824-101010	1	811-302004	1	811-102030	1	811-102029	832-003003	811-101016	1	811-102020
B1-30x20x...	832-002012	824-101010	1	811-302004	1	811-102044	1	811-102043	832-003007	811-101016	1	811-102028
B2-30x20x...	832-002012	824-101010	1	811-302004	1	811-102045	1	811-102044	832-003007	811-101016	1	811-102028
B3-30x20x...	832-002012	824-101010	1	811-302004	1	811-102045	1	811-102044	832-003007	811-101016	1	811-102028
B4-30x20x...	832-002012	824-101010	1	811-302004	1	811-102045	1	811-102044	832-003007	811-101016	1	811-102028
B1-40x25x44	832-002019	824-101010	1	811-302004	1	811-102045	1	811-102044	832-003012	811-101016	2	811-102028
B2-40x25x44	832-002019	824-101010	1	811-302004	1	811-102045	1	811-102044	832-003012	811-101016	2	811-102028
B3-40x25x44	832-002019	824-101010	1	811-302004	1	811-102047	1	811-102045	832-003033	811-101016	2	811-102028
B4-40x25x44	832-002019	824-101010	1	811-302004	1	811-102047	1	811-102045	832-003033	811-101016	2	811-102028
B1-50x32x55	832-002025	824-101010	1	811-302004	1	811-102045	2	-	832-003016	811-101017	2	811-102036
B2-50x32x55	832-002025	824-101010	1	811-302004	1	811-102045	2	-	832-003016	811-101017	2	811-102036
B3-50x32x55	832-002025	824-101010	1	811-302004	1	811-102083	1	811-102047	832-003034	811-101017	2	811-102036
B4-50x32x55	832-002025	824-101010	1	811-302004	1	811-102083	1	811-102047	832-003034	811-101017	2	811-102036
B1-60x32x60	832-002028	824-101020	1	811-302013	1	811-102054	2	-	832-003019	811-101017	2	811-102036
B2-60x32x60	832-002028	824-101020	1	811-302013	1	811-102054	2	-	832-003019	811-101017	2	811-102036
B3-60x32x60	832-002028	824-101020	1	811-302013	1	811-102057	1	811-102054	832-003019	811-101017	2	811-102036
B4-60x32x60	832-002028	824-101020	1	811-302013	1	811-102057	1	811-102054	832-003019	811-101017	2	811-102036
B1-80x40x75	832-002034	824-101020	2	811-302013	2	811-102056	3	-	832-003021	811-101017	2	811-102036
B2-80x40x75	832-002034	824-101020	2	811-302013	2	811-102056	3	-	832-003021	811-101017	2	811-102036
B3-80x40x75	832-002034	824-101020	2	811-302013	2	811-102058	2	811-102056	832-003021	811-101017	2	811-102036
B4-80x40x75	832-002034	824-101020	2	811-302013	2	811-102058	2	811-102056	832-003021	811-101017	2	811-102036

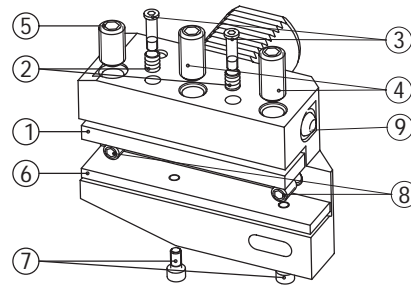
Code N. Coolant noose



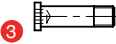







B...16x12...	PWZ1008D8X6
B1-20x16x...	PWZ1008D10X7
B2-20x16x...	PWZ1008D10X7
B3-20x16x...	PWZ1008D10X7
B4-20x16x...	PWZ1008D10X7
B1-25x16x...	PWZ1008D10X7
B2-25x16x...	PWZ1008D10X7
B3-25x16x...	PWZ1008D10X7
B4-25x16x40	PWZ1008D10X7
B4-25x16x30	PWZ1008D10X7
B..-30x20x...	PWZ1012D14X10
B..-40x25x44	PWZ1012D14X10
B..-50x32x55	PWZ1012D14X10
B..-60x32x60	PWZ1012D14X10
B..-80x40x75	PWZ1012D14X10

ERSATZTEILE / PIÈCES DETACHÉES SPARE PARTS / COMPONENTI

B5 - B6 - B7 - B8



Code N.	Tool clamp plate	Spring	Q	Screw	Q	Locking screw	Q	Locking screw short	Shim plate	Screw	Q	Stop screw		
														
B...16x12x...	832-002051	824-101010	2	811-302009	2	811-402047	2	811-102019	-	-	-	811-102020		
B...20x16x...	832-002006	824-101010	2	811-302004	2	811-102030	2	811-102029	832-003005	811-101016	1	811-102020		
B...25x16x...	832-002006	824-101010	2	811-302004	2	811-102030	2	811-102029	832-003005	811-101016	1	811-102020		
B5-30x20x...	832-002013	824-101010	2	811-302004	2	811-102044	2	811-102043	832-003009	811-101016	2	811-102028		
B6-30x20x...	832-002013	824-101010	2	811-302004	2	811-102045	2	811-102044	832-003009	811-101016	1	811-102028		
B5-40x25x44	832-002021	824-101010	2	811-302004	2	811-102045	2	811-102044	832-003014	811-101016	2	811-102028		
B6-40x25x44	832-002021	824-101010	2	811-302004	2	811-102047	2	811-102045	832-003014	811-101016	2	811-102028		
B7-40x25x44	832-002021	824-101010	2	811-302004	2	811-102045	3	-	832-003018	811-101017	2	811-102036		
B5-50x32x55	832-002026	824-101010	2	811-302004	2	811-102083	2	811-102047	832-003018	811-101017	2	811-102036		
B6-50x32x55	832-002026	824-101010	2	811-302004	2	811-102054	3	-	832-003020	811-101017	2	811-102036		
B7-50x32x55	832-002026	824-101010	2	811-302004	2	811-102057	2	811-102054	832-003020	811-101017	2	811-102036		
B5-60x32x60	832-002029	824-101020	2	811-302013	2	811-102056	3	-	832-003022	811-101017	2	811-102036		
B6-60x32x60	832-002029	824-101020	2	811-302013	2	811-102058	2	811-102056	832-003022	811-101017	2	811-102036		
B7-60x32x60	832-002029	824-101020	2	811-302013	2									
B8-60x32x60	832-002029	824-101020	2	811-302013	2									
B5-80x40x75	832-002035	824-101020	2	811-302013	2									
B6-80x40x75	832-002035	824-101020	2	811-302013	2									
B7-80x40x75	832-002035	824-101020	2	811-302013	2									
B8-80x40x75	832-002035	824-101020	2	811-302013	2									

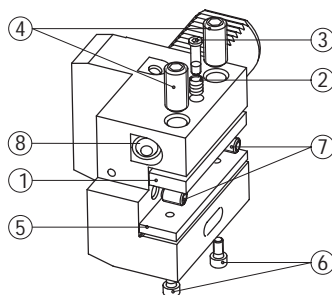
Code N. Coolant noose

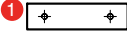

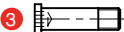

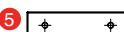




B...16x12...	PWZ1008D8X6
B...20x16...	PWZ1008D10X7
B...25x16...	PWZ1008D10X7
B...30x20...	PWZ1012D14X10
B...40x25x44	PWZ1012D14X10
B...50x32x55	PWZ1012D14X10
B...60x32x60	PWZ1012D14X10
B...80x40x75	PWZ1012D14X10

ERSATZTEILE PIECES DETACHEES SPARE PARTS COMPONENTI

C1 - C2 - C3 - C4



Code N.	Tool clamp plate	Spring	Q	Screw	Q	Locking screw	Q	Shim plate	Screw	Q	Stop screw
											
C...16x12x44	832-002090	824-101010	1	811-302009	1	811-402047	2	-	-	-	811-102020
C...20x16x50	832-002004	824-101010	1	811-302004	1	811-102030	2	832-003002	811-101016	1	811-102020
C...20x16x55	832-002003	824-101010	1	811-302004	1	811-102030	2	832-003003	811-101016	1	811-102020
C...25x16x55	832-002003	824-101010	1	811-302004	1	811-102030	2	832-003003	811-101016	1	811-102020
C1-30x20x70	832-002012	824-101010	1	811-302004	1	811-102044	2	832-003007	811-101016	1	811-102028
C2-30x20x70	832-002012	824-101010	1	811-302004	1	811-102044	2	832-003007	811-101016	1	811-102028
C1-S-30x20/16	832-002008	824-101010	1	811-302004	1	811-102044	2	832-003198	811-101016	1	-
C2-S-30x20/16	832-002008	824-101010	1	811-302004	1	811-102044	2	832-003198	811-101016	1	-
C3-30x20x70	832-002012	824-101010	1	811-302004	1	811-102045	2	832-003007	811-101016	1	811-102028
C4-30x20x70	832-002012	824-101010	1	811-302004	1	811-102045	2	832-003007	811-101016	1	811-102028
C1-40x25x85	832-002019	824-101010	1	811-302004	1	811-102045	2	832-003012	811-101016	2	811-102028
C2-40x25x85	832-002019	824-101010	1	811-302004	1	811-102045	2	832-003012	811-101016	2	811-102028
C1-S40x25/20	832-002058	824-101010	1	811-302004	1	811-102045	2	832-003200	811-101016	1	-
C2-S40x25/20	832-002058	824-101010	1	811-302004	1	811-102045	2	832-003200	811-101016	1	-
C3-40x25x85	832-002019	824-101010	1	811-302004	1	811-102047	2	832-003012	811-101016	2	811-102028
C4-40x25x85	832-002019	824-101010	1	811-302004	1	811-102047	2	832-003012	811-101016	2	811-102028
C1-50x32x100	832-002025	824-101010	1	811-302004	1	811-102045	2	832-003016	811-101017	2	811-102036
C2-50x32x100	832-002025	824-101010	1	811-302004	1	811-102045	2	832-003016	811-101017	2	811-102036
C1-S50x32/25	832-002066	824-101010	1	811-302004	1	811-102047	2	832-003199	811-101017	2	-
C2-S50x32/25	832-002066	824-101010	1	811-302004	1	811-102047	2	832-003199	811-101017	2	-
C3-50x32x100	832-002025	824-101010	1	811-302004	1	811-102083	2	832-003016	811-101017	2	811-102036
C4-50x32x100	832-002025	824-101010	1	811-302004	1	811-102083	2	832-003016	811-101017	2	811-102036
C1-60x32x125	832-002028	824-101020	1	811-302013	1	811-102054	2	832-003019	811-101017	2	811-102036
C2-60x32x125	832-002028	824-101020	1	811-302013	1	811-102054	2	832-003019	811-101017	2	811-102036
C1-S60x32	832-002160	824-101020	1	811-302013	1	811-102054	2	-	-	-	-
C2-S60x32	832-002160	824-101020	1	811-302013	1	811-102054	2	-	-	-	-
C3-60x32x125	832-002028	824-101020	1	811-302013	1	811-102056	2	832-003019	811-101017	2	811-102036
C4-60x32x125	832-002028	824-101020	1	811-302013	1	811-102056	2	832-003019	811-101017	2	811-102036
C1-80x40x160	832-002036	824-101020	2	811-302013	2	811-102056	3	832-003023	811-101017	2	811-102036
C2-80x40x160	832-002036	824-101020	2	811-302013	2	811-102056	3	832-003023	811-101017	2	811-102036
C1-S80x40	832-002161	824-101020	1	811-302013	1	811-102056	2	-	-	-	-
C2-S80x40	832-002161	824-101020	1	811-302013	1	811-102056	2	-	-	-	-
C3-80x40x160	832-002036	824-101020	2	811-302013	2	811-102058	3	832-003023	811-101017	2	811-102036
C4-80x40x160	832-002036	824-101020	2	811-302013	2	811-102058	3	832-003023	811-101017	2	811-102036

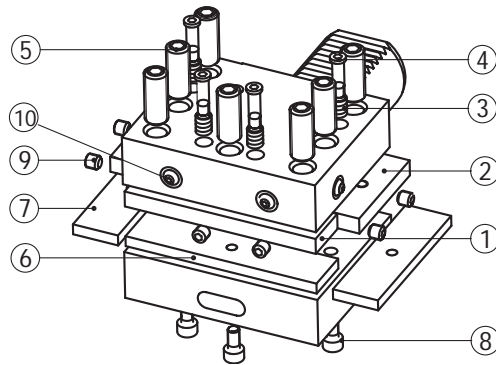
Code N.	Coolant noose
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C...16x12x...	PWZ1005D6X4,5
C...20x16x...	PWZ1008D10X7
C...25x16x...	PWZ1008D10X7
C...30x20x...	PWZ1012D14X10
C...40x25x...	PWZ1012D14X10
C...50x32x...	PWZ1012D14X10
C...60x32x...	PWZ1012D14X10
C...80x40x...	PWZ1012D14X10

ERSATZTEILE / PIÈCES DÉTACHÉES SPARE PARTS / COMPONENTI

D1-D2



Code N.	Tool clamp plate (rad)	Tool clamp plate (ax)	Spring	○	Screw	○	Locking screw	○	Shim plate (rad)	Shim plate (ax)	Screw	○	Stop screw
D.-25x16x48	832-002136	832-002098	824-101010	3	811-302004	3	811-102030	6	832-003004	832-003179	811-101016	3	811-102011
D.-30x20x60	832-002118	832-002009	824-101010	4	811-302004	4	811-102030	7	832-003008	832-003006	811-101016	3	811-102017
D1-40x25x72	832-002119	832-002015	824-101010	4	811-302004	4	811-102039	7	832-003013	832-003010	811-101016	3	811-102017
D2-40x25x72	832-002119	832-002015	824-101010	4	811-302004	4	811-102041	7	832-003013	832-003010	811-101016	3	811-102017
D1-50x32x85	832-002120	832-002023	824-101010	4	811-302004	4	811-102039	7	832-003017	832-003015	811-101017	3	811-102026
D2-50x32x85	832-002120	832-002023	824-101010	4	811-302004	4	811-102041	7	832-003017	832-003015	811-101017	3	811-102026
D1-60x32x110	832-002134	832-002071	824-101020	4	811-302013	4	811-102047	7	832-003025	832-003024	811-101017	6	811-102026
D2-60x32x110	832-002134	832-002071	824-101020	4	811-302013	4	811-102083	7	832-003025	832-003024	811-101017	6	811-102026
D1-80x40x140	832-002135	832-002033	824-101020	4	811-302013	4	811-102056	7	832-003093	832-003092	811-101017	6	811-102026
D2-80x40x140	832-002135	832-002033	824-101020	4	811-302013	4	811-102058	7	832-003093	832-003092	811-101017	6	811-102026

Code N.

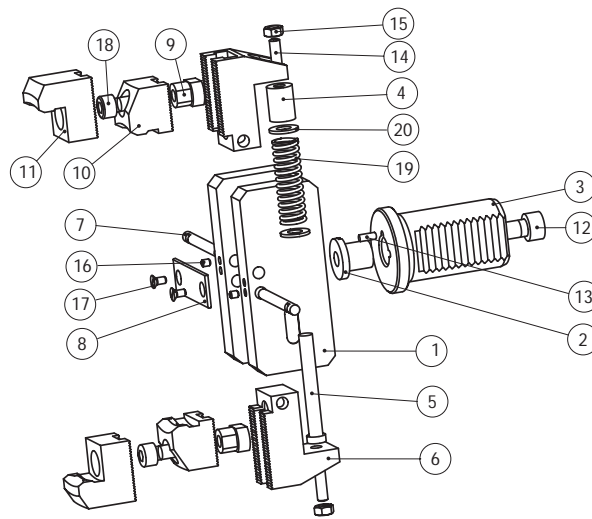
Coolant noose



D..-25x16x48	PWZ1008D8X6
D..-30x20x60	PWZ1008D8X6
D..-40x25x72	PWZ1008D10X7
D..-50x32x85	PWZ1008D10X7
D..-60x32x85	PWZ1012D12X8
D..-80x40x140	PWZ1012D12X8

ERSATZTEILE / PIÈCES DÉTACHÉES SPARE PARTS / COMPONENTI

HK1

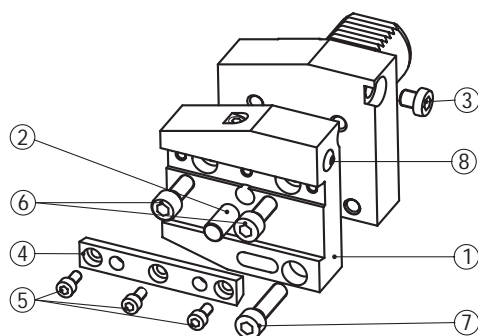


Code N.	Body	Threaded pawl	Shank	Pawl	Pin	Jaw base	Pin	Plate	Die slide	Short jaw	Long jaw
	1	2	3	4	5	6	7	8	9	10	11
H116K	H1-1x20	H1-2x16	H1-3x16	H1-4x20-30	H1-5x30	H1-6x30	H1-7x30	H1-8x30	H1-9x30-40	H1-10x30-40	H1-11x30-40
H120K	H1-1x20	H1-2x20	H1-3x20	H1-4x20-30	H1-5x30	H1-6x30	H1-7x30	H1-8x30	H1-9x30-40	H1-10x30-40	H1-11x30-40
H125K	H1-1x30	H1-2x30-40	H1-3x25	H1-4x20-30	H1-5x30	H1-6x30	H1-7x30	H1-8x30	H1-9x30-40	H1-10x30-40	H1-11x30-40
H125KC	H1-1x30	H1-2x30-40	H1-3x25C	H1-4x20-30	H1-5x30	H1-6x30	H1-7x30	H1-8x30	H1-9x30-40	H1-10x30-40	H1-11x30-40
H130K	H1-1x30	H1-2x30-40	H1-3x30	H1-4x20-30	H1-5x30	H1-6x30	H1-7x30	H1-8x30	H1-9x30-40	H1-10x30-40	H1-11x30-40
H132KC	H1-1x30	H1-2x30-40	H1-3x32C	H1-4x20-30	H1-5x30	H1-6x30	H1-7x30	H1-8x30	H1-9x30-40	H1-10x30-40	H1-11x30-40
H140K	H1-1x40	H1-2x30-40	H1-3x40	H1-4x40	H1-5x40	H1-6x40	H1-7x40	H1-8x40	H1-9x30-40	H1-10x30-40	H1-11x30-40
H140KC	H1-1x40	H1-2x30-40	H1-3x40C	H1-4x40	H1-5x40	H1-6x40	H1-7x40	H1-8x40	H1-9x30-40	H1-10x30-40	H1-11x30-40
H150K	H1-1x50-60	H1-2x50-60	H1-3x50	H1-4x50-60	H1-5x50-60	H1-6x50-60	H1-7x50-60	H1-8x50-60	H1-9x50-60	H1-10x50-60	H1-11x50-60
H150KC	H1-1x50-60	H1-2x50-60	H1-3x50C	H1-4x50-60	H1-5x50-60	H1-6x50-60	H1-7x50-60	H1-8x50-60	H1-9x50-60	H1-10x50-60	H1-11x50-60
H160K	H1-1x50-60	H1-2x50-60	H1-3x60	H1-4x50-60	H1-5x50-60	H1-6x50-60	H1-7x50-60	H1-8x50-60	H1-9x50-60	H1-10x50-60	H1-11x50-60

Code N.	Screw	Pin	Screw	Nut	Screw	Screw	Screw	Spring	Washer
	12	13	14	15	16	17	18	19	20
H116K	811-401041	815-210090	811-102022	812-101004	811-102002	811-108006	811-101040	824-101050	813-101090
H120K	811-401111	815-210090	811-102022	812-101004	811-102002	811-108006	811-101040	824-101050	813-101090
H125K	811-101055	815-210090	811-102022	812-101004	811-102002	811-108006	811-101040	824-101050	813-101090
H125KC	811-101055	815-210090	811-102022	812-101004	811-102002	811-108006	811-101040	824-101050	813-101090
H130K	811-101055	815-210090	811-102022	812-101004	811-102002	811-108006	811-101040	824-101050	813-101090
H132KC	811-101055	815-210090	811-102022	812-101004	811-102002	811-108006	811-101040	824-101050	813-101090
H140K	811-101055	815-210090	811-102022	812-101004	811-102002	811-108006	811-101040	824-101060	813-101090
H140KC	811-101055	815-210090	811-102022	812-101004	811-102002	811-108006	811-101040	824-101060	813-101090
H150K	811-101068	815-210180	811-102030	812-101005	811-102002	811-108006	811-101052	824-101120	813-101100
H150KC	811-101068	815-210180	811-102030	812-101005	811-102002	811-108006	811-101052	824-101120	813-101100
H160K	811-101068	815-210180	811-102030	812-101005	811-102002	811-108006	811-101052	824-101120	813-101100

ERSATZTEILE PIÈCES DETACHÉES SPARE PARTS COMPONENTI

AR-AL-ARU-ALU



Code N.	Tool holder plate	Pin	Stop screw	Tool clamping	Screw	Screw	Screw	Coolant noose
	1	2	3	4	5	6	7	8
AR2026	117-120101	815-210010	811-303103	832-002097	811-101016	811-101029	811-101031	PWZ1008D8X6
AL2026	117-220101	815-210010	811-303103	832-002097	811-101016	811-101029	811-101031	PWZ1008D8X6
AR2526	117-125101	815-210010	811-303103	832-002097	811-101016	811-101029	811-101031	PWZ1008D8X6
AL2526	117-225101	815-210010	811-303103	832-002097	811-101016	811-101029	811-101031	PWZ1008D8X6
ARU2526	117-325101	815-210010	811-303103	832-002145	811-101016	811-101029	811-101031	PWZ1008D8X6
ALU2526	117-425101	815-210010	811-303125	832-002145	811-101016	811-101029	811-101031	PWZ1008D8X6
AR3026	117-130101	815-210010	811-303011	832-002037	811-101016	811-101040	811-101042	PWZ1008D10X7
AL3026	117-230101	815-210010	811-303011	832-002037	811-101016	811-101040	811-101042	PWZ1008D10X7
ARU3026	117-330101	815-210010	811-303011	832-002037	811-101016	811-101040	811-101042	PWZ1008D10X7
ALU3026	117-430101	815-210010	811-303011	832-002037	811-101016	811-101040	811-101042	PWZ1008D10X7
AR4026	117-140101	815-210020	811-303011	832-002038	811-101016	811-101040	811-101042	PWZ1008D10X7
AL4026	117-240101	815-210020	811-303011	832-002038	811-101016	811-101040	811-101042	PWZ1008D10X7
ARU4026	117-340101	815-210020	811-303011	832-002038	811-101016	811-101040	811-101042	PWZ1008D10X7
ALU4026	117-440101	815-210020	811-303011	832-002038	811-101016	811-101040	811-101042	PWZ1008D10X7
AR4032	117-140111	815-210020	811-303011	832-002039	811-101016	811-101040	811-101042	PWZ1008D10X7
AL4032	117-240111	815-210020	811-303011	832-002039	811-101016	811-101040	811-101042	PWZ1008D10X7
ARU4032	117-340111	815-210020	811-303011	832-002039	811-101016	811-101040	811-101042	PWZ1008D10X7
ALU4032	117-440111	815-210020	811-303011	832-002039	811-101016	811-101040	811-101042	PWZ1008D10X7
AR5026	117-150101	815-210020	811-303011	832-002040	811-101027	811-101040	811-101042	PWZ1012D14X10
AL5026	117-250101	815-210020	811-303011	832-002040	811-101027	811-101040	811-101042	PWZ1012D14X10
ARU5026	117-350101	815-210020	811-303011	832-002040	811-101027	811-101040	811-101042	PWZ1012D14X10
ALU5026	117-450101	815-210020	811-303011	832-002040	811-101027	811-101040	811-101042	PWZ1012D14X10
AR5032	117-150111	815-210020	811-303011	832-002041	811-101027	811-101040	811-101042	PWZ1012D14X10
AL5032	117-250111	815-210020	811-303011	832-002041	811-101027	811-101040	811-101042	PWZ1012D14X10
ARU5032	117-350111	815-210020	811-303011	832-002041	811-101027	811-101040	811-101042	PWZ1012D14X10
ALU5032	117-450111	815-210020	811-303011	832-002041	811-101027	811-101040	811-101042	PWZ1012D14X10
AR6032	117-160101	815-210030	811-303012	832-002042	811-101027	811-101052	811-101054	PWZ1012D14X10
AL6032	117-260101	815-210030	811-303012	832-002042	811-101027	811-101052	811-101054	PWZ1012D14X10
ARU6032	117-360101	815-210030	811-303012	832-002042	811-101027	811-101052	811-101054	PWZ1012D14X10
ALU6032	117-460101	815-210030	811-303012	832-002042	811-101027	811-101052	811-101054	PWZ1012D14X10

The logo for KAMATEK is positioned at the top of the page. It features the brand name in a bold, sans-serif font. The letter 'K' is rendered in black, while the 'A' is a solid orange color. The remaining letters 'MATEK' are in black. The logo is superimposed on a background of a white metal grid, which is part of a shopping cart's structure.

KAMATEK

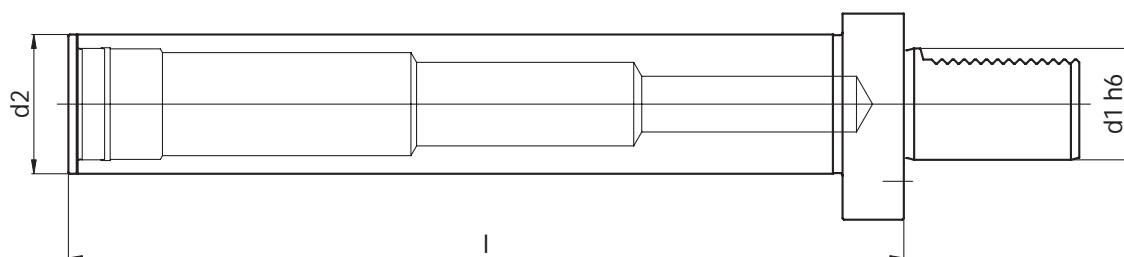
ACCESSORI / ACCESSORIES





PRÜFDORN BARRE DE CONTROLE
TEST BAR BARRA DI CONTROLLO

BC



Code N.	Description	d1	d2	l
118-51601	VDI 16 D25 L200	16	25	200
118-52002	VDI 20 D30 L220	20	30	220
118-52501	VDI 25 D30 L220	25	30	220
118-53002	VDI 30 D40 L230	30	40	230
118-54003	VDI 40 D50 L300	40	50	300
118-55002	VDI 50 D50 L300	50	50	300
118-56002	VDI 60 D60 L300	60	60	300
118-58001	VDI 80 D80 L350	80	80	350

IM HOLZKASTEN MIT PRÜFUNGSprotokoll GELIEFERT
SUPPLIED IN WOODEN BOXES AND WITH TEST CERTIFICATE
FOURNIES EN BOÎTES DE BOIS ET AVEC CERTIFICAT DE CONTROLE
FORNITE IN CASSETTA DI LEGNO E CON CERTIFICATO DI COLLAUDO



VDI- PRÜFDORNE:

TECHNISCHE DATEN

TOLERANZEN VOM ZYLINDRISCHEN SCHAFT

IN KLASSE IT6 (H6) ANGEFERTIGT

PRÜFDORNTOLERANZEN

Durchmesser:	+ -0.05
Rundlaufgenauigkeit:	0.01
Zylindrizität:	0.003

- Aus Stahl mit Härte HRC 58 +-2 angefertigt, Festigkeit 800-1000 N/mm²
- Komplett inklusiv Verzahnung geschliffen
- 100% durch zertifizierte Meßinstrumente geprüft



BARRES DE CONTROLE VDI:

DONNEES TECHNIQUES

TOLERANCE DE LA QUEUE CILINDRIQUE

FABRIQUÉS EN CLASSE IT6 (H6)

TOLERANCE DE LA BARRA

Diamètre :	+/- 0.05
Coaxialité :	0.01
Cylindricité :	0.003

- Dureté HRC 58 +- 2 résistance 800-1000 N/ mm²
- Finition de rectification, extérieure, denture.
- Contrôlés à 100 % avec des instruments de mesure certifiés.



VDI CONTROL PINS:

TECHNICAL FEATURES

CYLINDRICAL SHANK'S TOLERANCE

ACCORDING TO THE CLASS IT6 (H6)

PIN'S TOLERANCE

Diameter:	+ -0.05
Runout accuracy:	0.01
Cilindricity:	0.003

- Manufactured with casehardening steel with hardness HRC 58+-2, Strength 800-1000 N/mm²
- Shank and toothing are completely grinding finished
- Tested 100% with certified measuring instruments



BARRE DI CONTROLLO VDI:

DATI TECNICI

TOLLERANZA DEL GAMBO CILINDRICO

COSTRUIRE IN CLASSE IT6 (H6)

TOLLERANZE DELLA BARRA

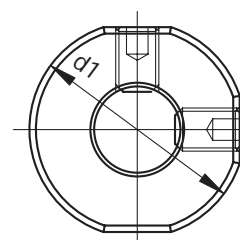
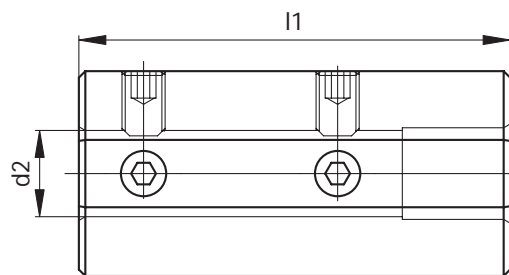
Diametro :	+/- 0.05
Coassialità :	0.01
Cilindricità :	0.003

- Costruite in acciaio con durezza HRC 58 +- 2 resistenza 800-1000 N/ mm²
- Finitura di rettifica esterna e dentatura
- Collaudate al 100% con strumenti di misura certificati



REDUZIERHÜLSE DOUILLE DE REDUCTION
ADAPTOR BUSSOLA DI RIDUZIONE

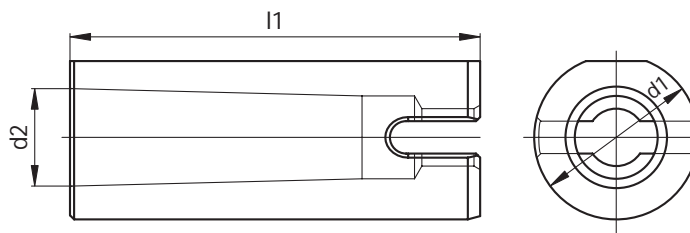
E2-1



Code N.	d1	d2	l1
E2-1-20x6	20	6	60
E2-1-20x8	20	8	60
E2-1-20x10	20	10	60
E2-1-20x12	20	12	60
E2-1-25x6	25	6	60
E2-1-25x8	25	8	60
E2-1-25x10	25	10	60
E2-1-25x12	25	12	60
E2-1-32x6	32	6	70
E2-1-32x8	32	8	70
E2-1-32x10	32	10	70
E2-1-32x12	32	12	70
E2-1-32x16	32	16	70
E2-1-32x20	32	20	70
E2-1-40x6	40	6	80
E2-1-40x8	40	8	80
E2-1-40x10	40	10	80
E2-1-40x12	40	12	80
E2-1-40x16	40	16	80
E2-1-40x20	40	20	80
E2-1-40x25	40	25	80
E2-1-50x12	50	12	90
E2-1-50x16	50	16	90
E2-1-50x20	50	20	90
E2-1-50x25	50	25	90
E2-1-50x32	50	32	90
E2-1-60x16	60	16	160
E2-1-60x20	60	20	160
E2-1-60x25	60	25	160
E2-1-60x32	60	32	160
E2-1-60x40	60	40	160

REDUZIERHÜLSE, MORSEKEGEL DOUILLE DE REDUCTION, CONE MORSE
 ADAPTOR, MORSE TAPER BUSSOLA DI RIDUZIONE, CONO MORSE

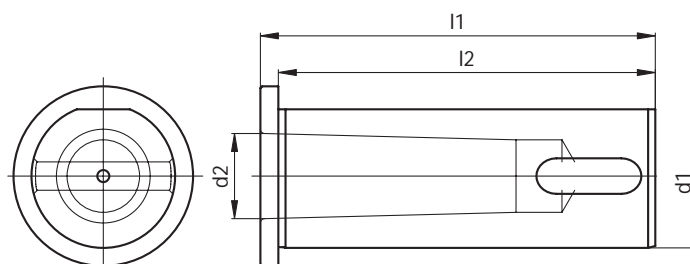
E2-3



Code N.	d1	MK	d2	l1
E2-3-20x1	20	1	12.065	60
E2-3-20x2	20	2	17.780	90
E2-3-32x1	32	1	12.065	60
E2-3-32x2	32	2	17.780	90
E2-3-32x3	32	3	23.825	100
E2-3-40x2	40	2	17.780	90
E2-3-40x3	40	3	23.825	100
E2-3-40x4	40	4	31.267	120
E2-3-50x2	50	2	17.780	90
E2-3-50x3	50	3	23.825	100
E2-3-50x4	50	4	31.267	120
E2-3-60x3	60	3	23.825	160
E2-3-60x4	60	4	31.267	160
E2-3-60x5	60	5	44.399	160

M.K. REDUZIERHÜLSE, MIT ANSCHLAG DOUILLE DE REDUCTION, CONE MORSE
 MORSE TAPER ADAPTER BUSSOLA DI RIDUZIONE CONO MORSE CON BATTUTA

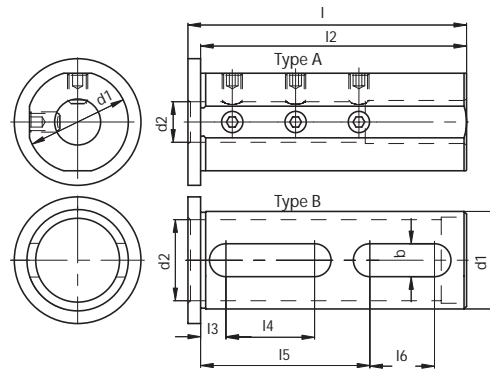
114



Code N.	d1	MK	d2	l1	l2
114-33208	32	1	12.065	90	85
114-33209	32	2	17.780	90	85
114-33210	32	3	23.825	100	95
114-34008	40	2	17.780	110	105
114-34009	40	3	23.825	110	105
114-34010	40	4	31.267	125	120
114-35004	50	2	17.780	130	125
114-35005	50	3	23.825	130	125
114-35006	50	4	31.267	130	125
114-36007	60	3	23.825	140	130
114-36008	60	4	31.267	140	130
114-36009	60	5	44.399	155	145

ZYLINDRISCHE REDUZIERHÜLSE MIT ANSCHLAG FÜR BOHRSTANGENHALTER TYP E2 DOUILLE DE REDUCTION CYLINDRIQUES POUR PORTE-BARRES D'ALEPAGE E2
CYLINDRICAL BUSHING FOR BORING BAR HOLDERS TYPE E2 BUSSOLA DI RIDUZIONE CILINDRICA CON BATTUTA, PER PORTABARENI E2

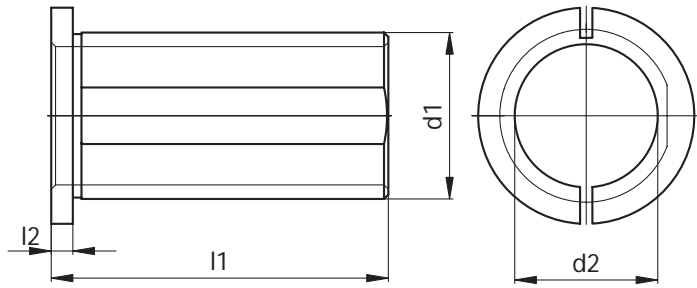
115 - 165



Code N.	d1	d2	l1	l2	l3	l4	l5	l6	b	Type
115-62573	25	6	65	60						A
115-62538	25	8	65	60						A
115-62539	25	10	65	60						A
115-62540	25	12	65	60						A
115-62541	25	16	65	60	9	13	37	12	11	B
165-63222	32	6	90	85						A
115-63260	32	8	90	85						A
115-63261	32	10	90	85						A
115-63211	32	12	90	85						A
115-63212	32	16	90	85						A
115-63213	32	20	90	85						A
115-63214	32	25	90	85	9	25	52	22	11	B
165-64074	40	6	110	105						A
115-64043	40	8	110	105						A
115-64044	40	10	110	105						A
115-64045	40	12	110	105						A
115-64046	40	16	110	105						A
115-64047	40	20	110	105						A
115-64048	40	25	110	105						A
115-64049	40	32	110	105	10	35	65	28	13	B
115-65053	50	12	130	125						A
115-65013	50	16	130	125						A
115-65014	50	20	130	125						A
115-65015	50	25	130	125						A
115-65016	50	32	130	125						A
115-65017	50	40	130	125	10	45	75	37	13	B
115-66017	60	20	140	135						A
115-66018	60	25	140	135						A
115-66019	60	32	140	135						A
115-66020	60	40	140	135						A
115-66021	60	50	140	135	15	40	83	58	13	B
115-68006	80	25	150	145						A
115-68007	80	32	150	145						A
115-68008	80	40	150	145						A
115-68009	80	50	150	145						A
115-68010	80	60	150	145	25	30	80	15	14	B

ZYLINDRISCHE REDUZIERHÜLSE MIT ANSCHLAG
 TOOL HOLDER BUSHING
 DOUILLE DE REDUCTION CYLINDRIQUE
 BUSSOLA DI RIDUZIONE CILINDRICA CON BATTUTA, TAGLIATA

RZ



Code N.	d1	d2	l1	l2
RZ-20x08	20	8	30	4
RZ-20x10	20	10	30	4
RZ-20x12	20	12	30	4
RZ-20x16	20	16	30	4
RZ-25x08	25	8	40	4
RZ-25x10	25	10	40	4
RZ-25x12	25	12	40	4
RZ-25x16	25	16	40	4
RZ-25x20	25	20	40	4
RZ-32x08	32	8	50	4
RZ-32x10	32	10	50	4
RZ-32x12	32	12	50	4
RZ-32x16	32	16	50	4
RZ-32x20	32	20	50	4
RZ-32x25	32	25	50	4
RZ-40x10	40	10	78	4
RZ-40x12	40	12	78	4
RZ-40x16	40	16	78	4
RZ-40x20	40	20	78	4
RZ-40x25	40	25	78	4
RZ-40x32	40	32	78	4
RZ-50x20	50	20	88	4
RZ-50x25	50	25	88	4
RZ-50x32	50	32	88	4
RZ-50x40	50	40	88	4
RZ-60x25	60	25	92	4
RZ-60x32	60	32	92	4
RZ-60x40	60	40	92	4
RZ-60x50	60	50	92	4

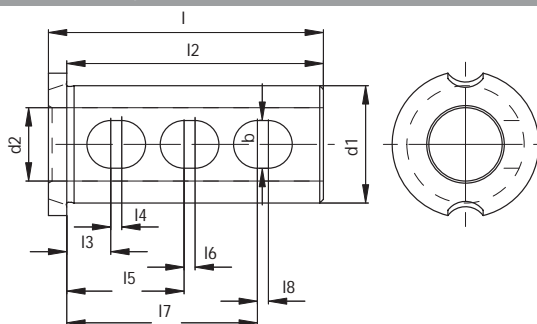
- Durch die elastische Spannung werden die Vibrationen des Werkzeuges gedämpft.
- *The elastic clamping reduces the tool vibrations.*
- Les vibrations de l'outil sont réduites par le serrage élastique.
- *Questo tipo di chiusura elastica riduce le vibrazioni dell'utensile.*



ZYLINDRISCHE REDUZIERHÜLSE MIT ANSCHLAG
 FÜR ALLE BOHRSTANGENHALTER TYP E2
 CYLINDRICAL BUSHING FOR BORING
 BAR HOLDERS TYPE E2

DOUILLES DE REDUCTION CYLINDRIQUES POUR
 PORTE-BARRES D'ALEPAGE E2
 BUSSOLA DI RIDUZIONE CILINDRICA CON
 BATTUTA, PER PORTABARENI E2

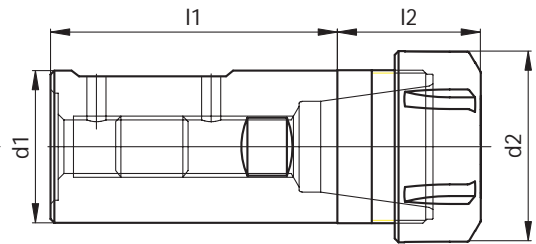
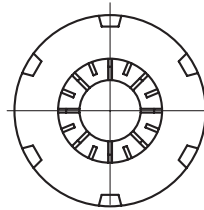
115-165



Code N.	d1	d2	l1	l2	l3	l4	l5	l6	l7	l8	b	VDI E2 type	HSK	
115-62574	25	8										20 E2-25x25 30	145-21310 145-21409 145-21601	
115-62575		10												
115-62576		12	52	47	8	2	24	5	39,5	-	9			
115-62577			16											
115-62578			20											
115-62579			8											
115-62580			10										E2-40x25	
115-62581			12	62	57	12	-	29	-	46	-	11		
115-62582			16											
115-62583			20											
115-62584			8											
115-62585			10										50 E2-60x25 80	
115-62586		12	75	70	12	3	32	3	52	3	13			
115-62587		16												
115-62588		20												
165-63223	32	8										25 E2-30x32 40	145-21410 145-21602	
165-63224		10												
165-63225		12	62	57	10	2	29	-	46	1	11			
165-63226			16											
165-63227			20											
165-63228			25											
165-63229			8											
165-63230			10										50 E2-60x32 80	
165-63231			12	75	70	12	3	32	3	52	3	13		
165-63232			16											
165-63233			20											
165-63234			25											
165-64075	40	8										E2-30x40		
165-64076		10												
165-64077		12	62	57	9	-	26	-	43	-	9			
165-64078			16											
165-64079			20											
165-64080			25											
165-64081			32											
165-64082			8										40 E2-50x40 60 80	145-21411 145-21603
165-64083			10											
165-64084			12	75	70	12	4	32	6,5	52,5	7,5	13		
165-64085			16											
165-64086			20											
165-64087		25												
165-64088		32												

SPANNZANGENAUFNAHMEN FÜR INNENKÜHLUNG PORTE-PINCES AVEC ARROSAGE CENTRAL
COLLET CHUCKS WITH COOLANT HOLES PORTAPINZE CON FORI DI LUBRIFICAZIONE

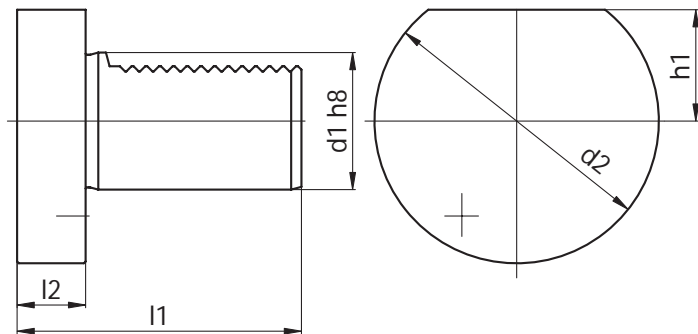
NC



Code N.	Description	Range	d1	d2	l1	l2
214-35170	NC32L60ER25	1-16	32	42	60	32
214-35171	NC32L70ER32	2-20	32	50	70	38
214-35172	NC40L75ER32	2-20	40	50	75	38
214-35173	NC40L75ER40	3-26	40	63	75	55

VERSCHLUSSTOPFEN BOUCHON DE PROTECTION
BLANKING PLUG TAMPONE DI PROTEZIONE

Z2



Code N.	d1	d2	h1	l1	l2
Z2-16 S/P	16	40	18	45	13
Z2-20 S/P	20	50	23	56	16
Z2-25 S *	25	58	25	64	16
Z2-30 S/P	30	68	28	71	16
Z2-40 S/P	40	83	32.5	83	20
Z2-50 S/P	50	98	35	98	20
Z2-60 S/P	60	123	42.5	114	20
Z2-80 S/P	80	158	55	144	20

S: Stahl - Steel - Acier - Acciaio

P: Plastik - Plastic - Plastique - Plastica

• Lieferbar sowohl aus Stahl als auch aus Plastik
* Z2-25S nur aus Stahl

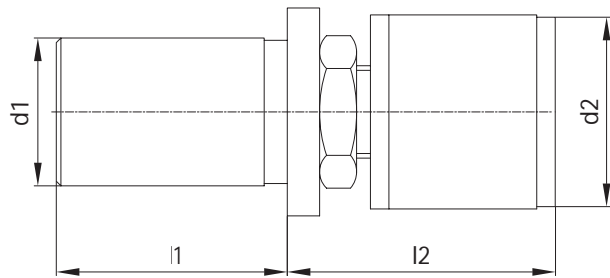
• Available either in plastic or in steel
* Z2-25S is only available in steel

• Disponible soit en acier soit en plastique
* Z2-25S seulement en acier

• Fornibili sia in acciaio sia in plastica
* Z2-25S fornibili solo in acciaio

WERKSTOFFANSCHLAG MIT ZYLINDERSCHAFT LÄNGENEINSTELLBAR PORTE-BUTEES CYLINDRIQUES
CYLINDRICAL BAR STOP FERMOBARRA CILINDRICO REGOLABILE

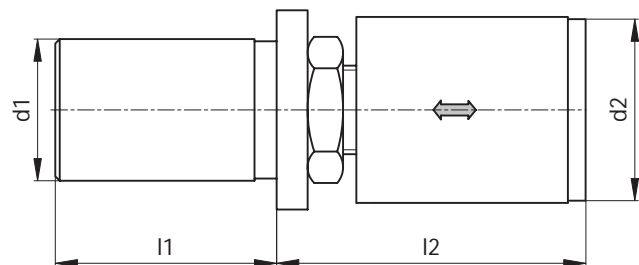
CW



Code N.	d1	d2	l1	l2
CW-1620	16	20	32	36-62
CW-2034	20	34	50	65-100
CW-2534	25	34	50	65-100
CW-3042	30	42	50	55-90
CW-3242	32	42	50	55-90
CW-4042	40	42	50	55-90

WERKSTOFFANSCHLAG MIT ZYLINDERSCHAFT
GEDÄMPFT LÄNGENEINSTELLBAR PORTE-BUTEES, CYLINDRIQUES,
CYLINDRICAL REVOLVING BAR STOP AMORTIS
WITH SHOCK ABSORBER FERMOBARRA CILINDRICI REGOLABILI
AMMORTIZZATI

CW-AM



Code N.	d1	d2	l1	l2
CW-2542-AM	25	42	50	62-97
CW-3042-AM	30	42	50	62-97
CW-3242-AM	32	42	50	62-97
CW-4042-AM	40	42	50	62-97

VDI	Code N.
16	237-32190
20	237-32290
25	237-32390
30	237-32490
40	237-32590
50	237-32690
60	237-32790
80	237-32890

Alle horizontale Flansche
sind auswechselbar

*Removable horizontal
flange*

Bride horizontal
démontable

*Flangia orizzontale
smontabile*



Code	Description
237-32191	DIN 69880 VDI 16
237-32291	DIN 69880 VDI 20
237-32391	DIN 69880 VDI 25
237-32491	DIN 69880 VDI 30
237-32591	DIN 69880 VDI 40
237-32691	DIN 69880 VDI 50
237-32791	DIN 69880 VDI 60
237-32891	DIN 69880 VDI 80

Dieses unkomplizierte System erlaubt die schnelle Montage und Demontage von VDI Werkzeughaltern (gemäß DIN 69880) in horizontaler und vertikaler Lage. Dieses System ist sehr einfach zu bedienen, und erlaubt sicheres Bestücken der Werkzeuge.

This system allows the assembly and disassembly operations of the VDI toolholders in horizontal and vertical position. This is a very simple system for tool handling.

Il permet d'effectuer toutes les opérations de montage et de démontage des porte outils VDI (DIN 69880) soit en horizontal qui en vertical. Ce système est très simple à utiliser pour la manipulation des outils.

Questo sistema molto semplice consente il montaggio e lo smontaggio dei portautensili VDI (secondo la normativa DIN 69880) sia in orizzontale che in verticale. È un sistema che offre la massima semplicità d'uso per la manipolazione degli utensili.

KANTER





**SONDER-WERKZEUGHALTER
SPECIAL TOOLHOLDERS
PORTEOUTILS SPECIAUX
PORTAUTENSILI SPECIALI**





SPECIAL TOOLHOLDERS / PORTAUTENSILI SPECIALI

DRIVEN TOOLS

PORTAUTENSILI MOTORIZZATI

Pag. 339-342

GILDEMEISTER TOOLHOLDERS

PORTAUTENSILI GILDEMEISTER

Pag. 343-350

MORI SEIKI TOOLHOLDERS

PORTAUTENSILI MORI-SEIKI

Pag. 351-355

OKUMA TOOLHOLDERS

PORTAUTENSILI OKUMA

Pag. 356-369

NAKAMURA TOME TOOLHOLDERS

PORTAUTENSILI NAKAMURA

Pag. 370-373



SPECIAL TOOLHOLDERS / PORTAUTENSILI SPECIALI

DOOSAN PUMA TOOLHOLDERS

PORTAUTENSILI DEWOO PUMA

Pag. 374-376

MAZAK TOOLHOLDERS

PORTAUTENSILI MAZAK

Pag. 377-378

WFL TOOLHOLDERS

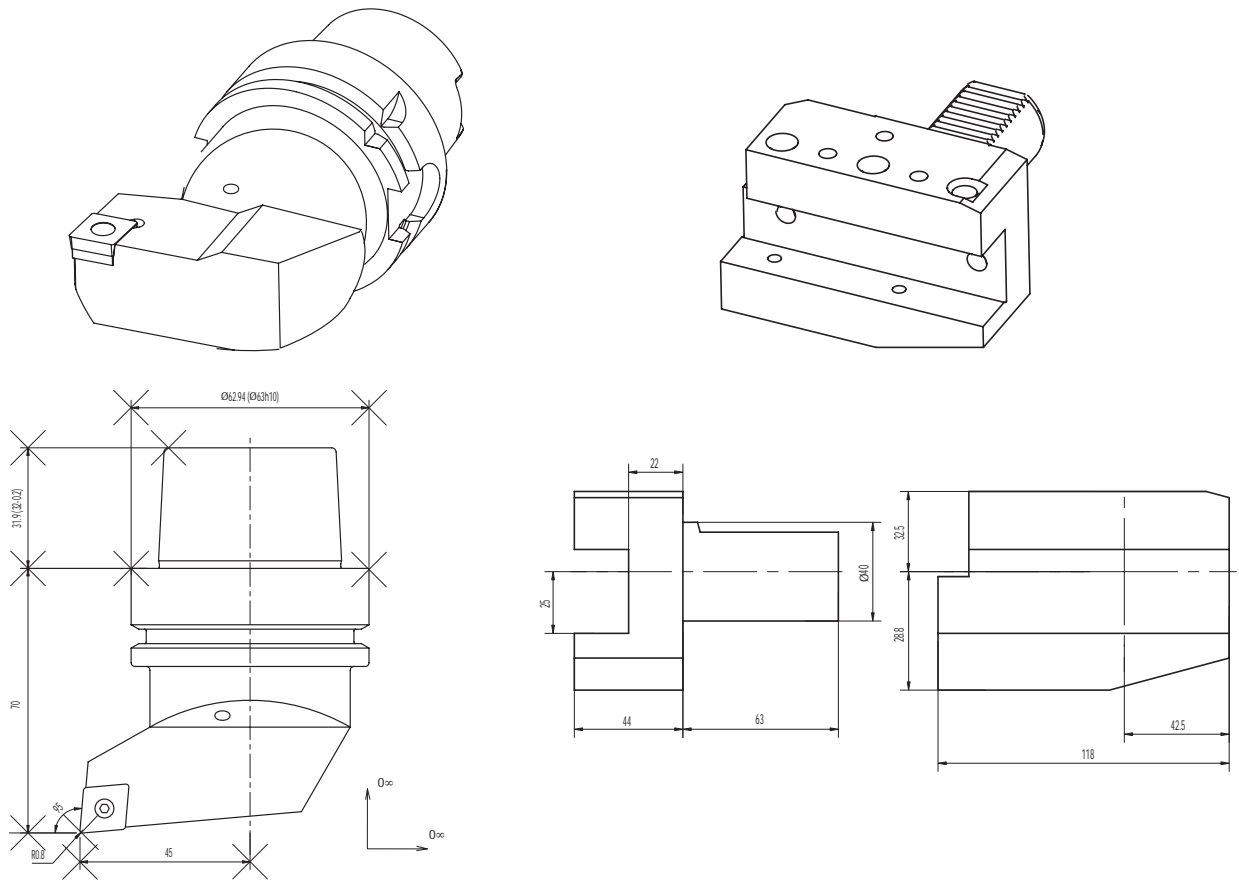
PORTAUTENSILI WFL

Pag. 379

TAKISAWA TOOLHOLDERS

PORTAUTENSILI TAKISAWA

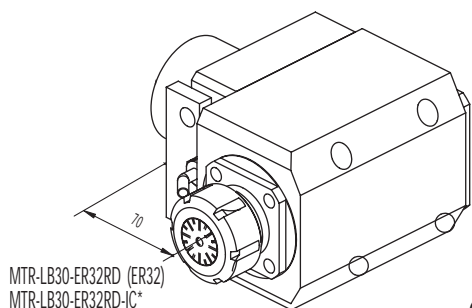
Pag. 380



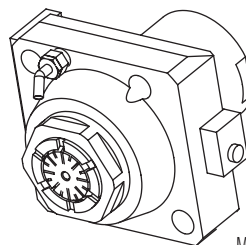
Auf Anfrage sind Dispositionszeichnungen im dxf Format mit entsprechenden Massen verfügbar.
On request we can send you general layouts in dxf format with the relative dimensions.
Sur demande les dessins d'avant-projet en format dxf sont disponibles avec les relatives cotes.
Sono disponibili a richiesta i disegni di massima in formato dxf con relative quote di ingombro.

