

serie



teste ad angolo
angle heads

**HEAVY
DUTY**



Un prodotto fondamentale che grazie alla riduzione dei piazzamenti in lavorazione, vanta un contributo prezioso per l'aumento della produttività necessaria per competere su tutti i mercati: parliamo della Testa ad Angolo, da considerare come parte integrante del parco utensili della macchina.

- **Esperienza** - E' dall'inizio degli anni '60 che O.M.G. crea prodotti. L'esperienza non si acquista, si acquisisce. La realizzazione fin dai primi anni di prodotti speciali ha formato le competenze per lo sviluppo di una gamma di Teste ad Angolo articolata e performante, idonea alla clientela più esigente che crede negli investimenti per conquistare nuovi mercati.
- **Tradizione** - Il termine "qualità" viene spesso citato, ma non significa soltanto utilizzare macchine utensili tecnologicamente avanzate per ottenere lavorazioni precise. La qualità è il risultato di esperienze pratiche, di calcoli matematici, di sfide vinte e perse ma comunque accettate, di cui fare grande tesoro.
- **Innovazione** - Le Teste ad Angolo Speciali di ultima generazione offrono prestazioni superiori a tutti gli standard e condizionano spesso la produzione fino al punto da divenire indispensabili nel completamento del processo produttivo. Da queste OMG continua a trarne grande beneficio e soddisfazione con soluzioni tecniche poi riproposte sulle Teste ad Angolo Standard a catalogo.
- **Modularità** - Indispensabile oggi la flessibilità produttiva, ancora maggiore negli investimenti. In questa ottica gli elementi modulari delle Teste ad Angolo consentono di ridurre i costi ed aumentare i benefici.
- **Personalizzazione** - Se l'ampia gamma di Teste ad Angolo standard non risponde all'esigenza specifica, siamo pronti a progettare e costruire il prodotto speciale, forti dell'esperienza di centinaia di soluzioni operative volte alle più svariate attività produttive.

An ultimate product that gives a valuable contribution to the productivity increase by reducing the management of the pieces to be machined, necessary condition to compete in the markets all over the world: we are talking about the Angle Heads, to be considered an integrant part of the machine tools range.

- **Experience** - O.M.G. engineers its products since the beginning of the '60's. The experience cannot be bought but it is acquired. Since that time the achievement of special products gave us the expertise to develop a range of Angle Heads very broad and performing, suitable to the most demanding customers believing in investments to gain new market shares.
- **Tradition** - The word "quality" is often mentioned, but it does not mean just to use technologically advanced machine tools to get accurate machining. The quality is the result of practical experiences, of mathematical calculations, of won and lost challenges, anyway accepted, which are treasured.
- **Innovation** - The last generation Special Angle Heads offers performances much higher than all standards, and they often affect the production cycles until becoming indispensable when completing production stages. O.M.G. keeps getting beneficial results from his special range which is also reflected into the standard Angle Heads range.
- **Modularity** - Nowadays the productivity flexibility is mandatory, and even more in the investments. Towards this goal the O.M.G. Angle Heads modular system allows cost reductions and to increase profits.
- **Customization** - And if the wide range of standard Angle Heads will not meet your requirements, we are ready to engineer and to manufacture a new Special Angle Head product, always supported by our experience of hundreds of solutions done for many different industrial activities.

BAH

TA.CP

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TSI/TSX

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MT-TC-TC3

Accessori
Accessories

Appendice tecnica
Technical supplement



Panoramica prodotti

Product overview



TAR

Piccole per piccoli spazi.

Tiny for narrow spaces.

Pagina/Page: 3-10



TA

Lavorazione singola di foratura e fresatura.

Drilling and milling machining.

Pagina/Page: 3-18



TA... D

Input refrigerante attraverso lo stop-block e uscita attraverso il centro utensile.

Input coolant from stop-block, and output through tool spindle.

Pagina/Page: 3-38



TAO

Mandrino offset, lavorazione in spazi ristretti ed ottima performance in fresatura.

Offset spindle, machining in narrow spaces, and excellent results in milling operations.

Pagina/Page: 3-48



TAF

Mandrino fisso, angolo su richiesta del cliente.

Fixed spindle with custom angle.

Pagina/Page: 3-67

Simboli/Icons



Capacità di foratura
Drilling capacity



Pressione
Pressure



Maschiatura
Tapping



Peso
Weight



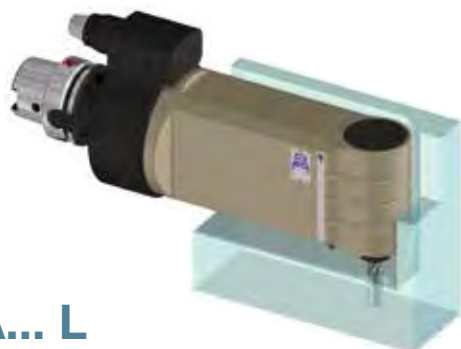
Rapporto entrata/uscita
Ratio input/output



N° max giri in uscita
Max output RPM

Panoramica prodotti

Product overview



TA... L

Versione allungata per lavorazioni singole di foratura e fresatura.

Length stretched version for drilling and milling single machining operations.

Pagina/Page: 3-11



TA... 2P

Due mandrini contrapposti di 180°.

180° two opposed spindles.

Pagina/Page: 3-32



TAO... PD

Mandrino offset, input refrigerante attraverso il centro cono, uscita attraverso centro utensili con pressione 70 bar.

Offset spindle, input coolant through machine taper, output through tool spindle at 70 bar pressure.

Pagina/Page: 3-49



TAV

Mandrino variabile $\pm 90^\circ$.

$\pm 90^\circ$ adjustable spindle.

Pagina/Page: 3-56

Simboli/Icons



Peso con cono 40
Weight with size 40 shank



Dual
Contact



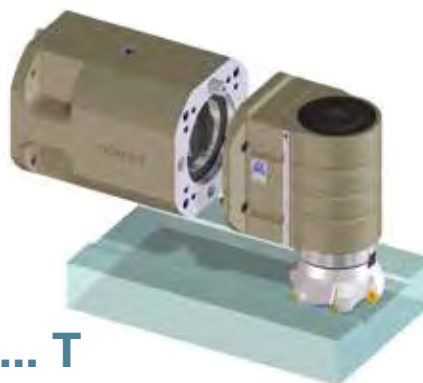
Peso con cono 50
Weight with size 50 shank



Rotazione in ingresso
Input rotation



Rotazione in uscita
Output rotation



TA... T

Connessione alla macchina tramite flangia.

To be connected to the machine by flange.

Pagina/Page: 3-72

BAH

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TA

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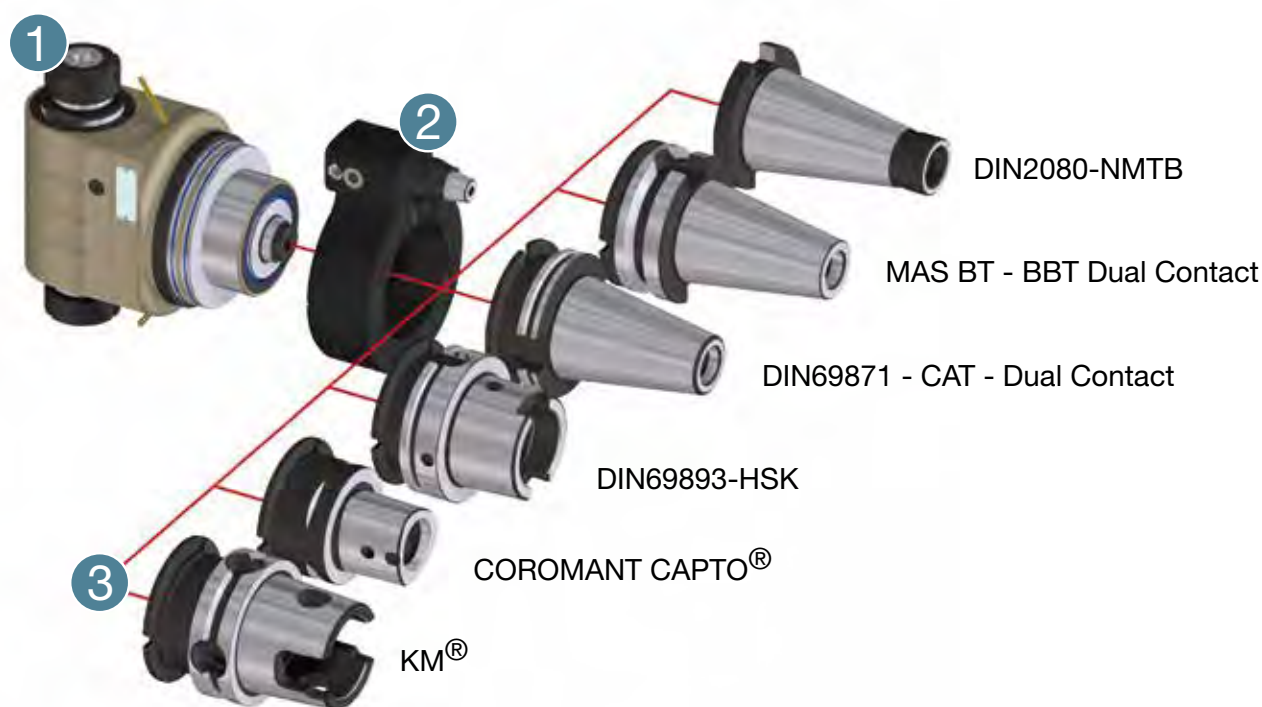
Accessori
Accessories

Appendice tecnica
Technical supplement

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Sistema modulare per applicazioni flessibili

Modular system for flexible application



- 1 Testa ad angolo con presa utensile ER standard, oppure vedi tipi Mandrino.
Angle Head with standard ER tool connection, or check other spindle types.
- 2 Antirotante standard "senza gioco", oppure su specifico design per la vostra macchina utensile.
No backlash standard torque arm, or under specific design for your machine tool.
- 3 Coni macchina standard o speciali su richiesta.
Standard or on-demand machine tapers.

Modularità Coni – Sono disponibili tutti i tipi di coni macchina, da sostituire tramite un esclusivo accoppiamento di precisione che crea un sistema rigido pari ai coni integrali, ma con i pregi dell'intercambiabilità.

Modularità Antirotanti – esistono fondamentalmente tre dimensioni unificate di interasse tra il centro cono ed il centro perno antirotante: 65 mm per i cono grandezza 40, 80 mm per i cono grandezza 50 ed in alcuni casi anche 110 mm. Sono disponibili tutte le dimensioni e sostituire il gruppo antirotante è una operazione banale.

Taper modularity - All the different machine tapers are available, and can be replaced with an exclusive precision coupling system generating a rigid system equal to integral tapers, but with additional interchangeability quality.

Torque arm modularity - Essentially three unified dimensions between taper and torque-arm centers exist: 65 mm for the taper size 40, 80 mm for the taper size 50 and also 110 mm in some cases. All sizes are available and torque-arm replacement is very simple.

Prese utensili - tipi mandrino

Clamping systems and spindle types



1 DIN6388-ER



2 Albero portafrese
Milling shaft



3 Weldon
Whistle-Notch



4 DIN69893-HSK



5 COROMANT
CAPTO®



6 ABS
Licenza KOMET®



7 ISO-DIN2079
NMTB-BT

Refrigerante utensile

Coolant tool



STANDARD



TA... PD
max 10 bar



TAO... PD
max 70 bar



TAF... PD
max 70 bar



TAV... PD
max 70 bar

Il circuito refrigerante è standard - Tutte le teste sono provviste di canalizzazione interna, che parte dal perno dell'antiro-
tante e termina sull'ugello vicino all'utensile, senza alcun costo aggiuntivo.

Refrigerante da cono macchina - La costruzione offset delle Teste ad Angolo serie TAO consente il montaggio di tenute
ad alta pressione affidabili nel tempo ed isolate dalle parti vitali della Testa ad Angolo, per un sicuro utilizzo di utensili con
passaggio refrigerante interno.

Coolant system is standard - All our Angle Heads are supplied with an internal channel system, which starts from the
torque-arm pin and ends on the nozzles next to the tool, without additional cost.

Coolant system from machine taper - The offset construction of the TAO Angle Head series allows to fit high pressure
seals which are time reliable and isolated from the vital parts of the Angle Heads, for a safe usage of tools with internal
coolant transit.



Antirotante Torque arm



STANDARD



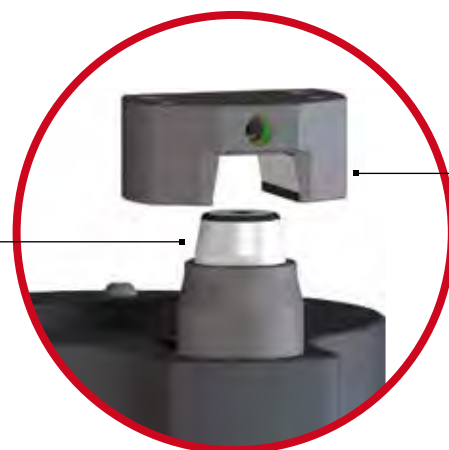
TriBlock 



QuadBlock 



Studiato e realizzato su
specifica richiesta.
*Customized design according
to your application.*



Stop-block

Perno conico
Conical pin

Prestazioni superiori - L'antirotante standard permette di cambiare la testa in automatico. Il sistema di accoppiamento fra perno conico regolabile assialmente e lo stop-block con sede a "V", permette di annullare la tolleranza tra le parti creando un sistema rigido, senza giochi. Evidenti sono i vantaggi: maggiore durata degli utensili, maggiore durata dei cuscinetti, risparmi in termini di manutenzione con conseguente riduzione dei costi.

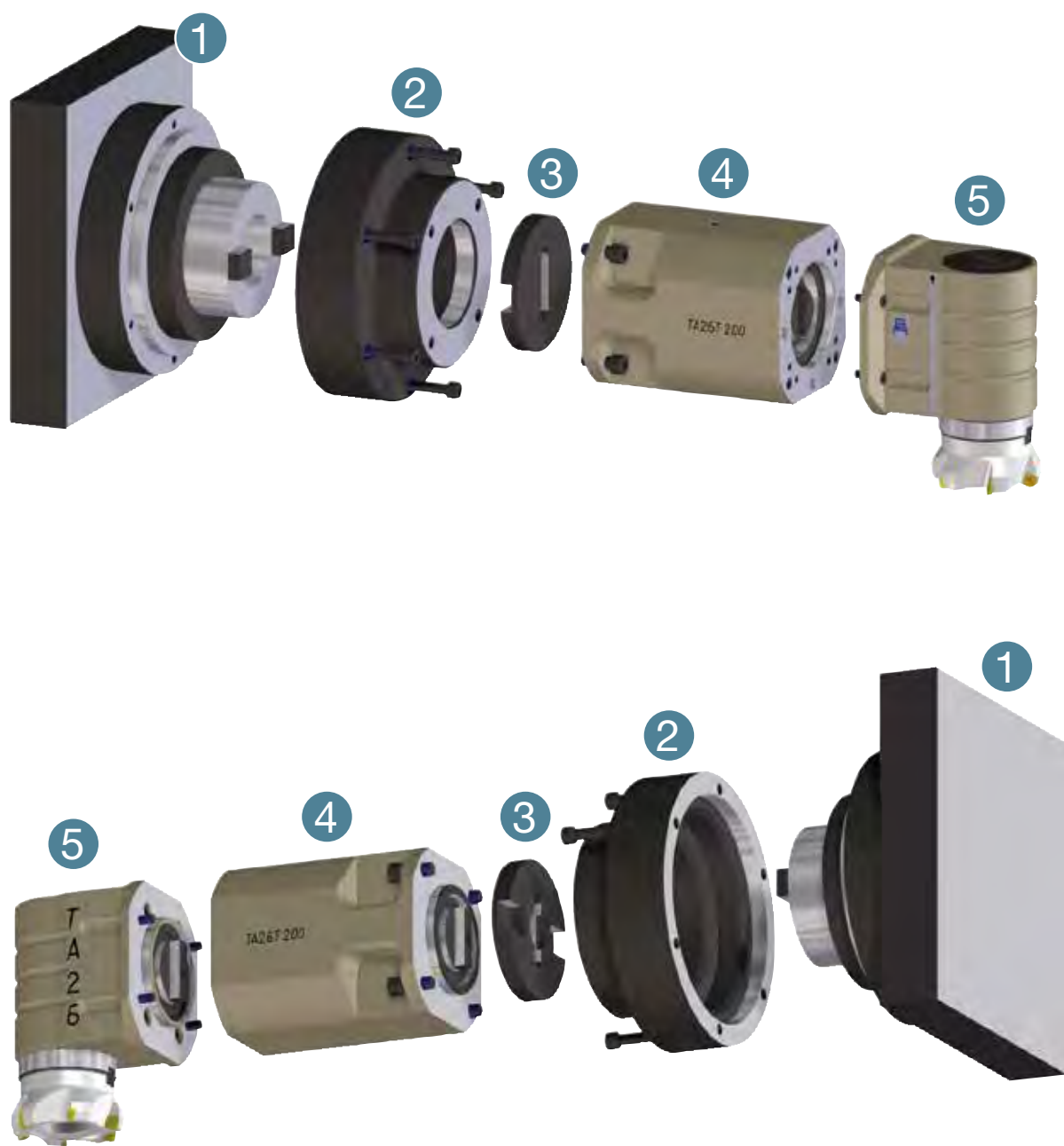
Massima stabilità - I sistemi antirotanti **TriBlock** e **QuadBlock** di O.M.G. con perni regolabili permettono di contrastare al meglio le spinte radiali e assiali con la possibilità di affrontare in sicurezza lavorazioni di fresatura o finitura fino a ora mai effettuate con le teste ad angolo, destinate inizialmente a diversi piazzamenti pezzo.

Higher performances - The standard torque arm allows an automatic change of the head. The coupling system between the conical pin, which can be axial adjusted, and the "V"-housing of the stop-block, allows to cancel any tolerance between those parts generating a rigid and backlash free system. The advantages are evident: longer life of tools, longer life of bearings, maintenance savings with consequent cost reductions.

Maximum stability - The O.M.G. **TriBlock** and **QuadBlock** torque arm systems with adjustable pin allow to oppose both radial and axial thrusts at their best, with the possibility of milling or finishing with total security, which was not possible until nowadays because requiring several changes of placement of the piece to be machined.

Connessione alla macchina tramite flangia

Machine connection by flange



1	Macchina	<i>Machine</i>
2	Flangia di connessione	<i>Connection flange</i>
3	Giunto ISO 40/50	<i>Driving joint ISO 40/50</i>
4	Estensione	<i>Extension</i>
5	Testa ad angolo TA... T	<i>Angle head TA... T</i>

Qualità dei componenti

Quality of components



CORPO/BODY

Corpo testa in acciaio: massima rigidità e minima dilatazione termica.

Heady body in steel: maximum rigidity and minimum thermal expansion.



CUSCINETTI/BEARINGS

Cuscinetti obliqui in classe di precisione ABEC7/9.

Angular contact ball bearings of precision class ABEC7/9



INGRANAGGI/GEARS

Ingranaggi Gleason con evolvente rettificato: massime performances e minori vibrazioni.

Gleason rectified gears: maximum performances and minimum vibration.



DESIGN

Design compatto, che insieme alle specifiche sopra descritte, consente: alte performances, elevate velocità, lunga durata degli utensili.

Compact design that, along with above mentioned described specifications, allows: high performances, high speeds, long life of tools.

Materiali - Tutte le teste ad angolo standard sono in acciaio ricavate dal pieno per fresatura a pareti sottili, minimo ingombro e minor peso. Hanno il corpo trattato con nipro, trattamento anticorrosione, che garantisce alta protezione contro la ruggine, lubrificanti aggressivi e acidi.

Componenti - Tutte le teste montano cuscinetti di precisione, oppure conici nelle versioni per grandi asportazioni. Si utilizzano solo cinematismi trattati termicamente e coppie coniche Gleason con dentatura rettificata. Lubrificazione con grasso long-life.

Materials - All our standard Angle Heads are made from solid steel for thin wall milling, resulting with the minimum possible size and less weight. Body is nipro treated and anti-corrosion coated giving the guarantee of high protection against rust as well as acid and aggressive lubricant-coolants.

Components - All our Angle Heads integrate precision bearings, or tapered roller bearings when models are for big removal machining. We only use thermal treated cinematic components and Gleason bevel gears with rectified teeth. Lubrication is with long-life grease.

Packaging



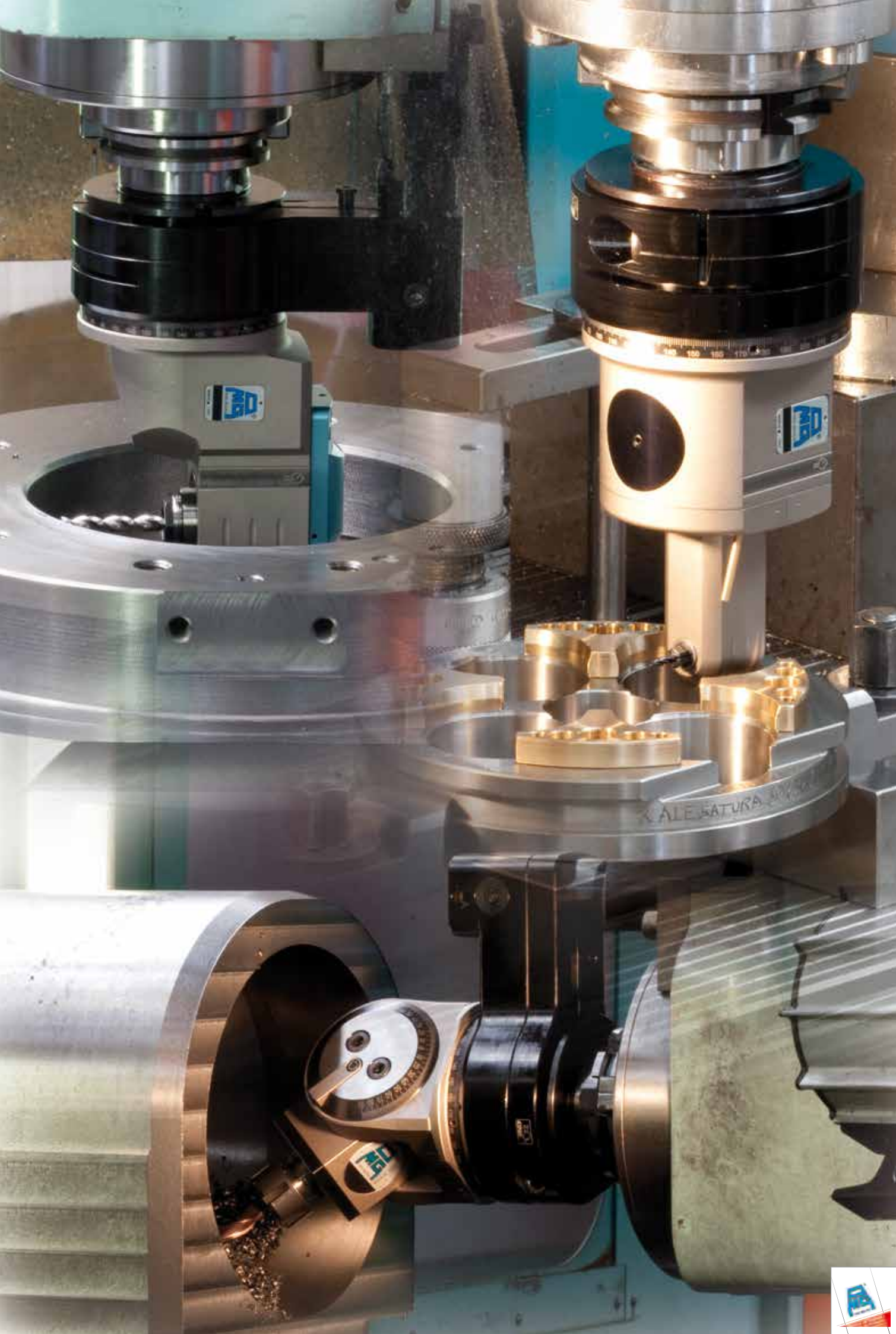
Le Teste ad Angolo sono racchiuse in robusta valigetta di materiale termoplastico e corredate di una completa dotazione di accessori:

- Stop-block standard con passaggio refrigerante
- Confezione di chiavi per messa in funzione e manutenzione
- Grasso di mantenimento
- Manuale istruzioni dettagliato per messa in funzione e manutenzione

The Angle Heads are packed in a strong thermoplastic case together with a complete set of accessories:

- *Standard stop-block with coolant way*
- *Set of keys for operation and maintenance*
- *Grease tube*
- *Operation and maintenance manual*





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Accessori
Accessories

Appendice tecnica
Technical supplement

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testa ad angolo - angle head

TAR03.P

caratteristiche/features



ø 3



M3



1-1



8000

peso/weight



6,7 kg



9,1 kg

rotazione/rotation

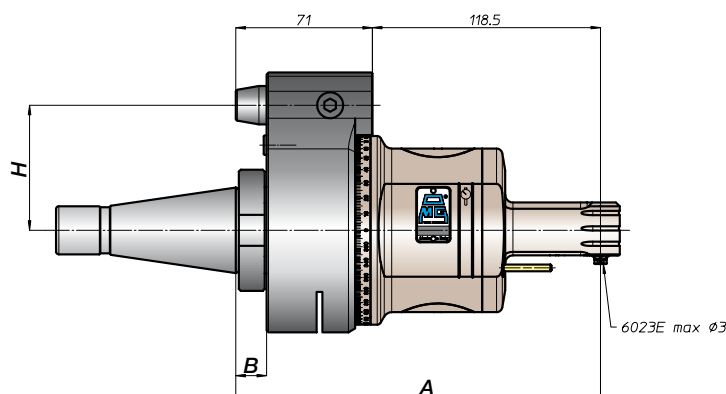
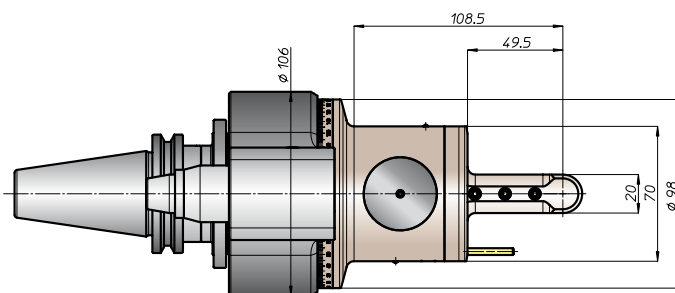
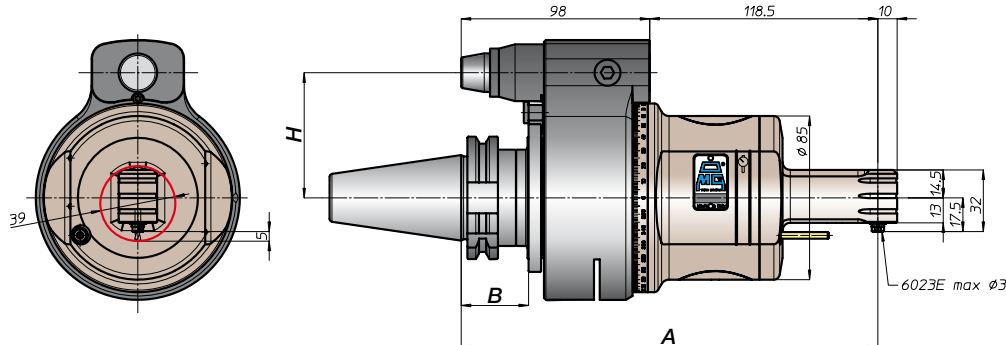
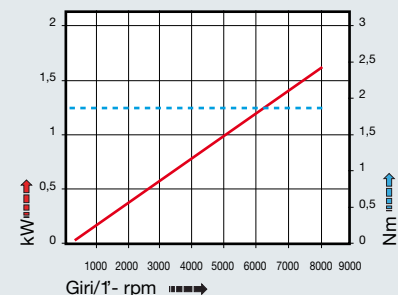


input



output

prestazioni/performance

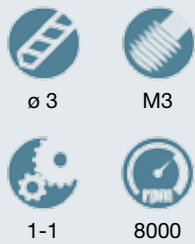


CONO SHANK	size	H			
		A	B	standard	optional
* DIN9871	30	216,5	35	65	-
	40			80	110
	45			80	110
	50			80	110
* CAT	40	224,5	45	65	-
	50			80	110
* BT	40	225,5	46	65	-
	50			80	110
HSK	63	220,5	39	65	-
	80			80	110
	100			80	110
CAPTO	C5	186,5	13	65	-
	C6			80	110
	C8			80	110
KM	63	189,5	16	65	-
	80			80	110
	100			80	110
DIN2080	-	188,5	13	65	-
	40			80	110
	-			80	110
NMTB	40	189,5	16	65	-
	50			80	110

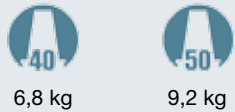
* Option: Dual Contact

TAR03.PL

caratteristiche/features



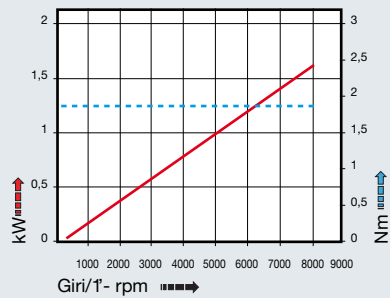
peso/weight



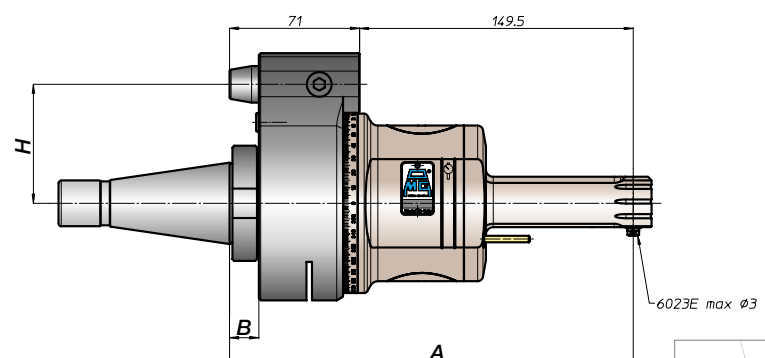
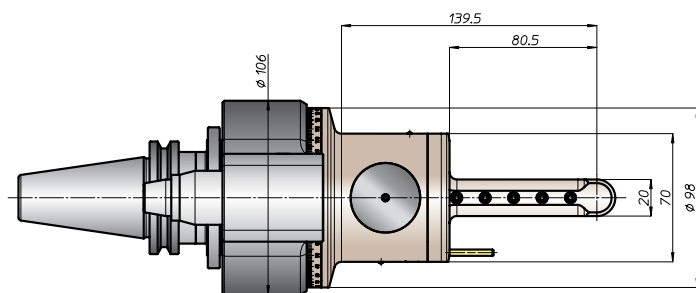
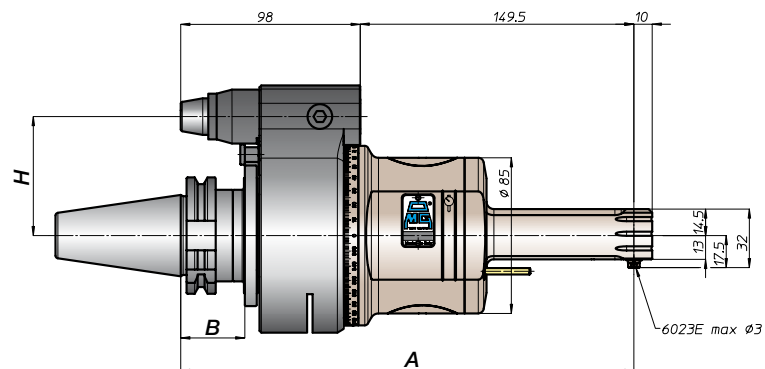
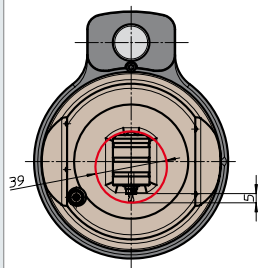
rotazione/rotation



prestazioni/performance



CONO SHANK	size	A	B	H	
				standard	optional
* DING9871	30	247,5	35	65	-
	40			80	110
	45			80	110
	50			80	110
* ANSIB5.50 CAT	40	255,5	45	65	-
	50			80	110
* BT	40			65	-
	50			80	110
DING9893 HSK	63	256,5	44	65	-
	80		46	80	110
	100		46	80	110
ISO26623 CAPTO	C5	251,5	39	65	-
	C6			80	110
	C8			80	110
KM	63	247,5	39	65	-
	80			80	110
	100			80	110
DIN2080	-	217,5	13	65	-
	40	217,5	13	65	-
	-	220,5	16	80	110
ANSIB5.18 NMTB	40	217,5	13	65	-
	50	220,5	16	80	110



testa ad angolo - angle head

TAR04.P



caratteristiche/features



ø 4



M3



1-1



8000

peso/weight



7 kg



9,4 kg

rotazione/rotation

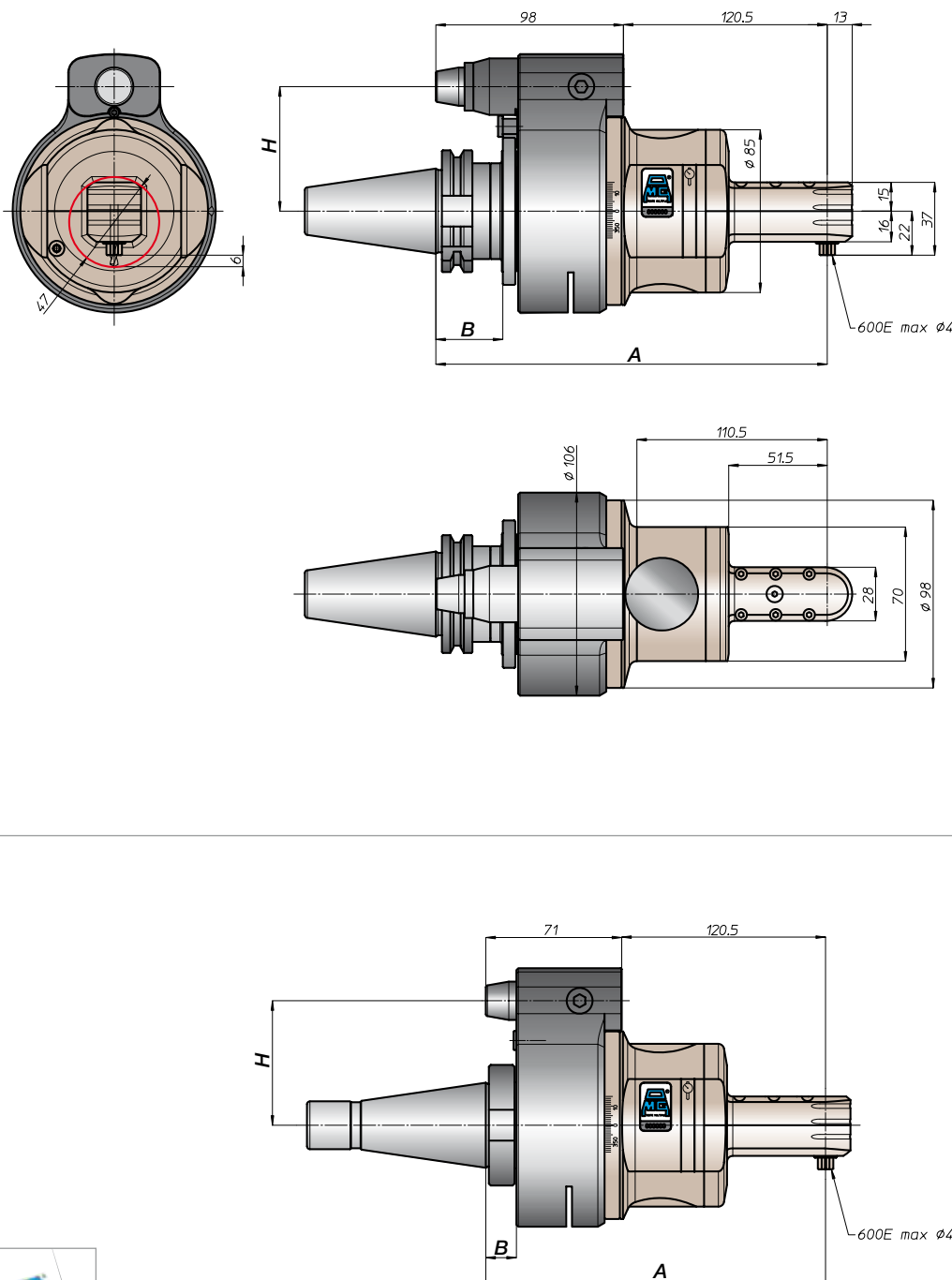
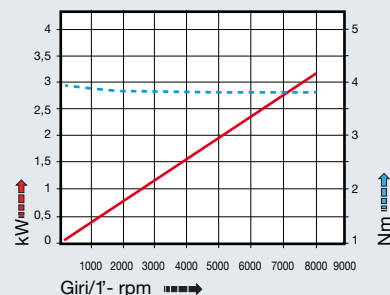


input



output

prestazioni/performance



CONO SHANK	size	H			
		A	B	standard	optional
* DIN9871	30	218,5	35	65	-
	40			80	110
	45			80	110
	50			80	110
* CAT ANSIB5.50	40	226,5	45	65	-
	50			80	110
* BT	40			65	-
	50			80	110
DIN9893 HSK	63	227,5	44	65	-
	80		46	80	110
	100		46	80	110
ISO28623 CAPTO	C5	222,5	39	65	-
	C6			80	110
	C8			80	110
KM	63	218,5	13	65	-
	80			80	110
	100			80	110
DIN2080	-	188,5	13	65	-
	40	191,5	16	80	110
	50			80	110
ANSIB5.18 NMTB	40	188,5	13	65	-
	50	191,5	16	80	110

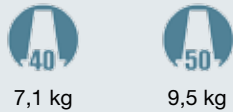
* Option: Dual Contact

TAR04.PL

caratteristiche/features



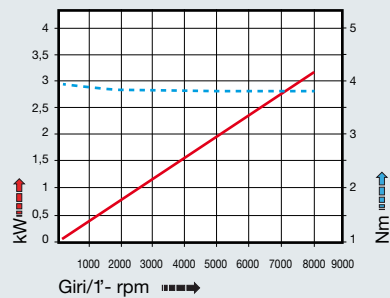
peso/weight



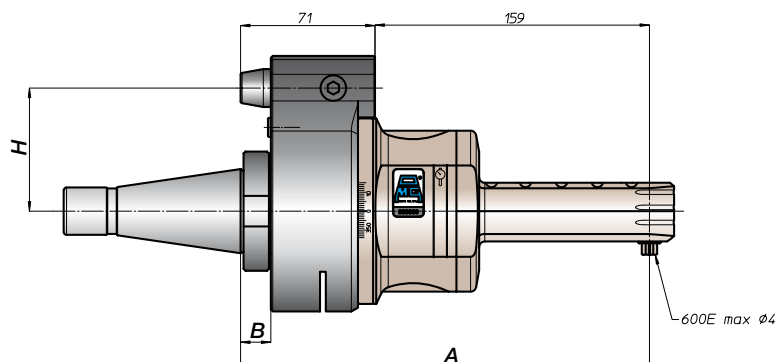
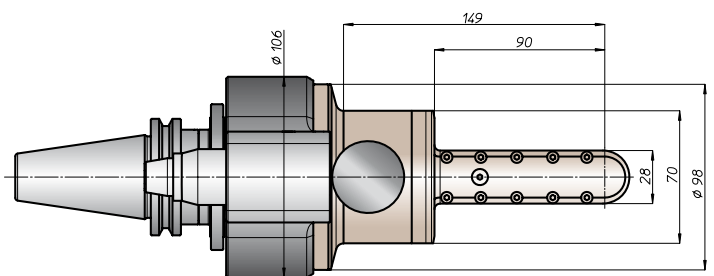
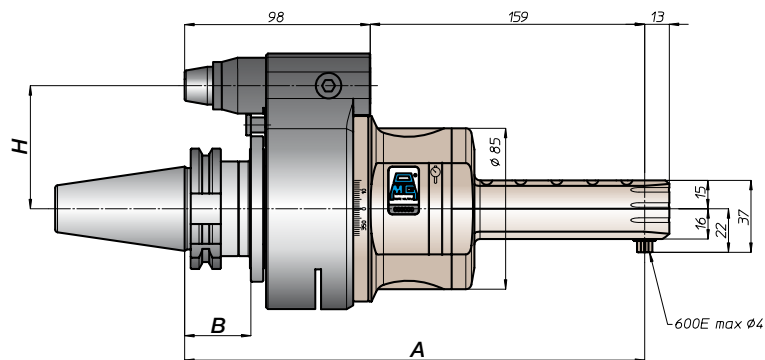
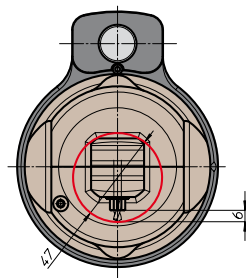
rotazione/rotation



prestazioni/performance



CONO SHANK	size	A	B	H	
				standard	optional
* DING9871	30	257	35	65	-
	40			80	110
	45			80	110
	50			80	110
* CAT	40	265	45	65	-
	50			80	110
* BT	40	265	45	65	-
	50			80	110
HSK	63	266	44	65	-
	80		46	80	110
	100		46	80	110
CAPTO	C5	261	39	65	-
	C6			80	110
	C8			80	110
KM	63	257	46	65	-
	80			80	110
	100			80	110
DIN2080	-	227	13	65	-
	40			80	110
	50			80	110
NMTB	40	227	13	65	-
	50			80	110



testa ad angolo - angle head

TAR06.P

caratteristiche/features



ø 6



M5



1-1



8000

peso/weight



7,2 kg



9,6 kg

rotazione/rotation

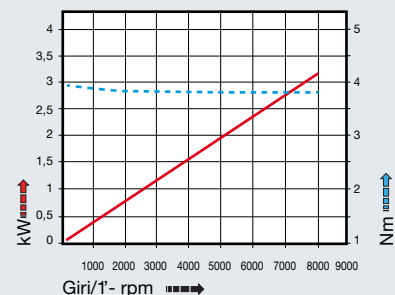


input



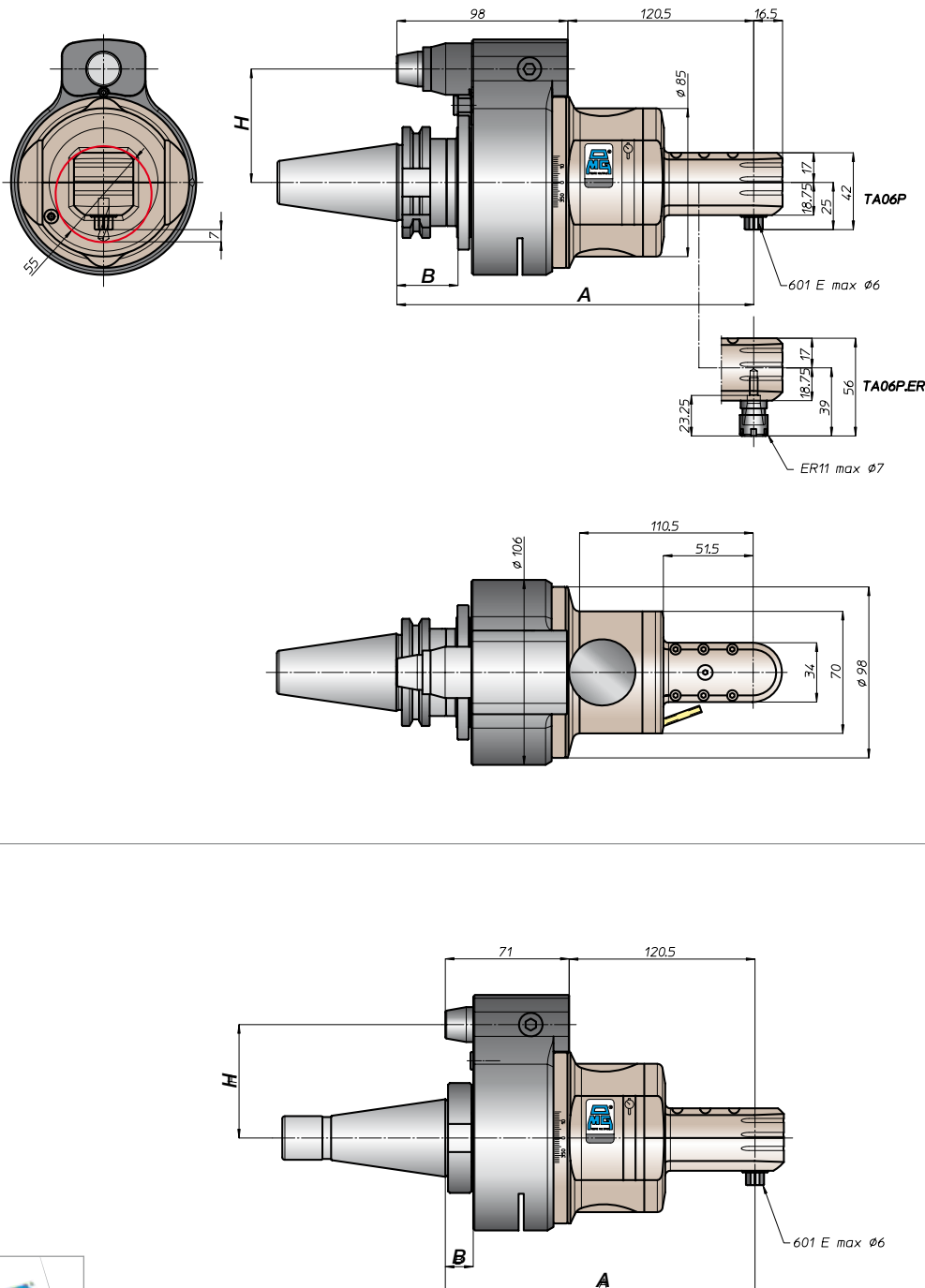
output

prestazioni/performance



tipi mandrino disponibili / available spindle types

3 Weldon
Whistle-Notch
Ø6



CONO SHANK	size	H			
		A	B	standard	optional
* DIN9871	30	218,5	35	65	-
	40			80	110
	45			80	110
	50			80	110
* CAT	40	226,5	45	65	-
	50			80	110
* BT	40	227,5	46	65	-
	50			80	110
* HSK	63	222,5	39	65	-
	80			80	110
	100			80	110
* CAPTO	C5	188,5	13	65	-
	C6			80	110
	C8			80	110
* KM	63	191,5	16	65	-
	80			80	110
	100			80	110
* DIN2080	-	188,5	13	65	-
	40			80	110
	50			80	110
* NMTB	40	188,5	13	65	-
	50			80	110

