

BT

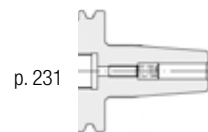


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Technical data and drawings are for information purposes only. Mickros reserves the right to update specs at anytime and without notice.

CTO 4,5° Standard

similar to DIN 69882-8

Mandrino per calettamento termico
Shrink fit chuck
Porte-outils de frettage
Schrumpfutter

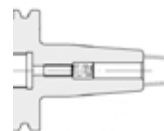


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CTW 4,5° Standard

Cooling Plus

Mandrino per calettamento termico con canali di lubrificazione
Shrink fit chuck with coolant bores
Porte-outils de frettage avec conduits d'arrosage
Schrumpfutter mit Kühlmittelbohrung

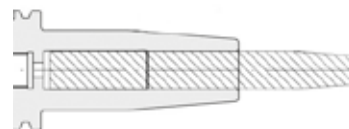


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CTP 4,5°

without back up screw

Mandrino per calettamento termico estensibile, adatto per prolunghe
Extensible shrink fit-chuck suitable for extensions
Porte outils de frettage prolongeable approprié pour rallonges
Verlängerbares schrumpfutter geeignet für verlängerungs

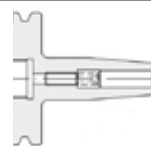


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CTF 4,5°

Slim

Mandrino per calettamento termico di finitura
Finishing shrink fit chuck
Porte outils de frettage pour finissage
Schrumpfutter zum schlichten

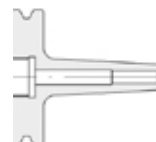


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CTF 3° Slim

without back up screw

Mandrino per calettamento termico. Ideale per la costruzione di STAMPI e cavità profonde
Shrink fit chuck. Suitable for the MOLD and for deep cavities
Porte outils de frettage. Idéal pour la construction de MOLD et des cavités profondes
Schrumpfutter für tiefe Kavitäten geeignet, speziell für den Gesenk, und Formenbau

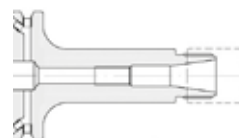


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ERM - Mini

DIN 6499

Portapinze di precisione ER - Mini DIN 6499
Precision collet chuck ER - Mini DIN 6499
Porte pinces de precision ER - Mini DIN 6499
Präzisions spannzangenfutter ER - Mini DIN 6499

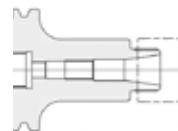


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ERO / ERH

High Performance

Portapinze di precisione ER DIN 6499
Precision collet chuck ER DIN 6499
Porte pinces de precision ER DIN 6499
Präzisions spannzangenfutter ER DIN 6499

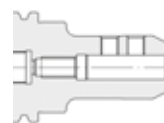


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PUH

DIN 6595-DIN 6535 HE

Mandrino portapunte
Adapter for drilling tools
Porte-foret
Aufnahme für Vollbohrer



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WEC Weldon

DIN 1835-8

Portafrese Weldon corto
End-mill holder Weldon type short execution
Mandrin porte-fraise Weldon type court
Weldon-kegelaufnahme Kurze Ausführung

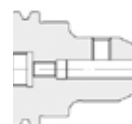


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WEH

DIN 6535-HB / 6535-HE

Mandrini per attacchi Weldon - WN
Weldon - WN toolholders
Porte outils Weldon - WN
Weldon-WN aufnahme



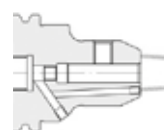
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WEW

Cooling Plus

DIN 6535-HB / 6535-HE

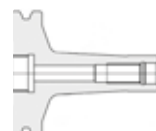
Mandrini per attacchi Weldon - WN con canali di lubrificazione
Weldon - WN toolholders with coolant bores
Porte outils Weldon - WN avec conduits d'arrosage
Weldon-WN aufnahme mit Kühlmittelbohrung



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MDO

Portafrese con filetto interno, per frese con attacco filettato
Cutter-Holder with modular threaded connection
Mandrin Porte-Fraise avec attachement modulaire fileté
Fräseraufnahme mit modular-gewinde aufnahme



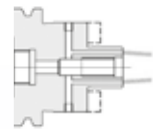
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FSW

Cooling Plus
DIN 6357 B

Portafrese a spianare con trascinatore fisso - con canali di lubrificazione
Face mill arbor with coolant bores
Porte-fraises à surfacer avec conduits d'arrosage
Messerkopf-aufnahme mit Kühlmittelbohrung

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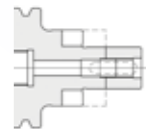


FC

DIN 6358

Portafrese combinato con trascinatore mobile
Kmbi-shell mill arbor
Porte-fraise a double usage
Kombi-aufsteckfräsdorne

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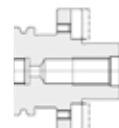


FF

DIN 6357-A / DIN 2079

Portafrese flangiati per frese a spianare
Face mill holder for face milling cutters
Porte-fraise pour fraises a surfacer
Aufsteckfräserdorne für messerköpfe

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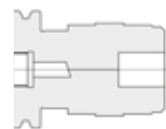


MS

SINKRO

Maschiatore sincronizzato (per bussole ABM-ER con passaggio lubrificante)
Sinkro tapping chucks (for Sinkro's tap adapter ABM-ER with coolant flow)
Sinkro-Gewindeschneidfutter (für schnellwechseleinsätze Sinkro ABM.ER)
Sinkro-appareil a taruder (pour douilles porte-taraud Sinkro ABM.ER)

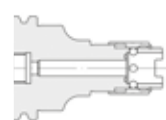
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MR

Maschiatore RIGIDO a cambio rapido senza compensazione assiale con passaggio lubrificante
RIGID tap holder without axial compensation with coolant flow
Appareil à thrauder avec changement rapid sans compensation axiale
Gewindeschneidfutter ohne längenausgleich

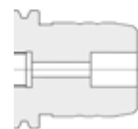
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MC

Maschiatore a cambio rapido con compensazione assiale senza passaggio lubrificante
Quick change tapping chuck with axial compensation without coolant flow
Appareil à thrauder avec changement rapid avec compensation axiale
Gewindeschneidfutter mit doppel längenausgleich

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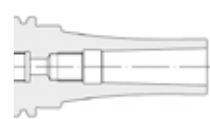


RF

DIN 228-1 Form A

Riduzione Cono Morse per frese
Morse adapter for milling cutter
Porte-fraise avec raccord CM
Morse-kegel-aufnahme mit Anzuggewinde

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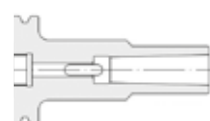


RP

DIN 228-1 Form B

Riduzione Cono Morse per punte
Morse-adapter for drilling tools
Porte-foret avec raccord CM
Morse-kegel-aufnahme

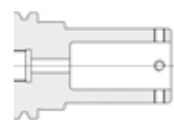
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DP

Sistema modulare DP
Modular system DP

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VAR

Sistema modulare VAR
Modular system VAR

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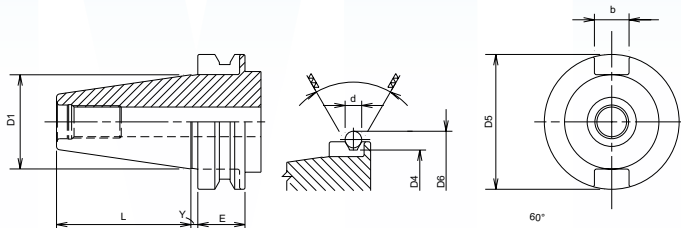
Codoli per BT

Spina di controllo
Control pin
Barre de contrôle
Prüfdorn

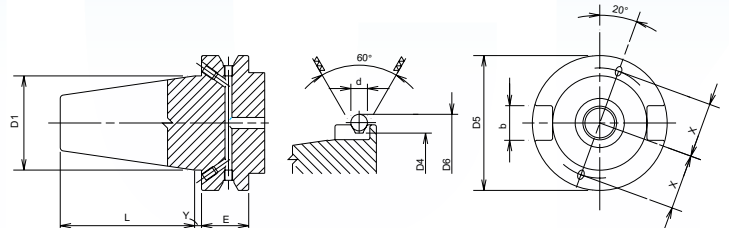
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ISO 7388-2 MAS 403BT - BT JD form



ISO 7388-2 MAS 403BT - BT JF form



	030	040	050
b	16,1	16,1	25,7
d	8	10	15
E	20	25	35
D1	31,75	44,45	69,85
D4	38	53	85
D5	46	63	100
D6	56,144	75,679	119,020
L	48,40	65,40	101,80
Y	2	2	3

	030	040	050
b	16,1	16,1	25,7
d	8	10	15
E	20	25	35
D1	31,75	44,45	69,85
D4	38	53	85
D5	46	63	100
D6	56,144	75,679	119,020
L	48,40	65,40	101,80
X	-	27	42
Y	2	2	3

Mandrini a fissaggio meccanico

- Temprati e cementati con durezza 60 - 2 HRC
- Resistenza alla trazione 950 N/mm²
- Attacco con qualità tolleranza cono AT3

Mandrini per il calettamento a caldo

- Acciaio speciale per lavorazioni a caldo resistente alle alte temperature
- Temprato 54 - 2 HRC

Note

BTB = Forma JD + JF:

- alimentazione interna del lubrificante a scelta attraverso foro centrale (forma AD) oppure attraverso il giunto (forma B)

BTA = Forma JD:

- alimentazione interna del lubrificante attraverso foro centrale

Tool holders:

- Case-hardened 60 - 2 HRC
- Tensile strength in the core at least 950 N/mm²
- Taper in tolerance quality AT3

Shrink fit chuck:

- Heat resistant hot-working steel
- Hardened 54 - 2 HRC

Note

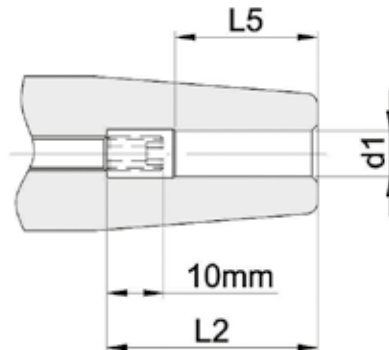
BTB = Forma JD + JF:


- central coolant supply and coolant channels through the flange which can be sealed again

BTA = Forma JD:

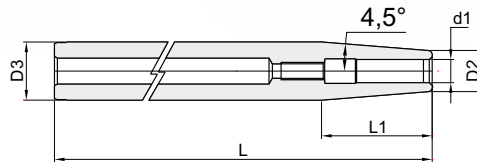
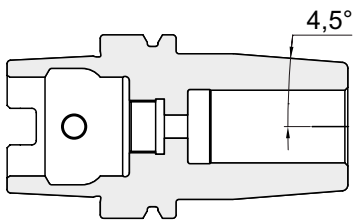
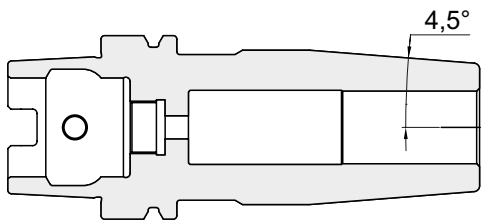
- central coolant supply

Shrink fit chuck

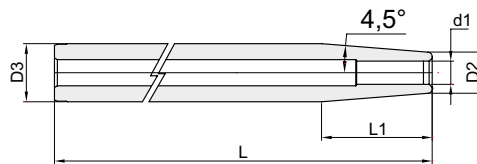


$d1$	$L2$	$L5$ minimum grip	RVR CTW 
3	-	9	-
4	-	12	-
5	-	15	-
6	37	22	M5 x 0,8
8	37	26	M6 x 1
10	42	31	M8 x 1
12	47	36	M10 x 1
14	47	36	M10 x 1
16	50	39	M12 x 1
18	50	39	M12 x 1
20	52	41	M16 x 1
25	58	47	M16 x 1
32	62	51	M16 x 1

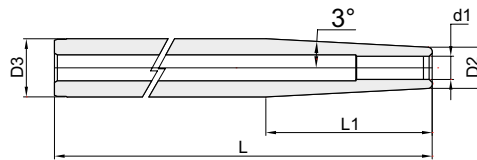
Prolunghe
Extensions



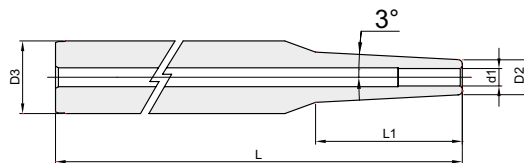
CIL CTO



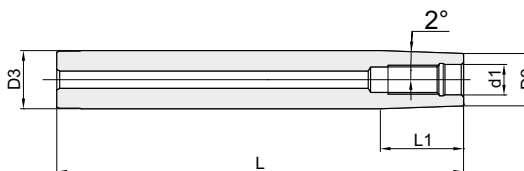
CIL CTP



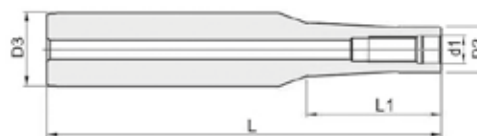
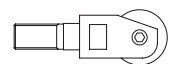
CIL CTF



