

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.



# Panoramica prodotti

## Product overview



### TAR

Piccole per piccoli spazi.

*Tiny for narrow spaces.*



### TA

Lavorazione singola di foratura e fresatura.

*Drilling and milling machining.*

Pagina/Page: 3-10



### 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*



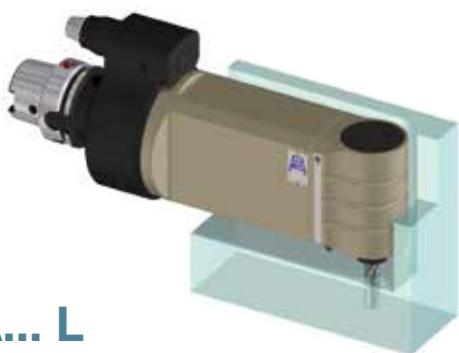
Rapporto entrata/uscita  
*Ratio input/output*



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



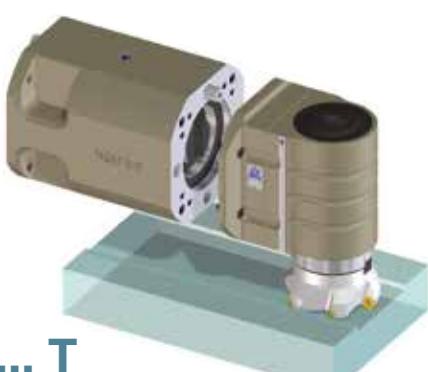
Peso con cono 50  
*Weight with size 50 shank*



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

# 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 coni 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



## Refrigerante utensile Coolant tool



**Il circuito refrigerante è standard** - Tutte le teste sono provviste di canalizzazione interna, che parte dal perno dell'antirottante 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  
specifiche 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 antirottanti **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 mini-  
mum 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 evol-  
vente rettificato:  
massime performances e  
minori vibrazioni.

*Gleason rectified gearings:  
maximum performances and  
minimum vibration.*



**DESIGN**

Design compatto, che in-  
sieme alle specifiche sopra  
descritte, consente: alte per-  
formances, 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 niploy, trattamento anticorrosione, che garantisce alta protezione contro la ruggine, lubrorefrigeranti aggressivi e acidi.

**Componenti** - Tutte le teste montano cuscinetti di precisione, oppure conici nelle versioni per grandi asportazioni. Si utilizzano solo cinematici 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 niploy 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



BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

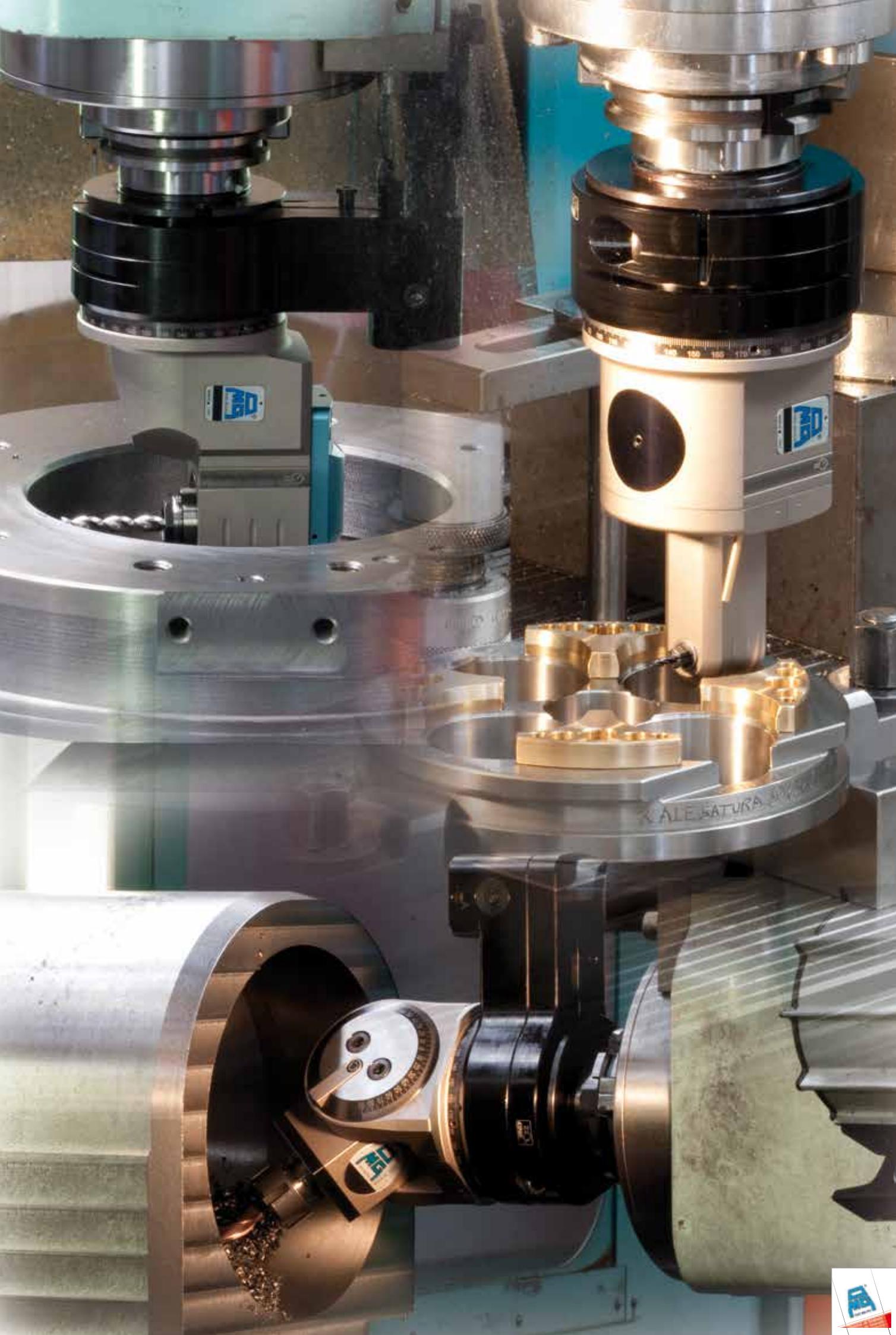
T

MT-TC-TC3

Accessori  
Accessories

Appendice tecnica  
Technical supplement

3-9



# TAR03.P



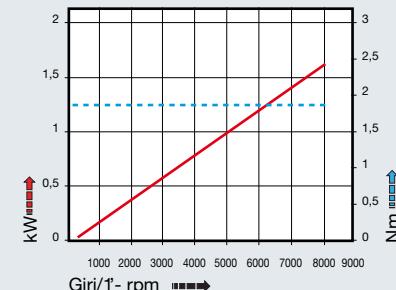
## caratteristiche/features

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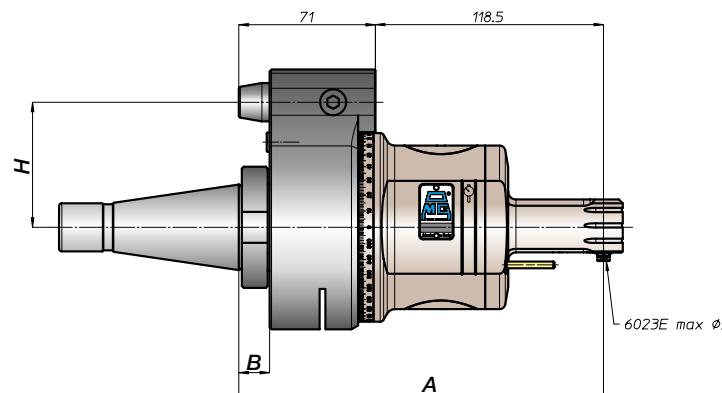
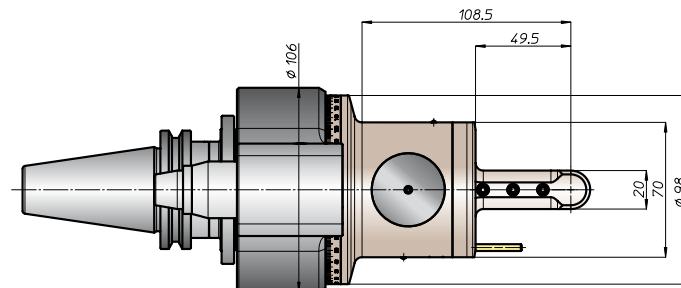
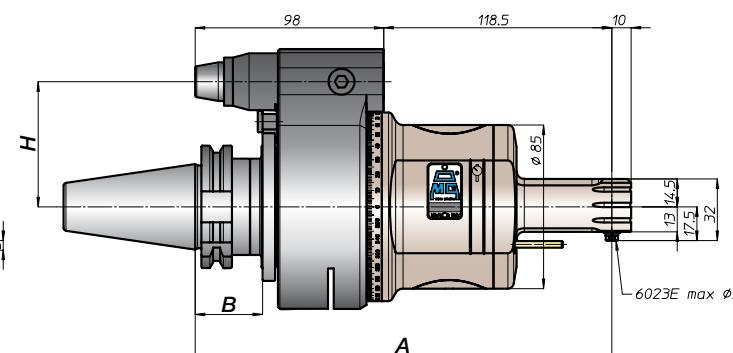
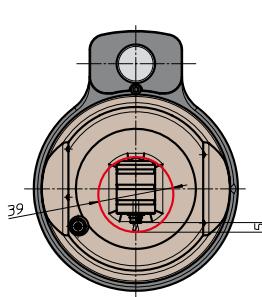
## peso/weight

- |        |        |
|--------|--------|
|        |        |
| 40     | 50     |
| 6,7 kg | 9,1 kg |
- rotazione/rotation

## prestazioni/performances



input      output



CONO SHANK	size	A	B	H standard	H optional
DIN69871 *	30			65	-
	40			80	110
	45			65	-
	50	216,5	35	80	110
ANSI B5.50 *	40			65	-
	50			80	110
BT *	40			65	
	50	224,5	45	80	110
HSK	63		44	65	
	80	225,5		80	110
	100		46	80	110
CAPTO	C5			65	
	C6		39	80	110
	C8	220,5		80	110
KM	63			65	
	80	216,5		80	110
	100			80	110
DIN2080	-		186,5	13	65
	40			80	110
	-		189,5	16	80
	50			80	110
NMTB	40	186,5	13	65	-
	50	189,5	16	80	110
ANSI B5.18					

\* Option: Dual Contact

# TAR03.PL

## caratteristiche/features



ø 3



M3



1-1



8000

## peso/weight



40

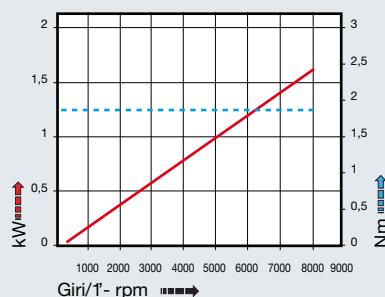


50

6,8 kg

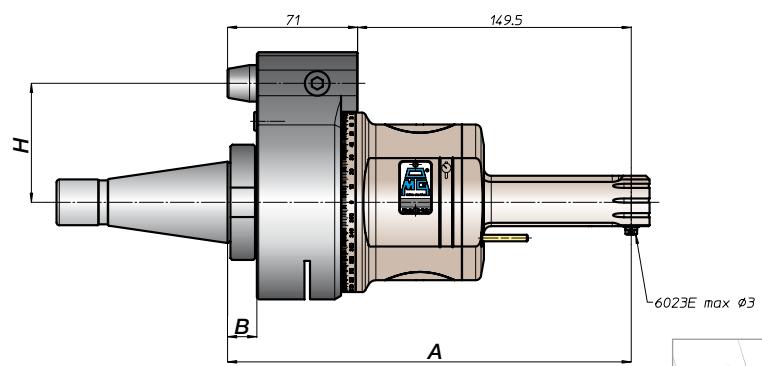
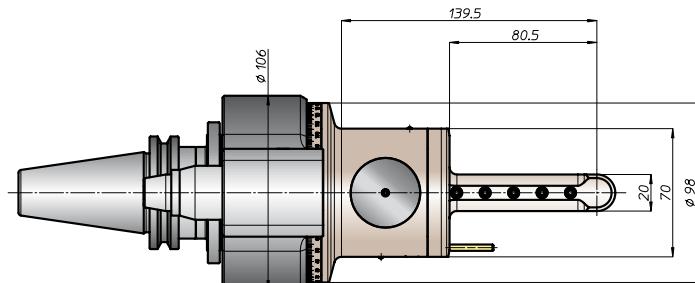
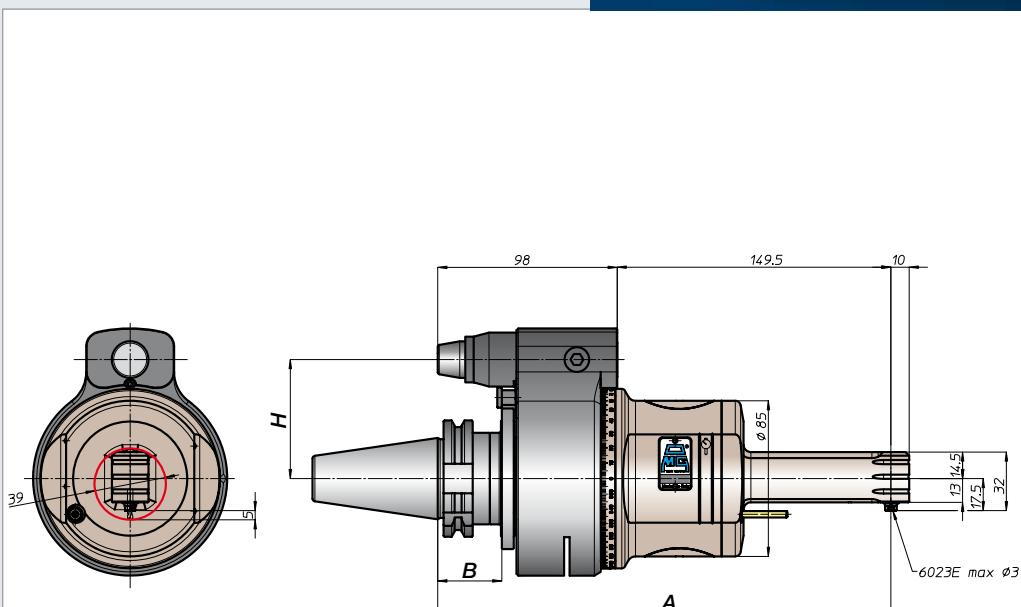
9,2 kg

## prestazioni/performances



CONO SHANK	size	A	B	H	
				standard	optional
DIN69871 *	30	247,5	35	65	-
	40				
	45			80	110
	50			65	-
ANSI B5.50 *	40	255,5	45	80	110
	50			65	
* BT	40	255,5	45	80	110
	50			65	
DIN69893 HSK	63	256,5	46	65	
	80			80	110
	100				
ISO26623 CAPTO	C5	251,5	39	65	
	C6				
	C8			80	110
KM	63	247,5		65	
	80			80	110
	100				
DIN2080	-	217,5	13	65	-
	40				
	-			80	110
	50				
ANSI B5.18 NMTB	40	217,5	13	65	-
	50	220,5	16	80	110

★ Option: Dual Contact



# TARO4.P



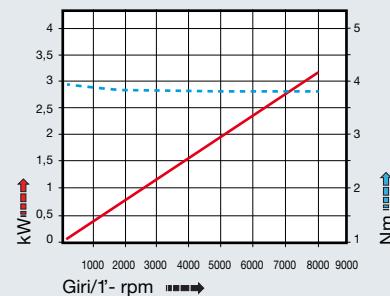
## caratteristiche/features

- ø 4
- M3
- 1-1
- 8000

## peso/weight

- |      |        |
|------|--------|
| 40   | 50     |
| 7 kg | 9,4 kg |
- rotazione/rotation
- input      output

## prestazioni/performances



	CONO SHANK	size	A	B	H	standard	optional
DIN9871 *	CONO SHANK	30			65	-	
		40			80	110	
		45			65	-	
		50	218,5	35	80	110	
ANSIB5.50 *	CAT	40			65	-	
		50			80	110	
BT *	BT	40			65	-	
		50	226,5	45	80	110	
DIN69893	HSK	63			65	-	
		80	227,5	46	80	110	
		100			65	-	
ISO26623	CAPTO	C5			65	-	
		C6	222,5	39	80	110	
		C8			65	-	
KM	KM	63			65	-	
		80	218,5		80	110	
		100			65	-	
DIN2080		-	188,5	13	65	-	
		40			80	110	
		-	191,5	16	80	110	
		50			65	-	
ANSIB5.18	NMTB	40	188,5	13	65	-	
		50	191,5	16	80	110	

★ Option: Dual Contact

# TARO4.PL

caratteristiche/features



Ø 4



M3



1-1



8000

peso/weight



40



50

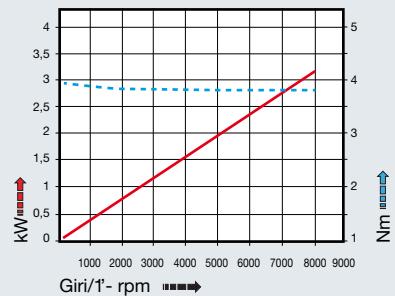


7,1 kg

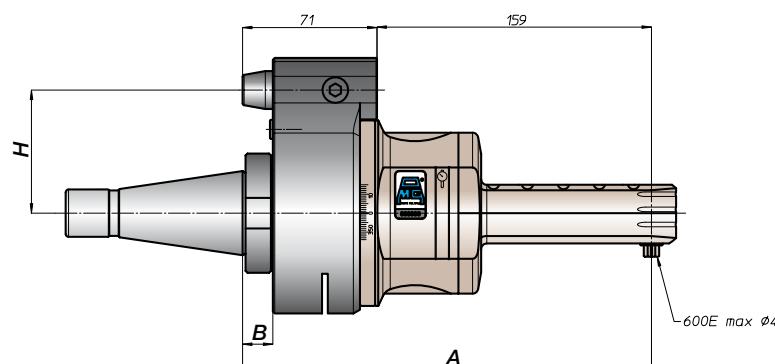
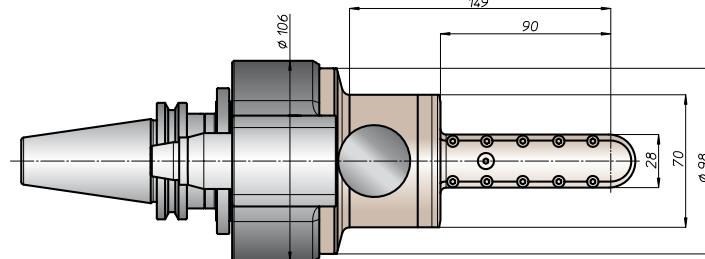
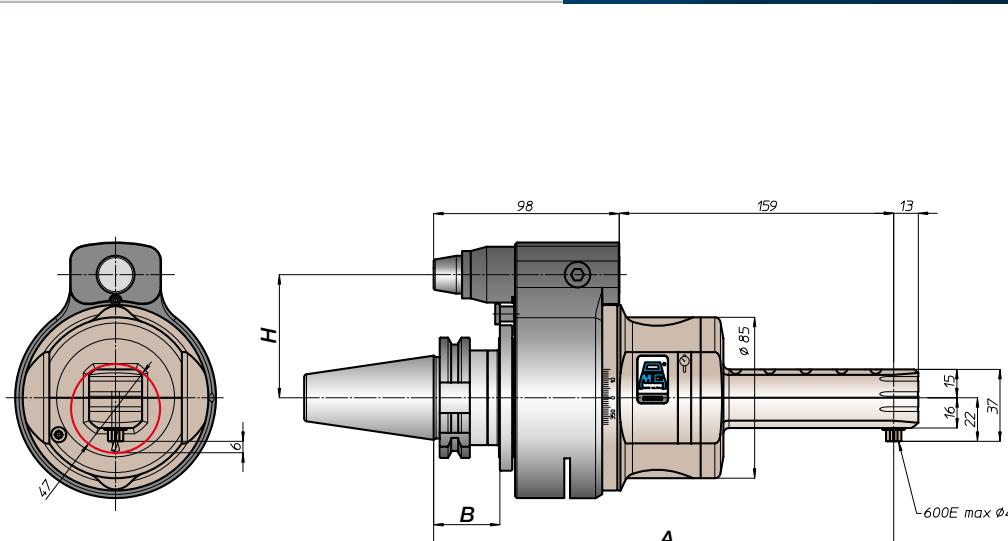


9,5 kg

prestazioni/performances



CONO SHANK	size	A	B	standard	optional
DIN9871 *	30	257	35	65	-
	40			80	110
	45			80	110
	50			80	110
ANSI5.50 *	40	265	45	65	-
	50			80	110
* BT	40	265	45	80	110
	50			80	110
DIN69893	63	266	44	65	
	80		46	80	110
	100				
ISO26623	C5	261	39	65	
	C6			80	110
	C8			80	110
KM	63	257	45	65	
	80			80	110
	100			80	110
DIN2080	-	227	13	65	-
	40		16	80	110
	-		16	80	110
	50		16	80	110
ANSI5.18	40	227	13	65	-
	50	230	16	80	110
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

## TAR06.P



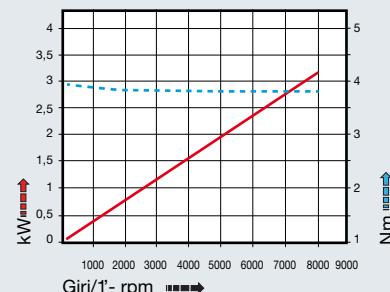
## caratteristiche/features

- - 
  - 
  - 
  - 
  -
- ø 6      M5  
1-1      8000

## peso/weight

- |  |                    |        |    |        |
|--|--------------------|--------|----|--------|
|  | 40                 | 7,2 kg | 50 | 9,6 kg |
|  | rotazione/rotation |        |    |        |
|  | input              |        |    |        |
|  | output             |        |    |        |

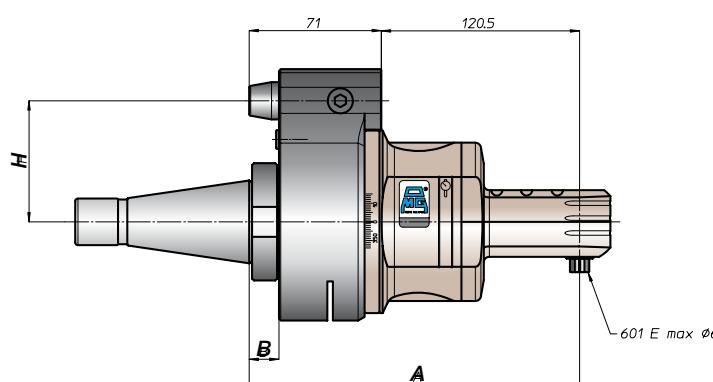
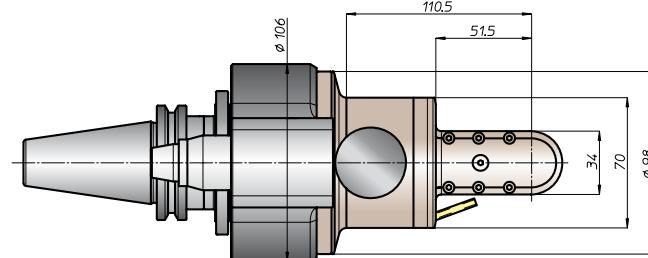
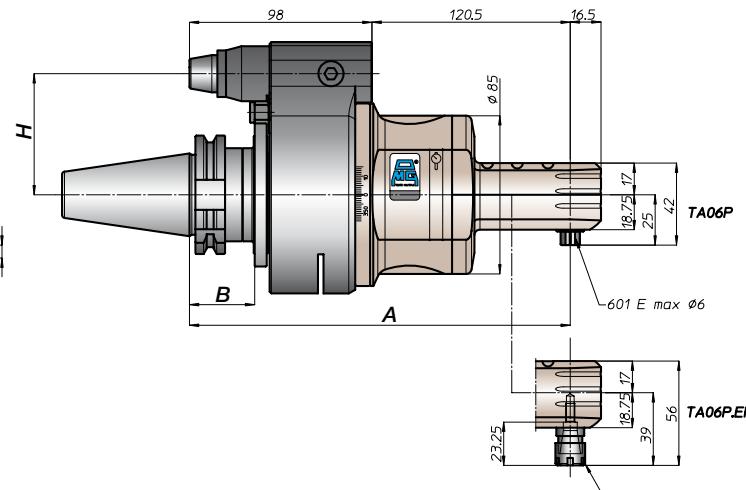
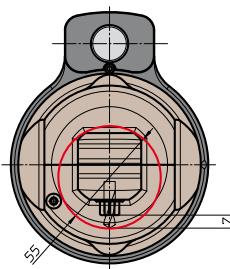
## prestazioni/performances



## tipi mandrino disponibili / available spindle types

Weldon Whistle-Notch

Ø6



CONO SHANK	size	A	B	H	Standard	Optional
DIN9871 *	30			65	-	
	40			80	110	
	45			65	-	
DIN9871 *	50	218,5		35		
CAT	40			65	-	
	50			80	110	
ANSIB5.50 *	40			65	-	
	50			80	110	
BT	40			65	-	
	50	226,5	45	80	110	
HSK	63			65	-	
	80	227,5		46	80	110
	100					
DIN69393						
CAPTO	C5			65	-	
	C6	222,5	39			
	C8			80	110	
ISO26623						
KM	63			65	-	
	80	218,5				
	100			80	110	
DIN2080						
	-	188,5	13	65	-	
	40					
	-	191,5	16	80	110	
	50					
ANSIS5.18	40	188,5	13	65	-	
	50	191,5	16	80	110	

\* Option: Dual Contact



# TAR06.PL

## caratteristiche/features



ø 6



M5



1-1



8000

## peso/weight



40



50

## rotazione/rotation

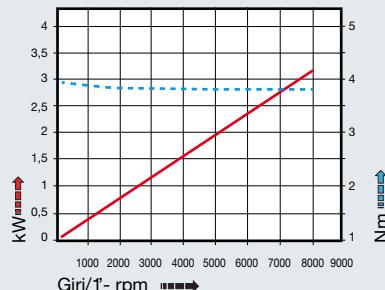


input



output

## prestazioni/performances

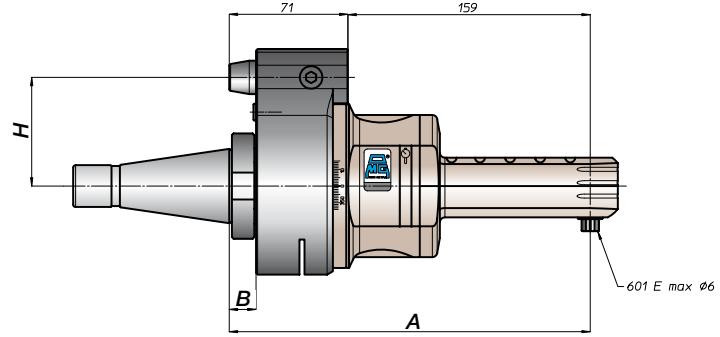
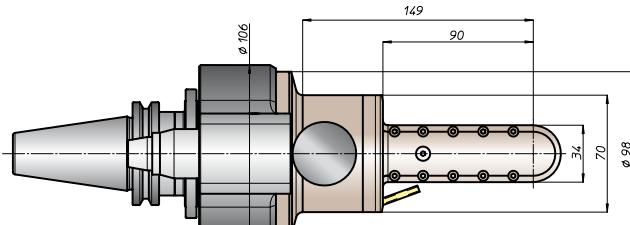
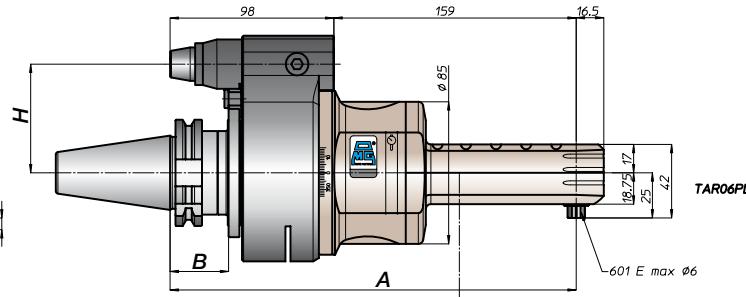
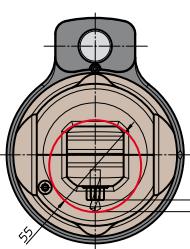


CONO SHANK	size	A	B	H	
				standard	optional
DIN69871 *	30	257	35	65	-
	40				
	45			80	110
	50			65	-
ANSI5.50 *	CAT	40	80	110	
	BT				
* BT	40	265	45	80	110
	50				
DIN69893	63	266	44	65	
	80				
	100				
ISO26623	C5	261	39	65	
	C6				
	C8				
KM	63	257	13	65	
	80				
	100				
DIN2080	-	227	16	80	110
	40				
	-				
	50				
ANSI5.18	NMTB	227	13	65	-
	40				
ANSI5.18	NMTB	230	16	80	110
	50				

## tipi mandrino disponibili / available spindle types

3 Weldon Whistle-Notch

Ø6



# TAR10.P



BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori  
AccessoriesAppendice tecnica  
Technical supplement

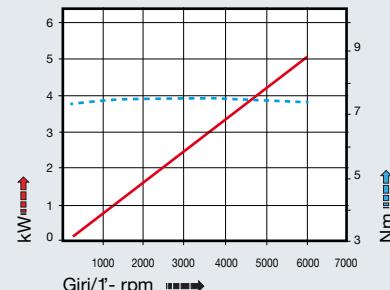
## caratteristiche/features



## peso/weight



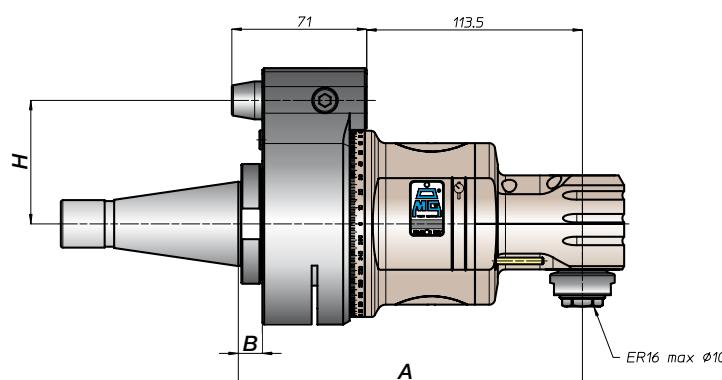
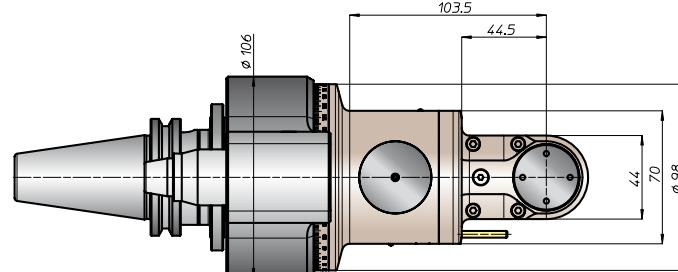
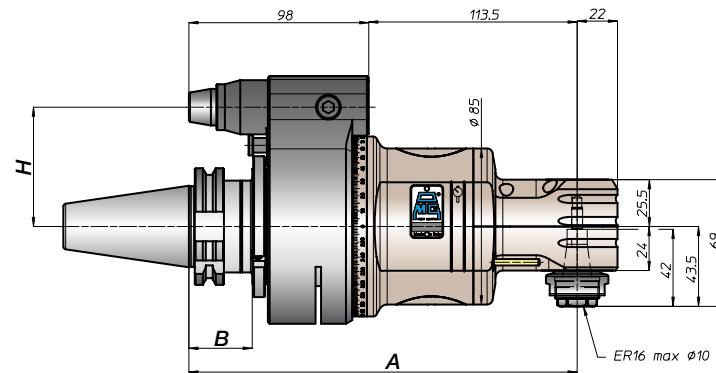
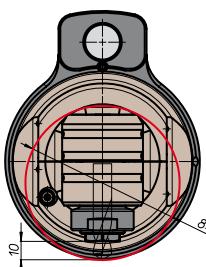
## prestazioni/performances



## tipi mandrino disponibili / available spindle types

3 Weldon Whistle-Notch

Ø12



CONO SHANK	size	A	B	H standard	H optional
DIN9871 *	-			65	-
	40			80	110
	45			65	-
	50	211,5	35	80	110
ANSIB5.50 *	40			65	-
	50			80	110
BT *	40			65	-
	50	219,5	45	80	110
DIN69893	63			65	-
	80	220,5	46	80	110
	100			65	-
CAPTO	C5			65	-
	C6	215,5	39	80	110
	C8			65	-
KM	63			65	-
	80	211,5		80	110
	100			65	-
DIN2080	-		181,5	13	65
	40			40	-
	-	184,5	16	80	110
	50			65	-
NMTB	40	181,5	13	65	-
	50	184,5	16	80	110
ANSIB5.18					

\* Option: Dual Contact



# TAR10.PL



## caratteristiche/features



ø 10



M8



1:1



6000

## peso/weight

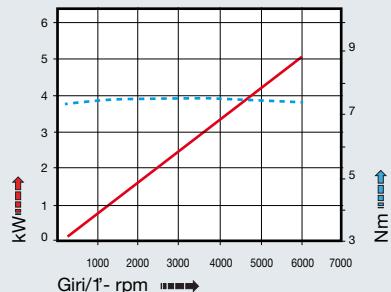


7,5 kg



9,3 kg

## prestazioni/performances



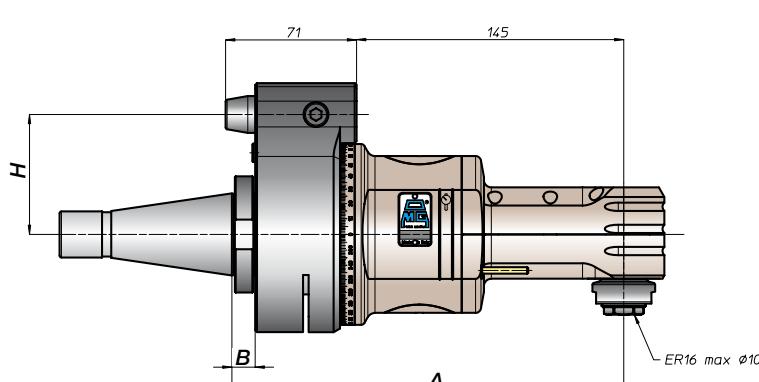
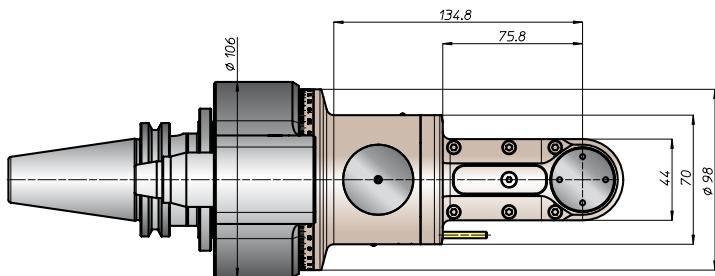
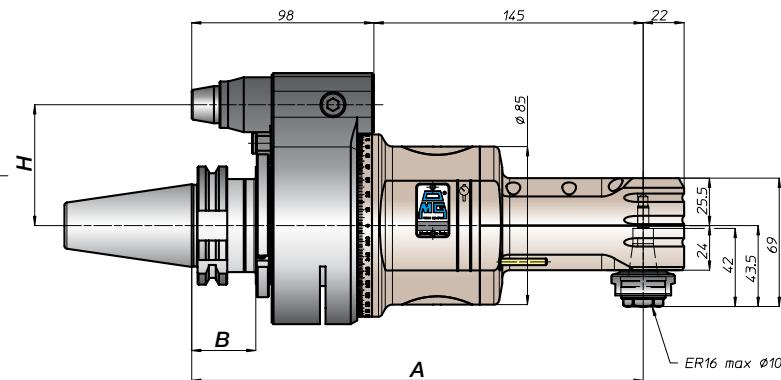
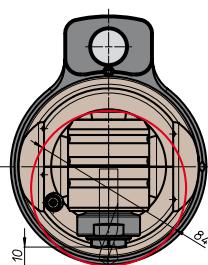
CONO SHANK	size	A	B	H	
				standard	optional
DIN69871 *	-	243	35	65	-
	40				
	45			80	110
	50			65	-
ANSIB5.50 *	40	251	45	80	110
	50			65	
* BT	40	251	45	80	110
	50			65	
DIN69893	63	252	44	65	
	80			80	110
	100			46	
ISO26623	C5	247	39	65	
	C6			80	110
	C8			65	
KM	63	243	13	65	
	80			80	110
	100			80	
DIN2080	-	213	13	65	-
	40			65	
	-			80	110
	50			80	
ANSIS5.18	40	213	13	65	-
	50	216	16	80	110

★ Option: Dual Contact

## tipi mandrino disponibili / available spindle types

3 Weldon Whistle-Notch

Ø12



## TA07.P



BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori  
AccessoriesAppendice tecnica  
Technical supplement

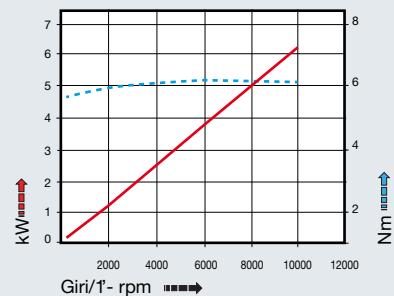
## caratteristiche/features



## peso/weight



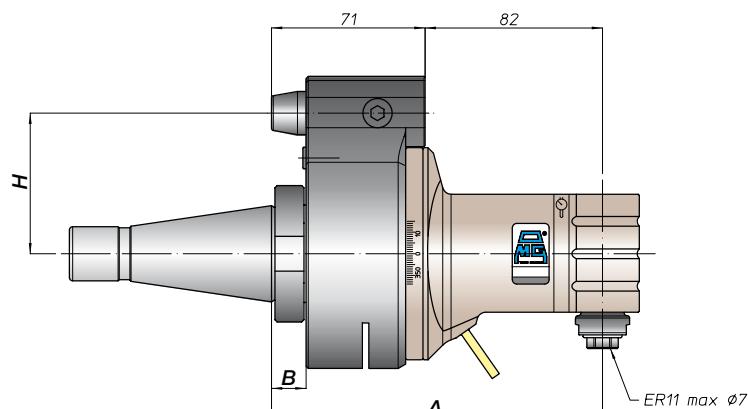
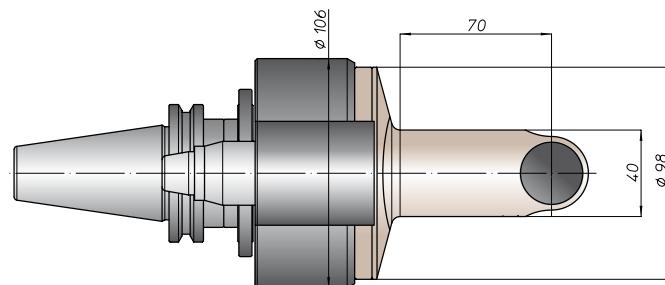
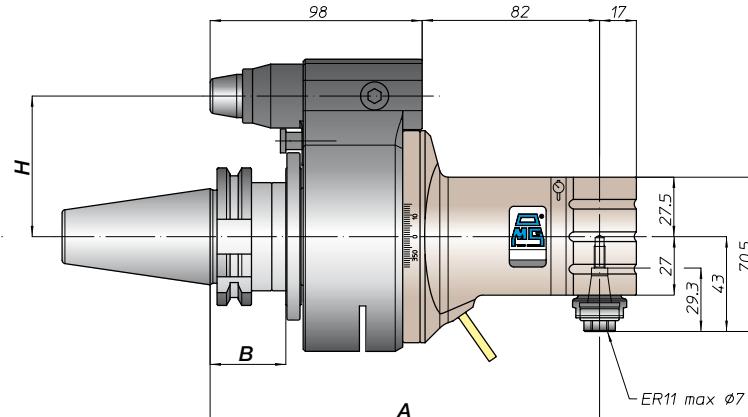
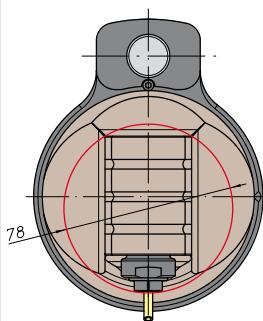
## prestazioni/performances



