BT

MAS 403BT (JIS-B 6339)

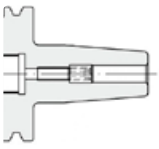
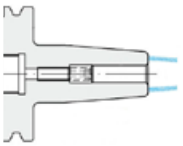
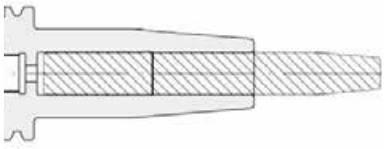
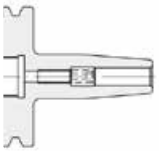
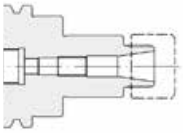
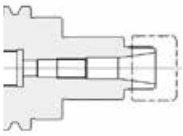
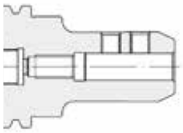
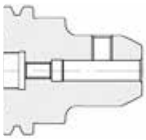
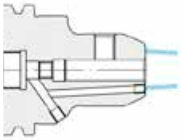
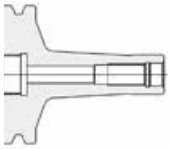


Dati tecnici ed immagini sono indicativi. Mickros si riserva di apportare aggiornamenti in qualsiasi momento e senza obbligo di preavviso.

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

Mandrini
Toolholders

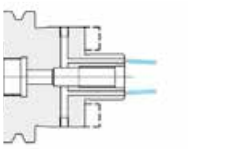
BT
MAS 403BT (JIS-B 6339)

CTO 4,5° Standard **(similar to DIN 69882-8)**	Mandrino per calettamento termico Shrink fit chuck Porte-outils de frettage Schrumpfutter	p. 140	
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 Kühlmittellbohrung	p. 142	
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 Verlägerbares schrumpfutter geeignet fur verlangerungs	p. 143	
CTF 4,5° **(Slim)**	Mandrino per calettamento termico di finitura Finishing shrink fit chuck Porte outils de frettage pour finissage Schrumpfutter zum schlichten	p. 144	
ERO **(Standard)**	Portapinze ER DIN 6499 Collet chuck ER DIN 6499 Porte pinces ER DIN 6499 Spannzangenfutter ER DIN 6499	p. 145	
ERH **(High Performance)**	Portapinze di precisione ER DIN 6499 Precision collet chuck ER DIN 6499 Porte pinces de precision ER DIN 6499 Prazisions spannzangenfutter ER DIN 6499	p. 146	
PU **(DIN 6535 HB - HE)**	Mandrino portapunte Adapter for drilling tools Porte-foret Aufnahme für Vollbohrer	p. 149	
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	p. 150	
WEH **(DIN 1835-B / 6535 HB)**	Mandrini per attacchi Weldon - WN Weldon - WN toolholders Porte outils Weldon - WN Weldon-WN aufnahme	p. 152	
WEW **(Cooling Plus)** **(DIN 1835-B / 6535 HB)**	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 kühlmittellbohrung	p. 153	
MDO	Portafrese con filetto interno, per frese con attacco filettato Cutter-Holder with modular threaded connection Mandrin Porte-Fraise avec attachement modulaire filetè Fraseraufnahme mit modular-gewinde aufnahme	p. 154	

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

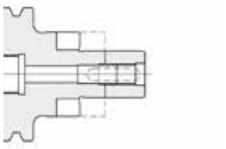
p. 155



FC
(DIN 6358)

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

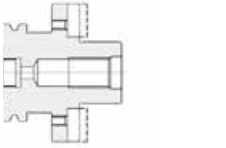
p. 156



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

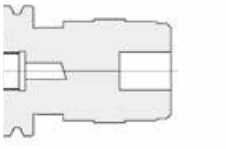
p. 157



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

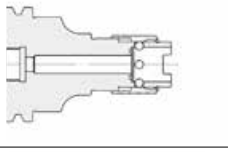
p. 158



MR

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

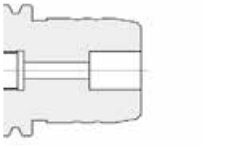
p. 159



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

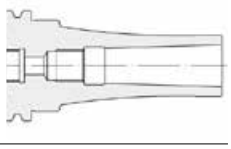
p. 160



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

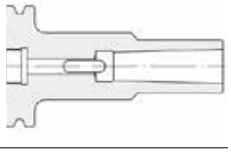
p. 166



RP
(DIN 228-1 Form B)

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

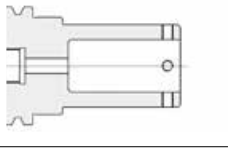
p. 163



DP

Sistema modulare DP
Modular system DP

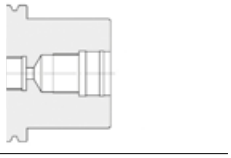
p. 164



VAR

Sistema modulare VAR
Modular system VAR

p. 164

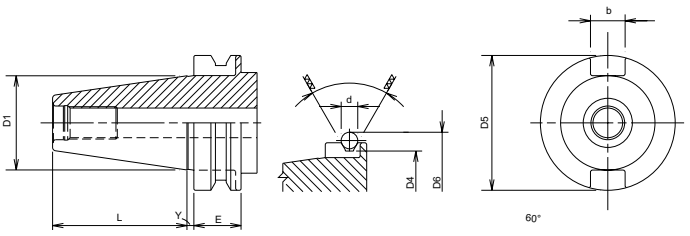


CC

Spina di controllo
Control pin
Barre de contrôle
Prüfdorn

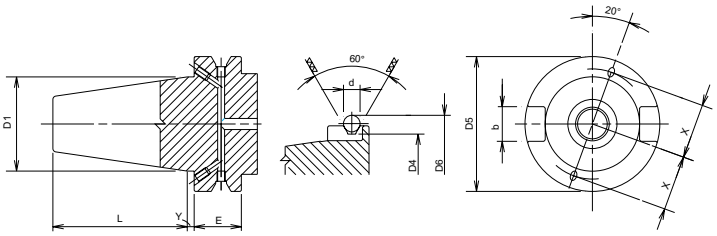
p. 165

MAS 403BT - BT AD 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

MAS 403BT - BT B 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
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 AD + B:
- alimentazione interna del lubrorefrigerante a scelta attraverso foro centrale (forma AD) oppure attraverso il giunto (forma B)

BTA = Forma AD:
- alimentazione interna del lubrorefrigerante attraverso foro centrale

Tool holders:

- Case-hardened 60 - 2 HRC
- Tensile streght 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

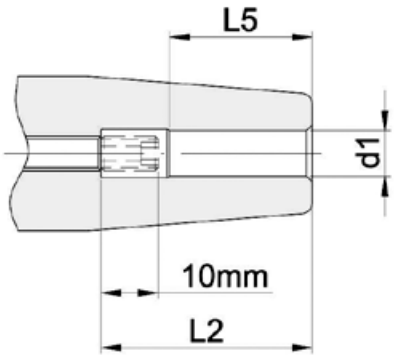
Note

BTB = Forma AD + B:
- central coolant supply and coolant channels through the flange which can be sealed again

BTA = Forma AD:
- central coolant supply

Shrink fit chuck

grip-plus
shrink fit technology



	L2		L5 minimum grip
Ø 6	37	M5 x 0,8	22
Ø 8	37	M6 x 1	26
Ø 10	42	M8 x 1	31
Ø 12	47	M10 x 1	36
Ø 14	47	M10 x 1	36
Ø 16	50	M12 x 1	39
Ø 18	50	M12 x 1	39
Ø 20	52	M16 x 1	41
Ø 25	58	M16 x 1	47
Ø 32	62	M16 x 1	51