OKUMA

MOTORIZZATI/DRIVEN TOOLS OKUMA LB2000EX-LB2500EX-LB3000EX

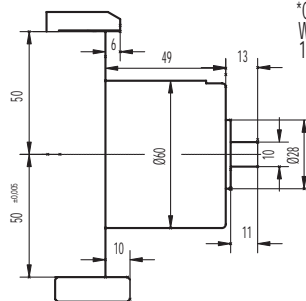
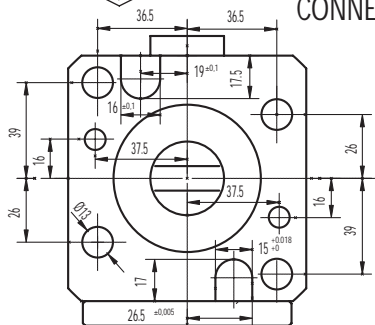


MTR-LB30-ER32RD (ER32)
MTR-LB30-ER32RD-IC*



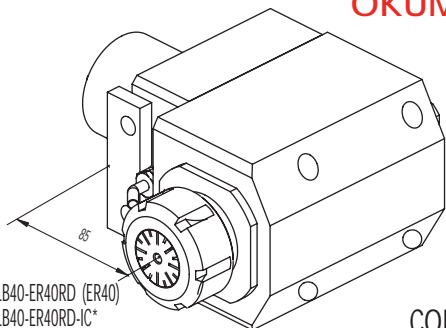
MTR-LB30-ER32AX (ER32A)
MTR-LB30-ER32AX-IC*

CONNECTION

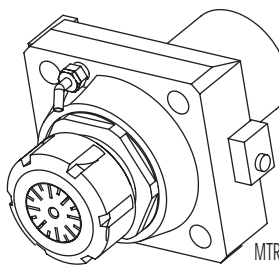


*Con passaggio refrigerante interno
With internal coolant
1000 PSI-70 bar

OKUMA LB4000EX

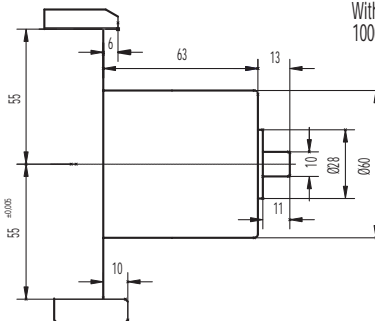
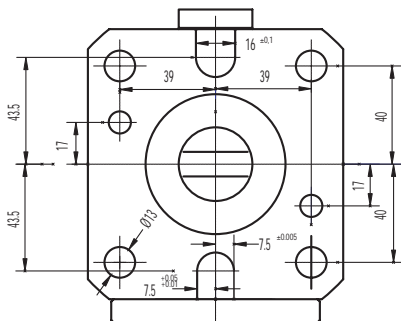


MTR-LB40-ER40RD (ER40)
MTR-LB40-ER40RD-IC*



MTR-LB40-ER40AX (ER40)
MTR-LB40-ER40AX-IC*

CONNECTION



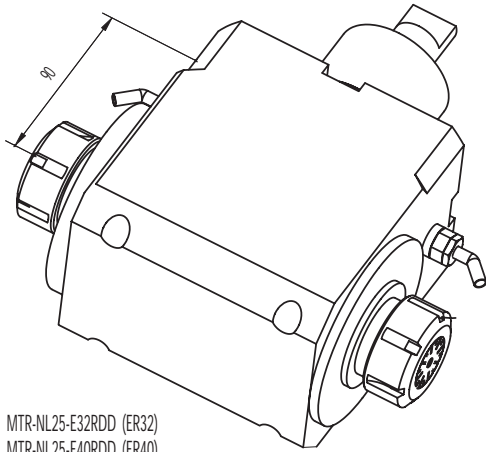
*Con passaggio refrigerante interno
With internal coolant
1000 PSI-70 bar

Velocità max./Max. speed: 6000rpm

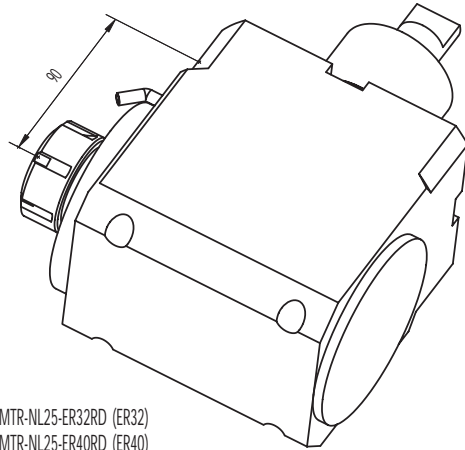
In dotazione: Chiavi di servizio/Viti di fissaggio/Ghiera ER/Tubetto di grasso/Libretto istruzioni
Standard equipment: Wrenches/Clamping screws/ER nut/Grease tube/Instruction book

MORI SEIKI

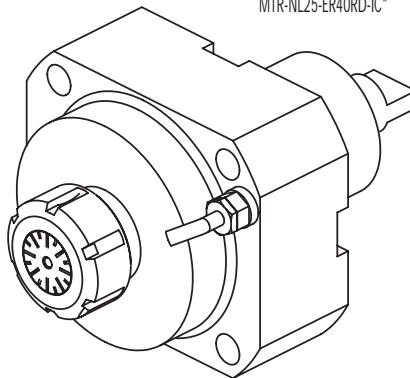
MOTORIZZATI/DRIVEN TOOLS MORI SEIKI NL1500-NL2000-NL2500-NL3000



MTR-NL25-E32RDD (ER32)
MTR-NL25-E40RDD (ER40)



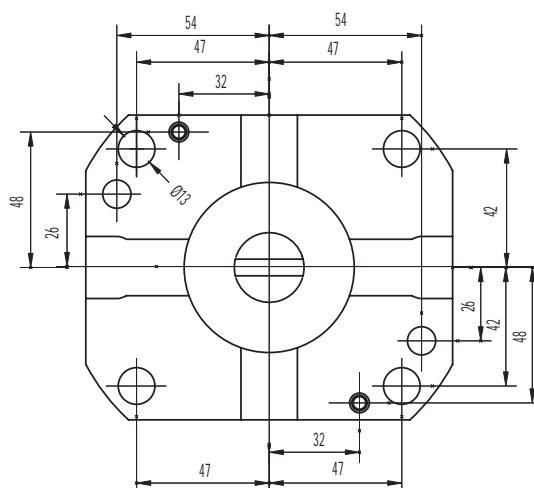
MTR-NL25-ER32RD (ER32)
MTR-NL25-ER40RD (ER40)
MTR-NL25-ER32RD-IC*
MTR-NL25-ER40RD-IC*



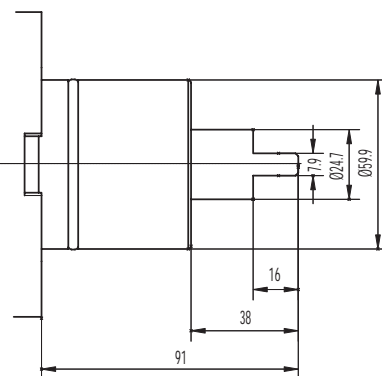
MTR-NL25-ER32AX (ER32)
MTR-NL25-ER40AX (ER40)

MTR-NL25-ER32AX-IC*
MTR-NL25-ER40AX-IC*

*Con passaggio refrigerante interno
With internal coolant
1000 PSI-70 bar



CONNECTION



Velocit. max./Max. speed: 6000rpm

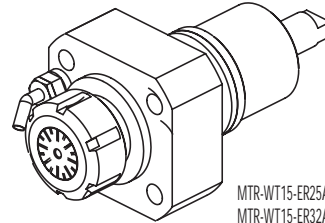
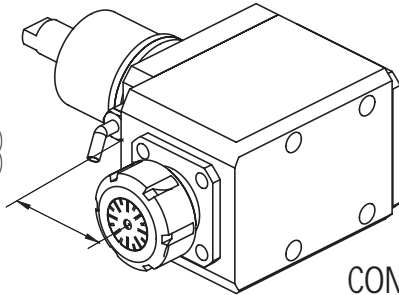
In dotazione: Chiavi di servizio/Viti di fissaggio/Ghiera ER/Tubetto di grasso/Libretto istruzioni
Standard equipment: Wrenches/Clamping screws/ER nut/Grease tube/Instruction book

NAKAMURA

MOTORIZZATI/DRIVEN TOOLS NAKAMURA TW10-WT150-250 WTW150-WTS150 SC150-250

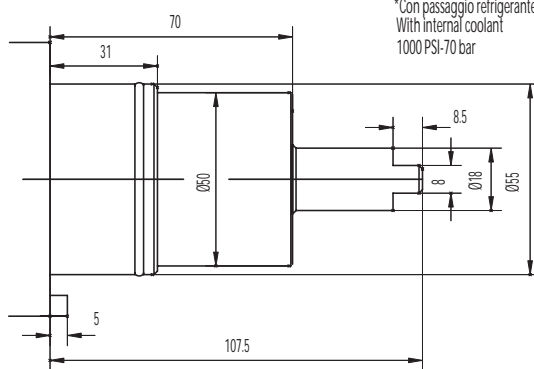
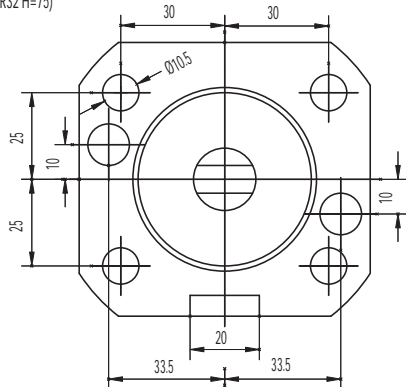
MTR-WT15-ER25RD (ER25 H=55)
MTR-WT15-ER32RD (ER32 H=55)
MTR-WT15-ER25RD-IC* (ER25 H=55)
MTR-WT15-ER32RD-IC* (ER32 H=55)

MWT15ER25RD75 (ER25 H=75)
MWT15ER32RD75 (ER32 H=75)
MWT15ER25RDIC75* (ER25 H=75)
MWT15ER32RDIC75* (ER32 H=75)



MTR-WT15-ER25AX (ER25)
MTR-WT15-ER32AX (ER32)
MTR-WT15-ER25AX-IC*
MTR-WT15-ER32AX-IC*

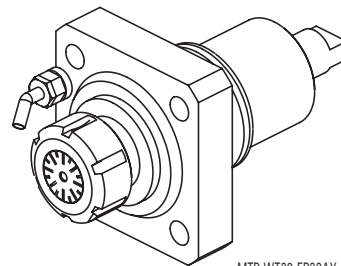
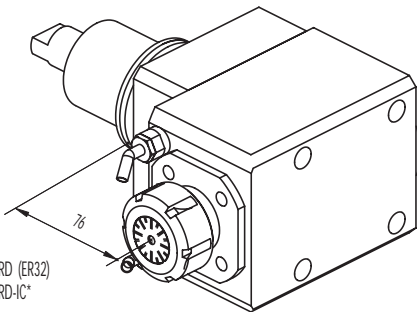
CONNECTION



*Con passaggio refrigerante interno
With internal coolant
1000 PSI-70 bar

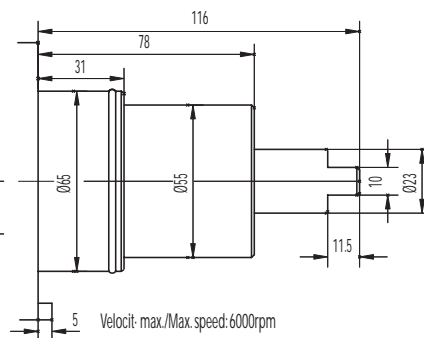
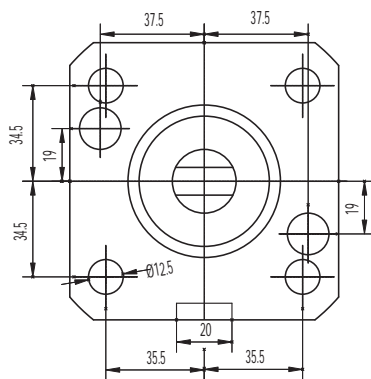
NAKAMURA TW20-WT300-SC300

MTR-WT30-ER32RD (ER32)
MTR-WT30-ER32RD-IC*



MTR-WT30-ER32AX (ER32)
MTR-WT30-ER32AX-IC*

CONNECTION



*Con passaggio refrigerante interno
With internal coolant
1000 PSI-70 bar

Velocit- max/Max. speed: 6000rpm

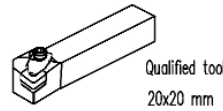
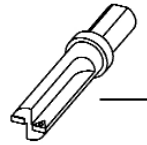
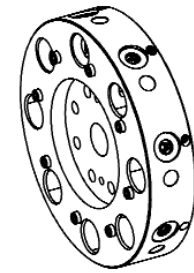
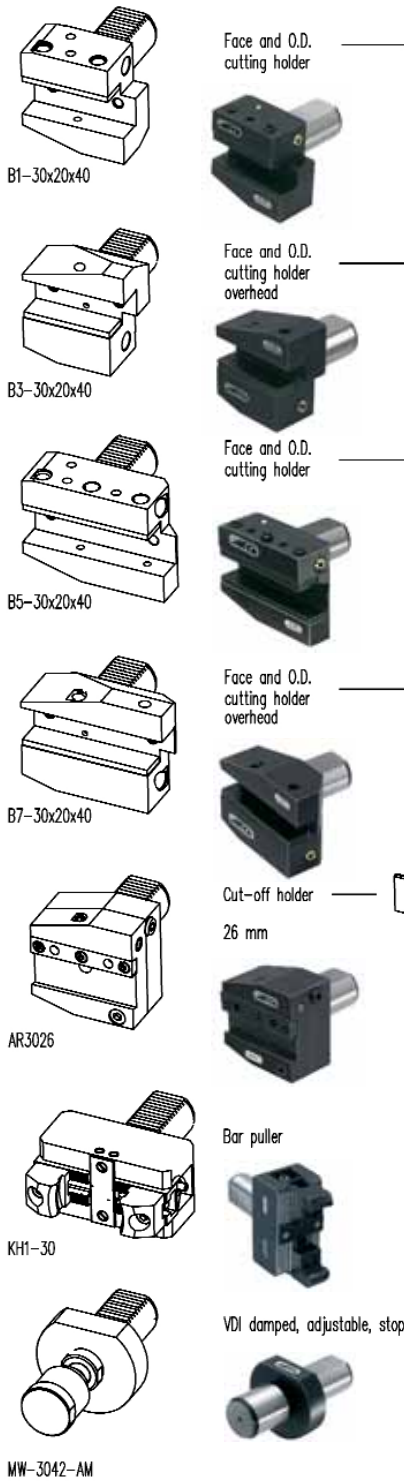
In dotazione: Chiavi di servizio/Viti di fissaggio/Ghiera ER/Tubetto di grasso/Libretto istruzioni
Standard equipment: Wrenches/Clamping screws/ER nut/Grease tube/Instruction book

GILDEMEISTER

(VDI30)

CTX 210/310/410 V3/V1 - CTX 320/420 V3
 CTX Alpha 300/500 V3
 CTX Beta 500/800/1250 V3 (option)
 CTV 160

AXIAL TURRET



Qualified tool
 20x20 mm

ACCESSORIES



E2-115

Boring bar sleeve $\varnothing 25$ mm

- 115-62574 ($\varnothing 8$ mm)
- 115-62575 ($\varnothing 10$ mm)
- 115-62576 ($\varnothing 12$ mm)
- 115-62577 ($\varnothing 16$ mm)
- 115-62578 ($\varnothing 20$ mm)

Boring bar sleeve $\varnothing 32$ mm

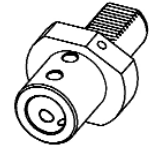
- 165-63223 ($\varnothing 8$ mm)
- 165-63224 ($\varnothing 10$ mm)
- 165-63225 ($\varnothing 12$ mm)
- 165-63226 ($\varnothing 16$ mm)
- 165-63227 ($\varnothing 20$ mm)
- 165-63228 ($\varnothing 25$ mm)

Boring bar sleeve $\varnothing 40$ mm

- 165-64075 ($\varnothing 8$ mm)
- 165-64076 ($\varnothing 10$ mm)
- 165-64077 ($\varnothing 12$ mm)
- 165-64078 ($\varnothing 16$ mm)
- 165-64079 ($\varnothing 20$ mm)
- 165-64080 ($\varnothing 25$ mm)
- 165-64081 ($\varnothing 32$ mm)

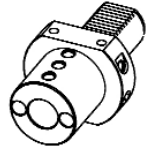
Toolholder for insert drill

- E1-30x06WN ($\varnothing 6$ mm)
- E1-30x08WN ($\varnothing 8$ mm)
- E1-30x10WN ($\varnothing 10$ mm)
- E1-30x12WN ($\varnothing 12$ mm)
- E1-30x16 ($\varnothing 16$ mm)
- E1-30x20 ($\varnothing 20$ mm)
- E1-30x25 ($\varnothing 25$ mm)
- E1-30x32 ($\varnothing 32$ mm)
- E1-30x40 ($\varnothing 40$ mm)



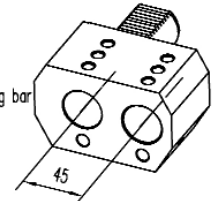
Toolholder for boring bar

- E2-30x6 ($\varnothing 6$ mm)
- E2-30x8 ($\varnothing 8$ mm)
- E2-30x10 ($\varnothing 10$ mm)
- E2-30x12 ($\varnothing 12$ mm)
- E2-30x16 ($\varnothing 16$ mm)
- E2-30x20 ($\varnothing 20$ mm)
- E2-30x25 ($\varnothing 25$ mm)
- E2-30x32 ($\varnothing 32$ mm)
- E2-30x40 ($\varnothing 40$ mm)



Double holder for boring bar

E7-30x25 ($\varnothing 25$ mm)



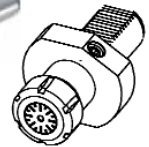
Toolholder with cylindrical shank

137-00041 ($\varnothing 40$ mm/HSK50A+C)



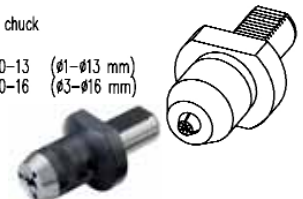
Collet chuck

- E4-30x16 (ER16)
- E4-30x20 (ER20)
- E4-30x25 (ER25)
- E4-30x32 (ER32)
- E4-30x40 (ER40)



Drilling chuck

- KS2-30-13 ($\varnothing 1$ - $\varnothing 13$ mm)
- KS2-30-16 ($\varnothing 3$ - $\varnothing 16$ mm)

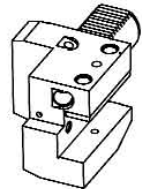


GILDEMEISTER

(VDI30)

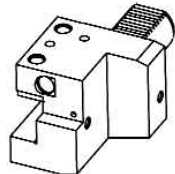
CTX 310/410 V4/V6 - CTX 320 V4/V6
 CTX 420 V4/V6 (option) - CTX Alpha 300 V4
 CTX Alpha 500 V 4/V6
 CTX Beta 500/800/1250 V4/V6 (option)
 TWIN 42/65/102
 SPRINT 65/50

RADIAL TURRET



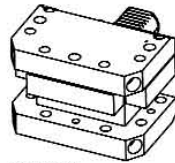
C1-30x20x70

Face and O.D. cutting holder



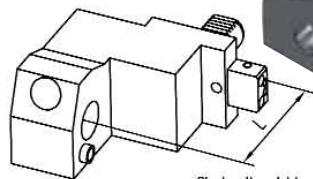
C2-30x20x70

Face and O.D. cutting holder



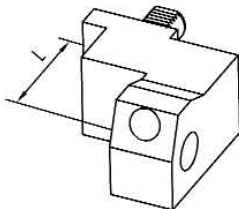
113-53003

Face and O.D. cutting holder



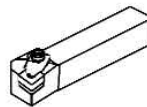
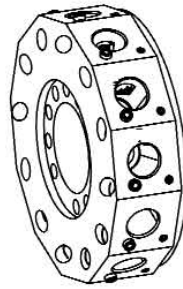
115-53015 (L=85)
115-53017 (L=100)

Single site, right



115-53016 (L=85)
115-53018 (L=100)

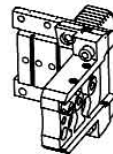
Single site, left



Qualified tool
20x20 mm

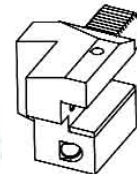


Cut-off holder
26 mm



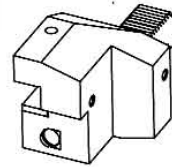
117-53001

Face and O.D. cutting holder overhead

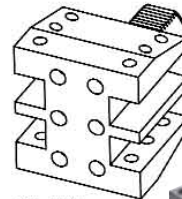


C3-30x20x70

Face and O.D. cutting holder overhead



C4-30x20x70

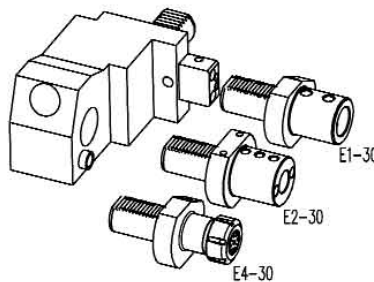


112-13013

Face and O.D. cutting holder



VDI30/VDI30 ADAPTORS

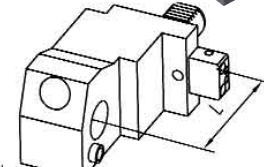


E1-30

E2-30

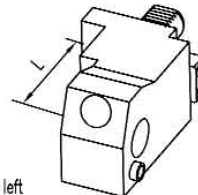
E4-30

Single site, right



115-53019 (L=85)
115-53021 (L=100)

Single site, left

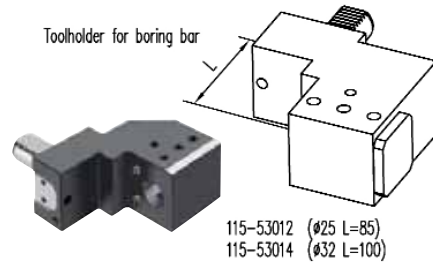
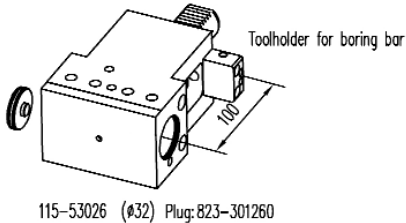
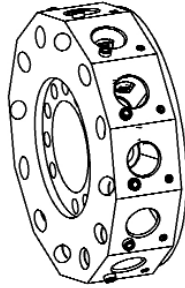
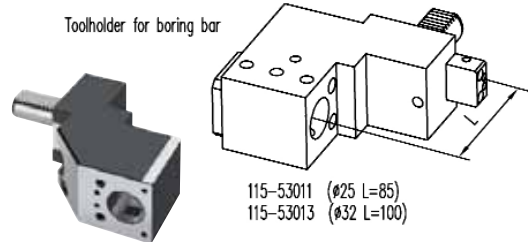
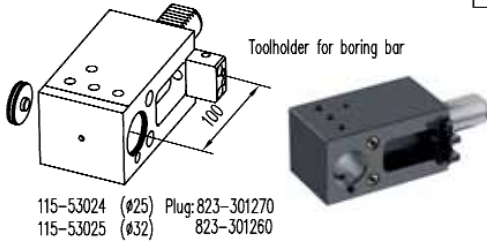


115-53020 (L=85)
115-53022 (L=100)

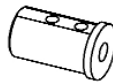
GILDEMEISTER (VDI30)

CTX310/410 V4/V6 - CTX 320 V4/V6
 CTX420 V4/V6 (option) - CTX Alpha 300 V4
 CTX Alpha 500 V4/V6
 CTX Beta 500/800/1250 V4/V6 (option)
 TWIN 42/65/102
 SPRINT 65/50

RADIAL TURRET



ACCESSORIES

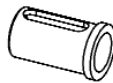
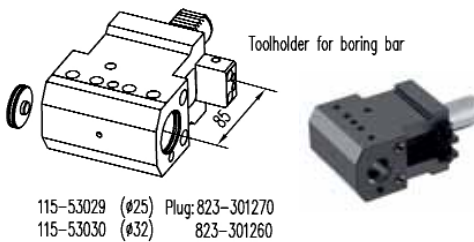
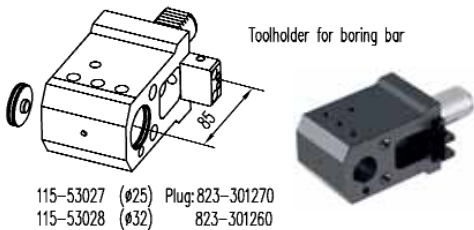


Boring bar sleeve Ø25 mm

- 165-62519 (Ø6 mm)
- 165-62520 (Ø8 mm)
- 165-62521 (Ø10 mm)
- 165-62522 (Ø12 mm)

Boring bar sleeve Ø32 mm

- 165-63301 (Ø6 mm)
- 165-63302 (Ø8 mm)
- 165-63303 (Ø10 mm)
- 165-63304 (Ø12 mm)

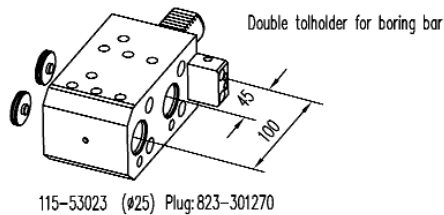


Boring bar sleeve Ø25 mm

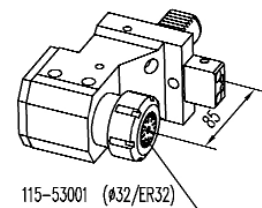
- 165-62523 (Ø16 mm)
- 165-62524 (Ø20 mm)

Boring bar sleeve Ø32 mm

- 165-63305 (Ø16 mm)
- 165-63306 (Ø20 mm)
- 165-63307 (Ø25 mm)

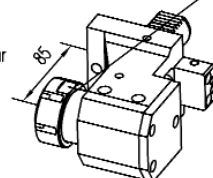


Toolholder for boring bar and collet chuck



Cylindrical collet chuck 264-35185

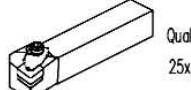
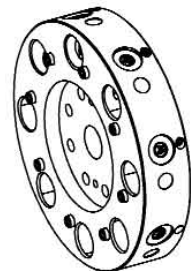
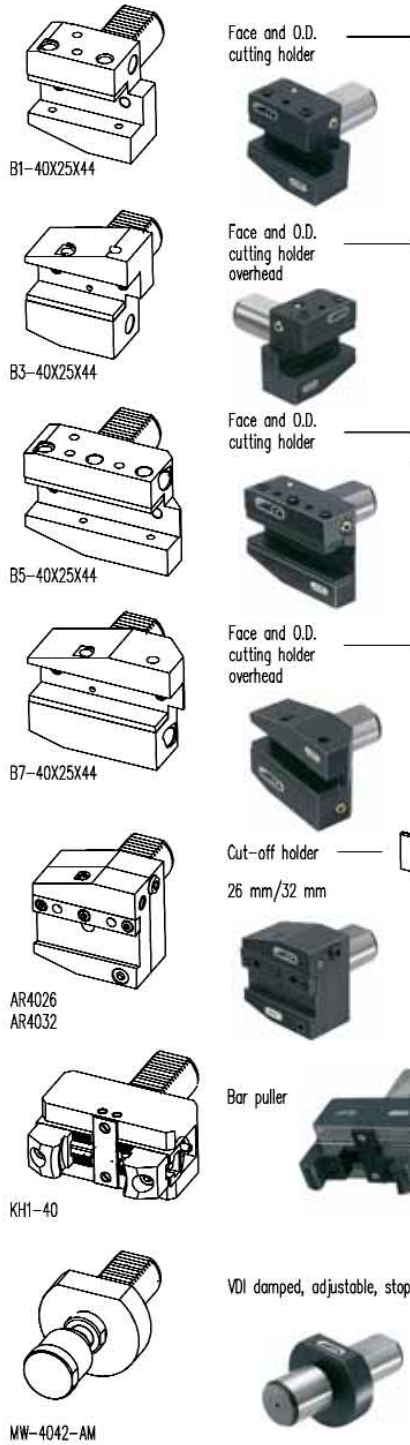
Toolholder for boring bar and collet chuck



GILDEMEISTER (VDI40)

CTX410 V3 (option)
 CTX510 V3/V4
 CTX420 V3 (option)
 CTX520 V3/V4
 CTX Beta 500/800/1250 V3/V4
 CTX Gamma 1250/2000 V3/V4 (option)

AXIAL TURRET



ACCESSORIES

Boring bar sleeve \varnothing 25 mm

- 115-62579 (\varnothing 8 mm)
- 115-62580 (\varnothing 10 mm)
- 115-62581 (\varnothing 12 mm)
- 115-62582 (\varnothing 16 mm)
- 115-62583 (\varnothing 20 mm)

Boring bar sleeve \varnothing 32 mm

- 165-63223 (\varnothing 8 mm)
- 165-63224 (\varnothing 10 mm)
- 165-63225 (\varnothing 12 mm)
- 165-63226 (\varnothing 16 mm)
- 165-63227 (\varnothing 20 mm)
- 165-63228 (\varnothing 25 mm)

Boring bar sleeve \varnothing 40 mm

- 165-64082 (\varnothing 8 mm)
- 165-64083 (\varnothing 10 mm)
- 165-64084 (\varnothing 12 mm)
- 165-64085 (\varnothing 16 mm)
- 165-64086 (\varnothing 20 mm)
- 165-64087 (\varnothing 25 mm)
- 165-64088 (\varnothing 32 mm)

Toolholder for insert drill

- E1-40x06WN (\varnothing 6 mm)
- E1-40x08WN (\varnothing 8 mm)
- E1-40x10WN (\varnothing 10 mm)
- E1-40x12WN (\varnothing 12 mm)
- E1-40x16 (\varnothing 16 mm)
- E1-40x20 (\varnothing 20 mm)
- E1-40x25 (\varnothing 25 mm)
- E1-40x32 (\varnothing 32 mm)
- E1-40x40 (\varnothing 40 mm)
- E1-40x50 (\varnothing 50 mm)

Toolholder for boring bar

- E2-40x6 (\varnothing 6 mm)
- E2-40x8 (\varnothing 8 mm)
- E2-40x10 (\varnothing 10 mm)
- E2-40x12 (\varnothing 12 mm)
- E2-40x16 (\varnothing 16 mm)
- E2-40x20 (\varnothing 20 mm)
- E2-40x25 (\varnothing 25 mm)
- E2-40x32 (\varnothing 32 mm)
- E2-40x40 (\varnothing 40 mm)
- E2-40x50 (\varnothing 50 mm)

Double holder for boring bar

E7-40x32 (\varnothing 32 mm)

Toolholder for boring bar

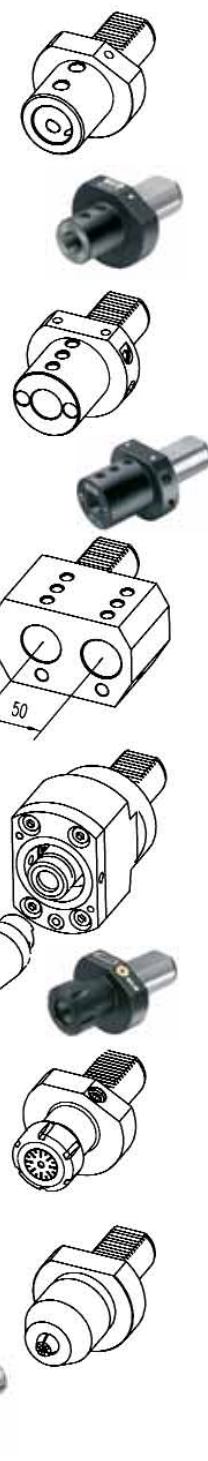
118-04013 (HSK63A+C)

Collet chuck

- E4-40x20 (ER20)
- E4-40x25 (ER25)
- E4-40x32 (ER32)
- E4-40x40 (ER40)

Drilling chuck

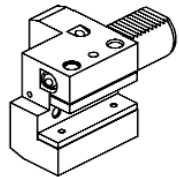
- KS2-40-13 (\varnothing 1- \varnothing 13 mm)
- KS2-40-16 (\varnothing 3- \varnothing 16 mm)



GILDEMEISTER (VDI40)

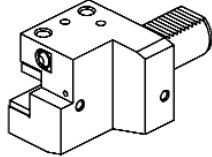
CTX410 V4/V6 (option) - CTX420 V4/V6
 CTXBeta 500/800/1250 V6
 TWIN42/65/102 RG2 - GMX250/300/400/500
 SPRINT65 (option)

RADIAL TURRET



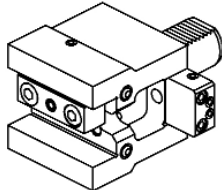
C1-40x25x85

Face and O.D.
cutting holder



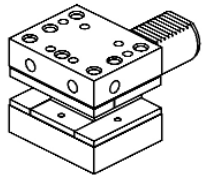
C2-40x25x85

Face and O.D.
cutting holder



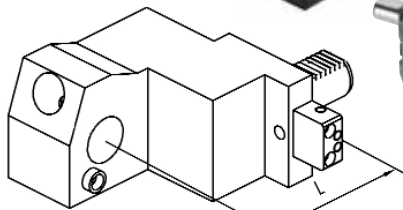
111-14035

Face and O.D.
cutting holder



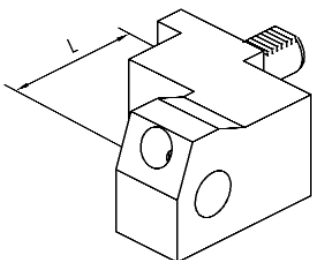
D1-40x25

Face and O.D.
cutting holder



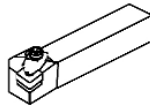
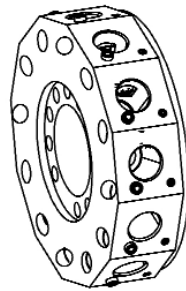
115-54139 (L=100)
115-54141 (L=120)

Single site, right

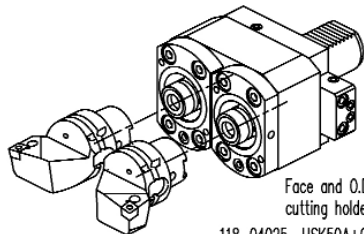


115-54140 (L=100)
115-54142 (L=120)

Single site, left

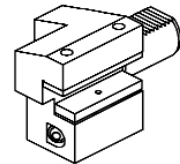


Qualified tool
25x25 mm



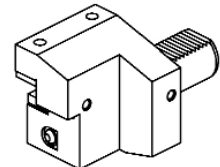
Face and O.D.
cutting holder
118-04025 HSK50A+C

Face and O.D.
cutting holder



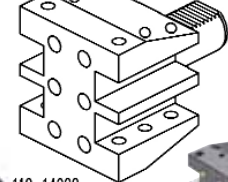
C3-40x25x85

Face and O.D.
cutting holder



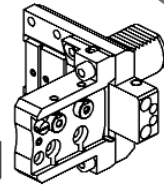
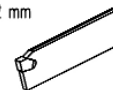
C4-40x25x85

Face and O.D.
cutting holder



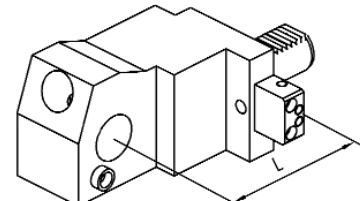
112-14022

Cut-off holder
32 mm



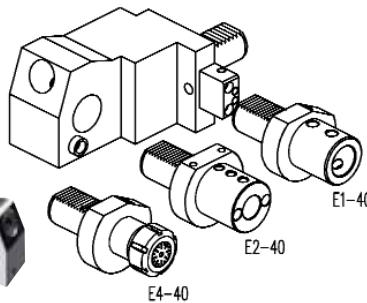
117-54006

VDI40/VDI40 ADAPTORS



Single site, right

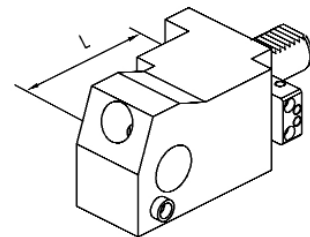
115-54143 (L=100)
115-54145 (L=120)



E1-40

E2-40

E4-40



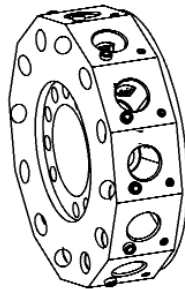
Single site, left

115-54144 (L=100)
115-54146 (L=120)

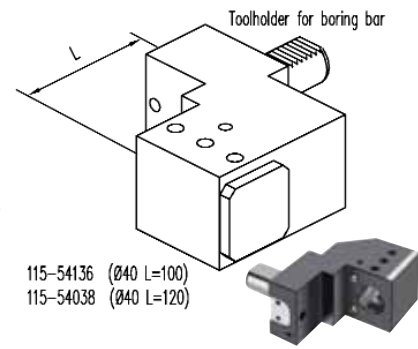
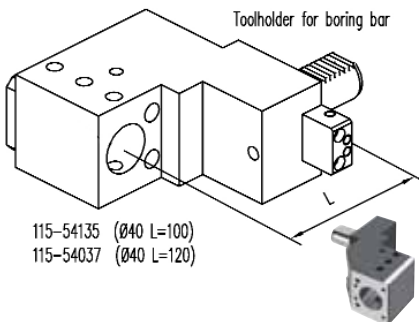
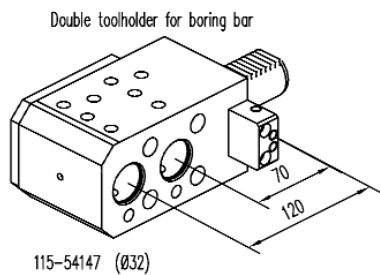
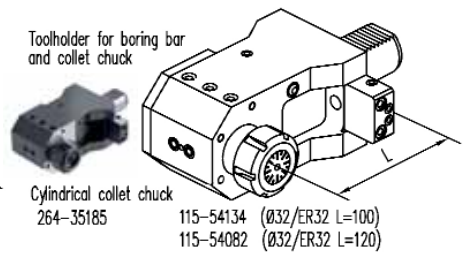
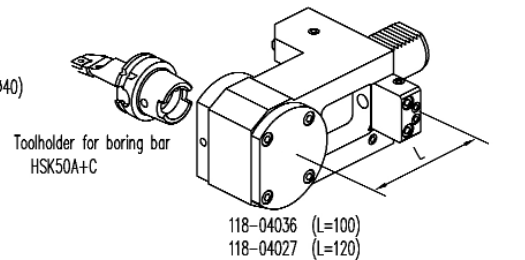
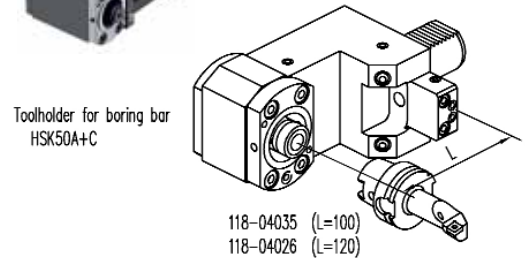
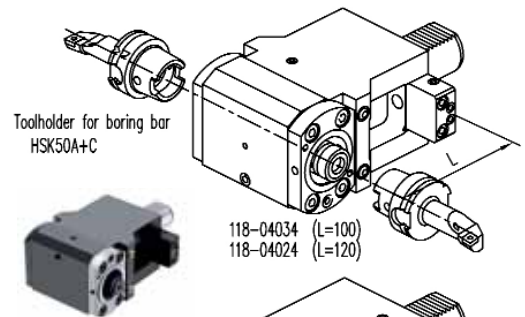
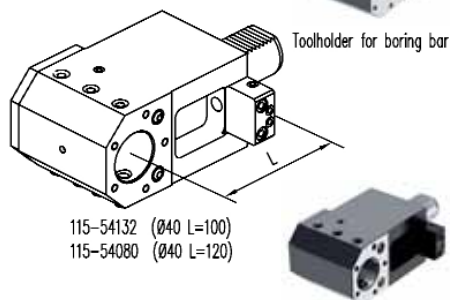
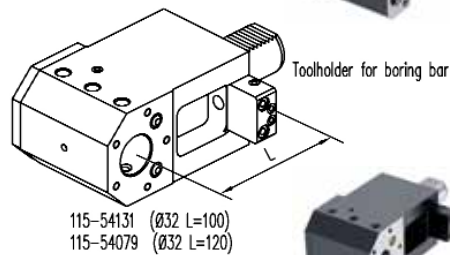
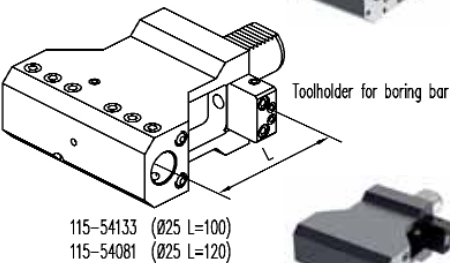
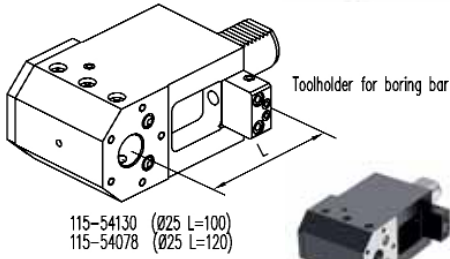
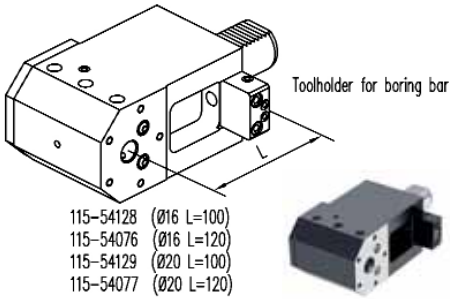
GILDEMEISTER (VDI40)

CTX410 V4/V6 (option) - CTX420 V4/V6
 CTXBeta 500/800/1250 V4/V6
 TWIN42/65/102 RG2 - GMX250/300/400/500
 SPRINT65 (option)

RADIAL TURRET



ACCESSORIES



GILDEMEISTER

(VDI50)

CTX620 V3/V4/V1 CTX Gamma 1250/2000 V3/V4 CTV400

AXIAL TURRET

Face and O.D. cutting holder

B1-50x32x55

Face and O.D. cutting holder overhead

B3-50x32x55

Face and O.D. cutting holder

B5-50x32x55

Face and O.D. cutting holder overhead

B7-50x32x55

Cut-off holder
26 mm/32 mm

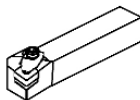
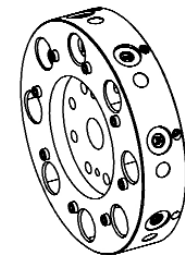
AR5026
AR5032

Bar puller

KH1-50

VDI damped, adjustable, stop bar

MW-5042-AM



ACCESSORIES



Boring bar sleeve $\varnothing 25$ mm

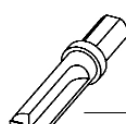
- 115-62584 ($\varnothing 8$ mm)
- 115-62585 ($\varnothing 10$ mm)
- 115-62586 ($\varnothing 12$ mm)
- 115-62587 ($\varnothing 16$ mm)
- 115-62588 ($\varnothing 20$ mm)

Boring bar sleeve $\varnothing 32$ mm

- 165-63229 ($\varnothing 8$ mm)
- 165-63230 ($\varnothing 10$ mm)
- 165-63231 ($\varnothing 12$ mm)
- 165-63232 ($\varnothing 16$ mm)
- 165-63233 ($\varnothing 20$ mm)
- 165-63234 ($\varnothing 25$ mm)

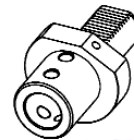
Boring bar sleeve $\varnothing 40$ mm

- 165-64082 ($\varnothing 8$ mm)
- 165-64083 ($\varnothing 10$ mm)
- 165-64084 ($\varnothing 12$ mm)
- 165-64085 ($\varnothing 16$ mm)
- 165-64086 ($\varnothing 20$ mm)
- 165-64087 ($\varnothing 25$ mm)
- 165-64088 ($\varnothing 32$ mm)



Toolholder for insert drill

- E1-50x16 ($\varnothing 16$ mm)
- E1-50x20 ($\varnothing 20$ mm)
- E1-50x25 ($\varnothing 25$ mm)
- E1-50x32 ($\varnothing 32$ mm)
- E1-50x40 ($\varnothing 40$ mm)
- E1-50x50 ($\varnothing 50$ mm)



Toolholder for boring bar

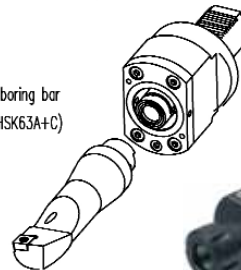
- E2-50x12 ($\varnothing 12$ mm)
- E2-50x16 ($\varnothing 16$ mm)
- E2-50x20 ($\varnothing 20$ mm)
- E2-50x25 ($\varnothing 25$ mm)
- E2-50x32 ($\varnothing 32$ mm)
- E2-50x40 ($\varnothing 40$ mm)
- E2-50x50 ($\varnothing 50$ mm)



Double holder for boring bar

- E7-50x32 ($\varnothing 32$ mm L=50 mm)
- E7-50x50 ($\varnothing 50$ mm L=68 mm)

Toolholder for boring bar
118-05006 (HSK63A+C)



Collet chuck

- E4-50x25 (ER25)
- E4-50x32 (ER32)
- E4-50x40 (ER40)

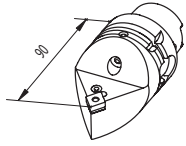
Drilling chuck

- KS2-50-13 ($\varnothing 1$ - $\varnothing 13$ mm)
- KS2-50-16 ($\varnothing 3$ - $\varnothing 16$ mm)

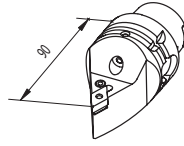
GILDEMEISTER GMX400 - GMX300 - GMX250

ATC Turret (HSK63T)

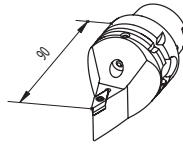
ICTM STANDARD



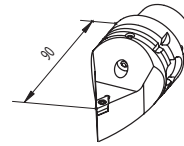
H63APCMNR12-90



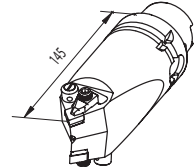
H63APDNNR15-90



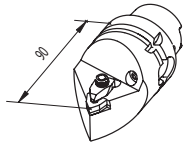
H63ASVVCN16-90



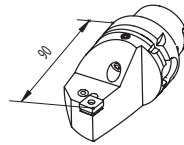
H63ASDNCN11-90



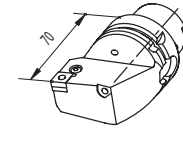
H63ADCM12DDM15-L145



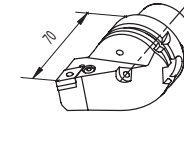
H63ADWMNR08-90



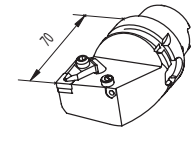
H63APCBNR12-90



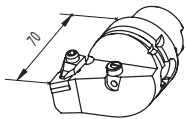
H63APCLNL/R12



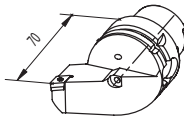
H63APDJNL/R15



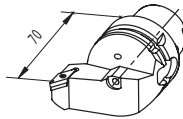
H63ADCLNL/R12



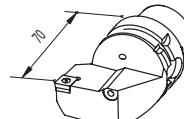
H63ADDJNL/R15



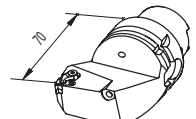
H63ASDJCL/R11



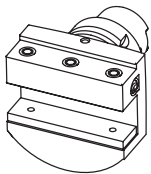
H63ASVJBL/R16



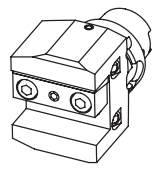
H63ASCLCL/R12



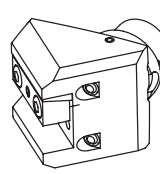
H63ATHEL/R16



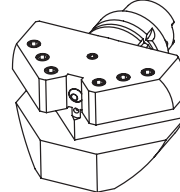
141-11408 32/25



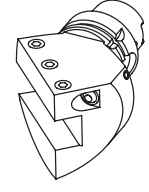
141-11406 25x25 mm



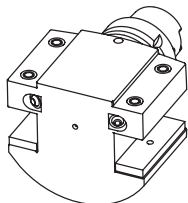
141-11405 25x25 mm



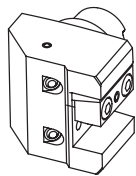
141-11409 25x25 mm



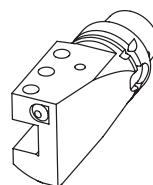
141-11407 (left) 25x25 mm
141-21401 (right)



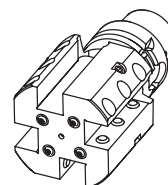
142-11405 32/25
142-11406 32/25



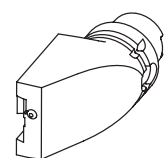
142-11402 25x25 mm



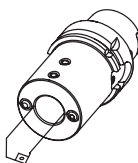
142-21401 (left) 25x25 mm
142-11403 (right)



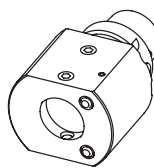
142-21404 20x20 mm (right)
142-21403 20x20 mm (left)



147-51405 (26mm, left)
147-51406 (26mm, right)
147-51407 (32mm, left)
147-51408 (32mm, right)



145-21404 (Ø12)
145-21406 (Ø16)
145-21408 (Ø20)
145-21409 (Ø25)
145-21410 (Ø32)
145-21411 (Ø40)



145-21412 Ø40 mm



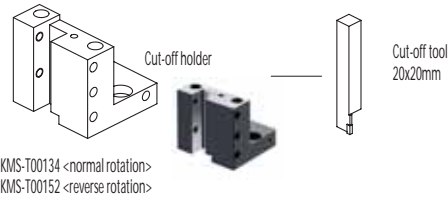
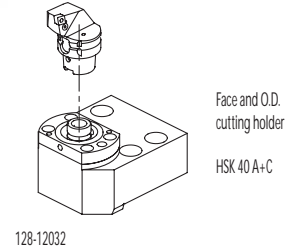
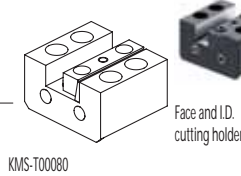
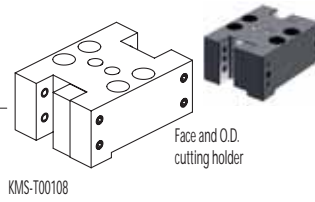
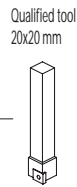
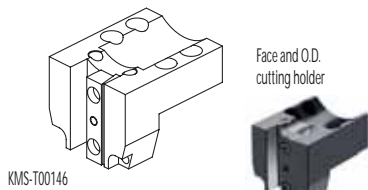
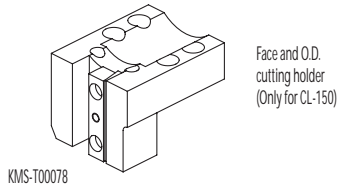
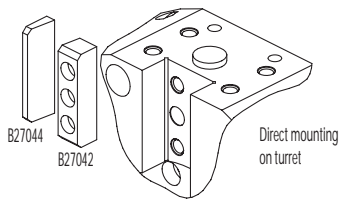
165-64124 (Ø10 mm)
165-64125 (Ø12 mm)
165-64126 (Ø16 mm)
165-64127 (Ø20 mm)



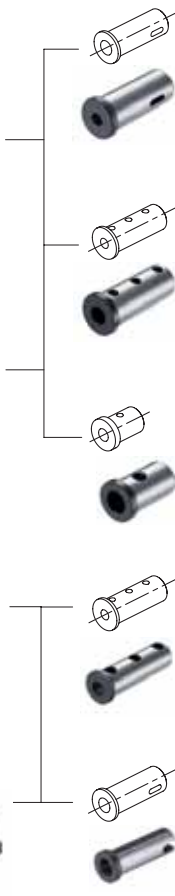
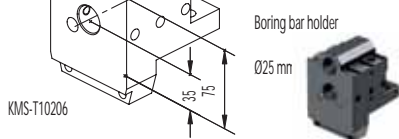
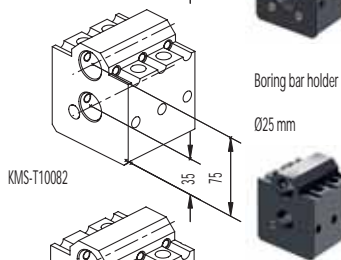
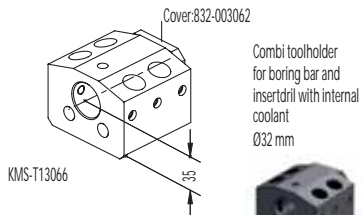
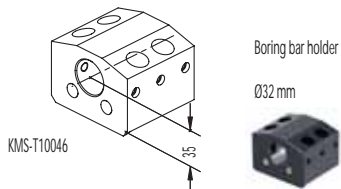
165-64128 (Ø25 mm)
165-64129 (Ø32 mm)

MORI SEIKI

SL150 - SL153 - ZL150 - CL150 - SL154



ACCESSORIES



Drill socket

KMS-T22048 <MT2>
KMS-T22050 <MT1>

Boring bar sleeve

KMS-T20122 (Ø25 mm)
KMS-T20120 (Ø20 mm)
KMS-T20118 (Ø16 mm)
KMS-T20116 (Ø12 mm)
KMS-T20114 (Ø10 mm)
KMS-T20112 (Ø8 mm)

Throw-away drill socket

KMS-T22054 (Ø25 mm)
KMS-T22052 (Ø20 mm)
KMS-T22068 (Ø16 mm)

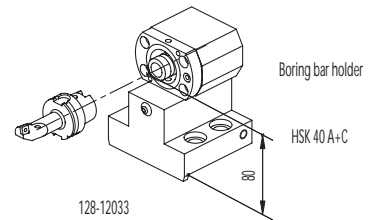
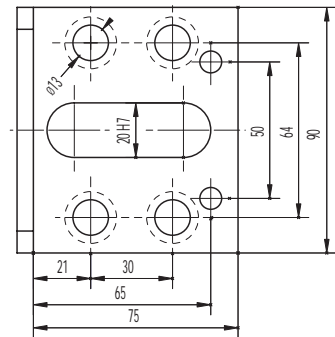
Boring bar sleeve

KMS-T20188 (Ø20 mm)
KMS-T20186 (Ø16 mm)
KMS-T20184 (Ø12 mm)
KMS-T20182 (Ø10 mm)
KMS-T20180 (Ø8 mm)

Drill socket

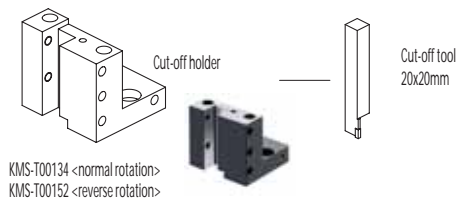
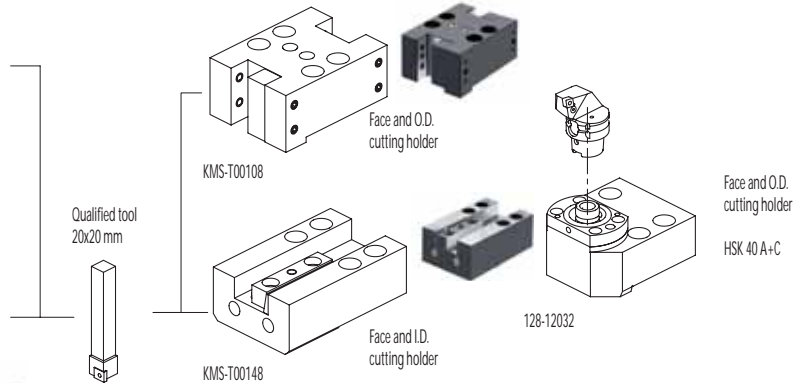
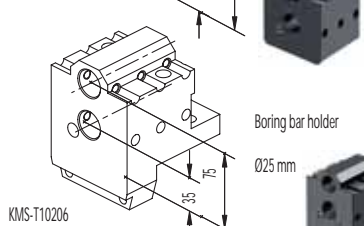
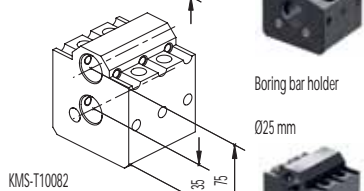
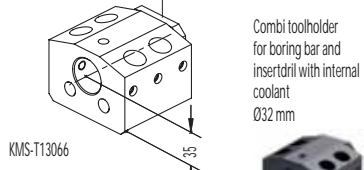
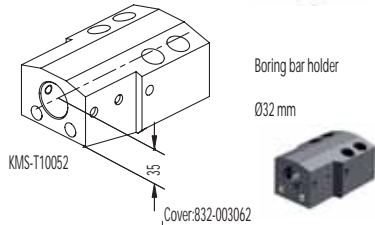
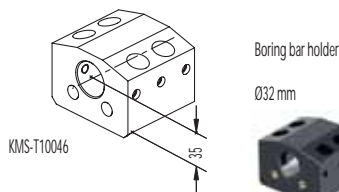
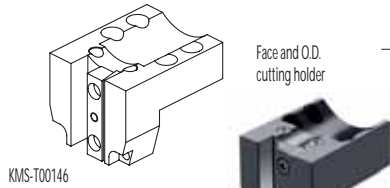
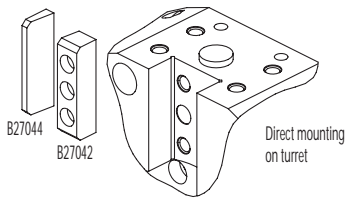
KMS-T22064 <MT2>
KMS-T22062 <MT1>

CONNECTION

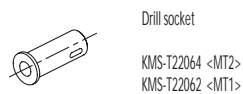
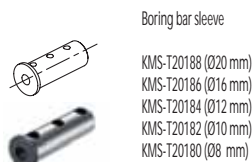
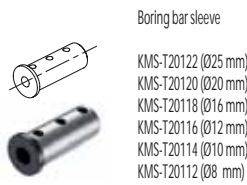


MORI SEIKI

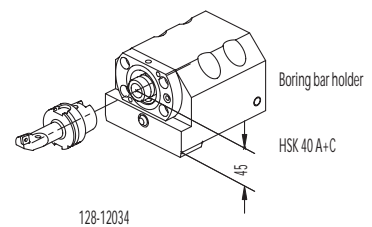
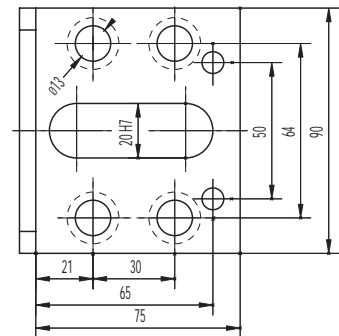
SL153MC - ZL150MC - SL154MC



ACCESSORIES

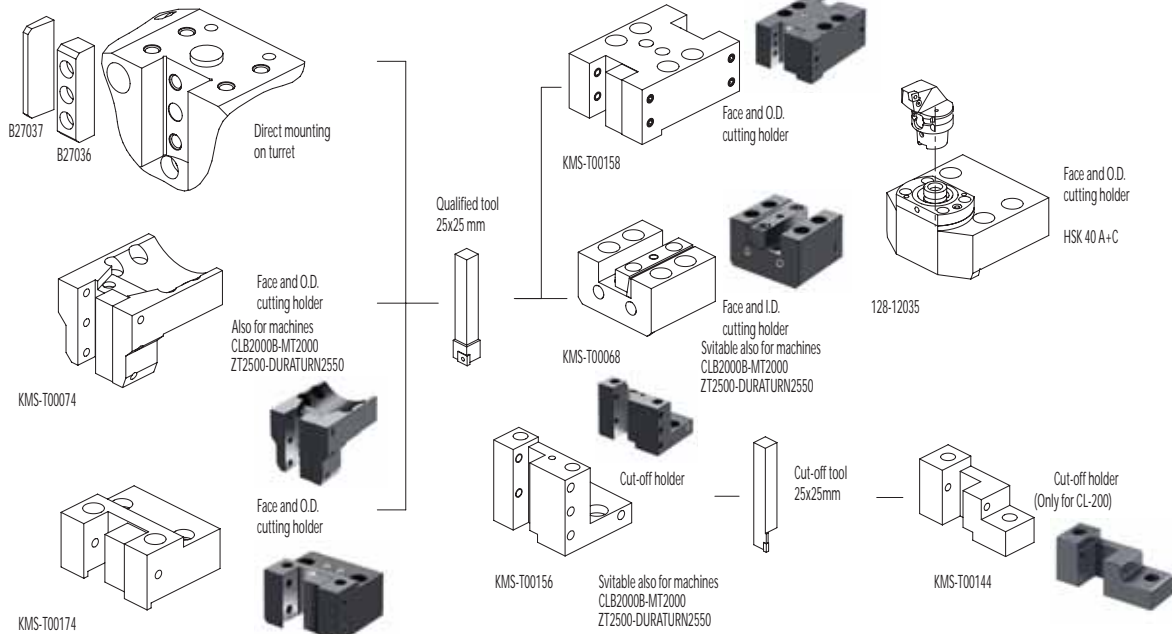


CONNECTION

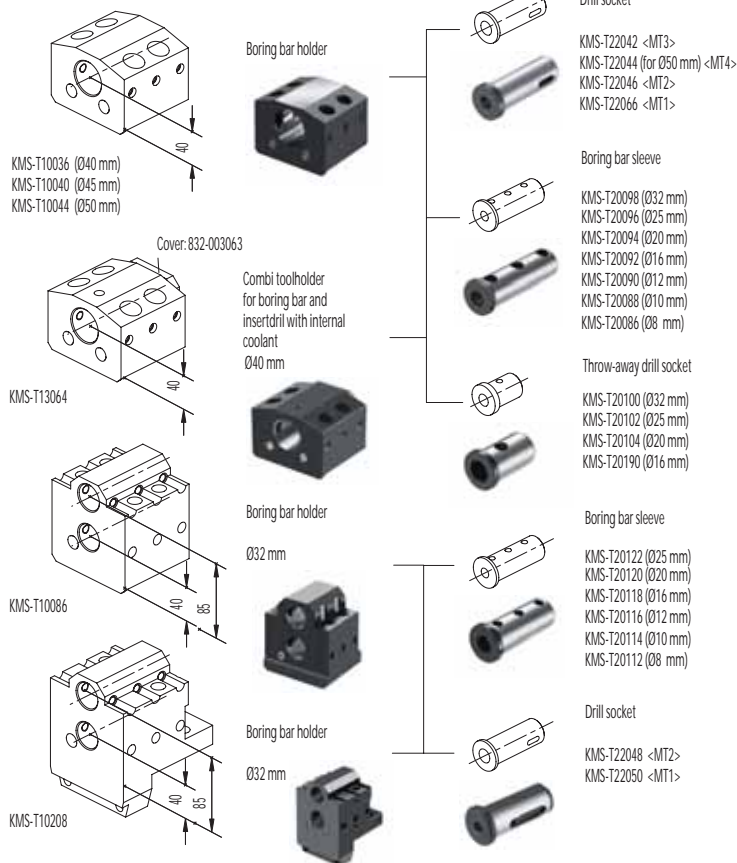


MORI SEIKI

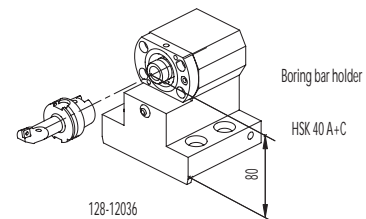
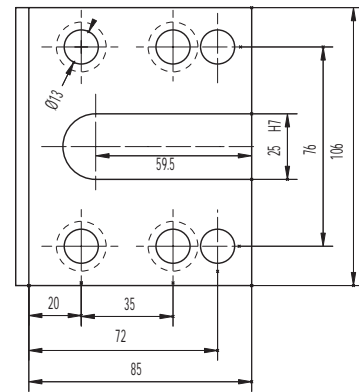
SL200 - SL203 - SL250 - SL253 - ZL200 - ZL250
(CL200) - SL204 - DURATURN 2030
DURATURN 2050 - DURATURN 2550