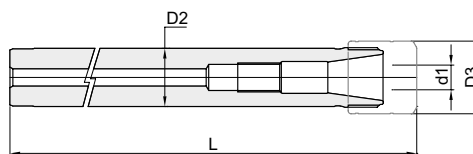
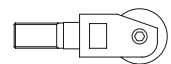
CIL CTR



CIL MD



CIL MDR



CIL ERM

CTO 4,5° standard (similar to DIN 69882-8)

Mandrino per calettamento termico

Shrink fit chuck

Porte-outils de frettage

Schrumpfutter



MANDRINI A CALETTAMENTO simile a DIN 69882-8

- Chuck Body Fine Balanced
- G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- Angolo di calettamento esterno 4,5° gradi
- Con grano di registrazione assiale
- Ø 3-4-5 senza grano di registrazione assiale
- Per utensili in HSS e in HM
- Tolleranza gambo utensile "h6"
- Raffreddamento con fori di refrigerazione "A RICHIESTA"

- Con fori di refrigerazione VEDI "CTW"
- Fori di refrigerazione "A RICHIESTA"

SHRINK FIT CHUCKS similar to DIN 69882-8

- Chuck Body Fine Balanced
- G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- 4,5° slope at the top
- With back-up screw
- Ø 3-4-5 Without back-up screw
- For carbide steel and HSS shanks
- For tools with shank tolerance h6
- With coolant channels ON REQUEST

- With coolant channels SEARCH "CTW"
- Coolant Channels "ON REQUEST"

Accessori | Accessories



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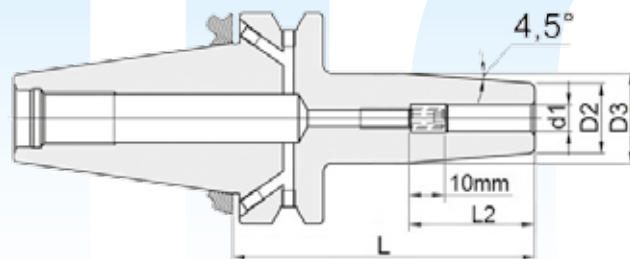


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Ricambi | Spare parts

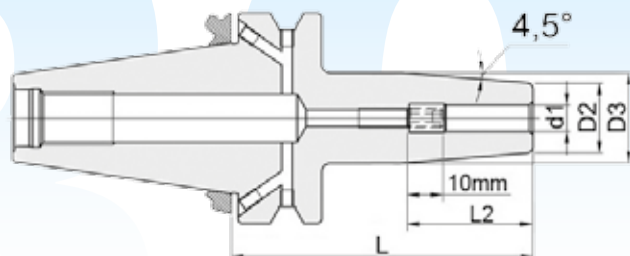


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BT 040 (JD+JF form) - CTO 4,5 STANDARD

codice - code	d1	L	D2	D3	L2	g	L5 minimum grip	Fori Refrigerazione Coolant Channels	APPLICATION
BTB.040.CT003.090	3	90	9	20		No RVR	9	--	
BTB.040.CT004.090	4	90	10	20		No RVR	12	--	
BTB.040.CT005.090	5	90	11	20		No RVR	15	--	
BTB.040.CT006.090	6	90	21	27	37	M5 x 0,8	22	•	
BTB.040.CT006.120	6	120	21	27	37	M5 x 0,8	22	•	
BTB.040.CT006.130	6	130	21	27	37	M5 x 0,8	22	•	
BTB.040.CT006.160	6	160	21	27	37	M5 x 0,8	22	•	
BTB.040.CT008.090	8	90	21	27	37	M6 x 1	26	•	
BTB.040.CT008.120	8	120	21	27	37	M6 x 1	26	•	
BTB.040.CT008.130	8	130	21	27	37	M6 x 1	26	•	
BTB.040.CT008.160	8	160	21	27	37	M6 x 1	26	•	
BTB.040.CT010.090	10	90	24	32	42	M8 x 1	31	•	
BTB.040.CT010.120	10	120	24	32	42	M8 x 1	31	•	
BTB.040.CT010.130	10	130	24	32	42	M8 x 1	31	•	
BTB.040.CT010.160	10	160	24	32	42	M8 x 1	31	•	
BTB.040.CT012.090	12	90	24	32	47	M10 x 1	36	•	
BTB.040.CT012.120	12	120	24	32	47	M10 x 1	36	•	
BTB.040.CT012.130	12	130	24	32	47	M10 x 1	36	•	
BTB.040.CT012.160	12	160	24	32	47	M10 x 1	36	•	
BTB.040.CT014.090	14	90	27	34	47	M10 x 1	36	•	
BTB.040.CT014.130	14	130	27	34	47	M10 x 1	36	•	
BTB.040.CT014.160	14	160	27	34	47	M10 x 1	36	•	
BTB.040.CT016.090	16	90	27	34	50	M12 x 1	39	•	
BTB.040.CT016.120	16	120	27	34	50	M12 x 1	39	•	
BTB.040.CT016.130	16	130	27	34	50	M12 x 1	39	•	
BTB.040.CT016.160	16	160	27	34	50	M12 x 1	39	•	
BTB.040.CT018.090	18	90	33	41	50	M12 x 1	39	•	
BTB.040.CT018.130	18	130	33	41	50	M12 x 1	39	•	
BTB.040.CT018.160	18	160	33	41	50	M12 x 1	39	•	
BTB.040.CT020.090	20	90	33	41	52	M16 x 1	41	•	
BTB.040.CT020.120	20	120	33	41	52	M16 x 1	41	•	
BTB.040.CT020.130	20	130	33	41	52	M16 x 1	41	•	
BTB.040.CT020.160	20	160	33	41	52	M16 x 1	41	•	
BTB.040.CT025.100	25	100	44	53	58	M16 x 1	47	•	
BTB.040.CT025.130	25	130	44	53	58	M16 x 1	47	•	
BTB.040.CT025.160	25	160	44	53	58	M16 x 1	47	•	
BTB.040.CT032.100	32	100			62	M16 x 1	47	•	



BT 050 (JD+JF form) - CT0 4,5 STANDARD

codice - code	d1	L	D2	D3	L2	g	L5 minimum grip	Fori Refrigerazione Coolant Channels	APPLICATION
BTB.050.CT006.100	6	100	21	27	37	M5 x 0,8	22	•	
BTB.050.CT006.130	6	130	21	27	37	M5 x 0,8	22	•	
BTB.050.CT006.160	6	160	21	27	37	M5 x 0,8	22	•	
BTB.050.CT008.100	8	100	21	27	37	M6 x 1	26	•	
BTB.050.CT008.130	8	130	21	27	37	M6 x 1	26	•	
BTB.050.CT008.160	8	160	21	27	37	M6 x 1	26	•	
BTB.050.CT010.100	10	100	24	32	42	M8 x 1	31	•	
BTB.050.CT010.130	10	130	24	32	42	M8 x 1	31	•	
BTB.050.CT010.160	10	160	24	32	42	M8 x 1	31	•	
BTB.050.CT012.100	12	100	24	32	47	M10 x 1	36	•	
BTB.050.CT012.130	12	130	24	32	47	M10 x 1	36	•	
BTB.050.CT012.160	12	160	24	32	47	M10 x 1	36	•	
BTB.050.CT014.100	14	100	27	34	47	M10 x 1	36	•	
BTB.050.CT014.160	14	160	27	34	47	M10 x 1	36	•	
BTB.050.CT016.100	16	100	27	34	50	M12 x 1	39	•	
BTB.050.CT016.130	16	130	27	34	50	M12 x 1	39	•	
BTB.050.CT016.160	16	160	27	34	50	M12 x 1	39	•	
BTB.050.CT018.100	18	100	33	42	50	M12 x 1	39	•	
BTB.050.CT018.160	18	160	33	42	50	M12 x 1	39	•	
BTB.050.CT020.100	20	100	33	42	52	M16 x 1	41	•	
BTB.050.CT020.130	20	130	33	42	52	M16 x 1	41	•	
BTB.050.CT020.160	20	160	33	42	52	M16 x 1	41	•	
BTB.050.CT025.100	25	100	44	53	58	M16 x 1	47	•	
BTB.050.CT025.130	25	130	44	53	58	M16 x 1	47	•	
BTB.050.CT025.160	25	160	44	53	58	M16 x 1	47	•	
BTB.050.CT032.100	32	100	44	53	62	M16 x 1	51	•	
BTB.050.CT032.130	32	130	44	53	62	M16 x 1	51	•	
BTB.050.CT032.160	32	160	44	53	62	M16 x 1	51	•	

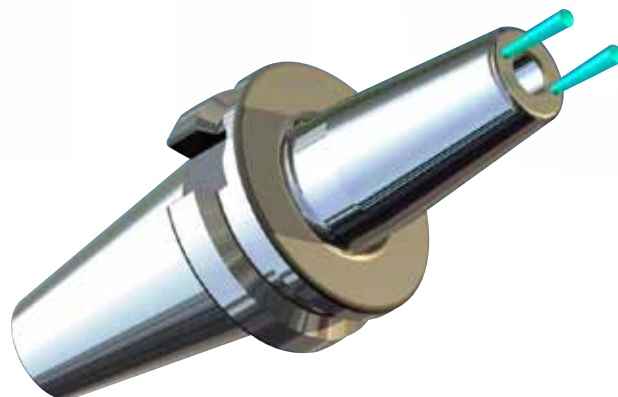
CTW Cooling Plus

Mandrino per calettamento termico con canali di lubrificazione

Shrink fit chuck with coolant bores

Porte-outils de frettage avec conduits d'arrosage

Schrumpfutter mit Kühlmittelbohrung



MANDRINI A CALETTAMENTO Cooling Plus

- Chuck Body Fine Balanced
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- Angolo di calettamento esterno 4,5° gradi
- Con grano di registrazione assiale
- Per utensili in HSS e in HM
- Tolleranza gambo utensile "h6"
- Fori di refrigerazione "STANDARD" richiudibili

SHRINK FIT CHUCKS Cooling Plus

- Chuck Body Fine Balanced
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- 4,5° slope at the top
- With back-up screw
- For carbide steel and HSS shanks
- For tools with shank tolerance h6
- With coolant channels

Accessori | Accessories

PST



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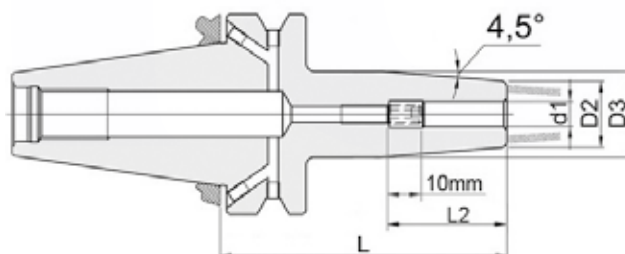
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Ricambi | Spare parts

RVR CTW



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BT 040 (JD+JF form) - CTW Cooling Plus

codice - code	d1	L	D2	D3	L2	G	L5 minimum grip	APPLICATION
BTB.040.CTW06.090	6	90	21	27	37	M5 x 0,8	22	
BTB.040.CTW06.130	6	130	21	27	37	M5 x 0,8	22	
BTB.040.CTW08.090	8	90	21	27	37	M6 x 1	26	
BTB.040.CTW08.130	8	130	21	27	37	M6 x 1	26	
BTB.040.CTW10.090	10	90	24	32	42	M8 x 1	31	
BTB.040.CTW10.130	10	130	24	32	42	M8 x 1	31	
BTB.040.CTW12.090	12	90	24	32	47	M10 x 1	36	
BTB.040.CTW12.130	12	130	24	32	47	M10 x 1	36	
BTB.040.CTW14.090	14	90	27	34	47	M10 x 1	36	
BTB.040.CTW16.090	19	90	27	34	50	M12 x 1	39	
BTB.040.CTW16.130	16	130	27	34	50	M12 x 1	39	
BTB.040.CTW18.090	18	90	33	41	50	M12 x 1	39	
BTB.040.CTW20.090	20	90	33	41	52	M16 x 1	41	
BTB.040.CTW20.130	20	130	33	41	52	M16 x 1	41	
BTB.040.CTW25.100	25	100	44	53	58	M16 x 1	47	

CTP 4,5°

Mandrino per calettamento termico estensibile, adatto per prolunghe

Extensible shrink fit-chuck suitable for extensions

Porte outils de frettage prolongeable approprié pour rallonges

Verlängerbares schrumpfutter geeignet für verlängerungs



MANDRINI A CALETTAMENTO per prolunghe e riduzioni prolungate

Consigliato per uso di prolunghe e riduzioni prolungate

- Chuck Body Fine Balanced
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- Angolo di calettamento esterno 4,5° gradi
- (*) Estensibile - impostazione di lunghezza variabile
- Senza grano di registrazione assiale
- Raffreddamento con fori di refrigerazione "A RICHIESTA"
- Per utensili in HSS e in HM
- Tolleranza gambo utensile "h6"

SHRINK FIT CHUCKS for extensions

Suitable to use with extensions and reduction

- *Chuck Body Fine Balanced*
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- *Run Out 3 micron*
- *4,5° slope at the top*
- *(*) Extensible - Variable length setting*
- *Without back-up screw*
- *With coolant channels ON REQUEST*
- *For carbide steel and HSS shanks*
- *For tools with shank tolerance h6*