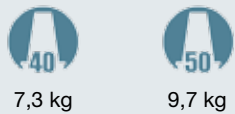
* Option: Dual Contact

TAR06.PL

caratteristiche/features



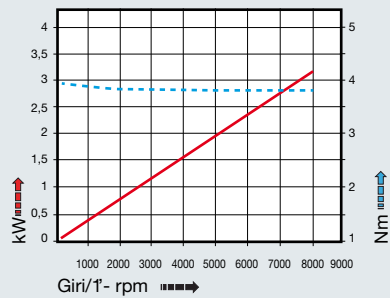
peso/weight



rotazione/rotation

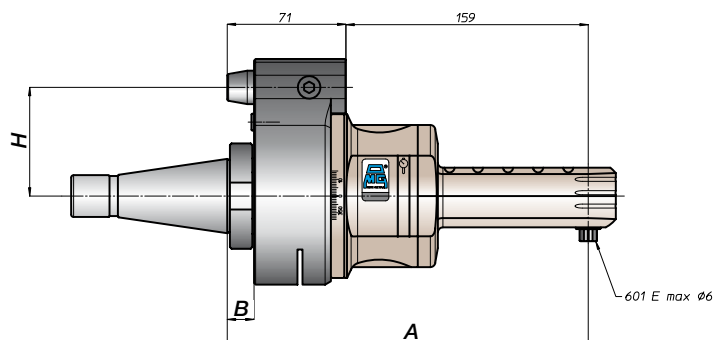
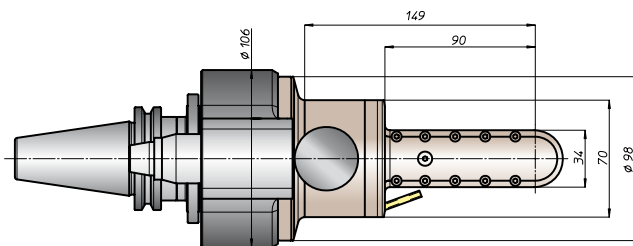
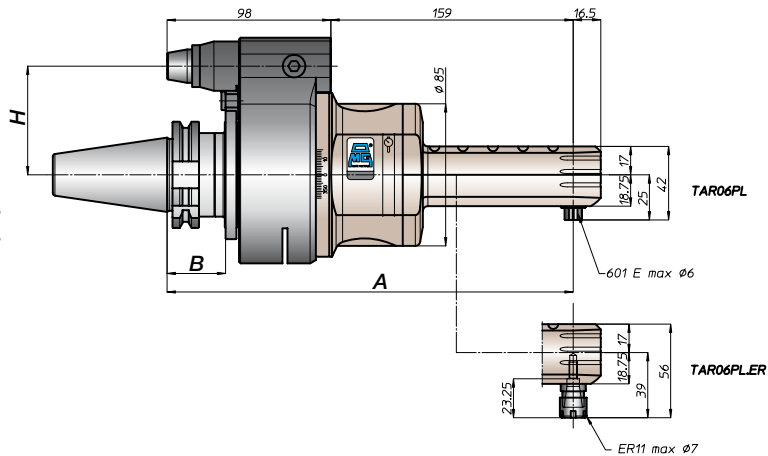
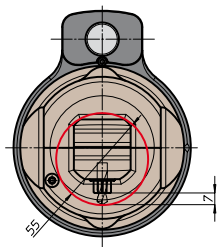


prestazioni/performance



tipi mandrino disponibili / available spindle types

3 Weldon
Whistle-Notch
Ø6



CONO SHANK	size	A	B	H	
				standard	optional
DIN9871 *	30	257	35	65	-
	40			80	110
	45			80	110
	50			80	110
ANSIB5.50 *	40	265	45	65	-
	50			80	110
BT *	40	265	45	65	-
	50			80	110
HSK	63	266	44	65	-
	80		46	80	110
	100		46	80	110
CAPTO	C5	261	39	65	-
	C6			80	110
	C8			80	110
KM	63	257	46	65	-
	80			80	110
	100			80	110
DIN2080	-	227	13	65	-
	40			80	110
	50			80	110
NMTB	40	227	13	65	-
	50			80	110

* Option: Dual Contact

BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori
Accessories

Appendice tecnica
Technical supplement

testa ad angolo - angle head

TAR10.P



caratteristiche/features



ø 10



M8



1-1



6000

peso/weight



7 kg



9 kg

rotazione/rotation

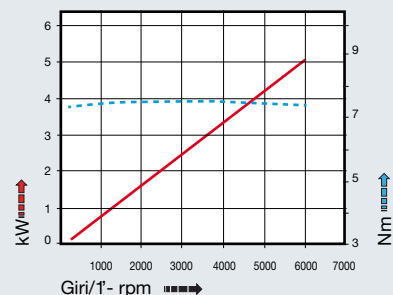


input



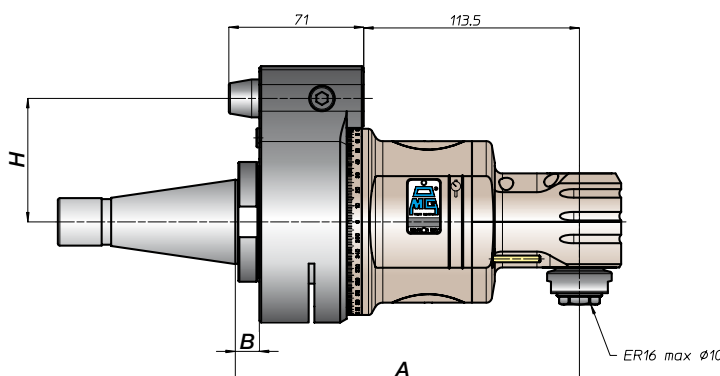
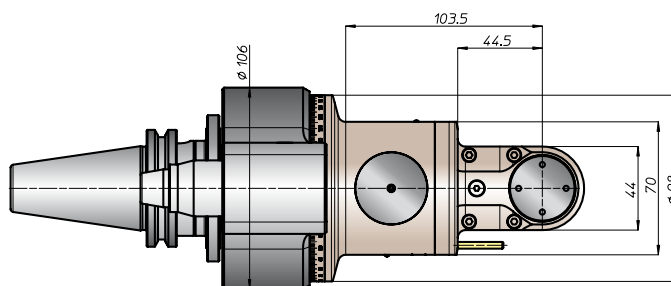
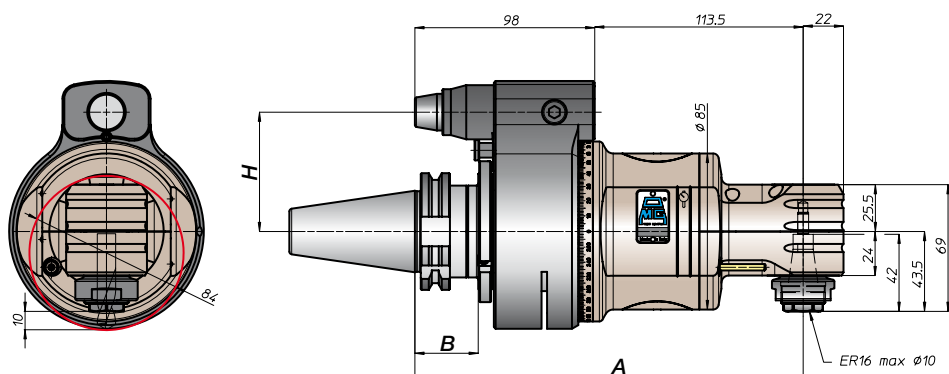
output

prestazioni/performance



tipi mandrino disponibili / available spindle types

3 Weldon
Whistle-Notch
Ø12



CONO SHANK	size	H			
		A	B	standard	optional
* DIN9871	-			65	-
	40			80	110
	45			80	110
* CAT	40	211,5	35	65	-
	50			80	110
* BT	40			65	
	50	219,5	45	80	110
DIN9893	63		44	65	
	80	220,5	46	80	110
	100			80	110
CAPTO	C5			65	
	C6	215,5	39	80	110
	C8			80	110
KM	63			65	
	80	211,5		80	110
	100			80	110
DIN2080	-	181,5	13	65	-
	40			80	110
	50	184,5	16	80	110
ANSIB5.18	40	181,5	13	65	-
	50	184,5	16	80	110

* Option: Dual Contact



caratteristiche/features



Ø 10



M8



1-1



6000

peso/weight



7,5 kg



9,3 kg

rotazione/rotation

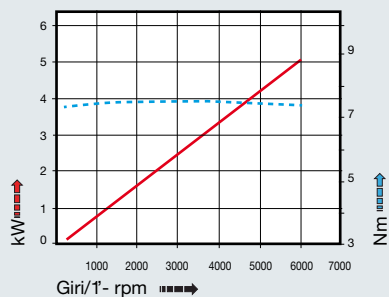


input



output

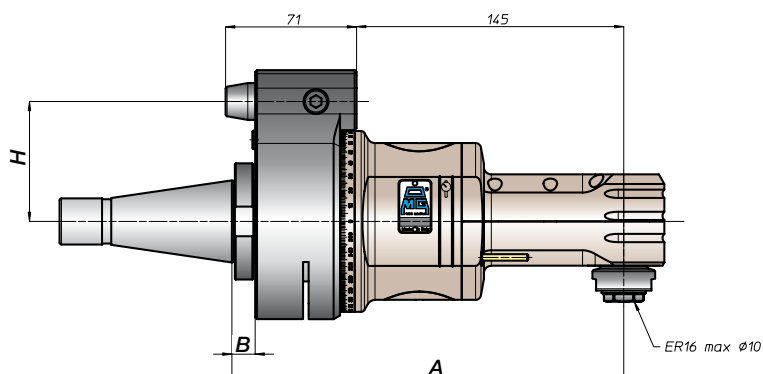
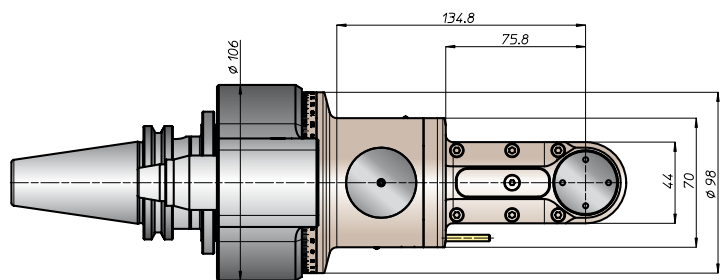
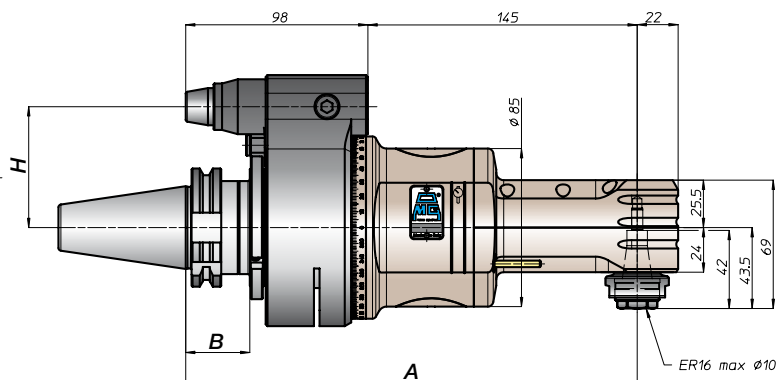
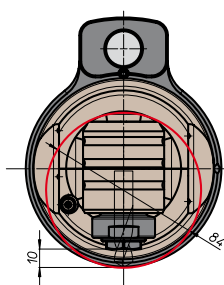
```
prestazioni/performances
```



CONO SHANK	size	A	B	H	
				standard	optional
★ DIN9871 	-	243	35	65	-
	40			80	110
	45				
	50				
★ CAT ANSI B5.50 	40			65	-
	50			80	110
★ BT 	40			65	
	50			251	45
DIN69893 HSK 	63	252	44	65	
	80		46	80	110
	100				
ISO26623 CAPTO 	C5	247		65	
	C6		39		
	C8			80	110
KM 	63	243		65	
	80			80	110
	100				
DIN2080 	-	213	13	65	-
	40				
	-	216	16	80	110
	50				
ANSI B5.18 NMTB 	40	213	13	65	-
	50	216	16	80	110

tipi mandrino disponibili / *available spindle types*

3 Weldon Whistle-Notch
Ø12



testa ad angolo - angle head

TA07.P



caratteristiche/features



ø 7



M6



1-1



10000

peso/weight



5,5 kg



7,5 kg

rotazione/rotation

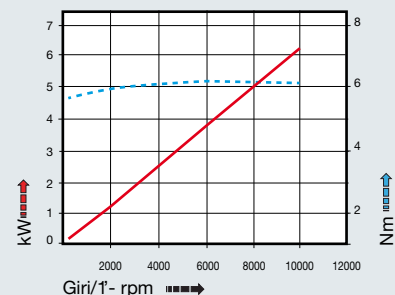


input



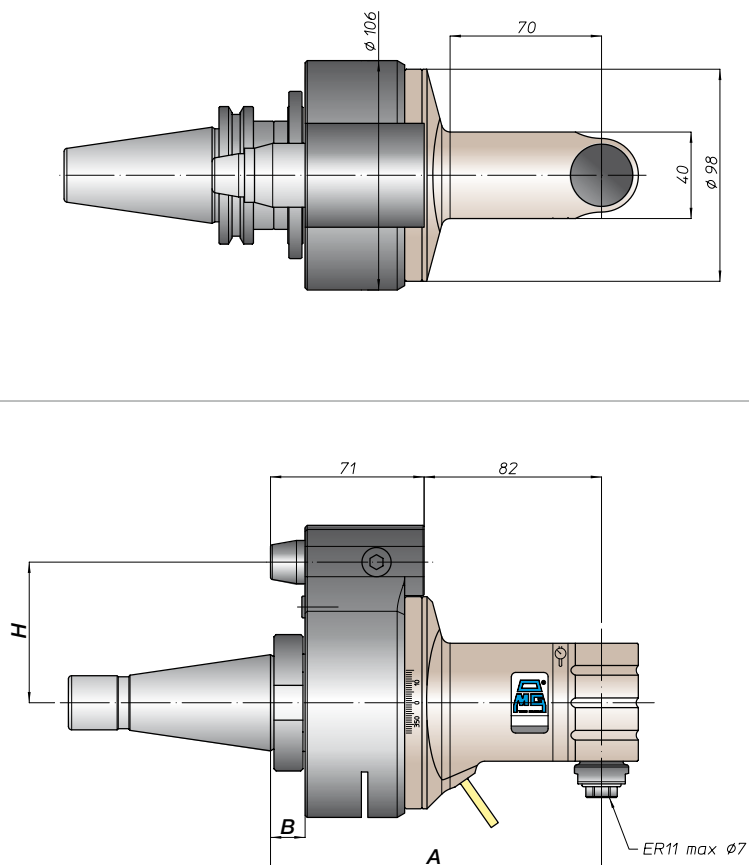
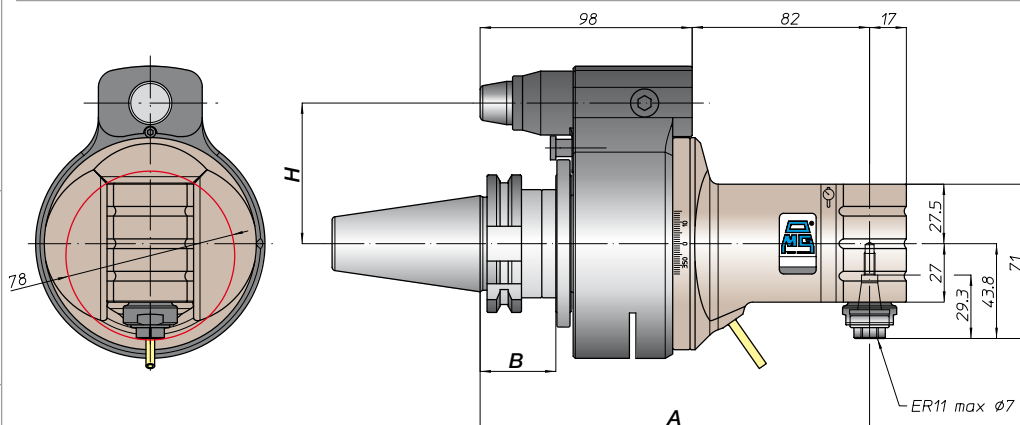
output

prestazioni/performance



tipi mandrino disponibili / available spindle types

3 Weldon
Whistle-Notch
Ø8-Ø10



CONO SHANK	size	H			
		A	B	standard	optional
* DIN9871	30	180	35	65	-
	40			80	110
	45			80	110
	50			80	110
* ANSI B5.50	40	188	45	65	-
	50			80	110
* BT	40	188	45	65	-
	50			80	110
* DIN9893	63	189	46	65	-
	80			80	110
	100			80	110
* ISO28623	C5	184	39	65	-
	C6			80	110
	C8			80	110
* KM	63	180	13	65	-
	80			80	110
	100			80	110
* DIN2080	-	150	16	65	-
	40			80	110
	50			80	110
* ANSI B5.18	40	150	13	65	-
	50			80	110

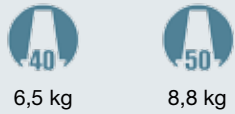
* Option: Dual Contact

TA07.PL

caratteristiche/features



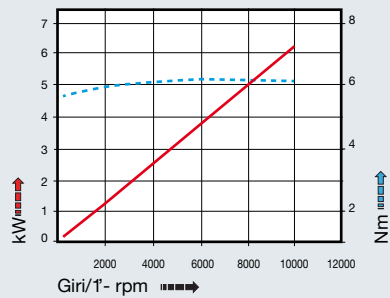
peso/weight



rotazione/rotation



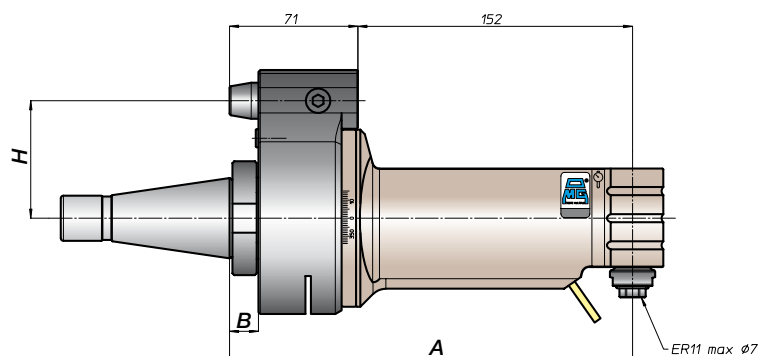
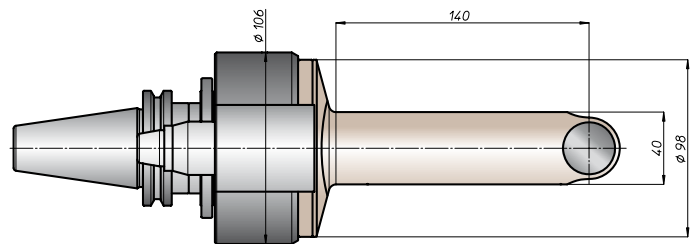
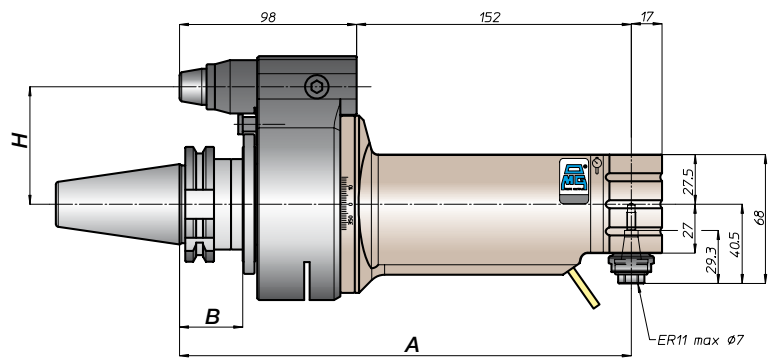
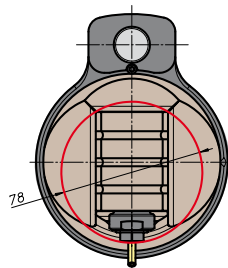
prestazioni/performance



tipi mandrino disponibili / available spindle types

3 Weldon
Whistle-Notch
Ø8-Ø10

CONO SHANK	size	A	B	H	
				standard	optional
* DING9871	-			65	-
	40				
	45			80	110
* CAT	40	250	35	65	-
	45			80	110
	50				
* BT	40			65	
	45				
	50	258	45	80	110
HSK	63		44	65	
	80	259			
	100		46	80	110
CAPTO	C5			65	
	C6	254	39		
	C8			80	110
KM	63			65	
	80	250			
	100			80	110
DIN2080	-	220	13	65	-
	40				
	50	223	16	80	110
NMTB	40	220	13	65	-
	45				
	50	223	16	80	110



testa ad angolo - angle head

TA10.P



caratteristiche/features



ø 10



M8



1-1



10000

peso/weight



5,8 kg



8 kg

rotazione/rotation

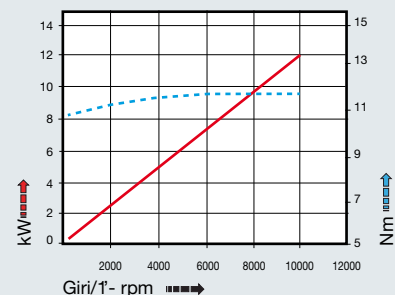


input



output

prestazioni/performance



tipi mandrino disponibili / available spindle types

1

DIN6388-ER

ER20

2

Albero portafrese

Milling shaft

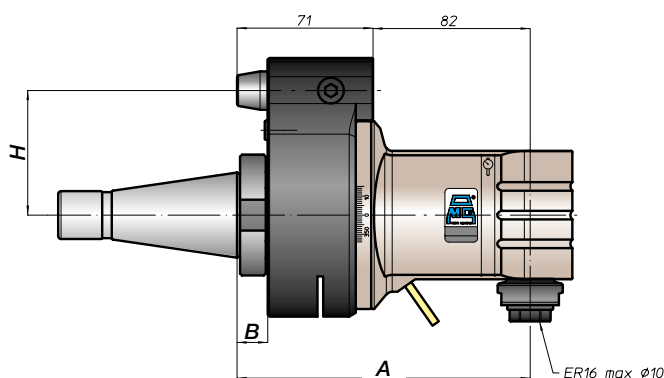
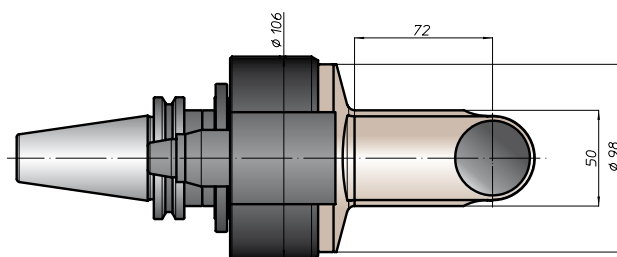
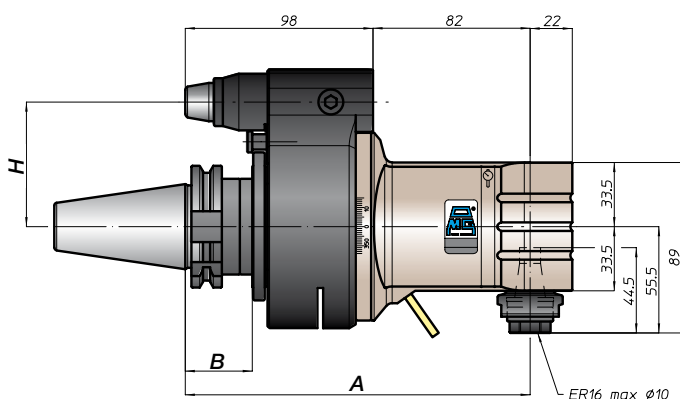
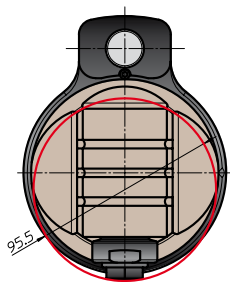
Ø16

3

Weldon

Whistle-Notch

Ø10



CONO SHANK	size	H			
		A	B	standard	optional
* DIN9871	30	180	35	65	-
	40			80	110
	45			80	110
	50			80	110
* CAT	40	188	45	65	-
	50			80	110
* BT	40	188	45	65	-
	50			80	110
DIN9893	63	189	46	65	-
	80			80	110
	100			80	110
CAPTO	C5	184	39	65	-
	C6			80	110
	C8			80	110
KM	63	180	13	65	-
	80			80	110
	100			80	110
DIN2080	-	150	16	65	-
	40			80	110
	50			80	110
ANSIB5.18	40	150	13	65	-
	50			80	110

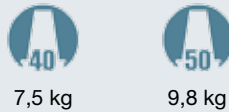
* Option: Dual Contact

TA10.PL

caratteristiche/features



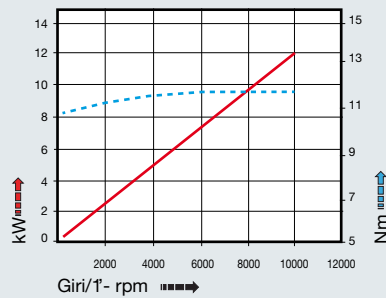
peso/weight



rotazione/rotation



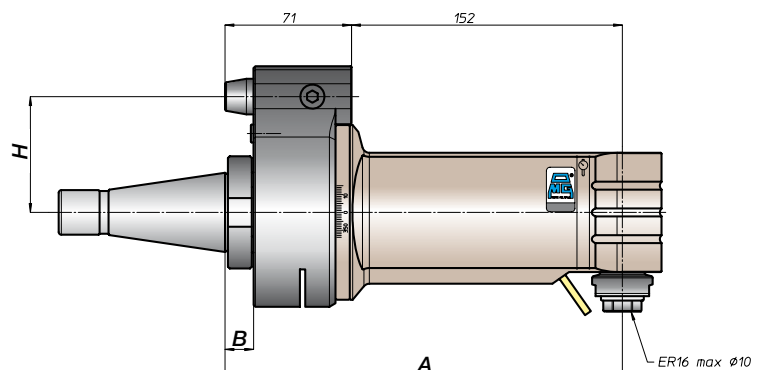
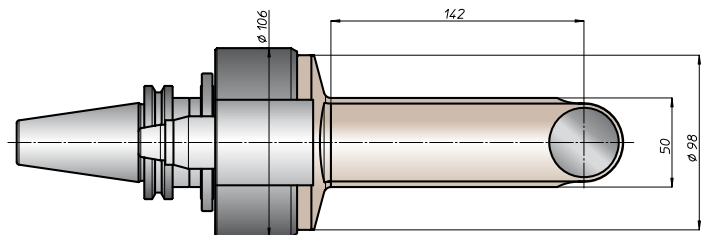
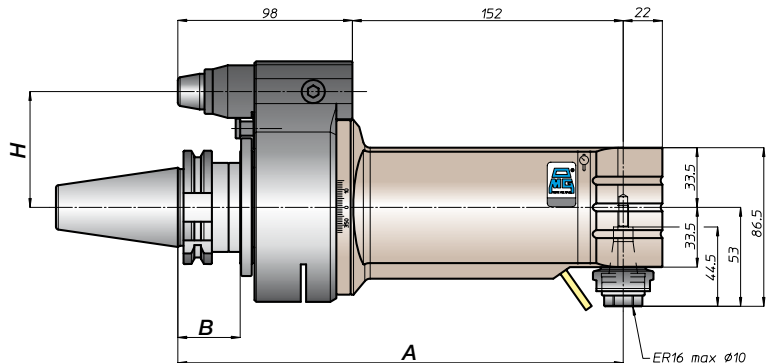
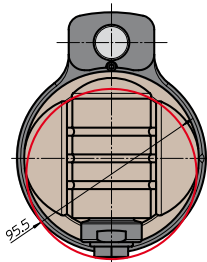
prestazioni/performance



tipi mandrino disponibili / available spindle types

- 1 DIN6388-ER ER20
- 2 Albero portafresa Milling shaft Ø16
- 3 Weldon Whistle-Notch Ø10

CONO SHANK	size	A	B	H	
				standard	optional
* DING9871	-			65	-
	40				
	45			80	110
* CAT ANSIB5.50	40	250	35	65	-
	50			80	110
	50				
* BT	40			65	
	50	258	45	80	110
	50				
HSK DING9893	63		44	65	
	80	259			
	100		46	80	110
CAPTO ISO26623	C5			65	
	C6	254	39		
	C8			80	110
KM	63			65	
	80	250			
	100			80	110
DIN2080	-	220	13	65	-
	40				
	-	223	16	80	110
NMTB ANSIB5.18	40	220	13	65	-
	50	223	16	80	110
	50				





TA13.P

caratteristiche/features



Ø 13



M10



1-1



8000

peso/weight



6,5 kg



9 kg

rotazione/rotation

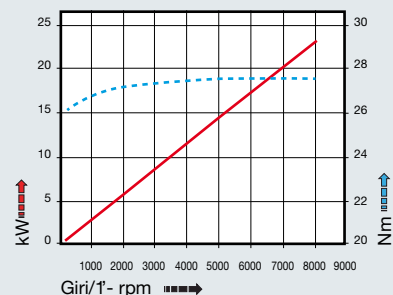


input



output

prestazioni/*performances*

tipi mandrino disponibili / *available spindle types*

1

DIN6388-ER

ER25

2

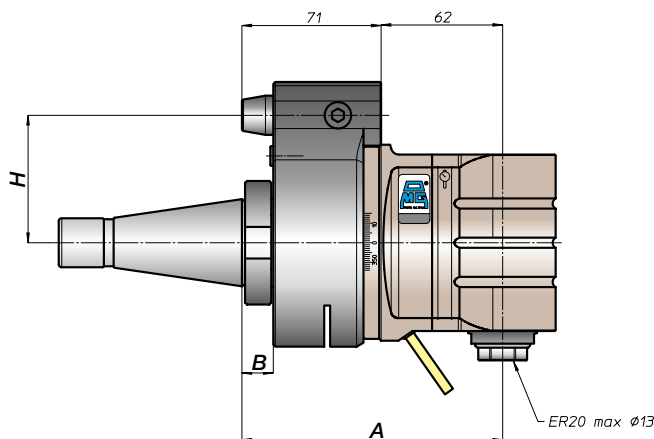
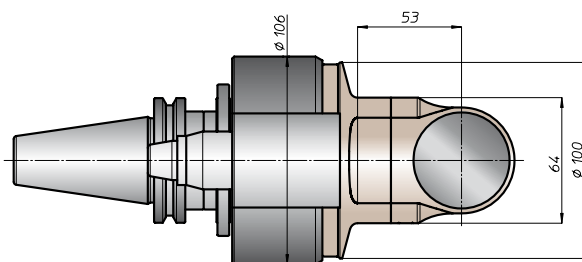
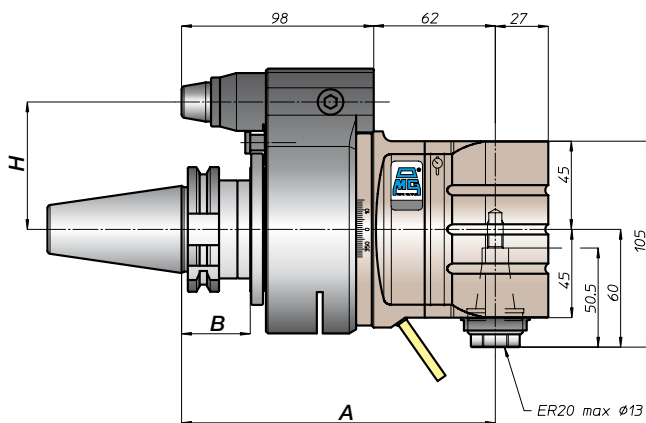
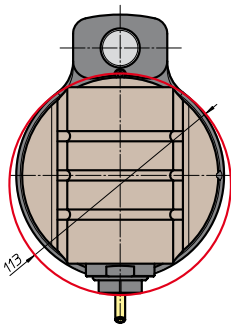
Albero portafrese
Milling shaft

Ø16-Ø22

3

Weldon
Whistle-Notch

Ø16



		H			
CONO SHANK	size	A	B	Standard	optional
★  DIN99871	-	160	35	65	-
	40			80	110
	45				
	50				
★ CAT  ANSI B5.50	40			65	-
	50			80	110
★ BT  BT	40			65	
	50			168	45
HSK  DIN69893	63	169	44	65	
	80		46	80	110
	100				
CAPTO  ISO26623	C5	164		65	
	C6		39		
	C8			80	110
KM  KM	63	160		65	
	80		80	110	
	100				
DIN2080  DIN2080	-	130	13	65	-
	40				
	-	133	16	80	110
	50				
NMTB  ANSI B5.18	40	130	13	65	-
	50	133	16	80	110

* Option: Dual Contact



TA13.PL

caratteristiche/features


ø 13



M10



1-1



8000

peso/weight


9,5 kg



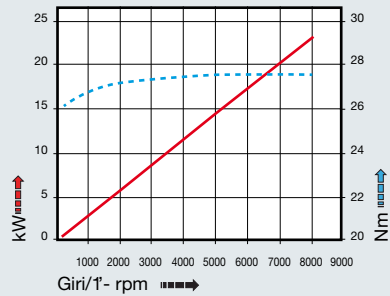
12 kg

rotazione/rotation


input



output

prestazioni/performance

tipi mandrino disponibili / available spindle types

1

DIN6388-ER

ER25

2

Albero portafresa

Milling shaft

Ø16-Ø22

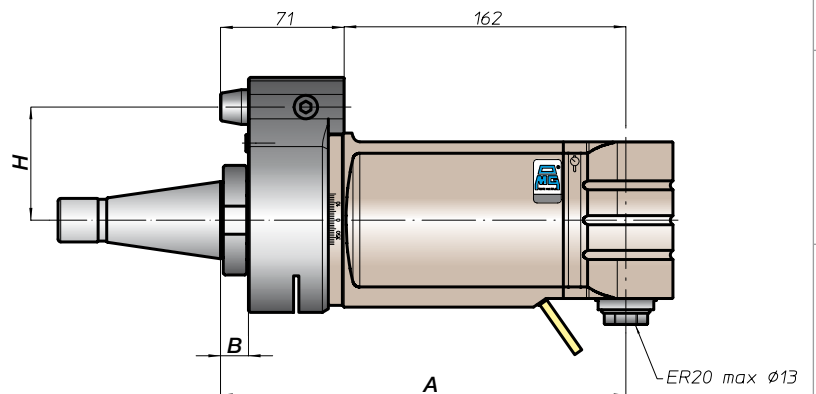
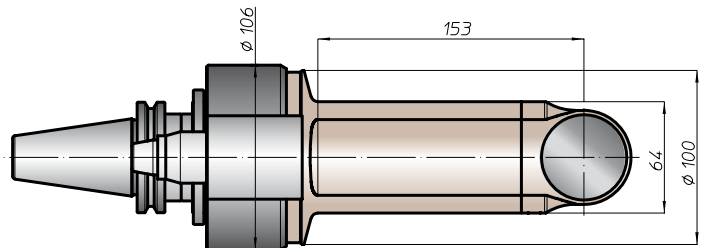
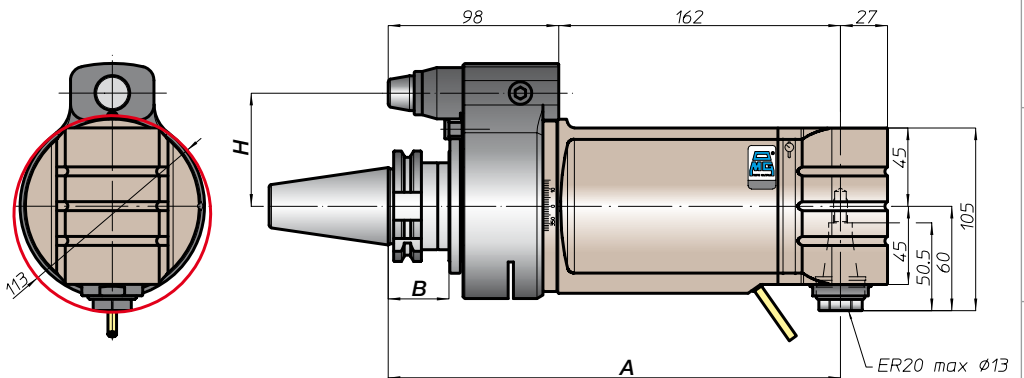
3

Weldon

Whistle-Notch

Ø16

CONO SHANK	size	A	B	H	standard	optional
DIN9871 *	-				65	-
	40					
	45				80	110
	50	260	35			
ANSIB5.50 *	CAT				65	-
	40					
	50				80	110
BT *					65	
	40					
	50	268	45		80	110
HSK	63		44		65	
DIN9893	80	269				
	100		46		80	110
CAPTO	C5				65	
ISO26623	C6	264	39			
	C8				80	110
KM	63				65	
	80	260				
	100				80	110
DIN2080	-	230	13		65	-
	40					
	-	233	16		80	110
	50					
NMTB	40	230	13		65	-
ANSIB5.18	50	233	16		80	110



TA16.P



caratteristiche/features



ø 16



M12



1-1



5000

peso/weight



7,7 kg



11,7 kg

rotazione/rotation

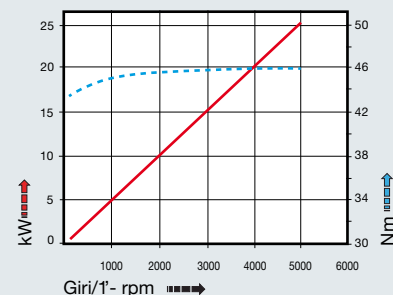


input



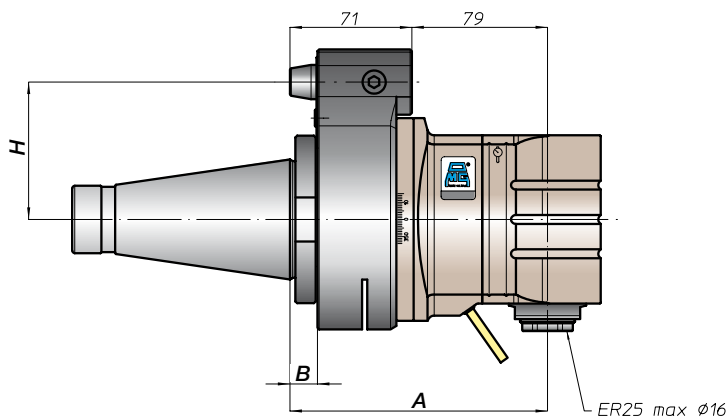
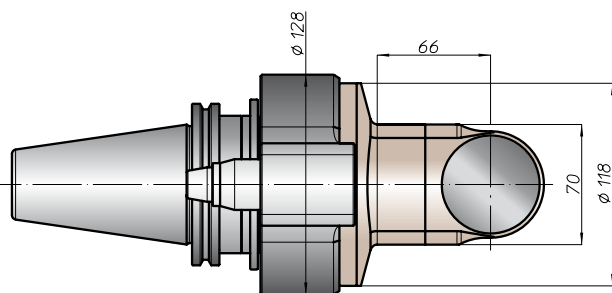
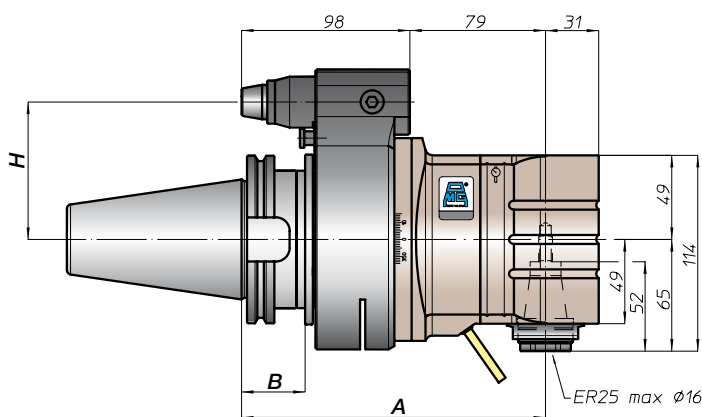
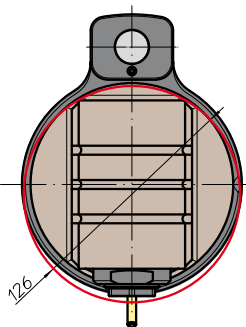
output

prestazioni/performance



tipi mandrino disponibili / available spindle types

1 DIN6388-ER	2 Albero portafrese Milling shaft	3 Weldon Whistle-Notch	4 DIN69893-HSK	5 COROMANT CAPTO®	6 ABS Licenza KOMET®
ER32	Ø16-Ø22-Ø27-Ø32	Ø20	HSK32	C3	ABS32



CONO SHANK	size	A	B	H	
				standard	optional
* DIN69871	-	172		65	-
	40				
	45			80	110
	50	177	35		
* CAT	40	172		65	-
	50	177		80	110
* BT	40	172		65	
	50	185	45	80	110
HSK	63	181	44	65	
	80				
	100	186	46	80	110
CAPTO	C5	176		65	
	C6		39		
	C8	181		80	110
KM	63	172		65	
	80				
	100	177		80	110
DIN2080	-	147	13	65	-
	40				
	50	150	16	80	110
NMTB	40	142	13	65	-
	50	150	16	80	110