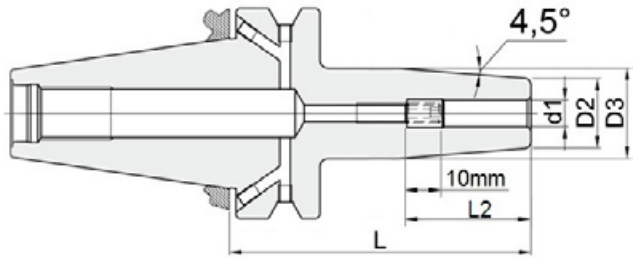
BT
MAS 403-BT
JIS-B 6339

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

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

G 2,5 25.000 RPM or U<1 gmm | ≤3 µm | 4,5° | ON REQUEST | HSS h6 | HM h6 | HSC | HPC

grip-plus
shrink fit technology



d1 = 3-4-5 **VEDI** - SEARCH "CTF"



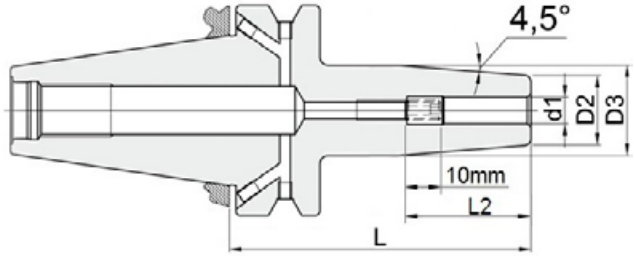
codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	-	-
BTB 040 (AD+B) form						
BTB.040.CT006.090	6	90	21	27		
BTB.040.CT008.090	8	90	21	27		
BTB.040.CT010. 090	10	90	24	32		
BTB.040.CT012.090	12	90	24	32		
BTB.040.CT014.090	14	90	27	34		
BTB.040.CT016.090	16	90	27	34		
BTB.040.CT018.090	18	90	33	41		
BTB.040.CT020.090	20	90	33	41		
BTB.040.CT025.100	25	100	44	53		
BTB.040.CT006.130	6	130	21	27		
BTB.040.CT008.130	8	130	21	27		
BTB.040.CT010.130	10	130	24	32		
BTB.040.CT012.130	12	130	24	32		
BTB.040.CT014.130	14	130	27	34		
BTB.040.CT016.130	16	130	27	34		
BTB.040.CT018.130	18	130	33	41		
BTB.040.CT020.130	20	130	33	41		
BTB.040.CT006.160	6	160	21	27		
BTB.040.CT008.160	8	160	21	27		
BTB.040.CT010.160	10	160	24	32		
BTB.040.CT012.160	12	160	24	32		
BTB.040.CT014.160	14	160	27	34		
BTB.040.CT016.160	16	160	27	34		
BTB.040.CT018.160	18	160	33	41		
BTB.040.CT020.160	20	160	33	41		
BTB.040.CT025.160	25	160	44	53		

BT
MAS 403-BT
JIS-B 6339

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

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

grip-plus
shrink fit technology





codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	-	-
BTB 050 (AD+B) form						
BTB.050.CT006.100	6	100	21	27		
BTB.050.CT008.100	8	100	21	27		
BTB.050.CT010.100	10	100	24	32		
BTB.050.CT012.100	12	100	24	32		
BTB.050.CT014.100	14	100	27	34		
BTB.050.CT016.100	16	100	27	34		
BTB.050.CT018.100	18	100	33	42		
BTB.050.CT020.100	20	100	33	42		
BTB.050.CT025.100	25	100	44	53		
BTB.050.CT032.100	32	100	44	51		
BTB.050.CT006.160	6	160	21	27		
BTB.050.CT008.160	8	160	21	27		
BTB.050.CT010.160	10	160	24	32		
BTB.050.CT012.160	12	160	24	32		
BTB.050.CT014.160	14	160	27	34		
BTB.050.CT016.160	16	160	27	34		
BTB.050.CT018.160	18	160	33	42		
BTB.050.CT020.160	20	160	33	42		
BTB.050.CT025.160	25	160	44	53		
BTB.050.CT032.160	32	160	44	51		

Accessori | Accessories

PULL STUDS



p. 166

Ricambi | Spare parts

RVR CT



p. 186

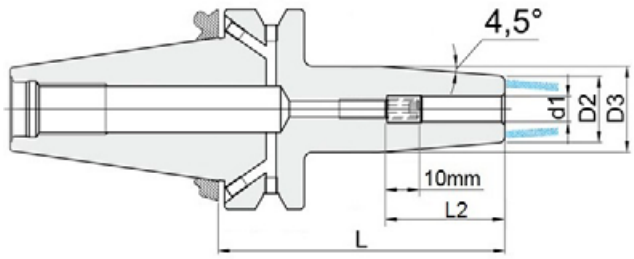
BT
MAS 403-BT
JIS-B 6339

CTW 4,5°
(Cooling Plus)

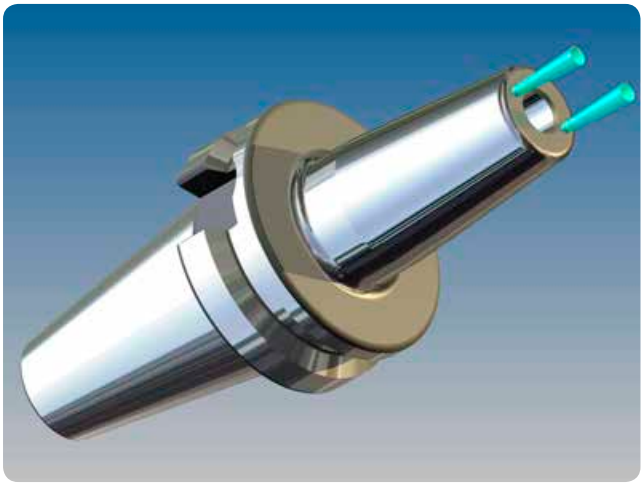
Mandrino per calettamento termico con canali di lubrificazione
Shrink fit chuck with coolant bores
Porte-outils de frettage avec conduits d'arrosage
Schrumpfutter mit Kühlmittellbohrung

G 2,5 25.000 RPM or U<1 gmm | ≤3 µm | 4,5° | HSS h6 | HM h6 | HSC | HPC

grip-plus
shrink fit technology



codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	-	-
BTB 040 (AD+B) form						
BTB.040.CTW06.090	6	90	21	27		
BTB.040.CTW08.090	8	90	21	27		
BTB.040.CTW10.090	10	90	24	32		
BTB.040.CTW12.090	12	90	24	32		
BTB.040.CTW14.090	14	90	27	34		
BTB.040.CTW16.090	19	90	27	34		
BTB.040.CTW18.090	18	90	33	41		
BTB.040.CTW20.090	20	90	33	41		
BTB.040.CTW25.100	25	100	44	53		



Accessori | Accessories

PULL STUDS



p. 166

Ricambi | Spare parts

RVR CTW



p. 186

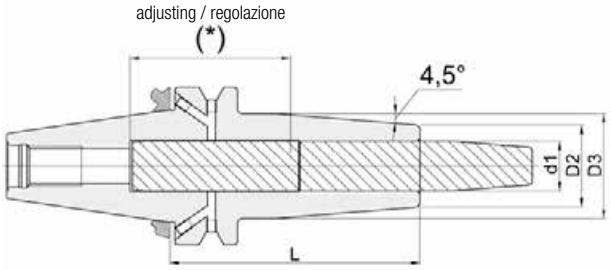
BT
MAS 403-BT
JIS-B 6339

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
Verlägerbares schrumpfutter geeignet fur verlangerungs

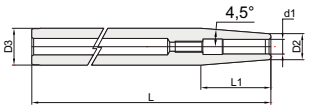
G 2,5 25.000 RPM or U<1 gmm | ≤3 µm | 4,5° | EXTENSIBLE | HSS h6 | HM h6 | HSC | HPC

grip-plus
shrink fit technology

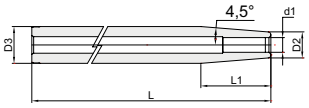


codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	(*)	-
BTB 040 (AD+B) form						
BTB.040.CTP12.090	12	90	24	32	80	
BTB.040.CTP16.090	16	90	27	34	67	
BTB.040.CTP20.090	20	90	33	41	65	
BTB.040.CTP25.100	25	100	44	53	49	
BTB 050 (AD+B) form						
BTB.050.CTP16.130	16	130	27	34	138	
BTB.050.CTP20.130	20	130	33	42	136	
BTB.050.CTP25.130	25	130	44	53	109	
BTB.050.CTP32.130	32	130	44	53	105	