## tipi mandrino disponibili / available spindle types

3 Weldon Whistle-Notch

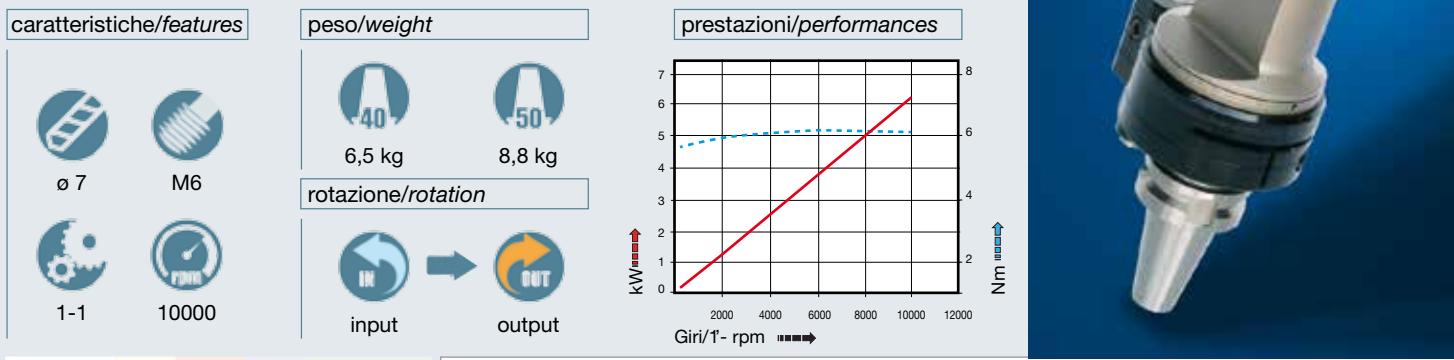
Ø8-Ø10



CONO SHANK	size	A	B	H standard	H optional
DIN987.1*	30			65	-
	40			80	110
	45				
DIN987.50*	50	180	35	65	-
CAT	40			80	110
	50				
ANSIB5.50*	40			65	-
BT	50	188	45	80	110
DIN69393	63		44	65	
	80	189		46	80 110
	100				
HSK					
ISO26623	C5			65	
	C6	184	39		
	C8			80	110
KM	63			65	
	80	180		80	110
	100				
DIN2080					
NMTB	40	150	13	65	-
	50				
ANSIB5.18	40	153	16	80	110
	50				

★ Option: Dual Contact

# TA07.PL

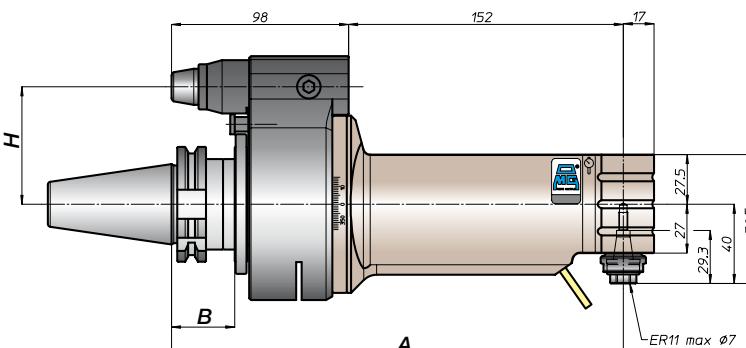


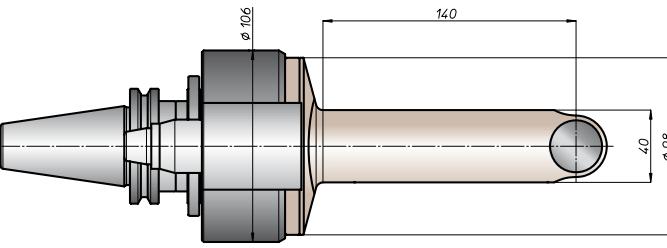
CONO SHANK	size	A	B	H	standard	optional
DIN9871 *	-	250	35	65	80 110	- -
	40					
	45					
	50					
ANSIB5.50 *	40	258	45	80	110	- -
	50					
* BT	40	258	45	80	110	- -
	50					
DIN6993	63	259	44	65	80 110	- -
	80		46	80		
	100			110		
ISO26623	C5	254	39	65	80 110	- -
	C6					
	C8					
KM	63	250	39	65	80 110	- -
	80					
	100					
DIN2080	-	220	13	65	80 110	- -
	40		16	80		
	-			110		
	50			110		
ANSIB5.18	40	220	13	65	80 110	- -
	50	223	16	80		

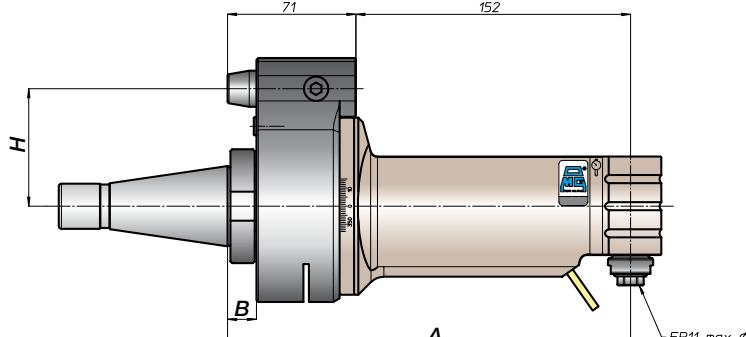
\* Option: Dual Contact

tipi mandrino disponibili / available spindle types

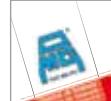
 3 Weldon Whistle-Notch  
**Ø8-Ø10**







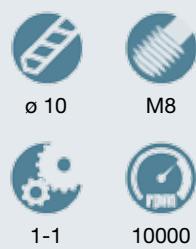
Accessori  
Accessories
Appendice tecnica  
Technical supplement



## TA10.P



## caratteristiche/features



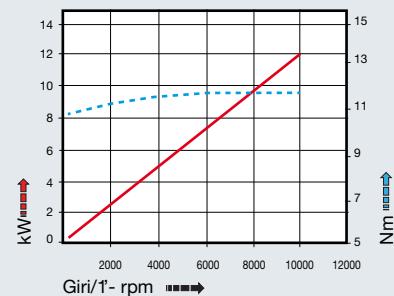
## peso/weight



rotazione/rotation



## prestazioni/performances



## tipi mandrino disponibili / available spindle types

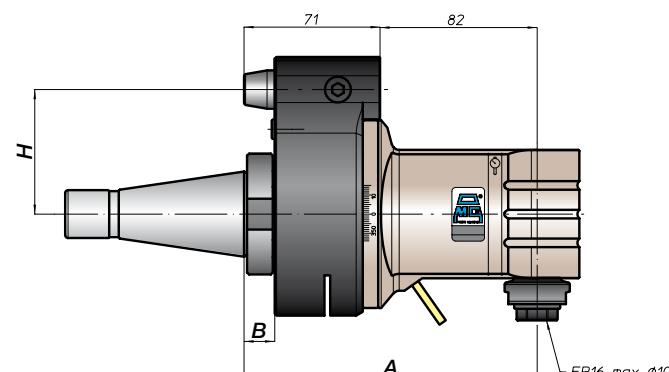
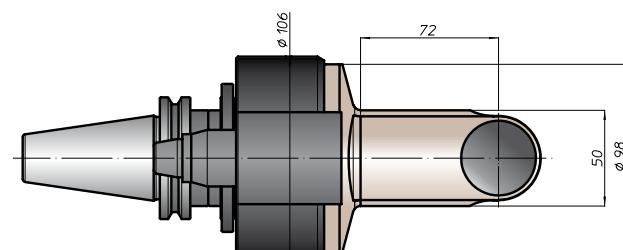
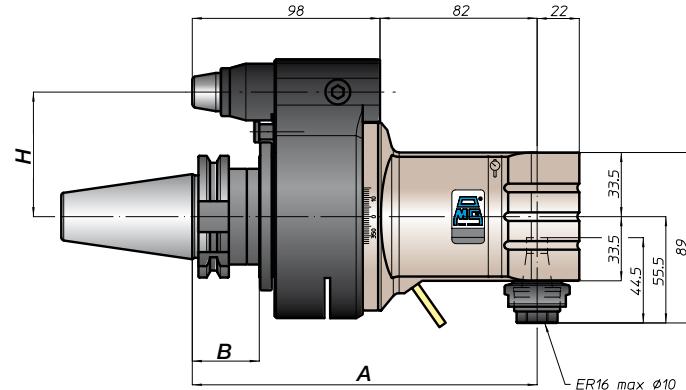
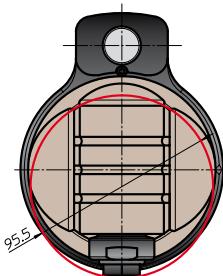
1 DIN6388-ER

2 Albero portafresce  
Milling shaft3 Weldon  
Whistle-Notch

ER20

Ø16

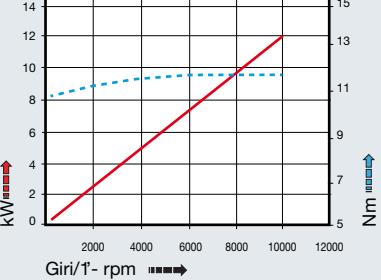
Ø10



CONO SHANK	size	A	B	H	standard	optional
DIN6388-ER *	30			65	-	
	40			80	110	
	45			65	-	
	50	180	35	80	110	
CAT	40			65	-	
	50			80	110	
ANSIB5.50 *	40			65	-	
	50	188	45	80	110	
BT	40			65	-	
	50			80	110	
HSK	63		44	65		
	80	189		46	80	110
	100					
DIN69893						
CAPTO	C5			65		
	C6	184	39			
	C8			80	110	
KM	63			65		
	80	180		80	110	
	100					
DIN2080						
	-	150	13	65	-	
	40					
	-	153	16	80	110	
	50					
ANSIB5.18 NMTB	40	150	13	65	-	
	50	153	16	80	110	

\* Option: Dual Contact

# TA10.PL

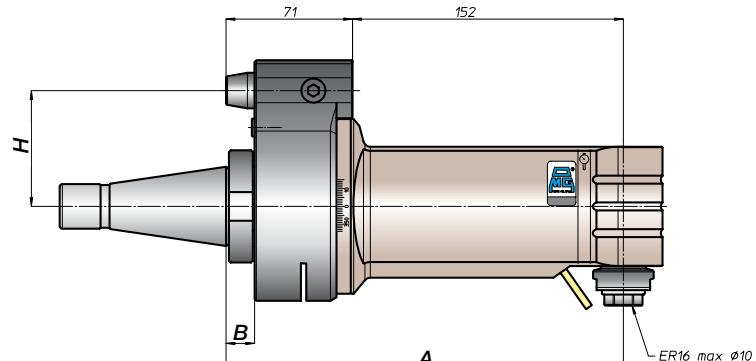
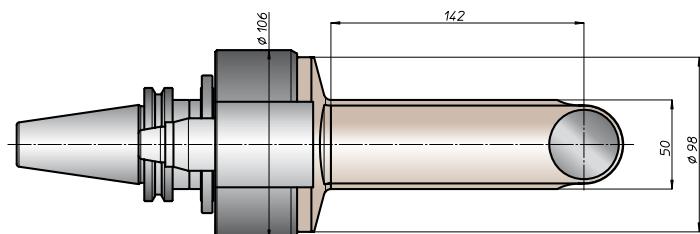
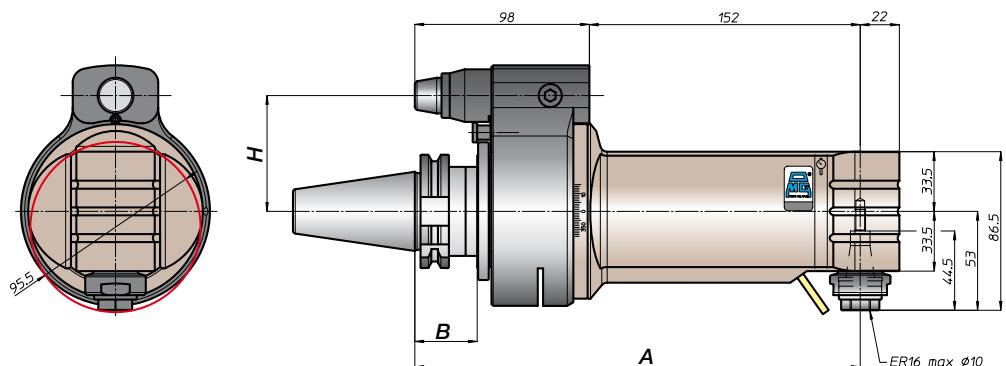
caratteristiche/features		peso/weight		prestazioni/performances			
		 ø 10	 M8	 40	 50		
		rotazione/rotation					
		 input	 output				
				 Kw → Nm			
CONO SHANK	size	A	B	standard	optional		
DIN69871 *	-			65	-		
	40						
	45			80	110		
	50	250	35				
ANSI5.50 *	-						
	CAT						
	40			65	-		
	50			80	110		
* BT	40			65			
	50	258	45	80	110		
DIN69893	63						
	80	259	44	65			
	100						
ISO26623	C5						
	C6	254	39	65			
	C8						
				80	110		
KM	63						
	80	250		65			
	100						
DIN2080	-						
	40	220	13	65	-		
	-	223	16	80	110		
	50						
ANSI5.18	NMTB	40	220	13	65	-	
		50	223	16	80	110	

tipi mandrino disponibili / available spindle types  
**1** DIN6388-ER   **2** Albero portafresa Milling shaft   **3** Weldon Whistle-Notch

ER20

Ø16

Ø10



## TA13.P



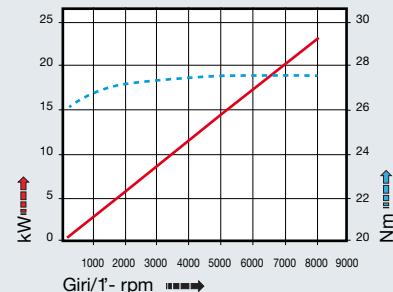
## caratteristiche/features



## peso/weight



## prestazioni/performances



## tipi mandrino disponibili / available spindle types

1 DIN6388-ER

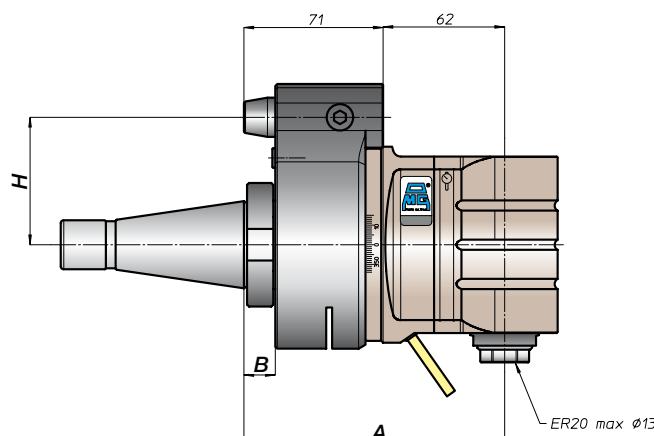
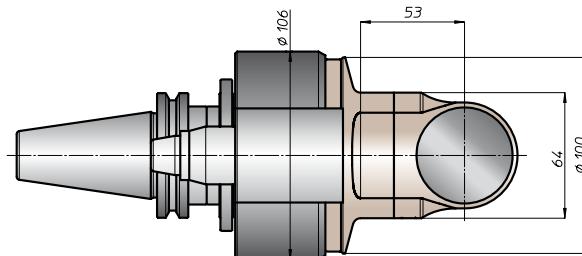
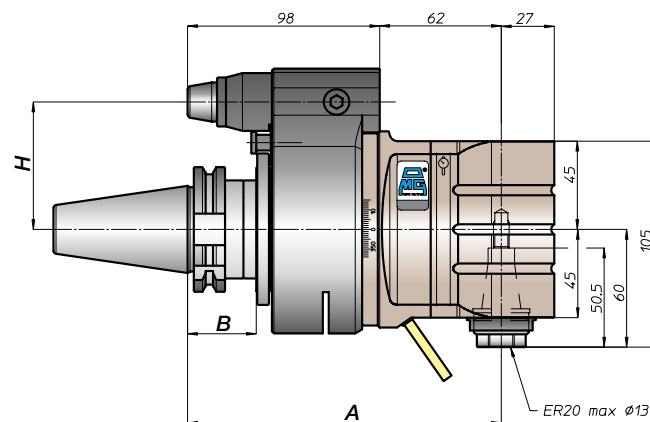
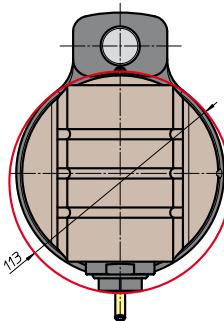
2 Albero portafrese Milling shaft

3 Weldon Whistle-Notch

ER25

Ø16-Ø22

Ø16



CONO SHANK	size	A	B	H	standard	optional
DIN9871 *	-			65	-	
	40			80	110	
	45			65	-	
	50	160	35	80	110	
ANSIB5.50 *	40			65	-	
	50			80	110	
BT *	40			65		
	50	168	45	80	110	
HSK	63			65		
	80	169		80	110	
	100			46		
DIN69893				80	110	
CAPTO	C5			65		
	C6	164	39			
	C8			80	110	
KM	63			65		
	80	160		80	110	
	100					
DIN2080	-			130	13	65
	40					-
	-			133	16	80
	50				110	
ANSIB5.18 NMTB	40	130	13	65	-	
	50	133	16	80	110	

\* Option: Dual Contact

# TA13.PL

## caratteristiche/features



Φ 13



M10



1-1



8000

## peso/weight



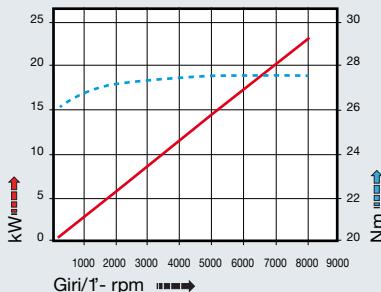
40



9,5 kg

12 kg

## prestazioni/performances



CONO SHANK	size	H		standard	optional
		A	B		
DIN9871 *	-				
	40			65	-
	45				
	50	260	35	80	110
	50			65	-
ANSIB5.50 *	40				
	50			80	110
	40			65	
	50	268	45	80	110
* BT					
	40				
	50				
HSK	63				
	80	269	44	65	
	100				
			46	80	110
ISO26623 CAPTO	C5				
	C6	264	39	65	
	C8			80	110
KM	63				
	80	260		65	
	100			80	110
DIN2080	-				
	40	230	13	65	-
	-	233	16	80	110
	50				
	40	230	13	65	-
ANSIS6.18 NMTB	50	233	16	80	110
	40				

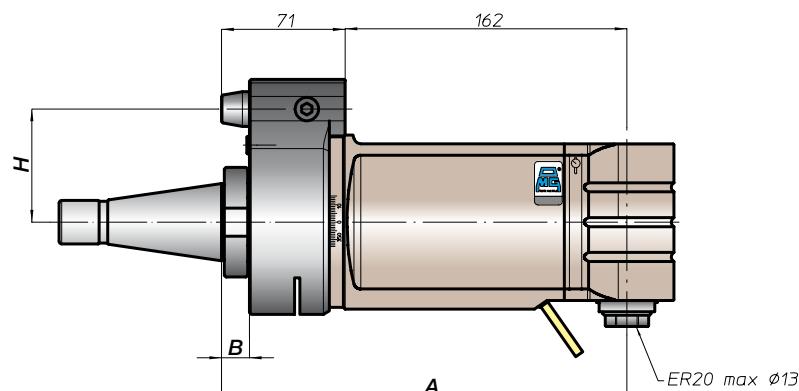
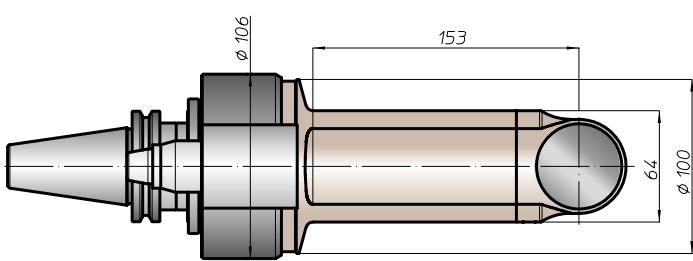
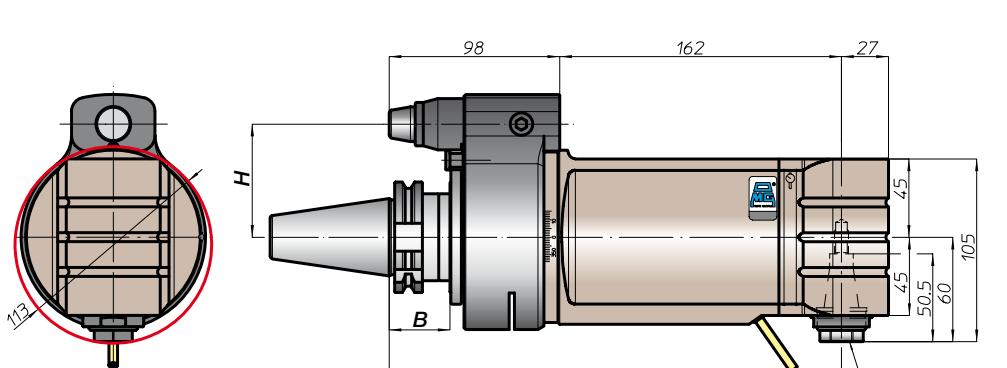
## tipi mandrino disponibili / available spindle types

**1** DIN6388-ER**2** Albero portafresa Milling shaft**3** Weldon Whistle-Notch

ER25

Ø16-Ø22

Ø16



# TA16.P



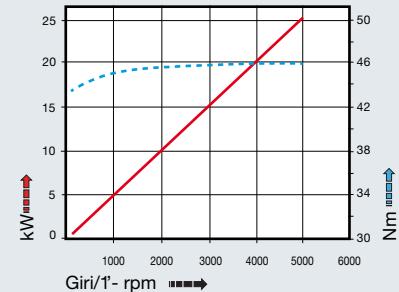
## caratteristiche/features



## peso/weight

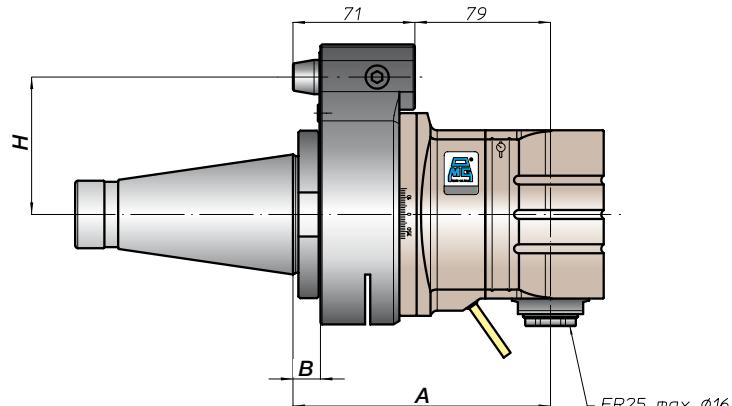
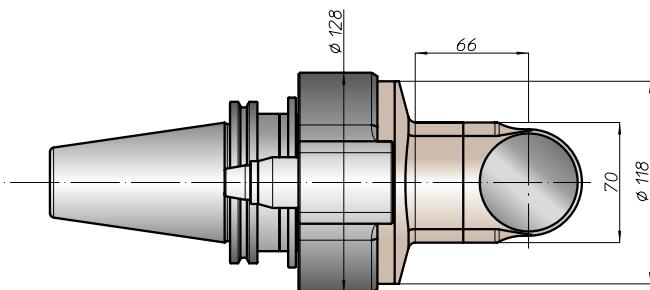
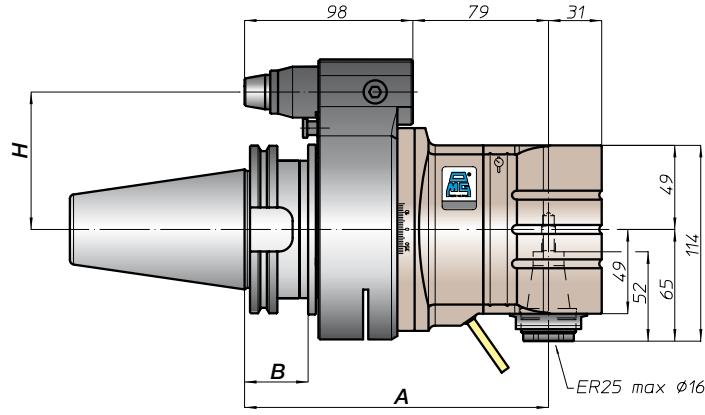
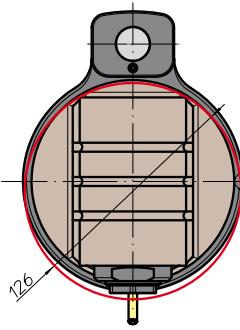


## prestazioni/performances



## tipi mandrino disponibili / available spindle types

1 DIN6388-ER	2 Albero portafresa Milling shaft	3 Weldon Whistle-Notch	4 DIN69893-HSK	5 CORAMANT 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				80	110
	45		177		65	-
	50			35	80	110
ANSIB5.50 *	CAT	40	172		65	-
		50	177		80	110
BT *	40	172			65	-
	50	185	45		80	110
DIN69893	HSK	63	181	44	65	
	80		186	46	80	110
	100					
ISO26623	C5	176			65	
	C6		181		80	110
	C8					
KM	63	172			65	
	80		177		80	110
	100					
DIN2080	-		147	13	65	-
	40					
	-		150	16	80	110
	50					
ANSIS5.18	NMTB	40	142	13	65	-
		50	150	16	80	110

\* Option: Dual Contact

# TA16.PL

## caratteristiche/features



o 16



M12



1-1



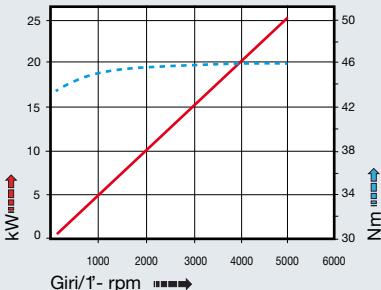
5000

## peso/weight



50 kg

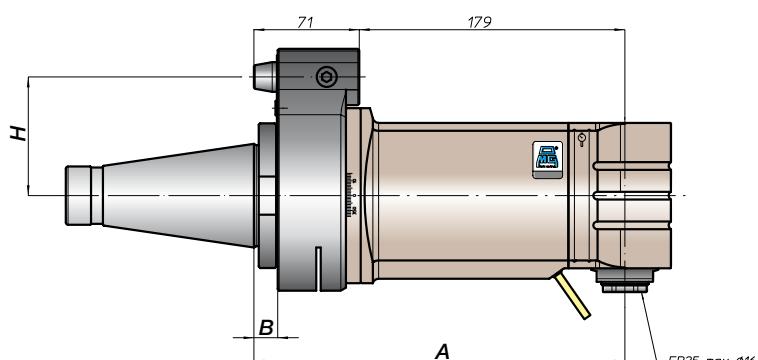
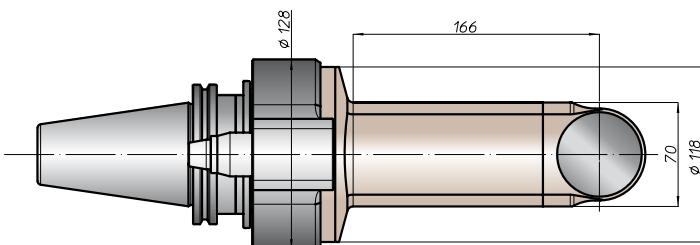
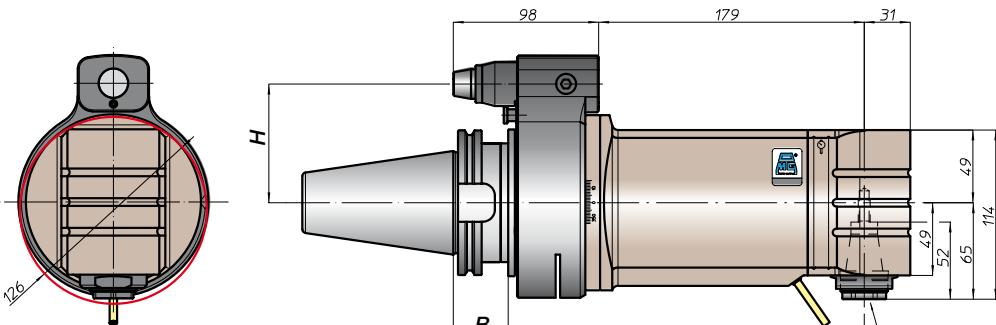
## prestazioni/performances



				H	
CONO SHANK	size	A	B	standard	optional
DIN69871 *	-	-		-	-
	-				
	45	277	35	80	110
ANSIB5.50 *	-	-		-	-
	50	277		80	110
* BT	-	-	-	-	-
	50	285	45	80	110
HSK DIN69893	-	-	-	-	-
	80	286	46	80	110
ISO26623 CAPTO	-	-	-	-	-
	C6	281	39	80	110
	C8				
KM	-	-		-	-
	80	277		80	110
	100				
DIN2080	-	-	-	-	-
	-	-	-	-	-
	-	250	16	80	110
	50				
ANSIS5.18 NMTB	-	-	-	-	-
	50	250	16	80	110

## tipi mandrino disponibili / available spindle types

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





# TA20.P

## caratteristiche/features



ø 20



M14



1-1



3500

## peso/weight



14,5 kg

## rotazione/rotation

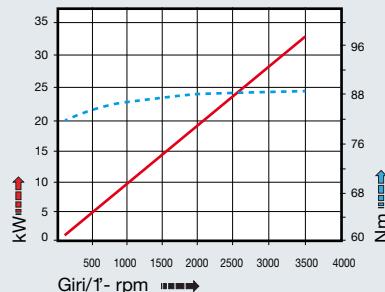


input



output

## prestazioni/performances



## tipi mandrino disponibili / available spindle types

1 DIN6388-ER

2 Albero portafrese  
Milling shaft3 Weldon  
Whistle-Notch

4 DIN69893-HSK

5 CORAMANT  
CAPTO®6 ABS  
Llicenza KOMET®

ER40

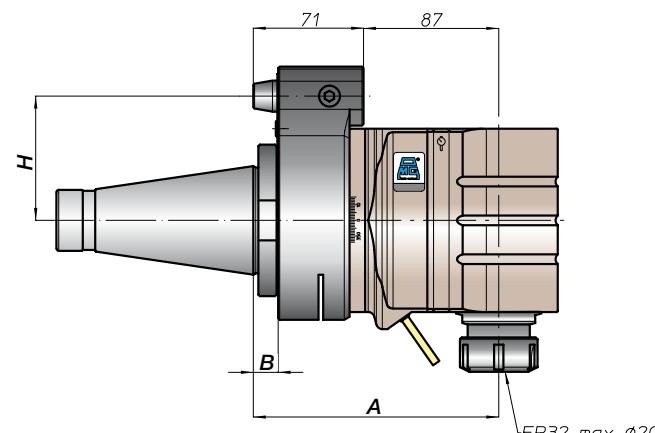
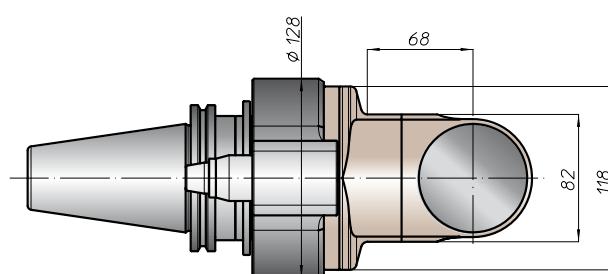
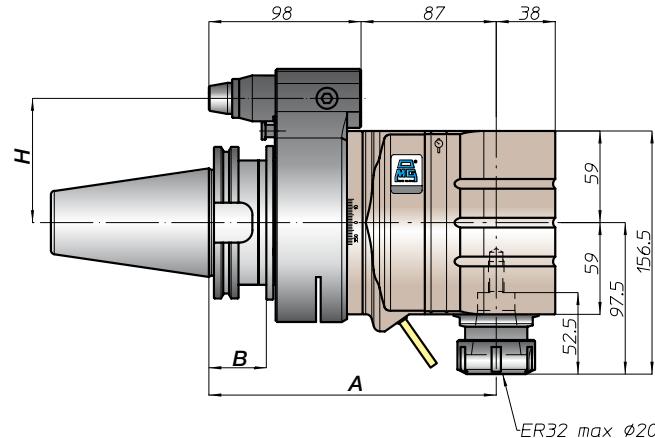
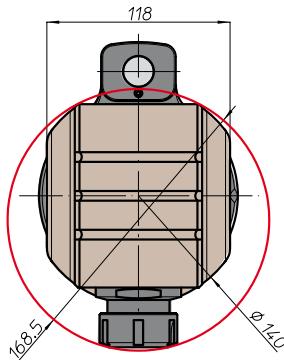
Ø22-Ø27-Ø32

Ø20-Ø25-Ø32

HSK40

C4

ABS40



CONO SHANK	size	A	B	H	standard	optional
DIN9871 *	-	-	-	-	-	-
	45	185	35	80	110	
	50	-	-	-	-	-
ANSIB5.50 *	50	-	-	80	110	
	BT	193	45	80	110	
	50	-	-	-	-	-
HSK	-	-	-	-	-	-
	80	194	-	46	80	110
	100	-	-	-	-	-
CAPTO	-	-	-	-	-	-
	-	189	-	-	-	-
ISO26623	-	-	-	-	-	-
	C8	-	-	-	-	-
KM	-	-	-	-	-	-
	80	185	-	-	-	-
	100	-	-	-	-	-
DIN2080	-	-	-	-	-	-
	-	-	-	-	-	-
	50	158	16	80	110	
NMTB	-	-	-	-	-	-
ANSI35.18	50	158	16	80	110	

\* Option: Dual Contact

# TA20.PL



## caratteristiche/features



ø 20



M14



1-1



3500

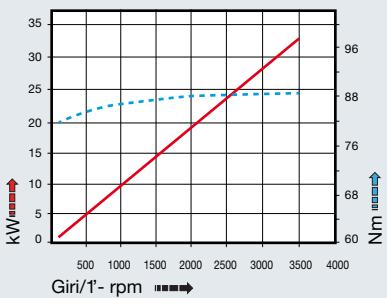
## peso/weight



50

kg

## prestazioni/performances

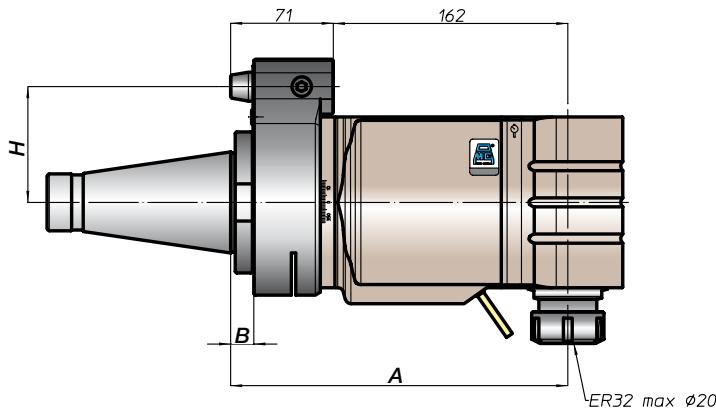
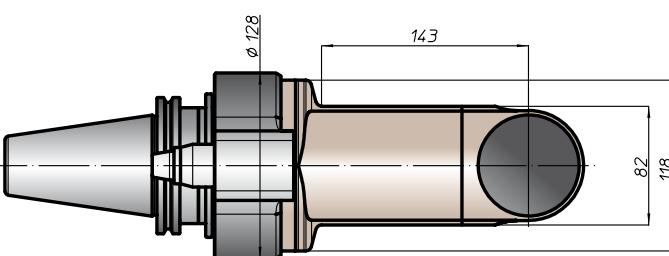
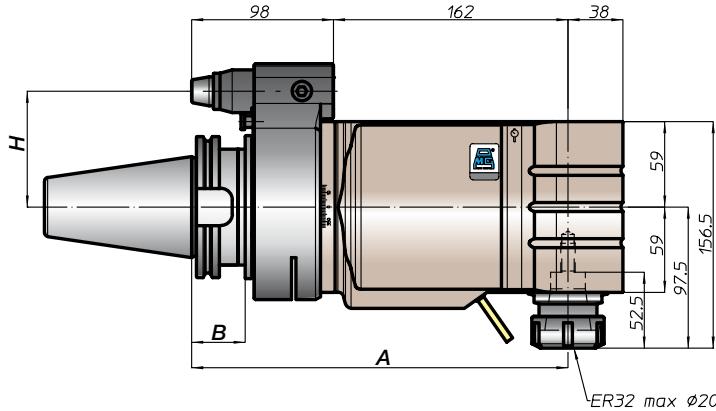
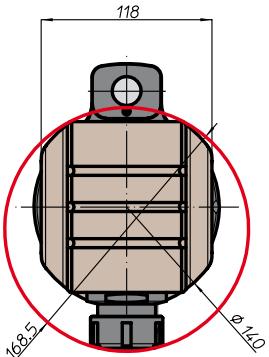


			H		
	size	A	B	standard	optional
CONO SHANK					
DIN69871 *		-		-	-
		-		-	-
	45				
	50	260	35	80	110
ANSIB5.50 *	CAT				
		-		-	-
	50				
	50	268	45	80	110
*	BT				
		-		-	-
	50				
	50	268	45	80	110
HSK					
DIN69893		-		-	-
	80	269		-	-
	100				
		46		80	110
CAPTO					
ISO26623		-		-	-
		-		-	-
	264				
	C8				
		80		80	110
KM					
	80	260			
	100				
		80		80	110
DIN2080					
	-				
	-				
	-				
	233		16	80	110
	50				
NMTB					
ANSIS6.18		-		-	-
		-		-	-
	50	233	16	80	110