* Option: Dual Contact



TA16.PL

caratteristiche/features


ø 16



M12



1-1



5000

peso/weight

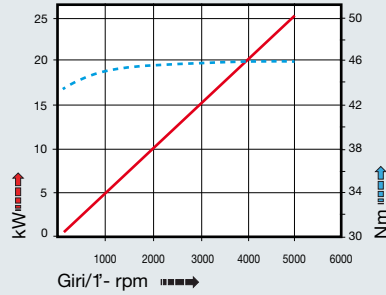

15,5 kg

rotazione/rotation


input



output

prestazioni/performance

tipi mandrino disponibili / available spindle types

1

DIN6388-ER

ER32

2

Albero portafresa
Milling shaft

Ø16-Ø22-Ø27-Ø32

3

Weldon
Whistle-Notch

Ø20

4

DIN69893-HSK

HSK32

5

COROMANT
CAPTO®

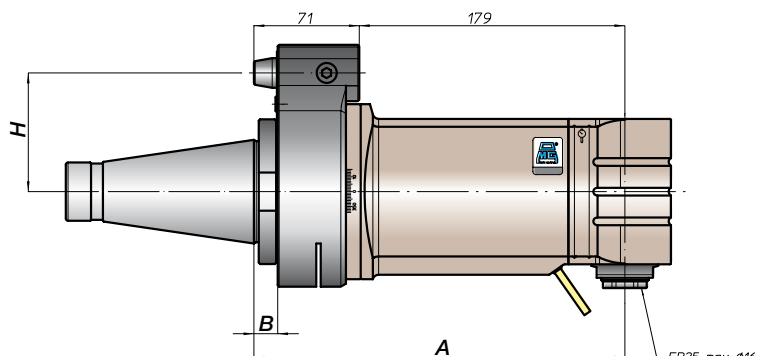
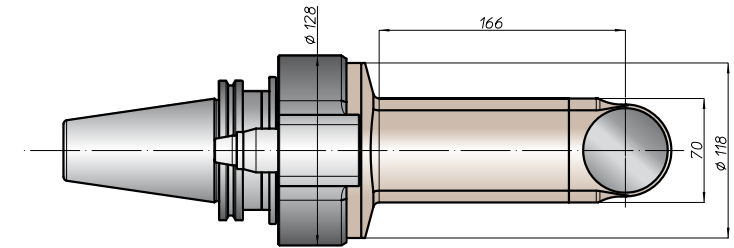
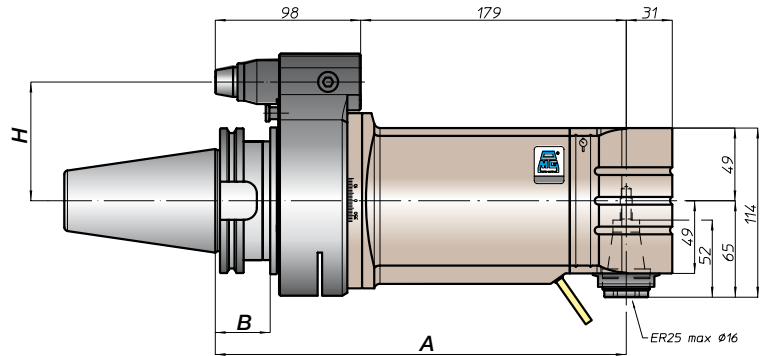
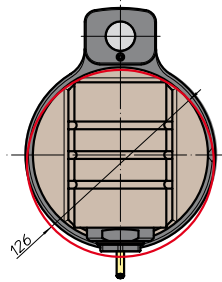
C3

6

ABS
Licenza KOMET®

ABS32

CONO SHANK	size	A	B	H	
				standard	optional
* DIN69871 *	-	-	-	-	-
	45	277	35	80	110
	50				
* CAT ANSIB5.50	-	-	-	-	-
	50	277		80	110
* BT	-	-	-	-	-
	50	285	45	80	110
* HSK DIN69893	-	-	-	-	-
	80	286	46	80	110
	100				
* CAPTO ISO26623	-	-	-	-	-
	C6	281	39	80	110
	C8				
* KM	-	-	-	-	-
	80	277		80	110
	100				
* DIN2080	-	-	-	-	-
	-	250	16	80	110
	50				
* NMTB ANSIB5.18	-	-	-	-	-
	50	250	16	80	110



* Option: Dual Contact

BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori
Accessories

Appendice tecnica
Technical supplement

3-25

testa ad angolo - angle head

TA20.P



caratteristiche/features



ø 20



M14



1-1



3500

peso/weight



14,5 kg

rotazione/rotation

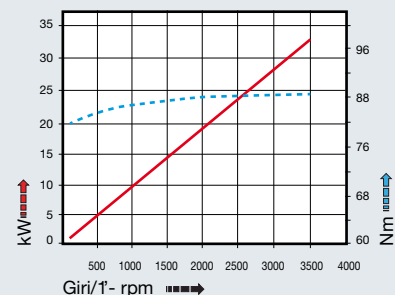


input



output

prestazioni/performance



tipi mandrino disponibili / available spindle types

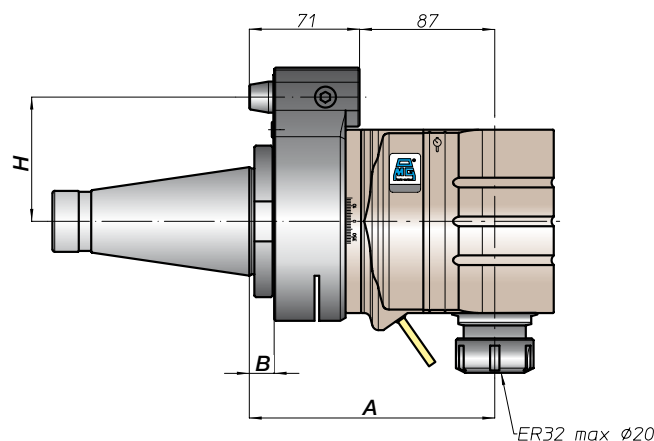
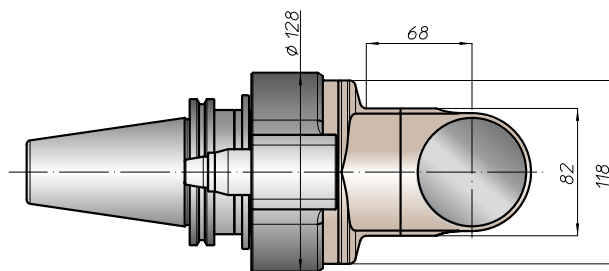
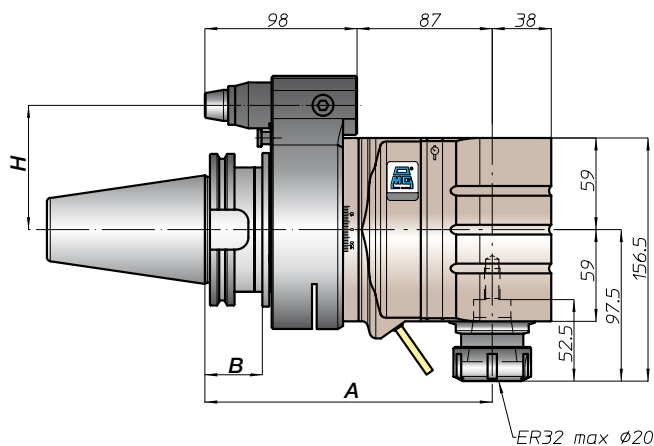
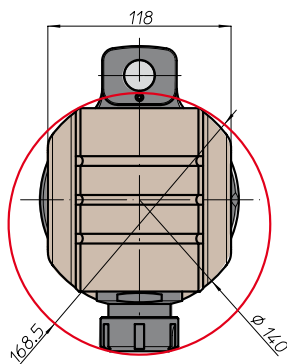
1 DIN6388-ER
ER40

2 Albero portafresa
Milling shaft
Ø22-Ø27-Ø32

3 Weldon
Whistle-Notch
Ø20-Ø25-Ø32

4 DIN69893-HSK
HSK40

5 COROMANT
CAPTO®
C4

6 ABS
Licenza KOMET®
ABS40


CONO SHANK	size	H			
		A	B	standard	optional
* DIN69871	-	185	35	-	-
	-			-	-
	45			80	110
* CAT ANSI B5.50	-	185	35	-	-
	50			80	110
* BT	-	193	45	-	-
	50			80	110
HSK DIN69893	-	194	46	-	-
	80			80	110
	100			80	110
CAPTO ISO28623	-	189	-	-	-
	-			80	110
	C8			80	110
KM	-	185	-	-	-
	80			80	110
	100			80	110
DIN2080	-	158	16	-	-
	-			80	110
	50			80	110
ANSI B5.18 NMTB	-	158	16	-	-
	50			80	110

* Option: Dual Contact

TA20.PL

caratteristiche/features



ø 20



M14



1-1



3500

peso/weight



19 kg

rotazione/rotation

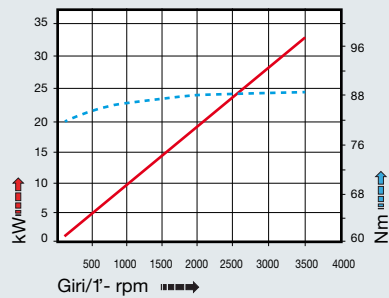


input



output

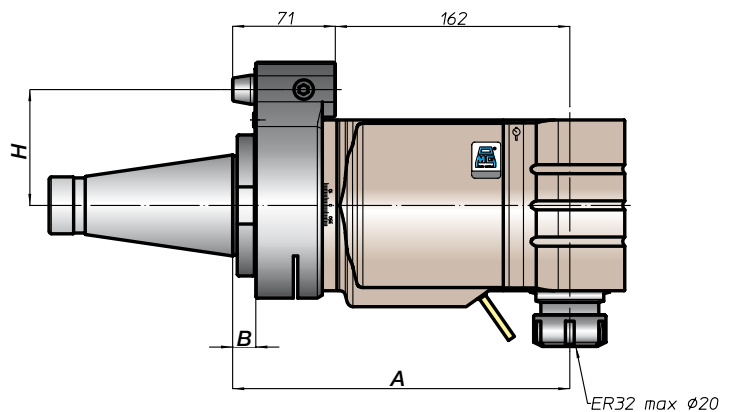
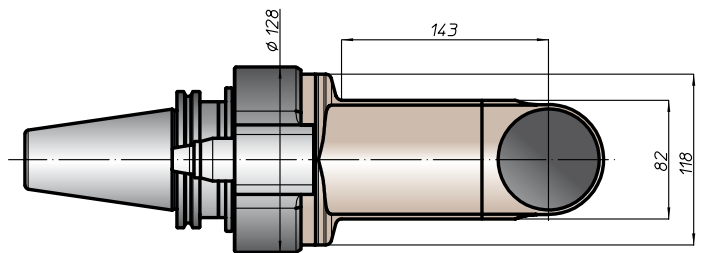
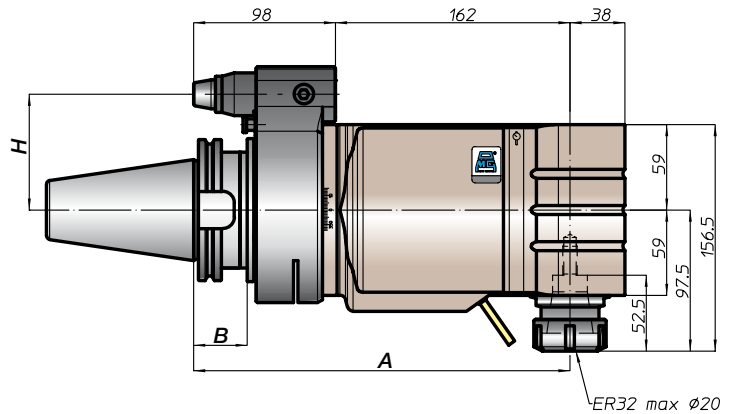
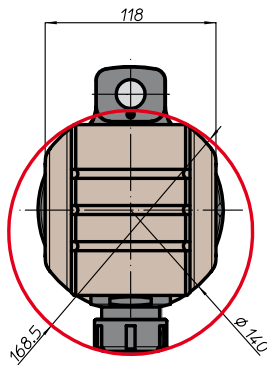
prestazioni/performance



CONO SHANK	size	A	B	H	
				standard	optional
* DIN9871	-	260	35	-	-
	45			80	110
	50			80	110
* CAT ANSIB5.50	-	268	45	-	-
	50			80	110
* BT	-	269	46	-	-
	50			80	110
	100			80	110
HSK DIN9893	-	264	16	-	-
	80			80	110
	100			80	110
CAPTO ISO26623	-	233	16	-	-
	-			80	110
	C8			80	110
KM	-	233	16	-	-
	80			80	110
	100			80	110
DIN2080	-	233	16	-	-
	-			80	110
	50			80	110
ANSIB5.18 NMTB	-	233	16	-	-
	50			80	110

tipi mandrino disponibili / available spindle types

1 DIN6388-ER ER40	2 Albero portafresa Milling shaft Ø22-Ø27-Ø32	3 Weldon Whistle-Notch Ø20-Ø25-Ø32	4 DIN69893-HSK HSK40	5 COROMANT CAPTO® C4	6 ABS Licenza KOMET® ABS40
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TA Extended Gallery



TA20.30

caratteristiche/features


ø 20



M14



1-1



3500

peso/weight

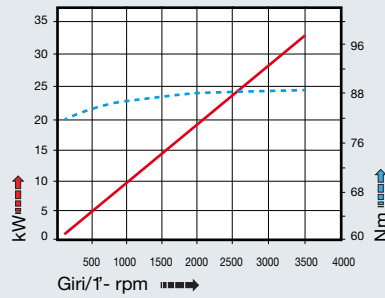

14,7 kg

rotazione/rotation


input

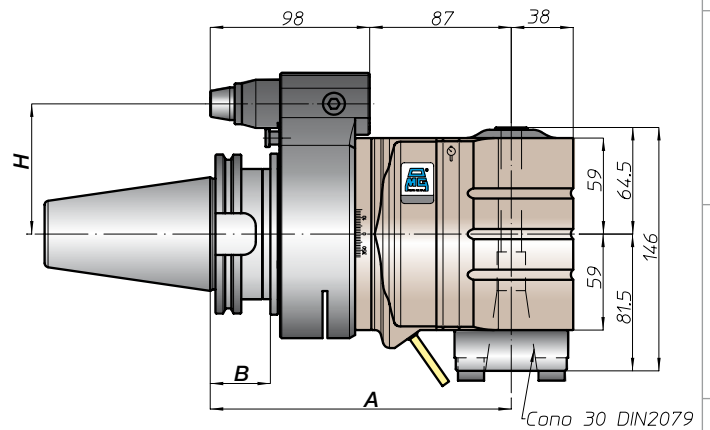
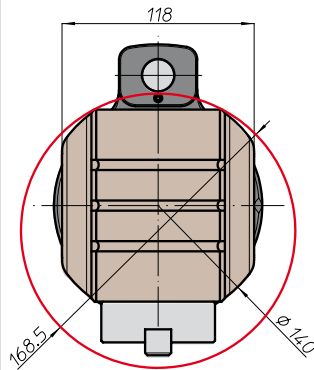


output

prestazioni/performance


CONO SHANK	size	A	B	H	
				standard	optional
* DING9871	-	185	35	-	-
	45			80	110
	50			80	110
* CAT	-	185	35	65	-
	50			80	110
* BT	-	193	45	80	110
	50			80	110
HSK	-	194	46	80	110
	80			80	110
	100			80	110
CAPTO	-	189	35	80	110
	-			80	110
	C8			80	110
KM	-	185	35	80	110
	80			80	110
	100			80	110
DIN2080	-	158	16	80	110
	-			80	110
	50			80	110
NMTB	-	158	16	80	110
	50			80	110

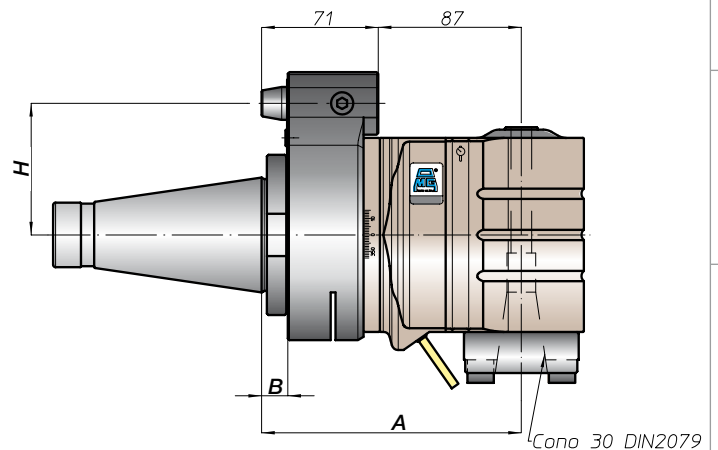
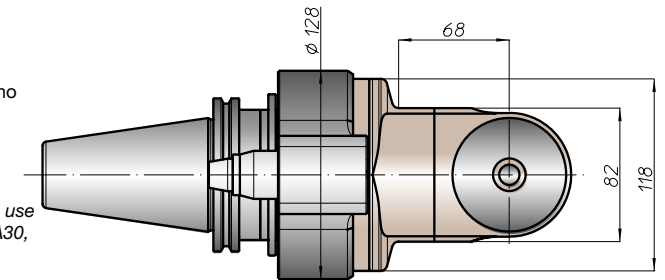
* Option: Dual Contact


Nota:

- nel mandrino DIN2079 si possono utilizzare coni DIN2080-30, DIN69871-A30, MAS403-BT30

Note:

- on the spindle DIN2079 you can use shank DIN2080-30, DIN69871-A30, MAS403-BT30



BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori
Accessories

Appendice tecnica
Technical supplement

testa ad angolo - angle head

TA26.P



caratteristiche/features



ø 26



M20



1-1



2500

peso/weight



22 kg

rotazione/rotation

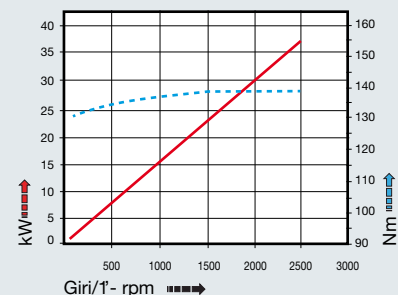


input



output

prestazioni/performance



tipi mandrino disponibili / available spindle types

2

Albero portafrese
Milling shaft

Ø16-Ø27-Ø32

3

Weldon
Whistle-Notch

Ø32

4

DIN69893-HSK

HSK63

5

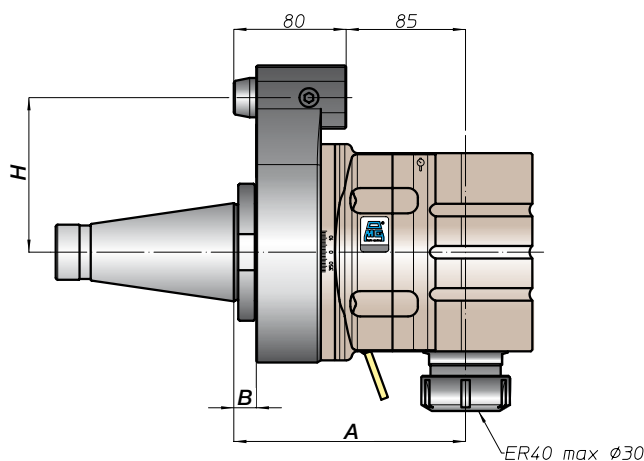
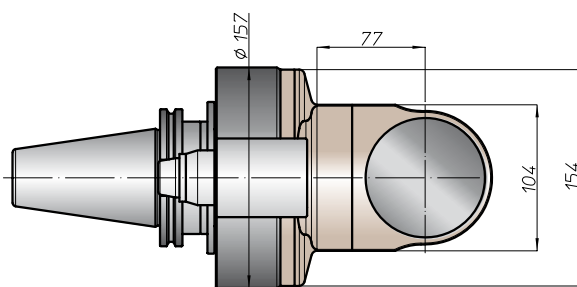
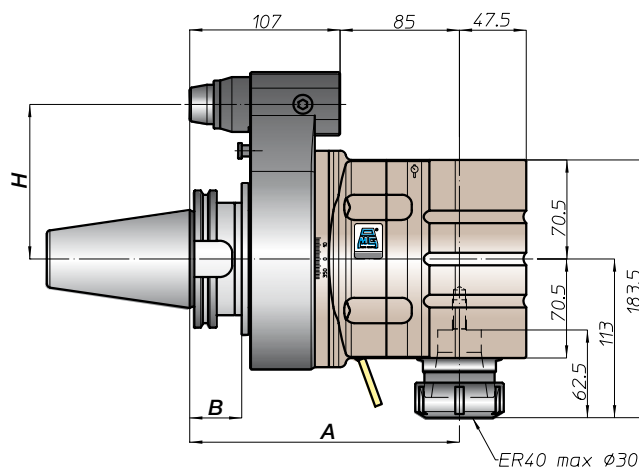
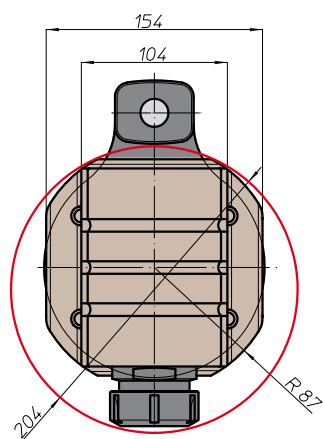
COROMANT
CAPTO®

C4

6

ABS
Licenza KOMET®

ABS50



CONO SHANK	size	H			
		A	B	standard	optional
* DIN9871	-	-	-	-	-
	-	-	-	-	-
	45	-	-	-	-
* ANSI B5.50	50	192	35	110	-
	-	-	-	-	-
	50	-	-	110	-
* BT	-	-	-	-	-
	50	200	45	110	-
HSK DIN9893	-	-	-	-	-
	80	201	46	110	-
	100	-	-	-	-
CAPTO ISO28623	-	-	-	-	-
	-	196	-	110	-
	C8	-	-	-	-
KM	-	-	-	-	-
	-	192	-	110	-
	100	-	-	-	-
DIN2080	-	-	-	-	-
	-	-	-	-	-
	50	165	16	110	-
NMTB ANSI B5.18	-	-	-	-	-
	50	165	16	110	-

* Option: Dual Contact

TA26.40

caratteristiche/features


ø 26



M20



1-1



2500

peso/weight

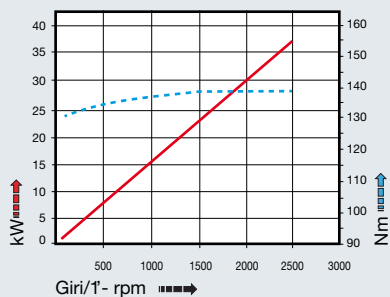

22 kg

rotazione/rotation

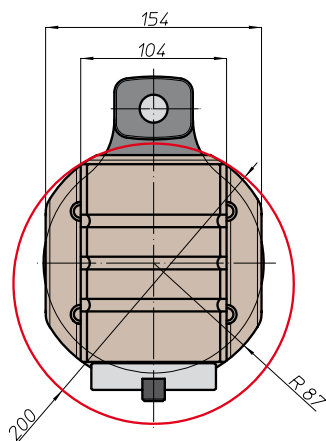

input



output

prestazioni/performance


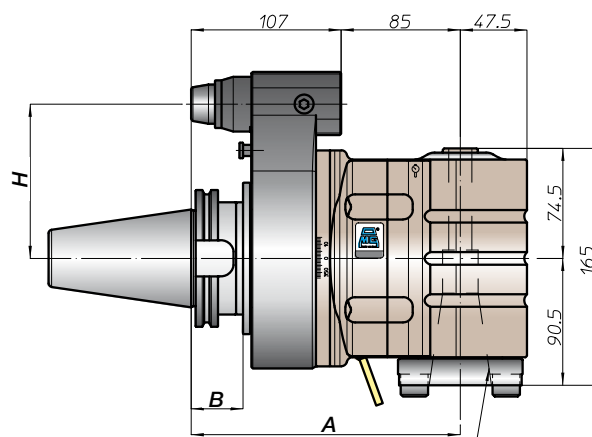
CONO SHANK	size	A	B	H	
				standard	optional
* DING9871	-	192	35	-	-
	45			110	-
	50			110	-
* CAT	-	192	35	-	-
	50			110	-
* BT	-	200	45	-	-
	50			110	-
HSK	-	201	46	-	-
	80			110	-
	100			110	-
CAPTO	-	196	35	-	-
	-			110	-
	C8			110	-
KM	-	192	35	-	-
	-			110	-
	100			110	-
DIN2080	-	165	16	-	-
	-			110	-
	50			110	-
NMTB	-	165	16	-	-
	50			110	-


Nota:

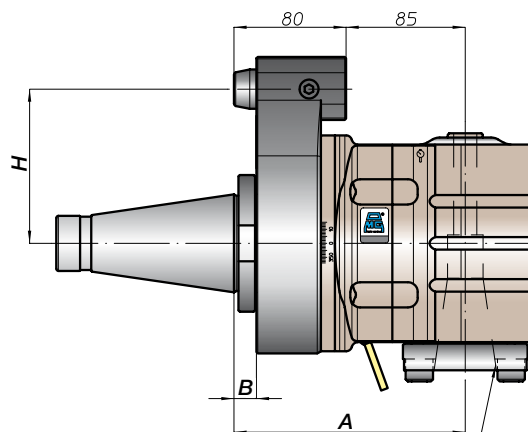
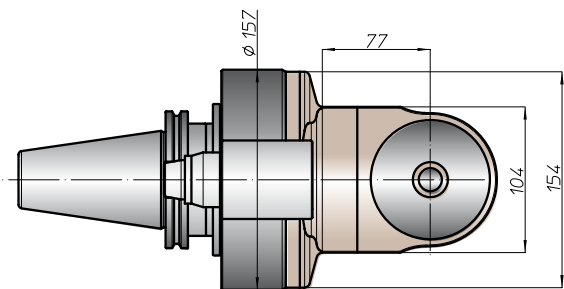
- nel mandrino DIN2079 si possono utilizzare coni DIN2080-40, DIN69871-A40, MAS403-BT40

Note:

- on the spindle DIN2079 you can use shank DIN2080-40, DIN69871-A40, MAS403-BT40



Cono 40 DIN2079



Cono 40 DIN2079

testa ad angolo - angle head

TA07.2P



caratteristiche/features



ø 7



M6



1-1



10000

peso/weight



5 kg



7 kg

rotazione/rotation

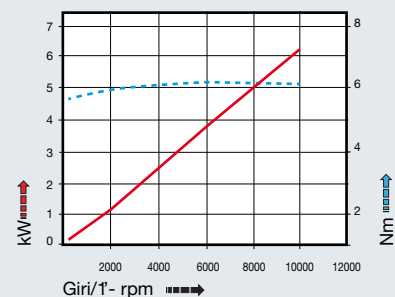


input



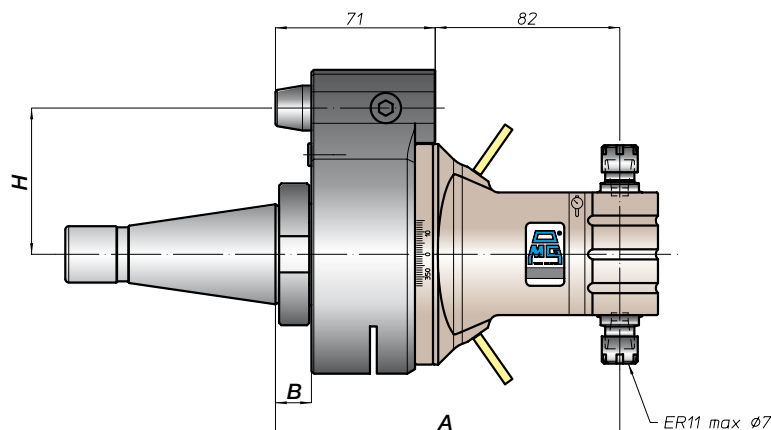
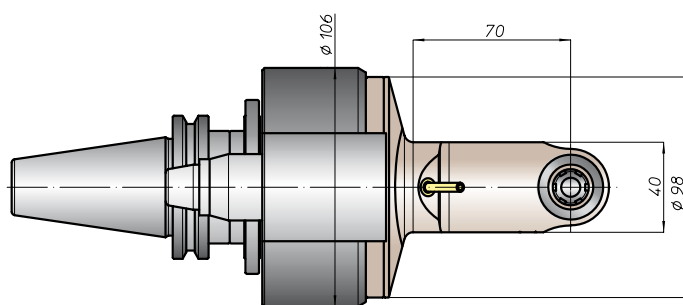
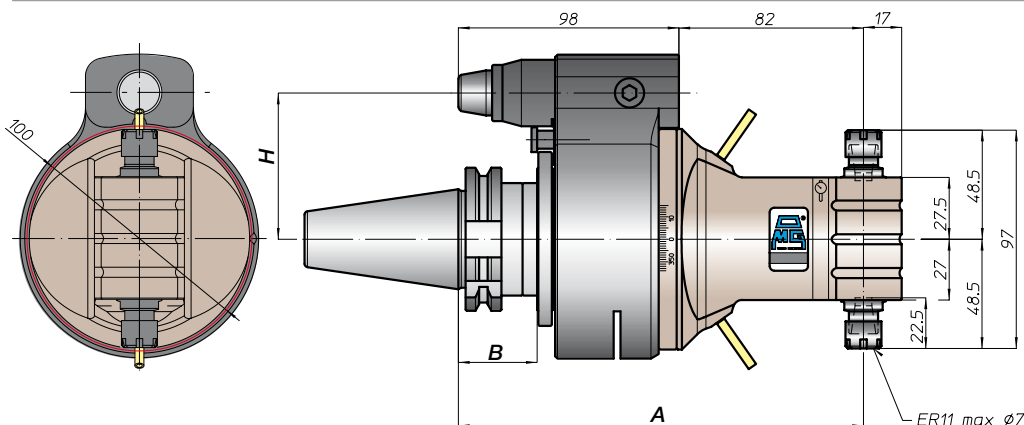
output

prestazioni/performance



tipi mandrino disponibili / available spindle types

3 Weldon
Whistle-Notch
Ø10



CONO SHANK	size	H			
		A	B	standard	optional
* DIN9871	30	180	35	65	-
	40			80	110
	45			80	110
	50			80	110
* ANSI B5.50 CAT	40	188	45	65	-
	50			80	110
* BT	40	188	45	65	-
	50			80	110
* DIN9893 HSK	63	189	46	65	-
	80			80	110
	100			80	110
* ISO28623 CAPTO	C5	184	39	65	-
	C6			80	110
	C8			80	110
* KM	63	180	13	65	-
	80			80	110
	100			80	110
* DIN2080	-	150	16	65	-
	40			80	110
	50			80	110
* ANSI B5.18 NMTB	40	150	13	65	-
	50			80	110

* Option: Dual Contact

TA10.2P

caratteristiche/features


ø 10



M8



1-1



10000

peso/weight


5,5 kg



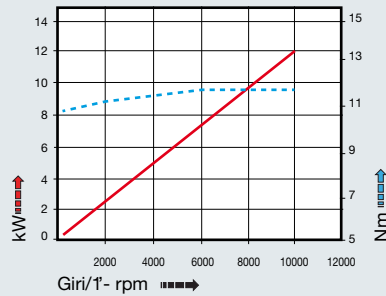
7,5 kg

rotazione/rotation


input

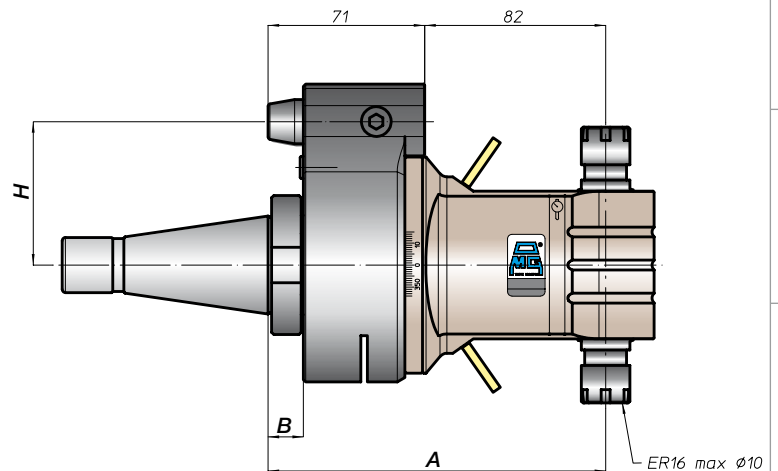
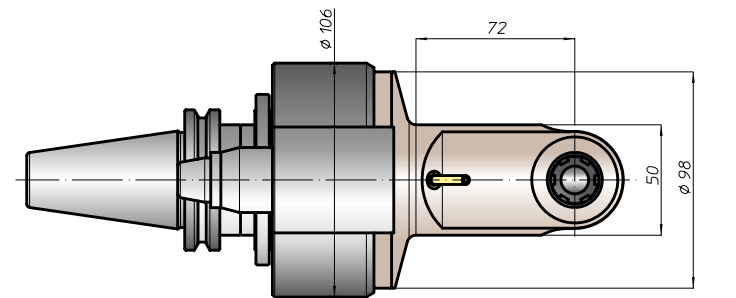
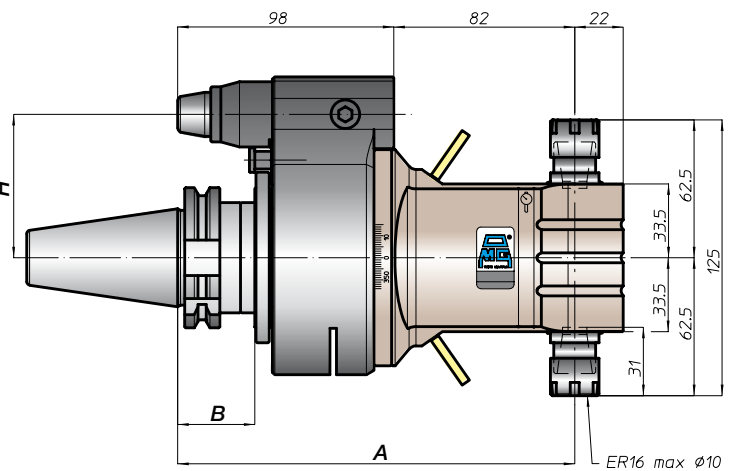
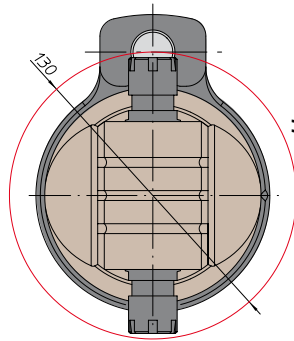


output

prestazioni/performance


CONO SHANK	size	A	B	H	
				standard	optional
DIN9871 *	30	180	35	65	-
	40			80	110
	45			80	110
	50			80	110
ANSIB5.50 *	40	188	45	65	-
	50			80	110
BT *	40	188	45	65	-
	50			80	110
HSK	63	189	44	65	-
	80		46	80	110
	100		46	80	110
CAPTO	C5	184	39	65	-
	C6			80	110
	C8			80	110
KM	63	180	46	65	-
	80			80	110
	100			80	110
DIN2080	-	150	13	65	-
	40	153	16	80	110
	50	153	16	80	110
NMTB	40	150	13	65	-
	50	153	16	80	110

* Option: Dual Contact



BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori
Accessories

Appendice tecnica
Technical supplement

testa ad angolo - angle head

TA13.2P



caratteristiche/features



ø 13



M10



1-1



8000

peso/weight



6,5 kg



9 kg

rotazione/rotation

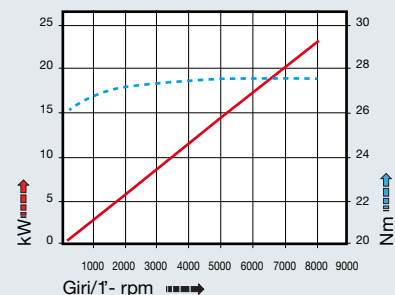


input



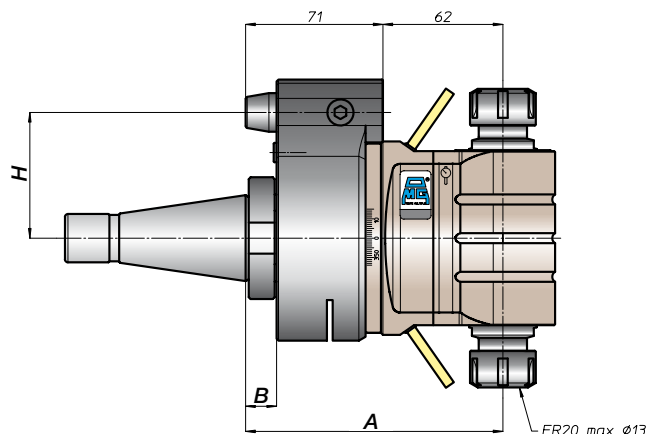
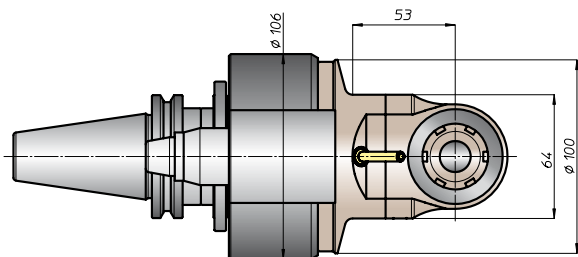
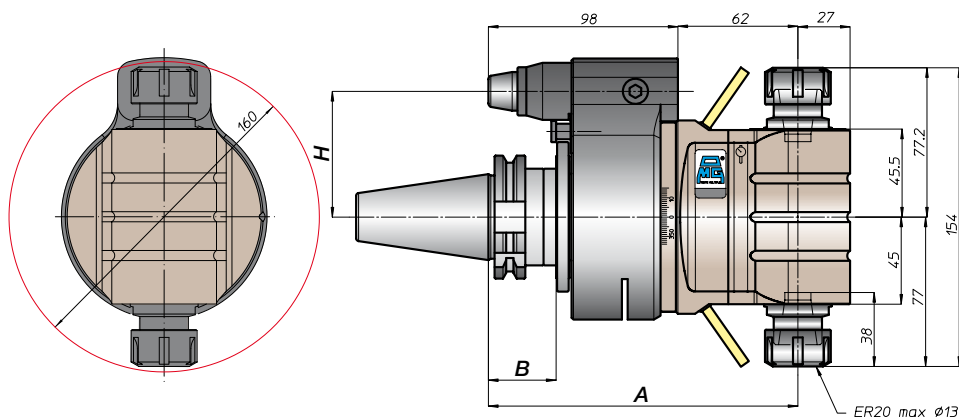
output

prestazioni/performance



tipi mandrino disponibili / available spindle types

1 DIN6388-ER
ER25

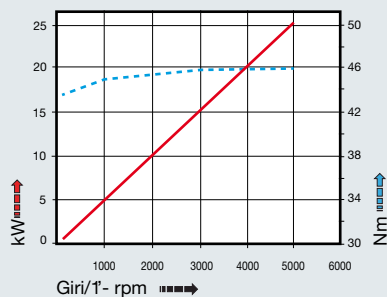


CONO SHANK	size	H			
		A	B	standard	optional
* DIN69871	-			65	-
	40			80	110
	45			80	110
* CAT ANSI B5.50	40	160	35	65	-
	50			80	110
	50			80	110
* BT	40			65	
	50	168	45	80	110
	50			80	110
HSK DIN69893	63		44	65	
	80	169	46	80	110
	100			80	110
CAPTO ISO 28623	C5			65	
	C6	164	39	80	110
	C8			80	110
KM	63			65	
	80	160		80	110
	100			80	110
DIN2080	-	130	13	65	-
	40			80	110
	50	133	16	80	110
ANSI B5.18 NMTB	40	130	13	65	-
	50	133	16	80	110

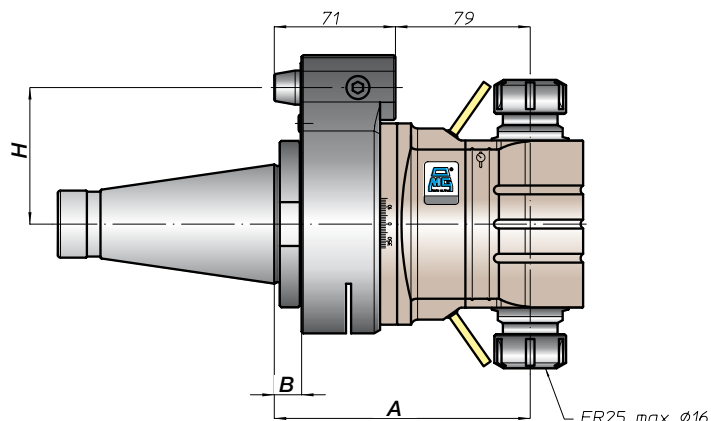
* Option: Dual Contact



```
prestazioni/performances
```



*** Option: Dual Contact**



TA20.2P



caratteristiche/features



ø 20



M14



1-1



3500

peso/weight



15 kg

rotazione/rotation

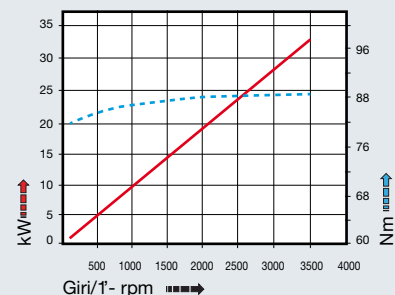


input



output

prestazioni/performance



tipi mandrino disponibili / available spindle types

2

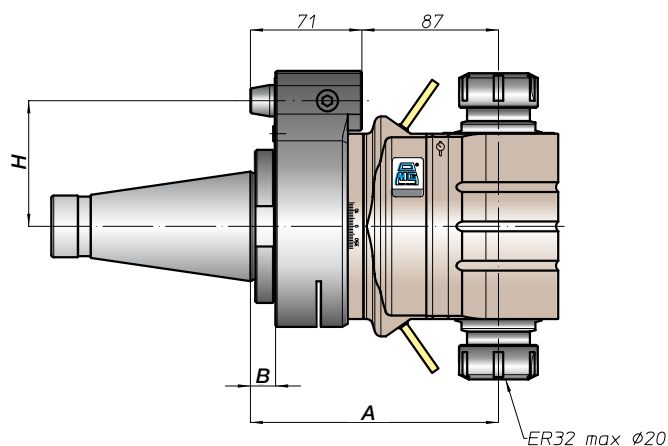
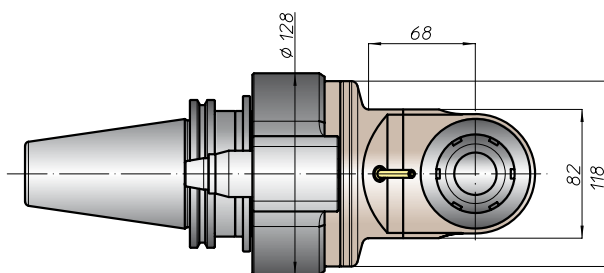
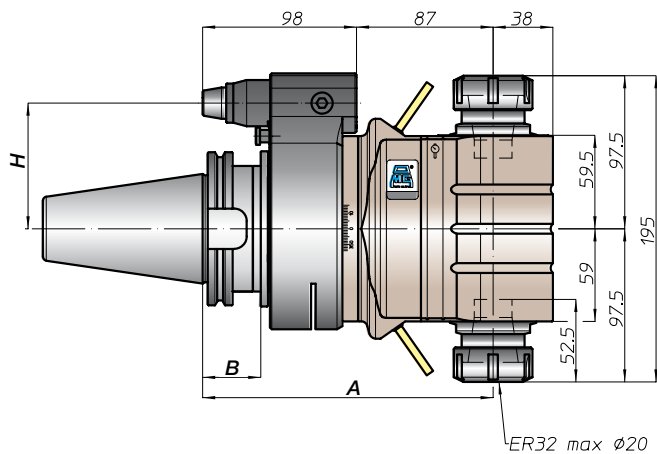
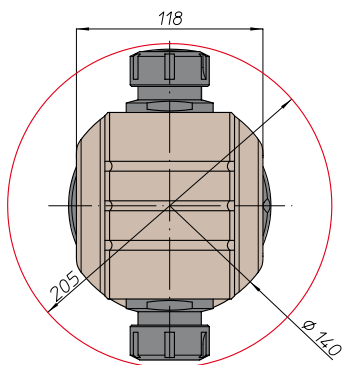
Albero portafrese
Milling shaft