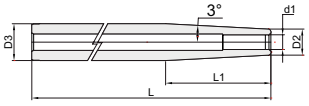




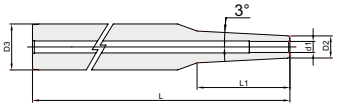
CIL CTO



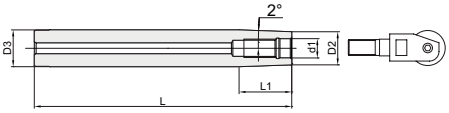
CIL CTP



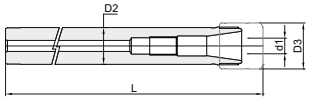
CIL CTF



CIL CTR



CIL MD



CIL ERM

Accessori | Accessories

PULL STUDS



p. 166

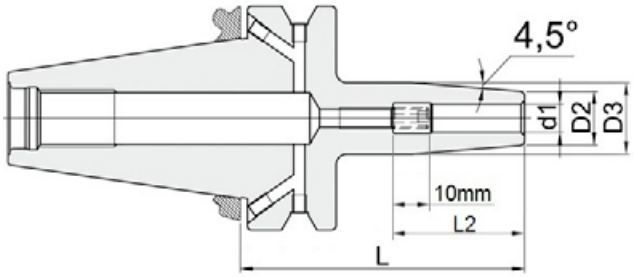
BT
MAS 403-BT
JIS-B 6339

CTF 4,5° (Slim)

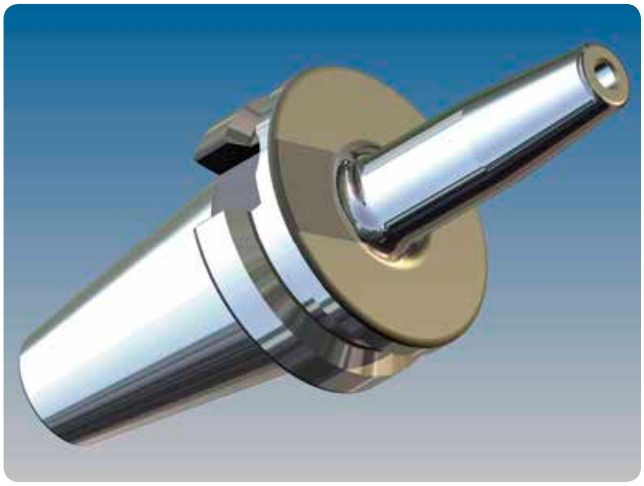
Mandrino per calettamento termico di finitura
Finishing shrink fit chuck
Porte outils de frettage pour finissage
Schrumpfutter zum schlichten

G 2,5 25.000 RPM or U<1 gmm | ≤3 µm | 4,5° | Ø 3 - 4 - 5 | HM h6 | HSC

grip-plus
shrink fit technology



codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	-	-
BTB 040 (AD+B) form						
BTB.040.CTF03.090- 4,5°	3	90	9	20	No RVR	
BTB.040.CTF04.090- 4,5°	4	90	10	20	No RVR	
BTB.040.CTF05.090- 4,5°	5	90	11	20	No RVR	
BTB.040.CTF06.090- 4,5°	6	90	15	20		
BTB.040.CTF08.090- 4,5°	8	90	15	20		
BTB.040.CTF10.090- 4,5°	10	90	18	25		
BTB.040.CTF12.090- 4,5°	12	90	18	25		



Accessori | Accessories

PULL STUDS



p. 166

Ricambi | Spare parts

RVR CT



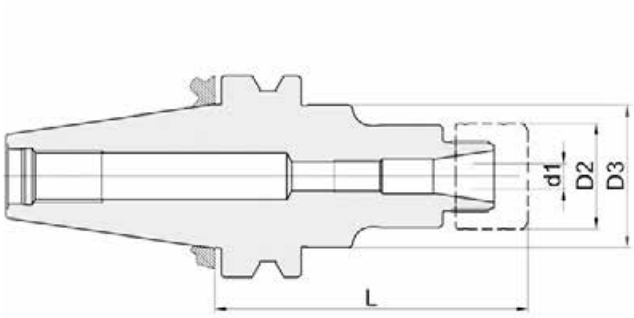
p. 186

BT
MAS 403-BT
JIS-B 6339

ER0
(Standard)

Portapinze ER DIN 6499
Collet chuck ER DIN 6499
Porte pinces ER DIN 6499
Spannzangenfutter ER DIN 6499

≤5 µm





codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	NUTS	-
BTA 030 (AD) form						
BTA.030.ER016.100.	0,5-10	100	32		RGS	
BTA.030.ER025.090.	1,5-16	90	42		RGS	
BTA.030.ER032.060.	2,5-20	60	50		RGS	
BTA 040 (AD) form - BTB 040 (AD+B) form						
BTA.040.ERM11.120 (MINI)	0,5-7	120	16	26	RGM mini	
BTA.040.ERM11.160 (MINI)	0,5-7	160	16	26	RGM mini	
BTA.040.ERM16.160 (MINI)	0,5-10	160	22	30	RGM mini	
BTB.040.ER016.070	0,5-10	70	32		RGS	
BTB.040.ER016.090	0,5-10	90	32	45	RGS	
BTB.040.ER016.120	0,5-10	120	32	45	RGS	
BTB.040.ER016.160	0,5-10	160	32	45	RGS	
BTA.040.ER020.070	1-13	70	35		RGS	
BTB.040.ER020.070	1-13	70	35		RGS	
BTB.040.ER020.120	1-13	120	35	45	RGS	
BTB.040.ER020.160	1-13	160	35	45	RGS	
BTB.040.ER025.070	1,5-16	70	42		RGS	
BTB.040.ER025.090	1,5-16	90	42	45	RGS	
BTB.040.ER025.120	1,5-16	120	42	45	RGS	
BTB.040.ER025.160	1,5-16	160	42	45	RGS	
BTB.040.ER032.070	2,5-20	70	50		RGS	
BTB.040.ER032.100	2,5-20	100	50		RGS	
BTB.040.ER032.140	2,5-20	140	50		RGS	
BTB.040.ER032.160	2,5-20	160	50			
BTB.040.ER032.200.	2,5-20	200	50		RGS	
BTB.040.ER040.070	3-26	70	63		RGS	
BTB 050 (AD+B) form						
BTB.050.ER025.100	1,5-16	100	42		RGS	
BTB.050.ER025.160	1,5-16	160	42		RGS	
BTB.050.ER032.100	2,5-20	100	50		RGS	
BTB.050.ER032.160	2,5-20	160	50		RGS	
BTB.050.ER032.200.	2,5-20	200	50		RGS	
BTB.050.ER040.100	3-26	100	63		RGS	
BTB.050.ER040.160	3-26	160	63		RGS	

Accessori | Accessories

PULL STUDS  p. 166

PER  p. 173

ACH GS  p. 179

ACH GM  p. 178

Ricambi | Spare parts

RGS  p. 179

RGM  p. 178

RVR ER  p. 186

BT
MAS 403-BT
JIS-B 6339

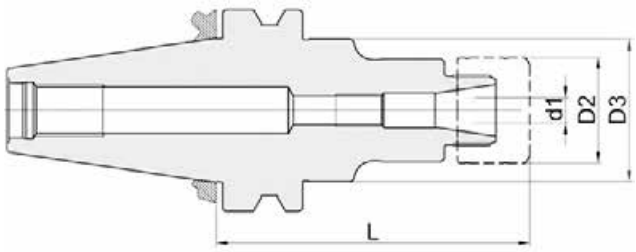
ERH
(High Performance)

