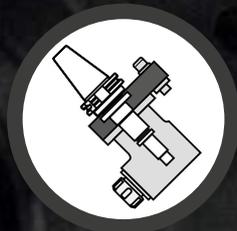




MADE IN ITALY



1

1

*Integral angle heads series!*

**CLASSIC LINE**

**Teste Angolari / Angle Heads**

# INDICE - INDEX

## ATC - AUTOMATIC TOOL CHANGE

	pages		pages
<b>LIGHT</b>		<b>GMU</b>	
GL90-7	from 1.10 to 1.13	GMU-13 / 13L	from 1.38 to 1.41
GL90-10		GMU-16	
GL90-16		GMU-20	
GTU-10			
<b>MINI</b>		<b>DOUBLE</b>	
		G90-16 2U / 16L 2U	from 1.42 to 1.47
<b>NEW 2024</b>	from 1.14 to 1.17	G90-20 2U / 20L 2U	
GM90-3 300 S		G90-30 2U / 30L 2U	
GM90-3 300			
GM90-3 200			
GM90-3 100		<b>OFFSET</b>	
<b>SLIM</b>		GR90-5	from 1.48 to 1.52
GS90-2	1.18	GR90-10	
GS90-3XS	<b>NEW</b>	GR90-16	
		GR90-20	
		GR90-S40	
<b>STD 90°</b>		<b>ACCESSORIES</b>	
G90-5	from 1.19 to 1.33	<b>OPZIONE REFRIGERANTE INTERNO</b> MODULAR QUICK CHANGE ADAPTORS	from 1.84 to 1.93
GM90-5		<b>OPZIONE USCITA ATC</b> ATC OUTPUT OPTION <b>NEW</b>	
G90-7 / 7L		<b>GHIERE RECOOL</b> RECOOL NUTS <b>NEW</b>	
G90-10 / 10L		<b>ESEMPIO SCHEDA DI COLLAUDO</b> INSPECTION SHEET EXAMPLE	
G90-16 / 16L		<b>SISTEMA ANTIROTANTE MULTIPOINT</b> MULTIPOINT ANTIROTATION SYSTEM	
G90-20 / 20L / 20L.272		<b>ESEMPIO DI MONTAGGIO</b> MOUNTING EXAMPLE	
G90-30 / 30L		<b>STOP-BLOCK</b> STOP-BLOCK	
G90-S40 / S40L		<b>GRUPPO ANTIROTANTE</b> ANTI-ROTATION GROUP	
G90-S40L.280		<b>GRUPPO PERNO SPECIALE</b> SPECIAL PIN GROUP	
<b>EXTENDED</b>			
<b>NEW 2024</b>	from 1.34 to 1.37		
G90-10L.240			
G90-16L.270			
G90-20L.332			
G90-30L. 287			

# INDICE - INDEX

## MTC - MANUAL TOOL CHANGE

	pages		pages
<b>STD 90°</b>		<b>DOUBLE</b>	
G90-5	from 1.55 to 1.66	G90-16 2U / 16L 2U	from 1.76 to 1.81
G90-7 / 7L		G90-20 2U / 20L 2U	
G90-10 / 10L		G90-30 2U / 30L 2U	
G90-16 / 16L		<b>ACCESSORIES</b>	from 1.94 to 1.100
G90-20 / 20L		<b>OPZIONE REFRIGERANTE INTERNO</b> MODULAR QUICK CHANGE ADAPTORS	
G90-30 / 30L		<b>OPZIONE USCITA MTC</b> MTC OUTPUT OPTION <i>NEW</i>	
G90-S40		<b>CONI / FLANGE / PROLUNGHE</b> SHANKS / FLANGES / EXTENSIONS	
<b>XL</b>	<b>ESEMPIO SCHEDA DI COLLAUDO</b> INSPECTION SHEET EXAMPLE		
G90-S40 XL	from 1.67 to 1.70	<b>ESEMPIO DI MONTAGGIO</b> MOUNTING EXAMPLE	
G90-S40 XLxx		<b>PINZE / GHIERE / CHIAVI</b> COLLETS / NUTS / WRENCHES	
G90-S50		<b>CAMBI RAPIDI MODULARI 2.0</b> MODULAR QUICK CHANGE 2.0	
G90-S50 XLxx			
<b>GMU</b>			
GMU-16	from 1.71 to 1.75		
GMU-20			
GMU-S40-125			
GMU-S40			
GMU-S50			

# Teste Angolari / Angle Heads

# CLASSIC LINE



Velocità / High-speed  
**10.000 Rpm**



Internal coolant  
fino a / Up to  
**70Bar**

## Cono e Albero Integrali - Integral Shank & Shaft !

from 1.10 to 1.52

### SERIE ATC / ATC SERIES



E' la linea di teste adatte ai centri di lavoro, trasportabile automaticamente dal magazzino utensili al mandrino e viceversa. Corpo testa orientabile di 360° su ASSE MANDRINO. Quando la testa non è in posizione di lavoro, un sistema di aggancio impedisce la rotazione del cono rispetto al corpo testa. **Una caratteristica primaria delle teste Classic - ATC è l'albero centrale realizzato in un solo pezzo con il cono di attacco, per offrire la massima rigidità.** Recentissima novità è il perno di fermo intercambiabile.

This range of heads is designed to be used on machining centres and can be automatically transferred from the tool magazine to the machine spindle and back. Angle head body adjustable at 360° on SPINDLE AXIS. This allows easy adjustment of the drive taper and head relative to arrester block mounted on the front of the machining centres' spindle housing. When the head is unloaded from the machine spindle, a safety latch prevents the drive taper from rotating. **A major feature of the Classic ATC heads is the main input shaft which is integral with the drive taper to ensure maximum rigidity.** The last news is the interchangeable positioning pin.

from 1.55 to 1.81

### SERIE MTC / MTC SERIES



E' la linea di teste adatte a macchine utensili tradizionali e da fissare al mandrino tramite flangiatura. La cava a "T" ricavata sulla flangia universale permette un facile posizionamento del corpo testa sui 360° intorno al suo asse verticale. Un sistema modulare componibile, rende possibile variare la lunghezza del corpo testa aggiungendo l'elemento di prolunga. Modulo di prolunga, coni e flangia universale sono modulari e quindi intercambiabili su tutti i corpi testa appartenenti allo stesso ordine di grandezza.

This is a range of heads for traditional machine tools with flange attachment. The T-slot on the universal flange facilitates positioning the head 360° around its vertical axis. The modular system makes it possible to extend the length of the body by adding a spacer. The extension spacer, drive tapers and universal flange are modular and therefore interchangeable among all the heads of similar size.



Prolunga / Extension



### Albero & Cono integrale Integral shank & shaft

Albero con cono di attacco integrale (cementato, temprato e rettificato) per garantire la massima rigidità

Main shaft is one solid piece with the drive input taper, case hardened and ground, to ensure maximum rigidity



### Cuscinetti ABEC 9 ABEC 9 Ball Bearings

Ciascun albero di trasmissione è supportato da una coppia di cuscinetti a contatto obliquo, precaricati in classe di precisione ABEC 9 e lubrificati con grasso a vita

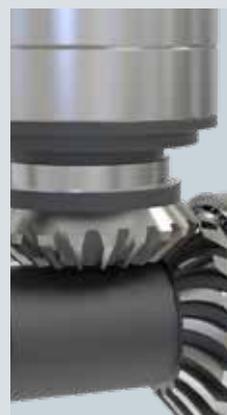
Shafts supported by sets of super precision pre-loaded angular contact bearings with Long Life grease lubrication and ABEC 9 accuracy rating



### Corpo Principale Main Body

Corpo testa orientabile a 360° con pressurizzazione interna. In acciaio trattato, massima rigidità e resistenza alla corrosione. Minima dilatazione termica

Treated steel head body with 360° position and internal air pressure, maximum rigidity and corrosion resistant. Minimum thermal expansion



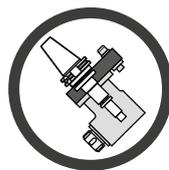
### Ingranaggi Gleason Gleason Gears

Ingranaggi conici spiroidali in materiale ad alta resistenza, rettificati per garantire minore riscaldamento e rumorosità ed elevato numero di giri. Calcolo computerizzato della coppia conica degli ingranaggi (gleason): più denti in presa, più coppia in uscita, maggior numero di ore di lavorazione, rumorosità quasi assente.

Ground spiral bevel gears in the highest performance materials able to guaranteed less warming and noise and the highest Rpm. Computerized computation of the data of the set gears more than one tooth working during mesh, more power transmitted, longer gear life, almost no noise

In continuo sviluppo, la gamma di teste Classic Line, è oggi composta da 197 modelli completamente compatibili con la Linea Evolution e con qualunque macchina sul mercato grazie all'ampia gamma di coni disponibili. L'obiettivo è sempre lo stesso: Ottimizzare i cicli, semplificare e migliorare sempre di più la qualità di qualsiasi tipo di lavorazione su centri orizzontali & verticali. Le Teste Angolari Gerardi della linea Classic nascono da solide basi tecniche e dall'esperienza maturata da oltre 45 anni trascorsi al fianco dei nostri clienti durante i quali abbiamo risolto i problemi più variegati cercando la soluzione migliore e garantendo sempre l'elevata qualità ed affidabilità dei nostri prodotti.

The Classic Line Angle Heads range is constantly evolving and it currently consists of 197 items, all compatible with both Evolution Line Angle Heads and all machining centres on the market thanks to the wide range of shanks available. Our goal is always the same: optimizing the production chain by simplifying and improving more and more every type of operation on horizontal and vertical machining centres. The new Classic line of Gerardi angle heads has been designed from a technical base derived from more than 40-years-experience in solving thousands of production problems, finding optimum solutions and always guaranteeing the highest product quality.



SCAN IT TO WATCH THE



VIDEO PRESENTATION



## Linea di teste angolari integrali! Integral angle heads series!

**Uscite regolabili GMU**  
Operazioni orizzontali, verticali e angolari con una sola testa.  
Uscita completamente regolabile con angolazione 0° a 90°

GMU Adjustable Output  
Vertical, horizontal and angular machining operations with one angle head only. Fully adjustable output 0° to 90°

**Intercambiabili per un utilizzo su più centri di lavoro**  
Interchangeable to fit any machine spindle.

**Refrigerante 10BAR attraverso il perno**  
Standard 10BAR coolant through the pin



**Manipoli ad Angolo**  
90° Angle Spindle



### PASSAGGIO REFRIGERANTE - COOLANT TYPES:

10bar	10bar	up to 70bar	up to 150bar
 <ul style="list-style-type: none"> <li>» Perno</li> <li>» Utensile</li> <li>» Positioning pin</li> <li>» Tool</li> </ul>	 <ul style="list-style-type: none"> <li>» Perno</li> <li>» Distributore</li> <li>» Utensile</li> <li>» Positioning Pin</li> <li>» Rotating Distributor</li> <li>» Tool</li> </ul>	 <ul style="list-style-type: none"> <li>» Cono</li> <li>» Distributore</li> <li>» Utensile</li> <li>» Shank</li> <li>» Rotating Distributor</li> <li>» Tool</li> </ul>	 <ul style="list-style-type: none"> <li>» Perno</li> <li>» Ghiera ReCool</li> <li>» Utensile</li> <li>» Positioning Pin</li> <li>» ReCool Nut</li> <li>» Tool</li> </ul>

1  
**Novità / News**

# Classic Line

## Nuovi Modelli di Teste Angolari Integrali

*New Types of Integral Angle Heads*



### MINI 90° SERIES

La nuova serie di teste angolari con manipolo ad angolo intercambiabile per lavorazioni con utensile da Ø1,6 a Ø3  
New series of angle heads with interchangeable angle spindle for machinings with Ø1,6 to Ø 3



### EXTENDED SERIES

La serie di teste angolari EXTRA LUNGHE con torretta riportata.  
New EXTENDED series angle heads with reported turret.



### SLIM SERIES

Nuovo modello di testa standard a 90° per MICRO lavorazioni in ingombri minimi  
New standard 90° head type for MICRO machining in minimum overall spaces



### OFFSET SERIES

Nuova gamma di teste disassate con refrigerante interno fino a 70bar.  
New offset heads range with internal coolant up to 70 bar.

Esempi applicativi / Applications examples

# Linea Classic

**Teste angolari integrali serie ATC (Cambio utensile automatico)**

*Integral angle heads ATC series (Automatic tool change)*



## MINI90° SERIES

La nuova serie di teste angolari con manipolo ad angolo intercambiabile per lavorazioni in ingombri minimi  
New series of angle heads with interchangeable angle spindle for machining in minimum overall spaces



## EXTENDED SERIES

La serie di teste con torretta riportata ideale per fresature, forature e maschiature in profondità.  
The angle head series with reported turret for deep milling, drilling and tapping.



## COOLANT SERIES

La serie di teste angolari con passaggio refrigerante diretto dal mandrino, uscita utensile fino a 70bar  
Angle heads series with coolant input directly from machine spindle and output through the tool up to 70bar



## GMU SERIES

La serie di teste angolari con angolazione regolabile da 0 a 90°. Spina di posizionamento rapido (Step 15°)  
Angle heads series with adjustable angle from 0 to 90°. Quick positioning pin (Step 15°)



## DOUBLE SERIES

La serie di teste angolari ideali per fresature, forature e maschiature attraverso 2 mandrini contrapposti di 180°  
Angle Heads series for milling drilling and tapping through 2 opposite outputs



## OFFSET SERIES

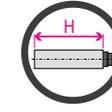
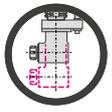
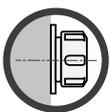
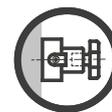
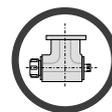
Testa angolari disassate per lavorazioni in spazi ristretti con opzione passaggio refrigerante dal cono, uscita utensile 70 BAR  
Offset series for machining in narrow spaces with coolant input directly from machine spindle and output through the tool at 70 BAR

1

## SIMBOLOGIA DATI TECNICI TECHNICAL DATA LOGOS

							
<b>Rapporto trasmissione</b> Ratio	<b>Numero di giri</b> Revolutions per minute Rpm	<b>Carico assiale</b> Axial load N	<b>Coppia</b> Torque Nm	<b>Peso</b> Weight Kg	<b>Uscita</b> Output Ø	<b>Maschio</b> Tapping M	<b>Pinza</b> Collet Ø

## INDICE OPZIONI OPTIONS INDEX

<b>OPZIONI</b> OPTIONS							
	<b>Manipolo ad angolo</b> Angular chuck	Angular chuck	<b>Spina per posizionamento rapido</b> Quick positioning pin	<b>Prolunga per manipolo ad angolo</b> Extension for angular chuck	<b>Lunghezze speciali</b> Special lenght	<b>Flangia Multipoint</b> Multipoint flange	
<b>PASSAGGIO REFRIGERANTE</b> COOLANT							
	<b>Attaverso il perno</b> Through the Pin  10bar (standard) <b>ROTAZ. a SECCO</b> DRY RUNNING ✓	<b>Perno » Distrib » Utensile</b> Pin » Distributor » Tool  10bar <b>ROTAZ. a SECCO</b> DRY RUNNING ✓	<b>Cono » Distrib » Utensile</b> Shank » Distributor » Tool 30 / 40 / 70bar <b>ROTAZ. a SECCO</b> DRY RUNNING NO	<b>Distributore » Utensile</b> Distributor » Tool 10bar <b>ROTAZ. a SECCO</b> DRY RUNNING ✓	<b>Perno » Ghiera » Utensile</b> Pin » Distrib » Tool  <b>ReCool NUT</b>		
<b>USCITA</b> OUTPUT							
	<b>Uscita ER</b> ER output	<b>Uscita HSK</b> HSK output	<b>Uscita ISO</b> ISO output	<b>Uscita portafresa</b> Shell mill holder output	<b>Uscita WELDON</b> WELDON output	<b>Uscita C.</b> C. output	<b>Doppia uscita</b> Double output

# ATC SERIES

## AUTOMATIC TOOL CHANGE

### INGRANAGGI - GEARS

Ingranaggi Gleason con evolvente rettificato massime performances e minori vibrazioni

Gleason ground spiral bevel gears maximum performances and minimum vibration



### STOP BLOCK

Con bussola cementata e guarnizione

With case hardened bushing and gasket



### CUSCINETTI - BEARINGS

Cuscinetti a sfera a contatto obliquo in classe di precisione ABEC 9

Angular contact preloaded ball bearings of precision class ABEC 9



### DESIGN

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

The Compact design, along with mentioned specifications, allows: highest performances, high speeds, long tools life

**Albero integrale con cono cementato, temprato, rettificato**

Integral case hardened and ground shank and shaft

**Gruppo antirotante modulare**  
Modular antirotation group

**Anello graduato**  
Graduated ring

### USCITE - OUTPUTS:

- Portapinza ER (standard)
- Weldon
- Portafresa
- Speciale
- ER collet (standard)
- Weldon
- Shell mill holder
- Special

**Perno di riferimento con sbloccaggio automatico del porta utensile**

Positioning pin with automatic tool release

**Passaggio refrigerante 10BAR attraverso il perno**

Standard 10BAR coolant through the pin

**Corpo testa orientabile a 360° con pressurizzazione interna.**

In acciaio trattato, massima rigidità e resistenza alla corrosione.

Minima dilatazione termica.

Treated steel head body with 360° position and internal air pressure, maximum rigidity and corrosion resistant.

Minimum thermal expansion.



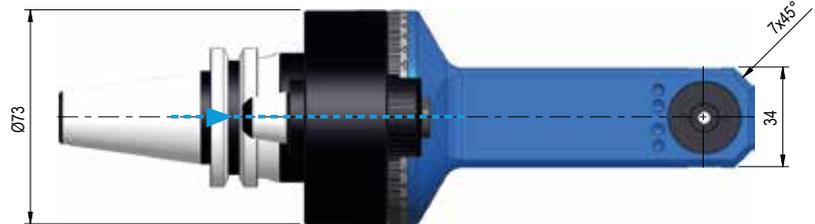
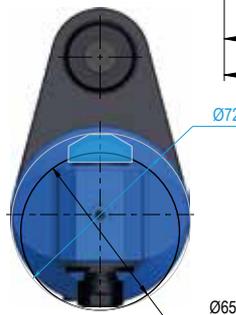
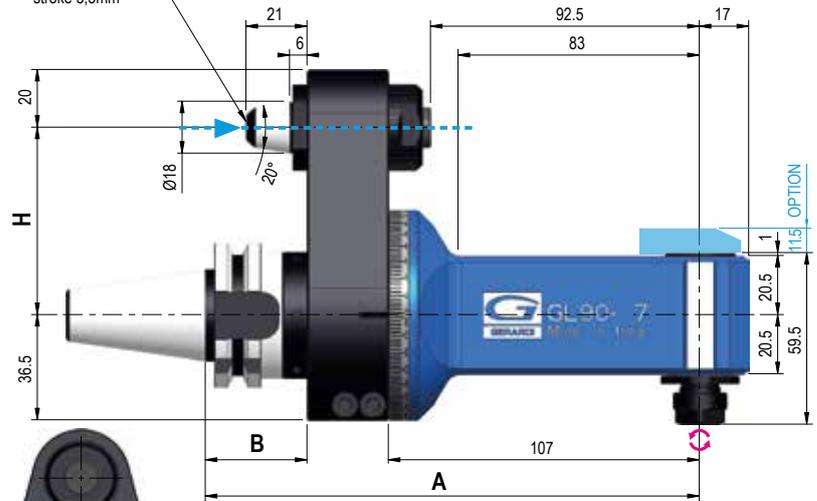
Ciascun albero di trasmissione supportato da cuscinetti a contatto obliquo, che garantiscono rotazioni dell'albero-cono e dell'uscita portautensile entro 0,01 mm  
Each transmission shaft is supported by slanting bearings that ensure the shaft with shank and the toolholder output rotations within 0,01mm.

# GL90-7

TYPE 0

Price:

**€ 3.147**

 Perno in posizione di sgancio  
 corsa 5,5mm  
 Pin during release position  
 stroke 5,5mm

**Dati tecnici - Technical data**

 Ratio  
 1:1

**ISO / BT 30**  
 Kg 2.2  
**ISO / BT 40**  
 Kg 2.7

 Rpm  
 10.000


Ø 7



N 120



M 6



Nm 5


**ER11**  
 Ø17


Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks		SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893
Grandezza - Size	30	40	40	40	30	40	63	63
Extra €	-	-	-	-	-	-	<b>200</b>	<b>200</b>
Dual contact (Optional)	<b>X</b>	<b>196</b>	<b>196</b>	<b>196</b>	<b>196</b>	<b>196</b>	<b>std</b>	<b>std</b>
<b>H</b>	Standard	65 / 80	65 / 80	65 / 80	65 / 80	65 / 80	65 / 80	65 / 80
	Optional 110 Extra €	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>
<b>A</b>	170	170	170	170	165	170	177	177
<b>B</b>	35	35	35	35	30	35	42	42

**IMBALLO & PESO - PACK WEIGHT:**

Valigetta - Bag 5,5Kg


**DOTAZIONE STANDARD - STANDARD EQUIPMENT**

Valigetta / Stop block / Ghiera ER / Chiavi di servizio

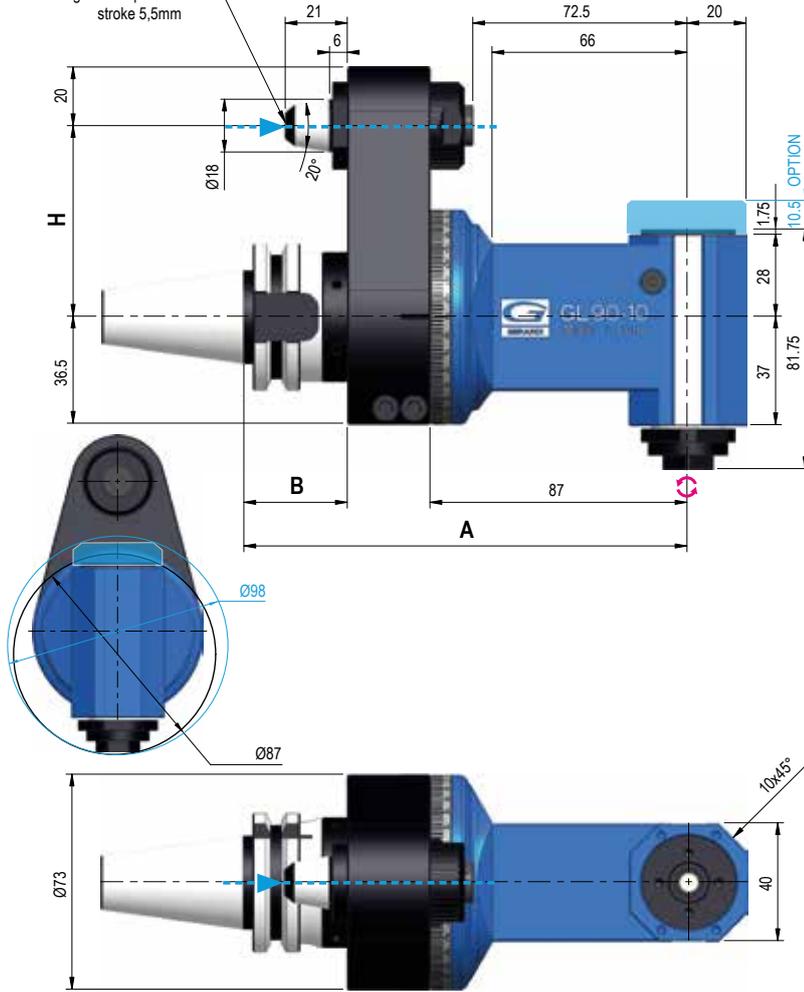
Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

**OPZIONI - OPTIONS**

€

**REFR. - COOLANT** - dal Perno - Pin through Max 10bar - 6000Rpm - **Dry running YES** **432**
**OUTPUT** - Weldon Max Ø6 **280**
**DOUBLE OUTPUT** - ER11 - ER 8M **227**

Perno in posizione di sgancio  
 corsa 5,5mm  
 Pin during release position  
 stroke 5,5mm

**GL90-10**

TYPE 0

Price:

**€ 2.732**

**Dati tecnici - Technical data**

 Ratio  
 1:1

 ISO / BT 40  
 Kg 2,4  
 ISO / BT 50  
 Kg 2,9

 Rpm  
 10.000


Ø 10



N 250



M 8



Nm 10


 ER16  
 Ø1/10

Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893
Grandezza - Size	30	40	40	63
Extra €	-	-	-	<b>200</b>
Dual contact (Optional)	<b>X</b>	<b>196</b>	<b>196</b>	<b>196</b>
<b>H</b>	Standard	65 / 80	65 / 80	65 / 80
	Optional 110 Extra €	<b>53</b>	<b>53</b>	<b>53</b>
<b>A</b>	150	150	145	157
<b>B</b>	35	35	30	42

**IMBALLO & PESO - PACK WEIGHT:**

Valigetta - Bag 6Kg


**DOTAZIONE STANDARD - STANDARD EQUIPMENT**

 Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
 Tubetto di grasso / Libro istruzioni

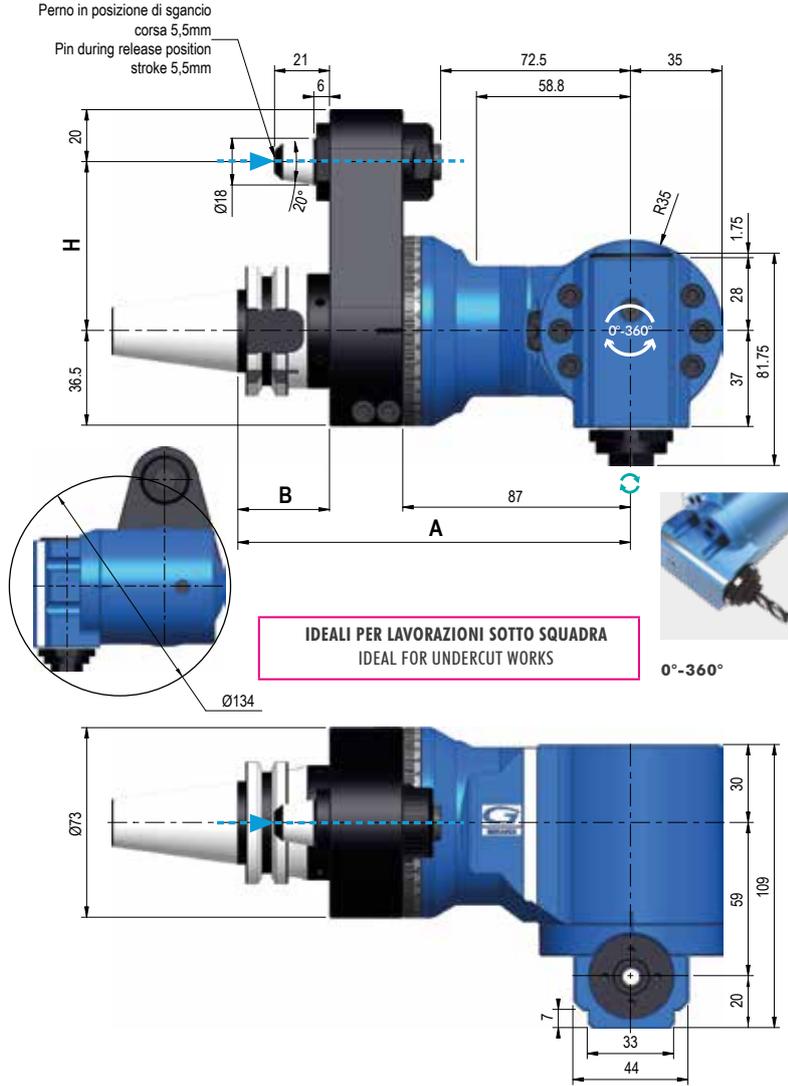
Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

**OPZIONI - OPTIONS**

REFR. - COOLANT - dal Perno - Pin through Max 10bar - 6000Rpm - Dry running YES	<b>432</b>
OUTPUT - Weldon Max Ø6	<b>130</b>

OUTPUT - Shell mill holder Ø13	<b>88</b>
OUTPUT - ER20	<b>103</b>
DOUBLE OUTPUT - ER11 - ER 8M	<b>227</b>





### GTU-10

TYPE 0

Price:

€ 5.043



#### Dati tecnici - Technical data



Ratio  
1:1



ISO / BT40  
Kg 3,8



Rpm  
6.000



Ø 10



N 250



M 8



Nm 10



ER16  
Ø1/10

Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623		
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	
<b>Extra €</b>	<b>95</b>	-	<b>243</b>	-	-	<b>95</b>	-	<b>237</b>	<b>200</b>	<b>222</b>	<b>243</b>	<b>412</b>	<b>412</b>	<b>412</b>	
Dual contact (Optional)	<b>X</b>	<b>196</b>	<b>237</b>	<b>196</b>	<b>237</b>	<b>196</b>	<b>196</b>	<b>237</b>	<b>std</b>	<b>std</b>	<b>std</b>	<b>std</b>	<b>std</b>	<b>std</b>	
<b>H</b>	Standard	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	
	Optional 110 <b>Extra €</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	
<b>A</b>	150	150	150	150	150	145	150	156	157	157	160	173	173	175	
<b>B</b>	35	35	35	35	35	30	35	41	42	42	45	38	38	40	

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 7Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

HIGH SPEED - 8000 Rpm

119

QUICK POSITIONING - Customized Angles

299

OUTPUT - Weldon Max Ø10

130

OUTPUT - ER20

227

### GM90-3 300S TYPE 1

Price: **€3.585**



**NEW  
2024**

Corpo - Body  
**€ 3.142**



MFC - 300S  
**€ 443**

#### Dati tecnici - Technical data



Reduction Ratio  
1:-1



**Kg** Kg 3,6



Rpm  
15.000



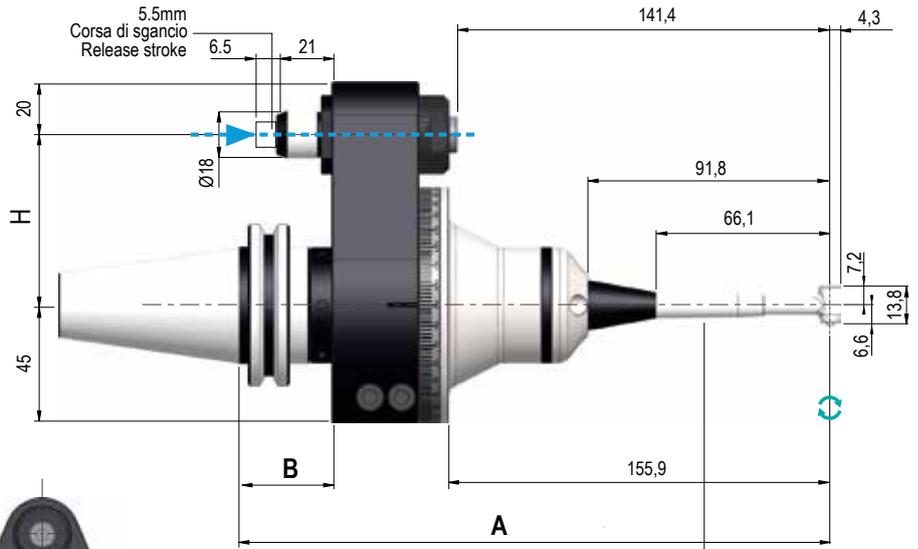
Ø 1,6 Max



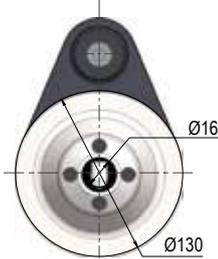
Nm 1



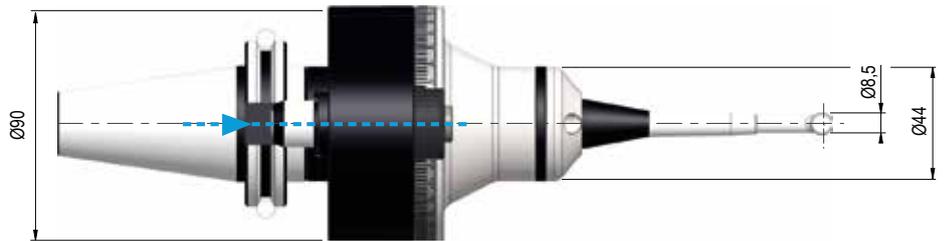
K252  
Ø1,6



**MANIPOLO ad ANGOLO  
90° ANGLE SPINDLE  
MFC - 300 S**



**IDEALI PER SVASATURE E SBAVATURE  
IDEAL FOR COUNTERSINKING AND SNAGGING**



Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623		
	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	
<b>Extra €</b>	<b>95</b>	-	-	-	-	<b>95</b>	-	-	<b>200</b>	<b>222</b>	<b>243</b>	<b>412</b>	<b>412</b>	<b>412</b>	
Dual contact (Optional)	<b>X</b>	<b>196</b>	<b>237</b>	<b>196</b>	<b>237</b>	<b>196</b>	<b>196</b>	<b>237</b>	std	std	std	std	std	std	
<b>H</b>	Standard	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	
	Optional 110 <b>Extra €</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	
<b>A</b>	223,8	223,8	223,8	223,8	223,8	223,8	223,8	229,8	230,8	230,8	233,8	226,8	226,8	228,8	
<b>B</b>	35	35	35	35	35	35	35	41	42	42	45	38	38	40	

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 7Kg



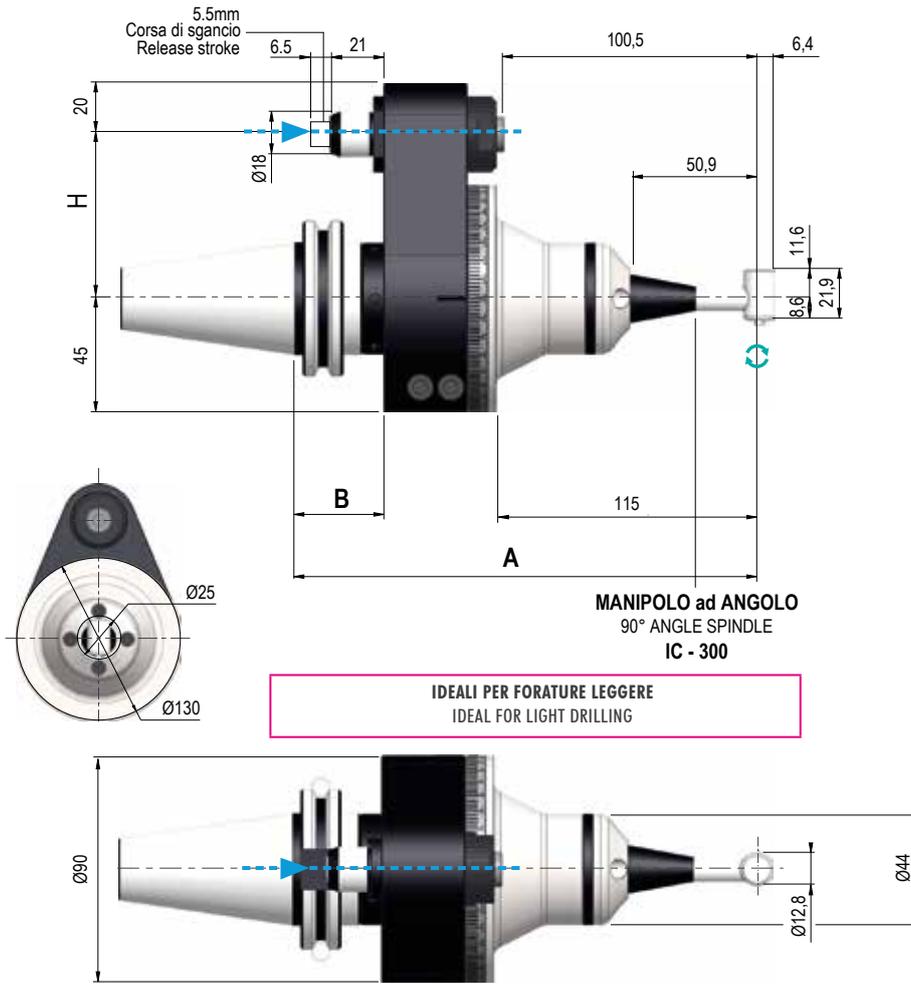
#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
 Tubetto di grasso / Libro istruzioni / Pinza K252 Ø1,6mm  
 Special bag / Stop block / ER nut / Wrenches / Grease tube  
 Instruction book / K252 Ø1,6mm collet

#### OPZIONI - OPTIONS

€

MANIPOLO - 90° ANGLE SPINDLE - RA-100	<b>896</b>
MANIPOLO - 90° ANGLE SPINDLE - IC-300	<b>597</b>
MANIPOLO - 90° ANGLE SPINDLE - RA-200	<b>906</b>
PROLUNGA - EXTENSION - CN-01 H=50,1 mm	<b>340</b>



### GM90-3 300

TYPE 1

Price:

**€3.739**



**NEW 2024**

Corpo - Body  
**€ 3.142**



IC - 300  
**€ 597**

#### Dati tecnici - Technical data



Reduction Ratio  
3/4



**Kg 3,58**



Rpm  
15.000 /  
11.250



Ø 3,175  
Max



-



-



Nm 1



CHC Ø  
1,6-3,175

Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623		
Grandezza - Size	30	40	50	40	50		30	40	50	63	80	100	C5	C6	C8
<b>Extra €</b>	<b>95</b>	-	-	-	-		<b>95</b>	-	-	<b>200</b>	<b>222</b>	<b>243</b>	<b>412</b>	<b>412</b>	<b>412</b>
Dual contact (Optional)	<b>X</b>	<b>196</b>	<b>237</b>	<b>196</b>	<b>237</b>		<b>196</b>	<b>237</b>	<b>237</b>	<b>200</b>	<b>222</b>	<b>243</b>	<b>412</b>	<b>412</b>	<b>412</b>
<b>H</b>	Standard	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80
	Optional 110 <b>Extra €</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>		<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>
<b>A</b>	183	183	183	183	183		183	183	189	190	190	193	186	186	188
<b>B</b>	35	35	35	35	35		35	35	41	42	42	45	38	38	40

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 7Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
 Tubetto di grasso / Libro istruzioni / Pinza CHCØ3/2,35mm  
 Special bag / Stop block / ER nut / Wrenches / Grease tube  
 Instruction book / CHCØ3/2,35mm collet

#### OPZIONI - OPTIONS

€

MANIPOLO - 90° ANGLE SPINDLE - RA-100	<b>896</b>
MANIPOLO - 90° ANGLE SPINDLE - MFC-300 S	<b>443</b>
MANIPOLO - 90° ANGLE SPINDLE - RA-200	<b>906</b>
PROLUNGA - EXTENSION - CN-01 H=50,1 mm	<b>340</b>

### GM90-3 200

TYPE 1

Price:

**€4.048**



**NEW  
2024**

Corpo - Body  
**€ 3.142**

RA - 200  
**€ 906**

#### Dati tecnici - Technical data



Reduction  
Ratio  
1:1,5



**Kg** 3,7



Rpm  
15.000 /  
10.000



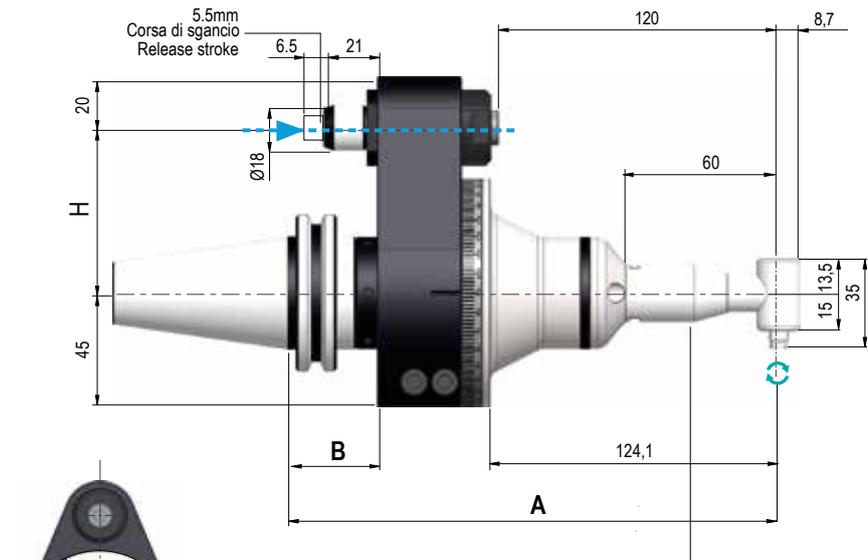
**Ø 3,175  
Max**



**Nm 4**

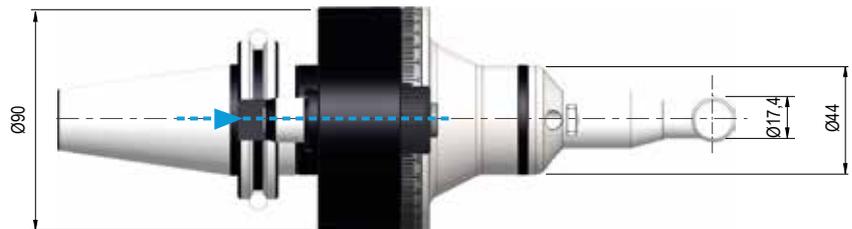
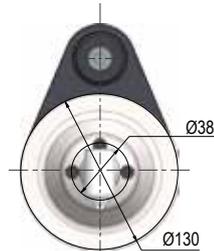


**CHS: Ø  
0,8-3,175**



**MANIPOLO ad ANGOLO  
90° ANGLE SPINDLE  
RA - 200**

**IDEALI PER FORATURE E FRESATURE LEGGERE  
IDEAL FOR LIGHT DRILLING AND MILLING**



Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50		BT MAS 403			HSK DIN 69893			C. ISO 26623			
	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	
<b>Extra €</b>	<b>95</b>	-	-	-	-	<b>95</b>	-	-	<b>196</b>	<b>217</b>	<b>237</b>	<b>412</b>	<b>412</b>	<b>412</b>	
Dual contact (Optional)	<b>X</b>	<b>196</b>	<b>237</b>	<b>196</b>	<b>237</b>	<b>196</b>	<b>196</b>	<b>237</b>	<b>std</b>	<b>std</b>	<b>std</b>	<b>std</b>	<b>std</b>	<b>std</b>	
<b>H</b>	Standard	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80
	Optional 110 <b>Extra €</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	
<b>A</b>	192	192	192	192	192	192	192	198	199	199	202	195	195	197	
<b>B</b>	35	35	35	35	35	35	35	41	42	42	45	38	38	40	

