

Classic Line TESTE ANGOLARI - ANGLE HEADS



MADE IN ITALY



1

INDICE - INDEX

1.11 - 1.14

series
LIGHT

1.15 - 1.29

series
STD 90°

ATC - AUTOMATIC TOOL CHANGE

GL90-7	G90-5	G90-30 / 30L
GL90-10	G90-7 / 7L	G90-20L/272
GL90-16	G90-10 / 10L	G90-S40/280
GTU-10	G90-16 / 16L	G90-S40 / S40L
	G90-20 / 20L	

1.47 - 1.57

series
STD 90°

1.58 - 1.62

series
XL

MTC - MANUAL TOOL CHANGE

G90-5	G90-30 / 30L	G90-S40
G90-7 / 7L		G90-S40 XL
G90-10 / 10L		G90-S40 XLxx
G90-16 / 16L		G90-S50
G90-20 / 20L		G90-S50 XLxx

1.76 - 1.85

ACCESSORIES

ATC - AUTOMATIC TOOL CHANGE

OPZIONE REFRIGERANTE INTERNO MODULAR QUICK CHANGE ADAPTORS	ESEMPIO DI MONTAGGIO MOUNTING EXAMPLE
OPZIONE DOPPIA USCITA DOUBLE OUTPUT OPTION	STOP-BLOCK STOP-BLOCK
GHIERE RECOOL RECOOL NUTS	GRUPPO ANTIROTANTE ANTI-ROTATION GROUP
ESEMPIO SCHEDA DI COLLAUDO INSPECTION SHEET EXAMPLE	GRUPPO PERNO SPECIALE SPECIAL PIN GROUP
SISTEMA ANTIROTANTE MULTIPOINT MULTIPOINT ANTIROTATION SYSTEM	

1.30 - 1.33

series
GMU

1.34 - 1.39

series
DOUB2E

1.40 - 1.43

series
OFFSET



ATC - AUTOMATIC TOOL CHANGE

GMU-13	G90-16 2U	G90-30L 2U	GR90-5
GMU-13L	G90-16L 2U		GR90-10
GMU-16	G90-20 2U		GR90-16
GMU-20	G90-20L 2U		GR90-S40
	G90-30 2U		

1.63 - 1.67

series
GMU

1.68 - 1.73

series
DOUB2E



MTC - MANUAL TOOL CHANGE

GMU-16	G90-16 2U	G90-30L 2U
GMU-20	G90-16L 2U	
GMU-S40-125	G90-20 2U	
GMU-S40	G90-20L 2U	
GMU-S50	G90-30 2U	

1.86 - 1.89

ACCESSORIES

1.90 - 1.91

MTC - AUTOMATIC TOOL CHANGE

ATC & MTC

OPZIONE REFRIGERANTE INTERNO INTERNAL COOLANT OPTION	PINZE / GHIERE / CHIAVI COLLETS / NUTS / WRENCHES
CONI / FLANGE / PROLUNGHE SHANKS / FLANGES / EXTENSIONS	
ESEMPIO SCHEDA DI COLLAUDO INSPECTION SHEET EXAMPLE	
ESEMPIO DI MONTAGGIO MOUNTING EXAMPLE	

1 Linea Classic

Teste Angolari Integrali

Le teste angolari Gerardi della nuovissima Linea Classic nascono da solide basi tecniche e dall'esperienza maturata in oltre 40 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.

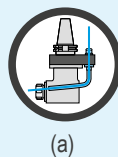
141 modelli di teste angolari standard, ideati, realizzati e distribuiti in oltre 60 paesi nel mondo dalla Gerardi S.p.A., corredati da una gamma di opzioni che ne completano le potenzialità applicative e prestazionali.



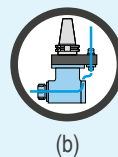
Fig. 1

Caratteristiche tecniche principali:

- 1- Corpo in acciaio sabbiato e cromato ad alta resistenza
- 2- **Albero con cono di attacco integrale (cementato, temprato e rettificato) per garantire la massima rigidità**
- 3- 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.
- 4- 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.
- 5- Pesi e ingombri ridotti rispetto ai modelli corrispondenti della linea Evolution.
- 6- Doppia tenuta anteriore (labirinto + tenuta).
- 7- Adduzione refrigerante esterno tramite perno e pressurizzazione interna compresa nel prezzo (a)
- 8- Opzione adduzione refrigerante interno attraverso l'utensile:
 - 10 bar tramite distributore rotante (b)
 - Da **30 a 70 bar** tramite mandrino macchina, rotazione a secco non possibile (c)
 - Ghieri speciali ReCool per ottenere il passaggio refrigerante tramite utensile anche su teste che non prevedono questa opzione. (d)
- 9- Alta velocità fino a 10.000 giri.
- 10- Compatibilità con le teste da sempre installate (perno anti-rotazione e stop block identici).
- 11- 100% Made in Italy, le teste angolari Gerardi Classic Line sono progettate ed interamente realizzate in Italia e sono coperte da 1 anno di garanzia.



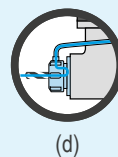
(a)



(b)



(c)



(d)

Per caratteristiche tecniche, prestazioni e dotazione standard, fare riferimento alle pagine successive

Serie ATC

da pag 1.9 a 1.43



E' la linea di teste adatte ai centri di lavoro, trasportabile automaticamente dal magazzino utensili al mandrino e viceversa. L'anello di orientamento e la flangia di indexaggio, che supporta il perno di fermo, sono entrambi posizionabili su 360° consentendo una facile ottimizzazione degli orientamenti angolari del cono e del corpo testa rispetto al tassello di fermo disposto sul mandrino del centro di lavoro.

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. (FIG.1)

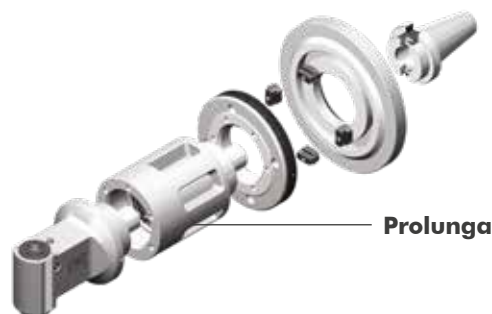
Recentissima novità è il perno di fermo intercambiabile.

Serie MTC

da pag 1.45 a 1.73



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.



Prolunga

Classic Line Integral Angle Heads

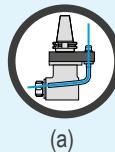
The new Classic line of Gerardi angle heads has been designed from a technical base derived from more than 40 years experience of solving thousands of production problems, finding optimum solutions and always guaranteeing the highest product quality. 141 standard angle head types are now offered, designed, built and distributed in more than 60 countries the world over by Gerardi S.p.A., and available with a range of options to complete their application and performance potentials.



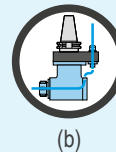
Pic. 1

Main Technical features:

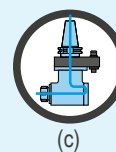
- 1- Minimum thermal expansion and high corrosion resistant treated steel body
 - 2- Main shaft is one solid piece with the drive input taper, case hardened and ground, to ensure maximum rigidity
 - 3- Shafts supported by sets of super precision pre-loaded angular contact bearings with Long Life grease lubrication and ABEC 9 accuracy rating
 - 4- 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
 - 5- New types of longer angular heads with reduced weights and overall dimensions
 - 6- Double seals on the front (mechanical seal + gasket)
 - 7- External coolant through the pin and internal air pressure included as a standard option. (a)
 - 8- Internal coolant feed through the tool options:
 - 10 bar through rotating distributor (b)
 - From 30 to 70 bar through machine spindle, dry running not possible (c)
 - Special ReCool nuts to get the internal coolant through the tool even on angle heads that aren't fitted for this option. (d)
 - 9- High speed until 10.000 rpm
 - 10- 100% compatibility with heads installed during the last 40 years (same anti-rotation/arrester pin and stop block dimensions)
 - 11- GERARDI Classic angle heads have been designed and are manufactured in Italy. They are covered by 1 year warranty.
- For technical features, performances and standard equipment, please refer to the following pages.



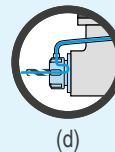
(a)



(b)



(c)



(d)

ATC Series

From page 1.9 to 1.43



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. The orientation ring and the arrester arm, which carries the arrester pin, can both be rotated through 360°.

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. (PIC.1)

The last news is the interchangeable positioning pin.

MTC Series

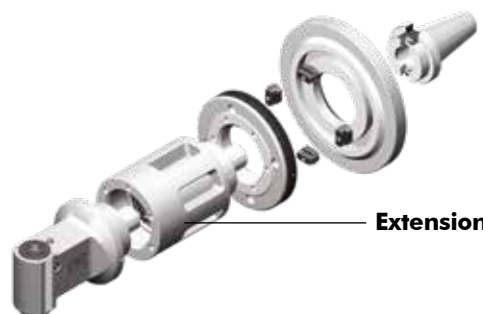
From page 1.45 to 1.73



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.



NOVITÀ CLASSIC LINE EVOLUTION CLASSIC NEWS



- Testa **LIGHT GTU 0°-360°**
- Angle head **LIGHT GTU 0°-360°**

Pag - Page
1.14

series
LIGHT



La nuova testa GTU permette lavorazioni sotto squadra impossibili prima d'ora su normali teste ATC

The new GTU head allows to perform works undercut, which were impossible before with standard ATC heads.



- Teste Angolari **GMU-L**
- GMU-L Angle Heads

Pag - Page
1.31

series
GMU



La serie di teste angolari con angolazione regolabile da 0 a 90°. NUOVA lunghezza disponibile.

Angle heads series with adjustable angle from 0 to 90°. NEW length available.



- Refrigerante **70 BAR**
- Internal Coolant **70 BAR**

Pag - Page
1.22 - 1.29

series
STD 90°



Passaggio refrigerante interno diretto all'utensile fino a 70bar e dal mandrino e attraverso il distributore rotante.

Internal coolant through the tool up to **70bar** directly from the main spindle and through the rotating distributor.



- Teste disassate **GR90**
- Offset Angle head **GR90**

Pag - Page
1.40 - 1.43

series
OFFSET



Nuova gamma di teste disassate con refrigerante interno fino a 70bar.

New offset heads range with internal coolant up to 70 bar.



- Testa **G90-5**
- Angle heads **G90-5**

Pag - Page
1.15

series
STD 90°



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



- Teste con **DOPPIA USCITA**
- Angle heads with **DOUBLE OUTPUT**

Pag - Page
1.34 - 1.39

series
DOUB2E



Nuova gamma di teste con doppia uscita simmetrica.

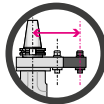
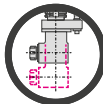
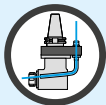
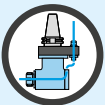
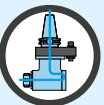
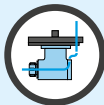
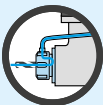
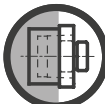
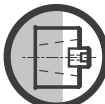
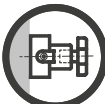
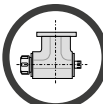
New double symmetric output heads range.



SIMBOLOGIA DATI TECNICI TECHNICAL DATA LOGOS

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

INDICE OPZIONI OPTIONS INDEX

OPZIONI OPTIONS						
	Alta velocità High speed	Spina per posizionamento rapido Quick positioning pin	Interasse speciale Special pitch	Lunghezze speciali Special lenght	Flangia Multipoint Multipoint flange	
PASSAGGIO REFRIGERANTE COOLANT						
	Attraverso il perno Through the Pin 10bar (standard) ROTAZ. a SECCO DRY RUNNING ✓	Perno » Distrib Utensile Pin » Distributor » Tool 10bar ROTAZ. a SECCO DRY RUNNING ✓	Cono » Distrib Utensile Shank » Distributor » Tool 30 / 40 / 70bar ROTAZ. a SECCO DRY RUNNING NO	Distributore » Utensile Distributor » Tool 10bar ROTAZ. a SECCO DRY RUNNING ✓	Perno » Ghiera » Utensile Pin » Distrib » Tool ReCool NUT	
USCITA OUTPUT						
	Uscita HSK HSK output	Uscita ISO ISO output	Uscita portafresa Toolholder output	Uscita WELDON WELDON output	Uscita C. C. output	Doppia uscita Double ouput

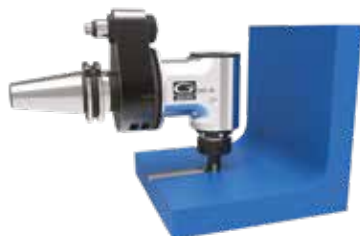
SERIE ATC - CAMBIO UTENSILE AUTOMATICO

ATC SERIES - AUTOMATIC TOOL CHANGE

- Serie G90

- G90 Series

series
STD 90°



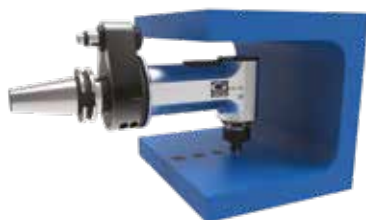
La serie ideale per fresature, forature e maschiature a $\pm 90^\circ$

The ideal series for milling, drilling and tapping at $\pm 90^\circ$

- Serie G90L

- G90L Series

series
STD 90°



La serie ideale per fresature, forature e maschiature profonde a $\pm 90^\circ$

The ideal series for deep milling, drilling and tapping at $\pm 90^\circ$

- Serie G90 RI

- G90 RI Series



series
COOLANT



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**

- Serie GMU

- GMU Series



series
GMU



La serie di teste angolari con angolazione regolabile da 0 a 90° . Spina di posizionamento rapido (Step 15°)

Nuova testa GMU-13L

Angle heads series with adjustable angle from 0 to 90° . Quick positioning pin (Step 15°)

New angle heads GMU-13L

- Serie G90 2U

- G90 2U Series



series
DOUB2E



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

- Serie GR90

- GR90 Series



series
OFFSET



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

ATC SERIES AUTOMATIC TOOL CHANGE

1

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

STOP BLOCK

con bussola cementata e guarnizione

with case hardened bushing and gasket



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

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

USCITE OUTPUTS:

- Portapinza ER std
- Weldon
- Portafresa
- Speciale
- ER collet (standard)
- Weldon
- Tool holder
- Special

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.

LIGHT SERIES

ANGLE HEADS LIGHT SERIES

series
L **GHT**

Serie **LIGHT**

da pag 1.11 a 1.14

Caratteristiche tecniche principali:

- Design ottimizzato per un miglior rapporto qualità prezzo.
- Corpo in alluminio.
- Riduzione significativa del peso.
- Perno di posizionamento conico.

LIGHT Series

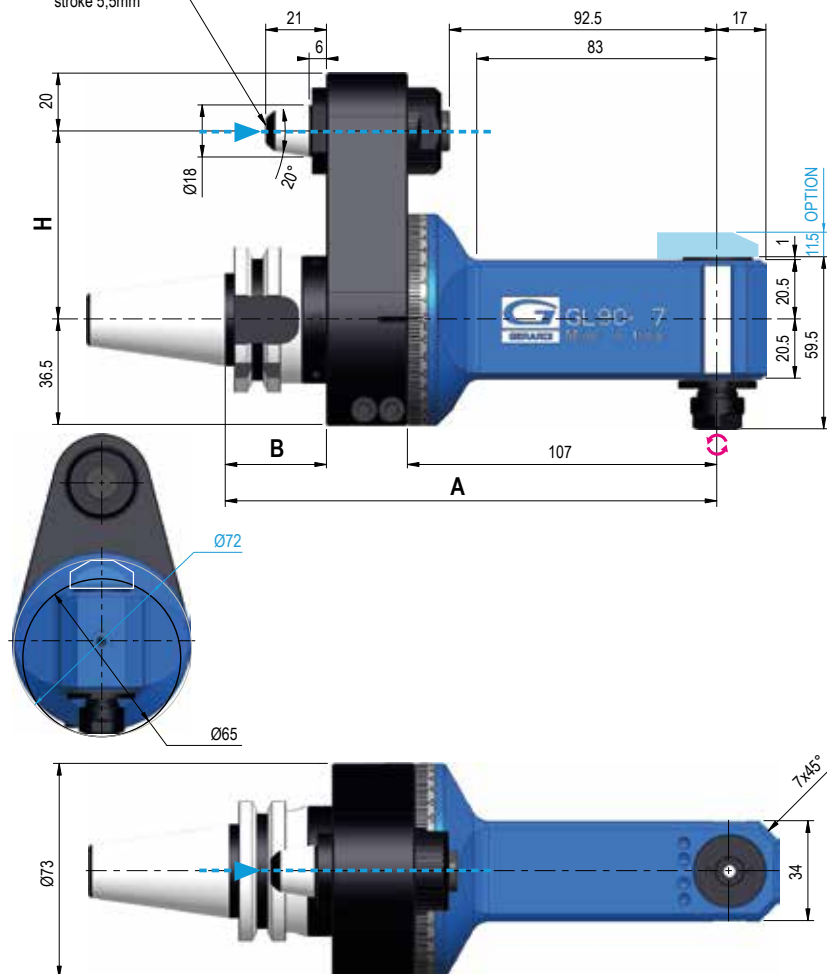
from page 1.11 to 1.14

Main technical features:

- Design studied for a best price-quality ratio.
- Aluminum body.
- Weight reduction.
- Tapered positioning pin.



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



GL90-7

TYPE 0

Code:

9.GL9.07000

Price:



Dati tecnici - Technical data



Ratio
1:1



ISO/BT30
2,2 Kg

ISO/BT40
2,7 Kg



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	30 40	63
Prezzo EXTRA Price €	std std	std	std std	optional
H Standard	65 / 80	65 / 80	65 / 80	65 / 80
H Optional 110 EXTRA Price €	optional	optional	optional	optional
A	150	150	145 150	157
B	35	35	30 35	42

Dotazione Standard
Standard Equipment

Opzioni - Options

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

IMBALLO & PESO

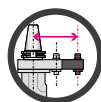
PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

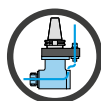
10.000 Rpm

Included !!



INTERASSE SPECIALE
SPECIAL PITCH

optional



REFR. DAL PERNO
COOLANT PIN THROUGH

DRY RUNNING POSSIBLE

Max 10 bar

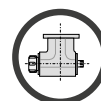
optional



USCITA
OUTPUT

Weldon Max Ø 6

optional



DOPPIA USCITA
DOUBLE OUTPUT

ER 11 / ER 8M

optional

GL90-10

TYPE 0

Code: **9.GL9.10000**

Price:



Dati tecnici - Technical data



Ratio
1:1



ISO/BT30
2,4 Kg
ISO/BT40
2,9 Kg



Rpm
10.000



Ø 10



N 250



M 8

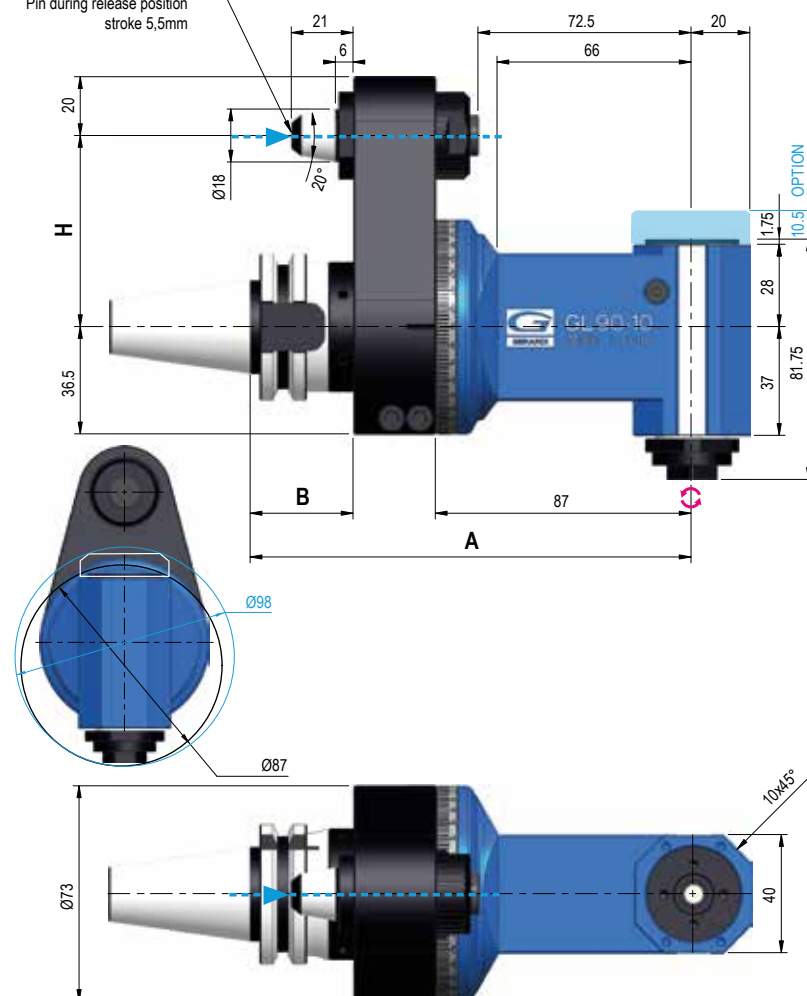


Nm 10



ER16
Ø1/10

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



SENDO 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	30 40	63
Prezzo EXTRA Price €	std std	std	std std	optional
H	65 / 80	65 / 80	65 / 80	65 / 80
Optional 110 EXTRA Price €	optional	optional	optional	optional
A	170	170	165	170
B	35	35	30	35

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

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



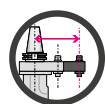
Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED

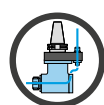
10.000 Rpm

Included !!



INTERASSE SPECIALE
SPECIAL PITCH

optional



REFR. DAL PERNO
COOLANT PIN THROUGH

DRY RUNNING POSSIBLE

Max 10 bar

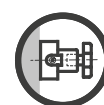
optional



USCITA
OUTPUT

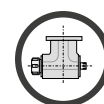
Weldon Max Ø10

optional



DOPPIA USCITA
DOUBLE OUTPUT
Portafresa - Toolholder Ø13

optional



DOPPIA USCITA
DOUBLE OUTPUT
ER16 - ER11M

optional

GL90-16

TYPE 1

Code: 9.GL9.16000

Price:



Dati tecnici - Technical data



Ratio
1:1



ISO/BT40
5,1 Kg
ISO/BT50
7,2 Kg



Rpm
8.000



Ø 16



N 510



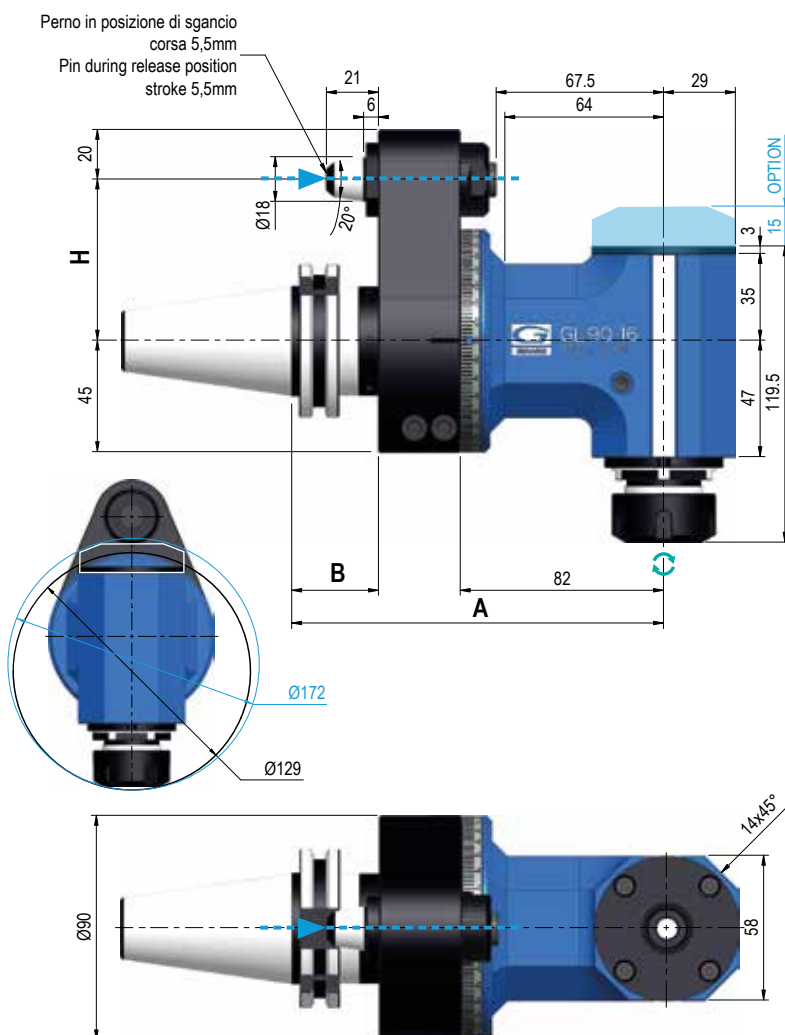
M 12



Nm 24



ER25
Ø1/16



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS 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
Prezzo EXTRA Price €		std	std	std	std	std	std	optional	optional	optional	optional		
H	Standard	65 / 80	80	65 / 80	80	65 / 80	80	65 / 80		80	65 / 80		80
	Optional 110 EXTRA Price €	optional		optional		optional		optional			optional		
A		150		150		150	156	157		160	153		155
B		35		35		35	41	42		45	38		40

Dotazione Standard Standard Equipment

Opzioni - Options

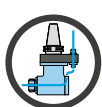
Valigetta - Stop-block - Ghiera ER -
Chiavi di servizio - Tubetto di grasso -
Libro Istruzioni
Special bag - Stop-block - ER nut -
Wrenches - Grease tube - Instruction book

IMBALLO & PESO
PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED
8.000 Rpm

Included !!