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

G 2,5
25.000 RPM
or
U < 1 gmm

≤3 µm

HSC



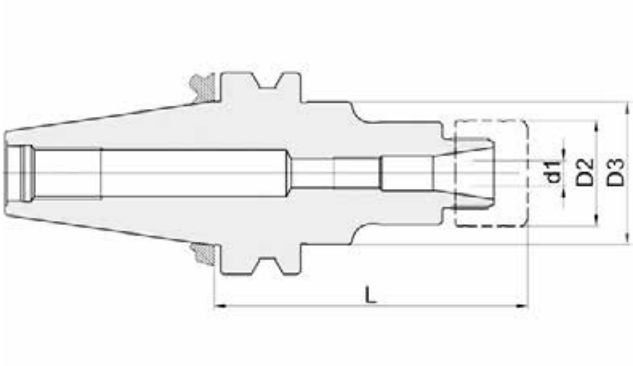


codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	NUTS	-
BTA 030 (AD) form						
BTA.030.ERH16.100.	0,5-10	100	32		RGE	
BTA.030.ERH25.090.	1,5-16	90	42		RGE	
BTA.030.ERH32.060.	2,5-20	60	50		RGE	
BTA 040 (AD) form - BTB 040 (AD+B) form						
BTA.040.ERH11.090.	0,5-7	090	25	45	RGX	
BTA.040.ERH11.120.	0,5-7	120	25	45	RGX	
BTB.040.ERH16.070	0,5-10	70	32		RGE	
BTB.040.ERH16.090	0,5-10	90	32	45	RGE	
BTB.040.ERH16.120	0,5-10	120	32	45	RGE	
BTB.040.ERH16.160	0,5-10	160	32	45	RGE	
BTB.040.ERH20.070	1-13	70	35		RGE	
BTB.040.ERH20.120	1-13	120	35	45	RGE	
BTB.040.ERH20.160.	1-13	160	35	45	RGE	
BTB.040.ERH25.070	1,5-16	70	42		RGE	
BTB.040.ERH25.090	1,5-16	90	42	45	RGE	
BTB.040.ERH25.120	1,5-16	120	42	45	RGE	
BTB.040.ERH25.160	1,5-16	160	42	45	RGE	
BTB.040.ERH32.070	2,5-20	70	50		RGE	
BTB.040.ERH32.100	2,5-20	100	50		RGE	
BTB.040.ERH32.140	2,5-20	140	50		RGE	
BTB.040.ERH32.160	2,5-20	160	50		RGE	
BTB.040.ERH40.070	3-26	70	63		RGE	

BT
MAS 403-BT
JIS-B 6339

ERH
(High Performance)

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



codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	NUTS	-
BTB 050 (AD+B) form						
BTB.050.ERH25.100	1,5-16	100	42		RGE	
BTB.050.ERH25.160	1,5-16	160	42		RGE	
BTB.050.ERH32.100	2,5-20	100	50		RGE	
BTB.050.ERH32.160	2,5-20	160	50		RGE	
BTB.050.ERH40.100	3-26	100	63		RGE	
BTB.050.ERH40.160	3-26	160	63		RGE	



Optional

RGE - HSC (DIN 6499) Fine Balanced - Coated



Accessori | Accessories

PULL STUDS  p. 166

PER  p. 173

ACH GS  p. 179

ACH GX  p. 178

Ricambi | Spare parts

RGX  p. 178

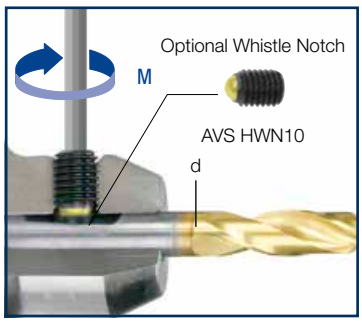
RGE  p. 180

RVR ER  p. 186

PU

Foratura MICKROS plus con utensili con gambo di diametro ≥ 14 mm
MICKROS plus punching with diameter stem tools ≥ 14 mm

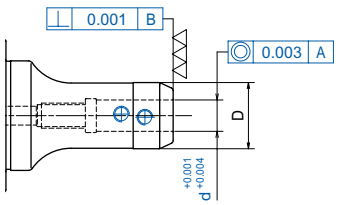
Particolare attenzione ha prestato la MICKROS plus a questa operazione, progettando e realizzando il prodotto “PU” che presenta i seguenti vantaggi rispetto ai tradizionali portautensili con attacco Whistle Notch (DIN 1835-E):



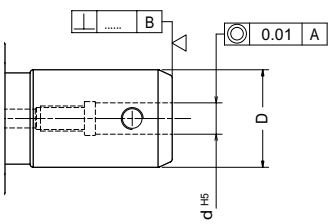
- Minore ingombro come illustrato in tabella
- Maggiore precisione di concentricità
- Maggiore precisione di coassialità
- Minore peso e maggiore bilanciabilità
- Maggiore resistenza alla torsione grazie alla posizione disassata dei grani di serraggio utensile.
- Possibilità di utilizzo di punte ad inserto con gambo diam. 40 anche su attacchi HSK 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

PU - MICKROS plus



Whistle Notch - DIN 1835 E



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 HSK 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 HSK 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 Konzentrizität
- 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 HSK 63
- Größere Festigkeit vor allem bei Verwendung von Spitzeneinsätzen mit Anschlag
- Möglichkeit zur Verwendung von Präzisionswerkzeugen mit Anschlag (optimale Anwendung mit Spezialwerkzeugen).

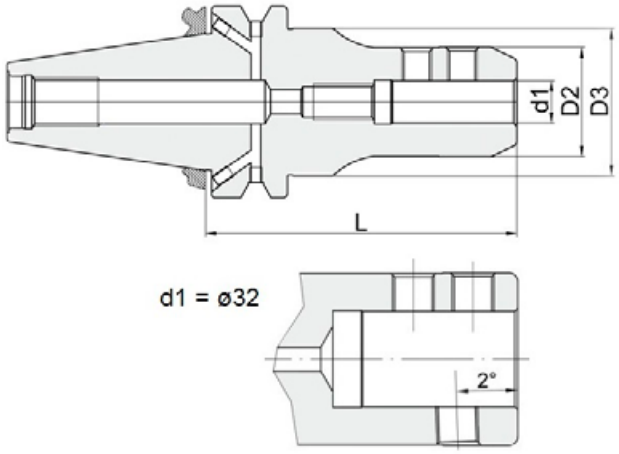
BT
MAS 403-BT
JIS-B 6339

PU
(DIN 6535 HB - HE)

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

≤3 µm

HPC





codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	-	-
BTB 040 (AD+B) form						
BTB.040.PUH14.100.	14	100	36	50		
BTB.040.PUH16.100.	16	100	38	50		
BTB.040.PUH18.100.	18	100	40	50		
BTB.040.PUH20.100	20	100	42	50		
BTB.040.PUH25.100	25	100	48			
BTB.040.PUH32.080	32	80	58		No RVR	
BTB 050 (AD+B) form						
BTA.050.PUH32.100	32	100	58	70	No RVR	
BTA.050.PUH40.115	40	115	68	80	No RVR	
BTA.050.PUH14.140.	14	140	36	70		
BTA.050.PUH16.140.	16	140	38	70		
BTA.050.PUH18.140.	18	140	40	70		
BTB.050.PUH20.140	20	140	42	70		
BTB.050.PUH25.140	25	140	48	70		
BTA.050.PUH14.200.	14	200	36	70		
BTA.050.PUH16.200.	16	200	38	70		
BTA.050.PUH18.200.	18	200	40	70		
BTA.050.PUH20.200.	20	200	42	70		