Accessori | Accessories

PST



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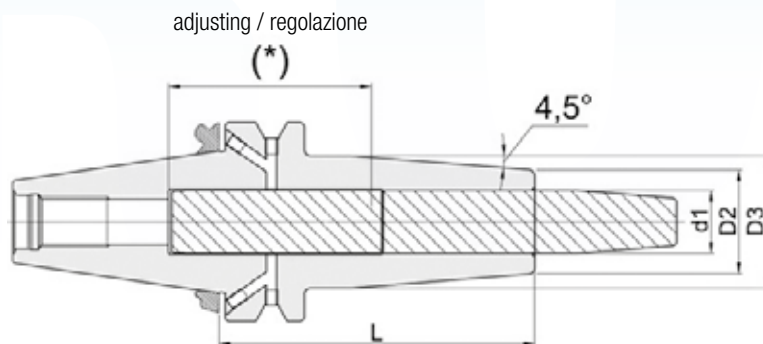
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CIL



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Ricambi | Spare parts

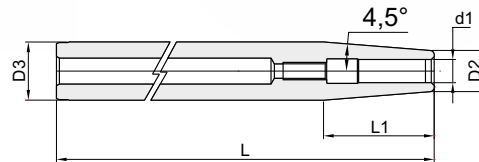
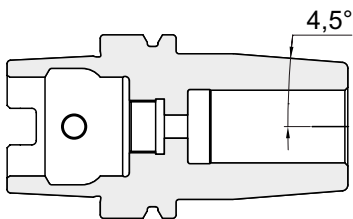
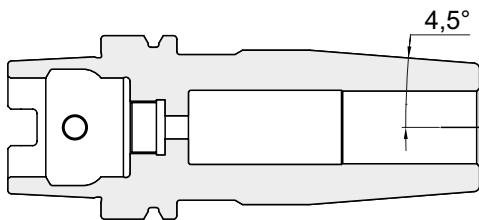


BT 040 (JD+JF form) - CTP 4,5°

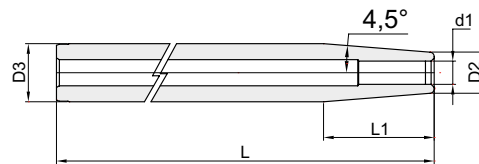
codice - code	D1	L	D2	D3	(*)	Minimum Grip	APPLICATION
BTB.040.CTP12.090	12	90	24	32	(*) 80	36	
BTB.040.CTP16.090	16	90	27	34	(*) 67	39	
BTB.040.CTP20.090	20	90	33	41	(*) 65	41	
BTB.040.CTP25.100	25	100	44	53	(*) 49	47	

BT 050 (JD+JF form) - CTP 4,5°

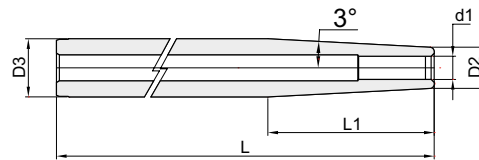
codice - code	D1	L	D2	D3	(*)	Minimum Grip	APPLICATION
BTB.050.CTP16.130	16	130	27	34	(*) 138	39	
BTB.050.CTP20.130	20	130	33	42	(*) 136	41	
BTB.050.CTP25.130	25	130	44	53	(*) 109	47	
BTB.050.CTP32.130	32	130	44	53	(*) 105	51	



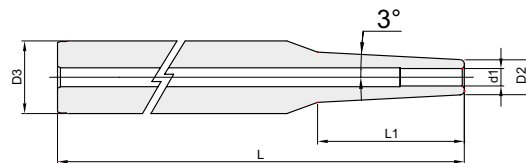
CIL CTO



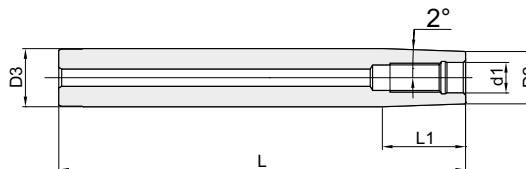
CIL CTP



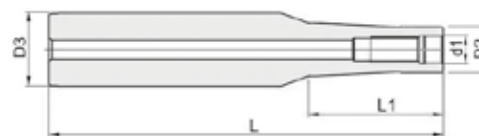
CIL CTF



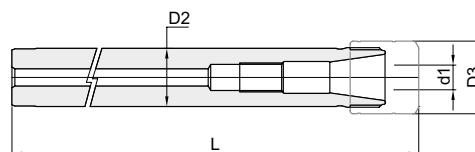
CIL CTR



CIL MD



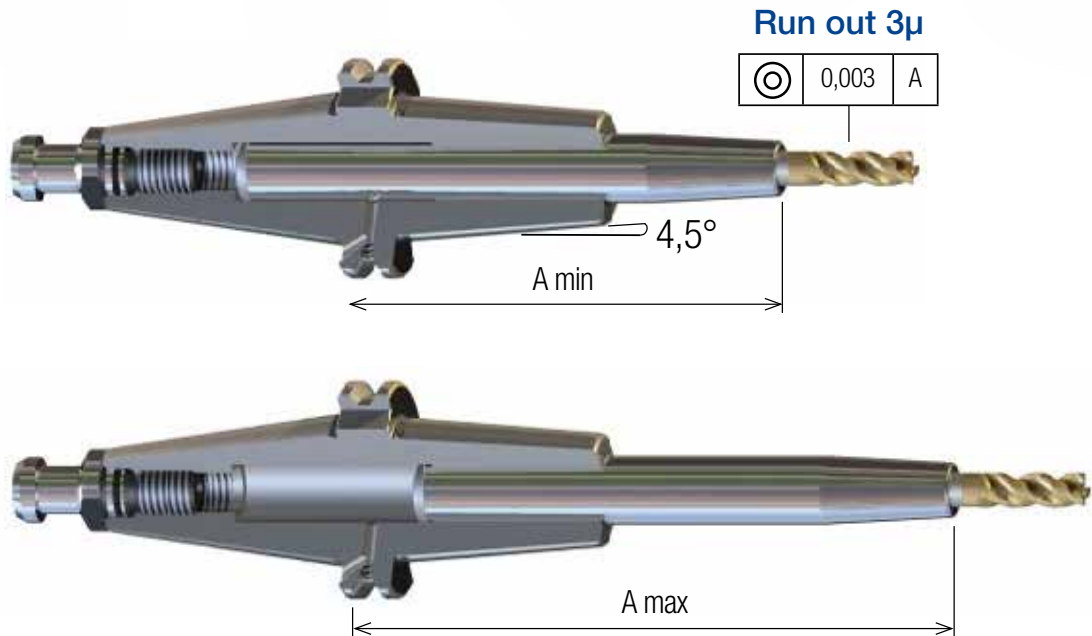
CIL MDR



CIL ERM

Esempio di applicazione

Application example



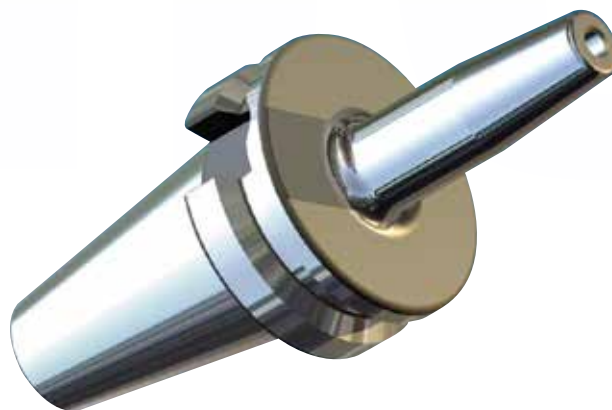
CTF slim - 4,5°

Mandrino per calettamento termico di finitura

Finishing shrink fit chuck

Porte outils de frettage pour finissage

Schrumpfutter zum schlichten



MANDRINI A CALETTAMENTO

Slim - 4,5°

MANDRINO A CALETTAMENTO DI FINITURA

- Chuck Body Fine Balanced
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- Con grano di registrazione assiale
- Angolo di calettamento esterno 4,5° gradi
- Solo per utensili in HM
- Tolleranza gambo utensile "h6"

SHRINK FIT CHUCKS

Slim - 4,5°

SHRINK FIT CHUCK FOR FINISHING

- Chuck Body Fine Balanced
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- With back-up screw
- 4,5° slope at the top
- Only for carbide steel shanks
- For tools with shank tolerance h6

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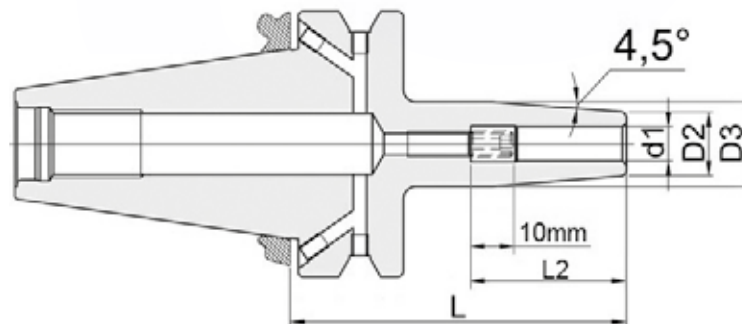
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Ricambi | Spare parts

RVR CTW



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BT 040 (JD+JF form) - CTF slim - 4,5°

codice - code	d1	L	D2	D3	L2	g	L5minimum grip	APPLICATION
BTB.040.CTF06.090- 45	6	90	15	20	37	M5 x 0,8	22	
BTB.040.CTF08.090- 45	8	90	15	20	37	M6 x 1	26	
BTB.040.CTF10.090- 45	10	90	18	25	42	M8 x 1	31	
BTB.040.CTF12.090- 45	12	90	18	25	47	M10 x 1	36	

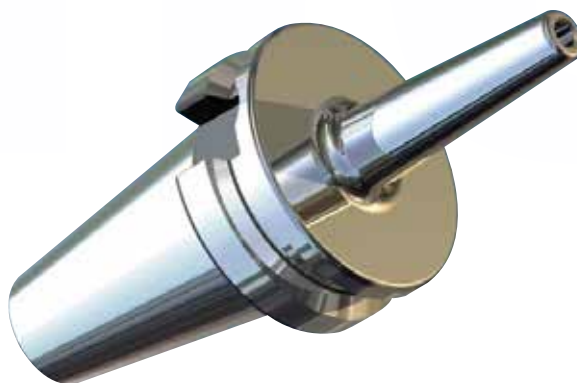
CTF slim - 3°

Mandrino per calettamento termico. Ideale per la costruzione di STAMPI e cavità profonde

Shrink fit chuck. Suitable for the MOLD and for deep cavities

Porte outils de frettage. Idéal pour la construction de MOLD et des cavités profondes

Schrumpfutter für tiefe Kavitäten geeignet, speziell für den Gesenk, und Formenbau



MANDRINI A CALETTAMENTO

Slim - 3°

MANDRINO A CALETTAMENTO DI FINITURA

- Chuck Body Fine Balanced
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- Angolo esterno inclinazione di 3° PER STAMPI
- Spessore Parete 3mm
- Senza grano di registrazione assiale
- Solo per utensili in HM
- Tolleranza gambo utensile "h6"

SHRINK FIT CHUCKS

Slim - 3°

SHRINK FIT CHUCK FOR FINISHING

- Chuck Body Fine Balanced
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- 3° slope at the top .Suitable for the MOLD
- 3 mm. wall thickness
- Without back-up screw
- Only for carbide tools
- For tools with shank tolerance h6

Accessori | Accessories

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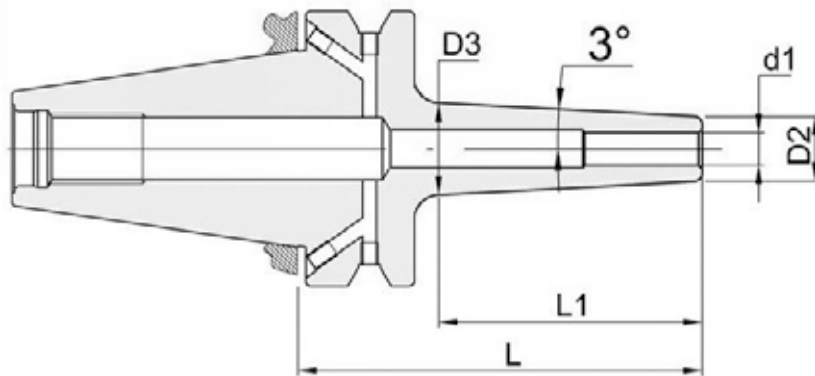
ASC



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Ricambi | Spare parts

spessore parete 3 mm - 3 mm wall thickness



BT 040 (JD+JF form) - CTF slim - 3°

codice - code	D1	L	D2	D3	L1	APPLICATION
BTB.040.CTF03.090-30	3	90	9	15	58	
BTB.040.CTF03.130-30	3	130	9	19	95	
BTB.040.CTF04.090-30	4	90	10	16	58	
BTB.040.CTF04.130-30	4	130	10	20	95	
BTB.040.CTF05.090-30	5	90	11	17	58	
BTB.040.CTF05.130-30	5	130	11	21	95	
BTB.040.CTF06.090-30	6	90	12	18	58	
BTB.040.CTF06.130-30	6	130	12	22	95	
BTB.040.CTF08.090-30	8	90	14	20	58	
BTB.040.CTF08.130-30	8	130	14	24	95	
BTB.040.CTF10.090-30	10	90	16	22	58	
BTB.040.CTF10.130-30	10	130	16	26	95	
BTB.040.CTF12.090-30	12	90	18	24	58	
BTB.040.CTF12.130-30	12	130	18	28	95	