★ Option: Dual Contact

## tipi mandrino disponibili / available spindle types

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



# TA Extended Gallery



BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori  
Accessories

Appendice tecnica  
Technical supplement



# TA20.30



## caratteristiche/features



ø 20



M14



1-1



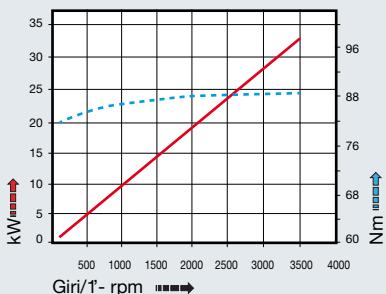
3500

## peso/weight



14,7 kg

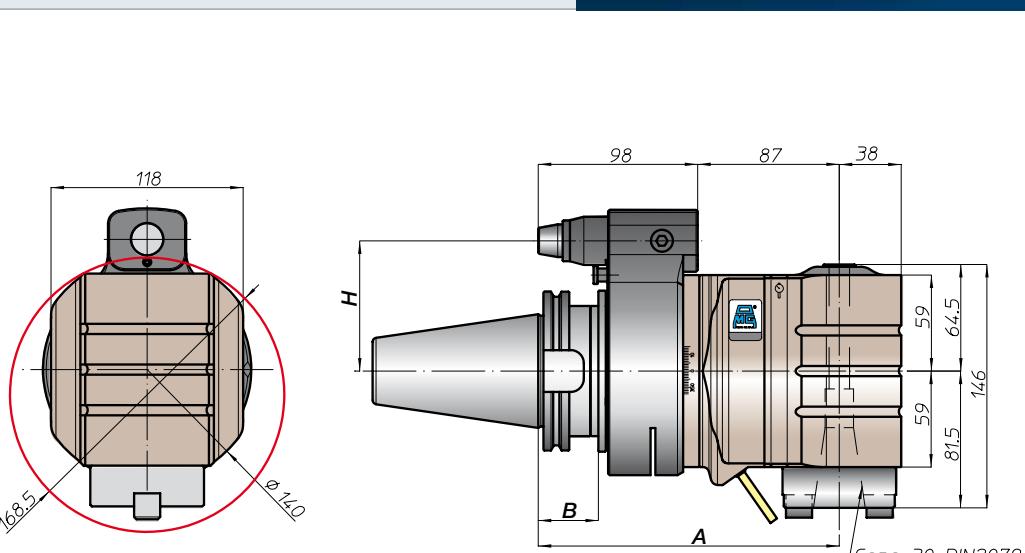
## prestazioni/performances



## rotazione/rotation



		size	A	B	standard	optional	H
DIN69871 *		-			-	-	
		-			-	-	
		45					
		50	185	35	80	110	
ANSI B5.50 *	CAT	-			65	-	
		-			-	-	
		50			80	110	
*	BT	-			-	-	
		-			-	-	
		50	193	45	80	110	
DIN69893	HSK	-			-	-	
		-			-	-	
		80	194	46	80	110	
		100					
ISO26623	CAPTO	-			-	-	
		-			-	-	
		189			80	110	
		C8					
KM		-			-	-	
		-			-	-	
		80	185		80	110	
		100					
DIN2080		-			-	-	
		-			-	-	
		-			-	-	
		158	16	80	110		
		50					
ANSI B5.18	NMTB	-			-	-	
		-			-	-	
		50	158	16	80	110	

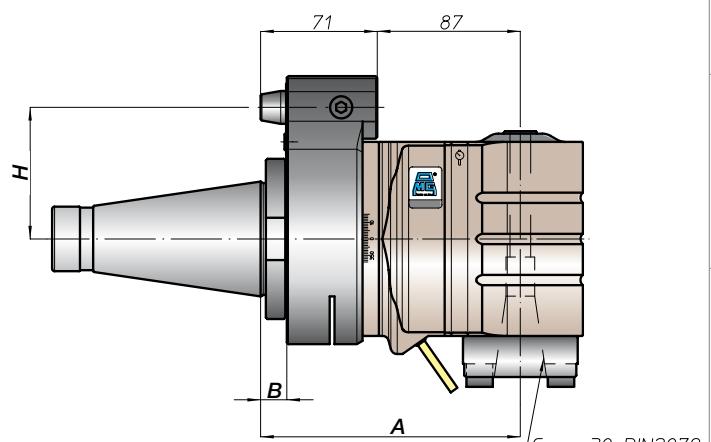
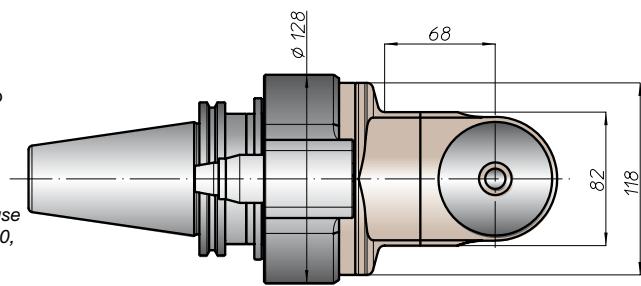


## Nota:

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

## Nota:

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



★ Option: Dual Contact

## TA26.P



## caratteristiche/features



## peso/weight



22 kg

## rotazione/rotation

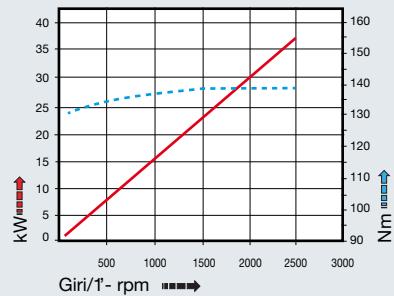


input



output

## prestazioni/performances



## tipi mandrino disponibili / available spindle types

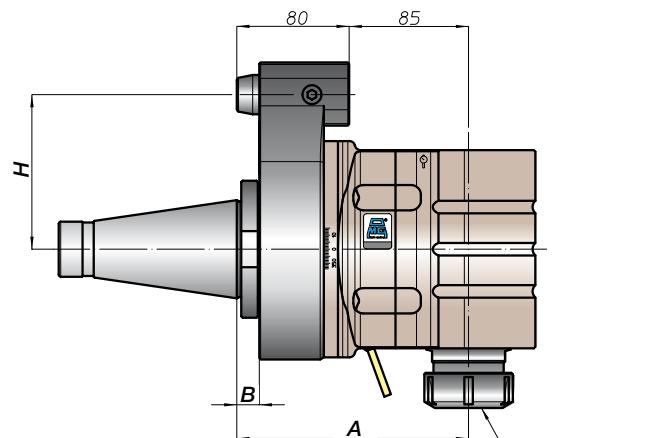
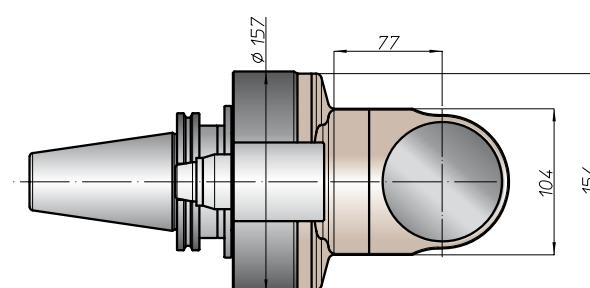
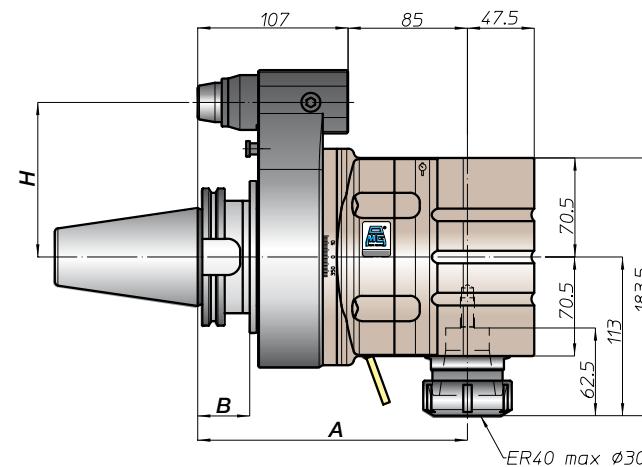
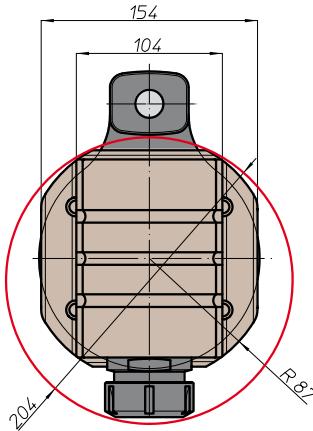
Ø16-Ø27-Ø32

Ø32

HSK63

C4

ABS50



CONO SHANK	size	A	B	H standard	H optional
DIN9871 *	-	-	-	-	-
	45	192	35	110	-
	50	-	-	-	-
ANSIB5.50 *	50	-	-	110	-
	50	200	45	110	-
BT *	-	-	-	-	-
	50	200	45	110	-
HSK	-	-	-	-	-
	80	201	46	110	-
	100	-	-	-	-
CAPTO	-	-	-	-	-
	-	196	-	-	-
ISO26623	-	-	-	-	-
	-	196	-	-	-
	C8	-	-	-	-
KM	-	-	-	-	-
	100	192	-	-	-
DIN2080	-	-	-	-	-
	-	-	-	-	-
	50	165	16	110	-
NMTB	-	-	-	-	-
ANSIS5.18	50	165	16	110	-

\* Option: Dual Contact

# TA26.40

## caratteristiche/features



o 26



M20



1-1



2500

## peso/weight



50

kg

## rotazione/rotation

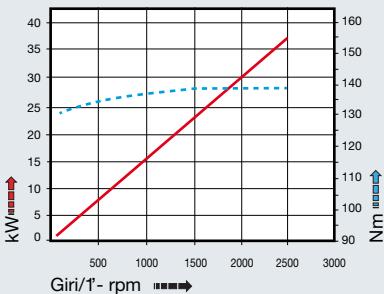


input



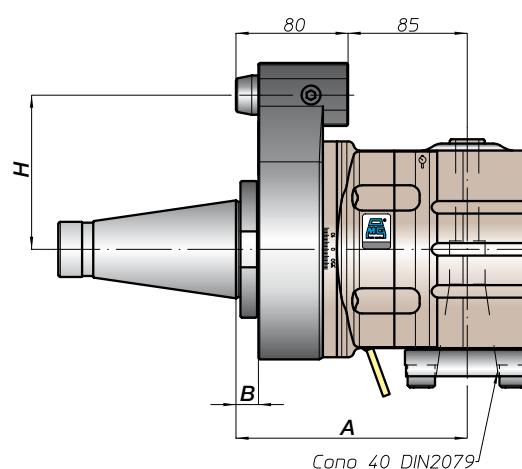
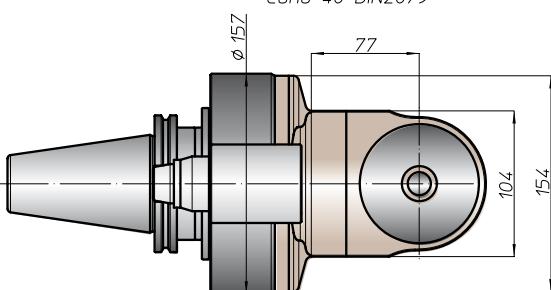
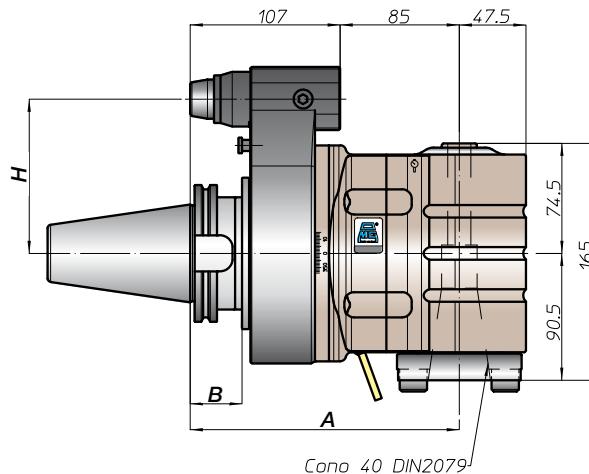
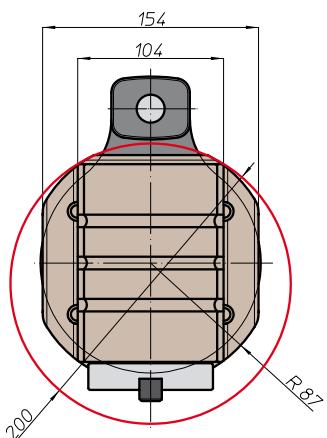
output

## prestazioni/performances



		size	A	B	standard	H	optional
DIN69871 *		-			-		-
		-			-		-
		45					
		50	192	35		110	-
ANSIB5.50 *	CAT	-			-		-
		-			-		-
		50				110	-
* BT		-			-		
		50	200	45	110	-	
DIN69893	HSK	-			-		
		-			-		-
		80	201	46	110	-	
		100					
ISO26623	CAPTO	-			-		
		-			-		-
		196					
		C8				110	-
KM		-			-		
		-			-		-
		192					
		100				110	-
DIN2080		-			-		
		-			-		-
		-			-		-
		165		16	110	-	
		50					
ANSIS5.18	NMTB	-			-		
		-			-		-
		50	165	16	110	-	

★ Option: Dual Contact



## TA07.2P



BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori  
AccessoriesAppendice tecnica  
Technical supplement

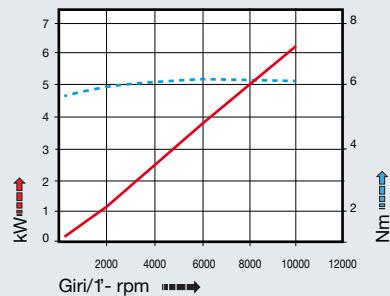
## caratteristiche/features



## peso/weight



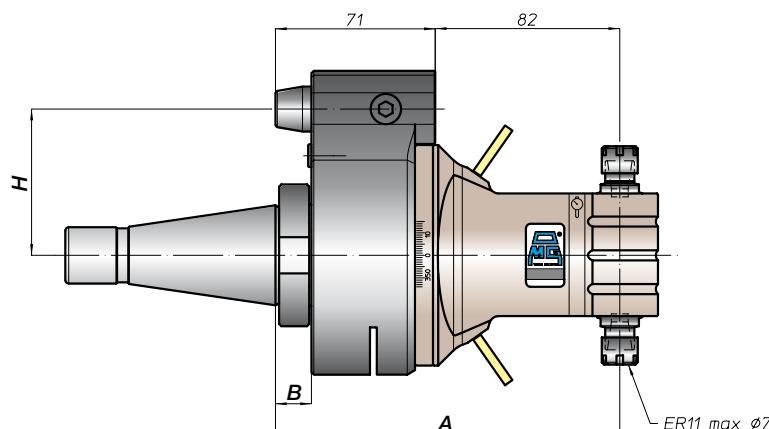
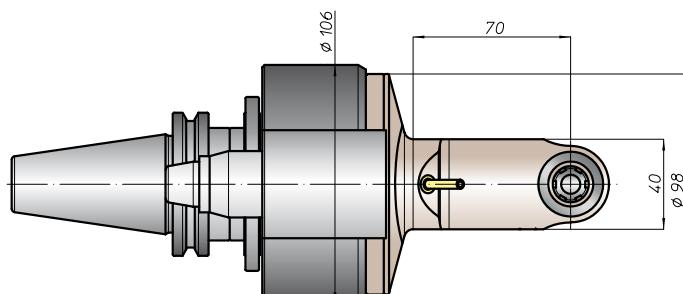
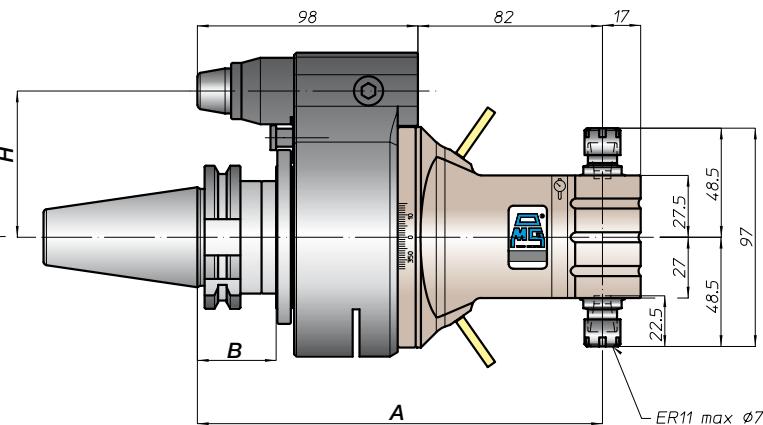
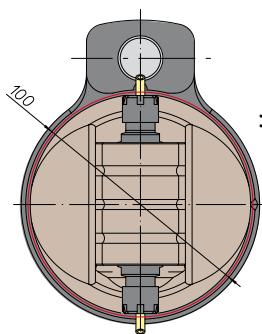
## prestazioni/performances



## tipi mandrino disponibili / available spindle types

3 Weldon Whistle-Notch

Ø10



CONO SHANK	size	A	B	H standard	H optional
DIN9871 *	30			65	-
	40			80	110
	45				
	50	180	35		
CAT 50	40			65	-
	50			80	110
ANSIB5.50	40				
BT	50	188	45	80	110
HSK	63			65	-
	80	189		80	110
	100				
DIN69893					
CAPTO	C5			65	-
	C6	184	39		
	C8			80	110
ISO26623					
KM	63			65	-
	80	180		80	110
	100				
DIN2080					
NMTB	40	150	13	65	-
	50	153	16	80	110
ANSIB5.18	40	150	13	65	-
	50	153	16	80	110

\* Option: Dual Contact



# TA10.2P

## caratteristiche/features



ø 10



M8



1-1



10000

## peso/weight

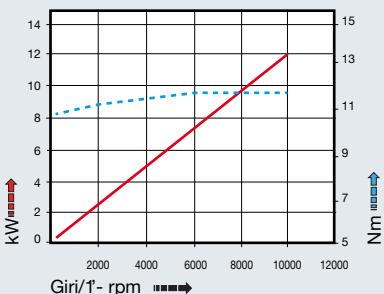


5,5 kg



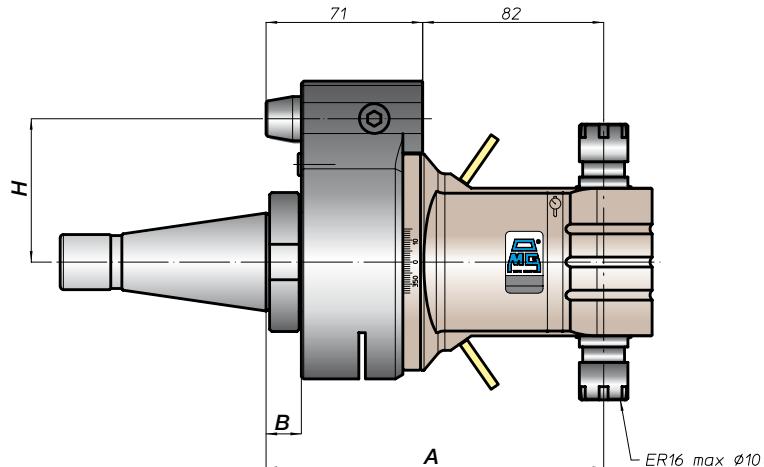
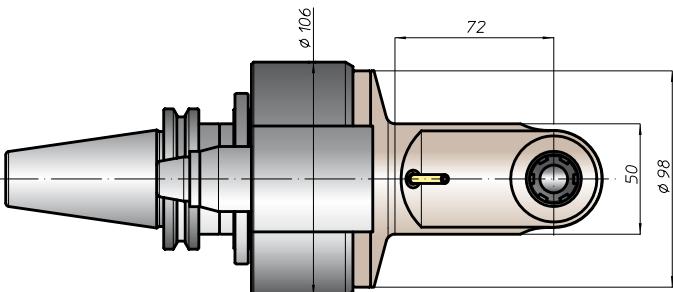
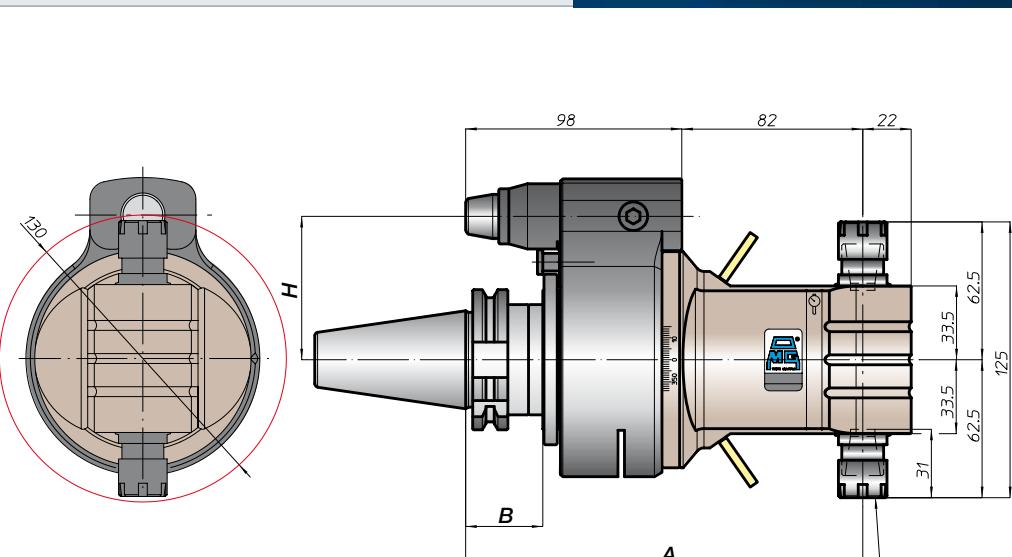
7,5 kg

## prestazioni/performances



	CONO SHANK	size	A	B	standard	H	optional
DIN69871 *	30	180	35	80	65	110	-
	40						
	45						
	50						
	CAT						
	40						
ANSIB5.50 *	50						
	CAT						
	40						
	50						
	BT						
	40						
DIN69893	50	188	45	80	65	110	
	HSK						
	63						
	80						
	100						
	CAPTO						
ISO26623	C5	184	39	65			
	C6						
	C8						
	KM						
	63						
	80						
DIN2080	100						
	-	150	13	65	80	110	
	40						
	-						
	50						
	NMTB						
ANSIS5.18	40	150	13	65	80	110	
	50						

★ Option: Dual Contact



# TA13.2P



## caratteristiche/features

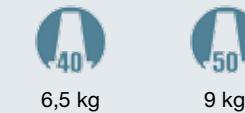


$\varnothing$  13 M10



1-1 8000

## peso/weight



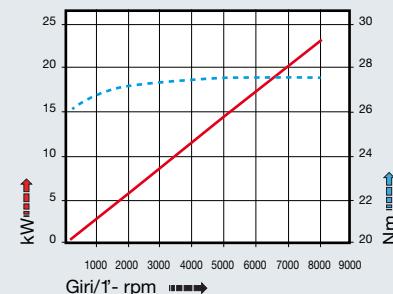
6,5 kg 9 kg

## rotazione/rotation



input output

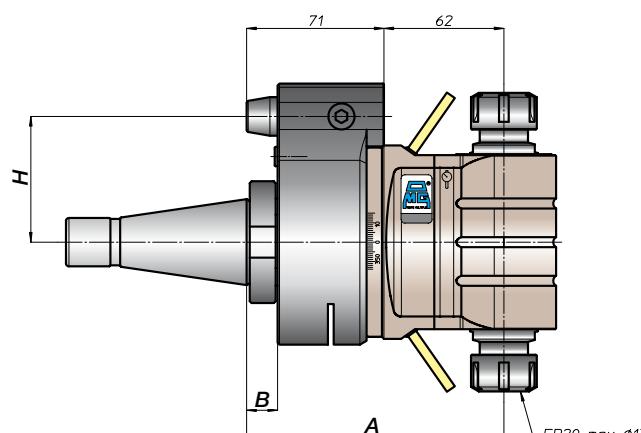
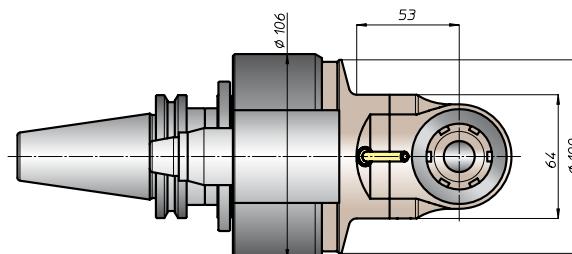
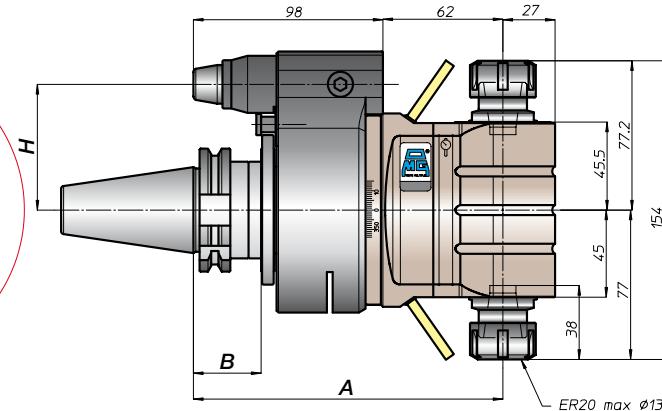
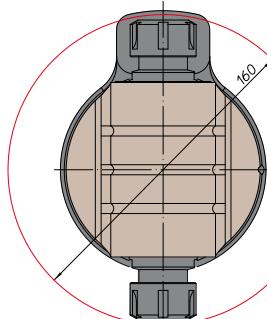
## prestazioni/performances



## tipi mandrino disponibili / available spindle types

1 DIN6388-ER

ER25



CONO SHANK	size	A	B	H standard	H optional
DIN9871 *	-			65	-
	40			80	110
	45			65	-
	50	160	35	80	110
ANSIB5.50 *	40			65	-
	50			80	110
BT *	40			65	-
	50	168	45	80	110
HSK	63			65	-
	80	169	44	80	110
	100		46	80	110
CAPTO	C5			65	-
	C6	164	39	80	110
	C8			65	-
KM	63			65	-
	80	160		80	110
	100			65	-
DIN2080	-			130	13
	40			133	16
	-			80	110
	50			65	-
ANSIB5.18 NMTB	40	130	13	80	110
	50	133	16	65	-

\* Option: Dual Contact

# TA16.2P

## caratteristiche/features



ø 16



M12



1:1



5000

## peso/weight



40

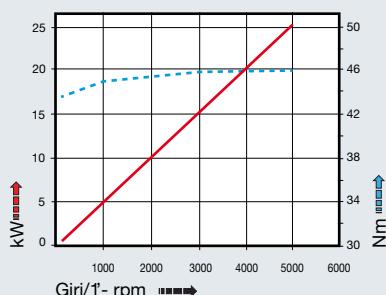


50

7,7 kg

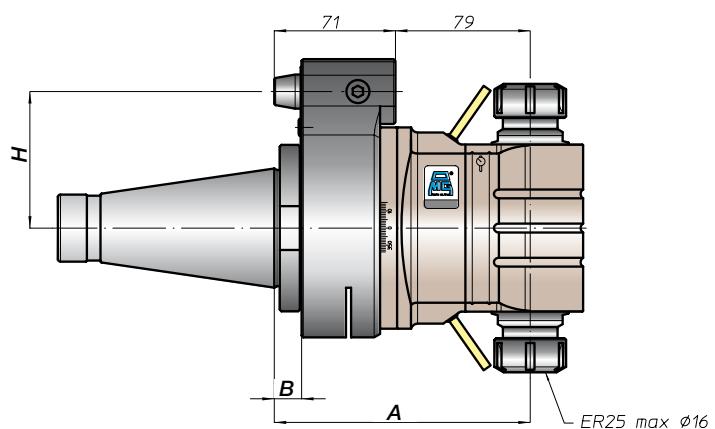
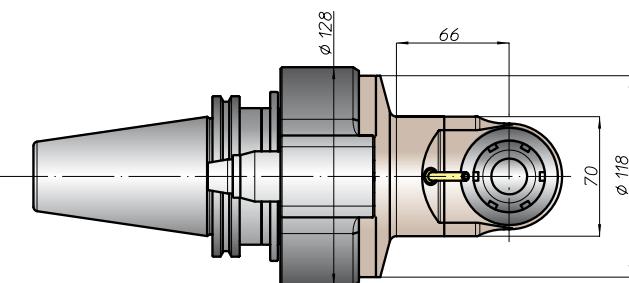
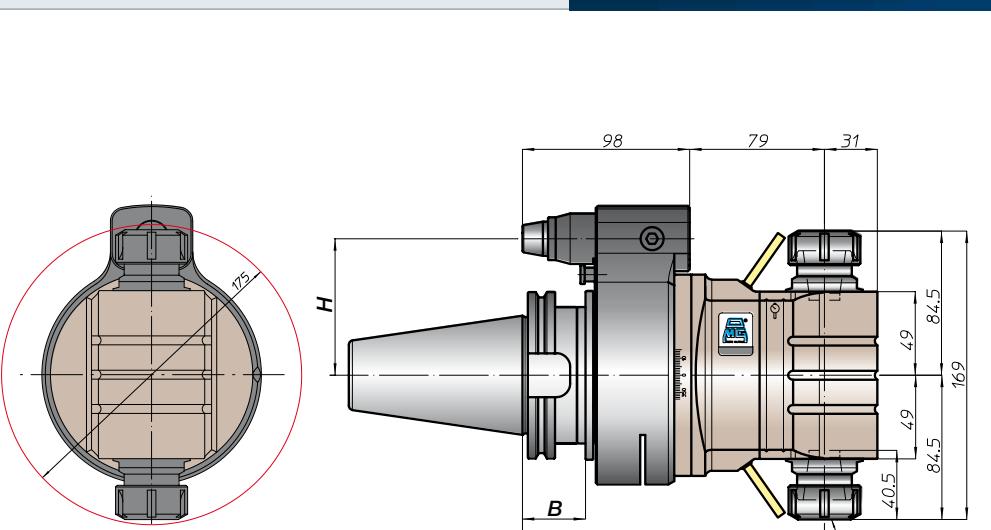
12,2 kg

## prestazioni/performances



CONO SHANK	size	A	B	standard	optional
DIN69871 *	-	172		65	-
	40				
	45	177		80	110
	50				
ANSIIS5.50 *	40	172		65	-
	50	177		80	110
* BT	40	172		65	
	50	185	45	80	110
DIN69893 HSK	63	181	44	65	
	80	186	46	80	110
	100				
ISO26623 CAPTO	C5	176		65	
	C6	181	39		
	C8			80	110
KM	63	172		65	
	80	177		80	110
	100				
DIN2080	-	147	13	65	-
	40				
	-	150	16	80	110
	50				
ANSIIS5.18 NMTB	40	142	13	65	-
	50	150	16	80	110

★ Option: Dual Contact



# TA20.2P



## caratteristiche/features

- ø 20
- M14
- 1-1
- 3500

## peso/weight



15 kg

## rotazione/rotation

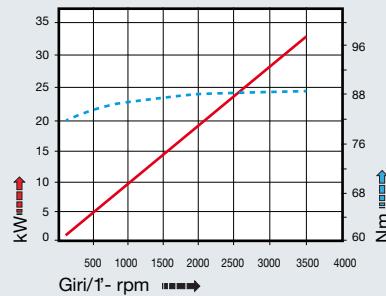


input



output

## prestazioni/performances

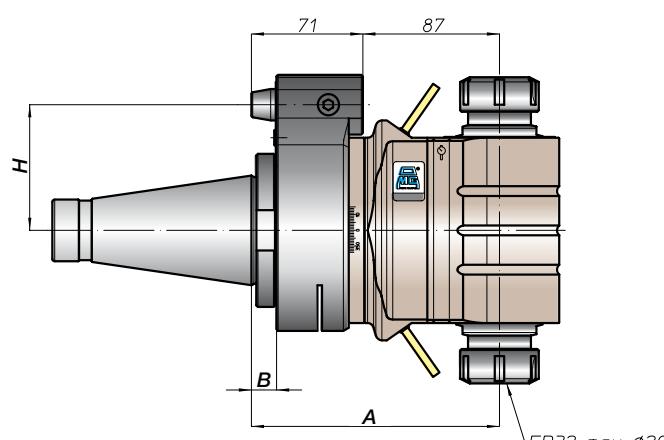
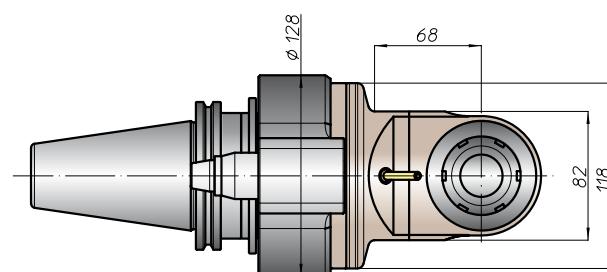
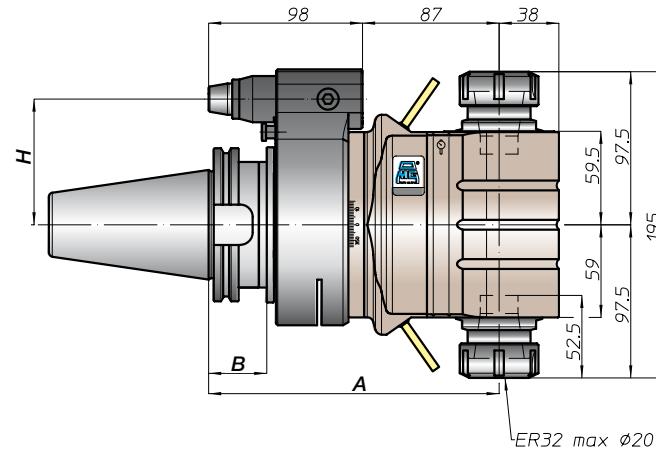
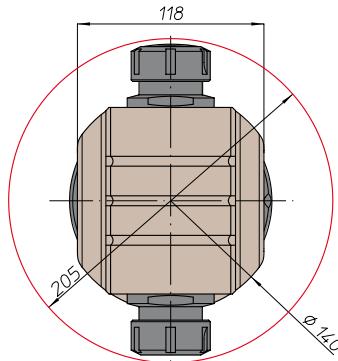


## tipi mandrino disponibili / available spindle types

**2** Albero portafrese Milling shaft**3** Weldon Whistle-Notch

Ø32

Ø20



CONO SHANK	size	A	B	H standard	H optional
DIN9871 *	-	-	-	-	-
	45	-	-	-	-
	50	185	35	80	110
ANSIB5.50 *	50	-	-	-	-
	50	193	45	80	110
BT *	50	-	-	-	-
DIN69893	-	-	-	-	-
	80	194	46	80	110
	100	-	-	-	-
CAPTO	-	-	-	-	-
ISO26623	-	-	-	-	-
	C8	189	-	80	110
KM	-	-	-	-	-
	80	185	-	80	110
	100	-	-	-	-
DIN2080	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	50	158	16	80	110
NMTB	-	-	-	-	-
ANSIS5.18	50	158	16	80	110

\* Option: Dual Contact



# TA26.2P

## caratteristiche/features



o 26



M20



1-1



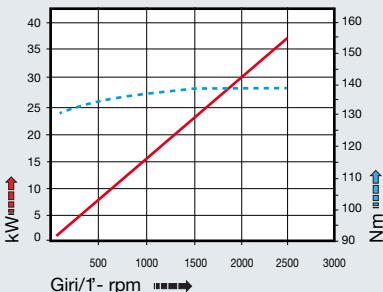
2500

## peso/weight



22,5 kg

## prestazioni/performances



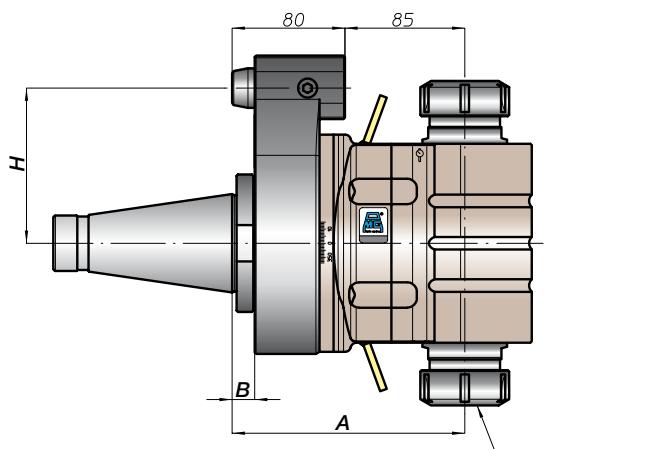
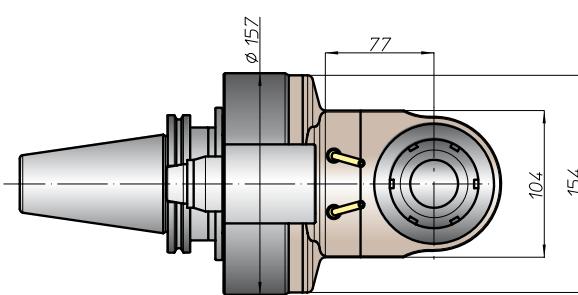
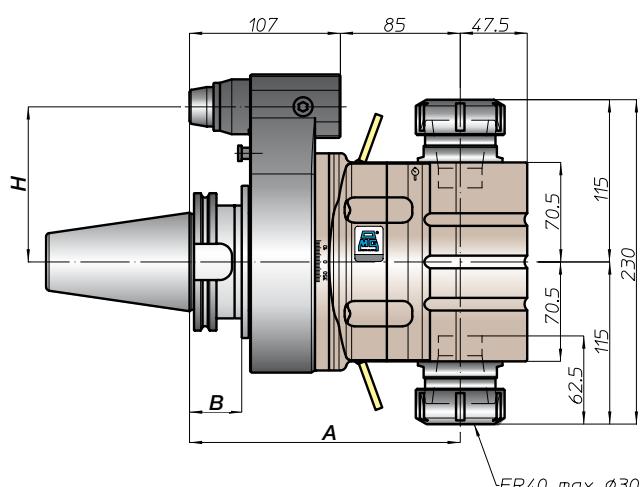
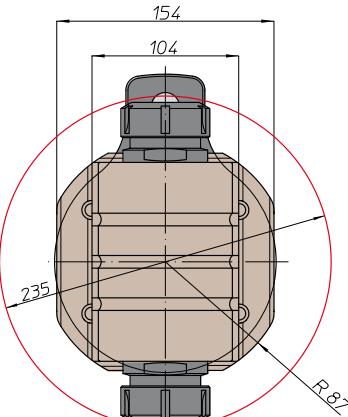
CONO SHANK	size	A	B	H	standard	optional
				-		
DIN69871 *	-					
	45					
ANSI B5.50 *	-					
	50					
* BT	-					
	50	200	45	110	-	
HSK	-					
	80					
DIN69893	-					
	100					
CAPTO	-					
	C8					
KM	-					
	100					
DIN2080	-					
	-					
ANSI B5.18	-					
	50	165	16	110	-	
NMTB	50	165	16	110	-	-

## tipi mandrino disponibili / available spindle types

Ø16-Ø27-Ø32

Ø32

ABS50

2 Albero portafresa  
Milling shaft3 Weldon  
Whistle-Notch6 ABS  
Llicenza KOMET®



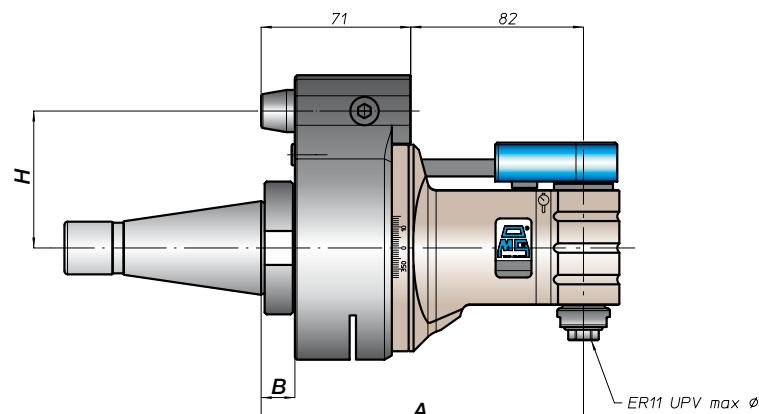
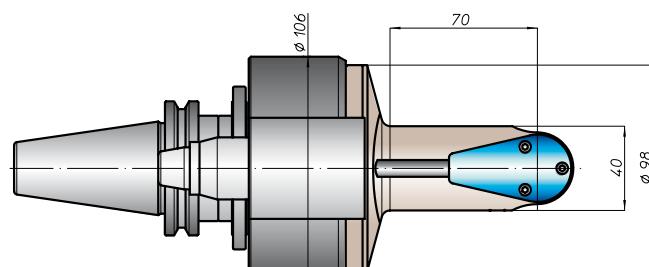
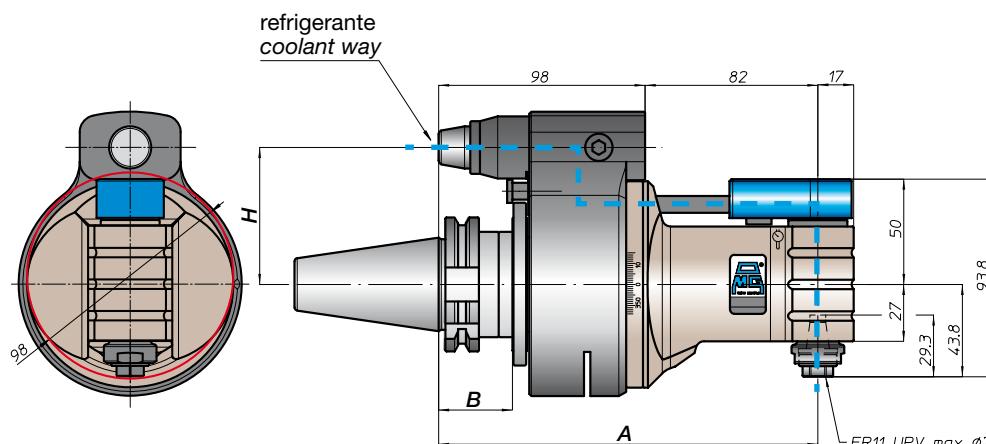
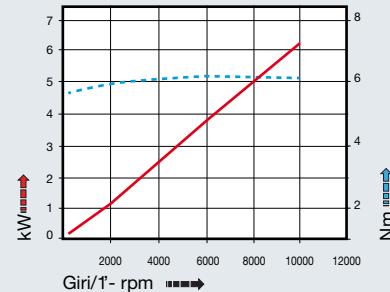
## caratteristiche/features