3

Weldon
Whistle-Notch

Ø32

Ø20



CONO SHANK	size	H			
		A	B	standard	optional
* DIN9871	-	-	-	-	-
	-	-	-	-	-
	45	-	-	-	-
* ANSI B5.50	50	185	35	80	110
	-	-	-	-	-
	50	-	-	80	110
* BT	-	-	-	-	-
	50	193	45	80	110
	-	-	-	-	-
DIN9893	-	-	-	-	-
	80	194	46	80	110
	100	-	-	-	-
CAPTO	-	-	-	-	-
	-	189	-	80	110
	C8	-	-	-	-
KM	-	-	-	-	-
	80	185	-	80	110
	100	-	-	-	-
DIN2080	-	-	-	-	-
	-	-	-	-	-
	50	158	16	80	110
ANSI B5.18	-	-	-	-	-
	50	158	16	80	110

* Option: Dual Contact

TA26.2P

caratteristiche/features


ø 26



M20



1-1



2500

peso/weight

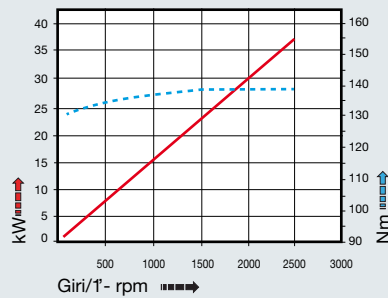

22,5 kg

rotazione/rotation


input



output

prestazioni/performance


CONO SHANK	size	A	B	H	
				standard	optional
DIN9871 *	-			-	-
	45			110	-
	50	192	35		
ANSIB5.50 *	-			-	-
	50			110	-
BT *	-			-	-
	50	200	45	110	-
HSK	-			-	-
DIN9893	80	201	46	110	-
	100				
CAPTO	-			-	-
ISO26623	-	196			
	C8			110	-
KM	-			-	-
	-	192		110	-
	100				
DIN2080	-			-	-
	-			-	-
	-	165	16	110	-
	50				
NMTB	-			-	-
ANSIB5.18	-			-	-
	50	165	16	110	-

tipi mandrino disponibili / available spindle types

2

Albero portafresa
Milling shaft

3

Weldon
Whistle-Notch

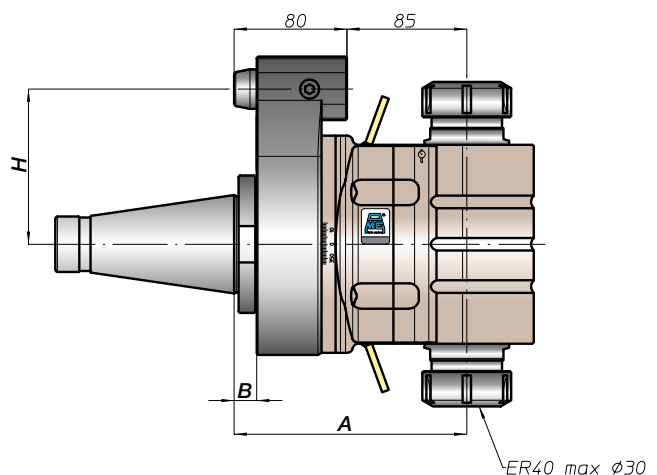
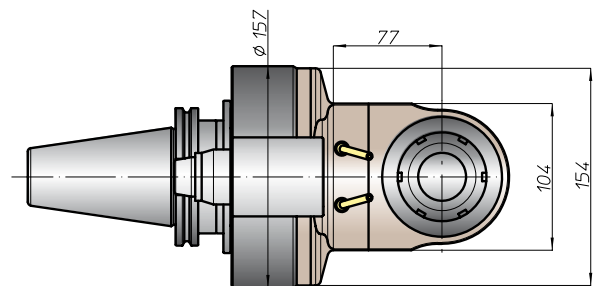
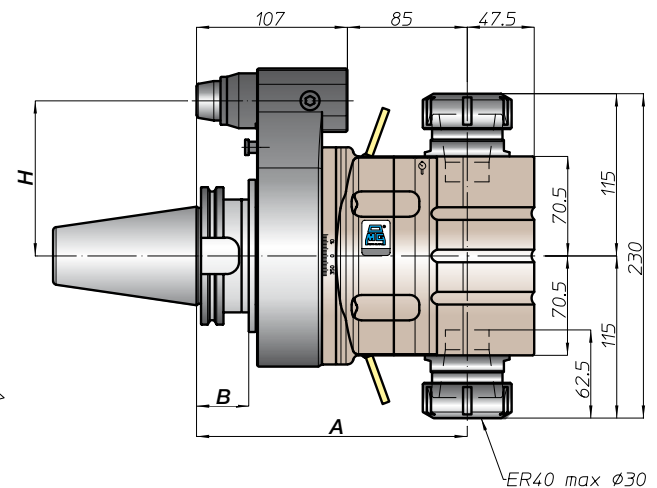
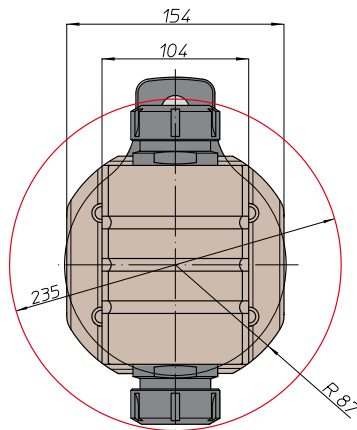
6

ABS
Licenza KOMET®

Ø16-Ø27-Ø32

Ø32

ABS50



★ Option: Dual Contact

BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori
Accessories

Appendice tecnica
Technical supplement

3-37

testa ad angolo - angle head

TA07.PD



caratteristiche/features



ø 7



M6



1-1



10000



10 bar

peso/weight



5 kg



7 kg

rotazione/rotation

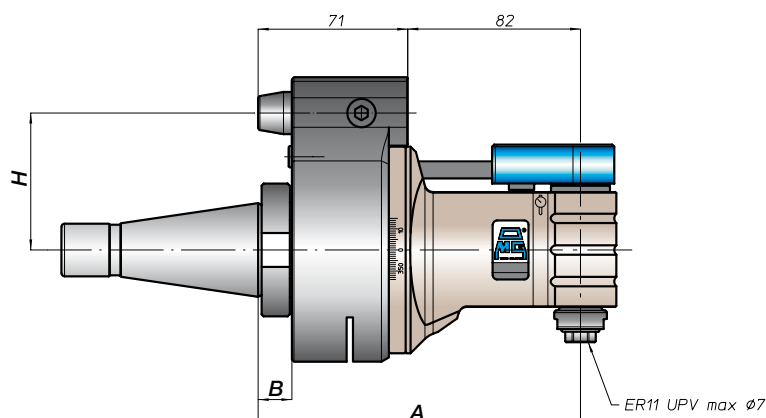
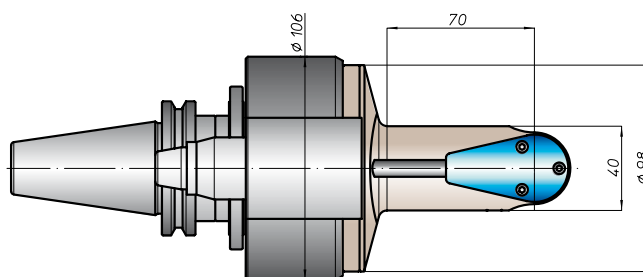
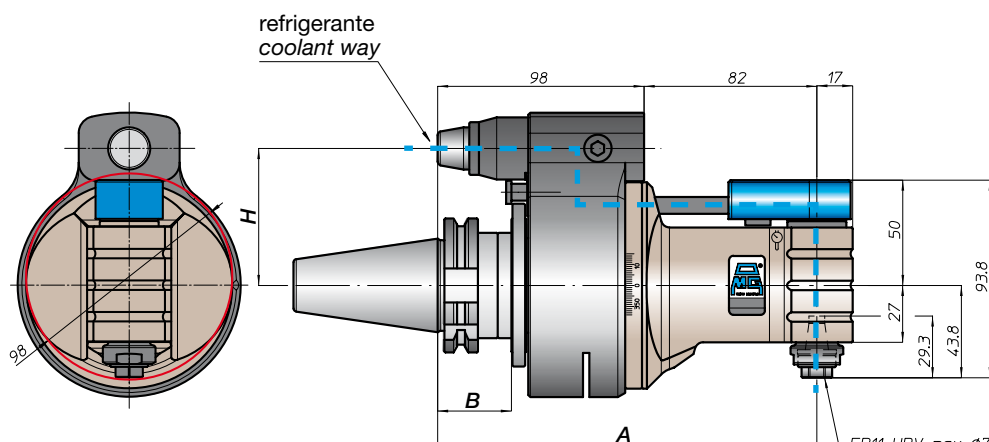
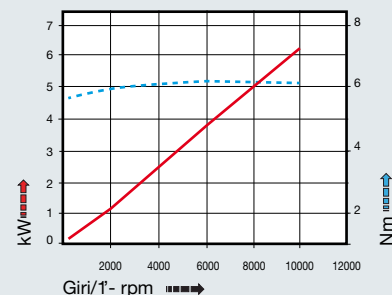


input



output

prestazioni/performance



CONO SHANK	size	H			
		A	B	standard	optional
* DIN9871	30	150	35	65	-
	40			80	110
	45			80	110
	50			80	110
* CAT ANSI B5.50	40	158	45	65	-
	50			80	110
* BT	40	159	46	65	-
	50			80	110
DIN9893 HSK	63	150	39	65	-
	80			80	110
	100			80	110
ISO 28623 CAPTO	C5	120	13	65	-
	C6			80	110
	C8			80	110
KM	63	123	16	65	-
	80			80	110
	100			80	110
DIN2080	-	120	13	65	-
	40			80	110
	50			80	110
ANSI B5.18 NMTB	40	120	13	65	-
	50			80	110

* Option: Dual Contact

TA07.PDL

caratteristiche/features

peso/weight

prestazioni/performance



6,7 kg



9 kg

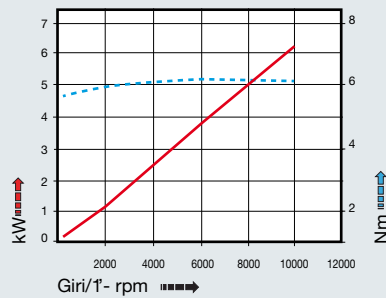
rotazione/rotation



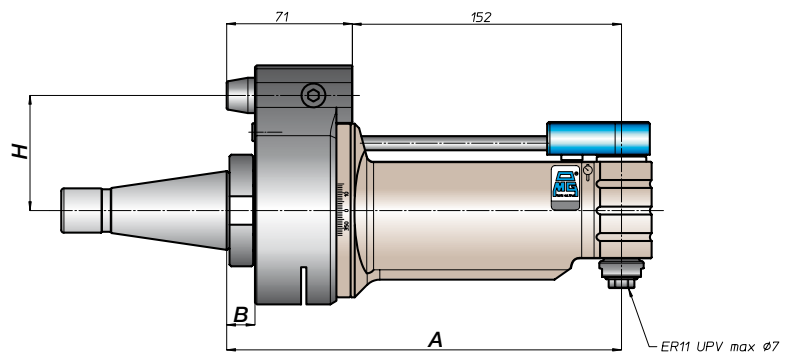
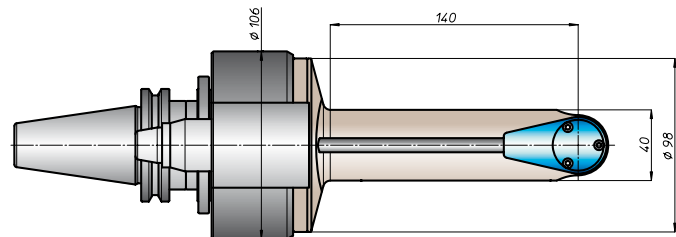
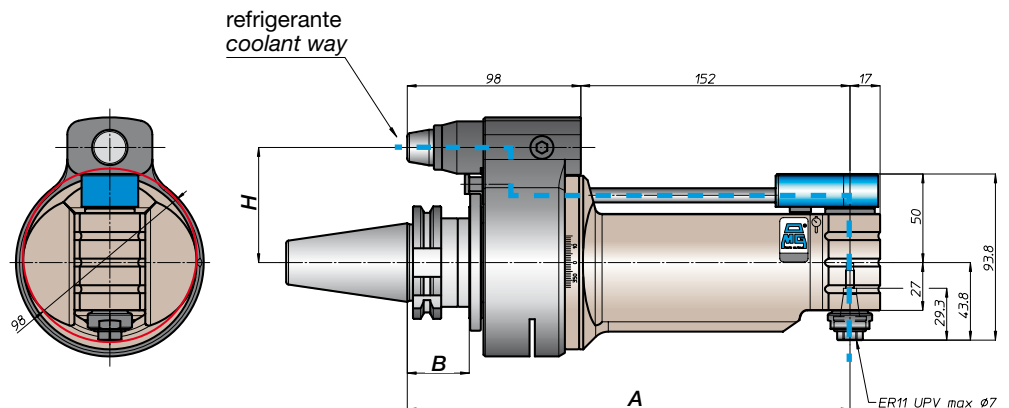
input



output



CONO SHANK	size	A	B	H	
				standard	optional
* DING9871	-			65	-
	40				
	45			80	110
	50	250	35		
* CAT	40			65	-
	50			80	110
* BT	40			65	
	50	258	45	80	110
DING9893	HSK	63	44	65	
		80			
		100	46	80	110
ISO26623	CAPTO	C5		65	
		C6	254	39	
		C8		80	110
KM		63		65	
		80	250		
		100		80	110
DIN2080		-	220	13	65
		40			
		-	223	16	80
		50			110
ANSIB5.18	NMTB	40	220	13	65
		50	223	16	80



testa ad angolo - angle head

TA10.PD



caratteristiche/features



ø 10



M8



1-1



10000



10 bar

peso/weight



5,8 kg



8 kg

rotazione/rotation

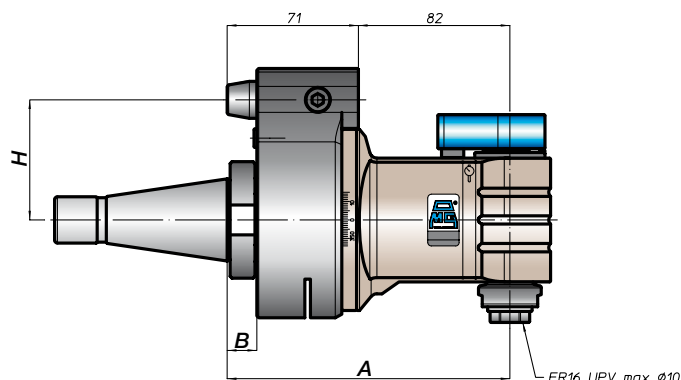
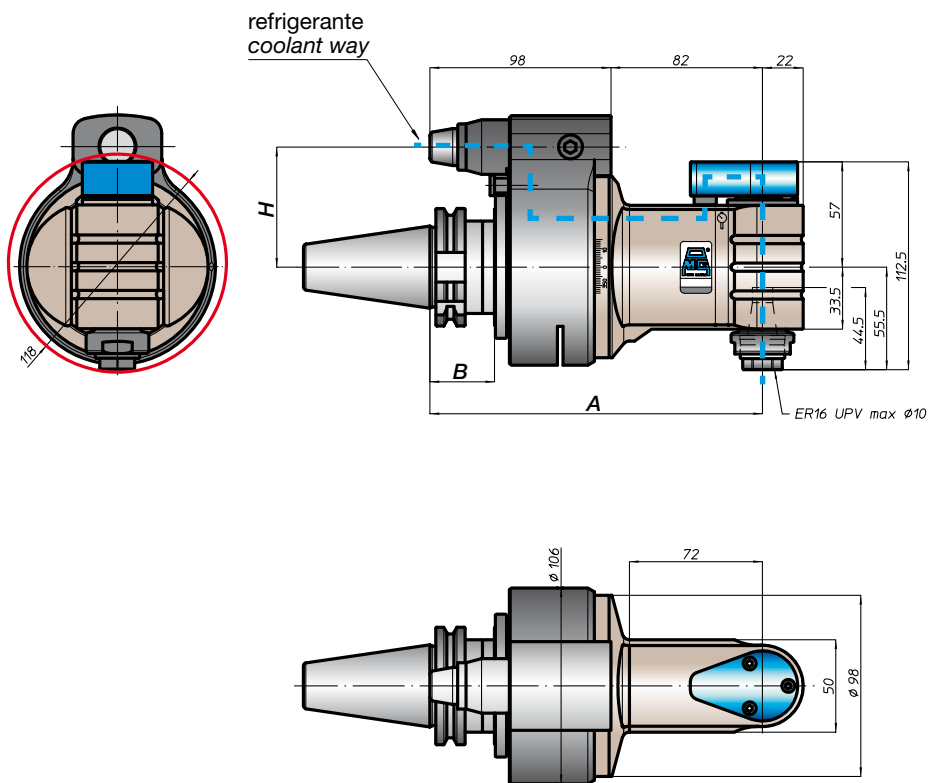
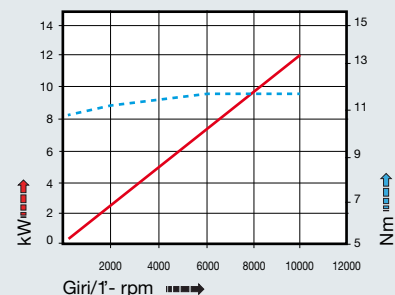


input



output

prestazioni/performance



CONO SHANK	size	H			
		A	B	standard	optional
* DIN9871	30	180	35	65	-
	40			80	110
	45			80	110
	50			80	110
* CAT ANSIB5.50	40	188	45	65	-
	50			80	110
* BT	40			65	-
	50			80	110
DIN9893 HSK	63	189	44	65	-
	80		46	80	110
	100		46	80	110
CAPTO ISO28623	C5	184	39	65	-
	C6			80	110
	C8			80	110
KM	63	180	13	65	-
	80			80	110
	100			80	110
DIN2080	-	150	16	65	-
	40			80	110
	50			80	110
ANSIB5.18 NMTB	40	150	16	65	-
	50			80	110

* Option: Dual Contact

TA10.PDL

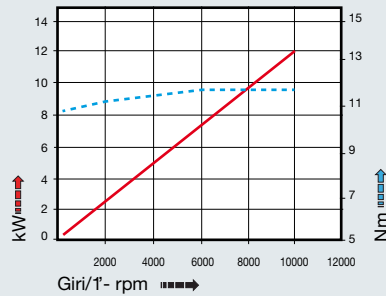
caratteristiche/features

peso/weight

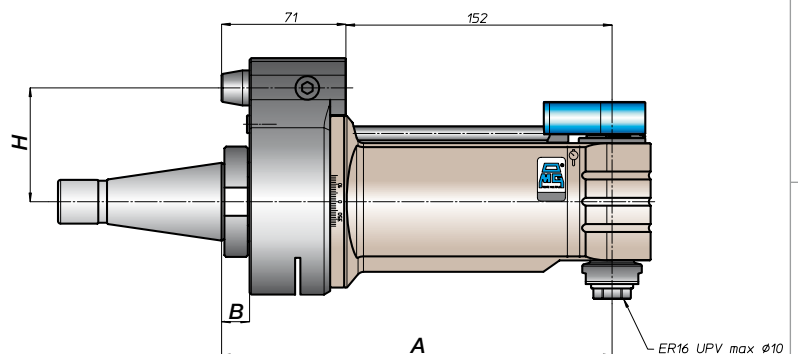
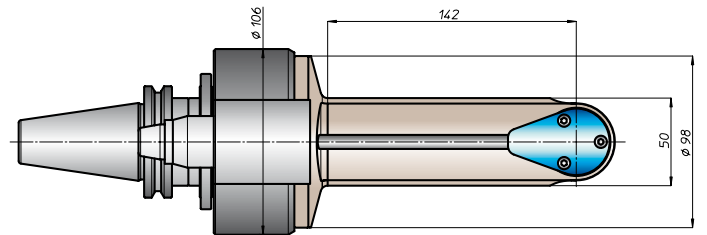
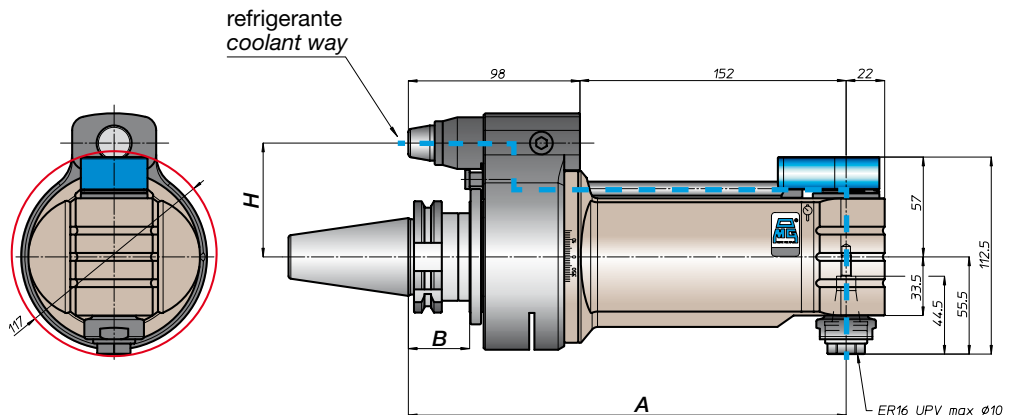
prestazioni/performance



rotazione/rotation



CONO SHANK	size	A	B	H	
				standard	optional
* DING9871	-			65	-
	40				
	45			80	110
	50	250	35		
* CAT	40			65	-
	50			80	110
* BT	40			65	
	50	258	45	80	110
HSK	63		44	65	
	80	259			
	100		46	80	110
CAPTO	C5			65	
	C6	284	39		
	C8			80	110
KM	63			65	
	80	250			
	100			80	110
DIN2080	-	220	13	65	-
	40				
	-	223	16	80	110
	50				
NMTB	40	220	13	65	-
	50	223	16	80	110





TA13.PD

caratteristiche/features



Ø 13



M10



1-1



8000



10 bar

peso/weight



6,5 kg



9 kg

rotazione/rotation

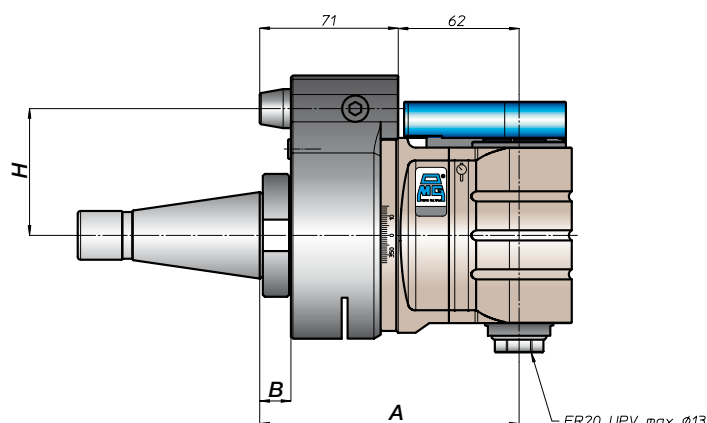
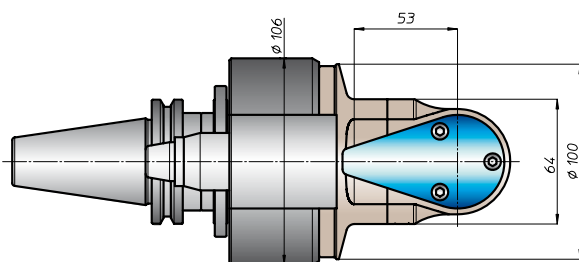
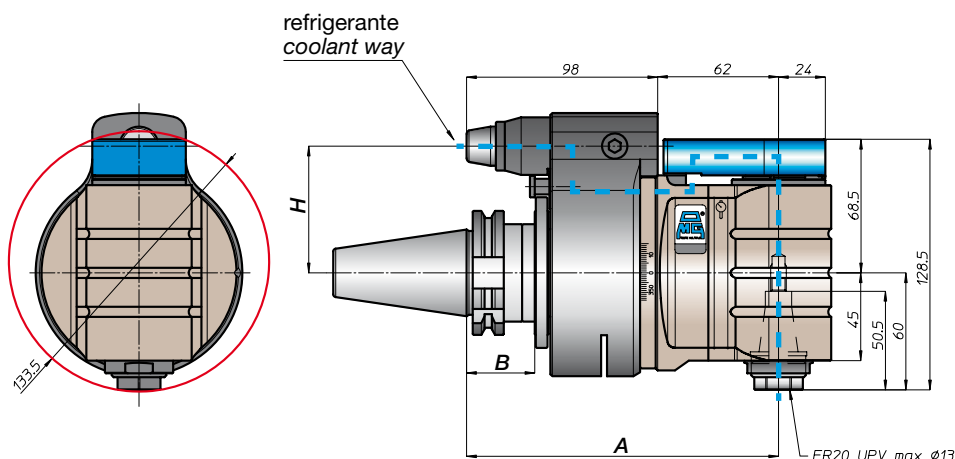
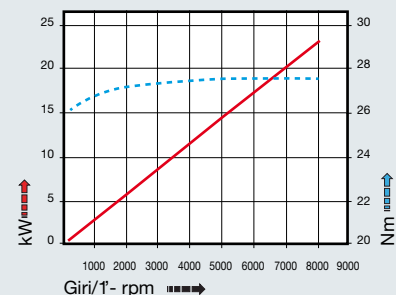


input



output

```
prestazioni/performances
```



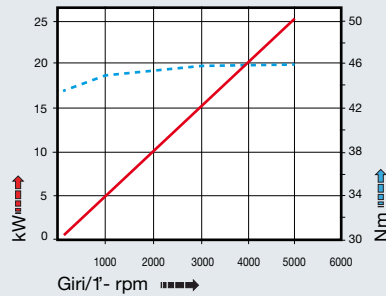
		H			
CONO SHANK	size	A	B	standard	optional

* Option: Dual Contact



TA16.PD

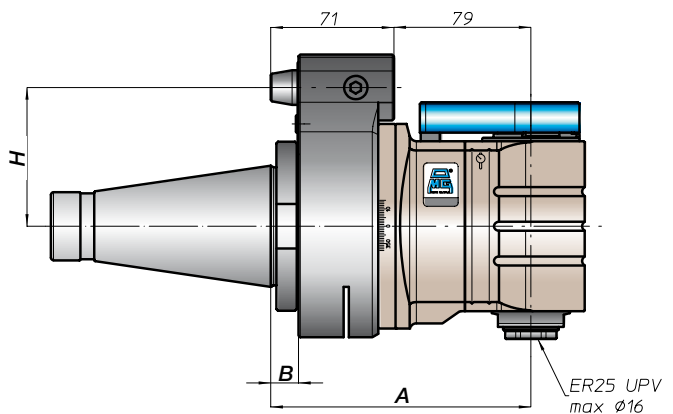
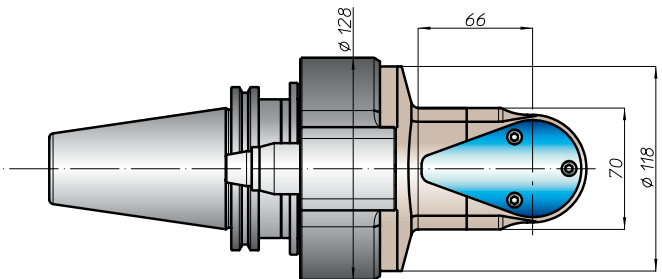
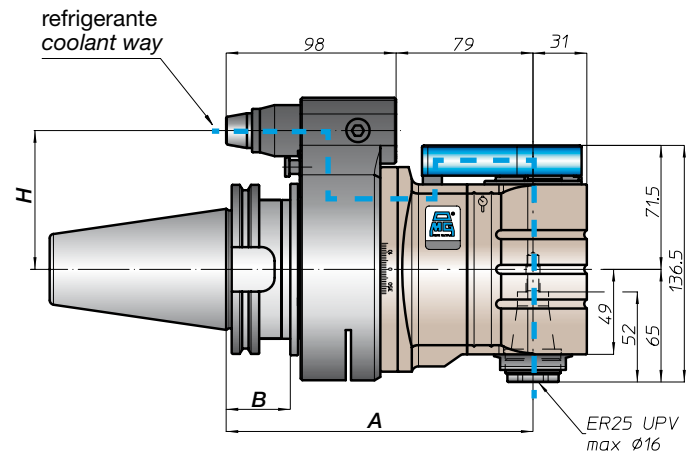
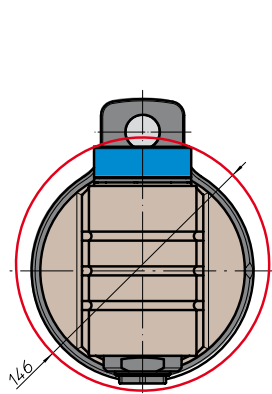
caratteristiche/features
peso/weight
prestazioni/performances

rotazione/rotation


CONO SHANK	size	A	B	H	
				standard	optional
DIN9871 *	-	172		65	-
	40				
	45				
ANSIB5.50 CAT	40	172		80	110
	50	177		80	110
	50				
BT	40	172		65	
	50	185	45	80	110
	50				
HSK	63	181	44	65	
	80				
	100	186	46	80	110
CAPTO	C5	176		65	
	C6		39		
	C8	181		80	110
KM	63	172		65	
	80				
	100	177		80	110
DIN2080	-	147	13	65	-
	40				
	50	150	16	80	110
NMTB	40	142	13	65	-
	50	150	16	80	110
	50				

tipi mandrino disponibili / available spindle types

1 DIN6388-ER
ER32





```
prestazioni/performances
```



Ø 20

M14

1-1

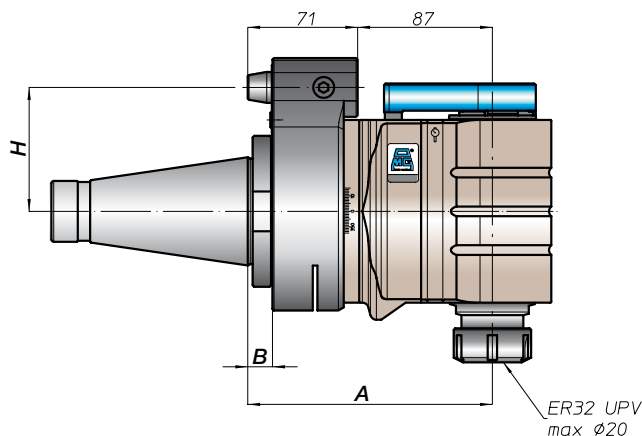
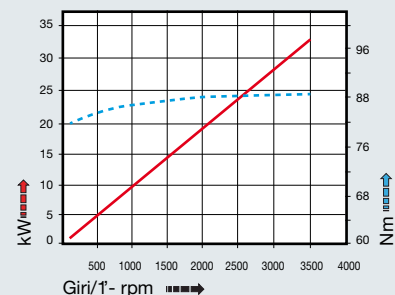


3500

10 bar

input

output



* Option: Dual Contact

TA26.PD

caratteristiche/features



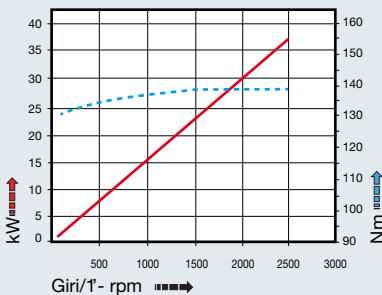
peso/weight



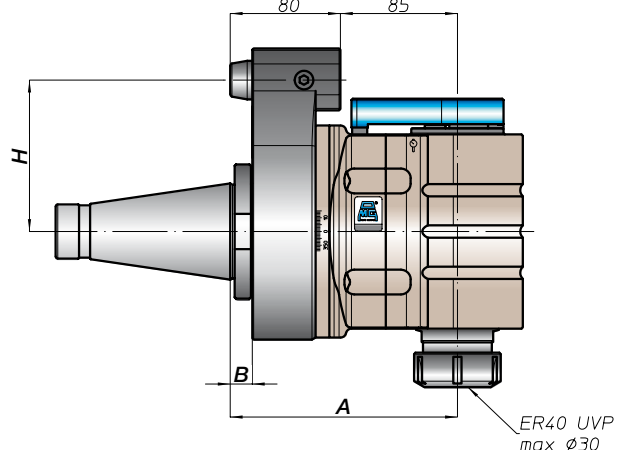
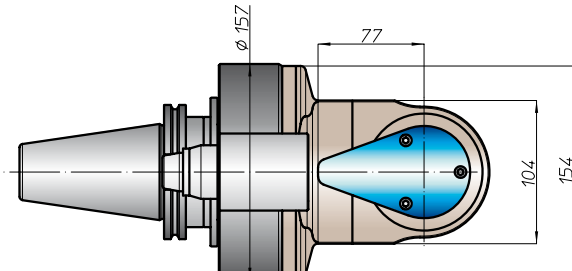
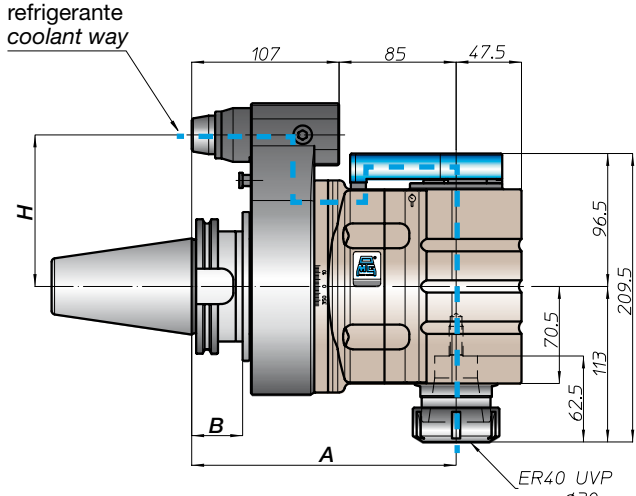
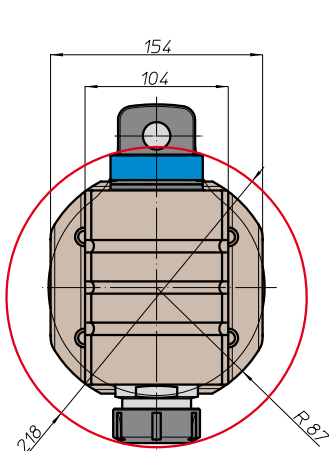
rotazione/rotation



prestazioni/performance



CONO SHANK	size	A	B	H	
				standard	optional
DIN9871 *	-	192	35	-	-
	45			110	-
	50			-	-
ANSIB5.50 *	-	192	35	-	-
	50			110	-
BT *	-	200	45	-	-
	50			110	-
HSK	-	201	46	-	-
	80			110	-
	100			-	-
CAPTO	-	196	-	-	-
	-			110	-
	C8			-	-
KM	-	192	-	-	-
	-			110	-
	100			-	-
DIN2080	-	165	16	-	-
	-			110	-
	50			-	-
ANSIB5.18	-	165	16	-	-
	50			110	-



* Option: Dual Contact

testa ad angolo - angle head

TA26.40.D

caratteristiche/features



ø 26



M20



1-1



2500



40 bar

peso/weight



22 kg

rotazione/rotation

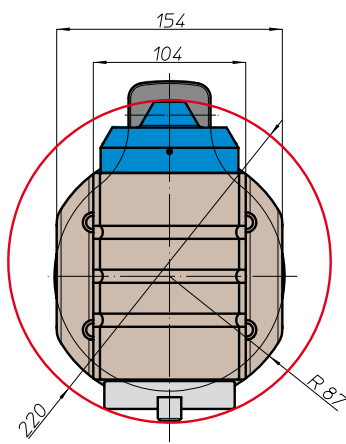
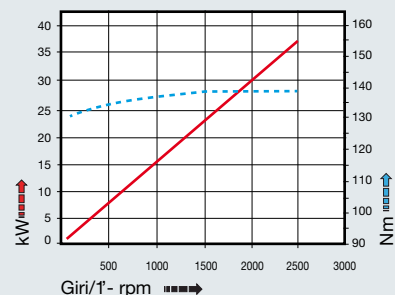
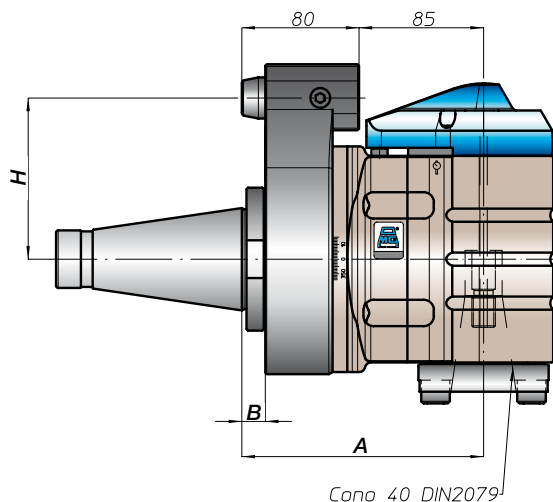
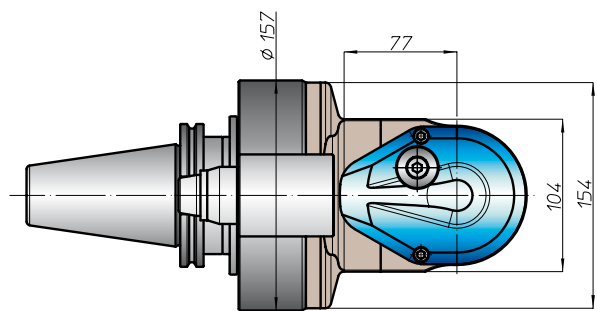
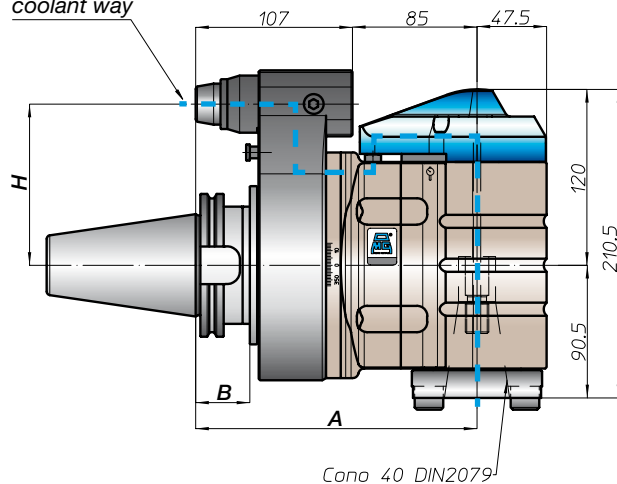


input



output

prestazioni/performance

refrigerante
coolant way

CONO SHANK	size	H			
		A	B	standard	optional
* DIN9871	-	-	-	-	-
	-	-	-	-	-
	45	-	-	-	-
* CAT	50	192	35	110	-
	50	-	-	-	-
	50	-	-	110	-
* BT	-	-	-	-	-
	50	200	45	110	-
	50	-	-	-	-
HSK	-	-	-	-	-
	80	201	46	110	-
	100	-	-	-	-
CAPTO	-	-	-	-	-
	-	196	-	110	-
	C8	-	-	-	-
KM	-	-	-	-	-
	-	192	-	110	-
	100	-	-	-	-
DIN2080	-	-	-	-	-
	-	-	-	-	-
	50	165	16	110	-
ANSIB5.18 NMTB	-	-	-	-	-
	50	165	16	110	-

* Option: Dual Contact



BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori
Accessories

Appendice tecnica
Technical supplement



TAO10.P

caratteristiche/features



Ø 10



M8



1-1



6000

peso/weight



6,2 kg



8,7 kg

rotazione/rotation

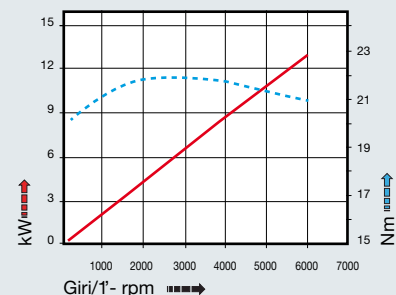


input



output

```
prestazioni/performances
```

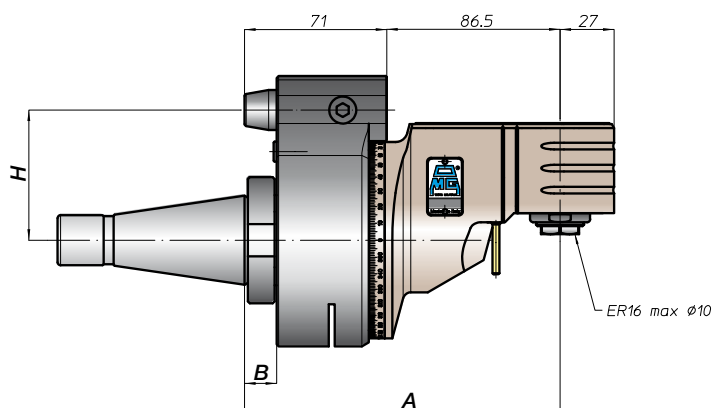
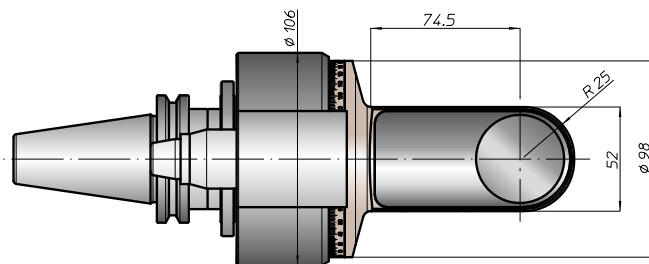
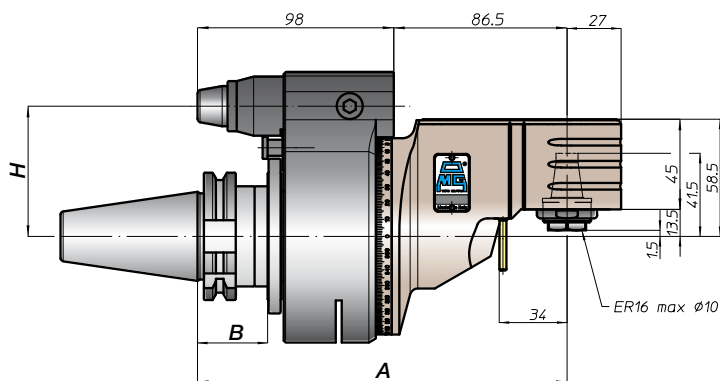
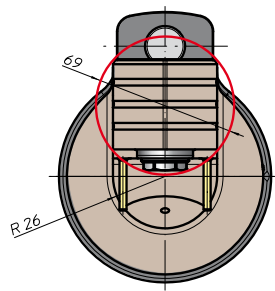
tipi mandrino disponibili / *available spindle types*

2 Albero portafrese
Milling shaft

Ø16

4 DIN69893-HSK

HSK25



CONO SHANK		size	A	B	H	
					standard	optional
★ DIN99871 	-	184,5	35	65	-	
	40			80	110	
	45					
	50					
★ CAT ANSI B5.50 	40			65	-	
	50			80	110	
★ BT 	40			65		
	50			192,5	45	80
HSK DIN99993 	63	193,5	44	65		
	80		46	80	110	
	100					
CAPTO ISO26623 	C5	188,5		65		
	C6		39			
	C8			80	110	
KM 	63	184,5		65		
	80			80	110	
	100					
DIN2080 	-	157,5	13	65	-	
	40					
	-	160,5	16	80	110	
	50					
NMTB ANSI B5.18 	40	157,5	13	65	-	
	50	160,5	16	80	110	