ERM - Mini DIN 6499

Portapinze di precisione ER - Mini DIN 6499

Precision collet chuck ER - Mini DIN 6499

Porte pincés de précision ER - Mini DIN 6499

Prazisions spannzangenfutter ER - Mini DIN 6499



MANDRINO PORTAPINZE DI PRECISIONE ERM - Mini type

- Run Out 3 micron
- Con grano di registrazione assiale

A RICHIESTA:



- Chuck Body Fine Balanced
G 2,5 - 25.000 Rpm - Or U < 1 gmm
«BTA» = Forma "JD"
«BTB» = Forma "JD+JF"

PRECISION COLLET CHUCK ERM - Mini type

- Run Out 3 micron
- With back-up screw

ON REQUEST:



- Chuck Body Fine Balanced
G 2,5 - 25.000 Rpm - Or U < 1 gmm
«BTA» = "JD" form
«BTB» = "JD+JF" form

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ACH GM



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RGM



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RVR ER



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fig. 1

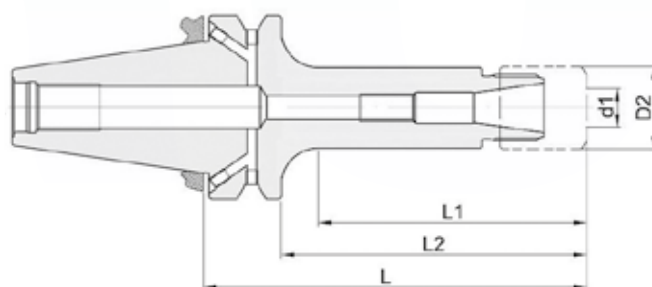
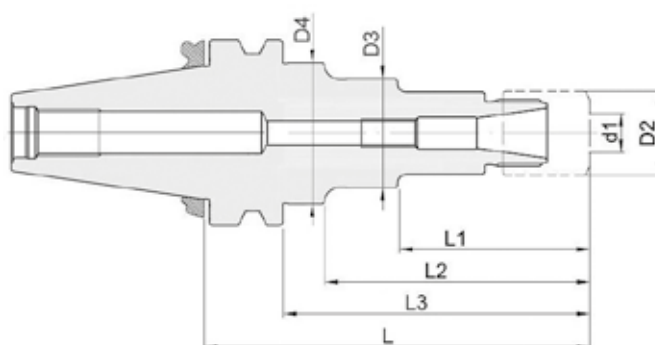


fig. 2



BT 040 (JD+JF form) - ERM - Mini

codice - code	D1	L	D2	D3	D4	L2	L1	Nuts/ghiere
BTB.040.ERM11.100	0,5-7	100	16			73	63	RGM-Mini
BTB.040.ERM11.125	0,5-7	125	16			98	88	RGM-Mini
BTB.040.ERM11.150	0,5-7	150	16			123	113	RGM-Mini
BTB.040.ERM16.100	1-10	100	22			73	63	RGM-Mini
BTB.040.ERM16.125	1-10	125	22			98	88	RGM-Mini
BTB.040.ERM16.150	1-10	150	22			123	113	RGM-Mini
BTB.040.ERM20.100	1-13	100	28			73	63	RGM-Mini
BTA.040.ERM11.120 (fig.2)	0,5-7	120	16	26	45	77	50	RGM-Mini
BTA.040.ERM11.160 (fig.2)	0,5-7	160	16	26	45	117	60	RGM-Mini
BTA.040.ERM16.160 (fig.2)	0,5-10	160	22	30	45	117	66	RGM-Mini

ERO Standard / ERH H/P High Performance DIN 6499

Portapinze di precisione - ER type

Precision collet chuck - ER type

Porte pinces de precision - ER type

Prazisions spannzangenfutter - ER type



ERO Standard

ERO:



ERH H/P High Performance DIN 6499

ERH:



ERO MANDRINO PORTAPINZE ER TYPE STANDARD

- Chuck Body Pre-Balanced
G 6,3 - 15.000 Rpm
- Run Out 3 micron
- Con grano di registrazione assiale

COLLET CHUCKS ER TYPE STANDARD

- Chuck Body Pre- Balanced
G 6,3 - 15.000 Rpm
- Run Out 3 micron
- With back-up screw

ERH MANDRINO PORTAPINZE ER TYPE H/P HIGH PERFORMANCE

- Chuck Body Fine-Balanced
G 2,5 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- Con grano di registrazione assiale

PRECISION COLLET CHUCKS ER TYPE H/P HIGH PERFORMANCE

- Chuck Body Fine Balanced
G 2,5 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- With back-up screw

Accessori | Accessories



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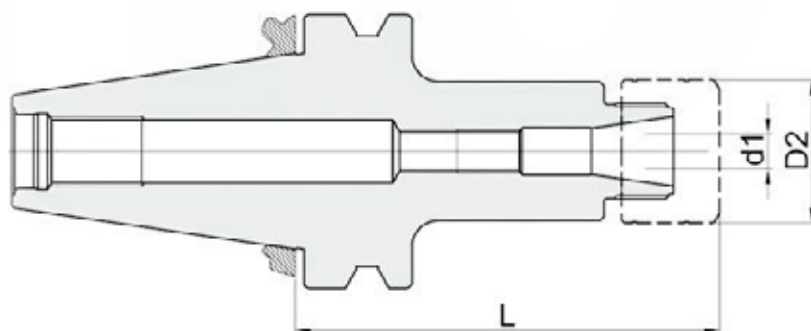
Ricambi | Spare parts



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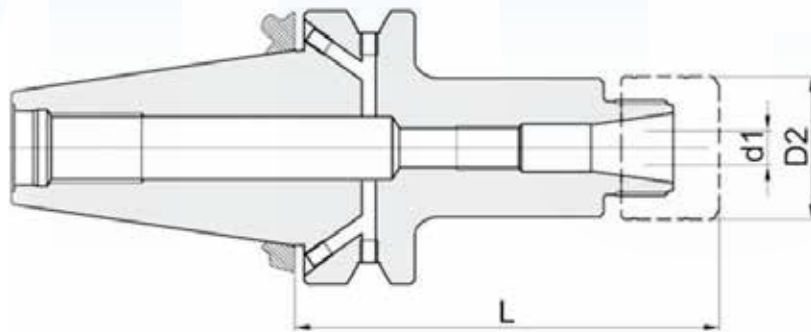
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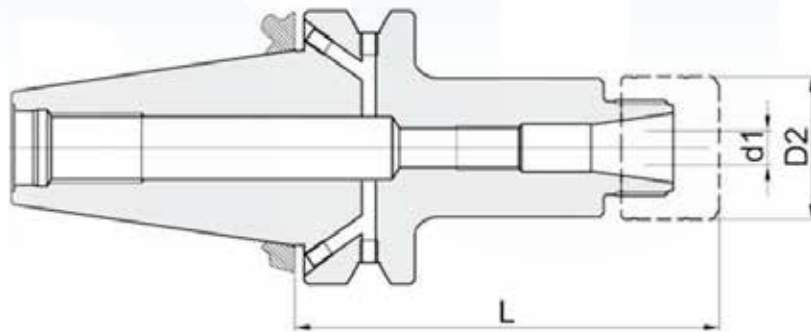
BT 030 (JD form) - ERO-ERH

codice - code		D1	L	D2	Nuts/ghiere ERO / ERH	Nuts/ghiere on request ERO / ERH	APPLICATION
ERO	ERH						
BTA.030.ER016.100	BTA.030.ERH16.100	0,5-10	100	32	RGS / RGE	RGX.ER16 D 2=28	
BTA.030.ER025.090	BTA.030.ERH25.090	1,5-16	90	42	RGS / RGE		
BTA.030.ER032.060	BTA.030.ERH32.060	2,5-20	60	50	RGS / RGE		



BT 040 (JD+JF form) - ERO-ERH

codice - code		d1	L	D2	Nuts ghiere ERO	Nuts ghiere ERH	on-request Nuts/ghiere	APPLICATION
ERO	ERH							
	BT.A.040.ERH11.090	0,5-10	90	32		RGX		
	BT.A.040.ERH11.120	0,5-10	120	32		RGX		
BTB.040.ER016.070	BTB.040.ERH16.070	0,5-10	70	32	RGS	RGE	RGX.ER16 D 2=28	
BTB.040.ER016.090	BTB.040.ERH16.090	0,5-10	90	32	RGS	RGE	RGX.ER16 D 2=28	
BTB.040.ER016.120	BTB.040.ERH16.120	0,5-10	120	32	RGS	RGE	RGX.ER16 D 2=28	
BTB.040.ER016.160	BTB.040.ERH16.160	0,5-10	160	32	RGS	RGE	RGX.ER16 D 2=28	
BTB.040.ER020.070	BTB.040.ERH20.070	1-13	70	35	RGS	RGE		
BTB.040.ER020.120	BTB.040.ERH20.120	1-13	120	35	RGS	RGE		
BTB.040.ER020.160	BTB.040.ERH20.160	1-13	160	35	RGS	RGE		
BTB.040.ER025.070	BTB.040.ERH25.070	1,5-16	70	42	RGS	RGE		
BTB.040.ER025.090	BTB.040.ERH25.090	1,5-16	90	42	RGS	RGE		
BTB.040.ER025.120	BTB.040.ERH25.120	1,5-16	120	42	RGS	RGE		
BTB.040.ER025.160	BTB.040.ERH25.160	1,5-16	160	42	RGS	RGE		
BTB.040.ER032.070	BTB.040.ERH32.070	2,5-20	70	50	RGS	RGE		
BTB.040.ER032.100	BTB.040.ERH32.100	2,5-20	100	50	RGS	RGE		
BTB.040.ER032.130	BTB.040.ERH32.130	2,5-20	130	50	RGS	RGE		
BTB.040.ER032.160	BTB.040.ERH32.160	2,5-20	160	50	RGS	RGE		
BTB.040.ER032.200	BTB.040.ERH32.200	2,5-20	200	50	RGS	RGE		
BTB.040.ER040.070	BTB.040.ERH40.070	3-26	70	63	RGS	RGE		



BT 050 (JD+JF form) - ERO-ERH

codice - code		d1	L	D2	Nuts ghiere ERO	Nuts ghiere ERH	on-request Nuts/ghiere	APPLICATION
ERO	ERH							
BTB.050.ER025.100	BTB.050.ERH25.100	1,5-16	100	42	RGS	RGE		
BTB.050.ER025.160	BTB.050.ERH25.160	1,5-16	160	42	RGS	RGE		
BTB.050.ER032.080	BTB.050.ERH32.080	2,5-20	80	50	RGS	RGE		
BTB.050.ER032.100	BTB.050.ERH32.100	2,5-20	100	50	RGS	RGE		
BTB.050.ER032.160	BTB.050.ERH32.160	2,5-20	160	50	RGS	RGE		
BTB.050.ER040.100	BTB.050.ERH40.100	3-26	100	63	RGS	RGE		
BTB.050.ER040.160	BTB.050.ERH40.160	3-26	160	63	RGS	RGE		

MICK

MICK

KROS

CNC TOOL HOLDERS

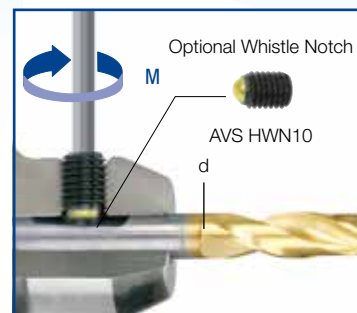
PUH

DIN 6595 / 6535 HE

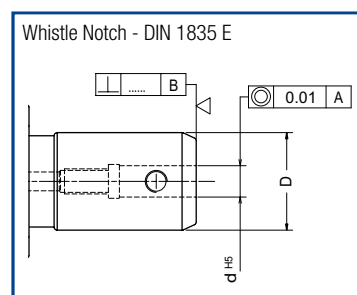
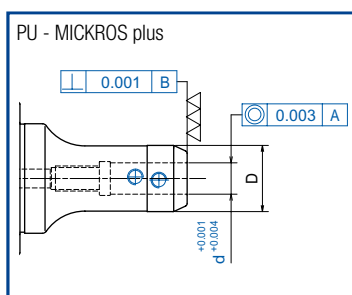
Mandrino portapunte - Foratura MICKROS plus con utensili con gambo di diametro ≥ 14 mm Adapter for drilling tools - MICKROS plus punching with diameter stem tools ≥ 14 mm

Particolare attenzione ha prestato la MICKROS plus a questa operazione, progettando e realizzando il prodotto "PU" che presenta i seguenti vantaggi rispetto ai tradizionali portautensili con attacco Whistle Notch (DIN 1835-E):

- Minore ingombro come illustrato in tabella
- Maggiore precisione di concentricità
- Maggiore precisione di coassialità
- Minore peso e maggiore bilanciabilità
- Maggiore resistenza alla torsione grazie alla posizione disassata dei grani di serraggio utensile.
- Possibilità di utilizzo di punte ad inserto con gambo diam. 40 anche su attacchi HBT 63
- Maggiore rigidità soprattutto nell'utilizzo di punte ad inserto con battuta
- Possibilità di utilizzare utensili di precisione con battuta (ottima applicazione con utensili speciali)
- Possibilità di usare grano con semisfera basculante **AVS HWN 10** dal diam. 14 ÷ 25 per attacchi Whistle Notch.



d	Ø D - DIN 1835-E Whistle Notch	Ø D - MICKROS plus PU
14	48	36
16	48	38
18	52	40
20	52	42
25	63	48
32	71	58
40	-	64



MICKROS plus lent particular attention to this operation, designing and building the product "PU" that offers the following advantages in respect to the traditional toolbox with Whistle Notch fastening (DIN 1835-E):

- Fewer obstacles as shown in table
- Greater concentricity precision
- Greater axial precision
- Less weight and better balance
- Greater resistance to torsion thanks to offset position of tool tightening grains
- Possible to use insertion tips with stem diameter 40 also on HBT 63
- Greater rigidity above all in the use of tips to insert with abutting end
- Possible to use precision tools with abutting end (excellent application with special tools).