## peso/weight



## prestazioni/performances



CONO SHANK	size	A	B	H standard	H optional
DIN9871 *	30	150	35	65	-
	40				
DIN9871 *	45	158	45	80	110
CAT	50				
ANSIB5.50	40	158	45	65	-
	50				
BT	50	158	45	80	110
	63				
HSK	63	159	44	65	
	80				
DIN69893	100	154	39	46	80 110
CAPTO	C5				
ISO26623	C6	154	39	65	
	C8				
KM	63	150	13	65	
	80				
	100				
DIN2080	-	120	13	65	-
	40				
NMTB	-	123	16	80	110
ANSIS5.18	40				
	50	123	16	80	110

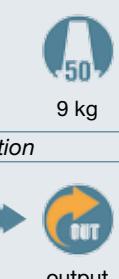
★ Option: Dual Contact

# TA07.PDL

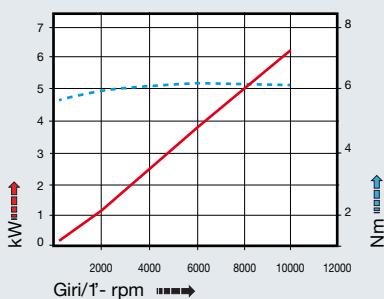
## caratteristiche/features



## peso/weight

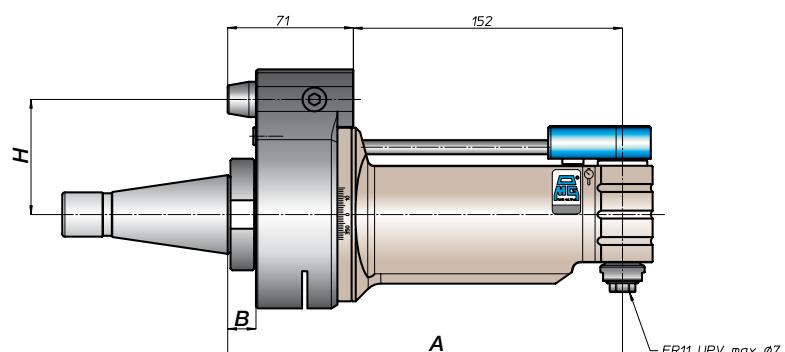
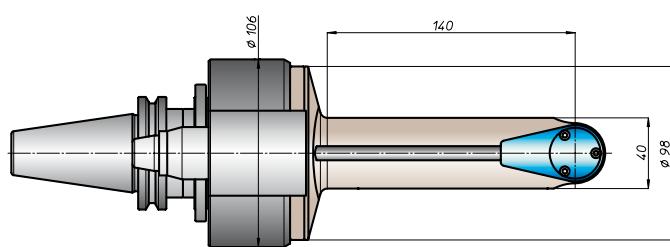
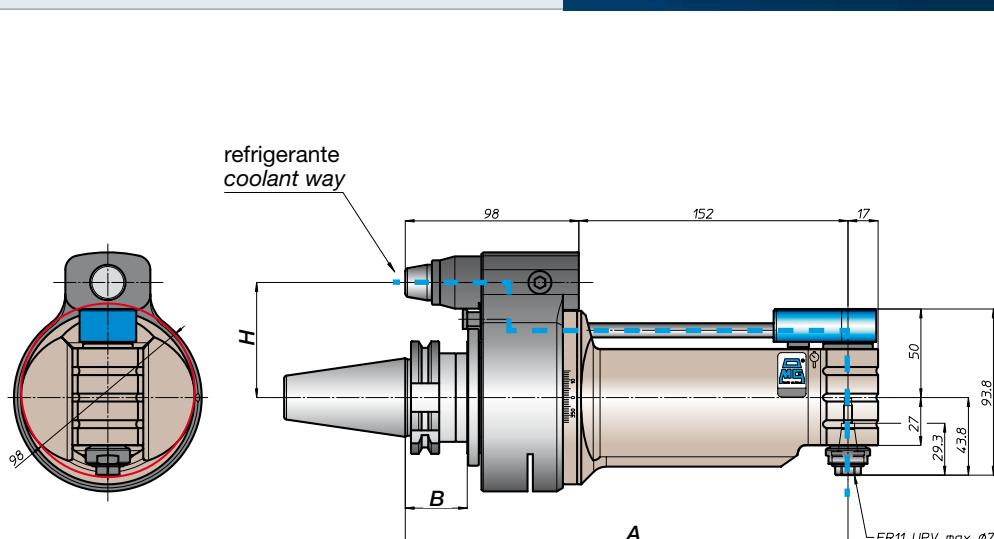


## prestazioni/performances



CONO SHANK	size	A	B	standard	optional	H
DIN69871 *	-			65	-	
	40					
	45					
	50	250	35	80	110	
	40			65	-	
	50			80	110	
ANSIB5.50 *	40					
	50					
	40	258	45	80	110	
	50					
BT	63					
	80	259	44	65		
	100					
	46			80	110	
HSK	C5					
	C6	254	39	65		
	C8			80	110	
ISO26623	63					
	80	250		65		
	100					
				80	110	
KM	63					
	80	250		65		
	100					
				80	110	
DIN2080	-					
	40	220	13	65	-	
	-	223	16	80	110	
	50					
ANSIS5.18 NMTB	40	220	13	65	-	
	50	223	16	80	110	

★ Option: Dual Contact



## TA10.PD



BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori  
AccessoriesAppendice tecnica  
Technical supplement

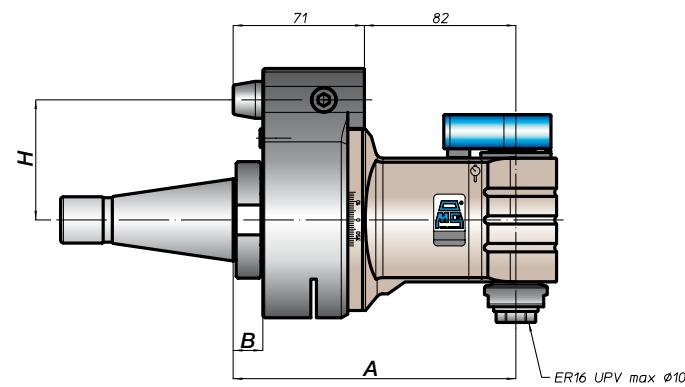
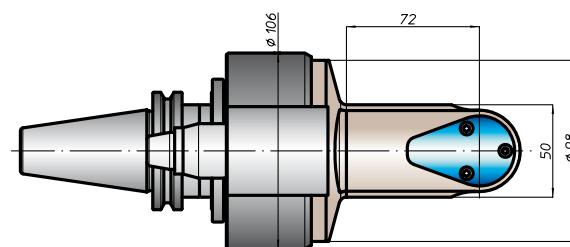
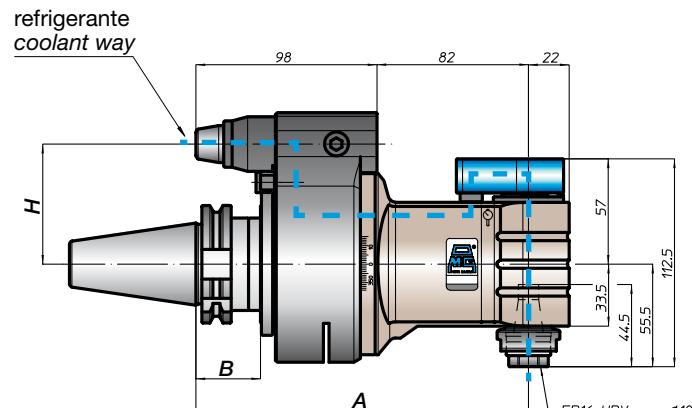
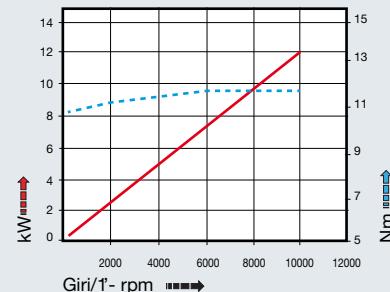
## caratteristiche/features

- ø 10
- M8
- 1-1
- 10000
- 10 bar

## peso/weight

- |                    |        |
|--------------------|--------|
| 40                 | 50     |
| 5,8 kg             | 8 kg   |
| rotazione/rotation |        |
| input              | output |

## prestazioni/performances



CONO SHANK	size	A	B	H	standard	optional
DIN9871 *	30			65	-	
	40			80	110	
	45			65	-	
DIN9871 *	50	180	35	80	110	
CAT	40			65	-	
	50			80	110	
ANSIB5.50 *	40			65	-	
	50			80	110	
BT	40			65	-	
	50	188	45	80	110	
HSK	63			65	-	
	80	189		80	110	
	100			46	80	110
DIN69893						
CAPTO	C5			65	-	
	C6	184	39	80	110	
	C8			65	-	
ISO26623						
KM	63			65	-	
	80	180		80	110	
	100			65	-	
DIN2080						
NMTB	40	150	13	65	-	
	50	153	16	80	110	
ANSIB5.18	40	150	13	65	-	
	50	153	16	80	110	

\* Option: Dual Contact



# TA10.PDL

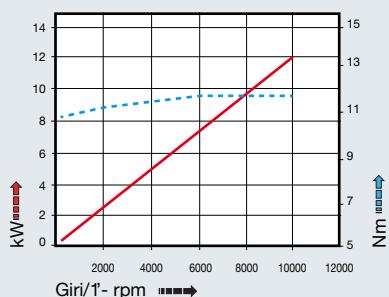
## caratteristiche/features



## peso/weight

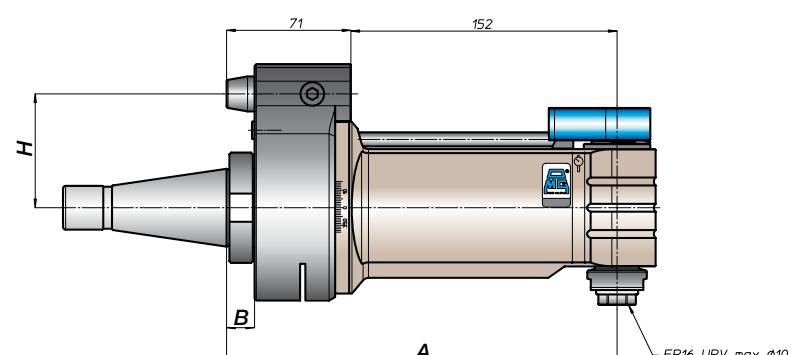
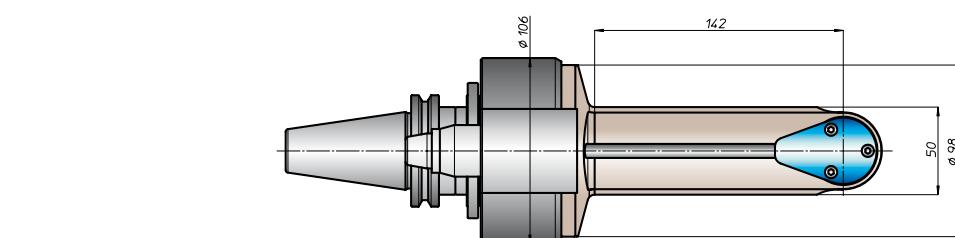
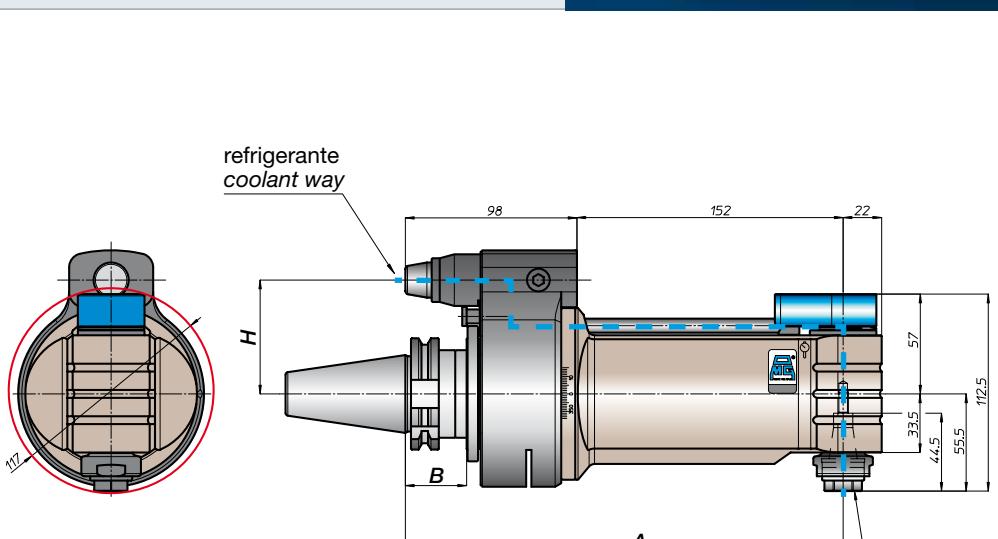


## prestazioni/performances



			H		
CONO SHANK	size	A	B	standard	optional
DIN69871 *	-			65	-
	40				
	45				
	50	250	35	80	110
	CAT				
ANSI B5.50	40			65	-
	50			80	110
* BT	40			65	
	50	258	45	80	110
	HSK				
	63		44	65	
DIN69893	80	259		46	80 110
	100				
	CAPTO				
ISO26623	C5			65	
	C6	284	39		
	C8			80	110
KM	63			65	
	80	250			
	100			80	110
DIN2080	-			65	
	40	220	13	65	-
	-	223	16	80	110
	50				
ANSI B5.18	40	220	13	65	-
	50	223	16	80	110

★ Option: Dual Contact



# TA13.PD



## caratteristiche/features



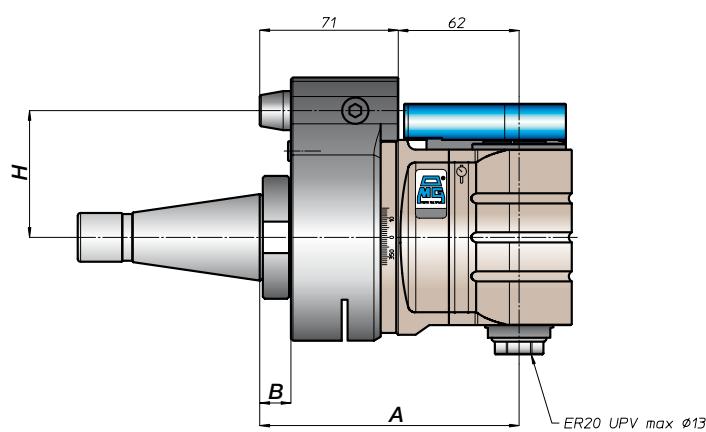
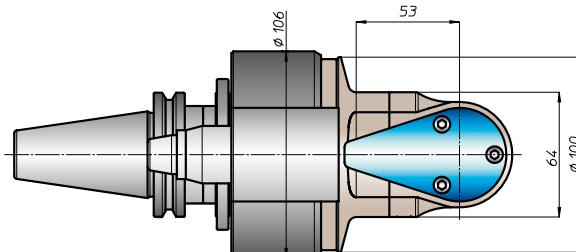
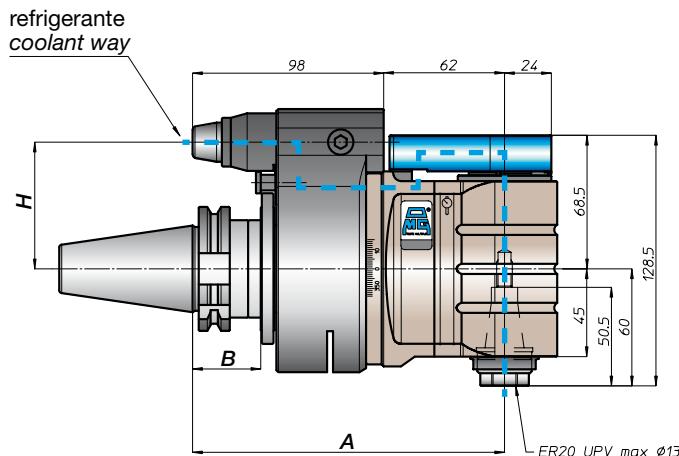
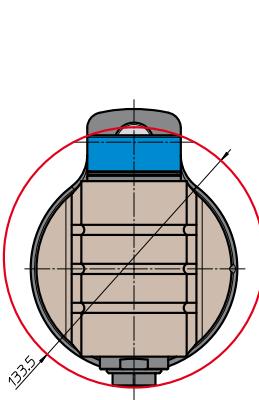
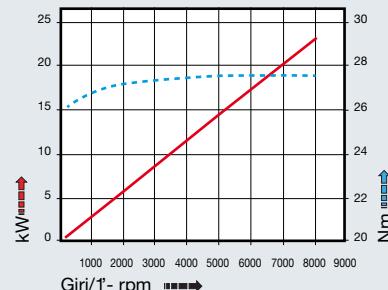
## peso/weight



## rotazione/rotation



## prestazioni/performances



CONO SHANK	size	A	B	H	standard	optional
DIN9871 *	-			65	-	
	40			80	110	
	45			65	-	
	50	160	35	80	110	
ANSIB5.50 *	40			65	-	
	50			80	110	
BT *	40			65		
	50	168	45	80	110	
HSK	63			65		
	80	169		80	110	
	100			46	80	110
DIN69893						
CAPTO	C5			65		
	C6	164	39			
	C8			80	110	
KM	63			65		
	80	160		80	110	
	100					
DIN2080						
	-	130	13	65	-	
	40					
	-	133	16	80	110	
	50					
ANSIB5.18 NMTB	40	130	13	65	-	
	50	133	16	80	110	

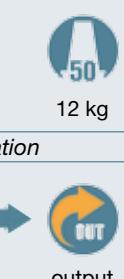
\* Option: Dual Contact

# TA16.PD

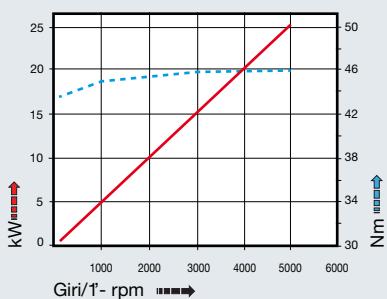
## caratteristiche/features



## peso/weight



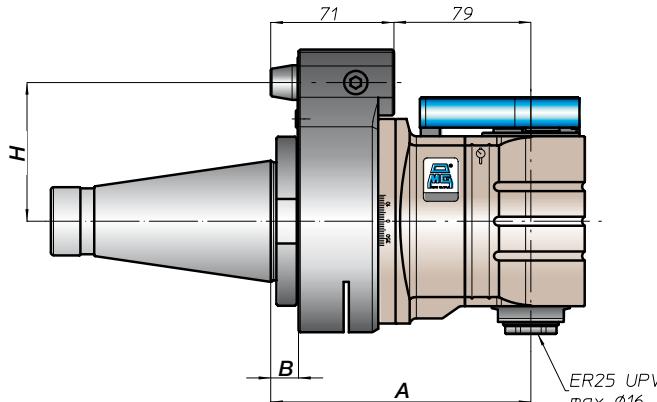
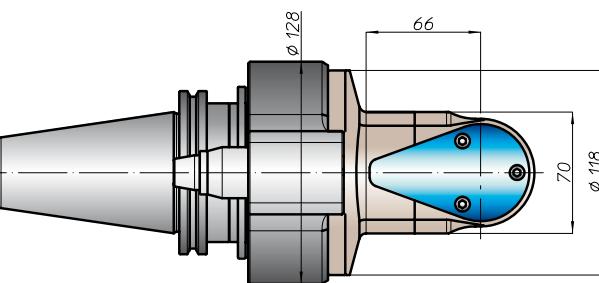
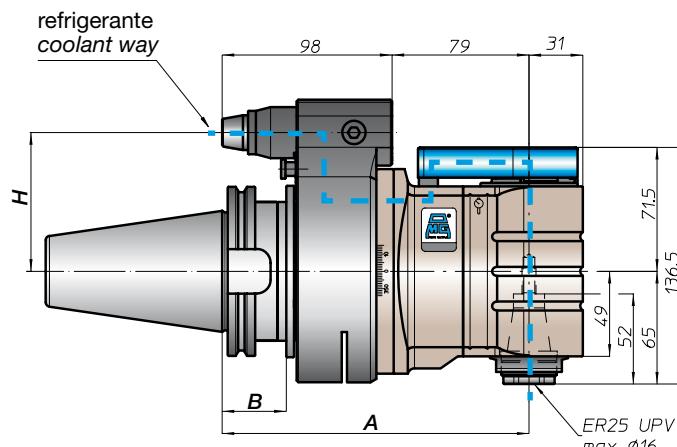
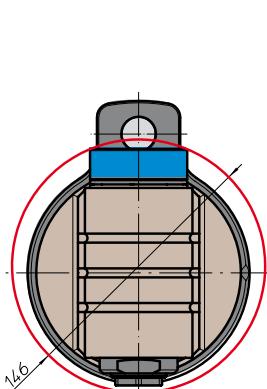
## prestazioni/performances



CONO SHANK	size	A	B	standard	optional	H
DIN69871 *	-	172		65	-	
	40					
	45	177		80	110	35
	50					
ANSI5.50 *	40	172		65	-	
	50	177		80	110	
* BT	40	172		65		
	50	185	45	80	110	
HSK DIN69893	63	181	44	65		
	80	186	46	80	110	
	100					
ISO26623 CAPTO	C5	176		65		
	C6	181	39			
	C8			80	110	
KM	63	172		65		
	80	177		80	110	
	100					
DIN2080	-	147	13	65	-	
	40					
	-	150	16	80	110	
	50					
ANSI5.18 NMTB	40	142	13	65	-	
	50	150	16	80	110	

## tipi mandrino disponibili / available spindle types

1 DIN6388-ER  
ER32



\* Option: Dual Contact

## TA20.PD



BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori  
AccessoriesAppendice tecnica  
Technical supplement

## caratteristiche/features



## peso/weight



rotazione/rotation

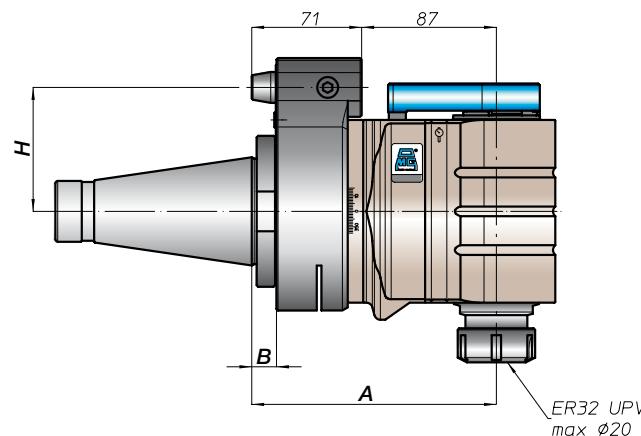
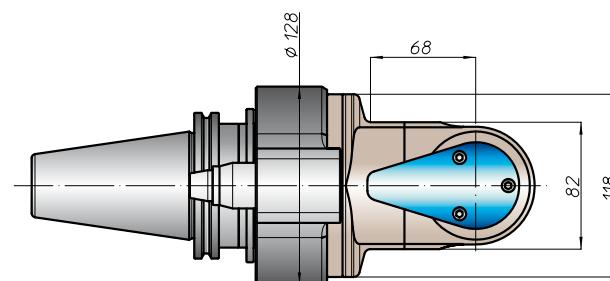
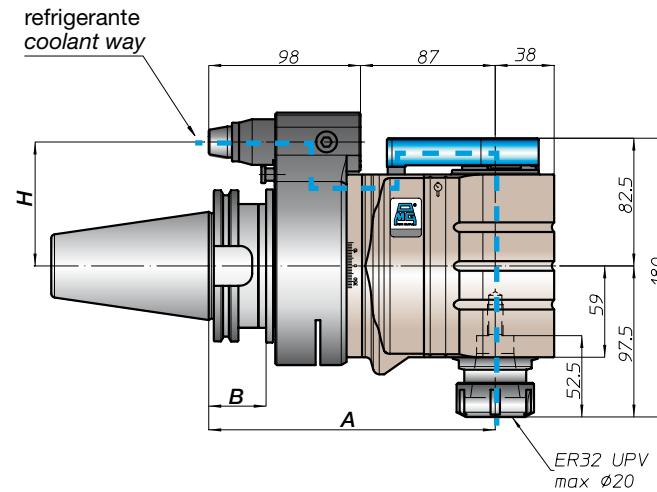
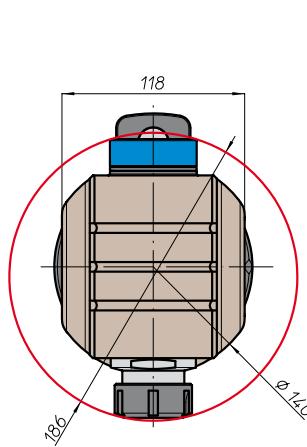
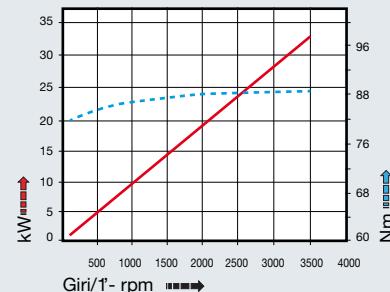


input



output

## prestazioni/performances



CONO SHANK	size	A	B	H	standard	optional
DIN9871 *	-				-	-
	45				80	110
	50	185	35		-	-
ANSIB5.50 *	50				80	110
	BT	-			-	-
	50	193	45	80	110	
DIN69893	HSK	-			-	-
	80	194		46	80	110
	100					
ISO26623	CAPTO	-		189	-	
		-			80	110
	C8					
KM	-				-	
	80	185			80	110
	100					
DIN2080	-				-	-
	-				158	16
	-				80	110
	50					
ANSIB5.18	NMTB	-			-	-
	50	158	16	80	110	

★ Option: Dual Contact



# TA26.PD

## caratteristiche/features



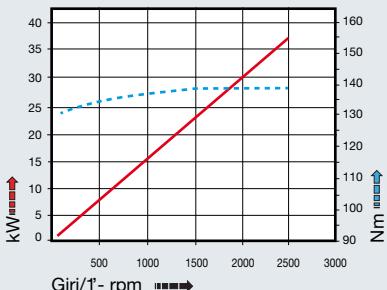
## peso/weight



## rotazione/rotation

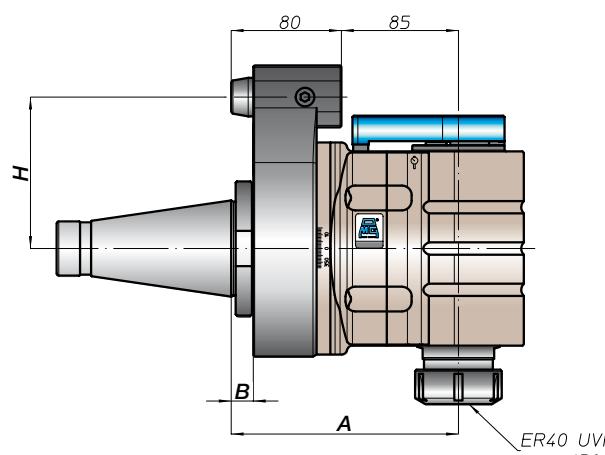
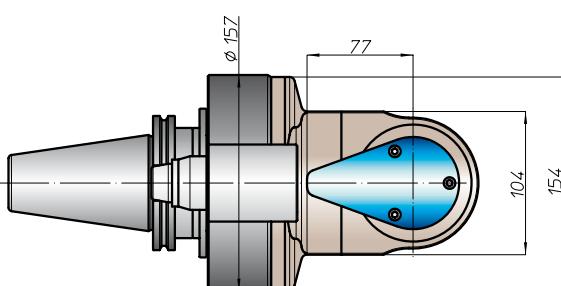
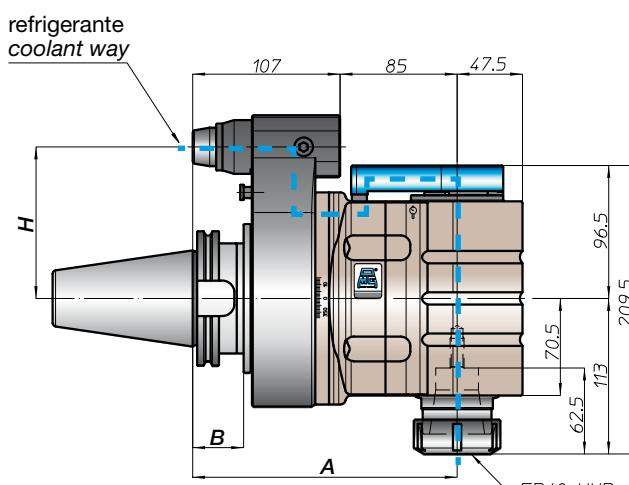
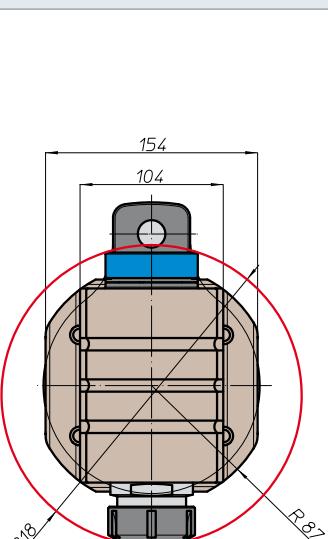


## prestazioni/performances



CONO SHANK	size	A	B	standard	optional	H
DIN69871 *	-					
	45	192	35	110	-	
ANSIB5.50 *	-					
	50	192	35	110	-	
* BT	-					
	50	200	45	110	-	
HSK	-					
	80	201	46	110	-	
ISO26623	-					
	100	196		110	-	
CAPTO	-					
	C8					
KM	-					
	100	192		110	-	
DIN2080	-					
	-					
	-					
	50	165	16	110	-	
ANSIB5.18 NMTB	-					
	50	165	16	110	-	

★ Option: Dual Contact



# testa ad angolo - angle head

# TA26.40.D



## caratteristiche/features

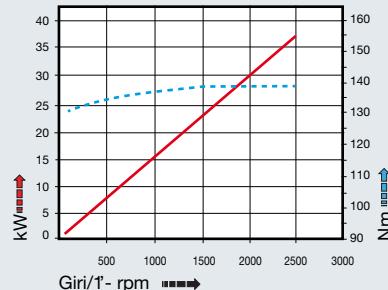


## peso/weight



22 kg  
rotazione/rotation

## prestazioni/performances



BAH

TA.CP

TA

MO

HT

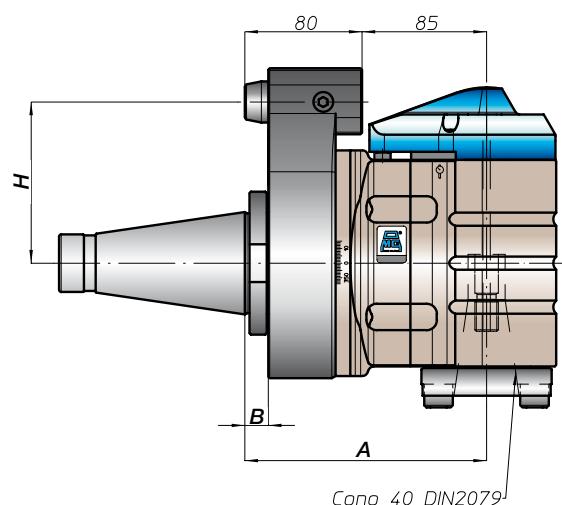
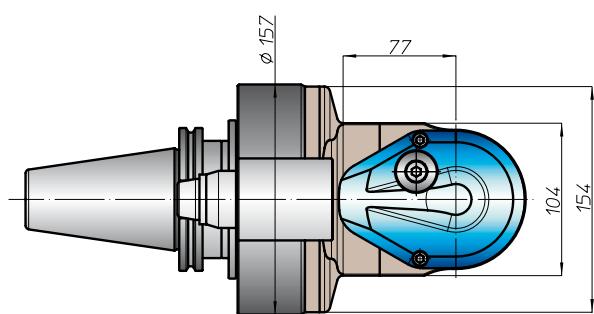
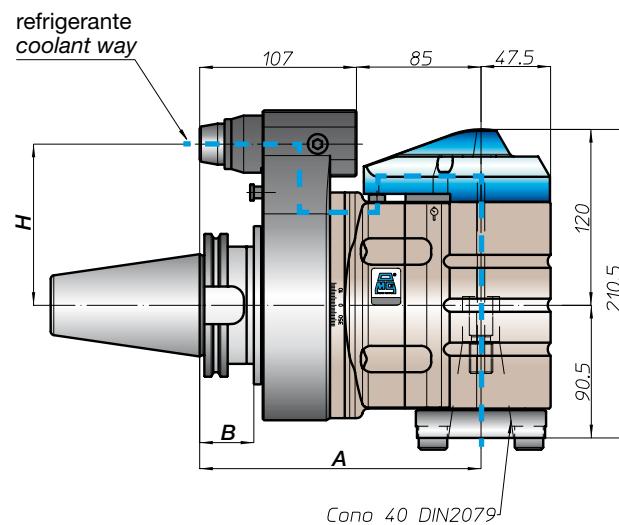
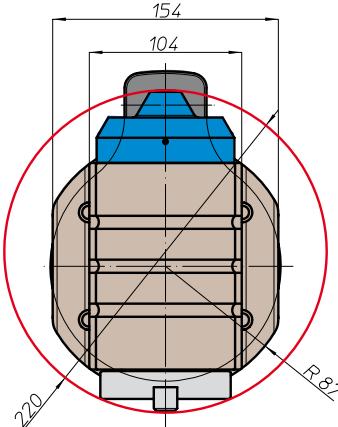
VH

TSI/TSX

T

Accessori  
AccessoriesAppendice tecnica  
Technical supplement

3-46



CONO SHANK	size	A	B	H
DIN9871 *	-			Standard -
	45			Optional 110 -
CAT	50	192	35	
ANSIB5.50	50			110 -
BT	50	200	45	110 -
HSK	-			
DIN69393	80	201	46	110 -
	100			
CAPTO	-		196	
ISO26623	C8			110 -
KM	-			
	100	192		110 -
DIN2080	-			
	-			
	-			
	50	165	16	110 -
ANSIB5.18	50	165	16	110 -
NMTB				

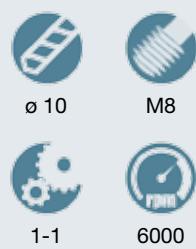
\* Option: Dual Contact



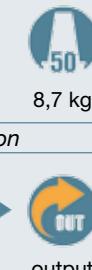
## TAO10.P



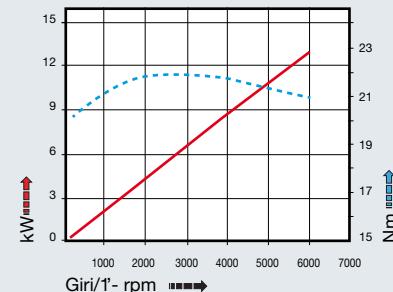
## caratteristiche/features



## peso/weight



## prestazioni/performances



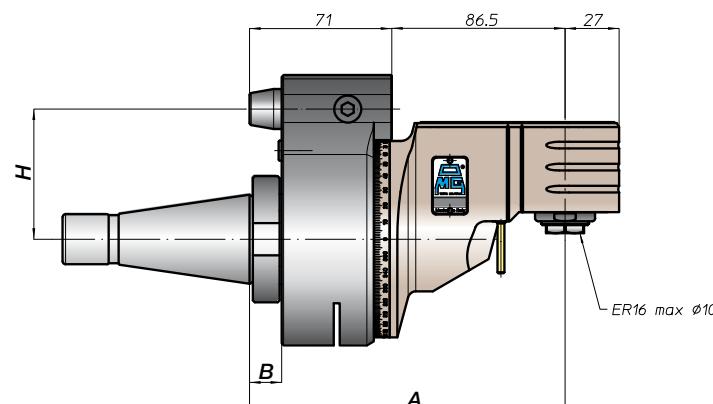
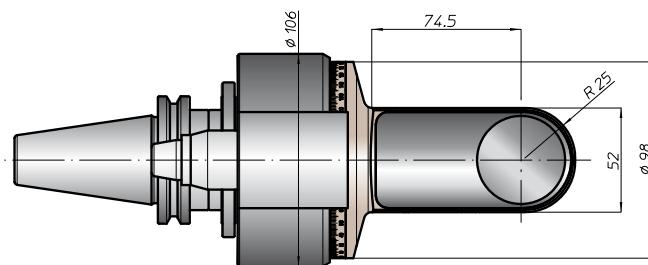
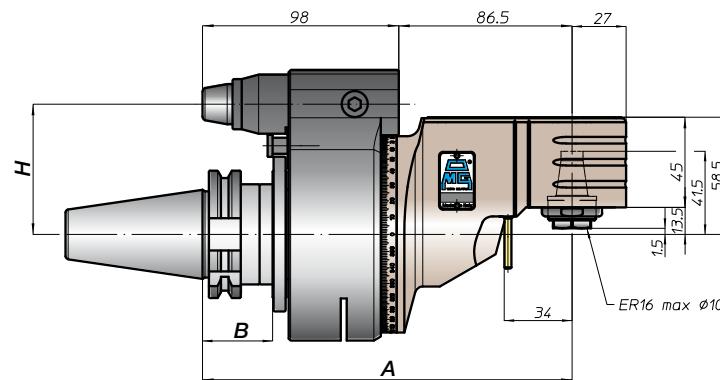
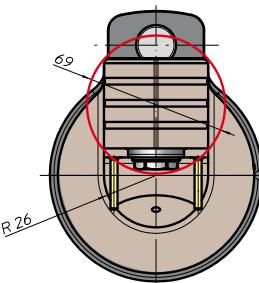
## tipi mandrino disponibili / available spindle types

2 Albero portafrese Milling shaft

4 DIN69893-HSK

Ø16

HSK25



CONO SHANK	size	A	B	H standard	H optional
DIN69871 *	-			65	-
	40			80	110
	45			65	-
	50	184,5	35	80	110
ANSI5.50 *	40			65	-
	50			80	110
BT *	40			65	-
	50	192,5	45	80	110
HSK	63		44	65	-
	80	193,5	46	80	110
	100			65	-
DIN69893	C5			65	-
	C6	188,5	39	80	110
	C8			65	-
ISO26623				80	110
KM	63			65	-
	80	184,5		80	110
	100			65	-
DIN2080	-		157,5	13	65
	40		160,5	16	80
	-			80	110
	50			65	-
ANSI5.18	40	157,5	13	65	-
	50	160,5	16	80	110