* Option: Dual Contact

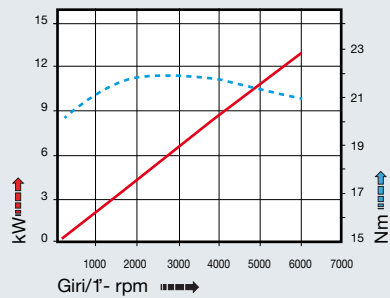


TAO10.PD

caratteristiche/features

peso/weight

rotazione/rotation

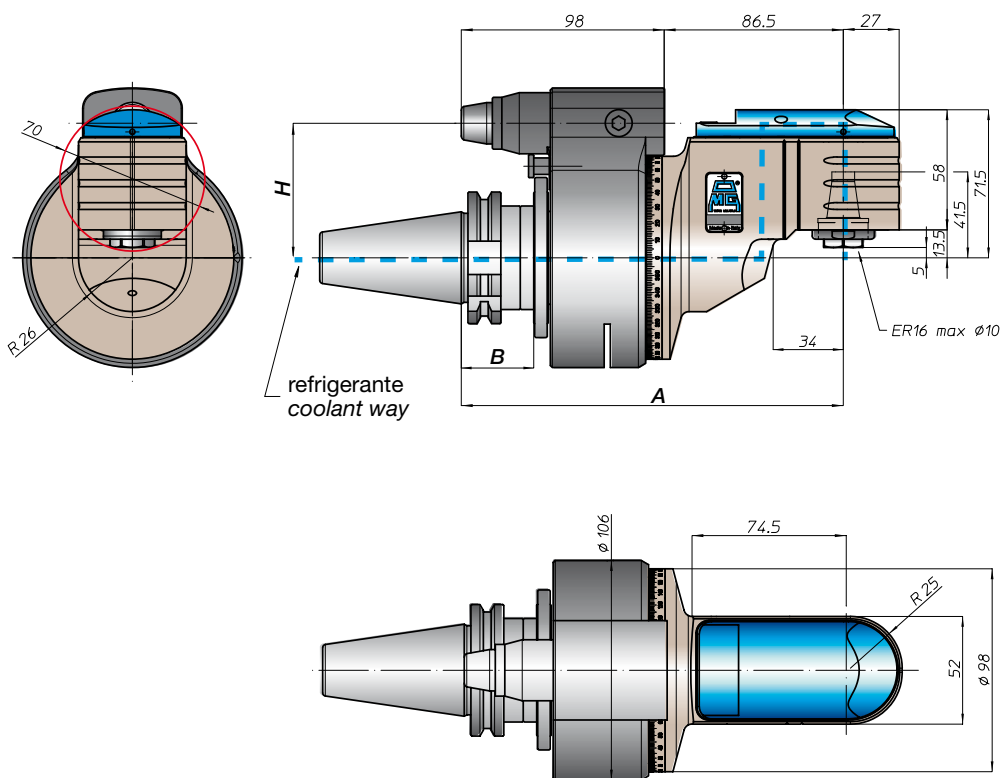
prestazioni/performance


CONO SHANK	size	A	B	H	
				standard	optional
* DIN9871 *	-			65	-
	40				
	45			80	110
	50	184,5	35		
* CAT ANSIB5.50 *	40			65	-
	50			80	110
* BT *	40			65	
	50	192,5	45	80	110
HSK DIN9893	63		44	65	
	80	193,5			
	100		46	80	110
CAPTO ISO26623	C5			65	
	C6	188,5	39		
	C8			80	110
KM	63			65	
	80	184,5			
	100			80	110
DIN2080	-			-	-
	-			-	-
	-			-	-
NMTB ANSIB5.18	-			-	-
	-			-	-

tipi mandrino disponibili / available spindle types

2 Albero portafresa Milling shaft
Ø16

4 DIN69893-HSK
HSK25



testa ad angolo - angle head

TAO13.P



caratteristiche/features



ø 13



M10



1-1



4500

peso/weight



7,5 kg



10,5 kg

rotazione/rotation

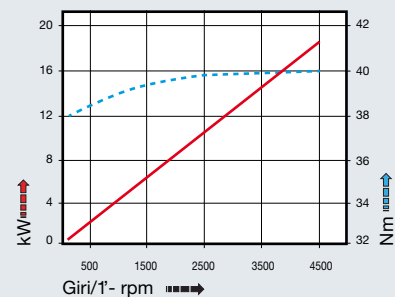


input



output

prestazioni/performance



tipi mandrino disponibili / available spindle types

2

Albero portafrese
Milling shaft

Ø16

3

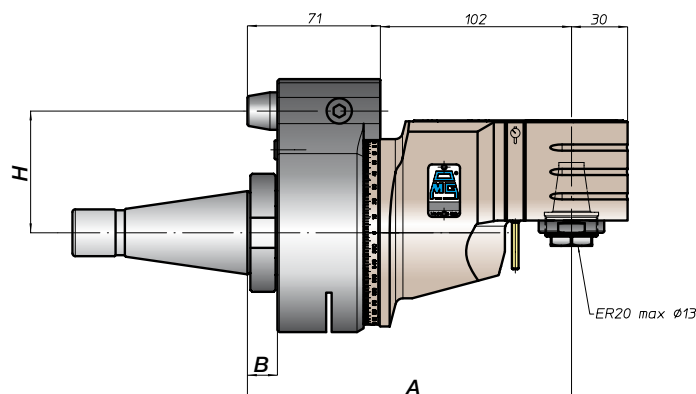
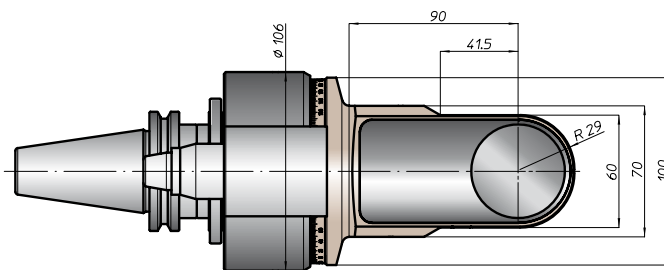
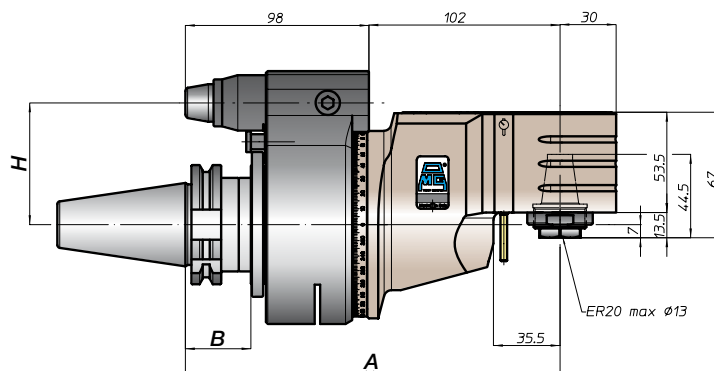
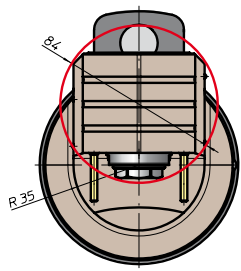
Weldon
Whistle-Notch

Ø12

4

DIN69893-HSK

HSK32



CONO SHANK	size	H			
		A	B	standard	optional
* DIN9871	-				
	40			65	-
	45			80	110
* CAT ANSI B5.50	40	200	35	65	-
	50			80	110
* BT	40			65	
	50	208	45	80	110
HSK DIN69893	63		44	65	
	80	209		80	110
	100		46	80	110
CAPTO ISO28623	C5			65	
	C6	204	39		
	C8			80	110
KM	63			65	
	80	200		80	110
	100				
DIN2080	-	170	13	65	-
	40				
	-	176	16	80	110
NMTB ANSI B5.18	40	173	13	65	-
	50	176	16	80	110

* Option: Dual Contact

TAO13.PD

caratteristiche/features



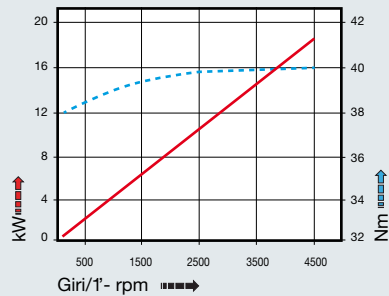
peso/weight



rotazione/rotation



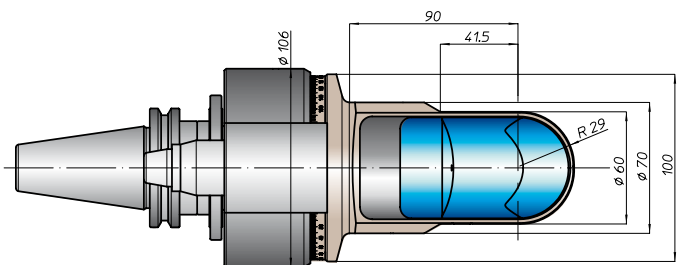
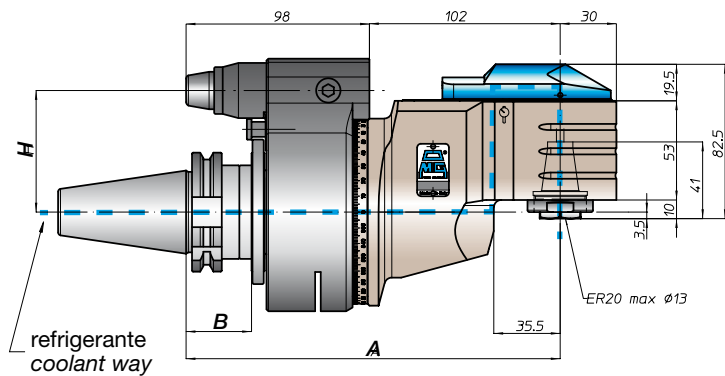
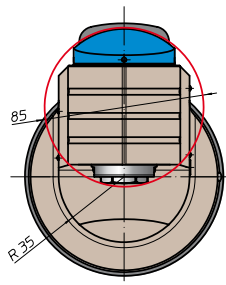
prestazioni/performance



CONO SHANK	size	A	B	H	
				standard	optional
* DIN9871	-			65	-
	40				
	45			80	110
	50	200	35		
* CAT ANSIB5.50	40			65	-
	50			80	110
* BT	40			65	
	50	208	45	80	110
HSK DIN9893	63		44	65	
	80	209			
	100		46	80	110
CAPTO ISO26623	C5			65	
	C6	204	39		
	C8			80	110
KM	63			65	
	80	200			
	100			80	110
DIN2080	-			-	-
	-			-	-
	-			-	-
NMTB ANSIB5.18	-			-	-
	-			-	-
	-			-	-

tipi mandrino disponibili / available spindle types

- 2** Albero portafresa Milling shaft Ø16
3 Weldon Whistle-Notch Ø12
4 DIN69893-HSK HSK32



TAO16.PD

caratteristiche/features



peso/weight

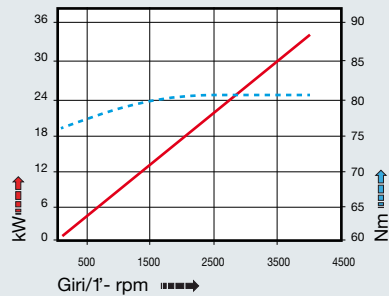


11,7 kg

rotazione/rotation



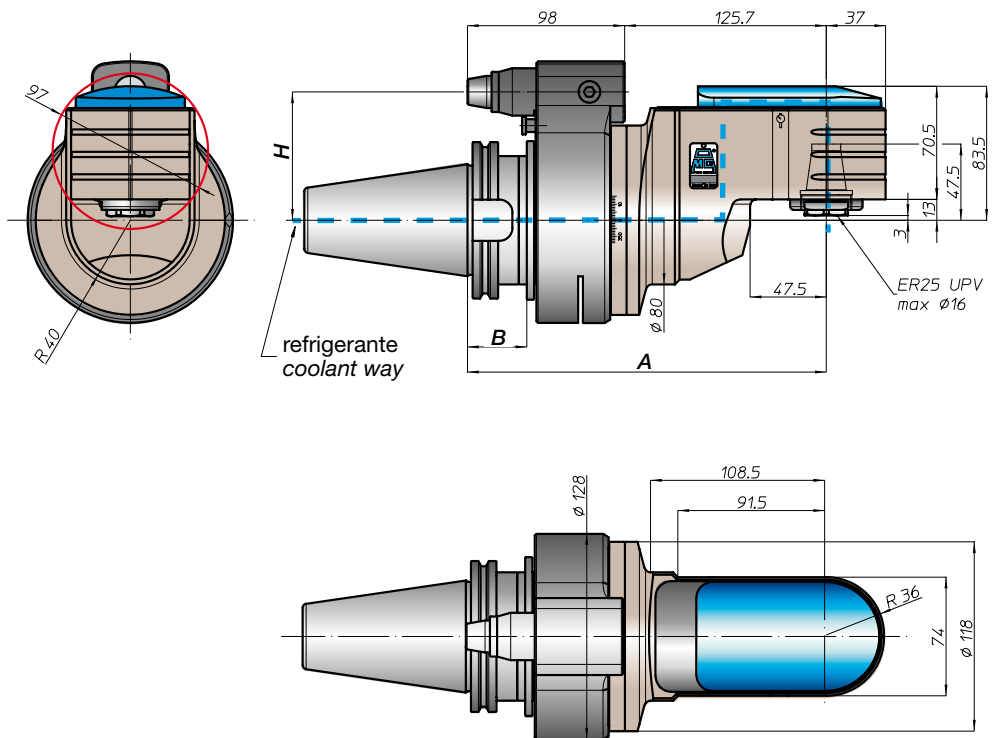
prestazioni/performance



CONO SHANK	size	A	B	H	
				standard	optional
DIN9871 *	-			-	-
	45			80	110
	50	223,5	35	80	110
ANSIB5.50 CAT	-			65	-
	50			80	110
BT	-			65	
	50	231,5	45	80	110
HSK	-			-	-
DIN9893	80			80	110
	100	232,5	46	80	110
CAPTO	-			-	-
ISO26623	-	227,5	-	80	110
	C8				
KM	-			-	-
	80	223,5	-	80	110
	100				
DIN2080	-			-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
NMTB	-	-	-	-	-
ANSIB5.18	-	-	-	-	-
	-	-	-	-	-

tipi mandrino disponibili / available spindle types

- 2 Albero portafresa Milling shaft Ø16-Ø22-Ø27
3 Weldon Whistle-Notch Ø16
4 DIN69893-HSK HSK40



testa ad angolo - angle head

TAO20.P



caratteristiche/features



ø 20



M14



1-1



3500

peso/weight



14,5 kg

rotazione/rotation

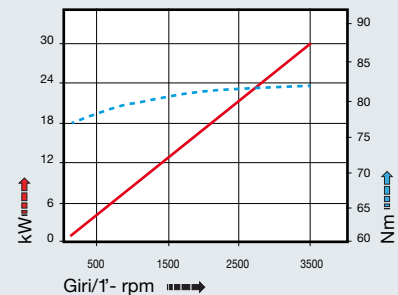


input



output

prestazioni/performance

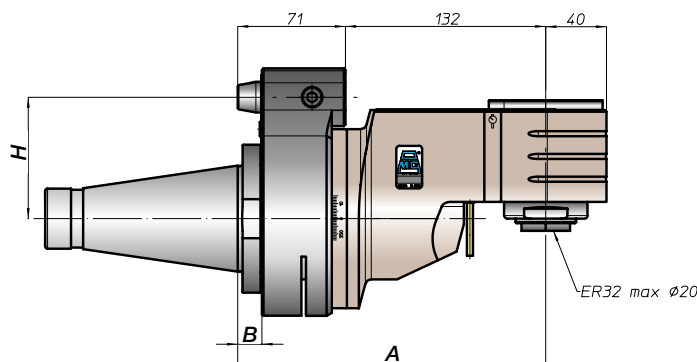
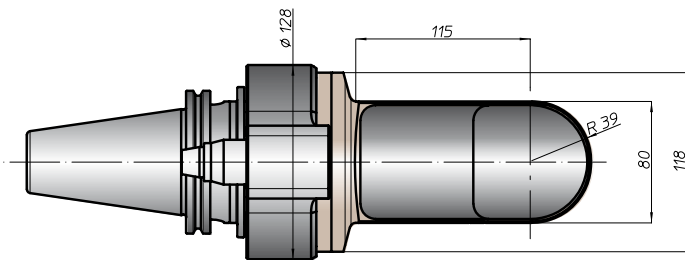
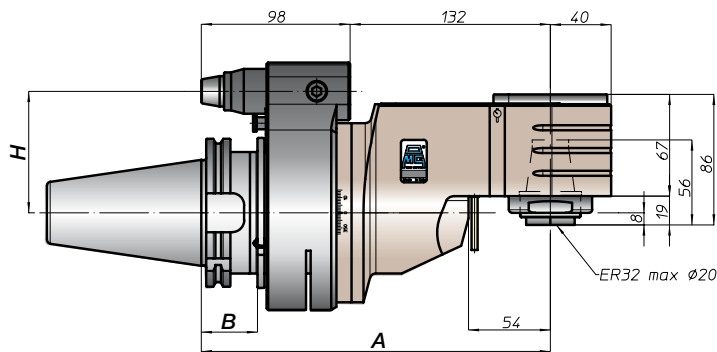
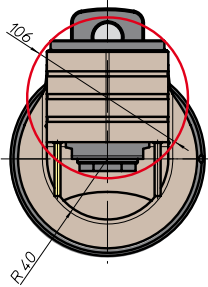


tipi mandrino disponibili / available spindle types

2 Albero portafrese
Milling shaft
Ø22-Ø27-Ø32

3 Weldon
Whistle-Notch
Ø16-Ø20

4 DIN69893-HSK
HSK50



CONO SHANK	size	A	B	H	
				standard	optional
* DIN9871	-	230	35	-	-
	45			80	110
	50			80	110
* CAT ANSI B5.50	-	238	45	-	-
	50			80	110
* BT	-	239	46	65	-
	50			80	110
HSK DIN69893	-	234	16	-	-
	80			80	110
	100			80	110
CAPTO ISO28623	-	230	80	-	-
	-			80	110
	C8			80	110
KM	-	203	16	-	-
	80			80	110
	100			80	110
DIN2080	-	203	16	-	-
	-			80	110
	50			80	110
ANSI B5.18 NMTB	-	203	16	-	-
	50			80	110

* Option: Dual Contact



TAO20.PD

caratteristiche/features



peso/weight



14,5 kg

rotazione/rotation

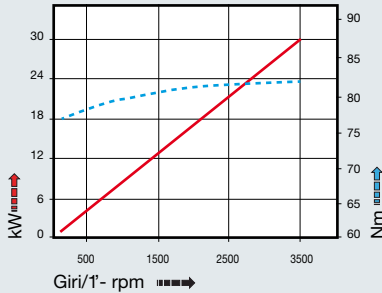


input



output

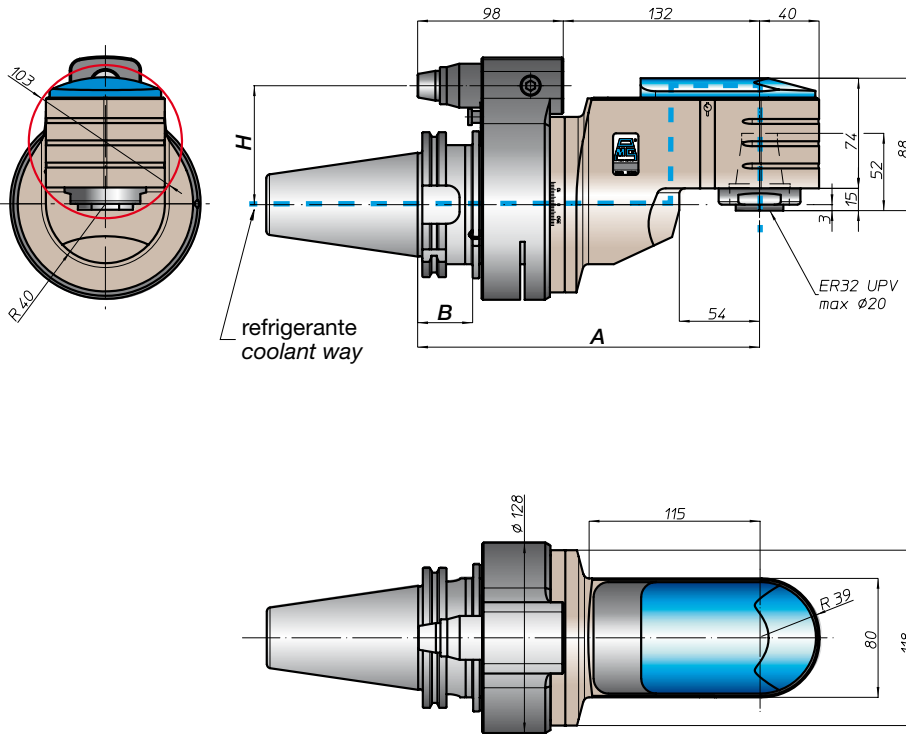
prestazioni/performance



tipi mandrino disponibili / available spindle types

- 2** Albero portafrese
Milling shaft
Ø22-Ø27-Ø32
- 3** Weldon
Whistle-Notch
Ø16-Ø20
- 4** DIN69893-HSK
HSK50

CONO SHANK	size	A	B	H	
				standard	optional
* DIN69871	-			-	-
	45			-	-
	50	230	35	80	110
* CAT	-			-	-
	50			80	110
* BT	-			65	
	50	238	45	80	110
HSK DIN69893	-		42	-	
	80	239	46	80	110
	100				
CAPTO ISO26623	-			-	
	-	234		-	
	C8			80	110
KM	-			-	
	80	230		-	
	100			80	110
DIN2080	-			-	
	-			-	
	-			-	
NMTB ANSIB5.18	-			-	
	-			-	



testa ad angolo - angle head

TAV10.P



caratteristiche/features



ø 10



M8



1-1



4000

peso/weight



6,4 kg



8,5 kg

rotazione/rotation

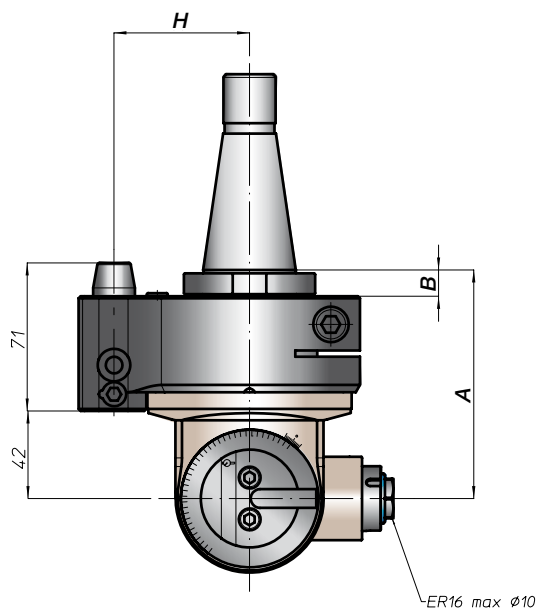
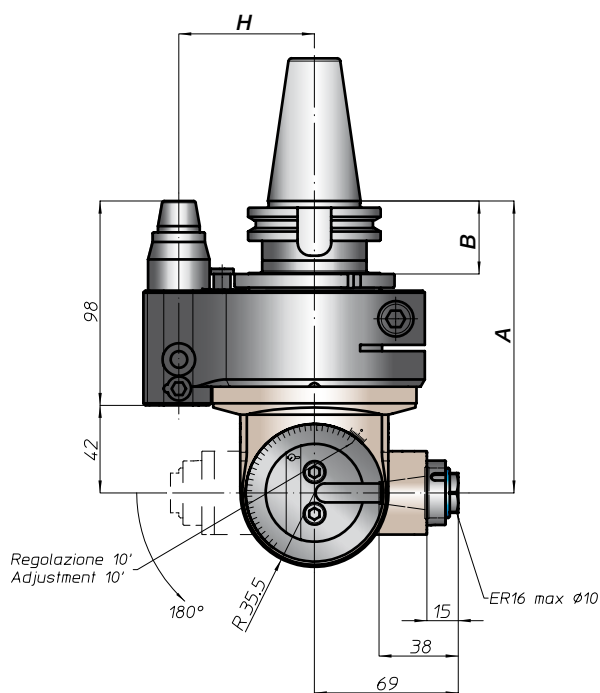
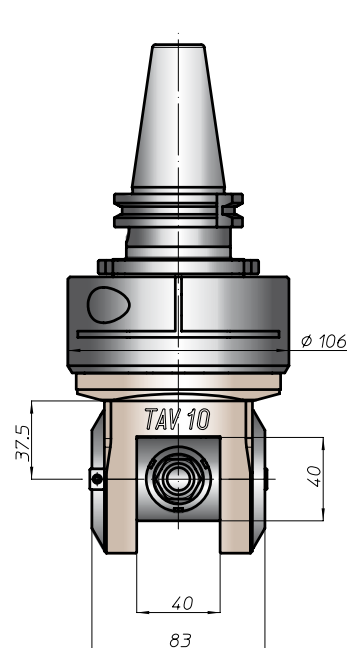
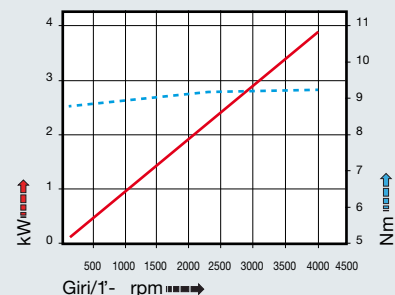


input



output

prestazioni/performance



CONO SHANK	size	H			
		A	B	standard	optional
* DIN9871	-				
	40			65	-
	45			80	110
* CAT ANSIB5.50	40	140	35	65	-
	50			80	110
* BT	40			65	
	50	148	45	80	110
DIN9893 HSK	63		44	65	
	80	149		80	110
	100		46	80	110
CAPTO ISO26623	C5			65	
	C6	144	39		
	C8			80	110
KM	63			65	
	80	140		80	110
	100			80	110
DIN2080	-	113	13	65	-
	40				
	-	116	16	80	110
ANSIB5.18 NMTB	40	113	13	65	-
	50	116	16	80	110

* Option: Dual Contact

TAV10.PD

caratteristiche/features



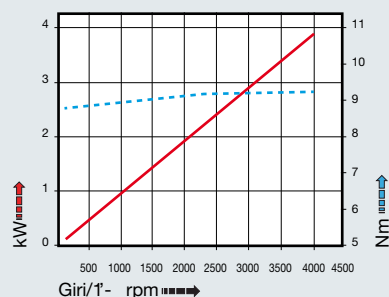
peso/weight



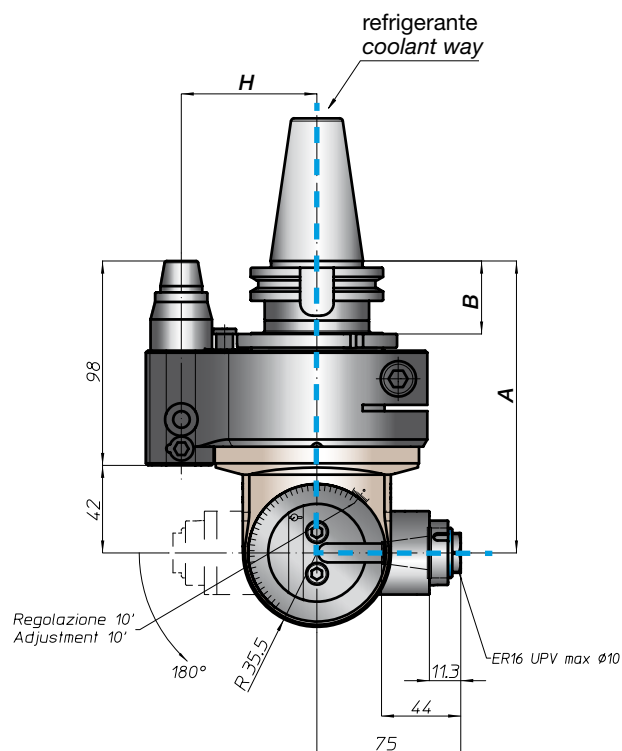
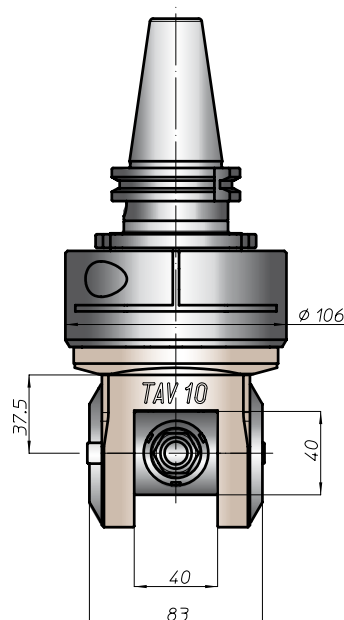
rotazione/rotation



prestazioni/performance



CONO SHANK	size	A	B	H	
				standard	optional
DIN9871 *	-	140	35	65	-
	40			80	110
	45			80	110
ANSIB5.50 *	40	140	35	65	-
	50			80	110
BT *	40	148	45	65	-
	50			80	110
HSK DIN9893	63	149	44	65	-
	80		46	80	110
	100		46	80	110
CAPTO ISO26623	C5	144	39	65	-
	C6			80	110
	C8			80	110
KM	63	140	35	65	-
	80			80	110
	100			80	110
DIN2080	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
NMTB ANSIB5.18	-	-	-	-	-
	-	-	-	-	-



testa ad angolo - angle head

TAV13.P



caratteristiche/features



ø 13



M10



1-1



3000

peso/weight



7,8 kg



10,5 kg

rotazione/rotation

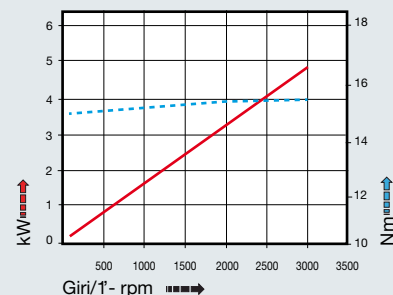


input



output

prestazioni/performance



tipi mandrino disponibili / available spindle types

1

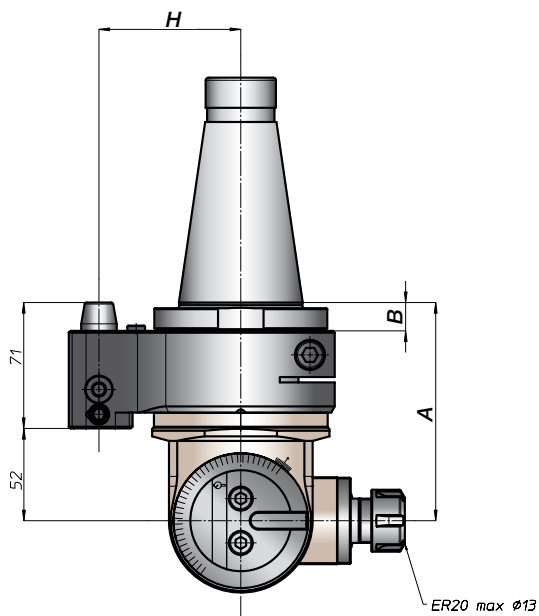
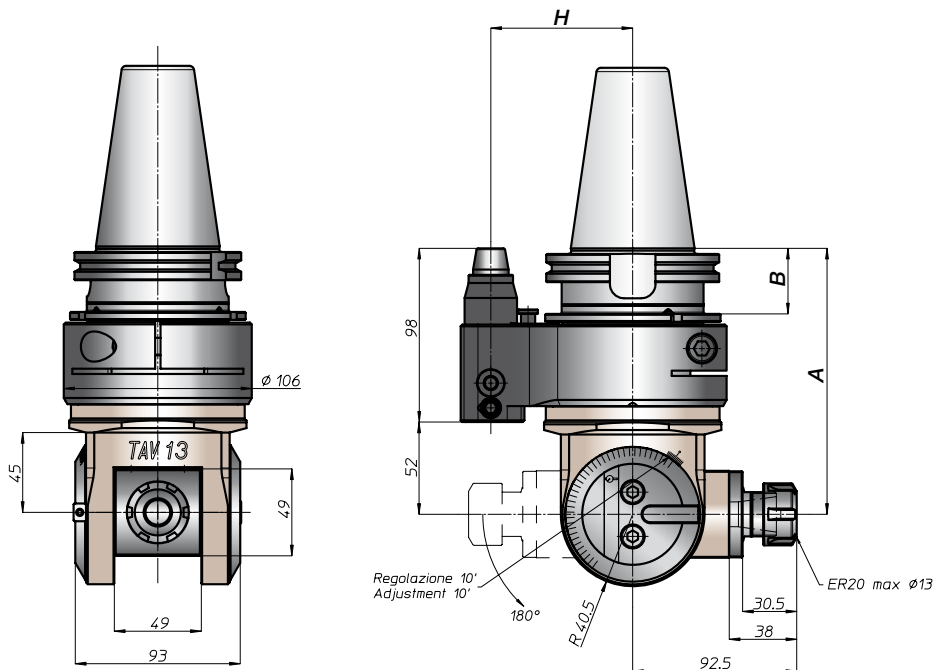
DIN6388-ER

3

Weldon
Whistle-Notch

ER25

Ø16



CONO SHANK	size	H			
		A	B	standard	optional
* DIN69871	-	150	35	65	-
	40			80	110
	45			80	110
* CAT	40	158	45	65	-
	50			80	110
	50			80	110
* BT	40	159	46	65	-
	50			80	110
	50			80	110
HSK	63	154	39	65	-
	80			80	110
	100			80	110
CAPTO	C5	120	13	65	-
	C6			80	110
	C8			80	110
KM	63	123	16	65	-
	80			80	110
	100			80	110
DIN2080	-	123	16	65	-
	40			80	110
	50			80	110
ANSIB5.18 NMTB	40	120	13	65	-
	50			80	110

* Option: Dual Contact

TAV13.PD

caratteristiche/features



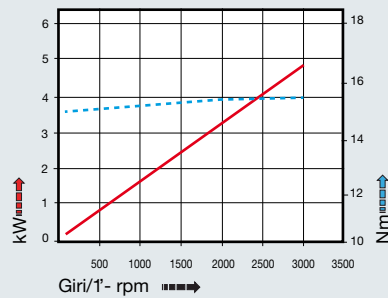
peso/weight



rotazione/rotation



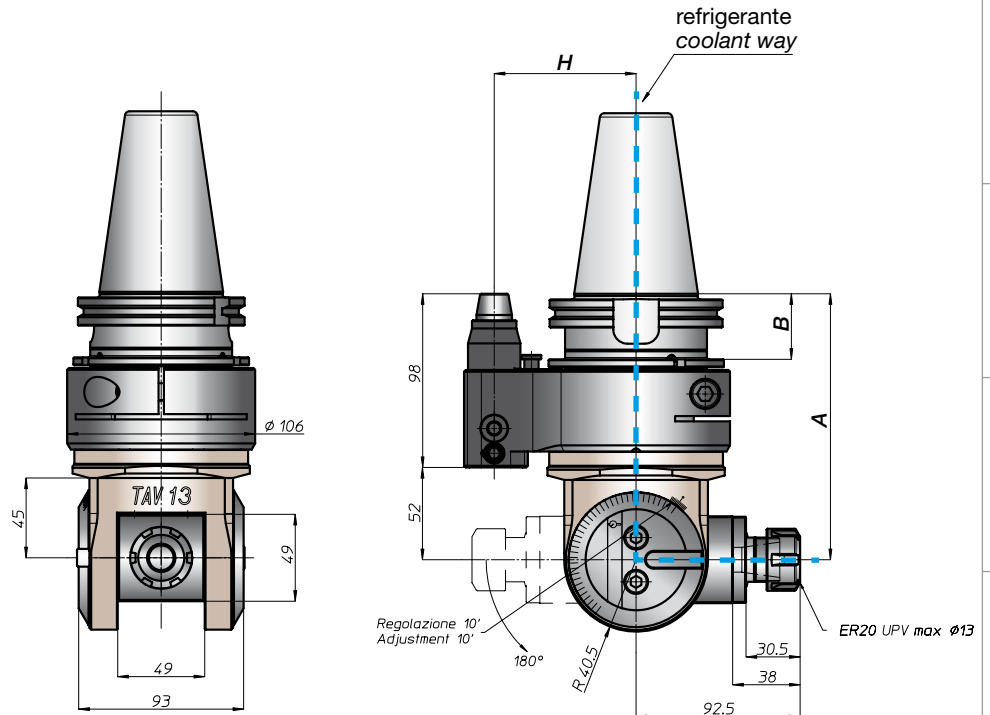
prestazioni/performance



tipi mandrino disponibili / available spindle types

1 DIN6388-ER	3 Weldon Whistle-Notch
ER25	Ø16

CONO SHANK	size	A	B	H	
				standard	optional
* DING9871 *	-			65	-
	40				
	45			80	110
	50	150	35		
* CAT ANSIB5.50	40			65	-
	50			80	110
* BT	40			65	
	50	158	45	80	110
DING9893 HSK	63		42	65	
	80	159			
	100		46	80	110
ISO26623 CAPTO	C5			65	
	C6	154	39		
	C8			80	110
KM	63			65	
	80	150			
	100			80	110
DIN2080	-	120	13	65	-
	40				
	-	-	-	-	-
ANSIB5.18 NMTB	-	-	-	-	-
	-	-	-	-	-



testa ad angolo - angle head

TAV20.P



caratteristiche/features



ø 20



M16



1-1



2500

peso/weight



22 kg

rotazione/rotation

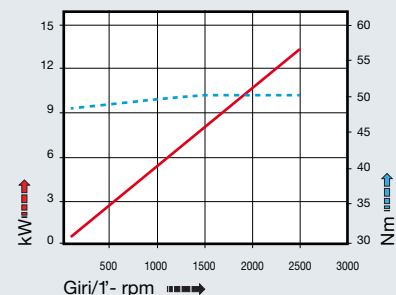


input



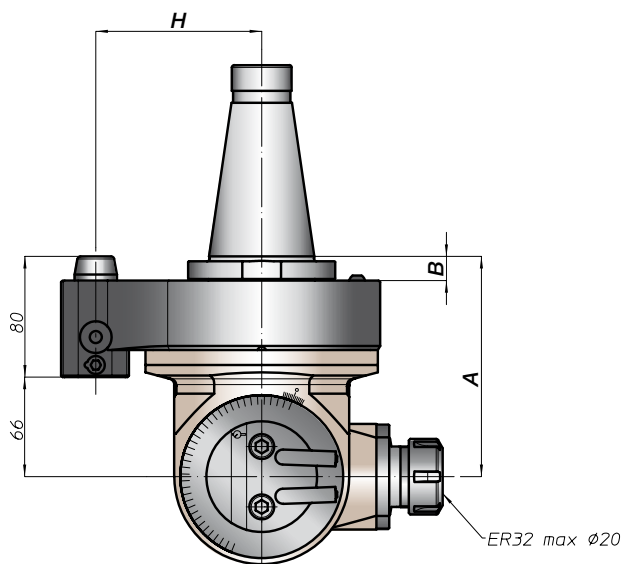
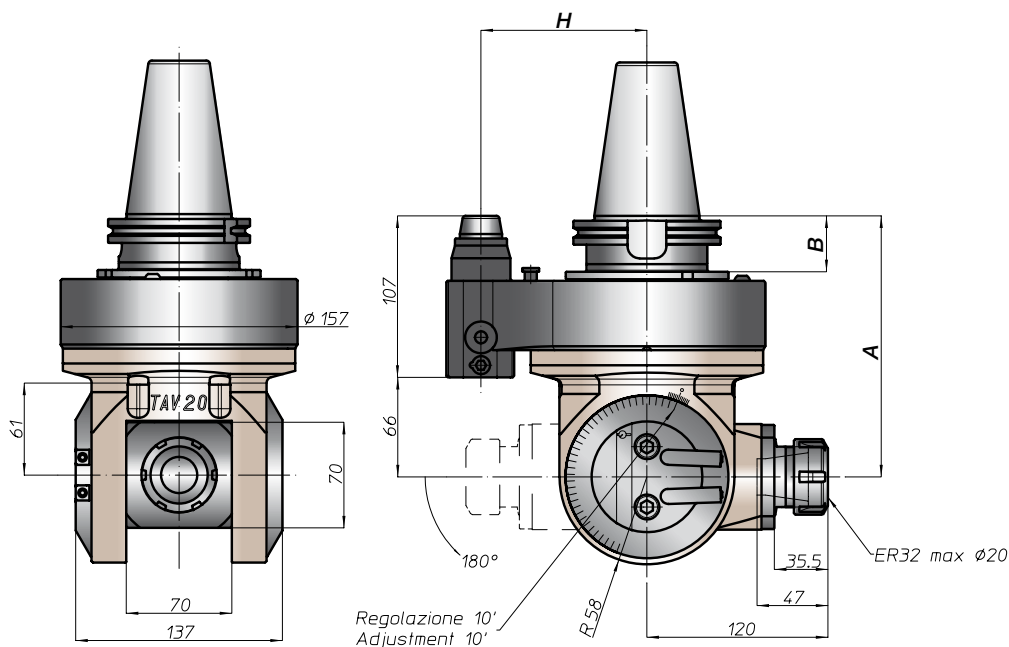
output

prestazioni/performance



tipi mandrino disponibili / available spindle types

1 DIN6388-ER	2 Albero portafrese Milling shaft	3 Weldon Whistle-Notch	4 DIN69893-HSK	6 ABS Licenza KOMET®
ER40	Ø32	Ø20-Ø25	HSK50	ABS50



CONO SHANK	size	H			
		A	B	standard	optional
* DIN69871	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
50	173	35	110	-	-
	50	-	-	-	-
* CAT	-	-	-	-	-
	-	-	-	-	-
ANSIB5.50	50	-	-	110	-
	50	-	-	-	-
* BT	-	-	-	-	-
	-	-	-	-	-
50	181	45	110	-	-
	50	-	-	-	-
HSK	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
DIN69893	80	182	46	110	-
	100	-	-	-	-
	100	-	-	-	-
CAPTO	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
ISO28623	-	177	-	110	-
	-	-	-	-	-
C8	-	-	-	-	-
	-	-	-	-	-
KM	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
100	173	-	110	-	-
	100	-	-	-	-
	100	-	-	-	-
DIN2080	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
50	149	16	110	-	-
	50	-	-	-	-
	50	-	-	-	-
NMTB	-	-	-	-	-
	-	-	-	-	-
ANSIB5.18	-	-	-	-	-
	-	-	-	-	-
50	149	16	110	-	-
	50	-	-	-	-

* Option: Dual Contact

TAV20.PD

caratteristiche/features



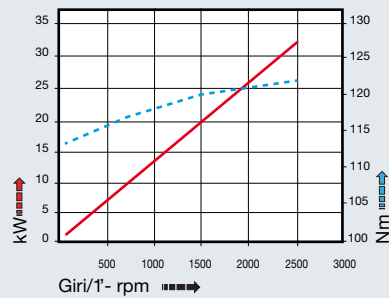
peso/weight



rotazione/rotation



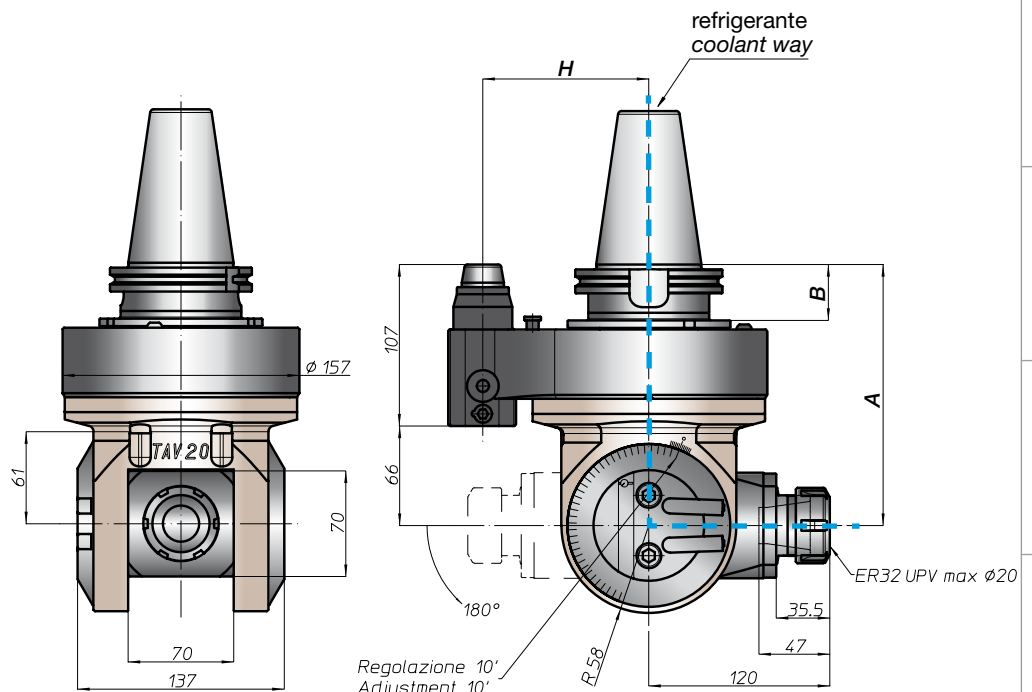
prestazioni/performance



tipi mandrino disponibili / available spindle types

1 DIN6388-ER	3 Weldon Whistle-Notch	4 DIN69893-HSK	6 ABS Licenza KOMET®
ER40	Ø20-Ø25	HSK50	ABS50

CONO SHANK	size	A	B	H	standard	optional
DIN69871 *	-	-	-	-	-	-
	50	173	35	110	-	-
ANSIB5.50 CAT	-	-	-	-	-	-
	50	-	-	110	-	-
BT	-	-	-	-	-	-
	50	181	45	110	-	-
HSK	-	-	-	-	-	-
	80	182	-	-	-	-
	100	-	46	110	-	-
CAPTO	-	-	-	-	-	-
	-	177	-	-	-	-
	C8	-	-	110	-	-
KM	-	-	-	-	-	-
	-	173	-	-	-	-
	100	-	-	110	-	-
DIN2080	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
NMTB	-	-	-	-	-	-
	-	-	-	-	-	-