MICKROS plus a prêté une attention particulière à cette opération en concevant et en réalisant le produit "PU" qui présente les avantages suivants par rapport aux porte-outils traditionnels avec attache Whistle Notch (DIN 1835-E):

- Encombrement mineur comme illustré dans le tableau
- Plus grande précision de concentricité
- Plus grande précision de coaxialité
- Poids plus petit et plus grand équilibrage
- Plus grande résistance à la torsion grâce à la position désaxée des grains de serrage de l'outil
- Possibilité d'utilisation de forets à insertion avec tige de diamètre 40 même sur attaches HBT 63
- Plus grande rigidité surtout dans l'utilisation de forets à insertion avec butée
- Possibilité d'utiliser des outils de précision avec butée (application optimale avec des outils spéciaux)
- Possibility to use screw with horizontally pivoted halfsphere AVS HWN 10 from Ø 14 to Ø 25 for Whistle Notch type.

MICKROS plus hat besondere Aufmerksamkeit auf diese Bearbeitungsform verwendet und das Produkt "PU" entwickelt und realisiert, das im Vergleich zu den traditionellen Werkzeugträgern mit Aufnahme Whistle Notch (DIN 1835-E) folgende Vorteile aufweist:

- Geringere Abmessungen wie in der Tabelle dargestellt
- Größere Genauigkeit der Konzentrität
- Größere Präzision der Koaxialität
- Geringeres Gewicht und größere Auswuchtfähigkeit
- Größere Torsionsbeständigkeit dank der außerachsigen Position der Werkzeugspannstifte
- Möglichkeit zur Nutzung von Spitzeneinsätzen mit Schaftdurchmesser 40 auch an Aufnahmen HBT 63
- Größere Festigkeit vor allem bei Verwendung von Spitzeneinsätzen mit Anschlag
- Möglichkeit zur Verwendung von Präzisionswerkzeugen mit Anschlag (optimale Anwendung mit Spezialwerkzeugen).

PUH DIN 6595 / 6535 HE

Mandrino portapunte

Adapter for drilling tools

Porte-foret

Aufnahme für Vollbohrer



MANDRINO PORTAPUNTE

- Run Out 3 micron
- Grano di registrazione assiale
- Minore ingombro come illustrato in tabella D2
- Maggiore precisione di coassialità ($d1 +0/+0,005$)
- Minore peso e maggiore bilanciabilità
- Maggiore resistenza alla torsione grazie alla posizione disassata dei grani di serraggio utensile
- Possibilità di utilizzo di punte ad inserto gambo diam. 40
- Maggiore rigidità con utensili con battuta

OPTIONAL:

Possibilità di usare grano con semisfera basculante AVS HWN10 per diam. 14 ÷ 25
per attacchi Whistle Notch Din 1835 E - Din 6535 HE

«BTA» = Forma "JD"

«BTB» = Forma "JD+JF"

ADAPTER FOR DRILLING TOOLS

- Run Out 3 micron
- With set-up screw
- Fewer obstacles as shown in table D2
- Greater axial precision ($d1 +0/+0,005$)
- Less weight and better balance
- Greater resistance to torsion thanks to offset position of tool tightening screws
- Possible to use insertion tips with tool shank diameter 40
- Greater rigidity above all tools with abutting end

OPTIONAL:

Possibility to use screw with horizontally pivoted halfsphere AVS HWN10 for diam. 14 ÷ 25
For Whistle Notch type Din 1835 E-Din 6535 HE

«BTA» = "JD" form

«BTB» = "JD+JF" form

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PST



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ABR



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AVS



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ASC



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Ricambi | Spare parts

RVU 5923

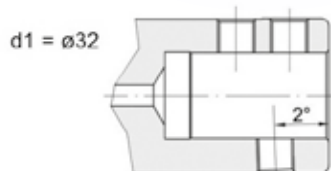
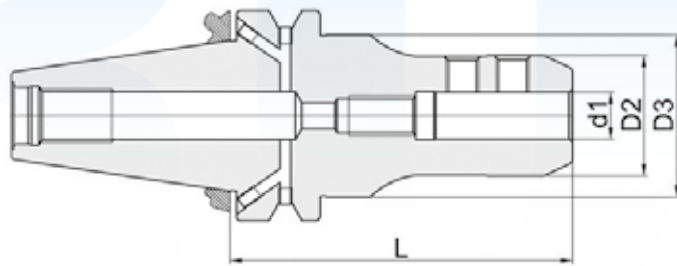


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RVR WN



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BT 040 (JD+JF form) - PUH

codice - code	d1 - H5	L	D2	D3			APPLICATION
BTB.040.PUH14.100	14	100	36	50			DIN 6595DIN 6535 HE
BTB.040.PUH16.100	16	100	38	50			DIN 6595DIN 6535 HE
BTB.040.PUH18.100	18	100	40	50			DIN 6595DIN 6535 HE
BTB.040.PUH20.100	20	100	42	50			DIN 6595DIN 6535 HE
BTB.040.PUH25.100	25	100	48				DIN 6595DIN 6535 HE
BTB.040.PUH32.080	32	80	58		No RVR		DIN 6595DIN 6535 HE
BTB.040.PUH40.080	40	80	63		No RVR		DIN 6595

BT 050 (JD+JF form) - PUH

codice - code	d1	L	D2	D3			APPLICATION
BTA.050.PUH14.140	14	140	36	70			DIN 6595DIN 6535 HE
BTA.050.PUH14.200	14	200	36	70			DIN 6595DIN 6535 HE
BTA.050.PUH16.140	16	140	38	70			DIN 6595DIN 6535 HE
BTA.050.PUH16.200	16	200	38	70			DIN 6595DIN 6535 HE
BTA.050.PUH18.140	18	140	40	70			DIN 6595DIN 6535 HE
BTA.050.PUH18.200	18	200	40	70			DIN 6595DIN 6535 HE
BTB.050.PUH20.140	20	140	42	70			DIN 6595DIN 6535 HE
BTA.050.PUH20.200	20	200	42	70			DIN 6595DIN 6535 HE
BTB.050.PUH25.140	25	140	48	70			DIN 6595DIN 6535 HE
BTB.050.PUH32.100	32	100	58	70	No RVR		DIN 6595DIN 6535 HE
BTA.050.PUH40.115	40	115	68	80	No RVR		DIN 6595

WEC Weldon DIN 1835-B

Portafrese Weldon corto

End-mill holder Weldon type short execution

Mandrin porte-fraise Weldon type court

Weldon-kegelaufnahme Kurze Ausführung



MANDRINI EXTRA CORTI per attacchi Weldon

- Run Out 3 micron
- Particolarmente adatti per volumi di truciatura elevati

«BTA» = Forma “JD”

«BTB» = Forma “JD+JF”

- Consigliati nella formazione della Forma “KOMBI” con maschiatori cilindrici CWE...
- Ottimo abbinamento con Prolunghe Rinforzate MDW (con attacco Weldon) per frese con attacco filettato

TOOL HOLDERS Weldon Extra Short

- Run Out 3 micron
- High Performance Cutting

«BTA» = “JD” form

«BTB» = “JD+JF” form

- Suitable to use in “KOMBI” form, with cylindrical tapping chuck CWE...
- Optimal combination with strengthened extensions MDW (Weldon shank) for threaded type cutter

Accessori | Accessories

PST



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ASC



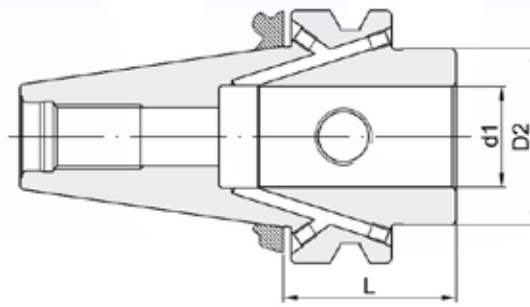
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Ricambi | Spare parts

RVD 1835



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BT 040 (JD+JF form) - WEC Weldon

codice - code	d1	L	D2					APPLICATION
BTA.040.WEC16.035	16	35	35					
BTB.040.WEC20.035	20	35	35					
BTB.040.WEC25.035	25	35	50					
BTB.040.WEC32.075	32	75	72					

BT 050 (JD+JF form) - WEC Weldon

codice - code	d1	L	D2					APPLICATION
BTA.050.WEC20.040	20	40	35					
BTB.050.WEC25.040	25	40	50					
BTB.050.WEC32.044	32	44	72					
BTA.050.WEC40.052	40	52	74					

WEH-WEW

DIN 6535 HB / 6535 HE

Mandrini per attacchi Weldon e Whistle Notch - Foratura MICKROS plus con utensili con gambo di diametro ≤ 12 mm Weldon and Whistle Notch toolholders - MICKROS plus punching with diameter stem tools ≤ 12 mm

Tutti i mandrini WEW - WEH Mickros Plus dal diam. 6 al diam. 12 possono montare sia frese con gambo Weldon (DIN 1835-B) che punte con gambo Whistle Notch (DIN 1835-E) grazie al Kit optional "AVK WN..." composto da:

- Vite speciale con sfera oscillante per il serraggio di utensili con piano inclinato 2° "AVSH WN..."
- Grano di battuta per la regolazione assiale dell'utensile "RVR..."

Vantaggi:

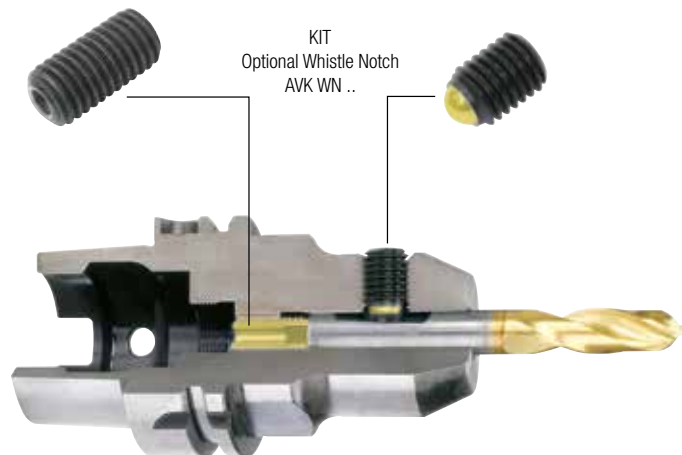
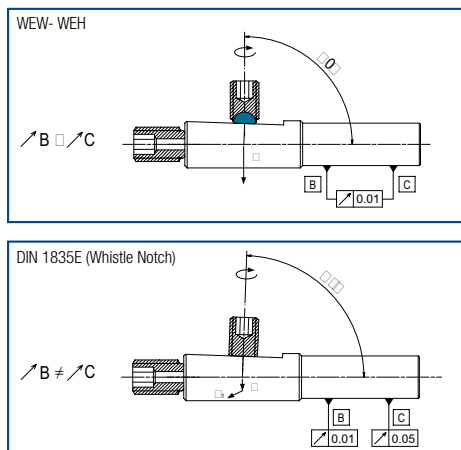
- Maggiore flessibilità: forare e fresare con un unico mandrino.
- Riduzione dei costi: nella maggioranza dei casi può sostituire i sistemi di serraggio idraulici.
- Maggiore precisione in foratura; la vite di serraggio con sfera spianata basculante blocca l'utensile agendo come un cuscinetto ed elimina l'attrito tra i piani (cosa che normalmente avviene con i sistemi DIN 1835E Whistle Notch a vite inclinata 2°) evitando la perdita di precisione in coassialità dovuta ad errori angolari (F; F1).

All of the spindles WEW - WEH Mickros Plus diameter from 6 to 12 can mount both cutters with Weldon stem (DIN 1835-B) and tips with Whistle Notch stem (DIN 1835-E) thanks to the Kit optional "AVK WN". Made up of:

- Special screw with oscillating sphere for the tightening of tools with inclined layout 2° "AVSH WN".
- Sprig striking beat for axial regulation of the "RVR" tool

Advantages:

- Greater flexibility: punch and mill with a single spindle.
- Lower costs: in most cases it can replace hydraulic tightening systems.
- Greater punching precision; the tightening screws with self-stabilizing levelled sphere blocks the tool while acting as a bearing and eliminating friction between the levels (which normally happens with DIN 1835 Whistle Notch systems with 2° inclined screw) and avoiding the loss of axial precision due to angular errors (F; F1).