Accessori | Accessories

PULL STUDS

p. 166

ABR

p. 185

AVS

p. 185

Ricambi | Spare parts

RVU 5923

p. 187

RVR WN

p. 187

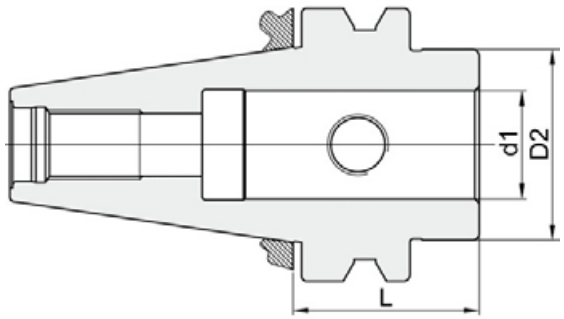
BT
MAS 403-BT
JIS-B 6339

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

≤3 µm

HPC



codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	-	-	-
BTA 040 (AD) form - BTB 040 (AD+B) form						
BTA.040.WEC16.035	16	35	35			
BTA.040.WEC20.035	20	35	35			
BTA.040.WEC25.035	25	35	50			
BTA.040.WEC32.075	32	75	72			
BTB.040.WEC20.035	20	35	35			
BTB.040.WEC25.035	25	35	50			
BTB.040.WEC32.075	32	75	72			
BTA 050 (AD) form						
BTA.050.WEC20.040	20	40	35			
BTA.050.WEC25.040	25	40	50			
BTA.050.WEC32.044	32	44	72			
BTA.050.WEC40.052	40	52	74			



Accessori | Accessories

PULL STUDS



p. 166

Ricambi | Spare parts

RVD 1835



p. 187

WEH-WEW

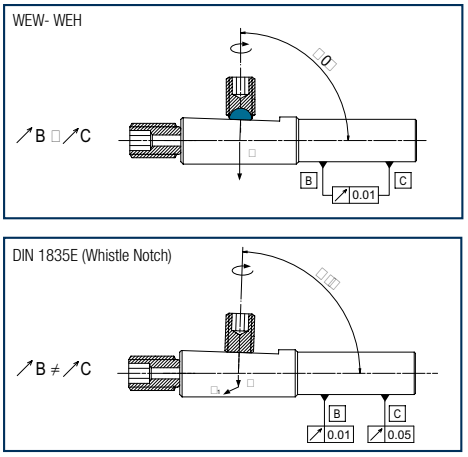
Foratura MICKROS plus con utensili con gambo di diametro ≤ 12 mm
MICKROS plus punching with diameter stem tools ≤ 12 mm

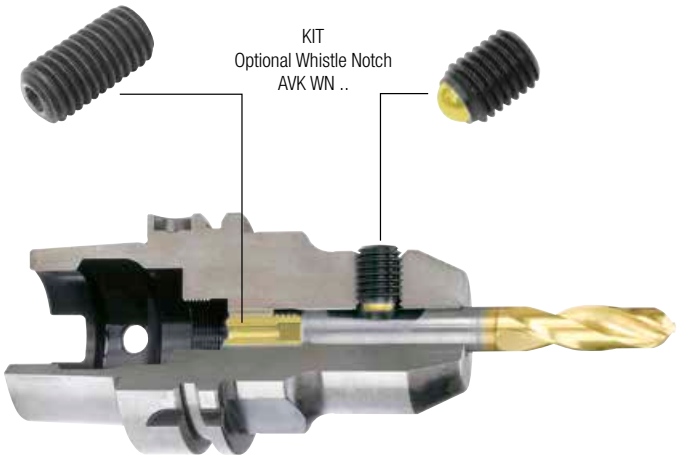
Tutti i mandrini WEW - WEH Mickros Plus dal diam. 6 al diam. 12 possono montare sia frese con gambo Weldon (DIN 1835-B) che punte con gambo Whistle Notch (DIN 1835-E) grazie al Kit optional "AVK WN…" composto da:
- Vite speciale con sfera oscillante per il serraggio di utensili con piano inclinato 2° "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…" em 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;

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…".

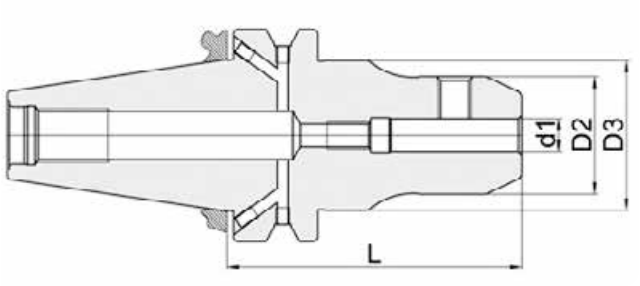
Vorteile:
- Größere Flexibilität: Bohren und Fräsen mit einer einzigen Werkzeugafnahme.
- Reduzierung der Kosten: Kann in den meisten Fällen die hydraulischen Einspannsysteme ersetzen.
- Größere Bohrpräzision: Die Spannschraube mit abgeflachter Schwingkugel blockiert das Werkzeug, indem es wie ein Lager 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).

BT
MAS 403-BT
JIS-B 6339

WEH
(DIN 1835-B / 6535 HB)

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

≤3 µm | ON REQUEST | HPC





codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	-	-
BTB 040 (AD+B) form						
BTB.040.WEH06.060	6	60	25			
BTB.040.WEH08.060	8	60	28			
BTB.040.WEH10.065	10	65	35			
BTB.040.WEH12.065	12	65	42			
BTB.040.WEH14.065	14	65	44			
BTB.040.WEH16.070	16	70	48			
BTB.040.WEH18.070	23	70	50			
BTB.040.WEH20.070	20	70	52			
BTB.040.WEH25.100	25	100	65			
BTB.040.WEH32.100	32	100	72			
BTB.040.WEH08.130.	8	130	28	50		
BTB.040.WEH10.130.	10	130	35	50		
BTB.040.WEH12.130.	12	130	42	50		
BTB.040.WEH16.130.	16	130	48	55		
BTA 050 (AD) form - BTB 050 (AD+B) form						
BTA.050.WEH10.075	10	75	35			
BTA.050.WEH12.075	12	75	42			
BTA.050.WEH16.075	16	75	48			
BTB.050.WEH20.105	20	105	52			
BTB.050.WEH25.105	25	105	65			
BTB.050.WEH32.105	32	105	72			
BTB.050.WEH40.115	40	115	80			
BTA.050.WEH06.140.	6	140	25	70		
BTA.050.WEH08.140.	8	140	28	70		
BTA.050.WEH10.140.	10	140	35	70		
BTA.050.WEH12.140.	12	140	42	70		
BTA.050.WEH16.140.	16	140	48	70		
BTA.050.WEH20.140.	20	140	52	70		
BTA.050.WEH25.140.	25	140	65	70		
BTA.050.WEH32.140.	32	140	72	80		
BTA.050.WEH06.200.	6	200	25	70		
BTA.050.WEH08.200.	8	200	28	70		
BTA.050.WEH10.200.	10	200	35	70		
BTA.050.WEH12.200.	12	200	42	70		
BTA.050.WEH16.200.	16	200	48	70		
BTA.050.WEH20.200.	20	200	52	70		
BTA.050.WEH25.200.	25	200	65	70		
BTA.050.WEH32.200.	32	200	72	80		

Accessori | Accessories

PULL STUDS



p. 166

AVK WN



p. 185

Ricambi | Spare parts

RVD 1835



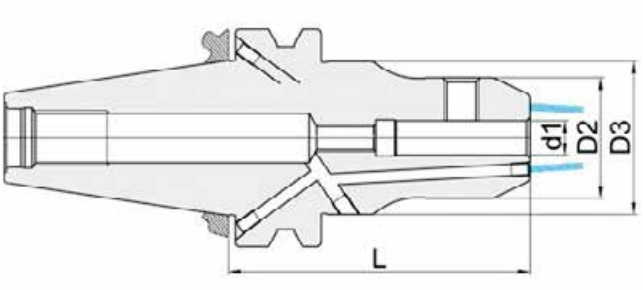
p. 187

BT
MAS 403-BT
JIS-B 6339

WEW Cooling Plus
(DIN 1835-B / 6535 HB)