TAV30.P



caratteristiche/features



ø 30



M24



1-1



2500

peso/weight



42 kg

rotazione/rotation

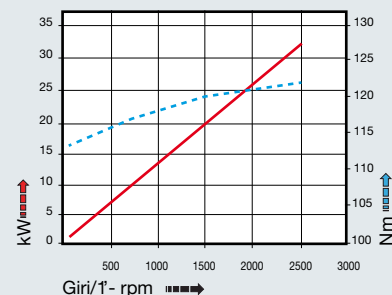


input



output

prestazioni/performances



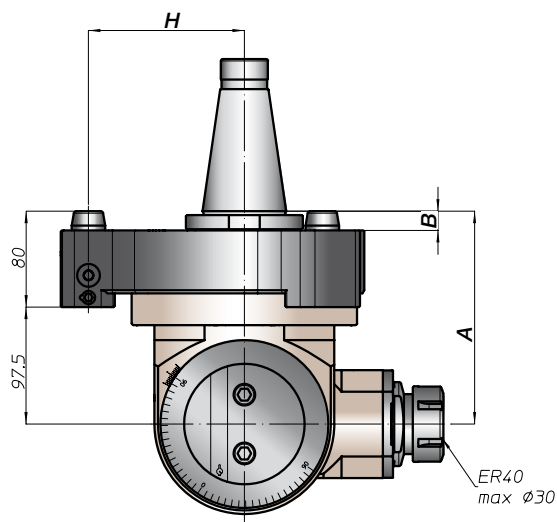
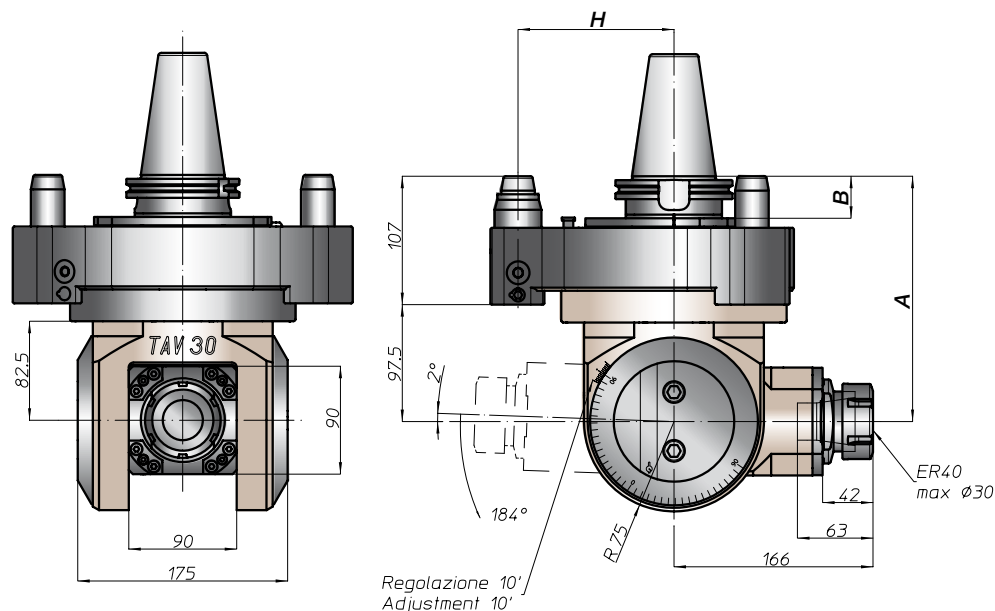
tipi mandrino disponibili / available spindle types

1 DIN6388-ER
ER50

2 Albero portafresa
Milling shaft
Ø32-Ø40

4 DIN69893-HSK
HSK63

6 ABS
Licenza KOMET®
ABS63



CONO SHANK	size	H			
		A	B	standard	optional
* DIN69871	-	204,5	35	-	-
	-			-	-
	50			130	-
* CAT ANSIB5.50	-	213,5	46	-	-
	50			130	-
* BT	-	212,5	45	-	-
	50			130	-
HSK DIN69893	-	208,5	-	-	-
	-			-	-
	100			130	-
CAPTO ISO26623	-	208,5	-	-	-
	C8			130	-
KM	-	204,5	-	-	-
	-			-	-
	100			130	-
DIN2080	-	177,5	16	-	-
	-			-	-
	50			130	-
ANSIB5.18 NMTB	-	177,5	16	-	-
	50			130	-

* Option: Dual Contact

TAV Gallery



BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori
Accessories

Appendice tecnica
Technical supplement



testa ad angolo - *angle head*

TAV40.T



caratteristiche/features



ø 32



M26



1-2



5000
OUTPUT

peso/weight



70 kg

rotazione/rotation



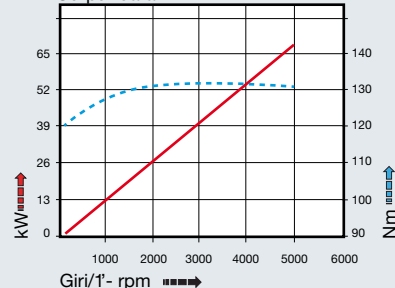
input



output

prestazioni/performance

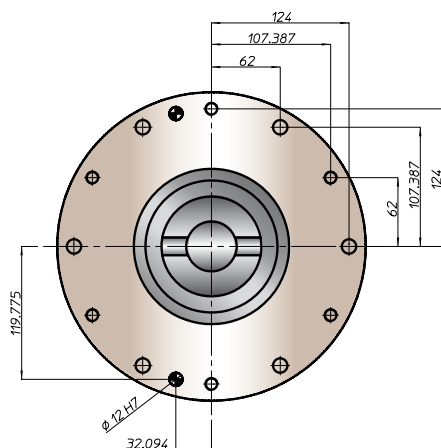
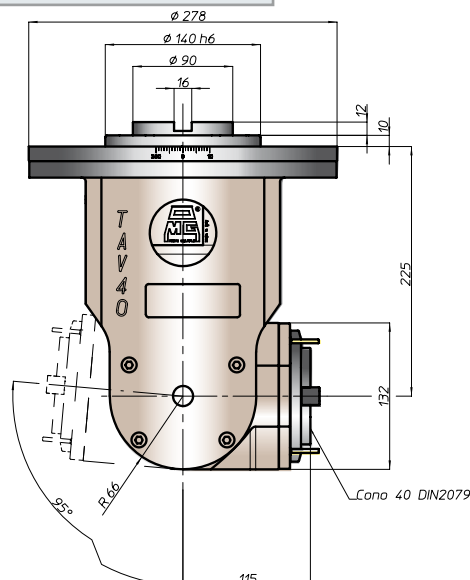
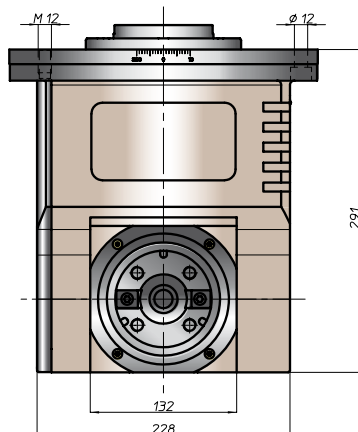
Output data



tipi mandrino disponibili / available spindle types

4 DIN69893-HSK
HSK63

5 COROMANT
CAPTO®
C5



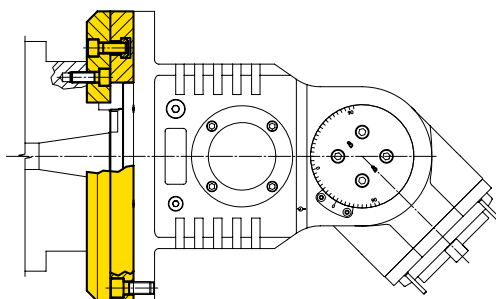
Equipaggiamento standard:

- pressurizzazione mandrino
- n. 4 ugelli orientabili vicino al mandrino
- regolazione angolare mandrino libera
- nel mandrino DIN2079 si possono utilizzare coni DIN2080-40, DIN69871-A40, MAS403-BT40

Standard equipment:

- spindle front pressurization
- nr 4 adjustable nozzle near the spindle
- free angle spindle adjustment
- on the spindle DIN2079 you can use shank DIN2080-40, DIN69871-A40, MAS403-BT40

esempio di collegamento - *connection example*



TAV50.T

caratteristiche/features



ø 45



M36



1-2



4000
OUTPUT

peso/weight



145 kg

rotazione/rotation



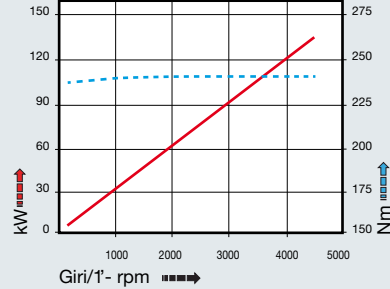
input



output

prestazioni/performance

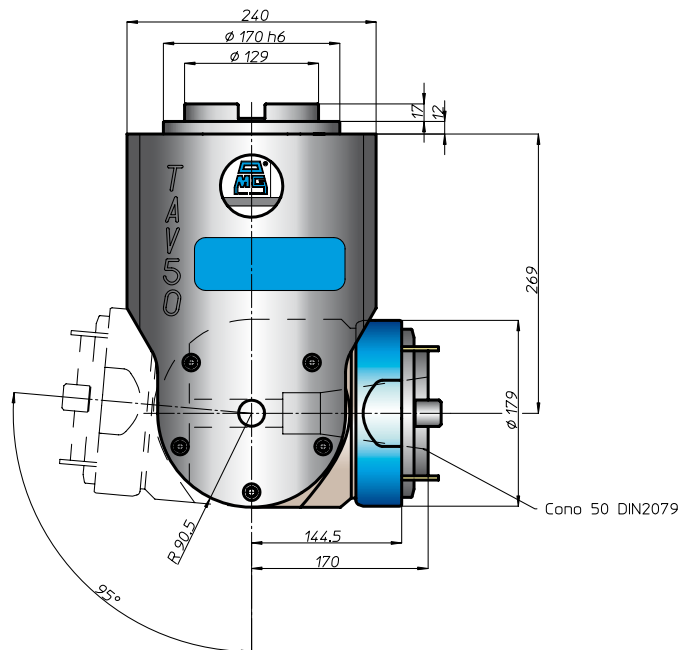
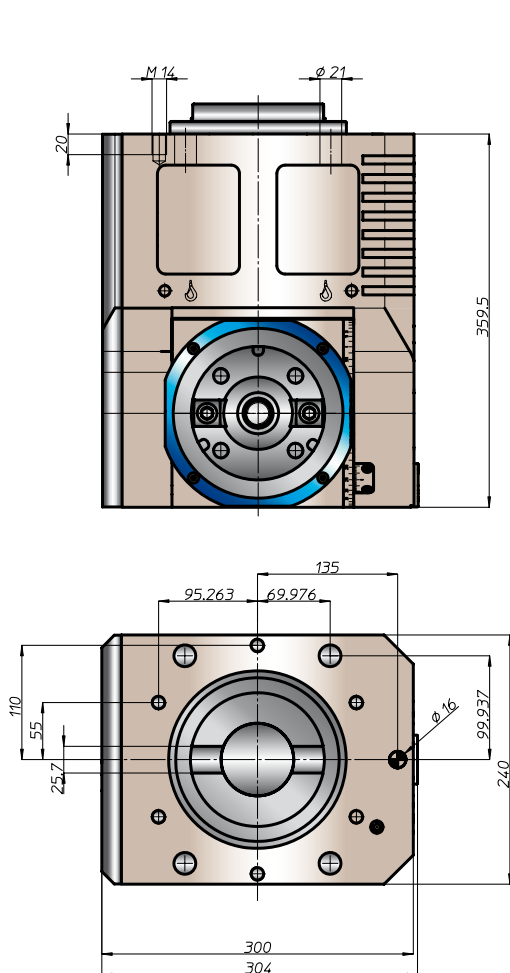
Output data



tipi mandrino disponibili / available spindle types

4 DIN69893-HSK
A100

5 COROMANT
CAPTO®
C8



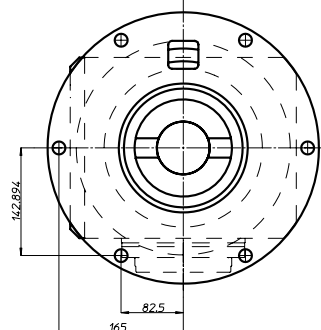
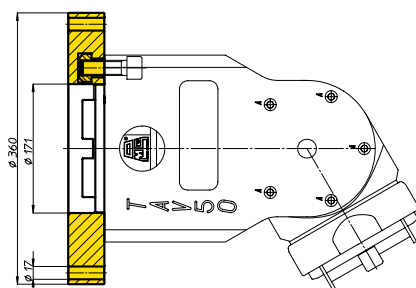
Equipaggiamento standard:

- pressurizzazione mandrino
- n. 4 ugelli orientabili vicino al mandrino
- regolazione angolare mandrino libera o posizionabile ogni 15°
- nel mandrino DIN2079 si possono utilizzare coni DIN69871-A50, MAS403-BT50

Standard equipment:

- spindle front pressurization
- nr 4 adjustable nozzle near the spindle
- free angle spindle adjustment or by pin each 15°
- on the spindle DIN2079 you can use shank DIN69871-A50, MAS403-BT50

esempio di collegamento - connection example



TAF Gallery



TAF10.P

caratteristiche/features


ø 10



M8



1-1



5000

peso/weight


5,5 kg



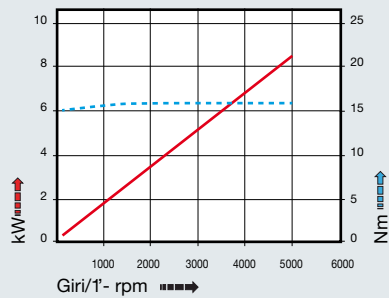
7 kg

rotazione/rotation

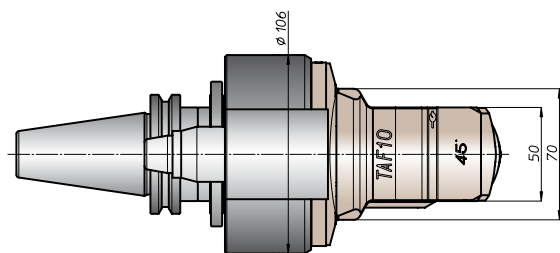
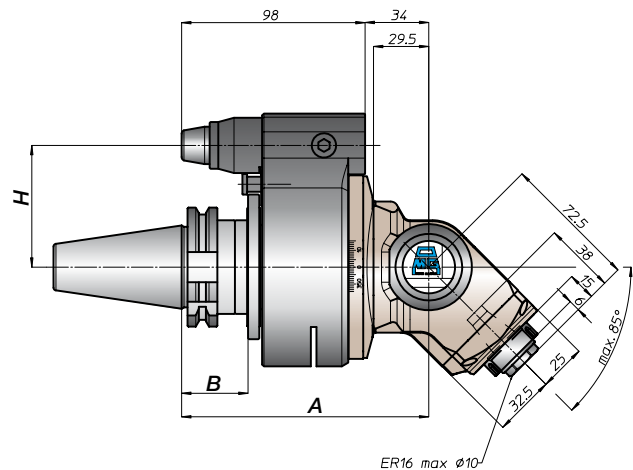
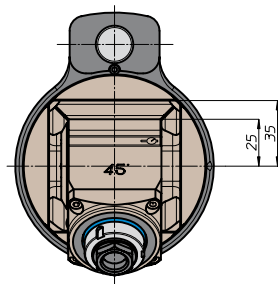

input



output

prestazioni/performance


CONO SHANK	size	A	B	H	
				standard	optional
* DIN9871 *	30	132	35	65	-
	40			80	110
	45			80	110
	50			80	110
* CAT	40	140	45	65	-
	50			80	110
* BT	40			65	-
	50			80	110
* HSK	63	141	42	65	-
	80		46	80	110
	100		46	80	110
* CAPTO	C5	136	39	65	-
	C6			80	110
	C8			80	110
* KM	63	132	45	65	-
	80			80	110
	100			80	110
* DIN2080	-	-	-	-	-
	-			-	-
	-			-	-
	-			-	-
* NMTB	-	-	-	-	-
	-			-	-



* Option: Dual Contact

BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori
Accessories

Appendice tecnica
Technical supplement

testa ad angolo - angle head

TAF13.P

caratteristiche/features



ø 13



M10



1-1



4000

peso/weight



6,5 kg



8,5 kg

rotazione/rotation

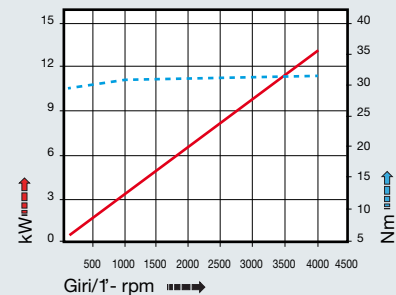


input



output

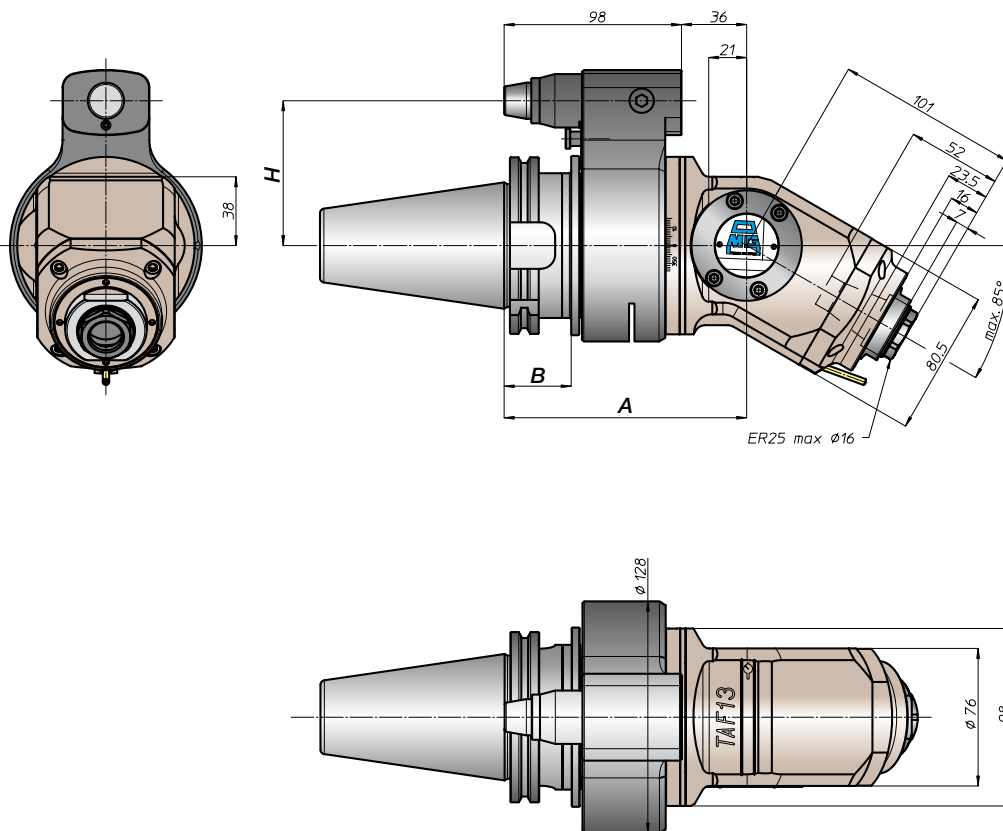
prestazioni/performances



tipi mandrino disponibili / available spindle types

4 DIN69893-HSK

HSK32



CONO SHANK	size	H			
		A	B	standard	optional
* DIN69871	-				
	40			65	-
	45			80	110
* CAT	50	134	35		
	40			65	-
	50			80	110
* BT	40			65	
	50	142	45	80	110
HSK	63		42	65	
	80	143		80	110
	100		46		
CAPTO	C5			65	
	C6	138	39		
	C8			80	110
KM	63			65	
	80	134		80	110
	100				
DIN2080	-			-	-
	-			-	-
	-			-	-
ANSIB5.18 NMTB	-			-	-
	-			-	-

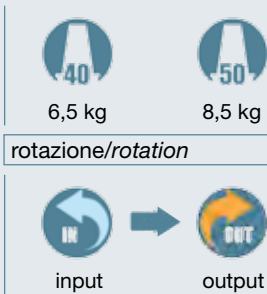
* Option: Dual Contact

TAF13.PD

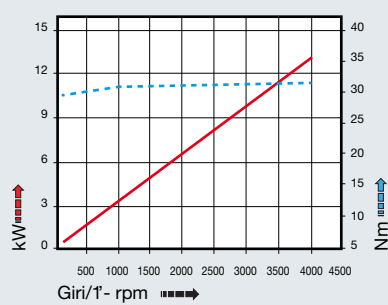
caratteristiche/features



peso/weight



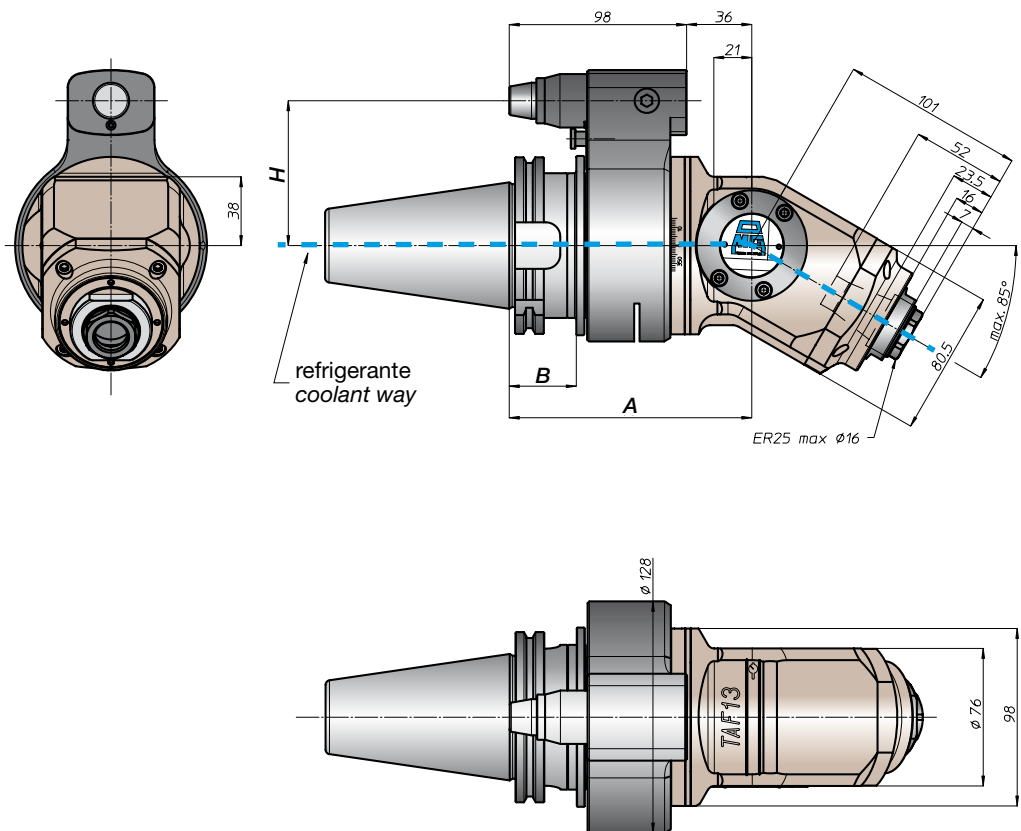
prestazioni/performance



CONO SHANK	size	A	B	H	
				standard	optional
* DIN69871	-			65	-
	40				
	45			80	110
* CAT	40	134	35	65	-
	50			80	110
* BT	40			65	
	50	142	45	80	110
HSK	63		42	65	
	80	143		80	110
	100		46	80	110
CAPTO	C5			65	
	C6	138	39	80	110
	C8			80	110
KM	63			65	
	80	134		80	110
	100			80	110
DIN2080	-			-	-
	-			-	-
	-			-	-
NMTB	-			-	-
	-			-	-

tipi mandrino disponibili / available spindle types

4 DIN69893-HSK
HSK32



testa ad angolo - angle head

TAF20.P



caratteristiche/features



ø 20



M16



1-1



3000

peso/weight



13,5 kg

rotazione/rotation

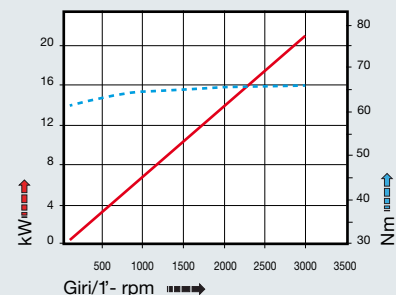


input



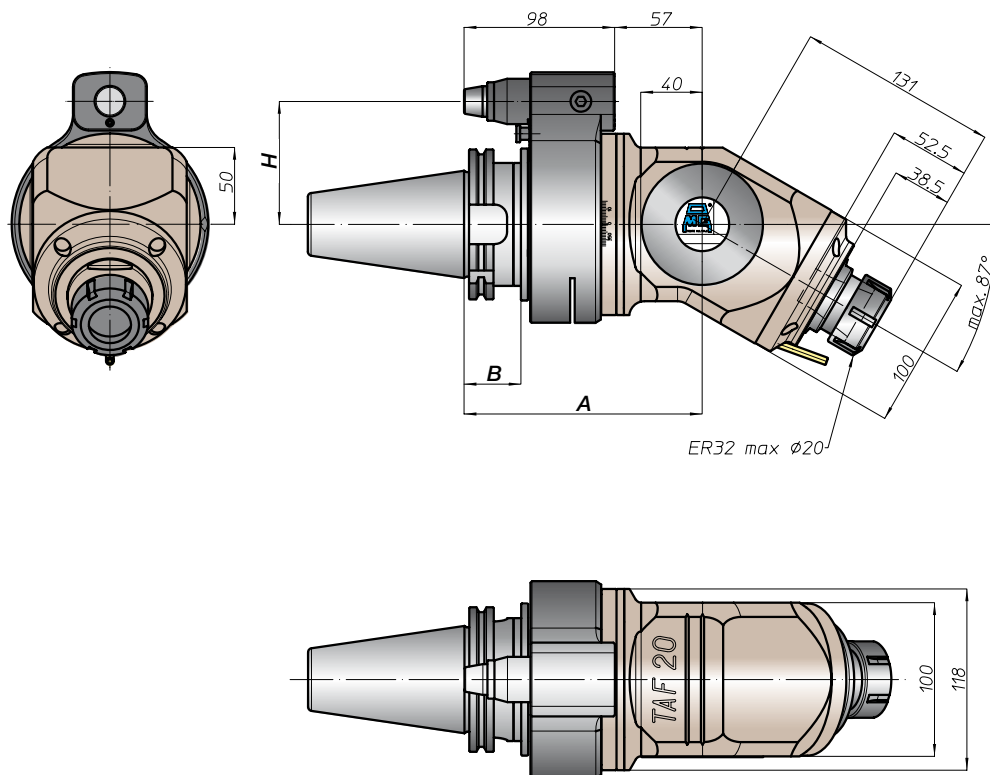
output

prestazioni/performance



tipi mandrino disponibili / available spindle types

- | | | | | |
|---------------------|---|----------------------------------|-----------------------|--------------------------------|
| 1 DIN6388-ER | 2 Albero portafrese
Milling shaft | 3 Weldon
Whistle-Notch | 4 DIN69893-HSK | 6 ABS
Licenza KOMET® |
| ER40 | Ø32 | Ø20 | HSK50 | ABS50 |



CONO SHANK	size	H			
		A	B	standard	optional
* DIN69871	-	155	35	-	-
	45			80	110
	50			80	110
* CAT	-	163	45	-	-
	50			80	110
* BT	-	164	46	-	-
	50			80	110
	100			80	110
HSK	-	159	-	-	-
	80			80	110
	100			80	110
CAPTO	-	155	-	-	-
	C6			80	110
	C8			80	110
KM	-	155	-	-	-
	80			80	110
	100			80	110
DIN2080	-	-	-	-	-
	-			-	-
	-			-	-
ANSIB5.18 NMTB	-	-	-	-	-
	-			-	-

* Option: Dual Contact

TAF20.PD

caratteristiche/features



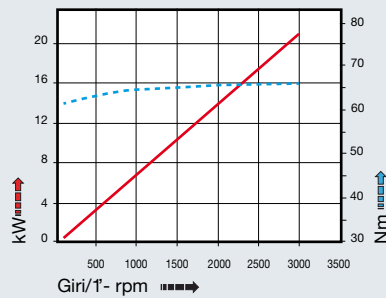
peso/weight



rotazione/rotation



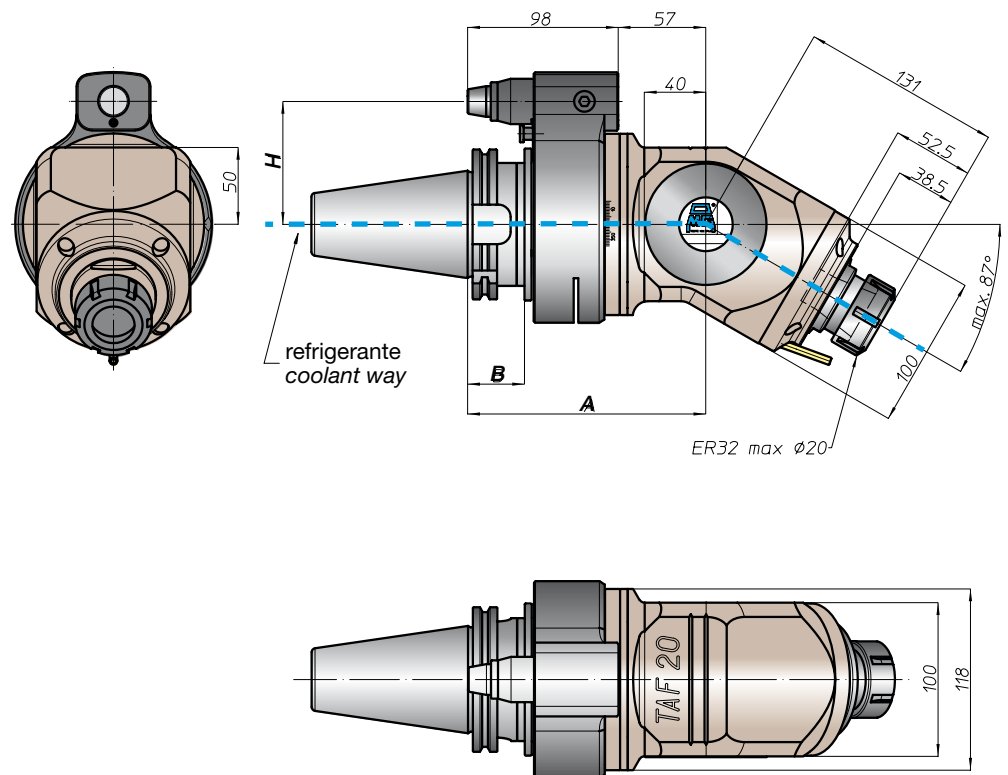
prestazioni/performance



CONO SHANK	size	A	B	H	
				standard	optional
* DIN69871 *	-	155	35	-	-
	45			80	110
	50			80	110
* CAT ANSIB5.50	-	163	45	-	-
	50			80	110
* BT	-	164	46	-	-
	50			80	110
HSK DIN69893	-	159	80	-	-
	80			80	110
	100			80	110
CAPTO ISO26623	-	155	80	-	-
	C6			80	110
KM	-	155	80	-	-
	80			80	110
	100			80	110
DIN2080	-	155	80	-	-
	-			-	-
	-			-	-
NMTB ANSIB5.18	-	155	80	-	-
	-			-	-

tipi mandrino disponibili / available spindle types

1 DIN6388-ER	3 Weldon Whistle-Notch	4 DIN69893-HSK	6 ABS Licenza KOMET®
ER40	Ø20	HSK50	ABS50



TA07P.T



caratteristiche/features



ø 7



M6



1-1



10000

peso/weight

head



1,5 kg

extension



L 100=2,2 kg
L 200=3,6 kg

rotazione/rotation

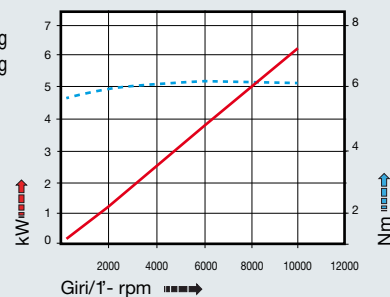


input



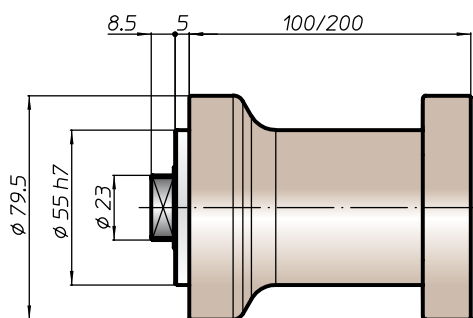
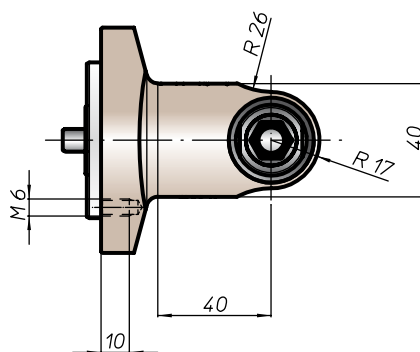
output

prestazioni/performance

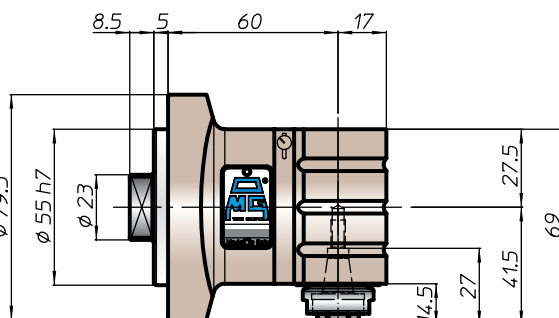


tipi mandrino disponibili / available spindle types

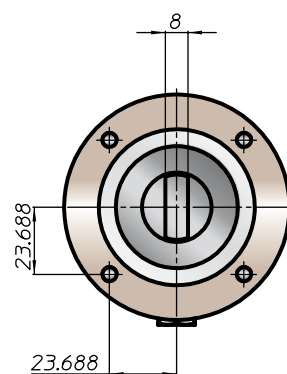
3 Weldon
Whistle-Notch
Ø8-Ø10



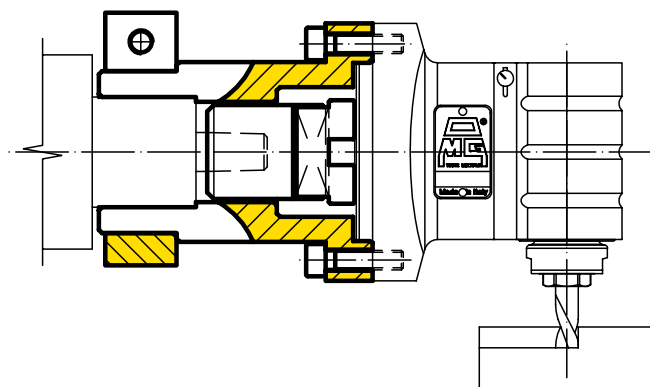
Prolunga
Extension



ER11 max Ø7



esempio di collegamento - *connection example*



TA13P.T



caratteristiche/features



ø 13



M10



1-1



8000

peso/weight



3,5 kg

rotazione/rotation

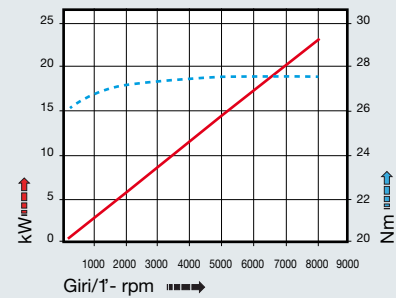


input



output

prestazioni/performance



tipi mandrino disponibili / available spindle types

1

DIN6388-ER

ER25

2

Albero portafrese

Milling shaft

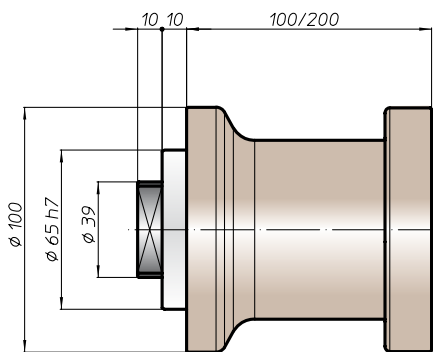
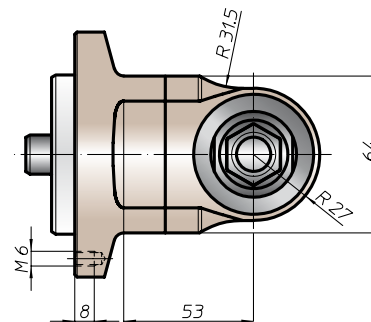
Ø16-Ø22

3

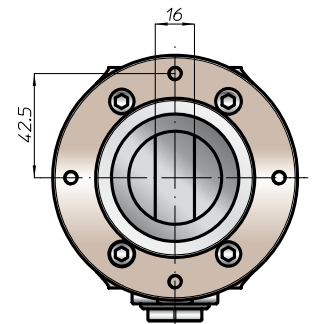
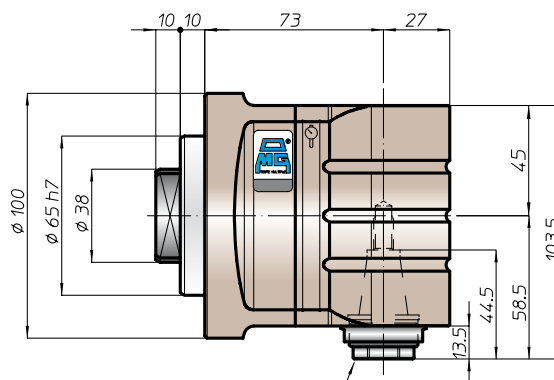
Weldon

Whistle-Notch

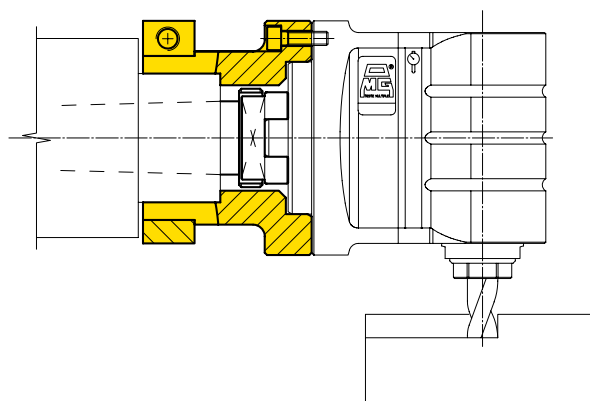
Ø16



Prolunga
Extension



esempio di collegamento - *connection example*



TA16P.T

caratteristiche/features



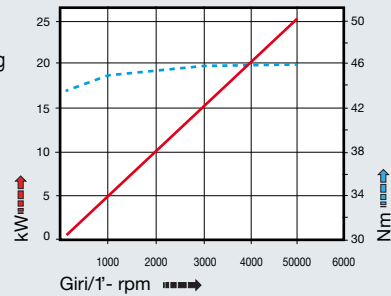
peso/weight



rotazione/rotation

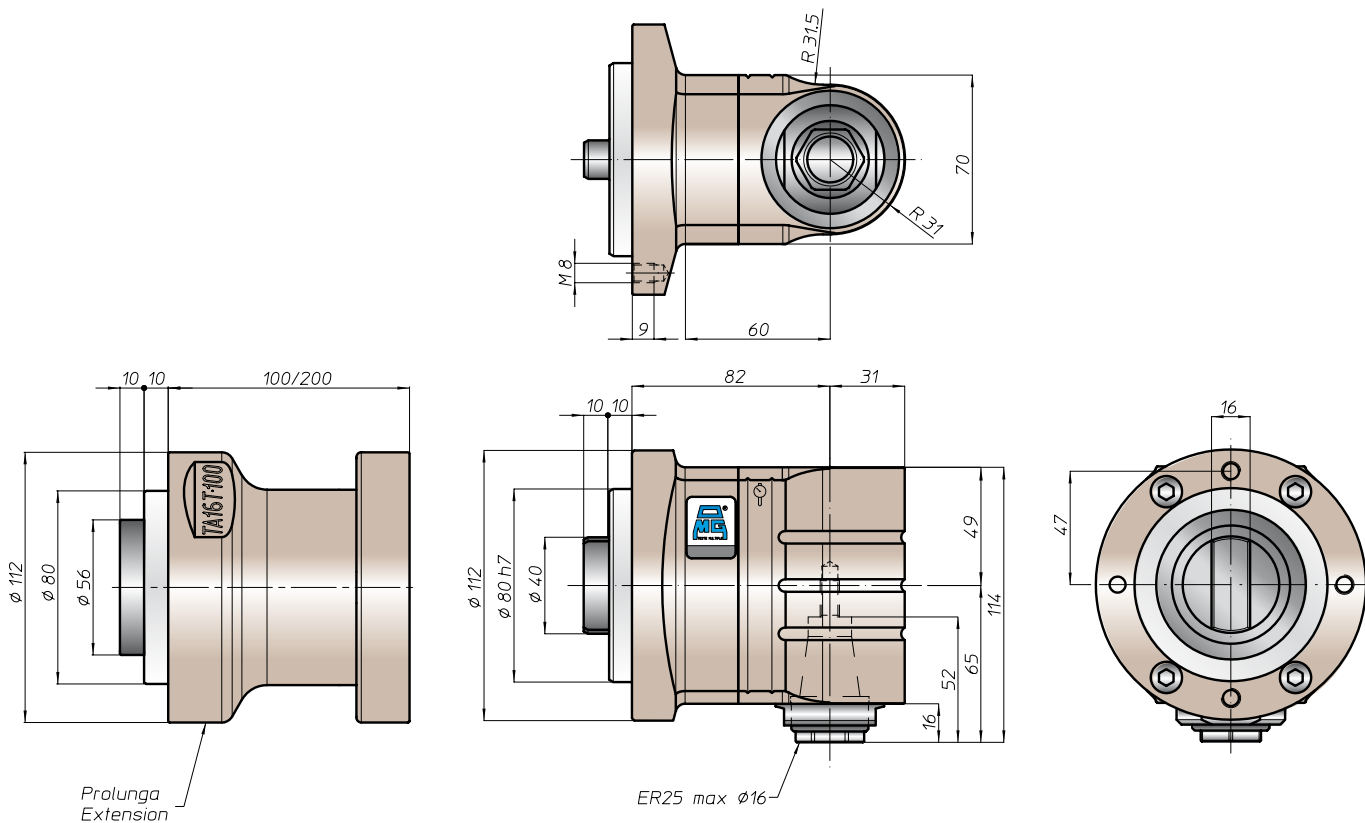


prestazioni/performance

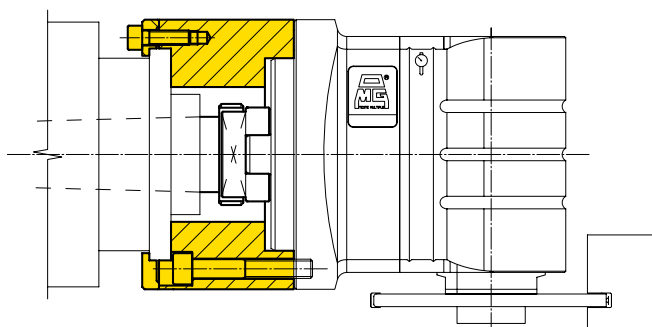


tipi mandrino disponibili / available spindle types

1 DIN6388-ER	2 Albero portafresa Milling shaft	3 Weldon Whistle-Notch	4 DIN69893-HSK	5 COROMANT CAPTO®	6 ABS Licenza KOMET®
ER32	Ø16-Ø22-Ø27-Ø32	Ø20	HSK32	C3	ABS32



esempio di collegamento - *connection example*



TA20.PT



caratteristiche/features



Ø 20



M14



1-1



3500

peso/weight



7,5 kg



L 100=7,5 kg
L 200=15 kg

rotazione/rotation

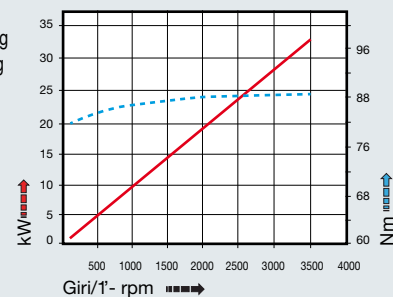


input



output

prestazioni/performance



tipi mandrino disponibili / available spindle types

1 DIN6388-ER
ER40

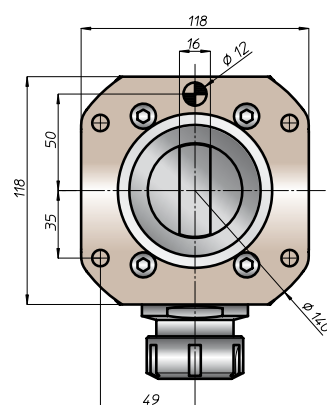
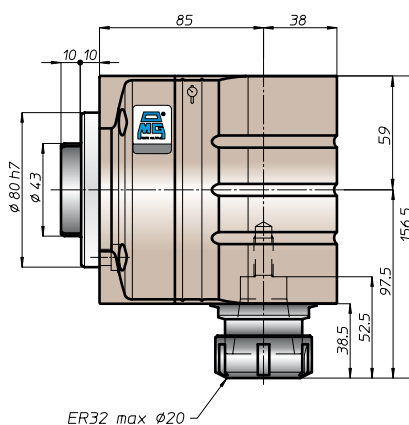
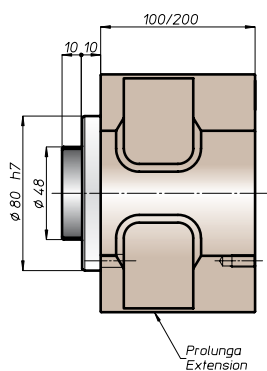
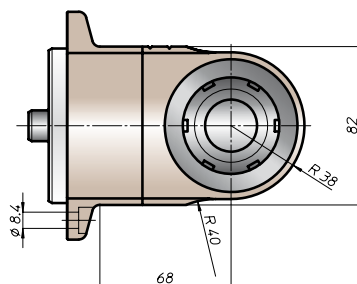
2 Albero portafrese
Milling shaft
Ø22-Ø27-Ø32