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 7Kg



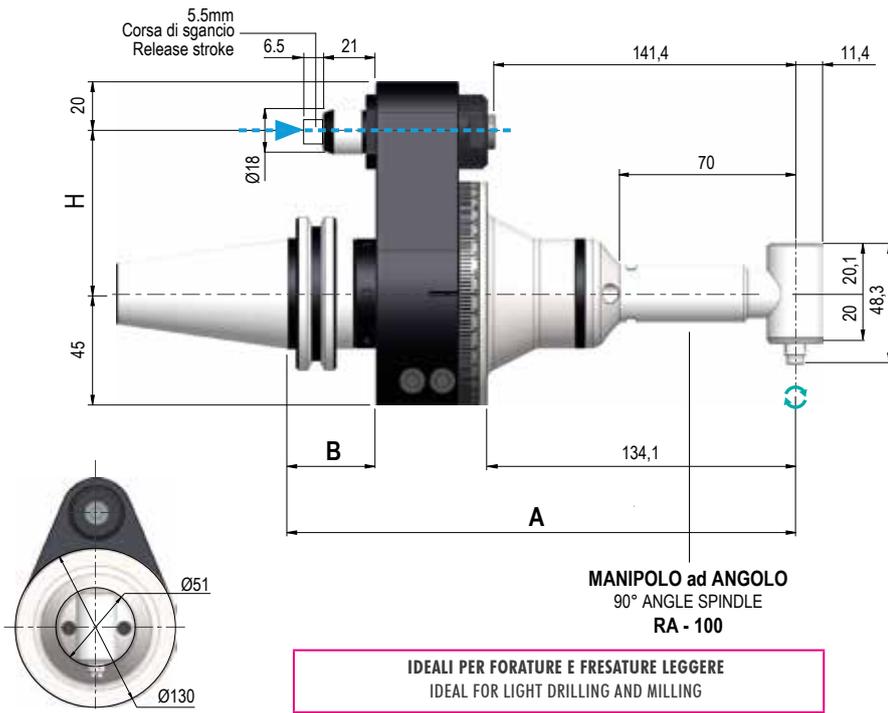
#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni / Pinza K252 Ø1,6mm  
Special bag / Stop block / ER nut / Wrenches / Grease tube  
Instruction book / K252 Ø1,6mm collet

#### OPZIONI - OPTIONS

€

<b>MANIPOLO - 90° ANGLE SPINDLE - RA-100</b>	<b>896</b>
<b>MANIPOLO - 90° ANGLE SPINDLE - MFC-300 S</b>	<b>443</b>
<b>MANIPOLO - 90° ANGLE SPINDLE - IC-300</b>	<b>597</b>
<b>PROLUNGA - EXTENSION - CN-01 H=50,1 mm</b>	<b>340</b>



### GM90-3 100

TYPE 1

Price:

**€4.038**



#### Dati tecnici - Technical data



Reduction Ratio  
1 / 2,67



**Kg** Kg 3,8



Rpm  
15.000 /  
5.620



**Max**  
Ø3,175



-



-



**Nm** 4



**CH8: Ø**  
0,8-3,175



Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623		
Grandezza - Size	30	40	50	40	50		30	40	50	63	80	100	C5	C6	C8
<b>Extra €</b>	<b>95</b>	-	-	-	-		<b>95</b>	-	-	<b>198</b>	<b>222</b>	<b>243</b>	<b>412</b>	<b>412</b>	<b>412</b>
Dual contact (Optional)	<b>X</b>	<b>196</b>	<b>237</b>	<b>196</b>	<b>237</b>		<b>196</b>	<b>196</b>	<b>237</b>	<b>std</b>	<b>std</b>	<b>std</b>	<b>std</b>	<b>std</b>	<b>std</b>
<b>H</b>	Standard	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80
	Optional 110 <b>Extra €</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>		<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>
<b>A</b>	202	202	202	202	202		202	202	208	209	209	212	205	205	207
<b>B</b>	35	35	35	35	35		35	35	41	42	42	45	38	38	40

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 7Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
 Tubetto di grasso / Libro istruzioni / Pinza CH8Ø3mm  
 Special bag / Stop block / ER nut / Wrenches / Grease tube  
 Instruction book / CH8Ø3mm collet

#### OPZIONI - OPTIONS

€

<b>MANIPOLO - 90° ANGLE SPINDLE - RA-200</b>	<b>906</b>
<b>MANIPOLO - 90° ANGLE SPINDLE - MFC-300 S</b>	<b>443</b>
<b>MANIPOLO - 90° ANGLE SPINDLE - IC-300</b>	<b>597</b>
<b>PROLUNGA - EXTENSION - CN-01 H=50,1 mm</b>	<b>340</b>

### GS90-2

TYPE 1

Price:

€ 6.252



#### Dati tecnici - Technical data



Ratio  
1:2,475



ISO / BT40  
Kg 4,96



Rpm  
12.000



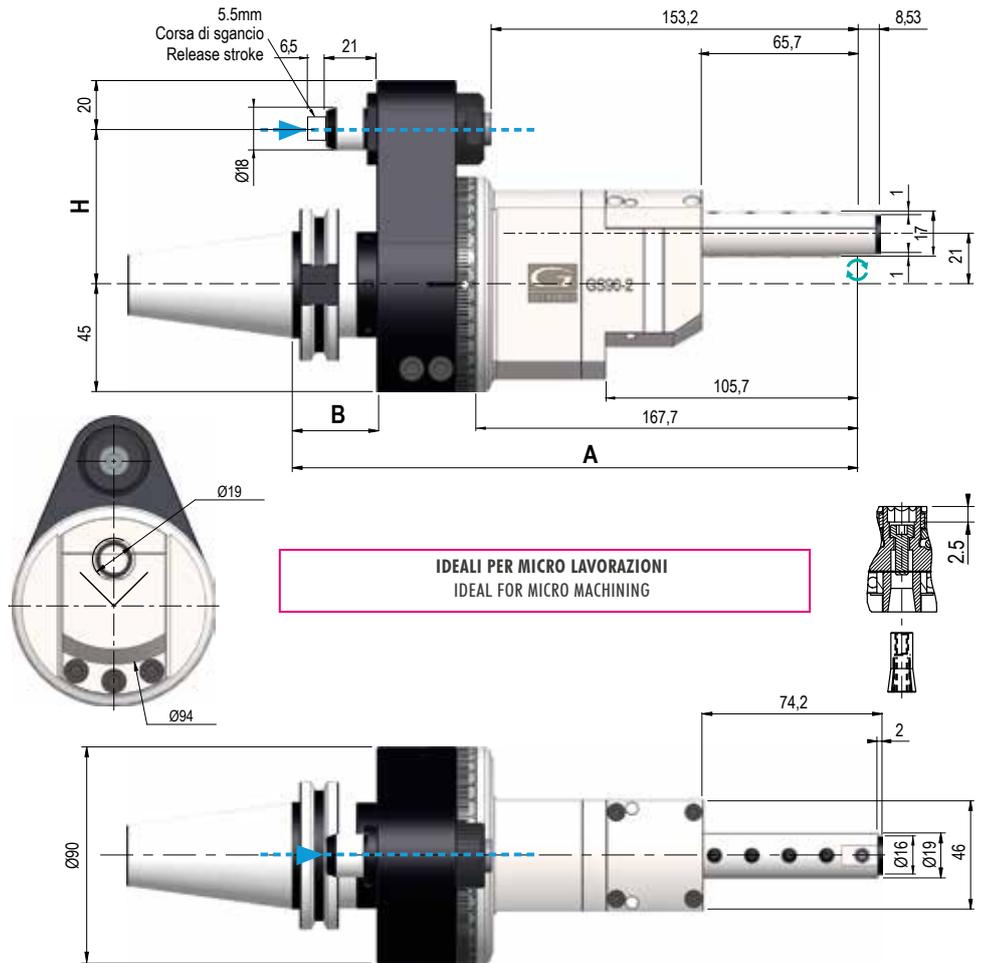
Ø 2,5



Nm 1.6



GS90-2  
Ø1/2,5



Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50		BT MAS 403			HSK DIN 69893			C. ISO 26623			
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	
Extra €	95	-	-	-	-	95	-	-	200	222	243	412	412	412	
Dual contact (Optional)	X	196	237	196	237	196	196	237	std	std	std	std	std	std	
H	Standard	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80
	Optional 110 Extra €	53	53	53	53	53	53	53	53	53	53	53	53	53	53
A	235,7	235,7	235,7	235,7	235,7	235,7	235,7	241,7	242,7	242,7	245,7	238,7	238,7	240,7	
B	35	35	35	35	35	35	35	41	42	42	45	38	38	40	

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 8Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio

Tubetto di grasso / Libro istruzioni

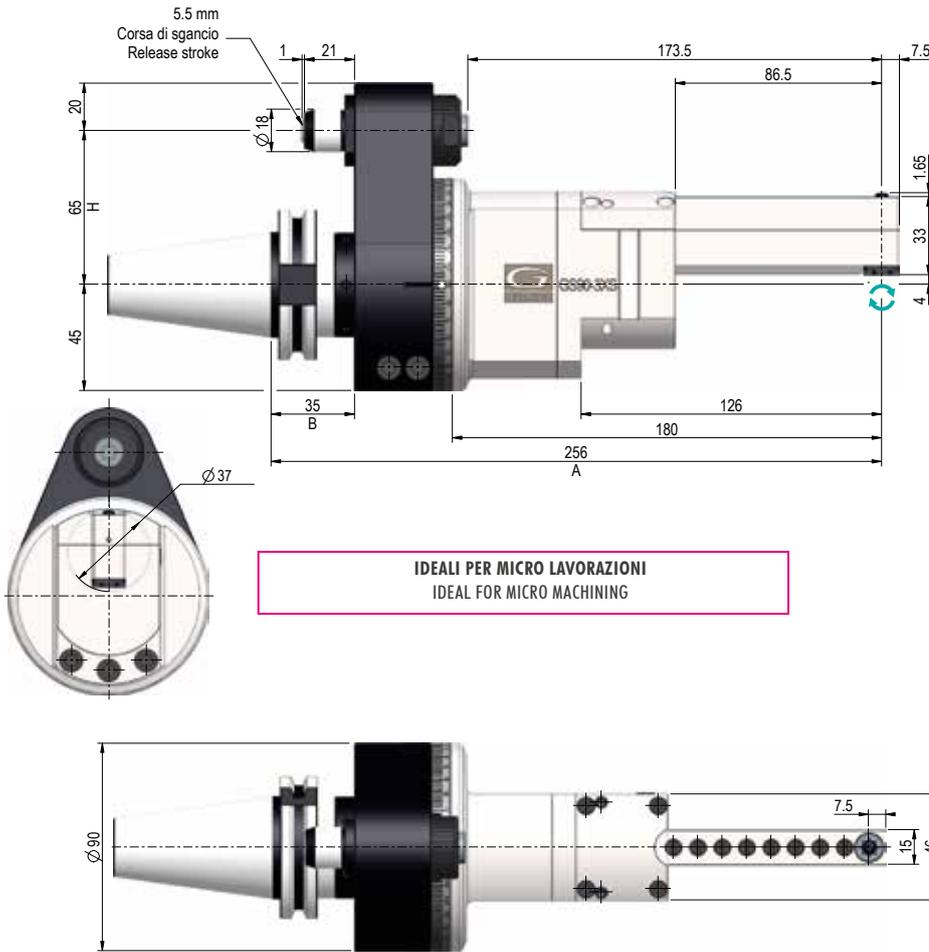
Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

PINZA - COLLETS GS90-2 Ø1 - 1,5 - 2 - 2,5

232



**IDEALI PER MICRO LAVORAZIONI**  
**IDEAL FOR MICRO MACHINING**

**GS90-3XS**

TYPE 1

Price:

**€ 10.500**

**Dati tecnici - Technical data**

 Ratio  
 1:3.19


Kg 5,34


 Rpm  
 10.000


Ø 3,5



-



Nm 2.3


 GS90-3XS  
 Ø2/3,5


Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623		
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	
Extra €	95	-	237	-	-	95	-	237	200	222	243	412	412	412	
Dual contact (Optional)	X	196	237	196	237	X	196	237	std	std	std	std	std	std	
H	Standard	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80
	Optional 110														
A		256	256	256	256	256	251	256	262	263	263	266	259	259	261
B		35	35	35	35	35	30	35	41	42	42	45	38	38	40

**IMBALLO & PESO - PACK WEIGHT:**

Valigetta - Bag 8,5Kg


**DOTAZIONE STANDARD - STANDARD EQUIPMENT**

 Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
 Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

**OPZIONI - OPTIONS**

€

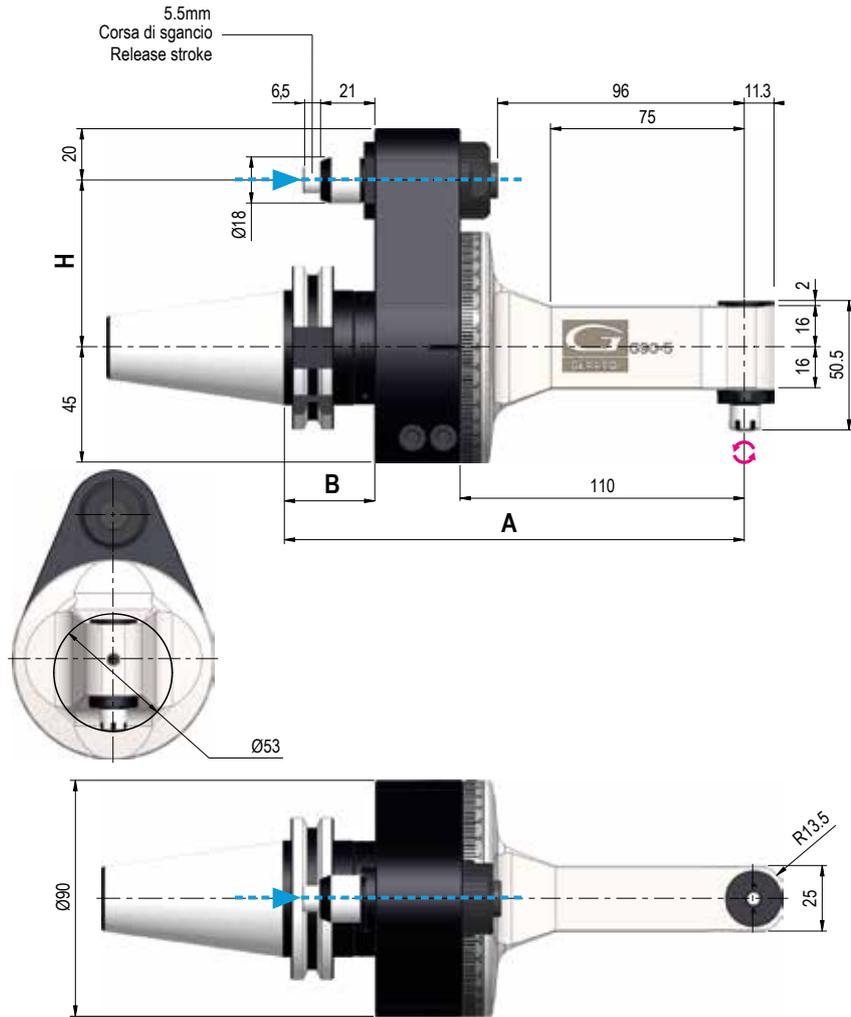
**PINZA - COLLETS GS90-3XS Ø2 - 2,5 - 3 - 3,5**
**232**

### G90-5

TYPE 1

Price:

**€ 3.121**



#### Dati tecnici - Technical data



Ratio  
1:1



ISO / BT 30  
Kg 4  
ISO / BT 40  
Kg 3,7



Rpm  
10.000



Ø 5



N 60



M 4



Nm 4



ER8  
Ø0,5/5



Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871			AT ANSI B5.50		BT MAS 403			HSK DIN 69893			C. ISO 26623			
	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	
Extra €	95	-	-	-	-	95	-	-	200	222	243	412	412	412	
Dual contact (Optional)	X	196	237	196	237	196	196	237	std	std	std	std	std	std	
H	Standard	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80
	Optional 110 Extra €	53	53	53	53	53	53	53	53	53	53	53	53	53	53
A	178	178	178	178	178	178	178	184	185	185	188	181	181	183	
B	35	35	35	35	35	35	35	41	42	42	45	38	38	40	

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 7Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio

Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

#### OUTPUT - WELDON MAX Ø6

180

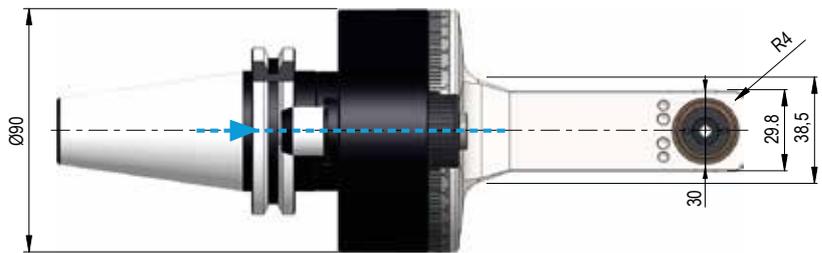
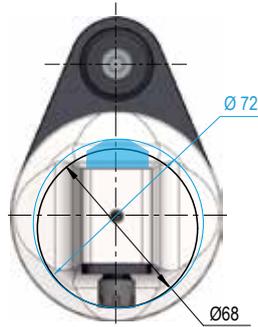
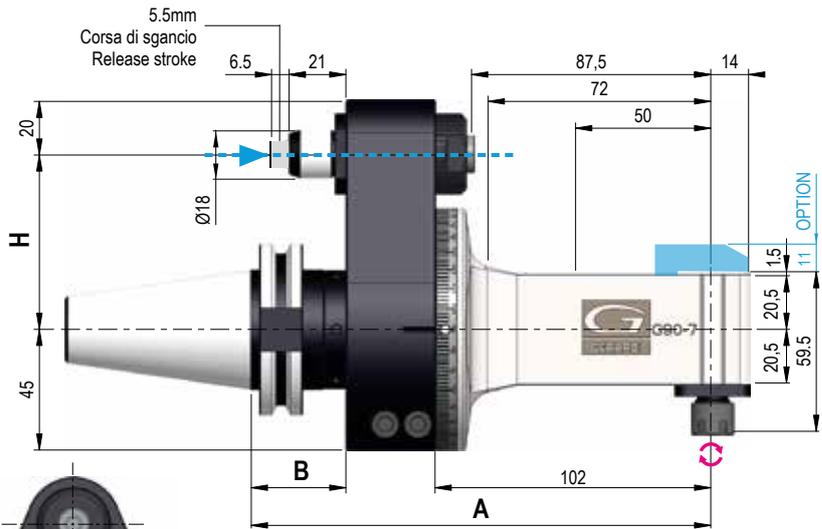


### G90-7

TYPE 1

Price:

€ 3.647



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 4



Rpm  
10.000



Ø 7



N 120



M 6



Nm 5



ER11  
Ø17



Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623		
Grandezza - Size	30	40	50	40	50		30	40	50	63	80	100	C5	C6	C8
Extra €	95	-	-	-	-		95	-	-	200	222	243	412	412	412
Dual contact (Optional)	X	196	237	196	237		196	196	237	std	std	std	std	std	std
H	Standard	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80
	Optional 110 Extra €	53	53	53	53	53	53	53	53	53	53	53	53	53	53
A	170	170	170	170	170		170	176	177	177	180		173	173	175
B	35	35	35	35	35		35	41	42	42	45		38	38	40

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 7Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio

Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

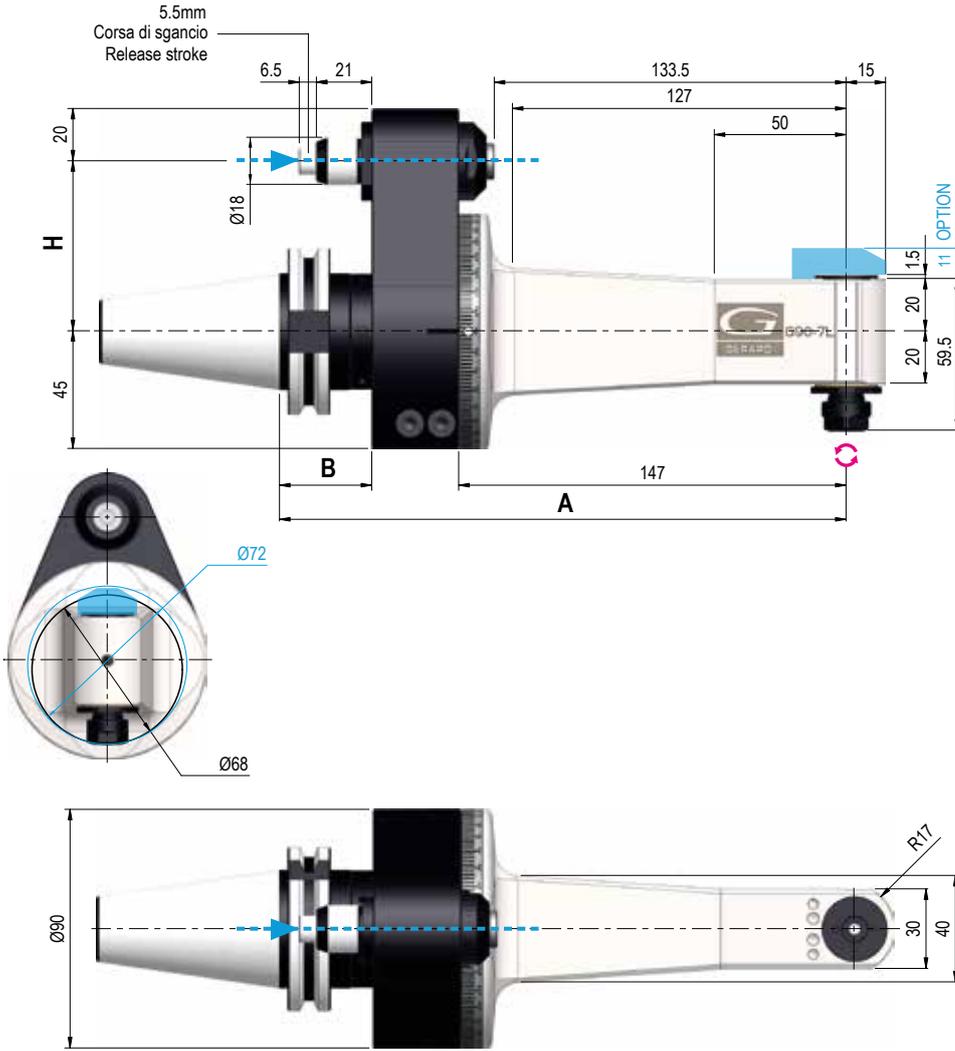
#### OPZIONI - OPTIONS

€

REFR. - COOLANT - dal Pemo - Pin through Max 10bar - 6000Rpm - Dry running YES 432

OUTPUT - Weldon Max Ø8 280

DOUBLE OUTPUT - ER11 - ER 8M 227



### G90-7L

TYPE 1

Price:

**€ 3.815**



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 4,3



Rpm  
10.000



Ø 7



N 120



M 6



Nm 5



ER11  
Ø17

Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623		
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	
Extra €	95	-	-	-	-	95	-	-	200	222	243	412	412	412	
Dual contact (Optional)	X	196	237	196	237	196	196	237	std	std	std	std	std	std	
H	Standard	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	
	Optional 110 Extra €	53	53	53	53	53	53	53	53	53	53	53	53	53	53
A	215	215	215	215	215	210	215	221	222	222	225	218	218	220	
B	35	35	35	35	35	30	35	41	42	42	45	38	38	40	

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 7,5Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

REFR. - COOLANT - dal Perno - Pin through Max 10bar - 6000Rpm - Dry running YES **432**

OUTPUT - Weldon Max Ø8 **280**

DOUBLE OUTPUT - ER11 - ER 8M **227**

### G90-10

TYPE 1

Price:

**€ 2.951**



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 4,3



Rpm  
10.000



Ø 10



N 250



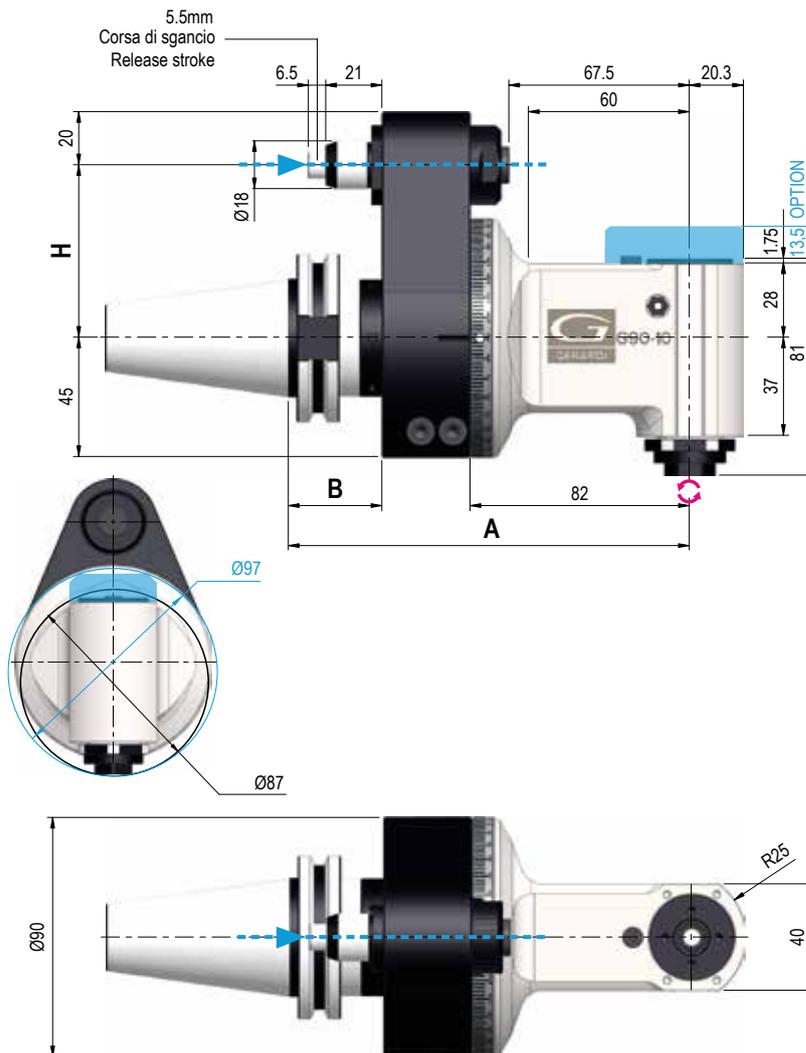
M 8



Nm 10



ER16  
Ø1/10



Coni - Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623		
Grandezza - Size	30	40	50	40	50		30	40	50	63	80	100	C5	C6	C8
Extra €	95	-	-	-	-		95	-	-	200	222	243	412	412	412
Dual contact (Optional)	X	196	237	196	237		196	196	237	std	std	std	std	std	std
H	Standard	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80
	Optional 110 Extra €	53	53	53	53	53	53	53	53	53	53	53	53	53	53
A	150	150	150	150	150		145	150	156	157	157	160	153	153	155
B	35	35	35	35	35		30	35	41	42	42	45	38	38	40

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 7,5Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio

Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

REFR. - COOLANT - dal Perno - Pin through Max 10bar - 6000Rpm - Dry running YES	432
REFR. - COOLANT - dal Cono - Through shank Max 40bar - 6000Rpm - Dry running NO	872
OUTPUT - Shell mill holder Ø16	88

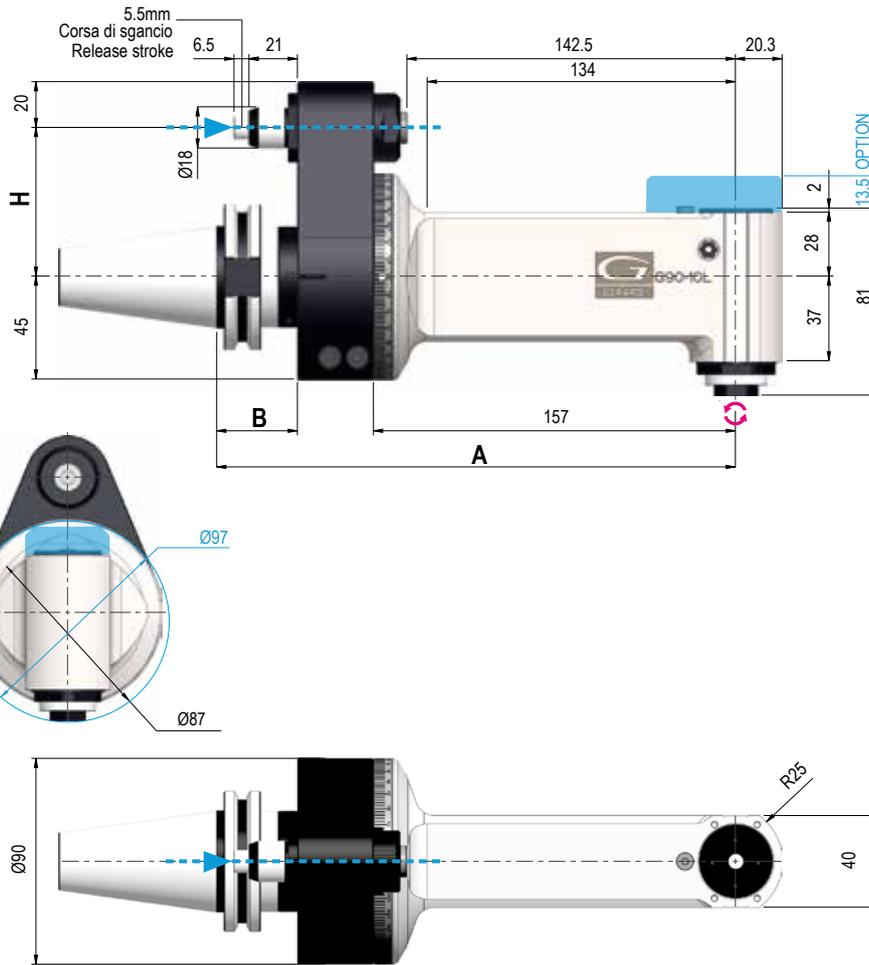
OUTPUT - ER20	103
DOUBLE OUTPUT - ER16 - ER 11M	227
OUTPUT - Weldon Max Ø10	130

### G90-10L

TYPE 1

Price:

**€ 3.689**



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 5,2



Rpm  
10.000



Ø 10



N 250



M 8



Nm 10



ER16  
Ø1/10

Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623		
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	
Extra €	95	-	-	-	-	95	-	-	200	222	243	412	412	412	
Dual contact (Optional)	X	196	237	196	237	196	196	237	std	std	std	std	std	std	
H	Standard	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	
	Optional 110 Extra €	53	53	53	53	53	53	53	53	53	53	53	53	53	53
A	225	225	225	225	225	225	225	231	232	232	235	228	228	230	
B	35	35	35	35	35	35	35	41	42	42	45	38	38	40	

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 8,5Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

	€
REFR. - COOLANT - dal Perno - Pin through Max 10bar - 6000Rpm - Dry running YES	432
REFR. - COOLANT - dal Cono - Through shank Max 40bar - 6000Rpm - Dry running NO	872
OUTPUT - Shell mill holder Ø16	88

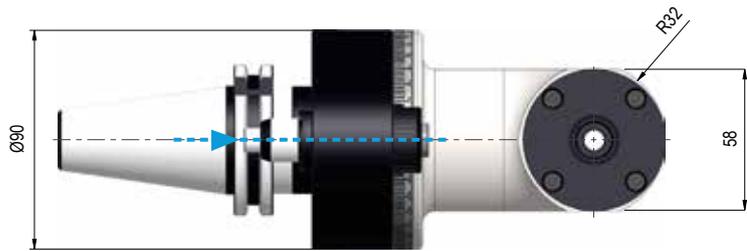
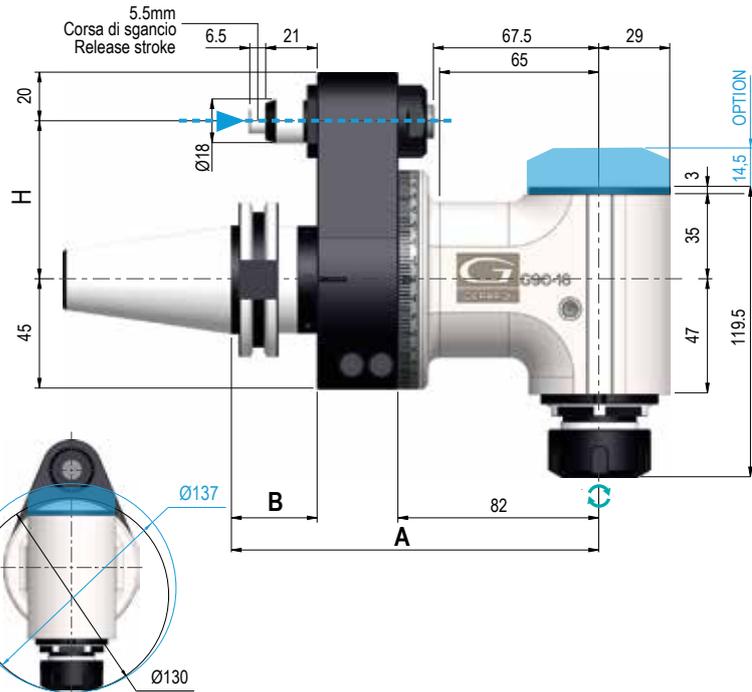
OUTPUT - ER20	103
DOUBLE OUTPUT - ER16 - ER 11M	227
OUTPUT - Weldon Max Ø10	130

### G90-16

TYPE 1

Price:

€ 3.598



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 5,4



Rpm  
8.000



Ø 16



N 510



M 12



Nm 24



ER25  
Ø1/16



Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	
Dual contact (Optional)	196	237	196	237	196	237	std	std	std	std	std	std	
H	Standard	65 / 80	80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80
	Optional 110 Extra €	53	53	53	53	53	53	53	53	53	53	53	53
A	150	150	150	150	150	156	157	157	160	153	153	155	
B	35	35	35	35	35	41	42	42	45	38	38	40	

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 8,5Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

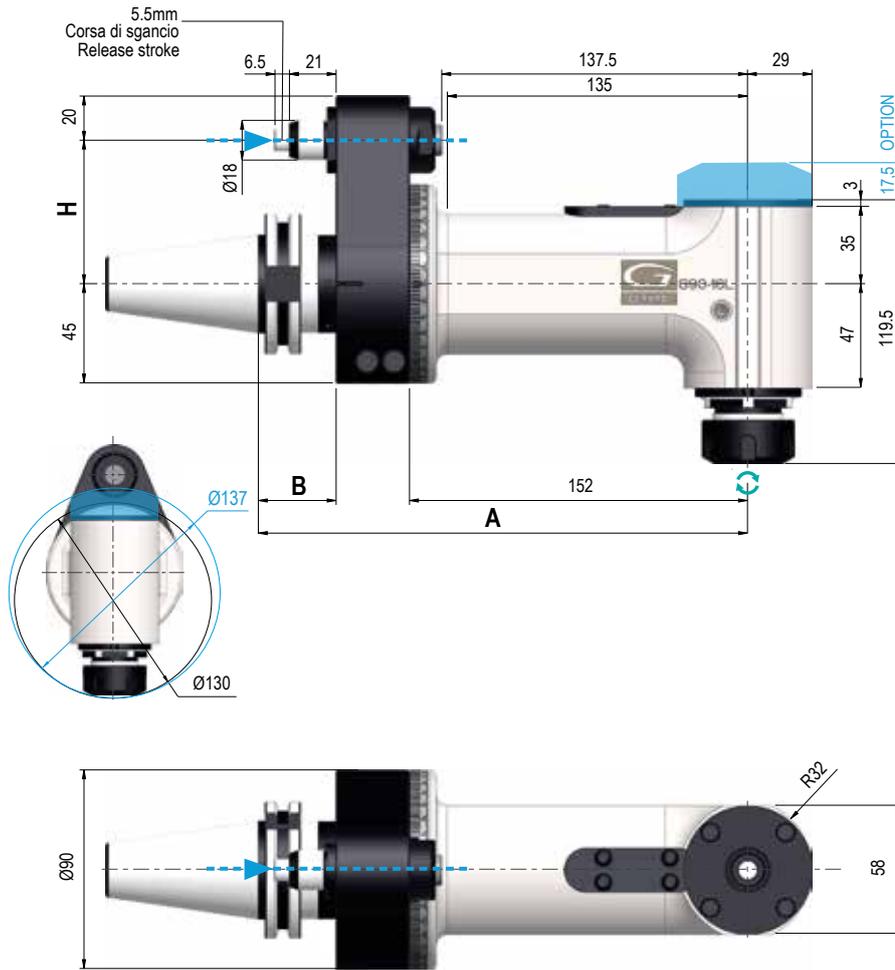
Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

REFR. - COOLANT - dal Perno - Pin through Max 10bar - 4000Rpm - Dry running YES	468
REFR. - COOLANT - dal Cono - Through shank Max 40bar - 4000Rpm - Dry running NO	888
OUTPUT - Shell mill holder Ø16	88

OUTPUT - ER32	217
DOUBLE OUTPUT - ER25 - ER 16M	309
OUTPUT - Weldon Max Ø16	180
OUTPUT - HSK 32	407



### G90-16L

TYPE 1

Price:

**€ 4.435**



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 6,7



Rpm  
8.000



Ø 16



N 510



M 12



Nm 24



ER25  
Ø1/16

Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623
Grandezza - Size	40 50	40 50	40 50	63 80 100	C5 C6 C8
<b>Extra €</b>	- -	- -	- -	<b>200 222 243</b>	<b>412 412 412</b>
Dual contact (Optional)	<b>196 237</b>	<b>196 237</b>	<b>196 237</b>	<b>std std std</b>	<b>std std std</b>
<b>H</b> Standard	65 / 80 80	65 / 80 80	65 / 80 80	65 / 80 80	65 / 80 65 / 80 80
Optional 110 <b>Extra €</b>	<b>53 53</b>	<b>53 53</b>	<b>53 53</b>	<b>53 53 53</b>	<b>53 53 53</b>
<b>A</b>	220 220	220 220	220 226	227 227	230 223 223 225
<b>B</b>	35 35	35 35	35 41	42 42	45 38 38 40

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 10Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

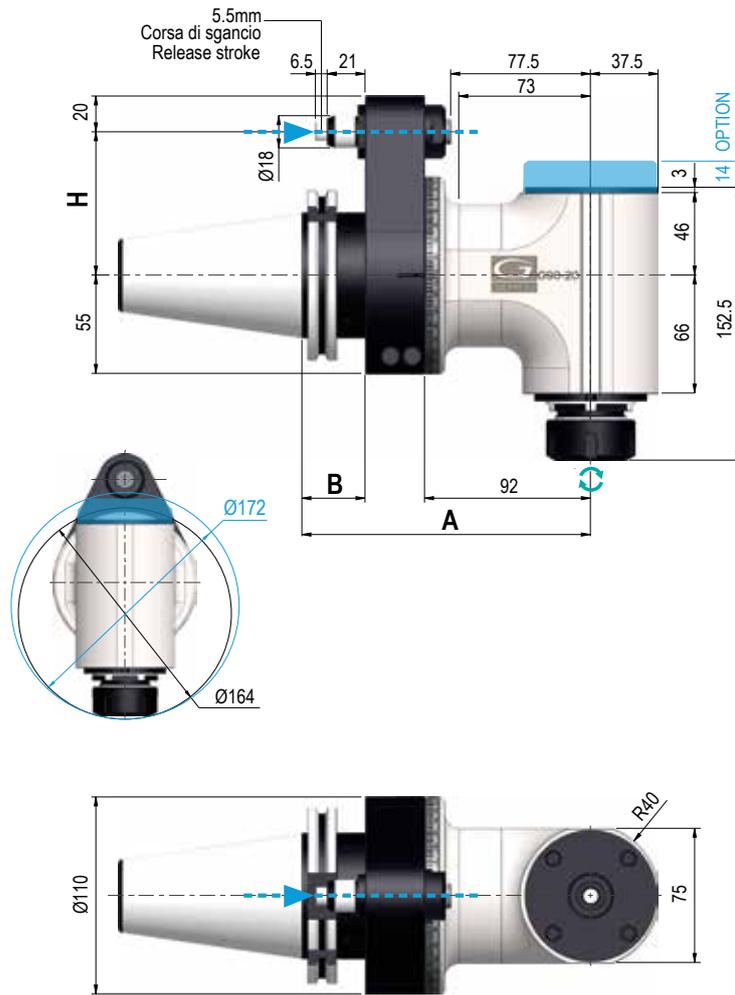
REFR. - COOLANT - dal Perno - Pin through Max 10bar - 4000Rpm - <b>Dry running YES</b>	<b>468</b>
REFR. - COOLANT - dal Cono - Through shank Max 40bar - 4000Rpm - <b>Dry running NO</b>	<b>888</b>
OUTPUT - Shell mill holder Ø16	<b>88</b>

OUTPUT - ER32	<b>217</b>
DOUBLE OUTPUT - ER25 - ER 16M	<b>309</b>
OUTPUT - Weldon Max Ø16	<b>180</b>
OUTPUT - HSK 32	<b>407</b>

### G90-20

TYPE 2

Price: **€ 3.804**



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 11



Rpm  
4.000



Ø 20



N 1.250



M 16



Nm 40



ER32  
Ø2/20



Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623			
Grandezza - Size	50	50	50	63	80	100	C6	C8
Extra €	-	-	-	200	222	243	412	412
Dual contact (Optional)	237	237	237	std	std	std	std	std
H	Standard	80	80	80	80	80	80	80
	Optional 110 Extra €	53	53	53	53	53	53	53
A	160	160	166	167	167	170	163	165
B	35	35	41	42	42	45	38	40

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 14Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

HIGH SPEED - 6000 Rpm - Internal coolant NO	€ 119
REFR. - COOLANT - dal Perno - Pin through Max 10bar - 4000Rpm - Dry running YES	€ 484
REFR. - COOLANT - dal Cono - Through shank Max 40bar - 4000Rpm - Dry running NO	€ 924
REFR. - COOLANT - dal Cono - Through shank Max 70bar - 4000Rpm - Dry running NO	€ 2.680
OUTPUT - Weldon Max Ø20	-

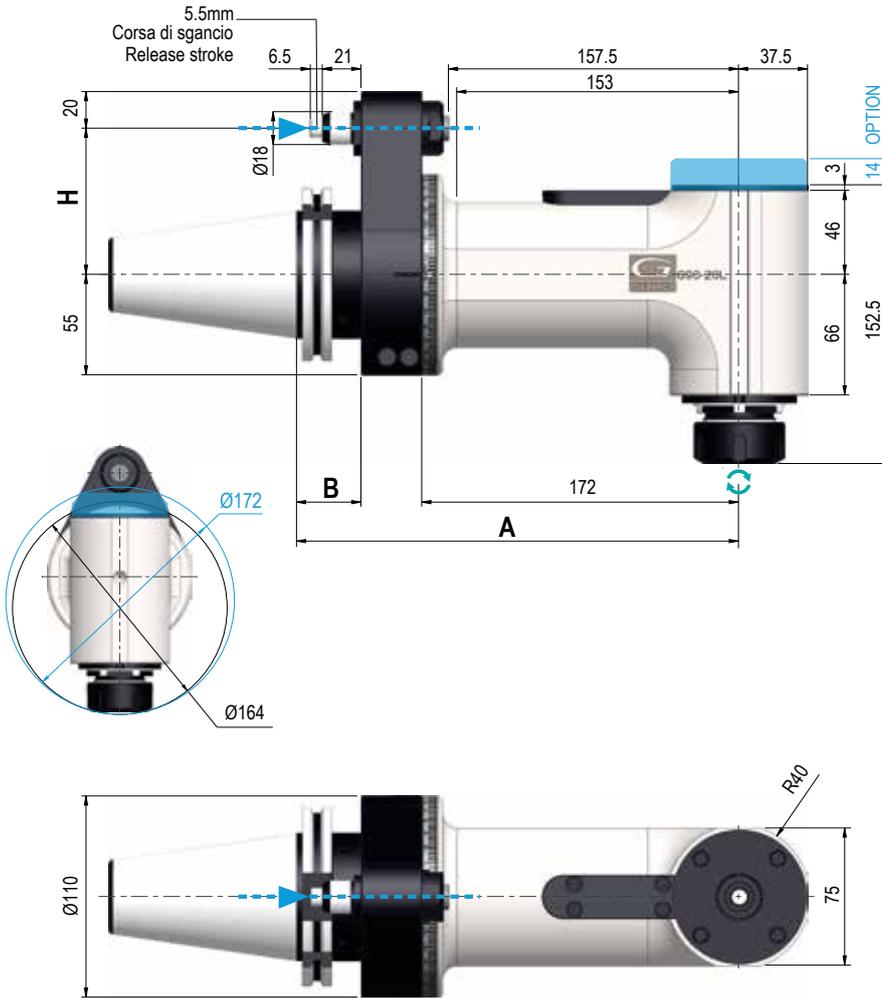
OUTPUT - HSK 40	€ 459
OUTPUT - Shell mill holder Ø22	€ 93
OUTPUT - ISO / CAT / BT 30	€ 181
OUTPUT - C4	€ 495
OUTPUT - ER40	€ 217
DOUBLE OUTPUT - ER32 - ER20M	€ 335