ACCESSORIES

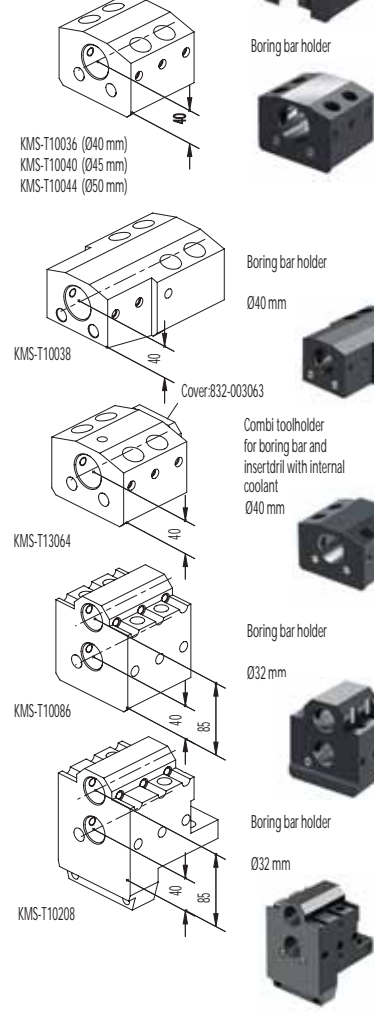
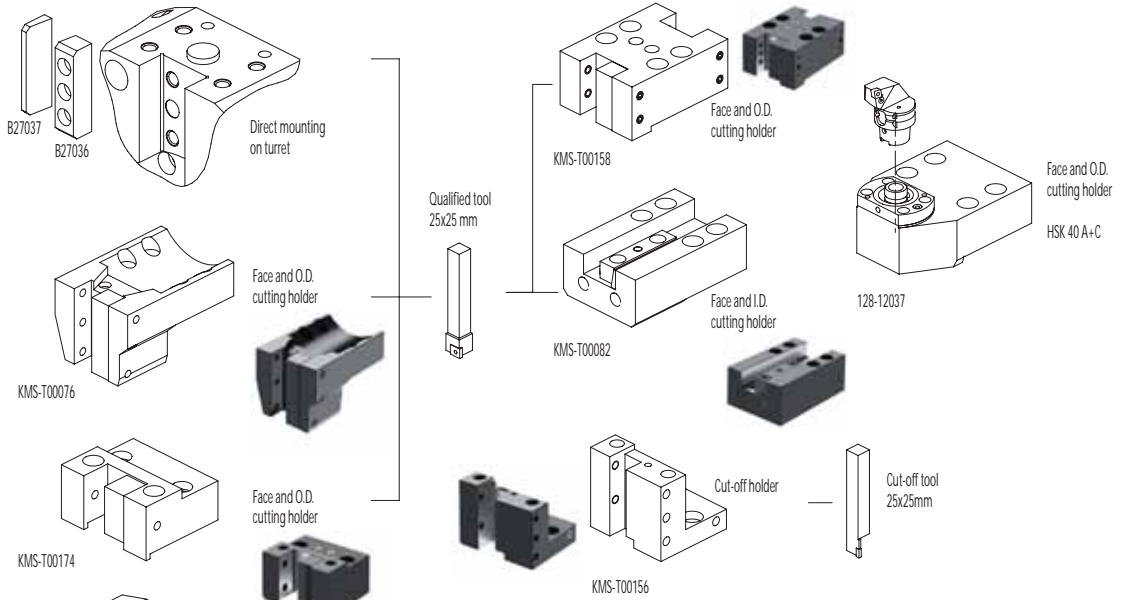


CONNECTION



MORI SEIKI

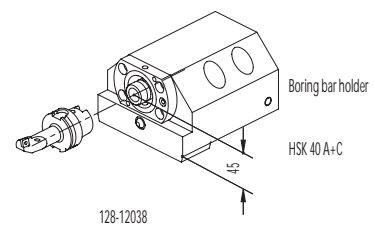
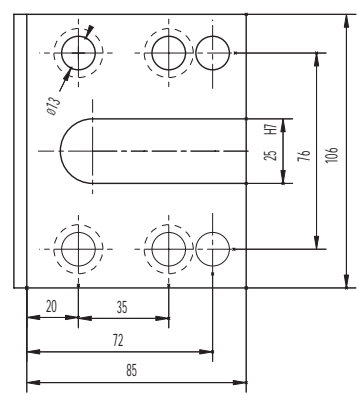
SL203MC - SL253MC - ZL200MC ZL250SMC - SL204SMC - SL300MC



ACCESSORIES

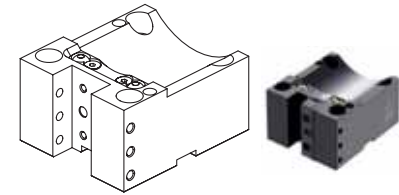
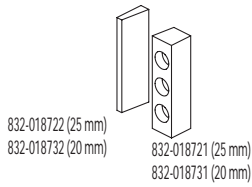
- Drill socket**
 KMS-T22042 <MT3>
 KMS-T22044 (for Ø50 mm) <MT4>
 KMS-T22046 <MT2>
 KMS-T22066 <MT1>
- Boring bar sleeve**
 KMS-T20098 (Ø32 mm)
 KMS-T20096 (Ø25 mm)
 KMS-T20094 (Ø20 mm)
 KMS-T20092 (Ø16 mm)
 KMS-T20090 (Ø12 mm)
 KMS-T20088 (Ø10 mm)
 KMS-T20086 (Ø8 mm)
- Throw-away drill socket**
 KMS-T20100 (Ø32 mm)
 KMS-T20102 (Ø25 mm)
 KMS-T20104 (Ø20 mm)
 KMS-T20190 (Ø16 mm)
- Boring bar sleeve**
 KMS-T20122 (Ø25 mm)
 KMS-T20120 (Ø20 mm)
 KMS-T20118 (Ø16 mm)
 KMS-T20116 (Ø12 mm)
 KMS-T20114 (Ø10 mm)
 KMS-T20112 (Ø8 mm)
- Drill socket**
 KMS-T22048 <MT2>
 KMS-T22050 <MT1>

CONNECTION

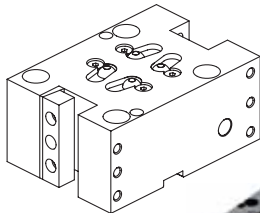


MORI SEIKI

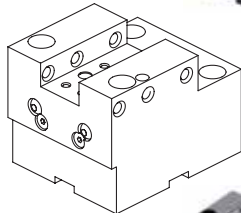
NL2000 (S)MC - 2500 (S)MC NL3000MC (12 STATIONS)



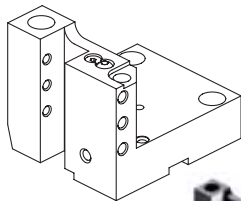
KMS-T00186 (25x25 mm)
KMS-T00187 (20x20 mm)



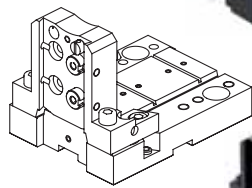
KMS-T00184 (25x25 mm)
KMS-T00185 (20x20 mm)



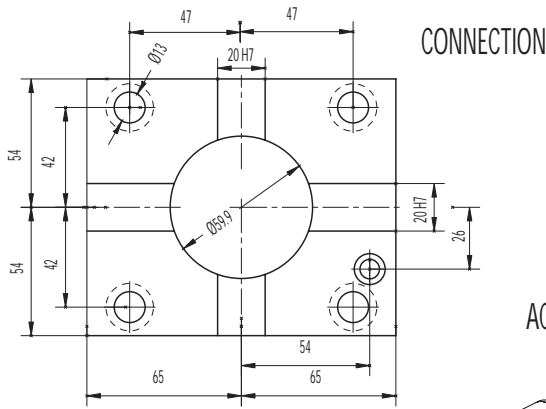
KMS-T03005 (25x25 mm)
KMS-T03006 (20x20 mm)



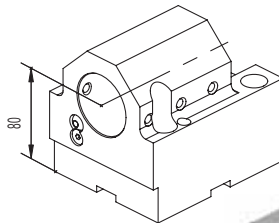
KMS-T00197 (25x25 mm)



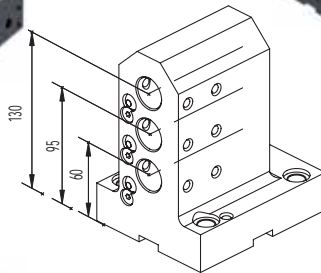
137-00092 (32 mm)



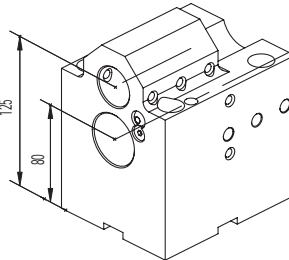
CONNECTION



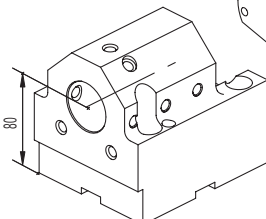
KMS-T10097 (Ø40 mm)
KMS-T10098 (Ø50 mm)



KMS-T10104 (Ø25 mm)

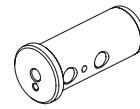


KMS-T10096 (Ø32 mm)

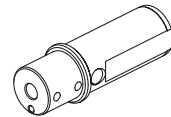


KMS-T13128 (Ø40 mm) with internal coolant

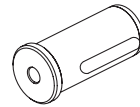
ACCESSORIES



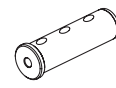
KMS-T20098-A (Ø32 mm)
KMS-T20096-A (Ø25 mm)
KMS-T20094-A (Ø20 mm)
KMS-T20092-A (Ø16 mm)
KMS-T20090-A (Ø12 mm)
KMS-T20088-A (Ø10 mm)
KMS-T20086-A (Ø8 mm)



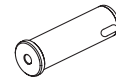
KMS-T20196-A (Ø20 mm)
KMS-T20194-A (Ø16 mm)
KMS-T20110-A (Ø12 mm)
KMS-T20108-A (Ø10 mm)
KMS-T20106-A (Ø8 mm)



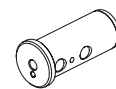
KMS-T22042-A (MT3)
KMS-T22044-A (MT4)
KMS-T22046-A (MT2)
KMS-T22066-A (MT1)



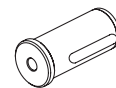
KMS-T20188 (Ø20 mm)
KMS-T20186 (Ø16 mm)
KMS-T20184 (Ø12 mm)
KMS-T20182 (Ø10 mm)
KMS-T20180 (Ø8 mm)



KMS-T22064 (MT2)
KMS-T22062 (MT1)



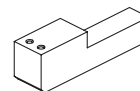
KMS-T20122-A (Ø25 mm)
KMS-T20120-A (Ø20 mm)
KMS-T20118-A (Ø16 mm)
KMS-T20116-A (Ø12 mm)
KMS-T20114-A (Ø10 mm)
KMS-T20112-A (Ø8 mm)



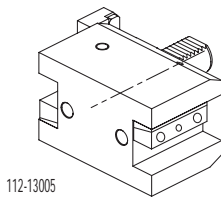
KMS-T22048-A (MT2)
KMS-T22050-A (MT1)



KMS-T20100-A (Ø32 mm)
KMS-T20102-A (Ø25 mm)
KMS-T20104-A (Ø20 mm)
KMS-T20190-A (Ø16 mm)

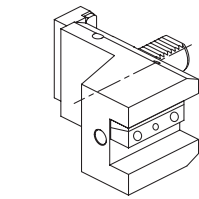


KMS-T17002 (Ø25x25 mm)



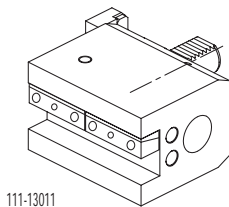
112-13005

Face and I.D.
cutting holder



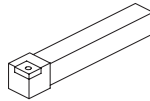
112-33008

Face and I.D.
cutting holder

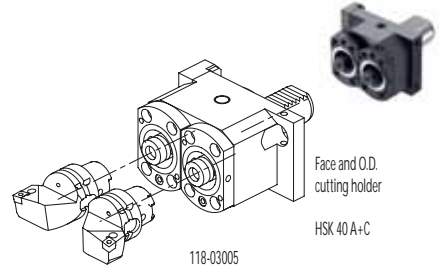


111-13011

Face and O.D.
cutting holder



Qualified tool
20x20 mm

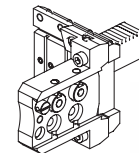


118-03005

Face and O.D.
cutting holder

HSK 40 A+C

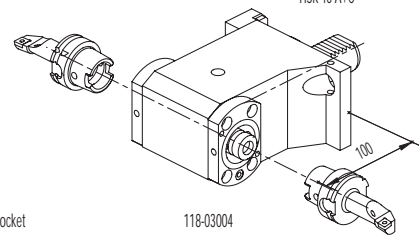
Cut-off holder
26 mm



117-53001

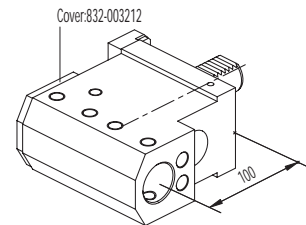
Boring bar holder

HSK 40 A+C



118-03004

ACCESSORIES

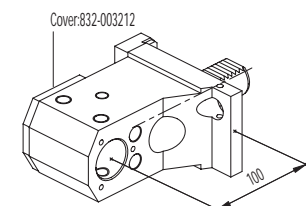


115-23045

Cover:832-003212

Combi toolholder
for boring bar and
insertdrill with internal
coolant

Ø32 mm

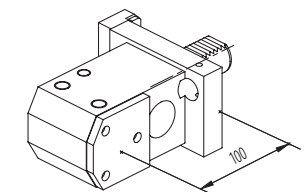


115-23046

Cover:832-003212

Combi toolholder
for boring bar and
insertdrill with internal
coolant

Ø32 mm

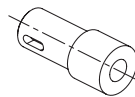


115-23087

Cover:832-003212

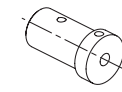
Combi toolholder
for boring bar and
insertdrill with internal
coolant

Ø32 mm



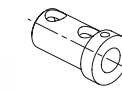
Drill socket

115-63282 <MT1>
115-63284 <MT2>



Boring bar sleeve

115-63286 (Ø8 mm)
115-63288 (Ø10 mm)
115-63290 (Ø12 mm)



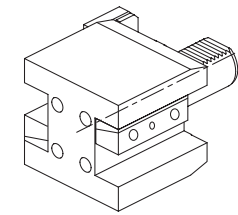
Boring bar sleeve

115-63292 (Ø16 mm)
115-63294 (Ø20 mm)
115-63296 (Ø25 mm)



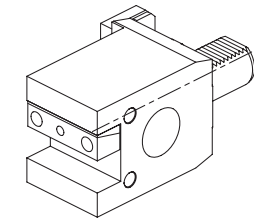
OKUMA (VDI40)

LT15M - LT300M - MT250 - LB300 - LB300M - LV300



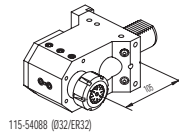
112-14009

Face and O.D. cutting holder

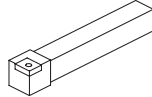


111-14014

Face and O.D. cutting holder



115-54088 (Ø32/ER32)



Qualified tool
25x25 mm

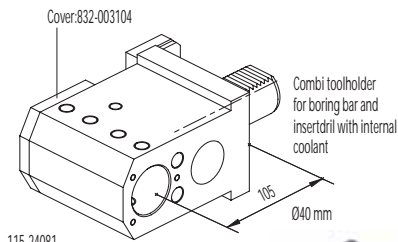


118-04012



Face and O.D. cutting holder
HSK 40 A+C

ACCESSORIES

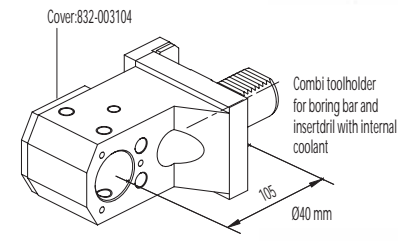


115-24081

Cover:832-003104

Combi toolholder for boring bar and insertdrill with internal coolant

Ø40 mm

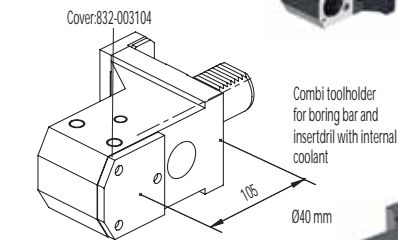


115-24070

Cover:832-003104

Combi toolholder for boring bar and insertdrill with internal coolant

Ø40 mm

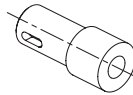


115-54060

Cover:832-003104

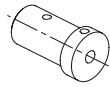
Combi toolholder for boring bar and insertdrill with internal coolant

Ø40 mm



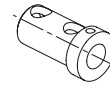
Drill socket

115-64094 <MT1>
115-64095 <MT2>
115-64096 <MT3>



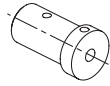
Boring bar sleeve and throw-away drill socket

115-64097 (Ø10 mm)
115-64098 (Ø12 mm)
115-64099 (Ø16 mm)
165-64001 (Ø20 mm)



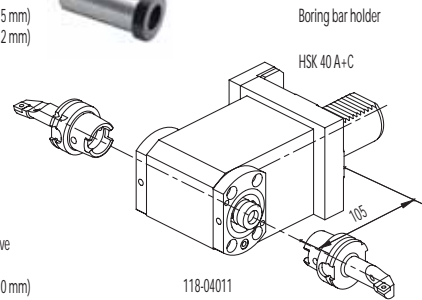
Boring bar sleeve and throw-away drill socket

165-64002 (Ø25 mm)
165-64003 (Ø32 mm)



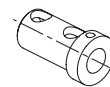
Boring bar sleeve

165-64004 (Ø10 mm)
165-64005 (Ø12 mm)
165-64006 (Ø16 mm)
165-64007 (Ø20 mm)



Boring bar holder
HSK 40 A+C

118-04011



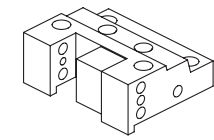
Boring bar sleeve

165-64008 (Ø25 mm)
165-64009 (Ø32 mm)



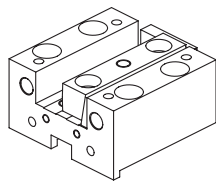
OKUMA LB15 - LB25 LB15II - LB300

HAAS SL20 - SL30



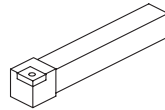
128-42011

Face and O.D.
cutting holder

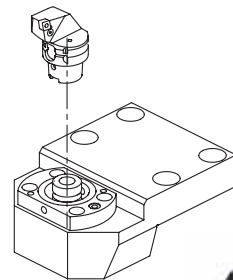


128-32001

Face and I.D.
cutting holder



Qualified tool
25x25 mm



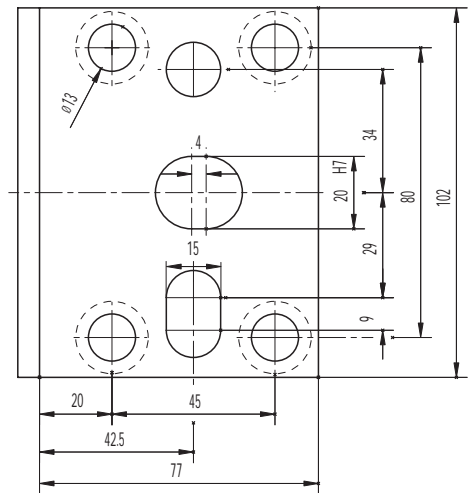
128-12039

Face and O.D.
cutting holder

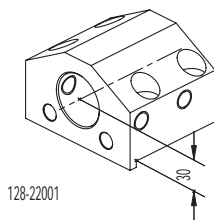
HSK 40 A+C



CONNECTION



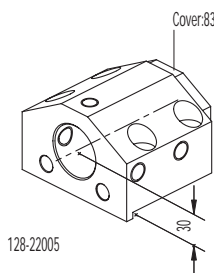
ACCESSORIES



128-22001

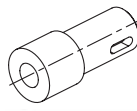
Toolholder
for boring bar

Ø40 mm



128-22005

Combi toolholder
for boring bar and
insert drill with internal
coolant



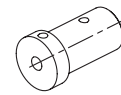
Drill socket

165-64010 <MT1>
165-64011 <MT2>
165-64012 <MT3>



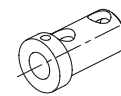
Boring bar sleeve and
throw-away drill socket

165-64135 (Ø8 mm)
165-64013 (Ø10 mm)
165-64014 (Ø12 mm)
165-64015 (Ø16 mm)
165-64016 (Ø20 mm)



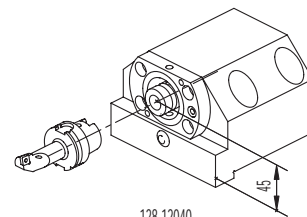
Boring bar sleeve and
throw-away drill socket

165-64017 (Ø25 mm)
165-64018 (Ø32 mm)



Boring bar holder

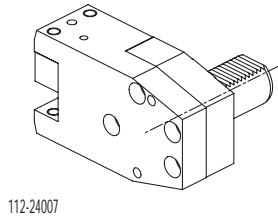
HSK 40 A+C



128-12040

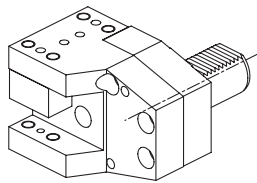
OKUMA (VDI40)

LB15IIMW



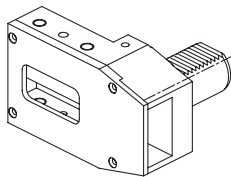
112-24007

Face and I.D.
cutting holder



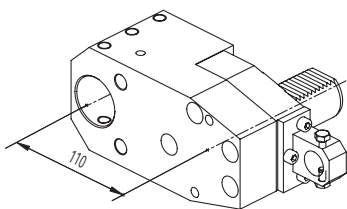
111-64005

Face and O.D.
cutting holder



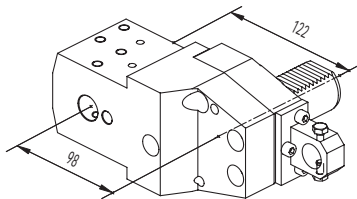
111-64006

Face and O.D.
cutting holder



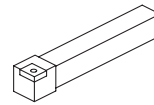
115-24068

Toolholder
for boring bar



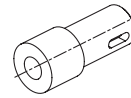
115-24067

Double toolholder
for boring bar



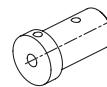
Qualified tool
25x25 mm

ACCESSORIES



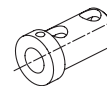
Drill socket

165-64021 <MT1>
165-64022 <MT2>
165-64023 <MT3>



Boring bar sleeve

165-64024 (Ø10 mm)
165-64025 (Ø12 mm)
165-64026 (Ø16 mm)
165-64027 (Ø20 mm)



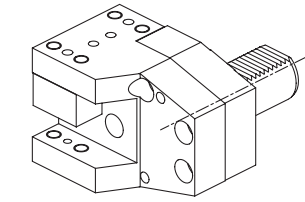
Boring bar sleeve

165-64028 (Ø25 mm)
165-64029 (Ø32 mm)



OKUMA (VDI40)

LB300IIMW

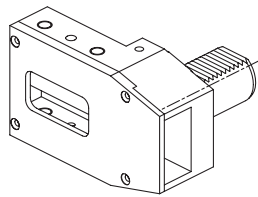


111-64009

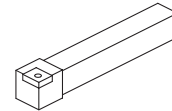
Face and O.D.
cutting holder



Face and O.D.
cutting holder

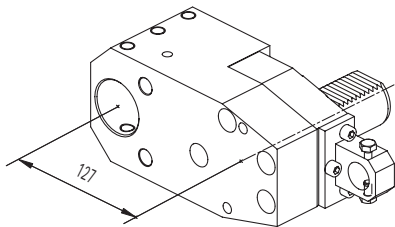


111-64006



Qualified tool
25x25 mm

ACCESSORIES



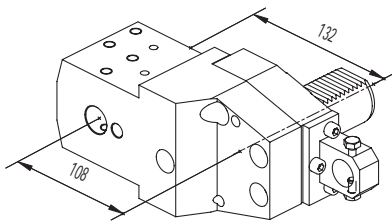
115-24093

Toolholder
for boring bar

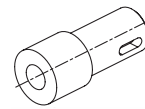
Ø40 mm



Double toolholder
for boring bar

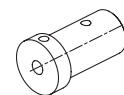


115-24092



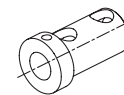
Drill socket

- 165-64021 <MT1>
- 165-64022 <MT2>
- 165-64023 <MT3>



Boring bar sleeve

- 165-64024 (Ø10 mm)
- 165-64025 (Ø12 mm)
- 165-64026 (Ø16 mm)
- 165-64027 (Ø20 mm)



Boring bar sleeve

- 165-64028 (Ø25 mm)
- 165-64029 (Ø32 mm)



OKUMA

Mac Turn 250/350/400 Multus B250/B300/B400

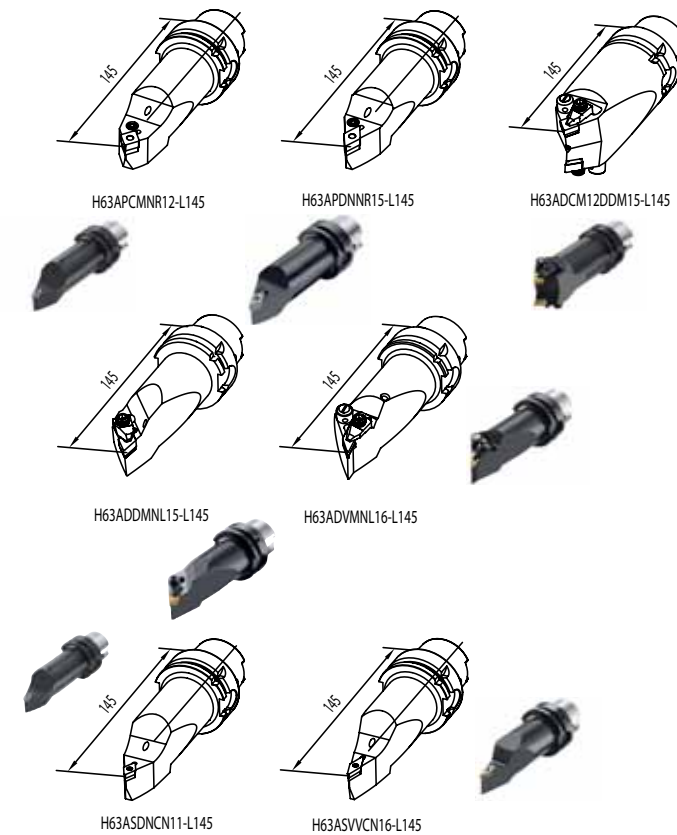
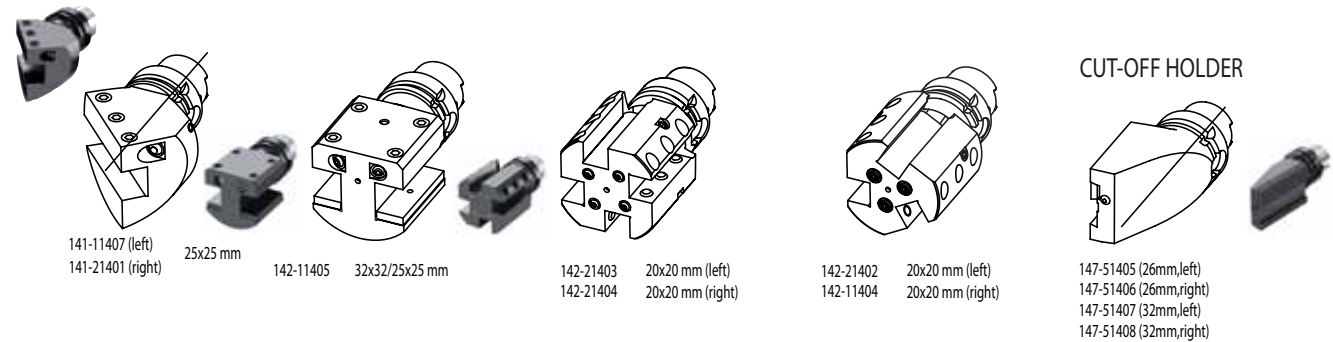
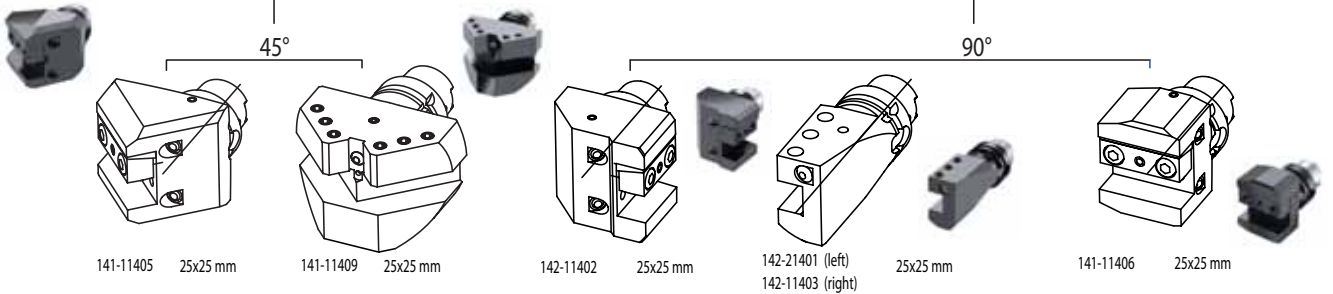
ATC Turret (HSK63T)

ICTM STANDARD

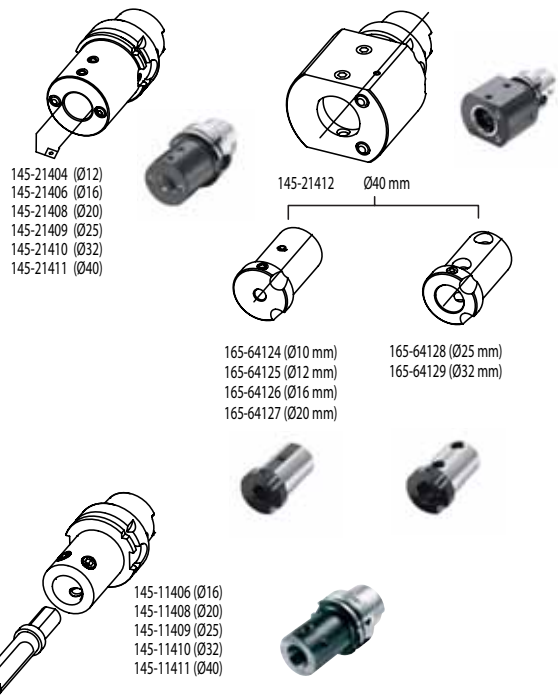
For turning

45°

90°



BORING BAR HOLDER



Lower Turret (VDI 40)

112-14009 (25x25)

115-54088 (Ø32/ER32)

111-14014 (25x25)

115-24081 (Ø40)

117-54005 (H=32)

118-04012 HSK 40 A+C

115-24070 (Ø40)

118-04011 HSK 40 A+C

115-54060 (Ø40)

ACCESSORIES

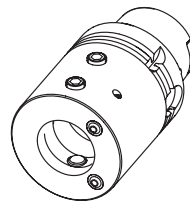
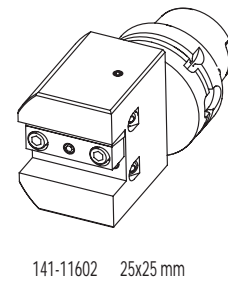
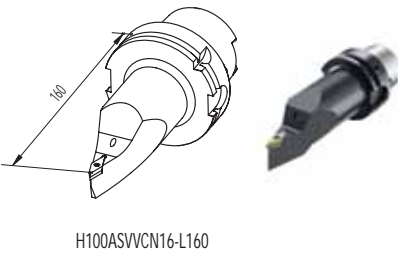
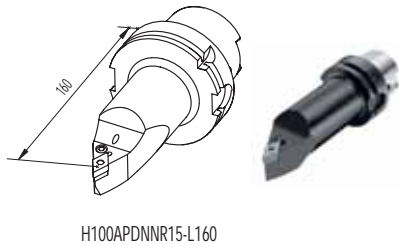
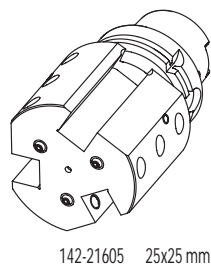
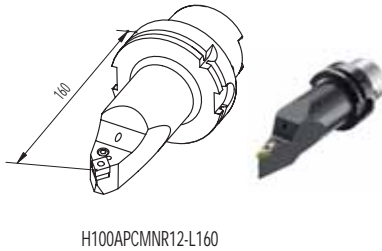
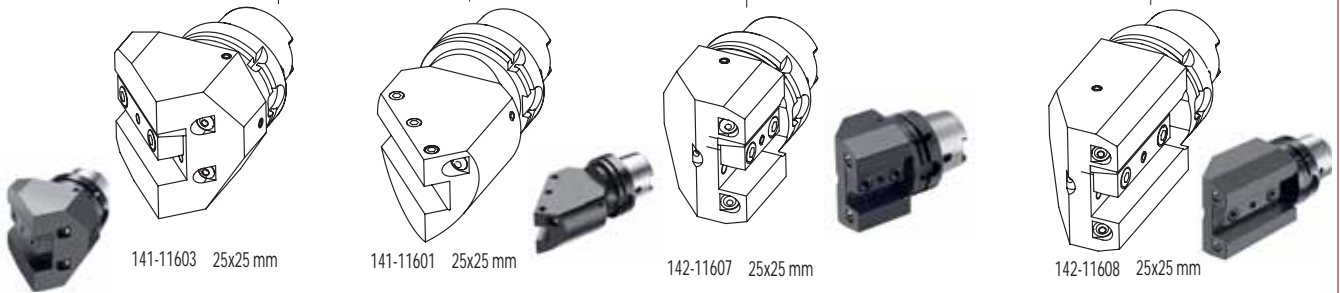
- Drill socket
 - 115-64094 <MT1>
 - 115-64095 <MT2>
 - 115-64096 <MT3>
- Boring bar sleeve and throw-away drill socket
 - 115-64097 (Ø10 mm)
 - 115-64098 (Ø12 mm)
 - 115-64099 (Ø16 mm)
 - 165-64001 (Ø20 mm)
- Boring bar sleeve and throw-away drill socket
 - 165-64002 (Ø25 mm)
 - 165-64003 (Ø32 mm)
- Boring bar sleeve
 - 165-64004 (Ø10 mm)
 - 165-64005 (Ø12 mm)
 - 165-64006 (Ø16 mm)
 - 165-64007 (Ø20 mm)
- Boring bar sleeve
 - 165-64008 (Ø25 mm)
 - 165-64009 (Ø32 mm)

For turning

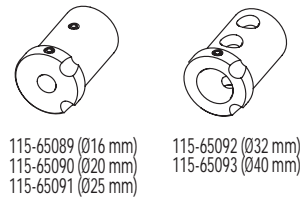
ATC Turret (HSK100A) ICTM STANDARD

45°

90°

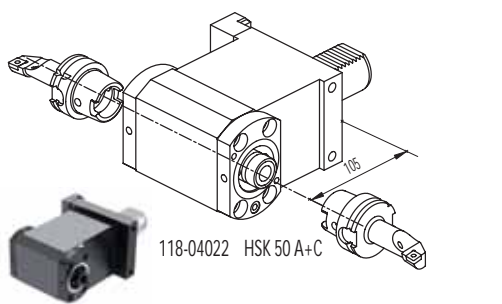
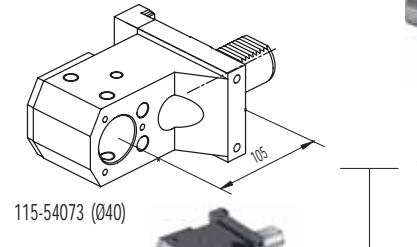
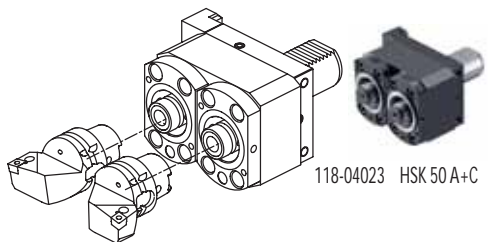
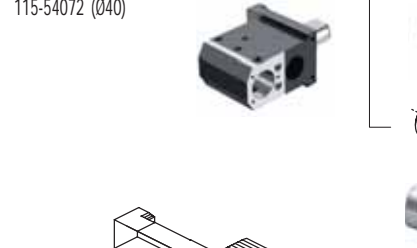
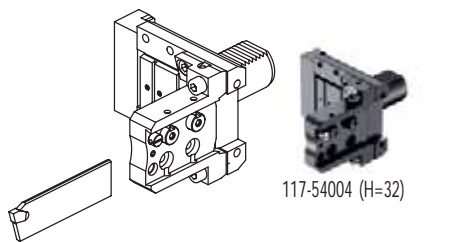
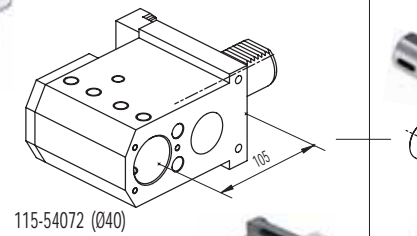
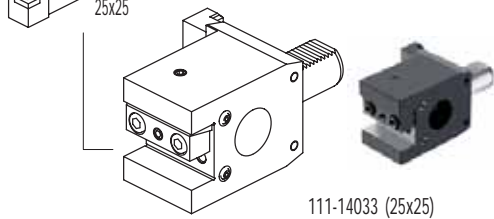
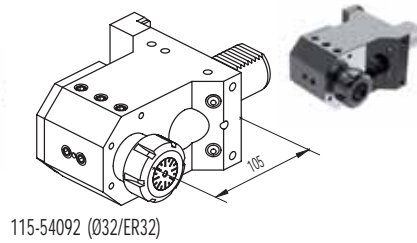
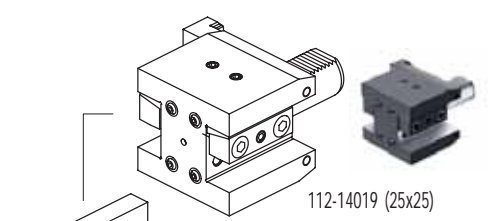


145-21608 Ø50 mm



OKUMA (VDI40)

Mac Turn 550



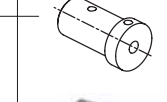
ACCESSORIES



Drill socket
115-64094 <MT1>
115-64095 <MT2>
115-64096 <MT3>



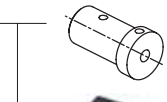
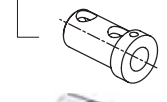
Boring bar sleeve and
throw-away drill socket
115-64097 (Ø10 mm)
115-64098 (Ø12 mm)
115-64099 (Ø16 mm)
165-64001 (Ø20 mm)



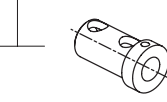
Boring bar sleeve and
throw-away drill socket
165-64002 (Ø25 mm)
165-64003 (Ø32 mm)



Boring bar sleeve
165-64124 (Ø10 mm)
165-64125 (Ø12 mm)
165-64126 (Ø16 mm)
165-64127 (Ø20 mm)



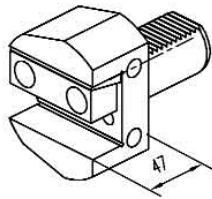
Boring bar sleeve
165-64008 (Ø25 mm)
165-64009 (Ø32 mm)



OKUMA

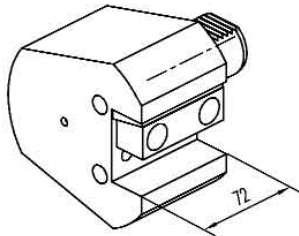
(VDI40)

LVT300



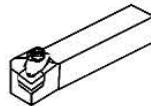
111-14041

Face and O.D. cutting holder

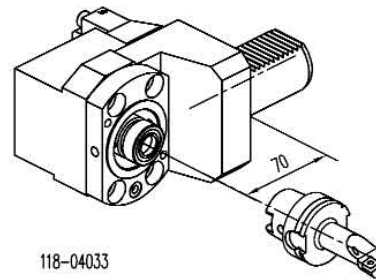


112-14021

Face and O.D. cutting holder



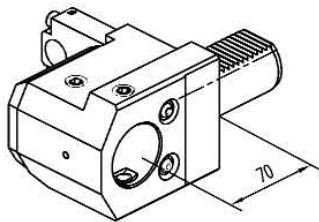
Qualified tool
25x25 mm



Boring bar holder
HSK 50 A+C

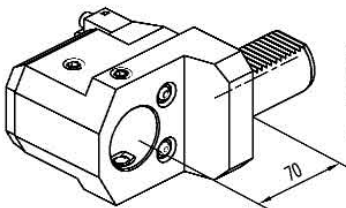
118-04033

ACCESSORIES



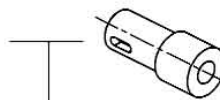
115-54068

Combi toolholder
for boring bar and
insertdrill
ø40 mm



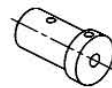
115-54069

Combi toolholder
for boring bar and
insertdrill
ø40 mm



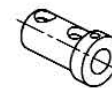
Drill socket

114-34034 <MT1>
114-34035 <MT2>



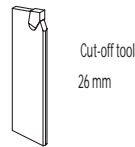
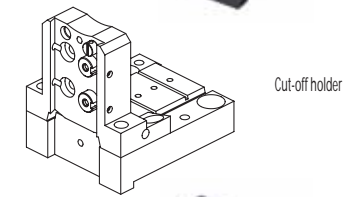
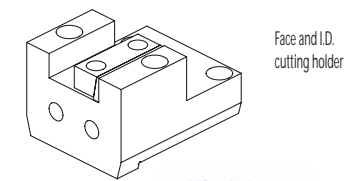
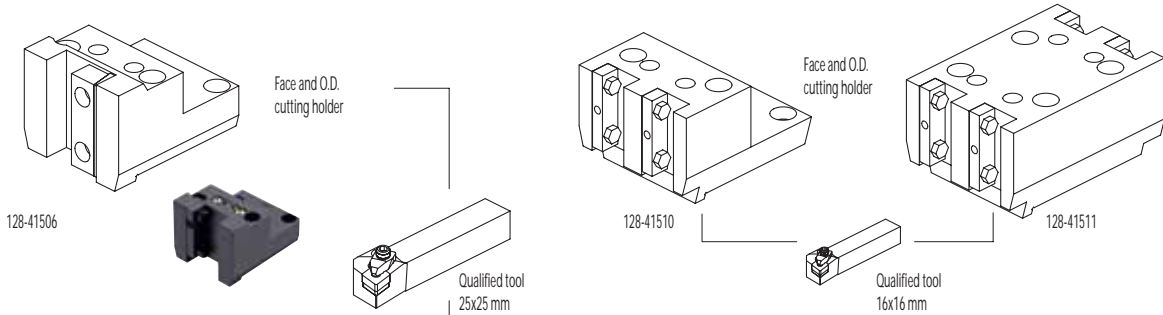
Boring bar sleeve

165-64124 (ø10 mm)
165-64125 (ø12 mm)
165-64126 (ø16 mm)
165-64127 (ø20 mm)

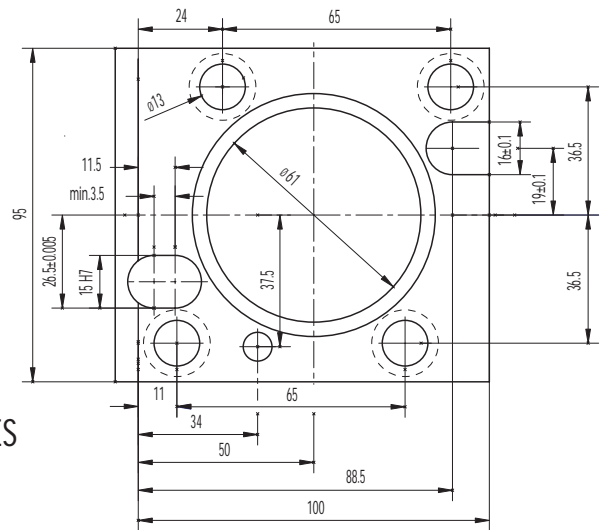


Boring bar sleeve

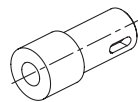
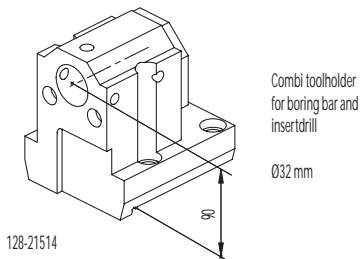
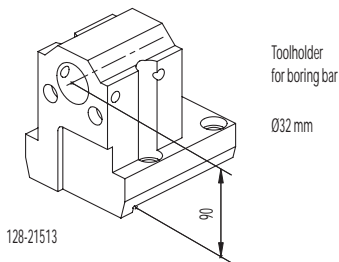
165-64128 (ø25 mm)
165-64129 (ø32 mm)



CONNECTION

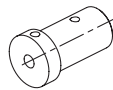


ACCESSORIES



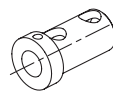
Drill socket

- 165-63295 <MT1>
- 165-63296 <MT2>



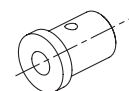
Boring bar sleeve

- 165-63289 ($\phi 8$ mm)
- 165-63290 ($\phi 10$ mm)
- 165-63291 ($\phi 12$ mm)
- 165-63292 ($\phi 16$ mm)



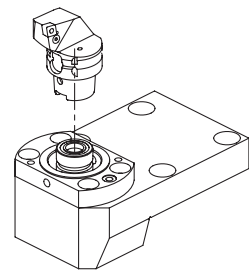
Boring bar sleeve

- 165-63293 ($\phi 20$ mm)
- 165-63294 ($\phi 25$ mm)

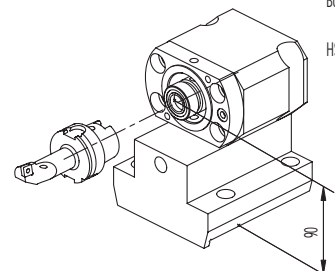


Throw-away drill socket

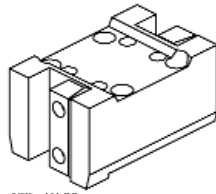
- 165-63297 ($\phi 16$ mm)
- 165-63298 ($\phi 20$ mm)
- 165-63299 ($\phi 25$ mm)



128-11530

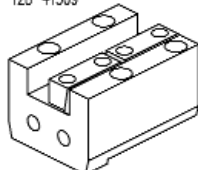


128-11531



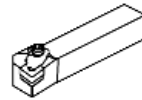
128-41509

Face and O.D. cutting holder

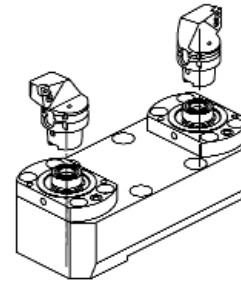


128-31505

Face and I.D. cutting holder

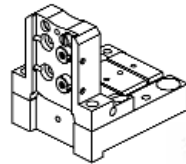


Qualified tool
25x25 mm



128 11537

Face and O.D. cutting holder
HSK 50 A+C

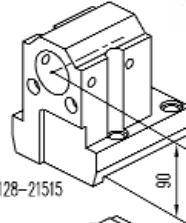


128-11535 (h=32 mm)
128 11534 (h=26 mm)

Cut-off holder

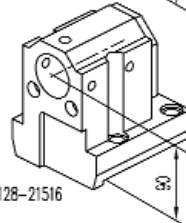


Cut-off tool
32 mm
26 mm



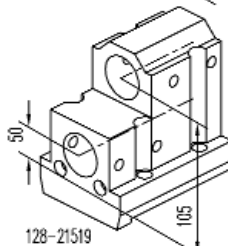
128-21515

Toolholder for boring bar
ø40 mm



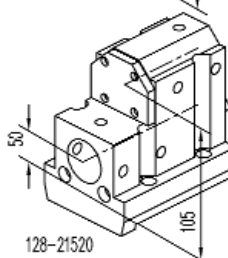
128-21516

Combi toolholder for boring bar and insertdrill
ø40 mm



128-21519

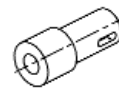
Double toolholder for boring bar
ø40 mm



128-21520

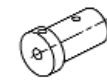
Double combi toolholder for boring bar and insertdrill
ø40 mm

ACCESSORIES



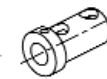
Drill socket

- 165-64010 <M11>
- 165-64011 <M12>
- 165-64012 <M13>



Boring bar sleeve

- 165-64135 (ø8 mm)
- 165-64013 (ø10 mm)
- 165-64014 (ø12 mm)
- 165-64015 (ø16 mm)
- 165-64016 (ø20 mm)



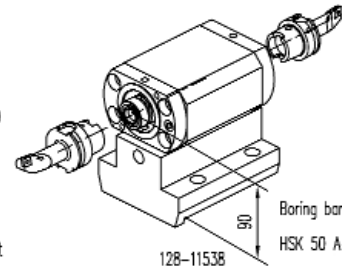
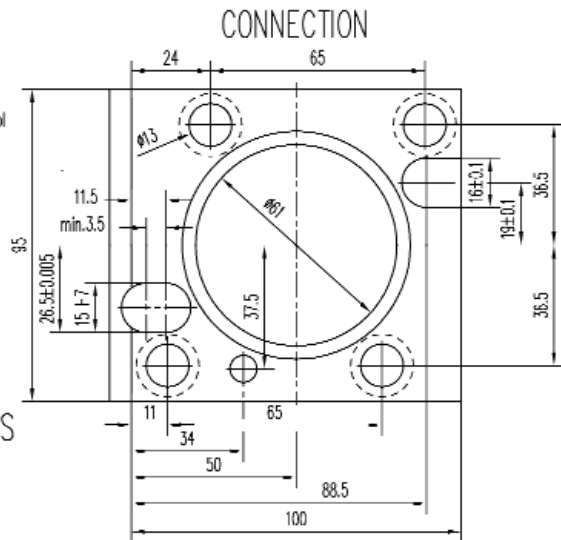
Boring bar sleeve

- 165-64019 (ø25 mm)
- 165-64020 (ø32 mm)



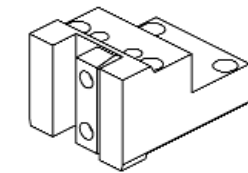
Throw-away drill socket

- 165-64203 (ø16 mm)
- 165-64204 (ø20 mm)
- 165-64205 (ø25 mm)
- 165-64206 (ø32 mm)



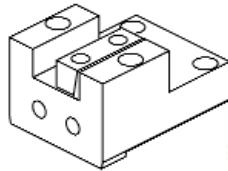
128-11538

Boring bar holder
HSK 50 A+C



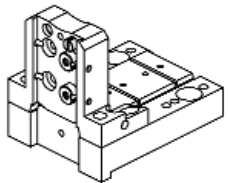
128-41508

Face and O.D. cutting holder



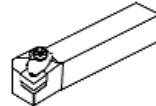
128-31504

Face and I.D. cutting holder

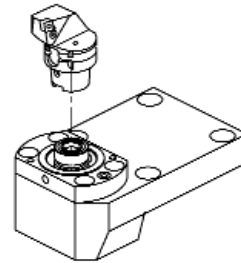


128-11536

Cut-off holder



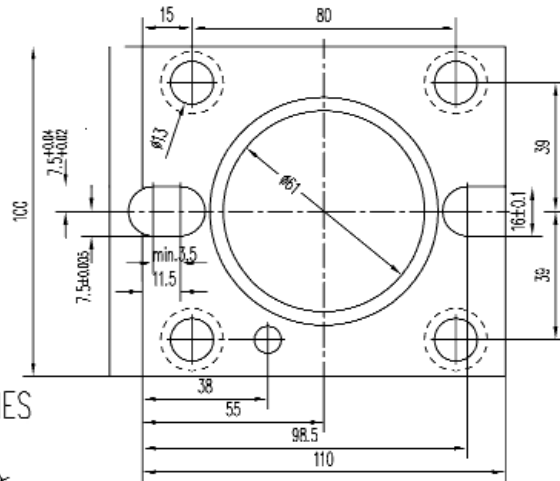
Qualified tool
25x25 mm



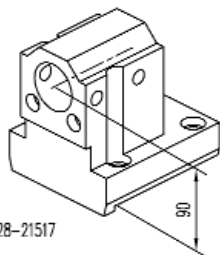
128-11552

Face and O.D. cutting holder
HSK 50 A+C

CONNECTION

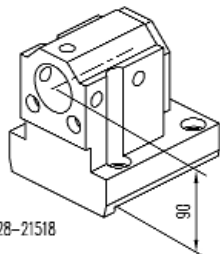


ACCESSORIES



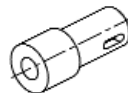
128-21517

Toolholder for boring bar
Ø40 mm



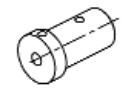
128-21518

Combi toolholder for boring bar and insert drill
Ø40 mm



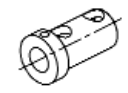
Drill socket

- 165-64010 <MT1>
- 165-64011 <MT2>
- 165-64017 <MT3>



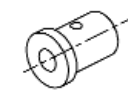
Boring bar sleeve

- 165-64135 (Ø8 mm)
- 165-64013 (Ø10 mm)
- 165-64014 (Ø12 mm)
- 165-64015 (Ø16 mm)
- 165-64016 (Ø20 mm)



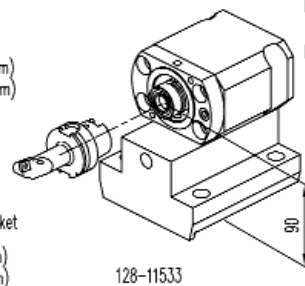
Boring bar sleeve

- 165-64019 (Ø25 mm)
- 165-64020 (Ø32 mm)



Throw-away drill socket

- 165-64203 (Ø16 mm)
- 165-64204 (Ø20 mm)
- 165-64205 (Ø25 mm)
- 165-64206 (Ø32 mm)

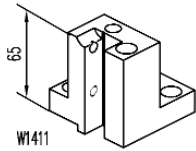


128-11533

Boring bar holder
HSK 50 A+C

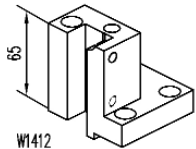
NAKAMURA TOME

TW10



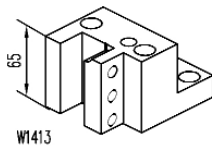
W1411

Face and O.D. cutting holder



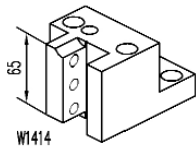
W1412

Face and O.D. cutting holder



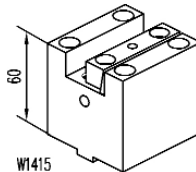
W1413

Face and O.D. cutting holder



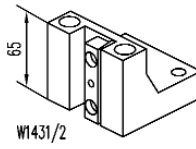
W1414

Face and O.D. cutting holder



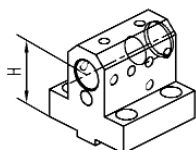
W1415

Face and I.D. cutting holder



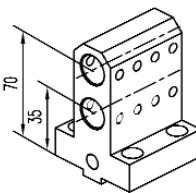
W1431/2

Face and O.D. cutting holder



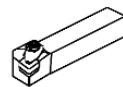
W1417 D25 (H=55 mm)
W4437 D25 (H=75 mm)