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 kühlmittellbohrung

≤3 µm | HPC





codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	-	-
BTB 040 (AD+B) form						
BTB.040.WEW06.060	6	60	25			
BTB.040.WEW08.060	8	60	28			
BTB.040.WEW10.065	10	65	35			
BTB.040.WEW12.065	12	65	42			
BTB.040.WEW14.065	14	65	44			
BTB.040.WEW16.070	16	70	48			
BTB.040.WEW18.070	18	70	50			
BTB.040.WEW20.070	20	70	52			
BTB.040.WEW25.100	25	100	65			
BTB.040.WEW32.100	32	100	72			
BTB.040.WEW06.130.	6	130	25	50		
BTB.040.WEW08.130.	8	130	28	50		
BTB.040.WEW10.130.	10	130	35	50		
BTB.040.WEW12.130.	12	130	42	50		
BTB.040.WEW16.130.	16	130	48	55		
BTB.040.WEW20.130.	20	130	52	55		

Accessori | Accessories

PULL STUDS



p. 166

AVK WN



p. 185

Ricambi | Spare parts

RVD 1835



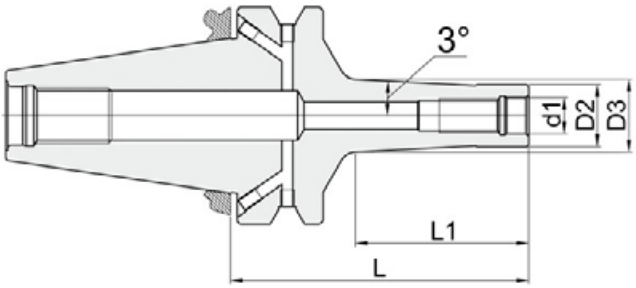
p. 187

BT
MAS 403-BT
JIS-B 6339

MD0

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





codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	L1	-
BTB 040 (AD+B) form						
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	



Accessori | Accessories

PULL STUDS



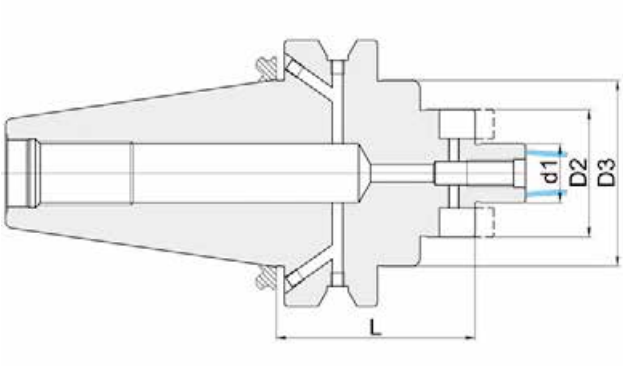
p. 166

BT
MAS 403-BT
JIS-B 6339

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

≤3 µm | HPC





codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	-	-	-
BTA 040 (AD) form - BTB 040 (AD+B) form						
BTB.040.FSW16.050 - D2=32	16	50	32			
BTB.040.FSW16.050 - D2=38	16	48	38			
BTB.040.FSW22.050 - D2=48	22	50	48			
BTB.040.FSW27.050 - D2=58	27	50	58			
BTB.040.FSW32.050 - D2=70	32	50	70			
BTB.040.FSW32.050 - D2=78	32	50	78			
BTB.040.FSW40.055 - D2=83	40	55	83			
BTB.040.FSW40.055 - D2=87	40	55	87			
BTB.040.FSW16.090 - D2=38	16	90	38			
BTB.040.FSW22.090 - D2=48	22	90	48			
BTA.040.FS027.090 - D2=58	27	90	58			
BTA.040.FS032.090 - D2=70	32	90	70			
BTA.040.FS032.090 - D2=78	32	90	78			
BTA.040.FS032.050.	32	50	70			
BTA.040.FS040.050.	40	50	83			
BTA.040.FS040.055.	40	55	83			
BTA.040.FS022.140.	22	140	48			
BTA 050 (AD) form - BTB 050 (AD+B) form						
BTB.050.FSW22.060 - D2=48	22	60	48			
BTB.050.FSW27.060 - D2=58	27	60	58			
BTB.050.FSW32.060 - D2=70	32	60	70			
BTB.050.FSW32.060 - D2=78	32	60	78			
BTB.050.FSW40.060 - D2=83	40	60	83			
BTB.050.FSW22.100 - D2=48	22	100	48			
BTB.050.FSW27.100 - D2=58	27	100	58			
BTB.050.FSW32.100 - D2=78	32	100	78			
BTA.050.FS032.060.	32	60	70			
BTA.050.FS040.060.	40	60	83			
BTA.050.FS027.112.	27	112	58			
BTA.050.FS032.112.	32	112	70			
BTA.050.FS032.160.	32	160	70			

FS: senza canali di lubrificazione - without coolant bores

Ricambi | Spare parts

RVU 5931 p. 189

RCT FM/DP p. 189

RVU 5933 p. 189

RRS FM p. 190

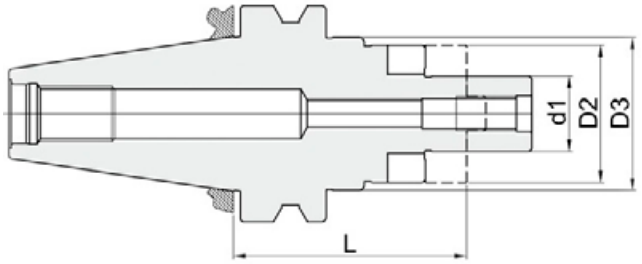
BT
MAS 403-BT
JIS-B 6339

FC
(DIN 6358)

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

≤3 µm

HPC





codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	-	-
BTA 040 (AD) form						
BTA.040.FC016.055	16	55	32			
BTA.040.FC022.055	22	55	40			
BTA.040.FC027.055	27	55	48			
BTA.040.FC032.060	32	60	58			
BTA.040.FC040.060	40	60	70			
BTA.040.FC016.100.	16	100	32	36		
BTA.040.FC027.100.	27	100	48			
BTA.040.FC032.100.	32	100	58			
BTA 050 (AD) form						
BTA.050.FC016.070	16	70	32			
BTA.050.FC022.070	22	70	40			
BTA.050.FC027.070	27	70	48			
BTA.050.FC032.070	32	70	58			
BTA.050.FC040.070	40	70	70			
BTA.050.FC016.125.	16	125	32	38		
BTA.050.FC022.125.	22	125	40	48		
BTA.050.FC027.125.	27	125	48	60		
BTA.050.FC032.125.	32	125	58	70		
BTA.050.FC040.125.	40	125	70			

Accessori | Accessories

PULL STUDS



p. 166

Ricambi | Spare parts

RVU 5933



p. 189

RRS FM



p. 190

RTD 6366



p. 190

RLU 6604



p. 190

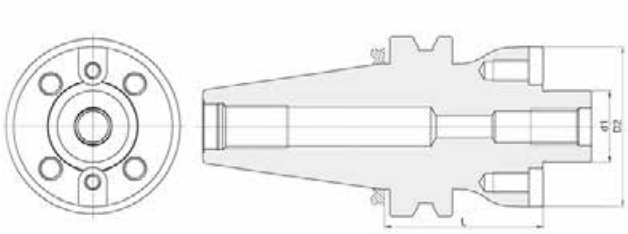
BT
MAS 403-BT
JIS-B 6339

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

≤3 µm

HPC



codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	-	-	-
BTA 050 (AD) form						
BTA.050.FF040.070	40	70	89			
BTA.050.FF040.112.	40	112	89			
BTA.050.FF060.080	60	80	129			



Accessori | Accessories

PULL STUDS



p. 166

Ricambi | Spare parts

RVU 5931



p. 189

RCT FM/DP



p. 189

RVU 5933



p. 189

RRS FM

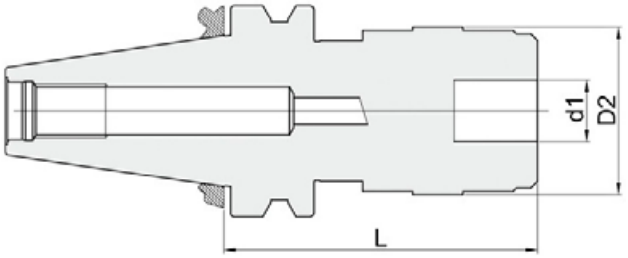


p. 190

BT
MAS 403-BT
JIS-B 6339

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



codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	-	-
BTA 040 (AD) form						
BTA.040.MC.019.076 (...WEC20.035+CWE...MC019)	19	76	38	35	KOMBI	
BTA.040.MC.031.098 (...WEC25.035+CWE...MC031)	31	98	55	44	KOMBI	
BTA.040.MC.048.184 (...WEC32.075+CWE...MC048)	48	184	79	72	KOMBI	
BTA 050 (AD) form						
BTA.050.MC.019.081 (...WEC20.040+CWE...MC019)	19	81	38	35	KOMBI	
BTA.050.MC.031.103 (...WEC25.040+CWE...MC031)	31	103	55	50	KOMBI	
BTA.050.MC.048.153 (...WEC32.044+CWE...MC048)	48	153	79	72	KOMBI	