### G90-20L

TYPE 2

Price:

€ 4.755



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 13,8



Rpm  
4.000



Ø 20



N 1.250



M 16



Nm 40



ER32  
Ø2/20

Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623
Grandezza - Size	50	50	50	63 80 100	C6 C8
Extra €	-	-	-	200 222 243	412 412
Dual contact (Optional)	237	237	237	std std std	std std
H	Standard	80	80	80 80 80	80 80
	Optional 110 Extra €	53	53	53 53 53	53 53
A	240	240	246	247 247 250	243 245
B	35	35	41	42 42 45	38 40

#### IMBALLO & PESO - PACK WEIGHT:

Cassa in Legno - Wooden Box 28Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio

Tubetto di grasso / Libro istruzioni

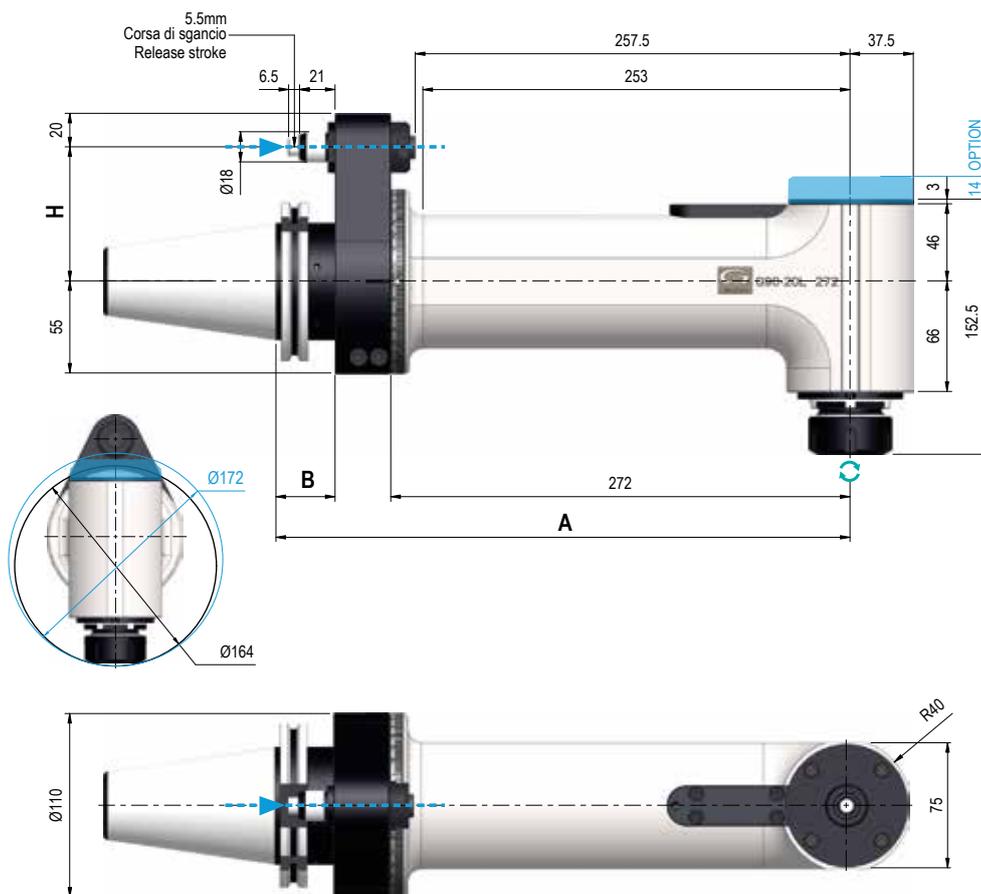
Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

HIGH SPEED - 6000 Rpm - Internal coolant NO	€ 119
REFR. - COOLANT - dal Perno - Pin through Max 10bar - 4000Rpm - Dry running YES	€ 484
REFR. - COOLANT - dal Cono - Through shank Max 40bar - 4000Rpm - Dry running NO	€ 924
REFR. - COOLANT - dal Cono - Through shank Max 70bar - 4000Rpm - Dry running NO	€ 2.680
OUTPUT - Weldon Max Ø20	-

OUTPUT - HSK 40	€ 459
OUTPUT - Shell mill holder Ø22	€ 93
OUTPUT - ISO / CAT / BT 30	€ 181
OUTPUT - C4	€ 495
OUTPUT - ER40	€ 217
DOUBLE OUTPUT - ER32 - ER20M	€ 335

**G90-20L.272** TYPE 2

 Price: **€ 6.409**

**Dati tecnici - Technical data**

 Ratio  
1:1


Kg 17


 Rpm  
4.000


Ø 20



N 1.250



M 16



Nm 40


 ER32  
Ø2/20


Senso di rotazione Uguaale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623		
Grandezza - Size	50	50	50	80	100	C6	C8
<b>Extra €</b>	-	-	-	<b>222</b>	<b>243</b>	<b>412</b>	<b>412</b>
Dual contact (Optional)	<b>237</b>	<b>237</b>	<b>237</b>	<b>std</b>	<b>std</b>	<b>std</b>	<b>std</b>
<b>H</b>	Standard	80	80	80	80	80	80
	Optional 110 <b>Extra €</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>
<b>A</b>	340	340	346	347	350	343	345
<b>B</b>	35	35	41	42	45	38	40

**IMBALLO & PESO - PACK WEIGHT:**

Cassa in Legno - Wooden Box 31Kg


**DOTAZIONE STANDARD - STANDARD EQUIPMENT**

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio

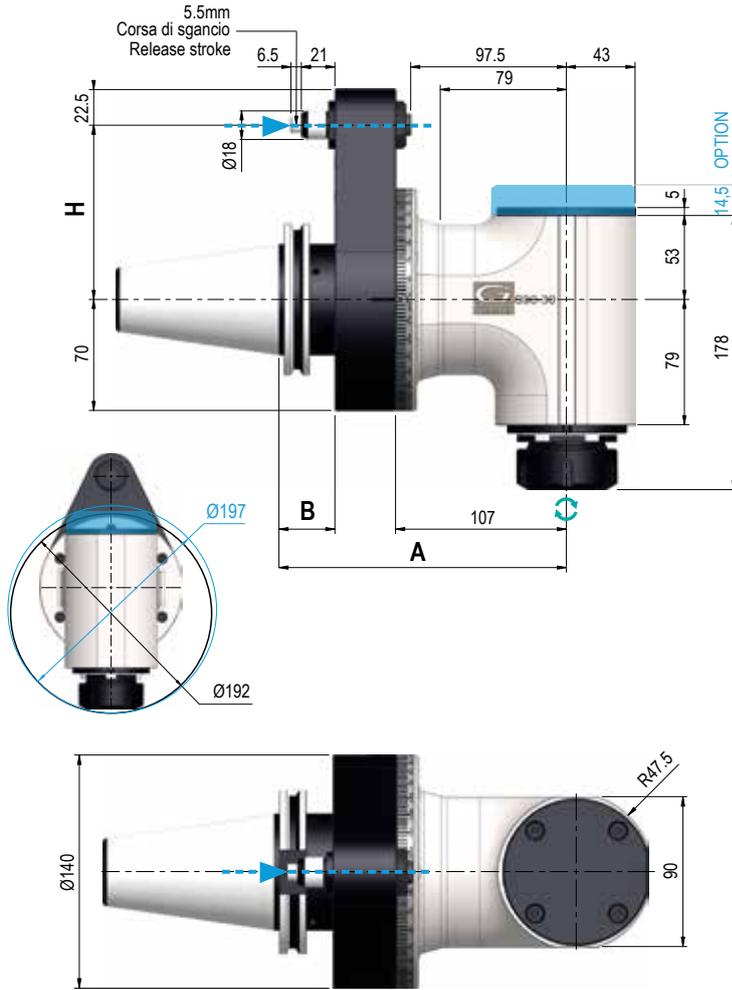
Tubetto di grasso / Libro istruzioni

Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

**OPZIONI - OPTIONS**

<b>REFR. - COOLANT</b> - dal Perno - Pin through Max 10bar - 4000Rpm - <b>Dry running YES</b>	<b>468</b>
<b>REFR. - COOLANT</b> - dal Cono - Through shank Max <b>40bar</b> - 4000Rpm - <b>Dry running NO</b>	<b>925</b>
<b>OUTPUT</b> - Weldon Max Ø20	-
<b>OUTPUT</b> - HSK 40	<b>459</b>

<b>OUTPUT</b> - Shell mill holder Ø22	<b>93</b>
<b>OUTPUT</b> - ISO / CAT / BT 30	<b>181</b>
<b>OUTPUT</b> - C4	<b>498</b>
<b>DOUBLE OUTPUT</b> - ER32 - ER20M	<b>335</b>



### G90-30

TYPE 3

Price:

€ 4.483



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 17



Rpm  
4.000



Ø 30



N 1.750



M 20



Nm 75



ER40  
Ø3/30



Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623	
Grandezza - Size	50	50	50	80	100	C8
Extra €	-	-	-	222	243	412
Dual contact (Optional)	237	237	237	std	std	std
<b>H</b> Standard	110	110	110	110	110	110
<b>A</b>	180	180	186	187	190	185
<b>B</b>	35	35	41	42	45	40

#### IMBALLO & PESO - PACK WEIGHT:

Cassa in Legno - Wooden Box 31Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio

Tubetto di grasso / Libro istruzioni

Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

HIGH SPEED - 5000 Rpm - Internal coolant NO	€ 119
REFR. - COOLANT - dal Perno - Pin through Max 10bar - 4000Rpm - Dry running YES	€ 495
REFR. - COOLANT - dal Cono - Through shank Max 40bar - 4000Rpm - Dry running NO	€ 936
REFR. - COOLANT - dal Cono - Through shank Max 70bar - 4000Rpm - Dry running NO	€ 2.890
OUTPUT - Weldon Max Ø25	€ 385

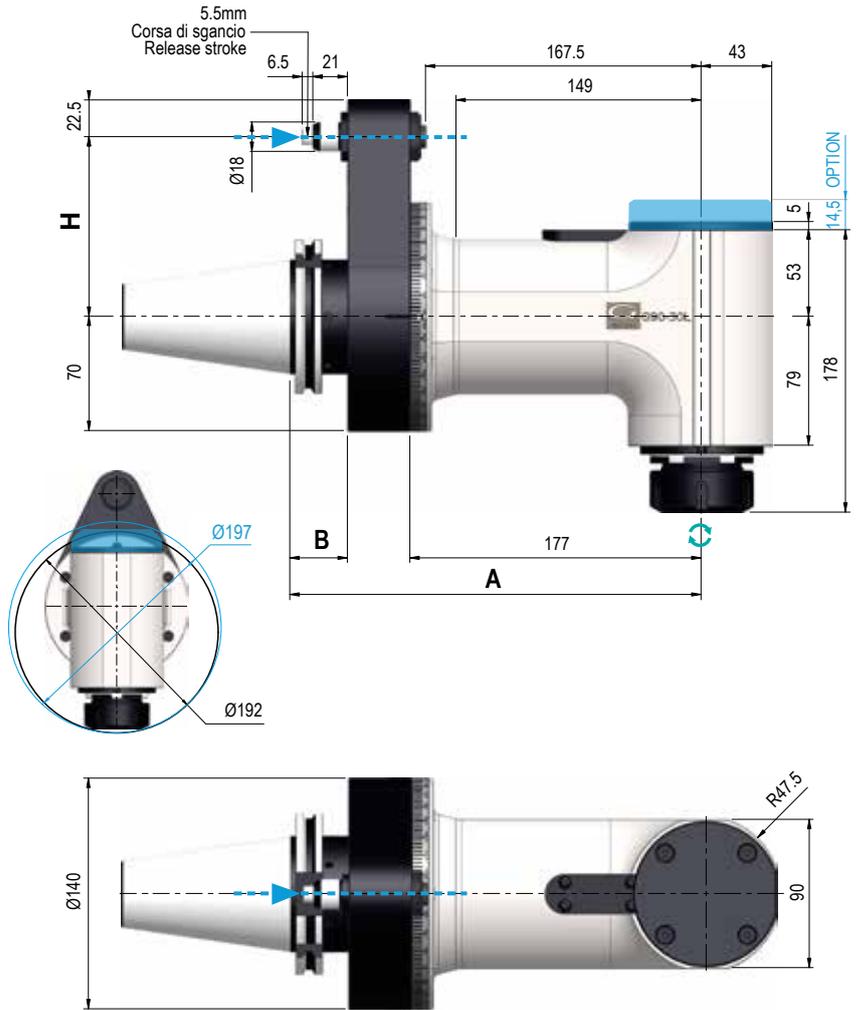
OUTPUT - HSK 40	€ 459
OUTPUT - Shell mill holder Ø27	€ 93
OUTPUT - ISO / CAT / BT 30	€ 181
OUTPUT - C4	€ 495
DOUBLE OUTPUT - ER32 - ER20M	€ 351

### G90-30L

TYPE 3

Price:

€ 5.593



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 20



Rpm  
4.000



Ø 30



N 1.750



M 20



Nm 75



ER40  
Ø3/30



Senso di rotazione Uguaale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623	
Grandezza - Size	50	50	50	80	100	C8
Extra €	-	-	-	222	243	412
Dual contact (Optional)	237	237	237	std	std	std
H Standard Ø18	110	110	110	110	110	110
A	250	250	256	257	260	255
B	35	35	41	42	45	40

#### IMBALLO & PESO - PACK WEIGHT:

Cassa in Legno - Wooden Box 34Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio

Tubetto di grasso / Libro istruzioni

Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

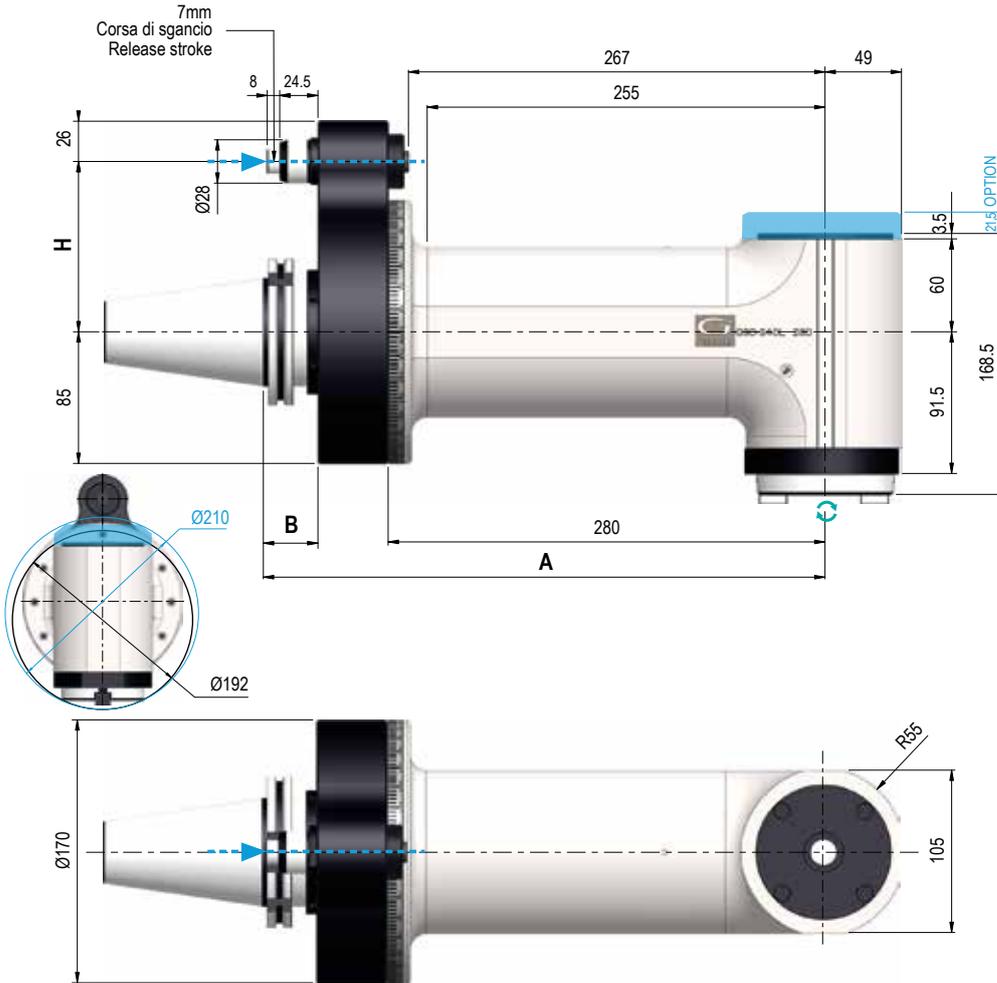
#### OPZIONI - OPTIONS

HIGH SPEED - 6000 Rpm - Internal coolant NO	€ 119
REFR. - COOLANT - dal Perno - Pin through Max 10bar - 4000Rpm - Dry running YES	€ 495
REFR. - COOLANT - dal Cono - Through shank Max 40bar - 4000Rpm - Dry running NO	€ 936
REFR. - COOLANT - dal Cono - Through shank Max 70bar - 4000Rpm - Dry running NO	€ 2.890
OUTPUT - Weldon Max Ø25	€ 385

OUTPUT - HSK 40	€ 459
OUTPUT - Shell mill holder Ø27	€ 93
OUTPUT - ISO 30	€ 181
OUTPUT - C4	€ 495
DOUBLE OUTPUT - ER40 - ER25M	€ 335







### G90-S40L.280 TYPE 4

Price: € 7.344



#### Dati tecnici - Technical data

Ratio 1:1	Kg 32,4
Rpm 4.000	Ø 26
N 1.800	M 20
Nm 140	ISO/BT/ CAT 40

Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623
Grandezza - Size	50	50	50	100	C8
Extra €	-	-	-	243	412
Dual contact (Optional)	237	237	237	std	std
<b>H</b> Standard Ø28	110	110	110	110	110
<b>A</b>	360	360	366	370	365
<b>B</b>	35	35	41	45	40

**IMBALLO & PESO - PACK WEIGHT:**  
Cassa in Legno - Wooden Box 79Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

REFR. - COOLANT - dal Perno - Pin through Max 10bar - 4000Rpm - Dry running YES	521
REFR. - COOLANT - dal Cono - Through shank Max 30bar - 4000Rpm - Dry running NO	961
REFR. - COOLANT - dal Cono - Through shank Max 70bar - 4000Rpm - Dry running NO	3.152
OUTPUT - Weldon Max Ø26	-

OUTPUT - HSK 63	711
OUTPUT - Shell mill holder Ø32	93
OUTPUT - C4	495
OUTPUT - C5	608

**G90-10L.240** TYPE 1

Price: € 6.263


**NEW**  
**2024**
**Dati tecnici - Technical data**

 Ratio  
 1:1


Kg 6,3


 Rpm  
 6.000


Ø 10



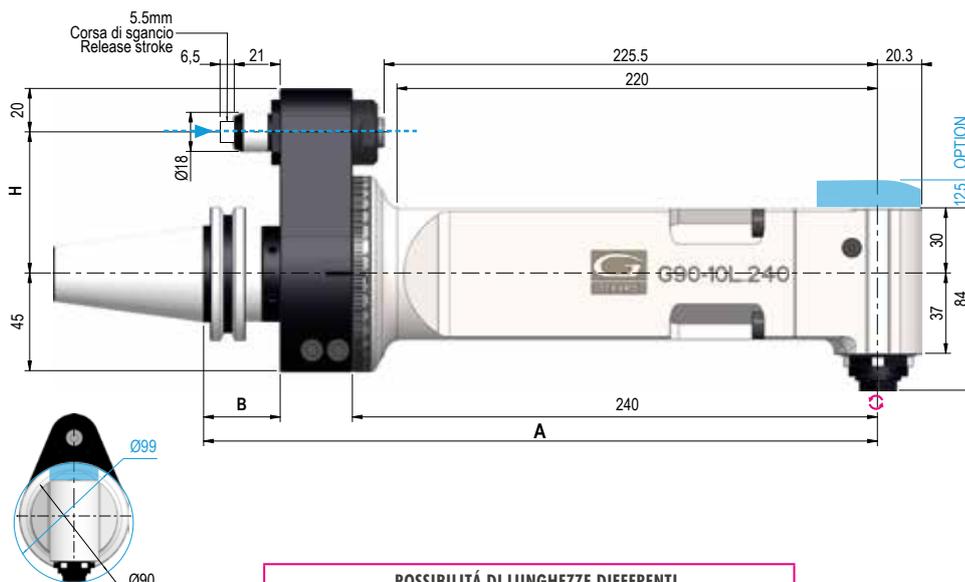
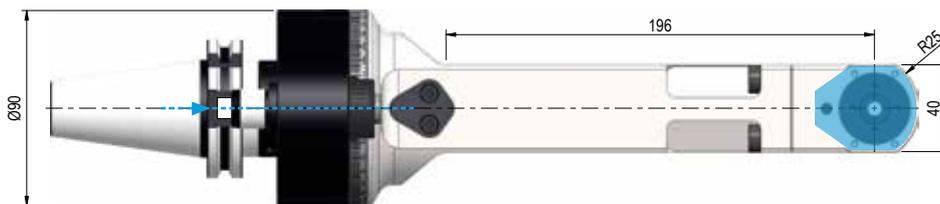
N 250



M 8



Nm 10


 ER16  
 Ø1/10

**POSSIBILITÀ DI LUNGHEZZE DIFFERENTI**  
 POSSIBILITY OF DIFFERENT LENGTHS


Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	
Extra €	-	-	-	-	-	-	200	222	243	824	824	824	
Dual contact (Optional)	196	237	196	237	196	237	std	std	std	std	std	std	
H	Standard	65 / 80	80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80
	Optional 110 Extra €	53	53	53	53	53	53	53	53	53	53	53	53
A	308	308	308	308	308	314	315	315	318	311	311	313	
B	35	35	35	35	35	41	42	42	45	38	38	40	

**IMBALLO & PESO - PACK WEIGHT:**

Valigetta - Bag 9,5Kg

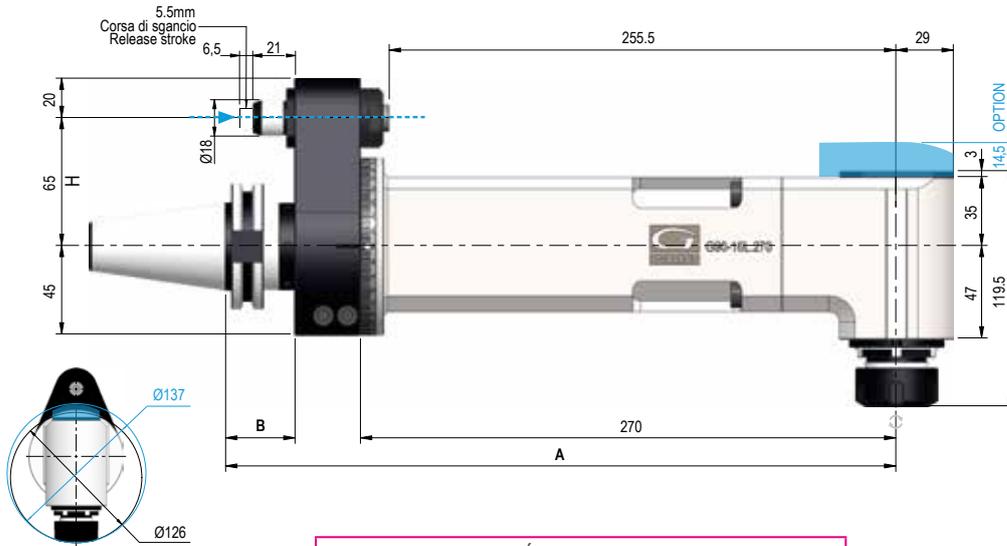

**DOTAZIONE STANDARD - STANDARD EQUIPMENT**

 Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
 Tubetto di grasso / Libro istruzioni  
 Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

**OPZIONI - OPTIONS**

REFR. - COOLANT - dal Perno - Pin through Max 10bar - 6000Rpm - Dry running YES	432
REFR. - COOLANT - dal Cono - Through shank Max 40bar - 6000Rpm - Dry running NO	872
OUTPUT - Shell mill holder Ø16	88

OUTPUT - ER20	103
DOUBLE OUTPUT - ER16 - ER 11M	227
OUTPUT - Weldon Max Ø10	130



**POSSIBILITÀ DI LUNGHEZZE DIFFERENTI**  
POSSIBILITY OF DIFFERENT LENGTHS



### G90-16L.270

TYPE 1

Price:

**€ 7.087**



**NEW 2024**

#### Dati tecnici - Technical data



Ratio  
1:1



Kg 8,9



Rpm  
4.000



Ø 16



N 510



M 12



Nm 24



ER25  
Ø1/16

Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623
Grandezza - Size	40 50	40 50	40 50	63 80 100	C5 C6 C8
Extra €	- -	- -	- -	200 222 243	824 824 824
Dual contact (Optional)	196 237	196 237	196 237	std std std	std std std
H	Standard	65 / 80 80	65 / 80 80	65 / 80 80	65 / 80 65 / 80 80
	Optional 110 Extra €	53 53	53 53	53 53	53 53 53
A	338 338	338 338	338 344	345 348	341 341 343
B	35 35	35 35	35 41	42 42	45 38 38 40

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 12Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

REFR. - COOLANT - dal Perno - Pin through Max 10bar - 4000Rpm - Dry running YES	468
REFR. - COOLANT - dal Cono - Through shank Max 40bar - 4000Rpm - Dry running NO	888
OUTPUT - Shell mill holder Ø16	88

OUTPUT - ER32	217
DOUBLE OUTPUT - ER25 - ER 16M	309
OUTPUT - Weldon Max Ø16	180
OUTPUT - HSK 32	407

**G90-20L.332** TYPE 2

 Price: **€ 7.319**

**NEW 2024**
**Dati tecnici - Technical data**

 Ratio  
1:1


Kg 20,5


 Rpm  
4.000


Ø 20



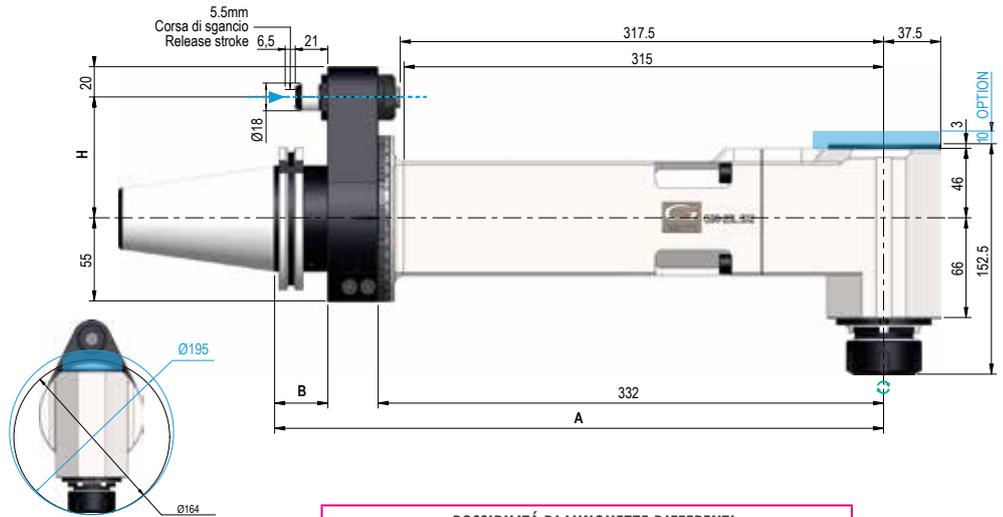
N 1250



M 16



Nm 40


 ER32  
Ø2/20

**POSSIBILITÀ DI LUNGHEZZE DIFFERENTI**  
**POSSIBILITY OF DIFFERENT LENGTHS**


Senso di rotazione Uguaale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623	
Grandezza - Size	50	50	50	80	100	C8
<b>Extra €</b>	-	-	-	<b>222</b>	<b>243</b>	<b>824</b>
Dual contact (Optional)	<b>237</b>	<b>237</b>	<b>237</b>	<b>std</b>	<b>std</b>	<b>std</b>
<b>H</b>	Standard Ø28	80	80	80	80	80
	Optional 110 <b>Extra €</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>
<b>A</b>	400	400	406	407	410	405
<b>B</b>	35	35	41	42	45	40

**IMBALLO & PESO - PACK WEIGHT:**

Cassa in Legno - Wooden Box 35Kg


**DOTAZIONE STANDARD - STANDARD EQUIPMENT**

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio

Tubetto di grasso / Libro istruzioni

Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

**OPZIONI - OPTIONS**

<b>REFR. - COOLANT</b> - dal Perno - Pin through Max 10bar - <b>Dry running YES</b>	<b>468</b>
<b>REFR. - COOLANT</b> - dal Cono - Through Shank 40bar - <b>Dry running NO</b>	<b>924</b>
<b>DOUBLE OUTPUT</b> - ER32 - ER 20M	<b>335</b>
<b>OUTPUT</b> - Weldon Max Ø20	-

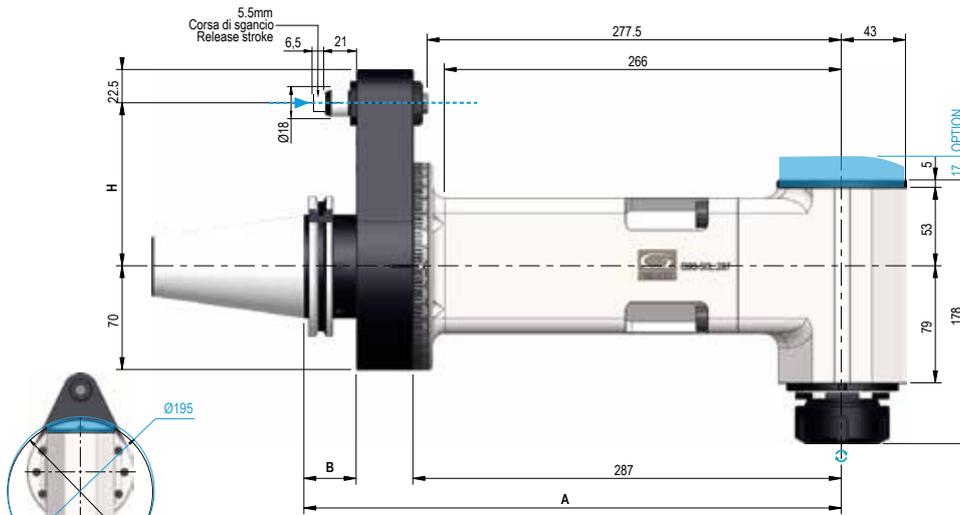
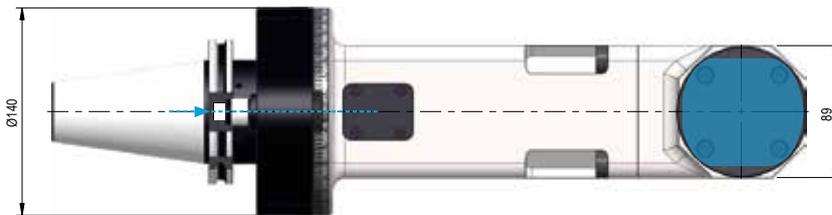
<b>OUTPUT</b> - HSK 40	<b>459</b>
<b>OUTPUT</b> - Shell mill holder Ø22	<b>93</b>
<b>OUTPUT</b> - C4	<b>495</b>
<b>OUTPUT</b> - ISO / CAT / BT 30	<b>181</b>

**G90-30L.287** TYPE 3

 Price: **€ 8.080**

**Dati tecnici - Technical data**

	Ratio 1:1		Kg 22,5
	Rpm 4.000		Ø 30
	N 1750		M 20
	Nm 75		ER40 Ø3/30


**POSSIBILITÀ DI LUNGHEZZE DIFFERENTI**  
**POSSIBILITY OF DIFFERENT LENGTHS**


Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623	
Grandezza - Size	50	50	50	80	100	C8
<b>Extra €</b>	-	-	-	<b>222</b>	<b>243</b>	<b>824</b>
Dual contact (Optional)	<b>237</b>	<b>237</b>	<b>237</b>	<b>std</b>	<b>std</b>	<b>std</b>
<b>H</b> Standard Ø28	110	110	110	110	110	110
<b>A</b>	360	360	366	367	370	365
<b>B</b>	35	35	41	42	45	40

**IMBALLO & PESO - PACK WEIGHT:**  
 Cassa in Legno - Wooden Box 36,5Kg

**DOTAZIONE STANDARD - STANDARD EQUIPMENT**

 Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio  
 Tubetto di grasso / Libro istruzioni  
 Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

<b>OPZIONI - OPTIONS</b>	<b>€</b>
<b>REFR. - COOLANT</b> - dal Perno - Pin through Max 10bar - <b>Dry running YES</b>	<b>494</b>
<b>REFR. - COOLANT</b> - dal Cono - Through Shank 40bar - <b>Dry running NO</b>	<b>936</b>
<b>DOUBLE OUTPUT</b> - ER40 - ER 25M	<b>351</b>
<b>OUTPUT</b> - Weldon Max Ø25	<b>385</b>

<b>OUTPUT</b> - HSK 40	<b>459</b>
<b>OUTPUT</b> - Shell mill holder Ø27	<b>93</b>
<b>OUTPUT</b> - C4	<b>495</b>
<b>OUTPUT</b> - ISO / CAT / BT 30	<b>181</b>

# GMU-13

TYPE 0

Price:

**€ 4.007**



### Dati tecnici - Technical data



Ratio  
1:1



Kg 4,4



Rpm  
4.000



Ø 13



N 450



M 10



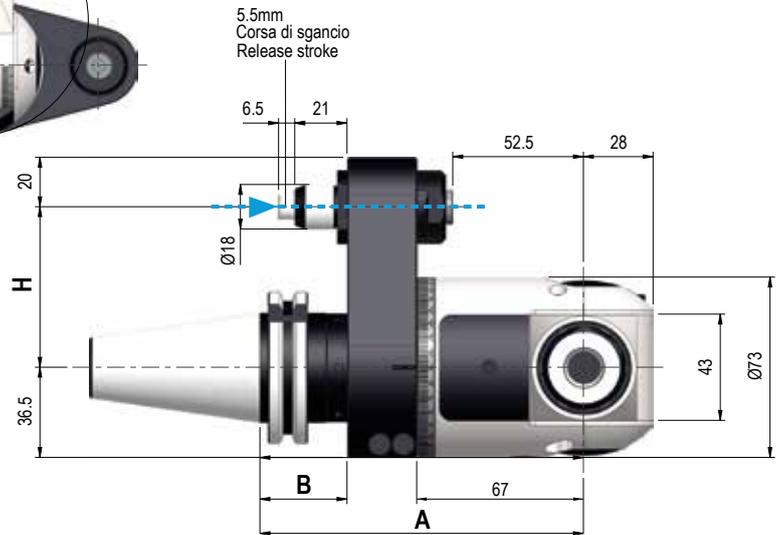
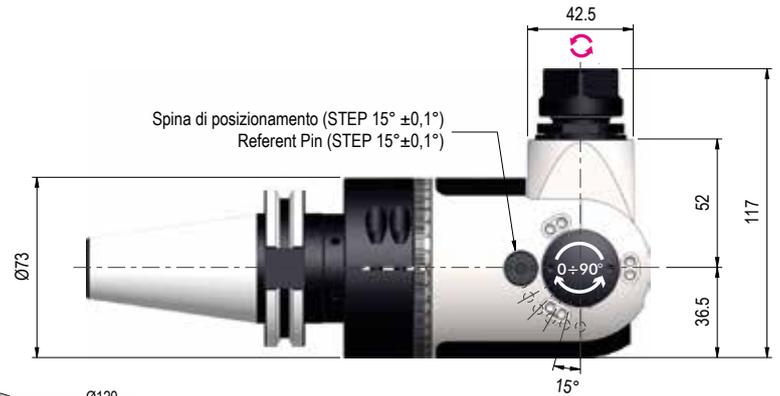
Nm 6



ER20  
Ø1/13



Scala Graduata  
Graduated degree



Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623		
Grandezza - Size	30	40	50	40	50		30	40	50	63	80	100	C5	C6	C8
Extra €	-	-	-	-	-	-	-	-	-	200	222	243	412	412	412
Dual contact (Optional)	196	196	237	196	237		196	196	237	std	std	std	std	std	std
H	Standard	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80
	Optional 110 Extra €	53	53	53	53	53		53	53	53	53	53	53	53	53
A	130	130	130	130	130		125	130	136	137	137	140	133	133	135
B	35	35	35	35	35		30	35	41	42	42	45	38	38	40

### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 7,5Kg



### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

### OPZIONI - OPTIONS

€

HIGH SPEED - 6000 Rpm

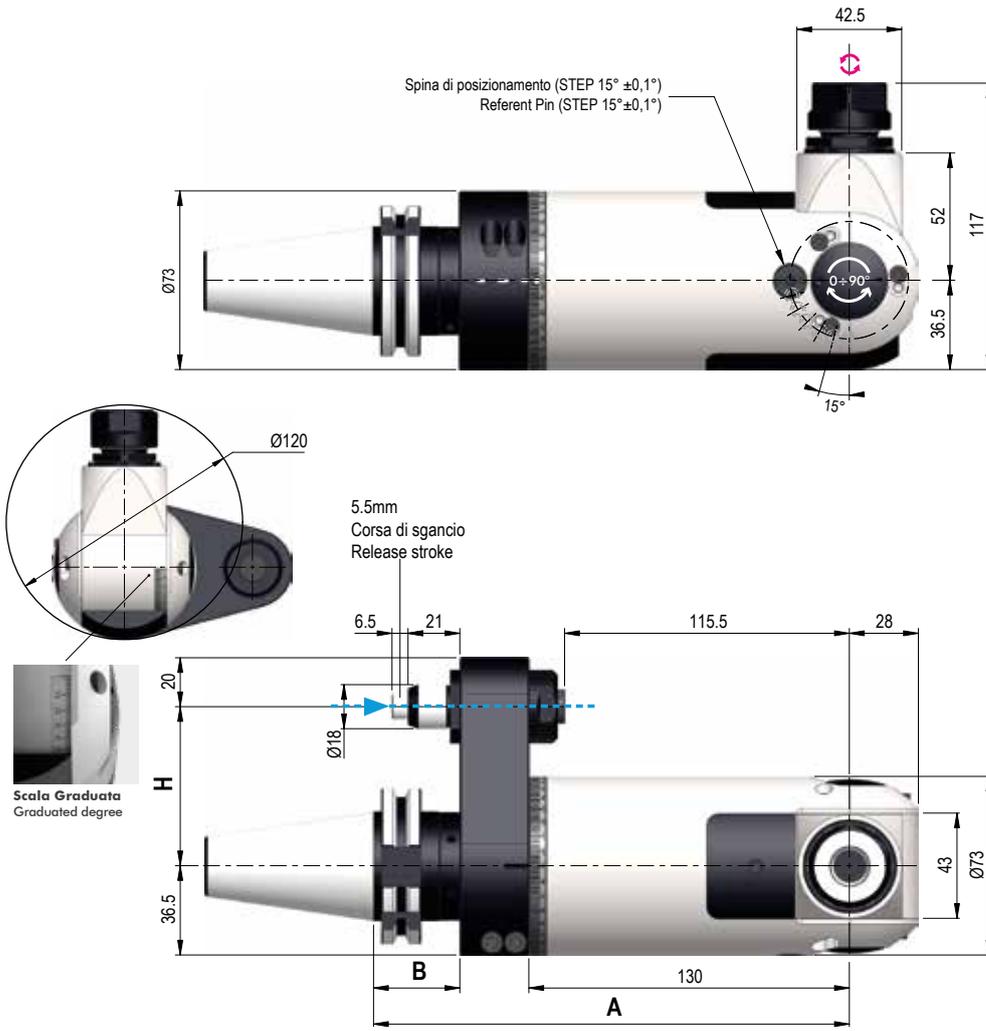
119

QUICK POSITIONING - Customized Angles

299

OUTPUT - ER 25

217



## GMU-13L

TYPE 0

Price:

€ 5.249



### Dati tecnici - Technical data



Ratio  
1:1



Kg 6,3



Rpm  
4.000



Ø 13



N 450



M 10



Nm 6



ER20  
Ø1/13

Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623
Grandezza - Size	40 50	40 50	40 50	63 80 100	C5 C6 C8
Extra €	- -	- -	- -	200 222 243	412 412 412
Dual contact (Optional)	196 237	196 237	196 237	std std std	std std std
H	Standard	65 80	65 80	65 / 80 80	65 / 80 65 / 80 80
	Optional 110 Extra €	53 53	53 53	53 53	53 53 53
A	193 193	193 193	193 199	200 200 203	196 196 198
B	35 35	35 35	35 41	42 42 45	38 38 40

### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 11Kg



### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

### OPZIONI - OPTIONS

€

HIGH SPEED - 6000 Rpm

119

QUICK POSITIONING - Customized Angles

299

OUTPUT - ER 25

217

# GMU-16

TYPE 1

Price:

**€ 4.216**



### Dati tecnici - Technical data



Ratio  
1:1



**Kg** 6,8



Rpm  
4.000



Ø 16



N 480



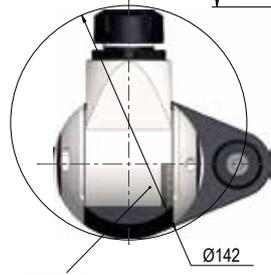
M 12



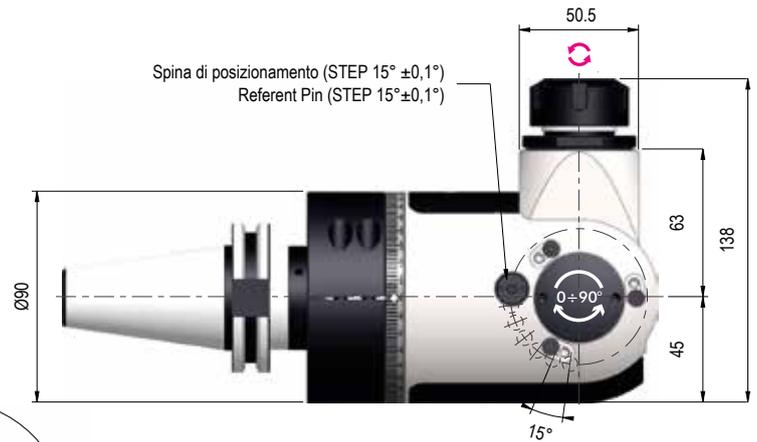
Nm 18



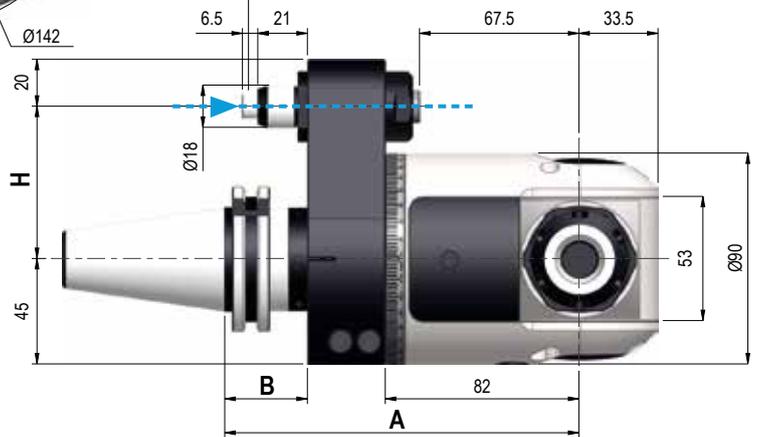
ER25  
Ø1/16



Scala Graduata  
Graduated degree



5.5mm  
Corsa di sgancio  
Release stroke



Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	
Dual contact (Optional)	196	237	196	237	196	237	std	std	std	std	std	std	
H	Standard	65 / 80	80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80
	Optional 110 Extra €	53	53	53	53	53	53	53	53	53	53	53	53
A	150	150	150	150	150	156	157	157	160	153	153	155	
B	35	35	35	35	35	41	42	42	45	38	38	40	

### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 10Kg



### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

### OPZIONI - OPTIONS

€

HIGH SPEED - 6000 Rpm

119

QUICK POSITIONING - Customized Angles

299

## GMU-20

TYPE 2

Price:

€ 4.516



### Dati tecnici - Technical data



Ratio  
1:1



Kg 13



Rpm  
4.000



Ø 20



N 715



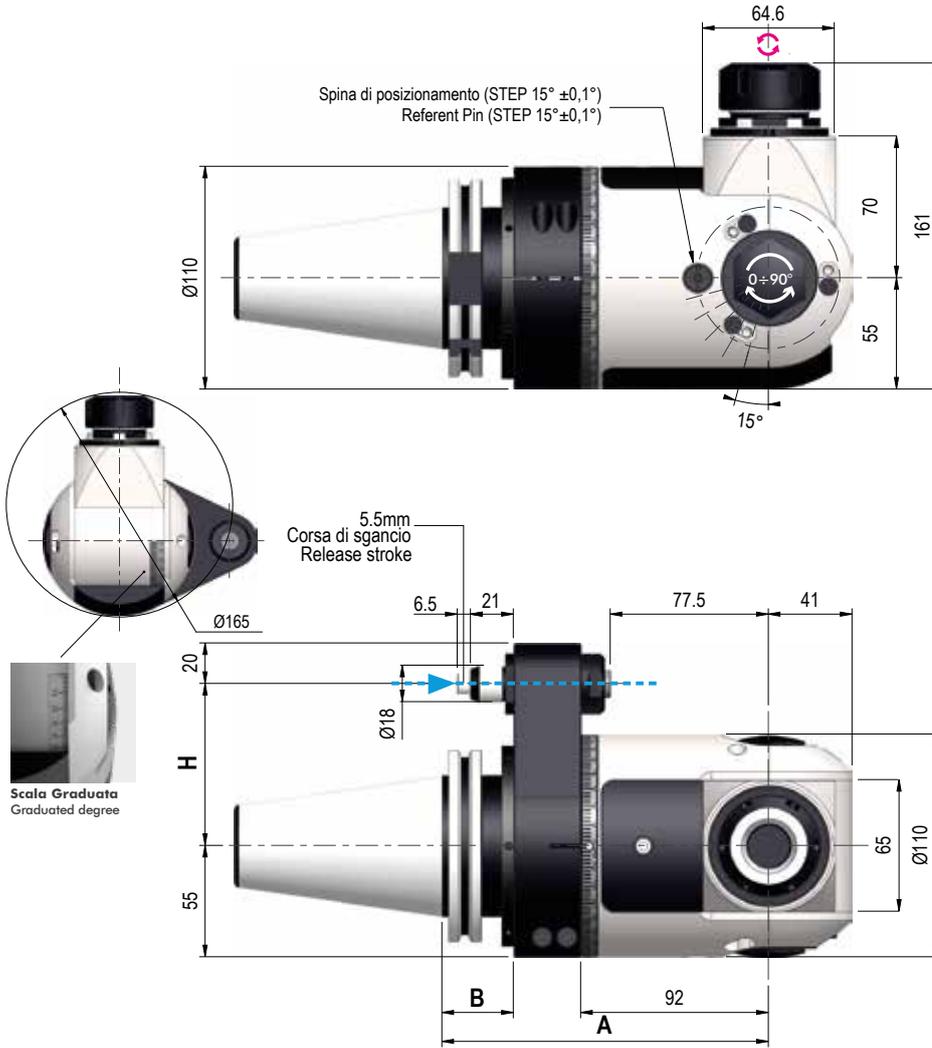
M 16



Nm 32



ER32  
Ø2/20



Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623		
Grandezza - Size	50	50	50	80	100	C6	C8
Extra €	-	-	-	222	243	412	412
Dual contact (Optional)	237	237	237	std	std	std	std
H	Standard	80	80	80	80	80	80
	Optional 110 Extra €	53	53	53	53	53	53
A	160	160	166	167	170	163	165
B	35	35	41	42	45	38	40

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 16Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

HIGH SPEED - 6000 Rpm

119

QUICK POSITIONING - Customized Angles

299

### G90-16 2U

TYPE 1

Price:

**€ 4.413**



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 6,4



Rpm  
4.000



Ø 16



N 510



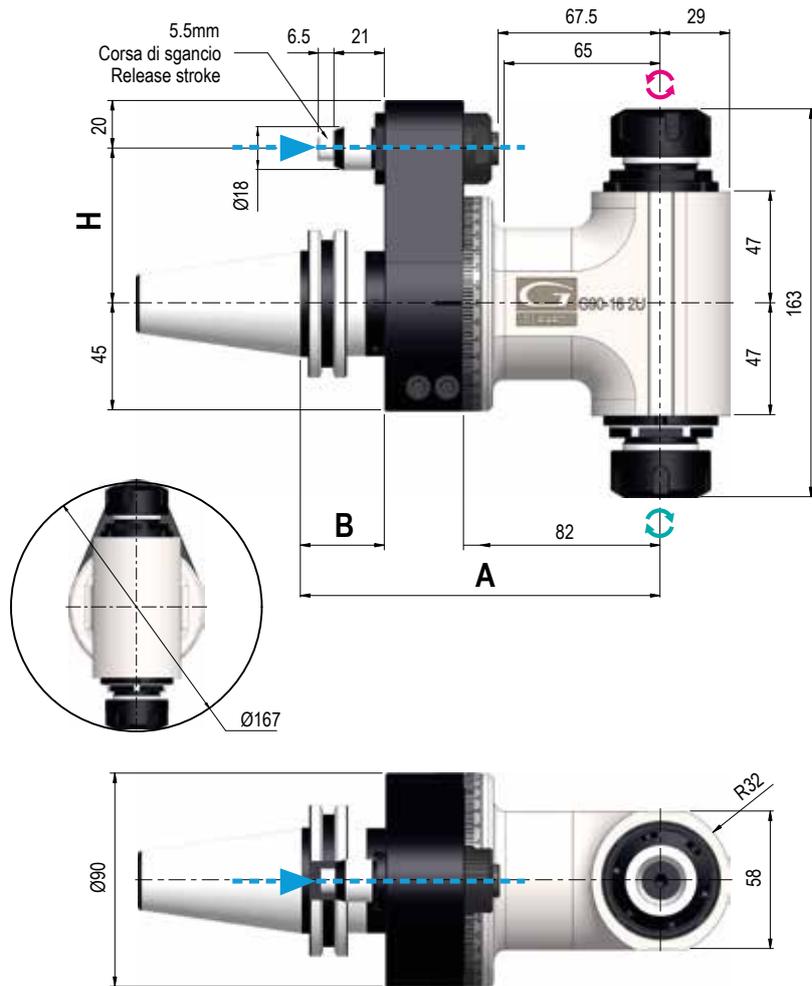
M 12



Nm 24



ER25  
Ø1/16



Senso di rotazione Uguale e Contrario al mandrino - Direction of rotation Same & Opposite to the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	
Dual contact (Optional)	196	237	196	237	196	237	std	std	std	std	std	std	
H	Standard	65 / 80	80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80
	Optional 110 Extra €	53	53	53	53	53	53	53	53	53	53	53	53
A	150	150	150	150	150	156	157	157	160	153	153	155	
B	35	35	35	35	35	41	42	42	45	38	38	40	

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 9,5Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

HIGH SPEED - 8000 Rpm

119

OUTPUT - Weldon Max Ø16 (X2)

360

OUTPUT - Shell mill holder Ø16 (X2)

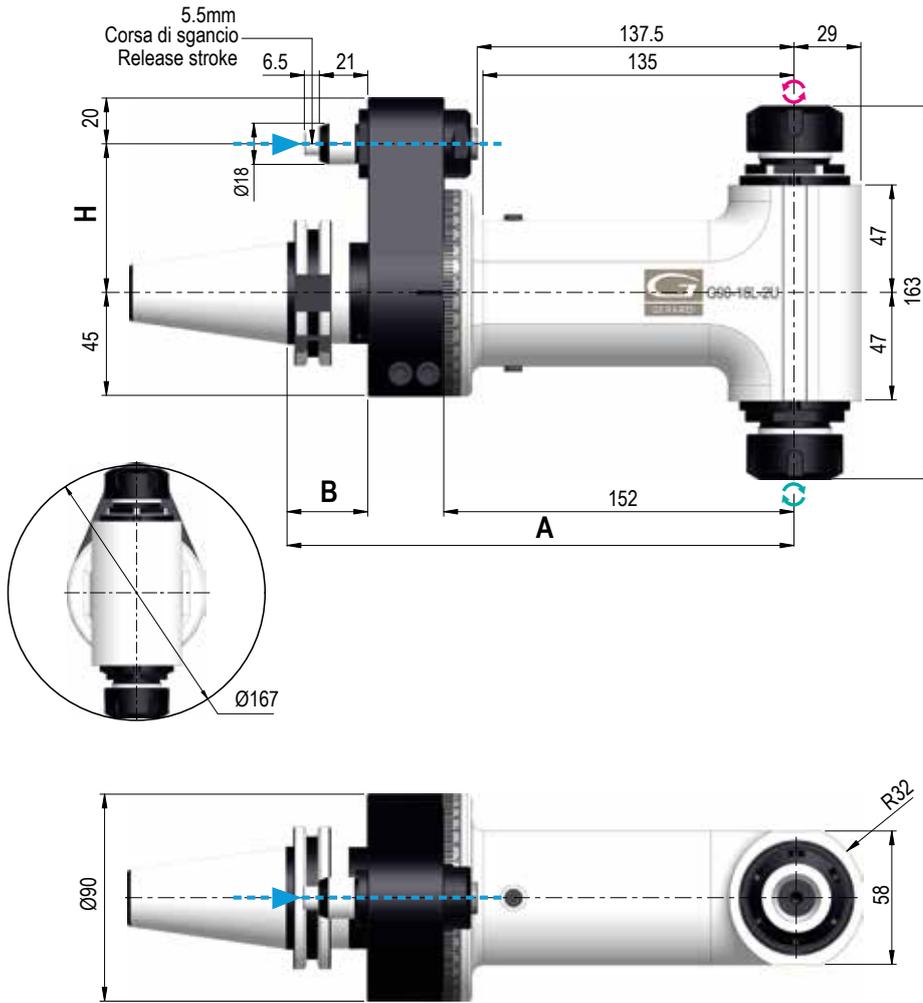
186

### G90-16L 2U

TYPE 1

Price:

**€ 5.249**



#### Dati tecnici - Technical data

Ratio 1:1	Kg 13
Rpm 4.000	Ø 16
N 510	M 12
Nm 24	ER25 Ø1/16

Senso di rotazione Uguaile e Contrario al mandrino - Direction of rotation Same & Opposite to the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623
Grandezza - Size	40 50	40 50	40 50	63 80 100	C5 C6 C8
Extra €	- -	- -	- -	200 222 243	412 412 412
Dual contact (Optional)	196 237	196 237	196 237	std std std	std std std
H	Standard	65 / 80 80	65 / 80 80	65 / 80 80	65 / 80 65 / 80 80
	Optional 110 Extra €	53 53	53 53	53 53	53 53 53
A	220 220	220 220	220 226	227 227	227 230 223 223 225
B	35 35	35 35	35 41	42 42	42 45 39 39 40

**IMBALLO & PESO - PACK WEIGHT:**  
Cassa in Legno - Wooden Box 27Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

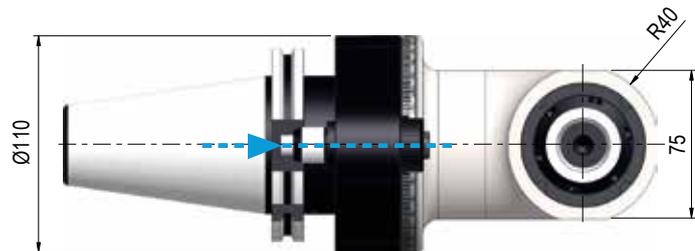
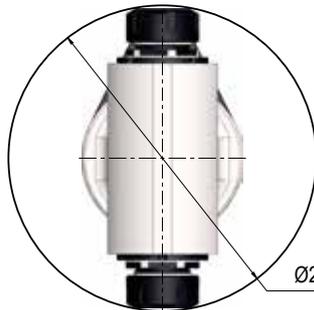
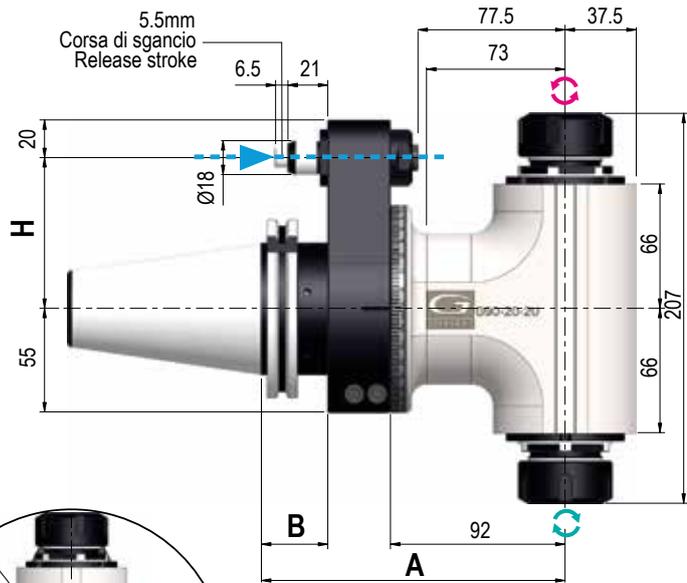
HIGH SPEED - 8000 Rpm	<b>119</b>
OUTPUT - Weldon Max Ø16 (X2)	<b>360</b>
OUTPUT - Shell mill holder Ø16 (X2)	<b>186</b>

### G90-20-2U

TYPE 2

Price:

**€ 4.683**



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 11,7



Rpm  
4.000



Ø 20



N 1250



M 16



Nm 40



ER32  
Ø2/20



Senso di rotazione Ugual e Contrario al mandrino - Direction of rotation Same & Opposite to the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623			
Grandezza - Size	50	50	50	63	80	100	C6	C8
<b>Extra €</b>	-	-	-	<b>200</b>	<b>222</b>	<b>243</b>	<b>412</b>	<b>412</b>
Dual contact (Optional)	<b>237</b>	<b>237</b>	<b>237</b>	<b>std</b>	<b>std</b>	<b>std</b>	<b>std</b>	<b>std</b>
<b>H</b>	Standard	80	80	80	80	80	80	80
	Optional 110 <b>Extra €</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>
<b>A</b>	160	160	166	167	167	170	163	165
<b>B</b>	35	35	41	42	42	45	38	40

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 15Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

HIGH SPEED - 6000 Rpm

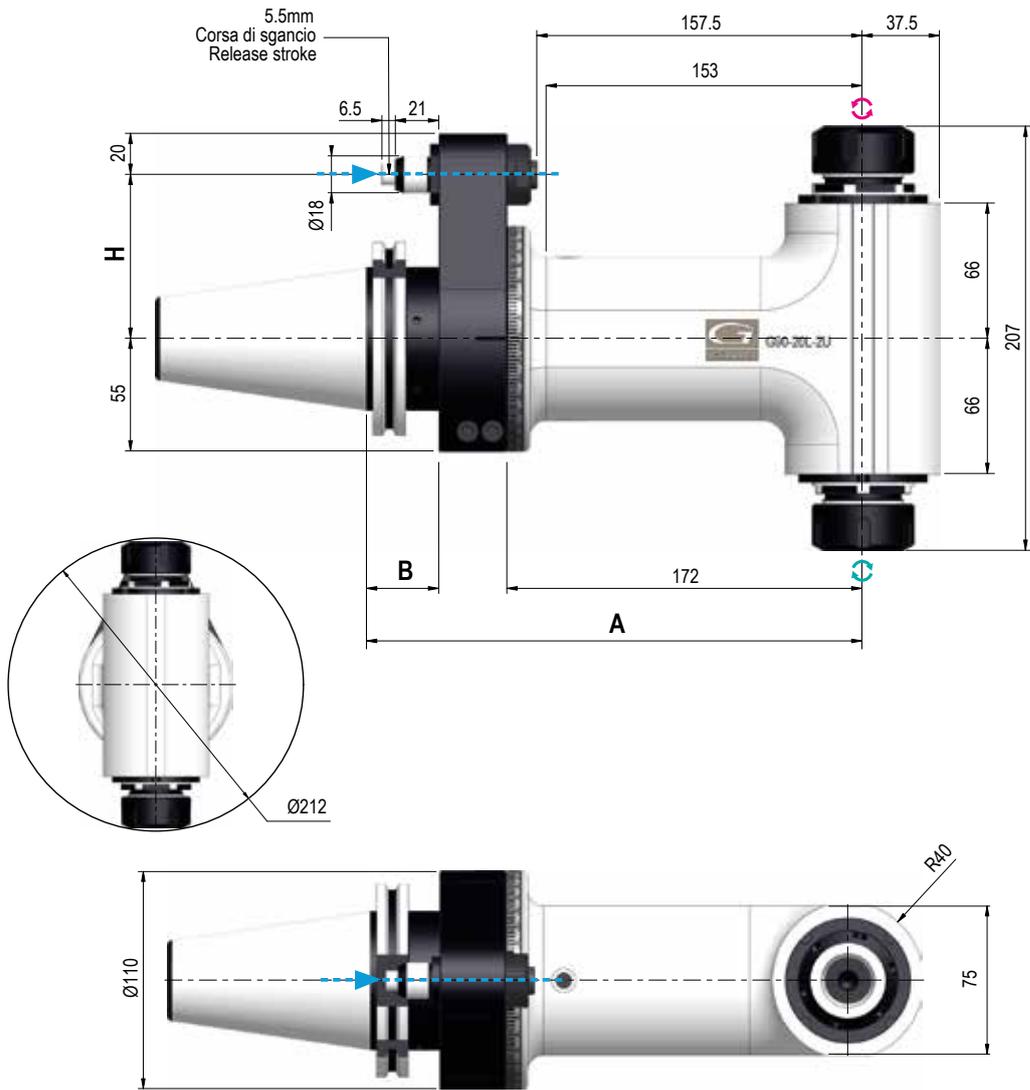
**119**

OUTPUT - Weldon Max Ø20 (X2)

-

OUTPUT - Shell mill holder Ø27 (X2)

**186**



### G90-20L-2U

TYPE 2

Price:

€ 5.634



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 15,5



Rpm  
4.000



Ø 20



N 1.250



M 16



Nm 40



ER-32  
Ø2/20

Senso di rotazione Uguaale e Contrario al mandrino - Direction of rotation Same & Opposite to the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623		
Grandezza - Size	50	50	50	80	100	C6	C8
Extra €	-	-	-	222	243	412	412
Dual contact (Optional)	237	237	237	std	std	std	std
H	Standard	80	80	80	80	80	80
	Optional 110 Extra €	53	53	53	53	53	53
A	240	240	246	247	250	243	245
B	35	35	41	42	45	38	40

IMBALLO & PESO - PACK WEIGHT:  
Cassa in Legno - Wooden Box 29,5Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

HIGH SPEED - 6000 Rpm

119

OUTPUT - Weldon Max Ø20 (X2)

-

OUTPUT - Shell mill holder Ø27 (X2)

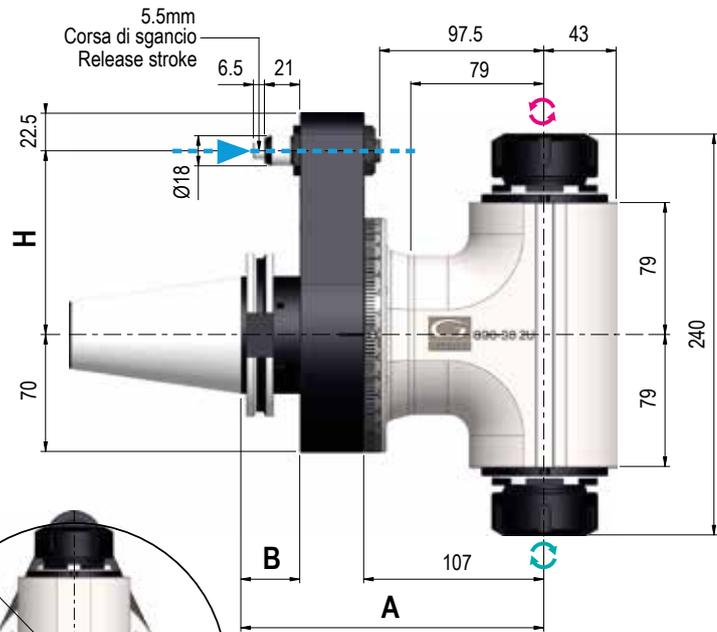
186

### G90-30-2U

TYPE 3

Price:

€ 5.429



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 20



Rpm  
4.000



Ø 30



N 1750



M 20



Nm 75



ER40  
Ø3/30



Senso di rotazione Uguale e Contrario al mandrino - Direction of rotation Same & Opposite to the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623	
Grandezza - Size	50	50	50	80	100	C8
<b>Extra €</b>	-	-	-	<b>222</b>	<b>240</b>	<b>412</b>
Dual contact (Optional)	<b>237</b>	<b>237</b>	<b>237</b>	<b>std</b>	<b>std</b>	<b>std</b>
<b>H</b> Standard Ø18	110	110	110	110	110	110
<b>A</b>	180	180	186	187	190	185
<b>B</b>	35	35	41	42	45	40

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 23Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

HIGH SPEED - 6000 Rpm	<b>119</b>
OUTPUT - Weldon Max Ø25 (X2)	<b>770</b>
OUTPUT - Shell mill holder Ø27 (X2)	<b>186</b>
OUTPUT - HSK 40 (X2)	<b>1.020</b>

### G90-30L-2U

TYPE 3

Price:

**€ 6.539**



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 23



Rpm  
4.000



Ø 30



N 1.750



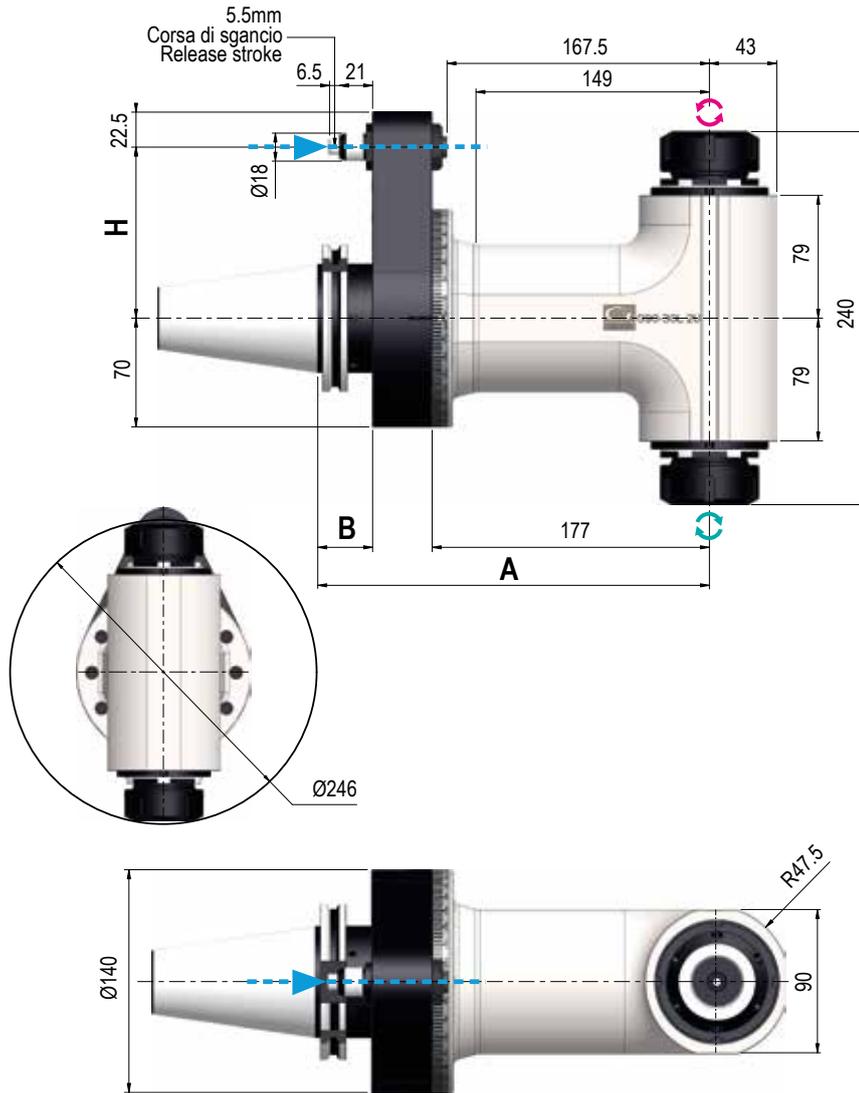
M 20



Nm 75



ER-40  
Ø3/30



Senso di rotazione Uguale e Contrario al mandrino - Direction of rotation Same & Opposite to the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623	
Grandezza - Size	50	50	50	80	100	C8
<b>Extra €</b>	-	-	-	<b>222</b>	<b>243</b>	<b>412</b>
Dual contact (Optional)	<b>237</b>	<b>237</b>	<b>237</b>	<b>std</b>	<b>std</b>	<b>std</b>
<b>H</b> Standard Ø18	110	110	110	110	110	110
<b>A</b>	250	250	256	257	260	255
<b>B</b>	35	35	41	42	45	40

#### IMBALLO & PESO - PACK WEIGHT:

Cassa in Legno - Wooden Box 37Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

HIGH SPEED - 6000 Rpm

**119**

OUTPUT - Weldon Max Ø25 (X2)

**770**

OUTPUT - Shell mill holder Ø27 (X2)

**186**

OUTPUT - HSK 40 (X2)

**1.020**

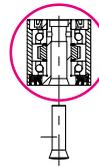
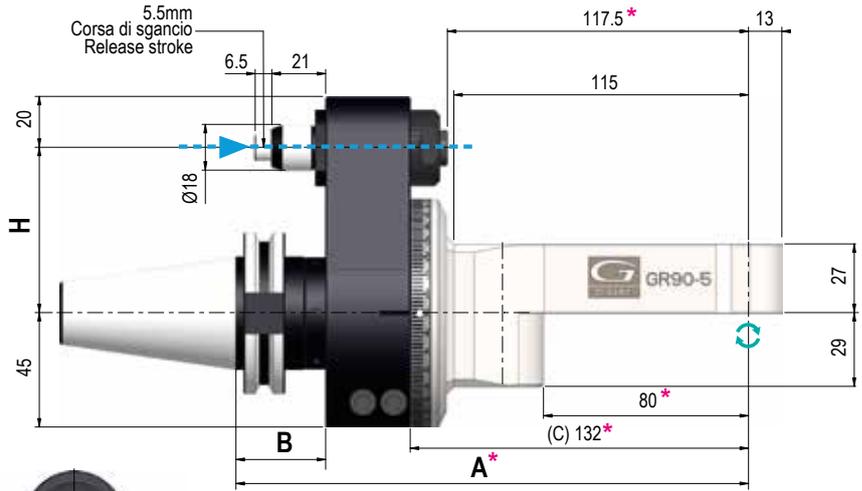
# GR90-5

TYPE 1

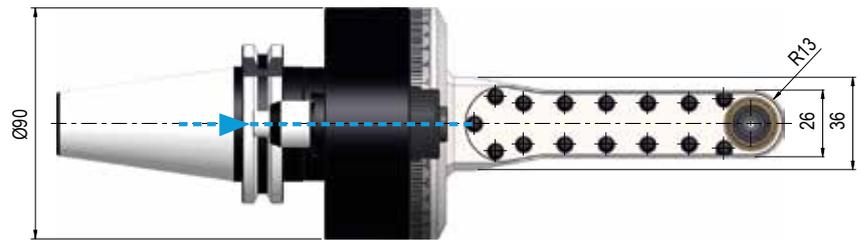
Price:

**€ 5.989**

* mm	C	€
+ 16	148	6.389
+ 32	164	6.789



\* **POSSIBILITÀ DI LUNGHEZZE DIFFERENTI CON STEP DA 16mm**  
 POSSIBILITY OF DIFFERENT LENGTH WITH 16mm STEP


**Dati tecnici - Technical data**


Ratio 1:1



Kg 4,7



Rpm 8.000



Ø 4,5



N 140



M 4



Nm 9


 SCHAUBLIN P6  
 Ø0,3 / 5


Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623		
	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	
<b>Extra €</b>	<b>93</b>	-	-	-	-	<b>93</b>	-	-	<b>200</b>	<b>222</b>	<b>243</b>	<b>412</b>	<b>412</b>	<b>412</b>	
Dual contact (Optional)	<b>X</b>	<b>196</b>	<b>237</b>	<b>196</b>	<b>237</b>	<b>196</b>	<b>196</b>	<b>237</b>	<b>std</b>	<b>std</b>	<b>std</b>	<b>std</b>	<b>std</b>	<b>std</b>	
<b>H</b>	Standard	65 / 80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80	80
	Optional 110 <b>Extra €</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	<b>53</b>	
<b>A *</b>	200	200	200	200	200	195	200	206	207	207	210	203	203	205	
<b>B</b>	35	35	35	35	35	30	35	41	42	42	45	38	38	40	

**IMBALLO & PESO - PACK WEIGHT:**

Valigetta - Bag 8Kg


**DOTAZIONE STANDARD - STANDARD EQUIPMENT**

 Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
 Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

**OPZIONI - OPTIONS**

€

<b>COLLETS</b> - Pinza Schaublin P6 Ø 0,3 - 0,9	<b>258</b>
<b>COLLETS</b> - Pinza Schaublin P6 Ø 1 - 1,9	<b>170</b>
<b>COLLETS</b> - Pinza Schaublin P6 Ø 2 - 3,5	<b>119</b>
<b>COLLETS</b> - Pinza Schaublin P6 Ø 4 - 5	<b>130</b>

### GR90-10

TYPE 1

Price:

**€ 4.300**



* mm	C	€
+ 30	152	<b>5.000</b>
+ 60	182	<b>5.800</b>
+ 90	212	<b>6.500</b>

#### Dati tecnici - Technical data



Ratio  
1:1,6



Kg 6,2



Rpm  
4.000



Ø 10



N 620



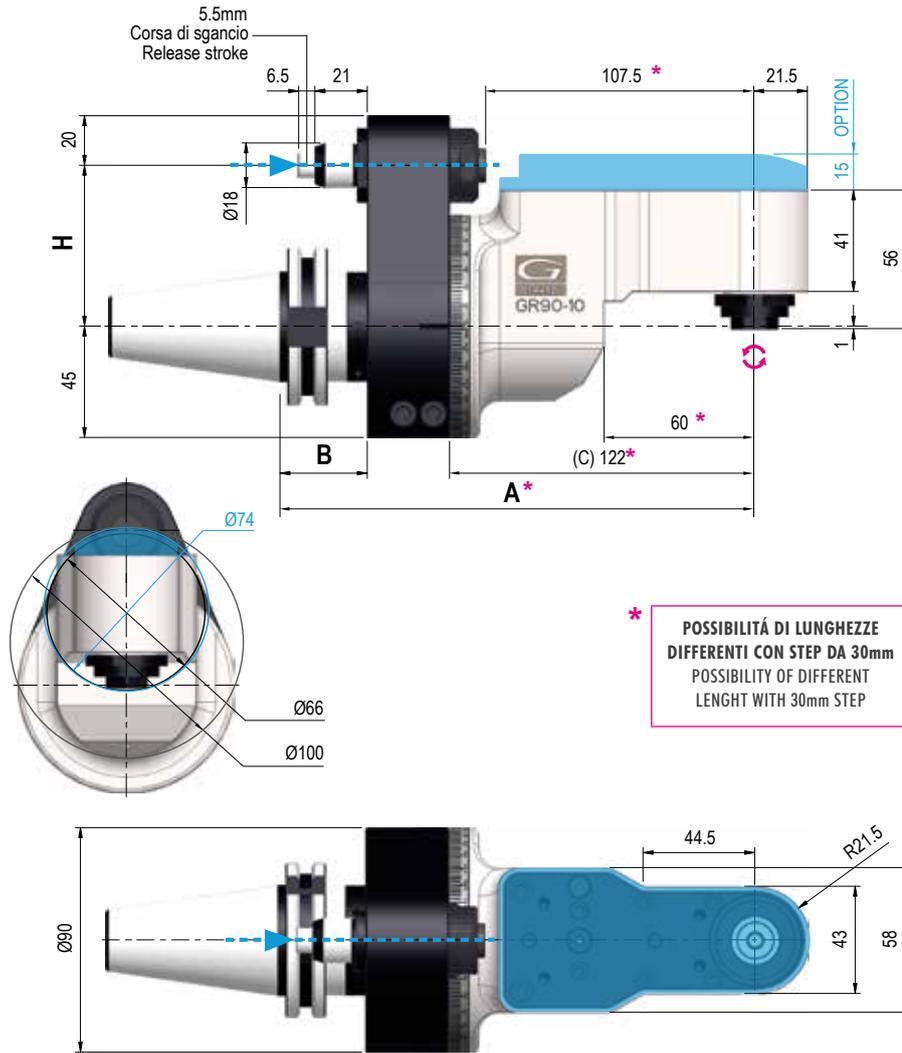
M 8



Nm 20



ER-16  
Ø1/10



\* POSSIBILITÀ DI LUNGHEZZE  
DIFFERENTI CON STEP DA 30mm  
POSSIBILITY OF DIFFERENT  
LENGHT WITH 30mm STEP

Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623
Grandezza - Size	40 50	40 50	40 50	63 80 100	C5 C6 C8
Extra €	- -	- -	- -	200 222 243	412 412 412
Dual contact (Optional)	196 237	196 237	196 237	std std std	std std std
H	Standard	65 / 80 80	65 / 80 80	65 / 80 80	65 / 80 65 / 80 80
	Optional 110 Extra €	53 53	53 53	53 53	53 53 53
A *	190 190	190 190	190 196	197 197 200	193 193 195
B	35 35	35 35	35 41	42 42 45	38 38 40

#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 9,5Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

HIGH SPEED - 8000 Rpm - Internal coolant NO	<b>119</b>
REFR. - COOLANT - dal Cono - Through Shank 70bar - Dry running NO	<b>1.892</b>
OUTPUT - Weldon Max Ø10	<b>130</b>
OUTPUT - Shell mill holder Ø13	<b>186</b>

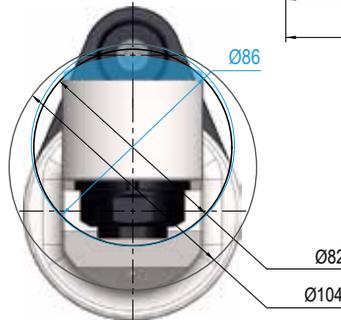
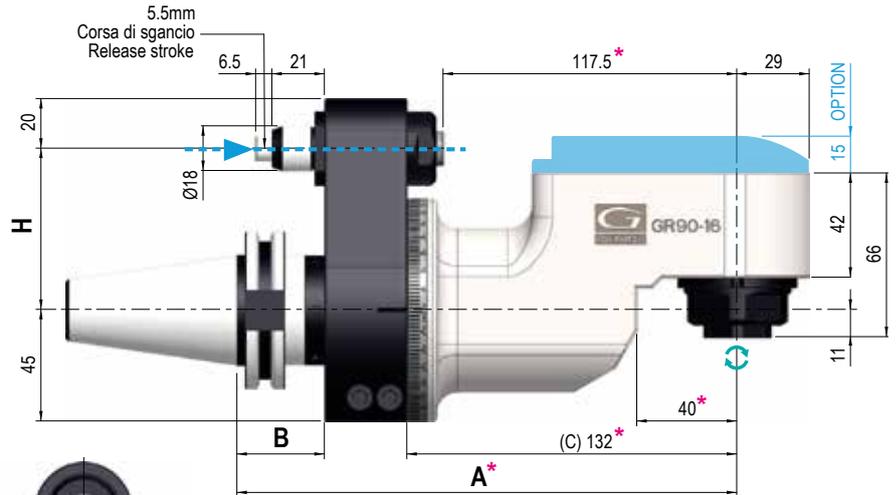
# GR90-16

TYPE 1

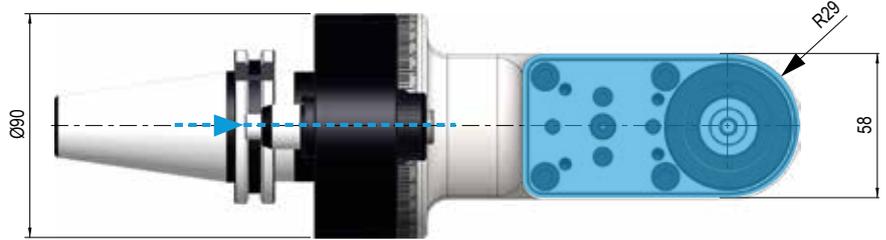
Price:

**€ 4.845**

* mm	C	€
+ 50	182	5.445
+ 100	232	5.745



\* POSSIBILITÀ DI LUNGHEZZE DIFFERENTI CON STEP DA 50mm  
 POSSIBILITY OF DIFFERENT LENGTH WITH 50mm STEP


**Dati tecnici - Technical data**

 Ratio  
 1:1


Kg 6


 Rpm  
 4.000


Ø 16



N 620



M 12



Nm 20


 ER-25  
 Ø1/16


Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623		
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8
Extra €	-	-	-	-	-	-	200	222	243	412	412	412
Dual contact (Optional)	196	237	196	237	196	237	std	std	std	std	std	std
H	Standard	65 / 80	80	65 / 80	80	65 / 80	80	65 / 80	65 / 80	80	65 / 80	65 / 80
	Optional 110 Extra €	53	53	53	53	53	53	53	53	53	53	53
A *	200	200	200	200	200	206	207	207	210	203	203	205
B	35	35	35	35	35	41	42	42	45	38	38	40

**IMBALLO & PESO - PACK WEIGHT:**

Valigetta - Bag 10Kg

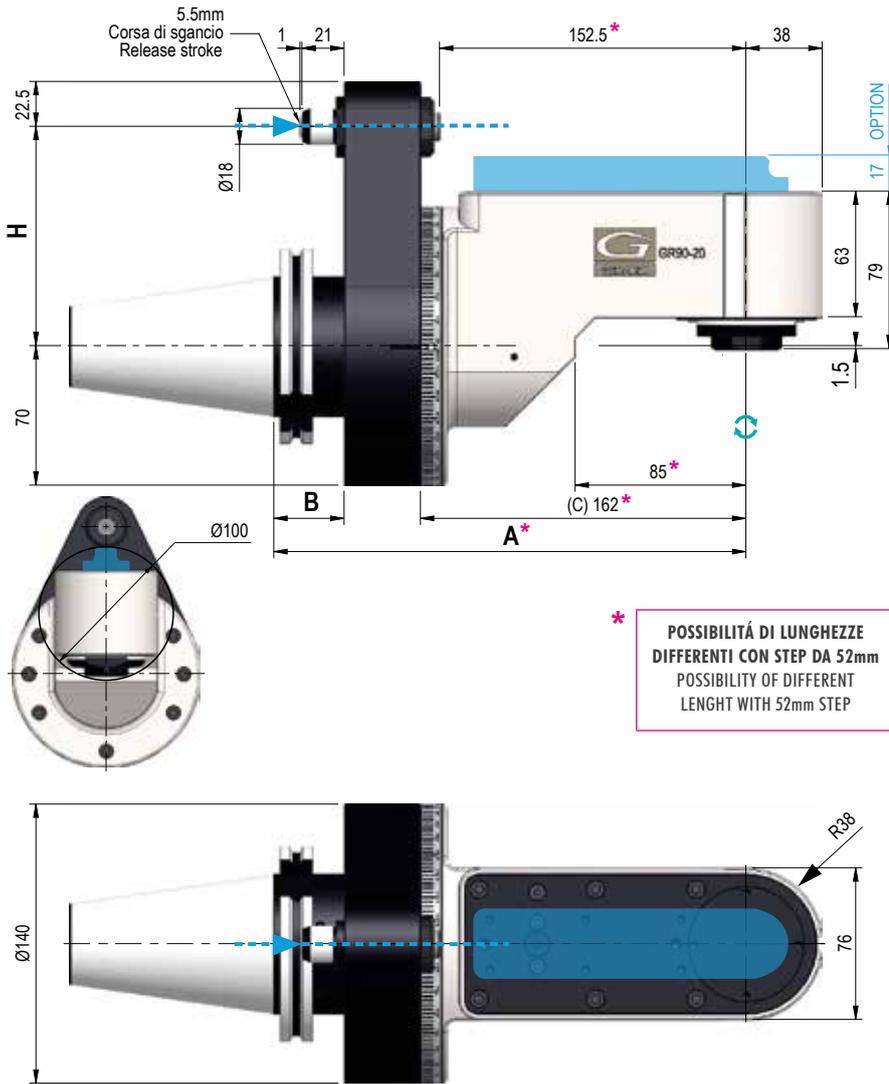

**DOTAZIONE STANDARD - STANDARD EQUIPMENT**

 Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
 Tubetto di grasso / Libro istruzioni  
 Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

**OPZIONI - OPTIONS**

€

HIGH SPEED - 8000 Rpm - Internal coolant NO	119
REFR. - COOLANT - dal Cono - Through Shank 70bar - Dry running NO	1.892
OUTPUT - Weldon Max Ø16	180
OUTPUT - Shell mill holder Ø16	93



\* POSSIBILITÀ DI LUNGHEZZE  
 DIFFERENTI CON STEP DA 52mm  
 POSSIBILITY OF DIFFERENT  
 LENGTH WITH 52mm STEP

**GR90-20**

TYPE 3

Price:

**€ 5.979**


* mm	C	€
+ 52	214	6.679
+ 104	266	6.979

**Dati tecnici - Technical data**

 Ratio  
 1:1


Kg 15,6


 Rpm  
 4.000


Ø 20



N 1.750



M 16



Nm 75


 ER-32  
 Ø2/20

Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623
Grandezza - Size	50	50	50	100	C8
Extra €	-	-	-	243	412
Dual contact (Optional)	237	237	237	std	std
<b>H</b> Standard Ø18	110	110	110	110	110
<b>A</b> *	235	235	241	245	240
<b>B</b>	35	35	41	45	40

**IMBALLO & PESO - PACK WEIGHT:**  
 Cassa in Legno - Wooden Box 30Kg

**DOTAZIONE STANDARD - STANDARD EQUIPMENT**

 Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio  
 Tubetto di grasso / Libro istruzioni  
 Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

**OPZIONI - OPTIONS**

€

**HIGH SPEED - 6000 Rpm - Internal coolant NO** 119

**REFR. - COOLANT - dal Cono - Through Shank 70bar - Dry running NO** 1.892

**OUTPUT - Weldon Max Ø20** -

**OUTPUT - Shell mill holder Ø16** 93

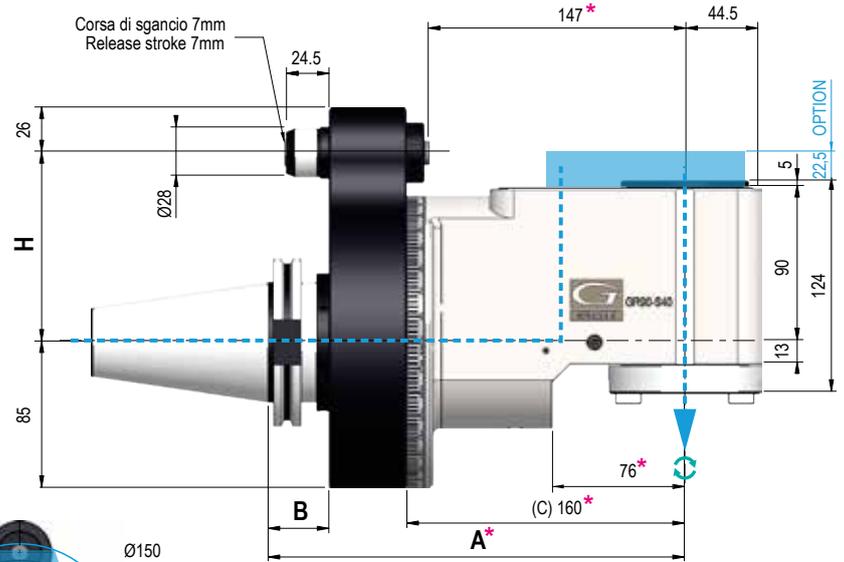
# GR90-S40

TYPE 4

Price:

**€ 6.514**

* mm	C	€
+ 68	228	7.314
+ 136	296	7.614



\* **POSSIBILITÀ DI LUNGHEZZE  
DIFFERENTI CON STEP DA 68mm**  
 POSSIBILITY OF DIFFERENT  
 LENGTH WITH 68mm STEP

**Dati tecnici - Technical data**

 Ratio  
1:1


Kg 22,6


 Rpm  
4.000


Ø 26



N 1800



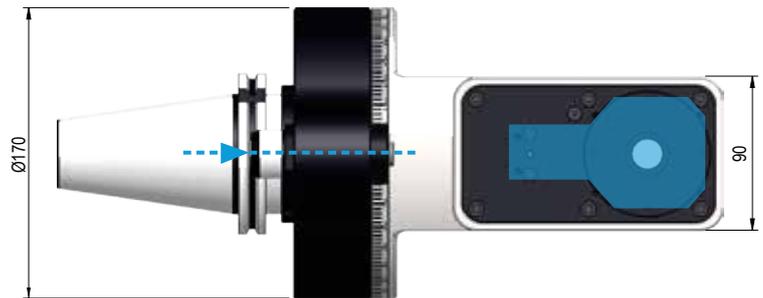
M 20



Nm 140


 ISO / CAT  
/ BT40


Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle



Coni - Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623
Grandezza - Size	50	50	50	100	C8
Extra €	-	-	-	243	412
Dual contact (Optional)	237	237	237	std	std
H Standard Ø18	110	110	110	110	110
A *	240	240	246	250	245
B	35	35	41	45	40

**IMBALLO & PESO - PACK WEIGHT:**

Cassa in Legno - Wooden Box 37Kg


**DOTAZIONE STANDARD - STANDARD EQUIPMENT**

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio

Tubetto di grasso / Libro istruzioni

Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

**OPZIONI - OPTIONS**

HIGH SPEED - 5000 Rpm - Internal coolant NO	119
REFR. - COOLANT - dal Cono - Through Shank Max 70bar - 4000Rpm - Dry running NO	2.522
OUTPUT - Weldon Max Ø26	-

OUTPUT - HSK 63	711
OUTPUT - Shell mill holder Ø27	93
OUTPUT - C4	495
OUTPUT - C5	608

# MTC SERIES

## MANUAL TOOL CHANGE



### INGRANAGGI - GEARS

Ingranaggi Gleason con evolvente rettificato massime performances e minori vibrazioni

Gleason ground spiral bevel gears maximum performances and minimum vibration



### CUSCINETTI - BEARINGS

Cuscinetti a sfera a contatto obliquo in classe di precisione ABEC 9

Angular contact preloaded ball bearings of precision class ABEC 9

### DESIGN

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

The Compact design, along with mentioned specifications, allows: highest performances, high speeds, long tools life



### PROLUNGHE - EXTENSIONS

Sulla serie di teste MTC è possibile variare la lunghezza del corpo aggiungendo il modulo di prolunga (pag.1.95)

On MTC series is possible to extend the length of the body by adding an extension (pag.1.95)



Massimo 2 elementi di prolunga ammessi - Max. 2 extensions admitted.