3 Weldon
Whistle-Notch
Ø20-Ø25

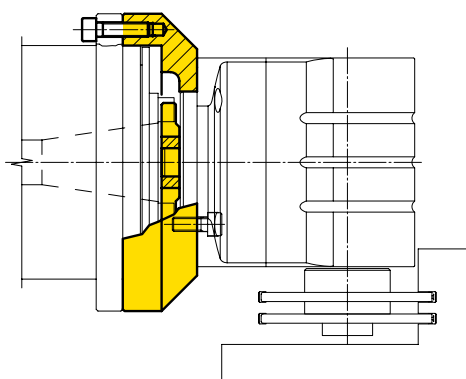
4 DIN69893-HSK
HSK40

5 COROMANT
CAPTO®
C4

6 ABS
Licenza KOMET®
ABS40



esempio di collegamento - *connection example*



TA20.30.T

caratteristiche/features



Ø 20



M14



1-1



3500

peso/weight



head
7,5 kg



extension
7,5 kg

L 100=7,5 kg
L 200=15 kg

rotazione/rotation

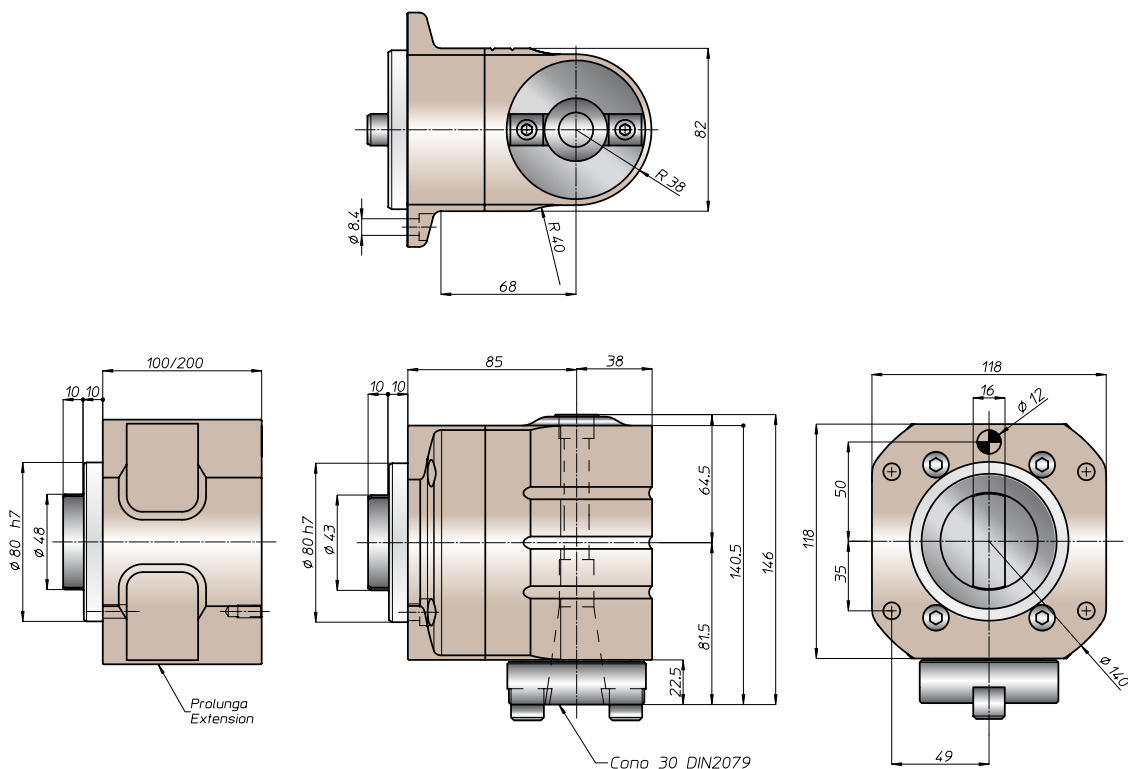
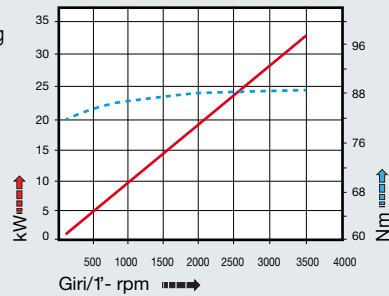


input



output

prestazioni/performance



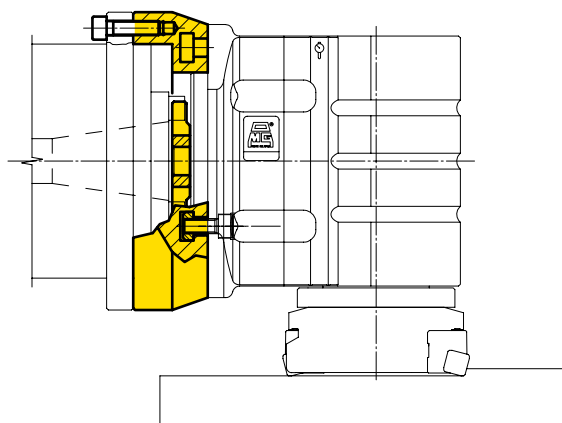
Nota:

- nel mandrino DIN2079 si possono utilizzare coni DIN2080-30, DIN69871-A30, MAS403-BT30

Note:

- on the spindle DIN2079 you can use shank DIN2080-30, DIN69871-A30, MAS403-BT30

esempio di collegamento - *connection example*



TA26.PT



caratteristiche/features



ø 26



M20



1-1



2500

peso/weight

head

13,5 kg

extension

L 100=12,5 kg
L 200=24 kg

rotazione/rotation

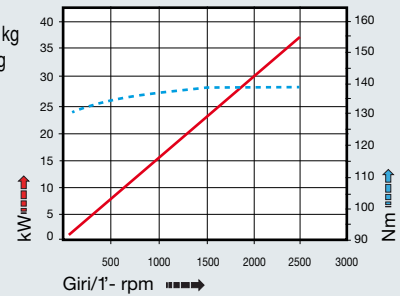


input



output

prestazioni/performance



tipi mandrino disponibili / available spindle types

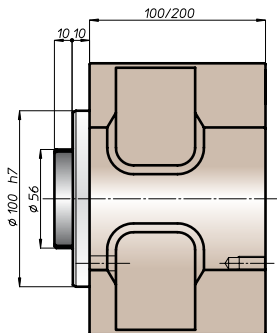
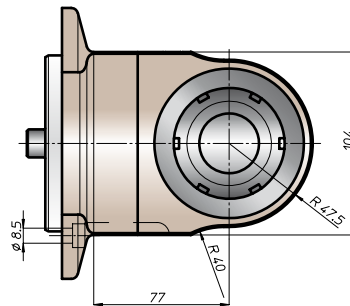
2 Albero portafrese
Milling shaft
Ø16-Ø27-Ø32

3 Weldon
Whistle-Notch
Ø32

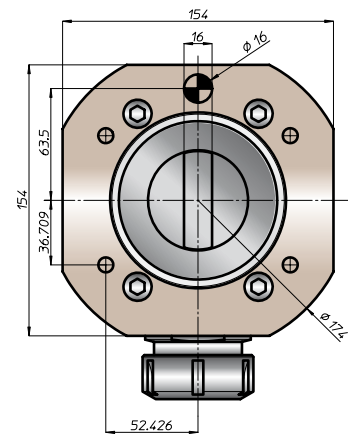
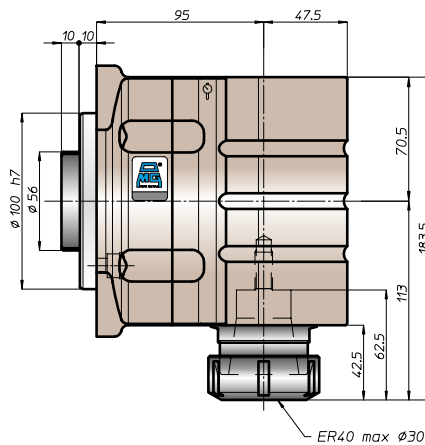
4 DIN69893-HSK
HSK63

5 COROMANT
CAPTO®
C4

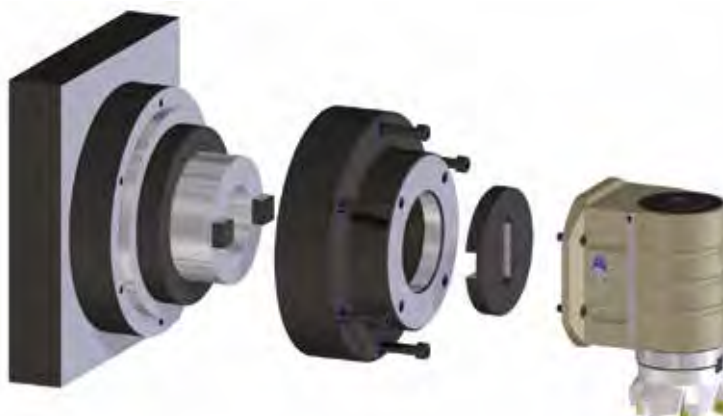
6 ABS
Licenza KOMET®
ABS50



Prolunga
Extension



esempio di collegamento - *connection example*



TA26.40.T

caratteristiche/features



ø 26



M20



1-1



2500

peso/weight



head
13,5 kg



extension
13,5 kg

L 100=12,5 kg
L 200=24 kg

rotazione/rotation

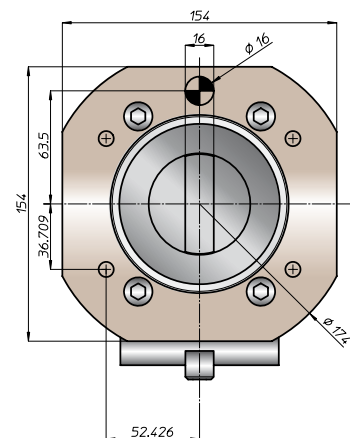
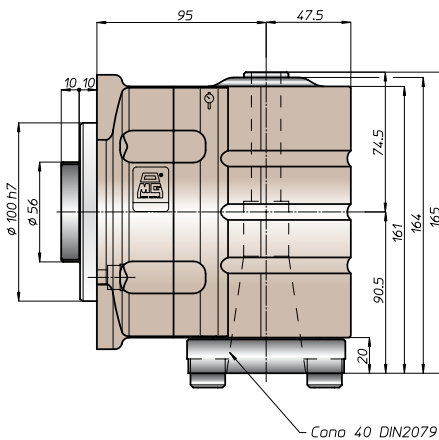
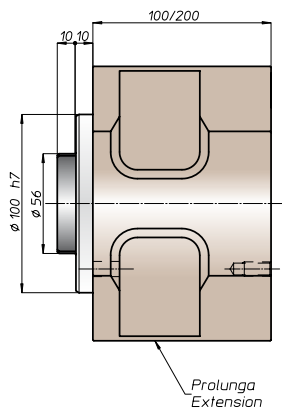
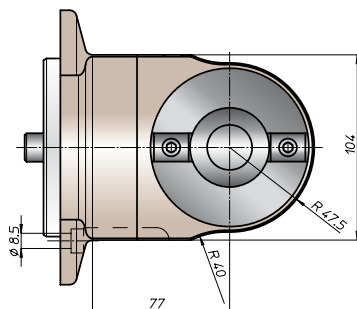
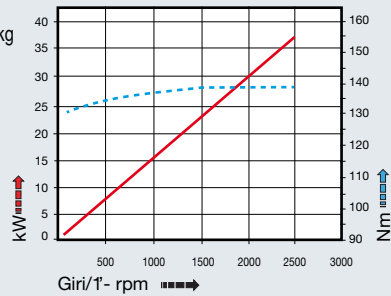


input



output

prestazioni/performance



Nota:

- nel mandrino DIN2079 si possono utilizzare coni DIN2080-40, DIN69871-A40, MAS403-BT40

Note:

- on the spindle DIN2079 you can use shank DIN2080-40, DIN69871-A40, MAS403-BT40

esempio di collegamento - *connection example*



BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

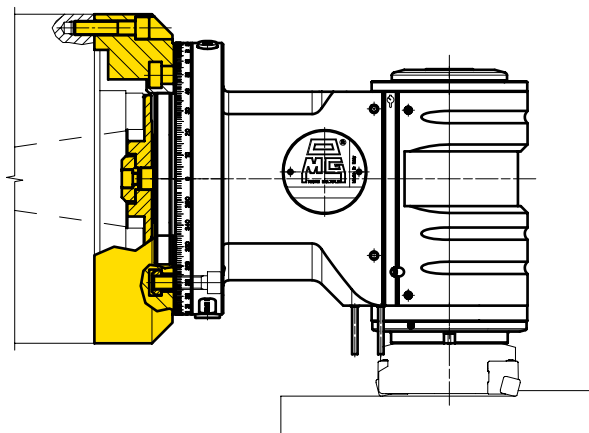
T

MT-TC-TC3

Accessori
Accessories

Appendice tecnica
Technical supplement

TA40.T



TA40.TD

caratteristiche/features



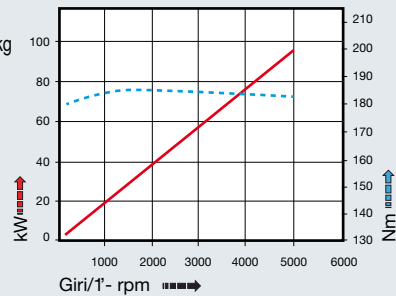
peso/weight



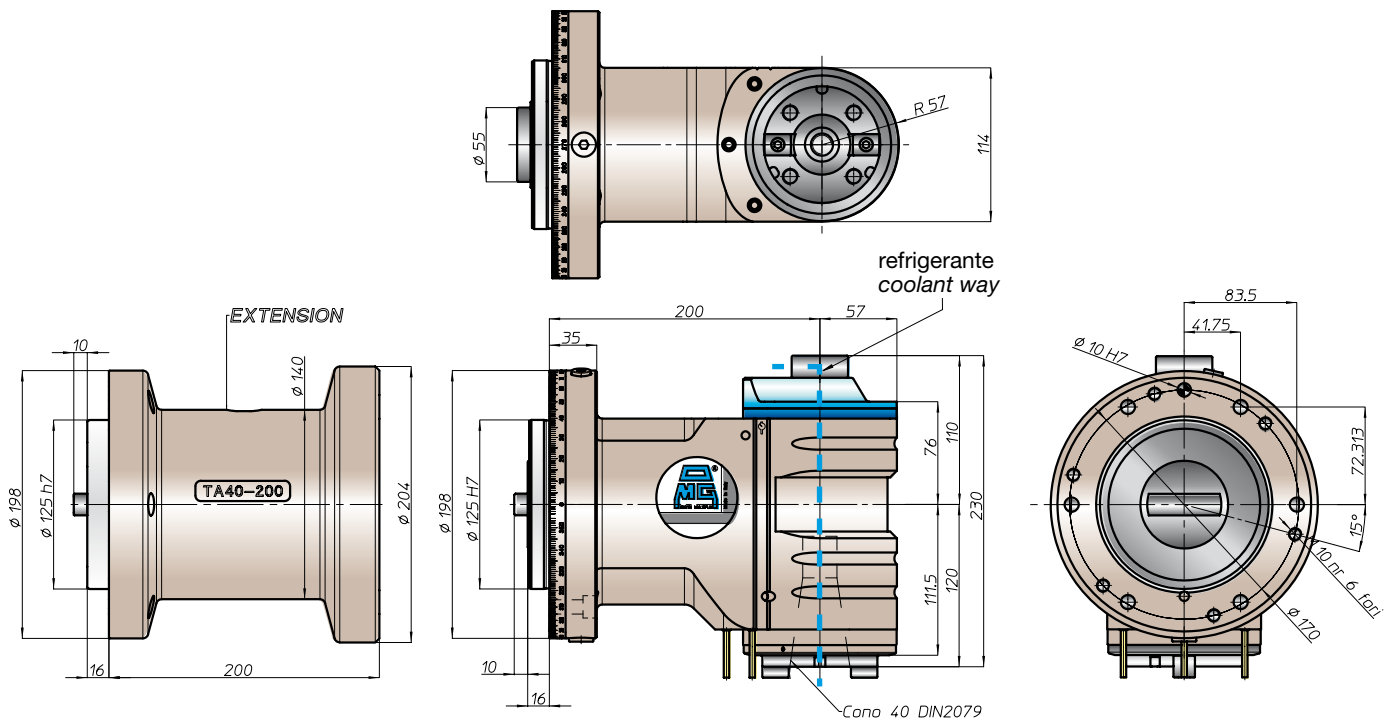
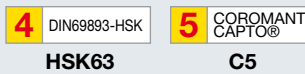
rotazione/rotation



prestazioni/performance



tipi mandrino disponibili / available spindle types



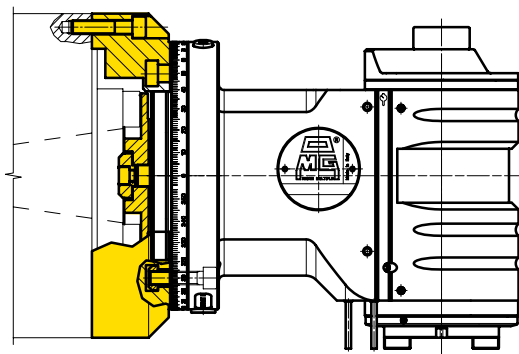
Equipaggiamento standard:

- pressurizzazione mandrino
- n. 3 ugelli orientabili vicino al mandrino
- nel mandrino DIN2079 si possono utilizzare coni DIN2080-40, DIN69871-A40, MAS403-BT40

Standard equipment:

- spindle front pressurization
- nr 3 adjustable nozzle near the spindle
- on the spindle DIN2079 you can use shank DIN2080-40, DIN69871-A40, MAS403-BT40

esempio di collegamento - connection example



TA50.T



caratteristiche/features



ø 45



M36



1-1



2500
4000

peso/weight



95 kg



L 300=110 kg

rotazione/rotation

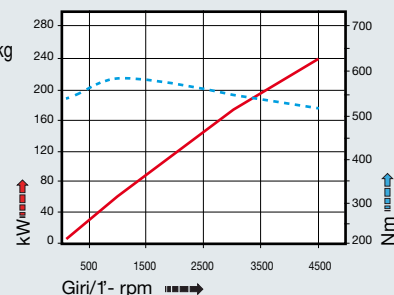


input



output

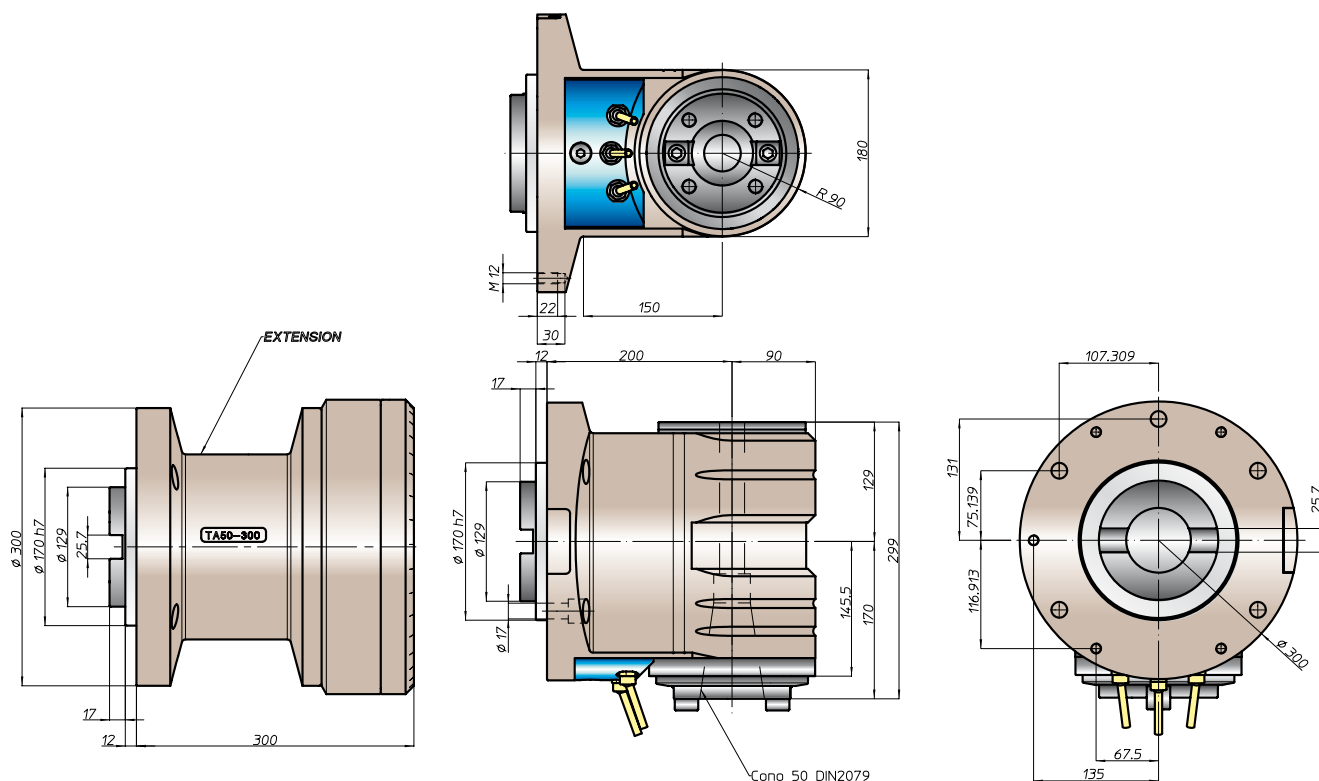
prestazioni/performances



tipi mandrino disponibili / available spindle types

4 DIN69893-HSK
HSK100

5 COROMANT
CAPTO®
C8



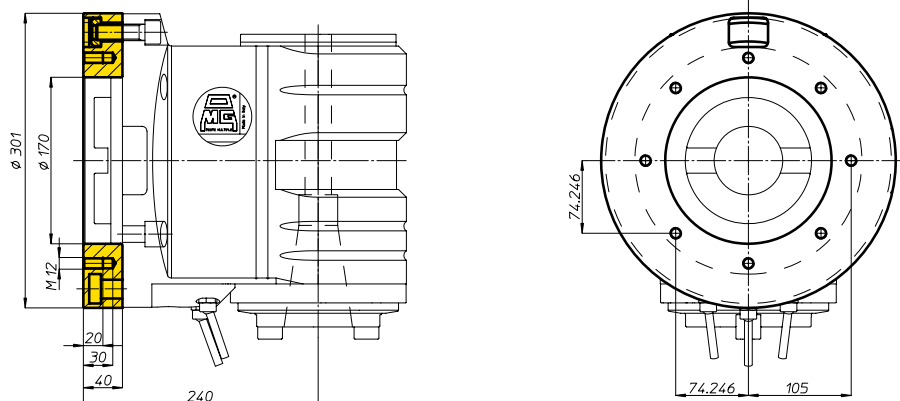
Equipaggiamento standard:

- pressurizzazione mandrino
- n. 3 ugelli orientabili vicino al mandrino
- nel mandrino DIN2079 si possono utilizzare coni DIN2080-50, DIN69871-A50, MAS403-BT50

Standard equipment:

- spindle front pressurization
- nr 3 adjustable nozzle near the spindle
- on the spindle DIN2079 you can use shank DIN2080-50, DIN69871-A50, MAS403-BT50

esempio di collegamento - *connection example*



TA50.TD

caratteristiche/features



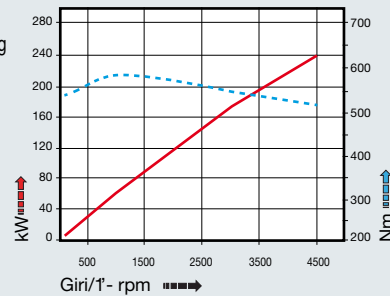
peso/weight



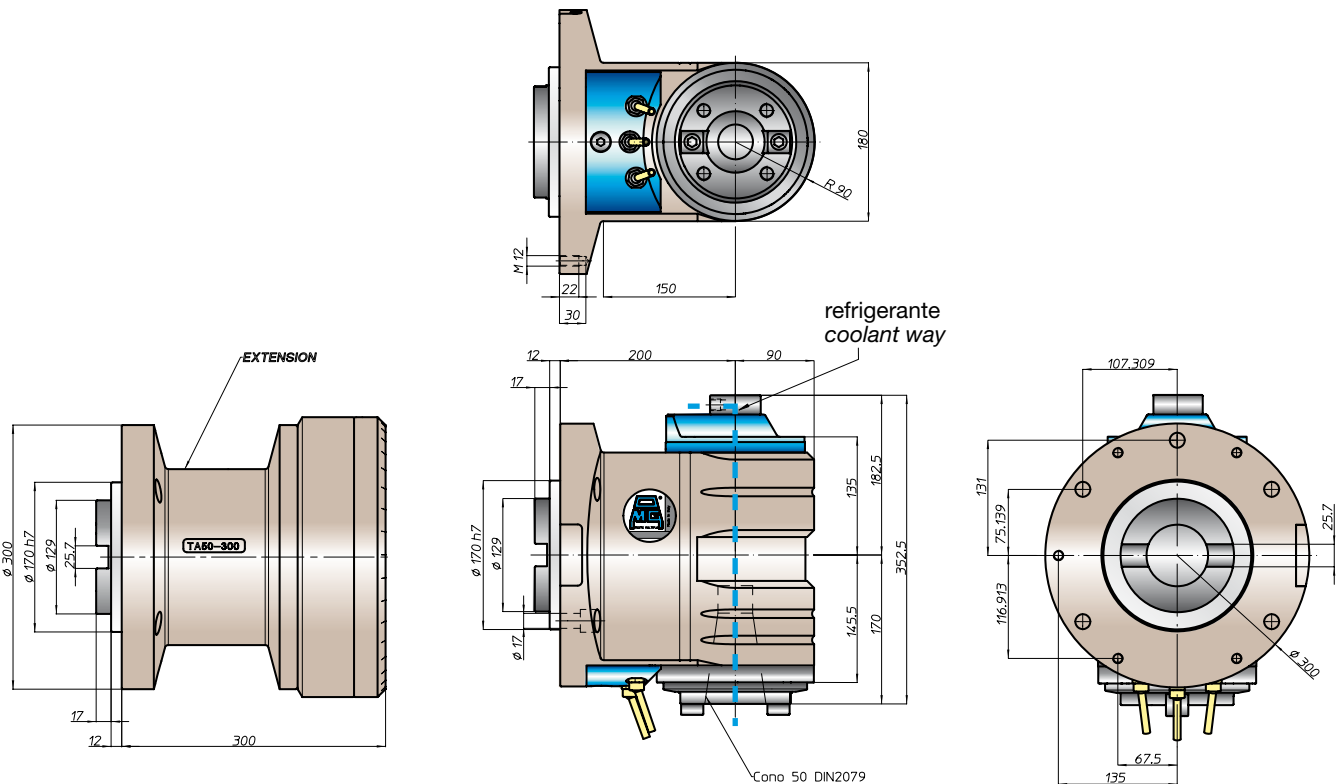
rotazione/rotation



prestazioni/performance



tipi mandrino disponibili / available spindle types



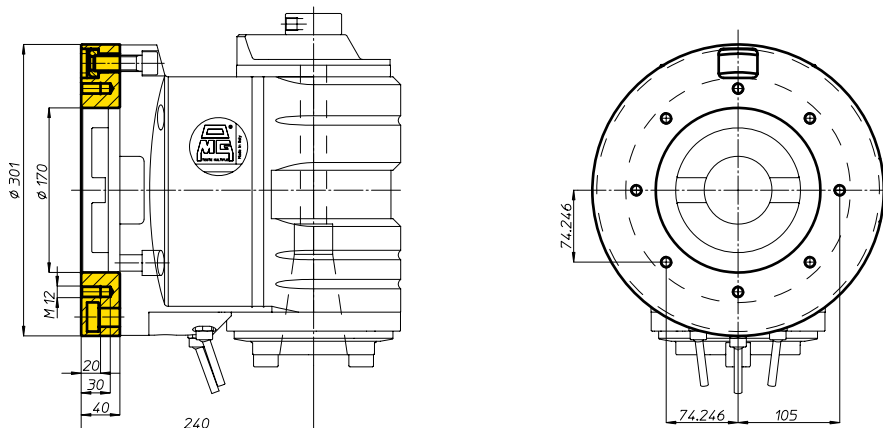
Equipaggiamento standard:

- pressurizzazione mandrino
- n. 3 ugelli orientabili vicino al mandrino
- nel mandrino DIN2079 si possono utilizzare coni DIN69871-A50, MAS403-BT50

Standard equipment:

- spindle front pressurization
- nr 3 adjustable nozzle near the spindle
- on the spindle DIN2079 you can use shank DIN69871-A50, MAS403-BT50

esempio di collegamento - *connection example*



TA..T Extended Gallery



TA..T Extended Gallery



BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori
Accessories

Appendice tecnica
Technical supplement



testa ad angolo - *angle head*

TA13.PVDI



caratteristiche/features



ø 13



M10



1-1



8000

peso/weight



4,5 kg

rotazione/rotation

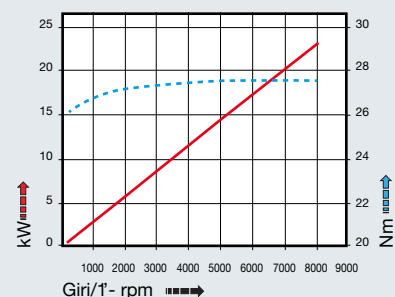


input



output

prestazioni/performance



tipi mandrino disponibili / available spindle types

1

DIN6388-ER

ER25

2

Albero portafresa

Milling Shaft

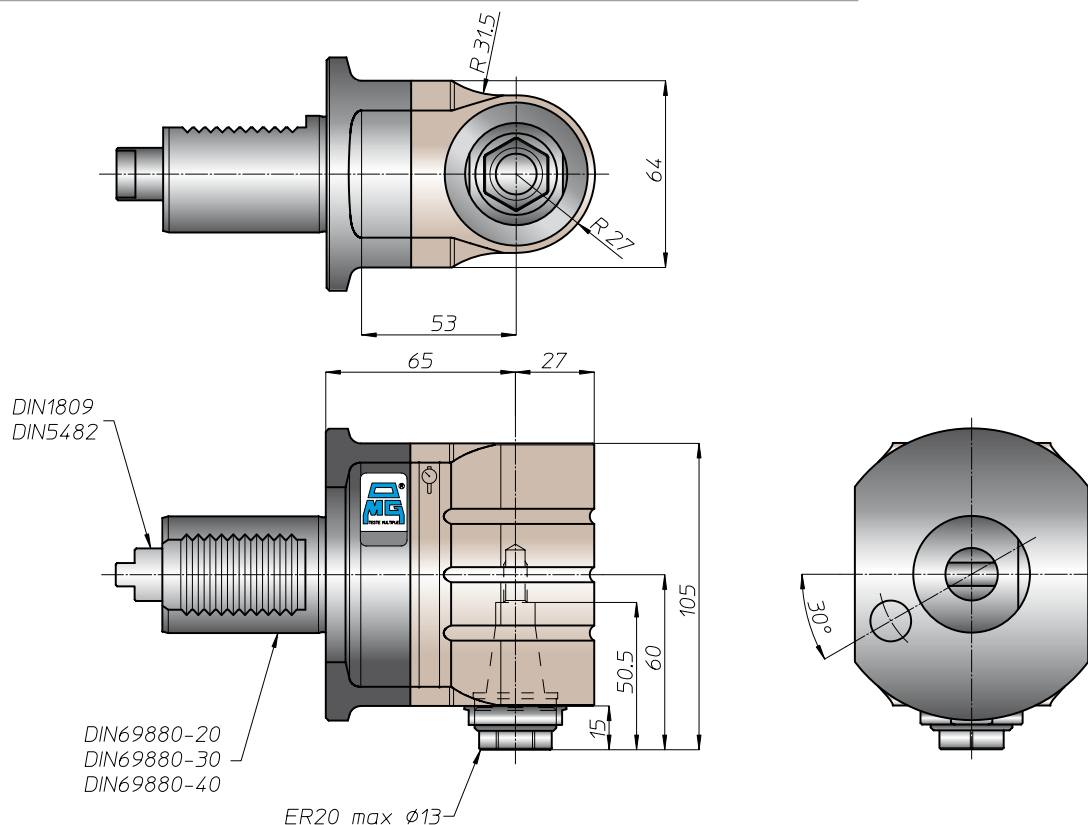
Ø16-Ø22

3

Weldon

Whistle-Notch

Ø16



soluzioni speciali - *special solutions*



TA16.PVDI

caratteristiche/features



ø 16



M12



1-1



5000

peso/weight



6,5 kg

rotazione/rotation

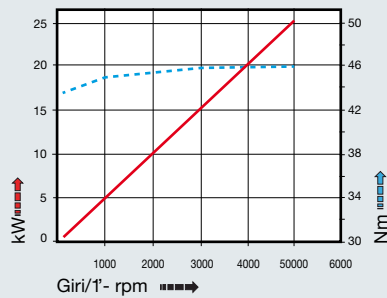


input



output

prestazioni/performance



tipi mandrino disponibili / available spindle types

1

DIN6388-ER

ER32

2

Albero portafresa

Milling shaft

Ø16-Ø27-Ø32

3

Weldon

Whistle-Notch

Ø20

4

DIN69893-HSK

HSK32

5

COROMANT

CAPTO®

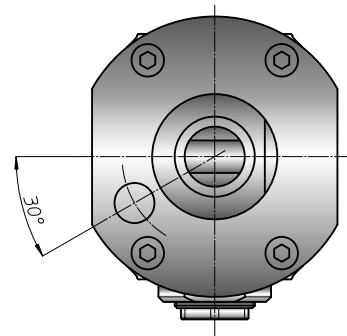
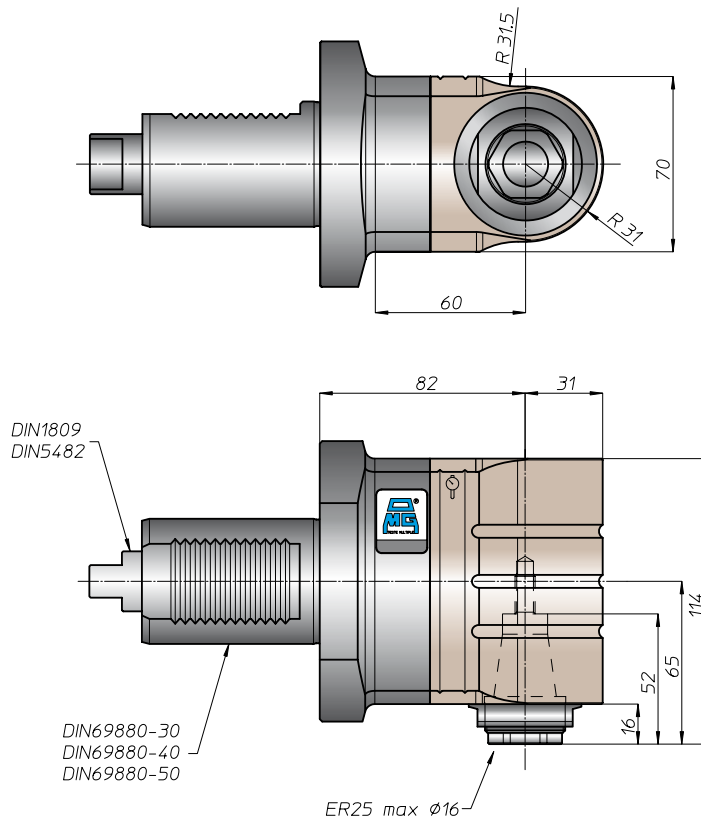
C3

6

ABS

Licenza KOMET®

ABS32



soluzioni speciali - special solutions



testa ad angolo - *angle head*

TAV10.PVDI

caratteristiche/features



ø 10



M8



1-1



4000

peso/weight



3,5 kg

rotazione/rotation

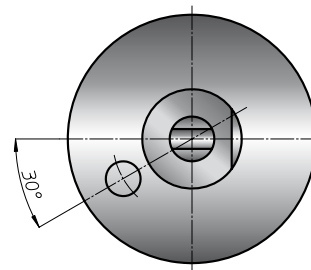
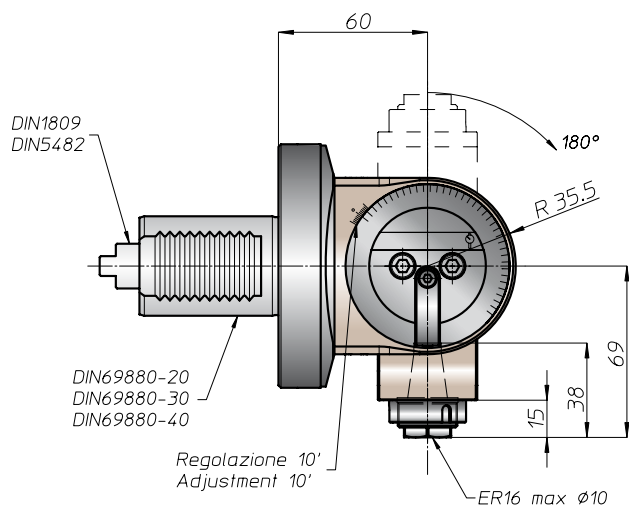
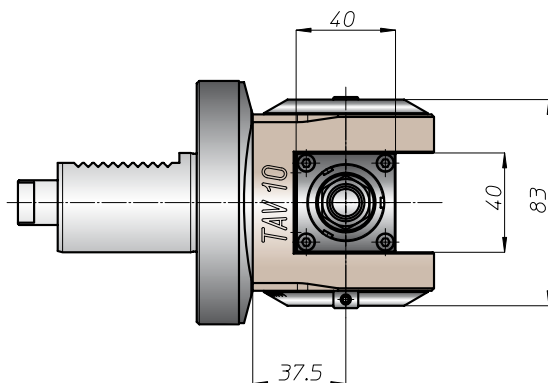
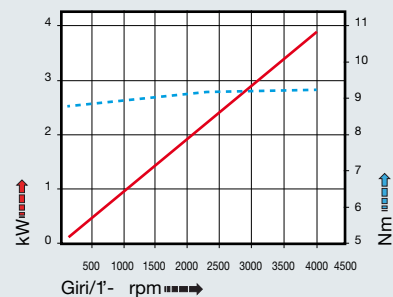


input



output

prestazioni/performance



soluzioni speciali - *special solutions*



TAV13.PVDI

caratteristiche/features



ø 13



M10



1-1



3000

peso/weight



5,5 kg

rotazione/rotation

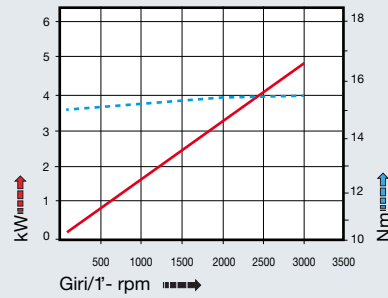


input



output

prestazioni/performance



tipi mandrino disponibili / available spindle types

1

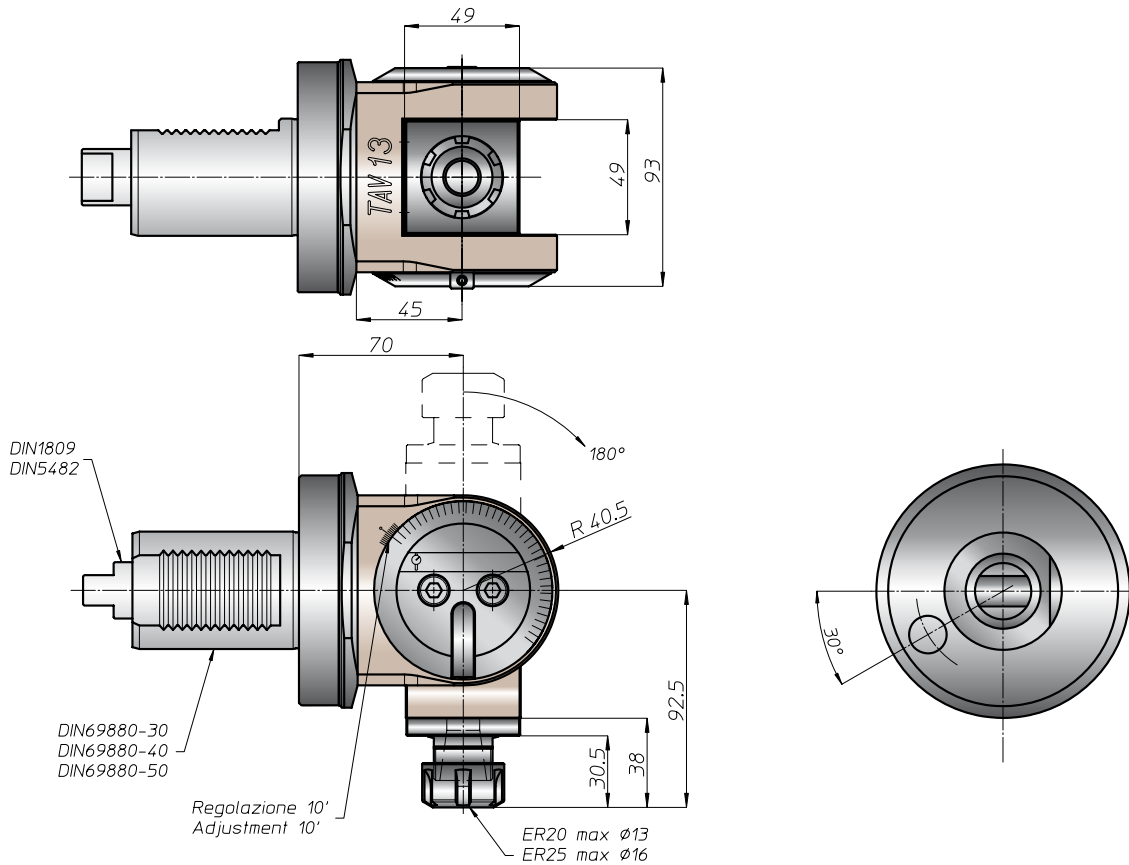
DIN6388-ER

ER25

3

Weldon Whistle-Notch

Ø16



soluzioni speciali - special solutions





Il gruppo antirotante ricopre una funzione di fondamentale importanza nella qualità di lavorazione della testa ad angolo. Per questo motivo i tecnici della OMG hanno studiato e messo a punto un antirotante di nuova concezione i cui punti salienti sono:

- Il perno conico
- La registrazione assiale del perno
- Adduzione del liquido passante per il corpo testa

Il perno conico e la propria registrazione assiale di mm 1.5 permettono una maggiore rigidità del sistema antirotante rispetto ai tradizionali, dotati di perni di Ø18 mm perché si eliminano i giochi con conseguente miglioramento della rigidità sia angolare che assiale.