Accessori | Accessories

PULL STUDS

p. 166

ABM R/RW

p. 182

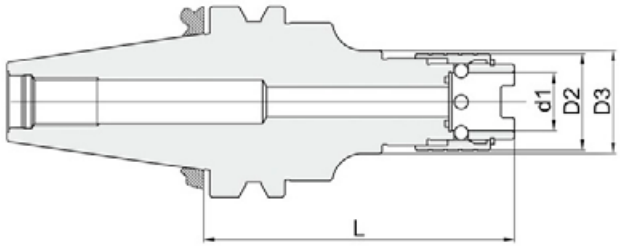
ABM F

p. 183

BT
MAS 403-BT
JIS-B 6339

MR

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



codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	-	-
BTA 040 (AD) form						
BTA.040.MR019.076 (... WEC20.035+CWE...MR019)	19	76	35	35	KOMBI	
BTA.040.MR031.098 (... WEC25.035+CWE...MR031)	31	98	50	44	KOMBI	
BTA.040.MR048.163 (... WEC32.075+CWE...MR048)	48	163	72	72	KOMBI	
BTA 050 (AD) form						
BTA.050.MR019.081 (... WEC20.040+CWE...MR019)	19	81	35	35	KOMBI	
BTA.050.MR031.103 (... WEC25.040+CWE...MR031)	31	103	50	50	KOMBI	
BTA.050.MR048.132 (... WEC32.044+CWE...MR048)	48	132	72	72	KOMBI	





Accessori | Accessories

PULL STUDS

p. 166

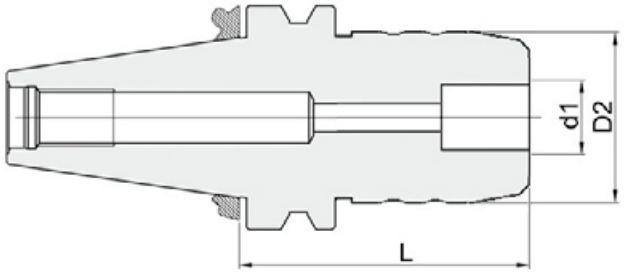
ABM R/RW

p. 182

ABM F

p. 183

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



codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	-	-	-
BTB 040 (AD+B) form						
BTB.040.MS020.061	20	61	43	ER16 M3÷12	INTEGRAL	
BTB.040.MS032.082	32	82	60	ER25 M6÷20	INTEGRAL	
BTB 050 (AD+B) form						
BTA.050.MS020.074 (...WEC25.040+CWE...MS020)	20	74	43	ER16 M3÷12	KOMBI	
BTA.050.MS032.096 (...WEC25.040+CWE...MS032)	32	96	60	ER25 M6÷20	KOMBI	



Accessori | Accessories

PULL STUDS



p. 166

ABM ER



p. 43

MS

Maschiatori per maschiatura sincronizzata “SINKRO”
Tapping chuck for syncronized 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.

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.

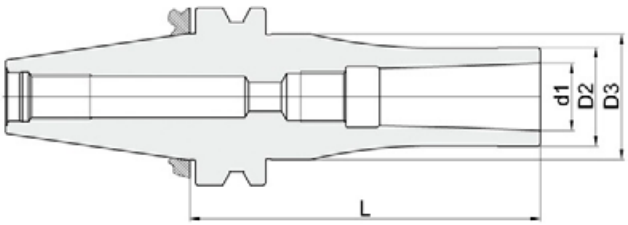
BT
MAS 403-BT
JIS-B 6339

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

≤5 µm

HPC



codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	-	-
BTA 040 (AD) form						
BTA.040.RF001.050	MORSE 1	50	25			
BTA.040.RF002.060	MORSE 2	60	32			
BTA.040.RF003.090	MORSE 3	90	34			
BTA.040.RF004.110	MORSE 4	110	44			
BTA.040.RF002.050.	MORSE 2	50	32			
BTA.040.RF002.100.	MORSE 2	100	28			
BTA.040.RF003.130.	MORSE 3	130	32			
BTA 050 (AD) form						
BTA.050.RF002.060	MORSE 2	60	32			
BTA.050.RF003.075	MORSE 3	75	40			
BTA.050.RF004.085	MORSE 4	85	40			
BTA.050.RF005.128.	MORSE 5	128				
BTA.050.RF002.112.	MORSE 2	112	28			
BTA.050.RF003.125.	MORSE 3	125	32			
BTA.050.RF004.140.	MORSE 4	140	40			



Accessori | Accessories

PULL STUDS

p. 166

ACH RF

p. 188

Ricambi | Spare parts

RBF RF

p. 188

RVS RF

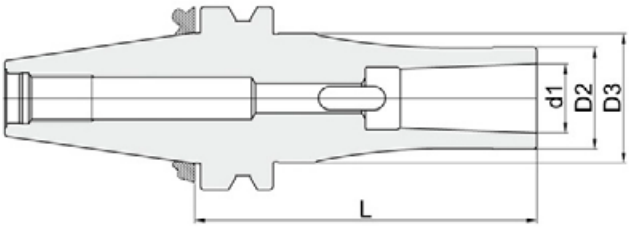
p. 188

BT
MAS 403-BT
JIS-B 6339

RP
(DIN 228-1 Form B)

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

≤5 µm



codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	-	-
BTA 040 (AD) form						
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			
BTA.040.RPF02.125.	MORSE 2	125	32			
BTA.040.RPF03.135.	MORSE 3	135	40			
BTA 050 (AD) form						
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		
BTA.050.RPF04.185.	MORSE 4	185	40			



Accessori | Accessories

PULL STUDS

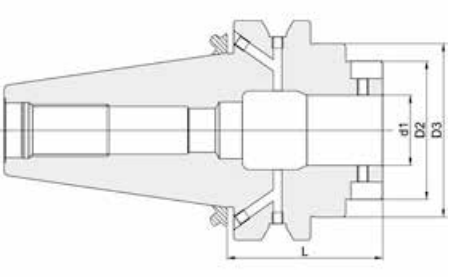


p. 166

BT
MAS 403-BT
JIS-B 6339

DP

Sistema modulare DP
Modular system DP



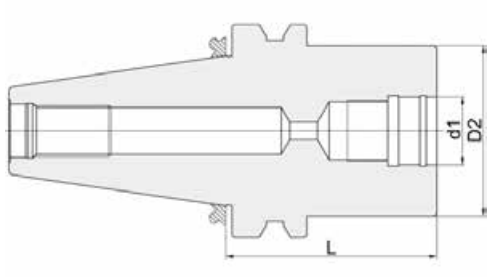


codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	-	-	-
BTA 040 (AD) form						
BTA.040.DP063.040.	32	40	63			
BTA 050 (AD) form						
BTA.050.DP063.056.	32	56	63			
BTA.050.DP080.056.	40	56	78			

BT
MAS 403-BT
JIS-B 6339

VAR

Sistema modulare VAR
Modular system VAR





codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	-	-	-
BTA 050 (AD) form						
BTA.050.VAR63.050.	32	50	63			
BTA.050.VAR80.050.	32	50	80			

Ricambi | Spare parts

RBF VAR



p. 191

RVS VAR



p. 191

CC

Spina di controllo
Control pin
Barre de contrôle
Prüfdorn



codice - code	dati tecnici - technical data					
	Ø d1	L	-	-	-	-
BTA 040 (AD) form						
BTA.040.CC040.315	40	315				