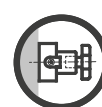
REFR. DAL PERNO
COOLANT PIN THROUGH
DRY RUNNING POSSIBLE
Max 10 bar

optional



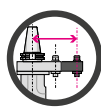
USCITA
OUTPUT
Weldon max Ø16

optional



USCITA
OUTPUT
Portafresa
Toolholder 16

optional



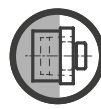
INTERASSE SPECIALE
SPECIAL PITCH

optional



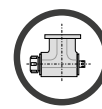
REFR. DAL CONO
COOLANT THROUGH SHANK
DRY RUNNING NOT POSSIBLE
Max 40 bar

optional



USCITA
OUTPUT
HSK 32

optional



DOPPIA USCITA
DOUBLE OUTPUT
ER25 - ER16M

optional

GTU-10

TYPE 0

Code: **9.GTU.10000**

Price:

NEW



0°-360°

Dati tecnici - Technical data



Ratio
1:1



ISO/BT40
3,8 Kg



Rpm
6.000



Ø 10



N 250



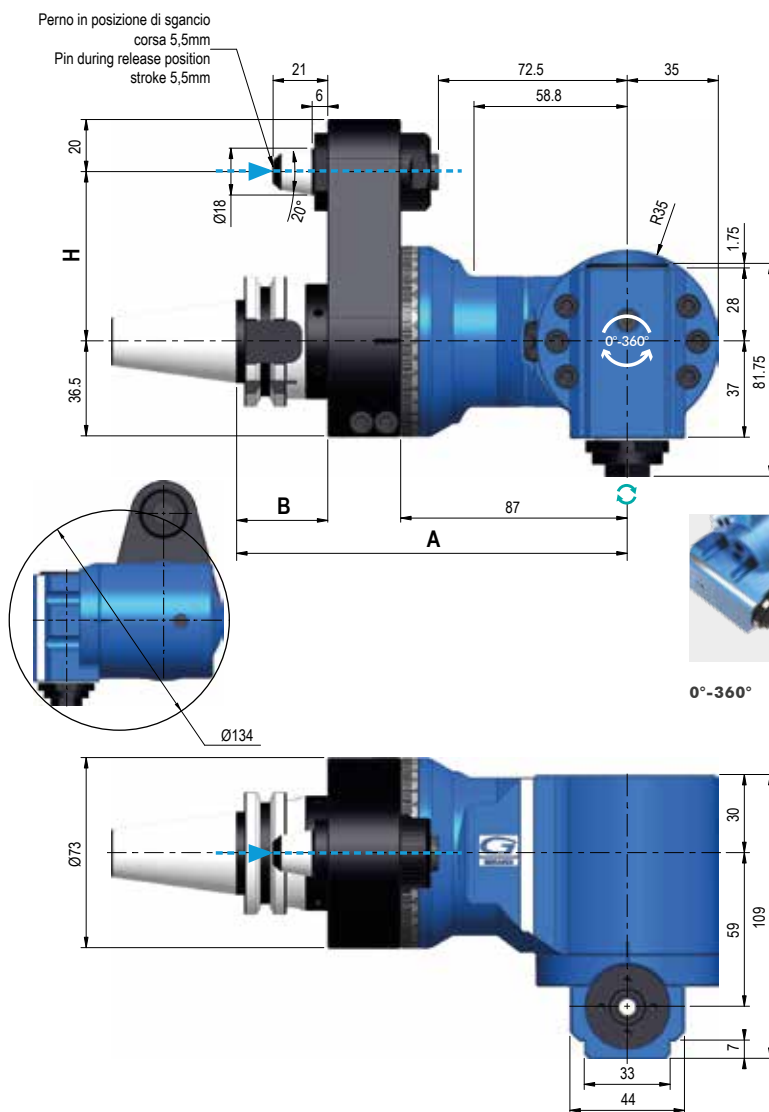
M 8



Nm 10



ER16
Ø1/10



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS 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
Prezzo EXTRA Price €		std	std	std	std	std	std	std	std	optional	optional	optional	optional		
H	Standard	65 / 80		80	65 / 80	80	65 / 80		80	65 / 80		80	65 / 80		80
	Optional 110 EXTRA Price €	optional			optional		optional			optional			optional		
A		150			150		145	150	156	157		10	173		175
B		35			35		30	35	41	42		45	38		40

Dotazione Standard Standard Equipment

Opzioni - Options

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

IMBALLO & PESO

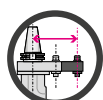
PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

8.000 Rpm

optional



INTERASSE SPECIALE
SPECIAL PITCH

optional



USCITA
OUTPUT

Weldon Max Ø10

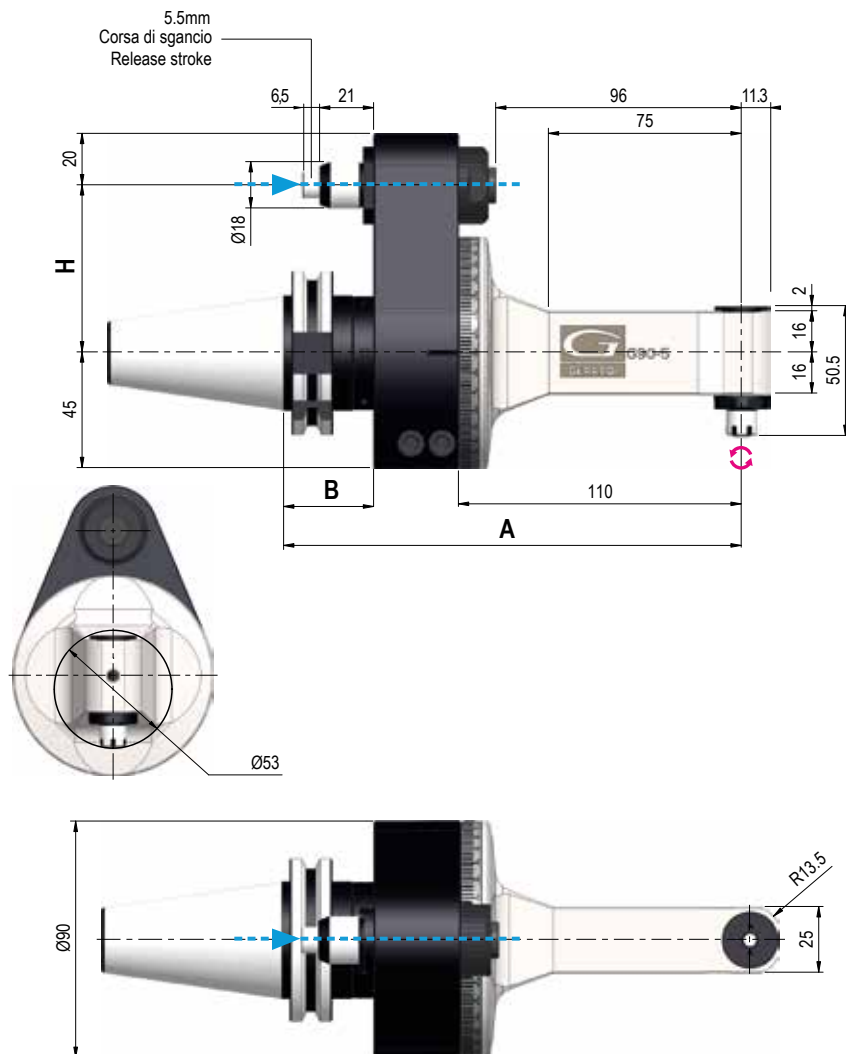
optional



SPINA POSIZIONE RAPIDA
QUICK POSITIONING PIN

Angolazioni personalizzate
Customized angles

optional



G90-5

TYPE 1

Code:

9.G90.05000

Price:



Per MICRO
lavorazioni
For MICRO
machining

Dati tecnici - Technical data



Ratio
1:1



ISO/BT30
4 Kg

ISO/BT40
- Kg



Rpm
10.000



Ø 5



N 60



M 4



Nm 4



ER8
Ø0,5/5

Coni Shanks		 SK DIN 69871			 CAT ANSI B5.50		 BT MAS 403			 HSK DIN 69893			 C. ISO 26623		
Grandezza - Size		30	40	50	50	50	30	40	50	63	80	100	C5	C6	C8
Prezzo EXTRA Price €		opt.	std	std	std	std	opt.	std	std	optional	optional	optional	optional		
H	Standard	65 / 80		80	65 / 80	80	65 / 80		80	65 / 80		80	65 / 80		80
	Optional 110 EXTRA Price €	optional			optional		optional			optional			optional		
A		178			178		173	178	184	185		188	181		183
B		35			35		30	35	41	42		45	38		40

Dotazione Standard
Standard Equipment

Opzioni - Options

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

IMBALLO & PESO

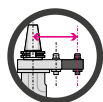
PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

10.000 Rpm

Included !!



INTERASSE SPECIALE
SPECIAL PITCH

optional



USCITA
OUTPUT

Weldon Max Ø 6

optional

1

G90-7

TYPE 1

Code: 9.G90.07000

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 4



Rpm
10.000



Ø 7



N 120



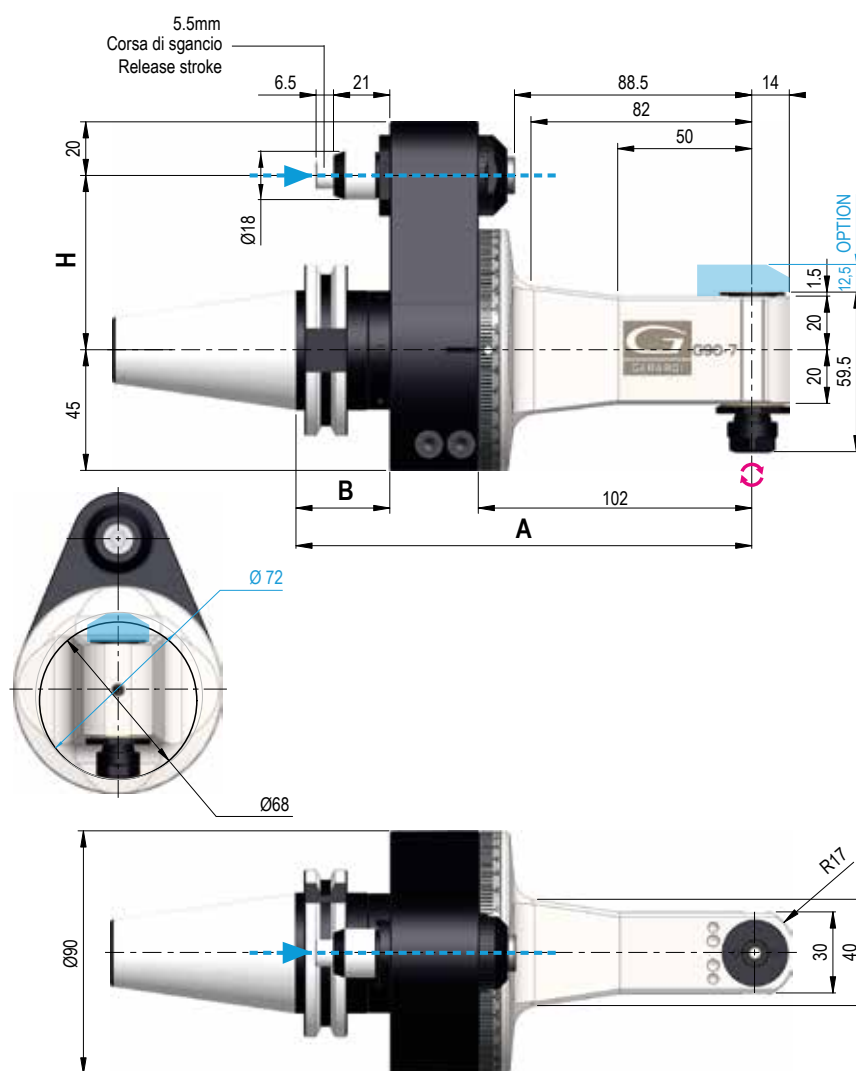
M 6



Nm 5



ER11
Ø17



SENDO 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
Prezzo EXTRA Price €	opt.	std	std	std	std	opt.	std	std	optional	optional	optional	optional		
Standard	65 / 80		80	65/80	80	65 / 80		80	65 / 80		80	65 / 80		80
H Optional 110 EXTRA Price €	optional			optional		optional			optional			optional		
A	170			170		165	170	176	177	180		173		175
B	35			35		35	35	41	42	45		38		40

Dotazione Standard Standard Equipment

Opzioni - Options

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

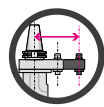
IMBALLO & PESO

PACK & WEIGHT: Max. 9 Kg



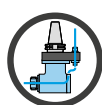
ALTA VELOCITÀ
HIGH SPEED
10.000 Rpm

Included !!



INTERASSE SPECIALE
SPECIAL PITCH

optional



REFR. DAL PERNO
COOLANT PIN THROUGH
DRY RUNNING POSSIBLE

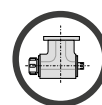
Max 10 bar

optional



USCITA
OUTPUT
Weldon Max Ø 8

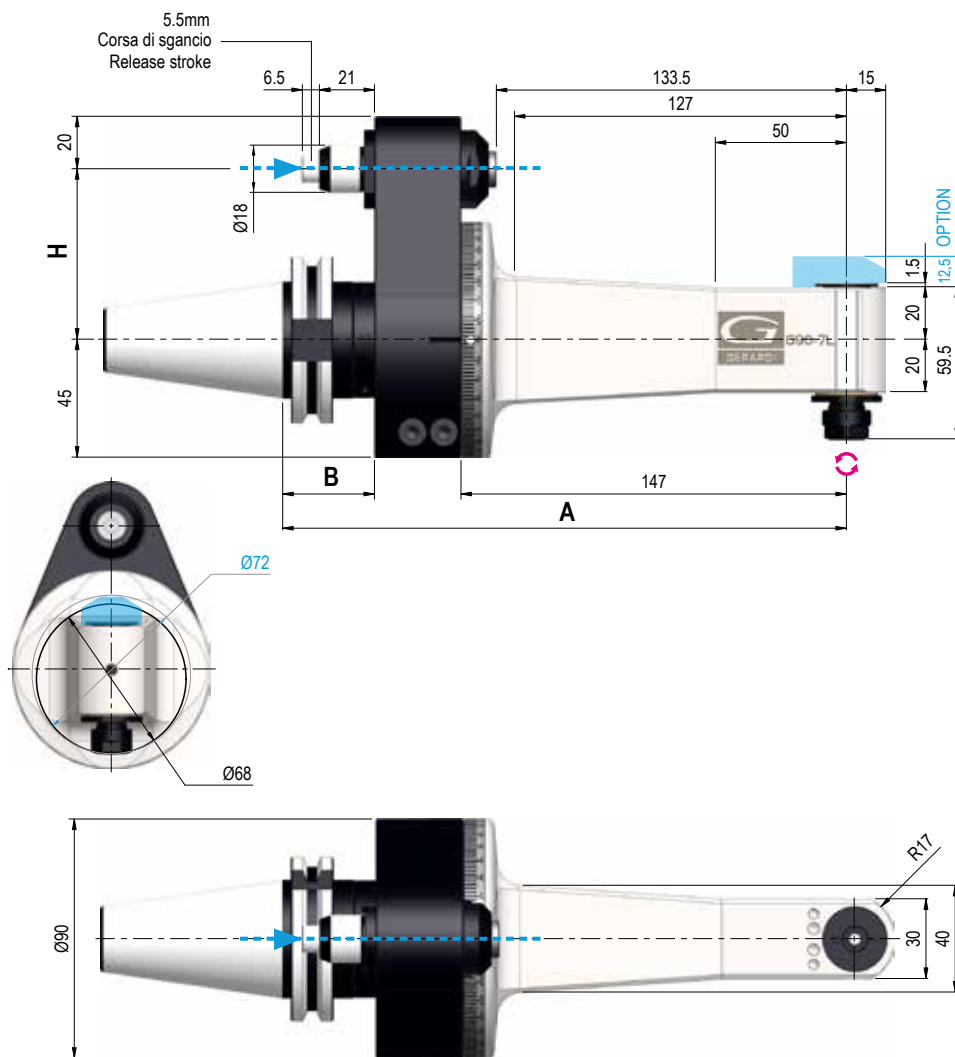
optional



DOPPIA USCITA
DOUBLE OUTPUT

ER 11 / ER 8M

optional



G90-7L

TYPE 1

Code:

9.G90.07L00

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 4,3



Rpm
10.000



Ø7



N 120



M6



Nm 5



ER11
Ø1/7



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
Prezzo EXTRA Price €	opt.	std	std	std	std	opt.	std	std	optional	optional	optional	optional		
H Standard	65 / 80		80	65/80	80	65 / 80		80	65 / 80		80	65 / 80		80
H Optional 110 EXTRA Price €	optional			optional		optional			optional			optional		
A	215			215		210	215	221	222		225	218		220
B	35			35		30	35	41	42		45	38		40

Dotazione Standard Standard Equipment

Opzioni - Options

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

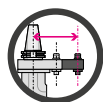
IMBALLO & PESO

PACK & WEIGHT: Max. Kg



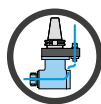
ALTA VELOCITÀ
HIGH SPEED
10.000 Rpm

Included !!



INTERASSE SPECIALE
SPECIAL PITCH

optional



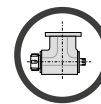
REFR. DAL PERNO
COOLANT PIN THROUGH
DRY RUNNING POSSIBLE
Max 10 bar

optional



USCITA
OUTPUT
Weldon Max Ø 8

optional



DOPPIA USCITA
DOUBLE OUTPUT
ER 11 / ER 8M

optional

G90-10

TYPE 1

Code: **9.G90.10000**

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 4,3



Rpm
10.000



Ø 10



N 250



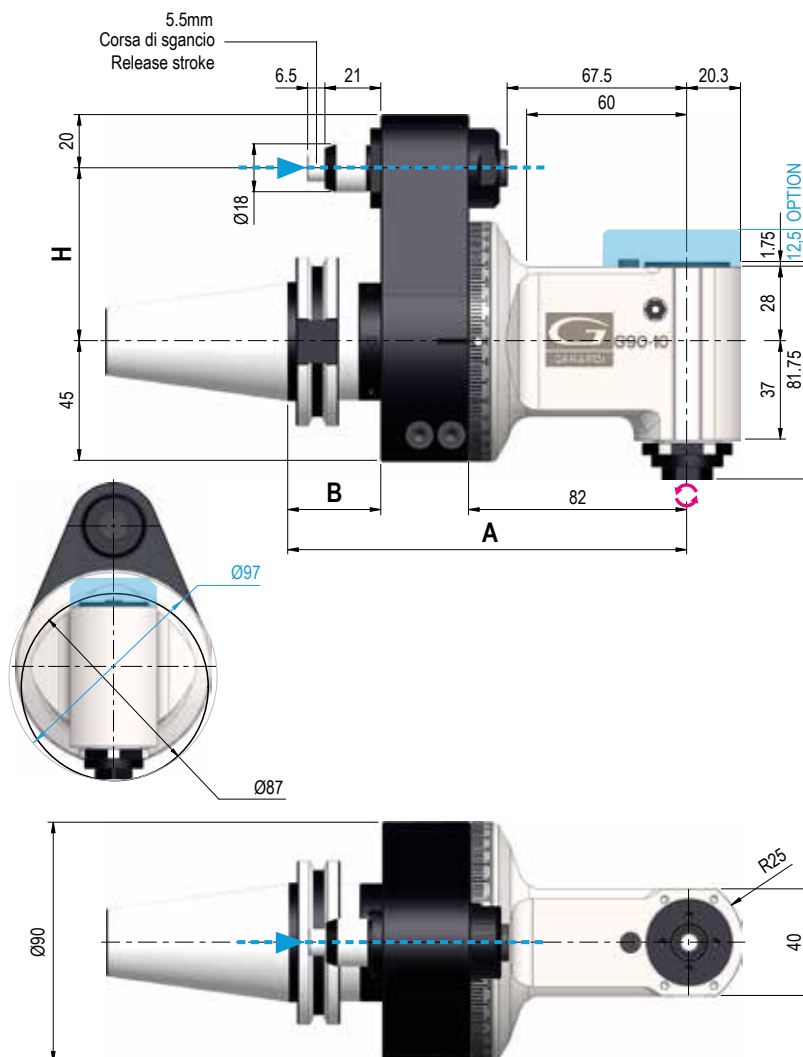
M 8



Nm 10



ER16
Ø1/10



SENDO 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
Prezzo EXTRA Price €	opt.	std	std	std	std	opt.	std	std	optional	optional	optional	optional		
Standard	65 / 80		80	65/80	80	65 / 80		80	65 / 80		80	65 / 80		80
H Optional 110 EXTRA Price €	optional			optional		optional			optional			optional		
A	150			150		145	150	156	157		160	153		155
B	35			35		30	35	41	42		45	38		40

Dotazione Standard Standard Equipment

Opzioni - Options

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

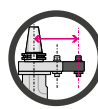
IMBALLO & PESO

PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED
10.000 Rpm

Included !!



INTERASSE SPECIALE
SPECIAL PITCH

optional



REFR. DAL PERNO
COOLANT PIN THROUGH

DRY RUNNING POSSIBLE

Max 10 bar

optional



REFR. DAL CONO
COOLANT THROUGH SHANK

DRY RUNNING NOT POSSIBLE

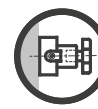
Max 40 bar

optional



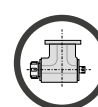
USCITA
OUTPUT
Weldon Max Ø10

optional



USCITA
OUTPUT
Portafresa
Toolholder Ø3

optional



DOPPIA USCITA
DOUBLE OUTPUT

ER16 - ER11 M

optional

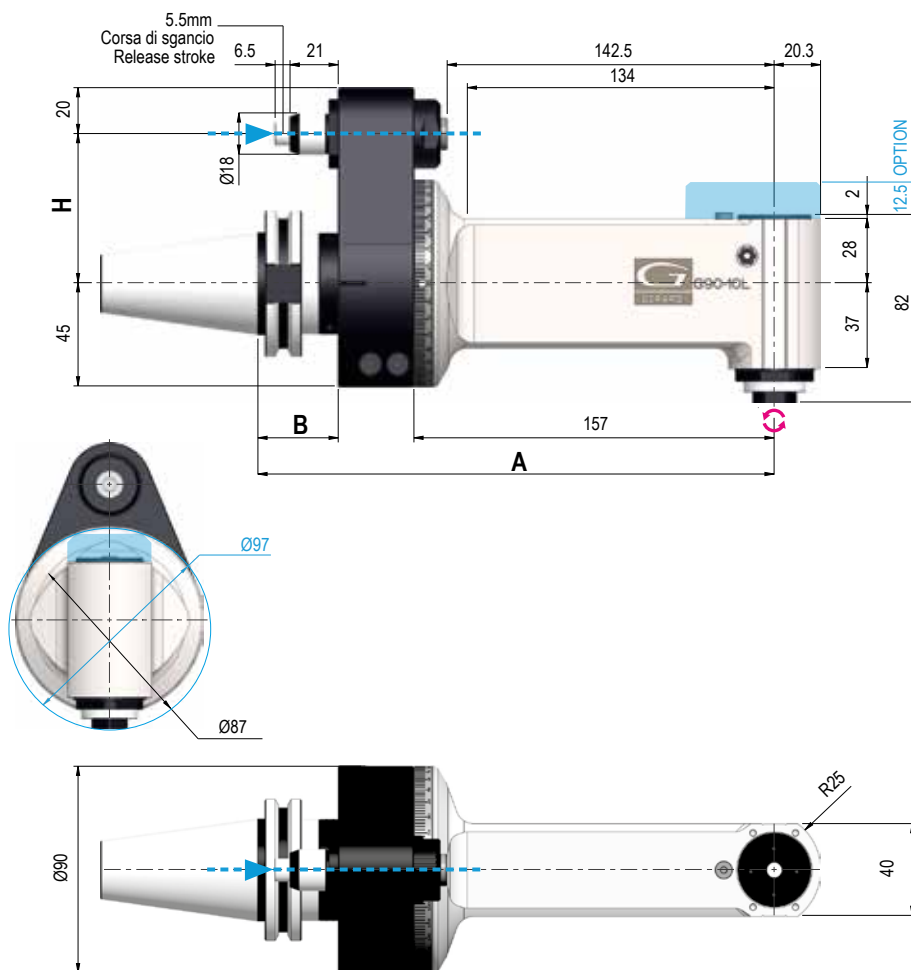
G90-10L

TYPE 1

Code:

9.G90.10L00

Price:



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
Prezzo EXTRA Price €		opt.	std	std	std	std	opt.	std	std	optional	optional	optional	optional		
H	Standard	65 / 80		80	65 / 80	80	65 / 80		80	65 / 80		80	65 / 80		80
	Optional 110 EXTRA Price €	optional			optional		optional			optional			optional		
A		225			225		220	225	231	232		235	228		230
B		35			35		30	35	41	42		45	38		40

Dotazione Standard Standard Equipment

Opzioni - Options

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

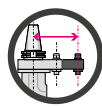
IMBALLO & PESO

PACK & WEIGHT: Max. 10,5 Kg



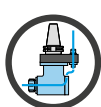
ALTA VELOCITÀ
HIGH SPEED
10.000 Rpm

Included !!