Combi toolholder for boring bar and insertdrill
Ø25 mm

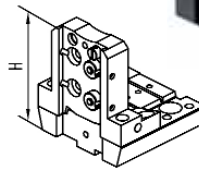


W1418 D25

Double toolholder for boring bar
Ø25 mm



Qualified tool
20x20 mm



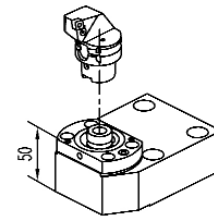
121-22075 (h=26 mm H=95 mm)
121-22076 (h=32 mm H=100 mm)



Cut-off holder



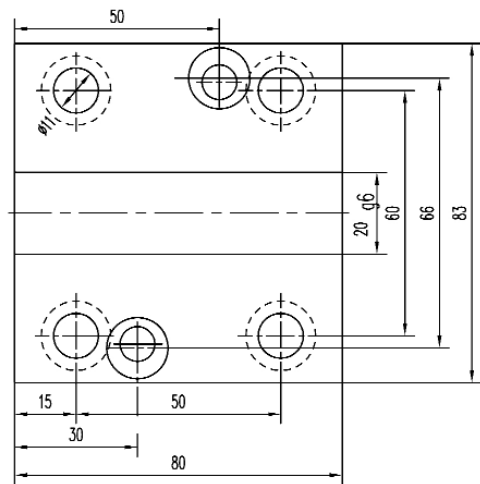
Cut-off tool



121-22056

Face and O.D. cutting holder
HSK 40 A+C

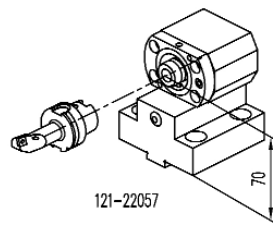
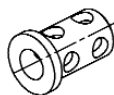
CONNECTION



ACCESSORIES

Boring bar sleeve and throw-away drill socket

- 739.0125.020 TW10 (Ø20 mm)
- 739.0125.016 TW10 (Ø16 mm)
- 739.0125.012 TW10 (Ø12 mm)
- 739.0125.010 TW10 (Ø10 mm)
- 739.0125.008 TW10 (Ø8 mm)
- 739.0125.006 TW10 (Ø6 mm)

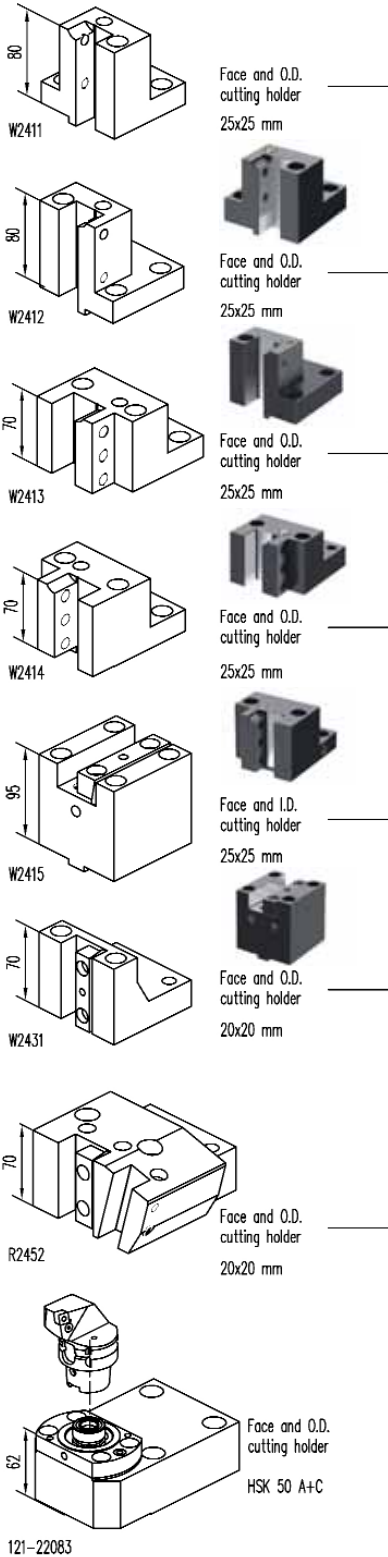


Boring bar holder
HSK 40 A+C

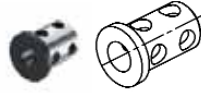
121-22057

NAKAMURA TOME

TW20 - WT300 - SC300

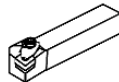


ACCESSORIES

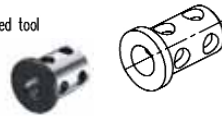


Boring bar sleeve and throw-away drill socket

- 739.0132.025 TW20 (∅25 mm)
- 739.0132.020 TW20 (∅20 mm)
- 739.0132.016 TW20 (∅16 mm)
- 739.0132.012 TW20 (∅12 mm)
- 739.0132.010 TW20 (∅10 mm)
- 739.0132.008 TW20 (∅8 mm)

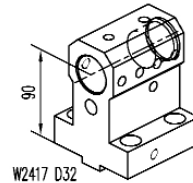


Qualified tool



Boring bar sleeve

- 739.0125.020 TW20 (∅20 mm)
- 739.0125.016 TW20 (∅16 mm)
- 739.0125.012 TW20 (∅12 mm)
- 739.0125.010 TW20 (∅10 mm)
- 739.0125.008 TW20 (∅8 mm)
- 739.0125.006 TW20 (∅6 mm)



W2417 D32

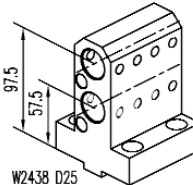
Combi toolholder for boring bar and insert drill

∅32 mm



Double toolholder for boring bar

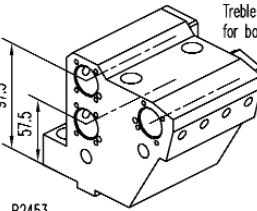
∅25 mm



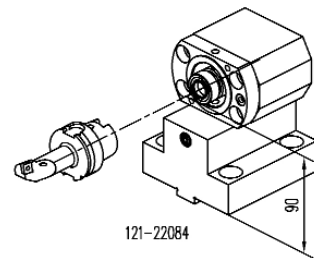
W2438 D25

Treble toolholder for boring bar

∅25 mm



R2453

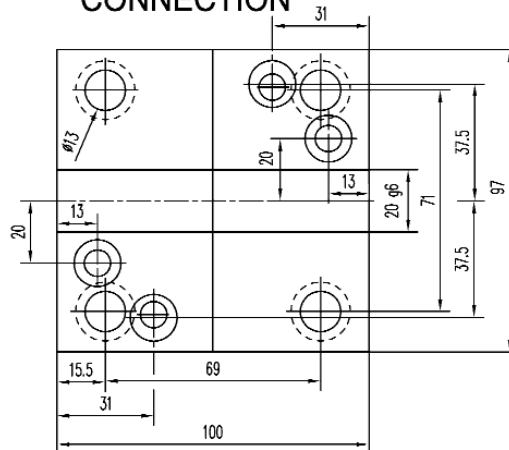


121-22084

Boring bar holder

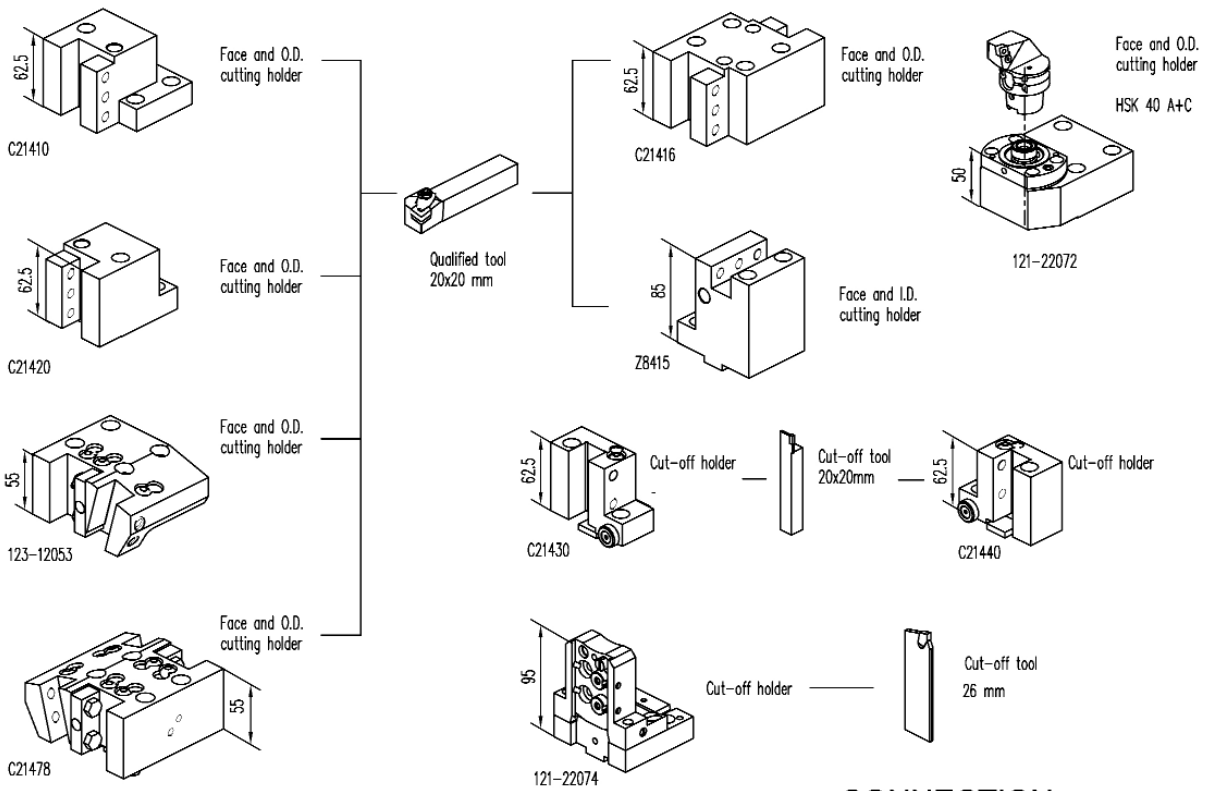
HSK 50 A+C

CONNECTION

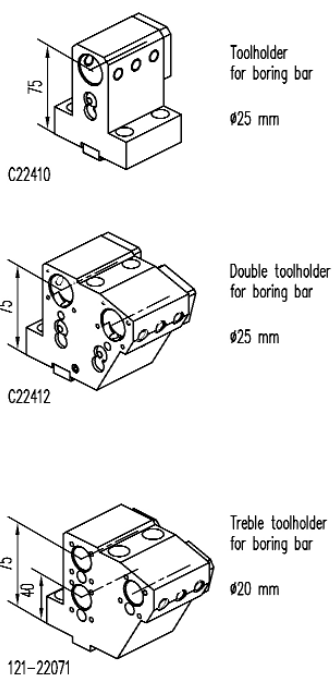


NAKAMURA TOME

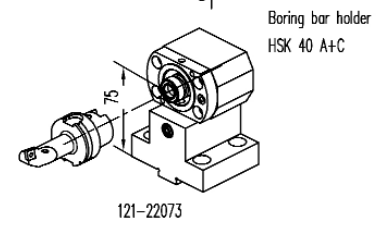
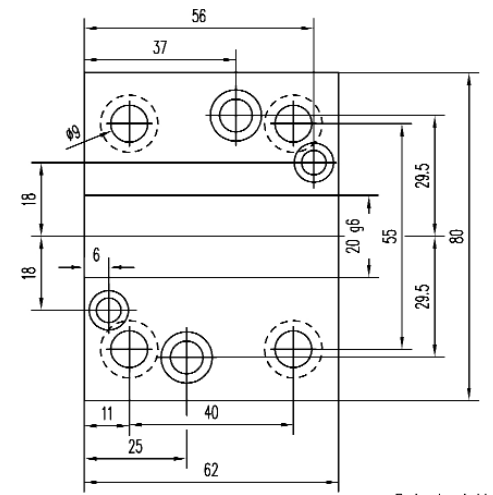
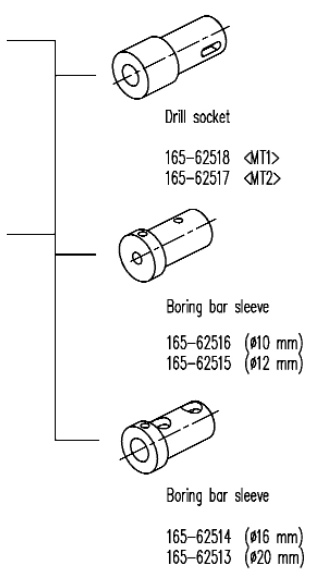
WT100



CONNECTION

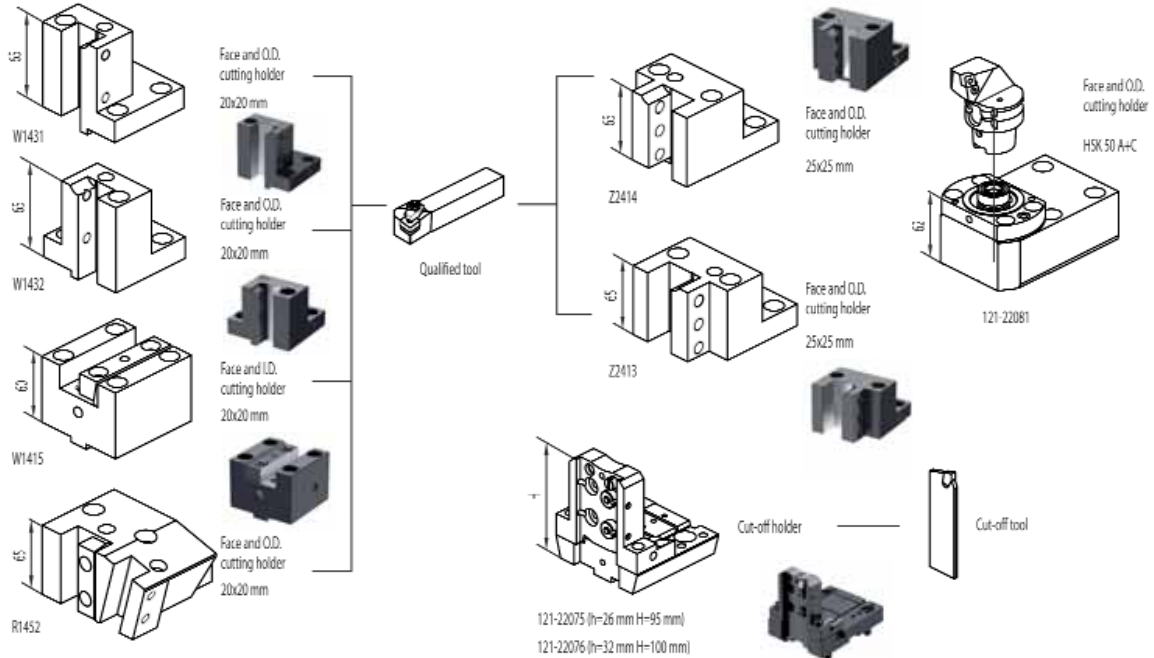


ACCESSORIES

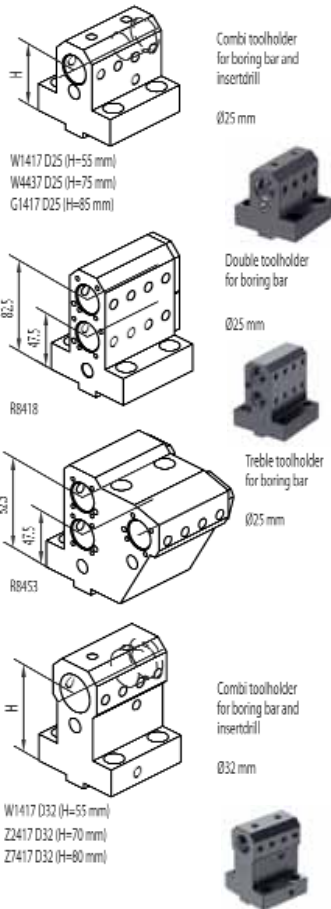


NAKAMURA TOME

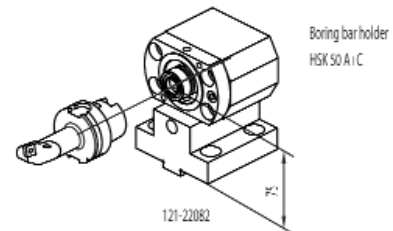
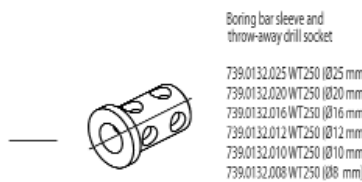
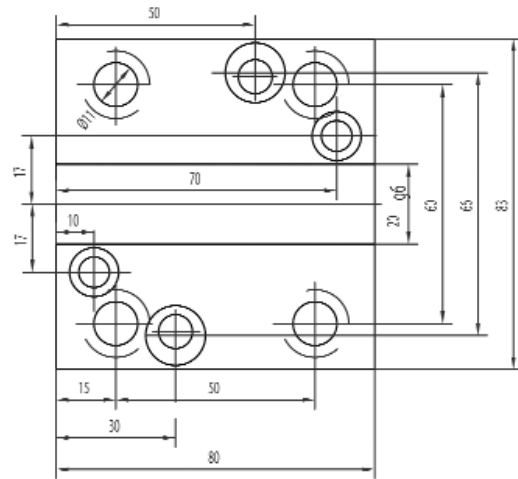
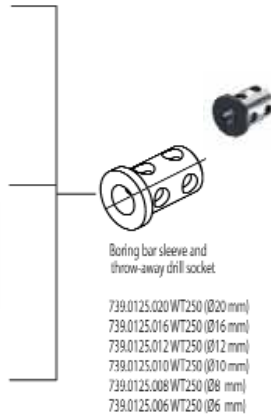
WT150 - WTW150 - WTS150
WT250 - SC150 - SC250



CONNECTION

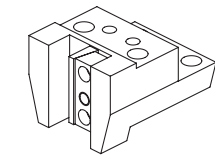


ACCESSORIES



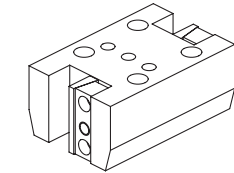
DOOSAN PUMA

230M/MS - 240M/MS - 280LM



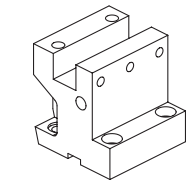
128-41501

Face and O.D. cutting holder



128-41502

Face and O.D. cutting holder

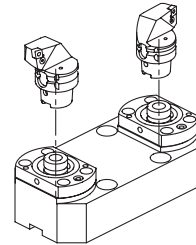


128-31501

Face and I.D. cutting holder



Qualified tool
25x25 mm



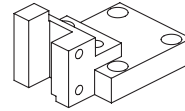
128-11528

Face and O.D. cutting holder

HSK 40 A+C



Cut-off holder

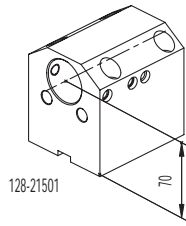


128-41503

Cut-off tool
25x25 mm



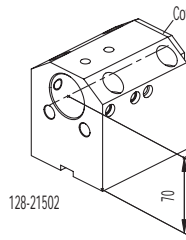
ACCESSORIES



128-21501

Boring bar holder

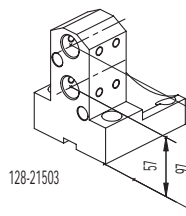
Ø40 mm



128-21502

Combi toolholder
for boring bar and
insertdrill with internal
coolant

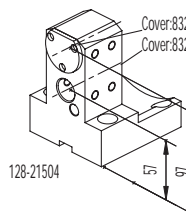
Ø40 mm



128-21503

Boring bar holder

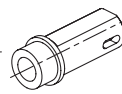
Ø20 mm



128-21504

Combi toolholder
for boring bar and
insertdrill with internal
coolant

Ø20 mm



Drill socket

114-34012 <MT1>
114-34013 <MT2>
114-34014 <MT3>



Boring bar sleeve

165-64089 (Ø10 mm)
165-64090 (Ø12 mm)
165-64091 (Ø16 mm)



Boring bar sleeve

165-64092 (Ø20 mm)
165-64093 (Ø25 mm)
165-64094 (Ø32 mm)



Throw-away drill socket

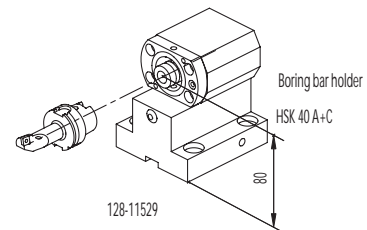
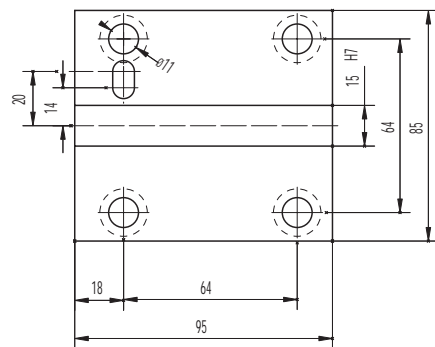
165-64095 (Ø20 mm)
165-64096 (Ø25 mm)
165-64097 (Ø32 mm)



Boring bar sleeve

115-62027 (Ø8 mm)
115-62028 (Ø10 mm)
115-62029 (Ø12 mm)
115-62030 (Ø16 mm)

CONNECTION



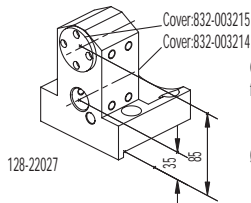
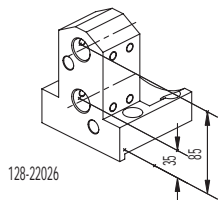
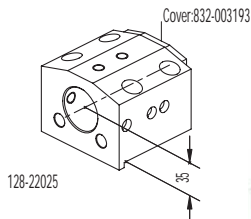
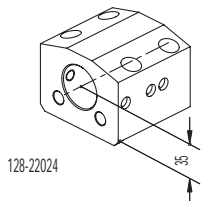
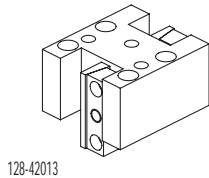
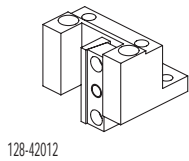
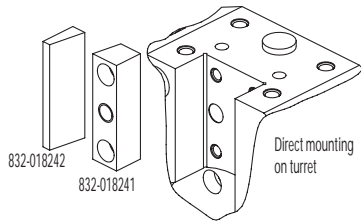
128-11529

Boring bar holder

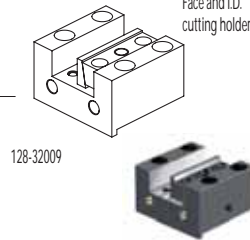
HSK 40 A+C

DOOSAN PUMA

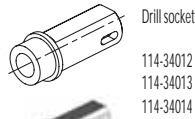
230S - 240S - LYNX210



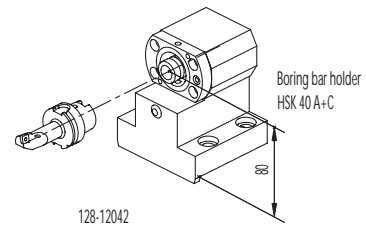
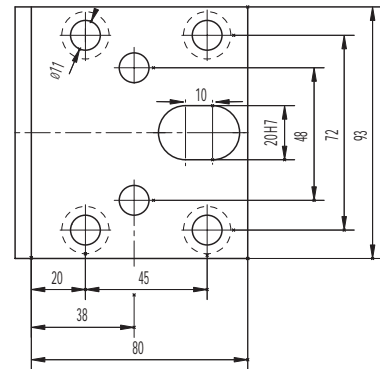
Qualified tool
25x25 mm



ACCESSORIES

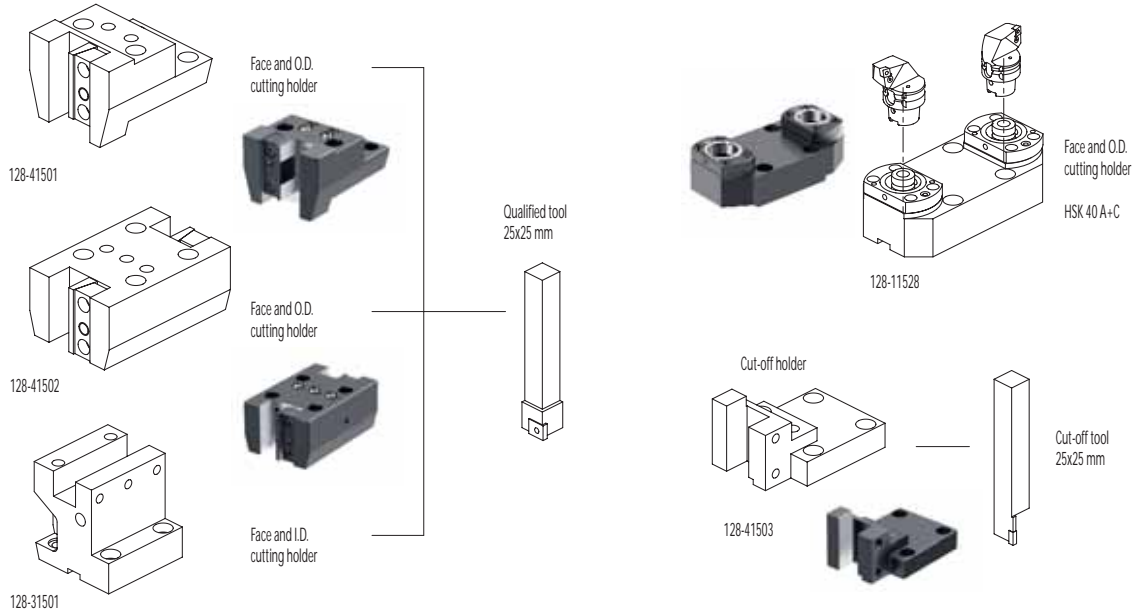


CONNECTION

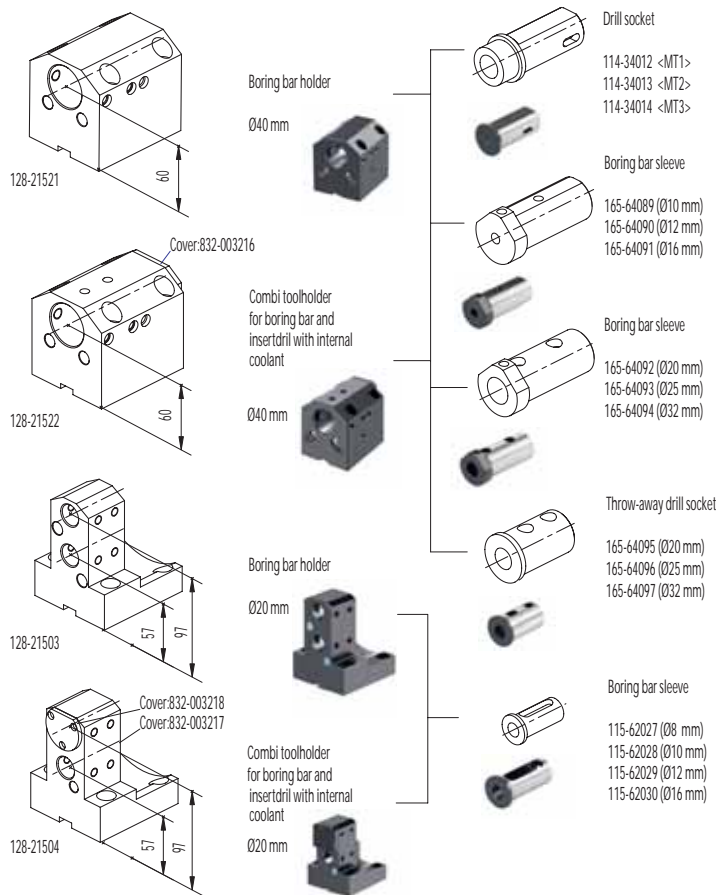


DOOSAN PUMA

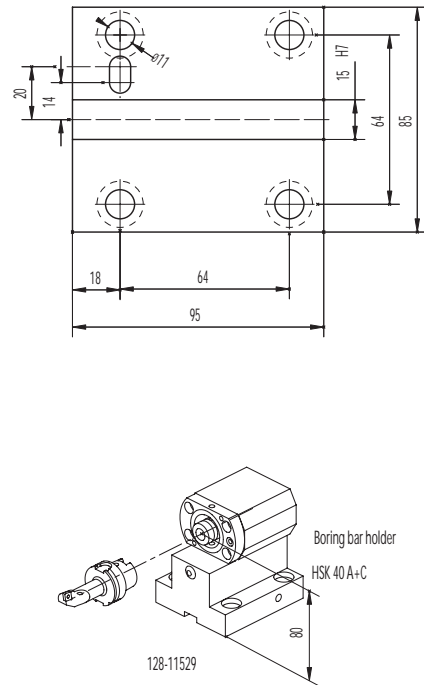
TT1500 SY - 2000 SY - 2500 SY
300M/MS - V400M



ACCESSORIES

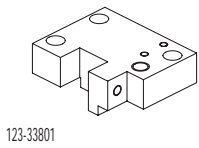


CONNECTION



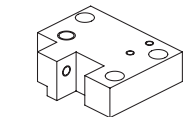
MAZAK NEXUS

SQT100/150



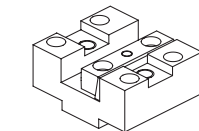
123-33801

Face and O.D. cutting holder



123-33802

Face and O.D. cutting holder

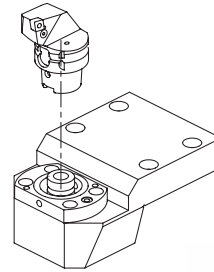


122-13801

Face and I.D. cutting holder



Qualified tool
20x20 mm



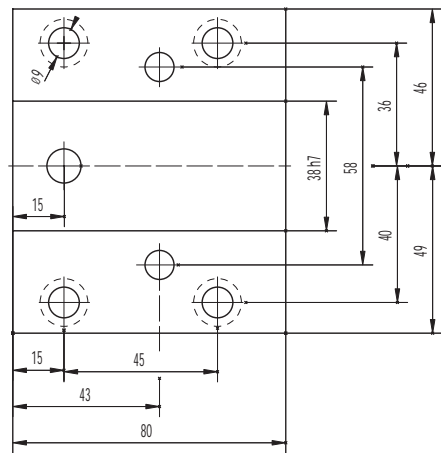
121-23803

Face and O.D. cutting holder

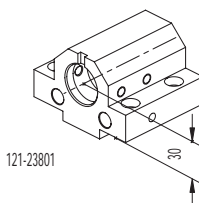
HSK 40 A+C



CONNECTION



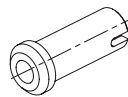
ACCESSORIES



121-23801

Boring bar holder

Ø32 mm



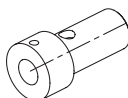
Drill socket

114-33215 <MT1>
114-33216 <MT2>



Boring bar sleeve

165-63241 (Ø8 mm)
165-63242 (Ø10 mm)
165-63243 (Ø12 mm)
165-63244 (Ø16 mm)



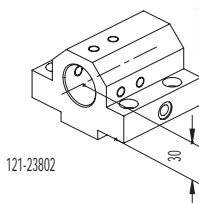
Boring bar sleeve

165-63245 (Ø20 mm)
165-63246 (Ø25 mm)



Throw-away drill socket

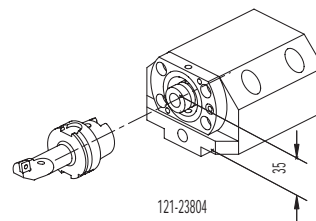
165-63247 (Ø20 mm)
165-63248 (Ø25 mm)



121-23802

Toolholder for insertdrill with internal coolant

Ø32 mm



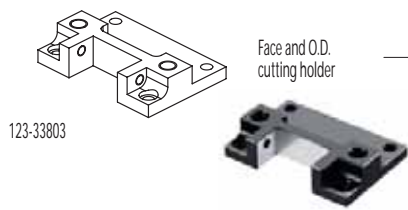
121-23804

Boring bar holder

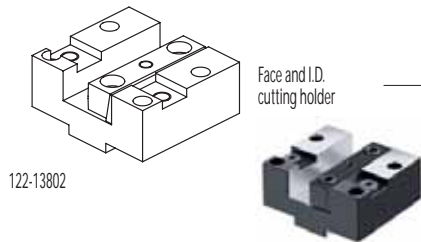
HSK 40 A+C

MAZAK NEXUS

QTN200/250



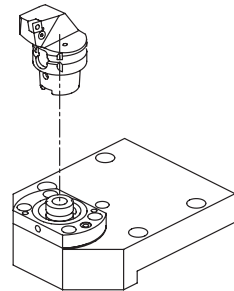
Face and O.D. cutting holder



Face and I.D. cutting holder



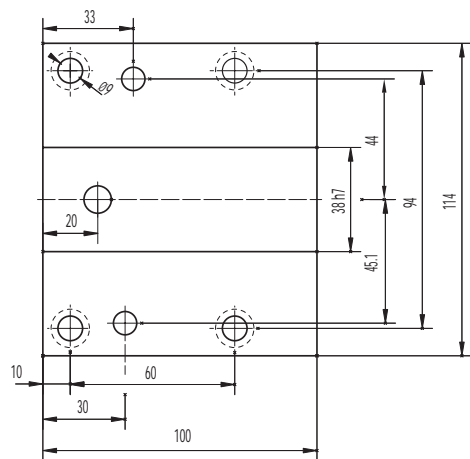
Qualified tool
25x25 mm



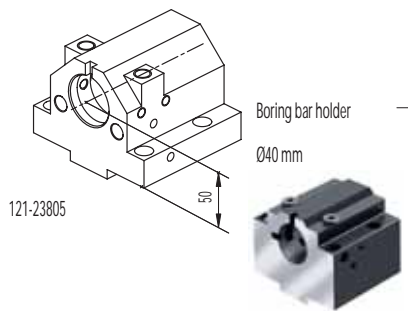
121-23807

Face and O.D. cutting holder
HSK 40 A+C

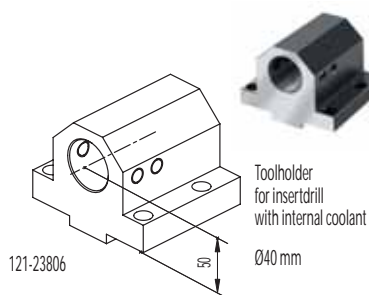
CONNECTION



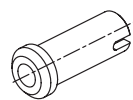
ACCESSORIES



Boring bar holder
Ø40 mm



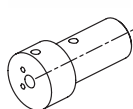
Toolholder for insert drill with internal coolant
Ø40 mm



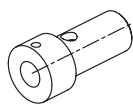
Drill socket
114-34015 <MT1>
114-34016 <MT2>
114-34017 <MT3>



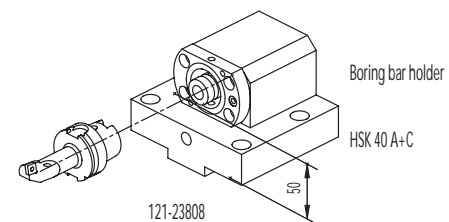
Boring bar sleeve
165-64114 (Ø8 mm)
165-64115 (Ø10 mm)
165-64116 (Ø12 mm)
165-64117 (Ø16 mm)
165-64118 (Ø20 mm)



Boring bar sleeve
165-64119 (Ø25 mm)
165-64120 (Ø32 mm)



Throw-away drill socket
165-64121 (Ø20 mm)
165-64122 (Ø25 mm)
165-64123 (Ø32 mm)



Boring bar holder
HSK 40 A+C

WFL (HSK100)

Millturn 120

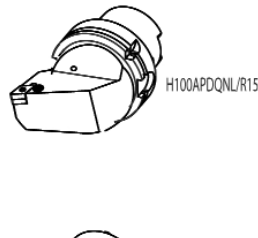
ICTM STANDARD



H100APCLNL/R16



H100APDUNL/R15



H100APDQNL/R15



H100APSBNL/R19



Head for boring bar
PCLN

HSK100A-TEST50PCLNL/R16 (Ø50)
HSK100A-TEST60PCLNL/R16 (Ø60)
HSK100A-TEST80PCLNL/R19 (Ø80)



Head for boring bar
PDUN

HSK100A-TEST50PDUNL/R15 (Ø50)
HSK100A-TEST60PDUNL/R15 (Ø60)
HSK100A-TEST80PDUNL/R15 (Ø80)



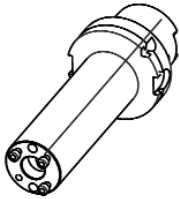
Head for boring bar
PSKN

HSK100A-TEST50PSKNL/R15 (Ø50)
HSK100A-TEST60PSKNL/R19 (Ø60)
HSK100A-TEST80PSKNL/R19 (Ø80)



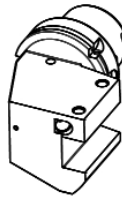
Head for boring bar
PTFN

HSK100A-TEST50PTFNL/R16 (Ø50)
HSK100A-TEST60PTFNL/R16 (Ø60)
HSK100A-TEST80PTFNL/R22 (Ø80)

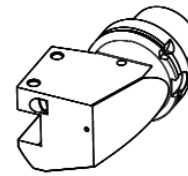


Boring bar

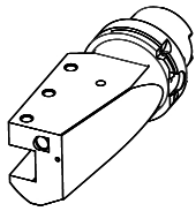
HSK100A-BR50L160 (Ø50)
HSK100A-BR60L210 (Ø60)
HSK100A-BR80L275 (Ø80)



Axial toolholder.RH
32x32 mm
142-11601

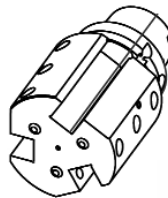


Axial toolholder.LH
32x32 mm
142-21601

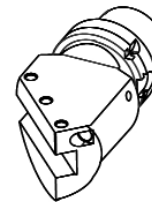


Axial toolholder long

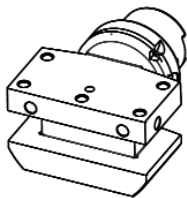
142-21604 (25x25 mm,left)
142-11603 (25x25 mm,right)
142-21603 (32x32 mm,left)
142-11604 (32x32 mm,right)



Axial toolholder
25x25 mm
142-21605 (left)
142-11605 (right)

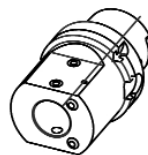


Toolholder 45°
25x25 mm
141-11601



Toolholder with multiple seats
32x32 mm

143-11601



Boring bar holder
Ø40 mm

145-21605



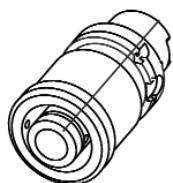
Boring bar sleeve

165-64124 (Ø10 mm)
165-64125 (Ø12 mm)
165-64126 (Ø16 mm)
165-64127 (Ø20 mm)



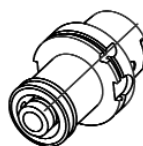
Boring bar sleeve

165-64128 (Ø25 mm)
165-64129 (Ø32 mm)



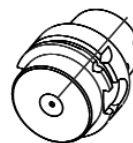
Extension adaptor

148-01601 (L=140)
148-01602 (L=200)



Reducing adaptor
HSK63 A+C

148-01603

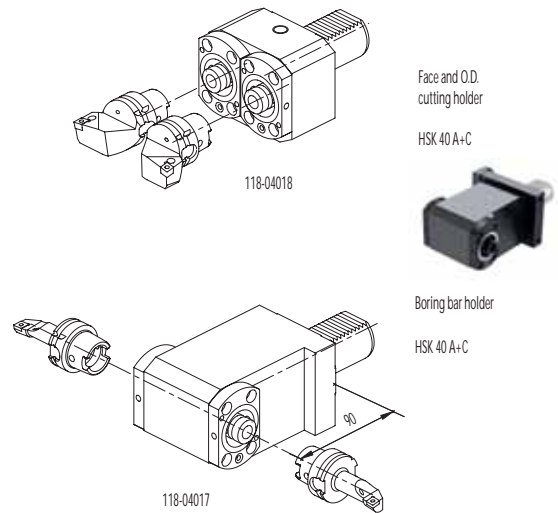
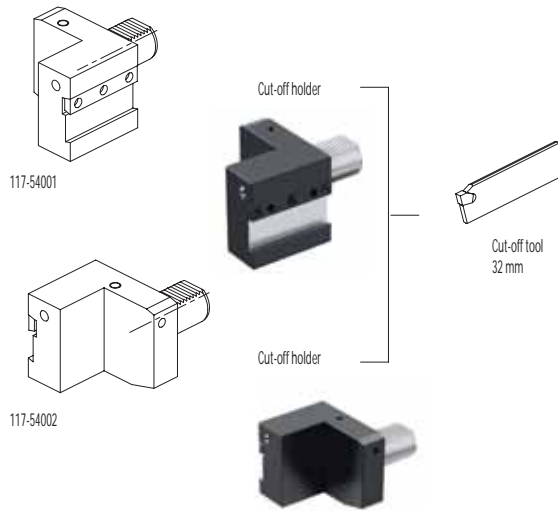


Blanking plug

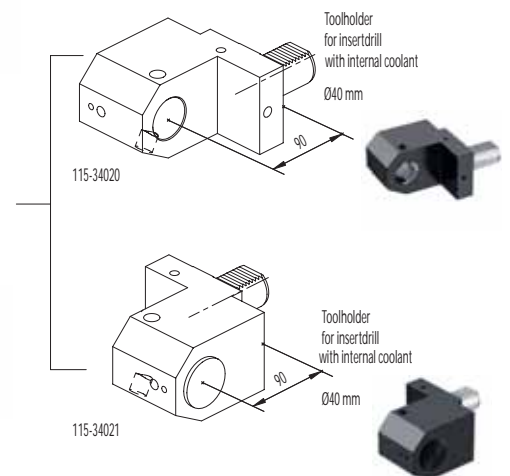
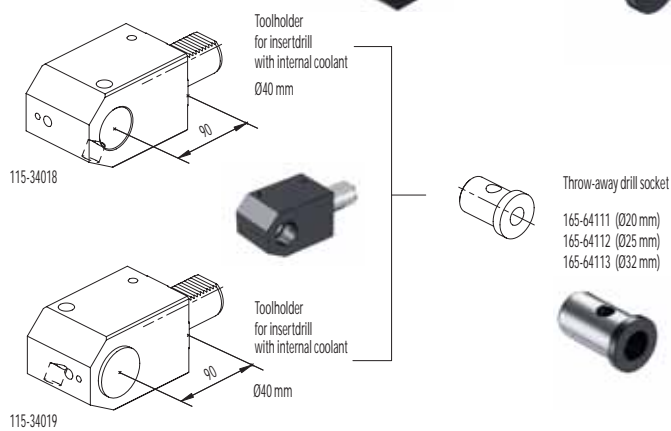
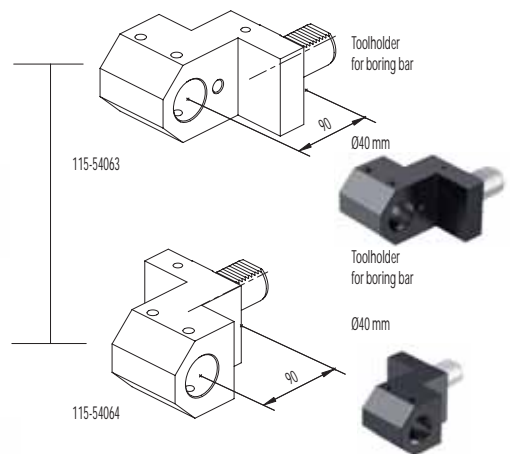
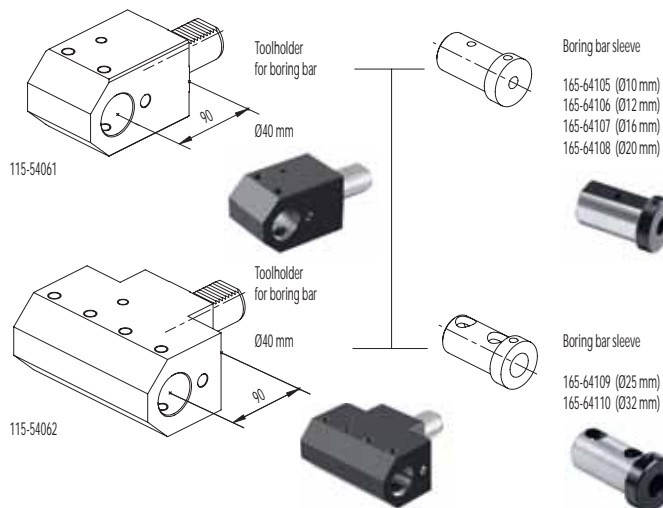
140-30006 (HSK63A)
140-30007 (HSK100A)

TAKISAWA (VDI40)

TMM-250



ACCESSORIES





KNIFE

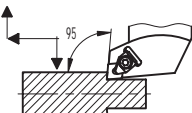
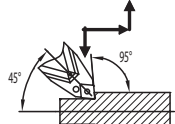
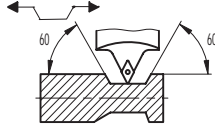
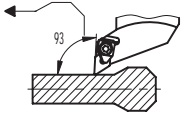
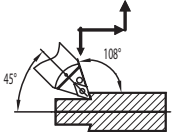
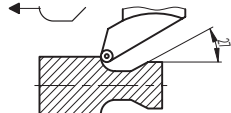
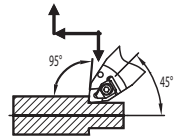
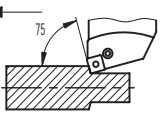
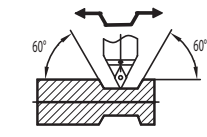
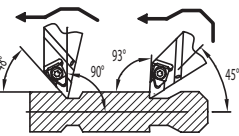
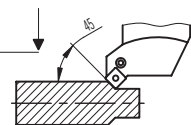
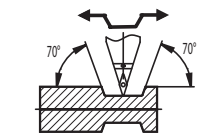
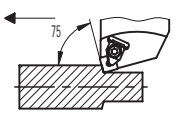
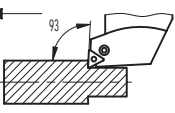
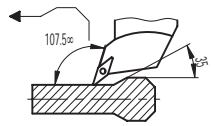
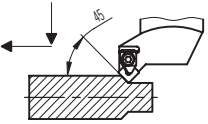
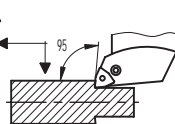
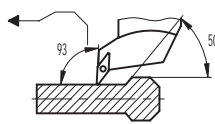
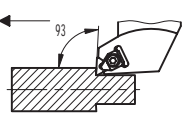
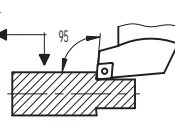
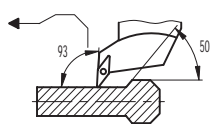
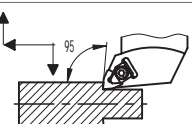
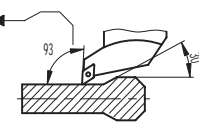
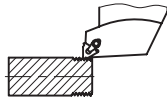
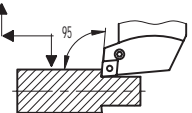
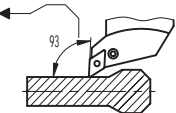




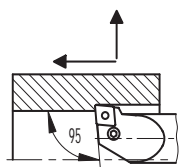
**HSK KLEMMHALTER UND WERKZEUGHALTER (ICTM STANDARD)
HSK HOLDERS AND TOOLHOLDERS (ICTM STANDARD)
OUTILS ET PORTE-OUTILS AVEC ATTACHEMENT HSK (ICTM STANDARD)
UTENSILI E PORTAUTENSILI CON ATTACCO HSK (ICTM STANDARD)**



KLEMMHALTER FÜR DIE AUSSENBEARBEITUNG / PORTE-PLAQUETTES EXTERIEURES
 EXTERNAL (O.D.) TURNING TOOLS / PORTA INSERTI PER ESTERNI

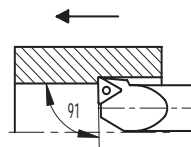
	DCLN Page 395		PCMNR Page 400		SDNC Page 404
	DDJN Page 395		PDNNR Page 400		SRGC Page 404
	DCM Page 396		PSBN Page 401		SDNC Page 405
	DDM Page 396		PSSN Page 401		SVVCN Page 405
	DSBN Page 397		PTJN Page 402		SVHC Page 406
	DSSN Page 397		PWLN Page 402		SVJC Page 406
	DTJN Page 398		SCLC Page 403		SVJB Page 407
	DWLN Page 398		SDJC Page 403		THE Page 407
	PCLN Page 399				
	PDJN Page 399				

BOHRSTANGE FÜR DIE INNENBEARBEITUNG BARRES D'ALESAGE INTERIEURS
 INTERNAL (I.D.) BORING BARS BARENI PER INTERNI



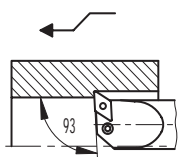
PCLN

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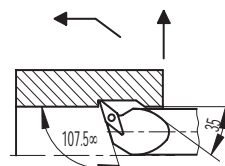
STFC

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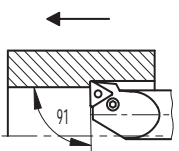
PDUN

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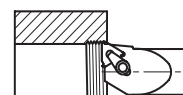
SVQB

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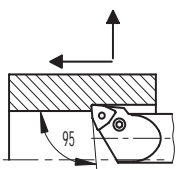
PTFN

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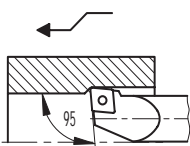
THE

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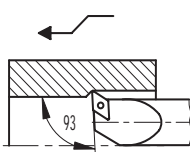
PWLN

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SCLC

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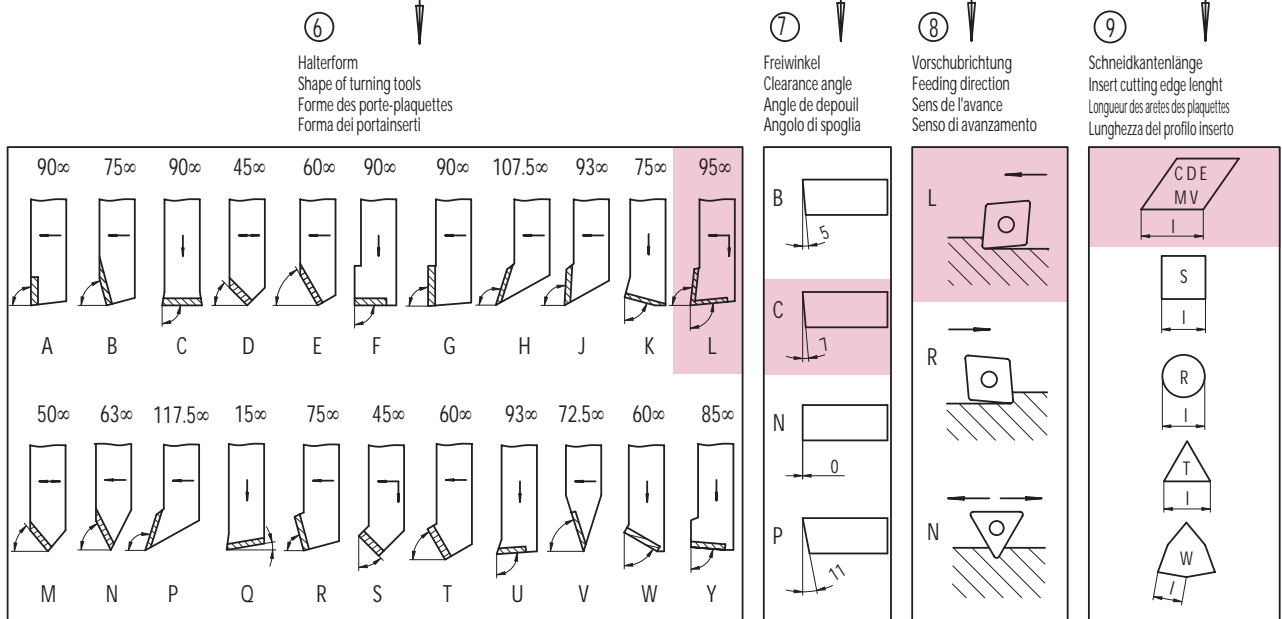
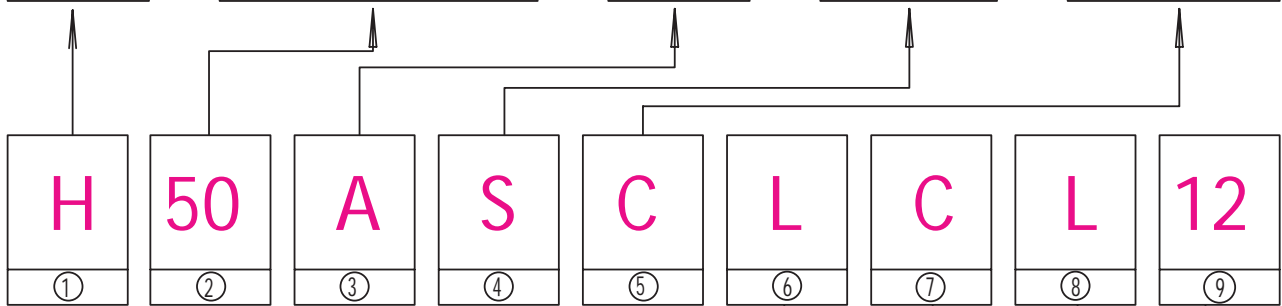
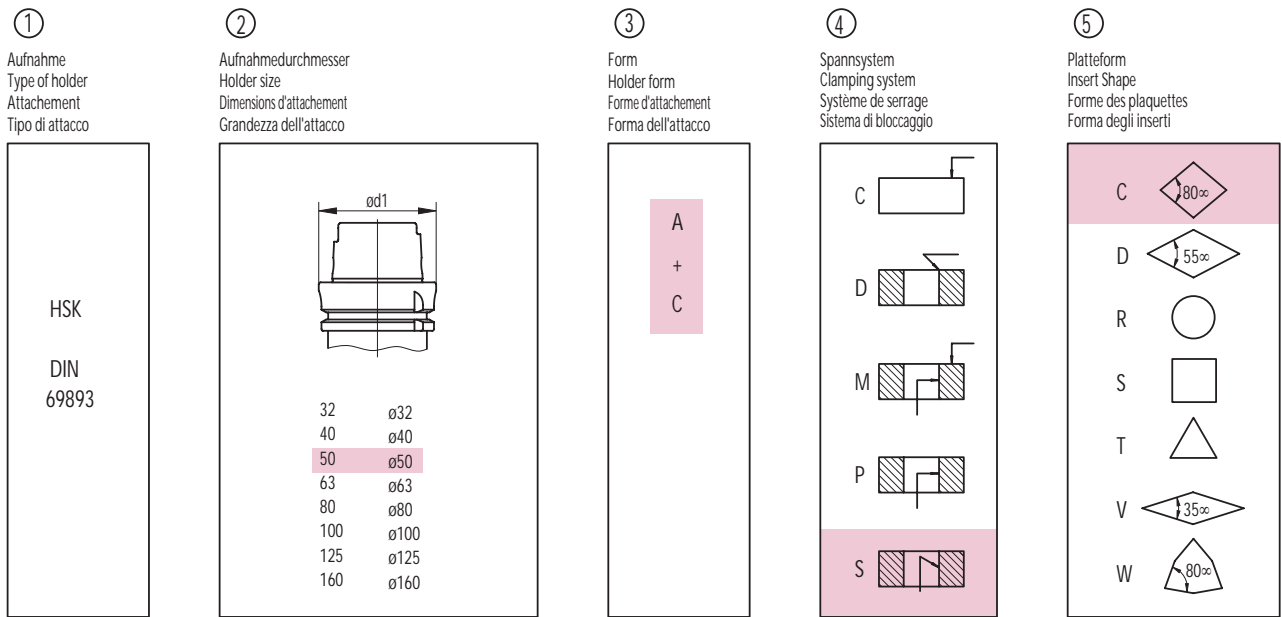