\* Option: Dual Contact



# TA010.PD

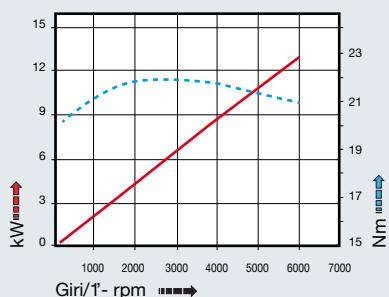
## caratteristiche/features



## peso/weight



## prestazioni/performances



			H		
CONO SHANK	size	A	B	standard	optional
DIN69871 *	-			65	-
	40			80	110
	45				
	50	184,5	35		
ANSIB5.50 *	40			65	-
	50			80	110
	40			65	
	50	192,5	45	80	110
HSK	63				
	80	193,5	44	65	
	100			80	110
ISO26623	C5				
	C6	188,5	39	65	
	C8			80	110
KM	63			65	
	80	184,5		80	110
	100				
DIN2080	-			-	-
	-			-	-
	-			-	-
	-			-	-
ANSIB5.18 NMTB	-			-	-
	-			-	-

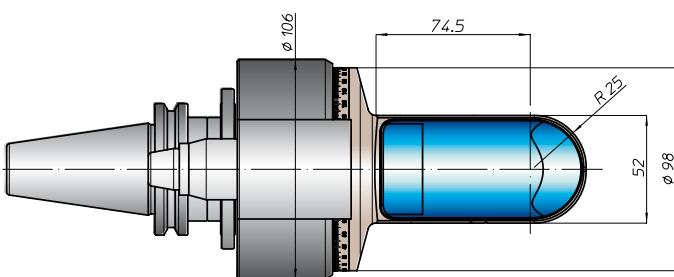
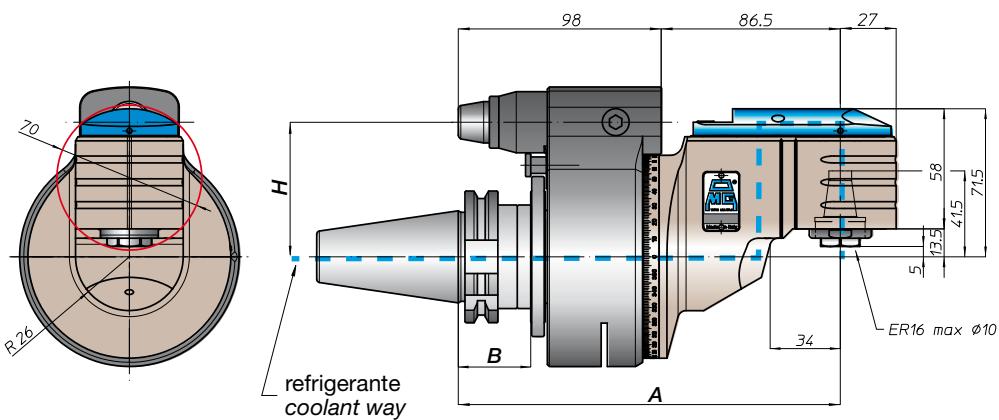
## tipi mandrino disponibili / available spindle types

2 Albero portafresa  
Milling shaft

4 DIN69893-HSK

Ø16

HSK25



# TAO13.P



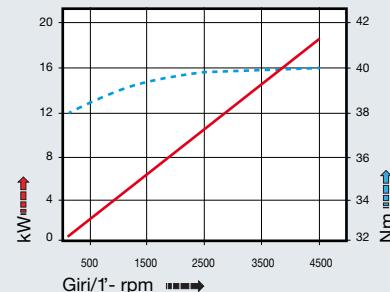
## caratteristiche/features



## peso/weight

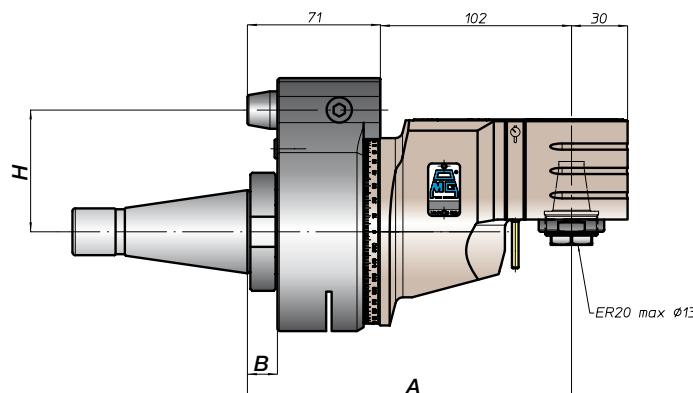
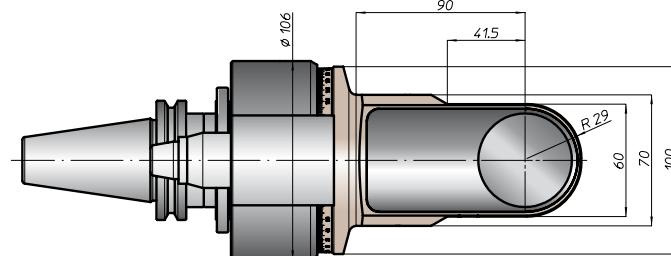
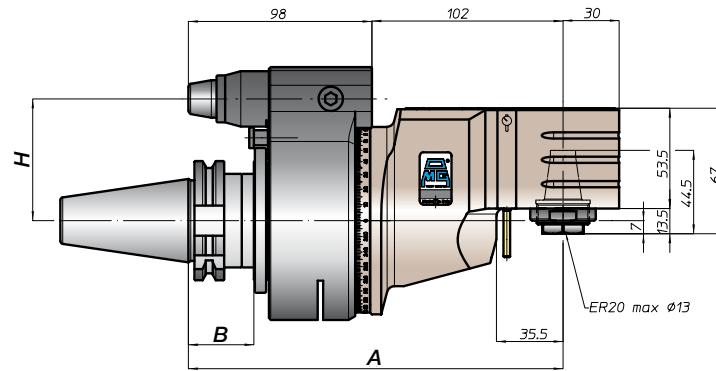
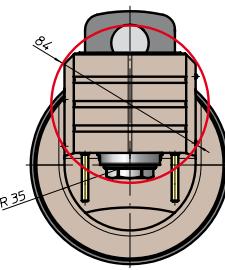


## prestazioni/performances



## tipi mandrino disponibili / available spindle types

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



CONO SHANK	size	A	B	H	standard	optional
DIN9871 *	-			65	-	
	40			80	110	
	45			65	-	
	50	200	35	80	110	
CAT	40			65	-	
	50			80	110	
ANSIB5.50	40			65	-	
	50			80	110	
BT	40			65	-	
	50	208	45	80	110	
HSK	63			65	-	
	80	209		80	110	
	100			46	80	110
DIN69893						
CAPTO	C5			65	-	
	C6	204	39	80	110	
	C8			65	-	
KM	63			65	-	
	80	200		80	110	
	100			65	-	
DIN2080				170	13	65
	40			176	16	80
	-			176	16	110
	50			173	13	65
NMTB	40	173	13	65	-	
	50	176	16	80	110	
ANSIB5.18						

\* Option: Dual Contact

# TA013.PD

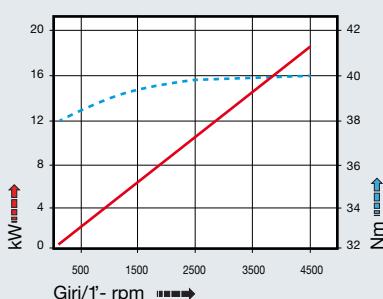
## caratteristiche/features



## peso/weight



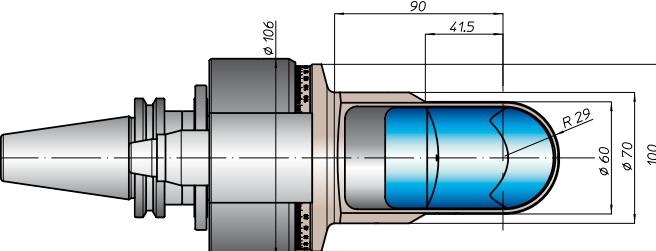
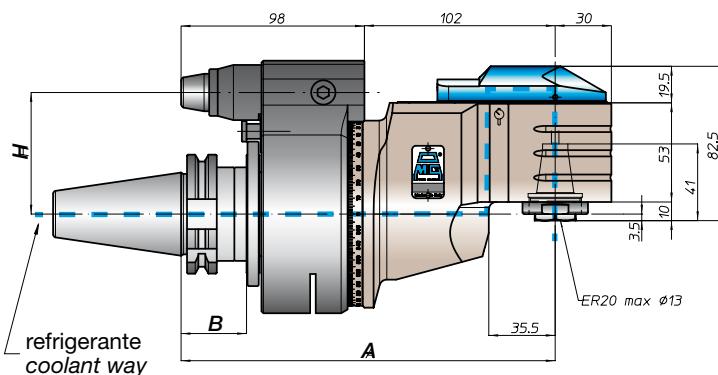
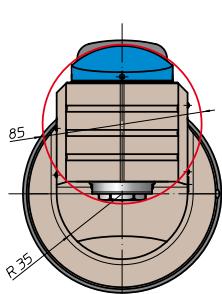
## prestazioni/performances



			H		
CONO SHANK	size	A	B	standard	optional
DIN9871 *	-			65	-
	40				
	45				
	50	200	35	80	110
ANSIB5.50 *	40			65	-
	50			80	110
* BT	40			65	
	50	208	45	80	110
DIN69893	63		44	65	
	80	209		46	80 110
	100				
ISO26623	C5			65	
	C6	204	39		
	C8			80	110
KM	63			65	
	80	200		80	110
	100				
DIN2080	-			-	-
	-			-	-
	-			-	-
	-			-	-
ANSIB5.18	-			-	-
	NMTB			-	-

## tipi mandrino disponibili / available spindle types

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



## TAO16.P



## caratteristiche/features



## peso/weight



11,7 kg

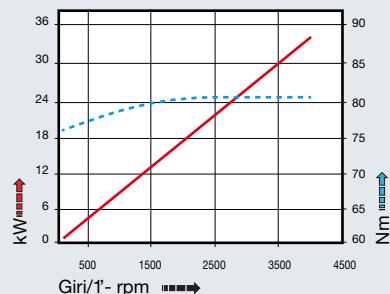
## rotazione/rotation



input

output

## prestazioni/performances



## tipi mandrino disponibili / available spindle types

2 Albero portafresa Milling shaft

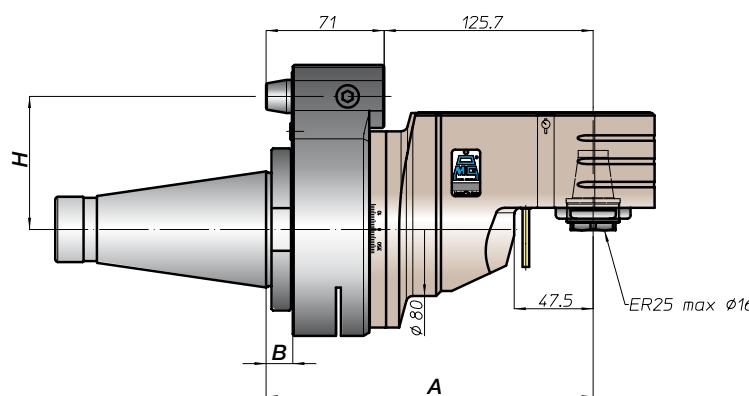
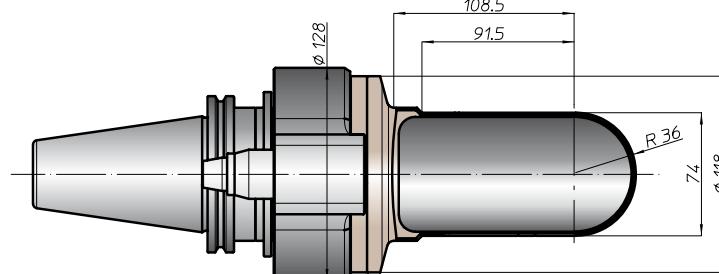
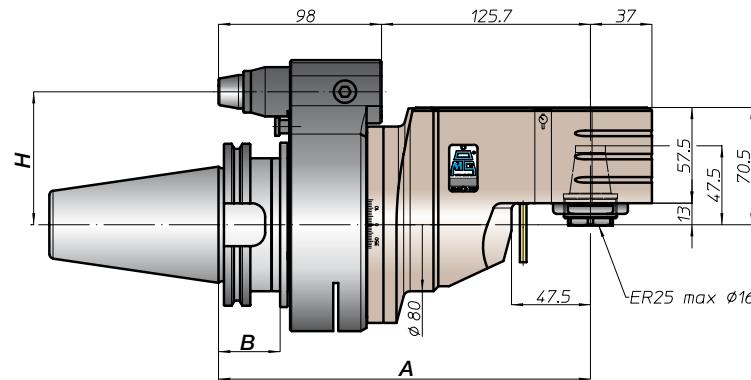
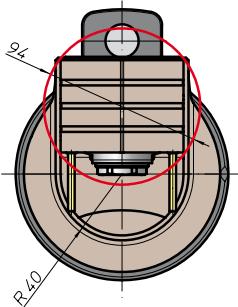
3 Weldon Whistle-Notch

4 DIN69893-HSK

Ø16-Ø22-Ø27

Ø16

HSK40



CONO SHANK	size	A	B	H standard	H optional
DIN9871 *	-	-	-	-	-
	45	-	-	-	-
	50	223,5	35	80	110
CAT	-	-	-	65	-
ANSIB6.50	50	-	-	80	110
BT	-	-	-	65	-
*	50	231,5	45	80	110
HSK	-	-	-	-	-
DIN69893	80	232,5	46	80	110
	100	-	-	-	-
CAPTO	-	227,5	-	-	-
ISO26623	-	-	-	80	110
KM	-	-	-	-	-
DIN2080	80	223,5	-	-	-
	100	-	-	80	110
NMTB	-	-	-	-	-
ANSIS6.18	50	199,5	16	80	110

\* Option: Dual Contact

# TA016.PD

## caratteristiche/features



ø 16 M12 1-1



4000 70 bar

## peso/weight



50

11,7 kg

## rotazione/rotation

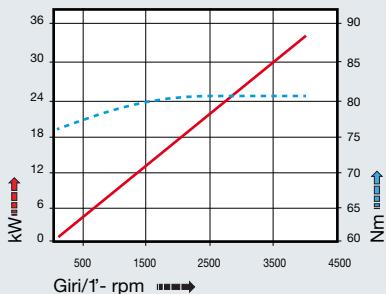


input



output

## prestazioni/performances



				H	
CONO SHANK	size	A	B	standard	optional
DIN69871 *	-	-	-	-	-
	-	-	-	-	-
	45	-	-	-	-
	50	223,5	35	80	110
ANSIB5.50 *	CAT	-	-	-	-
		-	-	-	-
	50	231,5	45	80	110
*	BT	-	-	-	-
	50	231,5	45	80	110
HSK	-	-	-	-	-
	80	232,5	46	80	110
	100	-	-	-	-
ISO26623	-	-	-	-	-
	-	227,5	-	-	-
	C8	-	-	-	-
KM	-	-	-	-	-
	80	223,5	-	-	-
	100	-	-	-	-
DIN2080	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
	-	-	-	-	-
NMTB	-	-	-	-	-
ANSIB5.18	-	-	-	-	-

## tipi mandrino disponibili / available spindle types

Ø16-Ø22-Ø27

Ø16

HSK40

2 Albero portafresa Milling shaft

3 Weldon Whistle-Notch

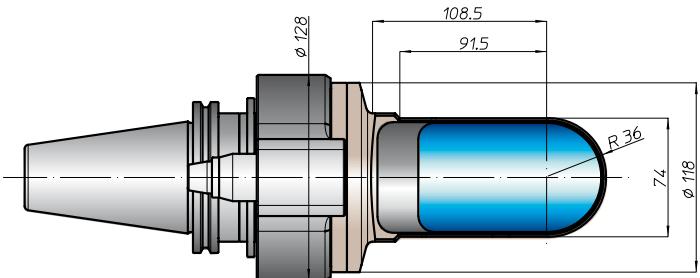
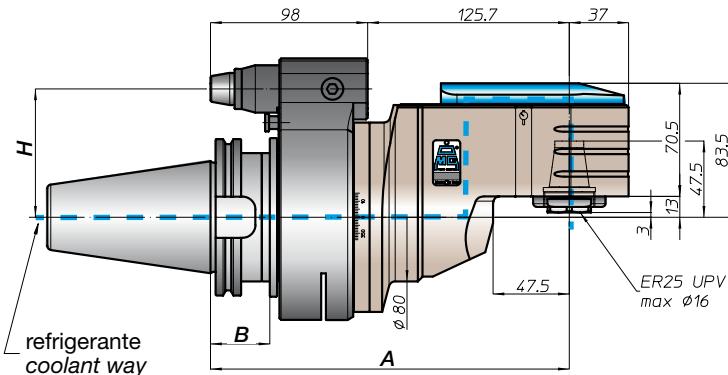
4 DIN69893-HSK

refrigerante coolant way

A

B

H





# TAO20.P

## caratteristiche/features



## peso/weight

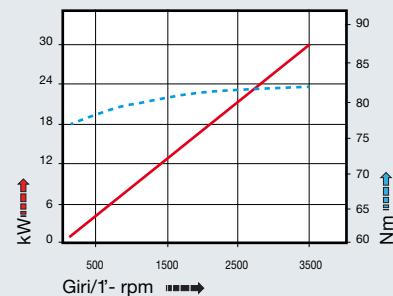


14,5 kg

## rotazione/rotation



## prestazioni/performances



## tipi mandrino disponibili / available spindle types

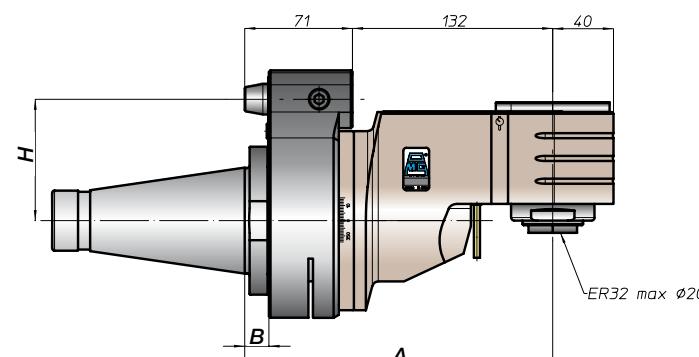
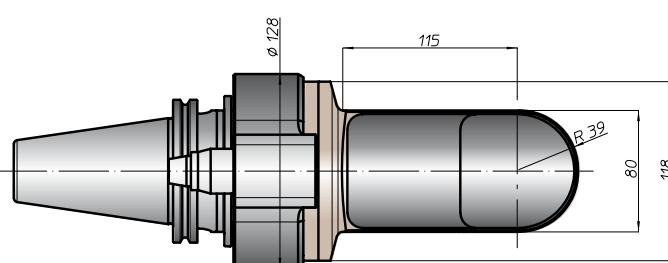
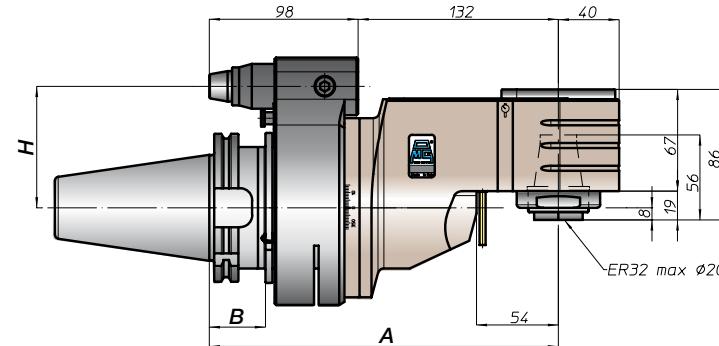
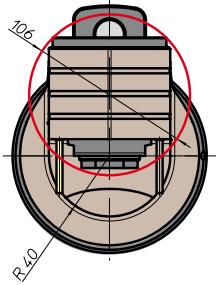
2 Albero portafresa  
Milling shaft3 Weldon  
Whistle-Notch

4 DIN69893-HSK

Ø22-Ø27-Ø32

Ø16-Ø20

HSK50



CONO SHANK	size	A	B	H	standard	optional
DIN9871 *	-				-	-
	45				80	110
	50	230	35		-	-
CAT	-				80	110
ANSIB5.50	50				-	-
*	BT	-			65	
	50	238	45	80	110	
HSK	-				-	-
DIN69893	80				80	110
	100	239	46	80	110	
CAPTO	-				-	
ISO26623	-				80	110
KM	-				-	
DIN2080	80	230			80	110
	100				-	-
	-				-	-
	-				-	-
	-				-	-
	50	203	16	80	110	
NMTB	-				-	-
ANSIS5.18	50	203	16	80	110	

\* Option: Dual Contact

# TA020.PD

## caratteristiche/features



ø 20 M14 1-1



3500 70 bar

## peso/weight



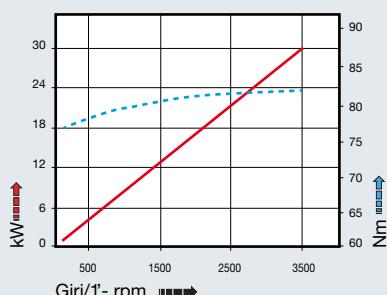
14,5 kg

## rotazione/rotation



input output

## prestazioni/performances



CONO SHANK	size	A	B	H	standard	optional				
DIN69871 *	-	230	35	80 110						
	-									
	45									
	50									
ANSI5.50 *	CAT	50	238	45 80 110						
* BT	-	238	45	80 110						
	50									
DIN69893	HSK	-	42	-						
		239								
	80									
ISO26623	CAPTO	-	46	80 110						
		234								
KM	-	230	80 110							
	80									
	100									
DIN2080	-	230	-	-						
	-									
	-									
	-									
ANSI5.18	NMTB	-	-	-						

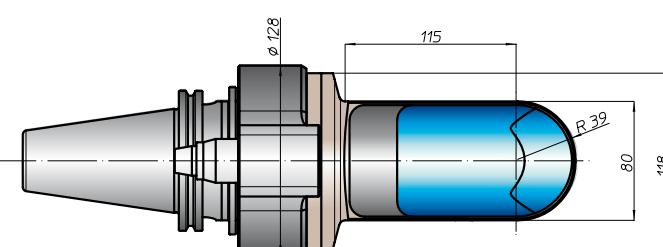
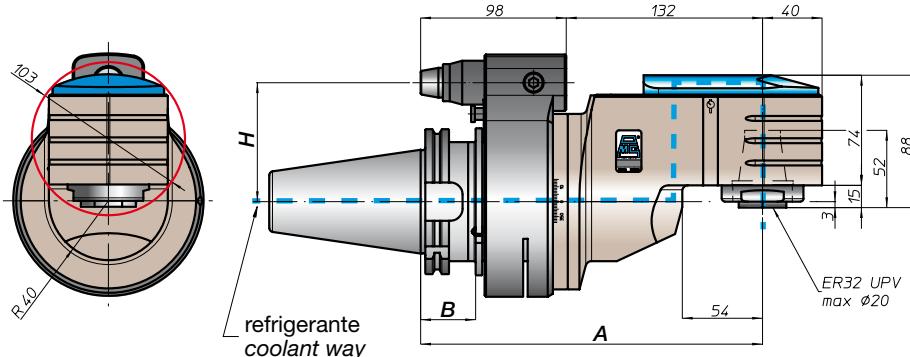
## tipi mandrino disponibili / available spindle types

Ø22-Ø27-Ø32

Ø16-Ø20

HSK50

2 Albero portafresa Milling shaft 3 Weldon Whistle-Notch 4 DIN69893-HSK



# TAV10.P



## caratteristiche/features



Φ10  
M8



1-1  
4000

## peso/weight



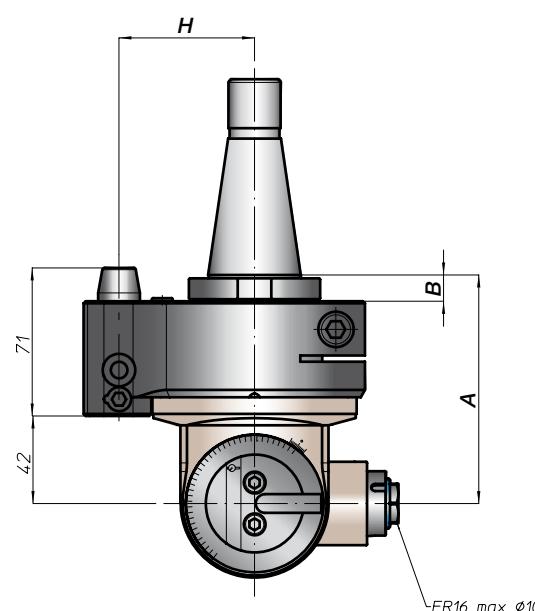
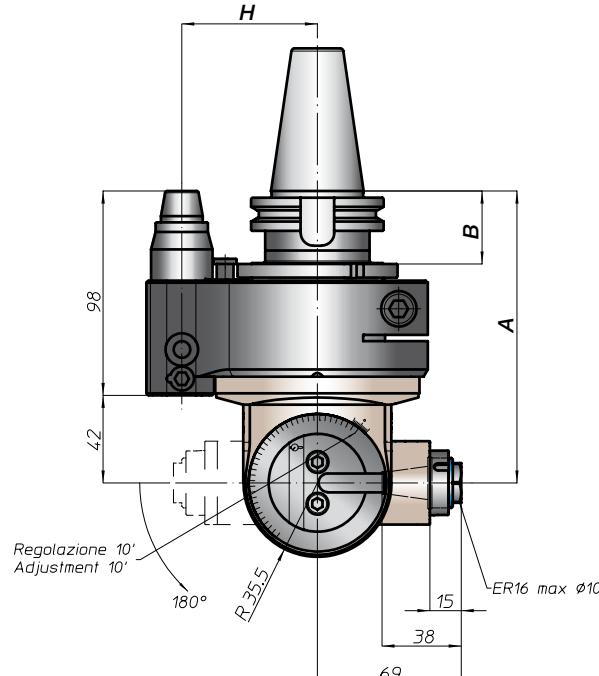
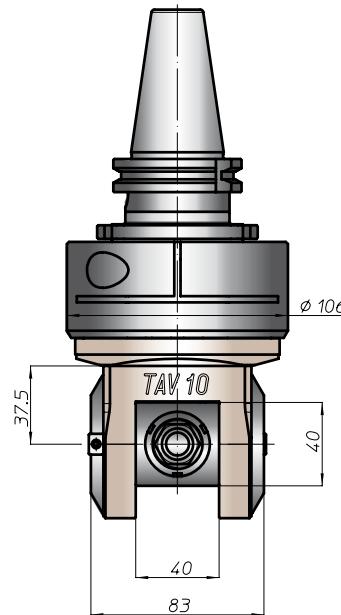
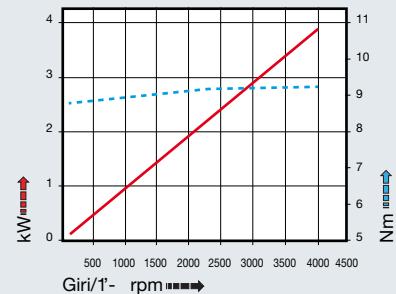
6,4 kg  
8,5 kg

## rotazione/rotation



input  
output

## prestazioni/performances



CONO SHANK	size	A	B	H
DIN69871 *	-			standard 65
	40			optional 80 110
	45			
	50	140	35	
ANSIB5.50 *	40			65
	50			80 110
BT *	40			65
	50	148	45	80 110
HSK	63			65
	80	149	44	80 110
	100		46	
DIN69893				
CAPTO	C5			65
	C6	144	39	
	C8			80 110
KM	63			65
	80	140		80 110
	100			
DIN2080	-			
	40	113	13	65
	-			
	50	116	16	80 110
ANSIB5.18 NMTB	40	113	13	65
	50	116	16	80 110

\* Option: Dual Contact

# TAV10.PD

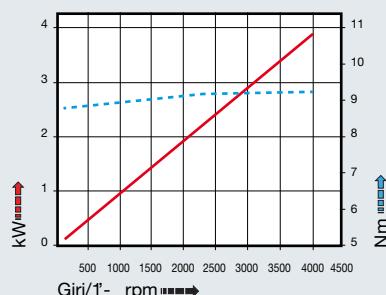
## caratteristiche/features



## peso/weight

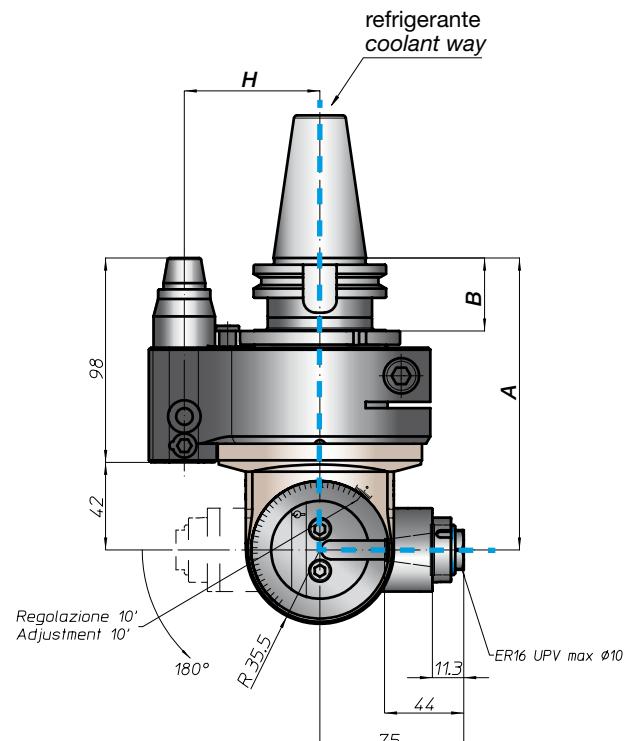
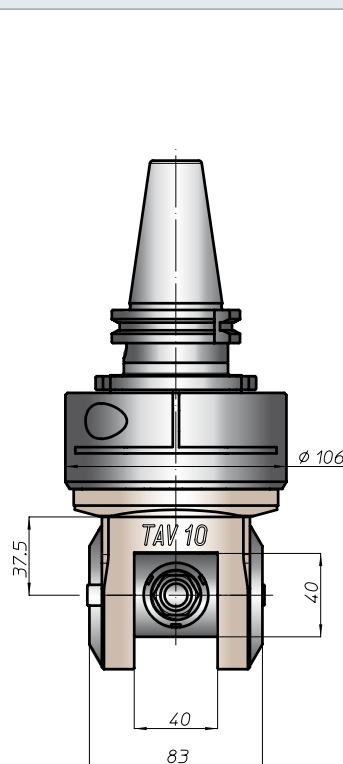


## prestazioni/performances



CONO SHANK	size	A	B	H	standard	optional
DIN69871 *	-			65		-
	40					
	45					
	50	140	35	80	110	
ANSIB5.50 *	40			65		-
	50			80	110	
* BT	40			65		
	50	148	45	80	110	
DIN6993	63		44	65		
	80	149		46	80	110
	100					
ISO26623	C5			65		
	C6	144	39			
	C8			80	110	
KM	63			65		
	80	140		80	110	
	100					
DIN2080	-					
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
ANSIB5.18	NMTB	-	-	-	-	-
		-	-	-	-	-

★ Option: Dual Contact



# TAV13.P

BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori  
AccessoriesAppendice tecnica  
Technical supplement

## caratteristiche/features



ø 13



M10



1-1



3000

## peso/weight



40



50

10,5 kg

## rotazione/rotation

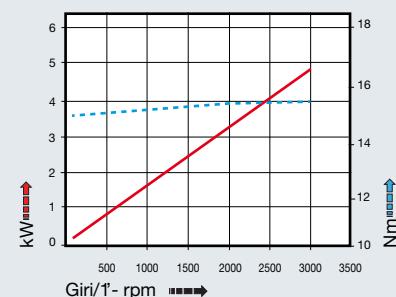


input



output

## prestazioni/performances

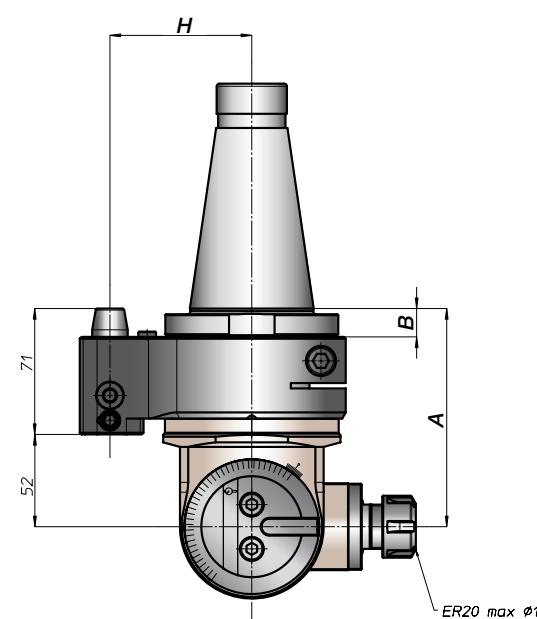
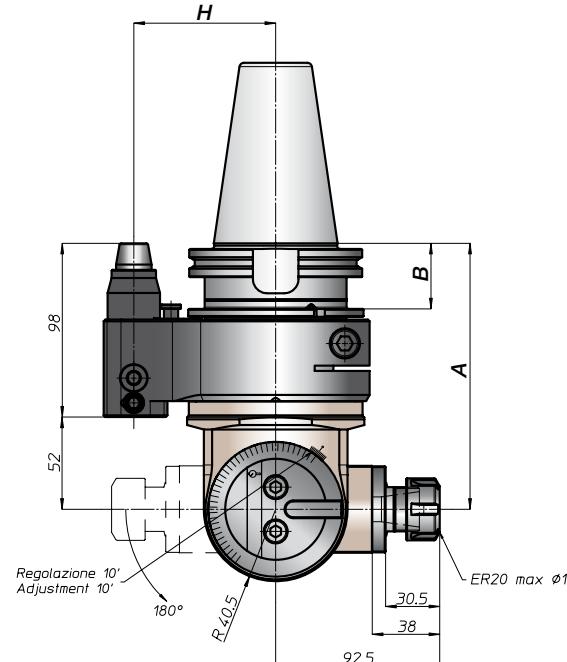
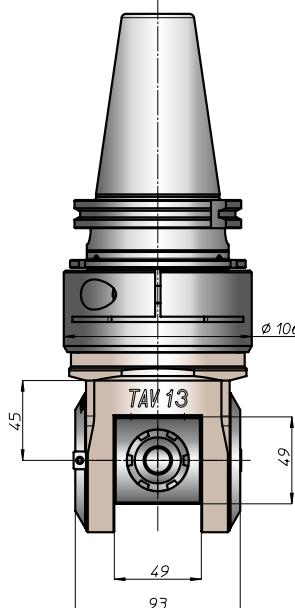


## tipi mandrino disponibili / available spindle types

- 1** DIN6388-ER    **3** Weldon Whistle-Notch

ER25

Ø16



CONO SHANK	size	A	B	H	standard	optional
DIN638871 *	-			65	-	
	40			80	110	
	45			65	-	
	50	150	35	80	110	
ANSIB5.50 *	40			65	-	
	50			80	110	
BT *	40			50	158	45
	50	158	45	80	110	
HSK	63			42	65	
	80	159		46	80	110
	100					
CAPTO	C5				65	
	C6	154	39		80	110
	C8					
KM	63				65	
	80	150			80	110
	100					
DIN2080	-			120	13	65
	40			40	123	16
	-				80	110
	50					
ANSIB5.18	40	120	13	65	-	
	50	123	16	80	110	

\* Option: Dual Contact

# TAV13.PD

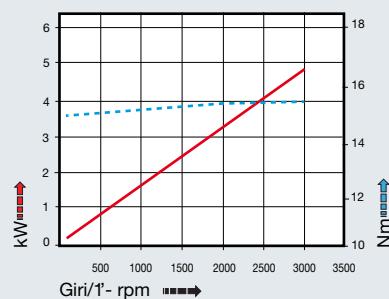
## caratteristiche/features



## peso/weight



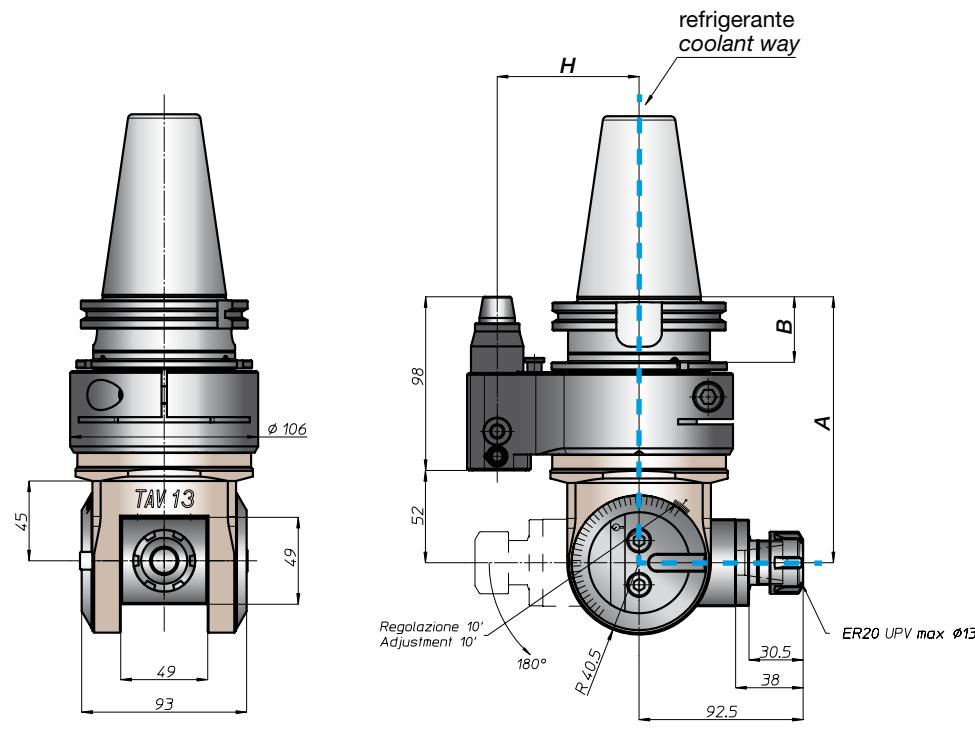
## prestazioni/performances



CONO SHANK	size	A	B	H	standard	optional
DIN69871 *	-				65	-
	40				80	110
	45				65	-
	50	150	35		80	110
	50				65	-
ANSI5.50 *	CAT	40			65	-
		50			80	110
* BT	40				65	
	50	158	45		80	110
HSK DIN69893	63				65	
	80	159	42		80	110
	100				65	
ISO26623 CAPTO	C5				65	
	C6	154	39		80	110
	C8				65	
KM	63				65	
	80	150			80	110
	100				65	
DIN2080	-				65	-
	40	120	13		80	110
	-	-	-		65	-
	-	-	-		-	-
ANSIB5.18 NMTB	-	-	-		-	-
	-	-	-		-	-