## Esempi applicativi / Applications examples

# Classic Line

### Teste angolari integrali MTC (Cambio utensile manuale)

Integral angle heads MTC series (Manual tool change)



**STD 90°** SERIES

La serie ideale per fresature, forature e maschiature a  $\pm 90^\circ$   
The ideal series for milling, drilling and tapping at  $\pm 90^\circ$ .



**STD 90°** SERIES

La serie ideale per fresature, forature e maschiature a  $\pm 90^\circ$   
The ideal series for milling, drilling and tapping at  $\pm 90^\circ$ .



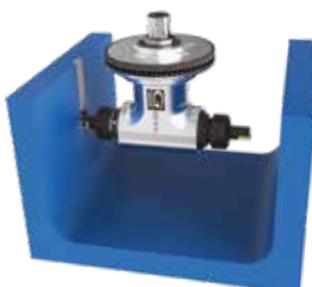
**GMU** SERIES

La serie di teste angolari con angolazione regolabile da 0 a  $90^\circ$ .  
Angle heads series with adjustable angle from 0 to  $90^\circ$ .



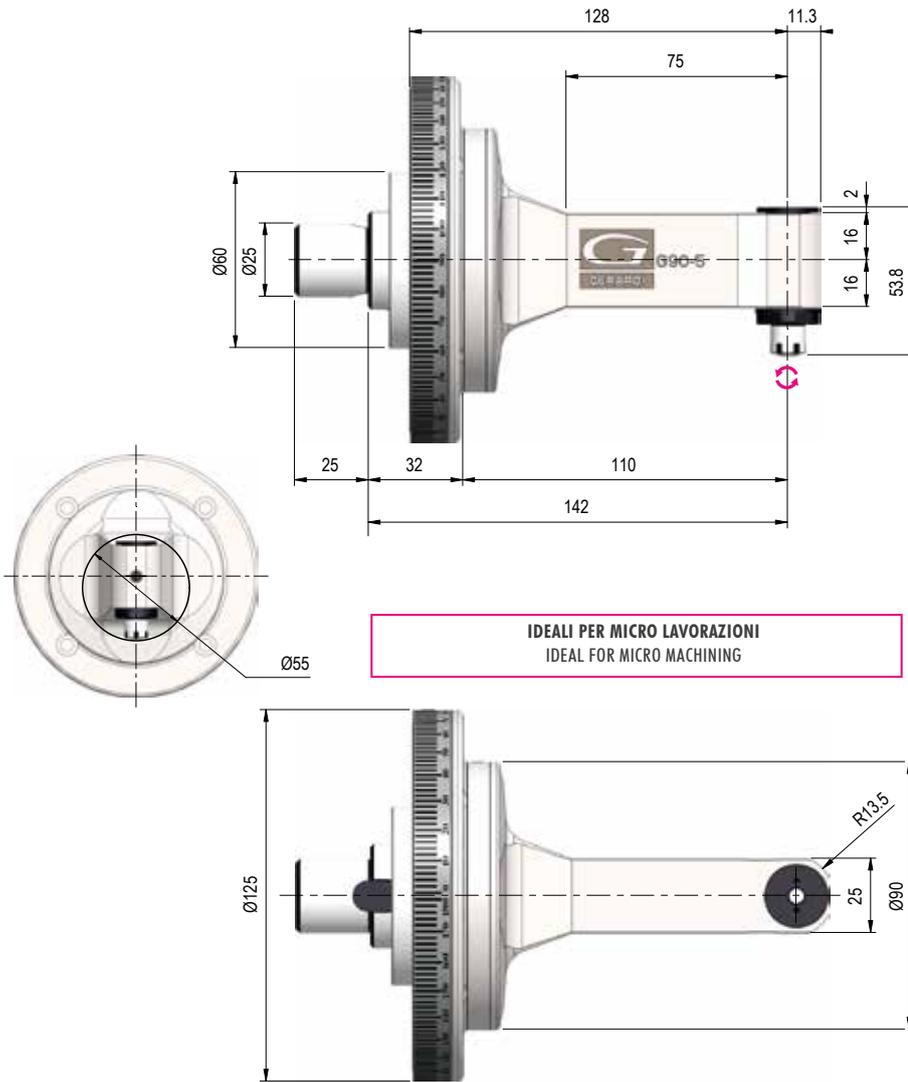
**GMU** SERIES

La serie di teste angolari con angolazione regolabile da 0 a  $360^\circ$ .  
Angle heads series with adjustable angle from 0 to  $360^\circ$ .



**DOUBLE** SERIES

La serie di teste angolari ideali per fresature, forature e maschiature attraverso 2 mandrini contrapposti di  $180^\circ$   
Angle Heads series for milling drilling and tapping through 2 opposite outputs



**IDEALI PER MICRO LAVORAZIONI  
IDEAL FOR MICRO MACHINING**

### G90-5

TYPE 1

Price:

**€ 2.882**



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 4



Rpm  
10.000



Ø 5



N 60



M 4



Nm 4

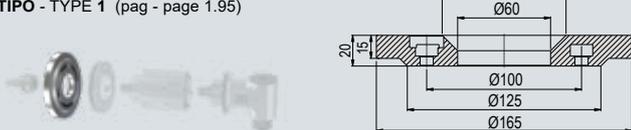


ER-8  
Ø0,5/5

Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50		BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN2080	
	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Extra €	105	-	-	-	-	105	-	-	200	222	243	412	412	412	169	195

**FLANGIA UNIVERSALE - UNIVERSAL FLANGE**  
TIPO - TYPE 1 (pag - page 1.95)



**PROLUNGA - EXTENSION**  
TIPO - TYPE 1



**IMBALLO & PESO - PACK WEIGHT:**  
Valigetta - Bag 8Kg



**DOTAZIONE STANDARD - STANDARD EQUIPMENT**

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

OPZIONI - OPTIONS

€

OUTPUT - Weldon Max Ø6

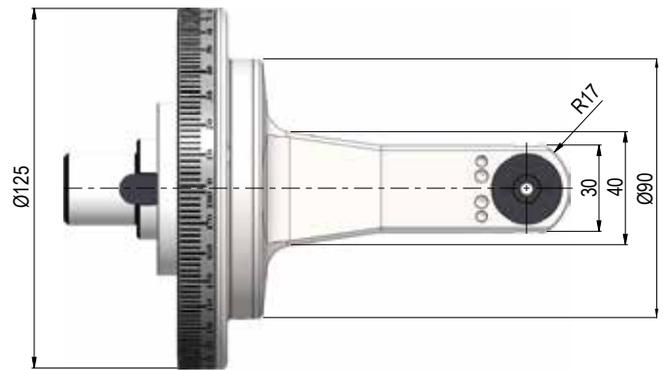
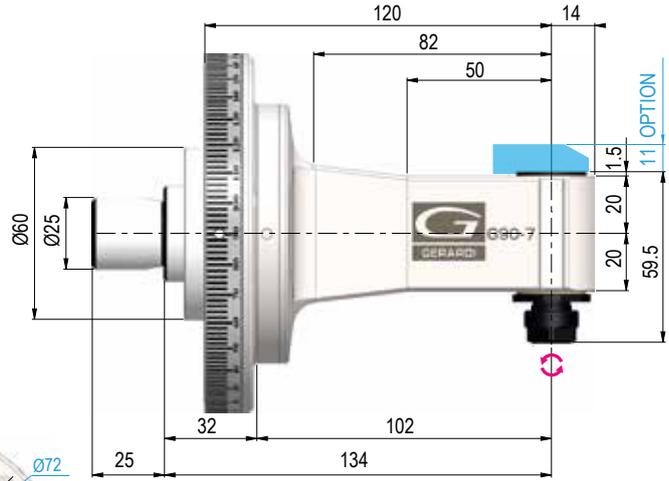
180

### G90-7

TYPE 1

Price:

€ 2.974



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 3,7



Rpm  
10.000



Ø 7



N 120



M 6



Nm 5



ER-11  
Ø17

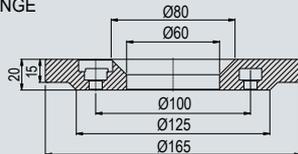


Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50		BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN2080	
	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Extra €	105	-	-	-	-	105	-	-	200	222	243	412	412	412	169	195

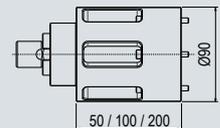
#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 1 (pag - page 1.95)



#### PROLUNGA - EXTENSION

TIPO - TYPE 1



#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 8Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio

Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

REFR. - COOLANT - dal Distr. - Through Distr. - Max 10bar RPM 6000 - Dry running YES 432

OUTPUT - Weldon Max Ø8 280

DOUBLE OUTPUT - ER11 - ER 8M 268

### G90-7L

TYPE 1

Price:

**€ 3.121**



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 4



Rpm  
10.000



Ø 7



N 120



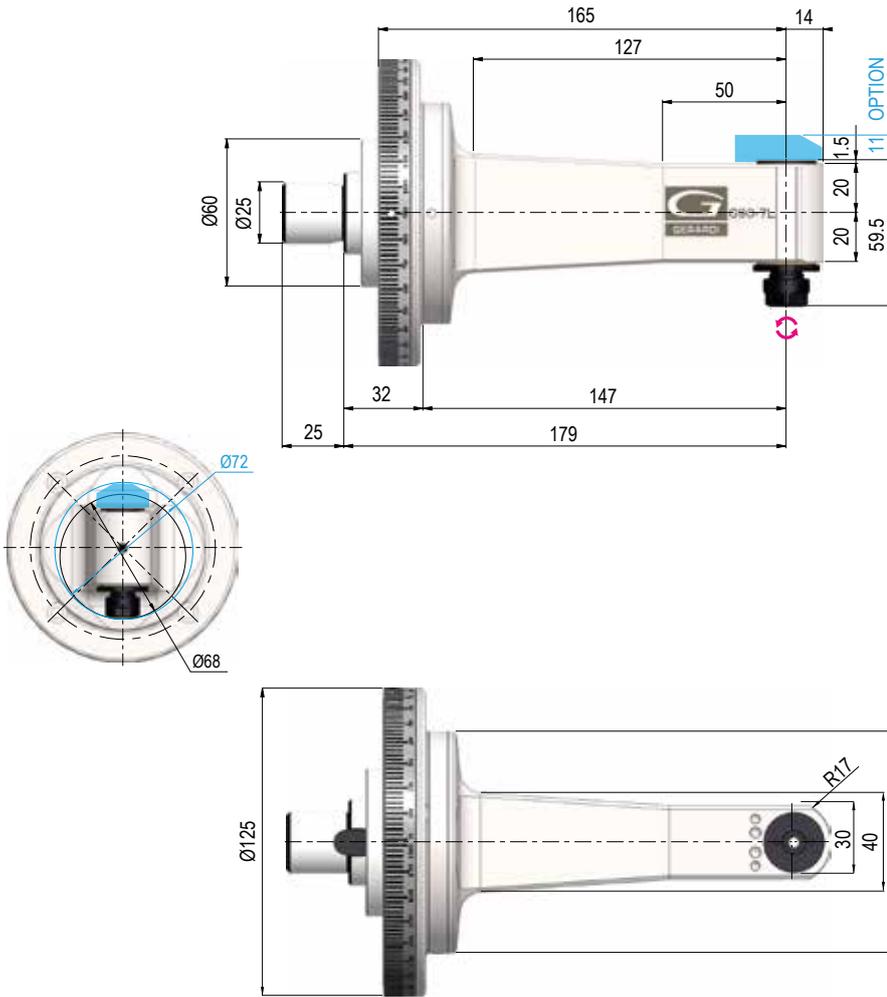
M 6



Nm 5

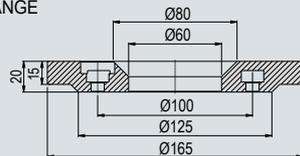


ER-11  
Ø17

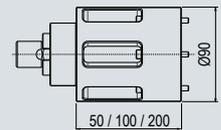


Coni - Shanks	SK DIN 69871			CAT ANSI B5.50		BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN2080	
	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Extra €	105	-	-	-	-	105	-	-	200	222	243	412	412	412	169	195

#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE TIPO - TYPE 1 (pag - page 1.95)



#### PROLUNGA - EXTENSION TIPO - TYPE 1



#### IMBALLO & PESO - PACK WEIGHT: Valigetta - Bag 8,5Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

REFR. - COOLANT - dal Perno - Through Distr. Max10bar - 6000Rpm - Dry running YES **432**

OUTPUT - Weldon Max Ø8 **280**

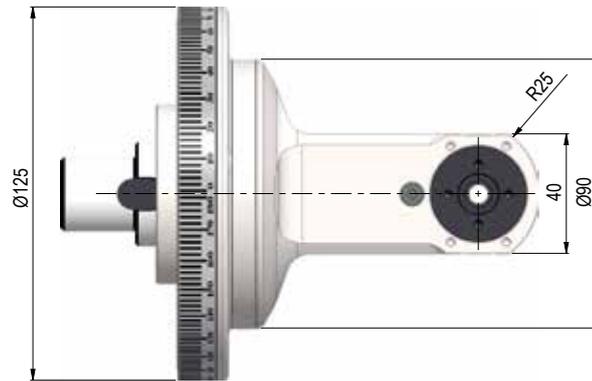
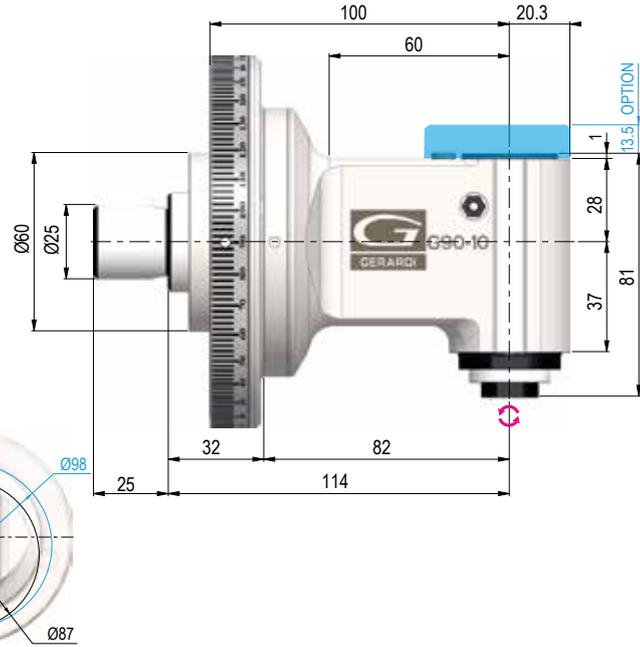
DOUBLE OUTPUT - ER11 - ER 8M **268**

### G90-10

TYPE 1

Price:

€ 2.562



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 4,3



Rpm  
10.000



Ø 10



N 250



M 8



Nm 10



ER-16  
Ø1/10

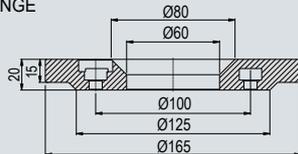


Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50		BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN2080	
	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Extra €	105	-	-	-	-	105	-	-	200	222	243	412	412	412	169	195

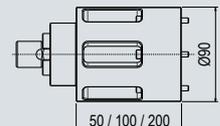
#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 1 (pag - page 1.95)



#### PROLUNGA - EXTENSION

TIPO - TYPE 1



#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 9Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio

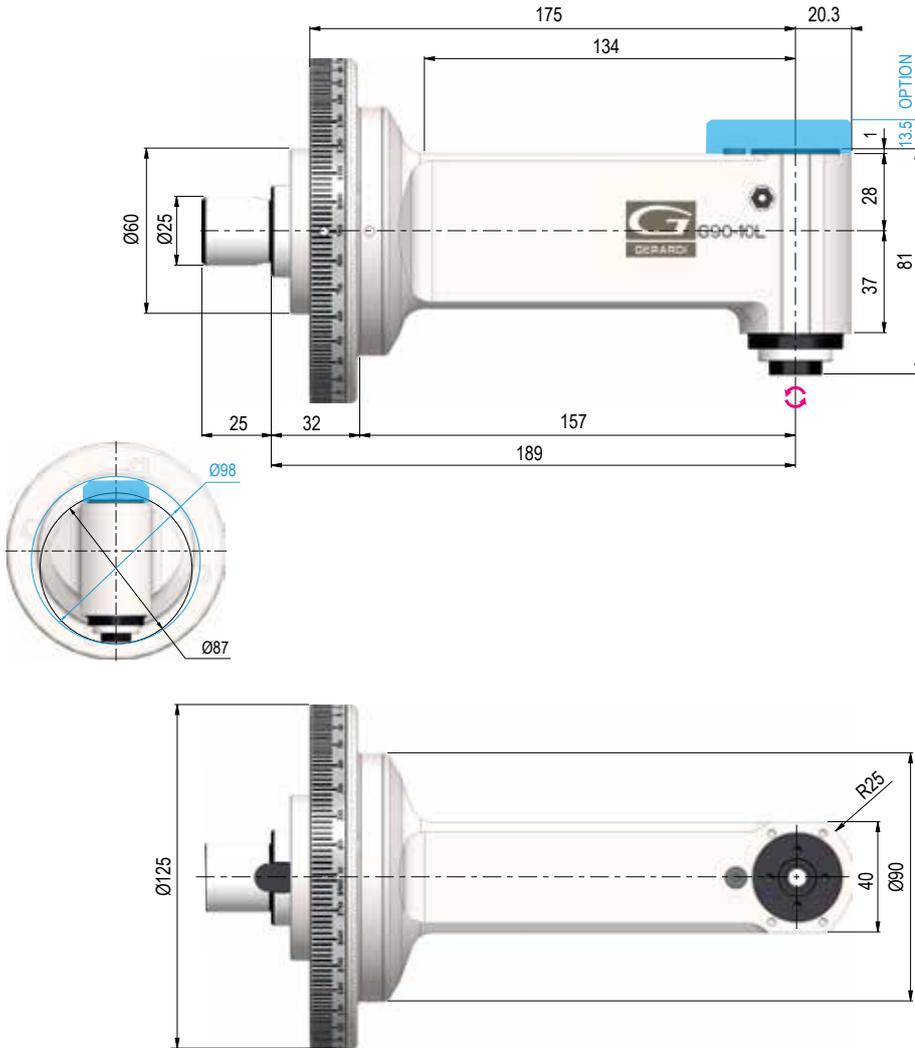
Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

REFR. - COOLANT - dal Distr. - Through Distr. Max 10bar RPM 4000 - Dry running YES	432
REFR. - COOLANT - dal Distr. - Through Distr. Max 40bar RPM 4000 - Dry running NO	432
DOUBLE OUTPUT - ER16 - ER 11M	227

OUTPUT - Weldon Max Ø10	130
OUTPUT - Shell mill holder Ø13	88
OUTPUT - ER 20	103



### G90-10L

TYPE 1

Price:

**€ 3.200**



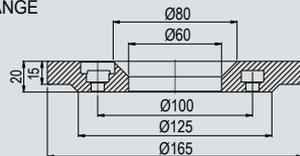
#### Dati tecnici - Technical data

Ratio 1:1	Kg 6
Rpm 10.000	Ø 16
N 250	M 8
Nm 10	ER-16 Ø1/10

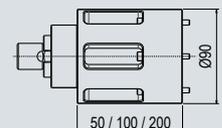
Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50		BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN2080	
	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Extra €	105	-	-	-	-	105	-	-	200	222	243	412	412	412	169	195

#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE TIPO - TYPE 1 (pag - page 1.95)



#### PROLUNGA - EXTENSION TIPO - TYPE 1



#### IMBALLO & PESO - PACK WEIGHT: Valigetta - Bag 10,5Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

OPZIONI - OPTIONS	€
REFR. - COOLANT - dal Distr. - Through Distr. Max 10bar RPM 4000 - Dry running YES	432
REFR. - COOLANT - dal Distr. - Through Distr. Max 40bar RPM 4000 - Dry running NO	432
DOUBLE OUTPUT - ER16 - ER 11M	227

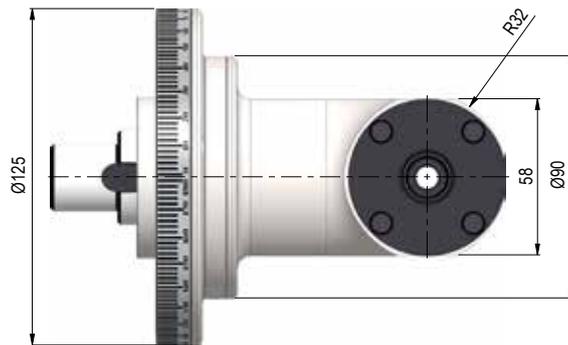
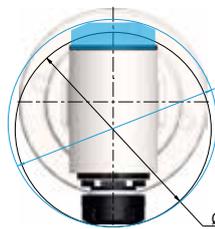
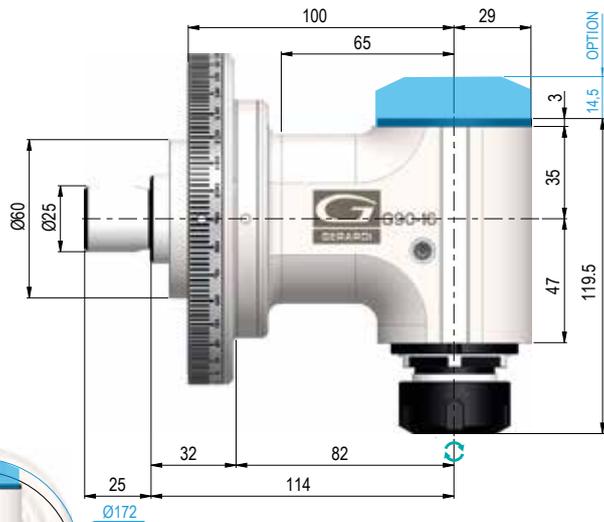
OUTPUT - Weldon Max Ø10	130
OUTPUT - Shell mill holder Ø13	88
OUTPUT - ER 20	103

### G90-16

TYPE 1

Price:

€ 3.264



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 4,5



Rpm  
8.000



Ø 16



N 510



M 12



Nm 24



ER-25  
Ø1/16

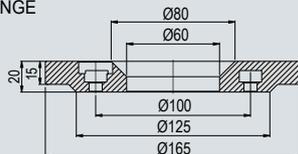


Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50		BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN2080	
	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Extra €	105	-	-	-	-	105	-	-	200	222	243	412	412	412	169	195

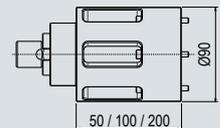
#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 1 (pag - page 1.95)



#### PROLUNGA - EXTENSION

TIPO - TYPE 1



#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 9Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

REFR. - COOLANT - dal Distr. - Through Distr. Max 10bar RPM 4000 - Dry running YES	468
REFR. - COOLANT - dal Distr. - Through Distr. Max 40bar RPM 4000 - Dry running NO	468
DOUBLE OUTPUT - ER25 - ER 16M	309

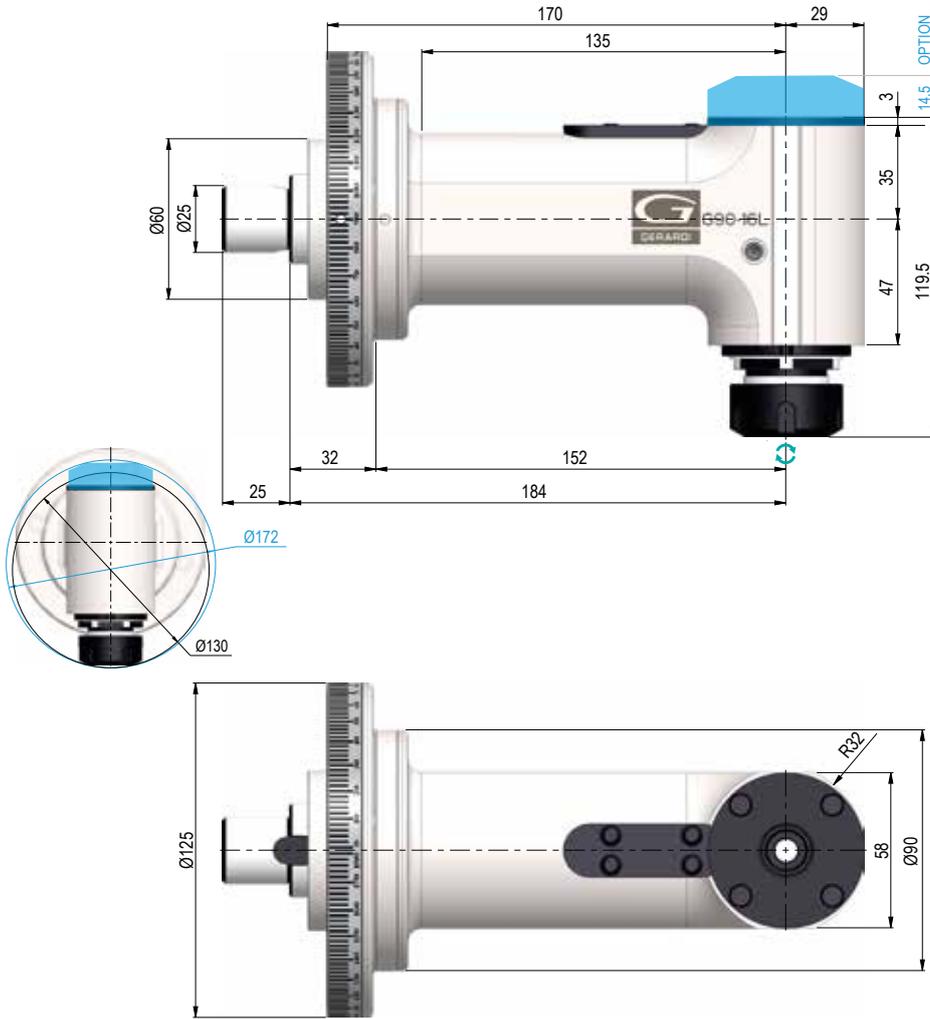
OUTPUT - Weldon Max Ø16	180
OUTPUT - Shell mill holder Ø16	93
OUTPUT - ER 32	217
OUTPUT - HSK 32	407

### G90-16L

TYPE 1

Price:

**€ 4.077**



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 6,1



Rpm  
8.000



Ø 16



N 510



M 12



Nm 24

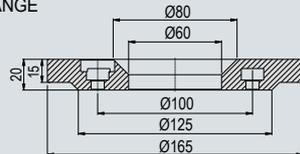


ER-25  
Ø1/16

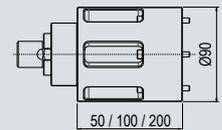
Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50		BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN2080	
	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Extra €	105	-	-	-	-	105	-	-	200	222	243	412	412	412	169	195

#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE TIPO - TYPE 1 (pag - page 1.95)



#### PROLUNGA - EXTENSION TIPO - TYPE 1



#### IMBALLO & PESO - PACK WEIGHT: Valigetta - Bag 10,5Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

REFR. - COOLANT - dal Distr. - Through Distr. Max 10bar RPM 4000 - Dry running YES	468
REFR. - COOLANT - dal Distr. - Through Distr. Max 40bar RPM 4000 - Dry running NO	468
DOUBLE OUTPUT - ER25 - ER 16M	309

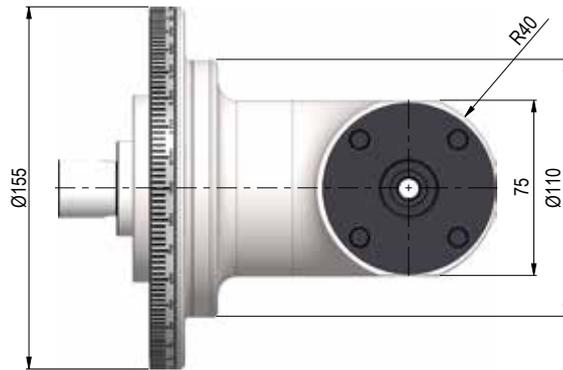
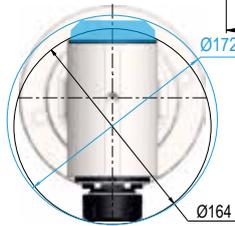
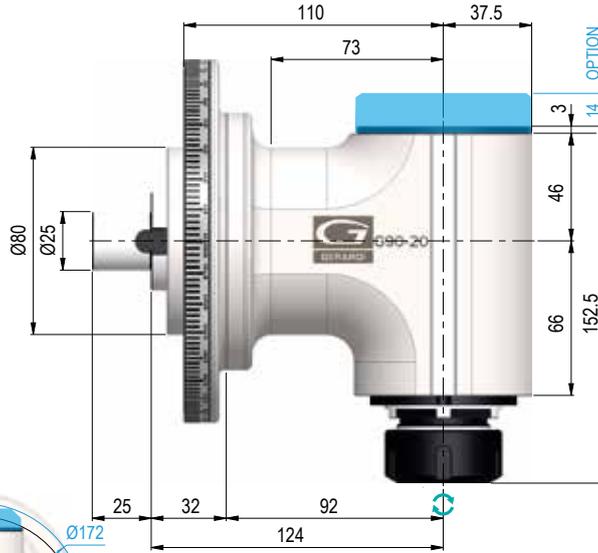
OUTPUT - Weldon Max Ø16	180
OUTPUT - Shell mill holder Ø16	93
OUTPUT - ER 32	217
OUTPUT - HSK 32	407

### G90-20

TYPE 2

Price:

€ 3.463



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 10



Rpm  
4.000



Ø 20



N 1.250



M 16



Nm 40



ER-32  
Ø2/20

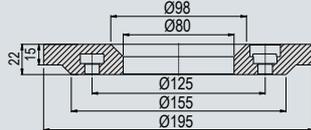


Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

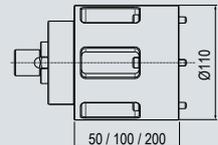
#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 2 (pag - page 1.95)



#### PROLUNGA - EXTENSION

TIPO - TYPE 2



#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 15Kg



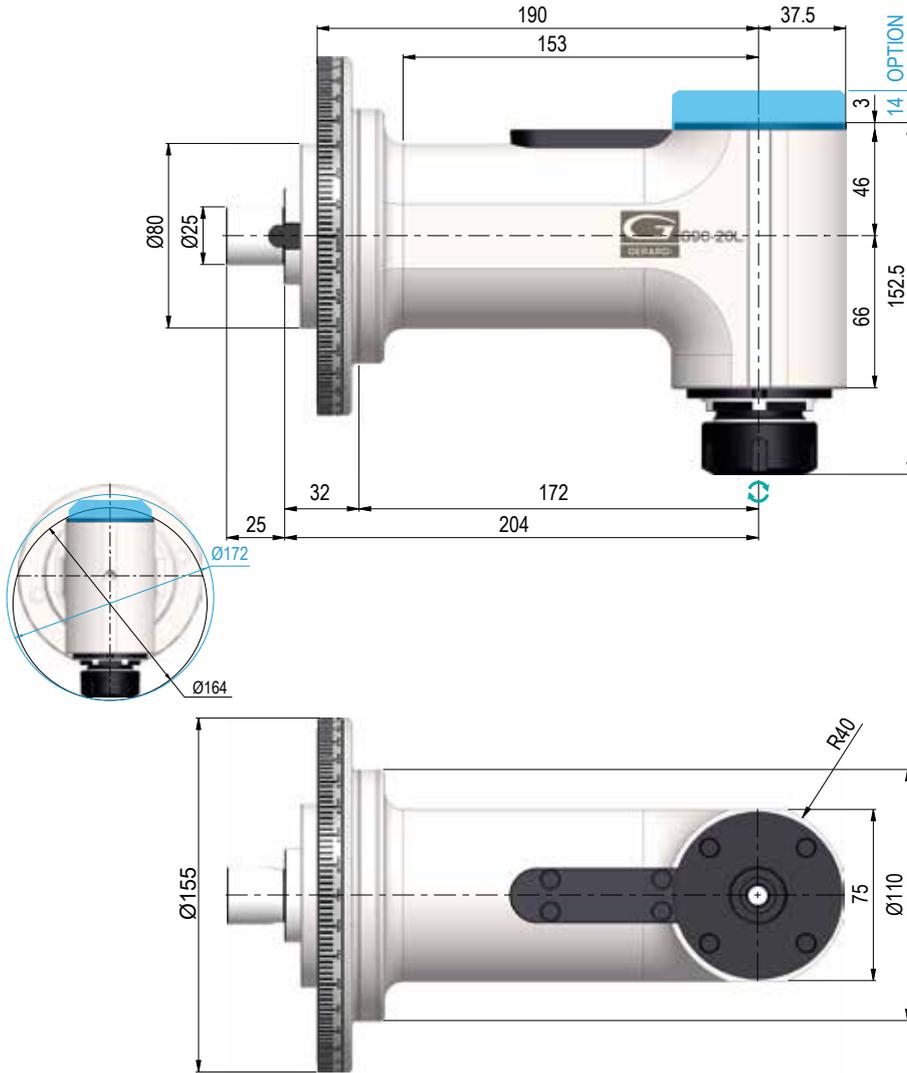
#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

HIGH SPEED - 6000 Rpm - Internal coolant NO	€ 119
REFR. - COOLANT - dal Distr. - Through Distributor- Max 10bar - Dry running YES	€ 485
REFR. - COOLANT - dal Distr. - Through Distributor - Max 40bar - Dry running NO	€ 485
OUTPUT - Weldon Max Ø20	-
OUTPUT - HSK 40	€ 459

OUTPUT - Shell mill holder Ø22	€ 93
OUTPUT - ISO / CAT / BT 30	€ 181
OUTPUT - C4	€ 495
DOUBLE OUTPUT - ER32 - ER20M	€ 335
OUTPUT - ER40	€ 217



### G90-20L

TYPE 2

Price:

€ 4.330



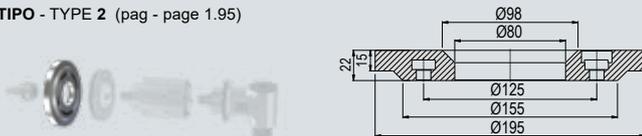
#### Dati tecnici - Technical data

	Ratio 1:1		Kg 12,2
	Rpm 4.000		Ø 20
	N 1.250		M 16
	Nm 40		ER-32 Ø2/20

Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE TIPO - TYPE 2 (pag - page 1.95)



#### PROLUNGA - EXTENSION TIPO - TYPE 2



#### IMBALLO & PESO - PACK WEIGHT: Cassa in Legno - Wooden Box 17,5Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

OPZIONI - OPTIONS	€
HIGH SPEED - 6000 Rpm - Internal coolant NO	119
REFR. - COOLANT - dal Distr. - Through Distributor - Max 10bar - Dry running YES	485
REFR. - COOLANT - dal Distr. - Through Distributor - Max 40bar - Dry running NO	485
OUTPUT - Weldon Max Ø20	-
OUTPUT - HSK 40	459

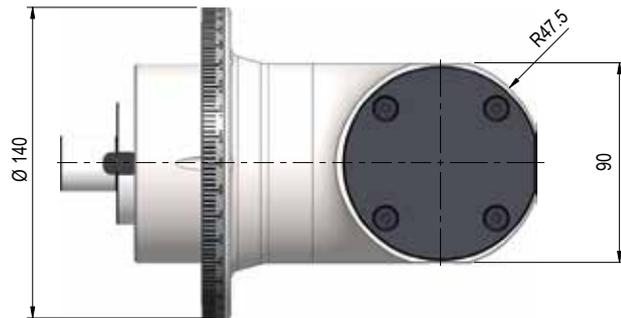
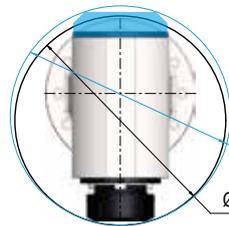
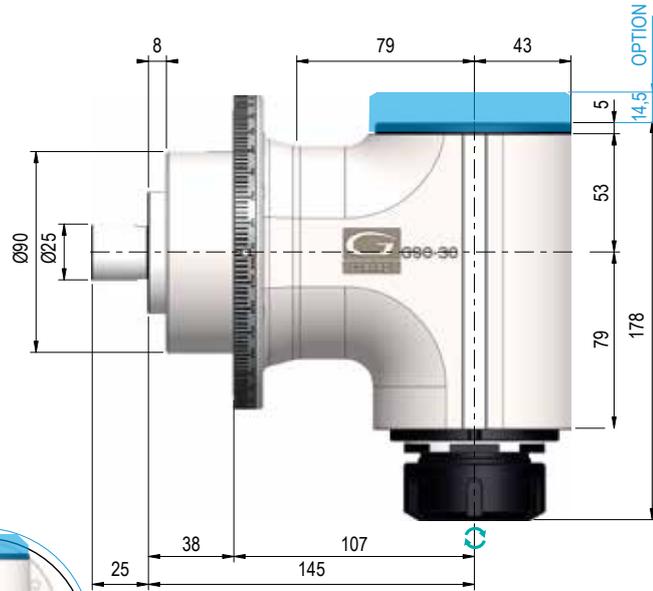
OUTPUT - Shell mill holder Ø22	93
OUTPUT - ISO / CAT / BT 30	181
OUTPUT - C4	495
DOUBLE OUTPUT - ER32 - ER20M	335
OUTPUT - ER40	217

### G90-30

TYPE 3

Price:

€ 4.081



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 17



Rpm  
4.000



Ø30



N 1.750



M 20



Nm 75



ER-40  
Ø3/30

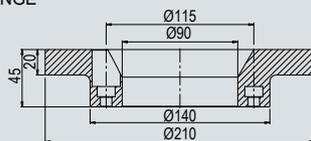


Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

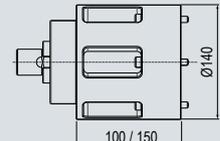
#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 3 (pag - page 1.95)



#### PROLUNGA - EXTENSION

TIPO - TYPE 3



#### IMBALLO & PESO - PACK WEIGHT:

Cassa in Legno - Wooden Box 32Kg



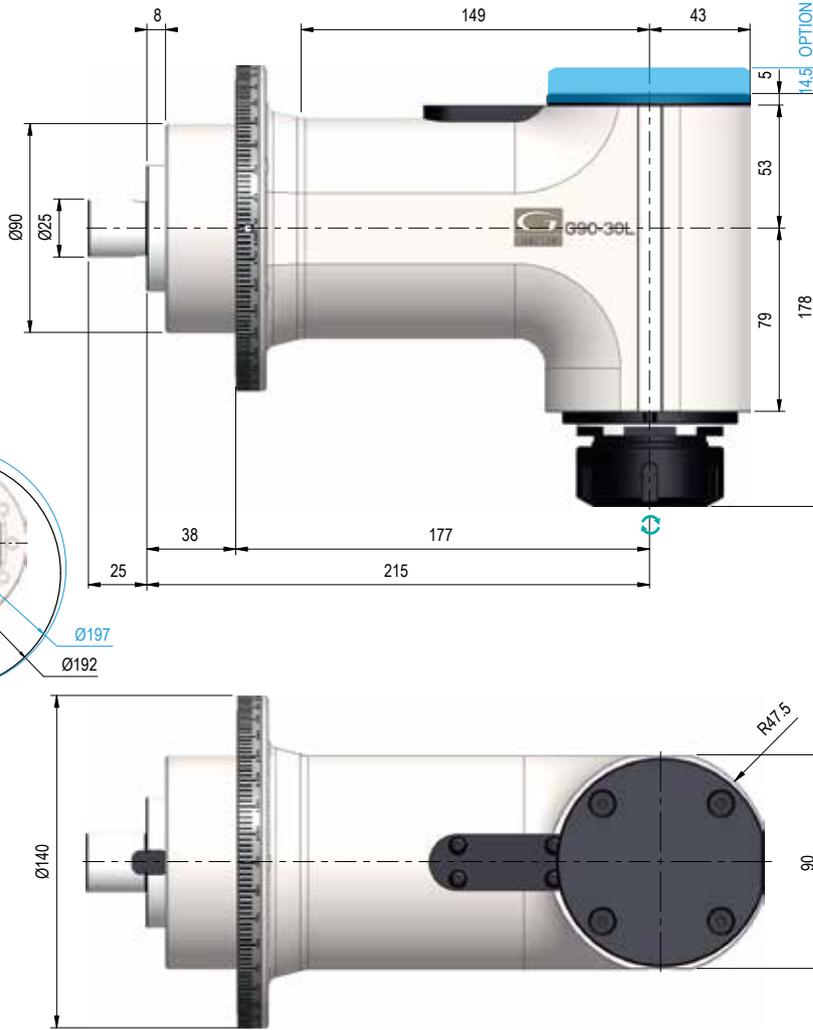
#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

HIGH SPEED - 6000 Rpm - Internal coolant NO	€ 119
REFR. - COOLANT - dal Distr. - Through Distributor- Max 10bar - Dry running YES	€ 495
REFR. - COOLANT - dal Distr. - Through Distributor - Max 30bar - Dry running NO	€ 495
OUTPUT - Weldon Max Ø25	€ 385

OUTPUT - HSK 40	€ 459
OUTPUT - Shell mill holder Ø27	€ 93
OUTPUT - ISO 30	€ 181
OUTPUT - C4	€ 495
DOUBLE OUTPUT - ER32 - ER20M	€ 335



### G90-30L

TYPE 3

Price:

€ 5.324



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 20



Rpm  
4.000



Ø30



N 1.750



M20



Nm 75

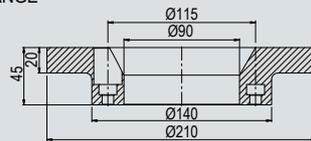


ER-40  
Ø3/30

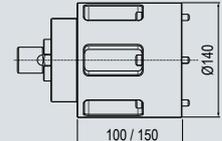
Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE TIPO - TYPE 3 (pag - page 1.95)



#### PROLUNGA - EXTENSION TIPO - TYPE 3



#### IMBALLO & PESO - PACK WEIGHT: Cassa in Legno - Wooden Box 35Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

HIGH SPEED - 6000 Rpm - Internal coolant NO	€ 119
REFR. - COOLANT - dal Distr. - Through Distributor - Max 10bar - Dry running YES	€ 495
REFR. - COOLANT - dal Distr. - Through Distributor - Max 30bar - Dry running NO	€ 495
OUTPUT - Weldon Max Ø25	€ 385

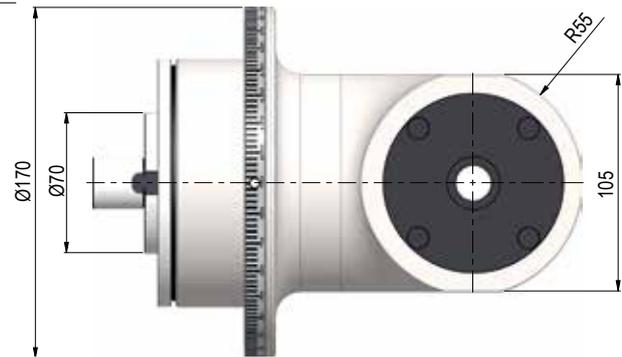
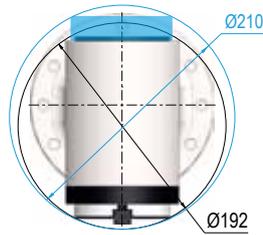
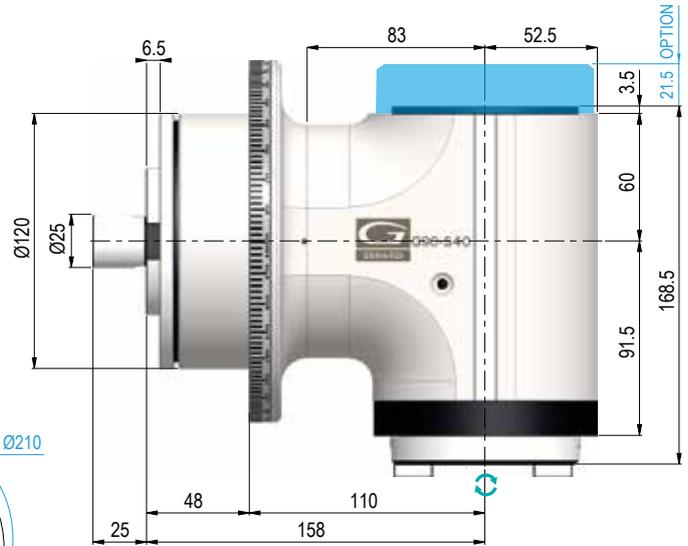
OUTPUT - HSK 40	€ 459
OUTPUT - Shell mill holder Ø27	€ 93
OUTPUT - ISO 30	€ 181
OUTPUT - C4	€ 495
DOUBLE OUTPUT - ER32 - ER20M	€ 351

### G90-S40

TYPE 4

Price:

€ 4.925



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 22



Rpm  
4.000



Ø26



N 1.800



M20



Nm 140



ISO/CAT  
/ BT40

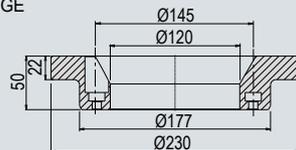


Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 4 (pag - page 1.95)



#### IMBALLO & PESO - PACK WEIGHT:

Cassa in Legno - Wooden Box 37Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

HIGH SPEED - 5000 Rpm - Internal coolant NO	€ 119
REFR. - COOLANT - dal Distr. - Through Distributor- Max 10bar - Dry running YES	€ 521
REFR. - COOLANT - dal Distr. - Through Distributor- Max 30bar - Dry running NO	€ 521

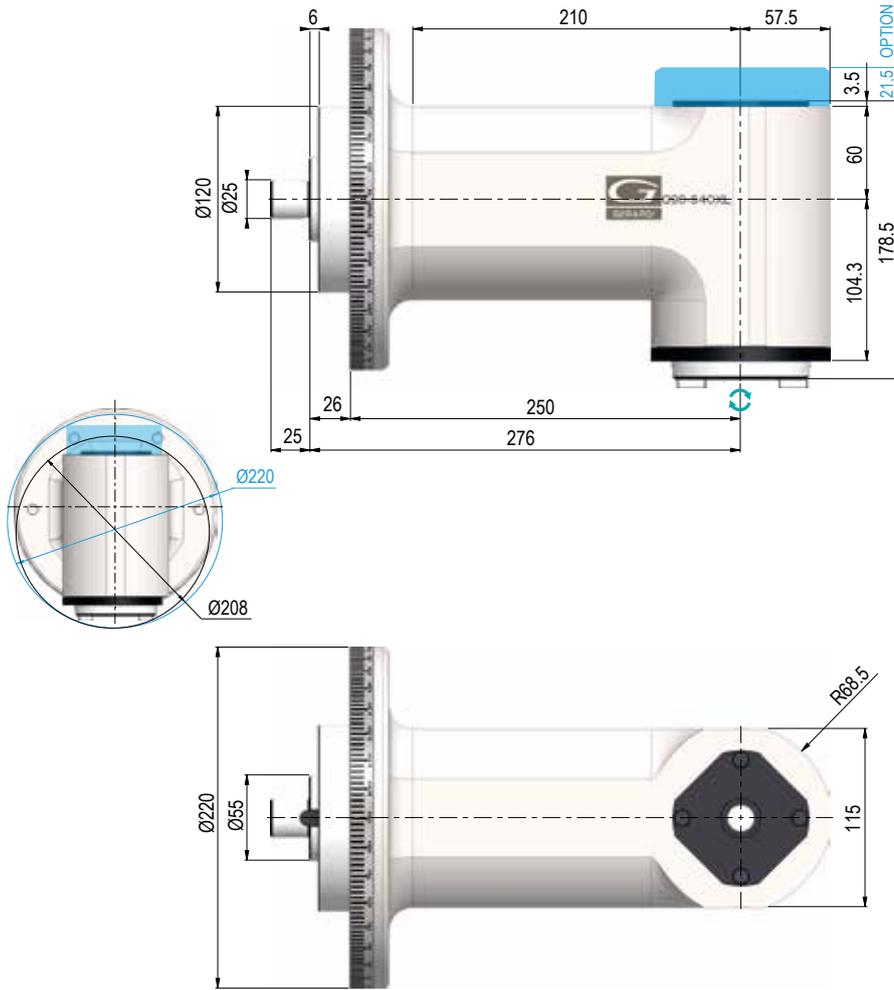
OUTPUT - HSK 63	€ 711
OUTPUT - C4	€ 495
OUTPUT - C5	€ 608

### G90-S40XL

TYPE 5

Price:

€ 4.728



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 32,5



Rpm  
4.000



Ø30



N 2.400



M22



Nm 140



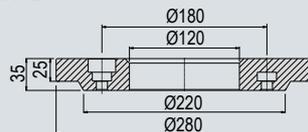
ISO/CAT / BT40

Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 5 (pag - page 1.95)



#### IMBALLO & PESO - PACK WEIGHT:

Cassa in Legno - Wooden Box 47Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio

Tubetto di grasso / Libro istruzioni

Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

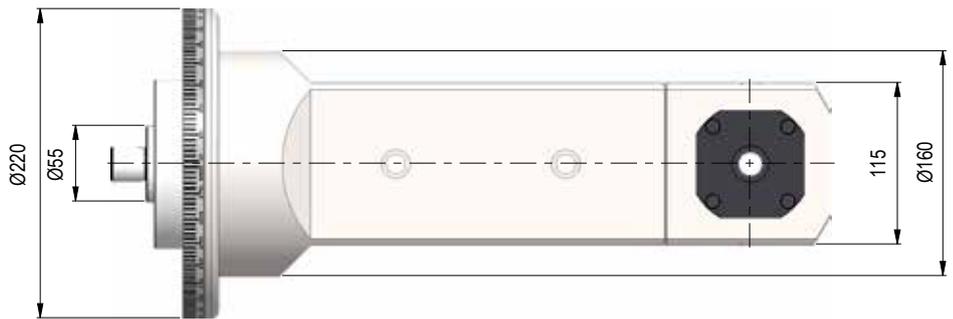
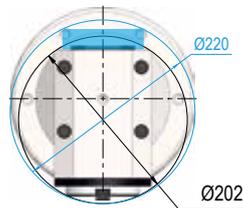
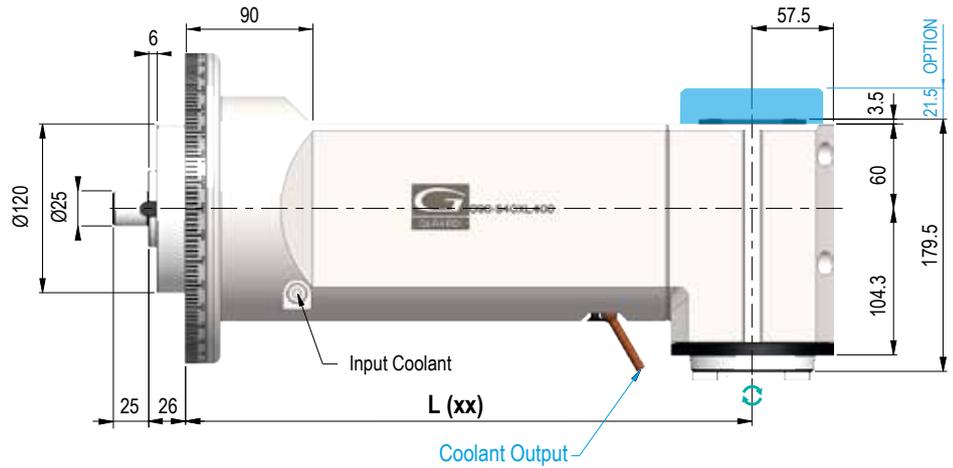
HIGH SPEED - 5000 Rpm - Internal coolant NO	€ 119
REFR. - COOLANT - dal Distr. - Through Distributor- Max 10bar - Dry running YES	€ 521
REFR. - COOLANT - dal Distr. - Through Distributor- Max 30bar - Dry running NO	€ 521

OUTPUT - HSK 63	€ 711
OUTPUT - C4	€ 495
OUTPUT - C5	€ 608

### G90-S40XL xx

TYPE 5

Lengths	.400	.500	.600	.700
Price:	<b>7.250</b>	<b>7.460</b>	<b>7.670</b>	<b>7.880</b>



#### Dati tecnici - Technical data



Ratio  
1:1



L400: Kg 57  
L500: Kg 67  
L600: Kg 78  
L700: Kg 86



Rpm  
4.000



Ø30



N 2.400



M22



Nm 140



ISO / CAT  
/ BT40

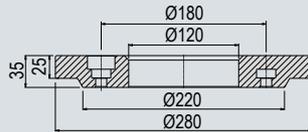


Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 5 (pag - page 1.95)



#### IMBALLO & PESO - PACK WEIGHT:

Cassa in Legno - Wooden Box Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

HIGH SPEED - 5000 Rpm - Internal coolant NO	€ 330
REFR. - COOLANT - dal Distr. - Through Distributor- Max 10bar - Dry running YES	€ 521
REFR. - COOLANT - dal Distr. - Through Distributor- Max 30bar - Dry running NO	€ 521

#### SPECIAL LENGHT

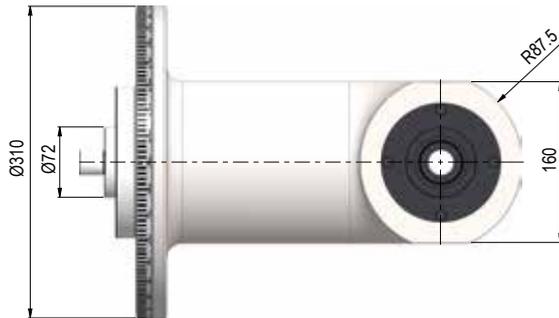
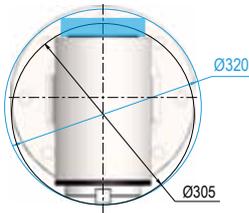
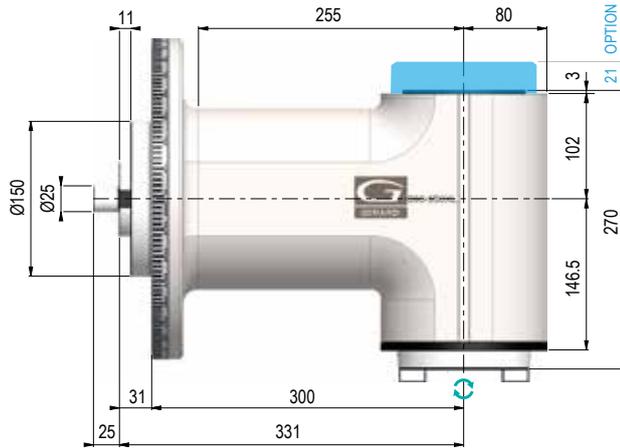
OUTPUT - HSK 63	On Req 711
OUTPUT - C4	495
OUTPUT - C5	608

### G90-S50

TYPE 6

Price:

€ 11.011



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 77



Rpm  
3.000



Ø45



N 3.300



M36



Nm 400



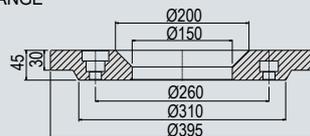
ISO / CAT  
/ BT50

Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 6 (pag - page 1.95)



#### IMBALLO & PESO - PACK WEIGHT:

Cassa in Legno - Wooden Box Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio

Tubetto di grasso / Libro istruzioni

Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

HIGH SPEED - 4000 Rpm - Internal coolant NO	€ 412
REFR. - COOLANT - dal Distr. - Through Distributor- Max 10bar - Dry running YES	€ 683
REFR. - COOLANT - dal Distr. - Through Distributor- Max 30bar - Dry running NO	€ 683

#### OUTPUT - HSK 63

€ 711

#### OUTPUT - C6

On Req

#### OUTPUT - C8

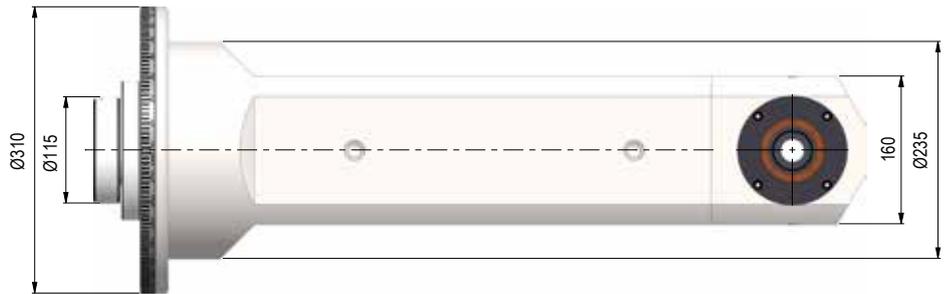
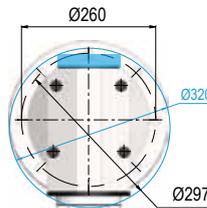
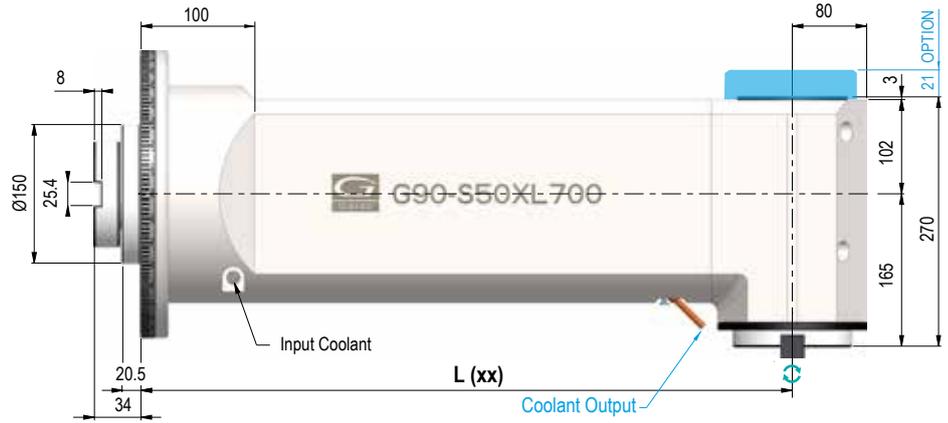
On Req

### G90-S50XL xx

TYPE 6

Lengths .400 .500 .600 .700 .800

Price: 13.133 13.658 14.184 14.709 15.234



#### Dati tecnici - Technical data



Ratio  
1:1



L400: Kg 149  
L500: Kg 169  
L600: Kg 190  
L700: Kg 211  
L700: Kg 231



Rpm  
3.000



Ø45



N 3.300



M36



Nm 400



ISO / CAT  
/ BT50

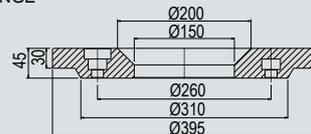


Senso di rotazione Uguaale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 6 (pag - page 1.95)



#### IMBALLO & PESO - PACK WEIGHT:

Cassa in Legno - Wooden Box Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

HIGH SPEED - 4000 Rpm	€ 485
REFR. - COOLANT - dal Distr. - Through Distributor- Max 10bar - Dry running YES	€ 683
REFR. - COOLANT - dal Distr. - Through Distributor - Max 30bar - Dry running NO	€ 683

#### SPECIAL LENGHT

OUTPUT - HSK 63	€ 670
OUTPUT - C6	On Req
OUTPUT - C8	On Req

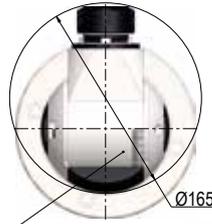
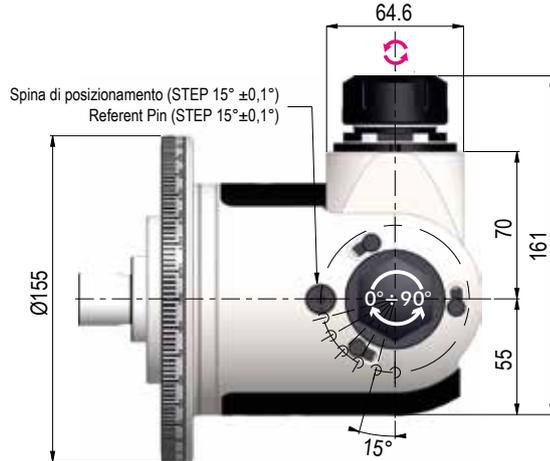


# GMU-20

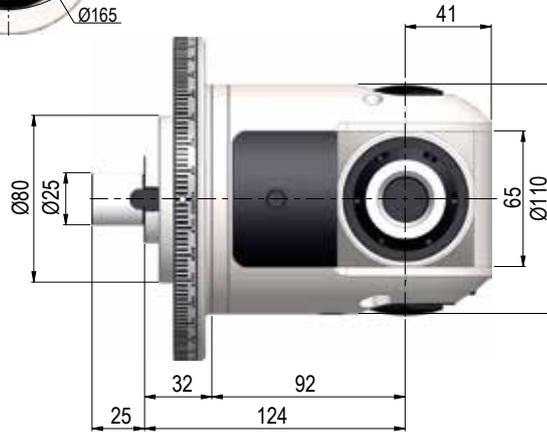
TYPE 2

Price:

€ 4.260



Scala Graduata  
Graduated degree



### Dati tecnici - Technical data



Ratio  
1:1



Kg 13



Rpm  
4.000



Ø20



N 715



M16



Nm 32



ER-32  
Ø2/20

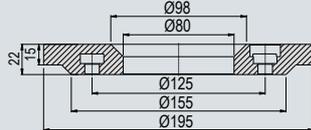


Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

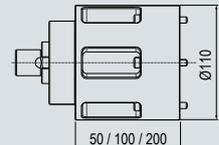
### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 2 (pag - page 1.95)



### PROLUNGA - EXTENSION

TIPO - TYPE 2



### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 18Kg



### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio

Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

### OPZIONI - OPTIONS

€

HIGH SPEED - 6000 Rpm

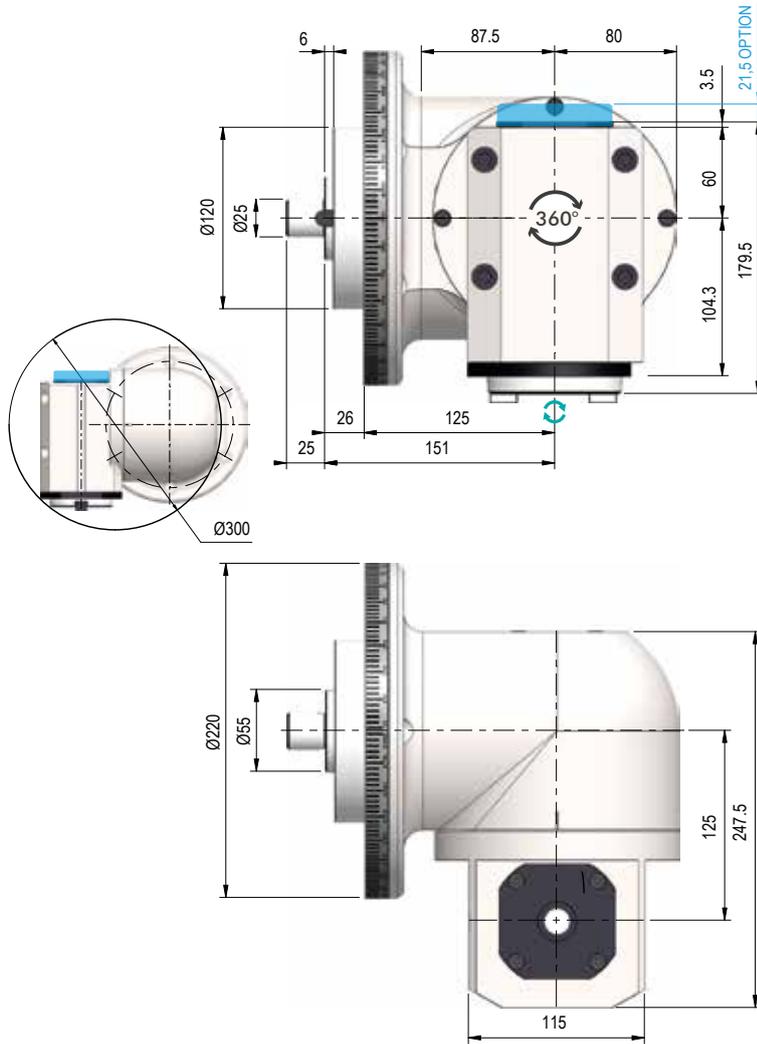
119

QUICK POSITIONING - Portafresa Toolholder Ø16

299

### GMU-S40-125 TYPE 6

Price: **€ 9.981**



#### Dati tecnici - Technical data

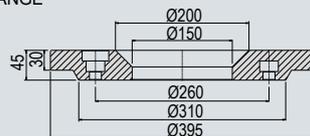
	Ratio 1:1		Kg 59,3
	Rpm 3.000		Ø30
	N 2.400		M22
	Nm 100		ISO / CAT / BT40

Senso di rotazione Contrario al mandrino - Direction of rotation Opposite to the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 6 (pag - page 1.95)



#### IMBALLO & PESO - PACK WEIGHT:

Cassa in Legno - Wooden Box Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio

Tubeetto di grasso / Libro istruzioni

Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

HIGH SPEED - 4000 Rpm	€ 330
REFR. - COOLANT - dal Distr. - Through Distributor - Max 10bar - Dry running YES	€ 521

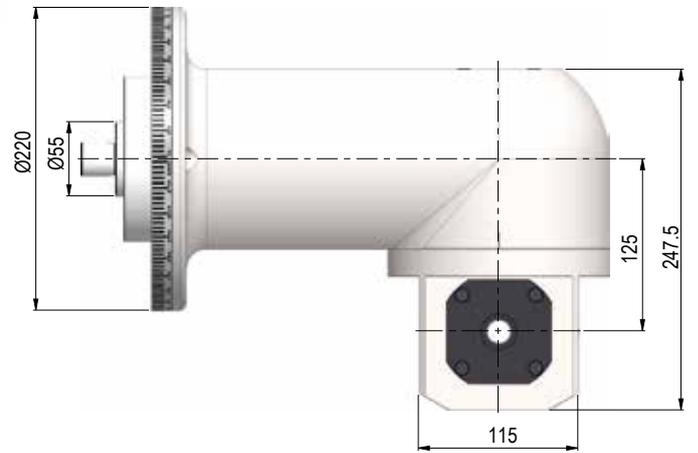
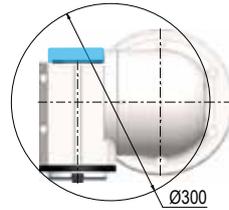
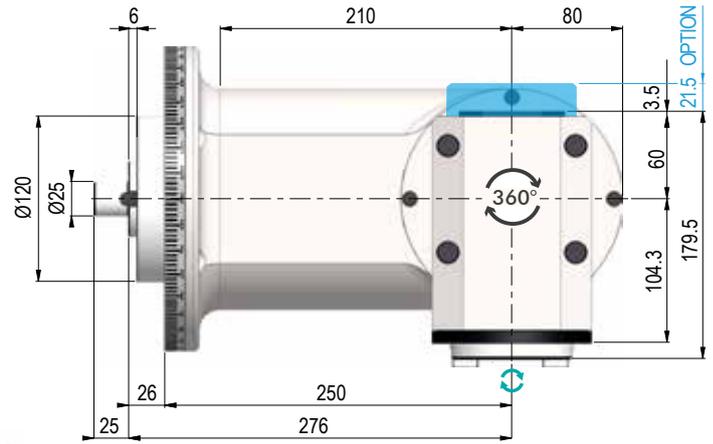
OUTPUT - HSK 63	€ 711
OUTPUT - C4	€ 495

### GMU-S40

TYPE 5

Price:

€ 8.119



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 49,5



Rpm  
3.000



Ø30



N 2.400



M22



Nm 100



ISO /CAT  
BT 40

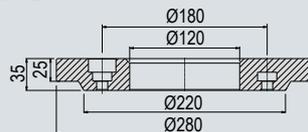


Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 5 (pag - page 1.95)



#### IMBALLO & PESO - PACK WEIGHT:

Cassa in Legno - Wooden Box Kg



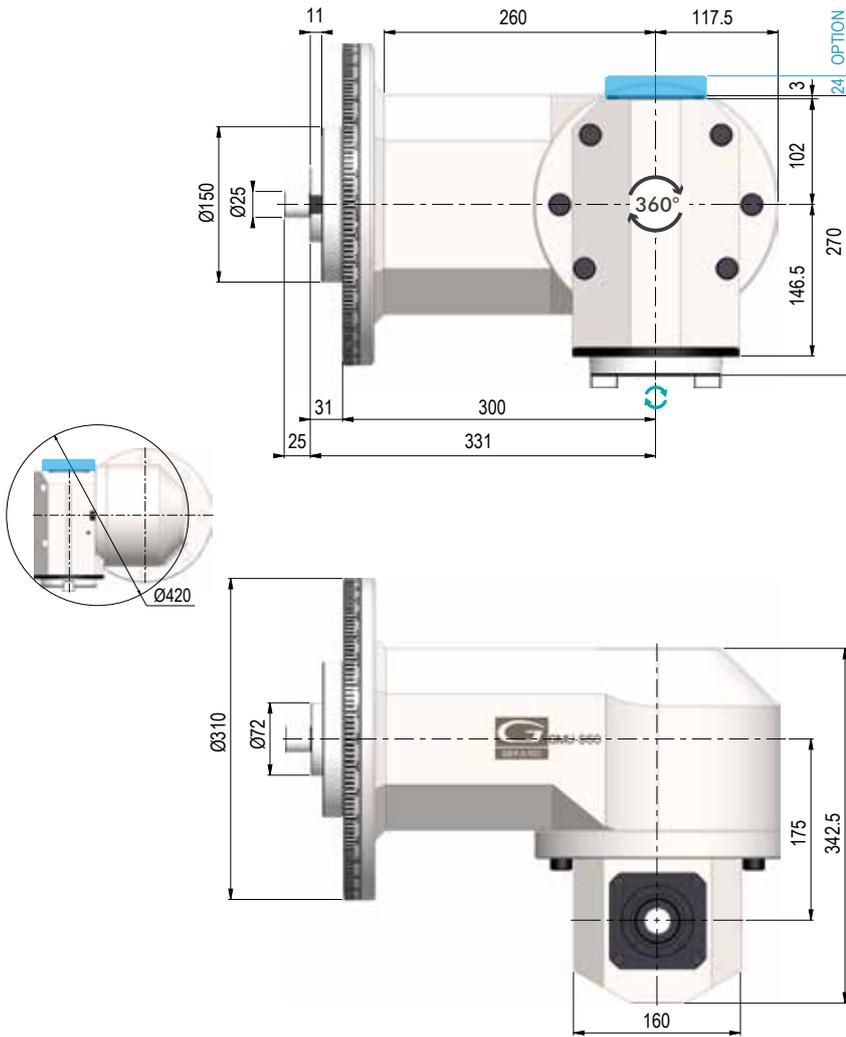
#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

HIGH SPEED - 4000 Rpm	€ 330
REFR. - COOLANT - dal Distr. - Through Distributor - Max 10bar - Dry running YES	€ 521

OUTPUT - HSK 63	€ 711
OUTPUT - C6	€ 495



### GMU-S50

TYPE 6

Price:

**€ 19.343**



#### Dati tecnici - Technical data



Ratio  
1:1



**Kg 121**



Rpm  
3.000



Ø45



N 3.300



M36



Nm 220



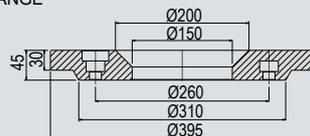
ISO / CAT / BT50

Senso di rotazione Uguale al mandrino - Direction of rotation Same as the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 6 (pag - page 1.95)



#### IMBALLO & PESO - PACK WEIGHT:

Cassa in Legno - Wooden Box Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio

Tube di grasso / Libro istruzioni

Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

HIGH SPEED - 4000 Rpm **€ 510**

REFR. - COOLANT - dal Distr. - Through Distributor - Max 10bar - Dry running YES **€ 683**

OUTPUT - HSK 63 **€ 711**

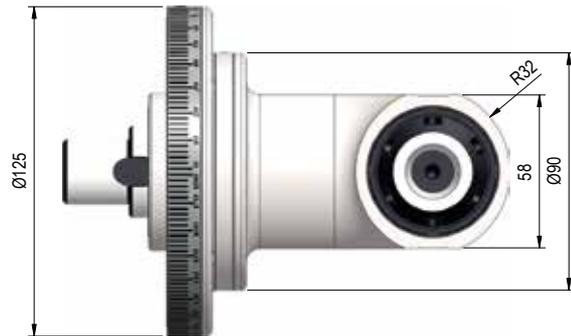
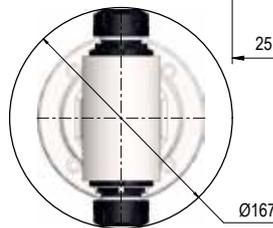
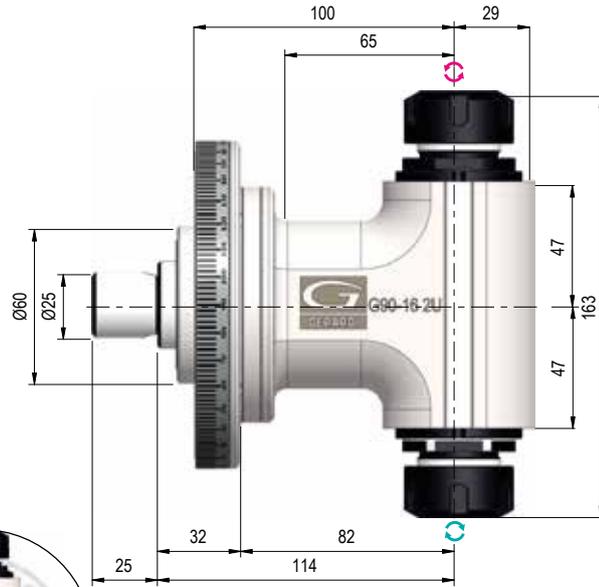
OUTPUT - C6 **€ 876**

### G90-16 2U

TYPE 1

Price:

€ 4.074



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 5,6



Rpm  
4.000



Ø16



N 510



M12



Nm 24



ER-25  
Ø1/16

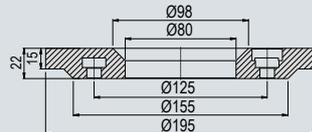


Senso di rotazione Ugual e Contrario al mandrino - Direction of rotation Same & Opposite to the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50		BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN2080	
	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Extra €	105	-	-	-	-	105	-	-	200	222	243	412	412	412	169	195

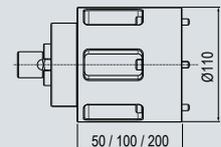
#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 2 (pag - page 1.95)



#### PROLUNGA - EXTENSION

TIPO - TYPE 2



#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 11Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio

Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

HIGH SPEED - 8000 Rpm

119

OUTPUT - Weldon Max Ø16 (X2)

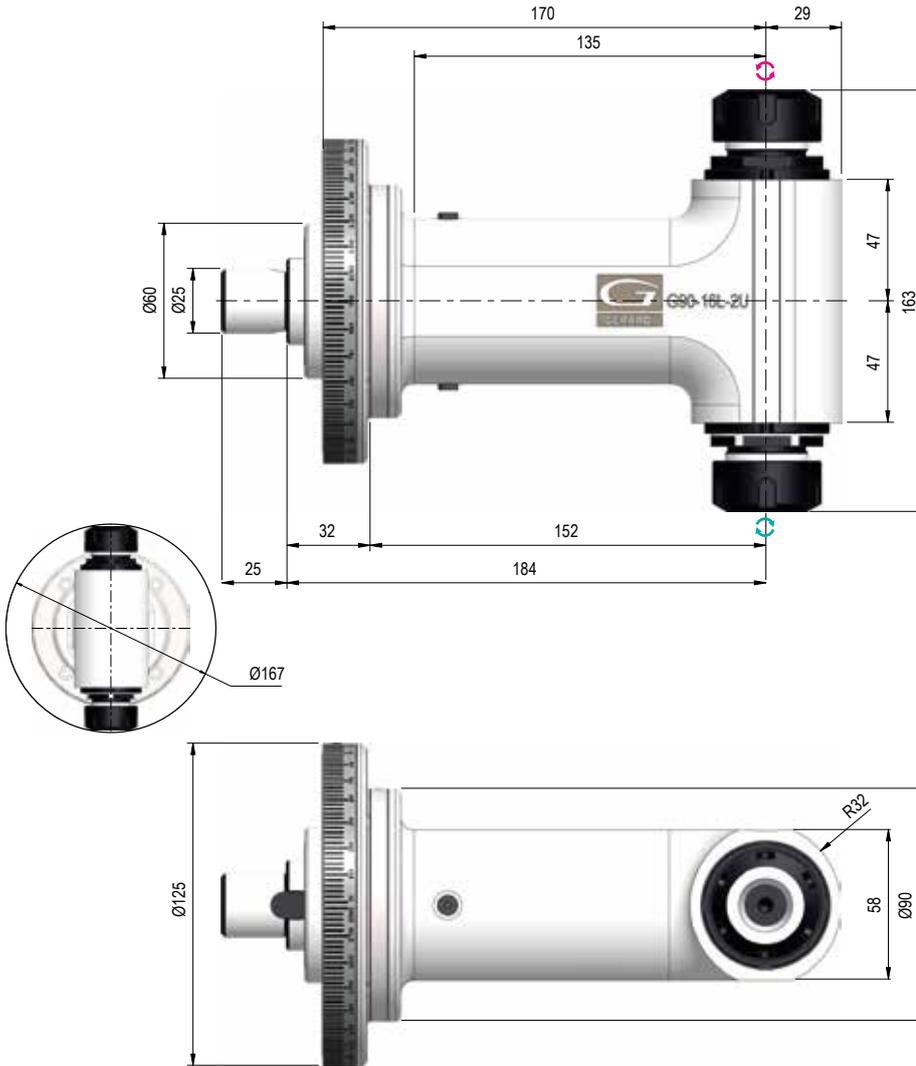
360

OUTPUT - HSK 32 (X2)

-

OUTPUT - Shell mill holder Ø16 (X2)

186



### G90-16L 2U

TYPE 1

Price:

€ 4.889



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 6,1



Rpm  
4.000



Ø16



N 510



M12



Nm 24



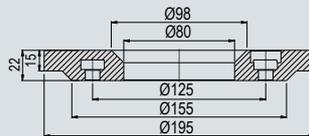
ER-25  
Ø1/16

Senso di rotazione Uguale e Contrario al mandrino - Direction of rotation Same & Opposite to the machine spindle

Coni - Shanks	SK DIN 69871			CAT ANSI B5.50		BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN2080	
	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Grandezza - Size	30	40	50	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Extra €	105	-	-	-	-	105	-	-	200	222	243	412	412	412	169	195

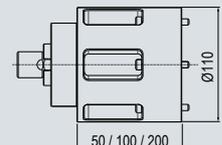
#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 2 (pag - page 1.95)



#### PROLUNGA - EXTENSION

TIPO - TYPE 2



#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 12Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio

Tubetto di grasso / Libro istruzioni

Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

HIGH SPEED - 8000 Rpm

119

OUTPUT - Weldon Max Ø16 (X2)

360

OUTPUT - HSK 32 (X2)

-

OUTPUT - Shell mill holder Ø16 (X2)

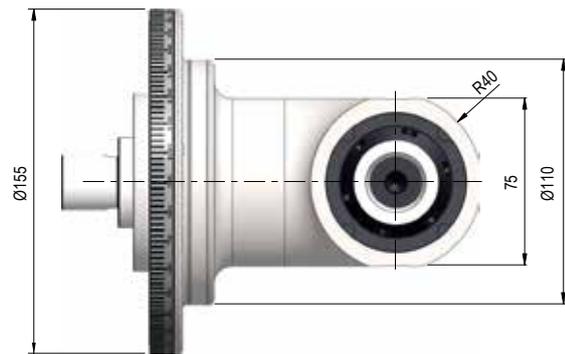
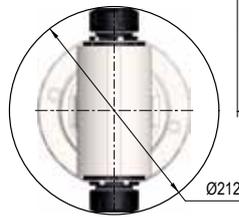
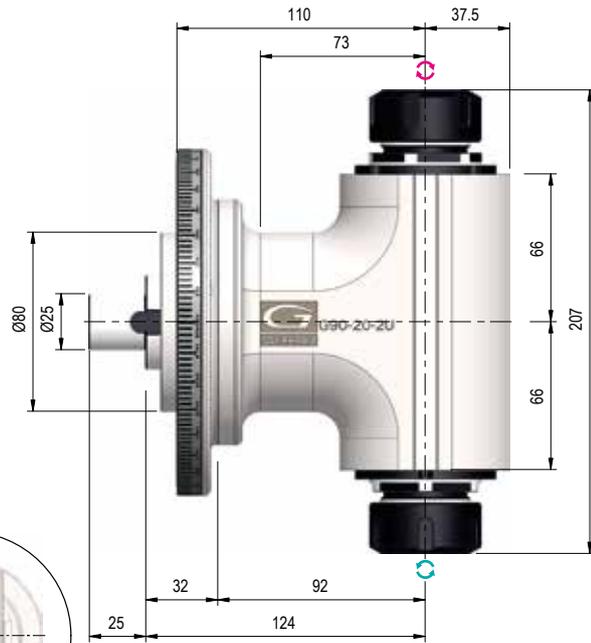
186