SDUC

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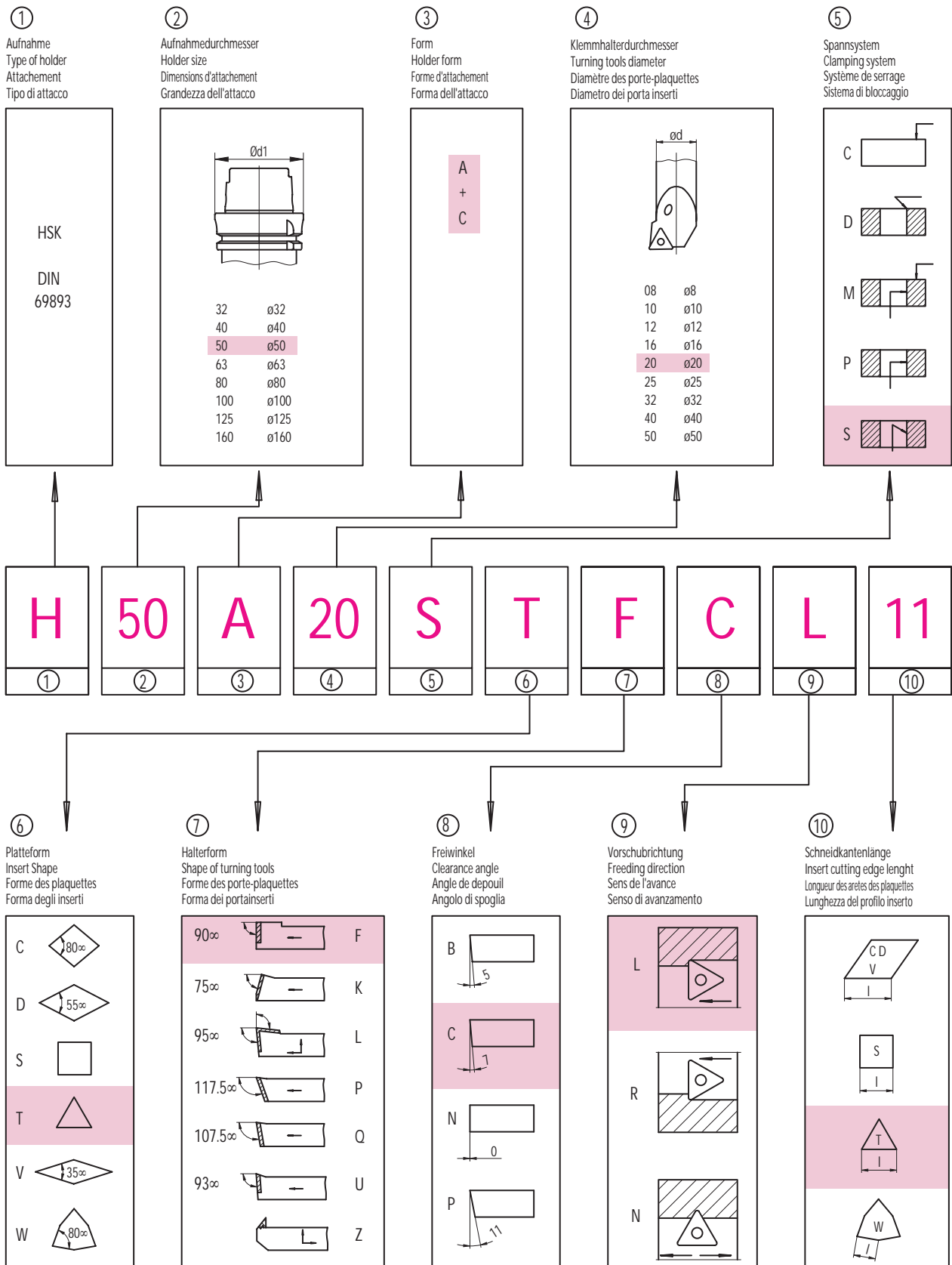
BEZEICHNUNG VON HSK KLEMMHALTER
FÜR AUSSENBEARBEITUNG
IDENTIFICATION OF EXTERNAL (O.D.)
TURNING TOOLS-HSK HOLDER

DESIGNATION DES PORTE-PLAQUETTES
EXTERIEURS-ATTACHEMENT HSK
IDENTIFICAZIONE DEI PORTA INSERTI
PER ESTERNI-ATTACCO HSK



BEZEICHNUNG VON HSK KLEMMHALTER
FÜR DIE INNENBEARBEITUNG
IDENTIFICATION OF INTERNAL (I.D.)
TURNING TOOLS-HSK HOLDER

DESIGNATION DES PORTE-PLAQUETTES
INTERIEURS-ATTACHEMENT HSK
IDENTIFICAZIONE DEI PORTA INSERTI
PER INTERNI-ATTACCO HSK





- Kintek präsentiert dieses modulare Drehsystem auf HSK-Basis das nicht nur die Wechselzeiten drastisch reduziert sondern auch eine universelle Schnittstelle darstellt, die auch auf den neueren Bearbeitungszentren mit HSK-Schnittstelle einsetzbar ist.
- Sehr schneller Werkzeugwechsel
- Vibrationsarm dank stabiler Spannung und Plananlage
- Sehr hohe Steifigkeit durch die Plananlage
- Hohe Wechselgenauigkeit der Schneide
- Maximaler Wiederholgenauigkeit +/- 0,002 mm
Der Werkzeugträger wird in den HSK-Adapter eingesetzt und mit einem einfachen Schlüssel in wenigen Sekunden befestigt. (Der Schlüssel dreht eine Schraube, die eine spezielle Spanneinheit ausdehnt und den HSK Kegel einzieht und so mit einer Plananlage spannt)
- Baluff chip Bohrung



- Adopting the famous HSK-DIN69893, in the several versions, and maintaining an interchangeability with the attacks for working centers, KINTEK offers the possibility to reduce, drastically, the times of set-up.
- Maximum rapidity in the tool change
- Great rigidity thanks to the big support surface
- The same cutting position
- Reduction of the vibrations
- Precision of interchangeability
- Optimal repeatability of positioning to the change tool: maximum error +/- 0,002 mm
- The conical bar hold is introduced in the appropriate center and, turning screw, a special clamp opens Locking the tool-holder taking advantage of the connection cone-plan
- Baluff chip hole



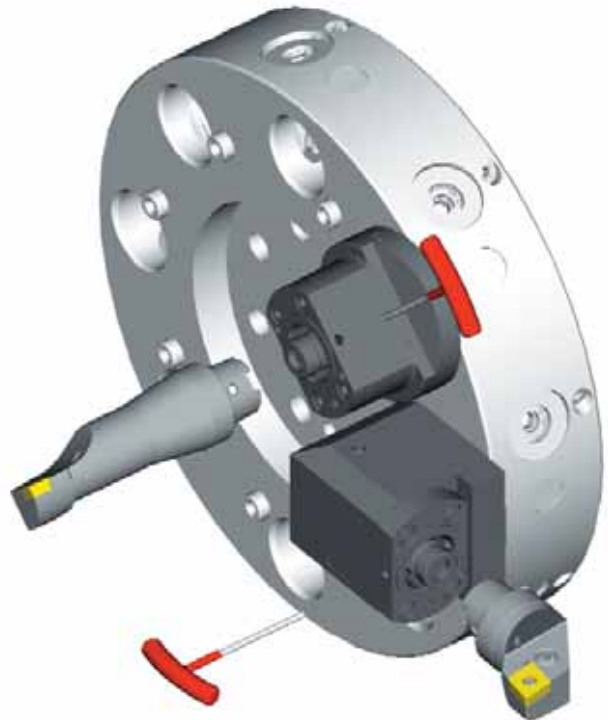
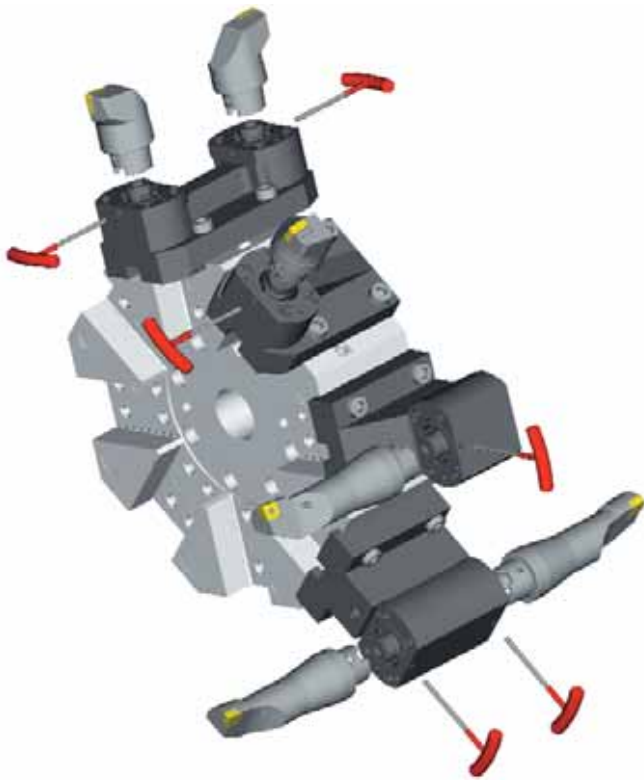
- En utilisant le fameux HSK-DIN69893, dans les différentes versions, et en gardant une interchangeabilité avec les attaques pour des centres d'usinage à commande numérique, KINTEK offre la possibilité de réduire, significativement, les temps de l'installation.
- Rapidité maximum dans le changement d'outil.
- Grande rigidité grâce à la surface d'appui.
- La position de découpe est toujours identique
- Réduction des vibrations.
- Précision d'interchangeabilité.
- Répétabilité optimale du positionnement du changement de l'outil : erreur maximum +/- millimetre 0.002
- La queue conique est introduite dans le siège spécial et en tournant une vis, on agit sur la bride spéciale qui bloquera le porte-outil en profitant de l'accouplement cône-plan.
- Trou pour balluff chip



- Adottando il noto HSK-DIN69893, nelle varie versioni, e mantenendo una intercambiabilità con gli attacchi per centri di lavoro, KINTEK offre la possibilità di ridurre, drasticamente, i tempi di set-up.
- Massima rapidità nel cambio utensile
- Grande rigidità grazie alle grandi superfici d'appoggio
- Posizione del tagliente sempre identica
- Riduzione delle vibrazioni
- Precisione d'intercambiabilità
- Ottima ripetibilità di posizionamento al cambio utensile : errore massimo +/- 0,002 mm
- Il codolo conico viene introdotto nell'apposita sede e, ruotando una vite, si agisce sull'apertura della speciale pinza che bloccherà il portautensile sfruttando l'accoppiamento cono-piano.
- Foro per baluff chip

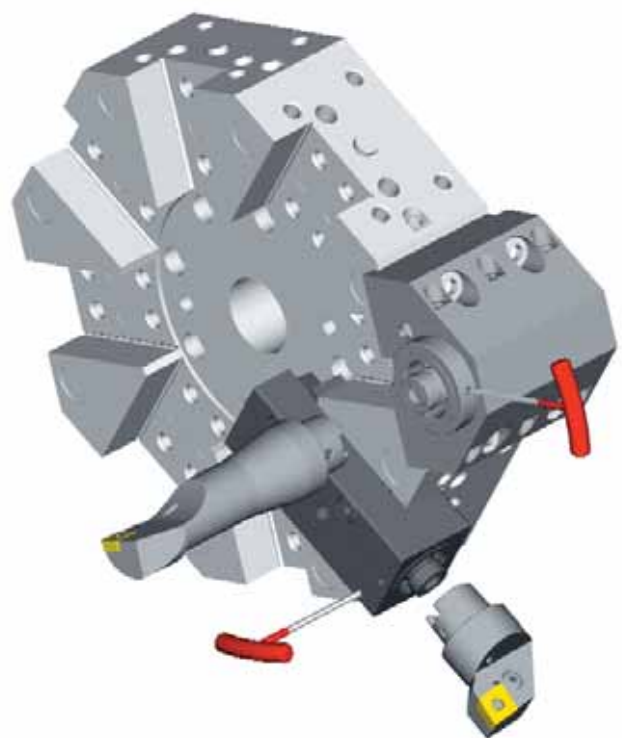
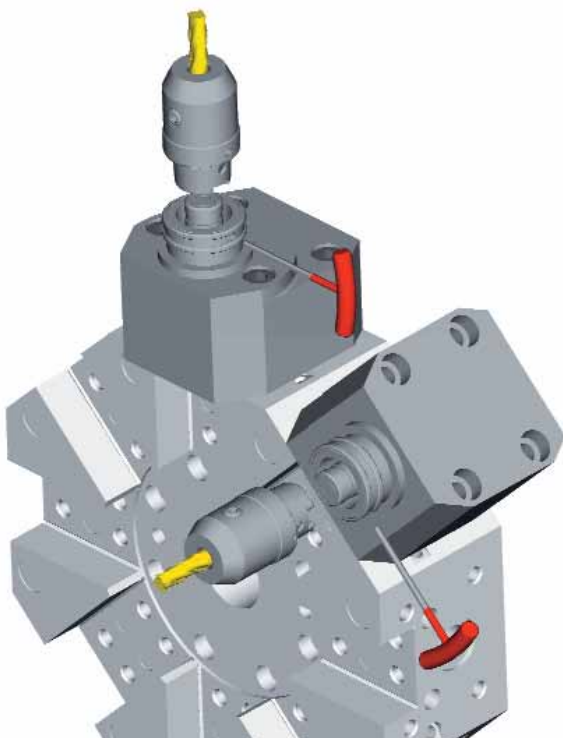
MASCHINENBEZOGENE LÖSUNGEN
PERSONALISED SOLUTION
SOLUTIONS PERSONALISÉES
SOLUZIONI PERSONALIZZATE

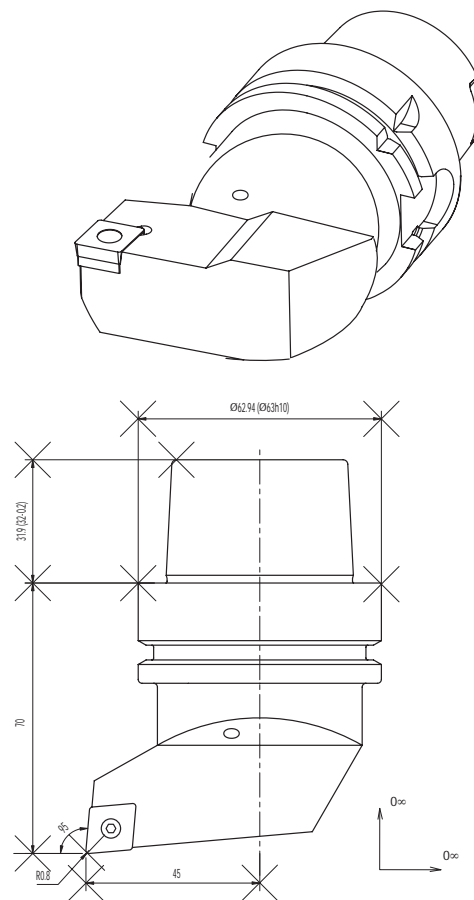
VDI LÖSUNGEN
VDI SOLUTION
SOLUTION VDI
SOLUZIONE VDI



ANGETRIEBENE WERKZEUGE
MOTORIZED TOOL-HOLDERS
PORTE-OUTILS MOTORISÉS
PORTAUTENSILI MOTORIZZATI

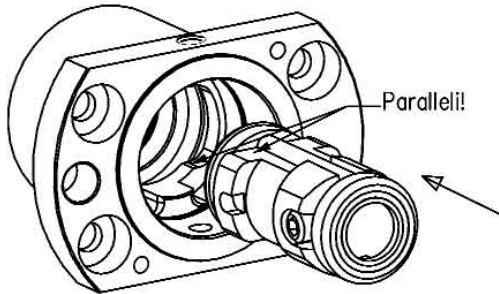
UNIVERSELLE LÖSUNG
UNIVERSAL SOLUTION
SOLUTION UNIVERSELLE
SOLUZIONE UNIVERSALE





Auf Anfrage sind Dispositionszeichnungen im dxf Format mit entsprechenden Massen verfügbar.
On request we can send you general layouts in dxf format with the relative dimensions.
Sur demande les dessins d'avant-projet en format dxf sont disponibles avec les relatives cotes.
Sono disponibili a richiesta i disegni di massima in formato dxf con relative quote di ingombro.

- 1—Setzen Sie den HN63C-Spannzylinder in den H63ABSL-Einsatz ein, indem Sie ihn durch die inneren Nuten des Einsatzes durchlassen. Spannschraube am Zylinder und Bohrung am Flansch sind um 90° versetzt.

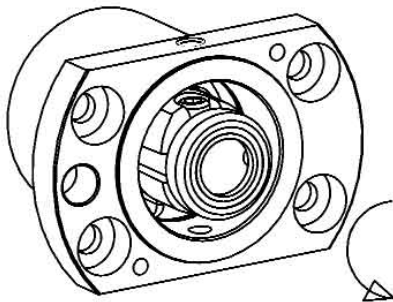


Insert the HN63C clamping down into the H63ABSL adapter, letting it go through the slots inside the adapter.

Introduire en totalité le dispositif de blocage HN63C à l'intérieur de la douille H63ABSL en utilisant les rainures de guidage qui se trouvent à l'intérieur du corps!

Inserire in profondità il giunto di bloccaggio HN63C all'interno della bussola H63ABSL facendolo passare fra le scanalature presenti all'interno della bussola stessa!

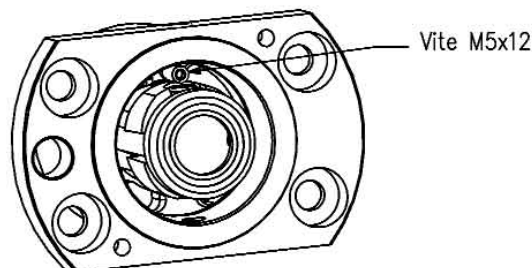
- 2—Drehen Sie den HN63C-Spannzylinder nun um 90°, sodaB die kleine Einfräsung auf der Seite des Spannzylinder sich unter dem Gewindestift befindet, der im Einsatz sitzt. Die Bohrung am Flansch und die Spannschraube am Spannzylinder sind nun in einer Linie.



Rotate of 90° the HN63C clamping, in order to put the little milling that lies on a side of the clamping itself exactly in the same position of the fastpin inside the adapter.

Tourner le dispositif HN63C de 90° (à gauche ou à droite) afin de positionner la goupille de retenue filetée dans la petite rainure située sur le coté du dispositif.

Ruotare il giunto HN63C di 90° in modo di posizionare la piccola fresatura presente su un lato dello stesso in corrispondenza della spina filettata di tenuta situata all'interno della bussola.

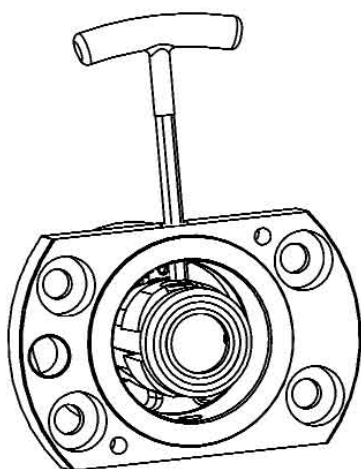


- 3—Schrauben Sie den M5x12 Gewindestift fest ein, sodaB der HN63C-Spannzylinder festgehalten wird.

Screw the M5x12 fastpin, in order to stop the movement of HN63C clamping.

Visser la goupille filée M5x12 afin d'arreter le mouvement du dispositif HN63C.

Avvitare la spina filettata M5x12 in modo di fermare il senso rotatorio del giunto HN63C.



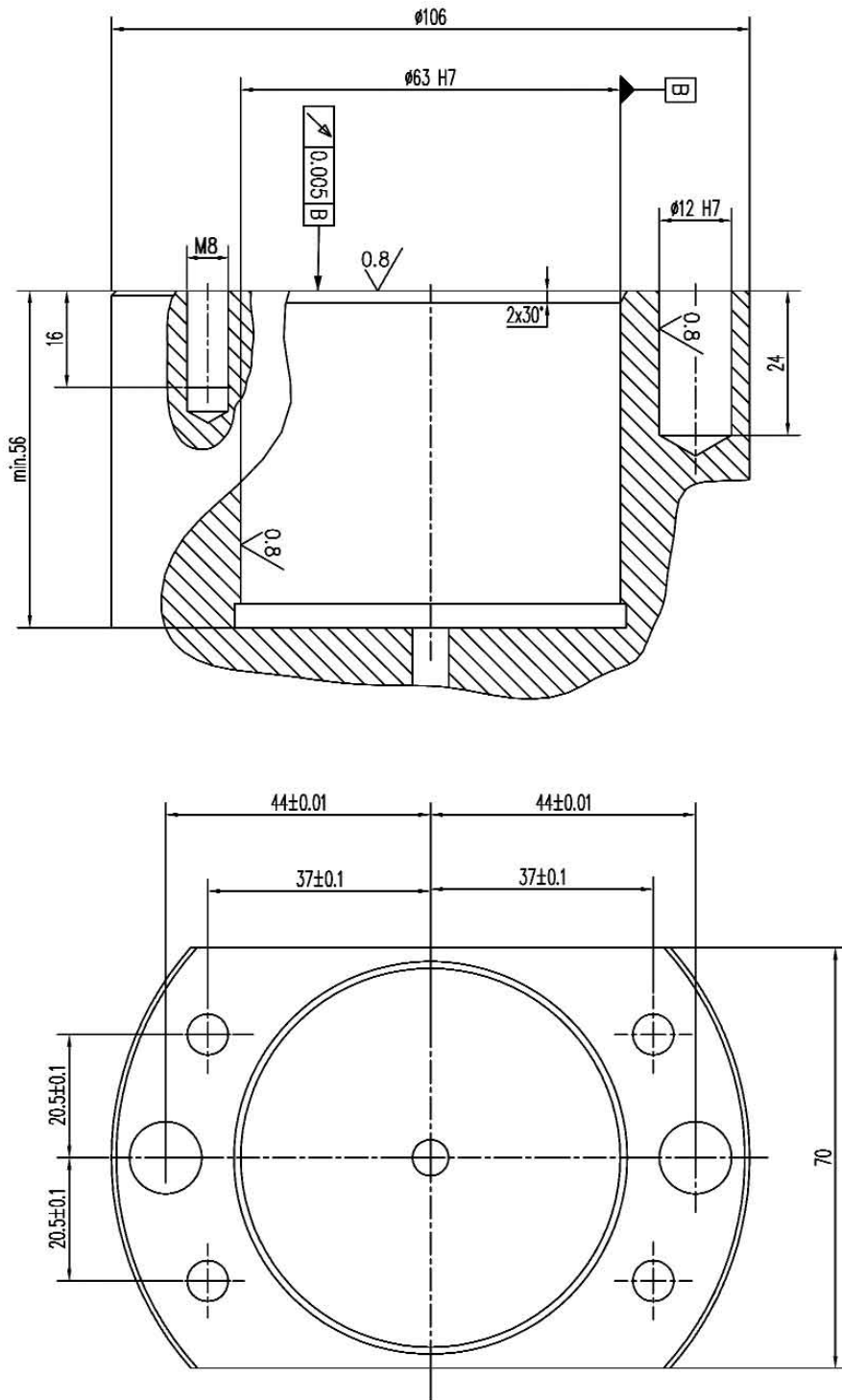
- 4—Zur Montage und Demontage der HSK63A-Werkzeuge, schrauben Sie mit dem 5mm-Inbusschlüssel im Uhrzeiger- und Gegenuhrzeigersinn die Klemmschraube auf den HN63C-Spannzylinder auf und zu.

To assemble and disassemble the HSK63A tools it's necessary to operate in clock-and underclockwise with a 5mm set screw wrench on the fastening screw of the HN63C clamping.

Pour le montage et le positionnement des outils HSK63A tourner dans le sens des aiguilles d'une montre et bloquer avec la clé 6 pans de 5mm la vis de serrage placée sur le dispositif de blocage HM63C. Faire l'inverse pour le démontage.

Per il montaggio e smontaggio utensili HSK63A agire, in senso orario ed antiorario, con chiave a brugola ob 5 mm alla vite di chiusura situata sul giunto di bloccaggio HN63C.

SITZ FÜR DEN H63ABSL-EINSATZ SIEGE POUR L'ADAPTEUR H63ABSL
 SEAT FOR THE H63ABSL-ADAPTER SEDE PER LA BUSSOLA H63ABSL





HSK - AUFNAHMEN UND WERKZEUGHALTER NACH DIN69893 **TECHNISCHE DATEN**



HSK-T

Alle HSK - Aufnahmen und Werkzeughalter werden nach den DIN-Normen angefertigt.

KEGELSCHAFTTOLERANZEN

Nach DIN 69893 angefertigt.

PASSFEDERTOLERANZEN

Nach den ICTM-Toleranzen angefertigt.

Wenn die ICTM-Toleranz eingehalten wird, ist das Kupplungsspiel zwischen der Paßfeder an den Werkzeugmaschinen und dem Werkzeughaltersitz auf das Minimum reduziert.

Die ICTM-Toleranzen, die bei diesen Produkten an den Paßfedersitzen eingehalten werden, versichern Höchstpräzision.

Weitere Vorteile sind: sehr gute Wiederholbarkeit der Positionierung beim Werkzeugwechsel, höchster Fehler $\pm 0,005$ mm bei der gleichen Position der Schneide, sehr guter Werkzeugwechsel, Beseitigung der Vibrationen.

- aus Einsatzstahl angefertigt
- in Einsatzhärte tiefe von 0,4-0,5 mm
- gehärtet, angelassen, brüniert
- Härte HRC 58 \pm 2, Festigkeit 800-1000 N/mm²
- inneres, äußeres Schleifen
- Vorderseite (Werkzeugsitz) bearbeitet
- Fertigbearbeitung der Paßfedersitze nach den ICTM-Toleranzen
- 100% durch zertifizierte Meßinstrumente geprüft



HSK DIN69893 TOOLS AND TOOLHOLDERS **TECHNICAL FEATURES**

HSK-T

All HSK tools and toolholders are manufactured according to DIN norm.

CONE'S TOLERANCE

According to DIN 69893

DRIVE KEY'S TOLERANCE

The so-called ICTM tolerance was born to reduce the positive allowance between the spindle drive key and the holder key slot. The ICTM tolerance applied on these products to the drive key gives them a great capacity of precision. The advantages of standard ICTM are multiple: excellent repeatability of change tool positioning, maximum error $\pm 0,005$ giving the cutting edge always the same position, it permits a perfect tool interchangeability, it eliminates vibrations.

- Manufactured with casehardening Steel
- Casehardened with depth 0,4-0,5 mm
- Hardened-Tempered-Black oxidized
- Hardness HRC 58 \pm 2, strength 800-1000 N/mm²
- Internal and external grinding finish
- Working of the front side (tool seat)
- Taking up drive keys to ICTM tolerance
- Tested 100% with certified measuring instruments



OUTILS ET PORTE-OUTILS AVEC ATTACHEMENT HSK DIN69893 **DONNEES TECHNIQUES**

HSK-T

Tous les outils et porte-outils avec attachement HSK sont fabriqués selon les normes DIN.

TOLERANCE DU CONE

Fabriqué selon DIN 69893

TOLERANCE DE LA CLAVETTE D'ENTRAINEMENT

La tolérance ICTM est née afin de réduire le jeu de couplage entre la cheville d'entraînement/mise en place, positionnée sur les machines outils, et le siège du porte-outil/outil.

Les tolérances ICTM appliquées pour ces produits sur le siège de la cheville de mise en place (clavettes) leur donnent des caractéristiques remarquables de haute précision. Les avantages du standard ICTM qui s'ensuivent sont différents; répétitivité de positionnement du porte-outil, erreur +/-0,005 mm maximum avec la plaquette toujours au même endroit, très bonne interchangeabilité de l'outil et l'élimination des vibrations.

- Produits en acier cémenté allié
- Cémentés avec profondeur 0,4-0,5 mm
- Tempré-Revenus-brunis
- Dureté HRC 58+-2 résistance 800-1000 N/mm²
- Finition de rectification intérieure, extérieure
- Finition de la face de référence de l'outil
- Finition des sièges de la cheville d'entraînement selon tolérance ICTM
- Contrôlés à 100% avec des instruments de mesure certifiés



UTENSILI E PORTAUTENSILI CON ATTACCO HSK DIN69893

DATI TECNICI

HSK-T

Tutti gli utensili e portautensili con attacco HSK vengono prodotti secondo le normative DIN.

TOLLERANZE DEL CONO

Prodotti secondo DIN 69893

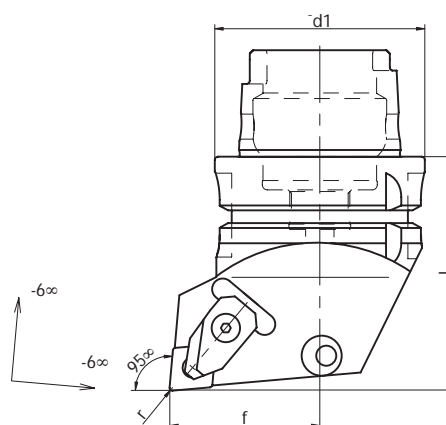
TOLLERANZE CHIAVETTE DI TRASCINAMENTO

La tolleranza definita ICTM è sorta per ridurre al minimo il gioco di accoppiamento tra il tassello di trascinamento/posizionamento, posizionato sulle macchine utensili, e la sede del portautensile/utensile.

Le tolleranze ICTM applicate in questi prodotti sulle sedi del tassello di posizionamento danno allo stesso notevoli caratteristiche di alta precisione. I vantaggi che ne conseguono dello standard ICTM sono diversi: ottima ripetibilità di posizionamento del cambio utensile, errore massimo +/-0,005 mm dando al tagliente sempre la stessa posizione, perfetta intercambiabilità dell'utensile, eliminazione delle vibrazioni.

- Costruiti in acciaio da cementazione legato
- Cementati con profondità 0,4-0,5 mm
- Temprati-rinvenuti-bruniti
- Durezza HRC 58+-2 resistenza 800-1000 N/mm²
- Finitura di rettifica interna-esterna
- Lavorazione della parte anteriore (sede utensile)
- Ripresa sedi tassello di trascinamento a tolleranze ICTM
- Collaudati 100% con strumenti di misura certificati

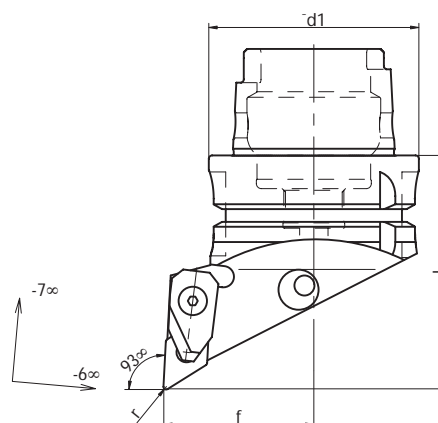
DCLN



Code N.	d1	l	f	r	Inserts N.	Support pad	Shim pin	Clamp	Spring	Screw
H40ADCLNL/R09	40	50	27	0.8	CNM.0903..					
H40ADCLNL/R12	40	55	27	0.8	CNM.1204..	SPCN12	SP02	STF12L/R	M2	VT22
H50ADCLNL/R12	50	65	35	0.8	CNM.1204..	SPCN12	SP02	STF12L/R	M2	VT22
H50ADCLNL/R16	50	70	35	1.2	CNM.1606..	SPCN16	SP03	STF12L/R	M2	VT22
H63ADCLNL/R12	63	75	45	0.8	CNM.1204..	SPCN12	SP02	STF12L/R	M2	VT22
H63ADCLNL/R16	63	75	45	1.2	CNM.1606..	SPCN16	SP03	STF12L/R	M2	VT22
H100ADCLNL/R12	100	90	65	0.8	CNM.1204..	SPCN12	SP02	STF12L/R	M2	VT22
H100ADCLNL/R16	100	90	65	1.2	CNM.1606..	SPCN16	SP03	STF12L/R	M2	VT22

ICTM standard (HSK-T)

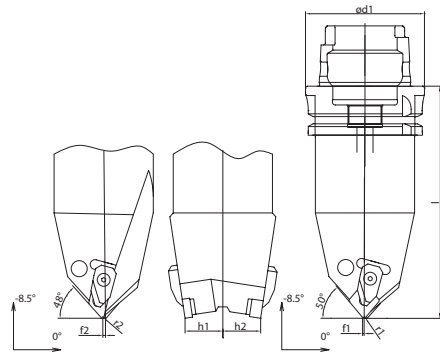
DDJN



Code N.	d1	l	f	r	Inserts N.	Support pad	Shim pin	Clamp	Spring	Screw
H40ADDJNL/R11	40	55	27	0.8	DNM.1104..					
H50ADDJNL/R11	50	60	35	0.8	DNM.1104..	SPDN11	SP05	STF11L/R	M1	VT21
H50ADDJNL/R15	50	70	35	0.8	DNM.1506..	SPDN15	SP02	STF12L/R	M2	VT22
H63ADDJNL/R15	63	80	45	0.8	DNM.1506..	SPDN15	SP02	STF12L/R	M2	VT22
H100ADDJNL/R15	100	90	65	0.8	DNM.1506..	SPDN15	SP02	STF12L/R	M2	VT22

ICTM standard (HSK-T)

DCM12DDM15

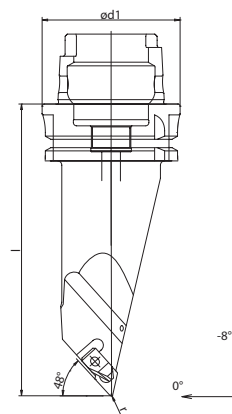


Code N.	d1	l	f1	r1	h1	f2	r2	h2	Inserts N.1	Inserts N.2
H63ADCM12DDM15-100	63	100	0.9	0.8	20	0.9	0.8	20	CN..1204..	DN..1506..
H63ADCM12DDM15-145	63	145	0.9	0.8	20	0.9	0.8	20	CN..1204..	DN..1506..
H63ADCM12DDM15-160	100	160	0.9	0.8	20	0.9	0.8	20	CN..1204..	DN..1506..

Code N.	Support pad - 1	Support pad - 2	Shim pin	Clamp	Spring	Screw
H63ADCM12DDM15-100	SPCN12	SPDN15	SP02	STF12L-M	M2	VT22
H63ADCM12DDM15-145	SPCN12	SPDN15	SP02	STF12L-M	M2	VT22
H63ADCM12DDM15-160	SPCN12	SPDN15	SP02	STF12L-M	M2	VT22

ICTM standard (HSK-T)

DDMNL

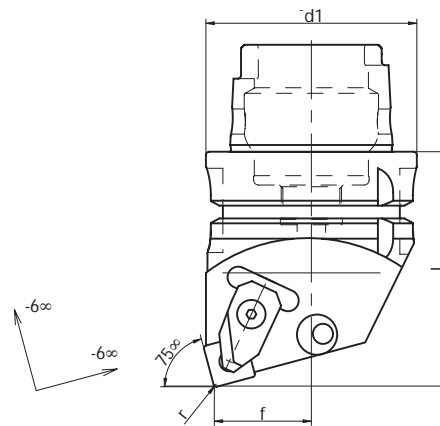


Code N.	d1	l	r	Inserts N.
H63ADDMNL15-100	63	100	0.8	DN.1506..
H63ADDMNL15-145	63	145	0.8	DN.1506..
H100ADDMNL15-160	63	160	0.8	DN.1506..

ICTM standard (HSK-T)

Support pad	Shim pin	Clamp	Spring	Screw
SPDN15	SP02	STF12L	M2	VT22
SPDN15	SP02	STF12L	M2	VT22
SPDN15	SP02	STF12L	M2	VT22

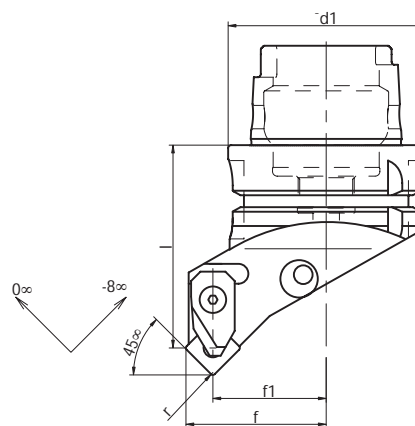
DSBN



Code N.	d1	l	f	r	Inserts N.	Support pad	Shim pin	Clamp	Spring	Screw
H40ADSBNL/R09	40	50	19	0.8	SNM.0903..					
H50ADSBNL/R12	50	60	23	0.8	SNM.1204..					
H63ADSBNL/R12	63	70	29	0.8	SNM.1204..					
H63ADSBNL/R15	63	70	29	1.2	SNM.1506..					
H100ADSBNL/R15	100	90	46	1.2	SNM.1506..					

ICTM standard (HSK-T)

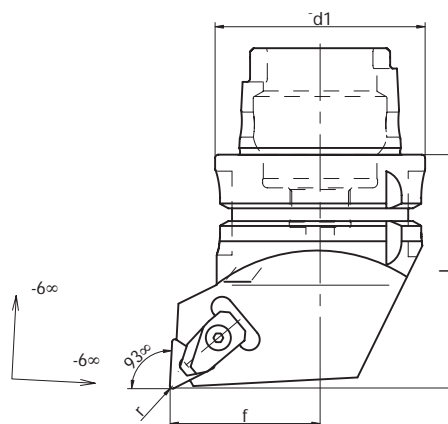
DSSN



Code N.	d1	l	f	f1	r	Inserts N.	Support pad	Shim pin	Clamp	Spring	Screw
H40ADSSNL/R12	40	50	27	19	0.8	SNM.1204..					
H50ADSSNL/R12	50	60	35	27	0.8	SNM.1204..					
H63ADSSNL/R12	63	65	45	37	0.8	SNM.1204..					
H100ADSSNL/R15	100	90	65	54	1.2	SNM.1506..					

ICTM standard (HSK-T)

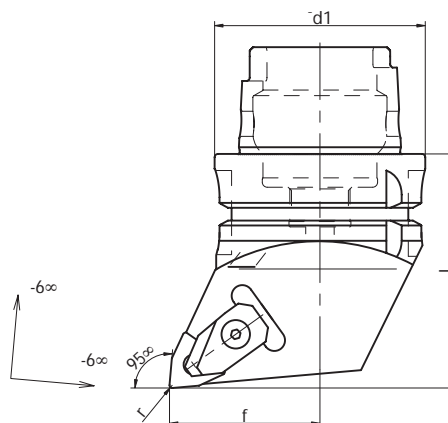
DTJN



Code N.	d1	l	f	r	Inserts N.	Support pad	Shim pin	Clamp	Spring	Screw
H40ADTJNL/R16	40	50	27	0.8	TNM.1604..					
H50ADTJNL/R16	50	60	35	0.8	TNM.1604..	SPTN16	SP05	STF11L/R	M1	VT21
H63ADTJNL/R16	63	70	45	0.8	TNM.1604..	SPTN16	SP05	STF11L/R	M1	VT21
H100ADTJNL/R16	100	90	65	0.8	TNM.1604..	SPTN16	SP05	STF11L/R	M1	VT21

ICTM standard (HSK-T)

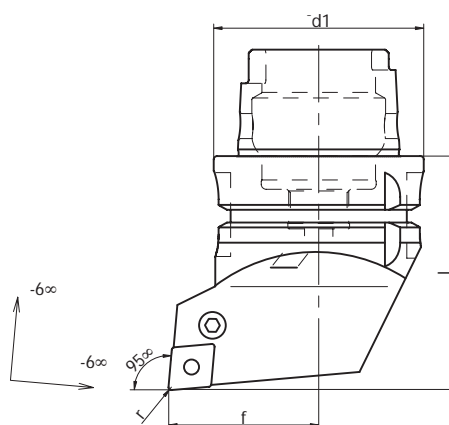
DWLN



Code N.	d1	l	f	r	Inserts N.	Support pad	Shim pin	Clamp	Spring	Screw
H40ADWLNL/R06	40	50	27	0.8	WNM.0604..					
H50ADWLNL/R06	50	60	35	0.8	WNM.0604..	SPWN06	SP05	STF11L/R	M1	VT21
H50ADWLNL/R08	50	60	35	0.8	WNM.0804..	SPWN08	SP02	STF12L/R	M2	VT22
H63ADWLNL/R08	63	70	45	0.8	WNM.0804..	SPWN08	SP02	STF12L/R	M2	VT22
H100ADWLNL/R08	100	90	65	0.8	WNM.0804..	SPWN08	SP02	STF12L/R	M2	VT22

ICTM standard (HSK-T)

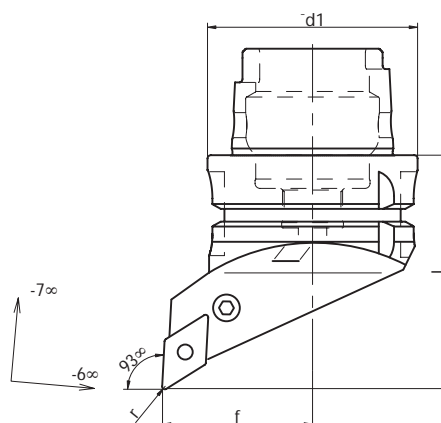
PCLN



Code N.	d1	l	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H32APCLNL/R09 *	32	40	22	0.8	CNM.0903..	SPCN09	SP01	LV01	VT01
H32APCLNL/R12 *	32	40	22	0.8	CNM.1204..	SPCN12	SP02	LV02	VT11
H40APCLNL/R09	40	50	27	0.8	CNM.0903..	SPCN09	SP01	LV01	VT01
H40APCLNL/R12	40	50	27	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H50APCLNL/R12	50	60	35	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H50APCLNL/R16	50	60	35	0.8	CNM.1606..	SPCN16	SP03	LV03	VT03
H63APCLNL/R12	63	70	45	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H63APCLNL/R16	63	70	45	0.8	CNM.1606..	SPCN16	SP03	LV03	VT03
H100APCLNL/R12	100	90	65	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H100APCLNL/R16	100	90	65	0.8	CNM.1606..	SPCN16	SP03	LV03	VT03

* HSK32 only type C
ICTM standard (HSK-T)

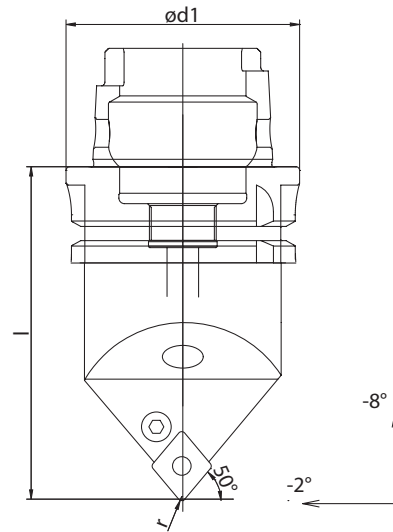
PDJN



Code N.	d1	l	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H32APDJNL/R11 *	32	40	22	0.8	DNM.1104..	SPDN11	SP05	LV17	VT01
H40APDJNL/R11	40	50	27	0.8	DNM.1104..	SPDN11	SP05	LV17	VT01
H40APDJNL/R15	40	55	27	0.8	DNM.1506..	SPDN15	SP02	LV05	VT05
H50APDJNL/R11	50	60	35	0.8	DNM.1104..	SPDN11	SP05	LV17	VT01
H50APDJNL/R15	50	70	35	0.8	DNM.1506..	SPDN15	SP02	LV05	VT05
H63APDJNL/R15	63	70	45	0.8	DNM.1506..	SPDN15	SP02	LV05	VT05
H100APDJNL/R15	100	90	65	0.8	DNM.1506..	SPDN15	SP02	LV05	VT05





* HSK32 only type C
ICTM standard (HSK-T)

PCMNR

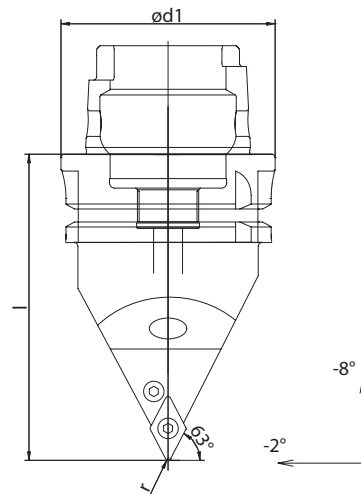


Code N.	d1	l	r	Inserts N.
H63APCMNR12-90	63	90	0.8	CN.1204..
H63APCMNR12-100	63	100	0.8	CN.1204..
H63APCMNR12-145	63	145	0.8	CN.1204..
H100APCMNR12-160	100	160	0.8	CN.1204..

ICTM standard (HSK-T)





Support pad	Shim pin	Lever	Screw
			
SPCN12	SP02	LV02	VT02
SPCN12	SP02	LV02	VT02
SPCN12	SP02	LV02	VT02
SPCN12	SP02	LV02	VT02

PDNNR

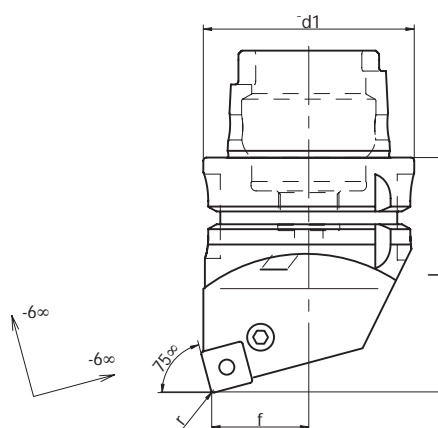


Code N.	d1	l	r	Inserts N.
H63APDNNR15-90	63	90	0.8	DN.1506..
H63APDNNR15-100	63	100	0.8	DN.1506..
H63APDNNR15-145	63	145	0.8	DN.1506..
H100APDNNR15-160	100	160	0.8	DN.1506..

ICTM standard (HSK-T)

Support pad	Shim pin	Lever	Screw
			
SPDN15	SP02	LV05	VT05
SPDN15	SP02	LV05	VT05
SPDN15	SP02	LV05	VT05
SPDN15	SP02	LV05	VT05

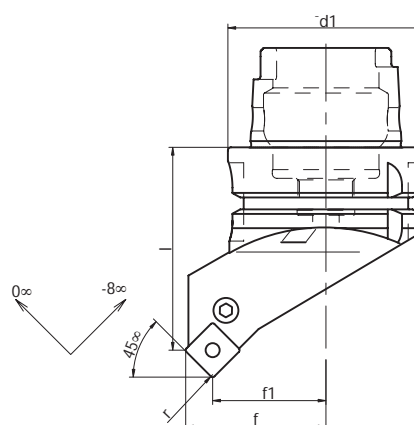
PSBN



Code N.	d1	l	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H32APSBNL/R09 *	32	40	15	0.8	SNM.0903..				
H40APSBNL/R12	40	50	19	0.8	SNM.1204..				
H50APSBNL/R12	50	60	23	0.8	SNM.1204..				
H50APSBNL/R15	50	60	23	1.2	SNM.1506..				
H63APSBNL/R12	63	70	29	0.8	SNM.1204..				
H63APSBNL/R15	63	70	29	1.2	SNM.1506..				
H100APSBNL/R15	100	90	46	1.2	SNM.1506..				

* HSK32 only type C
ICTM standard (HSK-T)

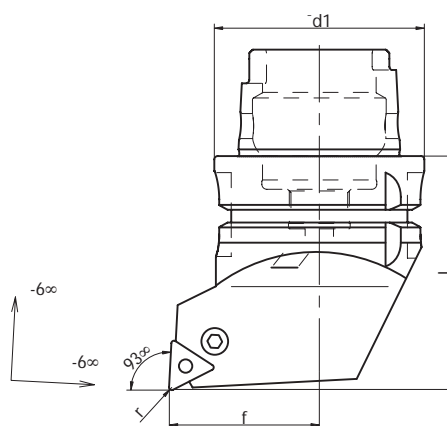
PSSN



Code N.	d1	l	f	f1	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H32APSSNL/R09 *	32	35	22	16	0.8	SNM.0903..				
H40APSSNL/R12	40	45	27	19	0.8	SNM.1204..				
H50APSSNL/R12	50	55	35	27	0.8	SNM.1204..				
H50APSSNL/R15	50	55	35	24	1.2	SNM.1506..				
H63APSSNL/R12	63	65	45	37	0.8	SNM.1204..				
H63APSSNL/R15	63	65	45	34	1.2	SNM.1506..				
H100APSSNL/R15	100	85	65	54	1.2	SNM.1506..				

* HSK32 only type C
ICTM standard (HSK-T)

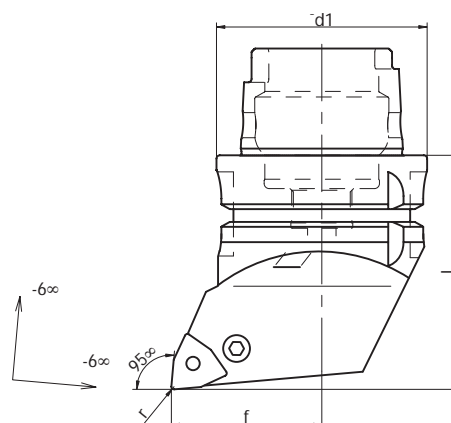
PTJN



Code N.	d1	l	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H32APTJNL/R16 *	32	40	22	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01
H40APTJNL/R16	40	50	27	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01
H50APTJNL/R16	50	60	35	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01
H63APTJNL/R16	63	70	45	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01
H100APTJNL/R16	100	90	65	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01

* HSK32 only type C
ICTM standard (HSK-T)

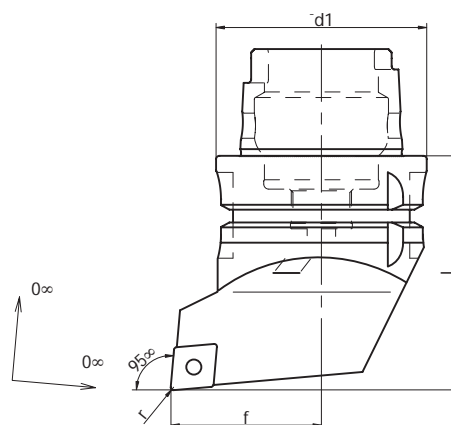
PWLN






Code N.	d1	l	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H32APWLNL/R06 *	32	40	22	0.8	WN..0604..	SPWN06	SP05	LV01	VT01
H40APWLNL/R06	40	50	27	0.8	WN..0604..	SPWN06	SP05	LV01	VT01
H40APWLNL/R08	40	50	27	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
H50APWLNL/R06	50	60	35	0.8	WN..0604..	SPWN06	SP05	LV01	VT01
H50APWLNL/R08	50	60	35	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
H63APWLNL/R08	63	70	45	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
H100APWLNL/R08	100	90	65	0.8	WN..0804..	SPWN08	SP02	LV02	VT02

* HSK32 only type C
ICTM standard (HSK-T)

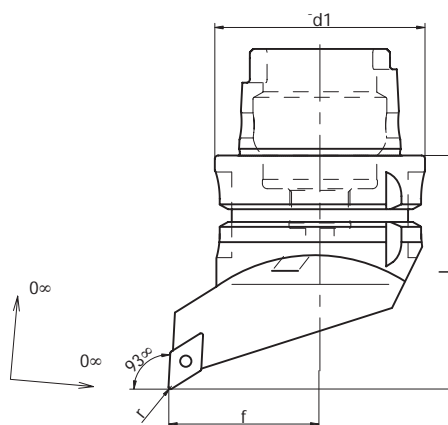
SCLC






Code N.	d1	l	f	r	Inserts N.	Support pad	Bush	Screw
								
H32ASCLCL/R09 *	32	40	22	0.8	CC..09T3..	SPCC09	VTA02	TR8
H40ASCLCL/R09	40	50	27	0.8	CC..09T3..	SPCC09	VTA02	TR8
H40ASCLCL/R12	40	50	27	0.8	CC..1204..	SPCC12	VTA01	TR4
H50ASCLCL/R09	50	60	35	0.8	CC..09T3..	SPCC09	VTA02	TR8
H50ASCLCL/R12	50	60	35	0.8	CC..1204..	SPCC12	VTA01	TR4
H63ASCLCL/R12	63	70	45	0.8	CC..1204..	SPCC12	VTA01	TR4
H100ASCLCL/R12	100	90	65	0.8	CC..1204..	SPCC12	VTA01	TR4

* HSK32 only type C
ICTM standard (HSK-T)

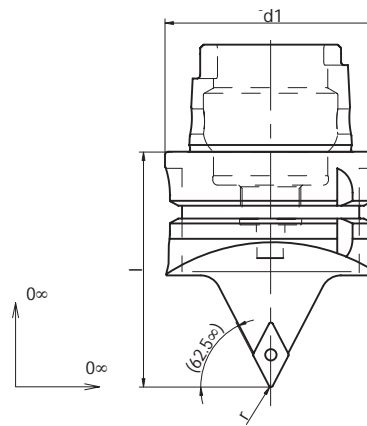
SDJC





Code N.	d1	l	f	r	Inserts N.	Support pad	Bush	Screw
								
H32ASDJCL/R07 *	32	40	22	0.4	DC..0702..	-	-	TR1
H40ASDJCL/R11	40	50	27	0.8	DC..11T3..	SPDC11	VTA02	TR8
H50ASDJCL/R11	50	60	35	0.8	DC..11T3..	SPDC11	VTA02	TR8
H63ASDJCL/R11	63	70	45	0.8	DC..11T3..	SPDC11	VTA02	TR8
H100ASDJCL/R11	100	90	65	0.8	DC..11T3..	SPDC11	VTA02	TR8

* HSK32 only type C
ICTM standard (HSK-T)

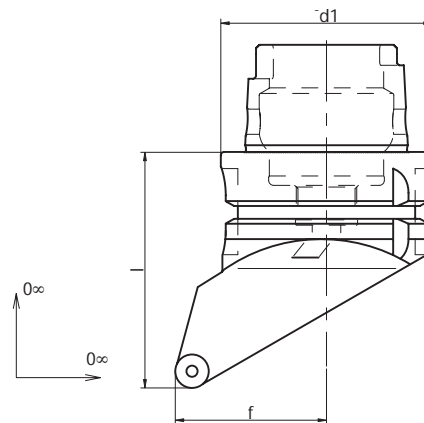
SDNC




Code N.	d1	l	r	Inserts N.	Support pad	Bush	Screw
H32ASDNCN07 *	32	40	0.4	DC..0702..			TR1
H40ASDNCN11	40	50	0.8	DC..11T3..	SPDC11	VTA02	TR8
H50ASDNCN11	50	60	0.8	DC..11T3..	SPDC11	VTA02	TR8
H63ASDNCN11	63	75	0.8	DC..11T3..	SPDC11	VTA02	TR8
H100ASDNCN11	100	90	0.8	DC..11T3..	SPDC11	VTA02	TR8

* HSK32 only type C
ICTM standard (HSK-T)

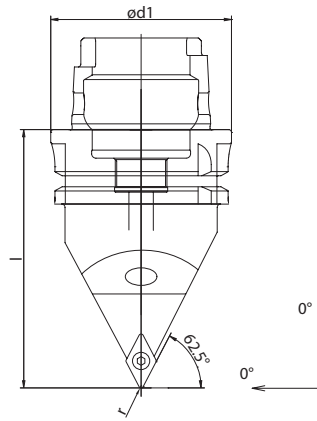
SRGC






Code N.	d1	l	f	Inserts N.	Screw
H32ASRGCL/R10 *	32	40	22	RC..10T3..	
H40ASRGCL/R10	40	50	27	RC..10T3..	TR8
H50ASRGCL/R10	50	60	35	RC..10T3..	TR8
H63ASRGCL/R10	63	70	45	RC..10T3..	TR8
H100ASRGCL/R10	100	90	65	RC..10T3..	TR8

* HSK32 only type C
ICTM standard (HSK-T)

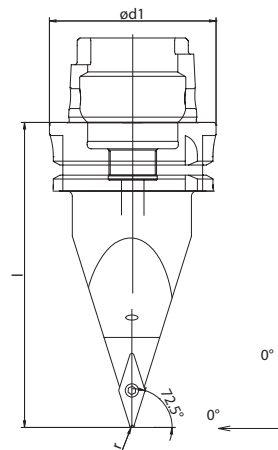
SDNCN






Code N.	d1	l	r	Inserts N.	Support pad	Bush	Screw
							
H63ASDNCN11-90	63	90	0.8	DC..11T3..	SPDC11	VTA02	TR8
H63ASDNCN11-100	63	100	0.8	DC..11T3..	SPDC11	VTA02	TR8
H63ASDNCN11-145	63	145	0.8	DC..11T3..	SPDC11	VTA02	TR8
H100ASDNCN11-160	100	160	0.8	DC..11T3..	SPDC11	VTA02	TR8

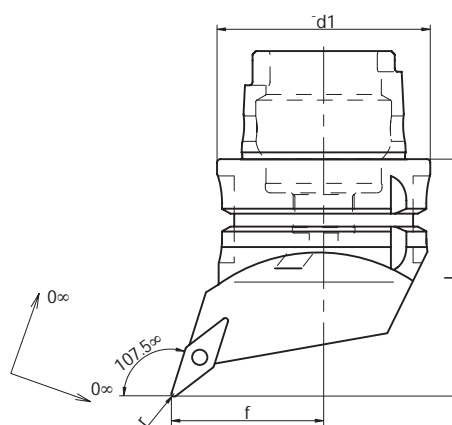
ICTM standard (HSK-T)




SVVCN



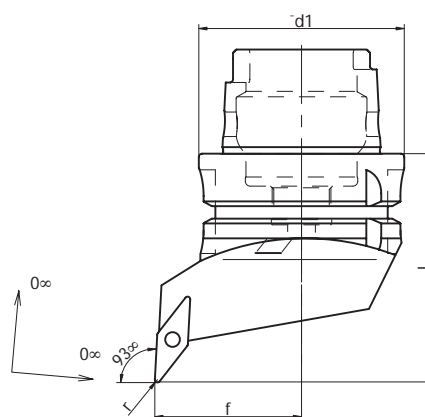
Code N.	d1	l	r	Inserts N.	Support pad	Bush	Screw
							
H63ASVVCN16-90	63	90	0.8	VC..1604..	SPVC16	VTA02	TR8
H63ASVVCN16-100	63	100	0.8	VC..1604..	SPVC16	VTA02	TR8
H63ASVVCN16-145	63	145	0.8	VC..1604..	SPVC16	VTA02	TR8
H100ASVVCN16-160	100	160	0.8	VC..1604..	SPVC16	VTA02	TR8




ICTM standard (HSK-T)

SVHC


Code N.	d1	l	f	r	Inserts N.	Support pad	Bush	Screw
								
H32ASVHCL/R11 *	32	40	22	0.4	VC..1103..	-	-	TR1
H40ASVHCL/R11	40	50	27	0.4	VC..1103..	-	-	TR1
H40ASVHCL/R16	40	55	27	0.8	VC..1604..	SPVC16	VTA02	TR8
H50ASVHCL/R11	50	60	35	0.4	VC..1103..	-	-	TR1
H50ASVHCL/R16	50	60	35	0.8	VC..1604..	SPVC16	VTA02	TR8
H63ASVHCL/R11	63	70	45	0.4	VC..1103..	-	-	TR1
H63ASVHCL/R16	63	70	45	0.8	VC..1604..	SPVC16	VTA02	TR8
H100ASVHCL/R16	100	90	65	0.8	VC..1604..	SPVC16	VTA02	TR8