## tipi mandrino disponibili / available spindle types

1 DIN6388-ER    3 Weldon Whistle-Notch  
ER25               Ø16



★ Option: Dual Contact

# TAV20.P



## caratteristiche/features

- 
- 
- 
- 

## peso/weight



22 kg

## rotazione/rotation

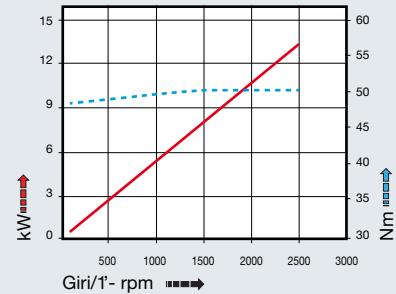


input



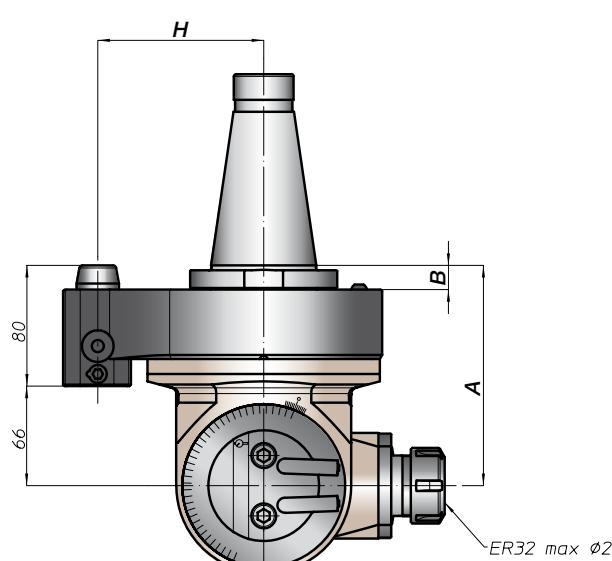
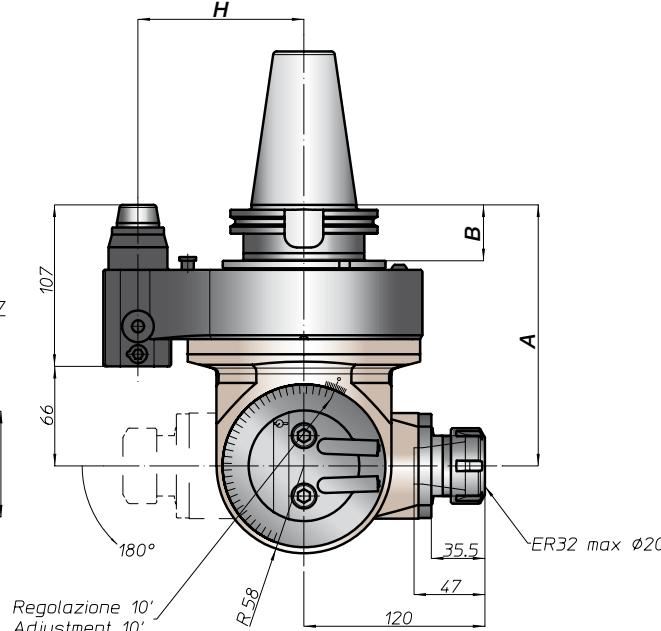
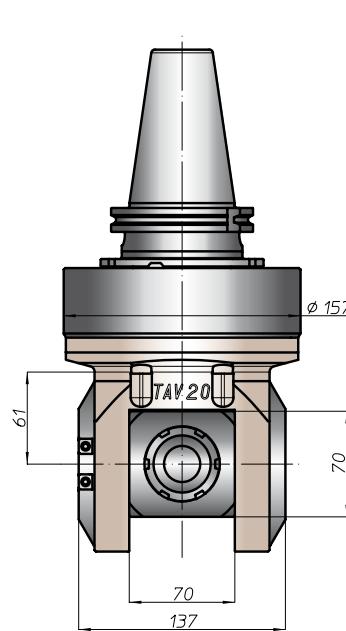
output

## prestazioni/performances



## tipi mandrino disponibili / available spindle types

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



CONO SHANK	size	A	B	H	Standard	Optional
DIN9871 *	-	-	-	-	-	-
ANSI5.50 *	50	173	35	110	-	-
BT *	50	181	45	110	-	-
HSK	-	-	-	-	-	-
DIN69893	80	182	46	110	-	-
	100					
CAPTO	-	177	-	-	-	-
ISO26623	C8			110	-	-
KM	-	173	-	-	-	-
	100			110	-	-
DIN2080	-	-	-	-	-	-
	50	149	16	110	-	-
ANSI35.18	50	149	16	110	-	-

\* Option: Dual Contact

# TAV20.PD

## caratteristiche/features



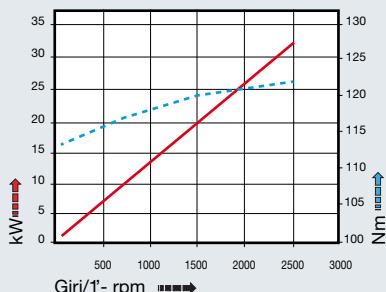
## peso/weight



## rotazione/rotation

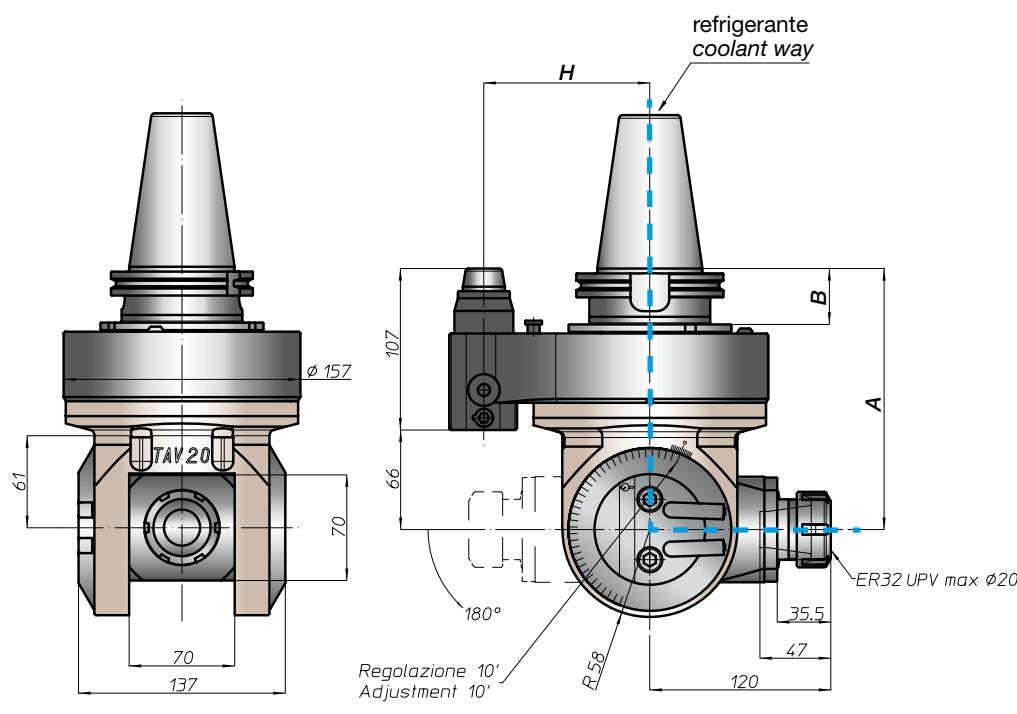


## prestazioni/performances



CONO SHANK	size	A	B	H	standard	optional
				-		
DIN69871 *	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
DIN69871 *	50	173	35	110	-	-
CAT	-	-	-	-	-	-
ANSI B5.50	50	173	35	110	-	-
* BT	-	-	-	-	-	-
	50	181	45	110	-	-
HSK	-	-	-	-	-	-
DIN69893	80	182	46	110	-	-
	100	182	46	110	-	-
CAPTO	-	-	-	-	-	-
ISO26623	-	-	-	-	-	-
	C8	177	-	110	-	-
KM	-	-	-	-	-	-
	-	-	-	-	-	-
	100	173	-	110	-	-
DIN2080	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
	-	-	-	-	-	-
ANSI B5.18	NMTB	-	-	-	-	-
	ANSI B5.18	-	-	-	-	-

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



★ Option: Dual Contact

# TAV30.P



## caratteristiche/features



## peso/weight



42 kg

## rotazione/rotation

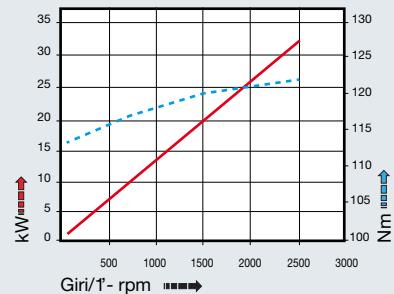


input



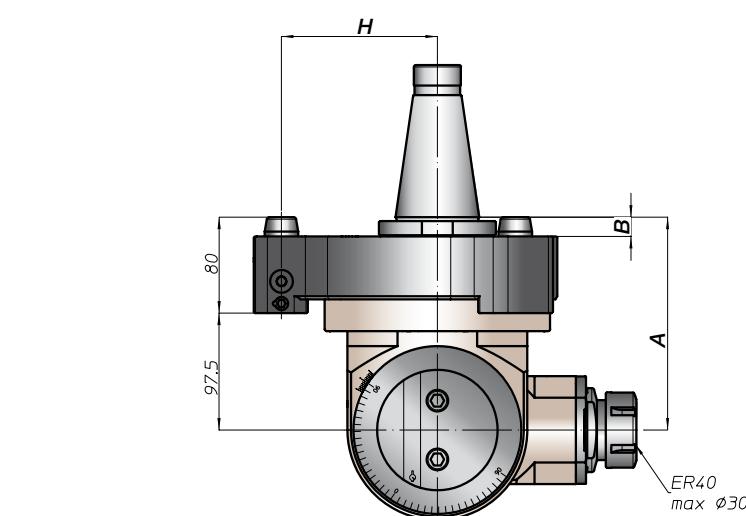
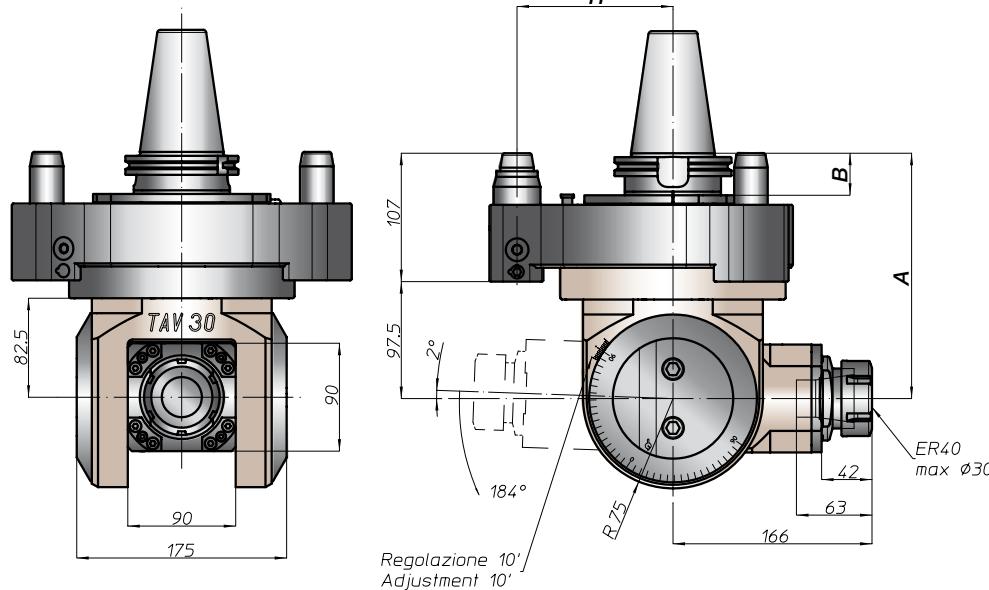
output

## prestazioni/performances



## tipi mandrino disponibili / available spindle types

- |              |                                      |                |                         |
|--------------|--------------------------------------|----------------|-------------------------|
| 1 DIN6388-ER | 2 Albero portafresa<br>Milling shaft | 4 DIN69893-HSK | 6 ABS<br>Licenza KOMET® |
| ER50         | Ø32-Ø40                              | HSK63          | ABS63                   |



CONO SHANK	size	A	B	H
DIN69871 *	-	-	-	standard
ANSIB5.50 *	50	204,5	35	optional
BT *	50	212,5	45	130
HSK	-	-	42	-
DIN69893	-	-	213,5	130
	100			-
CAPTO	-	-	208,5	130
KM	-	-	204,5	-
ISO26623	C8			-
DIN2080	-	-	177,5	130
	50			-
ANSIB5.18	-	-	177,5	130
NMTB	50	16	130	-

★ Option: Dual Contact

# TAV Gallery



# TAV40.T



## caratteristiche/features

- 
- 
- 
- 

## peso/weight



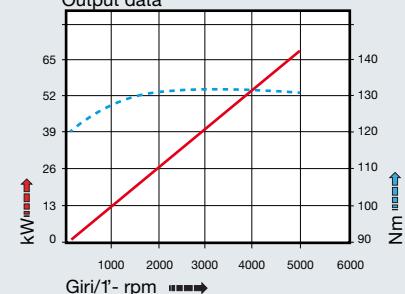
70 kg

## rotazione/rotation



## prestazioni/performances

## Output data



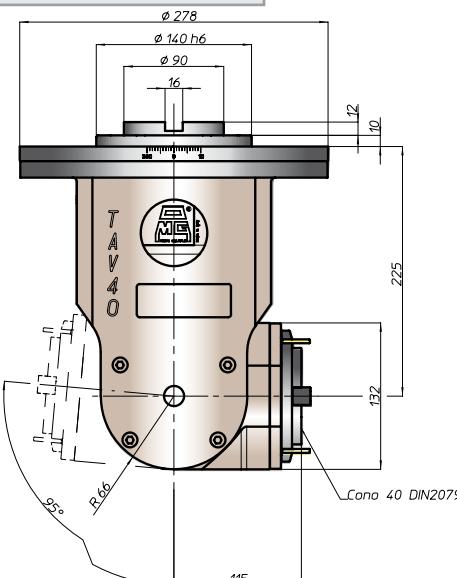
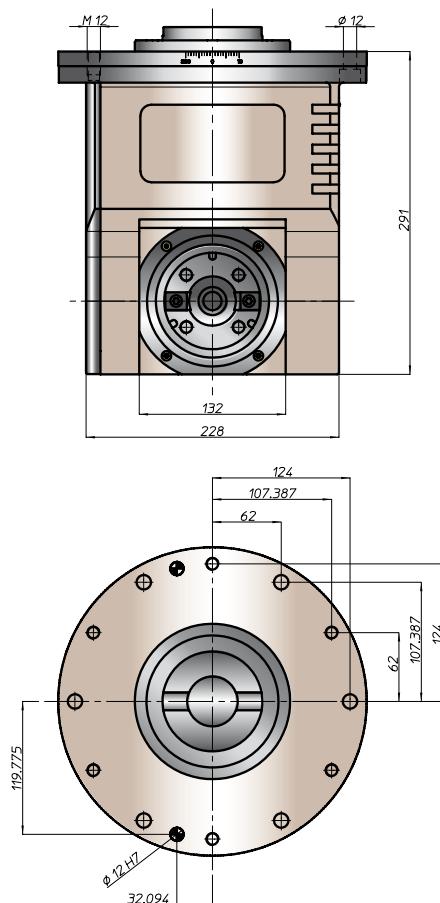
## tipi mandrino disponibili / available spindle types

4 DIN69893-HSK

5 COROMANT CAPTO®

HSK63

C5



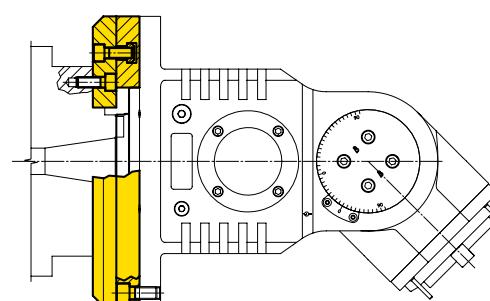
## Equipaggiamento standard:

- pressurizzazione mandrino
- nr 4 ugelli orientabili vicino al mandrino
- regolazione angolare mandrino libero
- 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

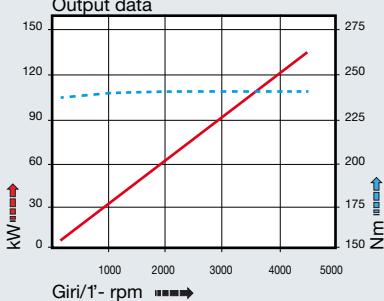
## peso/weight



145 kg

## prestazioni/performances

## Output data



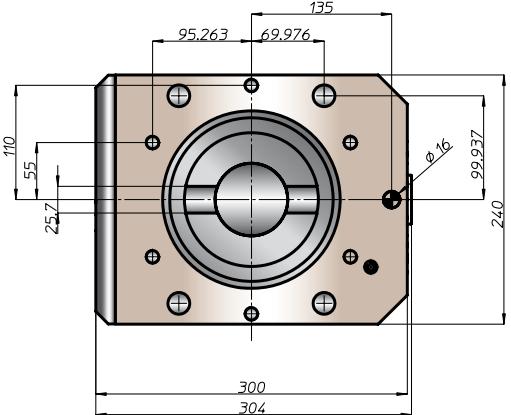
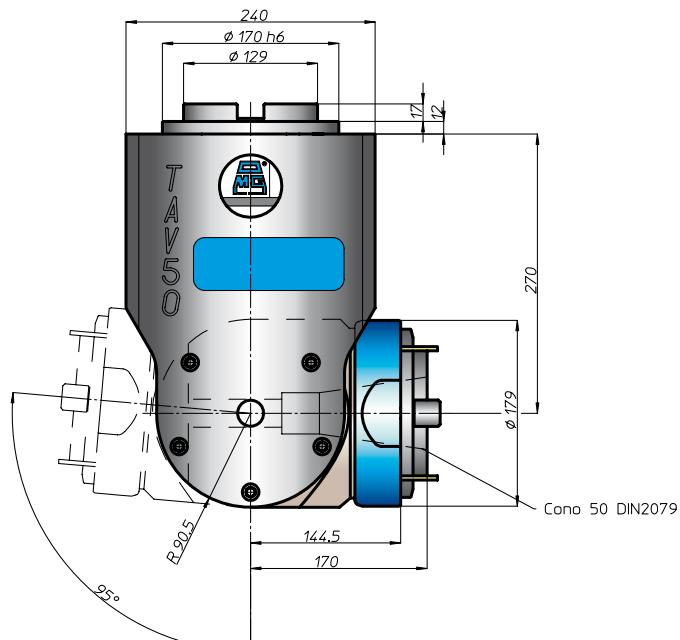
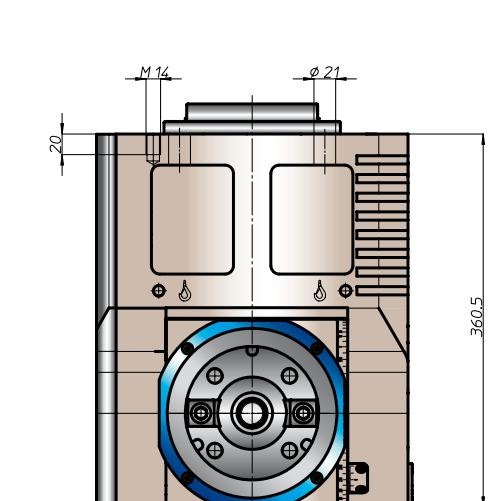
## tipi mandrino disponibili / available spindle types

4 DIN69893-HSK

5 COROMANT CAPTO®

A100

C8



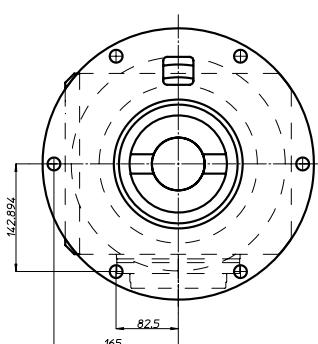
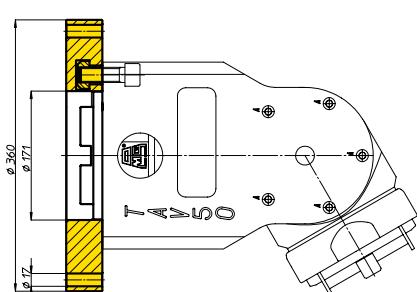
## Equipaggiamento standard:

- 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



40

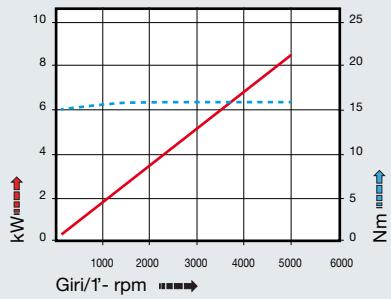


50

5,5 kg

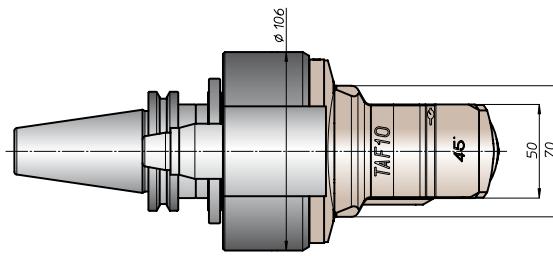
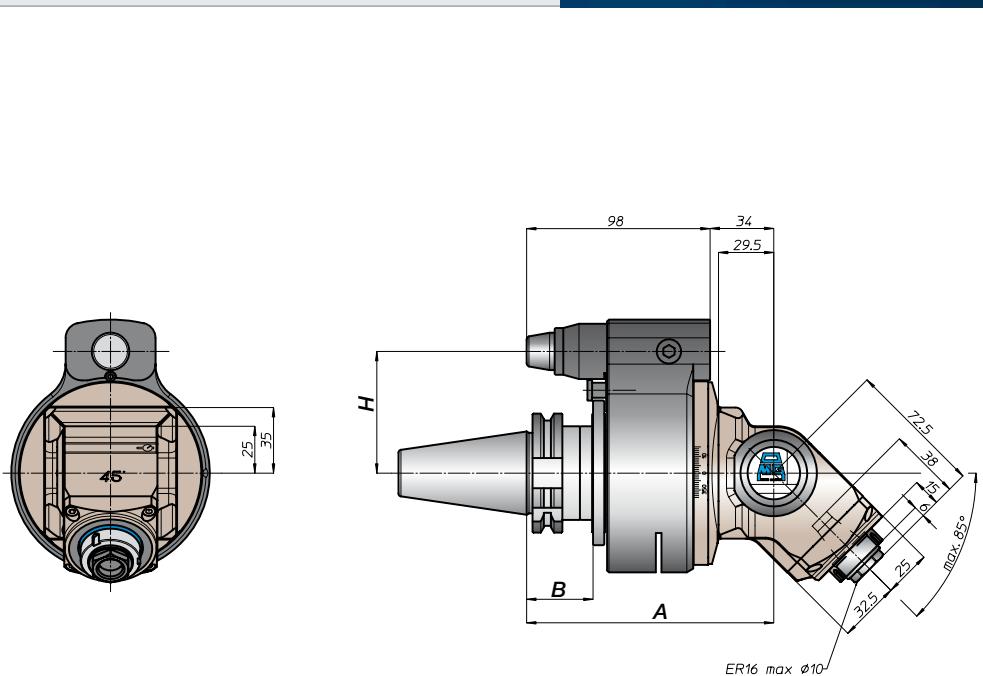
7 kg

## prestazioni/performances



CONO SHANK	size	A	B	H	
				standard	optional
DIN69871 *	30	132	35	65	-
	40				
	45			80	110
	50				
ANSIB5.50 *	40	140	45	65	-
	50				
	40			80	110
	50				
* BT	40	140	45	65	
	50				
	63	141	42	65	
	80				
DIN69893	100				
	63	136	39	65	
	80				
	100				
ISO26623 CAPTO	C5	136	39	65	
	C6				
	C8				
KM	63	132	80	65	
	80				
	100				
DIN2080	-	-	-	-	-
	-				
	-				
	-				
ANSIB5.18 NMTB	-	-	-	-	-
	-				

★ Option: Dual Contact





testa ad angolo - angle head

# TAF13.P

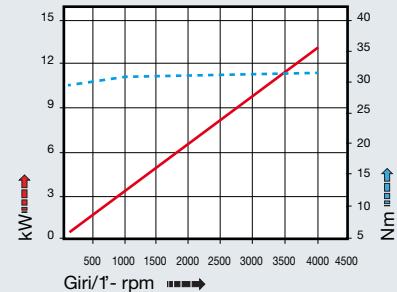
## caratteristiche/features

- ø 13
- M10
- 1-1
- 4000

## peso/weight

- |                    |        |
|--------------------|--------|
| 40                 | 50     |
| 6,5 kg             | 8,5 kg |
| rotazione/rotation |        |
| input              | output |

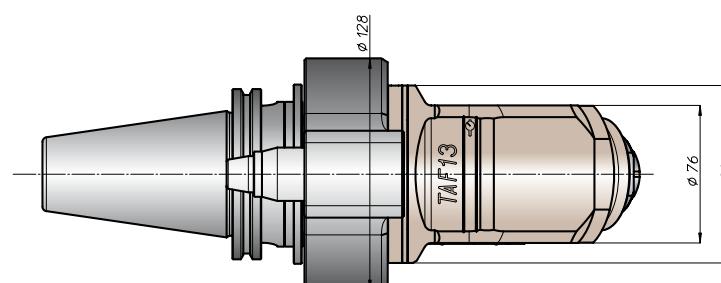
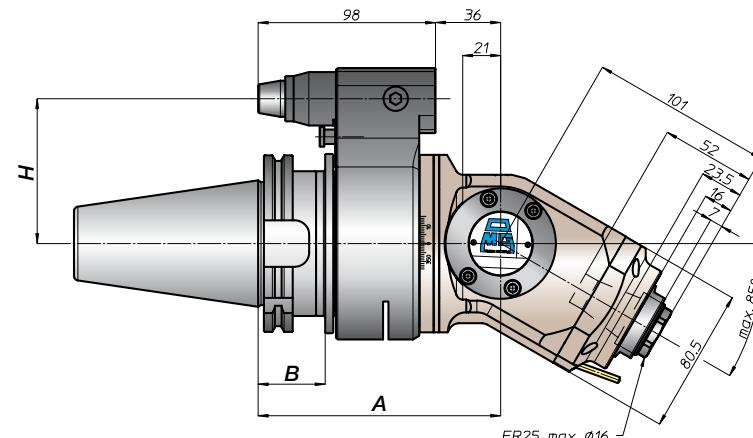
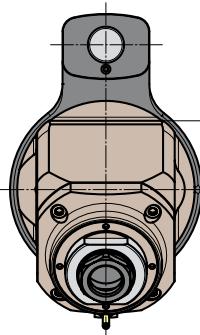
## prestazioni/performances



## tipi mandrino disponibili / available spindle types

4 DIN69893-HSK

HSK32



CONO SHANK	size	A	B	H	standard	option
DIN69871 *	-			65	-	
	40			80	110	
	45			65	-	
	50	134	35	80	110	
ANSIB5.50 *	40			65	-	
	50			80	110	
BT *	40			65	-	
	50	142	45	80	110	
HSK	63			42	65	
	80	143		46	80	110
	100					
DIN69893	C5			65	-	
	C6	138	39	80	110	
	C8					
CAPTO	63			65	-	
	80	134		80	110	
	100					
KM	63			65	-	
	80			80	110	
	100					
DIN2080	-			-	-	-
	-			-	-	-
	-			-	-	-
ANSIB5.18	-			-	-	-
NMTB	-			-	-	-

\* Option: Dual Contact

# TAF13.PD

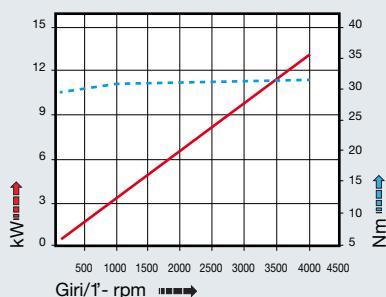
## caratteristiche/features



## peso/weight



## prestazioni/performances

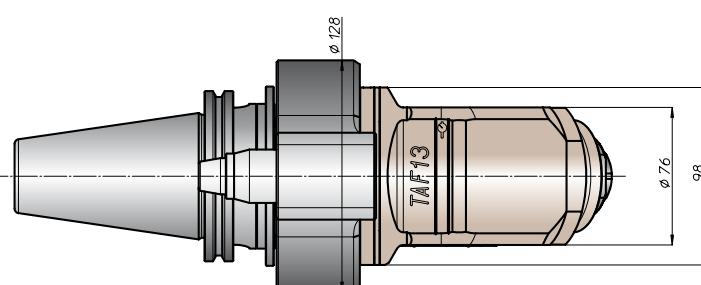
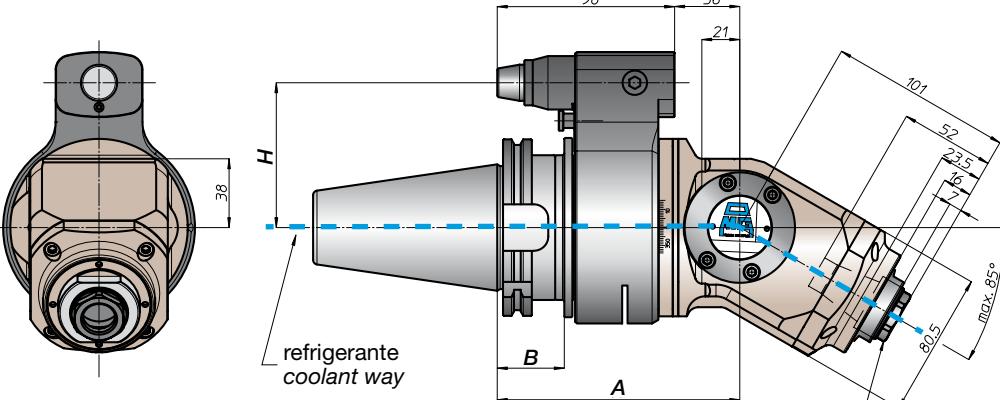


CONO SHANK	size	A	B	H	
				standard	optional
DIN9871 *	-			65	-
	40				
	45				
	50	134	35	80	110
ANSIB5.50 *	CAT			65	-
	40				
ANSIB5.50 *	50			80	110
* BT	40			65	
	50	142	45	80	110
HSK	63				
	80	143	42	65	
	100		46	80	110
ISO26623	C5				
	C6	138	39	65	
	C8			80	110
KM	63			65	
	80	134			
	100			80	110
DIN2080	-				
	-				
	-				
	-				
NMTB	-				
ANSIB5.18	-				

## tipi mandrino disponibili / available spindle types

4 DIN69893-HSK

HSK32



# TAF20.P



## caratteristiche/features



## peso/weight



13,5 kg

## rotazione/rotation

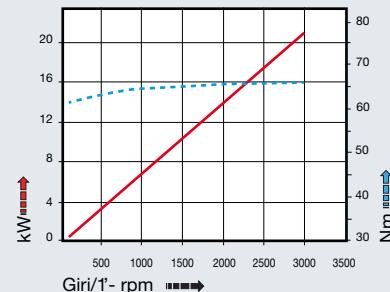


input



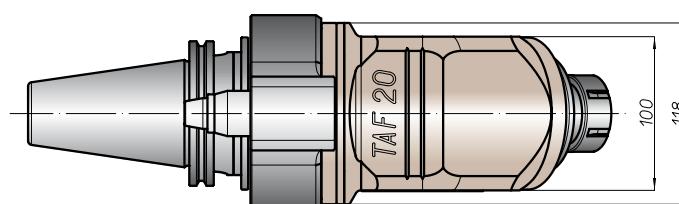
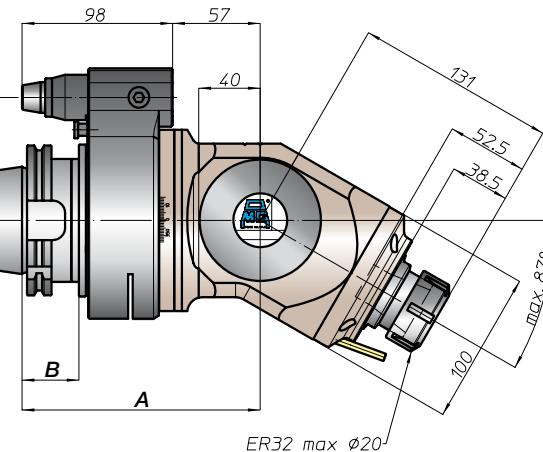
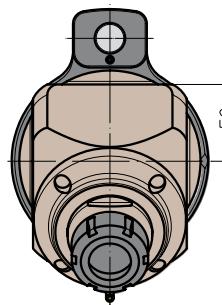
output

## prestazioni/performances



## tipi mandrino disponibili / available spindle types

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



CONO SHANK	size	A	B	H standard	H optional
DIN69871 *	-	-	-	-	-
	45	155	35	80	110
CAT	50	-	-	-	-
ANSIB5.50	50	163	45	80	110
BT	50	-	-	-	-
HSK	-	42	-	-	-
DIN69893	80	164	46	80	110
	100	-	-	-	-
CAPTO	-	159	-	-	-
ISO26623	C6	-	-	80	110
	C8	-	-	-	-
KM	-	155	-	-	-
	80	-	-	80	110
	100	-	-	-	-
DIN2080	-	-	-	-	-
ANSIB5.18	-	-	-	-	-
NMTB	-	-	-	-	-

★ Option: Dual Contact

# TAF20.PD

## caratteristiche/features



## peso/weight



13,5 kg

## rotazione/rotation

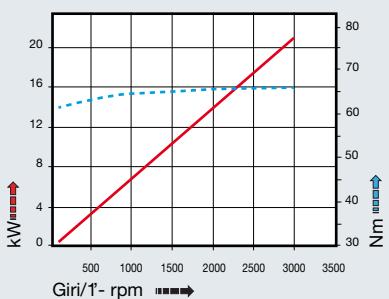


input



output

## prestazioni/performances



CONO SHANK	size	A	B	H	standard	optional
DIN69871 *	-	155	35	80	110	-
	-					-
	45					-
	50					-
ANSI5.50 * CAT	-	164	42	80	110	-
	50					-
* BT	-	163	45	80	110	-
	50					-
DIN69893	-	164	46	80	110	-
	80					-
	100					-
ISO26623	-	159	80	110	-	-
	C6					-
	C8					-
KM	-	155	80	110	-	-
	80					-
	100					-
DIN2080	-				-	-
	-					-
	-					-
	-					-
ANSIB5.18 NMTB	-				-	-
	-					-

## tipi mandrino disponibili / available spindle types

1 DIN6388-ER

3 Weldon Whistle-Notch

4 DIN69893-HSK

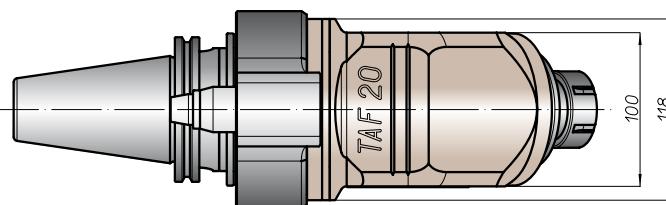
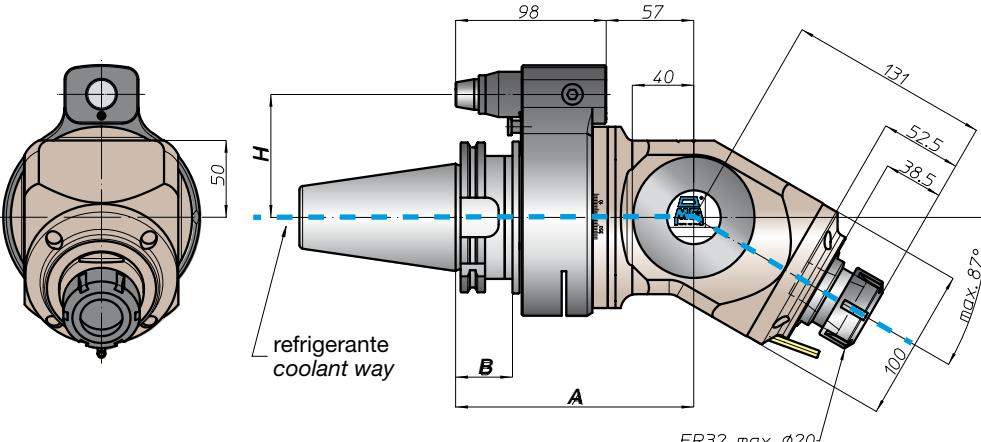
6 ABS Licenza KOMET®

ER40

Ø20

HSK50

ABS50



# TA07P.T



## caratteristiche/features



ø 7



M6



1:1



10000

## peso/weight

head  
1,5 kgextension  
L 100=2,2 kg  
L 200=3,6 kg

## rotazione/rotation

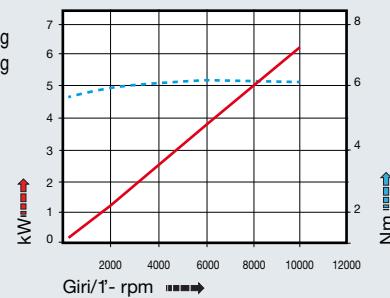


input



output

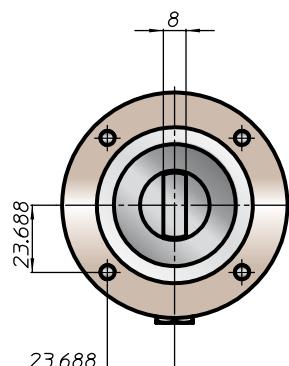
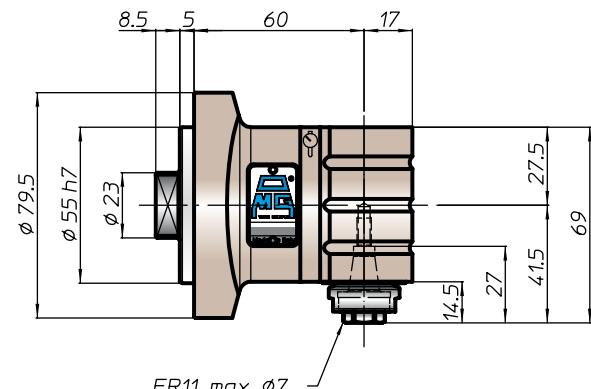
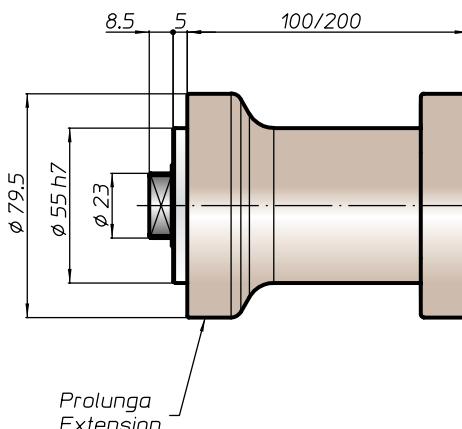
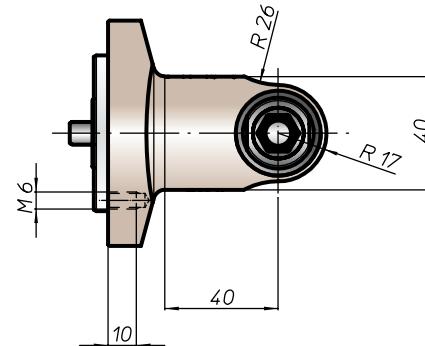
## prestazioni/performances



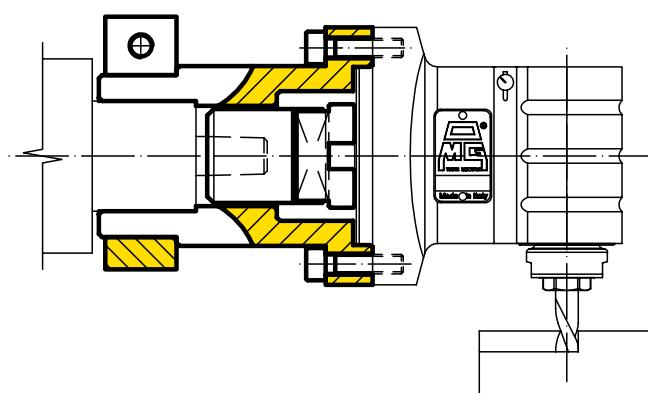
## tipi mandrino disponibili / available spindle types