### G90-20 2U

TYPE 2

Price:

€ 4.305



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 14



Rpm  
4.000



Ø20



N 1.250



M16



Nm 40



ER-32  
Ø2/20

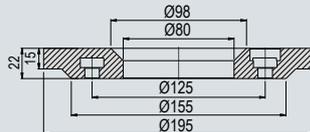


Senso di rotazione Ugual e Contrario al mandrino - Direction of rotation Same & Opposite to the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

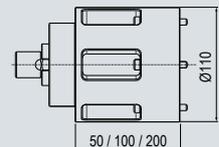
#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 2 (pag - page 1.95)



#### PROLUNGA - EXTENSION

TIPO - TYPE 2



#### IMBALLO & PESO - PACK WEIGHT:

Valigetta - Bag 21Kg



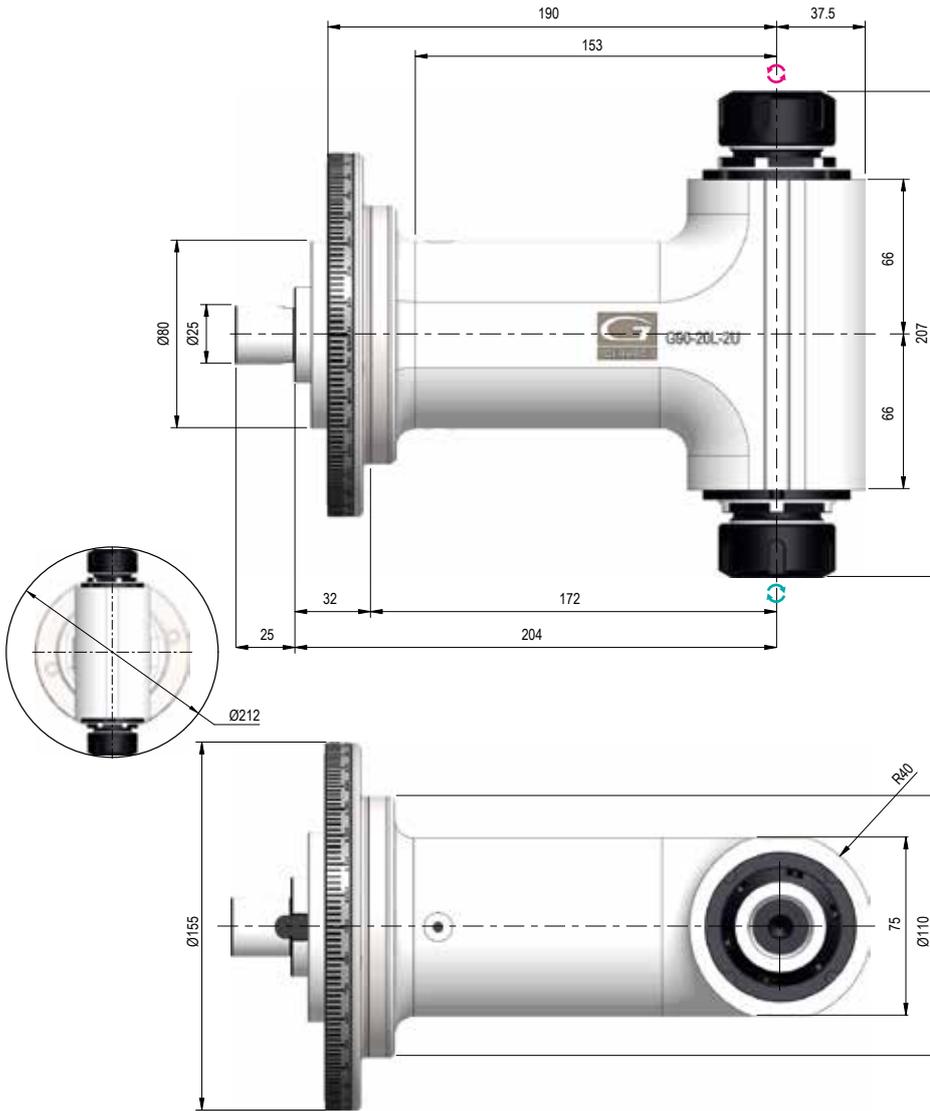
#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Valigetta / Stop block / Ghiera ER / Chiavi di servizio  
 Tubetto di grasso / Libro istruzioni  
 Special bag / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

HIGH SPEED - 6000 Rpm	119
OUTPUT - Weldon Max Ø20 (X2)	-
OUTPUT - HSK 40 (X2)	917
OUTPUT - Portafresa Toolholder Ø20 (X2)	186



### G90-20L 2U

TYPE 2

Price:

€ 5.171



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 15,5



Rpm  
4.000



Ø20



N 1.250



M16



Nm 40



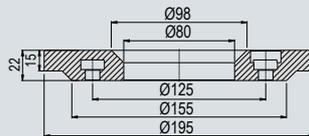
ER-32  
Ø2/20

Senso di rotazione Uguaale e Contrario al mandrino - Direction of rotation Same & Opposite to the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

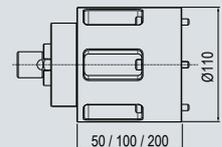
#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 2 (pag - page 1.95)



#### PROLUNGA - EXTENSION

TIPO - TYPE 2



#### IMBALLO & PESO - PACK WEIGHT:

Cassa in Legno - Wooden Box 31Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio

Tubetto di grasso / Libro istruzioni

Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

HIGH SPEED - 6000 Rpm

119

OUTPUT - Weldon Max Ø20 (X2)

-

OUTPUT - HSK 40 (X2)

917

OUTPUT - Shell mill holder Ø22 (X2)

186

### G90-30 2U

TYPE 3

Price:

€ 5.027



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 20



Rpm  
4.000



Ø30



N 1.750



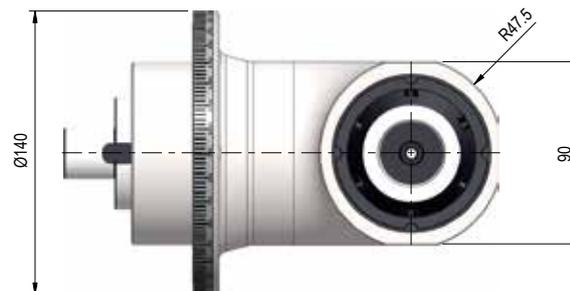
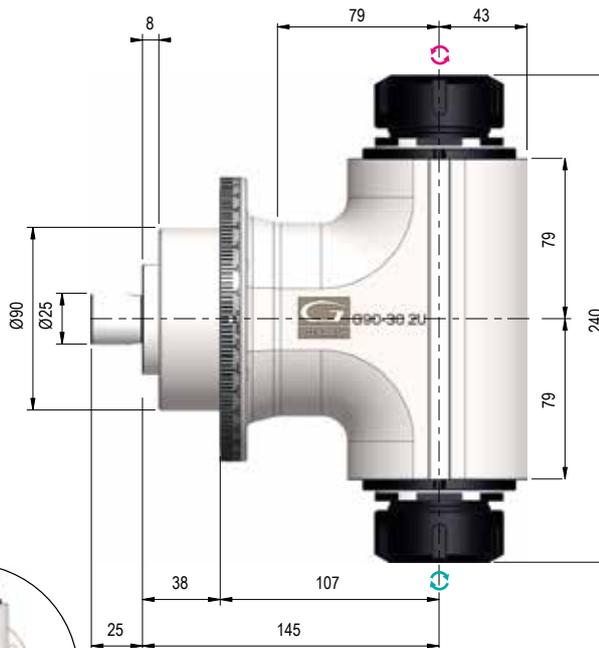
M20



Nm 75



ER-40  
Ø3/30

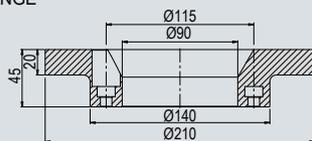


Senso di rotazione Ugual e Contrario al mandrino - Direction of rotation Same & Opposite to the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

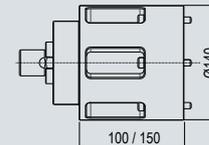
#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE

TIPO - TYPE 3 (pag - page 1.95)



#### PROLUNGA - EXTENSION

TIPO - TYPE 2



#### IMBALLO & PESO - PACK WEIGHT:

Cassa in Legno - Wooden Box 35Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

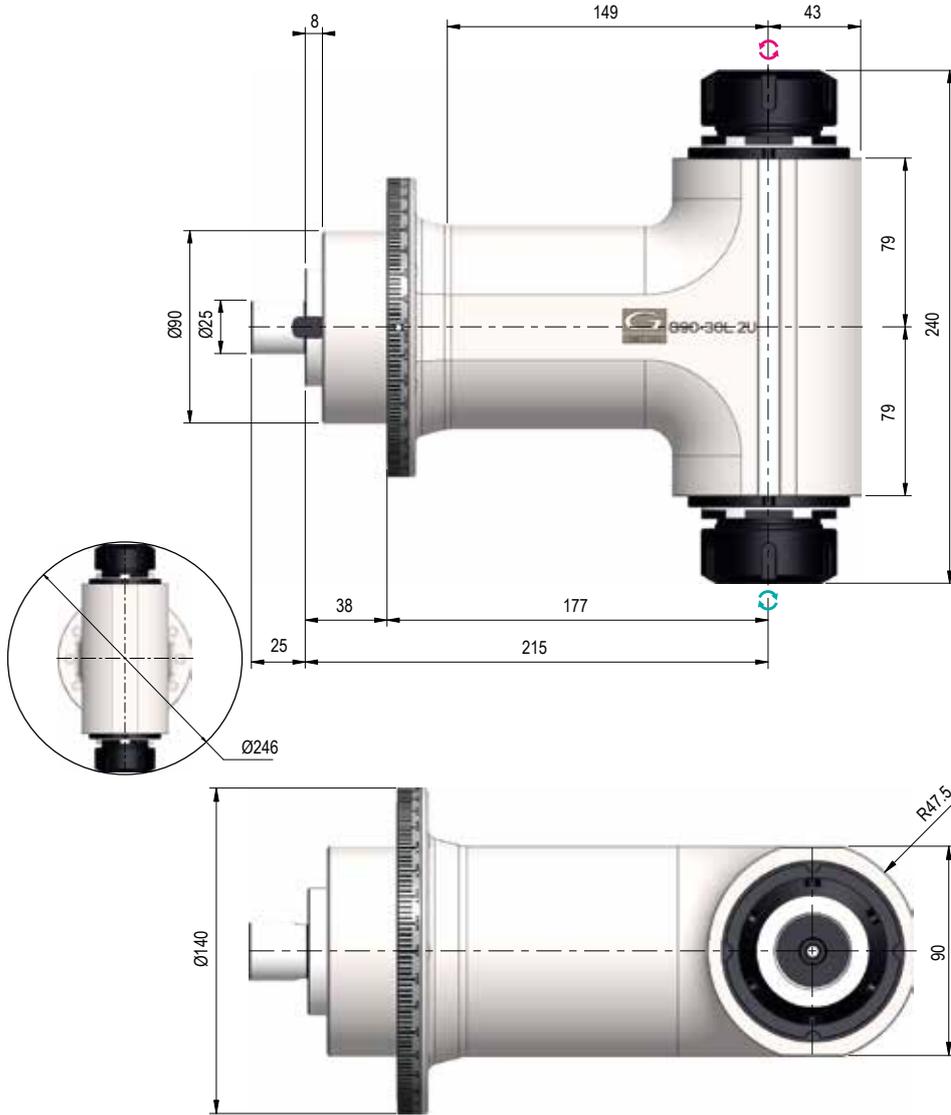
Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni

Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

HIGH SPEED - 6000 Rpm	119
OUTPUT - Weldon Max Ø25 (X2)	770
OUTPUT - HSK 40 (X2)	917
OUTPUT - Shell mill holder Ø27 (X2)	186



### G90-30L 2U

TYPE 3

Price:

€ 6.269



#### Dati tecnici - Technical data



Ratio  
1:1



Kg 23



Rpm  
4.000



Ø30



N 1.750



M20



Nm 75

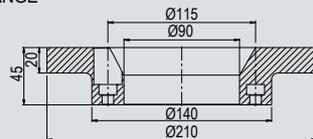


ER-40  
Ø3/30

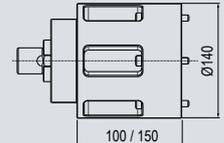
Senso di rotazione Uguale e Contrario al mandrino - Direction of rotation Same & Opposite to the machine spindle

Coni - Shanks	SK DIN 69871		CAT ANSI B5.50		BT MAS 403		HSK DIN 69893			C. ISO 26623			ISO DIN2080	
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Extra €	-	-	-	-	-	-	200	222	243	412	412	412	169	195

#### FLANGIA UNIVERSALE - UNIVERSAL FLANGE TIPO - TYPE 3 (pag - page 1.95)



#### PROLUNGA - EXTENSION TIPO - TYPE 2



#### IMBALLO & PESO - PACK WEIGHT: Cassa in Legno - Wooden Box 38Kg



#### DOTAZIONE STANDARD - STANDARD EQUIPMENT

Cassa in Legno / Stop block / Ghiera ER / Chiavi di servizio  
Tubetto di grasso / Libro istruzioni  
Wooden Box / Stop block / ER nut / Wrenches / Grease tube / Instruction book

#### OPZIONI - OPTIONS

€

HIGH SPEED - 6000 Rpm

119

OUTPUT - Weldon Max Ø25 (X2)

770

OUTPUT - HSK 40 (X2)

917

OUTPUT - Shell mill holder Ø27 (X2)

186

## Teste Angolari / Angle Heads

# ACCESSORIES

### Accessori Classic Line - Classic Line Accessories



Cambi rapidi Modulari  
Modular Quick Change

2.0



ReCool Nuts  
fino a / Up to  
150 Bar

from 1.10 to 1.52

#### SERIE ATC / ATC SERIES

E' la linea di teste adatte ai centri di lavoro, trasportabile automaticamente dal magazzino utensili al mandrino e viceversa. Corpo testa orientabile di 360° su ASSE MANDRINO. Quando la testa non è in posizione di lavoro, un sistema di aggancio impedisce la rotazione del cono rispetto al corpo testa. **Una caratteristica primaria delle teste Classic - ATC è l'albero centrale realizzato in un solo pezzo con il cono di attacco, per offrire la massima rigidità.** Recentissima novità è il perno di fermo intercambiabile.

This range of heads is designed to be used on machining centres and can be automatically transferred from the tool magazine to the machine spindle and back. Angle head body adjustable at 360° on SPINDLE AXIS. This allows easy adjustment of the drive taper and head relative to arrester block mounted on the front of the machining centres' spindle housing. When the head is unloaded from the machine spindle, a safety latch prevents the drive taper from rotating. **A major feature of the Classic ATC heads is the main input shaft which is integral with the drive taper to ensure maximum rigidity.** The last news is the interchangeable positioning pin.



from 1.55 to 1.81

#### SERIE MTC / MTC SERIES

E' la linea di teste adatte a macchine utensili tradizionali e da fissare al mandrino tramite flangiatura. La cava a "T" ricavata sulla flangia universale permette un facile posizionamento del corpo testa sui 360° intorno al suo asse verticale. Un sistema modulare componibile, rende possibile variare la lunghezza del corpo testa aggiungendo l'elemento di prolunga. Modulo di prolunga, coni e flangia universale sono modulari e quindi intercambiabili su tutti i corpi testa appartenenti allo stesso ordine di grandezza.

This is a range of heads for traditional machine tools with flange attachment. The T-slot on the universal flange facilitates positioning the head 360° around its vertical axis. The modular system makes it possible to extend the length of the body by adding a spacer. The extension spacer, drive tapers and universal flange are modular and therefore interchangeable among all the heads of similar size.



Prolunga / Extension



#### Stop-block per ATC Stop-block for ATC

Stop-block antirotazione con bussola cementata e guarnizione per una maggiore precisione di posizionamento.

Antirotation Stop-Block with case hardened bushing and gasket for accuracy positioning.



#### Pinze ER ER Collets

Pinze ER, pinze biconiche realizzate in acciaio e adatte al serraggio di utensili secondo normativa DIN 6499

ER Collets, steel biconical collets for tool clamping according to DIN6499 regulation.



#### Ghiere ReCool Re Cool nuts

Con queste ghiere speciali è possibile ottenere il passaggio refrigerante fino a 150BAR tramite utensile anche su teste che non prevedono questa opzione

With these special nuts it is possible to get coolant through the tool (Up to 150BAR) even on angle heads which do not have this option.



#### Cambi Rapidi Quick changes

Il cambio rapido dell'utensile permette di ridurre i tempi morti della macchina. Tempi di installazione ridotti e possibilità di presetting a bordo macchina.

The quick change of preset tools shortens downtime of machine. Reduced set-up times and offline tool presetting possibility.

Ampia gamma di accessori e parti di ricambio per tutta la gamma di teste angolari Classic. Le ghiera e le pinze sono costruite in acciaio temprato e rettificato con macchine utensili ad alta precisione.

Wide range of accessories and spare parts for all types of angle heads classic line. Nuts and collet are produced with top quality steel and they are hardened and grinded with high precision.



SCAN IT TO WATCH THE



VIDEO PRESENTATION



*Un'ampia gamma di accessori!*  
*Wide range of accessories!*

**Prolunghe per MTC**  
Extensions for MTC

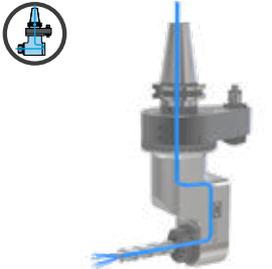


La cava a "T", ricavata sulla flangia universale, permette un facile posizionamento del corpo testa sui 360° intorno al suo asse verticale. Un sistema modulare componibile, rende possibile variare la lunghezza del corpo testa aggiungendo l'elemento di \*prolunga (Opzionale). Max 2 elementi.

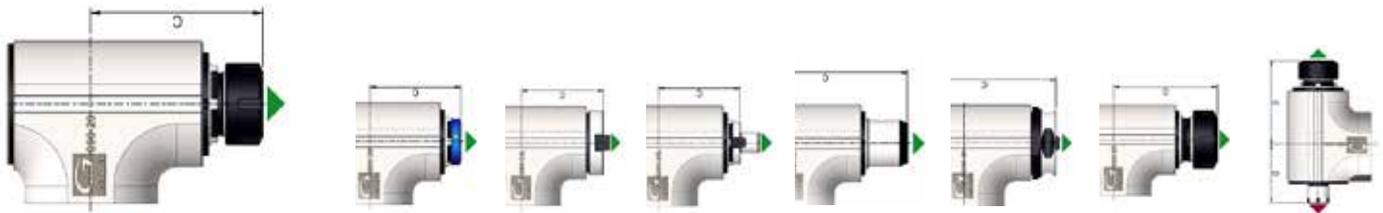
The T-slot on the universal flange facilitates the positioning the head 360° around its vertical axis. The modular system makes it possible to extend the length of the body by adding a \*extension (Optional). Max. 2 extensions admitted.



# OPZIONE REFRIGERANTE INTERNO INTERNAL COOLANT OPTION

10bar	Opzione B - B Option 10bar	Opzione RI - RI Option UP TO 70bar	Opzione Re-Cool - Re-Cool Option UP TO 150bar
 <p><b>Perno » Utensile</b> Positioning Pin » Tool</p>	 <p><b>Perno » Distributore » Utensile</b> Positioning Pin » Rotating Distributor » Tool</p>	 <p><b>Cono » Distributore » Utensile</b> Shank » Rotating Distributor » Tool</p>	 <p><b>Perno » Ghiera ReCool » Utensile</b> Positioning Pin » ReCool Nut » Tool</p>
<p><b>Passaggio refrigerante esterno all'utensile 10bar</b> External coolant 10bar through the tool</p>	<p><b>Passaggio refrigerante interno all'utensile 10bar dal perno attraverso distributore rotante</b> Internal coolant 10bar through the tool from positioning pin and through rotating distributor</p>	<p><b>Passaggio refrigerante interno all'utensile da 30 a 70 bar dal cono e attraverso il distributore rotante</b> Internal coolant through the tool from 30 to 70 bar from the shank and through the rotating distributor</p>	<p><b>Passaggio refrigerante interno l'utensile per mezzo della ghiera ReCool.</b> Internal coolant through the tool from the special nut ReCool</p>
<p><b>ROTAZIONE A SECCO - DRY RUNNING POSSIBILE - POSSIBLE</b></p>	<p><b>ROTAZIONE A SECCO - DRY RUNNING POSSIBILE - POSSIBLE</b></p>	<p><b>ROTAZIONE A SECCO - DRY RUNNING NON POSSIBILE - NOT POSSIBLE</b></p>	<p><b>Vedi pagine - See Pages 7.16 - 7.18</b></p>

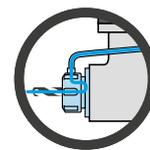
# OPZIONI DI USCITA TESTE ANGOLARI ATC OUTPUT OPTIONS ANGLE HEADS ATC



MODELLO	USCITA STD		HSK		ISO - CAT - BT		PORTAFRESA		WELDON		CAPTO		ER OPZIONE		DOPPIA	
	TIPO	C	TIPO	C	TIPO	C	TIPO	C	TIPO	C	TIPO	C	TIPO	C	TIPO	D
G90-5 / 5L	ER-8	32,5	-	-	-	-	-	-	Ø6	31	-	-	-	-	-	-
GL90-7 // G90-7 / 7L	ER-11	38	-	-	-	-	-	-	Ø8	36,3	-	-	-	-	ER-11 ER-8 MINI	34,2
GL90-10 // G90-10 / 10L / 10L.240	ER-16	49,5	-	-	-	-	Ø16	50	Ø10	63	-	-	-	-	ER-16 ER-11 MINI	45,5
GTU-10	ER-16	49,5	-	-	-	-	Ø16	50	Ø10	63	-	-	ER-20	63	ER-16 ER-11 MINI	45,5
GL90-16 // G90-16 / 16L 16L.270 // G90-16 2U / 16L 2U	ER-25	81,5	32	75,5	-	-	Ø16	63,5	Ø16	75	-	-	-	-	ER-25 ER-16 MINI	58,5
G90-20 / 20L / 20L.332 G90-20 2U / 20L 2U	ER-32	103,5	40	86,5	SK30	83,5	Ø22	83	Ø20	111	C4	90	ER-40	111	ER-32 ER-20 MINI	72,5
G90-30 / 30L / 30L.287 G90-30 2U / 30L 2U	ER-40	120	40	100	SK30	96,5	Ø27	101	Ø25	147	C4	95,5	*	*	ER-40 ER-25 MINI	82
G90-S40 / S40L / S40L.280	SK40	105	63	130	-	-	Ø27	132	Ø25	152	C4/C5	103 103	-	-	-	-

# RE COOL NUTS

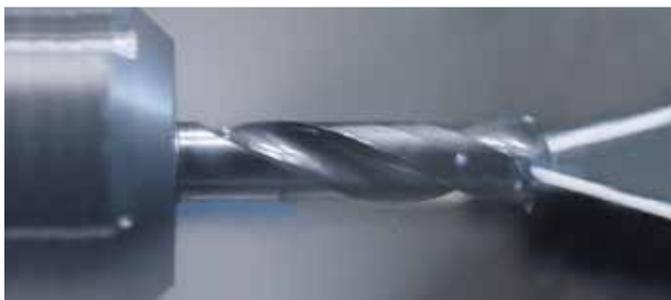
NEW  
2024



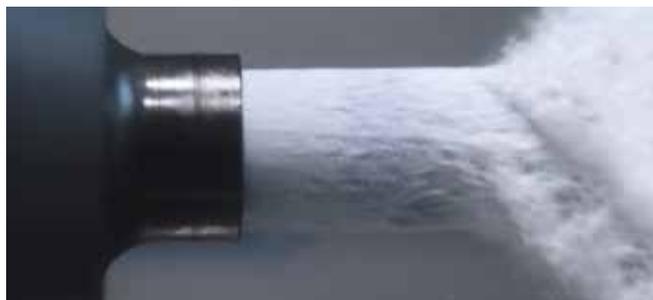
1

## DISCHETTI A TENUTA STAGNA PER GHIERE - SEALING DISKS FOR NUTS

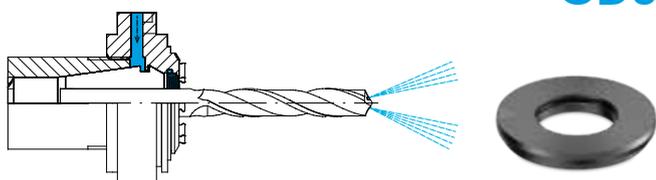
### REFRIGERAZIONE INTERNA - INTERNAL COOLANT



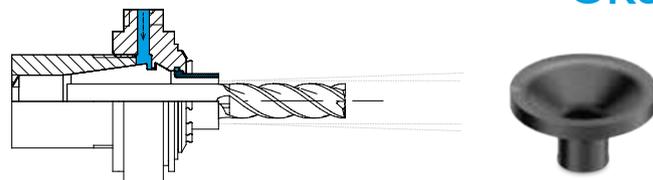
### REFRIGERAZIONE PERIFERICA - PERIPHERAL COOLANT



DISCHETTO A TENUTA STAGNA - SEALING DISK **GDS**



DISCHETTO PER REFRIGERAZIONE - FLUSH DISK **GKS**



### CARATTERISTICHE PRINCIPALI - KEY FEATURES

- Facile aggiunta della lubrorefrigerazione interna con Ghiera ReCool, con il dischetto a tenuta stagna GDS
- Precisa refrigerazione del tagliente e migliore asportazione di truciolo
- Ideale soprattutto per elevate profondità
- Lubrificazione e refrigerazione del tagliente
- Ottima finitura superficiale

- Achieve internal cooling with ReCool nuts and the use of our sealing disk GDS
- Precise cooling at the cutting edge and improved chip removal
- Particularly suitable for deep cavities
- Lubrication of cutting edge and cooling
- Best surface quality

### CARATTERISTICHE PRINCIPALI - KEY FEATURES

- Facile aggiunta della lubrorefrigerazione periferica con Ghiera ReCool, con il dischetto per refrigerazione GKS
- Applicabile su teste e motorizzati con refrigerante interno con apposita ghiera STDC - MINIC - AXC
- Lubrorefrigerante lungo l'utensile fino al tagliente
- Ideale per profondità medie

- Achieve peripheral cooling with ReCool nuts and the use of our coolant flush disk GKS
- Applicable on Angle Heads and Driven Tools with internal coolant through suitable nut STDC - MINIC - AXC
- Coolant is fed along the side of the tool to the cutting edge
- Can be used for moderate cavities



APPLICAZIONE RAPIDA E FACILE DELLA REFRIGERAZIONE INTERNA DALL'ESTERNO  
REASONABLE, FAST AND EASY CONVERSION TO INTERNAL COOLING

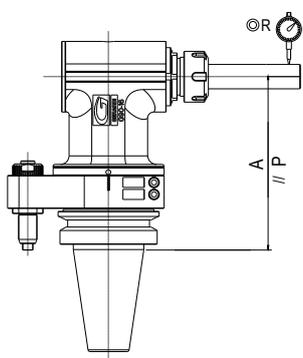
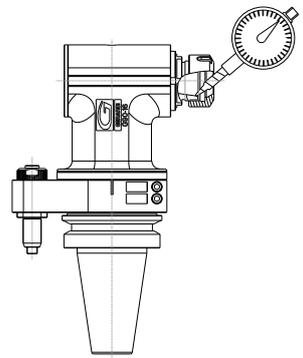
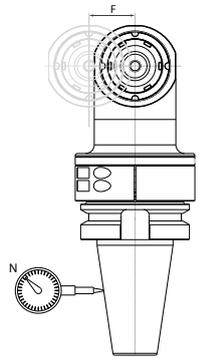
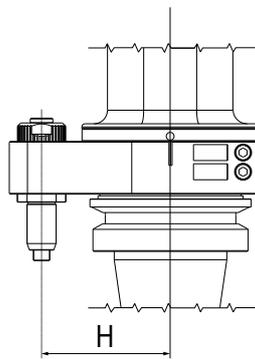
Per maggiori informazioni vedi da pagina 7.16 - 7.18 - See from page 7.16 to 7.18

1

# ESEMPIO SCHEDA DI COLLAUDO

## INSPECTION SHEET EXAMPLE

<b>Tipo - Type</b>	G90-16 ATC
<b>Codice - Code</b>	9.G90.16000
<b>Numero seriale - Serial number</b>	18-011
<b>Attacco cono - Input shank</b>	CAT50 - H=80
<b>Note speciali - Special notes</b>	

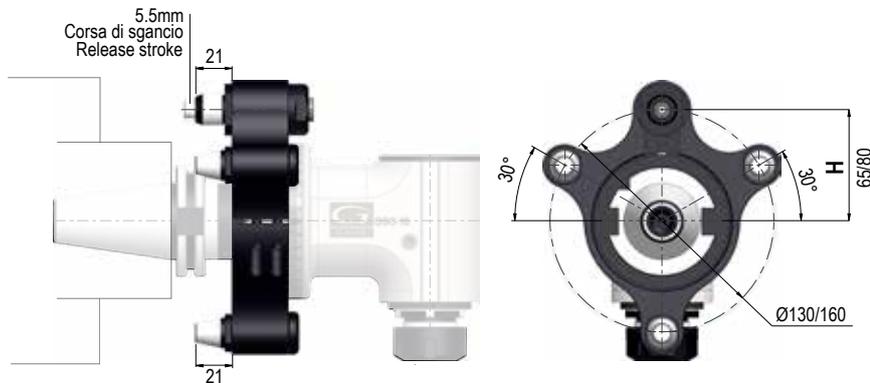
TIPO DI CONTROLLO Test type	RAFFIGURAZIONE Drawing	ERRORE Error	TIPO DI CONTROLLO Test type	RAFFIGURAZIONE Drawing	ERRORE Error
<p><b>Quota e parallelismo da filo cono ad asse principale. Oscillazione asse utensile.</b></p> <p>Height and parallelism from gauge line to main axis. Runout cutter axis.</p>		<p><b>Ammesso</b> Allowed A= ±0,03 R=±0,025 P=±0,015/100</p>	<p><b>Oscillazione mandrino porta utensile.</b></p> <p>Runout in cutter spindle.</p>		<p><b>Ammesso</b> Allowed 0,010</p>
		<p><b>Rilevato</b> Checked</p>			<p><b>Rilevato</b> Checked</p>
		<p>A = +0,010</p>			<p>0,008</p>
		<p>R = 0,015</p>			
<p><b>Concentricità tra cono e asse principale. Disassamento tra gli assi principali.</b></p> <p>Concentricity between shank and main axis. offset between main axis</p>		<p><b>Ammesso</b> Allowed F= ±0,02 N=±0,02</p>	<p><b>Interasse cono-perno di posizionamento.</b></p> <p>Pitch shank-positioning pin.</p>		<p><b>Ammesso</b> Allowed 0,010</p>
		<p><b>Rilevato</b> Checked</p>			<p><b>Rilevato</b> Checked</p>
		<p>F = 0,010</p>			<p>-0,010</p>
		<p>N = 0,016</p>			

### RODAGGIO TESTA - RUN-IN

RPM in entrata RPM	Durata Time	Temperatura Ambiente Room Temperature	Temperatura Sonda Sensor Temperature	Note Notes
1000	00:10:00	22°	27°	
2000	00:10:00		32°	
3000	00:05:00		36°	
4000	00:05:00		42°	
5000				
6000				

Revisioni - Revisions	Timbro - Stamp	Data - Date
		Firma - Signature

# SISTEMA ANTIROTANTE MULTIPOINT MULTIPOINT ANTIROTATION SYSTEM



## TYPE 1

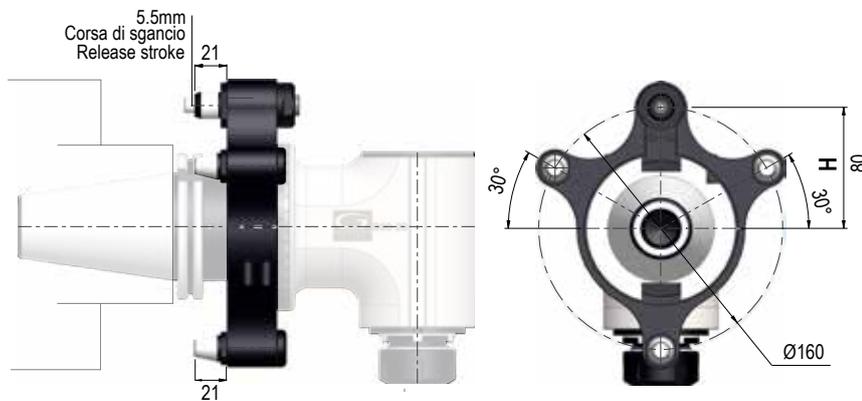
Code 9.G90.16T00/...\*

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

**Prezzo Extra €**  
**Extra Price €** 1.999

**Solo flangia**  
Only flange\*\* **A richiesta**  
On request

\*\*In caso di acquisto contestuale alla testa angolare  
In case of purchase together with angle head



## TYPE 2

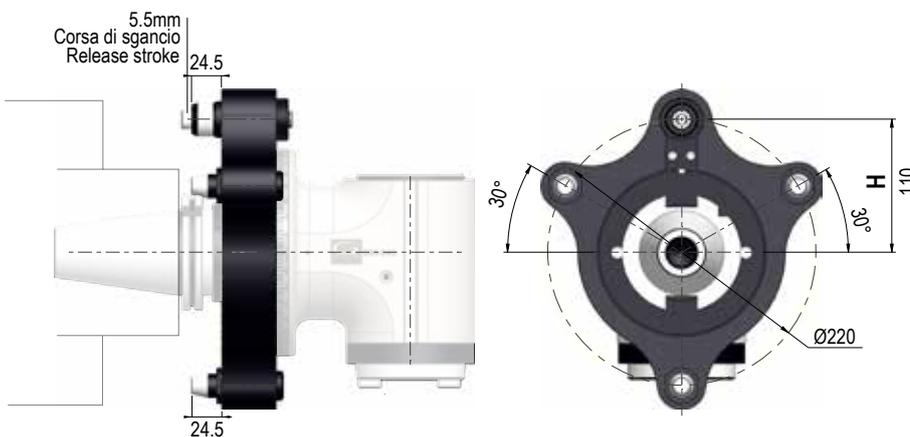
Code 9.G90.20T00/...\*

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

**Prezzo Extra €**  
**Extra Price €** 2.236

**Solo flangia**  
Only flange\*\* **A richiesta**  
On request

\*\*In caso di acquisto contestuale alla testa angolare  
In case of purchase together with angle head



## TYPE 3/4

Code 9.G90.30T00/...\*

Code 9.G90.S40T0/...\*

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

**Prezzo Extra €**  
**Extra Price €** 2.462

**Solo flangia**  
Only flange\*\* **A richiesta**  
On request

\*\*In caso di acquisto contestuale alla testa angolare  
In case of purchase together with angle head



Il sistema antirotante MULTIPOINT è composto da 4 punti d'appoggio di cui uno standard e tre supplementari ed è stato studiato per i seguenti motivi:

- Garantire una rigidità superiore allo standard
- Poter eseguire lavorazioni pesanti
- Annullare ogni tipo di vibrazione
- Applicabile ad ogni tipo di mandrino macchina

The anti-rotation MULTIPOINT system is made of 4 brace points (one standard and 3 additional) for:

- Granting a higher than standard rigidity
- Allowing heavy duty machining
- Avoiding any type of vibration
- Mounting on any type of machine spindle



\* In fase di ordine specificare tipo di cono e grandezza - In case of order specify shank type and size

1

## ESEMPIO DI MONTAGGIO SERIES ATC ATC SERIES MOUNTING EXAMPLE

PER UN CORRETTO ORDINE VERIFICARE L'IDONEITÀ DEL PERNO DI POSIZIONAMENTO  
FOR A RIGHT PURCHASE ORDER CHECK THE POSITIONING PIN SUITABILITY

### 1) STOP-BLOCK GIÀ PRESENTE SUL MANDRINO MACCHINA

- Per Stop-block Gerardi è sufficiente indicare il tipo di testa, interasse H, diametro perno ed altezza perno
- In caso di Stop-block NON Gerardi, inviateci il disegno del suddetto e del mandrino macchina per determinare il perno. Se possibile si consiglia di smontare lo stop block presente e di utilizzare il nostro standard.

### STOP-BLOCK ALREADY MOUNTED ON THE MACHINE SPINDLE

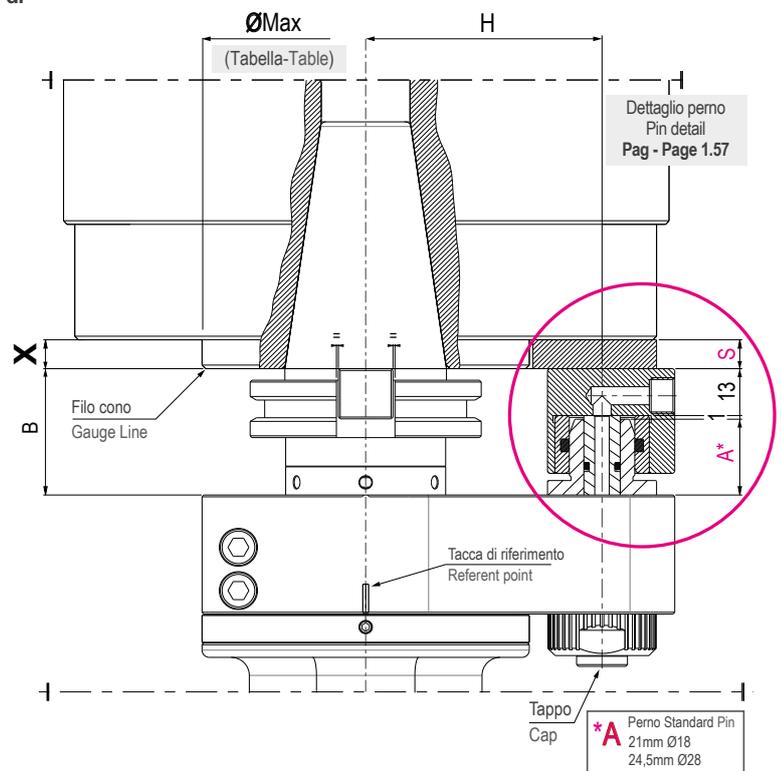
- For Gerardi items, please indicate the type of Angle Head, the H dimension, the pin diameter and height.
- For non-Gerardi items, please send us the stop-block and the machine spindle drawings in order to design the right pin. If possible, we suggest you to use Gerardi standard stop block, taking off the one already placed on the machine.

### 2) NESSUNO STOP-BLOCK MONTATO SUL MANDRINO MACCHINA

Rilevare la quota X sul mandrino della macchina e mediante la seguente formula calcolare lo spessore del distanziale. In caso di spessori inferiori a 8 mm è possibile richiedere un apposito stop-block con base lavorabile (Pag. 1.91)

### NO STOP-BLOCK MOUNTED ON THE MACHINE SPINDLE

Please check the X dimension on the machine spindle and calculate the width of the spacer through the following formula. In case of widths of less than 8 mm, a special stop block with machineable base can be ordered (Pag. 1.91)



$$S=X+B-35$$

Se sei in possesso di una testa angolare con perno Ø18

If you have an Angle Head with pin Ø18

$$S=X+B-38,5$$

Se sei in possesso di una testa angolare con perno Ø28

If you have an Angle Head with pin Ø28

X	B
12mm	35mm (SK40)
$S = X (12) + B (35) - 35 = 12$	

Esempio di calcolo spessore distanziale

Example of calculation for spacer thickness

# ESEMPIO DI MONTAGGIO SERIE ATC

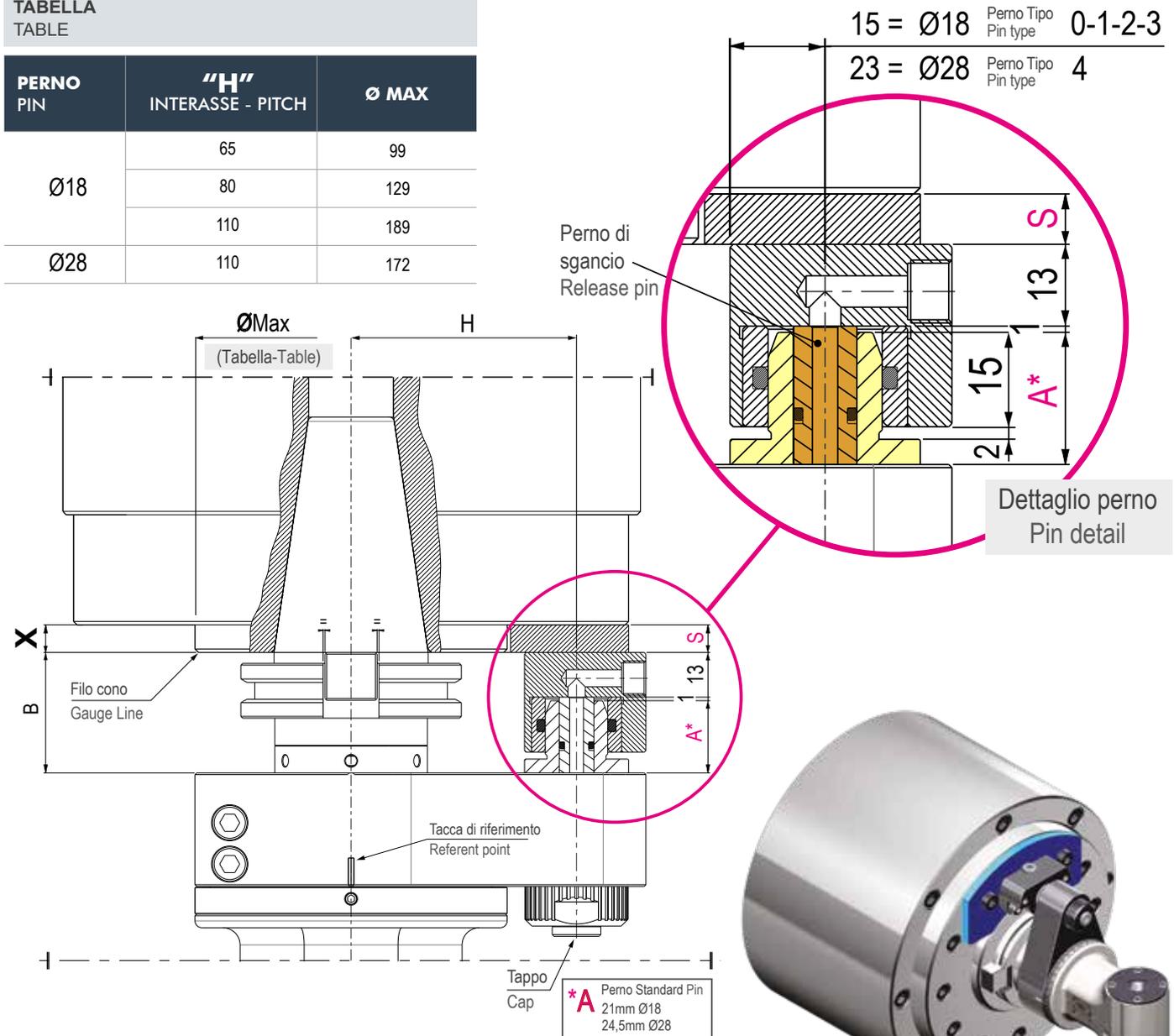
## ATC SERIES MOUNTING EXAMPLE

PER UN CORRETTO ORDINE VERIFICARE L'IDONEITA' DELL'INTERASSE "H"  
FOR A RIGHT PURCHASE ORDER CHECK PITCH "H" SUITABILITY

Verificare l'idoneità dell'interasse "H" tramite tabella - Check pitch "H" through table

TABELLA  
TABLE

PERNO PIN	"H" INTERASSE - PITCH	Ø MAX
Ø18	65	99
	80	129
	110	189
Ø28	110	172



### ATTENZIONE - ATTENTION

Il distanziale per il posizionamento dello stop-block, deve essere realizzato di uno spessore tale da comprimere il perno di sgancio NON per l'intera corsa, ma in modo da lasciare sempre 1mm di gioco.