* HSK32 only type C
ICTM standard (HSK-T)

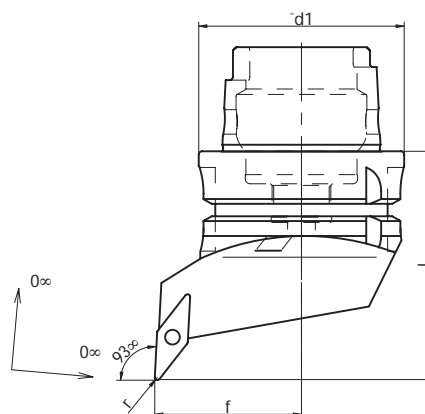
SVJC


Code N.	d1	l	f	r	Inserts N.	Support pad	Bush	Screw
								
H32ASVJCL/R11 *	32	40	22	0.4	VC..1103..	-	-	TR1
H40ASVJCL/R11	40	50	27	0.4	VC..1103..	-	-	TR1
H40ASVJCL/R16	40	60	27	0.8	VC..1604..	SPVC16	VTA02	TR8
H50ASVJCL/R16	50	70	35	0.8	VC..1604..	SPVC16	VTA02	TR8
H63ASVJCL/R16	63	75	45	0.8	VC..1604..	SPVC16	VTA02	TR8
H100ASVJCL/R16	100	90	65	0.8	VC..1604..	SPVC16	VTA02	TR8

* HSK32 only type C
ICTM standard (HSK-T)



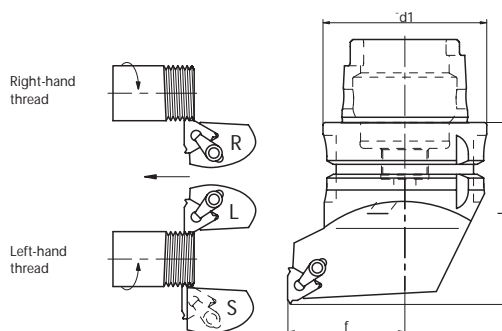
SVJB



Code N.	d1	l	f	r	Inserts N.	Support pad	Bush	Screw
H32ASVJBL/R11 *	32	40	22	0.4	VB..1102..	-	-	TR1
H40ASVJBL/R11	40	50	27	0.4	VB..1102..	-	-	TR1
H40ASVJBL/R16	40	60	27	0.8	VB..1604..	SPVC16	VTA02	TR8
H50ASVJBL/R16	50	70	35	0.8	VB..1604..	SPVC16	VTA02	TR8
H63ASVJBL/R16	63	75	45	0.8	VB..1604..	SPVC16	VTA02	TR8
H100ASVJBL/R16	100	90	65	0.8	VB..1604..	SPVC16	VTA02	TR8

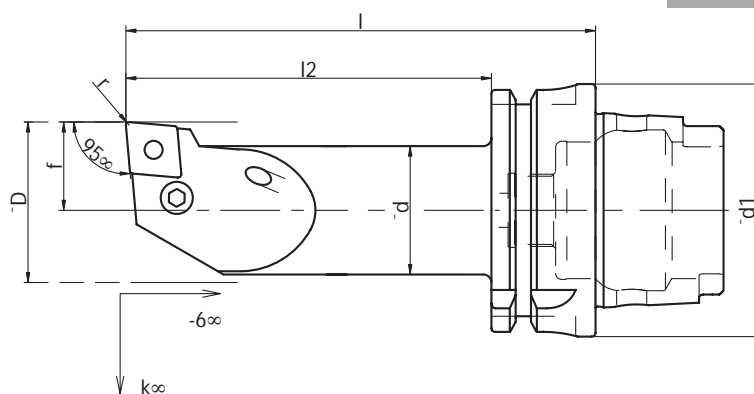
* HSK32 only type C
ICTM standard (HSK-T)

THE



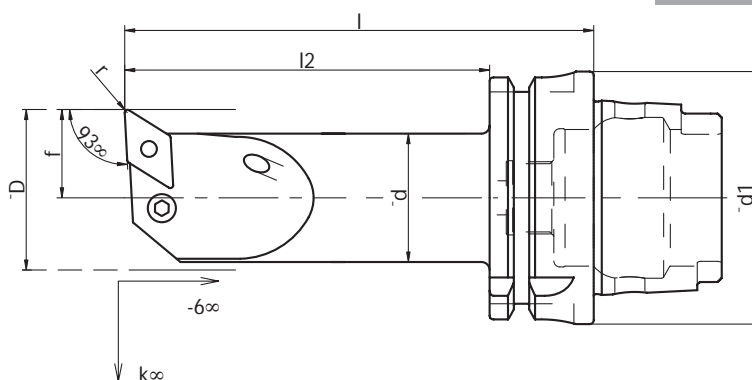
Code N.	d1	l	f	r	Support pad	Screw	Clamp
H32ATHEL16 *	32	40	22	16EL	SPTF16	VT26	STF13
H32ATHER16 *	32	40	22	16ER	SPTF16	VT26	STF13
H32ATHES16 *	32	40	22	16EL	SPTF16	VT26	STF13
H40ATHEL16	40	50	27	16EL	SPTF16	VT26	STF13
H40ATHER16	40	50	27	16ER	SPTF16	VT26	STF13
H40ATHES16	40	50	27	16EL	SPTF16	VT26	STF13
H50ATHEL16	50	60	35	16EL	SPTF16	VT26	STF13
H50ATHER16	50	60	35	16ER	SPTF16	VT26	STF13
H50ATHES16	50	60	35	16EL	SPTF16	VT26	STF13
H63ATHEL16	63	70	45	16EL	SPTF16	VT26	STF13
H63ATHER16	63	70	45	16ER	SPTF16	VT26	STF13
H63ATHES16	63	70	45	16EL	SPTF16	VT26	STF13
H100ATHEL16	100	90	65	16EL	SPTF16	VT26	STF13
H100ATHER16	100	90	65	16ER	SPTF16	VT26	STF13
H100ATHES16	100	90	65	16EL	SPTF16	VT26	STF13

* HSK32 only type C
ICTM standard (HSK-T)



Code N.	d1	d	l	l2	f	k°	D	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H32A20PCLNL/R09 *	32	20	70	55	13	-12	25	0.8	CNM.0903..	-	-	LV12	VT06
H32A25PCLNL/R09 *	32	25	85	70	17	-12	32	0.8	CNM.0903..	-	-	LV12	VT06
H40A20PCLNL/R09	40	20	75	55	13	-12	25	0.8	CNM.0903..	-	-	LV12	VT06
H40A25PCLNL/R12	40	25	90	70	17	-12	32	0.8	CNM.1204..	-	-	LV11	VT10
H40A32PCLNL/R12	40	32	110	90	22	-10	40	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H50A20PCLNL/R09	50	20	85	59	13	-12	25	0.8	CNM.0903..	-	-	LV12	VT06
H50A25PCLNL/R12	50	25	100	74	17	-12	32	0.8	CNM.1204..	-	-	LV11	VT10
H50A32PCLNL/R12	50	32	120	94	22	-10	40	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H50A40PCLNL/R12	50	40	140	114	27	-10	50	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H63A20PCLNL/R09	63	20	85	59	13	-12	25	0.8	CNM.0903..	-	-	LV12	VT06
H63A25PCLNL/R12	63	25	100	74	17	-12	32	0.8	CNM.1204..	-	-	LV11	VT10
H63A32PCLNL/R12	63	32	120	94	22	-10	40	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H63A40PCLNL/R12	63	40	140	114	27	-10	50	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H63A40PCLNL/R16	63	40	140	114	27	-10	50	1.2	CNM.1606..	SPCN16	SP03	LV03	VT03
H100A40PCLNL/R12	100	40	160	131	27	-10	50	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
H100A50PCLNL/R16	100	50	190	161	35	-8	63	1.2	CNM.1606..	SPCN16	SP03	LV03	VT03

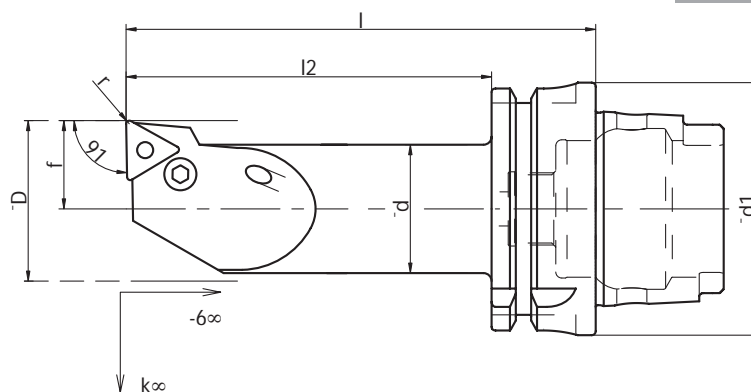
* HSK32 only type C
ICTM standard (HSK-T)







Code N.	d1	d	l	l2	f	k°	D	r	Inserts N.	Support pad	Shim pin	Lever	Screw
H32A20PDUNL/R11*	32	20	70	55	13	-10	25	0.8	DN..1104..	-	-	LV13	VT12
H32A25PDUNL/R11*	32	25	85	70	17	-10	32	0.8	DN..1104..	-	-	LV13	VT12
H40A20PDUNL/R11	40	20	75	55	13	-10	25	0.8	DN..1104..	-	-	LV13	VT12
H40A25PDUNL/R11	40	25	90	70	17	-10	32	0.8	DN..1104..	-	-	LV13	VT12
H40A32PDUNL/R15	40	32	110	90	22	-15	40	0.8	DN..1506..	SPDN15	SP02	LV05	VT05
H50A20PDUNL/R11	50	20	85	59	13	-10	25	0.8	DN..1104..	-	-	LV13	VT12
H50A25PDUNL/R11	50	25	100	74	17	-10	32	0.8	DN..1104..	-	-	LV13	VT12
H50A32PDUNL/R15	50	32	120	94	22	-15	40	0.8	DN..1506..	SPDN15	SP02	LV05	VT05
H50A40PDUNL/R15	50	40	140	114	27	-12	50	0.8	DN..1506..	SPDN15	SP02	LV05	VT05
H63A20PDUNL/R11	63	20	85	59	13	-10	25	0.8	DN..1104..	-	-	LV13	VT12
H63A25PDUNL/R11	63	25	100	74	17	-10	32	0.8	DN..1104..	-	-	LV13	VT12
H63A32PDUNL/R15	63	32	120	94	22	-15	40	0.8	DN..1506..	SPDN15	SP02	LV05	VT05
H63A40PDUNL/R15	63	40	140	114	27	-12	50	0.8	DN..1506..	SPDN15	SP02	LV05	VT05
H100A40PDUNL/R15	100	40	160	131	27	-12	50	0.8	DN..1506..	SPDN15	SP02	LV05	VT05
H100A50PDUNL/R15	100	50	190	161	35	-8	63	0.8	DN..1506..	SPDN15	SP02	LV05	VT05

* HSK32 only type C
ICTM standard (HSK-T)

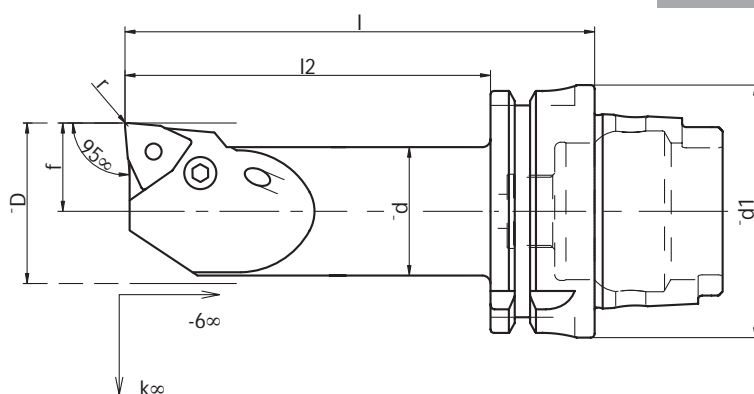
PTFN







Code N.	d1	d	l	l2	f	k°	D	r	Inserts N.	Support pad	Shim pin	Lever	Screw
													
H32A20PTFNL/R11*	32	20	70	55	13	-12	25	0.4	TN..1103..	-	-	LV06	VT06
H32A25PTFNL/R16*	32	25	85	70	17	-12	32	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
H40A20PTFNL/R11	40	20	75	55	13	-12	25	0.4	TN..1103..	-	-	LV06	VT06
H40A25PTFNL/R16	40	25	90	70	17	-12	32	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
H40A32PTFNL/R16	40	32	110	90	22	-12	40	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
H50A20PTFNL/R11	50	20	85	59	13	-12	25	0.4	TN..1103..	-	-	LV06	VT06
H50A25PTFNL/R16	50	25	100	74	17	-12	32	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
H50A32PTFNL/R16	50	32	120	94	22	-12	40	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
H50A40PTFNL/R16	50	40	140	114	27	-8	50	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
H63A20PTFNL/R11	63	20	85	59	13	-12	25	0.4	TN..1103..	-	-	LV06	VT06
H63A25PTFNL/R16	63	25	100	74	17	-12	32	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
H63A32PTFNL/R16	63	32	120	94	22	-12	40	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
H63A40PTFNL/R16	63	40	140	114	27	-8	50	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
H100A40PTFNL/R16	100	40	160	131	27	-8	50	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
H100A50PTFNL/R16	100	50	190	161	35	-8	63	0.8	TN..1604..	SPTN16	SP05	LV01	VT01

* HSK32 only type C

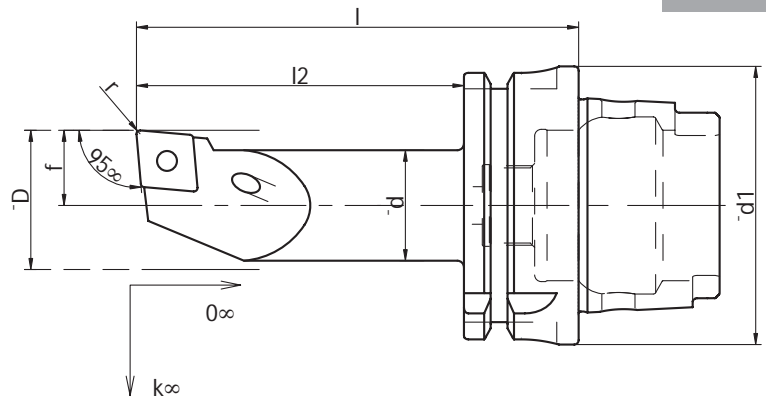
ICTM standard (HSK-T)



Code N.	d1	d	l	l2	f	k°	D	r	Inserts N.	Support pad	Shim pin	Lever	Screw
													
H32A20PWLNL/R06*	32	20	70	55	13	-15	25	0.8	WN..0604..	SPWN06	SP05	LV01	VT01
H32A25PWLNL/R06*	32	25	85	70	17	-12	32	0.8	WN..0604..	SPWN06	SP05	LV01	VT01
H40A20PWLNL/R06	40	20	75	55	13	-15	25	0.8	WN..0604..	SPWN06	SP05	LV01	VT01
H40A25PWLNL/R08	40	25	90	70	17	-12	32	0.8	WN..0804..	-	-	LV11	VT10
H40A32PWLNL/R08	40	32	110	90	22	-12	40	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
H50A20PWLNL/R06	50	20	85	59	13	-15	25	0.8	WN..0604..	SPWN06	SP05	LV01	VT01
H50A25PWLNL/R08	50	25	100	74	17	-12	32	0.8	WN..0804..	-	-	LV11	VT10
H50A32PWLNL/R08	50	32	120	94	22	-12	40	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
H50A40PWLNL/R08	50	40	140	114	27	-10	50	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
H63A20PWLNL/R06	63	20	85	59	13	-15	25	0.8	WN..0604..	SPWN06	SP05	LV01	VT01
H63A25PWLNL/R08	63	25	100	74	17	-12	32	0.8	WN..0804..	-	-	LV11	VT10
H63A32PWLNL/R08	63	32	120	94	22	-12	40	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
H63A40PWLNL/R08	63	40	140	114	27	-10	50	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
H100A40PWLNL/R08	100	40	160	131	27	-10	50	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
H100A50PWLNL/R08	100	50	190	161	35	-8	63	0.8	WN..0804..	SPWN08	SP02	LV02	VT02

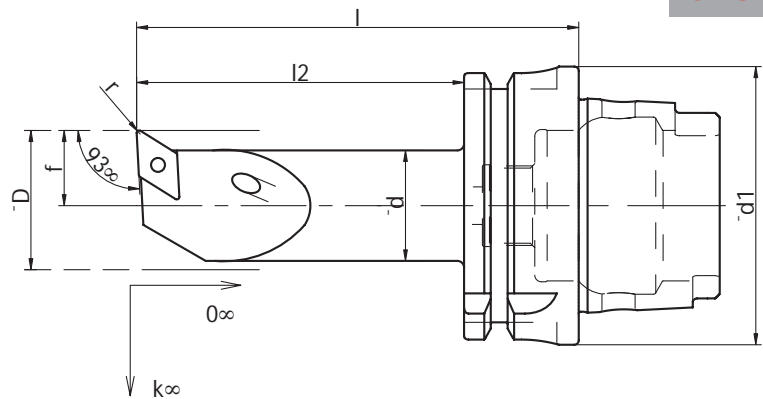
* HSK32 only type C




ICTM standard (HSK-T)



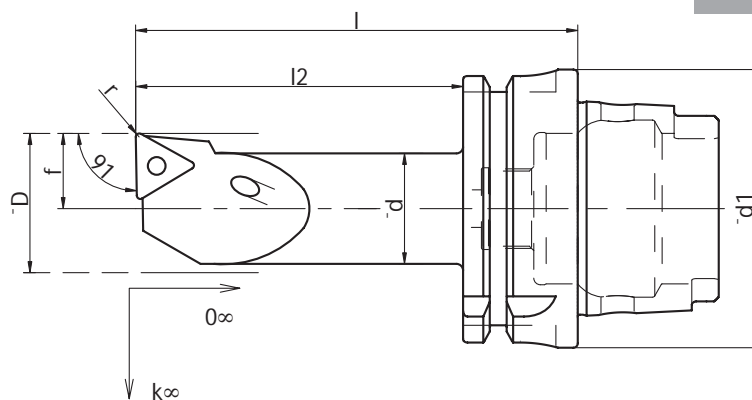
Code N.	d1	d	l	l2	f	k°	D	r	Inserts N.	Support pad	Bush	Screw
H32A20SCLCL/R09*	32	20	70	55	13	-8	25	0.8	CC..09T3..			
H32A25SCLCL/R09*	32	25	85	70	17	-5	32	0.8	CC..09T3..	SPCC09	VTA02	TR14
H40A20SCLCL/R09	40	20	75	55	13	-8	25	0.8	CC..09T3..	--	--	TR12
H40A25SCLCL/R12	40	25	90	70	17	-5	32	0.8	CC..1204..	--	--	TR13
H40A32SCLCL/R12	40	32	110	90	22	-5	40	0.8	CC..1204..	SPCC12	VTA01	TR4
H50A20SCLCL/R09	50	20	85	59	13	-8	25	0.8	CC..09T3..	--	--	TR12
H50A25SCLCL/R12	50	25	100	74	17	-5	32	0.8	CC..1204..	--	--	TR13
H50A32SCLCL/R12	50	32	120	94	22	-5	40	0.8	CC..1204..	SPCC12	VTA01	TR4
H50A40SCLCL/R12	50	40	140	114	27	-5	50	0.8	CC..1204..	SPCC12	VTA01	TR4
H63A20SCLCL/R09	63	20	85	59	13	-8	25	0.8	CC..09T3..	--	--	TR12
H63A25SCLCL/R12	63	25	100	74	17	-5	32	0.8	CC..1204..	--	--	TR13
H63A32SCLCL/R12	63	32	120	94	22	-5	40	0.8	CC..1204..	SPCC12	VTA01	TR4
H63A40SCLCL/R12	63	40	140	114	27	-5	50	0.8	CC..1204..	SPCC12	VTA01	TR4
H100A40SCLCL/R12	100	40	160	131	27	-5	50	0.8	CC..1204..	SPCC12	VTA01	TR4
H100A50SCLCL/R12	100	50	190	161	35	-5	63	0.8	CC..1204..	SPCC12	VTA01	TR4




* HSK32 only type C
ICTM standard (HSK-T)



Code N.	d1	d	l	l2	f	k°	D	r	Inserts N.	Support pad	Bush	Screw
H32A20SDUCL/R11*	32	20	70	55	13	-8	25	0.8	DC..11T3..			
H32A25SDUCL/R11*	32	25	85	70	17	-5	32	0.8	DC..11T3..	-	-	TR14
H40A20SDUCL/R11	40	20	75	55	13	-8	25	0.8	DC..11T3..	-	-	TR12
H40A25SDUCL/R11	40	25	90	70	17	-5	32	0.8	DC..11T3..	-	-	TR14
H40A32SDUCL/R11	40	32	110	90	22	-5	40	0.8	DC..11T3..	SPDC11	VTA02	TR8
H50A20SDUCL/R11	50	20	85	59	13	-8	25	0.8	DC..11T3..	-	-	TR12
H50A25SDUCL/R11	50	25	100	74	17	-5	32	0.8	DC..11T3..	-	-	TR14
H50A32SDUCL/R11	50	32	120	94	22	-5	40	0.8	DC..11T3..	SPDC11	VTA02	TR8
H63A20SDUCL/R11	63	20	85	59	13	-8	25	0.8	DC..11T3..	-	-	TR12
H63A25SDUCL/R11	63	25	100	74	17	-5	32	0.8	DC..11T3..	-	-	TR14
H63A32SDUCL/R11	63	32	120	94	22	-5	40	0.8	DC..11T3..	SPDC11	VTA02	TR8
H100A40SDUCL/R11	100	40	160	131	27	-5	50	0.8	DC..11T3..	SPDC11	VTA02	TR8
H100A50SDUCL/R11	100	50	190	161	35	-5	63	0.8	DC..11T3..	SPDC11	VTA02	TR8

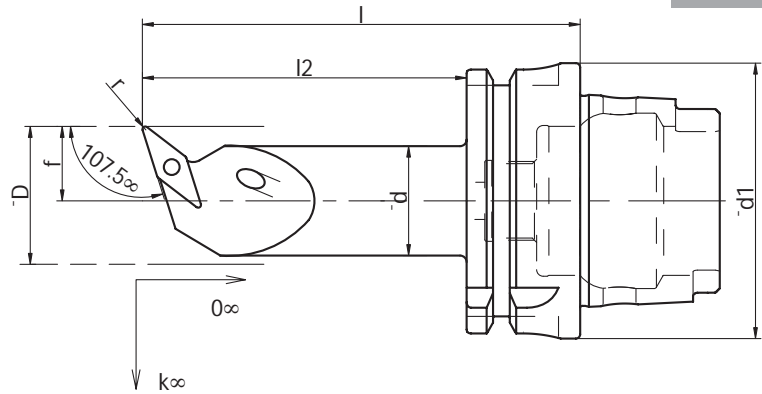
* HSK32 only type C
ICTM standard (HSK-T)



Code N.	d1	d	l	l2	f	k°	D	r	Inserts N.	Support pad	Bush	Screw
H32A20STFCL/R11*	32	20	70	55	13	-8	25	0.4	TC..1102..			
H32A25STFCL/R16*	32	25	85	70	17	-5	32	0.8	TC..16T3..	-	-	TR14
H40A20STFCL/R11	40	20	75	55	13	-8	25	0.4	TC..1102..	-	-	TR1
H40A25STFCL/R16	40	25	90	70	17	-5	32	0.8	TC..16T3..	-	-	TR14
H40A32STFCL/R16	40	32	110	90	22	-5	40	0.8	TC..16T3..	SPTC16	VTA02	TR8
H50A20STFCL/R11	50	20	85	59	13	-8	25	0.4	TC..1102..	-	-	TR1
H50A25STFCL/R16	50	25	100	74	17	-5	32	0.8	TC..16T3..	-	-	TR14
H50A32STFCL/R16	50	32	120	94	22	-5	40	0.8	TC..16T3..	SPTC16	VTA02	TR8
H50A40STFCL/R16	50	40	140	114	27	-5	50	0.8	TC..16T3..	SPTC16	VTA02	TR8
H63A20STFCL/R11	63	20	85	59	13	-8	25	0.4	TC..1102..	-	-	TR1
H63A25STFCL/R16	63	25	100	74	17	-5	32	0.8	TC..16T3..	-	-	TR14
H63A32STFCL/R16	63	32	120	94	22	-5	40	0.8	TC..16T3..	SPTC16	VTA02	TR8
H63A40STFCL/R16	63	40	140	114	27	-5	50	0.8	TC..16T3..	SPTC16	VTA02	TR8
H100A40STFCL/R16	100	40	160	131	27	-5	50	0.8	TC..16T3..	SPTC16	VTA02	TR8
H100A50STFCL/R16	100	50	190	161	35	-5	63	0.8	TC..16T3..	SPTC16	VTA02	TR8

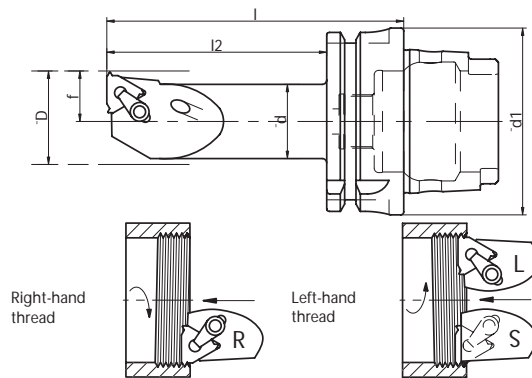
* HSK32 only type C




ICTM standard (HSK-T)



Code N.	d1	d	l	l2	f	k°	D	r	Inserts N.	Support pad	Bush	Screw
H32A20SVQBL/R11*	32	20	70	55	13	-8	25	0.4	VB..1102..	-	-	TR1
H32A25SVQBL/R11*	32	25	85	70	17	-5	32	0.4	VB..1102..	-	-	TR1
H40A20SVQBL/R11	40	20	75	55	13	-8	25	0.4	VB..1102..	-	-	TR1
H40A25SVQBL/R11	40	25	90	70	17	-5	32	0.4	VB..1102..	-	-	TR1
H40A32SVQBL/R16	40	32	110	90	22	-10	40	0.8	VB..1604..	SPVC16	VTA02	TR8
H50A20SVQBL/R11	50	20	85	59	13	-8	25	0.4	VB..1102..	-	-	TR1
H50A25SVQBL/R11	50	25	100	74	17	-5	32	0.4	VB..1102..	-	-	TR1
H50A32SVQBL/R16	50	32	120	94	22	-10	40	0.8	VB..1604..	SPVC16	VTA02	TR8
H50A40SVQBL/R16	50	40	140	114	27	-10	50	0.8	VB..1604..	SPVC16	VTA02	TR8
H63A20SVQBL/R11	63	20	85	59	13	-8	25	0.4	VB..1102..	-	-	TR1
H63A25SVQBL/R11	63	25	100	74	17	-5	32	0.4	VB..1102..	-	-	TR1
H63A32SVQBL/R16	63	32	120	94	22	-10	40	0.8	VB..1604..	SPVC16	VTA02	TR8
H63A40SVQBL/R16	63	40	140	114	27	-10	50	0.8	VB..1604..	SPVC16	VTA02	TR8
H100A40SVQBL/R16	100	40	160	131	27	-10	50	0.8	VB..1604..	SPVC16	VTA02	TR8
H100A50SVQBL/R16	100	50	190	161	35	-8	63	0.8	VB..1604..	SPVC16	VTA02	TR8

* HSK32 only type C
ICTM standard (HSK-T)

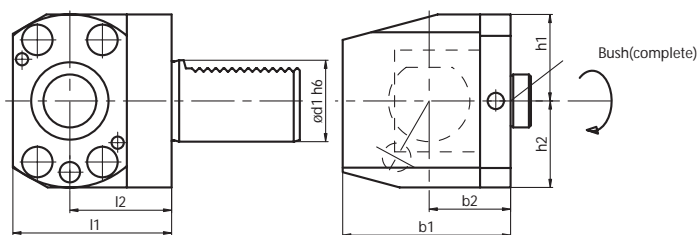


Code N.	d1	d	l	l2	f	D	Insert N.	Support pad	Screw	Clamp
H32A20THEL16 *	32	20	65	50	13	25	16IL			
H32A20THER16 *	32	20	65	50	13	25	16IR	SPTF16	VT26	STF13
H32A20THES16 *	32	20	65	50	13	25	16IL	SPTF16	VT26	STF13
H32A25THEL16 *	32	25	80	65	17	32	16IL	SPTF16	VT26	STF13
H32A25THER16 *	32	25	80	65	17	32	16IR	SPTF16	VT26	STF13
H32A25THES16 *	32	25	80	65	17	32	16IL	SPTF16	VT26	STF13
H40A20THEL16	40	20	75	55	13	25	16IL	SPTF16	VT26	STF13
H40A20THER16	40	20	75	55	13	25	16IR	SPTF16	VT26	STF13
H40A20THES16	40	20	75	55	13	25	16IL	SPTF16	VT26	STF13
H40A25THEL16	40	25	90	70	17	32	16IL	SPTF16	VT26	STF13
H40A25THER16	40	25	90	70	17	32	16IR	SPTF16	VT26	STF13
H40A25THES16	40	25	90	70	17	32	16IL	SPTF16	VT26	STF13
H40A32THEL16	40	32	110	90	22	40	16IL	SPTF16	VT26	STF13
H40A32THER16	40	32	110	90	22	40	16IR	SPTF16	VT26	STF13
H40A32THES16	40	32	110	90	22	40	16IL	SPTF16	VT26	STF13
H50A20THEL16	50	20	85	59	13	25	16IL	SPTF16	VT26	STF13
H50A20THER16	50	20	85	59	13	25	16IR	SPTF16	VT26	STF13
H50A20THES16	50	20	85	59	13	25	16IL	SPTF16	VT26	STF13
H50A25THEL16	50	25	100	74	17	32	16IL	SPTF16	VT26	STF13
H50A25THER16	50	25	100	74	17	32	16IR	SPTF16	VT26	STF13
H50A25THES16	50	25	100	74	17	32	16IL	SPTF16	VT26	STF13
H50A32THEL16	50	32	120	94	22	40	16IL	SPTF16	VT26	STF13
H50A32THER16	50	32	120	94	22	40	16IR	SPTF16	VT26	STF13
H50A32THES16	50	32	120	94	22	40	16IL	SPTF16	VT26	STF13
H50A40THEL16	50	40	140	114	27	50	16IL	SPTF16	VT26	STF13
H50A40THER16	50	40	140	114	27	50	16IR	SPTF16	VT26	STF13
H50A40THES16	50	40	140	114	27	50	16IL	SPTF16	VT26	STF13
H63A20THEL16	63	20	85	59	13	25	16IL	SPTF16	VT26	STF13
H63A20THER16	63	20	85	59	13	25	16IR	SPTF16	VT26	STF13
H63A20THES16	63	20	85	59	13	25	16IL	SPTF16	VT26	STF13
H63A25THEL16	63	25	100	74	17	32	16IL	SPTF16	VT26	STF13
H63A25THER16	63	25	100	74	17	32	16IR	SPTF16	VT26	STF13
H63A25THES16	63	25	100	74	17	32	16IL	SPTF16	VT26	STF13
H63A32THEL16	63	32	120	94	22	40	16IL	SPTF16	VT26	STF13
H63A32THER16	63	32	120	94	22	40	16IR	SPTF16	VT26	STF13
H63A32THES16	63	32	120	94	22	40	16IL	SPTF16	VT26	STF13
H63A40THEL16	63	40	140	114	27	50	16IL	SPTF16	VT26	STF13
H63A40THER16	63	40	140	114	27	50	16IR	SPTF16	VT26	STF13
H63A40THES16	63	40	140	114	27	50	16IL	SPTF16	VT26	STF13
H100A40THEL16	100	40	160	131	27	50	16IL	SPTF16	VT26	STF13
H100A40THER16	100	40	160	131	27	50	16IR	SPTF16	VT26	STF13
H100A40THES16	100	40	160	131	27	50	16IL	SPTF16	VT26	STF13

* HSK32 only type C
ICTM standard (HSK-T)

RADIAL WERKZEUGHALTER, MIT HSK KUPPLUNG
RADIAL TOOL-HOLDER WITH HSK COUPLING

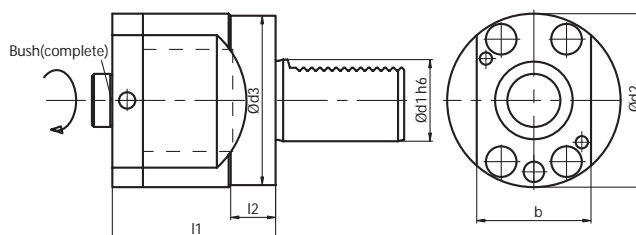
POTRE-OUTIL RADIAL AVEC ATTAQUE HSK
PORTAUTENSILE RADIALE PER UTENSILI CON ATTACCO HSK



Code N.	Description	d1	b1	b2	h1	h2	l1	l2	Bush (complete)
118-03001	H32AOV30L	30	65	30	28	33	58	40	H32ABSL
118-03002	H32AOV30R	30	65	30	28	33	58	40	H32ABSL
118-04001	H32AOV40L	40	80	40	30	40	58	40	H32ABSL
118-04002	H32AOV40R	40	80	40	30	40	58	40	H32ABSL
118-04003	H40AOV40L	40	80	40	34	40	67.5	45	H40ABSL
118-04004	H40AOV40R	40	80	40	34	40	67.5	45	H40ABSL
118-04005	H50AOV40L	40	80	40	42.5	42.5	78	50	H50ABSL
118-04006	H50AOV40R	40	80	40	42.5	42.5	78	50	H50ABSL
118-05001	H50AOV50L	50	90	40	42.5	48	78	50	H50ABSL
118-05002	H50AOV50R	50	90	40	42.5	48	78	50	H50ABSL
118-05003	H63AOV50L	50	90	40	53	53	90	55	H63ABSL
118-05004	H63AOV50R	50	90	40	53	53	90	55	H63ABSL

AXIAL WERKZEUGHALTER MIT HSK KUPPLUNG
AXIAL TOOLHOLDER WITH HSK COUPLING

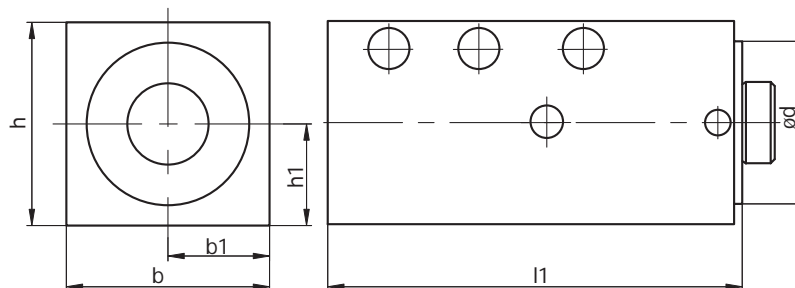
PORTE-OUTIL AXIAL AVEC ATTAQUE HSK
PORTAUTENSILE ASSIALE PER UTENSILI CON ATTACCO HSK



Code N.	Description	d1	d2	d3	b	l1	l2	Bush (complete)
118-03003	H32ADV30	30	55	68	36	52	22	H32ABSL
118-04007	H32ADV40	40	55	83	36	52	22	H32ABSL
118-04008	H40ADV40	40	68	83	45	60	22	H40ABSL
118-04009	H50ADV40	40	85	83	56	75	25	H50ABSL
118-05005	H50ADV50	50	85	98	56	75	30	H50ABSL
118-04013	H63ADV40	40	106	83	70	90	25	H63ABSL
118-05006	H63ADV50	50	106	98	70	90	33	H63ABSL

WERKZEUGHALTER MIT VIERECKIGEM SCHAFT UND HSK KUPPLUNG
TOOLHOLDER WITH SQUARE SHANK AND HSK ATTACHMENT

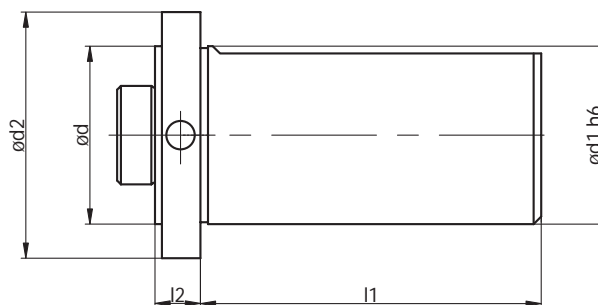
PORTE-OUTIL AVEC QUEUE CARÉE ET ATTAQUE HSK
PORTAUTENSILE A STELO QUADRO CON ATTACCO HSK



Code N.	Description	d	b	b1	h	h1	l1
137-00001	H40ASTQ50L	40	48	24	50	25	120
137-00002	H40ASTQ50R	40	48	24	50	25	120
137-00039	H50ASTQ50L	50	50	25	50	25	140
137-00040	H50ASTQ50R	50	50	25	50	25	140

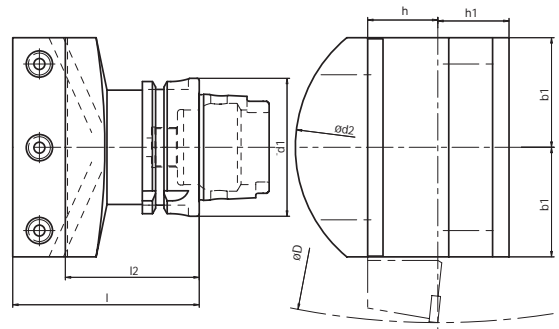
WERKZEUGHALTER MIT ZYLINDRISCHEM SCHAFT UND HSK KUPPLUNG
TOOLHOLDER WITH CYLINDRICAL SHANK AND HSK ATTACHMENT

PORTE-OUTIL AVEC QUEUE CYLINDRIQUE ET ATTAQUE HSK
PORTAUTENSILE A STELO CILINDRICO CON ATTACCO HSK



Code N.	Description	d	d1	d2	l1	l2
137-00003	H40ASTC40	40	40	50	80	12
137-00041	H50ASTC40	50	40	50	80	30
137-00104	H63ASTC50	63	50	63	160	36

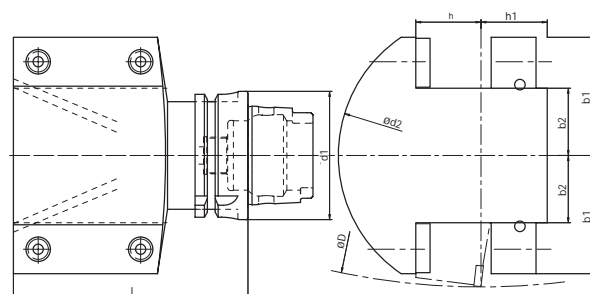
RADIAL WERKZEUGHALTER PORTE-OUTIL RADIAL
 RADIAL TOOLHOLDER PORTAUTENSILE RADIALE



Code N.	Description	d1	d2	D	b1	h	h1	l	l2
141-11408	H63ARAD32/25	63	130	340	50	32/25	32.5	85	50

ICTM standard (HSK-T)

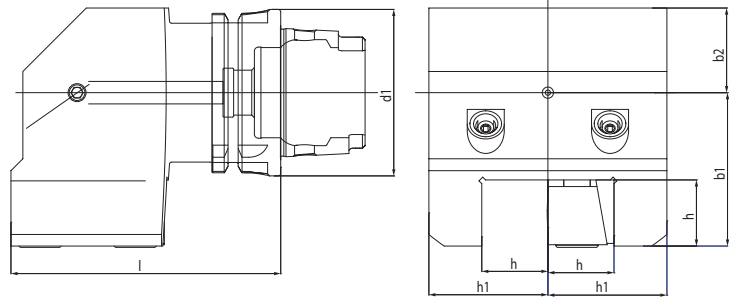
AXIAL WERKZEUGHALTER PORTE-OUTIL AXIAL
 AXIAL TOOLHOLDER PORTAUTENSILE ASSIALE



Code N.	Description	d	d2	D	b1	b2	h	h1	l
142-11405	H63AAX25/32	63	110	305	40	15	32/25	26.5	120
142-11406	H63AAX32/25	63	140	340	58	33	32/25	32.5	120

ICTM standard (HSK-T)

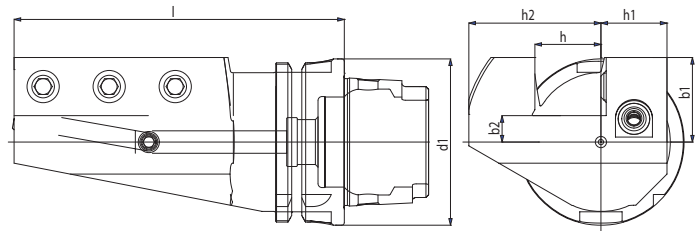
AXIAL WERKZEUGHALTER PORTE-OUTIL AXIAL
AXIAL TOOLHOLDER PORTAUTENSILE ASSIALE



Code N.	Description	d1	b1	b2	h	h1	l
142-11402	H63AAD25R	63	58	32	25	45	102
142-11607	H100AAD25R	100	48	53	25	57	119
142-11608	H100AALD25R	100	48	53	25	57	175

ICTM standard (HSK-T)

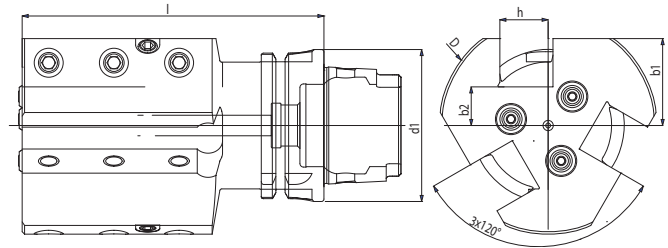
AXIAL WERKZEUGHALTER PORTE-OUTIL AXIAL
AXIAL TOOLHOLDER PORTAUTENSILE ASSIALE



Code N.	Description	d1	b1	b2	h	h1	h2	l
142-21401	H63AA25L	63	32	10	25	25	50	125
142-11403	H63AA25R	63	32	10	25	25	50	125
142-21601	H100AA25L	100	75.5	50.5	32	30	62	130
142-11601	H100AA25R	100	75.5	50.5	32	30	62	130
142-21604	HSK100ASL25X25	100	55	33	25	30	55	160
142-11603	HSK100ASR25X25	100	55	33	25	30	55	160
142-21603	HSK100ASL32X32	100	53	25	32	30	62	189
142-11604	HSK100ASR32X32	100	53	25	32	30	62	189

ICTM standard (HSK-T)

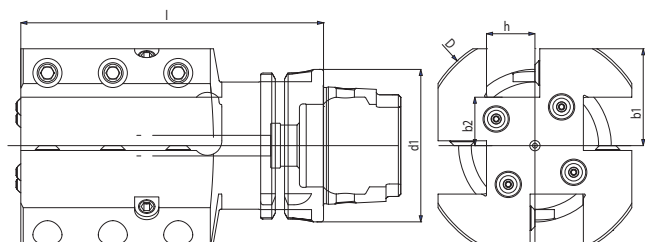
AXIAL WERKZEUGHALTER PORTE-OUTIL AXIAL
 AXIAL TOOLHOLDER PORTAUTENSILE ASSIALE



Code N.	Description	d1	D	b1	b2	h	l
142-21402	H63AAT20L	63	90	36	16	20	125
142-11404	H63AAT20R	63	90	36	16	20	125
142-21605	H100AAT25L	100	122	51	26	25	160
142-11605	H100AAT25R	100	122	51	26	25	160

ICTM standard (HSK-T)

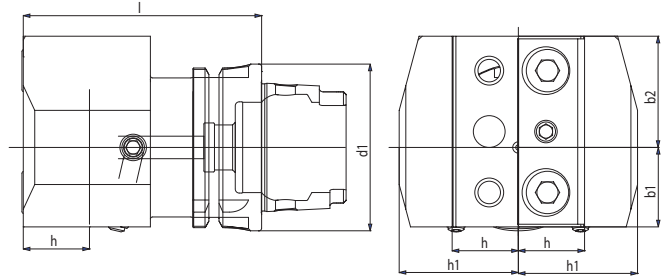
AXIAL WERKZEUGHALTER PORTE-OUTIL AXIAL
 AXIAL TOOLHOLDER PORTAUTENSILE ASSIALE



Code N.	Description	d1	D	b1	b2	h	l
142-21403	H63AAQ20L	63	95	40	20	20	125
142-21404	H63AAQ20R	63	95	40	20	20	125
142-21609	H100AAQ25L	100	122	51	26	25	160
142-11610	H100AAQ25R	100	122	51	26	25	160

ICTM standard (HSK-T)

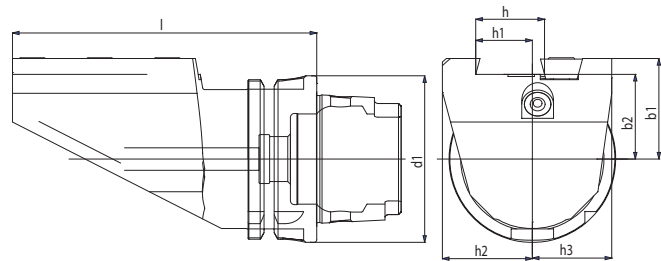
RADIAL WERKZEUGHALTER PORTE-OUTIL RADIAL
 RADIAL TOOLHOLDER PORTAUTENSILE RADIALE



Code N.	Description	d1	b1	b2	h	h1	l
141-11402	H63ARD25R	63	30	42	25	45	90
141-11602	H100ARD25R	100	20	65	25	57	146

ICTM standard (HSK-T)

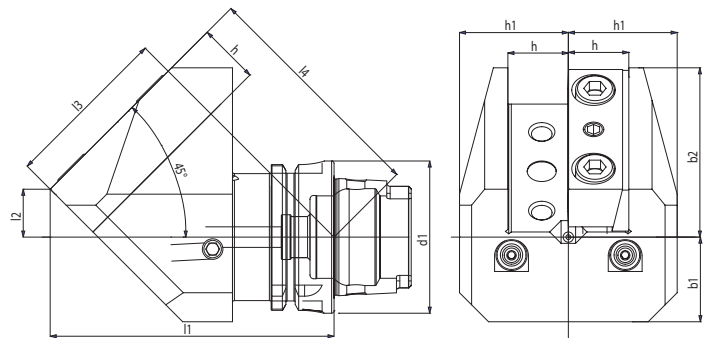
AXIAL ABSTECHMEISSELHALTER PORTE-OUTIL AXIAL DE TRONCONNAGE
 AXIAL TOOLHOLDER FOR CUT OFF TOOLS PORTAUTENSILE ASSIALE PER LAMA DA TAGLIO



Code N.	Description	d1	b1	b2	h	h1	h2	h3	l
147-51405	H63ASCA26L	63	38	32	26	21.4	34	30	115
147-51406	H63ASCA26R	63	38	32	26	21.4	34	30	115
147-51407	H63ASCA32L	63	38	32	32	25	38	33	150
147-51408	H63ASCA32R	63	38	32	32	25	38	33	150

ICTM standard (HSK-T)

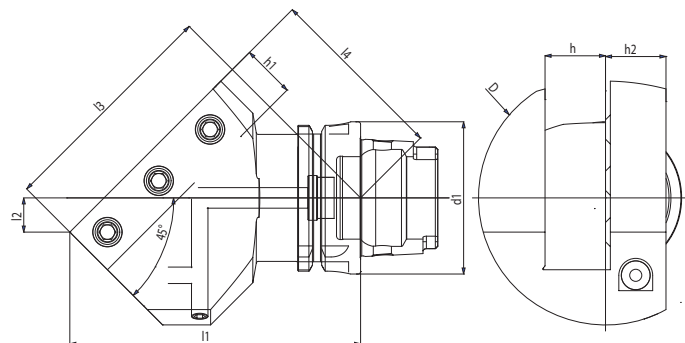
45° WERKZEUGHALTER PORTE-OUTIL 45°
45° TOOLHOLDER PORTAUTENSILE 45°



Code N.	Description	d1	b1	b2	h	h1	l1	l2	l3	l4
141-11405	H63AARD25L	63	35	70	25	45	117.4	19.8	69	97
141-11603	H100AARD25L	100	53	73	25	57	139.5	0	98.6	98.6

ICTM standard (HSK-T)

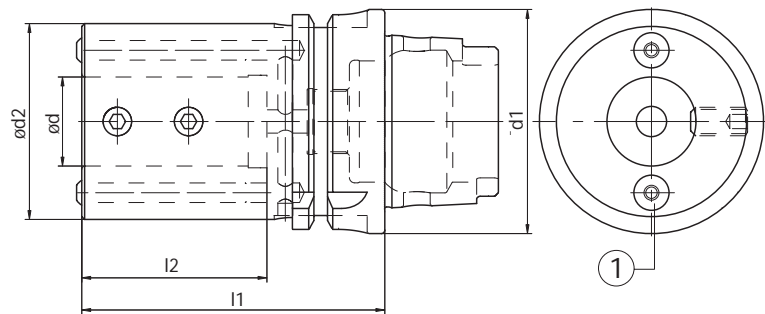
45° WERKZEUGHALTER PORTE-OUTIL 45°
45° TOOLHOLDER PORTAUTENSILE 45°




Code N.	Description	d1	D	h	h1	h2	l1	l2	l3	l4
141-11407	H63AAR25L	63	105	25	22	25	120	14.1	95	75
141-21401	H63AAR25R	63	105	25	22	25	120	14.1	95	75
141-11601	H100AAR25L	100	115	25	22	28	172.4	24	139	105

ICTM standard (HSK-T)

AXIAL BOHRSTANGENHALTER PORTE-OUTIL POUR BARRES D'ALEPAGE AXIAL
 AXIAL BORING BAR HOLDER PORTAUTENSILE PER BARENI, ASSIALE



Code N.	Description	d1	d	d2	l1	l2	Coolant noose
							
145-21101 *	H32AAX-E2x08	32	8	32	45	30	PWZ1008D8X06
145-21102 *	H32AAX-E2x10	32	10	34	45	30	PWZ1008D8X06
145-21103 *	H32AAX-E2x12	32	12	36	45	30	PWZ1008D8X06
145-21104 *	H32AAX-E2x16	32	16	40	50	35	PWZ1008D8X06
145-21201	H40AAX-E2x08	40	8	32	60	37	PWZ1008D8X06
145-21202	H40AAX-E2x10	40	10	34	60	37	PWZ1008D8X06
145-21203	H40AAX-E2x12	40	12	36	65	40	PWZ1008D8X06
145-21204	H40AAX-E2x16	40	16	40	70	42	PWZ1008D8X06
145-21205	H40AAX-E2x20	40	20	45	70	42	PWZ1008D10X7
145-21306	H50AAX-E2x10	50	10	38	75	45	PWZ1008D10X7
145-21307	H50AAX-E2x12	50	12	40	75	45	PWZ1008D10X7
145-21308	H50AAX-E2x16	50	16	45	80	50	PWZ1008D10X7
145-21309	H50AAX-E2x20	50	20	50	80	47	PWZ1008D10X7
145-21310	H50AAX-E2x25	50	25	55	85	50	PWZ1008D8X06
145-21402	H63AAX-E2x08	63	8	32	70	40	PWZ1008D10X7
145-21403	H63AAX-E2x10	63	10	38	75	45	PWZ1008D10X7
145-21404	H63AAX-E2x12	63	12	40	75	45	PWZ1008D10x7
145-21406	H63AAX-E2x16	63	16	45	80	50	PWZ1008D10x7
145-21408	H63AAX-E2x20	63	20	50	80	50	PWZ1008D10X7
145-21409	H63AAX-E2x25	63	25	55	85	52	PWZ1008D10X7
145-21410	H63AAX-E2x32	63	32	72	95	58	PWZ1008D10X7
145-21411	H63AAX-E2x40	63	40	80	120	72	PWZ1008D12X8
145-21606	H100AAX-E2x16	100	16	45	85	48	PWZ1008D12X8
145-21607	H100AAX-E2x20	100	20	50	85	48	PWZ1008D10X7
145-21601	H100AAX-E2x25	100	25	55	85	48	PWZ1008D10X7
145-21602	H100AAX-E2x32	100	32	72	95	58	PWZ1008D12X8
145-21603	H100AAX-E2x40	100	40	80	110	73	PWZ1008D12X8
145-21604	H100AAX-E2x50	100	50	90	120	82	PWZ1008D12X8

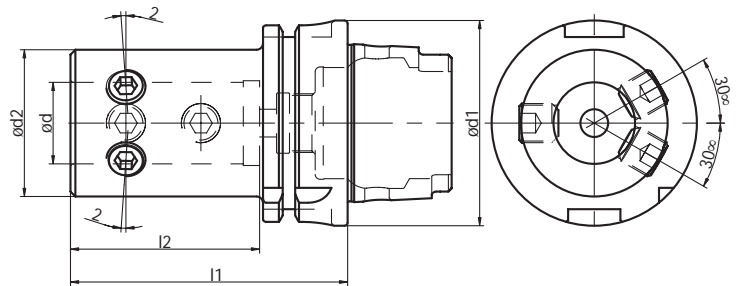
* HSK32 only type C

ICTM standard

Con refrigerante interno ed esterno - With internal and external coolant

AXIAL WERKZEUGHALTER FÜR WENDELPLATTENBOHRER
MIT INNERER KÜHLMITTELZUFUHR
AXIAL HOLDER FOR INDEXABLE INSERT DRILLS
WITH INTERNAL COOLANT SUPPLY

PORTE-OUTIL POUR FORETS A PLAQUETTES AVEC
ALIMENTATION INTERNE DU LIQUIDE D'ARROSAGE, AXIAL
PORTAUTENSILE PER PUNTE AD INSERTI CON
PASSAGGIO REFRIGERANTE INTERNO, ASSIALE



Code N.	Description	d1	d	d2	l1	l2
* 145-11101	H32AAX-E1x16	32	16	36	65	54
145-11201	H40AAX-E1x16	40	16	36	75	54
145-11202	H40AAX-E1x20	40	20	40	75	54
145-11301	H50AAX-E1x16	50	16	36	80	54
145-11302	H50AAX-E1x20	50	20	40	80	54
145-11303	H50AAX-E1x25	50	25	45	85	59
145-11406	H63AAX-E1x16	63	16	36	80	54
145-11408	H63AAX-E1x20	63	20	40	80	54
145-11409	H63AAX-E1x25	63	25	45	85	59
145-11410	H63AAX-E1x32	63	32	52	90	63
145-11411	H63AAX-E1x40	63	40	65	100	73
145-11604	H100AAX-E1x16	100	16	36	85	54
145-11605	H100AAX-E1x20	100	20	40	85	54
145-11601	H100AAX-E1x25	100	25	45	90	59
145-11602	H100AAX-E1x32	100	32	52	95	63
145-11603	H100AAX-E1x40	100	40	65	105	73

* HSK32 only type C

ICTM standard

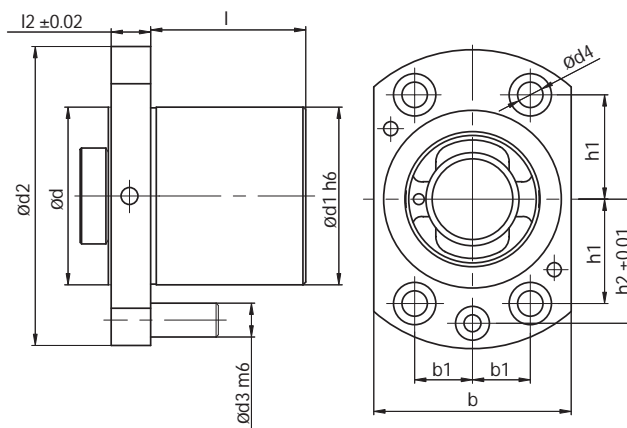
Für werkzeuge mit weldon oder whistle notch schaft

For weldon and whistle notch tools

Pour weldon et whistle notch outils

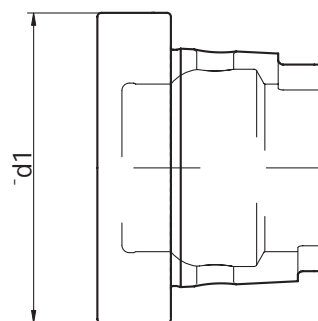
Per utensili weldon e whistle notch

EINSÄTZE MIT HSK KUPPLUNG ADAPTEUR AVEC ATTAQUE HSK
 ADAPTER WITH HSK ATTACHMENT BUSSOLA CON ATTACCO HSK



Code N.	d	d1	d2	d3	d4	l	l2	b	b1	h1	h2
H32ABSL	32	32	55	6	5.5	27	10	36	10.5	19.2	22
H40ABSL	40	40	68	8	6.5	33	12	45	13.5	23	27
H50ABSL	50	50	85	10	9	42	15	56	16	30	35
H63ABSL	63	63	106	12	9	55	15	70	20.5	37	44