Toutes les broches WEW - WEH Mickros Plus de diam. 6 au diam. 12 peuvent porter des fraises avec tige Weldon (DIN 1835-B) ainsi que des forets avec tige Whistle Notch (DIN 1835-E) grâce au jeu "AVK WN..." en option composé de:

- Vis spéciale avec bille oscillante pour le serrage des outils avec plan incliné 2° «AVSH WN...»
- Grain de butée pour la régulation axiale de l'outil "RVR..."

Avantages:

- Plus grande flexibilité: percer et fraiser avec une unique broche.
- Réduction des coûts: dans la plupart des cas, elle peut remplacer les systèmes de serrages hydrauliques.
- Plus grande précision dans le perçage, la vis de serrage avec bille plate oscillante bloque l'outil en agissant comme un coussinet et élimine le frottement entre les plans (chose qui arrive normalement avec les systèmes DIN 1835E Whistle Notch à vis inclinée 2°) en évitant la perte de précision en coaxialité due à des erreurs angulaires (F; F1).

Bei allen Werkzeugafnahmen WEW - WEH Mickros Plus von Durchmesser 6 bis Durchmesser 12 können sowohl Werkzeuge mit Schaft Weldon (DIN 1835-B) als auch Werkzeuge mit Schaft Whistle Notch (DIN 1835-E) montiert werden. Dazu ist optional das Kit "AVK WN..." erhältlich, das aus folgenden Elementen besteht:

- Spezialschraube mit Schwingkugel für das Einspannen von Werkzeugen mit 2° geneigter Ebene "AVSH WN..."
- Anschlagstift für die Axialregelung des Werkzeugs "RVR..."

Vorteile:

- Größere Flexibilität: Bohren und Fräsen mit einer einzigen Werkzeugaufnahme.
- Reduzierung der Kosten: Kann in den meisten Fällen die hydraulischen Einspannsysteme ersetzen.
- Größere Bohrpräzision: Die Spannschraube mit abgeflachter Schwingkugel blockiert das Werkzeug, indem es wie ein Lager wirkt, und vermeidet Reibung zwischen den Ebenen (die normalerweise mit den Systemen DIN 1835E Whistle Notch mit 2° geneigter Schraube eintritt), so dass ein Verlust der Koaxialitätspräzision durch Winkelfehler vermieden wird (F; F1).

WEH-WEW Cooling Plus DIN 6535 HB / 6535 HE

Mandrini per attacchi Weldon - WN (WEW con canali di lubrificazione)

Weldon - WN toolholders (WEW with coolant bores)

Porte outils Weldon - WN (WEW avec conduits d'arrosage)

Weldon - WN (WEW aufnahme mit kühlmittellbohrung)



MANDRINI per attacchi Weldon-Whistle Notch WEW - Cooling Plus

- Run Out 3 micron
- Fori di refrigerazione "STANDARD" richiudibili

Tutti i mandrini WEH - WEW Mickros Plus dal diam. 6 al diam. 12 possono montare:

- frese con gambo Weldon (DIN 1835-B)
- punte con gambo Whistle Notch (DIN 1835-E)

OPTIONAL:

Cod. AVK WN ($\varnothing d1 = 6 - 12$)

Whistle Notch Din 1835 E-Din 6535 HE

- Vite speciale con sfera oscillante per il serraggio di utensili con piano inclinato 2° "AVSH WN..."
- Grano per la regolazione assiale dell'utensile "RVR..."

«BTA» = Forma "JD"

«BTB» = Forma "JD+JF"

TOOL HOLDERS

Weldon-Whistle Notch WEW - Cooling Plus

- Run Out 3 micron
- With coolant channels "Standard"

All of the spindles WEH - WEW Mickros Plus diameter from 6 to 12 can mount:

- both cutters with Weldon stem (DIN 1835-B)
- and tips with Whistle Notch stem (DIN 1835-E)

OPTIONAL:

Cod. AVK WN ($\varnothing d1 = 6 - 12$)

Whistle Notch Din 1835 E-Din 6535 HE

- Special screw with oscillating sphere for the tightening of tools with inclined layout 2° "AVSH WN".
- With back-up screw "RVR"

- «BTA» = "JD" form

- «BTB» = "JD+JF" form

Accessori | Accessories



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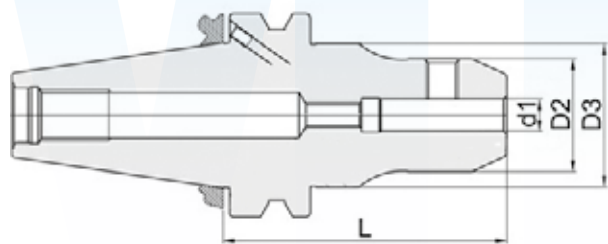


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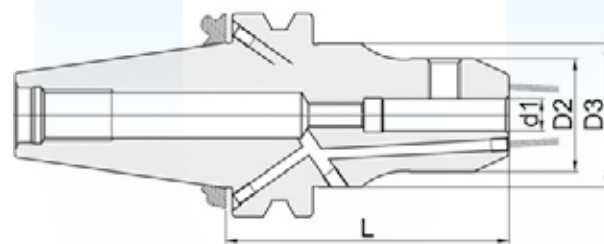
Ricambi | Spare parts



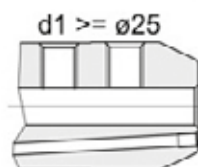
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WEH



WEW



BT 040 (JD+JF form) - WEH-WEW Cooling Plus

codice - code		d1 - H5	L	D2	D3		APPLICATION
WEH	WEW Cooling Plus						
BTB.040.WEH06.060	BTB.040.WEW06.060	6	60	25			DIN 6535 HBDIN 6535 HE
BTB.040.WEH06.130	BTB.040.WEW06.130	6	130	25	50		DIN 6535 HBDIN 6535 HE
BTB.040.WEH08.060	BTB.040.WEW08.060	8	60	28			DIN 6535 HBDIN 6535 HE
BTB.040.WEH08.130	BTB.040.WEW08.130	8	130	28	50		DIN 6535 HBDIN 6535 HE
BTB.040.WEH10.065	BTB.040.WEW10.065	10	65	35			DIN 6535 HBDIN 6535 HE
BTB.040.WEH10.130	BTB.040.WEW10.130	10	130	35	50		DIN 6535 HBDIN 6535 HE
BTB.040.WEH12.065	BTB.040.WEW12.065	12	65	42			DIN 6535 HBDIN 6535 HE
BTB.040.WEH12.130	BTB.040.WEW12.130	12	130	42	50		DIN 6535 HBDIN 6535 HE
BTB.040.WEH14.065	BTB.040.WEW14.065	14	65	44			DIN 6535 HB
BTB.040.WEH16.070	BTB.040.WEW16.070	16	70	48			DIN 6535 HB
BTB.040.WEH16.130	BTB.040.WEW16.130	16	130	48	55		DIN 6535 HB
BTB.040.WEH18.070	BTB.040.WEW18.070	18	70	50			DIN 6535 HB
BTB.040.WEH20.070	BTB.040.WEW20.070	20	70	52			DIN 6535 HB
BTB.040.WEH20.130	BTB.040.WEW20.130	20	130	52	55		DIN 6535 HB
BTB.040.WEH25.100	BTB.040.WEW25.100	25	100	65			DIN 6535 HB
BTB.040.WEH32.100	BTB.040.WEW32.100	32	100	72			DIN 6535 HB

BT 050 (JD+JF form) - WEH

codice - code	d1 - H5	L	D2	D3	APPLICATION
BTA.050.WEH06.200	6	200	25	70	DIN 6535 HBDIN 6535 HE
BTA.050.WEH08.200	8	200	28	70	DIN 6535 HBDIN 6535 HE
BTA.050.WEH10.075	10	75	35		DIN 6535 HBDIN 6535 HE
BTB.050.WEH10.130	10	130	35	70	DIN 6535 HBDIN 6535 HE
BTA.050.WEH10.200	10	200	35	70	DIN 6535 HBDIN 6535 HE
BTB.050.WEH12.075	12	75	42		DIN 6535 HBDIN 6535 HE
BTB.050.WEH12.130	12	130	42	70	DIN 6535 HBDIN 6535 HE
BTA.050.WEH12.200	12	200	42	70	DIN 6535 HBDIN 6535 HE
BTB.050.WEH16.075	16	75	48		DIN 6535 HB
BTA.050.WEH16.140	16	140	48	70	DIN 6535 HB
BTA.050.WEH16.200	16	200	48	70	DIN 6535 HB
BTB.050.WEH20.105	20	105	52		DIN 6535 HB
BTB.050.WEH20.130	20	130	52	70	DIN 6535 HB
BTB.050.WEH25.105	25	105	65		DIN 6535 HB
BTB.050.WEH25.130	25	130	65	70	DIN 6535 HB
BTA.050.WEH25.200	25	200	65	70	DIN 6535 HB
BTB.050.WEH32.105	32	105	72		DIN 6535 HB
BTA.050.WEH32.140	32	140	72	80	DIN 6535 HB
BTA.050.WEH32.200	32	200	72	80	DIN 6535 HB
BTB.050.WEH40.115	40	115	80		DIN 6535 HB

MDO

Portafrese con filetto interno, per frese con attacco filettato

Cutter-Holder with modular threaded connection

Mandrin Porte-Fraise avec attachement modulaire fileté

Fraseraufnahme mit modular-gewinde aufnahme



PORTAFRESE rigido per frese con attacco filettato

- Design ottimizzato, con metodo di costruzione migliorato, combina elevata rigidità con attenuazione delle vibrazioni.
- Chuck Body Fine Balanced
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- Angolo profilo esterno < 3 gradi

Rigid CUTTER-HOLDERS with modular threaded connection

- The optimized design with better construction combines high rigidity with vibration dampening features
- Chuck Body Fine Balanced
G 2,5 - 25.000 Rpm - Or U < 1 gmm
- Run Out 3 micron
- < 3° slope at the top

Accessori | Accessories

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MDM



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MDM ER



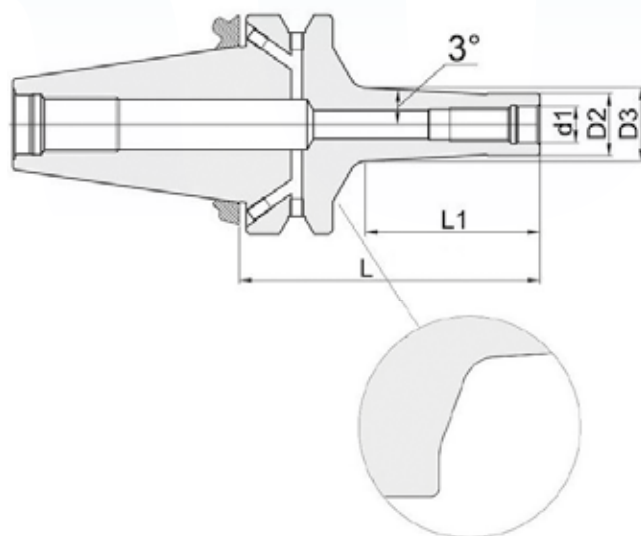
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ASC



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Ricambi | Spare parts



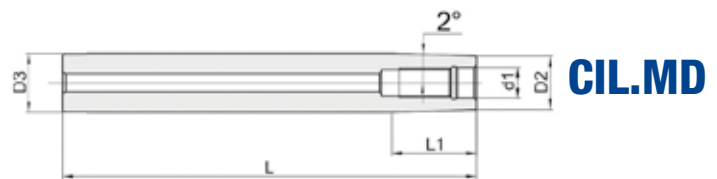
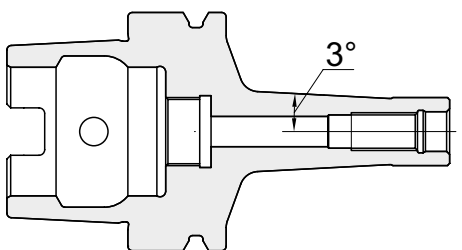
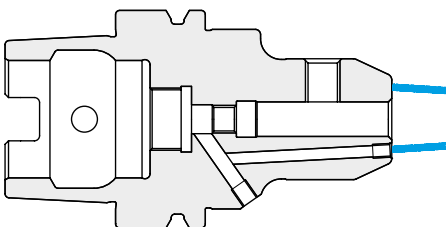
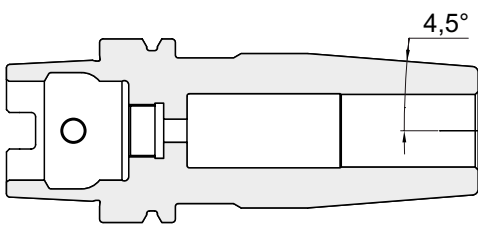
BT 040 (JD+JF form) - MD0

codice - code	d1	L	D2	D3	L1	APPLICATION
BTB.040.MD008.015	8,5-M8	50	13.5	13.5	15	
BTB.040.MD008.050	8,5-M8	90	13.5	17	50	
BTB.040.MD010.015	10,5-M10	50	18	18	15	
BTB.040.MD010.050	10,5-M10	90	18	21	50	
BTB.040.MD012.015	12,5-M12	50	21	21	15	
BTB.040.MD012.050	12,5-M12	90	21	24	50	
BTB.040.MD012.090	12,5-M12	130	21	28	90	
BTB.040.MD016.015	17-M16	50	29	29	15	
BTB.040.MD016.050	17-M16	90	29	32	50	
BTB.040.MD016.090	17-M16	130	29	36	90	