I calcoli della pagina precedente sono già fatti in tal senso.

The spacer for the stop-block must be done in order to push the release pin NOT for the whole stroke release, but leaving always 1mm play. Previous page calculations are already considering this issue.

## STOP-BLOCK Standard

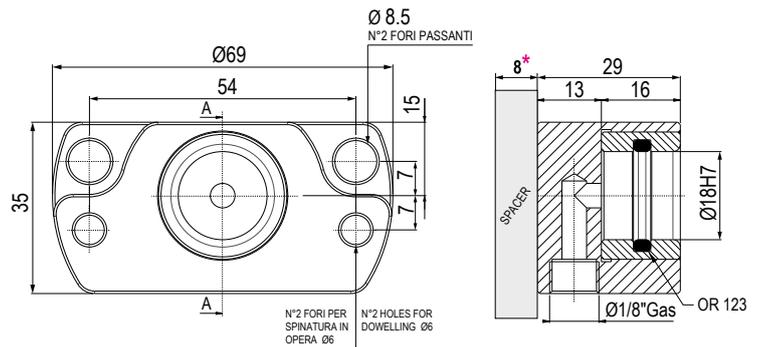


Ø18

Con bussola temprata - with hardened bushing

STOP BLOCK Code	€
9.INDEX.18	165
NO STOP BLOCK INCLUDED	-80

BUSHING Code	€
9.G18.INDEX.2	21

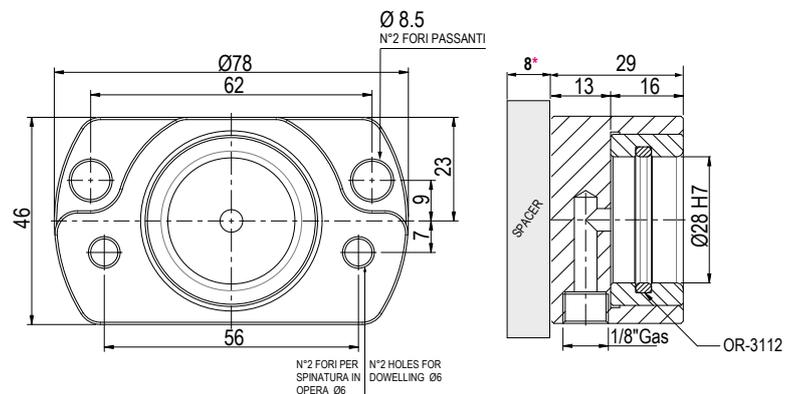


Ø28

Con bussola temprata - with hardened bushing

STOP BLOCK Code	€
9.INDEX.28	237
NO STOP BLOCK INCLUDED	-100

BUSHING Code	€
9.G28.INDEX.2	26



## STOP-BLOCK Conico - Conical

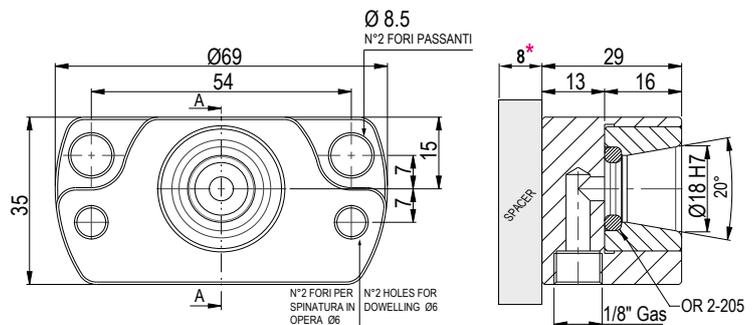


Ø18

Con bussola temprata - with hardened bushing

STOP BLOCK Code	€
9.INDEX.18C	165
NO STOP BLOCK INCLUDED	-80

BUSHING Code	€
9.G18.INDEX.2C	21

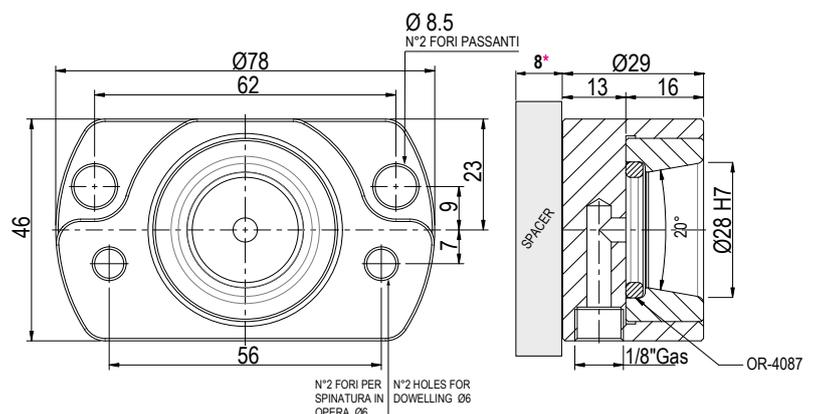


Ø28

Con bussola temprata - with hardened bushing

STOP BLOCK Code	€
9.INDEX.28C	237
NO STOP BLOCK INCLUDED	-80

BUSHING Code	€
9.G18.INDEX.2C	21



\* Misura minima per distanziale sotto la quale è necessario utilizzare lo stop-block lavorabile  
Spacer minimum dimension under this dimension it is necessary to use the machineable stop-block

## STOP-BLOCK Lavorabile\*\* - Machineable\*\*

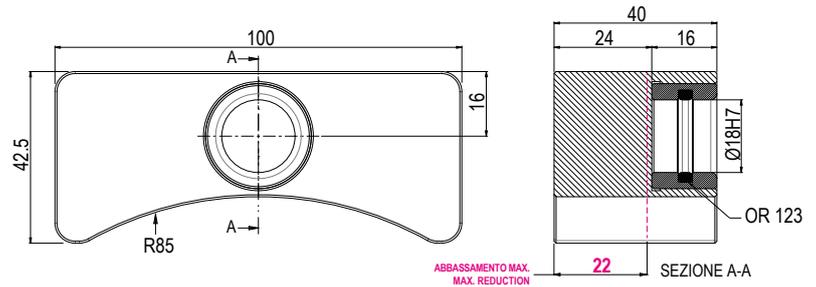


Ø18

Con bussola temprata - with hardened bushing

STOP BLOCK Code	€
9.G18.INDEX	196
NO STOP BLOCK INCLUDED	-90

BUSHING Code	€
9.G18.INDEX.2	21

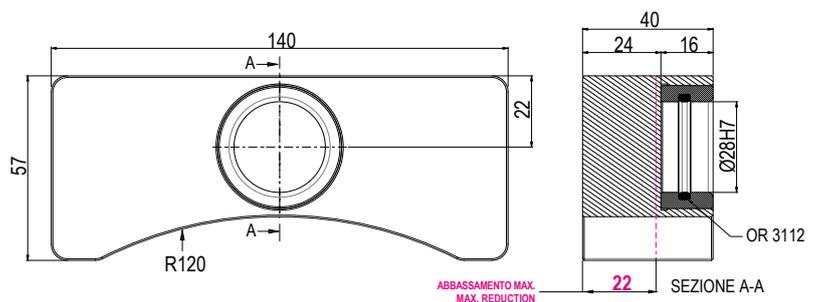


Ø28

Con bussola temprata - with hardened bushing

STOP BLOCK Code	€
9.G28.INDEX	268
NO STOP BLOCK INCLUDED	-90

BUSHING Code	€
9.G28.INDEX.2	36



## STOP-BLOCK Lavorabile conico\*\* - Conic machineable\*\*

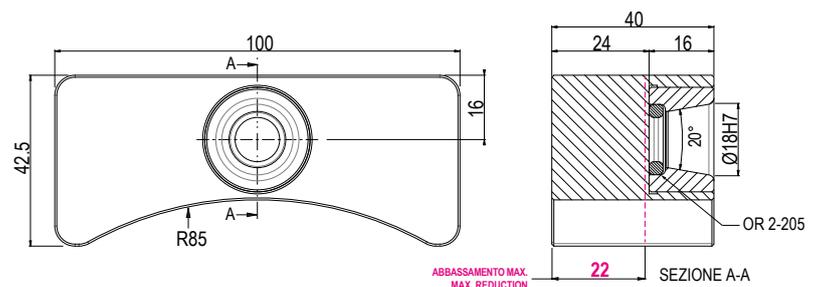


Ø18

Con bussola temprata - with hardened bushing

STOP BLOCK Code	€
9.G18.INDEXC	196
NO STOP BLOCK INCLUDED	-90

BUSHING Code	€
9.G18.INDEX.2C	21

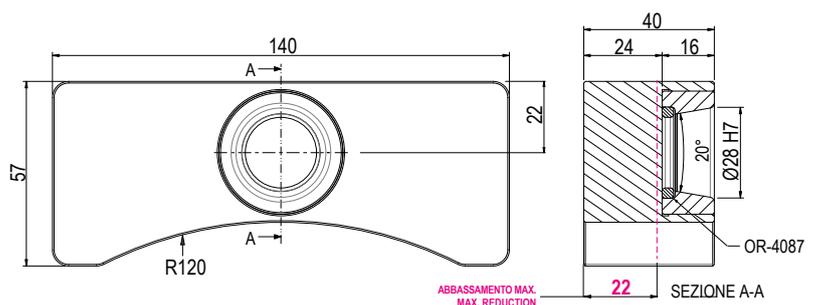


Ø28

Con bussola temprata - with hardened bushing

STOP BLOCK Code	€
9.G28.INDEXC	268
NO STOP BLOCK INCLUDED	-90

BUSHING Code	€
9.G28.INDEX.2C	21

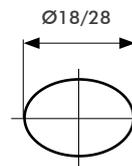
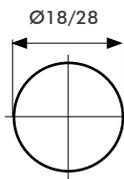


\*\* A richiesta - On request

# GRUPPO ANTIROTANTE ANTI-ROTATION GROUP



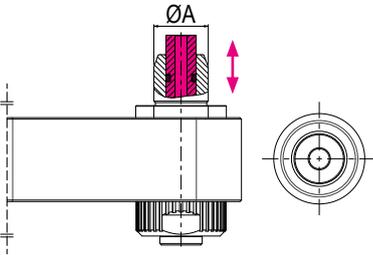
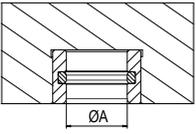
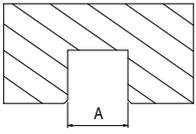
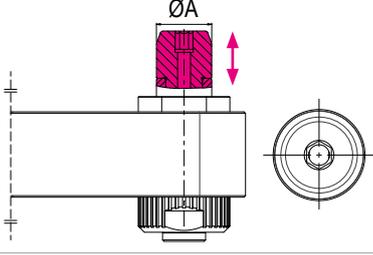
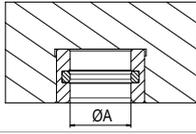
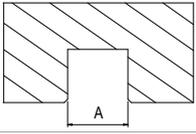
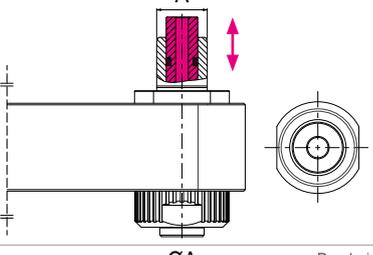
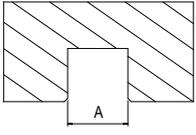
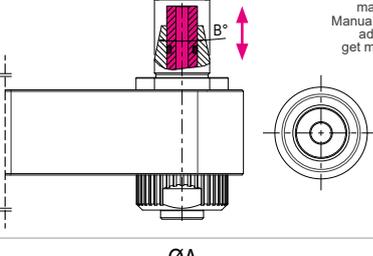
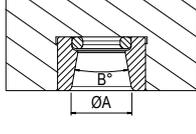
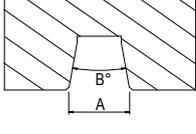
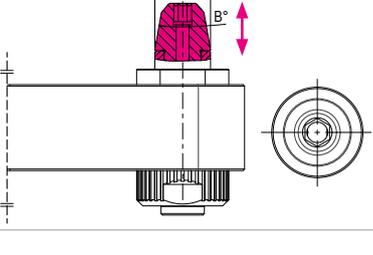
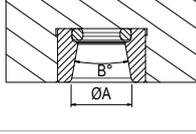
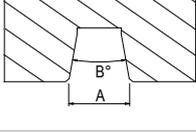
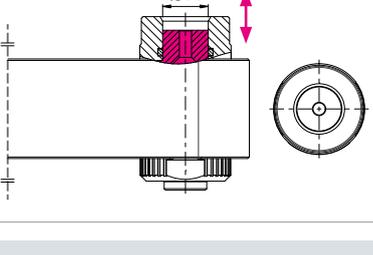
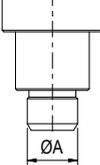
\*PERNO CONICO FLOTTANTE  
FLOATING CONICAL PIN



TESTA ANGOLARE ANGLE HEADS		GRUPPO ANTIROTANTE ANTI-ROTATION GROUP		FLANGIA INTEGRALE INTEGRAL FLANGE			STANDARD 2 AXIS		ON REQUEST 1 AXIS		GRUPPO PERNO PIN GROUP		
MODELLO Model	TIPO Type	Code	€	Code	Ø	H	€	PERNO CILINDRICO CYLINDRICAL PIN	PERNO ELLITTICO ELLIPTIC PIN	P	L	€	
GL90-7 GL90-10 GL90-16 GTU-10	<b>0</b> Ø73	* 9.GMU.13050C/i65	465	9.GMU.13030/i65		65	155	* 9.GMU.13075C		Ø18	21	320	
		* 9.GMU.13050C/i80	490										
		* 9.GMU.13050C/i110	515		9.GMU.13030/i80	Ø73	80	180	* 9.GMU.13075L		Ø18	35	320
GMU 13 / 13L			9.GMU.13050/i65	320	9.GMU.13030/i110		110	205	9.GMU.13071C	9.GMU.13073C	Ø18	21	175
		9.GMU.13050/i80	345					9.GMU.13071L	9.GMU.13073L	Ø18	35	175	
		9.GMU.13050/i110	370										
G90-5 G90-7 / 7L G90-7 / 7L 2U G90-10 / 10L G90-10 / 10L 2U G90-16 / 16L G90-16 / 16L 2U GMU-16 GR90-5 GR90-10 GR90-16	<b>1</b> Ø90	9.G90.16050/i65	330	9.G90.16030/i65		65	165						
									9.G90.16071C	9.G90.16073C	Ø18	21	175
			9.G90.16050/i80	355	9.G90.16030/i80	Ø90	80	190					
			9.G90.16050/i110	380	9.G90.16030/i110		110	215	9.G90.16071L	9.G90.16073L	Ø18	35	175
G90-20 / 20L G90-20 / 20L 2U GMU 20	<b>2</b> Ø110	9.G90.20050/i80	370	9.G90.20030/i80		80	205						
			9.G90.20050/i110	400	9.G90.20030/i110	Ø110	110	235	9.G90.16071C	9.G90.16073C	Ø18	21	175
G90-30 / 30L G90-30 / 30L 2U	<b>3</b> Ø140	9.G90.30050/i110	435	9.G90.30030/i110	Ø140	110	270	9.G90.16071L	9.G90.16073L	Ø28	35	175	
G90-S40 G90-S40L GR90-S40	<b>4</b> Ø170	9.G90.S4050/i110	475	9.G90.S4023/i110	Ø170	110	310	9.G90.S4072C	9.G90.S4074C	Ø28	24,5	175	
									9.G90.S4072L	9.G90.S4074L	Ø28		35

Flangia ad interasse speciale EXTRA € 515 - Flange with special pitch € 515 EXTRA

# GRUPPO PERNO SPECIALE SPECIAL PIN GROUP

FORMA Shape	TIPI DI PERNI Pin Types	€	TIPI DI STOP-BLOCK Stop-block Types	
<b>Cilindrico standard</b> Cylindrical standard <b>A</b>		<b>250*</b>	<b>Standard con bussola cilindrica</b> Standard with cylindric bushing 	<b>Prismatic</b> Prismatic 
<b>Cilindrico flottante</b> Cylindrical floating <b>B</b>		<b>125*</b>	<b>Standard con bussola cilindrica</b> Standard with cylindric bushing 	<b>Prismatic</b> Prismatic 
<b>Prismatico</b> Prismatic <b>C</b>		<b>250*</b>		<b>Prismatico</b> Prismatic 
<b>Conico regolabile</b> Adjustable conic <b>D</b>	 <p>Regolazione manuale meccanica per max precisione Manual mechanical adjustment to get max accuracy</p>	<b>250*</b>	<b>Bussola conica</b> Conic bushing 	<b>Prismatico conico</b> Conic prismatic 
<b>Conico flottante</b> Floating conical <b>E</b>		<b>125*</b>	<b>Bussola conica</b> Conic bushing 	<b>Prismatico conico</b> Conic prismatic 
<b>Cilindrico femmina</b> Female cylindrical <b>F</b>		<b>320*</b>	<b>Cilindrico maschio</b> Cylindric male 	

\* Extra prezzo perno speciale - \* Extra price special pin

# OPZIONE REFRIGERANTE INTERNO INTERNAL COOLANT OPTION

Opzione B - B Option  
**Up to 40bar**



Opzione Re-Cool - Re-Cool Option  
**UP TO 150bar**



Mandrino macchina » Distributore » Utensile  
Machine spindle » Rotating Distributor » Tool

Perno » Ghiera ReCool » Utensile  
Positioning Pin » ReCool Nut » Tool

Passaggio refrigerante interno all' utensile.  
Dal mandrino macchina e attraverso il distributore rotante  
Internal coolant through the tool from the machine spindle and through rotating distributor.

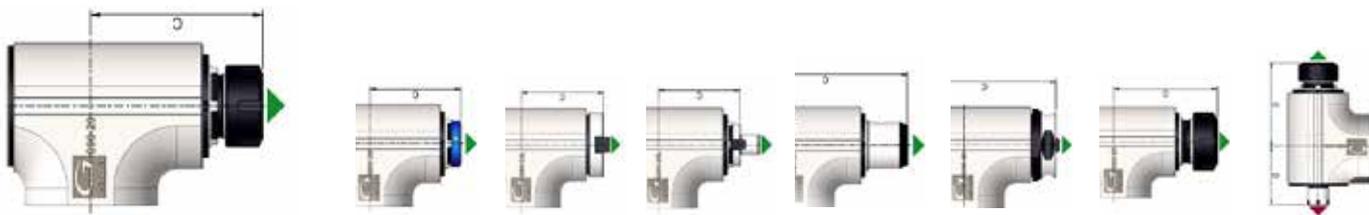
Passaggio refrigerante interno l'utensile per mezzo della ghiera ReCool.  
Internal coolant through the tool from the special nut ReCool.

ROTAZIONE A SECCO - DRY RUNNING  
**10 BAR POSSIBILE - POSSIBLE**  
**30/40 BAR NON POSSIBILE - NOT POSSIBLE**

Vedi pagine - See Pages 7.16 - 7.18

Passaggio refrigerante interno tramite cono » Distributore » Utensile **SU RICHIESTA** - Internal coolant through shank » rotating distributor » tool **ON REQUEST**

# OPZIONI DI USCITA TESTE ANGOLARI MTC OUTPUT OPTIONS ANGLE HEADS MTC



MODELLO	USCITA STD		HSK		ISO - CAT - BT		PORTAFRESA		WELDON		CAPTO		ER OPZIONE		DOPPIA	
	TIPO	C	TIPO	C	TIPO	C	TIPO	C	TIPO	C	TIPO	C	TIPO	C	TIPO	D
G90-5 / 5L	ER-8	32,5	-	-	-	-	-	-	Ø6	31	-	-	-	-	-	-
G90-7 / 7L	ER-11	38	-	-	-	-	-	-	Ø8	36,3	-	-	-	-	ER-11 ER-8 MINI	34,2
G90-10 / 10L	ER-16	49,5	-	-	-	-	Ø16	50	Ø10	63	-	-	-	-	ER-16 ER-11 MINI	45,5
GTU-10	ER-16	49,5	-	-	-	-	Ø16	50	Ø10	63	-	-	ER-20	63	ER-16 ER-11 MINI	45,5
G90-16 / 16L 16L.270 // G90-16 2U / 16L 2U	ER-25	81,5	32	75,5	-	-	Ø16	63,5	Ø16	75	-	-	-	-	ER-25 ER-16 MINI	58,5
G90-20 / 20L / G90-20 2U / 20L 2U	ER-32	103,5	40	86,5	SK30	83,5	Ø22	83	Ø20	111	C4	90	ER-40	111	ER-32 ER-20 MINI	72,5
G90-30 / 30L / G90-30 2U / 30L 2U	ER-40	120	40	100	SK30	96,5	Ø27	101	Ø25	147	C4	95,5	*	-	ER-40 ER-25 MINI	82
G90-S40 / S40XL	SK40	105	63	130	-	-	Ø27	132	Ø25	152	C4/C5	103 103	-	-	-	-
G90-S50 / G90-S50XL	-	-	-	-	SK50	165	-	-	-	-	C6/C8	163 163	-	-	-	-

Teste angolari MTC opzioni uscita - Output Options MTC angle heads

# CONI / FLANGE / PROLUNGHE

## SHANKS / FLANGES / EXTENSIONS


**1**

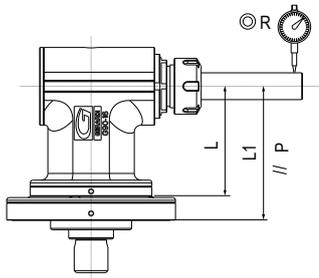
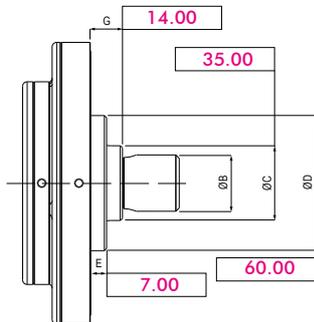
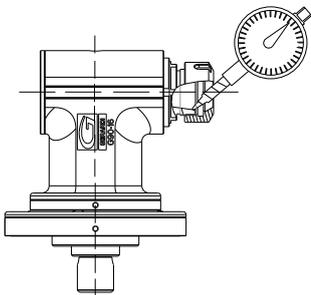
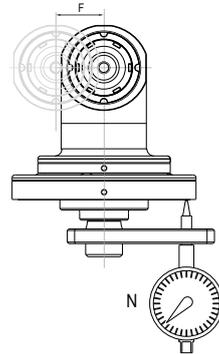
TESTA ANGOLARE ANGLE HEADS		FLANGIA UNIVERSALE UNIVERSAL FLANGE		PROLUNGA EXTENSION		CONO MODULARE MODULAR SHANK			
MODELLO MODEL	TIPO TYPE	Code	€	H	Code	€	Code	€	MODELLO MODEL
G90-5 G90-7 / 7L G90-10 / 10L G90-16 / 16L GMU-16 G90-16 / 16L 2U	<b>1</b>	9.UF.00001 NO FLANGE	<b>195</b> <b>-100</b>	50 100 200	9.GEX.10050 9.GEX.10100 9.GEX.10200	<b>360</b> <b>575</b> <b>1.135</b>	9.SK30.ISO 9.SK40.ISO 9.SK50.ISO		SK DIN 69871  30/40/50
G90-20 / 20L GMU-20 G90-20 / 20L 2U	<b>2</b>	9.UF.00002 NO FLANGE	<b>225</b> <b>-120</b>	50 100 200	9.GEX.20050 9.GEX.20100 9.GEX.20200	<b>360</b> <b>575</b> <b>1.135</b>	9.SK30.BT 9.SK40.BT 9.SK50.ISO		BT MAS 403  30/40/50
G90-30 / 30L G90-30 / 30L 2U	<b>3</b>	9.UF.00003 NO FLANGE	<b>300</b> <b>-150</b>	100 150	9.GEX.30100 9.GEX.30150	<b>720</b> <b>925</b>	9.SK40.CAT40 9.SK50.CAT50	<b>260</b>	CAT ANSI B5.50  40/50
G90-S40	<b>4</b>	9.UF.00004 NO FLANGE	<b>350</b> <b>-160</b>				9.SK30.2080 9.SK40.2080 9.SK50.2080		ISO DIN 2080  30/40/50
								<b>On Req.</b>	
G90-S40XL G90-S40XLxx GMU-S40-125 GMU-S40	<b>5</b>	9.UF.00005 NO FLANGE	<b>400</b> <b>-200</b>				9.HSK.63000 9.HSK.80000 9.HSK.10000	<b>455</b> <b>475</b> <b>495</b>	HSK DIN 69893  63/80/100
G90-S50 G90-S50XLxx GMU-S50	<b>6</b>	9.UF.00006 NO FLANGE	<b>620</b> <b>-280</b>				9.CPT.C5000 9.CPT.C6000 9.CPT.C8000		C. ISO 26623  C5/C6/C8

Senza cono -100 € - No shank -100 €

# ESEMPIO SCHEDA DI COLLAUDO

## INSPECTION SHEET EXAMPLE

<b>Tipo - Type</b>	G90-16 MTC
<b>Codice - Code</b>	9.G90.16001
<b>Numero seriale - Serial number</b>	17-127
<b>Attacco cono - Input shank</b>	DIN-69871/40
<b>Note speciali - Special notes</b>	

TIPO DI CONTROLLO TEST TYPE	RAFFIGURAZIONE DRAWING	ERRORE ERROR	TIPO DI CONTROLLO TEST TYPE	RAFFIGURAZIONE DRAWING	ERRORE ERROR
<p>Quota e parallelismo da filo cono ad asse principale. Oscillazione asse utensile.</p> <p>Height and parallelism from gauge line to main axis. Runout cutter axis.</p>		<p><b>Ammesso</b> Allowed A= ±0,03 R=±0,025 P=±0,015/100</p> <p><b>Rilevato</b> Checked</p> <p>L = +0,020</p> <p>L1 = +0,010</p> <p>R = 0,025</p> <p>P = 0,012/100</p>	<p>Verifica delle quote per l'attacco del cono e della flangia.</p> <p>Main input shaft dimension checked.</p>		<p><b>Ammesso</b> Allowed E/G=0,1/-0,5 C/D=+0/-0,03</p> <p><b>Rilevato</b> Checked</p> <p>B = 25h7 <b>ok</b></p> <p>E = -0,100</p> <p>G = -0,150</p> <p>C = -0,020</p> <p>D = -0,030</p>
<p>Oscillazione mandrino porta utensile.</p> <p>Runout in cutter spindle.</p>		<p><b>Ammesso</b> Allowed 0,010</p> <p><b>Rilevato</b> Checked</p> <p>0,008</p>	<p>Perpendicolarità e disassamento tra gli assi principali.</p> <p>Perpendicularity and offset between main axes.</p>		<p><b>Ammesso</b> Allowed F = ± 0,020 N = 0,010/100</p> <p><b>Rilevato</b> Checked</p> <p>F = 0,015</p> <p>N = 0,010/100</p>

### RODAGGIO TESTA - RUN-IN

RPM IN ENTRATA RPM INPUT	DURATA TIME	TEMPERATURA AMBIENTE ROOM TEMPERATURE	TEMPERATURA Sonda SENSOR TEMPERATURE	NOTE NOTES
1000	00:10:00	20°	28°	
2000	00:10:00		37°	
3000	00:05:00		41°	
4000	00:05:00		48°	
5000				
6000				

Revisioni - Revisions	Timbro - Stamp	Data - Date
		Firma - Signature

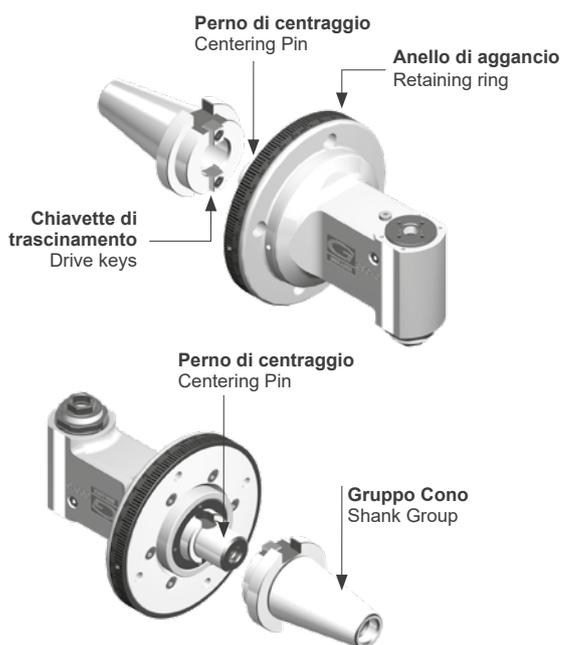
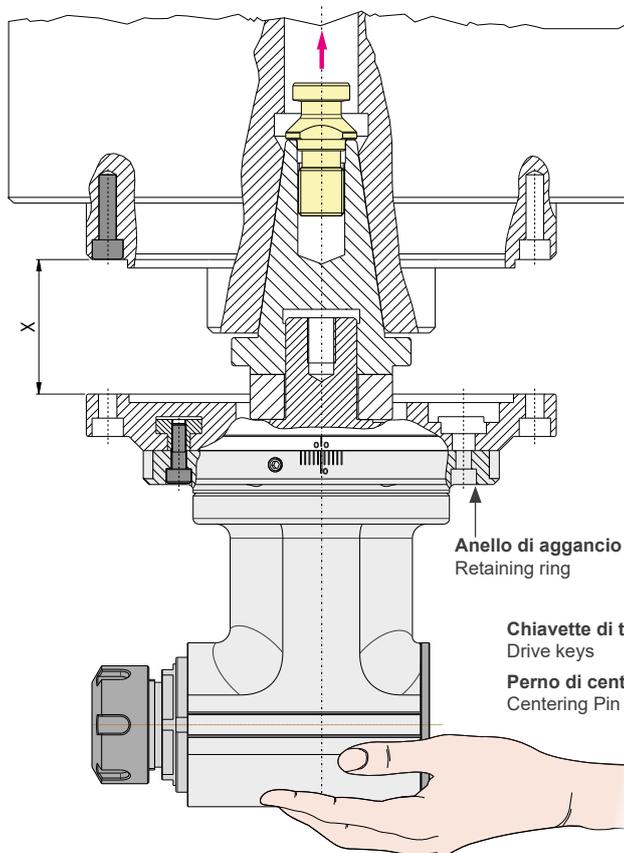
## ESEMPIO DI MONTAGGIO MOUNTING EXAMPLE

### DISTANZIALE REALIZZATO IN OPERA SPACER TO BE MADE

#### FASE 1 - STEP 1

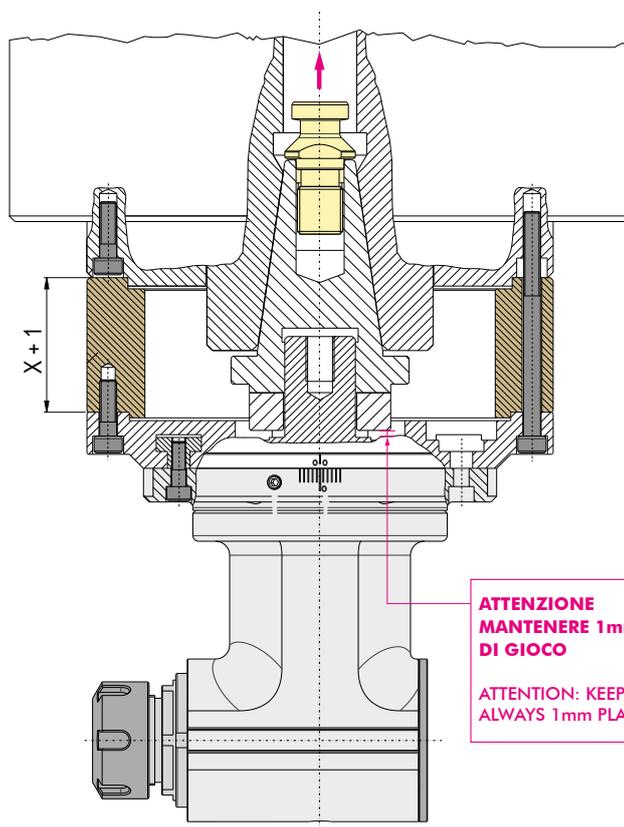
- Montare l'anello di aggancio e la flangia universale sulla testa
- Applicare il cono alla testa
- Inserire la testa nel mandrino macchina.
- Rilevare la misura "X"

- Mount the retaining ring and the universal flange
- Mount the shank on the Head.
- Mount the head into the machine spindle.
- Check dimension "X"



#### FASE 2 - STEP 2

- Realizzare un distanziale con spessore X+1mm
- Rimontare il tutto in macchina.
- Orientare e posizionare correttamente la testa angolare
- Azzerare l'anello graduato tramite il grano e le tacche di riferimento
- Make a spacer with X + 1mm thickness.
- Reassemble the Head on the machine.
- Turn the angle head in the correct position.
- Set the graduated ring by rotating the screw to the 0 position.



**ATTENZIONE  
MANTENERE 1mm  
DI GIOCO**

**ATTENTION: KEEP  
ALWAYS 1mm PLAY**

# PINZE COLLETS

MODELLO - MODEL	PINZA - COLLET	Ø	Code	€
GR90-5	Schaublin P6	0,3 - 0,4 - 0,5 - 0,6 - 0,7 - 0,8 - 0,9	9.P6.D0XXX	258
		1 - 1,1 - 1,2 - 1,3 - 1,4 - 1,5 - 1,59 (1/16") - 1,6 - 1,7 - 1,8 - 1,9		170
		2 - 2,5 - 3 - 3,5		119
		4 - 4,5 - 5		103

Esempio di ordinazione: Schaublin P6 - Ø0,3 = 9.P6.D003 - Ø1,59 = 9.P6.D0159 - Example to order: Schaublin P6 - Ø0,3 = 9.P6.D003 - Ø1,59 = 9.P6.D0159

MODELLO - MODEL	PINZA - COLLET	Ø	Code	€
GS90-2	GS90-2	1 - 1,5 - 2 - 2,5	GS.9020004/...	232

MODELLO - MODEL	PINZA - COLLET	Ø	Code	€
Manipolo ad angolo IC300 Angular chuck IC300	CHC	1 - 2,35 - 3 - 3,175	CHC00XXX	88
		2		150
Manipolo ad angolo RA200 Angular chuck RA200	CHS	0,8 - 0,9	CHS00XXX	284
		1 - 2 - 2,5		88
		1 - 1,1 - 1,2 - 1,3 - 1,4 - 1,5 - 1,7 - 1,8 - 1,9 - 2,1 - 2,2 - 2,3 - 2,4 - 2,6 - 2,7 - 2,8 - 2,9		124
		1,6 - 3 - 3,175		73
Manipolo ad angolo RA100 Angular chuck RA100	CH8	0,8 - 0,9	CH800XXX	315
		1 - 1,5 - 2		103
		1 - 1,1 - 1,2 - 1,3 - 1,4 - 1,6 - 1,7 - 1,8 - 1,9 - 2,1 - 2,2 - 2,3 - 2,35 - 2,4 - 3,175		140
Manipolo ad angolo MFC300S Angular chuck MFC300S	K252	1,6	K2520XXX	62

## ER-DIN 6499

Foratura-fresatura / drilling-milling



Maschiatura / tapping



MODELLO MODEL	PINZA COLLET	Ø	Code	€	PINZA ET1 (compensate) COLLET ET1 (compensation)	Code	€
G90-5	ER8	0,5 / 5	9.ER.08000/...	10	-	-	-
GL90-7 G90-7 / 7L	ER11	1 / 7	9.ER.11000/...	9	-	-	-
GL90-7B G90-7B / 7LB	ER11 WP	3 / 7	9.ER.11WP0/...	39	-	-	-
GTU 10 GL90-10 G90-10 / 10L GR90-10	ER16	1 / 10	9.ER.16000/...	8	ET-1 / 16 (M1 - M6)	9.ET.16000/...	79
GL90-10B G90-10B / 10LB G90-10RI / 10LRI GR90-10RI	ER16 WP	1 / 10	9.ER.16WP0/...	23	-	-	-
GMU-13 / 13L	ER20	1/13	9.ER.20000/...	9	ET- 1/ 20 (M2 - M8)	9.ET.20000/...	87
GL90-16 G90-16 / 16L GMU-16 GR90-16 G90-16 / 16L 2U	ER25	1 / 16	9.ER.25000/...	9	ET-1 / 25 (M2 - M12)	9.ET.25000/...	81
GL90-16B / RI G90-16B / 16LB G90-16RI / 16LRI GR90-16RI	ER25 WP	1 / 16	9.ER.25WP0/...	23	-	-	-
G90-20 / 20L G90-20L/272 GMU-20 G90-20 / 20L 2U	ER32	2 / 20	9.ER.32000/...	9	ET-1 / 32 (M3,5 - M16)	9.ET.32000/...	95
G90-20B / 20LB G90-20L/272B G90-20RI 20LRI	ER32 WP	2 / 20	9.ER.32WP0/...	23	-	-	-
G90-30 / 30L G90-30 / 30L 2U	ER40	3 / 30	9.ER.40000/...	11	ET-1 / 40 (M6 - M16)	9.ET.40000/...	115
G90-30B 30LB G90-30RI 30LRI	ER40 WP	3 / 30	9.ER.40WP0/...	26	-	-	-

Esempio di ordinazione: ER25 - Ø10=9.ER.25000/10 - Example to order: ER25 - Ø10=9.ER.25000/10

WP= Resistenza all'acqua - WP= Waterproof

## GHIERE NUTS



MODELLO MODEL	GHIERA NUT	Code	COPPIA SERRAGGIO CLAMPING FORCE (Nm)	€
G90-5	ER8 Mini	9.ER.0800M	5 (6)	37
GL90-7 G90-7 / 7L	ER11 STD	9.ER.11STD	12 (15)	26
GTU 10 GL90-10 G90-10 / 10L	ER16 ES-S	9.ER.160ES-S	24 (30)	64
GR90-10 / 10RI	ER16 AX	9.ER.160AX	24 (30)	39
GMU-13 / 13L	ER20 STD	9.ER.20STD	28 (35)	30
GL90-16 G90-16 / 16L GMU-16 G90-16 / 16L 2U	ER25 STD	9.ER.25STD	32 (40)	27
GR90-16	ER25 AX	9.ER.250AX	32 (40)	41
G90-20 / 20L G90-20L/272 GMU-20 G90-20 / 20L 2U	ER32 STD	9.ER.32STD	136 (70)	28
GR90-20	ER32 AX	9.ER.320AX	104	44
G90-30 / 30L G90-30 / 30L 2U	ER40 STD	9.ER.40STD	176 (220)	43

## CHIAVI WRENCHES



CHIAVI WRENCHES	Code	€
CH-8 MINI	9.CH.08MINI	16
CH-21 ES	9.CH.210ES	11
CH-17 ES	9.CH.170ES	11
CH-27 ES	9.CH.270ES	11
CH-17 ES	9.CH.170ES	11
CH-32 ES	9.CH.270ES	11
CH-16 AX	9.CH.160AX	26
CH-32 ES	9.CH.320ES	11
CH-20 STD	9.CH.32STD	11
CH-32 ES	9.CH.320ES	11
CH-25 STD	9.CH.25STD	13
CH-39 ES	9.CH.390ES	11
CH-25 AX	9.CH.250AX	36
CH-40 ES	9.CH.400ES	11
CH-32 STD	9.CH.32STD	13
CH-46 ES	9.CH.460ES	11
CH-32 AX	9.CH.320AX	46
CH-49 ES	9.CH.490ES	11
CH-59 ES	9.CH.590ES	11
CH-40 STD	9.CH.40STD	13



# MODULAR QUICK CHANGE ADAPTORS



COMPATIBILI CON TUTTE LE USCITE ER - COMPATIBLE WITH ALL ER OUTPUTS

## SISTEMA MODULARE MODULAR SYSTEM



Facile e veloce sistema modulare universale per cambiare rapidamente diverse tipologie di utensili.

An easy modular system to replace quickly any tool you need.

## VANTAGGI ADVANTAGES



Aiutano a ridurre i costi-extra per l'acquisto di nuovi motorizzati o teste angolari.

The costs for further requirements of spindle units can be reduced by using the universal quick change adaptors

## ALTE PRESTAZIONI HIGH PERFORMANCE



Ghiera con cuscinetto a sfera e losanga di trascinamento removibile per una maggiore rigidità.

High rigidity thanks to the ball bearing nut and the removable diamond plate

## COMPATIBILITÀ COMPATIBILITY



Ampia gamma di uscite disponibili adatte al montaggio su qualsiasi tipologia di motorizzato o testa angolare con uscita ER

Wide range of outputs available. Ball bearing nut and removable diamond plate for highest rigidity.

I cambi rapidi modulari Gerardi mantenendo il presetting precedentemente realizzato consentono un notevole risparmio dei costi ed un ottimizzazione dei tempi ciclo. Sono perfettamente compatibili con tutti i motorizzati e le teste angolari aventi uscita ER DIN6499 e possono essere utilizzati sia con refrigerante interno che esterno.

- Nuovi cambi rapidi modulari 2.0 a FORTE SERRAGGIO, 100% Made in Italy.
- Prestazioni garantite e maggior rigidità sui motorizzati Gerardi grazie alla losanga di trascinamento (rimovibile) e alla ghiera con cuscinetto a sfera.
- Adattabili a motorizzati con uscita refrigerante sia interna che esterna.

The Gerardi modular quick change adaptors keep the tool presetting previously made and allow great costs and machining times saving. They are perfectly compatible with all driven tools and angle head with ER DIN6499 output and they can be used with internal or external coolant.

- Universal HIGH TORQUE modular quick change adaptor 100% Made in Italy.
- Guaranteed higher rigidity and performances on Gerardi driven tools thanks to the removable diamond plate and the ball bearing nut
- Suitable for ER toolholder with external and internal coolant supply



Vedi Pagine 7.12 - 7.15 - See pages 7.12 - 7.15



ER OUTPUTS COMPATIBLE



2 YEARS GUARANTEED



100% MADE IN ITALY