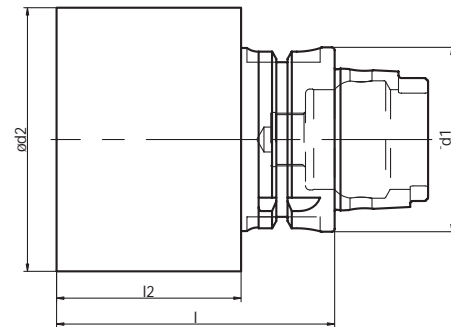
VERSCHLUSSDECKEL BOUCHON DE PROTECTION
 BLANKING PLUG TAPPO DI PROTEZIONE



Code N.	d1
H32ATP	32
H40ATP	40
H50ATP	50
H63ATP	63

ROHLINGE FÜR SONDERWERKZEUGE
BLANK TOOLHOLDER FOR SPECIAL TOOLS

EBAUCHES POUR PORTE-OUTILS SPECIAUX
SEMILAVORATI PER UTENSILI SPECIALI



Code N.	d1	d2	l	l2
H32A040110SML *	32	40	110	98
H32A050125SML *	32	50	125	113
H32A070065SML *	32	70	65	53
H32A090075SML *	32	90	75	63
H40A040095SML	40	40	95	71
H40A060160SML	40	60	160	136
H40A080075SML	40	80	75	51
H40A100085SML	40	100	85	61
H50A050125SML	50	50	125	94
H50A075170SML	50	75	170	139
H50A090080SML	50	90	80	49
H50A110090SML	50	110	90	59
H63A080190SML	63	80	190	158
H63A110085SML	63	110	85	53
H63A130095SML	63	130	95	63

* HSK32 only type C
ICTM standard

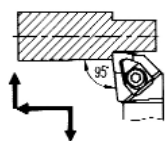
KANTER





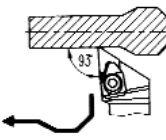
KLEMMHALTER/BOHRSTANGEN
TURNING TOOLS
PORTE-PLAQUETTES
PORTAINSERTI





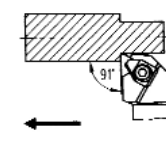
DCLN

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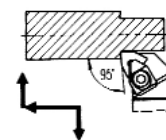
DDJN

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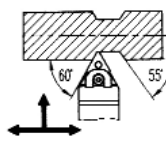
DTGN

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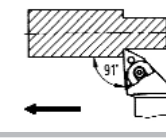
DWLN

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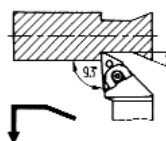
MTEN

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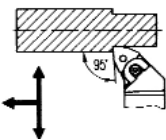
MTGN

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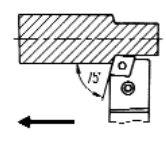
MTJN

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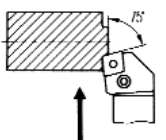
MWLN

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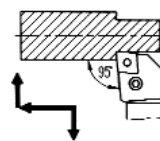
PCBN

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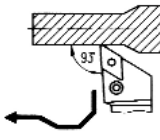
PCKN

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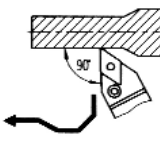
PCLN

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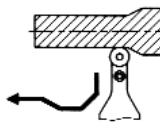
PDJN

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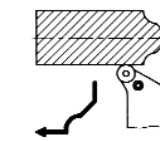
PDNN

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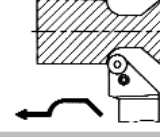
PRDC

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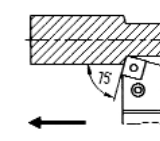
PRGC

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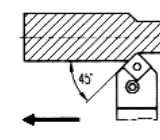
PRGN

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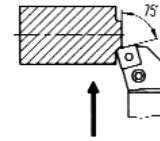
PSBN

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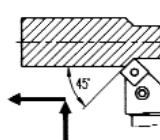
PSDN

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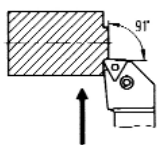
PSKN

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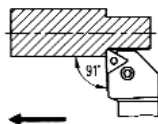
PSSN

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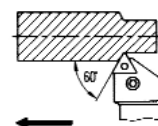
PTFN

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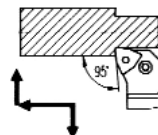
PTGN

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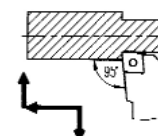
PTTN

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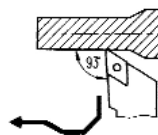
PWLN

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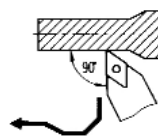
SCLC

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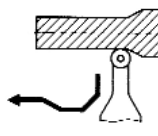
SDJC

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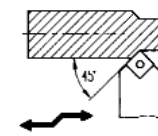
SDNC

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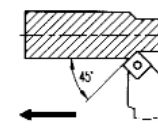
SRDC

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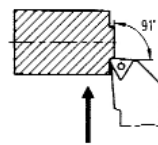
SSDC

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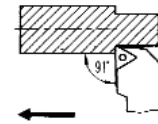
SSSC

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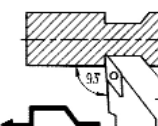
STFC

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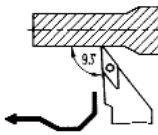
STGC

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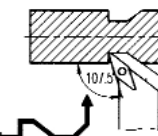
SVJB

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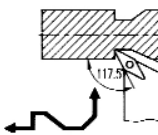
SVJC

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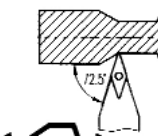
SVHB

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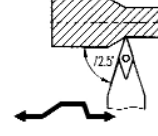
SVPB

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SVVB

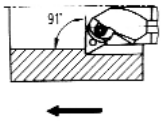
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SVVC

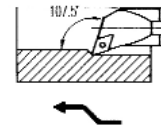
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BOHRSTANG FÜR INNENBEARBEITUNG BARRES D'ALEPAGE
 INTERNAL (I.D.) BORING BARS BARENI PER INTERNI



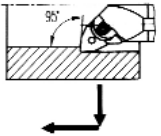
MTFN

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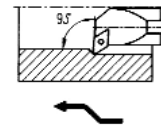
SDQC

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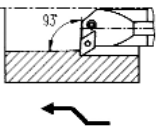
MWLN

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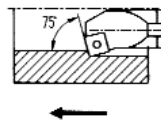
SDUC

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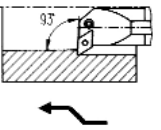
PCLN

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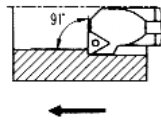
SSKC

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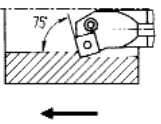
PDUN

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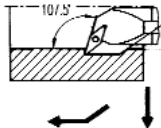
STFC

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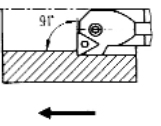
PSKN

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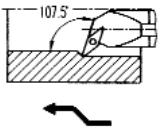
SVQB

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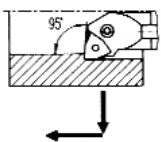
PTFN

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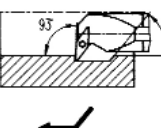
SVQC

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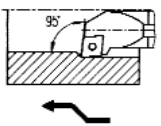
PWLN

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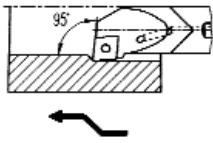
SVUB

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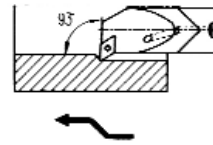
SCLC

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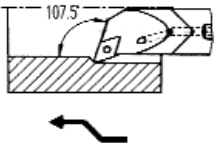
SCLC

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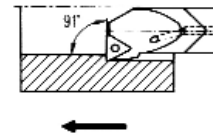
SDUC

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SDQC

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STFC

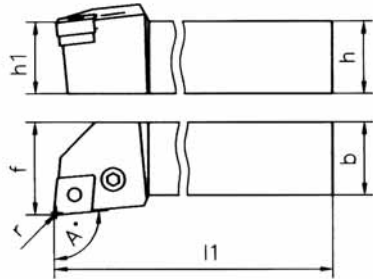
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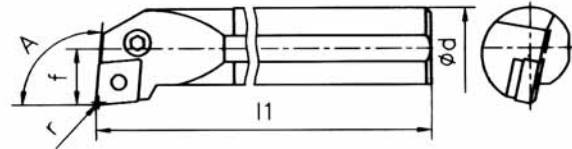
KINTEK DREHWERKZEUGE

TECHNISCHE DATEN

ISO5610 - Aussenbearbeitung



ISO5609 - Innenbearbeitung



TOLERANZEN

- h: h13
- b: h13
- d: g7
- f: +0/+0,5 (Aussenbearbeitung)
- f: -0/-0,25 (Innenbearbeitung)
- l1: k16
- h1: js13

- 1 Die Klemmhalter und Bohrstangen werden aus Vergütungsstahl hergestellt, Harte 43 HRC.
- 2 Der Kopf der HM-Bohrstangen wird auch aus Vergütungsstahl produziert.
- 3 Die Auflagefläche aller Drehwerkzeuge ist geschliffen

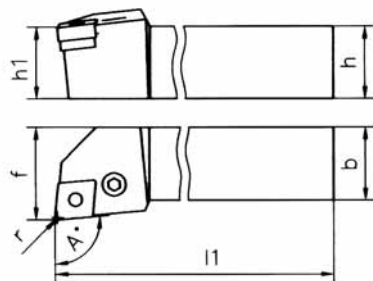
Innenkreis der WSPlatte	6,35	7,94	9,525	12,7	15,875	19,05	25,4
Radius r	0,4		0,8		1,2		2,4



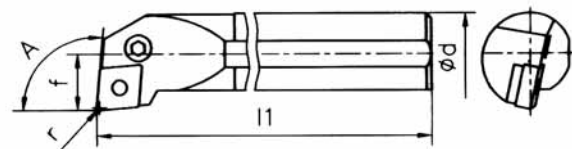
PORTE OUTILS DE TOURNAGE KINTEK

DONNEES TECHNIQUES

ISO5610 - A usage externe



ISO5609 - A usage interieur



TOLERANCE

- h: h13
- b: h13
- d: g7
- f: +0/+0,5 (à usage externe)
- f: -0/-0,25 (à usage interieur)
- l1: k16
- h1: js13

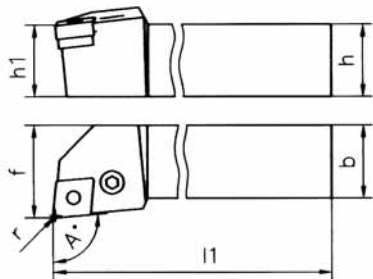
- 1 Le matériel utilisé pour les outils à usage externe et à usage interieur est: acier bonifié, dureté 43 HRC.
- 2 La tête des outils en carbure est fait en acier bonifié.
- 3 La partie plate des porte outils de tournage à usage externe est rectifié.

Cercle inscrit de la plaquette	6,35	7,94	9,525	12,7	15,875	19,05	25,4
Rayon r	0,4		0,8		1,2		2,4

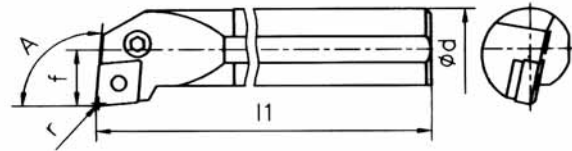
KINTEK TURNING TOOLS

TECHNICAL DATAS

ISO5610 - External turning tools



ISO5609 - Internal turning tools



TOLERANCE

h: h13
 b: h13
 d: g7
 f: +0/+0,5 (External)
 f: -0/-0,25 (Internal)
 l1: k16
 h1: js13

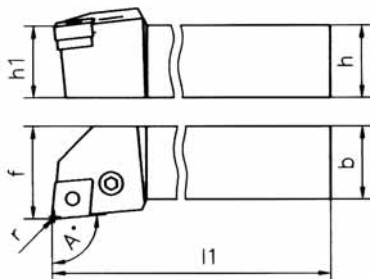
- 1 Turning tools for external and internal machining are produced of hardened steel with an hardness of 43 HRC.
- 2 The head of HM-Boring bars is made of hardened steel.
- 3 The face of turning tools for external is ground.

Inscribed circle of the insert	6,35	7,94	9,525	12,7	15,875	19,05	25,4
Radius r	0,4		0,8		1,2		2,4

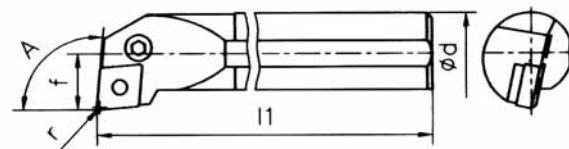
UTENSILI DI TORNITURA KINTEK

DATI TECNICI

ISO5610 - Per esterni



ISO5609 - Per interni



TOLLERANZE

h: h13
 b: h13
 d: g7
 f: +0/+0,5 (per esterni)
 f: -0/-0,25 (per interni)
 l1: k16
 h1: js13

- 1 Il materiale degli utensili per interni ed esterni è: acciaio bonificato, durezza 43 HRC.
- 2 La testa degli utensili in metallo duro è in acciaio bonificato.
- 3 Il piano di appoggio degli utensili per esterni è rettificato.

Cerchio inscritto dell'inserto	6,35	7,94	9,525	12,7	15,875	19,05	25,4
Raggio r	0,4		0,8		1,2		2,4



BEZEICHNUNG VON KLEMMHALTERN FÜR DIE AUSSENBEARBEITUNG
IDENTIFICATION OF THE EXTERNAL (O.D.) TURNING TOOLS

DESIGNATION DES PORTE-PLAQUETTES EXTERIEURES
IDENTIFICAZIONE DEI PORTA INSERTI PER ESTERNI

① M
Spannsystem
Clamping system
Système de serrage
Sistema di bloccaggio

② W
Plattenform
Insert Shape
Forme des plaquettes
Forma degli inserti

③ L
Austellwinkel
Shape of turning tools
Forme des porte-plaquettes
Forma dei portainseriti

90°	75°	90°	45°	60°	90°	90°	107.5°	93°	75°	95°
A	B	C	D	E	F	G	H	J	K	L
50°	63°	117.5°	15°	75°	45°	60°	93°	72.5°	60°	85°
M	N	P	Q	R	S	T	U	V	W	Y

④ N
Freiwinkel
Clearance angle
Angle de dépouil
Angolo di spoglio

M W L N R 25 25 M 08

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

⑤ R
Vorshubruchtung
Freeding direction
Sens de l'avance
Senso di avanzamento

⑥ 25
Schaffhöhe
Shank height
Hauteur des porte-plaquettes
Altezza portainserito

⑦ 25
Schaffbreite
Shank width
Largeur des porte-plaquettes
Larghezza portainserito

⑧ M
Werkzeuglänge
Total length
Longueur totale
Lunghezza totale

⑨ 08
Schneidkantenlänge
Insert cutting edge length
Longueur des arêtes des plaquettes
Lunghezza del profilo inserto

H (mm)		H (mm)	
A	32	M	150
B	40	N	160
C	50	P	170
D	60	Q	180
E	70	R	200
F	80	S	250
G	90	T	300
H	100	U	350
J	110	V	400
K	125	W	450
L	140	Y	500
		Z	600

BEZEICHNUNG VON KLEMMHALTERN FÜR INNENBEARBEITUNG
IDENTIFICATION OF THE INTERNAL (I.D.) BORING TOOLS

DESIGNATION DES BARRES D'ALEPAGE INTERIEURES
IDENTIFICAZIONE DEI BARENI PER INTERNI

① S
Konstruktion
Construction
Construction
Costruzione

A	Toll holder with oil hole Stell shank
C	Carbide shank
E	Toll holder with oil hole Carbide shank
S	Stell shank

② 25
Klemmhalterdurchmesser
Turning tools diameter
Diametre des porte-plaquettes
Diametro dei porta inserti

08	ø8
10	ø10
12	ø12
16	ø16
20	ø20
25	ø25
32	ø32
40	ø40
50	ø50

③ T
Werkzeuglänge
Total length
Longueur totale
Lunghezza totale

l _t (mm)	
F	80
H	100
K	125
M	150
P	170
Q	180
R	200
X	225
S	250
T	300
U	350
V	400
W	450
Z	600

④ P
Spannsystem
Clamping system
Système de serrage
Sistema di bloccaggio

S	25	T	P	D	U	N	R	11
①	②	③	④	⑤	⑥	⑦	⑧	⑨

⑤ D
Platteform
Insert Shape
Forme des plaquettes
Forma degli inserti

C	80°
D	55°
S	□
T	△
V	35°
W	80°

⑥ U
Austellwinkel
Shape of turning tools
Forme des porte-plaquettes
Forma dei portainseriti

90°	F
75°	K
95°	L
117.5°	P
107.5°	Q
93°	U

⑦ N
Freiwinkel
Clearance angle
Angle de depouil
Angolo di spoglia

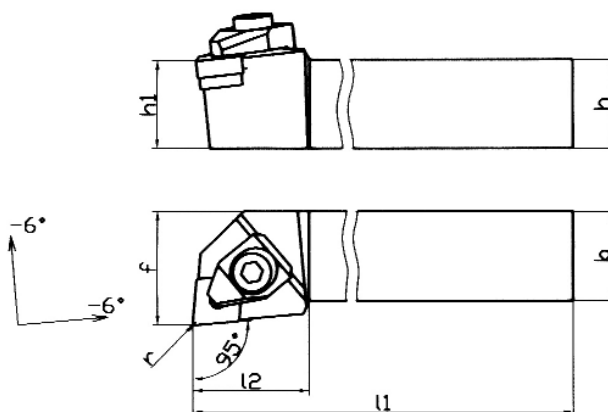
B	5°
C	T
N	0°
P	11°

⑧ R
Vorschubrichtung
Freeding direction
Sens de l'avance
Senso di avanzamento

⑨ 11
Schneidkantenlänge
Insert cutting edge length
Longueur des arêtes des plaquettes
Lunghezza del profilo inserto

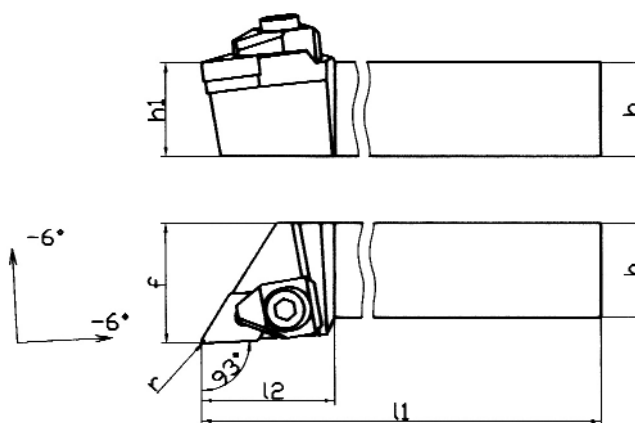
C D V
S I
T I
W I

DCLN



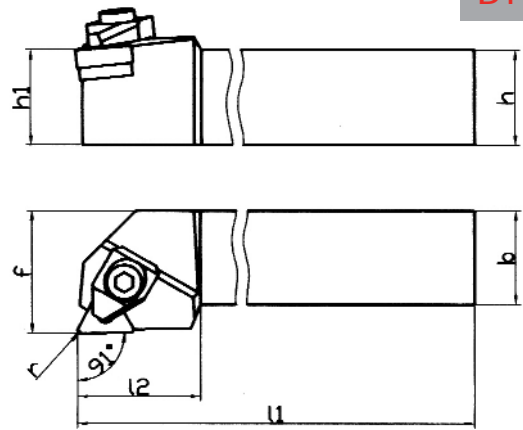
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Shim pin	Clamp	Spring	Screw
DCLNR/L 1616H09	16	16	100	25	16	20	0.8	CNM.0903..	SPCN09	SP01	STF11R/L	M1	VT21
DCLNR/L 2020K09	20	20	125	27	20	25	0.8	CNM.0903..	SPCN09	SP01	STF11R/L	M1	VT21
DCLNR/L 2525M09	25	25	150	32	25	32	0.8	CNM.0903..	SPCN09	SP01	STF11R/L	M1	VT21
DCLNR/L 2020K12	20	20	125	27	20	25	0.8	CNM.1204..	SPCN12	SP02	STF12R/L	M2	VT22
DCLNR/L 2525M12	25	25	150	32	25	32	0.8	CNM.1204..	SPCN12	SP02	STF12R/L	M2	VT22
DCLNR/L 3225P12	32	25	170	32	32	32	0.8	CNM.1204..	SPCN12	SP02	STF12R/L	M2	VT22
DCLNR/L 3225P16	32	25	170	34	32	32	1.2	CNM.1606..	SPCN16	SP03	STF12R/L-M	M2	VT22
DCLNR/L 3225P19	32	25	170	42	32	32	1.2	CNM.1906..	SPCN19	SP04		STF16	

DDJN



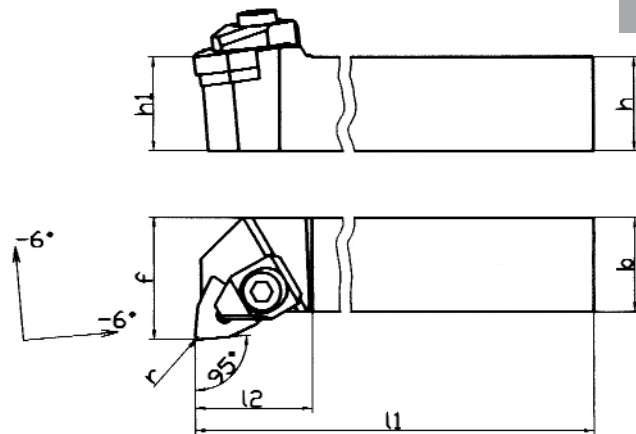
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Shim pin	Clamp	Spring	Screw
DDJNR/L 1616H11	16	16	100	30	16	20	0.8	DNM.1104..	SPDN11	SP05	STF11R/L	M1	VT21
DDJNR/L 2020K11	20	20	125	27	20	25	0.8	DNM.1104..	SPDN11	SP05	STF11R/L	M1	VT21
DDJNR/L 2525M11	25	25	150	32	25	32	0.8	DNM.1104..	SPDN11	SP05	STF11R/L	M1	VT21
DDJNR/L 3225P11	32	25	170	32	32	32	0.8	DNM.1104..	SPDN11	SP05	STF11R/L	M1	VT21
DDJNR/L 2020K15	20	20	125	34	20	25	0.8	DNM.1506..	SPDN15	SP02	STF12R/L	M2	VT22
DDJNR/L 2525M15	25	25	150	38	25	32	0.8	DNM.1506..	SPDN15	SP02	STF12R/L	M2	VT22
DDJNR/L 3225P15	32	25	170	32	32	32	0.8	DNM.1506..	SPDN15	SP02	STF12R/L	M2	VT22

DTGN



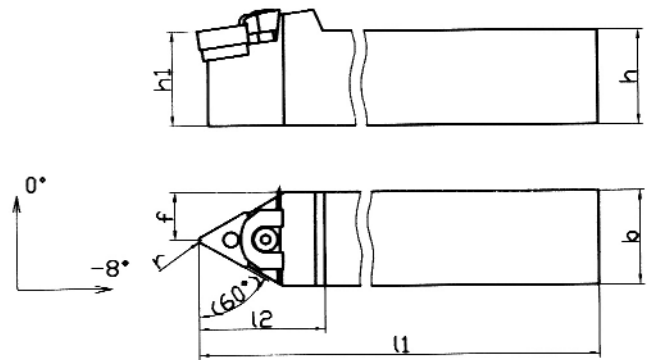
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Shim pin	Clamp	Spring	Screw
DTGNR/L 1616H16	16	16	100	25	16	20	0.8	TNM.1604..	SPTN16	SP05	STF11R/L	M1	VT21
DTGNR/L 2020K16	20	20	125	27	20	25	0.8	TNM.1604..	SPTN16	SP05	STF11R/L	M1	VT21
DTGNR/L 2525M16	25	25	150	32	25	32	0.8	TNM.1604..	SPTN16	SP05	STF11R/L	M1	VT21
DTGNR/L 3225P16	32	25	170	32	32	32	0.8	TNM.1604..	SPTN16	SP05	STF11R/L	M1	VT21
DTGNR/L 3225P22	32	25	170	34	32	32	0.8	TNM.2204..	SPTN22	SP02	STF12R/L	M2	VT22

DWLN



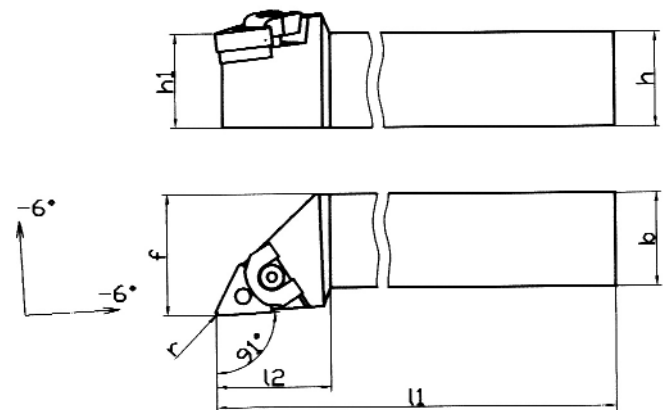
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Shim pin	Clamp	Spring	Screw
DWLNLR/L 1616H06	16	16	100	28	16	20	0.8	WNM.0604..	SPWN06	SP05	STF11R/L	M1	VT21
DWLNLR/L 2020K06	20	20	125	27	20	25	0.8	WNM.0604..	SPWN06	SP05	STF11R/L	M1	VT21
DWLNLR/L 2525M06	25	25	150	32	25	32	0.8	WNM.0604..	SPWN06	SP05	STF11R/L	M1	VT21
DWLNLR/L 2020K08	20	20	125	27	20	25	0.8	WNM.0804..	SPWN08	SP02	STF12R/L	M2	VT22
DWLNLR/L 2525M08	25	25	150	32	25	32	0.8	WNM.0804..	SPWN08	SP02	STF12R/L	M2	VT22
DWLNLR/L 3225P08	32	25	170	32	32	32	0.8	WNM.0804..	SPWN08	SP02	STF12R/L	M2	VT22

MTEN



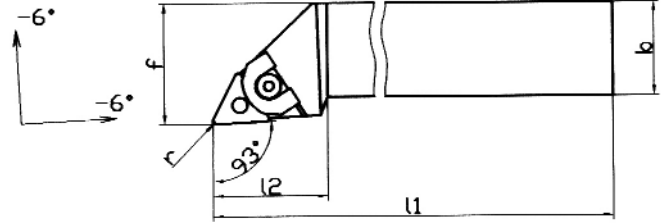
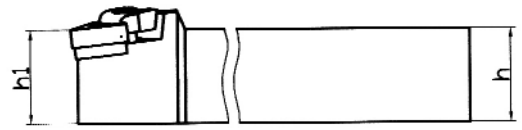
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Clamp	Pin	Screw
MTENN 2525M16	25	25	150	33	25	12.5	0.8	TN..1604..	MSPTN16	STF02	PER02	VT14
MTENN 3225P16	32	25	170	33	32	12.5	0.8	TN..1604..	MSPTN16	STF02	PER02	VT14
MTENN 3232P16	32	32	170	33	32	16	0.8	TN..1604..	MSPTN16	STF02	PER02	VT14
MTENN 2525M22	25	25	150	35	25	12.5	0.8	TN..2204..	MSPTN22	STF04	PER03	VT16
MTENN 3225P22	32	25	170	35	32	12.5	0.8	TN..2204..	MSPTN22	STF04	PER03	VT16
MTENN 3232P22	32	32	170	35	32	16	0.8	TN..2204..	MSPTN22	STF04	PER03	VT16





MTGN



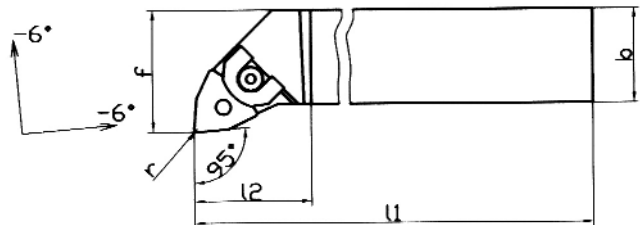
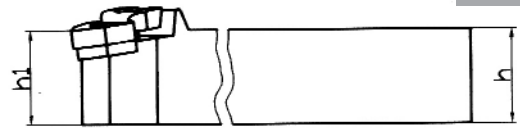
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Clamp	Pin	Screw
MTGNR/L 2525M22	25	25	150	35	25	32	0.8	TN..2204..	MSPTN22	STF04	PER03	VT16
MTGNR/L 3225P22	32	25	170	35	32	32	0.8	TN..2204..	MSPTN22	STF04	PER03	VT16
MTGNR/L 3232P22	32	32	170	35	32	40	0.8	TN..2204..	MSPTN22	STF04	PER03	VT16





MTJN



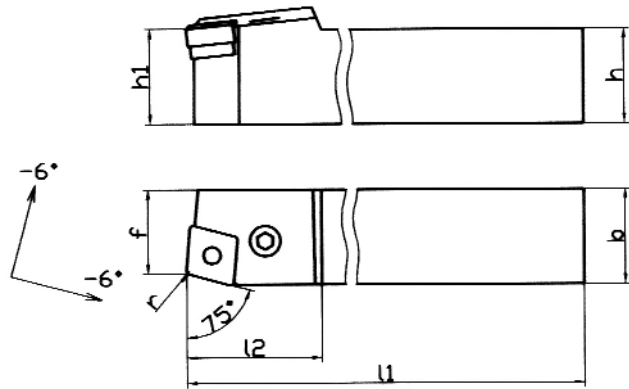
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Clamp	Pin	Screw
												
MTJNR/L 2020K16	20	20	125	30	20	25	0.8	TN..1604..	MSPTN16	STF01	PER02	VT14
MTJNR/L 2525M16	25	25	150	30	25	32	0.8	TN..1604..	MSPTN16	STF01	PER02	VT14
MTJNR/L 3225P16	32	25	170	30	32	32	0.8	TN..1604..	MSPTN16	STF01	PER02	VT14
MTJNR/L 2525M22	25	25	150	35	25	32	0.8	TN..2204..	MSPTN22	STF04	PER03	VT16
MTJNR/L 3225P22	32	25	170	35	32	32	0.8	TN..2204..	MSPTN22	STF04	PER03	VT16
MTJNR/L 3232P22	32	32	170	35	32	40	0.8	TN..2204..	MSPTN22	STF04	PER03	VT16
MTJNR/L 4025M22	40	25	150	39	40	32	0.8	TN..2204..	MSPTN22	STF04	PER03	VT16

MWLN



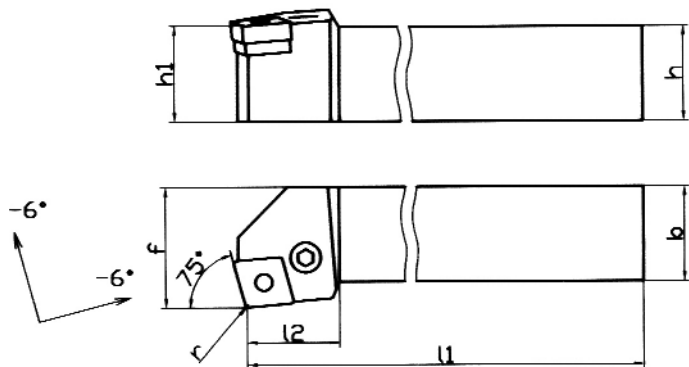
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Clamp	Pin	Screw
												
MWLNLR/L 2020K08	20	20	125	31	20	25	0.8	WN..0804..	MSPWN08	STF10	PER03	VT16
MWLNLR/L 2525M08	25	25	150	31	25	32	0.8	WN..0804..	MSPWN08	STF10	PER03	VT16
MWLNLR/L 3225P08	32	25	170	31	32	32	0.8	WN..0804..	MSPWN08	STF10	PER03	VT16
MWLNLR/L 3232P08	32	32	170	31	32	40	0.8	WN..0804..	MSPWN08	STF10	PER03	VT16

PCBN



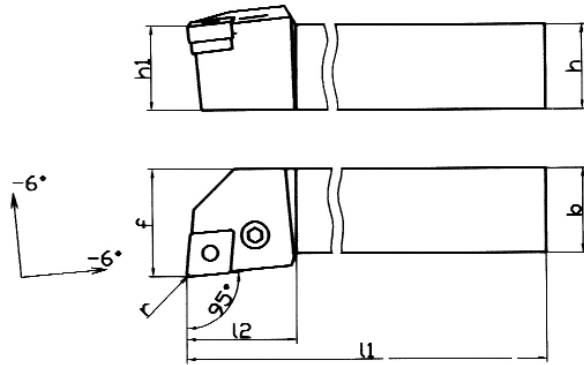
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
PCBNR/L 1616H09	16	16	100	23	16	13	0.8	CNM.0903..	SPCN09	SP01	LV01	VT01
PCBNR/L 2020K09	20	20	125	29	20	17	0.8	CNM.0903..	SPCN09	SP01	LV01	VT01
PCBNR/L 2020K12	20	20	125	29	20	17	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
PCBNR/L 2525M12	25	25	150	37	25	22	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
PCBNR/L 3225P12	32	25	170	37	32	22	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
PCBNR/L 2525M16	25	25	150	37	25	22	1.2	CNM.1606..	SPCN16	SP03	LV03	VT03
PCBNR/L 3225P16	32	25	170	37	32	22	1.2	CNM.1606..	SPCN16	SP03	LV03	VT03
PCBNR/L 3232P16	32	32	170	43	32	27	1.2	CNM.1606..	SPCN16	SP03	LV03	VT03
PCBNR/L 3232P19	32	32	170	43	32	27	1.2	CNM.1906..	SPCN19	SP09	LV04	VT04
PCBNR/L 4040S19	40	40	250	41	40	35	1.2	CNM.1906..	SPCN19	SP09	LV04	VT04

PCKN



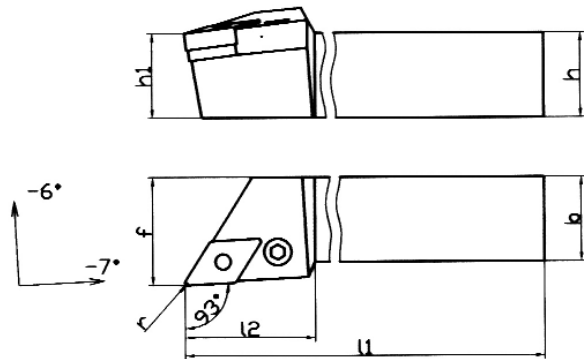
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
PCKNR/L 2020K12	20	20	125	24	20	25	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
PCKNR/L 2525M12	25	25	150	26	25	32	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
PCKNR/L 3225P12	32	25	170	35	32	32	0.8	CNM.1204..	SPCN12	SP02	LV02	VT02
PCKNR/L 3225P16	32	25	170	35	32	32	1.2	CNM.1606..	SPCN16	SP03	LV03	VT03
PCKNR/L 3225P19	32	25	170	35	32	32	1.2	CNM.1906..	SPCN19	SP09	LV04	VT04
PCKNR/L 3232P19	32	32	170	35	32	40	1.2	CNM.1906..	SPCN19	SP09	LV04	VT04
PCKNR/L 4040S19	40	40	250	35	40	50	1.2	CNM.1906..	SPCN19	SP09	LV04	VT04

PCLN



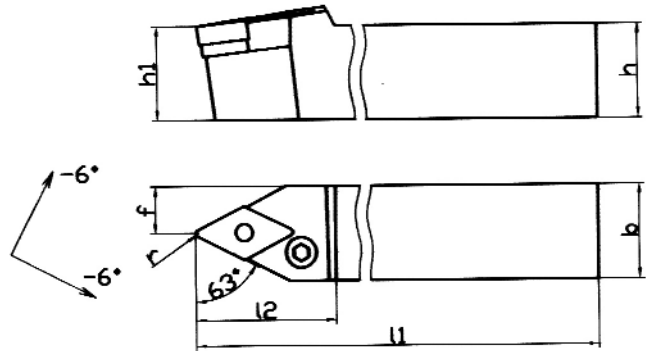
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
PCLNR/L 1616H09	16	16	100	26	16	20	0.8	CNM.0903..				
PCLNR/L 2020K09	20	20	125	28	20	25	0.8	CNM.0903..				
PCLNR/L 2525M09	25	25	150	33	25	32	0.8	CNM.0903..				
PCLNR/L 1616H12	16	16	100	26	16	20	0.8	CNM.1204..				
PCLNR/L 2020K12	20	20	125	28	20	25	0.8	CNM.1204..				
PCLNR/L 2525M12	25	25	150	33	25	32	0.8	CNM.1204..				
PCLNR/L 3225P12	32	25	170	33	32	32	0.8	CNM.1204..				
PCLNR/L 2525M16	25	25	150	33	25	32	1.2	CNM.1606..				
PCLNR/L 3225P16	32	25	170	33	32	32	1.2	CNM.1606..				
PCLNR/L 3232P16	32	32	170	39	32	40	1.2	CNM.1606..				
PCLNR/L 4040S16	40	40	250	39	40	50	1.2	CNM.1606..				
PCLNR/L 2525M19	25	25	150	39	25	32	1.2	CNM.1906..				
PCLNR/L 3225P19	32	25	170	39	32	32	1.2	CNM.1906..				
PCLNR/L 3232P19	32	32	170	39	32	40	1.2	CNM.1906..				
PCLNR/L 4040S19	40	40	250	39	40	50	1.2	CNM.1906..				





PDJN



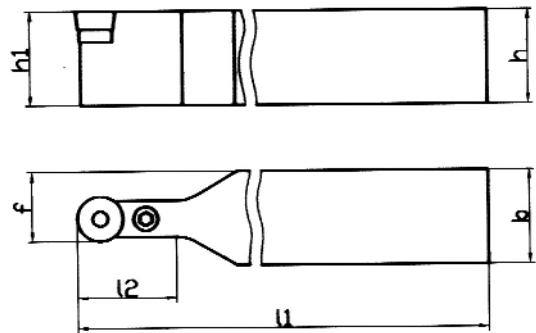
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
PDJNR/L 1616H11	16	16	100	31	16	20	0.8	DNM.1104..				
PDJNR/L 2020K11	20	20	125	28	20	25	0.8	DNM.1104..				
PDJNR/L 2525M11	25	25	150	33	25	32	0.8	DNM.1104..				
PDJNR/L 2020K15	20	20	125	35	20	25	0.8	DNM.1506..				
PDJNR/L 2525M15	25	25	150	39	25	32	0.8	DNM.1506..				
PDJNR/L 3225P15	32	25	170	33	32	32	0.8	DNM.1506..				
PDJNR/L 3232P15	32	32	170	39	32	40	0.8	DNM.1506..				
PDJNR/L 4025R15	40	25	200	39	40	32	0.8	DNM.1506..				





PDNN



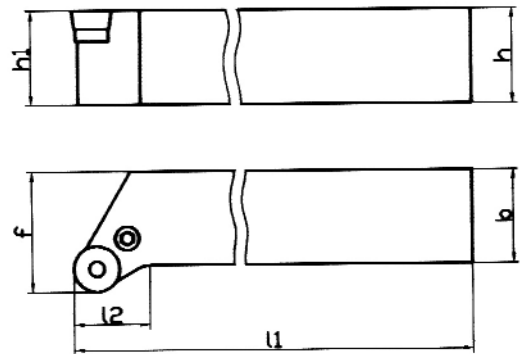
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
												
PDNNR/L 2020K15	20	20	125	37	20	10	0.8	DNM.1506..	SPDN15	SP02	LV05	VT05
PDNNR/L 2525M15	25	25	150	37	25	12.5	0.8	DNM.1506..	SPDN15	SP02	LV05	VT05
PDNNR/L 3225P15	32	25	170	37	32	12.5	0.8	DNM.1506..	SPDN15	SP02	LV05	VT05
PDNNR/L 4025M15	40	25	150	37	40	12.5	0.8	DNM.1506..	SPDN15	SP02	LV05	VT05
PDNNR/L 5032P15	50	32	170	36	50	16	0.8	DNM.1506..	SPDN15	SP02	LV05	VT05

PRDC



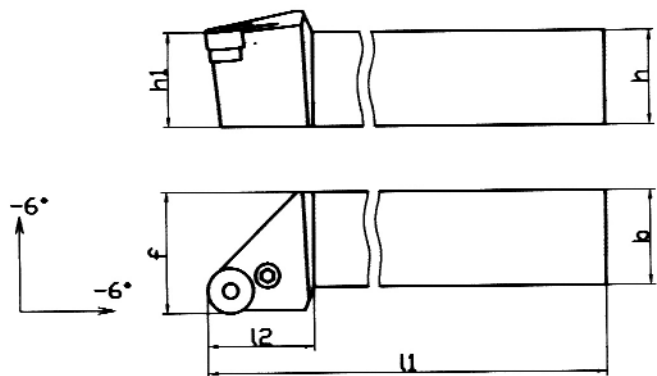
Code N.	h	b	l1	l2	h1	f	Inserts N.	Support pad	Shim pin	Lever	Screw
											
PRDCN 2020K10	20	20	125	21	20	15	RCM.100300.	SPRC10	SP01	LV07	VT07
PRDCN 2525M10	25	25	150	21	25	17.5	RCM.100300.	SPRC10	SP01	LV07	VT07
PRDCN 2525M12	25	25	150	26	25	18.5	RCM.120400.	SPRC12	SP01	LV08	VT01
PRDCN 3225Q12	32	25	180	26	32	18.5	RCM.120400.	SPRC12	SP01	LV08	VT01
PRDCN 3225Q16	32	25	180	31	32	20.5	RCM.160600.	SPRC16	SP07	LV10	VT08
PRDCN 3232P20	32	32	170	36	32	26	RCM.200600.	SPRC20	SP03	LV09	VT09

PRGC



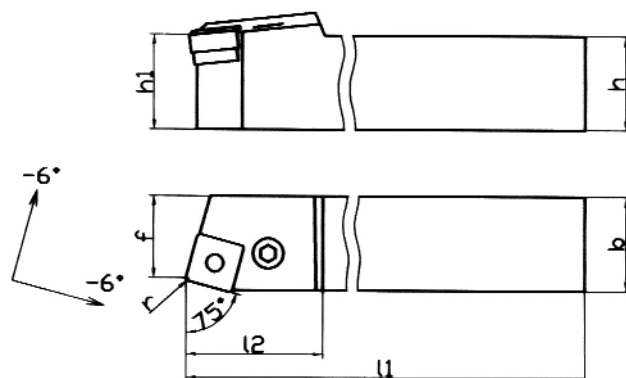
Code N.	h	b	l1	l2	h1	f	Inserts N.	Support pad	Shim pin	Lever	Screw
PRGCR/L 2020K10	20	20	125	16	20	25	RCM.100300.				
PRGCR/L 2525M10	25	25	150	24	25	32	RCM.100300.				
PRGCR/L 2020K12	20	20	125	17	20	25	RCM.120400.				
PRGCR/L 2525M12	25	25	150	20	25	32	RCM.120400.				
PRGCR/L 3225P12	32	25	170	20	32	32	RCM.120400.				
PRGCR/L 2525M16	25	25	150	23	25	32	RCM.160600.				
PRGCR/L 3225P16	32	25	170	23	32	32	RCM.160600.				
PRGCR/L 3225P20	32	25	170	26	32	32	RCM.200600.				
PRGCR/L 3232P20	32	32	170	27	32	40	RCM.200600.				

PRGN



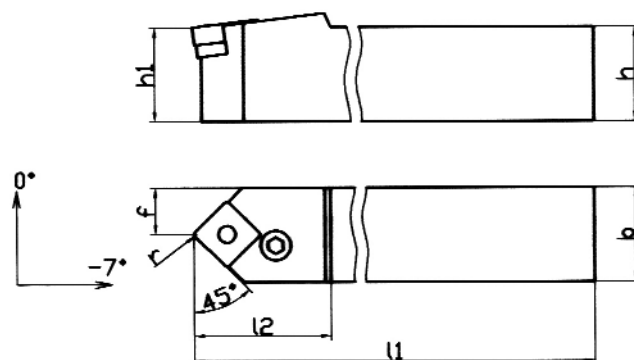
Code N.	h	b	l1	l2	h1	f	Inserts N.	Support pad	Shim pin	Lever	Screw
PRGNR/L 2020K09	20	20	125	21	20	25	RNM.090300.				
PRGNR/L 2525M12	25	25	150	28	25	32	RNM.120400.				
PRGNR/L 3225P15	32	25	170	35	32	32	RNM.150600.				
PRGNR/L 3232P19	32	32	170	39	32	40	RNM.190600.				
PRGNR/L 4040S25	40	40	250	44	40	50	RNM.250900.				

PSBN



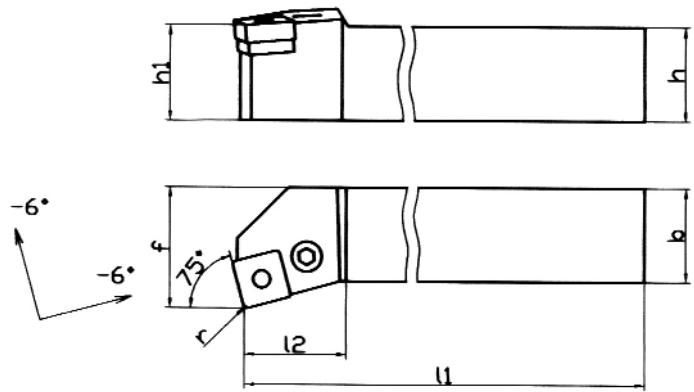
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
PSBNR/L 1616H09	16	16	100	23	16	13	0.8	SNM.0903..				
PSBNR/L 2020K09	20	20	125	29	20	17	0.8	SNM.0903..	SPSN09	SP01	LV01	VT01
PSBNR/L 2020K12	20	20	125	29	20	17	0.8	SNM.1204..	SPSN12	SP02	LV02	VT02
PSBNR/L 2525M12	25	25	150	37	25	22	0.8	SNM.1204..	SPSN12	SP02	LV02	VT02
PSBNR/L 3225P12	32	25	170	37	32	22	0.8	SNM.1204..	SPSN12	SP02	LV02	VT02
PSBNR/L 2525M15	25	25	150	37	25	22	1.2	SNM.1506..	SPSN15	SP03	LV03	VT03
PSBNR/L 3225P15	32	25	170	37	32	22	1.2	SNM.1506..	SPSN15	SP03	LV03	VT03
PSBNR/L 3232P15	32	32	170	43	32	27	1.2	SNM.1506..	SPSN15	SP03	LV03	VT03
PSBNR/L 3232P19	32	32	170	43	32	27	1.2	SNM.1906..	SPSN19	SP09	LV04	VT04
PSBNR/L 4040S19	40	40	250	43	40	35	1.2	SNM.1906..	SPSN19	SP09	LV04	VT04
PSBNR/L 4040S25	40	40	250	51	40	35	2.4	SNM.2507..	SPSN25	SP08	LV15	VT13

PSDN



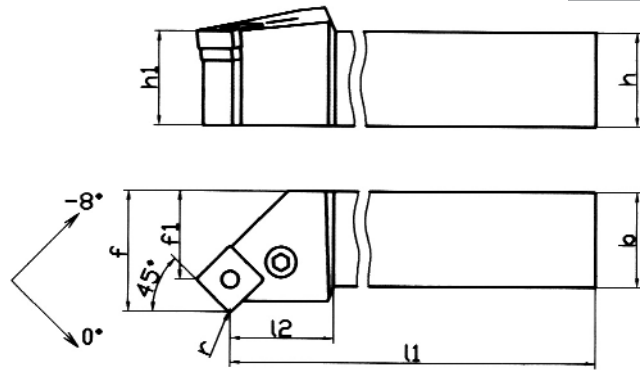
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
PSDNN 1212F09	12	12	80	21	12	6	0.8	SNM.0903..	-	-	LV12	VT06
PSDNN 1616H09	16	16	100	23	16	8	0.8	SNM.0903..	SPSN09	SP01	LV01	VT01
PSDNN 2020K12	20	20	125	29	20	10	0.8	SNM.1204..	SPSN12	SP02	LV02	VT02
PSDNN 2525M12	25	25	150	37	25	12.5	0.8	SNM.1204..	SPSN12	SP02	LV02	VT02
PSDNN 3225P12	32	25	170	37	32	12.5	0.8	SNM.1204..	SPSN12	SP02	LV02	VT02
PSDNN 3225P19	32	25	170	37	32	12.5	1.2	SNM.1906..	SPSN19	SP09	LV04	VT04
PSDNN 3232P19	32	32	170	43	32	16	1.2	SNM.1906..	SPSN19	SP09	LV04	VT04
PSDNN 4040S25	40	40	250	51	40	20	2.4	SNM.2507..	SPSN25	SP08	LV15	VT13

PSKN



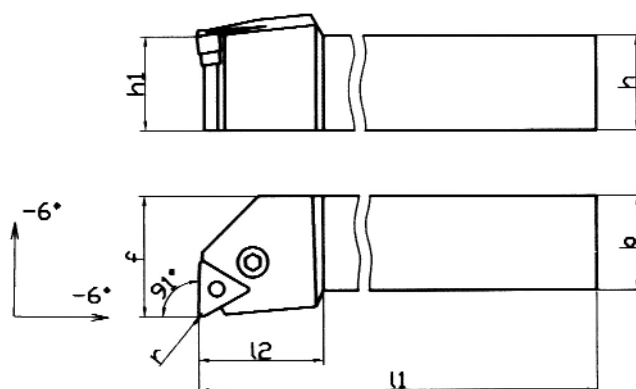
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
PSKNR/L 1616H09	16	16	100	17	16	20	0.8	SNM.0903..	SPSN09	SP01	LV01	VT01
PSKNR/L 2020K12	20	20	125	24	20	25	0.8	SNM.1204..	SPSN12	SP02	LV02	VT02
PSKNR/L 2525M12	25	25	150	26	25	32	0.8	SNM.1204..	SPSN12	SP02	LV02	VT02
PSKNR/L 3225P12	32	25	170	33	32	32	0.8	SNM.1204..	SPSN12	SP02	LV02	VT02
PSKNR/L 2525M15	25	25	150	26	25	32	1.2	SNM.1506..	SPSN15	SP03	LV03	VT03
PSKNR/L 3225P15	32	25	170	33	32	32	1.2	SNM.1506..	SPSN15	SP03	LV03	VT03
PSKNR/L 3232P15	32	32	170	35	32	40	1.2	SNM.1506..	SPSN15	SP03	LV03	VT03
PSKNR/L 3232P19	32	32	170	35	32	40	1.2	SNM.1906..	SPSN19	SP09	LV04	VT04
PSKNR/L 4040S19	40	40	250	35	40	50	1.2	SNM.1906..	SPSN19	SP09	LV04	VT04

PSSN



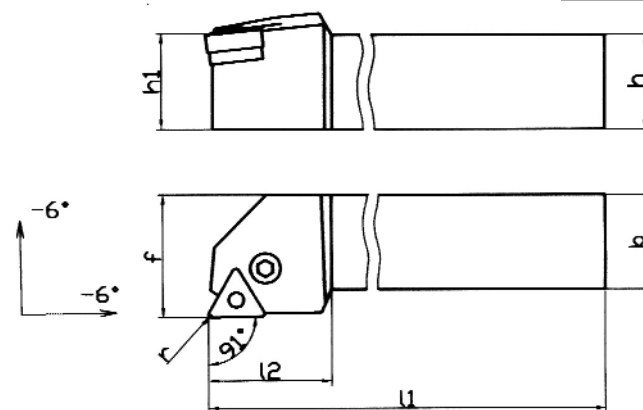
Code N.	h	b	l1	l2	h1	f	f1	r	Inserts N.	Support pad	Shim pin	Lever	Screw
PSSNR/L 1616H09	16	16	100	17	16	20	14	0.8	SNM.0903..	SPSN09	SP01	LV01	VT01
PSSNR/L 2020K09	20	20	125	22	20	25	19	0.8	SNM.0903..	SPSN09	SP01	LV01	VT01
PSSNR/L 2020K12	20	20	125	22	20	25	17	0.8	SNM.1204..	SPSN12	SP02	LV02	VT02
PSSNR/L 2525M12	25	25	150	25	25	32	24	0.8	SNM.1204..	SPSN12	SP02	LV02	VT02
PSSNR/L 3225P12	32	25	170	25	32	32	24	0.8	SNM.1204..	SPSN12	SP02	LV02	VT02
PSSNR/L 2525M15	25	25	150	25	25	32	21	1.2	SNM.1506..	SPSN15	SP03	LV03	VT03
PSSNR/L 3225P15	32	25	170	25	32	32	21	1.2	SNM.1506..	SPSN15	SP03	LV03	VT03
PSSNR/L 3232P15	32	32	170	25	32	40	24	1.2	SNM.1506..	SPSN15	SP03	LV03	VT03
PSSNR/L 3232P19	32	32	170	29	32	40	26	1.2	SNM.1906..	SPSN19	SP09	LV04	VT04
PSSNR/L 4040S19	40	40	250	29	40	50	40	1.2	SNM.1906..	SPSN19	SP09	LV04	VT04

PTFN



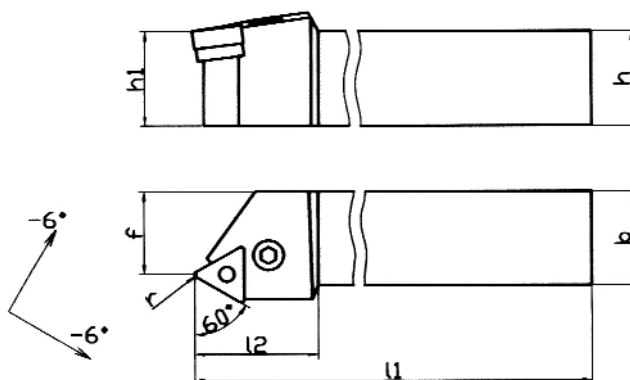
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
PTFNR/L 1010E11	10	10	70	16	10	15	0.4	TNM.1103..	-	-	LV06	VT06
PTFNR/L 1212F11	12	12	80	23	12	16	0.4	TNM.1103..	-	-	LV06	VT06
PTFNR/L 1616H11	16	16	100	26	16	20	0.4	TNM.1103..	-	-	LV06	VT06
PTFNR/L 1616H16	16	16	100	26	16	20	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01
PTFNR/L 2020K16	20	20	125	28	20	25	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01
PTFNR/L 2525M16	25	25	150	33	25	32	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01
PTFNR/L 2525M22	25	25	150	33	25	32	0.8	TNM.2204..	SPTN22	SP02	LV02	VT02
PTFNR/L 3225P22	32	25	170	33	32	32	0.8	TNM.2204..	SPTN22	SP02	LV02	VT02
PTFNR/L 3232P27	32	32	170	39	32	40	1.2	TNM.2706..	SPTN27	SP03	LV14	VT09
PTFNR/L 4040S27	40	40	250	39	40	50	1.2	TNM.2706..	SPTN27	SP03	LV14	VT09

PTGN



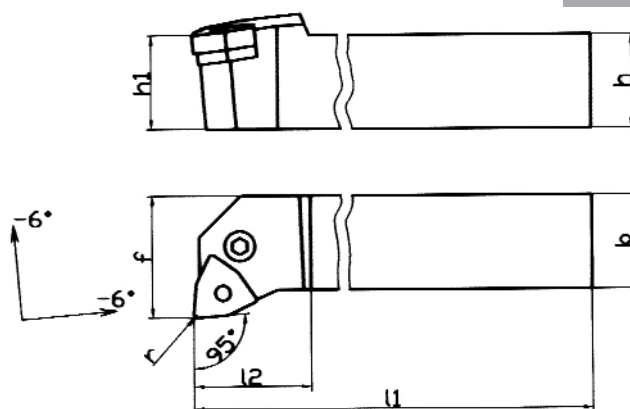
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
PTGNR/L 1010E11	10	10	70	16	10	12	0.4	TNM.1103..	-	-	LV06	VT06
PTGNR/L 1212F11	12	12	80	23	12	16	0.4	TNM.1103..	-	-	LV06	VT06
PTGNR/L 1616H11	16	16	100	26	16	20	0.4	TNM.1103..	-	-	LV06	VT06
PTGNR/L 1616H16	16	16	100	26	16	20	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01
PTGNR/L 2020K16	20	20	125	28	20	25	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01
PTGNR/L 2525M16	25	25	150	33	25	32	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01
PTGNR/L 3225P16	32	25	170	33	32	32	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01
PTGNR/L 2525M22	25	25	150	33	25	32	0.8	TNM.2204..	SPTN22	SP02	LV02	VT02
PTGNR/L 3225P22	32	25	170	33	32	32	0.8	TNM.2204..	SPTN22	SP02	LV02	VT02
PTGNR/L 3232P22	32	32	170	39	32	40	0.8	TNM.2204..	SPTN22	SP02	LV02	VT02
PTGNR/L 4040S27	40	40	250	39	40	50	1.2	TNM.2706..	SPTN27	SP03	LV14	VT09

PTTN



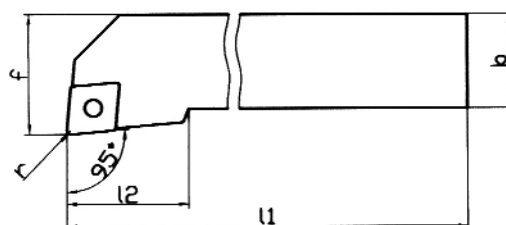
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
PTTNR/L 1212F11	12	12	80	23	12	11	0.4	TNM.1103..	-	-	LV06	VT06
PTTNR/L 1616H16	16	16	100	26	16	13	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01
PTTNR/L 2020K16	20	20	125	28	20	17	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01
PTTNR/L 2525M16	25	25	150	33	25	22	0.8	TNM.1604..	SPTN16	SP05	LV01	VT01
PTTNR/L 2525M22	25	25	150	33	25	22	0.8	TNM.2204..	SPTN22	SP02	LV02	VT02
PTTNR/L 3225P22	32	25	170	33	32	22	0.8	TNM.2204..	SPTN22	SP02	LV02	VT02