**3** Weldon Whistle-Notch

Ø8-Ø10



## esempio di collegamento - connection example



# TA10P.T

## caratteristiche/features



ø 10



M8



1-1



10000

## peso/weight



head

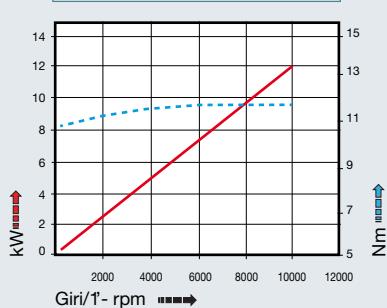
2,7 kg



extension

kg

## prestazioni/performances



## tipi mandrino disponibili / available spindle types

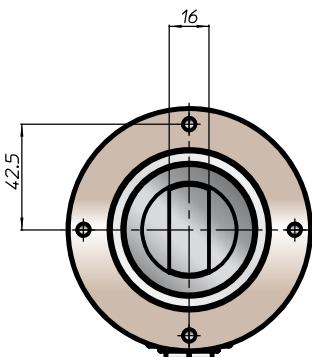
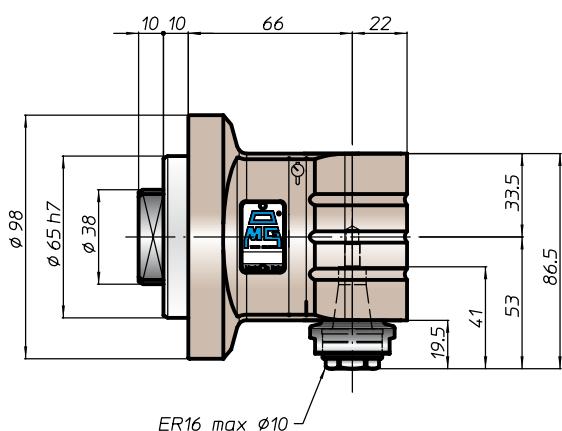
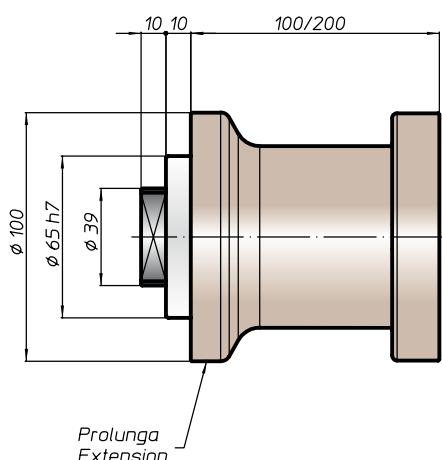
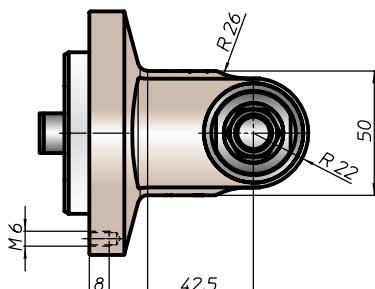
1 DIN6388-ER

2 Albero portafresa  
Milling shaft3 Weldon  
Whistle-Notch

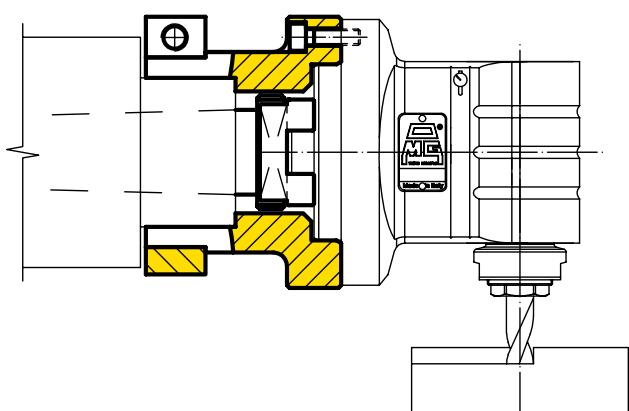
ER20

Ø16

Ø10



## esempio di collegamento - connection example



# TA13P.T



## caratteristiche/features

- - 
  - 
  -
- ø 13      M10  
 1-1      8000

## peso/weight



3,5 kg

## rotazione/rotation

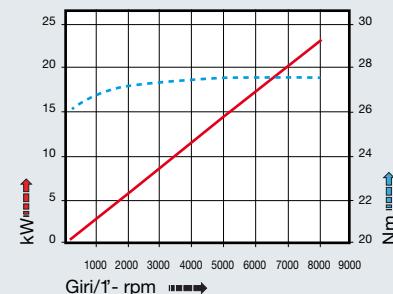


input



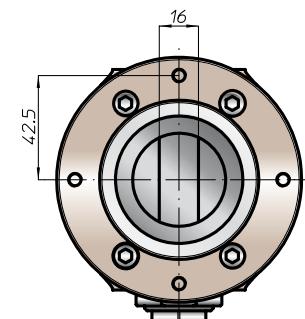
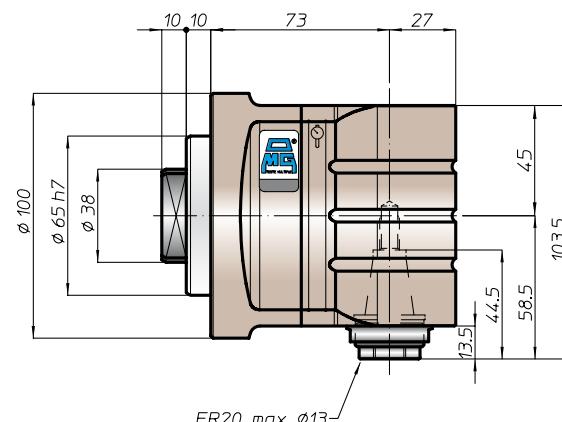
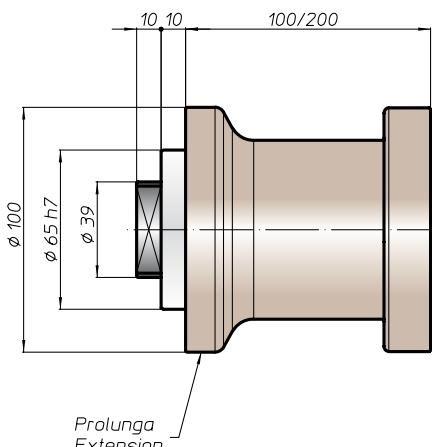
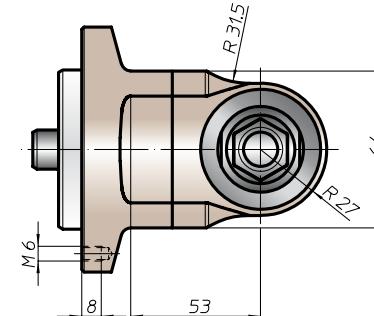
output

## prestazioni/performances

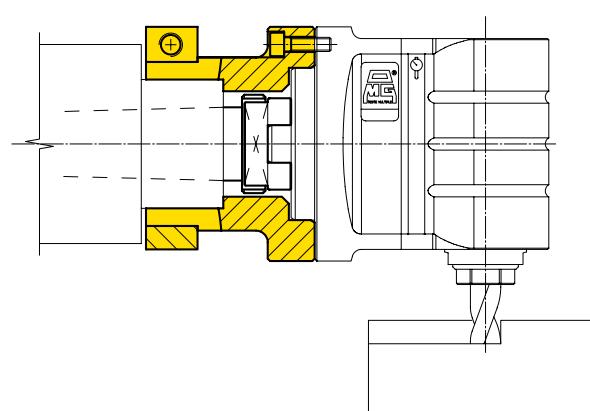


## tipi mandrino disponibili / available spindle types

- 1** DIN6388-ER
  - 2** Albero portafresa  
Milling shaft
  - 3** Weldon  
Whistle-Notch
- ER25**      **Ø16-Ø22**      **Ø16**



## esempio di collegamento - connection example



# TA16P.T

## caratteristiche/features



ø 16



M12



1:1



5000

## peso/weight

head  
5 kgextension  
L 100=5 kg  
L 200=8,5 kg

## rotazione/rotation

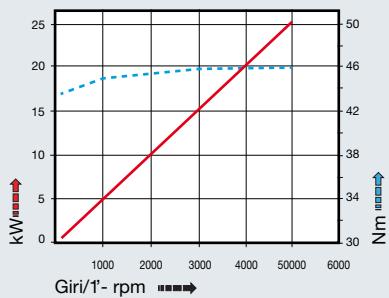


input



output

## prestazioni/performances



## tipi mandrino disponibili / available spindle types

1 DIN6388-ER

ER32

2 Albero portafrese  
Milling shaft

Ø16-Ø22-Ø27-Ø32

3 Weldon  
Whistle-Notch

Ø20

4 DIN69893-HSK

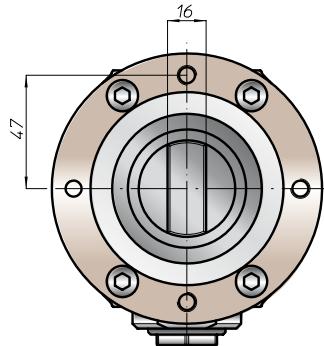
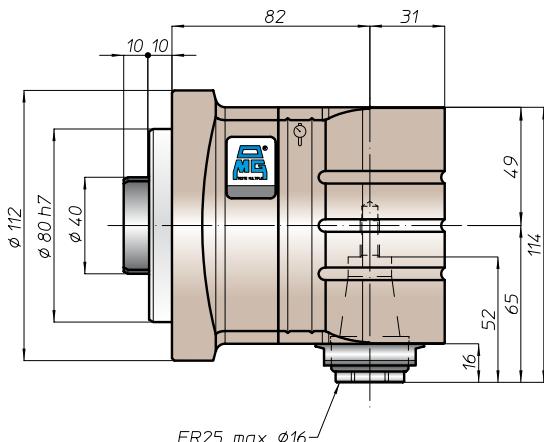
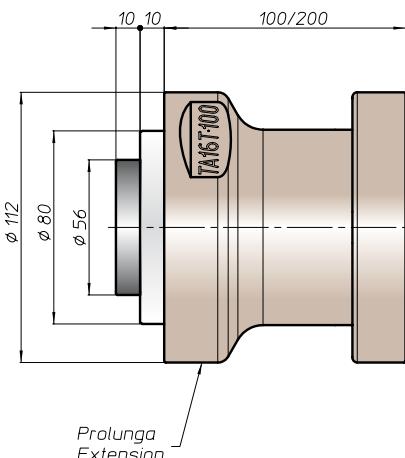
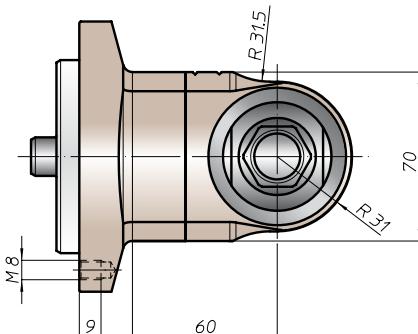
HSK32

5 CORAMANT  
CAPTO®

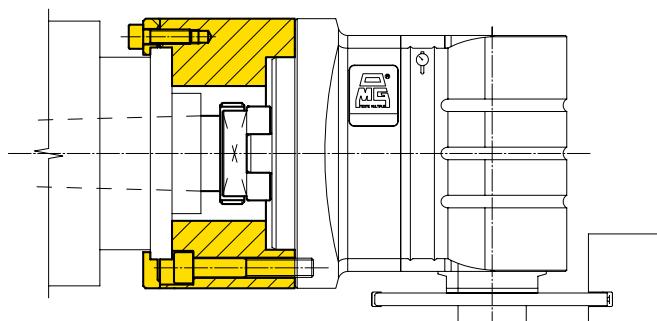
C3

6 ABS  
Licenza KOMET®

ABS32



## esempio di collegamento - connection example



# TA20.PT



## caratteristiche/features

- 
- 
- 
- 

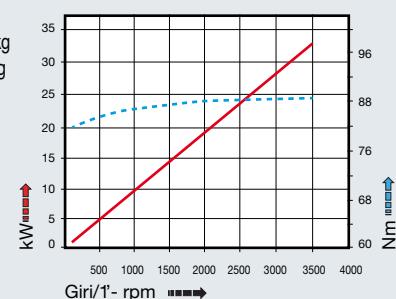
## peso/weight

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

## rotazione/rotation

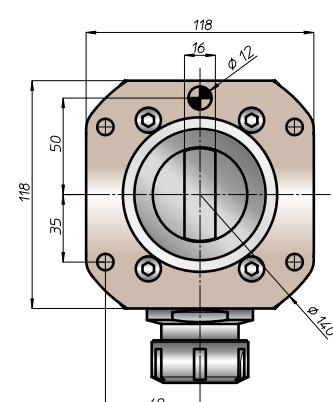
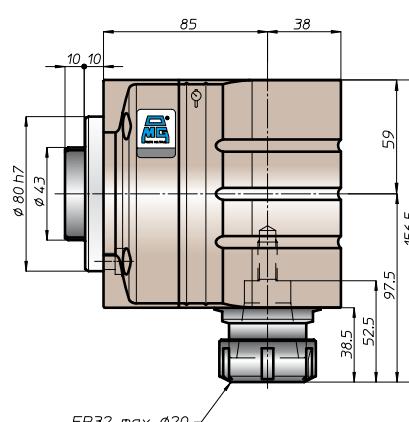
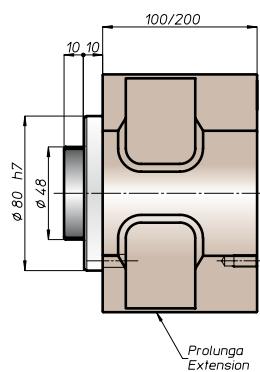
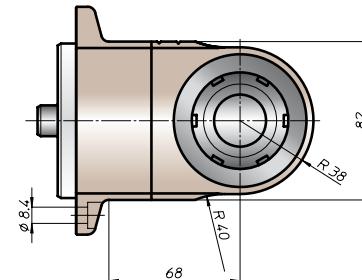


## prestazioni/performances

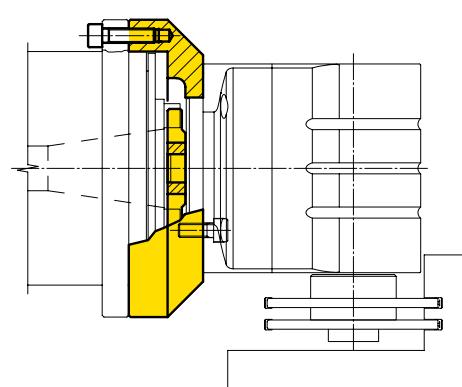


## tipi mandrino disponibili / available spindle types

- |                     |  |                               |                       |                          |                             |
|---------------------|--|-------------------------------|-----------------------|--------------------------|-----------------------------|
| <b>1</b> DIN6388-ER | <b>2</b> Albero portafrese Milling shaft | <b>3</b> Weldon Whistle-Notch | <b>4</b> DIN69893-HSK | <b>5</b> CORAMANT CAPTO® | <b>6</b> ABS Licenza KOMET® |
| ER40                | Ø22-Ø27-Ø32                              | Ø20-Ø25                       | HSK40                 | C4                       | ABS40                       |



## esempio di collegamento - connection example



# TA20.30.T

## caratteristiche/features



Ø 20



M14



1-1



3500

## peso/weight

head



7,5 kg



extension

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

## rotazione/rotation

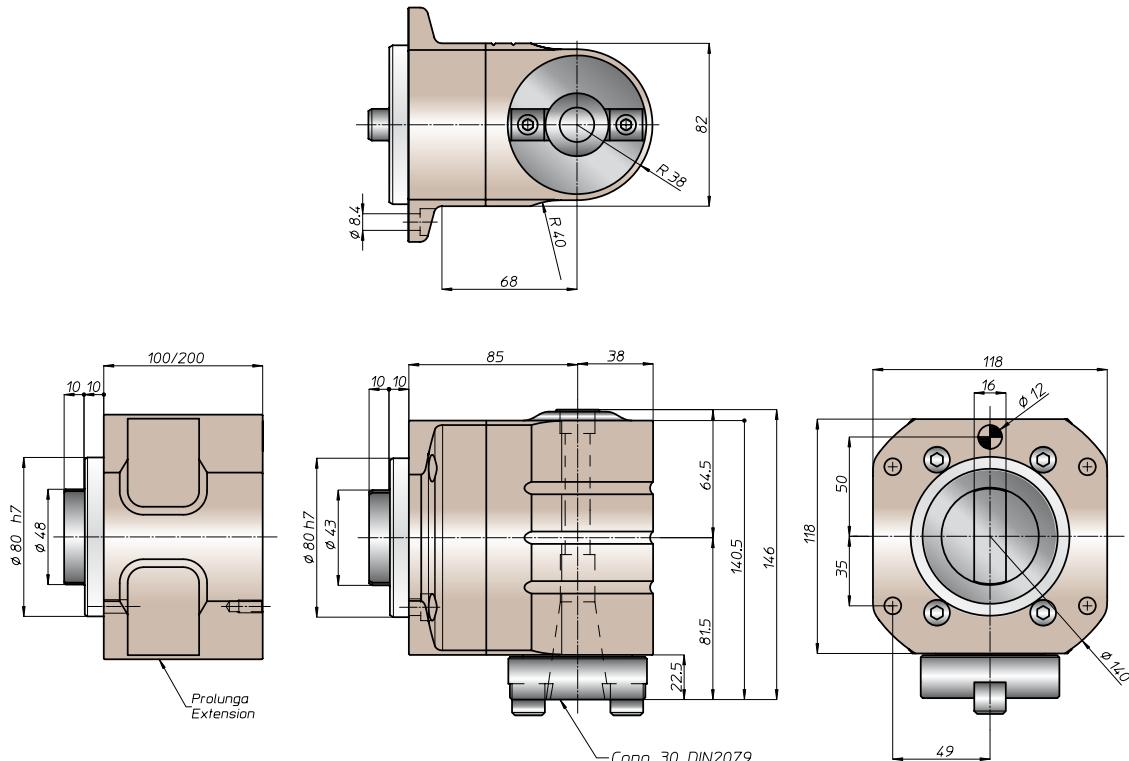
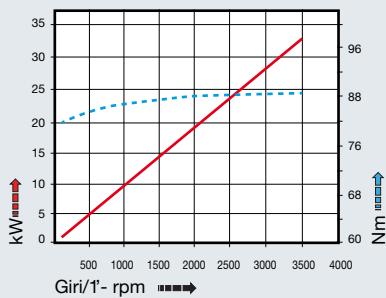


input



output

## prestazioni/performances



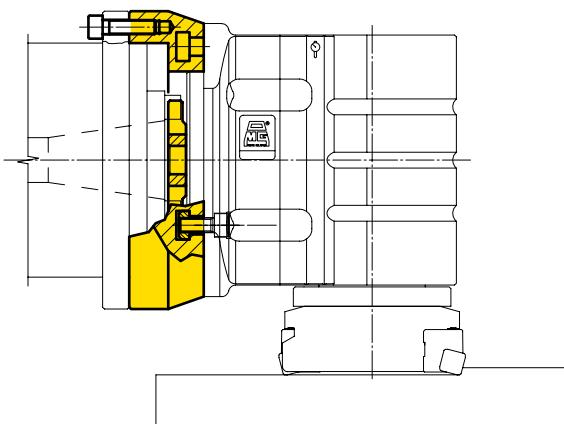
## Nota:

- 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



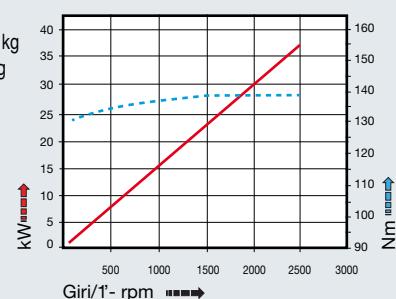
## peso/weight

head 13,5 kg  
extension L 100=12,5 kg  
L 200=24 kg

## rotazione/rotation

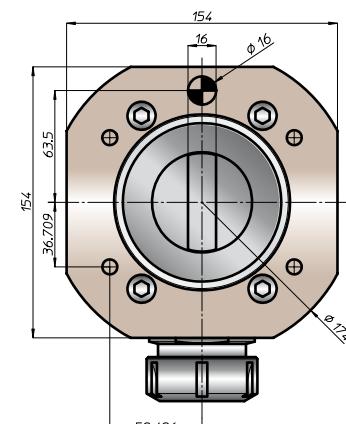
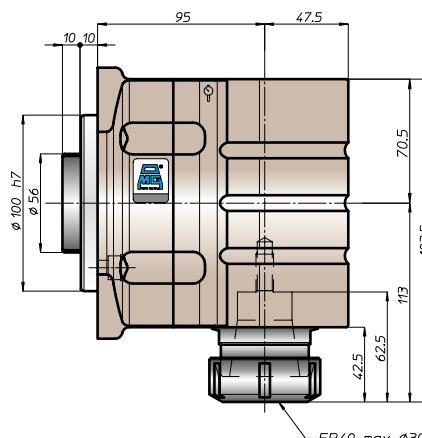
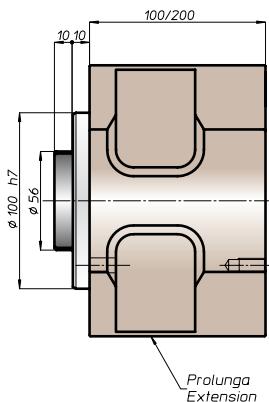
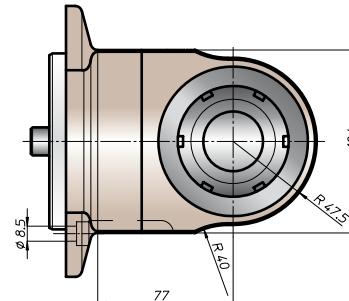


## prestazioni/performances

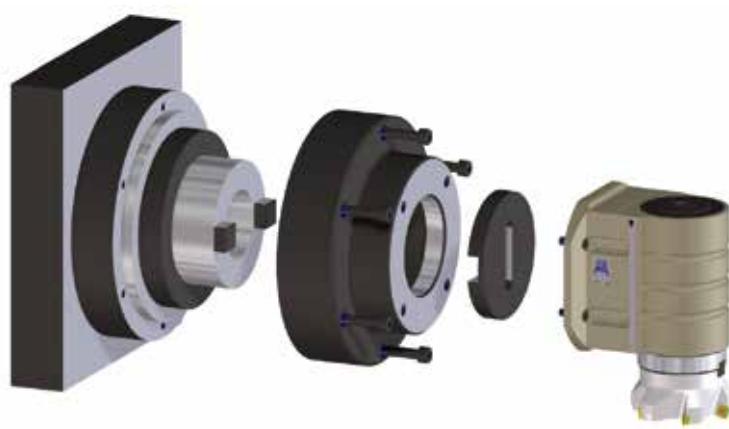


## tipi mandrino disponibili / available spindle types

- |                                      |                           |                |                      |                         |
|--------------------------------------|---------------------------|----------------|----------------------|-------------------------|
| 2 Albero portafrese<br>Milling shaft | 3 Weldon<br>Whistle-Notch | 4 DIN69893-HSK | 5 CORAMANT<br>CAPTO® | 6 ABS<br>Licenza KOMET® |
| Ø16-Ø27-Ø32                          | Ø32                       | HSK63          | C4                   | ABS50                   |



## esempio di collegamento - connection example



# TA26.40.T

## caratteristiche/features



ø 26



M20



1-1

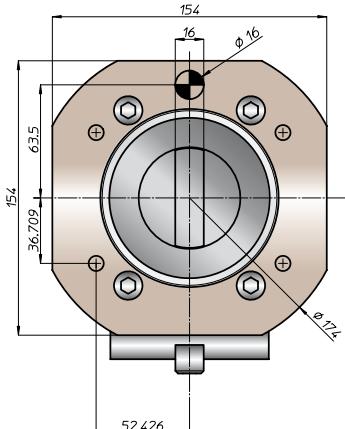
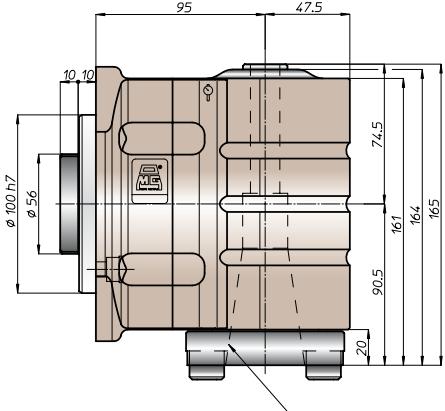
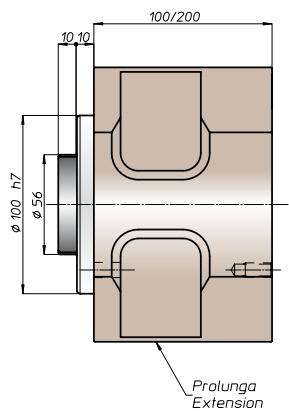
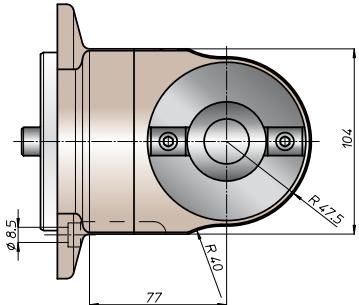
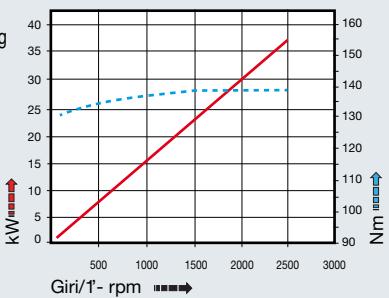


2500

## peso/weight

head  
13,5 kgextension  
L 100=12,5 kg  
L 200=24 kg

## prestazioni/performances



## 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



# TA40.T



## caratteristiche/features



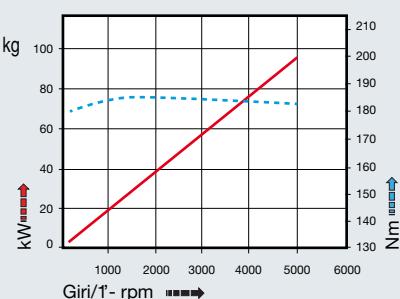
## peso/weight

head 33 kg  
extension L 200=26,5 kg

## rotazione/rotation



## prestazioni/performances

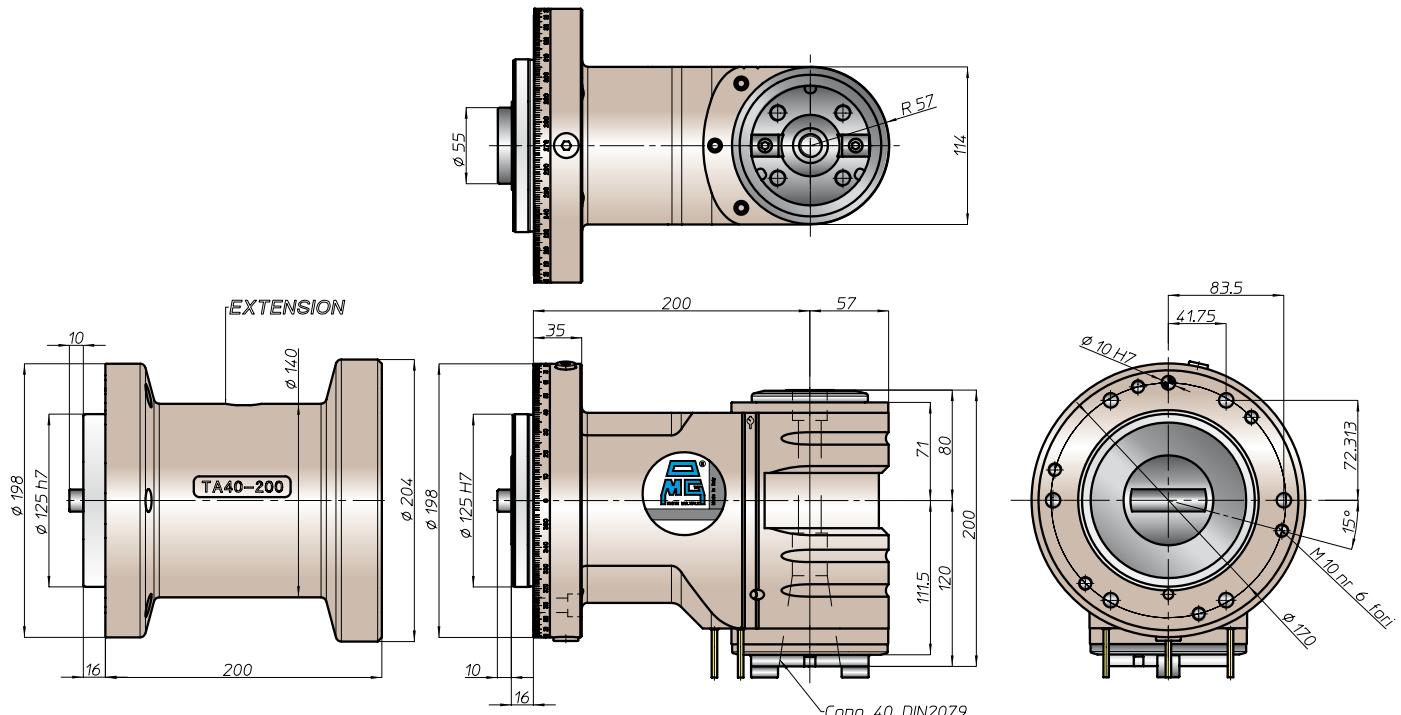


## tipi mandrino disponibili / available spindle types

**4** DIN69893-HSK**5** COROMANT CAPTO®

HSK63

C5



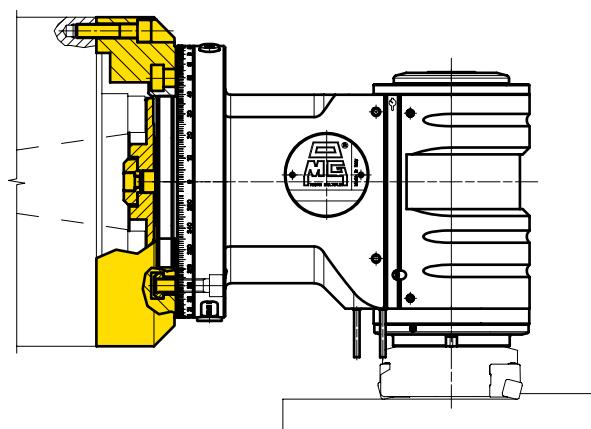
## Equipaggiamento standard:

- 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



# TA40.TD

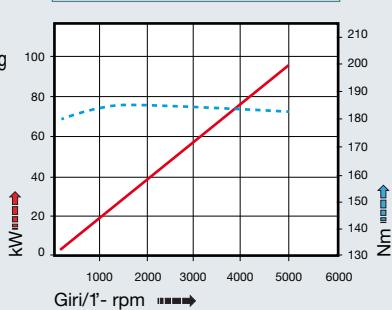
## caratteristiche/features



## peso/weight



## prestazioni/performances



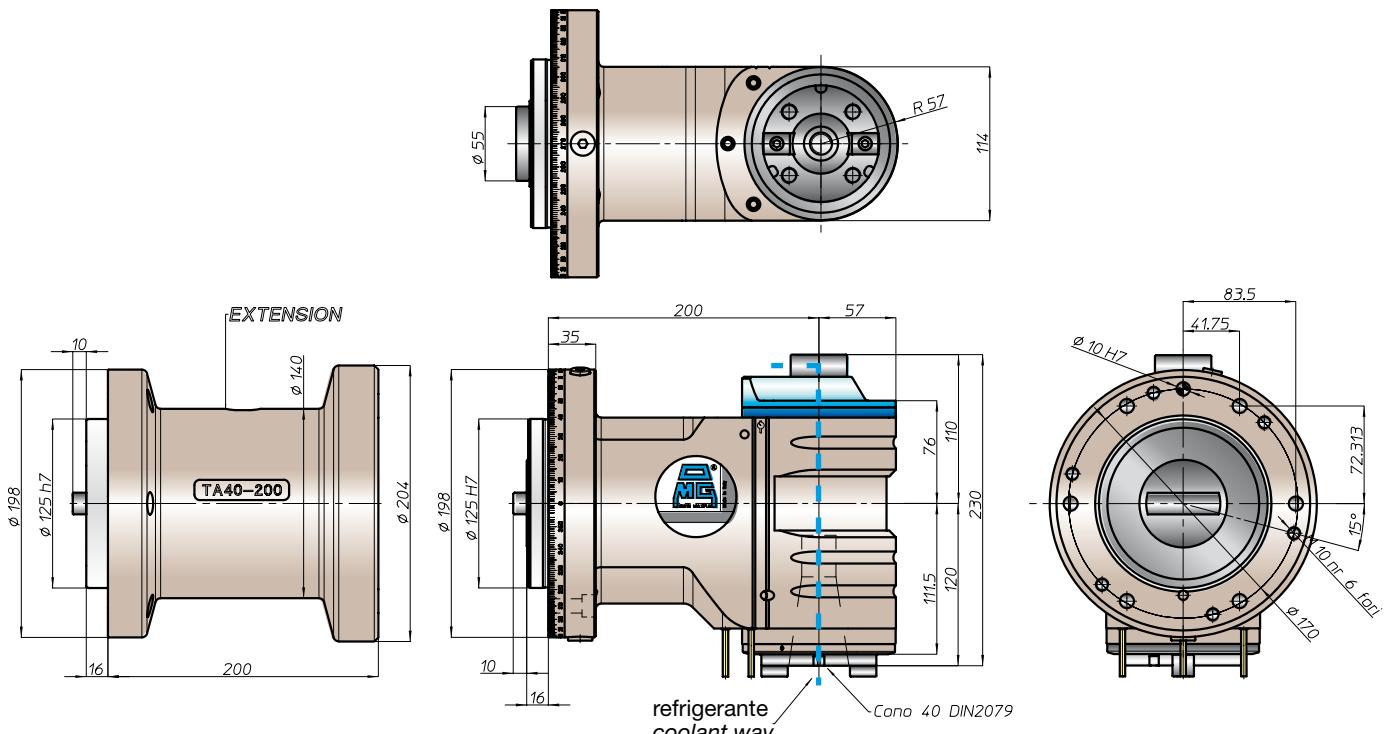
## tipi mandrino disponibili / available spindle types

4 DIN69893-HSK

5 CORAMANT CAPTO®

HSK63

C5

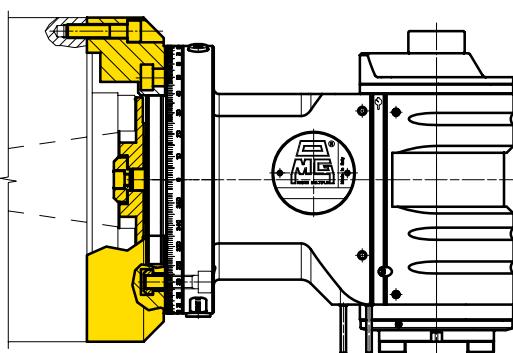
**Equipaggiamento standard:**

- 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



head

108 kg

extension

L 300=110 kg

## rotazione/rotation

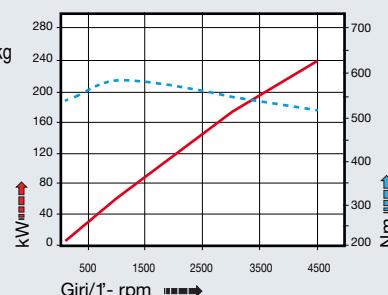


input

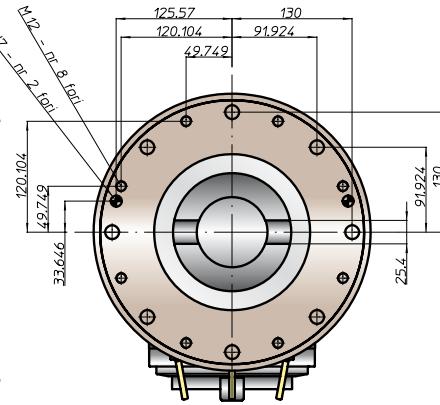
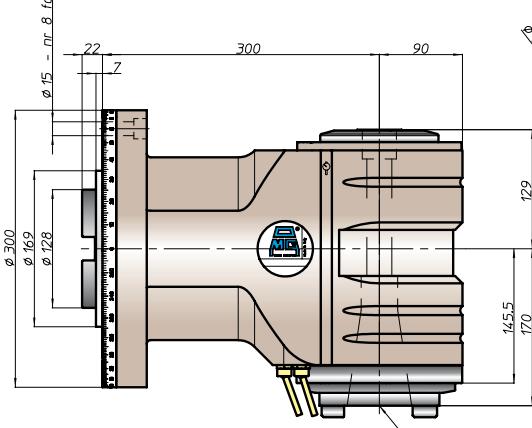
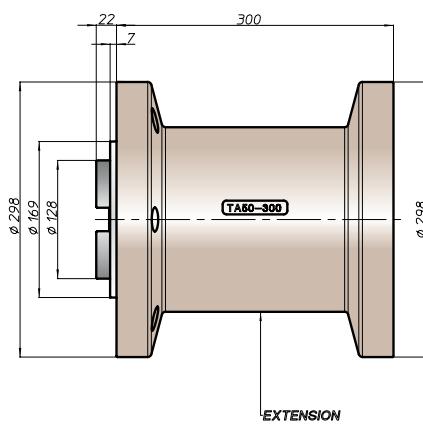
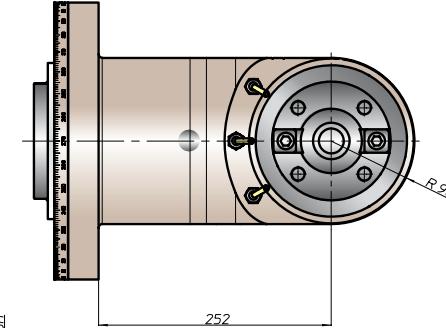


output

## prestazioni/performances



## tipi mandrino disponibili / available spindle types

**4** DIN69893-HSK**HSK100****5** COROMANT CAPTO®**C8**

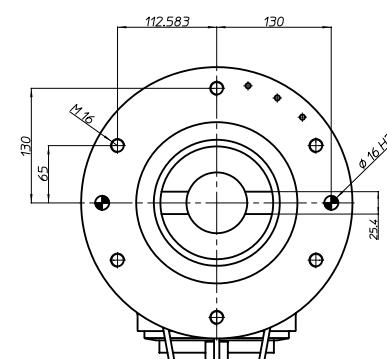
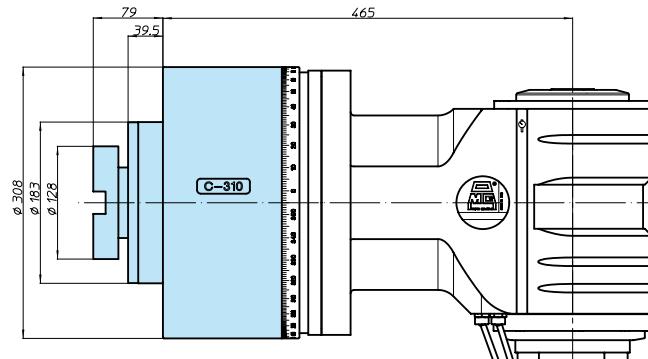
## Equipaggiamento standard:

- 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

## applicazione con asse C-310 manuale - example with manual C axis C-310



# TA50.TD



## caratteristiche/features



Ø 45 M36 1-1



2500 4000 bar

## peso/weight



head

extension

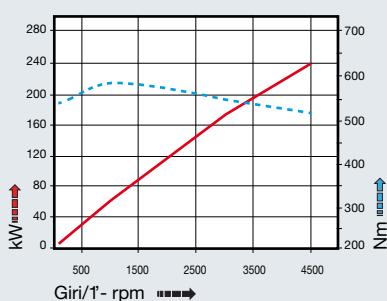
112 kg

L 300=110 kg

112 kg

L 300=110 kg

## prestazioni/performances



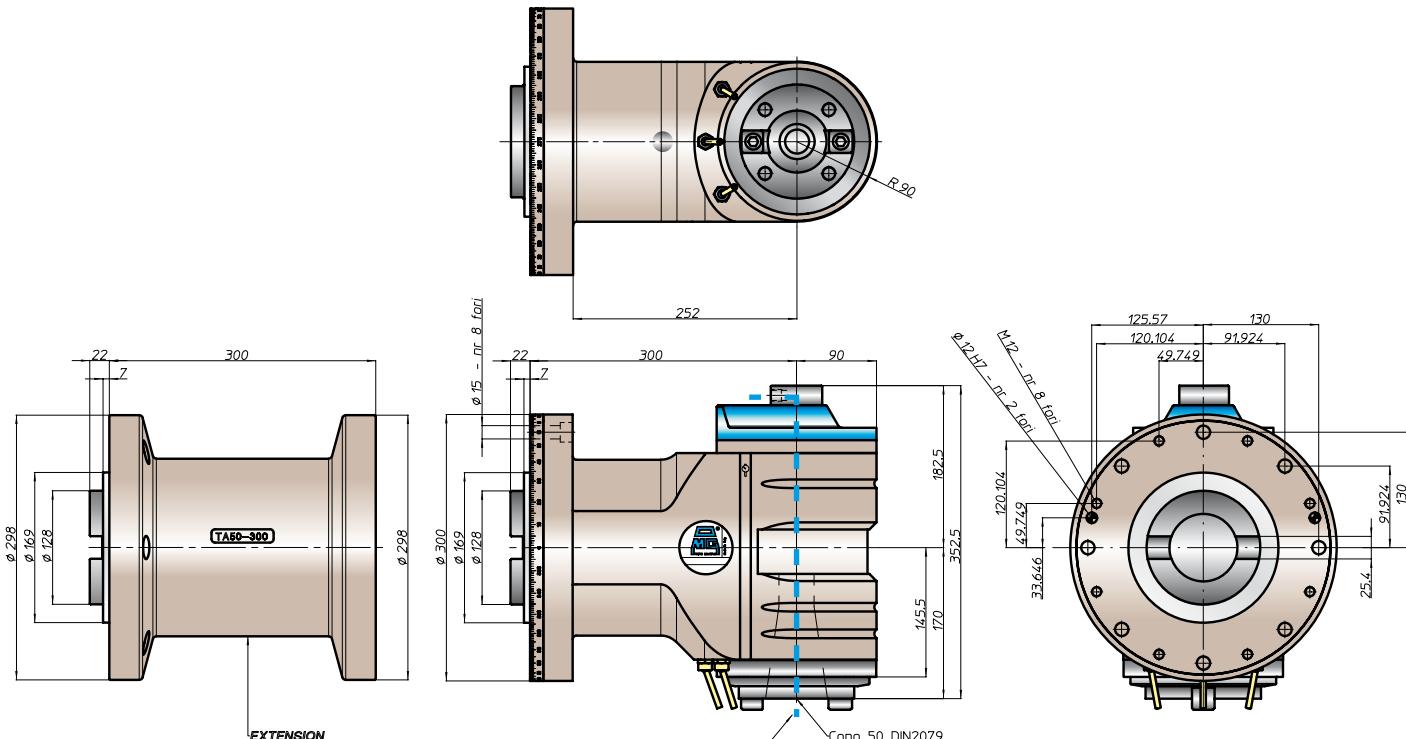
## tipi mandrino disponibili / available spindle types

4 DIN69893-HSK

5 COROMANT CAPTO®

HSK100

C8



## Equipaggiamento standard:

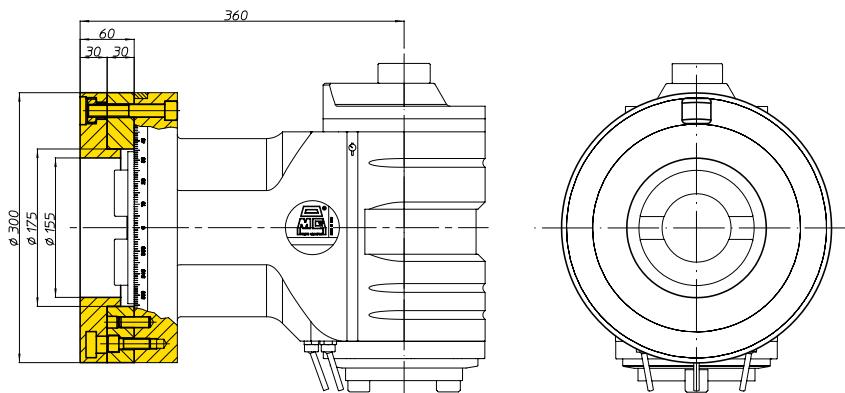
- pressurizzazione mandrino
- n. 3 ugelli orientabili vicino al mandrino
- nel mandrino DIN2079 si possono utilizzare coni DIN69871-A50, MAS403-BT50

refrigerante  
coolant way

## 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



BAH

TA.CP

TA

MO

HT

VH

TSI/TSX

T

MT-TC-TC3

Accessori  
Accessories

Appendice tecnica  
Technical supplement



# TA..T Extended Gallery



# TA13.PVDI



## caratteristiche/features



ø 13



M10



1-1



8000

## peso/weight



4,5 kg

## rotazione/rotation

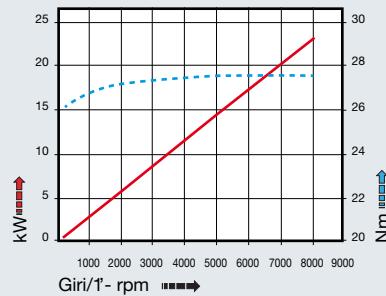


input



output

## prestazioni/performances



## tipi mandrino disponibili / available spindle types

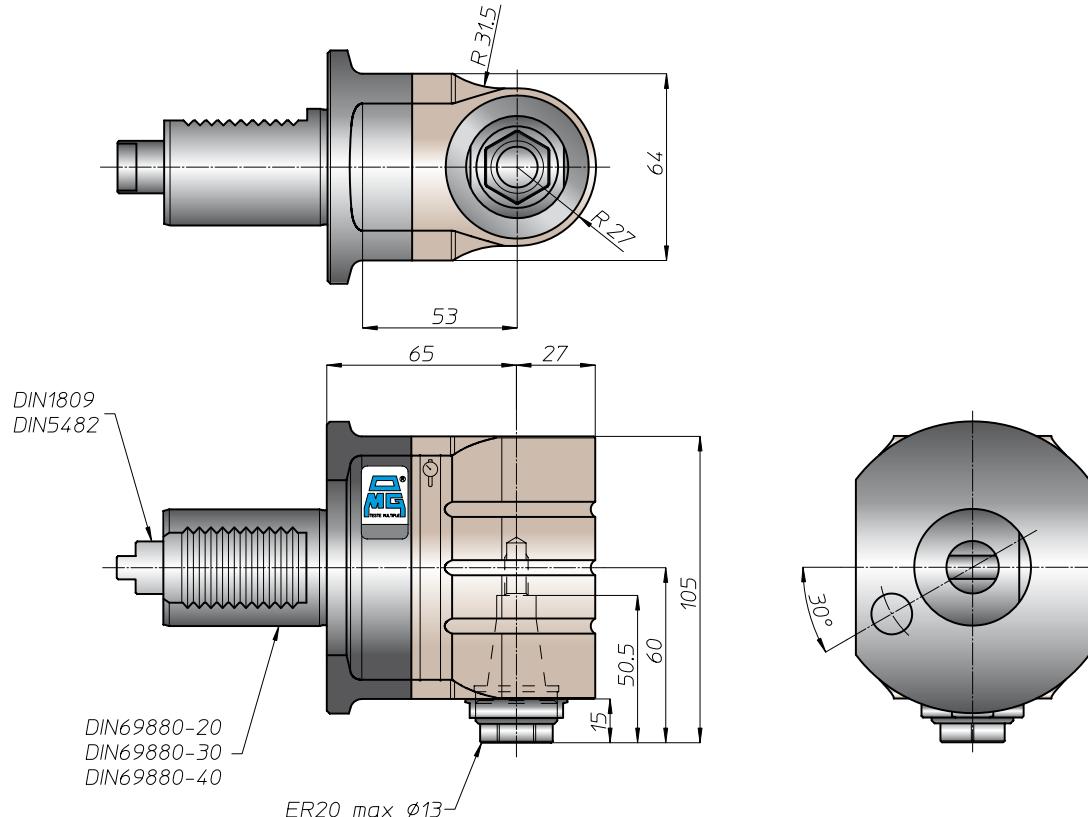
1 DIN6388-ER

2 Albero portafrese  
Milling shaft3 Weldon  
Whistle-Notch

ER25

Ø16-Ø22

Ø16



## soluzioni speciali - special solutions



# TA16.PVDI

## caratteristiche/features



ø 16



M12



1-1



5000

## peso/weight



6,5 kg

## rotazione/rotation

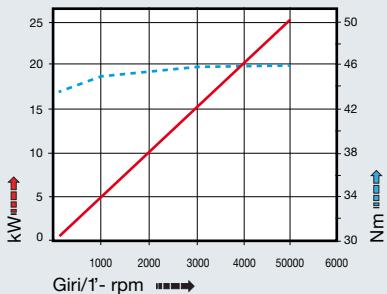


input



output

## prestazioni/performances



## 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

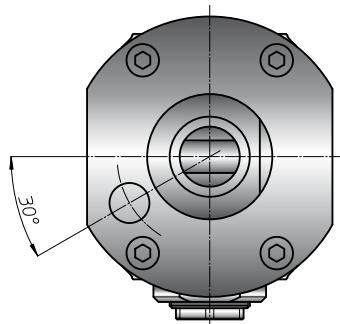
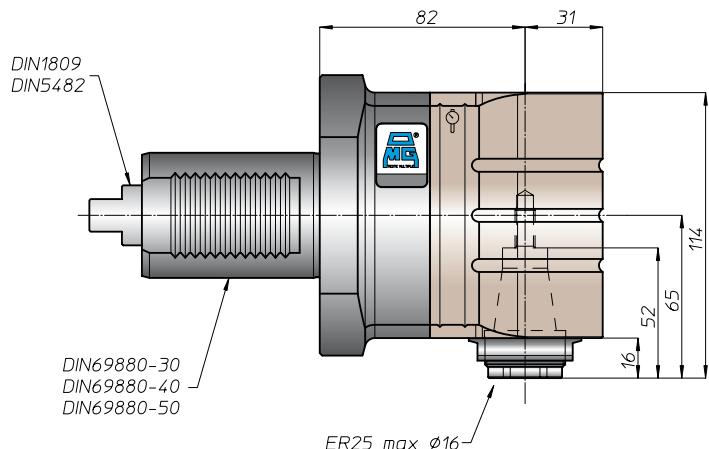
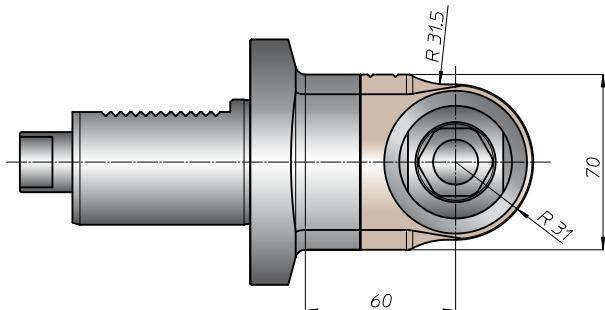
HSK32

5 COROMANT  
CAPTO®

C3

6 ABS  
Licenza KOMET®

ABS32



## soluzioni speciali - special solutions



# TAV10.PVDI



## caratteristiche/features

- ø 10
- M8
- 1-1
- 4000

## peso/weight



3,5 kg

## rotazione/rotation

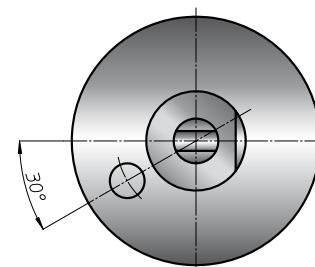
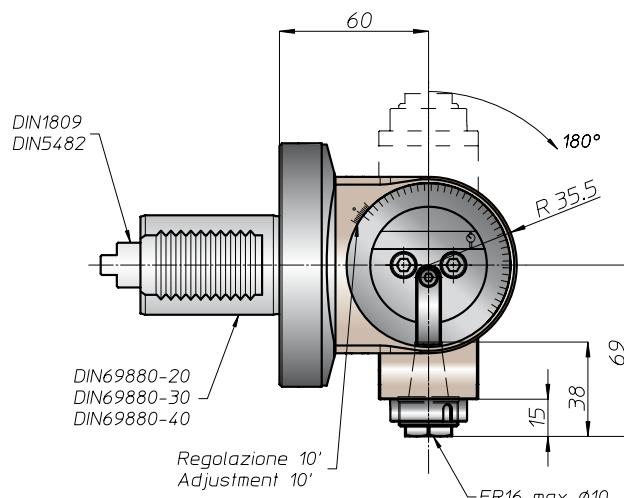
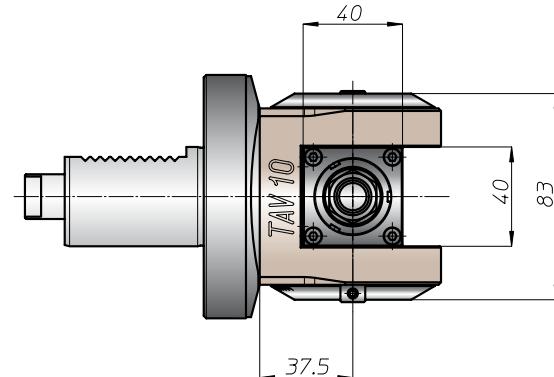
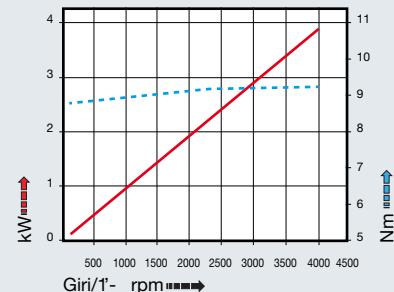


input



output

## prestazioni/performances



## soluzioni speciali - special solutions



# TAV13.PVDI

## caratteristiche/features



ø 13



M10



1-1



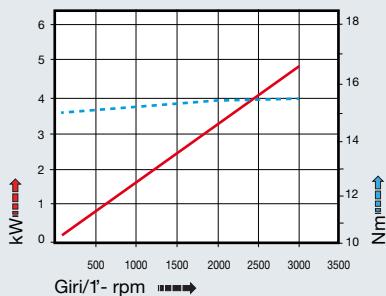
3000

## peso/weight



5,5 kg

## prestazioni/performances



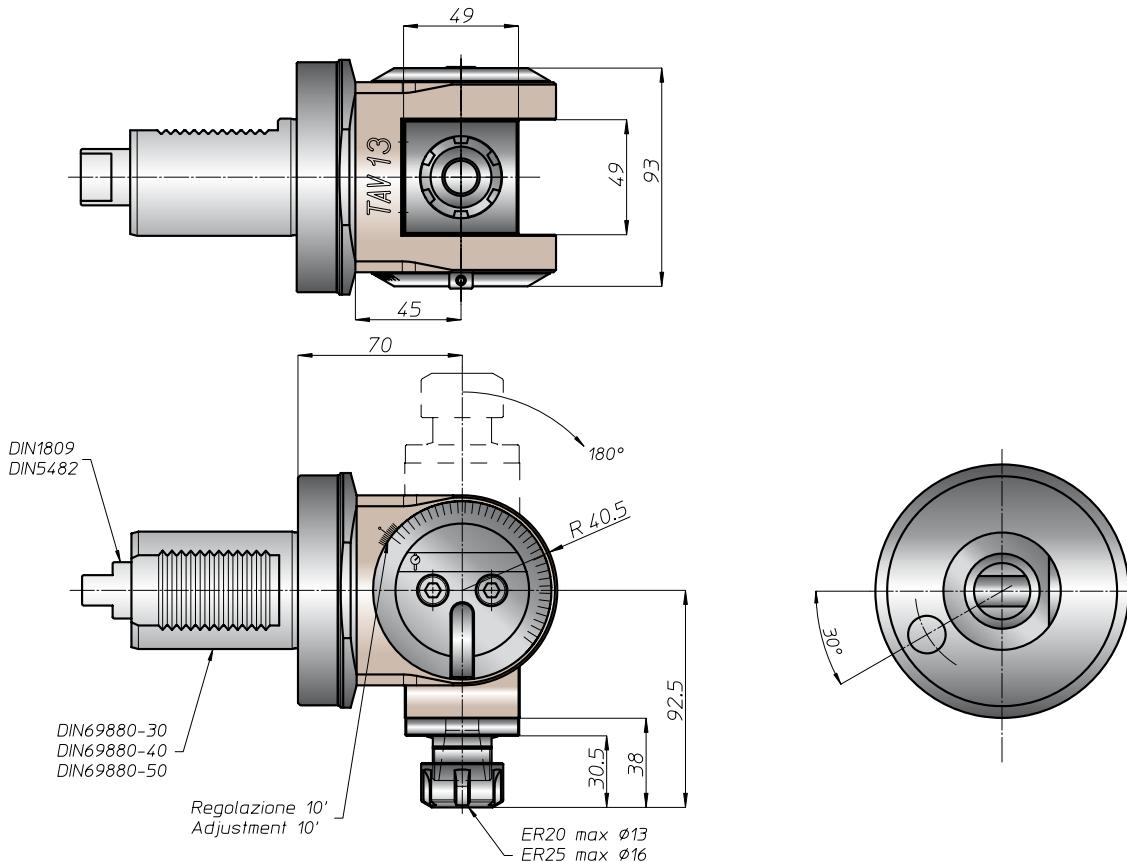
## tipi mandrino disponibili / available spindle types

1 DIN6388-ER

3 Weldon Whistle-Notch

ER25

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.

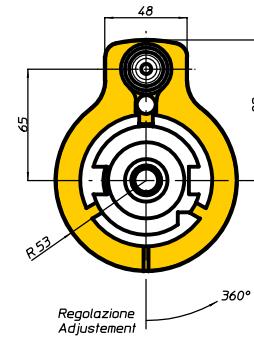
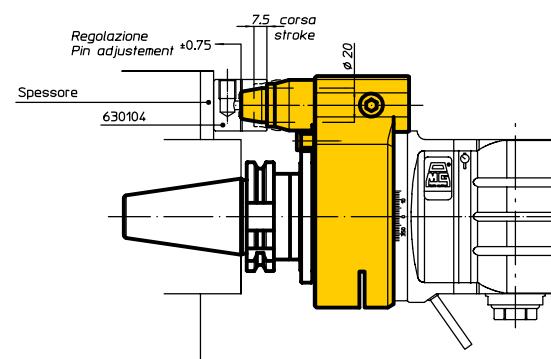
L'adduzione del liquido passante per il corpo testa, la cui uscita avviene tramite un ugello direzionale, offre il vantaggio di non avere tubi "volanti" che possono muoversi durante le lavorazioni.



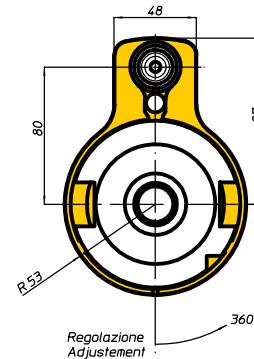
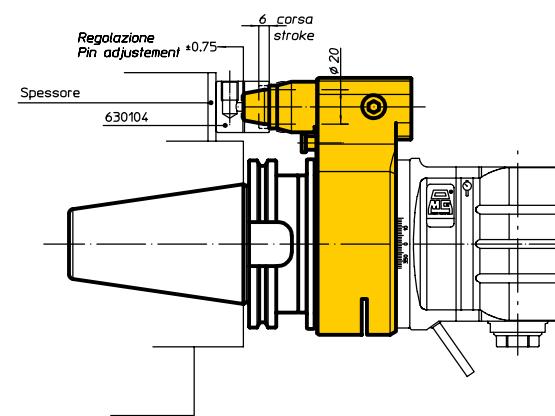
Quando possibile, nella Vostra applicazione, posizionate il perno conico dalla parte opposta al mandrino della testa ad angolo.

# Antirotante Torque arm

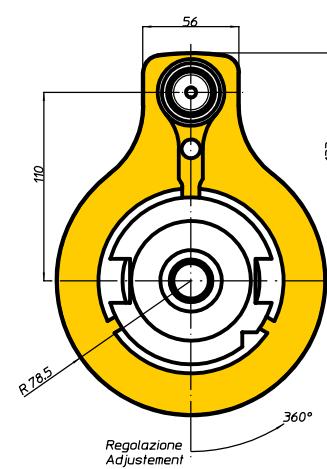
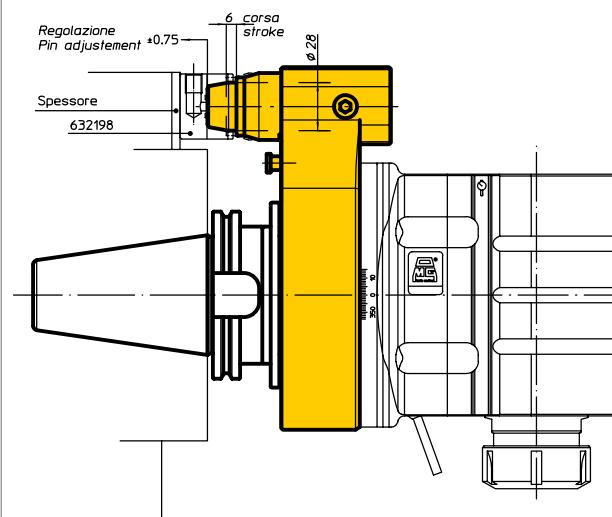
Teste ad angolo con interasse H=65  
Angle heads with centre distance H=65



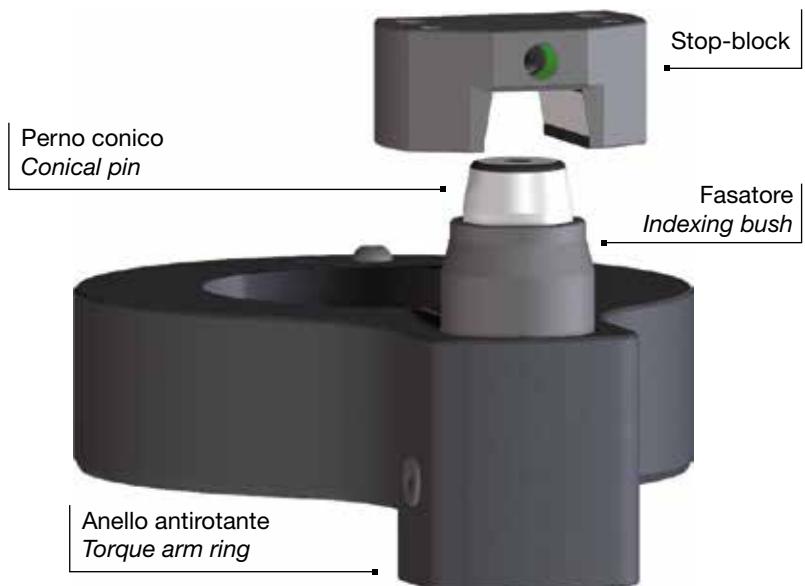
Teste ad angolo con interasse H=80  
Angle heads with centre distance H=80



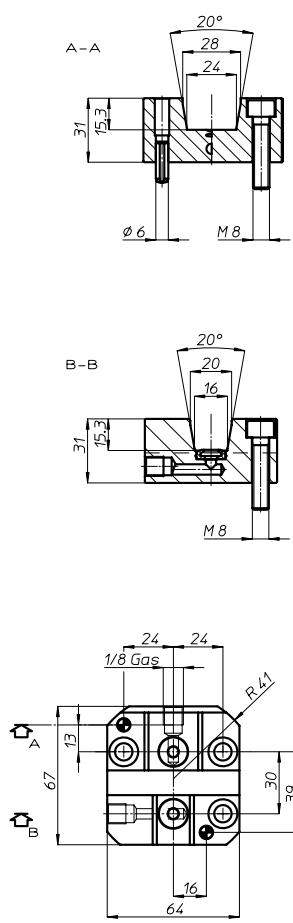
Teste ad angolo con interasse H=110  
Angle heads with centre distance H=110



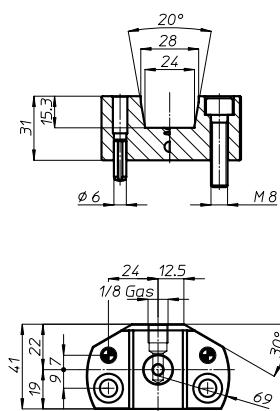
# Stop-block



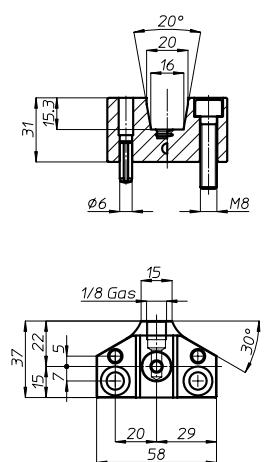
Double Stop-block (cod. 632199)



Stop-block (cod. 632198)



Stop-block (cod. 630104)



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 Ø 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.

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

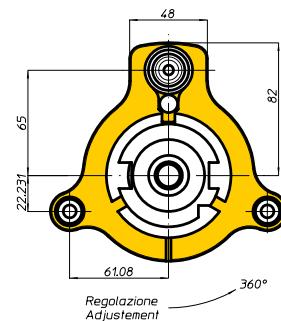
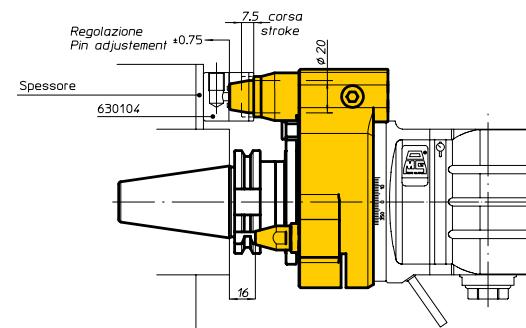
Il **TriBlock** è dotato di tre punti di appoggio di cui uno è lo standard come nei precedenti e due supplementari da registrare tramite un rasamento. Questi tre punti, allargando l'appoggio di base della testa ad angolo, consentono di ottenere una rigidità superiore allo standard. Quando poi si richiede 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

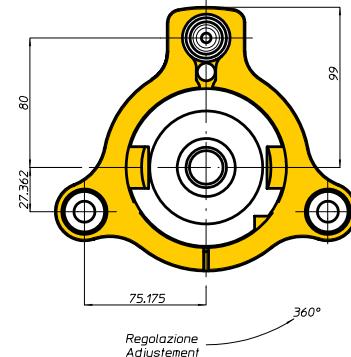
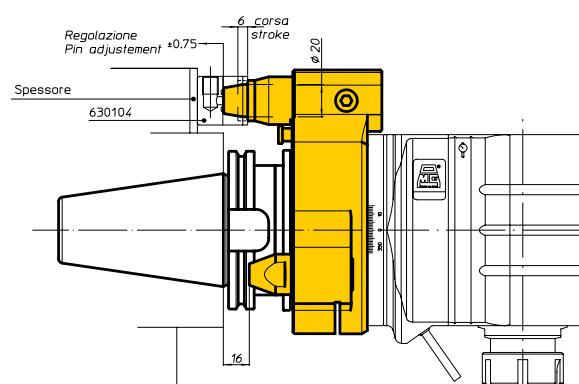
**TriBlock**



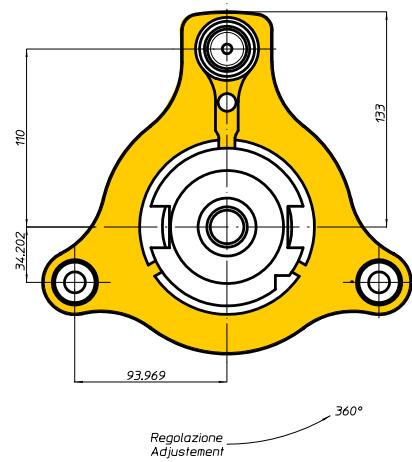
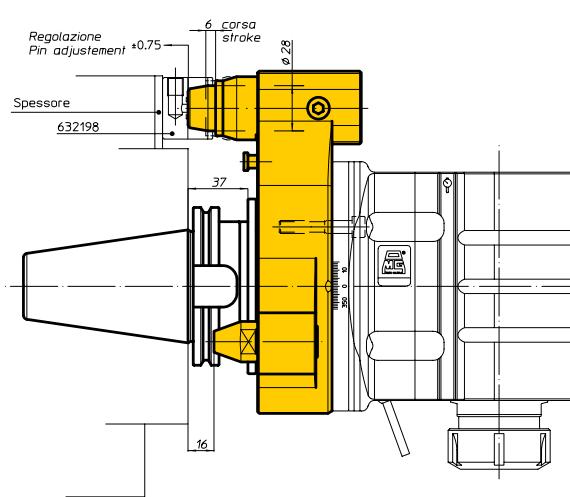
Teste ad angolo con interasse H=65  
Angle heads with centre distance H=65



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



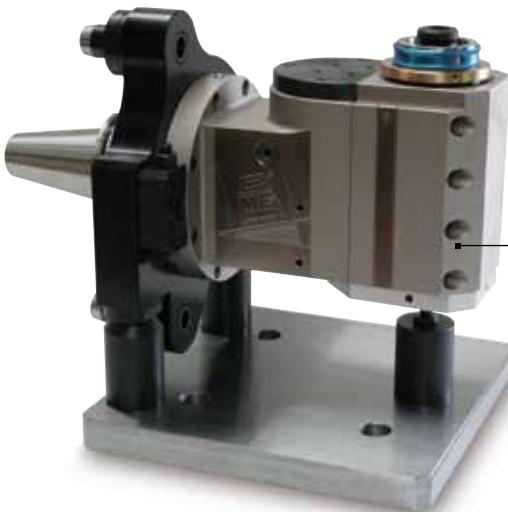
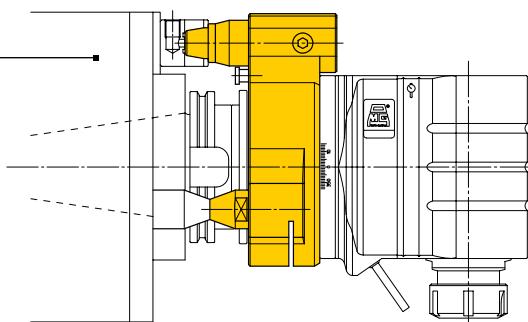
Teste ad angolo con interasse H=110  
Angle heads with centre distance H=110



# Antirotante/Torque arm

**TriBlock** ®

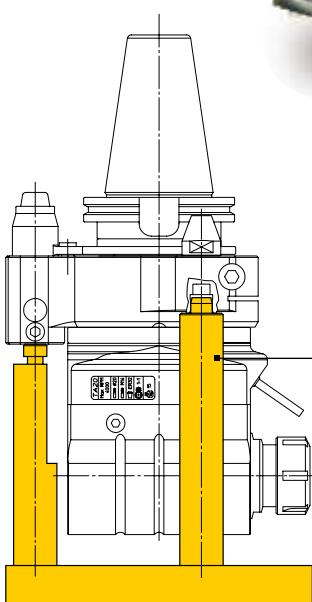
Sul mandrino macchina  
On spindle machine



**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 fresa  
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.



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 culle 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** ®

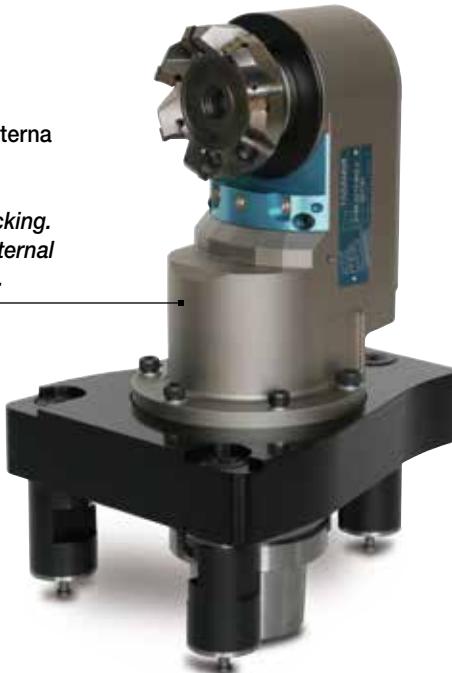
**TAS24408**

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 elettrosaldata 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.

# 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



**TAS 15505**

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



**TFS 23301**

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



**TFS 39998**

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

# Teste ad angolo speciali

## Special angle heads



**TFS 36699**  
Testa ad angolo bimandrino  
registrabile, peso kg 29  
*Adjustable twin angle head,  
weight kg 29*

**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.*



**TA 09603**  
Testa ad angolo di alesatura con  
utensile Ø 160 peso Kg 77  
*Boring angle head with tools  
Ø 160 weight Kg 77*



**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*



**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*



# Teste ad angolo speciali

## Special angle heads



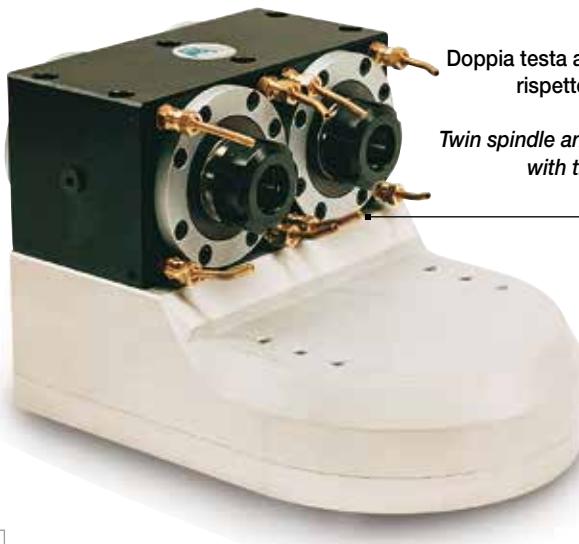
**TAS 33206**  
Testa bimandrino di fresatura  
per frese Ø 160 peso kg 63  
*Twin milling head with  
milling cutter Ø 160 weight kg 63*



**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

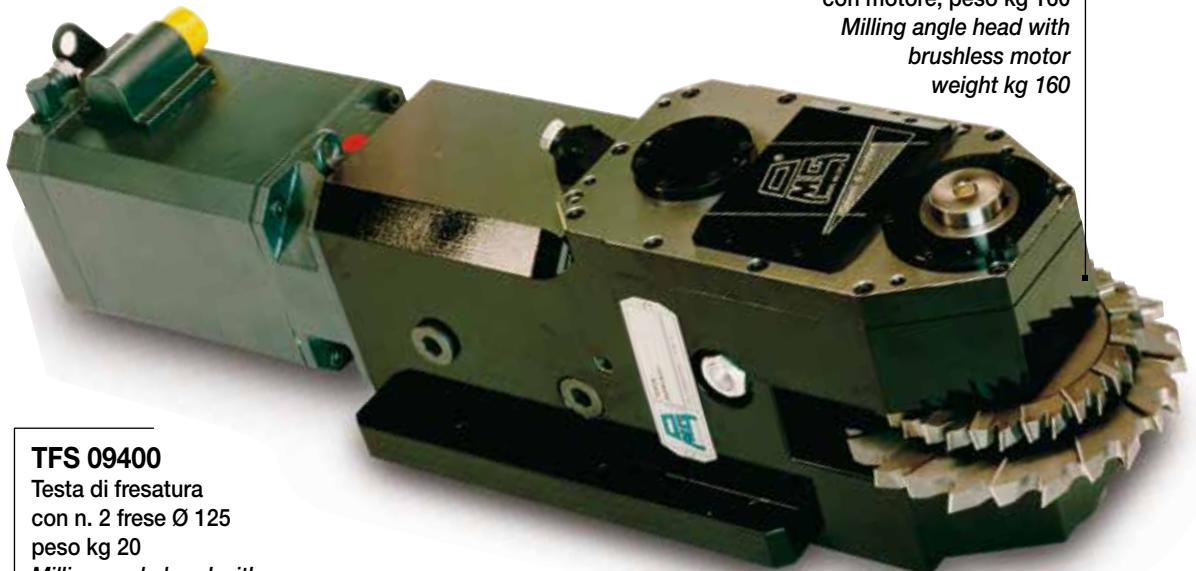
## Special angle heads



**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



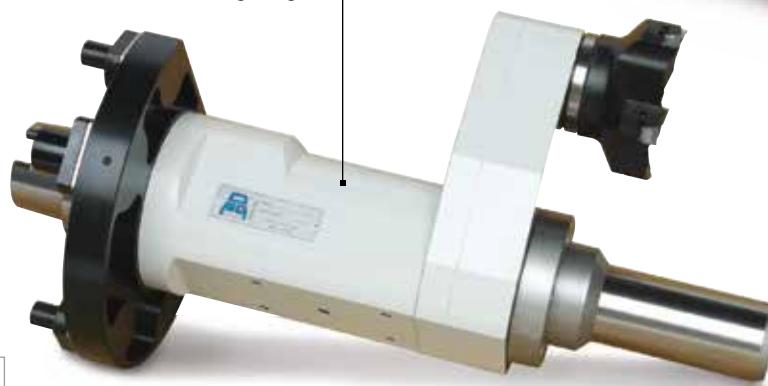
**TFS 12005**

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 fresa 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 fresa 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 fresa 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 bimandrino,  
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 lenght  
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 vertical lathe. Weight Kg 286*



**TAS 08411**  
Testa ad Angolo con tre mandrini  
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 19610**  
Testa ad Angolo di fresatura  
per macchina transfer.  
Peso Kg 35  
*Milling Angle Head for transfer machine. Weight Kg 35*



**TAS 28010**  
Testa ad Angolo con tre  
assi a regolazione manuale.  
Peso Kg 590  
*Angle Head with three manual movement axis.*  
*Weight Kg 590*

# 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 fresa-tura canna di fucile.

Peso Kg 6,5

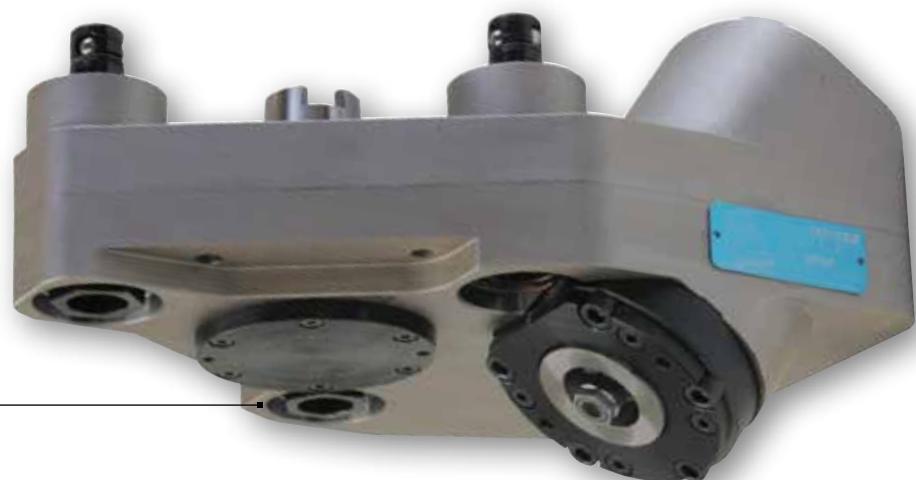
*Milling Angle Head for rifle barrel. Weight Kg 6,5*

**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*