Accessori | Accessories

PULL STUDS



p. 166



Tiranti per MAS-BT (JIS-B 6339)
Pull studs for MAS-BT (JIS-B 6339)

CARATTERISTICHE TECNICHE:
- Costruiti in acciaio da cementazione legati al NiCrMo
- Cementati profondità 0,5-0,7 mm; temprati, rinvenuti, sabbiati e bruniti HRC60±2
- Rettificati su tutto il profilo di aggancio e sede mandrino

TECNICHAL FEATURES:
- Made of hardened NiCrMo steel alloy
- case hardened to 0,5-0,7 mm, hardened, tempered, sandblasted and polished HRC60 ± 2
- Ground on all the coupling profile and spindle seat



MAS 403 BT 45°- 60°- 90° p. 167



CAT METRIC - 45° p. 167



HURCO 45°-90° p. 168



JIS-B 6339 - 75° p. 168

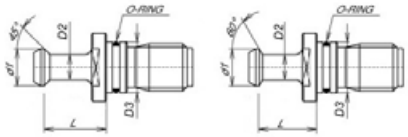


MITSUI 90° p. 169

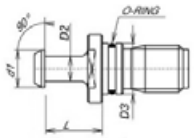
BT
MAS 403-BT
JIS-B 6339

MAS 403 BT
45°- 60°- 90°

Tiranti per MAS-BT (JIS-B 6339)
Pull studs for MAS-BT (JIS-B 6339)
Tirettes pour MAS-BT (JIS-B 6339)
Anzugsbolzen für MAS-BT (JIS-B 6339)



(B45) MAS 403-BT I (B60) MAS 403-BT II



(B90) MAS 403-BT III

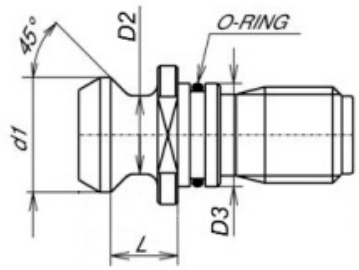


codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	HOLE	Tool Shank
MAS 403 BT WITH COOLANT BORE - FORATO						
T40.B45.01528.60A	15	28	10	17 M16	3	BT40 - 45°
T40.B60.01528.60A	15	28	10	17 M16	3	BT40 - 60°
T40.B90.01528.60A	15	28	10	17 M16	3	BT40 - 90°
T50.B45.02335.85A	23	35	17	25 M24	6	BT50 - 45°
T50.B60.02335.85A	23	35	17	25 M24	6	BT50 - 60°
T50.B90.02335.85A	23	35	17	25 M24	6	BT50 - 90°
MAS 403 BT WITHOUT COOLANT BORE - SENZA FORO						
T30.B45.01118.43B	11	18	7	12,5 M12	-	BT30 - 45°
T40.B45.01528.60B	15	28	10	17 M16	-	BT40 - 45°
T40.B60.01528.60B	15	28	10	17 M16	-	BT40 - 60°
T40.B90.01528.60B	15	28	10	17 M16	-	BT40 - 90°
T50.B45.02335.85B	23	35	17	25 M24	-	BT50 - 45°
T50.B60.02335.85B	23	35	17	25 M24	-	BT50 - 60°
T50.B90.02335.85B	23	35	17	25 M24	-	BT50 - 90°

BT
MAS 403-BT
JIS-B 6339

CAT METRIC - 45°

Tiranti per MAS-BT (JIS-B 6339)
Pull studs for MAS-BT (JIS-B 6339)
Tirettes pour MAS-BT (JIS-B 6339)
Anzugsbolzen für MAS-BT (JIS-B 6339)



(C45) CAT - METRIC

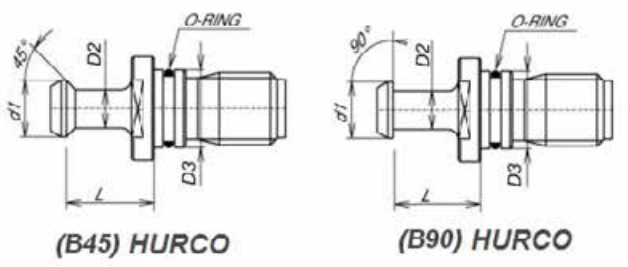


codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	HOLE	Tool Shank
CAT METRIC - 45° WITH COOLANT BORE - FORATO						
T40.C45.01914.44A	18,80	14,02	12,45	17 M16	7	BT40
T50.C45.02917.65A	28,95	17,58	20,83	25 M24	10	BT50
CAT METRIC - 45° WITHOUT COOLANT BORE - SENZA FORO						
T40.C45.01914.44B	18,80	14,02	12,45	17 M16	-	BT40

BT
MAS 403-BT
JIS-B 6339

HURCO 45°-90°

Tiranti per MAS-BT (JIS-B 6339)
Pull studs for MAS-BT (JIS-B 6339)
Tirettes pour MAS-BT (JIS-B 6339)
Anzugsbolzen für MAS-BT (JIS-B 6339)



(B45) HURCO (B90) HURCO

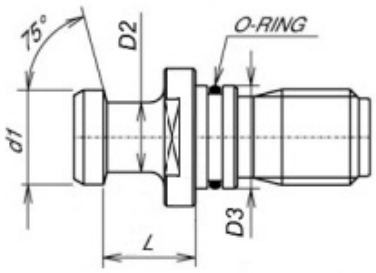


codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	HOLE	Tool Shank
HURCO TYPE WITH COOLANT BORE - FORATO						
T40.B45.01525.57A	15	25,15	10	17 M16	3	BT40 - 45°
T40.B90.01525.57A	15	25,15	10	17 M16	3	BT40 - 90°
HURCO TYPE WITHOUT COOLANT BORE - SENZA FORO						
T40.B45.01525.57B	15	25,15	10	17 M16	-	BT40 - 45°
T40.B90.01525.57B	15	25,15	10	17 M16	-	BT40 - 90°

BT
MAS 403-BT
JIS-B 6339

JIS-B 6339 - 75°

Tiranti per MAS-BT (JIS-B 6339)
Pull studs for MAS-BT (JIS-B 6339)
Tirettes pour MAS-BT (JIS-B 6339)
Anzugsbolzen für MAS-BT (JIS-B 6339)



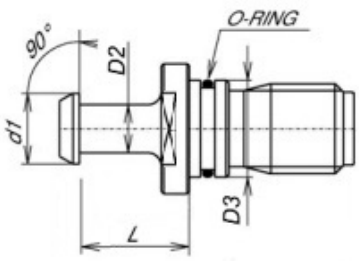
(J75) JS-B 6339



codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	HOLE	Tool Shank
JIS-B 6339 - 75° WITH COOLANT BORE - FORATO						
T40.J75.01923.56A	19	23	14	17 M16	3	BT40
T50.J75.02825.74A	28	25		25 M24	10	BT50
JIS-B 6339 - 75° WITHOUT COOLANT BORE - SENZA FORO						
T40.J75.01923.56B	19	23	14	17 M16	-	BT40
T50.J75.02825.74B	28	25		25 M24	-	BT50

MITSUI 90°

Tiranti per MAS-BT (JIS-B 6339)
Pull studs for MAS-BT (JIS-B 6339)
Tirettes pour MAS-BT (JIS-B 6339)
Anzugsbolzen für MAS-BT (JIS-B 6339)



(B90) MITSUI SEIKI



codice - code	dati tecnici - technical data					
	Ø d1	L	Ø D2	Ø D3	HOLE	Tool Shank
MITSUI - 90° WITH COOLANT BORE - FORATO						
T40.B90.01518.50A	15	18	10	17 M16	3	BT40
T50.B90.02423.71A	24	23	18	25 M24	8	BT50
MITSUI - 90° WITHOUT COOLANT BORE - SENZA FORO						
T40.B90.01518.50B	15	18	10	17 M16	-	BT40
T50.B90.02423.71B	24	23	18	25 M24	-	BT50