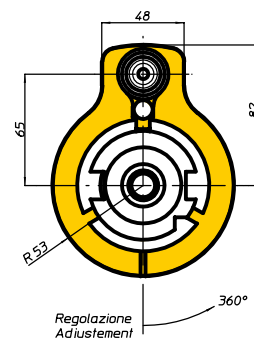
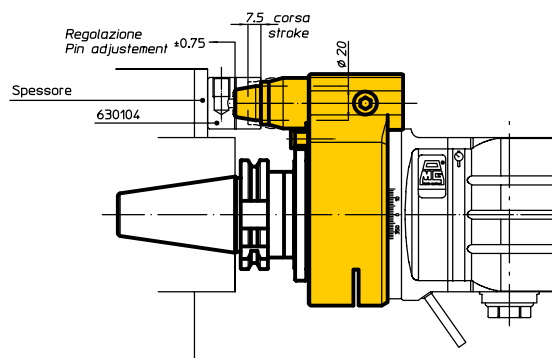
L'adduzione del liquido passante per il corpo testa, la cui uscita avviene tramite un ugello direzionabile, offre il vantaggio di non avere tubi "volanti" che possono muoversi durante le lavorazioni.



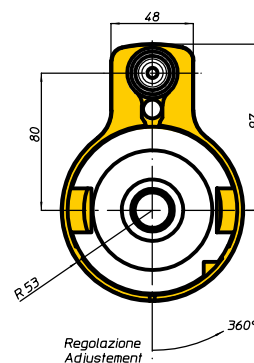
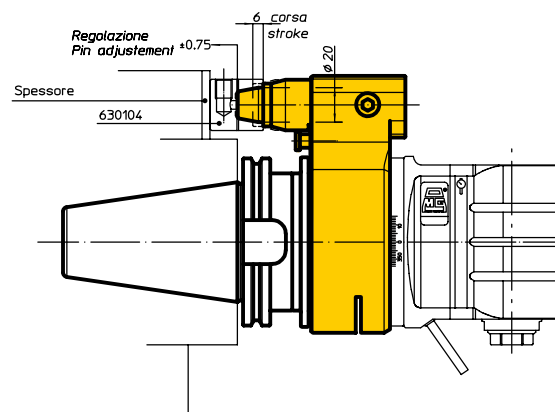
Quando possibile, nella Vostra applicazione, posizionate il perno conico dalla parte opposta al mandrino della testa ad angolo.

Antirotante Torque arm

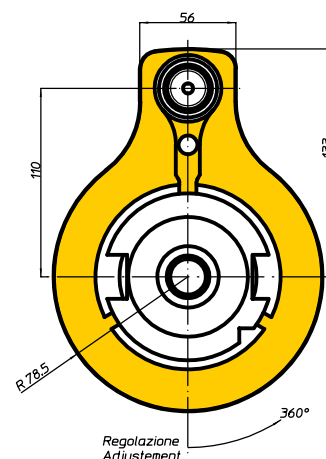
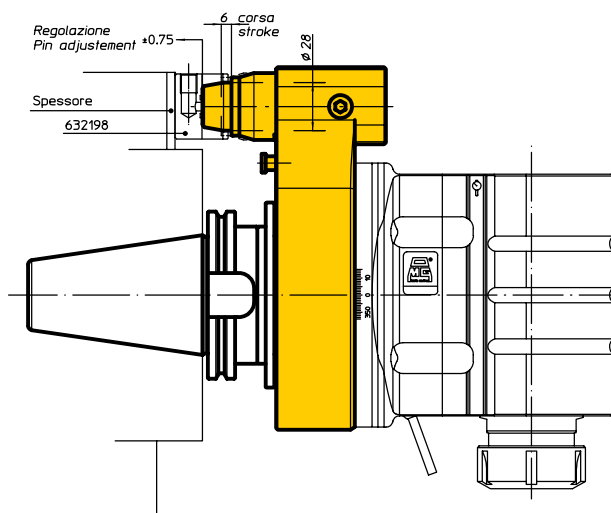
Teste ad angolo con interasse H=65
Angle heads with centre distance H=65



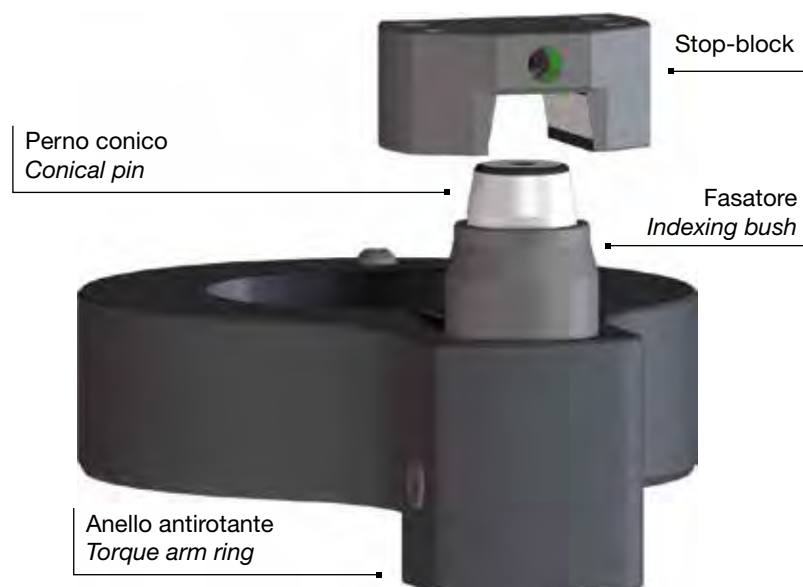
Teste ad angolo con interasse H=80
Angle heads with centre distance H=80



Teste ad angolo con interasse H=110
Angle heads with centre distance H=110



Stop-block



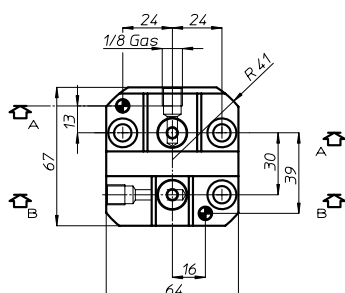
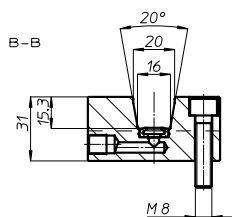
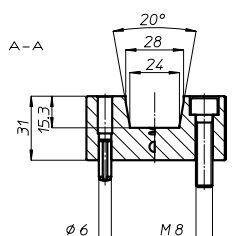
The torque arm system is crucial as far as angle-head machining quality is concerned. For this reason OMG technicians have designed and developed a new system with the following characteristics:

- conical pin
- axial pin adjustment
- coolant through the head body

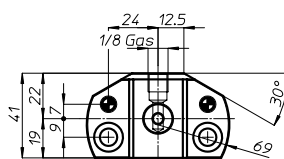
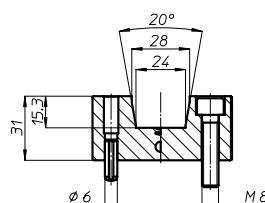
The conical pin and its 1.5 mm axial adjustment ensure upgraded antirotation system strength compared to traditional systems, featuring $\varnothing 18$ mm pin, because play is eliminated, thereby improving both angular and axial strength.

By the pin the coolant through the head, thanks to an adjustable nozzle, the added advantage is achieved of eliminating "free" pipes that could move during machining operations.

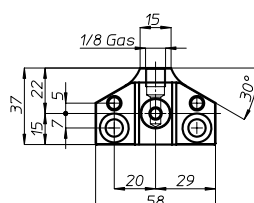
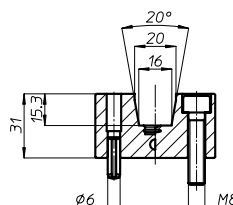
Double Stop-block (cod. 632199)



Stop-block (cod. 632198)



Stop-block (cod. 630104)



Position the conical pin on the opposite side of the angle head spindle when possible in your application.





Il gruppo antirotante **TriBlock** ricopre una funzione di fondamentale importanza quando alla testa ad angolo è richiesto di:

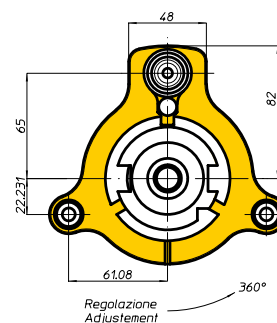
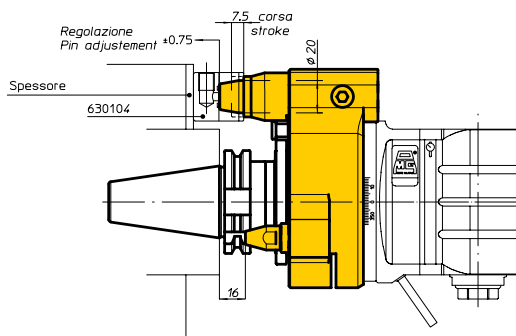
- eseguire una lavorazione più pesante
- essere più lunga dello standard
- finitura superficiale eccellente

Il **TriBlock** è dotato di tre punti di appoggio di cui uno è lo standard come nei precedenti e due supplementari da registrare tramite un rasamento. Questi tre punti, allargando l'appoggio di base della testa ad angolo, consentono di ottenere una rigidità superiore allo standard. Quando poi si richiede alla testa di essere immagazzinata su di un supporto esterno al magazzino standard, ecco che il **TriBlock** utilizza i propri tre punti per posizionare la testa.

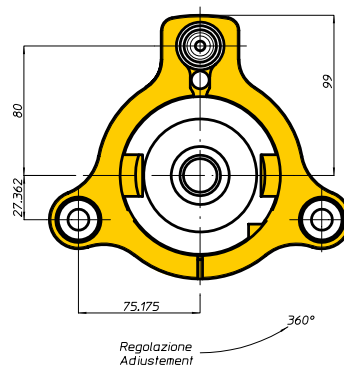
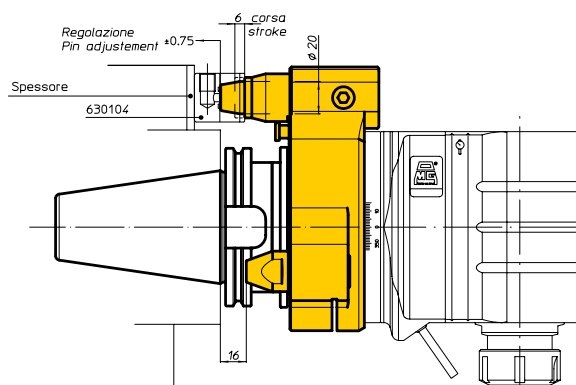
Antirotante/Torque arm

TriBlock

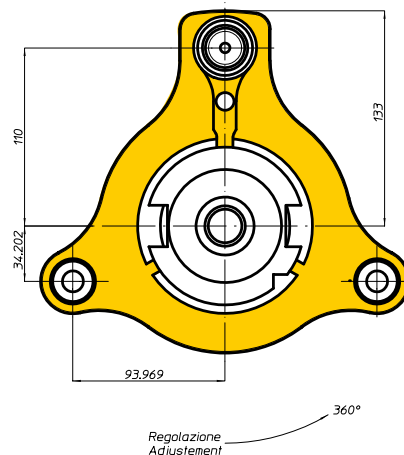
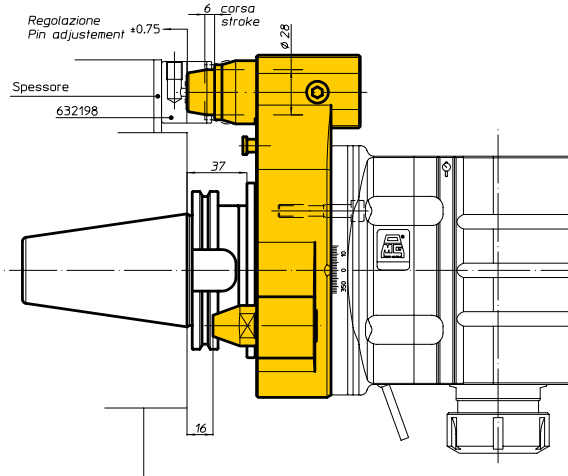
Teste ad angolo con interasse H=65
Angle heads with centre distance H=65



Teste ad angolo con interasse H=80
Angle heads with centre distance H=80



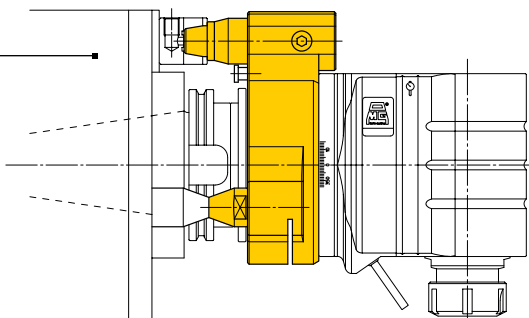
Teste ad angolo con interasse H=110
Angle heads with centre distance H=110



Antirrotante/Torque arm

TriBlock

Sul mandrino macchina
On spindle machine

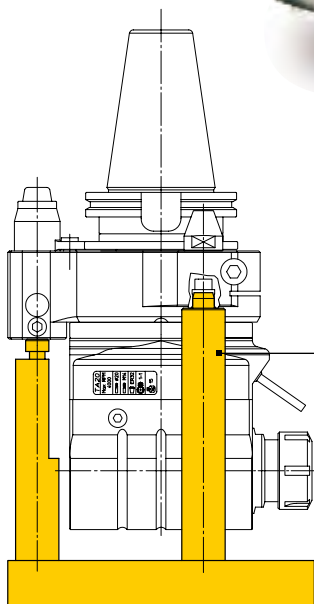


TFS 19907

Testa ad angolo per fresatura
componente motore a reazione.
Peso Kg 45,5
Milling angle head for jet engine.
Weight Kg 45,5

TFS 39195

Testa bimandrino di fresatura n° 2 frese
Ø 100 peso Kg 33
Twin milling head, nr. 2 milling cutter
Ø 100 weight Kg 33



Sul supporto da tavola
On rack table



The **TriBlock** system is of crucial importance when it comes to:

- doing difficult jobs
- having a head that is longer than standard
- achieving an excellent surface finish

The **TriBlock** system features three supporting points, one of which is standard, as in the previous version, plus two additional ones that need adjusting by means of a spacer. These three points, by extending the angle-head supporting base, provide above-average standards of strength.

When the head has to be stored on a rack table outside the standard magazine, the **TriBlock** system uses the three points to storage the angle heads.

BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori
Accessories

Appendice tecnica
Technical supplement



Il sistema antirotante **QuadBlock** è un sistema all'avanguardia per equipaggiare Teste ad Angolo dove si richiede alta asportazione e alta rigidità dell'insieme "testa ad angolo-macchina". Utilizzabile nel montaggio manuale, esso consiste in un anello antirotante completo di quattro perni di contrasto suddivisi equamente sui 360°. Tale disposizione consente di poter ruotare la Testa ad Angolo in automatico con un semplice movimento della macchina, se questa ne ha le capacità. Il vantaggio di poter lavorare quattro facce del pezzo senza sostituire la Testa ad Angolo si concretizza con la riduzione dei costi previsti per gli utensili.

L'evoluzione del sistema **QuadBlock** per le macchine con cambio automatico, consente di utilizzare la Testa ad Angolo come un prolungamento del mandrino macchina ruotato dei gradi richiesti dal cliente. È possibile inoltre sostituire il portautensile in automatico ed ampliare infinitamente la versatilità della macchina utensile avendo a disposizione quei servizi normalmente presenti sul mandrino macchina:

- Aria pulizia del portautensile
- Liquido refrigerante centro utensile alta pressione
- Liquido refrigerante esterno utensile
- Liquido bloccaggio-sbloccaggio utensile
- Controllo presenza utensile

Tutto ciò per consentire l'utilizzo di portautensili tipo Capto, HSK, DIN69871. Mettiamo a disposizione il nostro ufficio tecnico e la nostra esperienza per personalizzare al meglio il Vostro sistema.

Antirotante/Torque arm

QuadBlock 

TAS13609

Fresatura su corpo in fusione di ghisa. Peso kg 36.
Milling on cast iron pump's body. Weight 36 kg.



TAS13209

Lavorazione di finitura interna sulle motore idraulico. Peso kg 36.
Internal finishing work for hydraulic motor's body. Weight 21 kg.



TAS16209

Linee di servizio per il mandrino HSK63F con cambio automatico dell'utensile, sensore presenza utensile in radiofrequenza. Peso kg 28.
Utility line for HSK63F spindle with automatic tool change, radio-frequency switch to verify tool presence. Weight 28 kg.



Antirotante/Torque arm

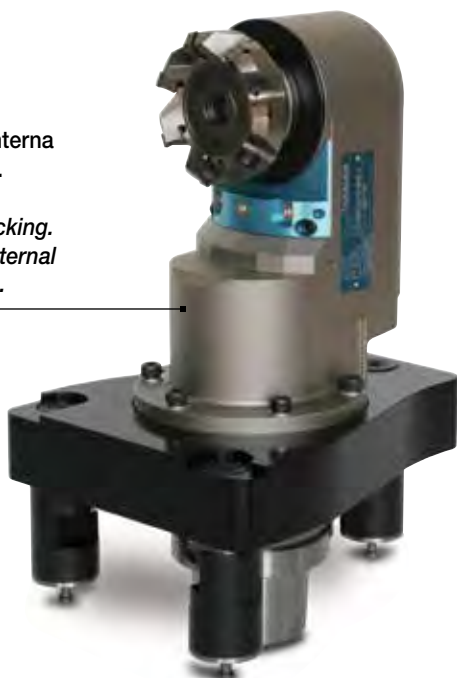
QuadBlock 

TAS24408

Lavorazione di fresatura interna
corpo pinza freno in ghisa.

Peso Kg 28.

*Triblock with automatic locking.
Cast iron brake housing internal
milling work. Weight 28 kg.*



TA12907

Lavorazione di fresatura generica
struttura elettrosaldada di acciaio.

Peso Kg 48.

*Special Quadblock with automatic
locking. General milling work on
electro-welded steel structure.
Weight 48 kg.*



TAS08606

Servizi per mandrino CAPTO C4 con
cambio automatico dell'utensile.

Peso kg 36.

*Spindle with utility line for CAPTO C4
with automatic tool change.
Weight kg 36.*



The **QuadBlock** torque arm is a forefront system to equip Angle Heads which are requested with a high removal machining capacity and with extremely high rigidity in coupling with the machine tool. It can be used with a manual tool change and is made by a torque arm ring complete with four counterposed pins with same distance each other on the 360°. Such a layout allows an automatic rotation of the Angle Head with a simple movement of the machine if featured to do it. The possibility of machining four faces of the piece without replacing the Angle Head is giving the advantage of reducing costs of tools equipment.

The evolution of the **QuadBlock** system on automatic tool change machines allows to use the Angle Head like an extension of the machine spindle with the degree rotations required by the customer. It is also possible to automatically change the tool holder and to infinitely widen the versatility of the machine tool getting those utilities normally available on the machine spindle:

- tool-holder cleaning air
- through-tool high pressure coolant
- side-tool coolant
- tool locking-unlocking liquid
- tool presence control

All these to allow using tool-holders like Capto, HSK, DIN69871. Our R&D department is at your disposal with his experience to customize your system at its best.

BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

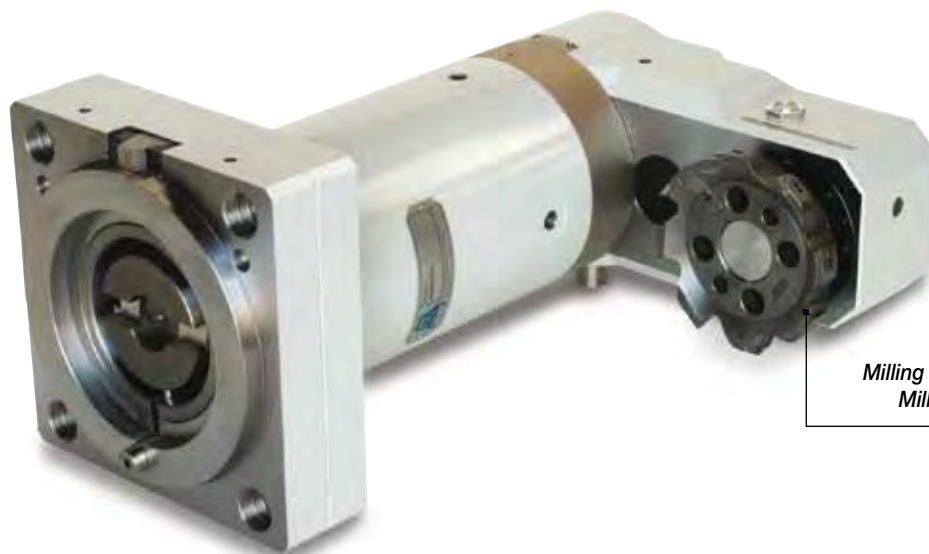
MT-TC-TC3

Accessori
Accessories

Appendice tecnica
Technical supplement

Teste ad angolo speciali

Special angle heads



TFS 41304

Testa ad angolo di fresatura
con mandrino ribaltato.
Fresa Ø 200. Peso Kg 327,5.
*Milling angle head with reverse spindle.
Milling tool Ø 200. Weight Kg 327,5.*



TFS 05303

Testa ad angolo di fresatura con
fresa diam. 7 peso Kg 8
*Milling angle head with milling
cutter diam. 7 weight Kg 8*



TFS 23301

Testa ad angolo di foratura
a tre mandrini peso kg 5,9
*Drilling angle head with
three spindles weight kg 5,9*



TAS 15505

Testa ad angolo di foratura e fresa-
tura, attacco utensile CAPTO C4
automatico. Peso Kg 130.
*Drilling and milling angle head, auto-
matic tools changer CAPTO C4.
Weight Kg 130.*

TFS 39998

Testa ad angolo universale.
Preso utensili ISO50, peso kg 580
*Angle head with tool
shank ISO50, weight kg 580*

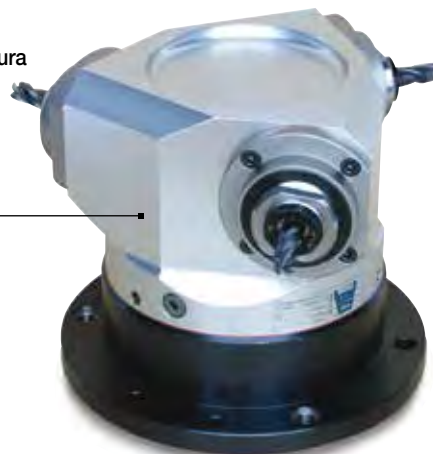
Teste ad angolo speciali

Special angle heads



TFS 34004

Testa ad angolo di foratura
a 3 mandrini a 120°.
Peso Kg 18.
*Drilling angle head, n 3
spindles at 120°.
Weight Kg 18.*



TFS 36699

Testa ad angolo bimandrino
registrabile, peso kg 29
*Adjustable twin angle head,
weight kg 29*



TA 09603

Testa ad angolo di alesatura con
utensile Ø 160 peso Kg 77
*Boring angle head with tools
Ø 160 weight Kg 77*



TAF 37503

Doppia testa ad angolo di foratura.
Twin drilling angle head.



TFS 08993

Testa ad angolo speciale
con doppia coppia
di mandrini contrapposti
peso kg 18
*Angle head with two
opposite twin spindles
weight kg 18*



TFS 06003

Testa ad angolo di fresatura con
fresa Ø 110 peso Kg 210
*Milling angle head with milling
cutter Ø 110 weight Kg 210*

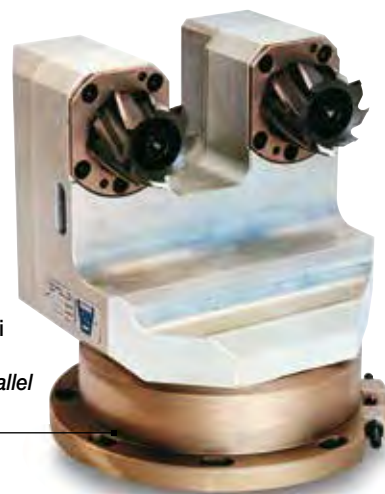
Teste ad angolo speciali

Special angle heads



TAS 33206

Testa bimandrino di fresatura
per frese Ø 160 peso kg 63
*Twin milling head with
milling cutter Ø 160 weight kg 63*

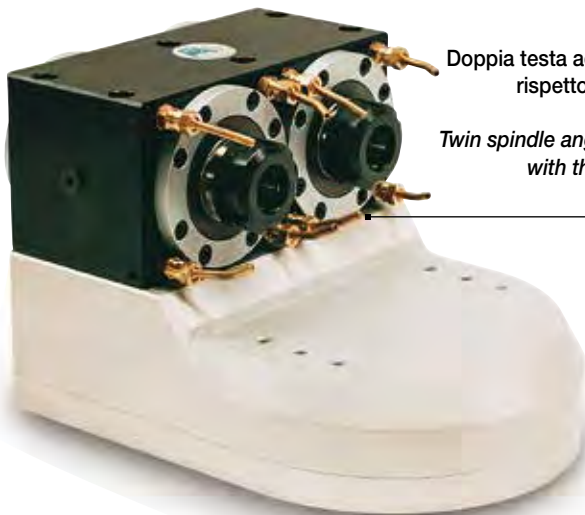


TFS 21701

Testa di fresatura a due mandrini
paralleli, peso kg 14
*Milling angle head with two parallel
spindles, weight kg 14*

TFS 34495

Testa bimandrino di fresatura n. 2 frese Ø 130
peso kg 290
*Twin milling head, nr. 2 milling cutter Ø 130
weight kg 290*



TFS 16696

Doppia testa ad angolo disassata
rispetto all'asse macchina
peso kg 24
*Twin spindle angle head not in line
with the machine spindle
weight kg 24*



TFS 36994

Testa bimandrino di fresatura
n. 2 frese Ø 60, peso kg 15,5
*Twin milling head, nr. 2 milling
cutter Ø 60, weight kg 15,5*



Teste ad angolo speciali

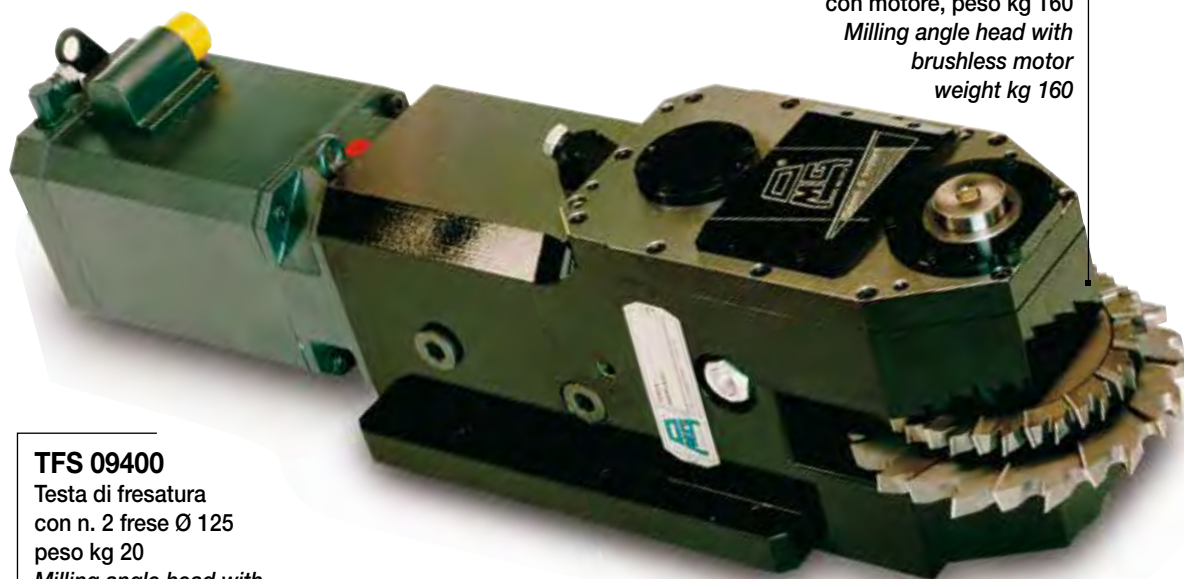
Special angle heads



TFS 12101
Testa di fresatura con cono ISO30
peso kg 16
*Milling angle head with ISO30
weight kg 16*



TFS 13094
Testa ad angolo disassata
rispetto all'asse macchina
peso kg 17
*Angle head not in line
with the machine spindle
weight kg 17*



TFS 50900
Testa di fresatura
con motore, peso kg 160
*Milling angle head with
brushless motor
weight kg 160*



TFS 09400
Testa di fresatura
con n. 2 frese Ø 125
peso kg 20
*Milling angle head with
nr. 2 milling cutter Ø 125
weight kg 20*



TFS 24196
Testa ad angolo bimandrino per
fresatura su scatola del cambio
peso kg 70
*Twin milling spindle angle head
on gear box weight kg 70*

Teste ad angolo speciali

Special angle heads

TAS 41504

Testa ad angolo mandrino di fresatura. Peso Kg 338.
Twin milling angle head.
Weight Kg 338.



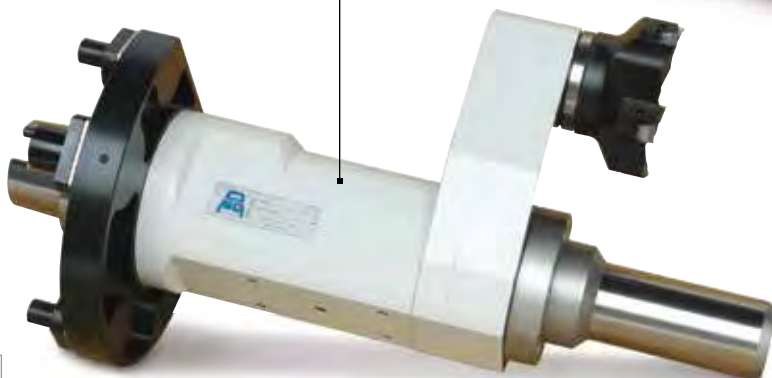
TFS 35698

Testa ad angolo di fresatura con fresa Ø 100 peso Kg34
Milling angle head, with
milling cutter Ø 100
weight Kg 34



TFS 12005

Testa ad angolo disassata per fresature Ø 150.
Peso Kg 48.
Shift spindle angle head,
milling tools Ø 150.
Weight Kg 48.



TFS 28603

Testa di fresatura con n. 4 frese a disco Ø 125. Peso Kg 218.
Milling head, nr. 4 milling disc
cutter Ø 125. Weight Kg 218.



Teste ad angolo speciali

Special angle heads



TFS 33303

Testa ad angolo disassata per foratura. Peso Kg 9,4.
Angle head with shift drilling spindle.
Weight Kg 9,4.



TFS 12095

Testa ad angolo di foratura peso kg 5
Drilling angle head weight Kg 5



TAS 30505

Testa ad angolo di foratura HSK100 entrata e uscita.
Peso Kg 50.
Drilling angle head, HSK 100 input-output. Weight Kg 50

TFS 33503

Testa ad angolo di lucidatura con doppia rotazione, sia corpo che utensile.
Peso kg 6,5.
Polish angle head with double rotation: body and tools. Weight Kg 6,5.



TFS 13198

Testa ad angolo disassata per foratura peso kg 5
Angle head with shift spindle weight kg 5



Teste ad angolo speciali

Special angle heads



TFS 39997
Testa ad angolo speciale
bimandrino per foratura e
maschiatura peso kg 16
*Twin angle head for
drilling and tapping
weight kg 16*

TAS 13806

Testa bimandrino Capto C5
manuale, peso kg 33
*Twin angle head with Capto C5
manual clamping tool
weight kg 33*



TAS 39806

Testa di foratura a due mandrini
con refrigerante attraverso il
centro utensile a 50 Bar
peso kg 21
*Twin drilling angle head with
coolant through the centre tool
at 50 Bar, weight kg 21*



TAS 08606

Testa fresatura conica su acciaio
peso kg 23
*Milling angle head with conical tool
weight kg 23*

TFS 40601

Testa ad angolo bimandrino,
angolo tra i due mandrini 176°,
peso Kg 13
*Twin angle head, angle 176°
between spindles, weight Kg 13*



Teste ad angolo speciali

Special angle heads



TFS 20298
Testa bimandrino di fresatura
n°2 frese Ø 120 peso kg 25
*Twin milling angle head, nr.2
milling cutter Ø 120
weight kg 25*



TA 05500
Testa ad angolo di fresatura
con fresa Ø125 peso kg 17
*Milling angle head with milling
cutter Ø 125, weight kg 17*

TAS 20706

Testa per fresatura interna
pinza freno peso Kg 23
*Angle milling head for brake
housing weight Kg 23*



TAS 39706

Testa di fresatura per
supporto motore frese
Ø160/180 peso kg 31
*Milling head for engine's
bracket milling cutter
Ø160/180 weight kg 31*



TA 34397

Testa ad angolo
di fresatura
con cono ISO20
peso kg 0,9
*Milling angle head
with shank ISO20
weight kg 0,9*



TFS 39999

Testa ad angolo
speciale fresatura
su plastica peso kg 4
*Milling angle head
for plastic weight kg 4*



TA 17292

Testa ad angolo di fresatura
n. 2 frese per legno
peso kg 3
*Twin angle head with nr. 2
milling cutter for wood
weight kg 3*



Teste ad angolo speciali

Special angle heads

TAS 37806

Testa ad Angolo di fresatura
componente aeronautico,
materiale Inconel. Peso Kg 40
*Milling Angle Head for
aeronautic piece, Inconel alloy
material. Weight Kg 40*



TFS 23910

Testa ad Angolo bimandri-
no, fresatura di componente
in ghisa. Peso Kg 50
*Twin Angle Head, milling
cast iron pieces.
Weight Kg 50*



TFS 31110

Testa ad Angolo di foratura
con mandrino HSK50 ribal-
tato. Peso Kg 31
*Drilling Angle Head with
HSK50 reverse spindle.
Weight Kg 31*



TAS 10708

Testa ad Angolo lunghezza
mm 1.000, fresatura di cave
su acciaio. Peso Kg 216
*Angle Head overall length
mm 1.000, milling key-way
on steel. Weight Kg 216*



TAS 13910

Testa ad Angolo di foratura
con mandrino ER25.
Peso Kg 31
*Drilling Angle Head with
ER25 spindle.
Weight Kg 31*



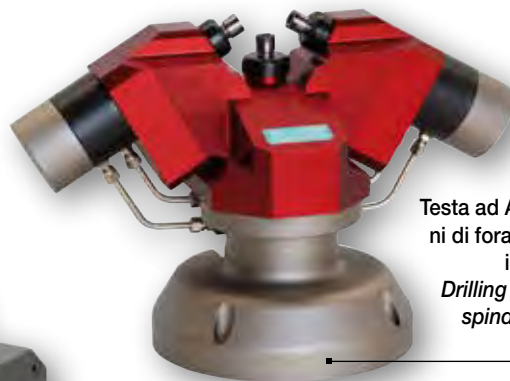
Teste ad angolo speciali

Special angle heads



TFS 05609

Testa ad Angolo di fresatura
per tornio verticale.
Peso Kg 286
*Milling Angle Head for ver-
tical lathe. Weight Kg 286*



TAS 08411

Testa ad Angolo con tre mandri-
ni di foratura con avanzamento
idraulico. Peso Kg 17,5
*Drilling Angle Head with three
spindles, hydraulic spindles
feed. Weight Kg 17,5*

TFS 26908

Testa ad Angolo bimandrino
di foratura per macchina
transfer. Peso Kg 9,5
*Twin drilling Angle Head for
transfer machine.
Weight Kg 9,5*



TAS 28010

Testa ad Angolo con tre
assi a regolazione manuale.
Peso Kg 590
*Angle Head with three
manual movement axis.
Weight Kg 590*

TAS 19610

Testa ad Angolo di fresatura
per macchina transfer.
Peso Kg 35
*Milling Angle Head for transfer
machine. Weight Kg 35*



Teste ad angolo speciali

Special angle heads



TAS 19010

Testa ad Angolo di foratura per macchina transfer. Max RPM 20.000.
Peso Kg 5
Drilling Angle Head for transfer machine. Max RPM 20.000. Weight Kg 5

TAS 26810

Testa ad Angolo TAO20, utilizzata in fresatura su torretta a revolver HT250. Peso Kg 14
Milling Angle Head TAO20, assembled on HT250 turret head. Weight Kg 14



TAS 09407

Testa ad Angolo per fresatura canna di fucile.
Peso Kg 6,5
Milling Angle Head for rifle barrel. Weight Kg 6,5

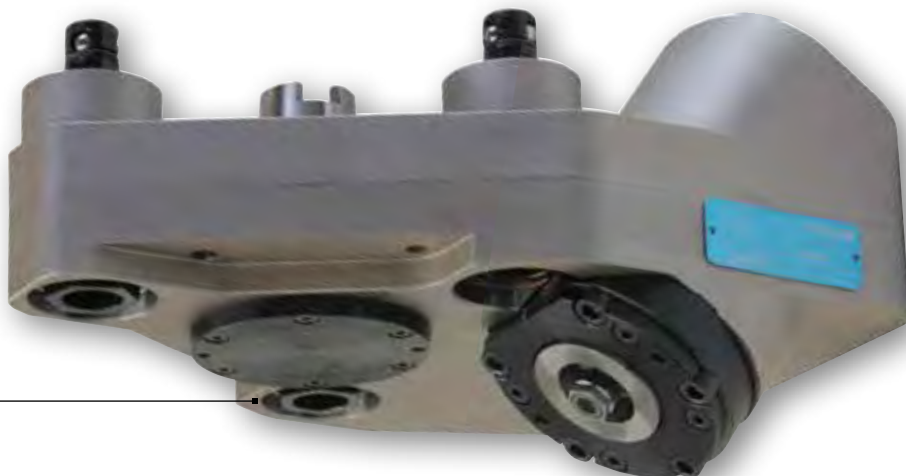


TFS 06906

Testa ad Angolo di foratura scatola sterzo. Peso Kg 10
Drilling Angle Head for steering body. Weight Kg 10

TAS 16308

Testa ad Angolo di foratura con mandrino HSK32 a cambio automatico utensile. Peso Kg 13,5
Drilling Angle Head with spindle HSK32 with automatic tool changer. Weight Kg 13,5



Teste ad angolo speciali

Special angle heads

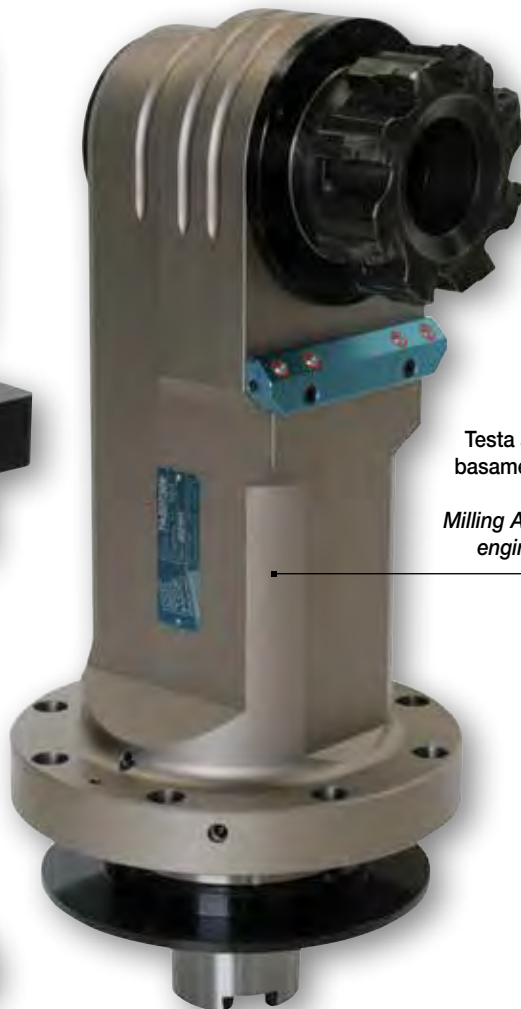
TAS 24508

Testa ad Angolo di fresatura
pinza freno. Peso Kg 29
*Milling Angle Head for brake
truck body. Weight Kg 29*



TAS 07309

Testa ad Angolo di fresatura,
basamento motore 12 cilindri.
Peso Kg 60
*Milling Angle Head, 12 cylinder
engine block. Weight Kg 60*



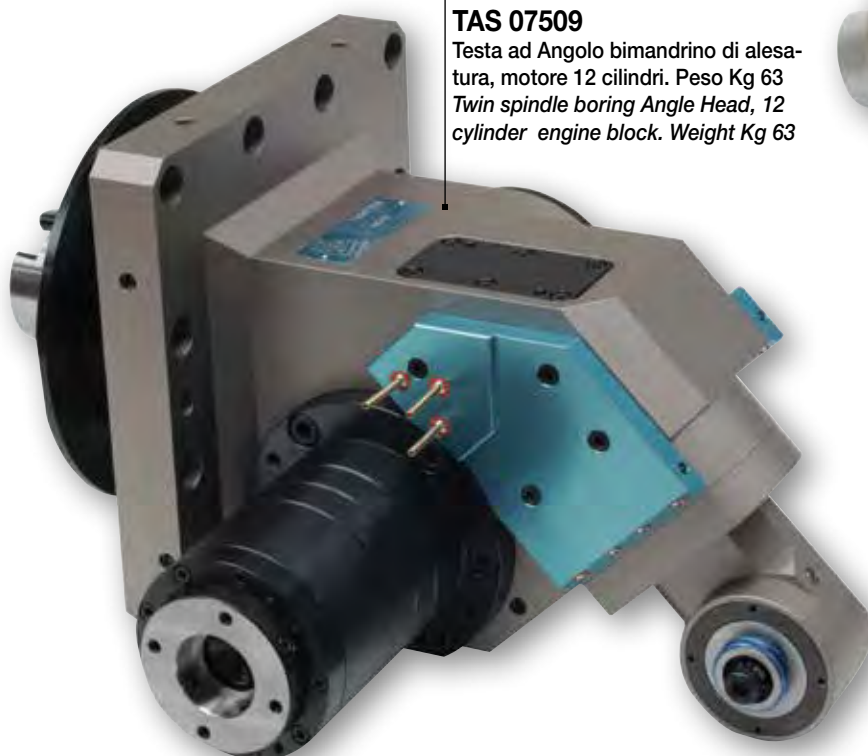
TAS 24010

Testa ad Angolo di foratura componente
aeronautico in alluminio.
Peso Kg 13,5
*Drilling Angle Head for aluminium
aeronautic component. Weight Kg 13,5*



TAS 07509

Testa ad Angolo bимandrino di alesatura,
motore 12 cilindri. Peso Kg 63
*Twin spindle boring Angle Head, 12
cylinder engine block. Weight Kg 63*



TAS 28606

Testa ad Angolo di foratura componen-
te aeronautico con mandrino HSK50,
materiale Inconel. Peso Kg 27
*Drilling Angle Head with HSK50 spin-
dle for aeronautic piece, Inconel alloy
material. Weight Kg 27*