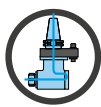
INTERASSE SPECIALE
SPECIAL PITCH

optional



REFR. DAL PERNO
COOLANT PIN THROUGH
DRY RUNNING POSSIBLE
Max 10 bar

optional



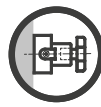
REFR. DAL CONO
COOLANT THROUGH SHANK
DRY RUNNING NOT POSSIBLE
Max 40 bar

optional



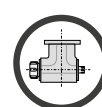
USCITA
OUTPUT
Weldon Max Ø10

optional



USCITA
OUTPUT
Portafresa
Toolholder Ø13

optional



DOPPIA USCITA
DOUBLE OUTPUT
ER16 - ER11 M

optional

G90-16

TYPE 1

Code: 9.G90.16000

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 5,4



Rpm
8.000



Ø 16



N 510



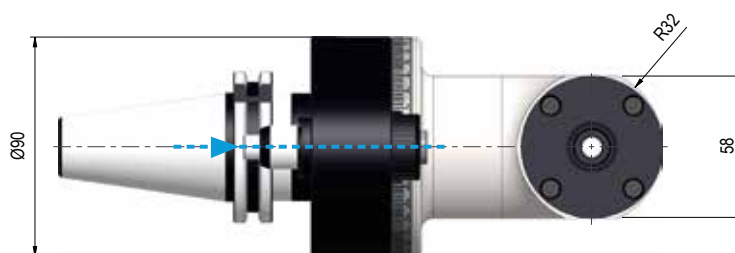
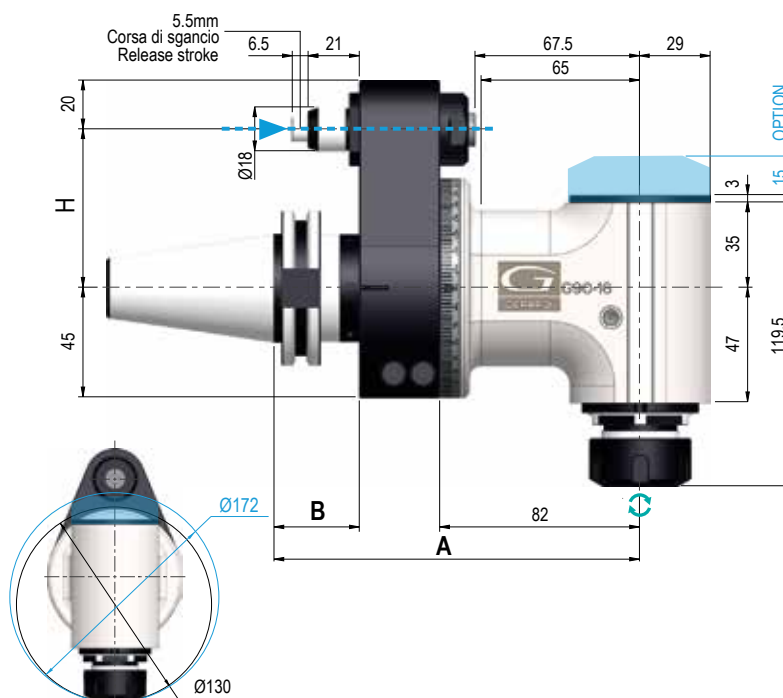
M 12



Nm 24



ER25
Ø1/16



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS 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
Prezzo EXTRA Price €		std	std	std	std	std	std	optional	optional	optional	optional		
H	Standard	65 / 80	80	65 / 80	80	65 / 80	80	65 / 80		80	65 / 80		80
	Optional 110 EXTRA Price €	optional		optional		optional		optional			optional		
A		150		150		150	156	157		160	153		155
B		35		35		35	41	42		45	38		40

Dotazione Standard Standard Equipment

Opzioni - Options

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

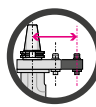
IMBALLO & PESO

PACK & WEIGHT: Max. 11 Kg



ALTA VELOCITÀ
HIGH SPEED
8.000 Rpm

Included !!



INTERASSE SPECIALE
SPECIAL PITCH

optional



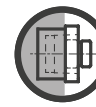
REFR. DAL PERNO
COOLANT PIN THROUGH
DRY RUNNING POSSIBLE
Max 10 bar
optional



REFR. DAL CONO
COOLANT THROUGH SHANK
DRY RUNNING NOT POSSIBLE
Max 40 bar
optional



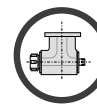
USCITA
OUTPUT
Weldon Max Ø16
optional



USCITA
OUTPUT
HSK 32
optional



USCITA
OUTPUT
Portafresa
Toolholder Ø16
optional



DOPPIA USCITA
DOUBLE OUTPUT
ER25 - ER16M
optional

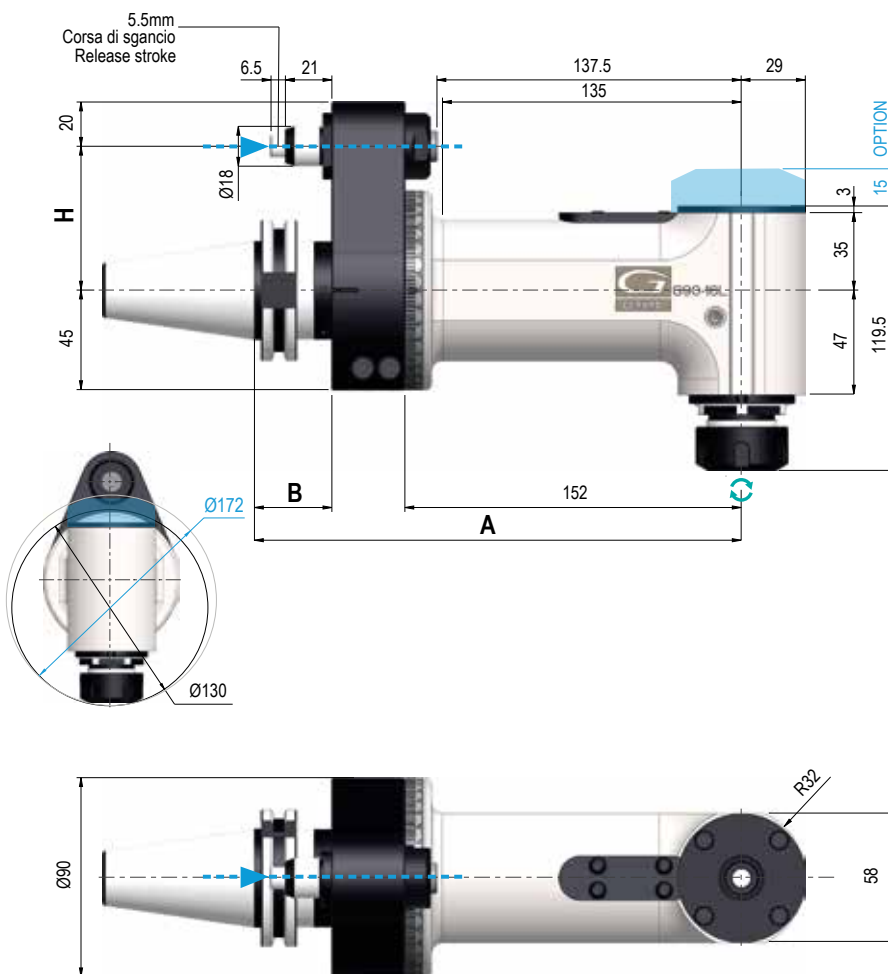
G90-16L

TYPE 1

Code:

9.G90.16L00

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 6,7



Rpm
8.000



Ø 16



N 510



M 12



Nm 24



ER25
Ø1/16



SENDO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS 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
Prezzo EXTRA Price €		std	std	std	std	std	std	optional	optional	optional	optional		
H	Standard	65 / 80	80	65 / 80	80	65 / 80	80	65 / 80		80	65 / 80		80
	Optional 110 EXTRA Price €	optional		optional		optional		optional			optional		
A		220		220		220	226	227		230	223		225
B		35		35		35	41	42		45	38		40

Dotazione Standard Standard Equipment

Opzioni - Options

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

IMBALLO E PESO

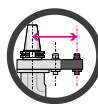
PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

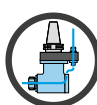
8.000 Rpm

Included !!



INTERASSE SPECIALE
SPECIAL PITCH

optional



REFR. DAL PERNO
COOLANT PIN THROUGH

DRY RUNNING POSSIBLE

Max 10 bar

optional



REFR. DAL CONO
COOLANT THROUGH SHANK

DRY RUNNING NOT POSSIBLE

Max 40 bar

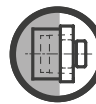
optional



USCITA
OUTPUT

Weldon Max Ø16

optional



USCITA
OUTPUT

HSK 32

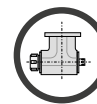
optional



USCITA
OUTPUT

Portafresa
Toolholder Ø16

optional



DOPPIA USCITA
DOUBLE OUTPUT

ER25 - ER16M

optional

1

G90-20

TYPE 2

Code: 9.G90.20000

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 11



Rpm
4.000



Ø 20



N 1.250



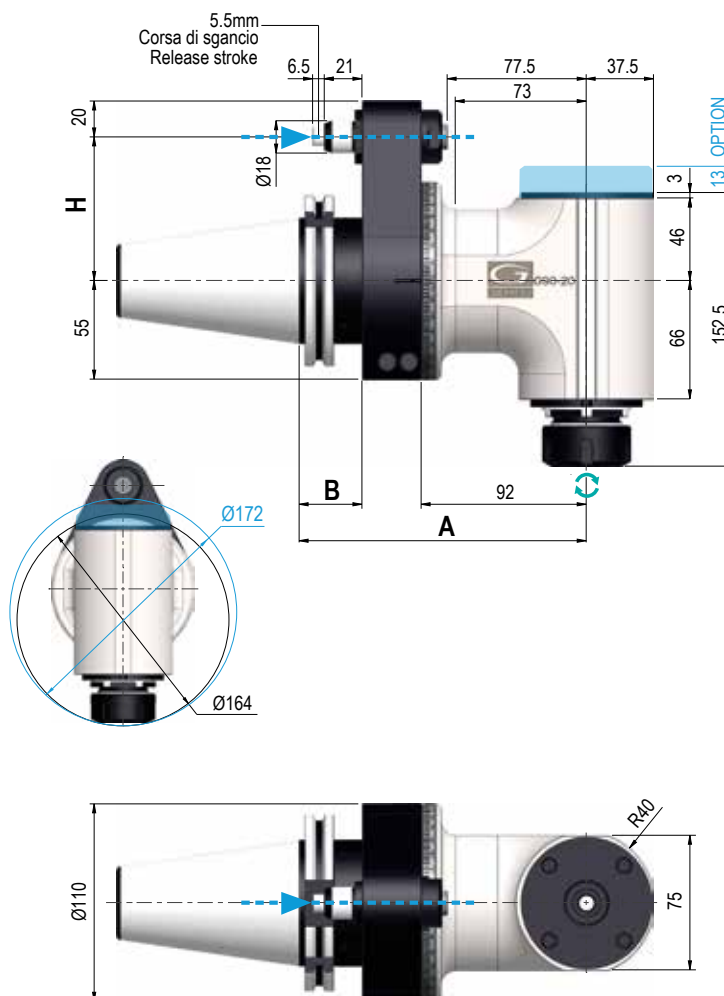
M 16



Nm 40



ER32
Ø2/20



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS 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
Prezzo EXTRA Price €	std	std	std	optional optional optional	optional
H	Standard 80	80	80	80	80
	Optional 110 EXTRA Price €	optional	optional	optional	optional
A	160	160	166	167 170	163 165
B	35	35	41	42 45	38 40

Dotazione Standard Standard Equipment

Opzioni - Options

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

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED
6.000 Rpm

optional



REFR. DAL PERNO
COOLANT PIN THROUGH
DRY RUNNING POSSIBLE
Max 10 bar

optional



USCITA
OUTPUT
Weldon
Max Ø20

optional



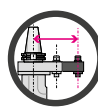
USCITA
OUTPUT
Portafresa
Toolholder Ø22

optional



USCITA
OUTPUT
C4

optional



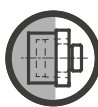
INTERASSE SPECIALE
SPECIAL PITCH
G90-20/20L

optional



REFR. DAL CONO
COOLANT
THROUGH SHANK
DRY RUNNING NOT POSSIBLE
40 bar 70 bar

opt. opt.



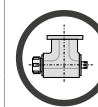
USCITA
OUTPUT
HSK 40

optional



USCITA
OUTPUT
SK 30

optional



DOPPIA USCITA
DOUBLE OUTPUT
ER32 - ER20M

optional

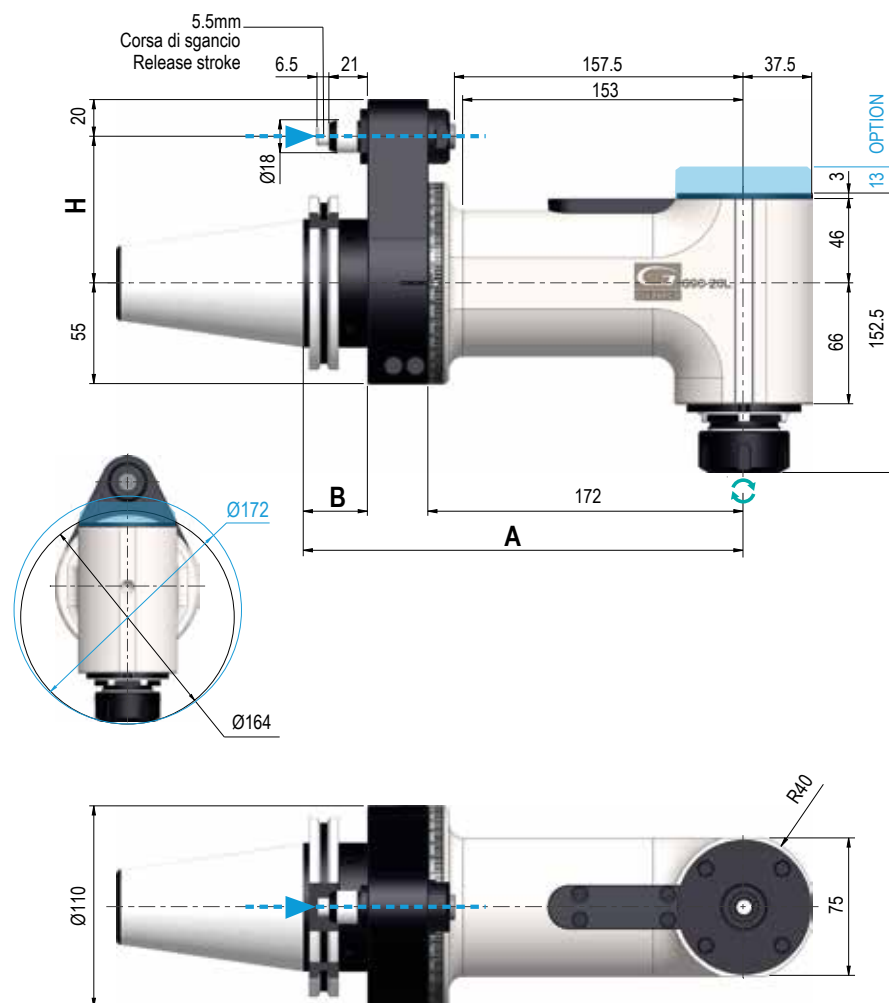
G90-20L

TYPE 2

Code:

9.G90.20L00

Price:



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 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
Prezzo EXTRA Price €	std	std	std	optional optional optional	optional
H Standard	80	80	80	80	80
H Optional 110 EXTRA Price €	optional	optional	optional	optional	optional
A	240	240	246	247 250	243 245
B	35	35	41	42 45	38 40

Dotazione Standard Standard Equipment

Opzioni - Options

Cassa in legno - Stop-block -
Ghiera ER - Chiavi di servizio -
Tubetto di grasso - Libro istruzioni
Wood box - Stop-block - ER nut -
Wrenches - Grease tube - Instruction book

IMBALLO E PESO

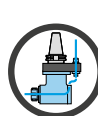
PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

6.000 Rpm

optional



REFR. DAL PERNO
COOLANT PIN THROUGH

DRY RUNNING POSSIBLE

Max 10 bar

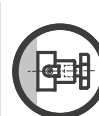
optional



USCITA
OUTPUT

Weldon
Max Ø20

optional



USCITA
OUTPUT

Portafresa
Toolholder Ø22

optional



USCITA
OUTPUT

C4

optional



USCITA
OUTPUT

G90-20/20L
ER40

optional



REFR. DAL CONO
COOLANT THROUGH SHANK

DRY RUNNING NOT POSSIBLE

40 bar 70 bar

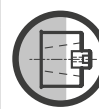
opt. opt.



USCITA
OUTPUT

HSK 40

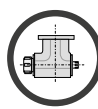
optional



USCITA
OUTPUT

ISO 30

optional



DOPPIA USCITA
DOUBLE OUTPUT

ER32 - ER20M

optional

1

G90-20L/272

TYPE 2

Code: [9.G90.20L00.272](#)

Price:

NEW



Dati tecnici - Technical data



Ratio
1:1



Kg 17



Rpm
4.000



Ø 20



N 1.250



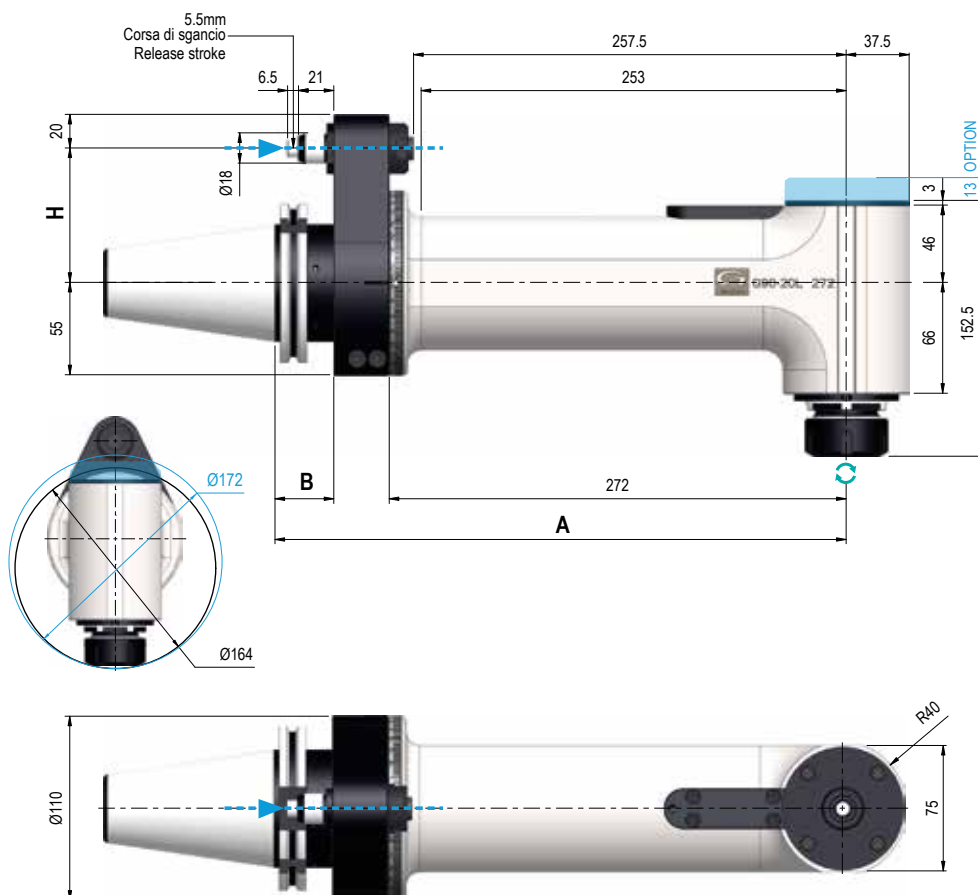
M 16



Nm 40



ER32
Ø2/20



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS 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
Prezzo EXTRA Price €	std	std	std	optional optional optional	optional
H Standard	80	80	80	80	80
H Optional 110 EXTRA Price €	optional	optional	optional	optional	optional
A	340	340	346	347 350	343 345
B	35	35	41	42 45	38 40

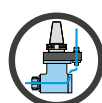
Dotazione Standard Standard Equipment

Opzioni - Options

Cassa in legno - Stop-block -
Chiaviera ER - Chiavi di servizio -
Tubetto di grasso - Libro istruzioni
Wood box - Stop-block - ER nut -
Wrenches - Grease tube - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



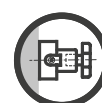
REFR. DAL PERNO
COOLANT PIN
THROUGH
DRY RUNNING POSSIBLE
Max 10 bar
optional



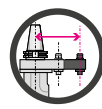
USCITA
OUTPUT
C4
optional



USCITA
OUTPUT
Weldon Max Ø20
optional



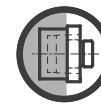
USCITA
OUTPUT
Portafresa
Toolholder Ø22
optional



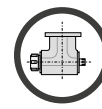
INTERASSE SPECIALE
SPECIAL PITCH
optional



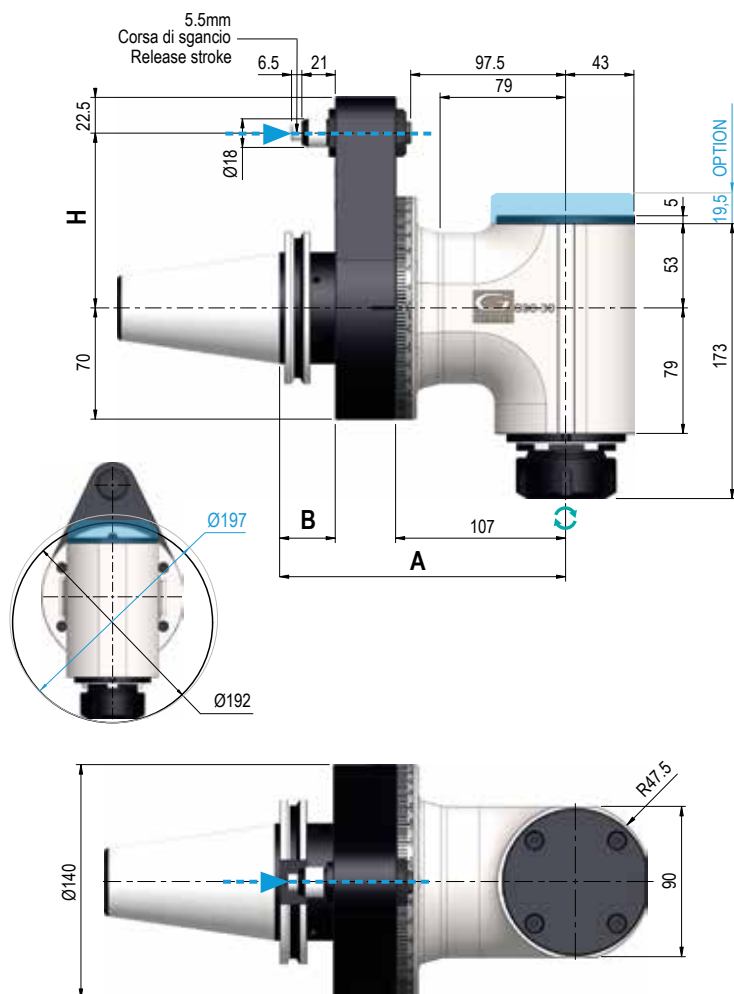
USCITA
OUTPUT
HSK 40
optional



USCITA
OUTPUT
ISO 30
optional



DOPPIA USCITA
DOUBLE OUTPUT
ER32 - ER20M
optional



G90-30

TYPE 3

Code:

9.G90.30000

Price:



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 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
Prezzo EXTRA Price €	std	std	std	optional optional	optional
H Standard	110	110	110	110	110
A	250	250	256	257 260	255
B	35	35	41	42 45	40

Dotazione Standard Standard Equipment

Opzioni - Options

Cassa in legno - Stop-block -
Ghiera ER - Chiavi di servizio -
Tubetto di grasso - Libro istruzioni
Wood box - Stop-block - ER nut -
Wrenches - Grease tube - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

6.000 Rpm

optional



REFR. DAL PERNO
COOLANT PIN THROUGH

DRY RUNNING POSSIBLE

Max 10 bar

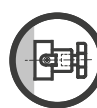
optional



USCITA
OUTPUT

Weldon
Max Ø25

optional



USCITA
OUTPUT

Portafresa
Toolholder Ø27

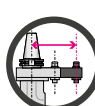
optional



USCITA
OUTPUT

ISO 30

optional



INTERASSE SPECIALE
SPECIAL PITCH

optional

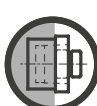


REFR. DAL CONO
COOLANT THROUGH SHANK

DRY RUNNING NOT POSSIBLE

30 bar 70 bar

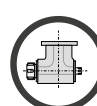
opt. opt.