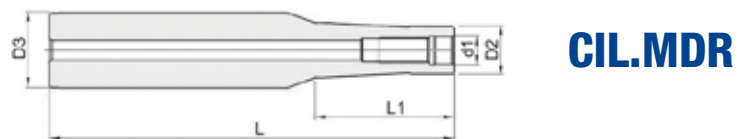
Prolunghe Extensions

Sistema modulare per frese attacco filettato

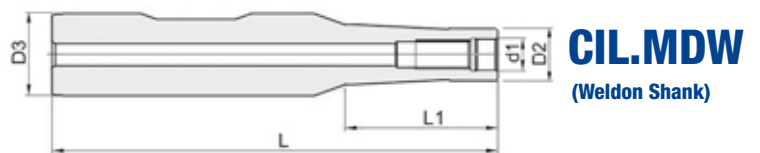
Threaded modular tool system for
milling cutter with threaded connection



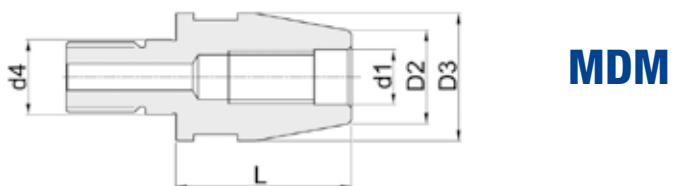
CIL.MD



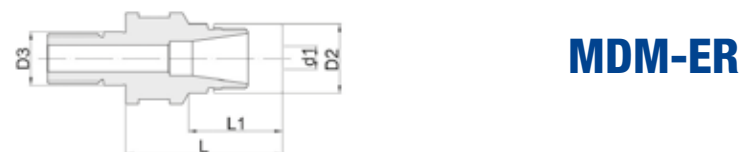
CIL.MDR



CIL.MDW
(Weldon Shank)



MDM



MDM-ER

FSW Cooling Plus DIN 6357-B

Portafrese a spianare con trascinatore fisso - con canali di lubrificazione

Face mill arbor with coolant bores

Porte-fraises à surfacer avec conduits d'arrosage

Messerkopf- aufnahme mit Kühlmittelbohrun



PORTAFRESE con canali di lubrificazione

PORTAFRESE A SPIANARE CON TRASCINATORE FISSO

- Run Out 3 micron
- Fori di refrigerazione "STANDARD"

FACE MILL ARBOR with coolant channels

FACE MILL ARBOR WITH COOLANT CHANNELS

- Run Out 3 micron
- With "STANDARD" coolant channels

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Ricambi | Spare parts

RVU 5931



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RCT FM/DP



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RVU 5933



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RRS FM



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Fig. 1

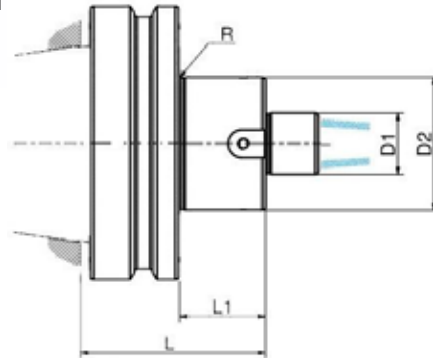
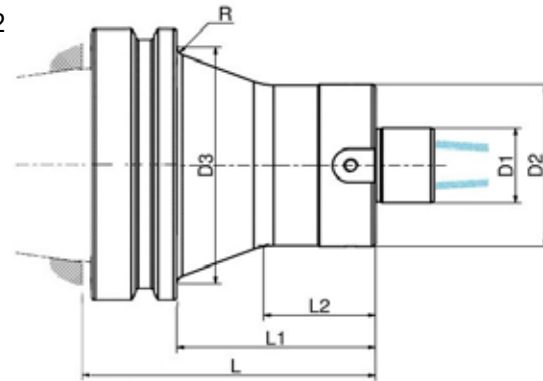


Fig. 2



BT 040 (JD+JF form) - FSW Cooling Plus

codice - code	d1	L	D2			L1 - R	APPLICATION
BTB.040.FSW16.050	16	50	38			23	Fig. 1
BTB.040.FSW16.090	16	90	38			63	Fig. 1
BTB.040.FSW22.050	22	50	48			23	Fig. 1
BTB.040.FSW22.090	22	90	48			63	Fig. 1
BTB.040.FSW27.050	27	50	58			23	Fig. 1
BTB.040.FSW27.090	27	90	58			63	Fig. 1
BTB.040.FSW32.050	32	50	70			23	Fig. 1
BTB.040.FSW40.055	40	55	83			28	Fig. 1

Fig. 1

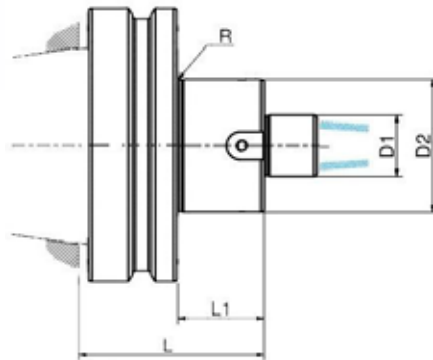
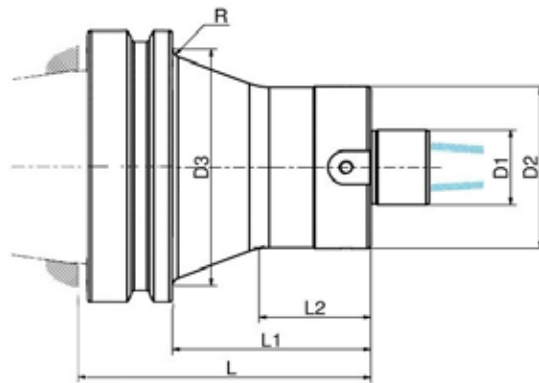


Fig. 2



BT 050 (JD+JF form) - FSW Cooling Plus

codice - code	d1	L	D2	D3		L1 - R	L2	APPLICATION
BTB.050.FSW22.060	22	60	48			22		Fig. 1
BTB.050.FSW22.100	22	100	48	70		62 - 3	35	Fig. 2
BTB.050.FSW27.060	27	60	58			22		Fig. 1
BTB.050.FSW27.100	27	100	58	75		62 - 3	37	Fig. 2
BTB.050.FSW32.060	32	60	78			22		Fig. 1
BTB.050.FSW32.100	32	100	78			62		Fig. 1
BTB.050.FSW40.060 - 83	40	60	83			22		Fig. 1

FC DIN 6358

Portafrese combinato con trascinatore mobile

KOMBI-shell mill arbor

Porte-fraise a double usage

Kombi-aufsteckfräsdorne



PORTAFRESE COMBINATO con trascinatore mobile

Per il fissaggio di frese DIN 841 / DIN 1880
e di frese angolari DIN 842 / DIN 1830.

- Run Out 3 micron

COMBI SHELL END MILL ARBOR

*For clamping shell end mills DIN 841 / DIN 1880
and angular milling cutters DIN 842 / DIN 1830.*

- Run Out 3 micron

Accessori | Accessories

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Ricambi | Spare parts

RVU 5933



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RRS FM



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RTD 6366

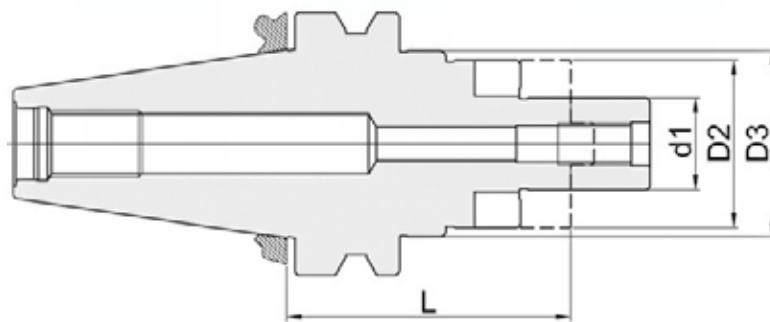


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RLU 6604



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BT 040 (JD form) - FC

codice - code	D1	L	D2	D3	APPLICATION
BTA.040.FC016.055	16	55	32		
BTA.040.FC016.100	16	100	32	36	
BTA.040.FC022.055	22	55	40		
BTA.040.FC027.055	27	55	48		
BTA.040.FC027.100	27	100	48		
BTA.040.FC032.060	32	60	58		
BTA.040.FC032.100	32	100	58		
BTA.040.FC040.060	40	60	70		

BT 050 (JD form) - FC

codice - code	d1	L	D2	D3	APPLICATION
BTA.050.FC016.070	16	70	32		
BTA.050.FC016.125	16	125	32	38	
BTA.050.FC022.070	22	70	40		
BTA.050.FC027.070	27	70	48		
BTA.050.FC027.125	27	125	48	60	
BTA.050.FC032.070	32	70	58		
BTA.050.FC032.125	32	125	58	70	
BTA.050.FC040.070	40	70	70		
BTA.050.FC040.125	40	125	70		

FF DIN 6357-A / DIN 2079

Portafrese flangiati per frese a spianare

Face mill holder for face milling cutters

Porte-fraise pour fraises a surfacer

Aufsteckfräserdorne für messerköpfe



PORTAFRESE CON FLANGIA

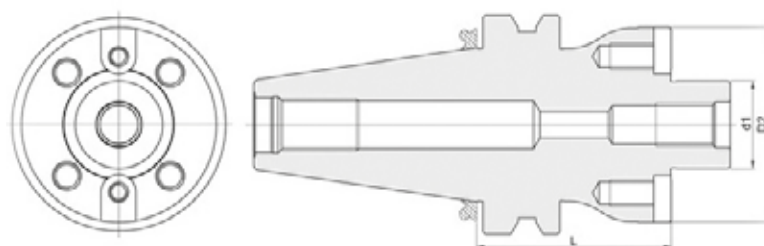
- Run Out 3 micron

«BTA» = Forma "JD"

ADAPTER for MILLING TOOLS with flange

- Run Out 3 micron

«BTA» = "JD" form



codice - code	d1	L	D2				APPLICATION
BTA.050.FF040.070	40	70	89				
BTA.050.FF040.112	40	112	89				
BTA.050.FF060.080	60	80	129				

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RVU 5931



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RCT FM/DP



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RVU 5933



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RRS FM



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KROS

MICK

KROS

CNC TOOL HOLDERS

Maschiatori per maschiatura sincronizzata "SINKRO"

Tapping chuck for synchronized tapping "SINKRO"

Sulle macchine con maschiatura rigida sincronizzata la compensazione assiale, anche se minima, è fondamentale per l'esecuzione di filetti in tolleranza, questa compensazione permette infatti di eliminare eventuali errori della macchina dovuti a difetti o giochi che inevitabilmente si vengono a creare.

Esiste una correlazione tra la durata del maschio per lavorazioni meccaniche e l'allineamento maschio-foro particolarmente evidente su maschi da M3 a M12. Se il fissaggio del maschio nel maschiatore è tale da non garantire in punta al maschio un perfetto allineamento ed una perfetta assenza di gioco assiale, nell'esecuzione del filetto il maschio avrà un'usura rapida nelle prime spire dell'elica dovuta alle micro collisioni generate dallo scorretto imbocco con il foro da filettare.

Al contrario se il maschio è perfettamente allineato al foro ed anche perfettamente esente da giochi, quando inizia a filettare, la durata del maschio aumenta in modo evidente, fino a tre volte la durata solita.

Caratteristiche tecniche:

- Capacità di maschiatura: M3 - M12; M6 - M20; M14 - M33
- Perfetto allineamento maschio - foro
- Durata del maschio tripla rispetto ad un sistema di maschiatura tradizionale
- Cambio rapido del maschio e della bussola
- Adatto per maschiatura rigida sincronizzata con compensazione in sfilamento (1 mm) ed in rientro (0,2 mm) per serie **M3 - M12 e M6 - M20** e con compensazione in sfilamento (2 mm) ed in rientro (0,4 mm) per serie **M14 - M33**
- Predisposto per il passaggio della lubrificazione fino a 50 bar
- Ingombro ridotto

La filettatura rigida sincronizzata presuppone una macchina atta a sincronizzare la rotazione del mandrino principale ed il movimento di avanzamento. Oggi questa è generalmente una caratteristica standard dei centri di lavoro.

L'esperienza ha dimostrato che al momento dell'inversione di rotazione la sincronia non è sempre garantita al 100%. In tal caso si producono in parte sull'utensile forze assiali molto elevate.

I maschi per filettatura sincrona possono essere alloggiati sia nei comuni mandrini Weldon che nei portautensili a pinze. Entrambi gli elementi di serraggio presentano lo svantaggio, che le forze assiali prodotte non possono essere compensate nell'inversione.