PWLNR



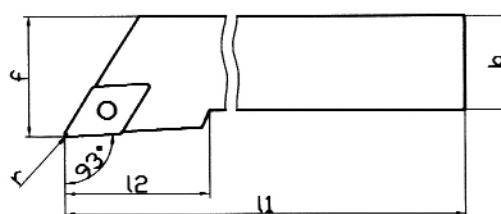
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Shim pin	Lever	Screw
PWLNR/L 2020K06	20	20	125	28	20	25	0.8	WN..0604..	SPWN06	SP05	LV01	VT01
PWLNR/L 2525M06	25	25	150	33	25	32	0.8	WN..0604..	SPWN06	SP05	LV01	VT01
PWLNR/L 3225P06	32	25	170	33	32	32	0.8	WN..0604..	SPWN06	SP05	LV01	VT01
PWLNR/L 2020K08	20	20	125	28	20	25	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
PWLNR/L 2525M08	25	25	150	33	25	32	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
PWLNR/L 3225P08	32	25	170	33	32	32	0.8	WN..0804..	SPWN08	SP02	LV02	VT02

SCLC



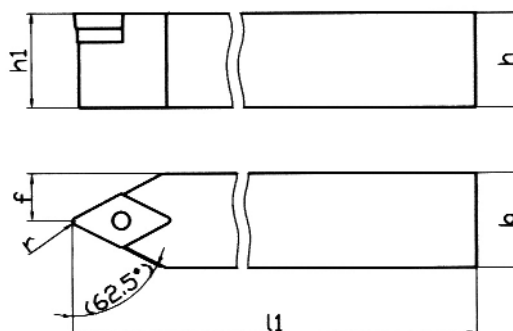
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Bush	Screw
SCLCR/L 1010E06	10	10	70	17	10	12	0.4	CC..0602..	-	-	TR1
SCLCR/L 1212F09	12	12	80	29	12	16	0.8	CC..09T3..	-	-	TR14
SCLCR/L 1616H09	16	16	100	29	16	20	0.8	CC..09T3..	SPCC09	VTA02	TR8
SCLCR/L 2020K09	20	20	125	29	20	25	0.8	CC..09T3..	SPCC09	VTA02	TR8
SCLCR/L 1616H12	16	16	100	29	16	20	0.8	CC..1204..	SPCC12	VTA01	TR4
SCLCR/L 2020K12	20	20	125	29	20	25	0.8	CC..1204..	SPCC12	VTA01	TR4
SCLCR/L 2525M12	25	25	150	33	25	32	0.8	CC..1204..	SPCC12	VTA01	TR4



SDJC



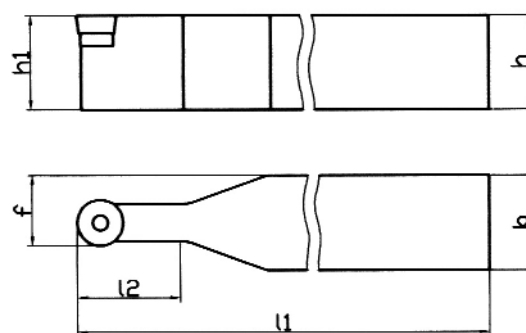
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Bush	Screw
SDJCR/L 1010E07	10	10	70	17	10	12	0.4	DC..0702..	-	-	TR1
SDJCR/L 1212F07	12	12	80	17	12	16	0.4	DC..0702..	-	-	TR1
SDJCR/L 1616H07	16	16	100	17	16	20	0.4	DC..0702..	-	-	TR1
SDJCR/L 2020K07	20	20	125	17	20	25	0.4	DC..0702..	-	-	TR1
SDJCR/L 1212F11	12	12	80	29	12	16	0.8	DC..11T3..	-	-	TR14
SDJCR/L 1616H11	16	16	100	29	16	20	0.8	DC..11T3..	SPDC11	VTA02	TR8
SDJCR/L 2020K11	20	20	125	29	20	25	0.8	DC..11T3..	SPDC11	VTA02	TR8
SDJCR/L 2525M11	25	25	150	33	25	32	0.8	DC..11T3..	SPDC11	VTA02	TR8


SDNC



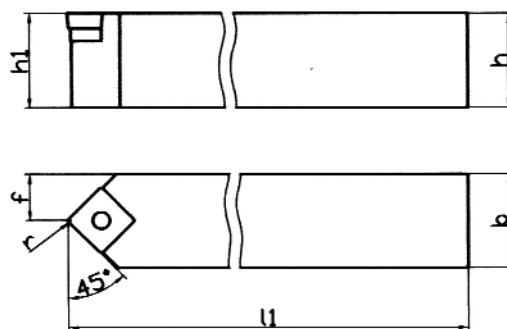
Code N.	h	b	l1	h1	f	r	Inserts N.	Support pad	Bush	Screw
SDNCN 1010E07	10	10	70	10	5	0.4	DC..0702..			TR1
SDNCN 1212F07	12	12	80	12	6	0.4	DC..0702..	-	-	TR1
SDNCN 1616H07	16	16	100	16	8	0.4	DC..0702..	-	-	TR1
SDNCN 1212F11	12	12	80	12	6	0.8	DC..11T3..	-	-	TR14
SDNCN 1616H11	16	16	100	16	8	0.8	DC..11T3..	SPDC11	VTA02	TR8
SDNCN 2020K11	20	20	125	20	10	0.8	DC..11T3..	SPDC11	VTA02	TR8
SDNCN 2525M11	25	25	150	25	12.5	0.8	DC..11T3..	SPDC11	VTA02	TR8

SRDC



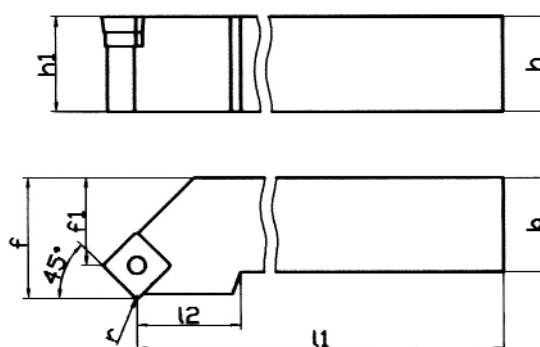
Code N.	h	b	l1	h1	l2	f	Inserts N.	Screw
SRDCN 1010E06	10	10	70	10	10	8	RC..0602..	
SRDCN 1212F06	12	12	80	12	12	9	RC..0602..	TR1
SRDCN 1616H06	16	16	100	16	16	11	RC..0602..	TR1
SRDCN 1010E08	10	10	70	10	10	9	RC..0803..	TR5
SRDCN 1212F08	12	12	80	12	12	10	RC..0803..	TR5
SRDCN 1616H08	16	16	100	16	16	12	RC..0803..	TR5

SSDC



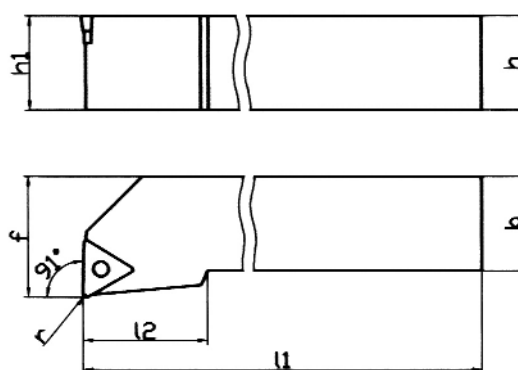
Code N.	h	b	l1	h1	f	r	Inserts N.	Support pad	Bush	Screw
SSDCN 1212F09	12	12	80	12	6	0.8	SCM.09T3..	-	-	TR14
SSDCN 1616H09	16	16	100	16	8	0.8	SCM.09T3..	SPSC09	VTA02	TR8
SSDCN 2020K09	20	20	125	20	10	0.8	SCM.09T3..	SPSC09	VTA02	TR8
SSDCN 1616H12	16	16	100	16	8	0.8	SCM.1204..	SPSC12	VTA01	TR4
SSDCN 2020K12	20	20	125	20	10	0.8	SCM.1204..	SPSC12	VTA01	TR4
SSDCN 2525M12	25	25	150	25	12.5	0.8	SCM.1204..	SPSC12	VTA01	TR4

SSSC



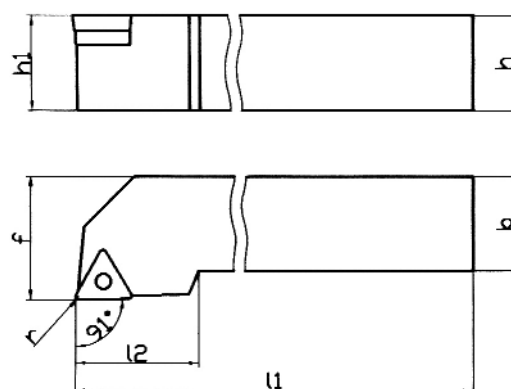
Code N.	h	b	l1	l2	h1	f	f1	r	Inserts N.	Support pad	Bush	Screw
SSSCR/L 1212F09	12	12	80	29	12	16	10	0.8	SCM.09T3..	-	-	TR14
SSSCR/L 1616H09	16	16	100	29	16	20	14	0.8	SCM.09T3..	SPSC09	VTA02	TR8
SSSCR/L 2020K09	20	20	125	29	20	25	19	0.8	SCM.09T3..	SPSC09	VTA02	TR8
SSSCR/L 1616H12	16	16	100	29	16	20	12	0.8	SCM.1204..	SPSC12	VTA01	TR4
SSSCR/L 2020K12	20	20	125	29	20	25	17	0.8	SCM.1204..	SPSC12	VTA01	TR4
SSSCR/L 2525M12	25	25	150	33	25	32	24	0.8	SCM.1204..	SPSC12	VTA01	TR4

STFC



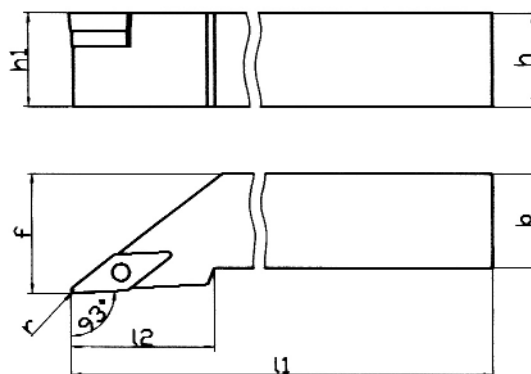
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Bush	Screw
STFCR/L 1010E09	10	10	70	14	10	12	0.4	TCM.0902..			TR6
STFCR/L 1212F11	12	12	80	16	12	16	0.4	TCM.1102..	-	-	TR1
STFCR/L 1616H11	16	16	100	16	16	20	0.4	TCM.1102..	-	-	TR1
STFCR/L 1616H16	16	16	100	21	16	20	0.8	TCM.16T3..	SPTC16	VTA02	TR8
STFCR/L 2020K16	20	20	125	21	20	25	0.8	TCM.16T3..	SPTC16	VTA02	TR8
STFCR/L 2525M16	25	25	150	21	25	32	0.8	TCM.16T3..	SPTC16	VTA02	TR8
STFCR/L 2525M22	25	25	150	26	25	32	0.8	TCM.2204..	-	-	TR3




STGC



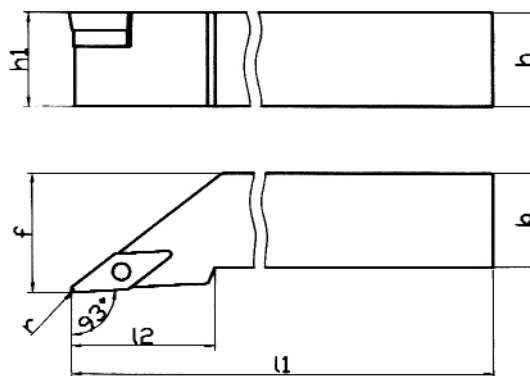
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Bush	Screw
STGCR/L 1010E09	10	10	70	14	10	12	0.4	TCM.0902..			TR6
STGCR/L 1212F11	12	12	80	17	12	16	0.4	TCM.1102..	-	-	TR1
STGCR/L 1616H11	16	16	100	17	16	20	0.4	TCM.1102..	-	-	TR1
STGCR/L 1616H16	16	16	100	29	16	20	0.8	TCM.16T3..	SPTC16	VTA02	TR8
STGCR/L 2020K16	20	20	125	29	20	25	0.8	TCM.16T3..	SPTC16	VTA02	TR8
STGCR/L 2525M16	25	25	150	33	25	32	0.8	TCM.16T3..	SPTC16	VTA02	TR8
STGCR/L 2525M22	25	25	150	33	25	32	0.8	TCM.2204..	-	-	TR3




SVJB



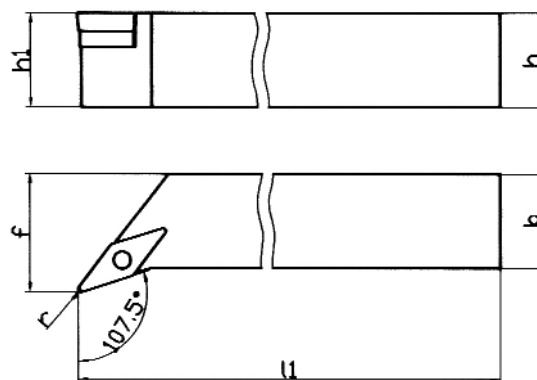
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Bush	Screw
											
SVJBR/L 1212F11	12	12	80	29	12	16	0.4	VB..1102..	-	-	TR1
SVJBR/L 1616H11	16	16	100	29	16	20	0.4	VB..1102..	-	-	TR1
SVJBR/L 2020K11	20	20	125	29	20	25	0.4	VB..1102..	-	-	TR1
SVJBR/L 2525M11	25	25	150	29	25	32	0.4	VB..1102..	-	-	TR1
SVJBR/L 2020K16	20	20	125	35	20	25	0.8	VB..1604..	SPVC16	VTA02	TR8
SVJBR/L 2525M16	25	25	150	35	25	32	0.8	VB..1604..	SPVC16	VTA02	TR8
SVJBR/L 3225P16	32	25	170	35	32	32	0.8	VB..1604..	SPVC16	VTA02	TR8

SVJC



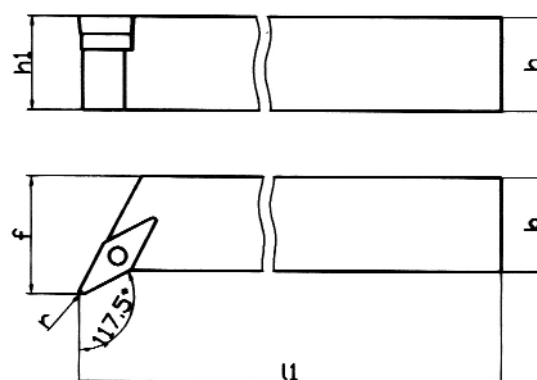
Code N.	h	b	l1	l2	h1	f	r	Inserts N.	Support pad	Bush	Screw
											
SVJCR/L 1010E11	10	10	70	23	10	12	0.4	VC..1103..	-	-	TR1
SVJCR/L 1212F11	12	12	80	23	12	16	0.4	VC..1103..	-	-	TR1
SVJCR/L 1616H11	16	16	100	23	16	20	0.4	VC..1103..	-	-	TR1
SVJCR/L 2020K11	20	20	125	23	20	25	0.4	VC..1103..	-	-	TR1
SVJCR/L 2525M11	25	25	150	26	25	32	0.4	VC..1103..	-	-	TR1
SVJCR/L 1212F16	12	12	80	29	12	16	0.8	VC..1604..	-	-	TR14
SVJCR/L 1616H16	16	16	100	34	16	20	0.8	VC..1604..	SPVC16	VTA02	TR8
SVJCR/L 2020K16	20	20	125	34	20	25	0.8	VC..1604..	SPVC16	VTA02	TR8
SVJCR/L 2525M16	25	25	150	35	25	32	0.8	VC..1604..	SPVC16	VTA02	TR8
SVJCR/L 3225P16	32	25	170	35	32	32	0.8	VC..1604..	SPVC16	VTA02	TR8

SVHB



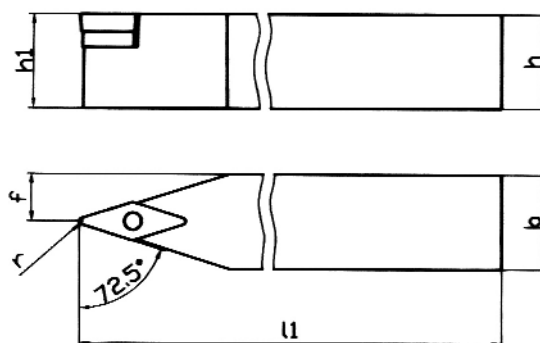
Code N.	h	b	l1	h1	f	r	Inserts N.	Support pad	Bush	Screw
SVHBR/L 2020K11	20	20	125	20	25	0.4	VB..1102..	-	-	TR1
SVHBR/L 2525M11	25	25	150	25	32	0.4	VB..1102..	-	-	TR1
SVHBR/L 2020K16	20	20	125	20	25	0.8	VB..1604..	SPVC16	VTA02	TR8
SVHBR/L 2525M16	25	25	150	25	32	0.8	VB..1604..	SPVC16	VTA02	TR8
SVHBR/L 3225P16	32	25	170	32	32	0.8	VB..1604..	SPVC16	VTA02	TR8




SVPB



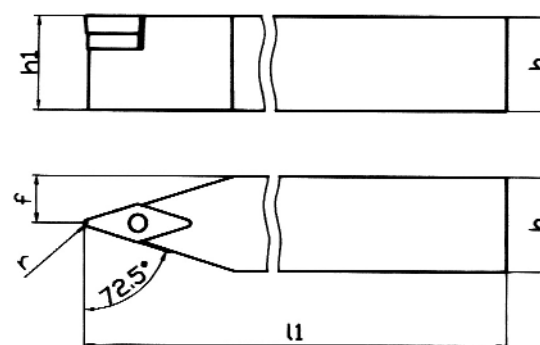
Code N.	h	b	l1	h1	f	r	Inserts N.	Support pad	Bush	Screw
SVPBR/L 1212F11	12	12	80	12	16	0.4	VB..1102..	-	-	TR1
SVPBR/L 1616H11	16	16	100	16	20	0.4	VB..1102..	-	-	TR1
SVPBR/L 2020K11	20	20	125	20	25	0.4	VB..1102..	-	-	TR1
SVPBR/L 2020K16	20	20	125	20	25	0.8	VB..1604..	SPVC16	VTA02	TR8
SVPBR/L 2525M16	25	25	150	25	32	0.8	VB..1604..	SPVC16	VTA02	TR8
SVPBR/L 3225P16	32	25	170	32	32	0.8	VB..1604..	SPVC16	VTA02	TR8




SVVB



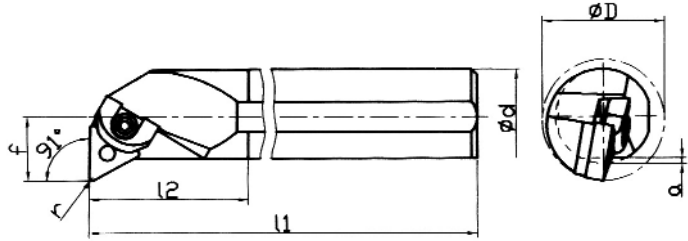
Code N.	h	b	l1	h1	f	r	Inserts N.	Support pad	Bush	Screw
										
SVVBN 1212F11	12	12	80	12	6	0.4	VB..1102..	-	-	TR1
SVVBN 1616H11	16	16	100	16	8	0.4	VB..1102..	-	-	TR1
SVVBN 2020K11	20	20	125	20	10	0.4	VB..1102..	-	-	TR1
SVVBN 2525M11	25	25	150	25	12.5	0.4	VB..1102..	-	-	TR1
SVVBN 2020K16	20	20	125	20	10	0.8	VB..1604..	SPVC16	VTA02	TR8
SVVBN 2525M16	25	25	150	25	12.5	0.8	VB..1604..	SPVC16	VTA02	TR8
SVVBN 3225P16	32	25	170	32	12.5	0.8	VB..1604..	SPVC16	VTA02	TR8

SVVC



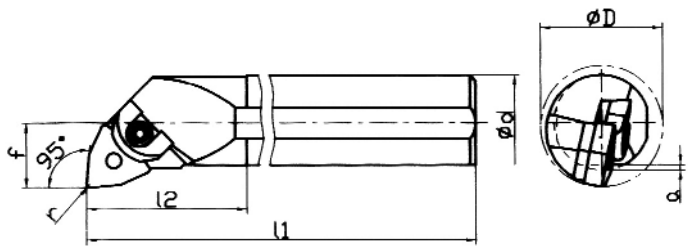
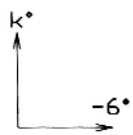
Code N.	h	b	l1	h1	f	r	Inserts N.	Support pad	Bush	Screw
										
SVVCN 1212F11	12	12	80	12	6	0.4	VC..1103..	-	-	TR1
SVVCN 1616H11	16	16	100	16	8	0.4	VC..1103..	-	-	TR1
SVVCN 2020K11	20	20	125	20	10	0.4	VC..1103..	-	-	TR1
SVVCN 2525M11	25	25	150	25	12.5	0.4	VC..1103..	-	-	TR1
SVVCN 2020K16	20	20	125	20	10	0.8	VC..1604..	SPVC16	VTA02	TR8
SVVCN 2525M16	25	25	150	25	12.5	0.8	VC..1604..	SPVC16	VTA02	TR8
SVVCN 3225P16	32	25	170	32	12.5	0.8	VC..1604..	SPVC16	VTA02	TR8

MTFN



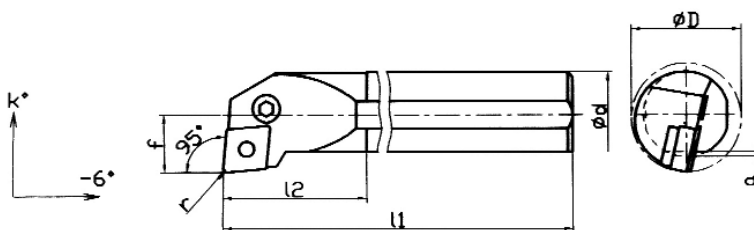
Code N.	d	l1	l2	f	a	K°	D	r	Inserts N.	Support pad	Clamp	Pin	Screw
S32TMTFNR/L16	32	300	55	22	2	-12	40	0.8	TN..1604..				
S40UMTFNR/L16	40	350	55	27	2	-10	50	0.8	TN..1604..				
S50WMTFNR/L16	50	450	70	35	2	-10	63	0.8	TN..1604..				
S32TMTFNR/L22	32	300	55	22	2	-10	40	0.8	TN..2204..				
S40UMTFNR/L22	40	350	63	27	2	-10	50	0.8	TN..2204..				
S50WMTFNR/L22	50	450	70	35	2	-10	63	0.8	TN..2204..				

MWLN



Code N.	d	l1	l2	f	a	K°	D	r	Inserts N.	Support pad	Clamp	Pin
S25SMWLN/L08	25	250	42	17	2	-12	32	0.8	WN..0804..			
S32UMWLN/L08	32	350	49	22	2	-12	40	0.8	WN..0804..			
S40VMWLN/L08	40	400	56	27	2	-10	50	0.8	WN..0804..			
S50WMWLN/L08	50	450	63	35	2	-10	63	0.8	WN..0804..			

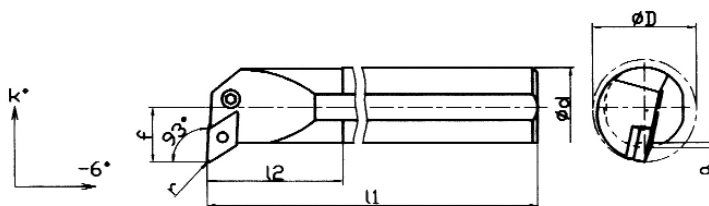
PCLN



Code N.	d	l1	l2	f	a	K°	D	r	Inserts N.	Support pad	Shim pin	Lever	Screw
A20RPCLNR/L09◦	20	200	40	13	-	-12	25	0.8	CNM..0903..	-	-	LV12	VT06
A25SPCLNR/L12◦	25	250	45	17	-	-12	32	0.8	CNM..1204..	-	-	LV11	VT10
A32SPCLNR/L12◦	32	250	50	22	-	-10	40	0.8	CNM..1204..	SPCN12	SP02	LV02	VT02
A40TPCLNR/L12◦	40	300	60	27	-	-10	50	0.8	CNM..1204..	SPCN12	SP02	LV02	VT02
A40TPCLNR/L16◦	40	300	60	27	-	-10	50	1.2	CNM..1606..	SPCN16	SP03	LV03	VT03
S16RPCLNR/L09	16	200	40	11	1	-14	20	0.8	CNM..0903..	-	-	LV12	VT06
S20SPCLNR/L09	20	250	40	13	1.5	-12	25	0.8	CNM..0903..	-	-	LV12	VT06
S25TPCLNR/L09	25	300	45	17	2	-12	32	0.8	CNM..0903..	-	-	LV12	VT06
S25TPCLNR/L12	25	300	45	17	2	-12	32	0.8	CNM..1204..	-	-	LV11	VT10
S32UPCLNR/L12	32	350	50	22	2	-10	40	0.8	CNM..1204..	SPCN12	SP02	LV02	VT02
S40VPCLNR/L12	40	400	60	27	2	-10	50	0.8	CNM..1204..	SPCN12	SP02	LV02	VT02
S40VPCLNR/L16	40	400	60	27	2	-10	50	1.2	CNM..1606..	SPCN16	SP03	LV03	VT03
S50WPCLNR/L16	50	450	75	35	2	-8	63	1.2	CNM..1606..	SPCN16	SP03	LV03	VT03
S50WPCLNR/L19	50	450	75	35	2	-8	63	1.2	CNM..1906..	SPCN19	SP04	LV04	VT04

◦ : Mit Kühlmittelzufuhr - With oil hole
Avec trou pour refrigerant - Con foro per refrigerante

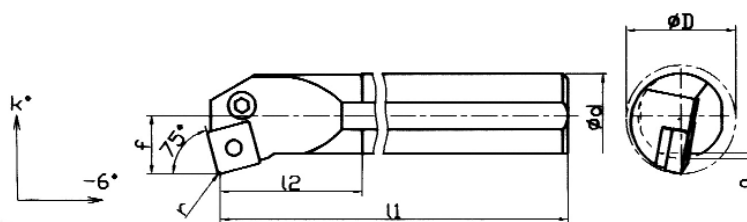
PDUN



Code N.	d	l1	l2	f	a	K°	D	r	Inserts N.	Support pad	Shim pin	Lever	Screw
A25SPDUNR/L11◦	25	250	45	17	-	-10	32	0.8	DN..1104..	-	-	LV13	VT12
A32SPDUNR/L15◦	32	250	60	22	-	-15	40	0.8	DN..1506..	SPDN15	SP02	LV05	VT05
A40TPDUNR/L15◦	40	300	60	27	-	-12	50	0.8	DN..1506..	SPDN15	SP02	LV05	VT05
A50TPDUNR/L15◦	50	300	70	35	-	-8	63	0.8	DN..1506..	SPDN15	SP02	LV05	VT05
S20SPDUNR/L11	20	250	50	13	1.5	-10	25	0.8	DN..1104..	-	-	LV13	VT12
S25TPDUNR/L11	25	300	45	17	2	-10	32	0.8	DN..1104..	-	-	LV13	VT12
S32UPDUNR/L15	32	350	60	22	2	-15	40	0.8	DN..1506..	SPDN15	SP02	LV05	VT05
S40VPDUNR/L15	40	400	60	27	2	-12	50	0.8	DN..1506..	SPDN15	SP02	LV05	VT05
S50WPDUNR/L15	50	450	70	35	2	-8	63	0.8	DN..1506..	SPDN15	SP02	LV05	VT05

◦ : Mit Kühlmittelzufuhr - With oil hole
Avec trou pour refrigerant - Con foro per refrigerante

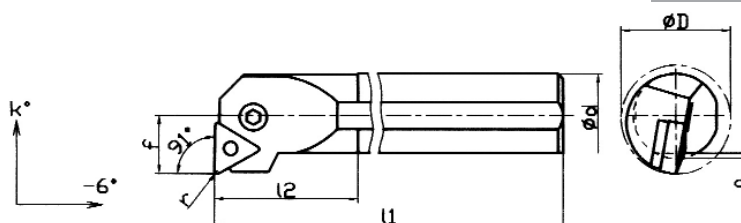
PSKN



Code N.	d	l1	l2	f	a	K°	D	r	Inserts N.	Support pad	Shim pin	Lever	Screw
A20RPSKNR/L09	20	200	38	13	-	-12	25	0.8	SN..0903..	-	-	LV12	VT06
A25SPSKNR/L12	25	250	42	17	-	-12	32	0.8	SN..1204..	-	-	LV11	VT10
A32SPSKNR/L12	32	250	57	22	-	-10	40	0.8	SN..1204..	SPSN12	SP02	LV02	VT02
A40TPSKNR/L12	40	300	57	27	-	-10	50	0.8	SN..1204..	SPSN12	SP02	LV02	VT02
S20SPSKNR/L09	20	250	38	13	1.5	-12	25	0.8	SN..0903..	-	-	LV12	VT06
S25TPSKNR/L12	25	300	42	17	2	-12	32	0.8	SN..1204..	-	-	LV11	VT10
S32UPSKNR/L12	32	350	57	22	2	-10	40	0.8	SN..1204..	SPSN12	SP02	LV02	VT02
S40VPSKNR/L12	40	400	57	27	2	-10	50	0.8	SN..1204..	SPSN12	SP02	LV02	VT02
S40VPSKNR/L15	40	400	57	27	2	-10	50	1.2	SN..1506..	SPSN15	SP03	LV03	VT03
S50WPSKNR/L15	50	450	70	35	2	-10	63	1.2	SN..1506..	SPSN15	SP03	LV03	VT03
S50WPSKNR/L19	50	450	70	35	2	-10	63	1.2	SN..1906..	SPSN19	SP09	LV04	VT04

◦ : Mit Kühlmittelzufuhr - With oil hole
Avec trou pour refrigerant - Con foro per refrigerante

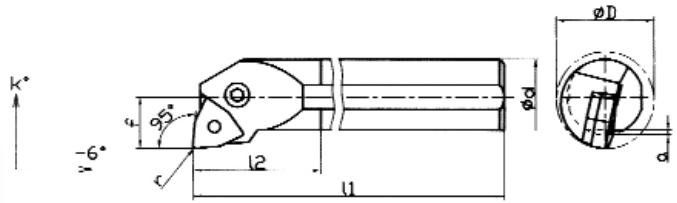
PTFN



Code N.	d	l1	l2	f	a	K°	D	r	Inserts N.	Support pad	Shim pin	Lever	Screw
A16MPTFNR/L11	16	150	40	11	-	-14	20	0.4	TN..1103..	-	-	LV06	VT06
A20RPTFNR/L11	20	200	40	13	-	-12	25	0.4	TN..1103..	-	-	LV06	VT06
A25SPTFNR/L16	25	250	45	17	-	-12	32	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
A32SPTFNR/L16	32	250	60	22	-	-12	40	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
A40TPTFNR/L22	40	300	60	27	-	-8	50	0.8	TN..2204..	SPTN22	SP02	LV02	VT02
S16RPTFNR/L11	16	200	40	11	1	-14	20	0.4	TN..1103..	-	-	LV06	VT06
S20SPTFNR/L11	20	250	40	13	1.5	-12	25	0.4	TN..1103..	-	-	LV06	VT06
S25TPTFNR/L16	25	300	45	17	2	-12	32	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
S32UPTFNR/L16	32	350	60	22	2	-12	40	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
S40VPTFNR/L16	40	400	60	27	2	-8	50	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
S50WPTFNR/L16	50	450	70	35	2	-8	63	0.8	TN..1604..	SPTN16	SP05	LV01	VT01
S40VPTFNR/L22	40	400	60	27	2	-8	50	0.8	TN..2204..	SPTN22	SP02	LV02	VT02
S50WPTFNR/L22	50	450	70	35	2	-8	63	0.8	TN..2204..	SPTN22	SP02	LV02	VT02

◦ : Mit Kühlmittelzufuhr - With oil hole
Avec trou pour refrigerant - Con foro per refrigerante

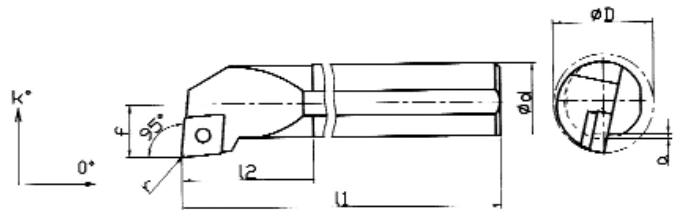
PWLN



Code N.	d	l1	l2	f	a	K°	D	r	Inserts N.	Support pad	Shim pin	Lever	Screw
A16MPWLN/L06	16	150	40	11	-	-15	22	0.8	WN..0604..	-	-	LV13	VT12
A20RPWLN/L06	20	200	40	13	-	-15	27	0.8	WN..0604..	SPWN06	SP05	LV01	VT01
A25SPWLN/L06	25	250	45	17	-	-15	32	0.8	WN..0604..	SPWN06	SP05	LV01	VT01
A25SPWLN/L08	25	250	45	17	-	-12	32	0.8	WN..0804..	-	-	LV11	VT10
A32SPWLN/L08	32	250	60	22	-	-12	40	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
A40TPWLN/L08	40	300	60	27	-	-10	50	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
S16RPWLN/L06	16	200	40	11	1	-15	22	0.8	WN..0604..	-	-	LV13	VT12
S20SPWLN/L06	20	250	40	13	1.5	-15	27	0.8	WN..0604..	SPWN06	SP05	LV01	VT01
S25TPWLN/L06	25	300	45	17	2	-15	32	0.8	WN..0604..	SPWN06	SP05	LV01	VT01
S25TPWLN/L08	25	300	45	17	2	-12	32	0.8	WN..0804..	-	-	LV11	VT10
S32UPWLN/L08	32	350	60	22	2	-12	40	0.8	WN..0804..	SPWN08	SP02	LV02	VT02
S40VPWLN/L08	40	400	60	27	2	-10	50	0.8	WN..0804..	SPWN08	SP02	LV02	VT02

◦ : Mit Kühlmittelzufuhr - With oil hole
 Avec trou pour refrigerant - Con foro per refrigerante

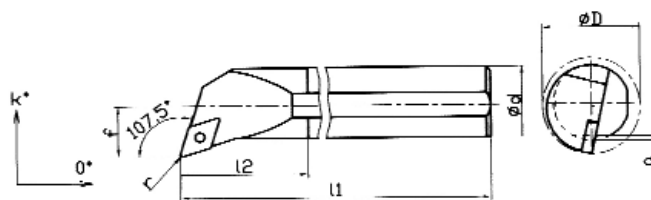
SCLC



Code N.	d	l1	l2	f	a	K°	D	r	Inserts N.	Support pad	Bush	Screw
A12KSCLCR/L06	12	125	30	9	-	-10	16	0.4	CC..0602..	-	-	TR1
A16MSCLCR/L09	16	150	40	11	-	-10	20	0.8	CC..09T3..	-	-	TR12
A20RSCLCR/L09	20	200	40	13	-	- 8	25	0.8	CC..09T3..	-	-	TR12
A25SSCLCR/L09	25	250	45	17	-	- 5	32	0.8	CC..09T3..	-	-	TR14
A25SSCLCR/L12	25	250	50	17	-	- 5	32	0.8	CC..1204..	-	-	TR13
S08HSCLCR/L06	8	100	25	6	0.5	-12	11	0.4	CC..0602..	-	-	TR1
S10KSCLCR/L06	10	125	25	7	0.5	-10	13	0.4	CC..0602..	-	-	TR1
S12MSCLCR/L06	12	150	30	9	0.5	-10	16	0.4	CC..0602..	-	-	TR1
S16RSCLCR/L06	16	200	40	11	1	-10	20	0.4	CC..0602..	-	-	TR1
S16RSCLCR/L09	16	200	40	11	1	-10	20	0.8	CC..09T3..	-	-	TR12
S20SSCLCR/L09	20	250	40	13	1.5	- 8	25	0.8	CC..09T3..	-	-	TR14
S25TSCLCR/L09	25	300	45	17	2	-10	32	0.8	CC..09T3..	-	-	TR14
S25TSCLCR/L12	25	300	50	17	2	- 5	32	0.8	CC..1204..	-	-	TR13
S32USCLCR/L12	32	350	60	22	2	- 5	40	0.8	CC..1204..	SPCC12	VTA01	TR4
S40VSCLCR/L12	40	400	60	27	2	- 5	50	0.8	CC..1204..	SPCC12	VTA01	TR4

◦ : Mit Kühlmittelzufuhr - With oil hole
 Avec trou pour refrigerant - Con foro per refrigerante

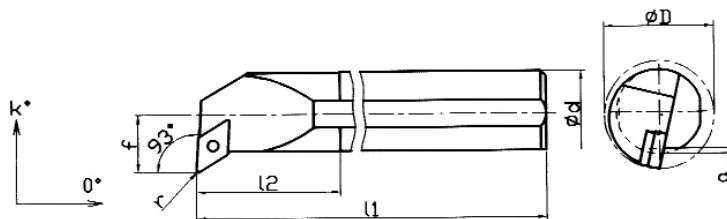
SDQC



Code N.	d	l1	l2	f	a	K°	D	r	Inserts N.	Screw
A12KSDQCR/L07 ◦	12	125	30	9	-	-10	16	0.4	DC..0702..	TR1
A16MSDQCR/L07 ◦	16	150	40	11	-	-10	20	0.4	DC..0702..	TR1
A20RSDQCR/L11 ◦	20	200	40	13	-	-8	25	0.8	DC..11T3..	TR12
A25SSDQCR/L11 ◦	25	250	45	17	-	-5	32	0.8	DC..11T3..	TR14
S10KSDQCR/L07	10	125	25	7	0.5	-10	13	0.4	DC..0702..	TR1
S12MSDQCR/L07	12	150	30	9	0.5	-10	16	0.4	DC..0702..	TR1
S16RSDQCR/L07	16	200	40	11	1	-10	20	0.4	DC..0702..	TR1
S20SSDQCR/L11	20	250	40	13	1.5	-8	25	0.8	DC..11T3..	TR12
S25TSDQCR/L11	25	300	45	17	2	-5	32	0.8	DC..11T3..	TR14
S32USDQCR/L11	32	350	60	22	2	-5	40	0.8	DC..11T3..	TR8

- : Mit Kühlmittelzufuhr - *With oil hole*
 Avec trou pour refrigerant - *Con foro per refrigerante*

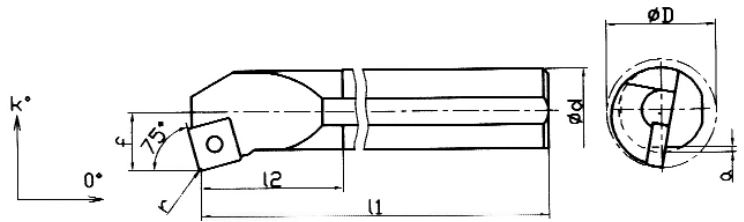
SDUC



Code N.	d	l1	l2	f	a	K°	D	r	Inserts N.	Support pad	Bush	Screw
A12KSDUCR/L07 ◦	12	125	25	9	-	-10	16	0.4	DC..0702..		-	TR1
A16MSDUCR/L07 ◦	16	150	40	11	-	-10	20	0.4	DC..0702..	-	-	TR1
A20RSDUCR/L11 ◦	20	200	40	13	-	-8	25	0.8	DC..11T3..	-	-	TR12
A25SSDUCR/L11 ◦	25	250	45	17	-	-5	32	0.8	DC..11T3..	-	-	TR14
S10KSDUCR/L07	10	125	25	7	0.5	-10	13	0.4	DC..0702..	-	-	TR1
S12MSDUCR/L07	12	150	25	9	0.5	-10	16	0.4	DC..0702..	-	-	TR1
S16RSDUCR/L07	16	200	40	11	1	-10	20	0.4	DC..0702..	-	-	TR1
S20SSDUCR/L11	20	250	40	13	1.5	-8	25	0.8	DC..11T3..	-	-	TR12
S25TSDUCR/L11	25	300	45	17	2	-5	32	0.8	DC..11T3..	-	-	TR14
S32USDUCR/L11	32	350	60	22	2	-5	40	0.8	DC..11T3..	SPDC11	VTA02	TR8

- : Mit Kühlmittelzufuhr - *With oil hole*
 Avec trou pour refrigerant - *Con foro per refrigerante*

SSKC

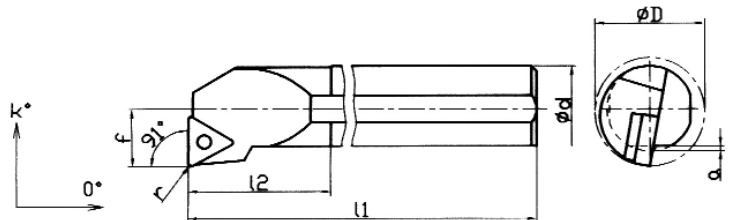


Code N.	d	l1	l2	f	a	K°	D	r	Inserts N.	Screw
A16MSSKCR/L09 ◦	16	150	35	11	-	-8	20	0.8	SC..09T3..	TR12
A20RSSKCR/L09 ◦	20	200	40	13	-	-8	25	0.8	SC..09T3..	TR12
A25SSSKCR/L12 ◦	25	250	50	17	-	-5	32	0.8	SC..1204..	TR13
S16RSSKCR/L09	16	200	40	11	1	-8	20	0.8	SC..09T3..	TR12
S20SSSKCR/L09	20	250	40	13	1.5	-8	25	0.8	SC..09T3..	TR12
S25TSSKCR/L12	25	300	50	17	2	-5	32	0.8	SC..1204..	TR13



◦ : Mit Kühlmittelzufuhr - With oil hole
Avec trou pour refrigerant - Con foro per refrigerante

STFC

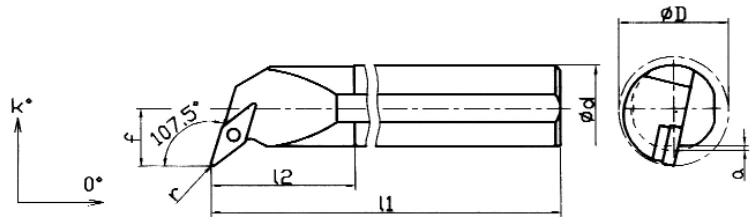


Code N.	d	l1	l2	f	a	K°	D	r	Inserts N.	Support pad	Bush	Screw
A12KSTFCR/L11 ◦	12	125	30	9	-	-10	16	0.4	TC..1102..	-	-	TR1
A16MSTFCR/L11 ◦	16	150	35	11	-	-8	20	0.4	TC..1102..	-	-	TR1
A20RSTFCR/L16 ◦	20	200	45	13	-	-8	25	0.8	TC..16T3..	-	-	TR14
A25SSTFCR/L16 ◦	25	250	50	17	-	-5	32	0.8	TC..16T3..	-	-	TR14
S08HSTFCR/L09	8	100	25	6	0.5	-15	11	0.4	TC..0902..	-	-	TR6
S10KSTFCR/L09	10	125	25	7	0.5	-12	13	0.4	TC..0902..	-	-	TR6
S12MSTFCR/L09	12	150	30	9	0.5	-10	16	0.4	TC..0902..	-	-	TR6
S10KSTFCR/L11	10	125	28	7	0.5	-12	13	0.4	TC..1102..	-	-	TR1
S12MSTFCR/L11	12	150	30	9	0.5	-10	16	0.4	TC..1102..	-	-	TR1
S16RSTFCR/L11	16	200	40	11	1	-8	20	0.4	TC..1102..	-	-	TR1
S20SSTFCR/L11	20	250	40	13	1.5	-8	25	0.4	TC..1102..	-	-	TR1
S20SSTFCR/L16	20	250	45	13	1.5	-8	25	0.8	TC..16T3..	-	-	TR14
S25TSTFCR/L16	25	300	50	17	2	-5	32	0.8	TC..16T3..	-	-	TR14
S32USTFCR/L16	32	350	50	22	2	-5	40	0.8	TC..16T3..	SPTC16	VTA02	TR8
S40VSTFCR/L16	40	400	60	27	2	-5	50	0.8	TC..16T3..	SPTC16	VTA02	TR8



◦ : Mit Kühlmittelzufuhr - With oil hole
Avec trou pour refrigerant - Con foro per refrigerante

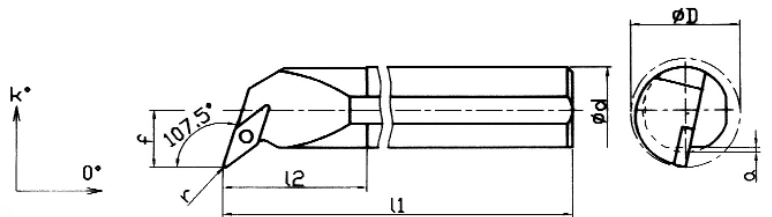
SVQB



Code N.	d	l1	l2	f	a	K°	D	r	Inserts N.	Support pad	Bush	Screw
A16MSVQBR/L11 ◦	16	150	40	11	-	- 5	20	0.4	VB..1102..	-	-	TR1
A20RSVQBR/L11 ◦	20	200	45	13	-	- 5	25	0.4	VB..1102..	-	-	TR1
A25SSVQBR/L11 ◦	25	250	55	17	-	- 5	32	0.4	VB..1102..	-	-	TR1
A25SSVQBR/L16 ◦	25	250	50	17	-	- 5	32	0.8	VB..1604..	-	-	TR14
A32SSVQBR/L16 ◦	32	250	60	22	-	-10	40	0.8	VB..1604..	SPVC16	VTA02	TR8
A40TSVQBR/L16 ◦	40	300	65	27	-	-10	50	0.8	VB..1604..	SPVC16	VTA02	TR8
S16RSVQBR/L11	16	200	40	11	1	- 8	20	0.4	VB..1102..	-	-	TR1
S20SSVQBR/L11	20	250	45	13	1.5	- 8	25	0.4	VB..1102..	-	-	TR1
S25TSVQBR/L11	25	300	50	17	2	- 5	32	0.4	VB..1102..	-	-	TR1
S25TSVQBR/L16	25	300	50	17	2	- 5	32	0.8	VB..1604..	-	-	TR14
S32USVQBR/L16	32	350	60	22	2	-10	40	0.8	VB..1604..	SPVC16	VTA02	TR8
S40VSVQBR/L16	40	400	65	27	2	-10	50	0.8	VB..1604..	SPVC16	VTA02	TR8

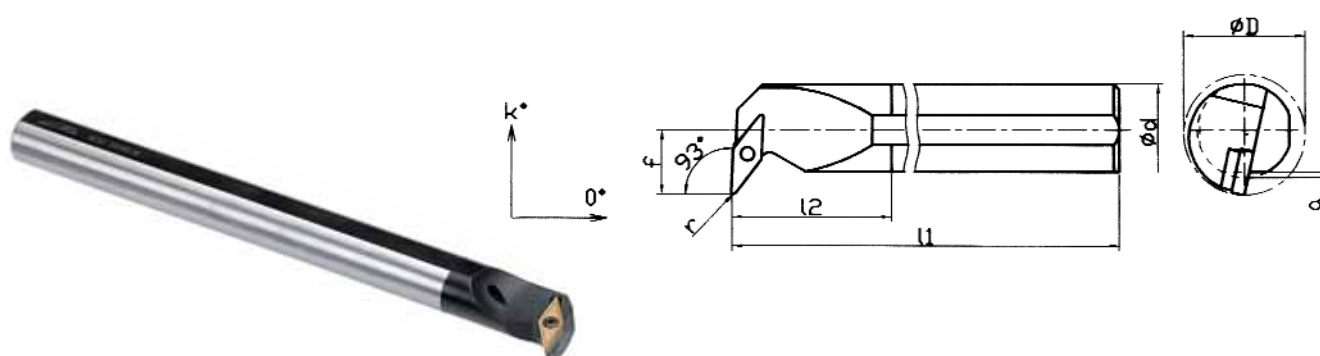
◦ : Mit Kühlmittelzufuhr - With oil hole
Avec trou pour refrigerant - Con foro per refrigerante

SVQC



Code N.	d	l1	l2	f	a	K°	D	r	Inserts N.	Screw
A16MSVQCR/L11 ◦	16	150	40	11	-	-8	20	0.4	VC..1103..	TR1
A20RSVQCR/L11 ◦	20	200	45	13	-	-8	25	0.4	VC..1103..	TR1
A25SSVQCR/L16 ◦	25	250	50	17	-	-5	32	0.8	VC..1604..	TR14
S16RSVQCR/L11	16	200	40	11	1	-8	20	0.4	VC..1103..	TR1
S20SSVQCR/L11	20	250	45	13	1.5	-8	25	0.4	VC..1103..	TR1
S25TSVQCR/L16	25	300	50	17	2	-5	32	0.8	VC..1604..	TR14

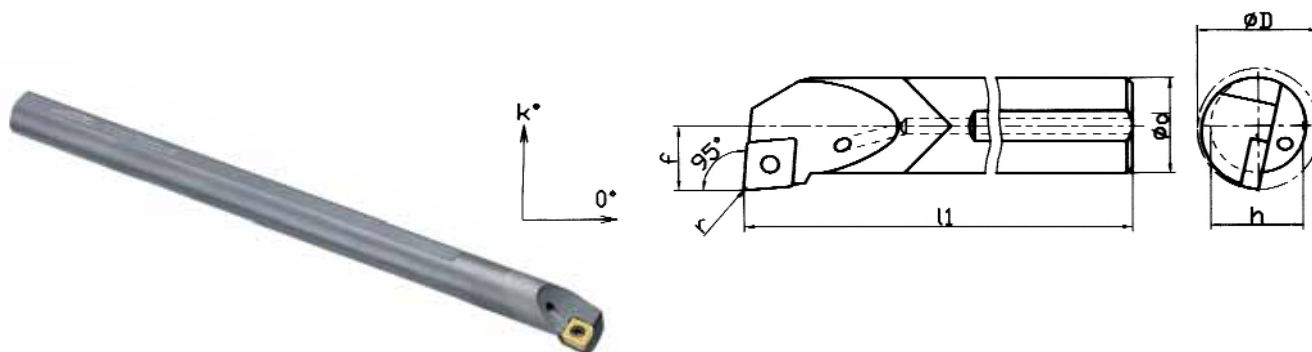
◦ : Mit Kühlmittelzufuhr - With oil hole
Avec trou pour refrigerant - Con foro per refrigerante



Code N.	d	l1	l2	f	a	K°	D	r	Inserts N.	Support pad	Bush	Screw
A16MSVUBR/L11 ◦	16	150	40	13	-	- 8	22	0.4	VB..1102..	-	-	TR1
A20RSVUBR/L11 ◦	20	200	45	15	-	- 8	27	0.4	VB..1102..	-	-	TR1
A25SSVUBR/L11 ◦	25	250	50	18	-	- 5	33	0.4	VB..1102..	-	-	TR1
A25SSVUBR/L16 ◦	25	250	50	18	-	- 5	33	0.8	VB..1604..	-	-	TR14
A32SSVUBR/L16 ◦	32	250	60	22	-	-10	40	0.8	VB..1604..	SPVC16	VTA02	TR8
A40TSVUBR/L16 ◦	40	300	60	27	-	-10	50	0.8	VB..1604..	SPVC16	VTA02	TR8
S16RSVUBR/L11	16	200	40	13	1	- 8	22	0.4	VB..1102..	-	-	TR1
S20SSVUBR/L11	20	250	45	15	1.5	- 8	27	0.4	VB..1102..	-	-	TR1
S25TSVUBR/L11	25	300	50	18	2	- 5	33	0.4	VB..1102..	-	-	TR1
S25TSVUBR/L16	25	300	50	18	2	- 5	33	0.8	VB..1604..	-	-	TR14
S32USVUBR/L16	32	350	60	22	2	-10	40	0.8	VB..1604..	SPVC16	VTA02	TR8
S40VSVUBR/L16	40	400	60	27	2	-10	50	0.8	VB..1604..	SPVC16	VTA02	TR8

◦ : Mit Kühlmittelzufuhr - With oil hole
Avec trou pour refrigerant - Con foro per refrigerante

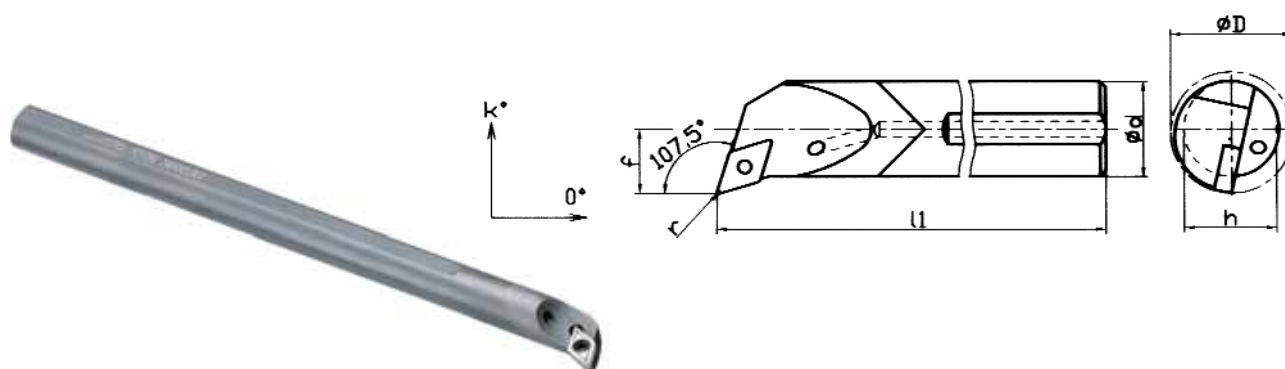
SCLC



Code N.	d	l1	f	h	K°	D	r	Inserts N.	Screw
E08KSCLCR/L06	8	125	6	7.5	-12	11	0.4	CC..0602..	TR1
E10MSCLCR/L06	10	150	7	9.5	-10	13	0.4	CC..0602..	TR1
E12QSCLCR/L06	12	180	9	11.5	-10	16	0.4	CC..0602..	TR1
E16RSCLCR/L09	16	200	11	15.5	-10	20	0.8	CC..09T3..	TR12
E20SSCLCR/L09	20	250	13	19.5	- 8	25	0.8	CC..09T3..	TR12
E25TSCLCR/L09	25	300	17	24	- 5	32	0.8	CC..09T3..	TR12



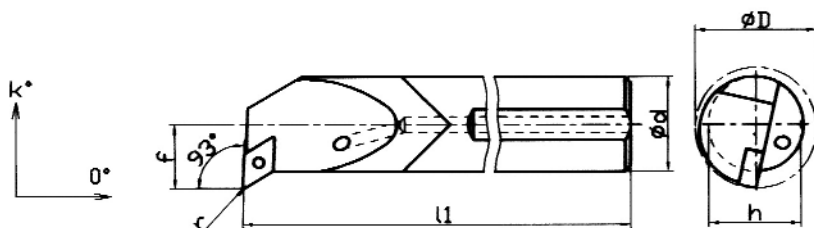
SDQC



Code N.	d	l1	f	h	K°	D	r	Inserts N.	Screw
E10MSDQCR/L07	10	150	7	9.5	-10	13	0.4	DC..0702..	TR1
E12OSDQCR/L07	12	180	9	11.5	-10	16	0.4	DC..0702..	TR1
E16RSDQCR/L07	16	200	11	15.5	-10	20	0.4	DC..0702..	TR1
E20SSDQCR/L11	20	250	13	19.5	- 8	25	0.8	DC..11T3..	TR12
E25TSDQCR/L11	25	300	17	24	- 5	32	0.8	DC..11T3..	TR12



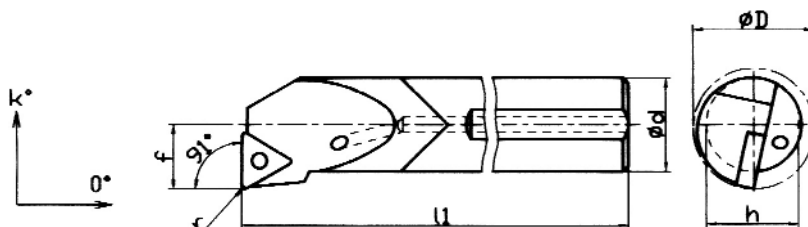
SDUC



Code N.	d	l1	f	h	K°	D	r	Inserts N.	Screw
E10MSDUCR/L07	10	150	7	9.5	-10	13	0.4	DC..0702..	TR1
E12QSDUCR/L07	12	180	9	11.5	-10	16	0.4	DC..0702..	TR1
E16RSDUCR/L07	16	200	11	15.5	-10	20	0.4	DC..0702..	TR1
E20SSDUCR/L11	20	250	13	19.5	- 8	25	0.8	DC..11T3..	TR12
E25TSDUCR/L11	25	300	17	24	- 5	32	0.8	DC..11T3..	TR14



STFC



Code N.	d	l1	f	h	K°	D	r	Inserts N.	Screw
E08KSTFCR/L06	8	125	6	7.5	-15	11	0.4	TC..06T1..	TR16
E10MSTFCR/L09	10	150	7	9.5	-12	13	0.4	TC..0902..	TR6
E12QSTFCR/L09	12	180	9	11.5	-10	16	0.4	TC..0902..	TR6
E16RSTFCR/L11	16	200	11	15.5	- 8	20	0.4	TC..1102..	TR1
E20SSTFCR/L16	20	250	13	19.5	- 8	25	0.8	TC..16T3..	TR14
E25TSTFCR/L16	25	300	17	24	- 5	32	0.8	TC..16T3..	TR14





Die in diesem Katalog angegebenen Abmessungen können ohne Voranzeige an den Kunden geändert werden.

Les dimensions et les mesures sur ce catalogue peuvent être changées à n'importe quel moment sans l'obligation de renseigner les clients.

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stampa
la grafica - cantù