USCITA
OUTPUT

HSK 40

optional



USCITA
OUTPUT

DOPPIA USCITA
DOUBLE OUTPUT

ER40 - ER25M

optional



USCITA
OUTPUT

C4

optional

G90-30L

TYPE 3

Code: **9.G90.30L00**

Price:

NEW



Dati tecnici - Technical data



Ratio
1:1



Kg 20



Rpm
4.000



Ø 30



N 1.750



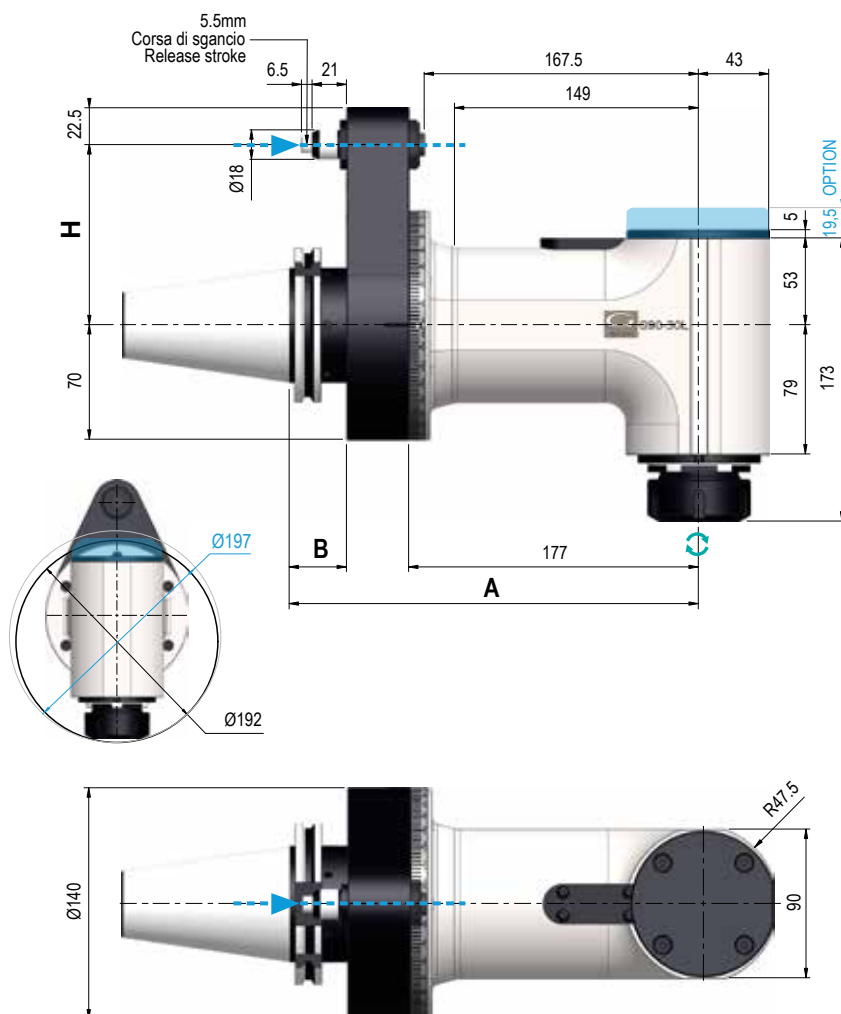
M 20



Nm 75



ER40
Ø3/30



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS 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
Prezzo EXTRA Price €		std	std	std	optional	optional	optional
H	Standard Ø18	110	110	110	110		110
A		180	180	186	187	190	185
B		35	35	41	42	45	40

Dotazione Standard Standard Equipment

Opzioni - Options

Cassa in legno - Stop-block -
Ghiera ER - Chiavi di servizio -
Tubetto di grasso - Libro istruzioni
Wood box - Stop-block - ER nut -
Wrenches - Grease tube - Instruction book

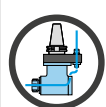
IMBALLO & PESO

PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED
6.000 Rpm

optional



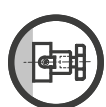
REFR. DAL PERNO
COOLANT PIN THROUGH
DRY RUNNING POSSIBLE
Max 10 bar

optional



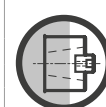
USCITA
OUTPUT
Weldon
Max Ø25

optional



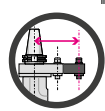
USCITA
OUTPUT
Portafresa
Toolholder Ø27

optional



USCITA
OUTPUT
ISO 30

optional



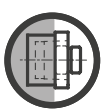
INTERASSE SPECIALE
SPECIAL PITCH

optional



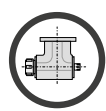
REFR. DAL CONO
COOLANT
THROUGH SHANK
DRY RUNNING NOT POSSIBLE
30 bar 70 bar

opt. opt.



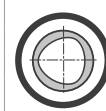
USCITA
OUTPUT
HSK 40

optional



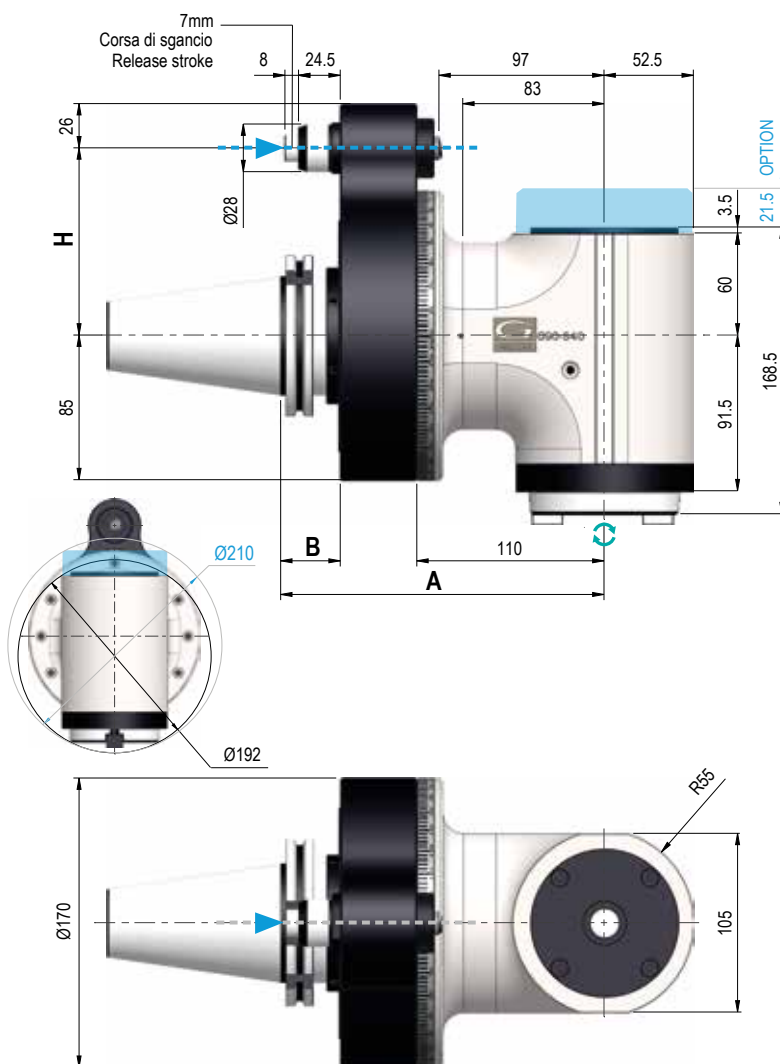
DOPPIA USCITA
DOUBLE OUTPUT
ER40 - ER25M

optional



USCITA
OUTPUT
C4

optional



G90-S40

TYPE 4

Code:

9.G90.S4000

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 22



Rpm
4.000



Ø 26



N 1.800



M 20



Nm 140



ISO 40 /
CAT / BT40



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS 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
Prezzo EXTRA Price €	std	std	std	optional optional	optional
H Standard Ø28	110	110	110	110	110
A	190	190	196	197 200	195
B	35	35	41	42 45	40

Dotazione Standard Standard Equipment

Cassa in legno - Stop-block -
Ghiera ER - Chiavi di servizio -
Tubetto di grasso - Libro istruzioni
Wood box - Stop-block - ER nut -
Wrenches - Grease tube - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



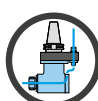
Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED

5.000 Rpm

optional



REFR. DAL PERNO
COOLANT PIN THROUGH

DRY RUNNING POSSIBLE

Max 10 bar

optional

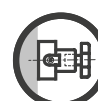


USCITA
OUTPUT

Weldon

Max Ø26

optional



USCITA
OUTPUT

Portafresa

Toolholder Ø32

optional



INTERASSE SPECIALE
SPECIAL PITCH

optional



REFR. DAL CONO
COOLANT THROUGH SHANK

DRY RUNNING NOT POSSIBLE

30 bar 70 bar

opt. opt.



USCITA
OUTPUT

HSK 63

opt.



USCITA
OUTPUT

C4 C5

opt. opt.

1

G90-S40L

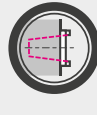
TYPE 4

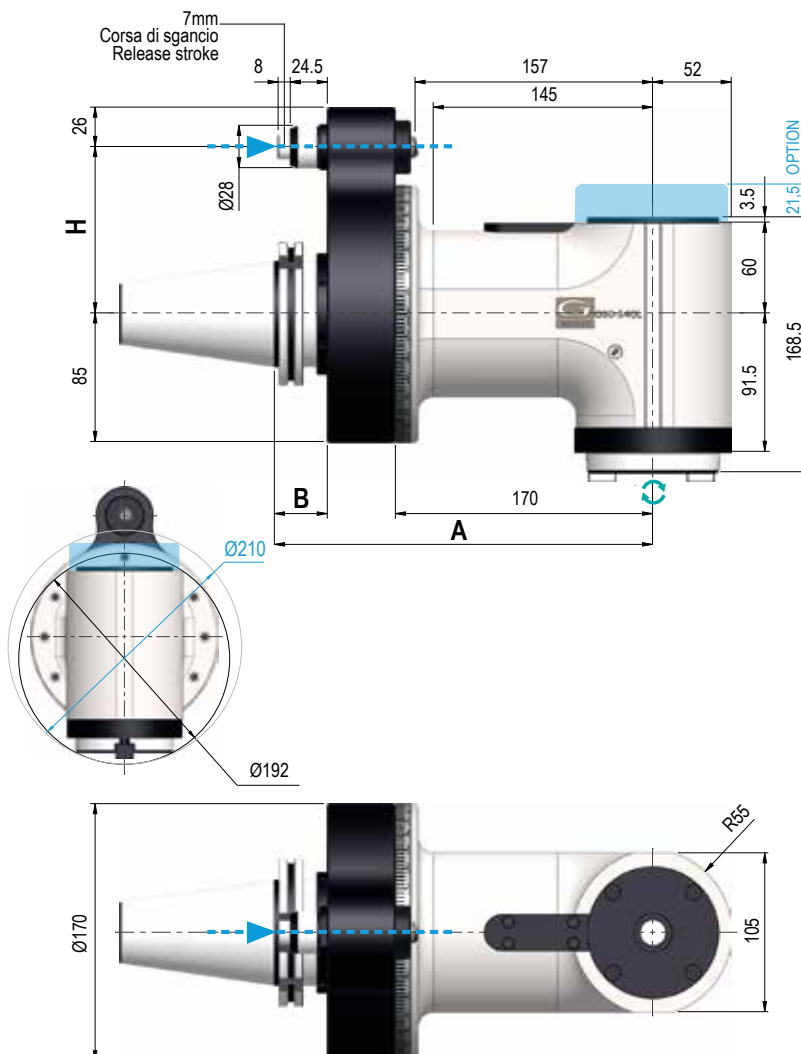
Code: **9.G90.S40L00**

Price:



Dati tecnici - Technical data

	Ratio 1:1		Kg 26,2
	Rpm 4.000		Ø 26
	N 1.800		M 20
	Nm 140		ISO 40 / CAT / BT40



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS 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
Prezzo EXTRA Price €	std	std	std	optional optional	optional
H Standard Ø28	110	110	110	110	110
A	190	190	196	197 200	195
B	35	35	41	42 45	40

Dotazione Standard Standard Equipment

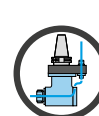
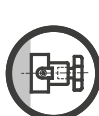
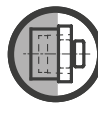
Cassa in legno - Stop-block -
Ghiera ER - Chiavi di servizio -
Tubetto di grasso - Libro istruzioni
Wood box - Stop-block - ER nut -
Wrenches - Grease tube - Instruction book

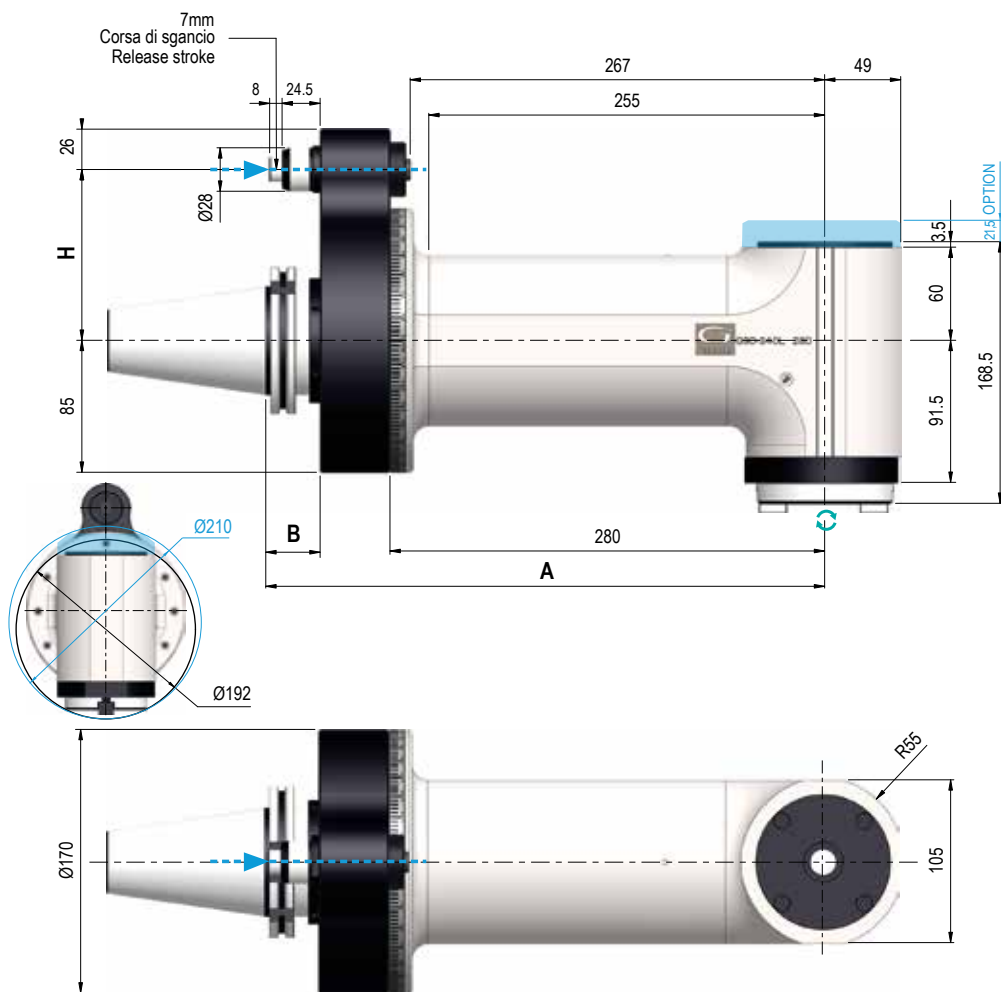
IMBALLO & PESO

PACK & WEIGHT: Max. Kg



Opzioni - Options

	ALTA VELOCITÀ HIGH SPEED 5.000 Rpm optional		REFR. DAL PERNO COOLANT PIN THROUGH DRY RUNNING POSSIBLE Max 10 bar optional		USCITA OUTPUT Weldon Max Ø26 optional		USCITA OUTPUT Portafresa Toolholder Ø32 optional
	INTERASSE SPECIALE SPECIAL PITCH optional		REFR. DAL CONO COOLANT THROUGH SHANK DRY RUNNING NOT POSSIBLE 30 bar 70 bar opt. opt.		USCITA OUTPUT HSK 63 optional		USCITA OUTPUT C4 C5 opt. opt.



G90-S40L/280 TYPE 4

Code: 9.G90.S40L0.280

Price:



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 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
Prezzo EXTRA Price €	std	std	std	optional	optional
H Standard Ø28	110	110	110	110	110
A	360	360	366	370	365
B	35	35	41	45	40

Dotazione Standard Standard Equipment

Opzioni - Options

Cassa in legno - Stop-block -
Ghiera ER - Chiavi di servizio -
Tubetto di grasso - Libro istruzioni
Wood box - Stop-block - ER nut -
Wrenches - Grease tube - Instruction book

IMBALLO & PESO

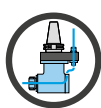
PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

5.000 Rpm

optional



REFR. DAL PERNO
COOLANT PIN THROUGH

DRY RUNNING POSSIBLE

Max 10 bar

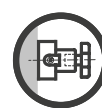
optional



USCITA
OUTPUT

Weldon
Max Ø26

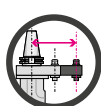
optional



USCITA
OUTPUT

Portafresa
Toolholder Ø32

optional



INTERASSE SPECIALE
SPECIAL PITCH

optional

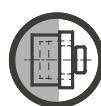


REFR. DAL CONO
COOLANT
THROUGH SHANK

DRY RUNNING NOT POSSIBLE

30 bar 70 bar

opt. opt.



USCITA
OUTPUT

HSK 63

optional



USCITA
OUTPUT

C4 C5

opt. opt.

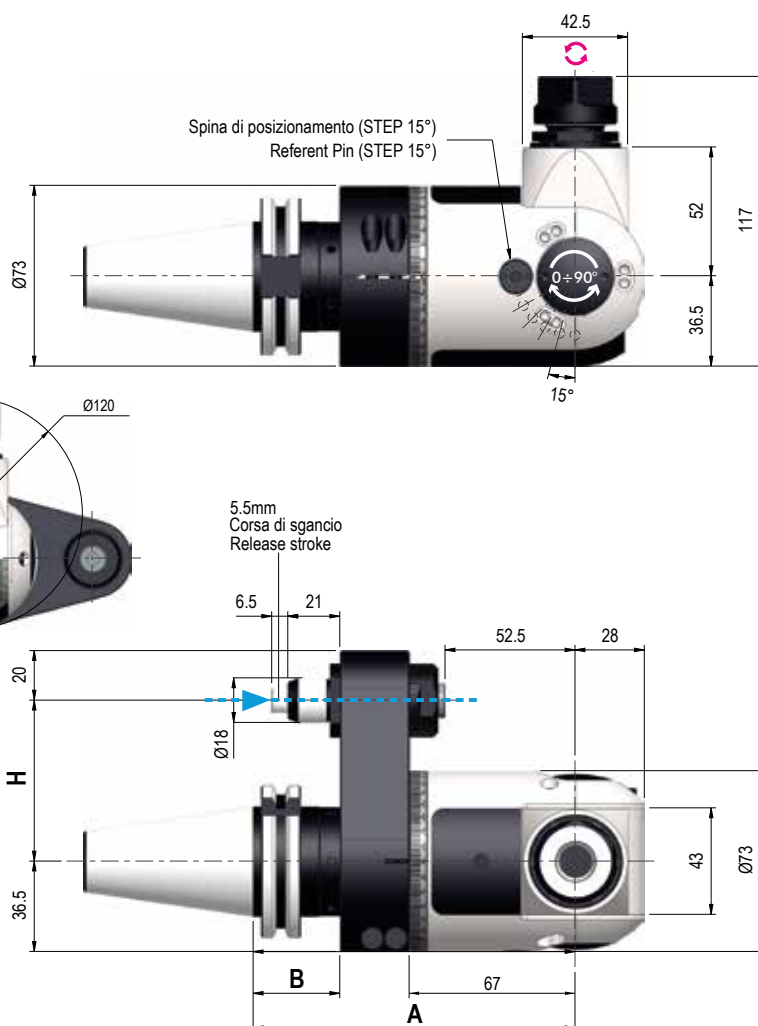
GMU-13

TYPE 0

Code:

9.GMU.13000

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 4,20



Rpm
4.000



Ø 13



N 450



M 10



Nm 6



ER-20
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
Prezzo EXTRA Price €		std	std	std	std	std	std	optional	optional	optional	optional		
H	Standard	65 / 80	80	65 / 80	80	65 / 80	80	65 / 80		80	65 / 80		80
	Optional 110 EXTRA Price €	optional		optional		optional		optional			optional		
A		130		130		130	136	137		140	133		135
B		35		35		35	41	42		45	38		40

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

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



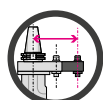
Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED

8.000 Rpm

optional



INTERASSE SPECIALE
SPECIAL PITCH

optional



USCITA
OUTPUT

Weldon Max Ø 16

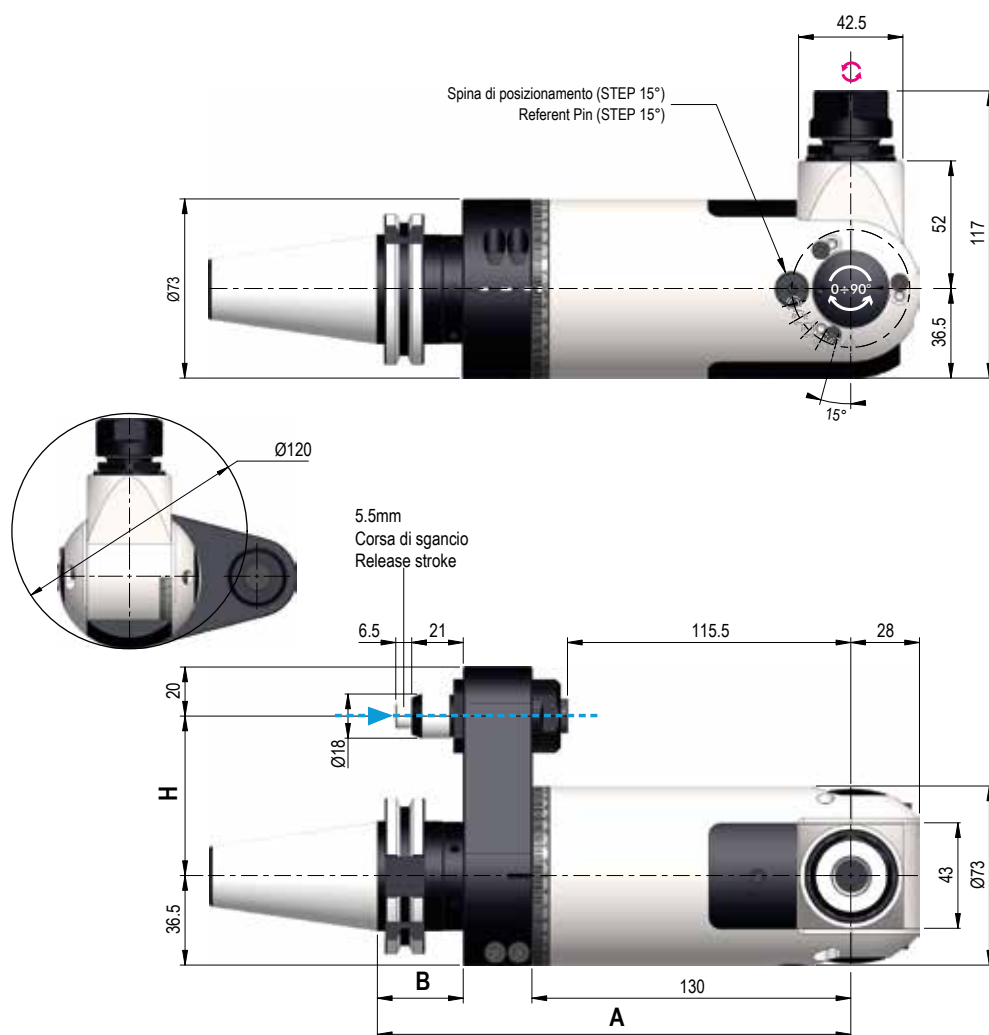
optional



SPINA POSIZIONE RAPIDA
QUICK POSITIONING PIN

Angolazioni personalizzate
Customized angles

optional



GMU-13L

TYPE 0

Code:

9.GMU.13L00

Price:

NEW



Dati tecnici - Technical data



Ratio
1:1



Kg 6,3



Rpm
4.000



Ø 13



N 450



M 10



Nm 6



ER-20
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		30	40	50	30	40	50	30	40	50	63	80	100	C5	C6	C8
Prezzo EXTRA Price €		std	std	std	std	std	std	std	std	std	optional	optional	optional	optional		
H	Standard	65 / 80		80	65 / 80		80	65 / 80		80	65 / 80		80	65 / 80		80
	Optional 110 EXTRA Price €	optional			optional			optional			optional			optional		
A		193			193			188	193	199	200		203	196		198
B		35			35			30	35	41	42		45	38		40

Dotazione Standard Standard Equipment

Opzioni - Options

Cassa in legno - Stop-block -
Ghiera ER - Chiavi di servizio -
Tubetto di grasso - Libro istruzioni
Wood box - Stop-block - ER nut -
Wrenches - Grease tube- Instruction book

IMBALLO & PESO

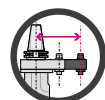
PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

8.000 Rpm

optional



INTERASSE SPECIALE
SPECIAL PITCH

optional



USCITA
OUTPUT

Weldon Max Ø20

optional



SPINA POSIZIONE RAPIDA
QUICK POSITIONING PIN

Angolazioni personalizzate
Customized angles

optional

GMU-16

TYPE 1

Code: **9.GMU.16000**

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 6,8



Rpm
4.000



Ø 16



N 480



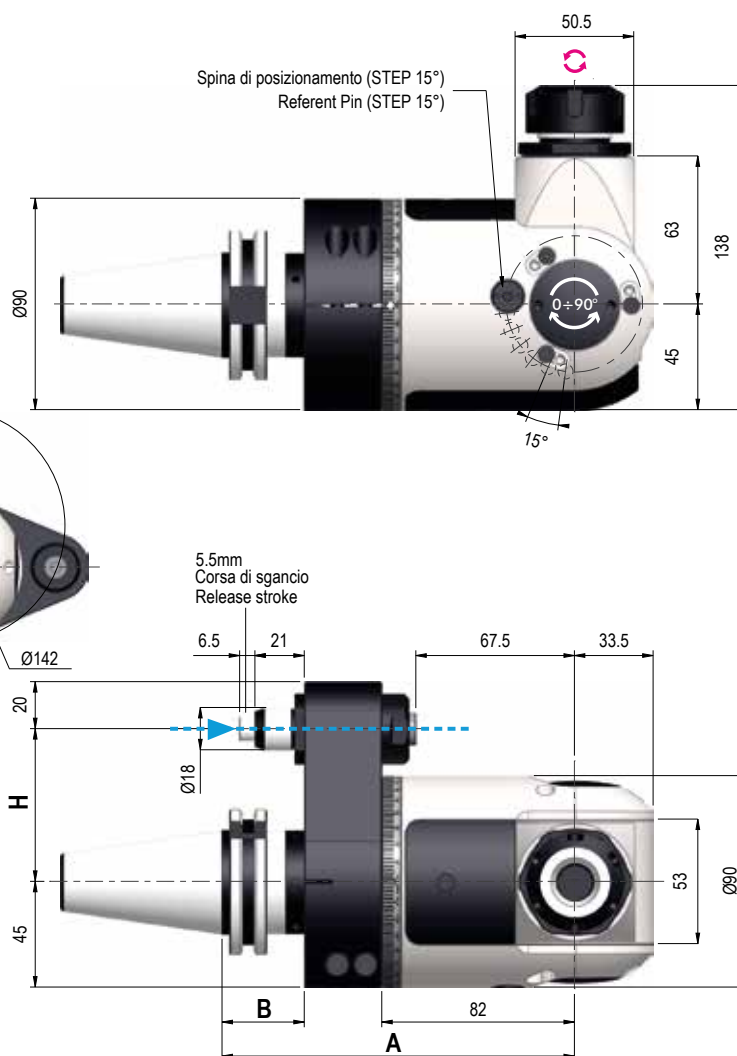
M 12



Nm 18



ER-25
Ø1/16



SENDO 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
Prezzo EXTRA Price €		std	std	std	std	std	std	optional	optional	optional	optional		
H	Standard	65 / 80	80	65 / 80	80	65 / 80	80	65 / 80		80	65 / 80		80
	Optional 110 EXTRA Price €	optional		optional		optional		optional			optional		
A		150		150		150	156	157		160	153		155
B		35		35		35	41	42		45	38		40

Dotazione Standard Standard Equipment

Opzioni - Options

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

IMBALLO & PESO

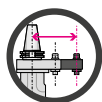
PACK & WEIGHT: Max.12,5 Kg



ALTA VELOCITÀ
HIGH SPEED

6.000 Rpm

optional



INTERASSE SPECIALE
SPECIAL PITCH

optional



USCITA
OUTPUT

Weldon Max Ø 16

optional



SPINA POSIZIONE RAPIDA
QUICK POSITIONING PIN

Angolazioni personalizzate
Customized angles

optional

GMU-20

TYPE 2

Code:

9.GMU.20000

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 13



Rpm
4.000



Ø 20



N 715



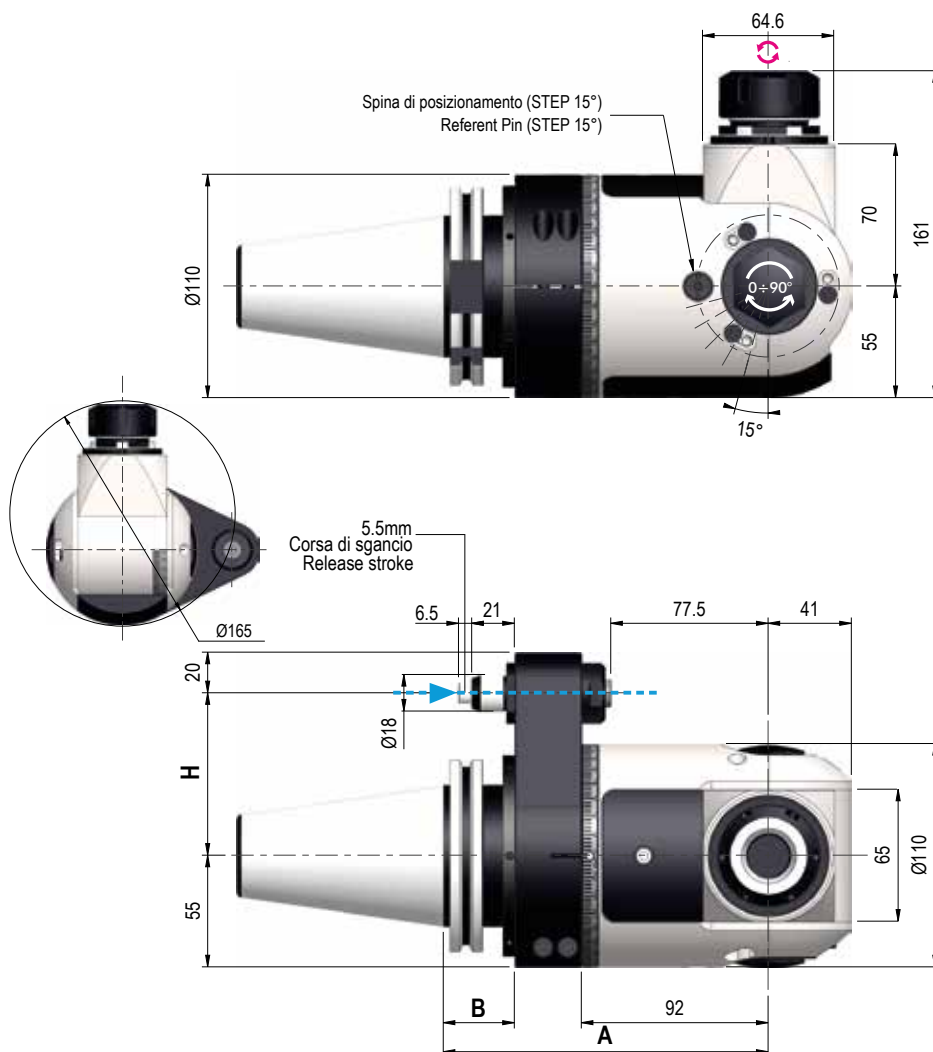
M 16



Nm 32



ER-32
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
Prezzo EXTRA Price €	std	std	std	optional optional	optional
H Standard	80	80	80	80	80
H Optional 110 EXTRA Price €	optional	optional	optional	optional	optional
A	160	160	166	167 170	163 165
B	35	35	41	42 45	38 40

Dotazione Standard Standard Equipment

Opzioni - Options

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

IMBALLO & PESO

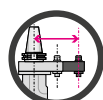
PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

6.000 Rpm

optional



INTERASSE SPECIALE
SPECIAL PITCH

optional



USCITA
OUTPUT

Weldon Max Ø20

optional



SPINA POSIZIONE RAPIDA
QUICK POSITIONING PIN

Angolazioni personalizzate
Customized angles

optional

G90-16-2U

TYPE 1

Code: 9.G90.162U0

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 6.4



Rpm
4.000



Ø 16



N 510



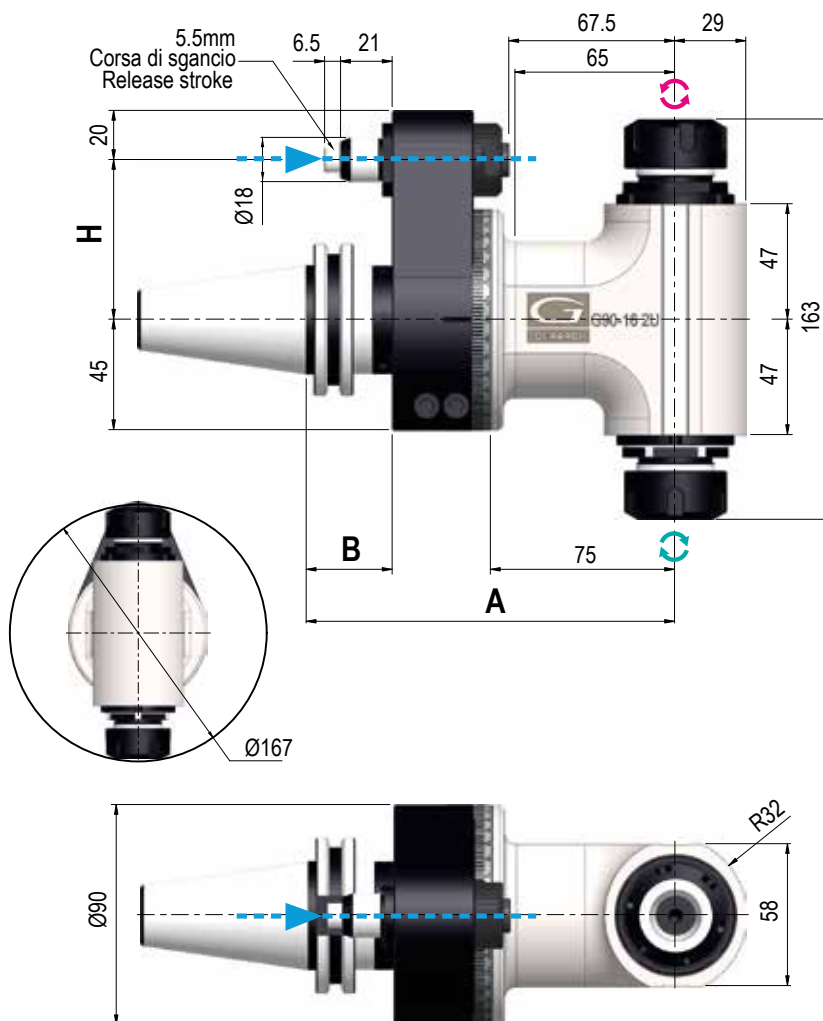
M 12



Nm 24



ER-25
Ø1/16



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE
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
Prezzo EXTRA Price €		std	std	std	std	std	std	optional	optional	optional	optional		
H	Standard	65 / 80	80	65 / 80	80	65 / 80	80	65 / 80		80	65 / 80		80
	Optional 110 EXTRA Price €	optional		optional		optional		optional			optional		
A		150		150		150	156	157		160	153		155
B		35		35		35	41	42		45	38		40

Dotazione Standard Standard Equipment

Opzioni - Options

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

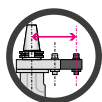
IMBALLO & PESO
PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

8.000 Rpm

optional



INTERASSE SPECIALE
SPECIAL PITCH

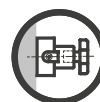
optional



USCITA
OUTPUT

Weldon Max Ø16 (X2)

optional

USCITA
OUTPUT

Portafresa
Toolholder Ø16 (X2)

optional

G90-16L-2U

TYPE 1

Code:

9.G90.16L2U0

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 13



Rpm
4.000



Ø 16



N 510



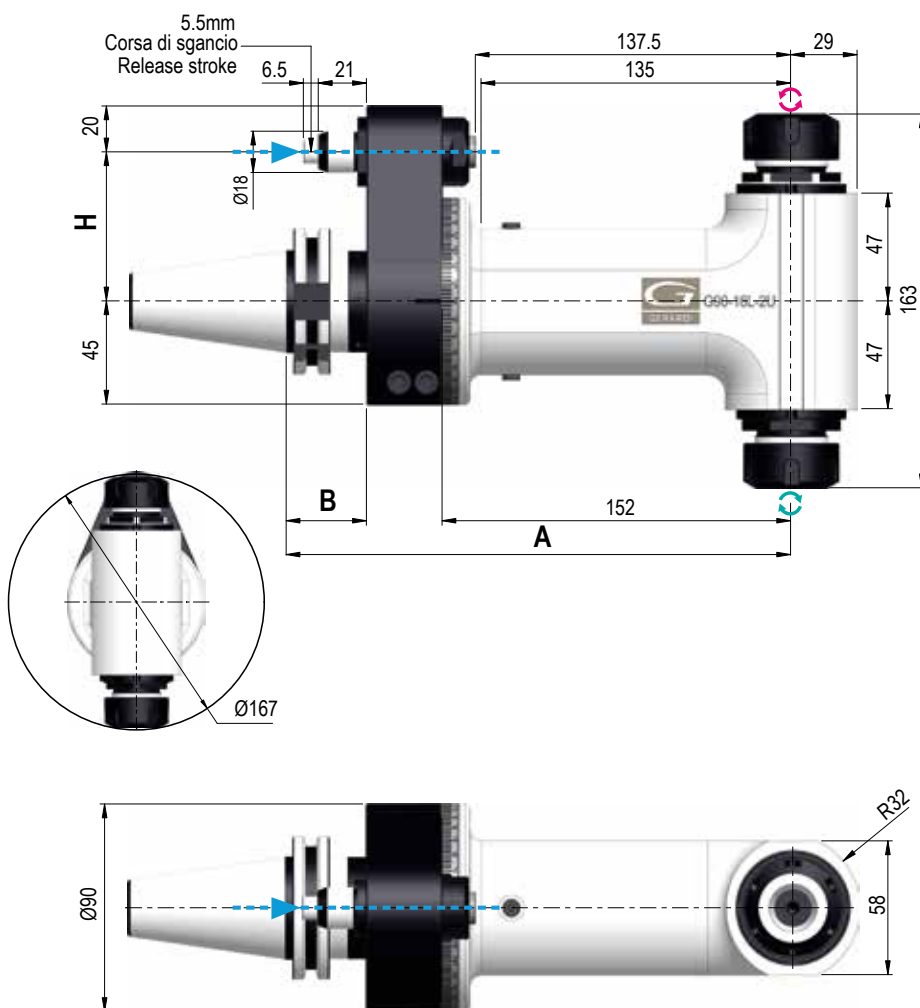
M 12



Nm 24



ER-25
Ø1/16



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE
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
Prezzo EXTRA Price €	std std	std std	std std	optional optional optional	optional
H Standard	65 / 80 80	65 / 80 80	65 / 80 80	65 / 80 80	65 / 80 80
H Optional 110 EXTRA Price €	optional	optional	optional	optional	optional
A	220	220	220	226	227 230 223 225
B	35	35	35	41	42 45 39 40

Dotazione Standard Standard Equipment

Opzioni - Options

Cassa in legno - Stop-block -
Ghiera ER - Chiavi di servizio -
Tubetto di grasso - Libro istruzioni
Wood box - Stop-block - ER nut -
Wrenches - Grease tube- Instruction book

IMBALLO & PESO

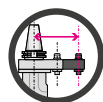
PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

8.000 Rpm

optional



INTERASSE SPECIALE
SPECIAL PITCH

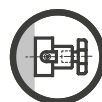
optional



USCITA
OUTPUT

Weldon Max Ø16 (X2)

optional



USCITA
OUTPUT

Portafresa
Toolholder Ø16 (X2)

optional

1

G90-20-2U

TYPE 2

Code: 9.G90.202U0

Price:

NEW



Dati tecnici - Technical data



Ratio
1:1



Kg 11,7



Rpm
4.000



Ø 20



N 1250



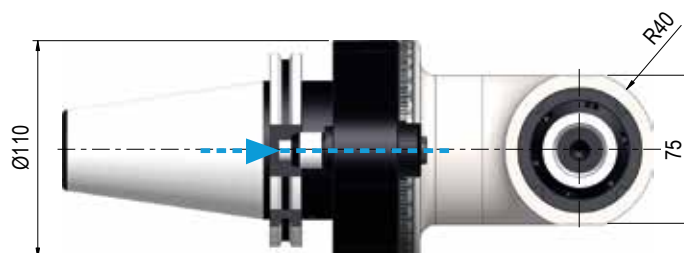
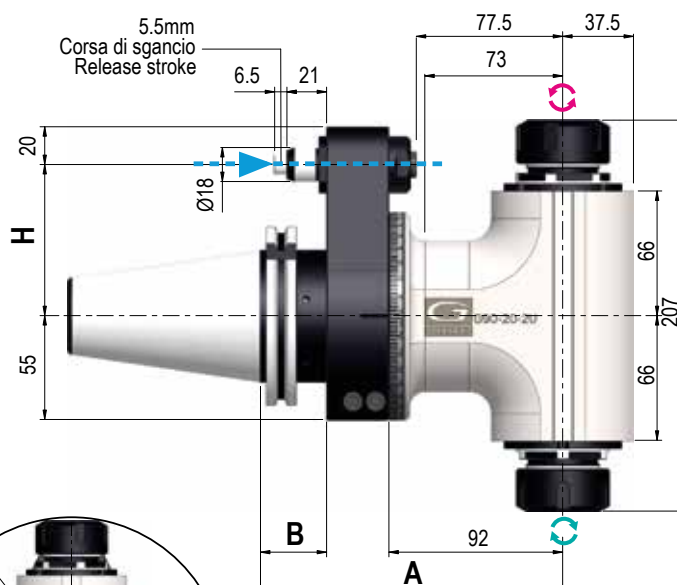
M 16



Nm 40



ER-32
Ø2/20



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE
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	63 80 100	C6 C8
Prezzo EXTRA Price €	std	std	std	std optional optional	optional
H Standard	80 / 110	80 / 110	80 / 110	80 / 110	80
H Optional 110 EXTRA Price €	optional	optional	optional	optional	optional
A	160	160	166	167 170	163 165
B	35	35	41	42 45	38 40

Dotazione Standard Standard Equipment

Opzioni - Options

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

IMBALLO & PESO

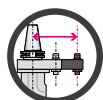
PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

6.000 Rpm

optional



INTERASSE SPECIALE
SPECIAL PITCH

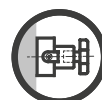
optional



USCITA
OUTPUT

Weldon Max Ø20 (X2)

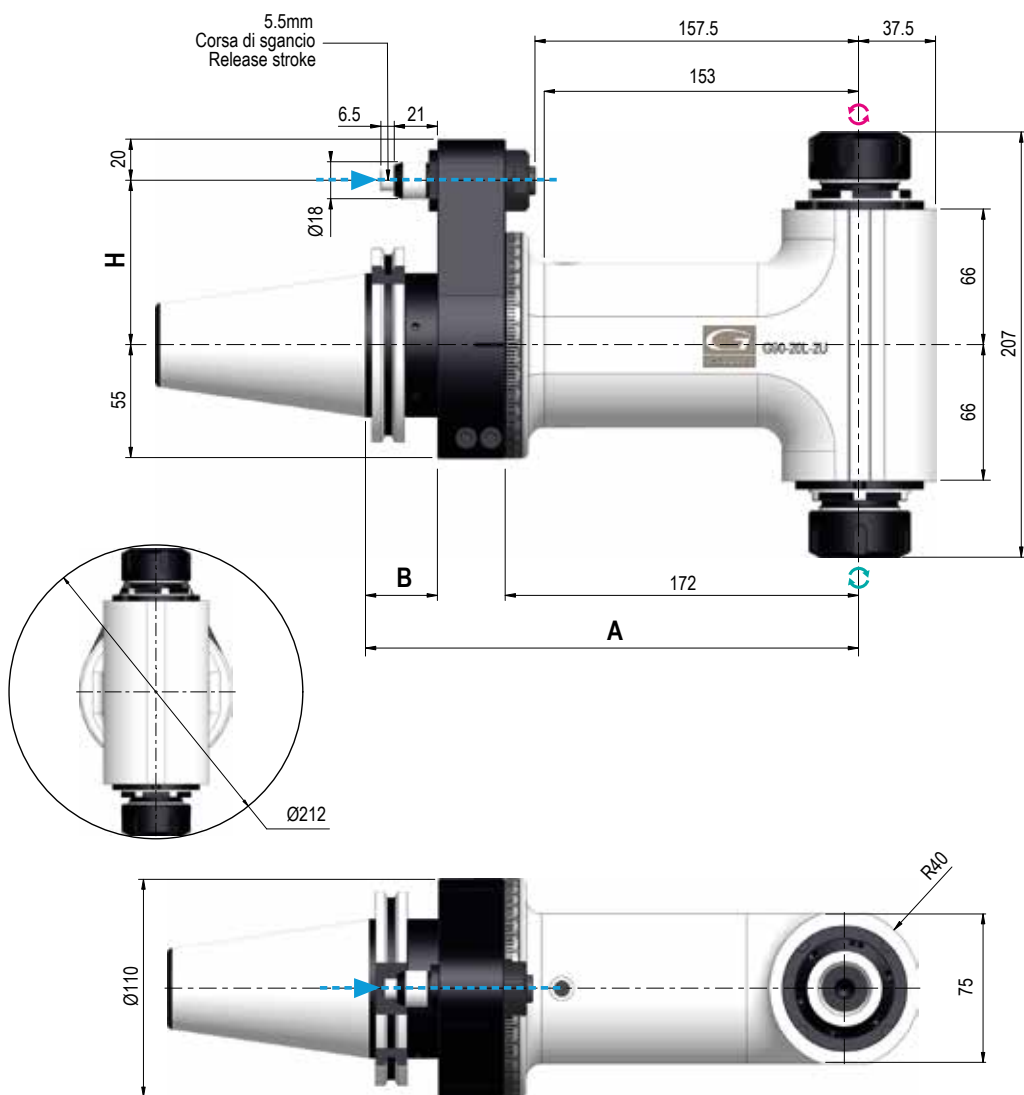
optional



USCITA
OUTPUT

Portafresa
Toolholder Ø27 (X2)

optional



G90-20L-2U

TYPE 2

Code:

9.G90.20L2U0

Price:



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 UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE

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	63 80 100	C6 C8
Prezzo EXTRA Price €	std	std	std	std optional optional	optional
H Standard	80	80	80	80	80
H Optional 110 EXTRA Price €	optional	optional	optional	optional	optional
A	240	240	246	247 250	243 245
B	35	35	41	42 45	38 40

Dotazione Standard
Standard Equipment

Opzioni - Options

Cassa in legno - Stop-block -
Ghiera ER - Chiavi di servizio -
Tubetto di grasso - Libro istruzioni
Wood box - Stop-block - ER nut -
Wrenches - Grease tube- Instruction book

IMBALLO & PESO

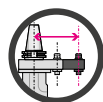
PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

6.000 Rpm

optional



INTERASSE SPECIALE
SPECIAL PITCH

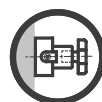
optional



USCITA
OUTPUT

Weldon Max Ø20 (X2)

optional



USCITA
OUTPUT

Portafresa
Toolholder Ø27 (X2)

optional

1

G90-30-2U

TYPE 3

Code: 9.G90.302U0

Price:

NEW



Dati tecnici - Technical data



Ratio
1:1



Kg 20



Rpm
4.000



Ø 30



N 1.750



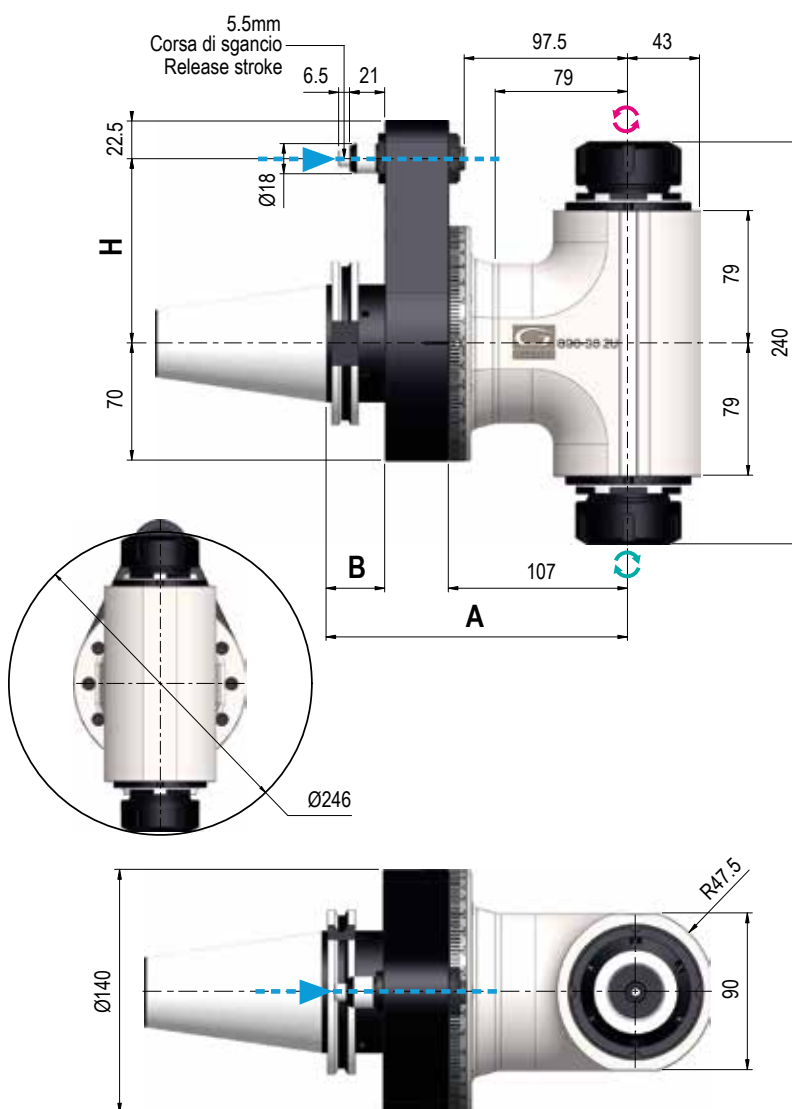
M 20



Nm 75



ER-40
Ø3/30



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
Prezzo EXTRA Price €	std	std	std	optional optional	optional
H Standard Ø18	110	110	110	110	110
A	180	180	186	187 190	185
B	35	35	41	42 45	40

Dotazione Standard Standard Equipment

Opzioni - Options

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

IMBALLO & PESO

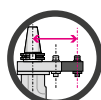
PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

6.000 Rpm

optional



INTERASSE SPECIALE
SPECIAL PITCH

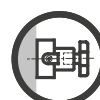
optional



USCITA
OUTPUT

Weldon Max Ø25 (X2)

optional



USCITA
OUTPUT

Portafresa
Toolholder Ø27 (X2)

optional

G90-30L-2U

TYPE 3

Code:

9.G90.30L2U0

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 23



Rpm
4.000



Ø 30



N 1.750



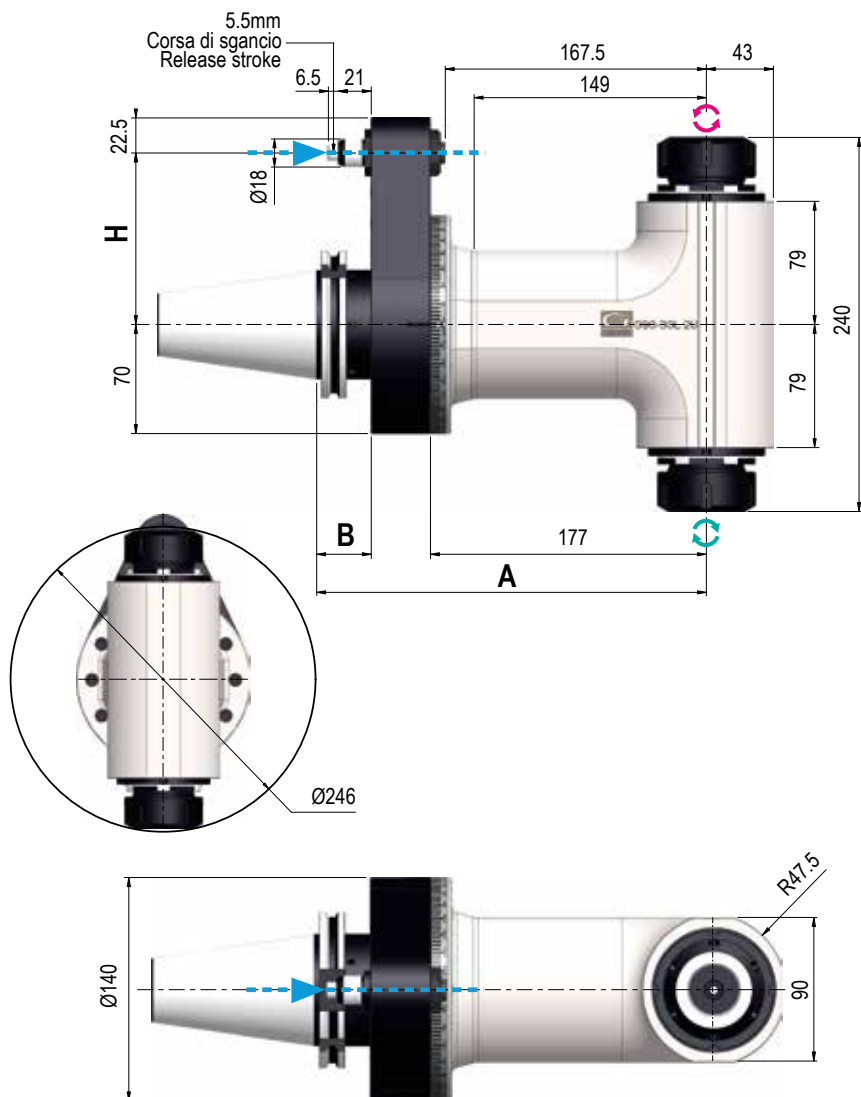
M 20



Nm 75



ER-40
Ø3/30



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE
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	C8
Prezzo EXTRA Price €	std	std	std	optional optional	optional
H Standard Ø18	110	110	110	110	110
A	250	250	256	257 260	255
B	35	35	41	42 45	40

Dotazione Standard Standard Equipment

Opzioni - Options

Cassa in legno - Stop-block -
Ghiera ER - Chiavi di servizio -
Tubetto di grasso - Libro istruzioni
Wood box - Stop-block - ER nut -
Wrenches - Grease tube - Instruction book

IMBALLO & PESO

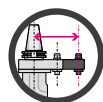
PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

6.000 Rpm

optional



INTERASSE SPECIALE
SPECIAL PITCH

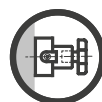
optional



USCITA
OUTPUT

Weldon Max Ø25 (X2)

optional



USCITA
OUTPUT

Portafresa
Toolholder Ø27 (X2)

optional

GR90-5

TYPE 1

Code: 9.GR9.05000

Price:

NEW



Dati tecnici - Technical data



Ratio
1:1



Kg 4,7



Rpm
8.000



Ø 4,5



N 140



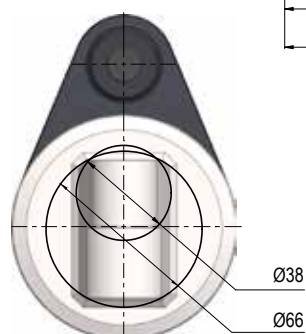
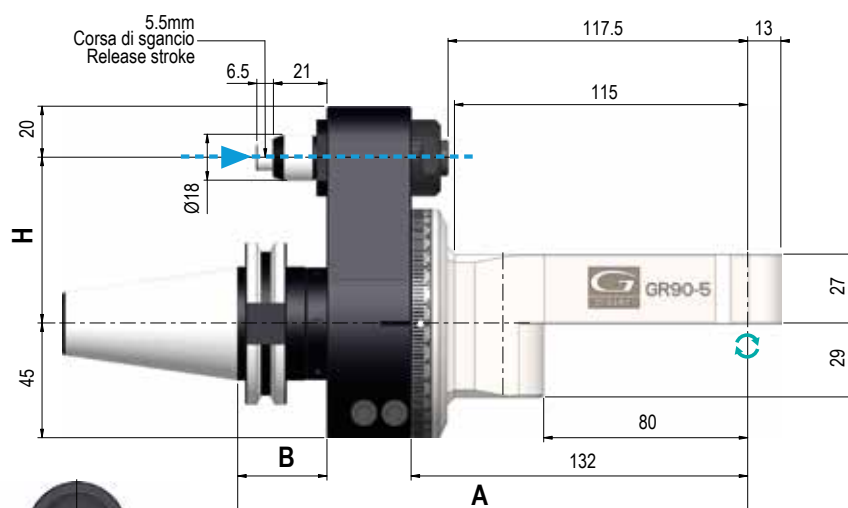
M 4



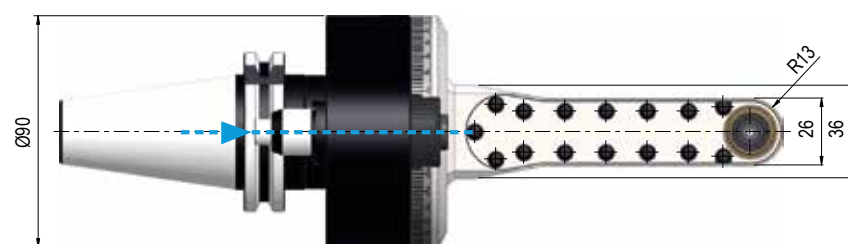
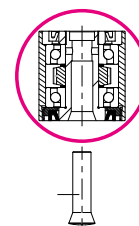
Nm 9



SCHAUBLIN P6
Ø0.3/4.5



Pinza / Collet
SCHAUBLIN P6



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS 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	30	40	50	30	40	50	63	80	100	C5	C6	C8
Prezzo EXTRA Price €	std	std	std	std	std	std	std	std	std	optional	optional	optional	optional		
H	65 / 80		80	65 / 80		80	65 / 80		80	65 / 80		80	65 / 80		80
	optional			optional			optional			optional			optional		
A	200			200			195	200	206	207	210		203		205
B	35			35			30	35	41	42	45		38		40

Dotazione Standard Standard Equipment

Opzioni - Options

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

INTERASSE SPECIALE
SPECIAL PITCH

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



optional



GR90-10

TYPE 1

Code:

9.GR9.10000

Price:



Dati tecnici - Technical data



Ratio
1:1,6



Kg 6,2



Rpm
4.000



Ø 10



N 620



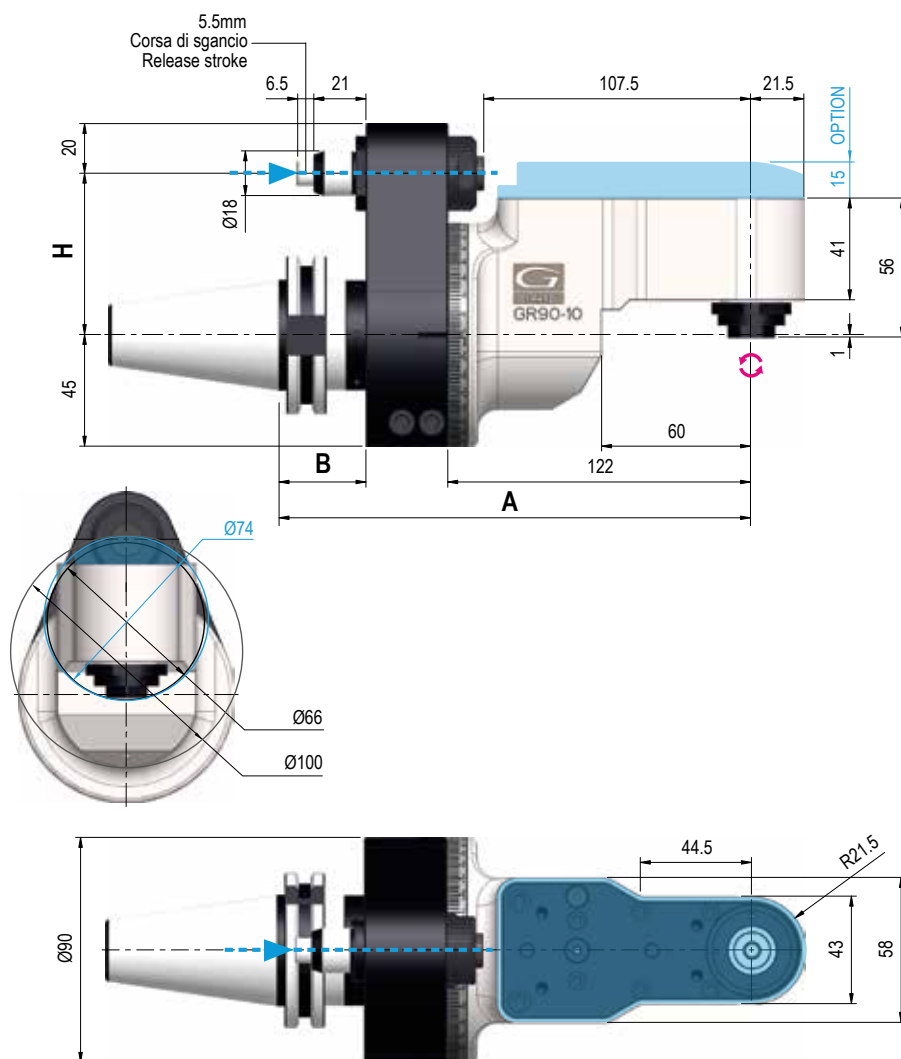
M 8



Nm 20



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	40 50	30 50	40 50	63 80 100	C5 C6 C8
Prezzo EXTRA Price €	std std	std std	std std		
H Standard	65 / 80 80	65 / 80 80	65 / 80 80	65 / 80 80	65 / 80 80
H Optional 110 EXTRA Price €	optional	optional	optional	optional	optional
A	190	190	190	197	193
B	35	35	35	42	38

Dotazione Standard Standard Equipment

Opzioni - Options

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

IMBALLO E PESO

PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED
8.000 Rpm

optional



USCITA
OUTPUT
Weldon Max Ø10

optional



USCITA
OUTPUT
Toolholder Ø13

optional



INTERASSE SPECIAL
SPECIAL PITCH

optional



REFR. DAL CONO
COOLANT THROUGH SHANK
Max 70 bar

optional

GR90-16

TYPE 1

Code:

9.GR9.16000

Price:

NEW



Dati tecnici - Technical data



Ratio
1:1



Kg 6



Rpm
4.000



Ø 16



N 620



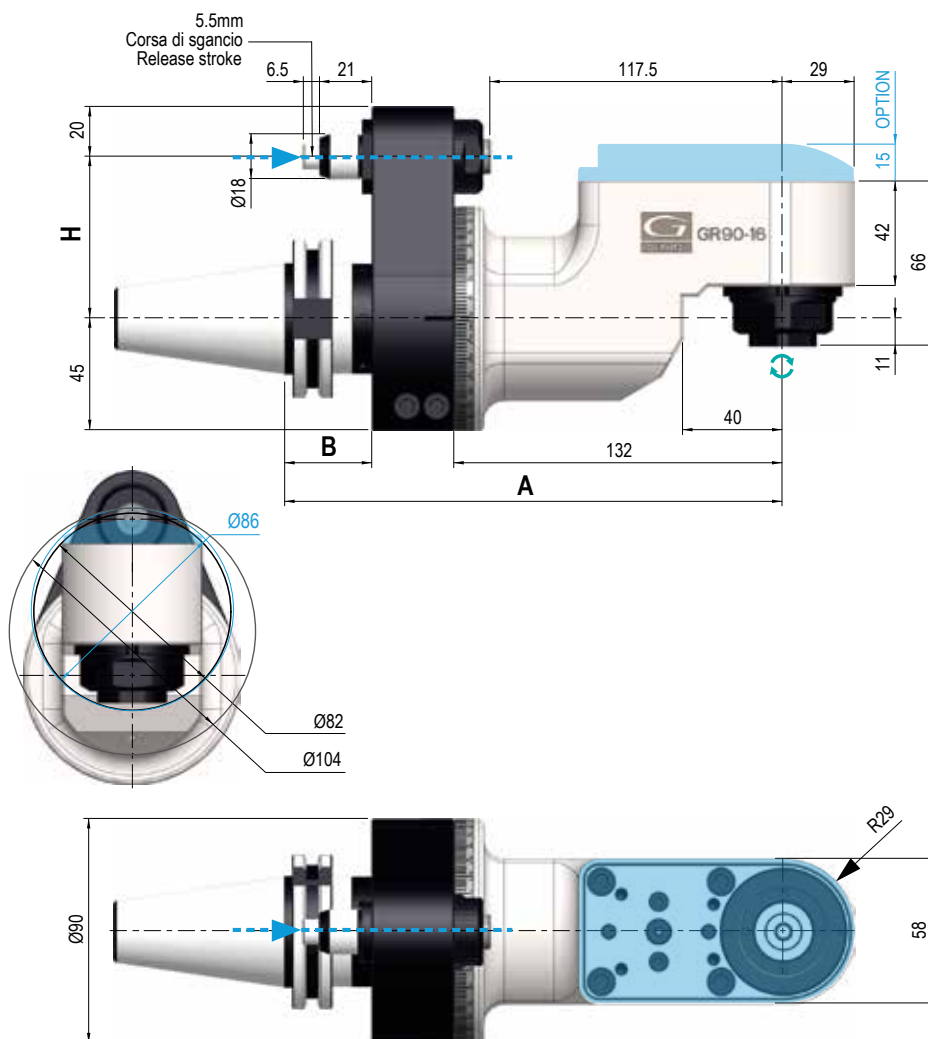
M 12



Nm 20



ER-25
Ø1/16



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE

Coni Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623
Grandezza - Size	40 50	30 50	40 50	63 80 100	C5 C6 C8
Prezzo EXTRA Price €	std std	std std	std std	optional optional optional	optional
Standard	65 / 80 80	65 / 80 80	65 / 80 80	65 / 80 80	65 / 80 80
H Optional 110 EXTRA Price €	optional	optional	optional	optional	optional
A	200	200	200	207	210
B	35	35	35	41	42

DOTAZIONE STANDARD STANDARD EQUIPMENT

OPZIONI - OPTIONS

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

IMBALLO & PESO:

PACK & WEIGHT: Max. Kg



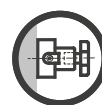
ALTA VELOCITÀ
HIGH SPEED
8.000 Rpm

optional



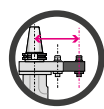
REFR. DAL CONO
COOLANT THROUGH SHANK
DRY RUNNING NOT POSSIBLE
Max 70 bar

optional



USCITA
OUTPUT
Portafresa
Toolholder Ø16

optional



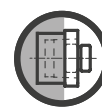
INTERASSE SPECIALE
SPECIAL PITCH

optional



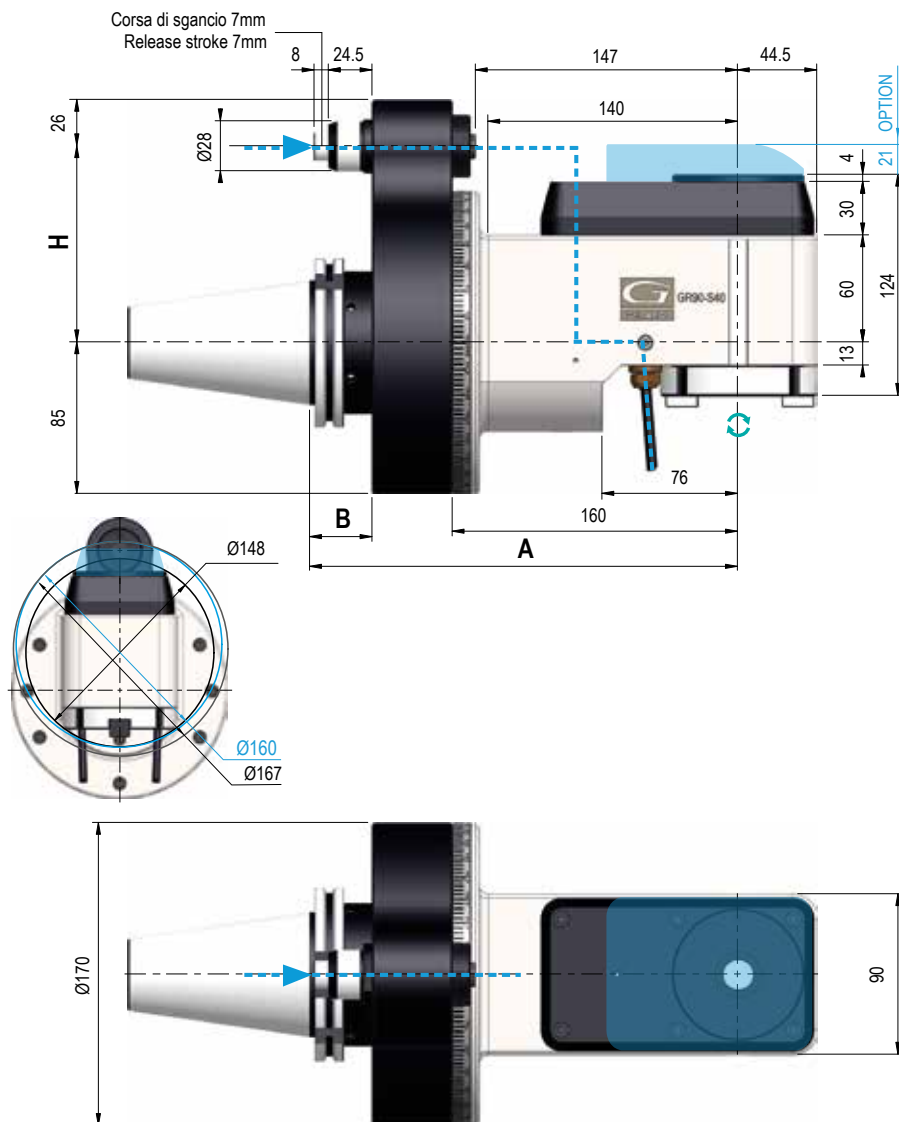
USCITA
OUTPUT
Weldon Max Ø 16

optional



USCITA
OUTPUT
HSK 32

optional



GR90-S40

TYPE 4

Code:

9.GR9.S4000

Price:

NEW



Dati tecnici - Technical data



Ratio
1:1



Kg 22,6



Rpm
4.000



Ø 26



N 1.800



M 20



Nm 140



ISO /
CAT / BT
40



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS 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
Prezzo EXTRA Price €	std	std	std	optional	optional
H Standard Ø18	110	110	110	110	110
A	240	240	246	250	245
B	35	35	41	45	40

Dotazione Standard Standard Equipment

Opzioni - Options

Cassa in legno - Stop-block -
Ghiera ER - Chiavi di servizio -
Tubetto di grasso - Libro istruzioni
Wood box - Stop-block - ER nut -
Wrenches - Grease tube - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

5.000 Rpm

optional



REFR. DAL PERNO
COOLANT PIN THROUGH

DRY RUNNING POSSIBLE

Max 10 bar

optional



USCITA
OUTPUT

Weldon

Max Ø26

optional



USCITA
OUTPUT

Portafresa

Toolholder Ø32

optional



INTERASSE SPECIALE
SPECIAL PITCH

optional



REFR. DAL CONO
COOLANT THROUGH SHANK

DRY RUNNING NOT POSSIBLE

Max 70 bar

optional



USCITA
OUTPUT

HSK 63

optional



USCITA
OUTPUT

C4

opt.

C5

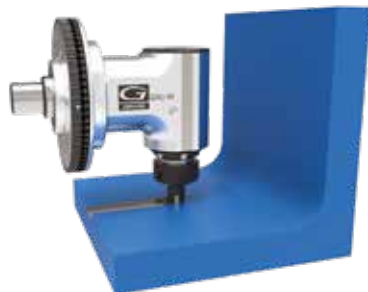
opt.

SERIE MTC - CAMBIO UTENSILE MANUALE

MTC SERIES - MANUAL TOOL CHANGE

- Serie G90
- G90 Series

series
STD 90°



La serie ideale per fresature, forature e maschiature a $\pm 90^\circ$

The ideal series for milling, drilling and tapping at $\pm 90^\circ$

- Serie G90L
- G90L Series

series
STD 90°



La serie ideale per fresature, forature e maschiature a $\pm 90^\circ$

The ideal series for milling, drilling and tapping at $\pm 90^\circ$

- Serie GMU
- GMU Series

series
GMU



La serie di teste angolari con angolazione regolabile da 0 a 90° .