INTEGRAL

On rigid tapping we need a minimum compensation to absorb eventual errors between feed rate and pitch of the thread. Analysis showed that there is a correlation between the alignment of the tap and hole especially on small taps from M3 to M12. If the alignment isn't perfect than the tap wears out easily because the tap touches the flanks of the hole because of a slight radial play. On the other hand we found that if there is no radial play involved the tool life can be increased drastically.

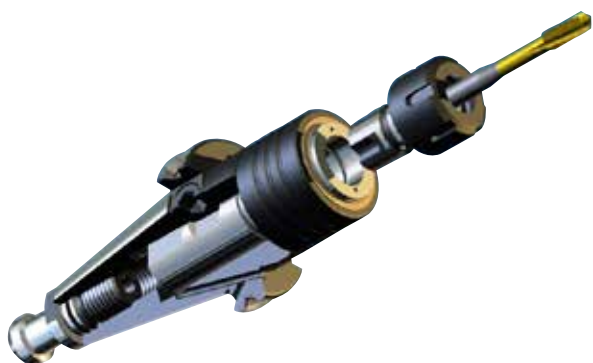
Technical features:

- Tap capacity: M3 - M12; M6 - M20; M14 - M33;
- Perfect line up tap-hole
- Triple life of tap in comparison to a traditional tapping system
- Quick change of the tap and the adapter
- Suitable for rigid tapping with a micro compensation in extension (1 mm) and (0,2 mm) in compression type **M3 - M12 and M6 - M20** and compensation in extension (2 mm) and (0,4 mm) in compression type **M14 - M33**
- Possible coolant flow till 50 bar
- Reduced dimensions.

With rigid tapping we need a machining centre with a rigid tapping program. This has become a standard feature nowadays.

Our experience showed us at the very critical moment of inverting the sense of the machine the synchronisation is not always 100% granted. In that case there is a high pressure on the flanks of the tap.

Taps for synchronized tapping can be placed in Weldon tapping chucks or in collect chucks. In both cases axial forces can not be compensated during the inversion.



KOMBI

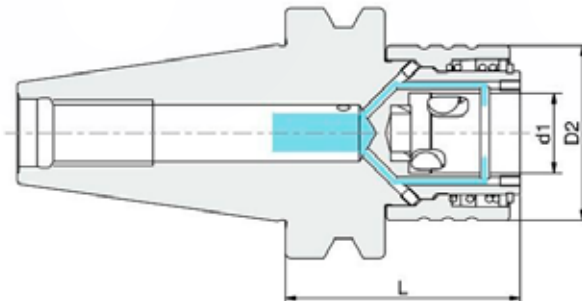
MS Sinkro Plus

Maschiatore sincronizzato (per bussole ABM-ER) con passaggio lubrificante

Sinkro tapping chucks (for Sinkro's tap adapter ABM-ER) with coolant flow

Sinkro-Gewindeschneidfutter (für schnellwechseleinsätze SinKro ABM.ER)

Sinkro-appareil a taruder (pour douilles porte-taraud Sinkro ABM.ER)



MASCHIATORE SINCRONIZZATO Sinkro Plus

- Con passaggio lubrificante
- per bussole ABM.ER con pinze PER-S (ER Type-Din 6499)

Sinkro Plus TAPPING CHUCKS

- With coolant flow
- for Sinkro's tap adapter ABM.ER with PER-S Collets (ER Type Din 6499)

BT 040 (JD+JF form) - MS Sinkro Plus

codice - code	d1	L	D2	Accessories	APPLICATION
BTB.040.MS020.061	20	61	43	ABM.020.ER16 M3÷12	INTEGRAL
BTB.040.MS032.082	32	82	60	ABM.032.ER25 M6÷20	INTEGRAL

BT 050 (JD+JF form) - MS Sinkro Plus

codice - code	D1	L	D2	Accessories	APPLICATION
BTB.050.MS020.074	20	74	43	ABM.020.ER16 M3÷12	KOMBI
BTB.050.MS032.096	32	96	60	ABM.032.ER25 M6÷20	KOMBI

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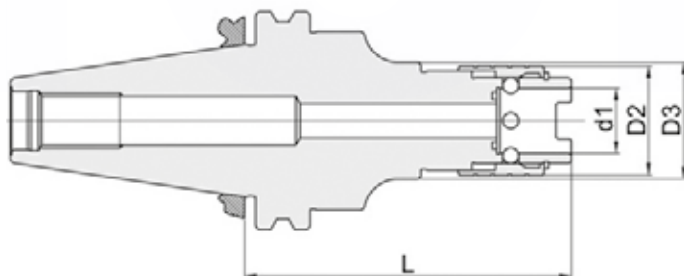
MR

Maschiatore rigido a cambio rapido senza compensazione assiale con passaggio lubrificante

Rigid tap holder without axial compensation with coolant flow

Appareil à thrauder avec changement rapid sans compensation axiale

Gewindeschneidfutter ohne längenausgleich



MASCHIATORE RIGIDO senza compensazione assiale

CON PASSAGGIO LUBRIFICANTE

- Adatti macchine CNC predisposte per "maschiatura rigida".
- (per bussole portamaschi ABM-R)

RIGID TAPPING CHUCKS without axial compensation

WITH COOLANT FLOW

- Suitable for use on CNC machines with rigid tapping cycles.
- (Bush for tapping ABM-R/RW/F type)

BT 040 (JD+JF form) - MR

codice - code	d1	L	D2	D3	Capacity	APPLICATION
BTB.040.MR019.076	19	76	35	35	M3 - M12	KOMBI
BTB.040.MR031.098	31	98	50	44	M6 - M20	KOMBI
BTB.040.MR048.163	48	163	72	72	M14 - M33	KOMBI

BT 050 (JD+JF form) - MR

codice - code	d1	L	D2	D3	Capacity	APPLICATION
BTA.050.MR019.081	19	81	35	35	M3 - M12	KOMBI
BTB.050.MR031.103	31	103	50	50	M6 - M20	KOMBI
BTB.050.MR048.132	48	132	72	72	M14-M33	KOMBI

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ABM R



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ABM RW



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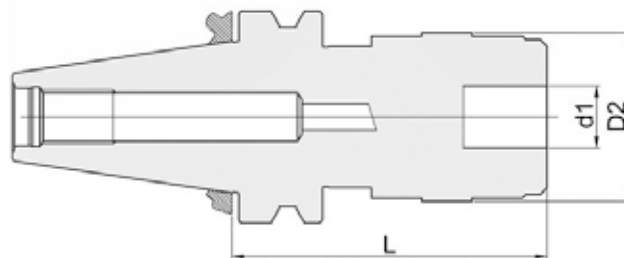
MC

Maschiatore a cambio rapido con compensazione assiale senza passaggio lubrificante

Quick change tapping chuck with axial compensation without coolant flow

Appareil à thrauder avec changement rapid avec compensation axiale

Gewindeschneidfutter mit doppel längenausgleich



MASCHIATORE doppia compensazione assiale

- Senza passaggio lubrificante
(per bussole portamaschi ABM-R/RW/F)

QUICK-CHANGE TAPPING CHUCK with double axial compensation

- Without coolant flow
(Bush for tapping ABM-R/RW/F type)

BT 040 (JD+JF form) - MC

codice - code	d1	L	D2	D3	Capacity	Rientro-Sfilam Compr - Ext	APPLICATION
BTB.040.MC.019.076	19	76	38		M3 - M12	9 - 9	KOMBI
BTB.040.MC.031.098	31	98	55		M6 - M20	15 - 15	KOMBI
BTB.040.MC.048.184	48	184	79		M14-M33	24 - 24	KOMBI

BT 050 (JD+JF form) - MC

codice - code	d1	L	D2	D3	Capacity	Rientro-Sfilam Compr - Ext	APPLICATION
BTA.050.MC.019.081	19	81	38		M3 - M12	9 - 9	KOMBI
BTB.050.MC.031.103	31	103	55		M6 - M20	15 - 15	KOMBI
BTB.050.MC.048.153	48	153	79		M14-M33	24 - 24	KOMBI

Accessori | Accessories

Ricambi | Spare parts



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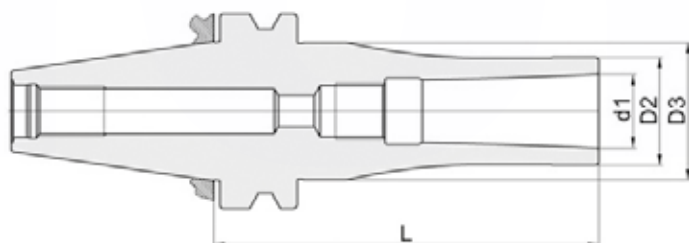
RF DIN 228-1 FORM A

Riduzione cono morse per frese

Morse adapter for milling cutter

Porte-fraise avec raccord CM

Morse-kegel-aufnahme mit Anzuggewinde



Riduzione cono morse per frese

- Run Out 5 micron

Adapter for morse taper with thread

- Run Out 5 micron

BT 040 (JD form) - RF

codice - code	d1	L	D2				APPLICATION
BTA.040.RF001.050	MORSE 1	50	25				
BTA.040.RF002.050	MORSE 2	50	32				
BTA.040.RF002.060	MORSE 2	60	32				
BTA.040.RF002.100	MORSE 2	100	28				
BTA.040.RF003.090	MORSE 3	90	34				
BTA.040.RF003.130	MORSE 3	130	32				
BTA.040.RF004.110	MORSE 4	110	44				

BT 050 (JD form) - RF

codice - code	d1	L	D2				APPLICATION
BTA.050.RF002.060	MORSE 2	60	32				
BTA.050.RF002.112	MORSE 2	112	28				
BTA.050.RF003.075	MORSE 3	75	40				
BTA.050.RF004.085	MORSE 4	85	48				
BTA.050.RF004.140	MORSE 4	140	40				

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ACH RF



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RBH RF



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RVH RF



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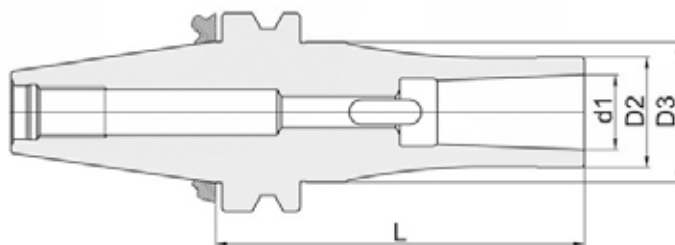
RP DIN 228-1 FORM B

Riduzione cono morse per punta

Morse-adapter for drilling tools

Porte-foret avec raccord CM

Morse-kegel-aufnahme



Riduzione cono morse per punta

- Run Out 5 micron

Adapter for morse taper with tang

- Run Out 5 micron

BT 040 (JD form) - RP

codice - code	d1	L	D2				APPLICATION
BTA.040.RP001.050	MORSE 1	50	25				
BTA.040.RP002.050	MORSE 2	50	32				
BTA.040.RP003.070	MORSE 3	70	40				
BTA.040.RP004.095	MORSE 4	95	48				

BT 050 (JD form) - RP

codice - code	d1	L	D2	D3			APPLICATION
BTA.050.RP002.060	MORSE 2	60	32				
BTA.050.RP003.065	MORSE 3	65	40				
BTA.050.RP004.095	MORSE 4	95	48				
BTA.050.RP005.105	MORSE 5	105	63	70			

Accessori | Accessories

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DP Modular

Sistema modulare DP

Modular system DP

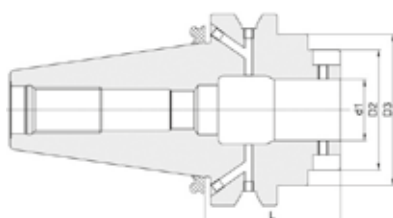


Adattatore modulare BT - DP

- ADATTATORE MODULARE TIPO "DP"
"ON - DEMAND" Lotti/minimi produzione 30 pezzi

Modular Adaptor BT - DP

- MODULAR ADAPTOR "DP" type
"ON - DEMAND" Minimal quantity of production 30 pieces



codice - code	d1	L	D2					APPLICATION
BTA.040.DP063.040	32	40	63					

codice - code	d1	L	D2					APPLICATION
BTA.050.DP063.056	32	56	63					
BTA.050.DP080.056	40	56	78					

Accessori | Accessories

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VAR Modular

Sistema modulare Varilock
Modular system Varilock

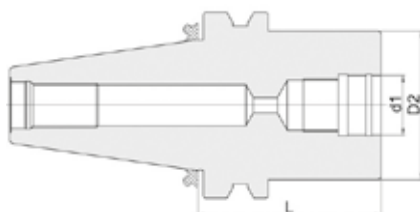


Adattatore Modulare tipo BT - VAR

- ADATTATORE MODULARE TIPO "VAR"
"ON-DEMAND" Lotti/minimi produzione 30 pezzi

Modular Adaptor BT - VAR

- ADAPTOR HBT - VAR
"ON-DEMAND" Minimal quantity of production 30 pieces



codice - code	d1	L	D2					APPLICATION
BTA.050.VAR63.050	32	50	63					
BTA.050.VAR80.050	32	50	80					

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Ricambi | Spare parts

RBF VAR



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RVS VAR



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