Angle heads series with adjustable angle from 0 to 90° .

- Serie GMU
- GMU Series

series
GMU



La serie di teste angolari con angolazione regolabile da 0 a 360° .

Angle heads series with adjustable angle from 0 to 360° .

- Serie G90 2U
- G90 2U Series

series
DOUB2E



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

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

Anello graduato
Graduated ring

Flangia universale
Universal flange

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

USCITE OUTPUTS:

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

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.

PROLUNGHE MTC MTC EXTENSIONS



Prolunghe MTC

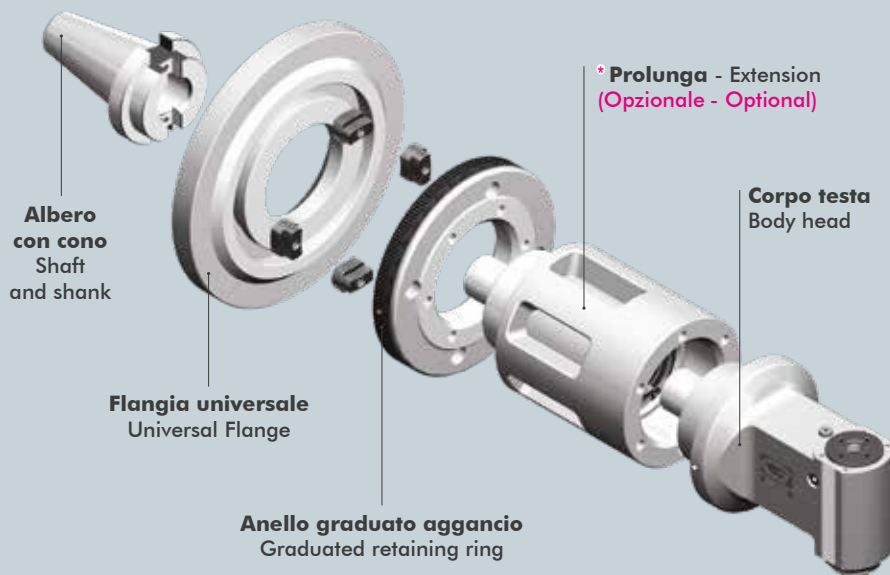
pag 1.87

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

MTC Extension

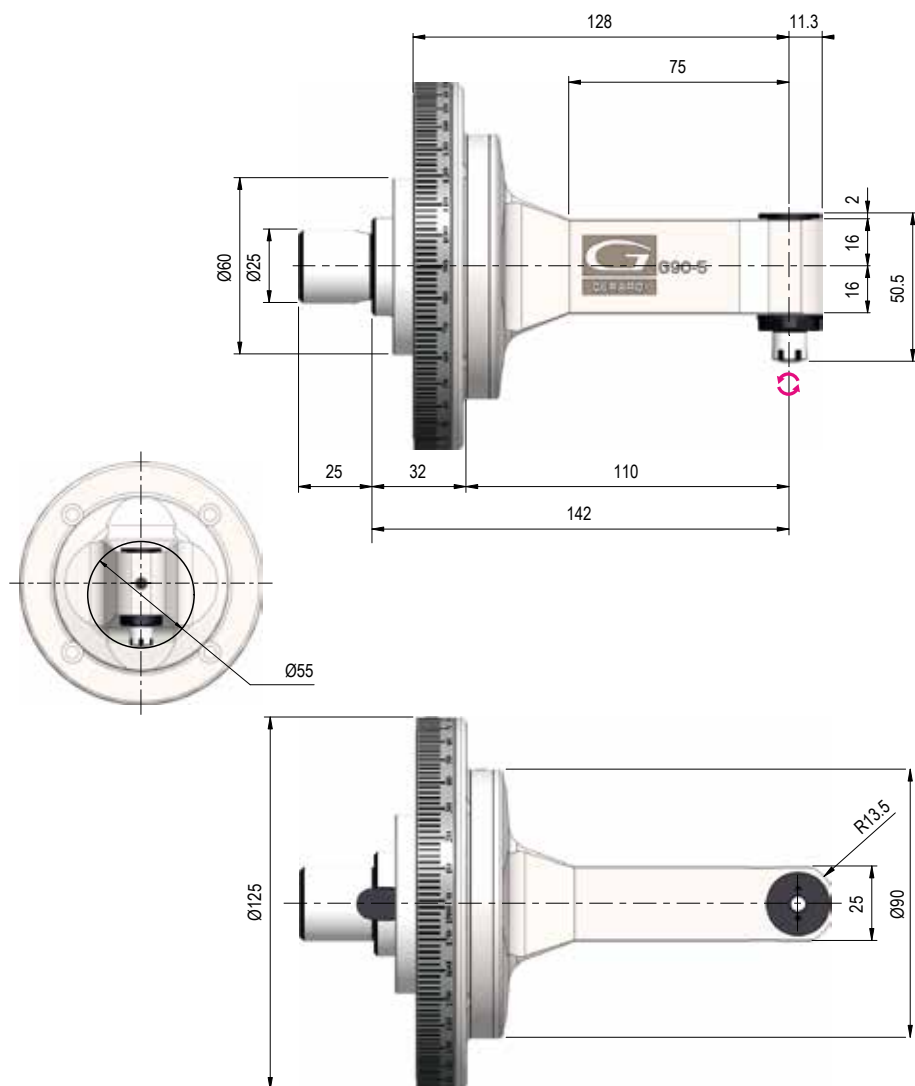
pag 1.87

On MTC series is possible to extend the lenght of the body by adding an extension



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). **Massimo 2 elementi di prolunga ammessi.**

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 lenght of the body by adding a *extension (Optional). **Max. 2 extensions admitted.**



G90-5

TYPE 1

Code:

9.G90.05001

Price:



Per MICRO
lavorazioni
For MICRO
machining

Dati tecnici - Technical data



Ratio
1:1



Kg 4



Rpm
10.000



Ø 5



N 60



M 4



Nm 4



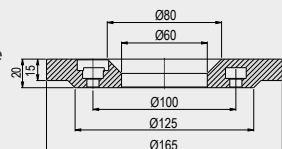
ER-8
Ø0,5/5



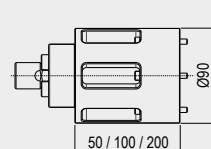
SENSO DI ROTAZIONE CONTRARIO AL MANDRINO - DIRECTION OF ROTATION OPPOSITE TO THE MACHINE SPINDLE

Coni Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN 2080	
Grandezza - Size	30	40	50	30	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Prezzo EXTRA Price €	opt.	std	std	opt.	std	std	opt.	std	std	opt.	opt.	opt.	optional			optional	optional

Flangia Universale
Universal Flange
TIPO - TYPE 1



Prolunga
Extension
TIPO - TYPE 1



Dotazione Standard
Standard Equipment

Valigetta - Flangia universale - Ghiera ER -
Cono std - Chiavi di servizio - Tubetto di
grasso - Libro istruzioni
Special bag - Universal flange - ER nut - Shank -
Wrenches - Grease tube - Instruction book

IMBALLO & PESO:

PACK & WEIGHT: Max. Kg



ALTA VELOCITÀ
HIGH SPEED

10.000 Rpm

Included !!



USCITA
OUTPUT

Weldon Max Ø6

optional



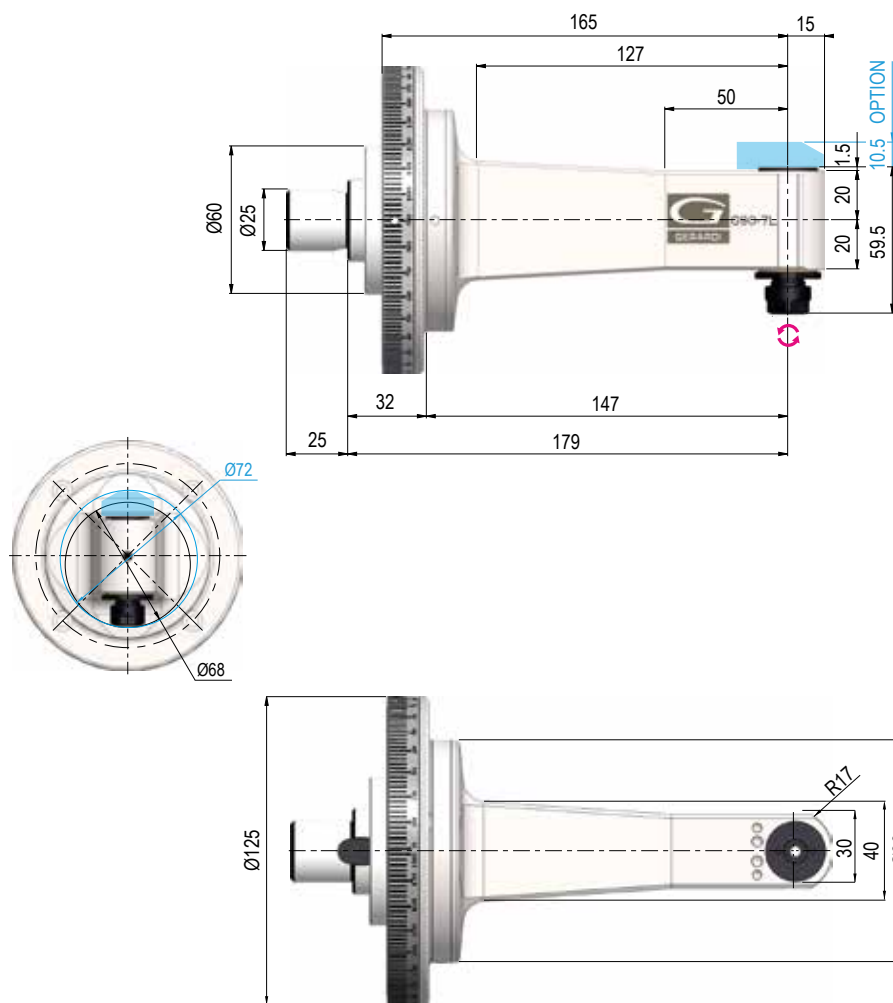
G90-7L

TYPE 1

Code:

9.G90.07L01

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 4



Rpm
10.000



Ø 7



N 120



M 6



Nm 5



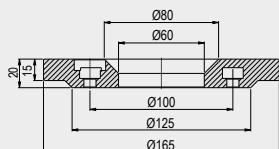
ER-11
Ø1/7



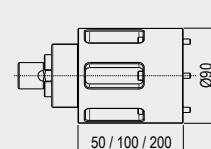
SENSO DI ROTAZIONE CONTRARIO AL MANDRINO - DIRECTION OF ROTATION OPPOSITE TO THE MACHINE SPINDLE

Coni Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN 2080	
Grandezza - Size	30	40	50	30	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Prezzo EXTRA Price €	opt.	std	std	opt.	std	std	opt.	std	std	opt.	opt.	opt.	optional			optional	optional

Flangia Universale Universal Flange TIPO - TYPE 1



Prolunga Extension TIPO - TYPE 1



Dotazione Standard Standard Equipment

Valigetta - Flangia universale - Ghiera ER -
Cono std - Chiavi di servizio - Tubetto di
grasso - Libro istruzioni
Special bag - Universal flange - ER nut - Shank -
Wrenches - Grease tube - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED

10.000 Rpm

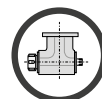
Included !!



USCITA
OUTPUT

Weldon Max Ø8

optional



DOPPIA USCITA
DOUBLE OUTPUT

ER11 - ER8 M

optional



REFR. DAL DISTRIBUTORE
COOLANT THROUGH ROTATING DISTRIBUTOR

DRY RUNNING POSSIBLE

Max 10 bar
optional

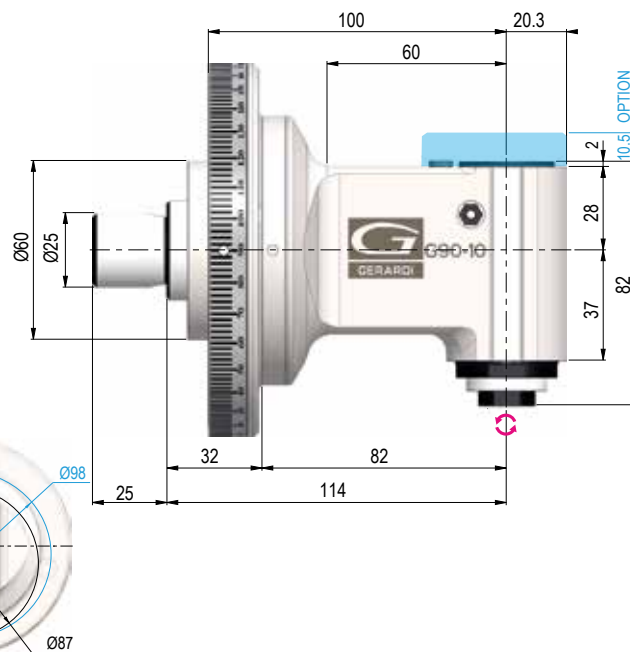
1

G90-10

TYPE 1

Code: 9.G90.10001

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 4,3



Rpm
10.000



Ø 10



N 250



M 8



Nm 10



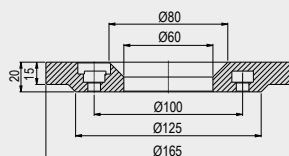
ER-16
Ø1/10



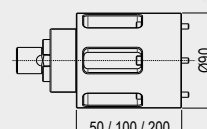
SENDO DI ROTAZIONE CONTRARIO AL MANDRINO - DIRECTION OF ROTATION OPPOSITE TO THE MACHINE SPINDLE

Coni Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN 2080	
Grandezza - Size	30	40	50	30	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Prezzo EXTRA Price €	opt.	std	std	opt.	std	std	opt.	std	std	opt.	opt.	opt.	optional			optional	optional

Flangia Universale Universal Flange TIPO - TYPE 1



Prolunga Extension TIPO - TYPE 1



Dotazione Standard Standard Equipment

Valigetta - Flangia universale - Ghiera ER - Cono - Chiavi di servizio - Tubetto di grasso - Libro Istruzioni
Special bag - Universal flange - ER nut - Shank - Wrenches - Grease tube - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max.9,5 Kg



Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED

10.000 Rpm

Included !!



REFR. DAL DISTRIBUTORE
COOLANT THROUGH ROTATING
DISTRIBUTOR

DRY RUNNING POSSIBLE
Max 10 bar

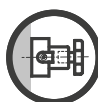
optional



USCITA
OUTPUT

Weldon Max Ø10

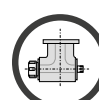
optional



USCITA
OUTPUT

Portafresa - Toolholder
Ø13

optional



DOPPIA USCITA
DOUBLE OUTPUT

ER 16 / ER 11 M

optional



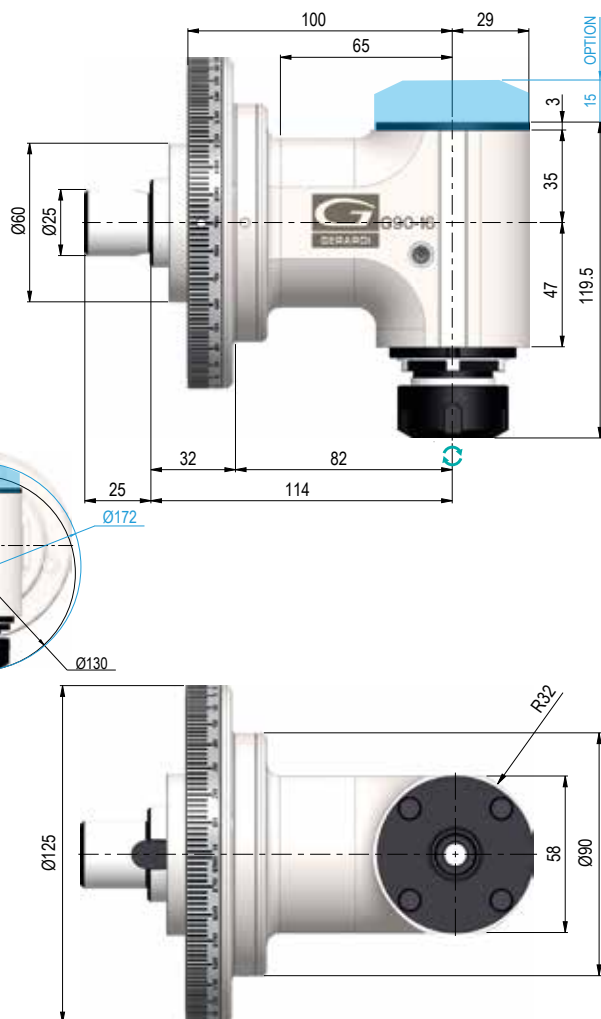
1

G90-16

TYPE 1

Code: 9.G90.16001

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 4,5



Rpm
8.000



Ø 16



N 510



M 12



Nm 24



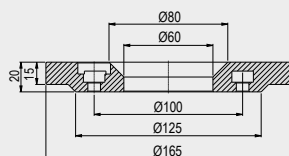
ER-25
Ø1/16



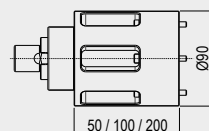
SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE

Coni Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN 2080	
Grandezza - Size	30	40	50	30	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Prezzo EXTRA Price €	opt.	std	std	opt.	std	std	opt.	std	std	opt.	opt.	opt.	optional			optional	optional

Flangia Universale Universal Flange TIPO - TYPE 1



Prolunga Extension TIPO - TYPE 1



Dotazione Standard Standard Equipment

Valigetta - Flangia universale - Ghiera ER -
Cono - Chiavi di servizio - Tubetto di
grasso - Libro Istruzioni
Special bag - Universal flange - ER nut - Shank -
Wrenches - Grease tube - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED

8.000 Rpm

Included !!

REFR. DAL DISTRIBUTORE
COOLANT THROUGH ROTATING
DISTRIBUTOR

DRY RUNNING POSSIBLE
Max 10 bar

optional



USCITA
OUTPUT

Weldon Max Ø16

optional



USCITA
OUTPUT

Portafresa - Toolholder
Ø16

optional



USCITA
OUTPUT

HSK 32

optional



DOPPIA USCITA
DOUBLE OUTPUT

ER 25 / ER 16 M

optional

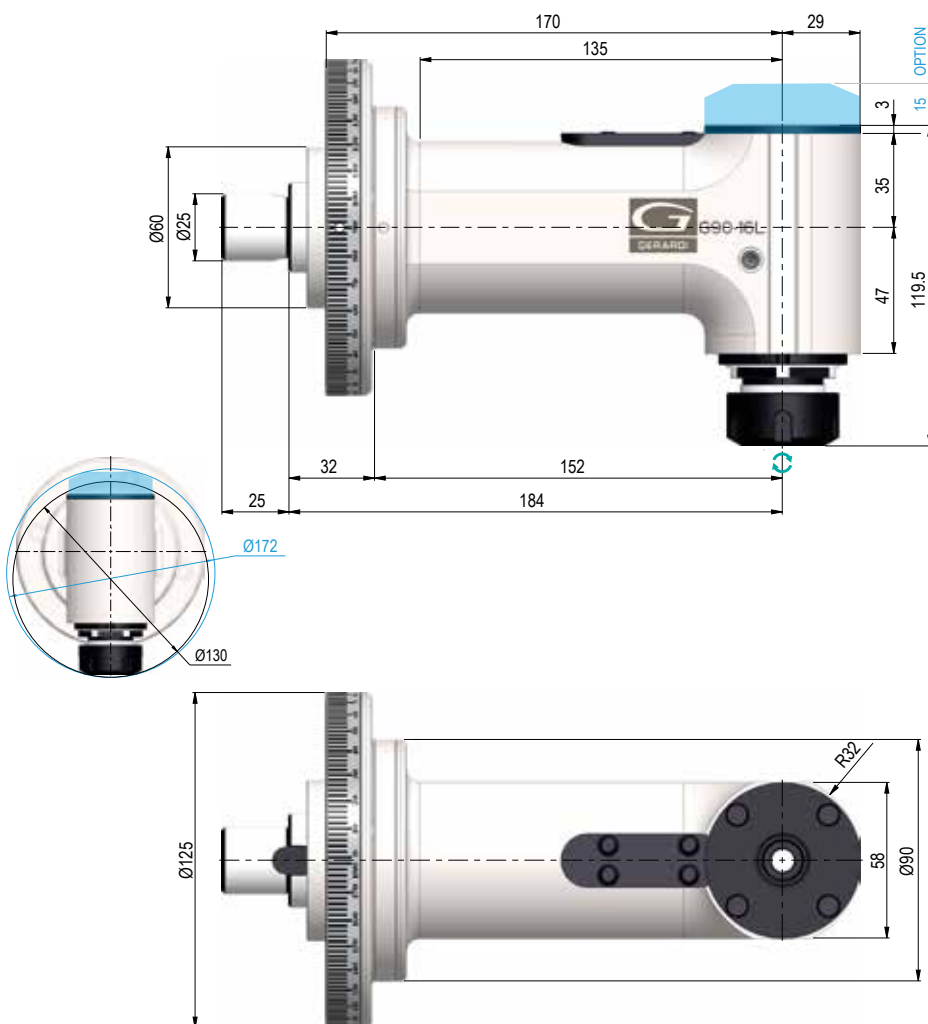
G90-16L

TYPE 1

Code:

9.G90.16L01

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 6,1



Rpm
8.000



Ø 16



N 510



M 12



Nm 24



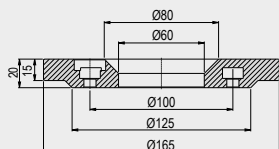
ER-25
Ø1/16



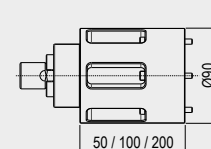
SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE

Coni Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN 2080	
Grandezza - Size	30	40	50	30	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Prezzo EXTRA Price €	opt.	std	std	opt.	std	std	opt.	std	std	opt.	opt.	opt.	optional			optional	optional

Flangia Universale Universal Flange TIPO - TYPE 1



Prolunga Extension TIPO - TYPE 1



Dotazione Standard Standard Equipment

Valigetta - Flangia universale - Ghiera ER - Cono std - Chiavi di servizio - Tubetto di grasso - Libro istruzioni
Special bag - Universal flange - ER nut - Shank - Wrenches - Grease tube - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



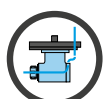
Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED

8.000 Rpm

Included !!



REFR. DAL DISTRIBUTORE
COOLANT THROUGH ROTATING
DISTRIBUTOR

DRY RUNNING
POSSIBLE
Max 10 bar

DRY RUNNING
NO POSSIBLE
Max 40 bar

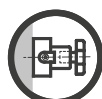
optional



USCITA
OUTPUT

Weldon Max Ø16

optional



USCITA
OUTPUT

Portafresa - Toolholder
Ø16

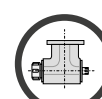
optional



USCITA
OUTPUT

HSK 32

optional



DOPPIA USCITA
DOUBLE OUTPUT

ER 25 / ER 16 M

optional

1

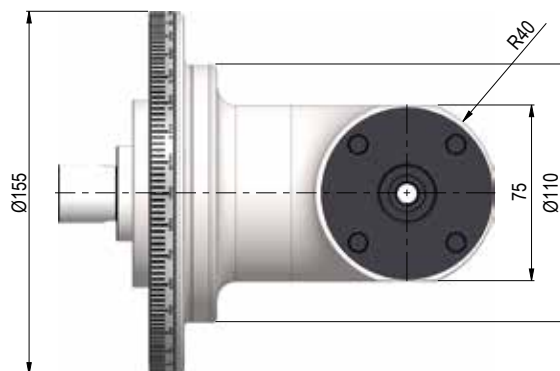
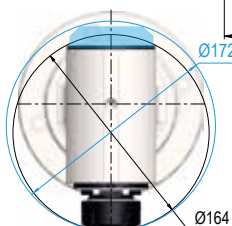
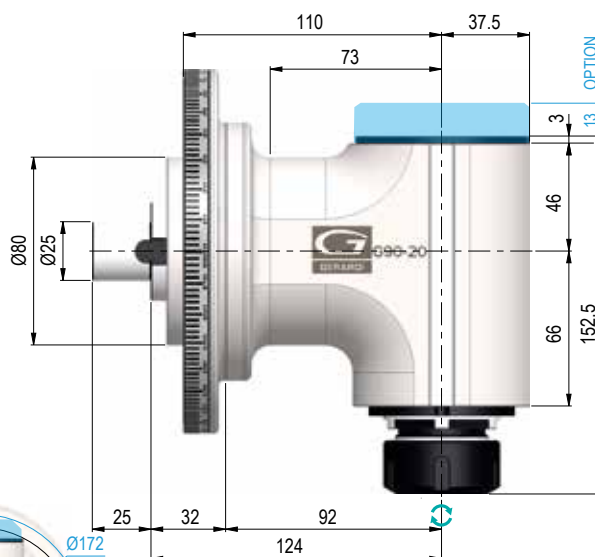
G90-20

TYPE 2

Code:

9.G90.20001

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 10



Rpm
4.000



Ø 20



N 1.250



M 16



Nm 40



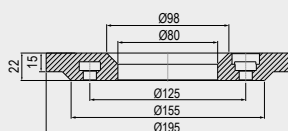
ER-32
Ø2/20



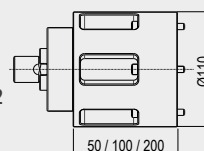
SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE

Coni Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN 2080	
Grandezza - Size	30	40	50	30	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Prezzo EXTRA Price €	opt.	std	std	opt.	std	std	opt.	std	std	opt.	opt.	opt.	optional			optional	optional

Flangia Universale Universal Flange TIPO - TYPE 2



Prolunga Extension TIPO - TYPE 2



Dotazione Standard Standard Equipment

Valigetta - Flangia universale -
Chiavi ER - Cono - Chiavi di servizio -
Tubetto di grasso - Libro istruzioni
Special bag - Universal flange - ER nut -
Shank - Wrenches - Grease tube -
Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED
6.000 Rpm

optional



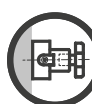
REFR. DAL DISTRIBUTORE
COOLANT THROUGH
ROTATING DISTRIBUTOR
MAX 10bar

optional



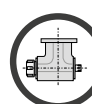
USCITA
OUTPUT
Weldon
Max Ø20

optional



USCITA
OUTPUT
Portafresa
Toolholder Ø22

optional



DOPPIA USCITA
DOUBLE OUTPUT
ER32 - ER20 M

optional



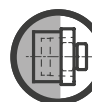
USCITA
OUTPUT
C4

optional



REFR. DAL DISTRIBUTORE
COOLANT THROUGH
ROTATING DISTRIBUTOR
MAX 40bar

optional



USCITA
OUTPUT
HSK 40

optional



USCITA
OUTPUT
ISO 30

optional

G90-20L

TYPE 2

Code:

9.G90.20L01

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 12,2



Rpm
4.000



Ø 20



N 1.250



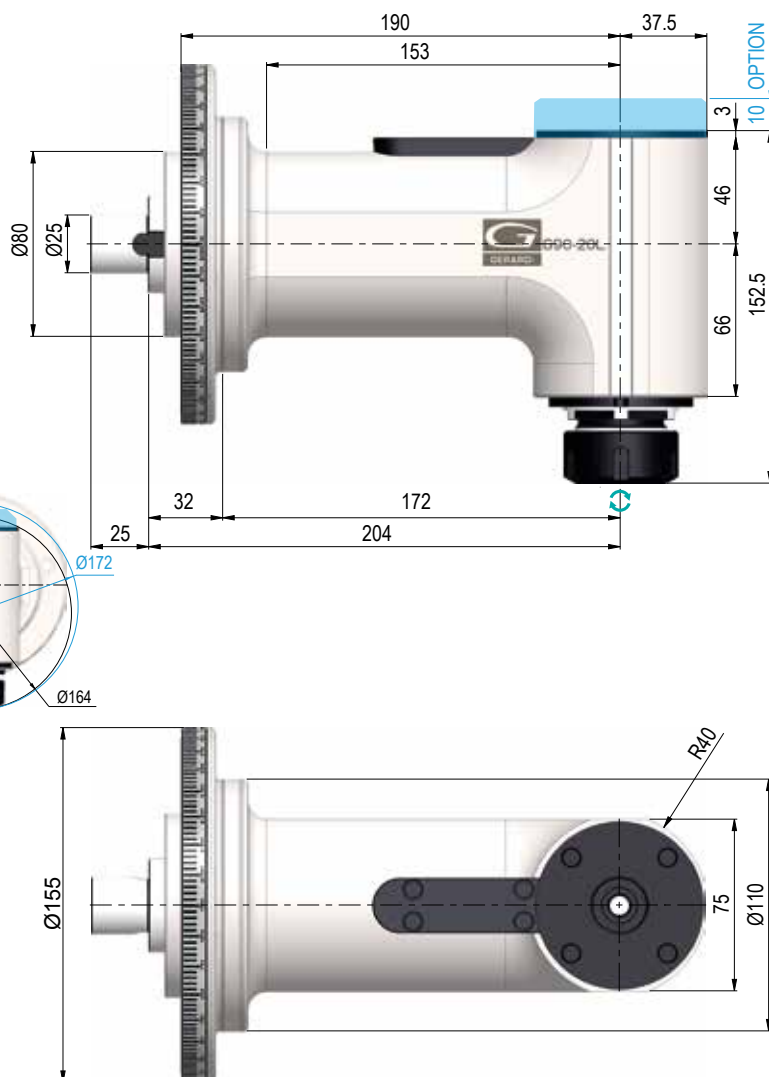
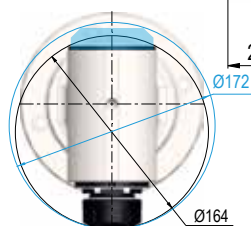
M 16



Nm 40



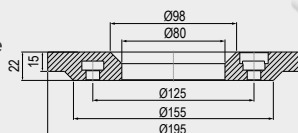
ER-32
Ø2/20



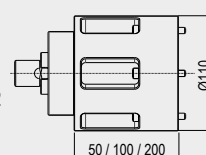
SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE

Coni Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN 2080	
Grandezza - Size	30	40	50	30	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Prezzo EXTRA Price €	opt.	std	std	opt.	std	std	opt.	std	std	opt.	opt.	opt.	optional			optional	optional

Flangia Universale Universal Flange TIPO - TYPE 2



Prolunga Extension TIPO - TYPE 2



Dotazione Standard Standard Equipment

Cassa in legno - Flangia universale -
Ghiera ER - Cono - Chiavi di servizio -
Tubetto di grasso - Libro istruzioni
Wood box - Universal flange - ER nut -
Wrenches - Grease tube - Shank
Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED
6.000 Rpm

optional



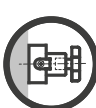
REFR. DAL DISTRIBUTORE
COOLANT THROUGH
ROTATING DISTRIBUTOR
DRY RUNNING POSSIBLE
MAX 10bar

optional



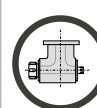
USCITA
OUTPUT
Weldon
Max Ø20

optional



USCITA
OUTPUT
Portafresa
Toolholder Ø22

optional



DOPPIA USCITA
DOUBLE OUTPUT
ER32 - ER20 M

optional



USCITA
OUTPUT
C4

optional



REFR. DAL DISTRIBUTORE
COOLANT THROUGH
ROTATING DISTRIBUTOR
DRY RUNNING NOT POSSIBLE
MAX 40bar

optional



USCITA
OUTPUT
HSK 40

optional



USCITA
OUTPUT
ISO 30

optional

1

G90-30

TYPE 3

Code:

9.G90.30001

Price:

NEW



Dati tecnici - Technical data



Ratio
1:1



Kg 17



Rpm
4.000



Ø30



N 750



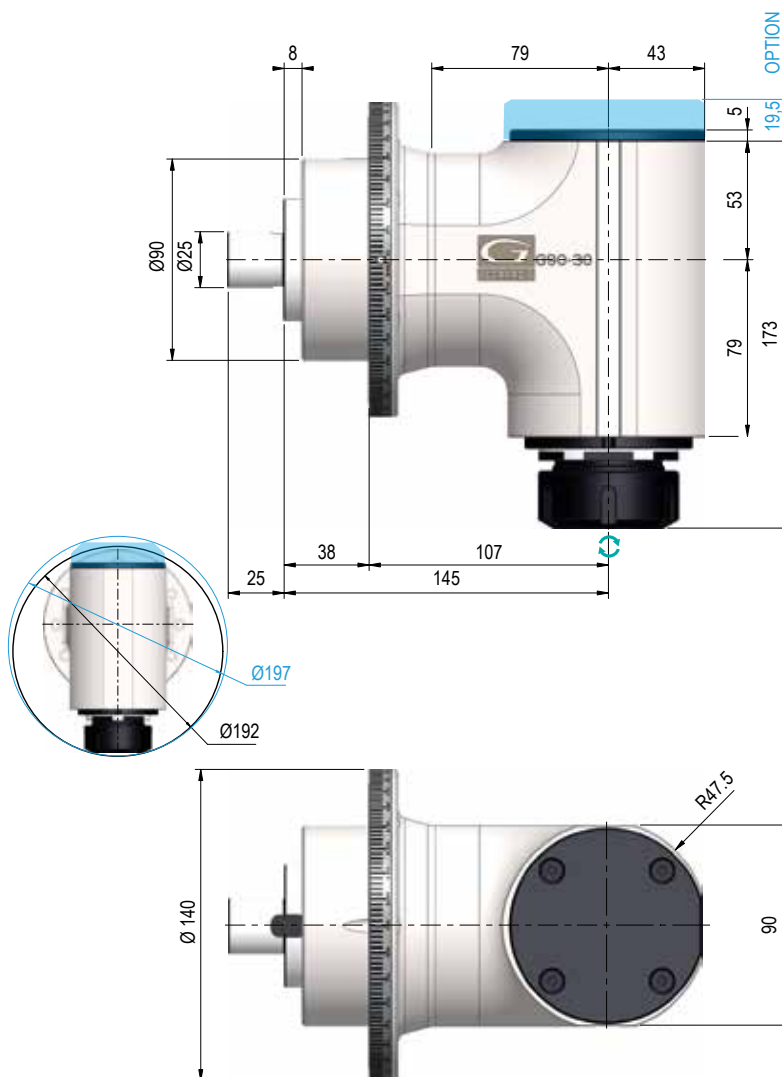
M20



Nm 75

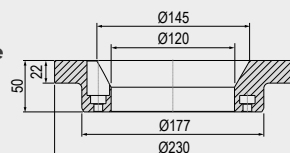


ER-40
Ø3/30



Coni Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623	ISO DIN 2080
Grandezza - Size	40 50	40 50	40 50	63 80 100	C5 C6 C8	40 50
Prezzo EXTRA Price €	std std	std std	std std	opt. opt. opt.	optional	optional optional

Flangia Universale Universal Flange TIPO - TYPE 3



Prolunga Extension TIPO - TYPE 3



Dotazione Standard Standard Equipment

Cassa in legno - Flangia universale - Ghiera ER - Cono - Chiavi di servizio - Tubetto di grasso - Libro istruzioni
Wood box - Universal flange - ER nut - Wrenches - Grease tube - Shank Instruction book
IMBALLO & PESO
PACK & WEIGHT:



Opzioni - Options



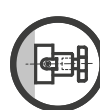
ALTA VELOCITÀ
HIGH SPEED
6000 Rpm
optional



REFR. DAL DISTRIBUTORE
COOLANT THROUGH
ROTATING DISTRIBUTOR
DRY RUNNING POSSIBLE
MAX 10bar
optional



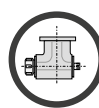
USCITA OUTPUT
Weldon
Max Ø25
optional



USCITA OUTPUT
Portafresa
Toolholder Ø27
optional



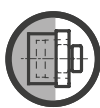
USCITA OUTPUT
ISO 30
optional



DOPPIA USCITA
DOUBLE OUTPUT
ER40 - ER25M
optional



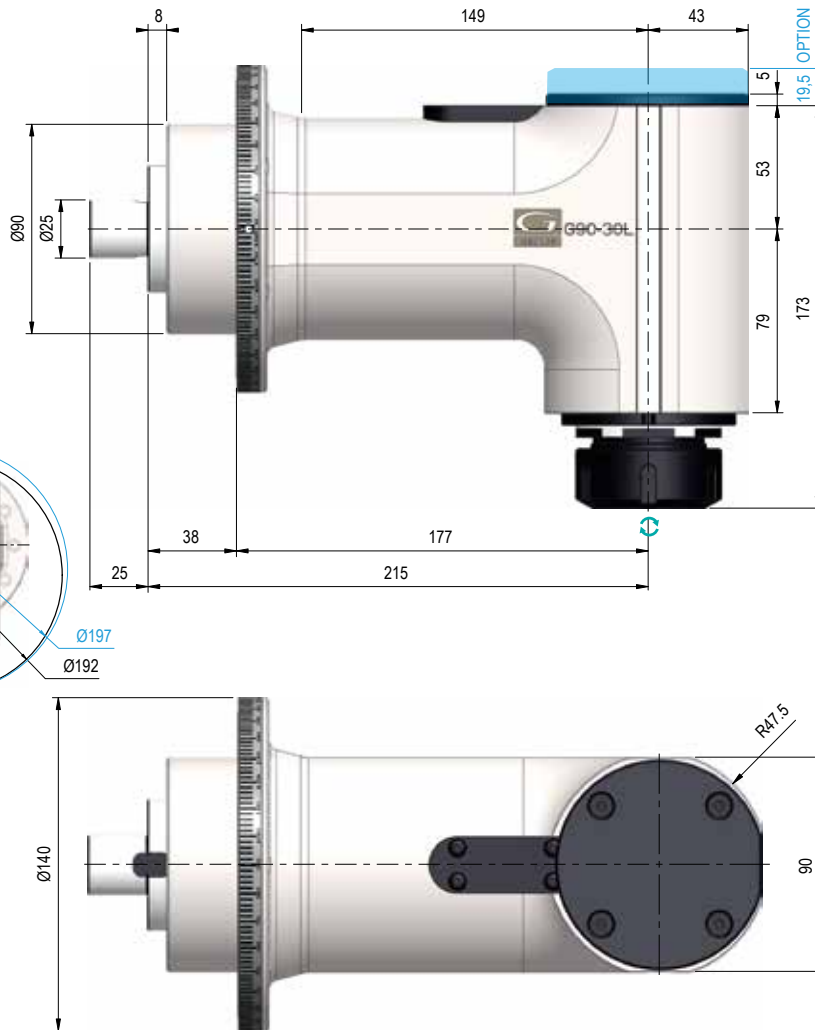
REFR. DAL DISTRIBUTORE
COOLANT THROUGH
ROTATING DISTRIBUTOR
DRY RUNNING NOT POSSIBLE
MAX 30bar
optional



USCITA OUTPUT
HSK 40
optional



USCITA OUTPUT
C4
optional



G90-30L

TYPE 3

Code:

9.G90.30L01

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 20



Rpm
4.000



Ø30



N 750



M20



Nm 75



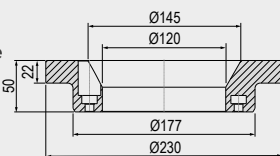
ER-40
Ø3/30



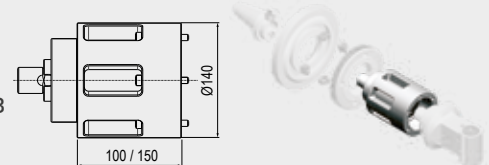
SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE

Coni Shanks	 SK DIN 69871		 CAT ANSI B5.50		 BT MAS 403		 HSK DIN 69893			 C. ISO 26623			 ISO DIN 2080	
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Prezzo EXTRA Price €	std	std	std	std	std	std	opt.	opt.	opt.	optional			optional	optional

Flangia Universale Universal Flange TIPO - TYPE 3



Prolunga Extension TIPO - TYPE 3



Dotazione Standard Standard Equipment

Cassa in legno - Flangia universale -
Ghiera ER - Cono - Chiavi di servizio -
Tubetto di grasso - Libro istruzioni
Wood box - Universal flange - ER nut -
Wrenches - Grease tube - Shank
Instruction book

IMBALLO & PESO
PACK & WEIGHT:

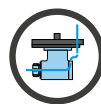


Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED
6000 Rpm

optional



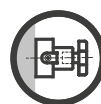
REFR. DAL DISTRIBUTORE
COOLANT THROUGH
ROTATING DISTRIBUTOR
MAX 10bar

optional



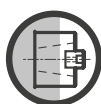
USCITA
OUTPUT
Weldon
Max Ø25

optional



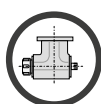
USCITA
OUTPUT
Portafresa
Toolholder Ø27

optional



USCITA
OUTPUT
ISO 30

optional



DOPPIA USCITA
DOUBLE OUTPUT
ER40 - ER25M

optional



REFR. DAL DISTRIBUTORE
COOLANT THROUGH
ROTATING DISTRIBUTOR
MAX 30bar

optional



USCITA
OUTPUT
HSK 40

optional



USCITA
OUTPUT
C4

optional

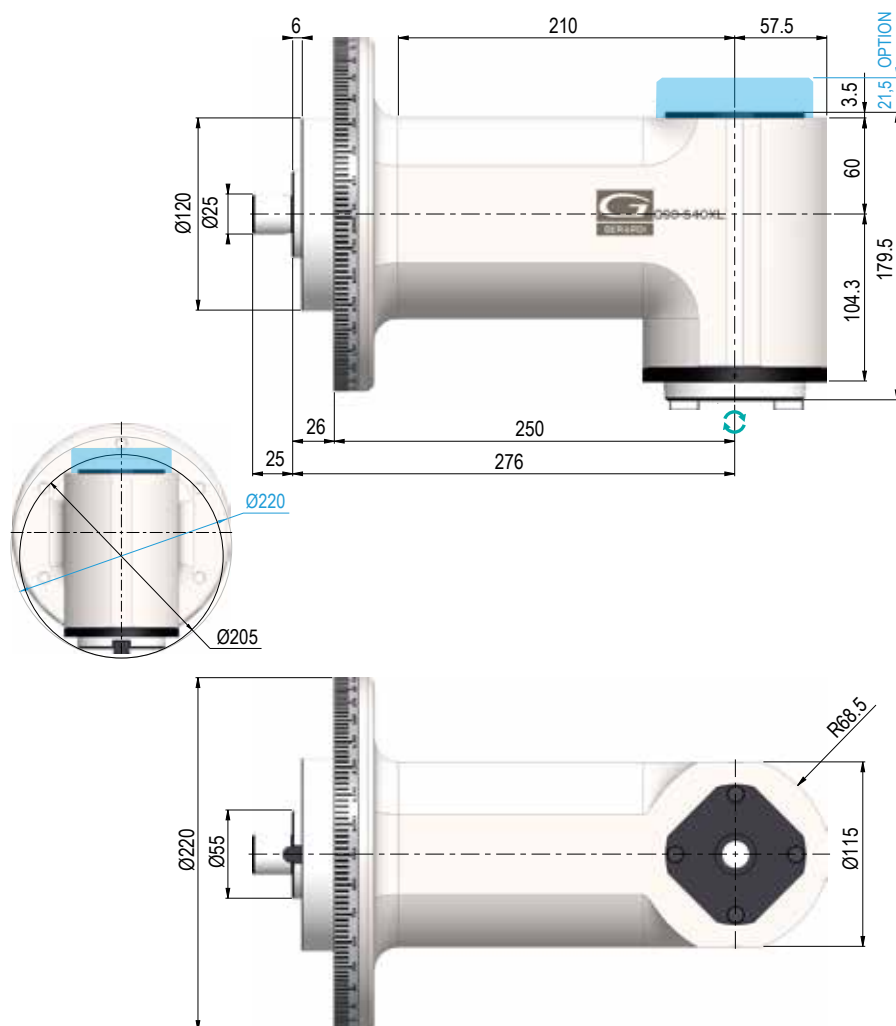
G90-S40XL

TYPE 5

Code:

[9.G90.S40XL1](#)

Price:


Dati tecnici - Technical data

 Ratio
1:1


Kg 32,5


 Rpm
4.000


Ø30



N 2.400



M22

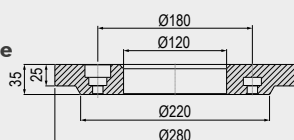


Nm 140


 ISO /
CAT / BT
40


SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE

Coni Shanks	 SK DIN 69871	 CAT ANSI B5.50	 BT MAS 403	 HSK DIN 69893	 C. ISO 26623	 ISO DIN 2080								
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Prezzo EXTRA Price €	std	std	std	std	std	std	opt.	opt.	opt.	optional			optional	optional

Flangia Universale
 Universal Flange
TIPO - TYPE 5

Dotazione Standard
 Standard Equipment

 Cassa in legno - Flangia universale - Ghiera ER -
 Cono - Chiavi di servizio - Tubetto di
 grasso - Libro istruzioni
 Wood box - Universal flange - ER nut - Wrenches -
 Grease tube- Shank - Instruction book

IMBALLO & PESO

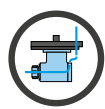
PACK & WEIGHT: Max.70 Kg


Opzioni - Options

 ALTA VELOCITÀ
HIGH SPEED

5.000 Rpm

optional


 REFR. DAL DISTRIBUTORE
COOLANT THROUGH ROTATING DISTRIBUTOR

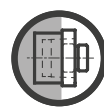
DRY RUNNING POSSIBLE

Max 10 bar

DRY RUNNING NOT POSSIBLE

Max 30 bar

optional


 USCITA
OUTPUT

HSK 63

optional


 USCITA
OUTPUT

 C4
optional

 C5
optional

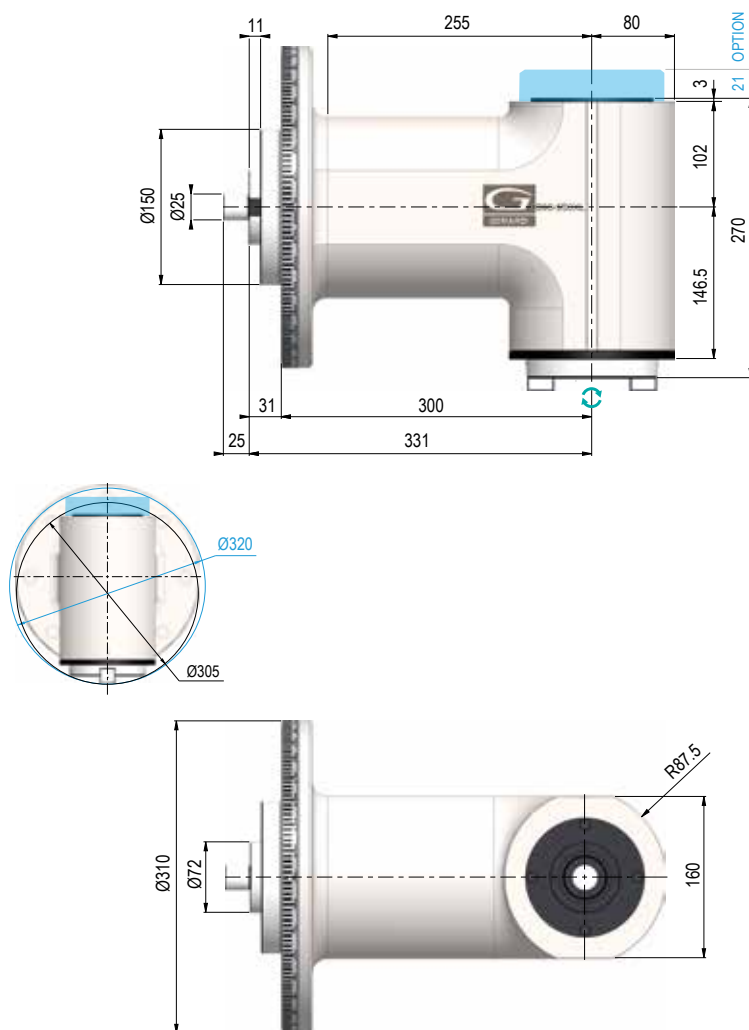
G90-S50

TYPE 6

Code:

9.G90.S5001

Price:



Dati tecnici - Technical data


 Ratio
1:1


Kg 77


 Rpm
3.000


Ø45



N 3.300



M36



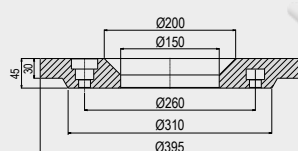
Nm 400


 ISO /
CAT / BT
50


SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE

Coni Shanks	 SK DIN 69871	 CAT ANSI B5.50	 BT MAS 403	 HSK DIN 69893	 C. ISO 26623	 ISO DIN 2080								
Grandezza - Size	40	50	40	50	40	50	63	80	100	C5	C6	C8	40	50
Prezzo EXTRA Price €	std	std	std	std	std	std	opt.	opt.	opt.	optional			optional	optional

Flangia Universale Universal Flange TIPO - TYPE 6



Dotazione Standard Standard Equipment

 Cassa in legno - Flangia universale - Ghiera ER -
 Cono - Chiavi di servizio - Tubetto di
 grasso - Libro istruzioni
 Wood box - Universal flange - ER nut - Wrenches -
 Grease tube - Shank - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg

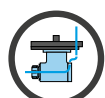


Opzioni - Options


 ALTA VELOCITÀ
HIGH SPEED

4.000 Rpm

optional


 REFR. DAL DISTRIBUTORE
COOLANT THROUGH ROTATING DISTRIBUTOR

DRY RUNNING POSSIBLE

Max 10 bar

DRY RUNNING NOT POSSIBLE

Max 30 bar

optional


 USCITA
OUTPUT

HSK 63

optional


 USCITA
OUTPUT

C6

C8

optional

1

G90-S50XL xx

TYPE 6

9.G90.S50XL .400 .500 .600 .700 .800

NEW

Dati tecnici - Technical data

Ratio
 1:1


L= 400 - 149 Kg
 L= 500 - 169 Kg
 L= 600 - 190 Kg
 L= 700 - 211 Kg
 L= 800 - 231 Kg

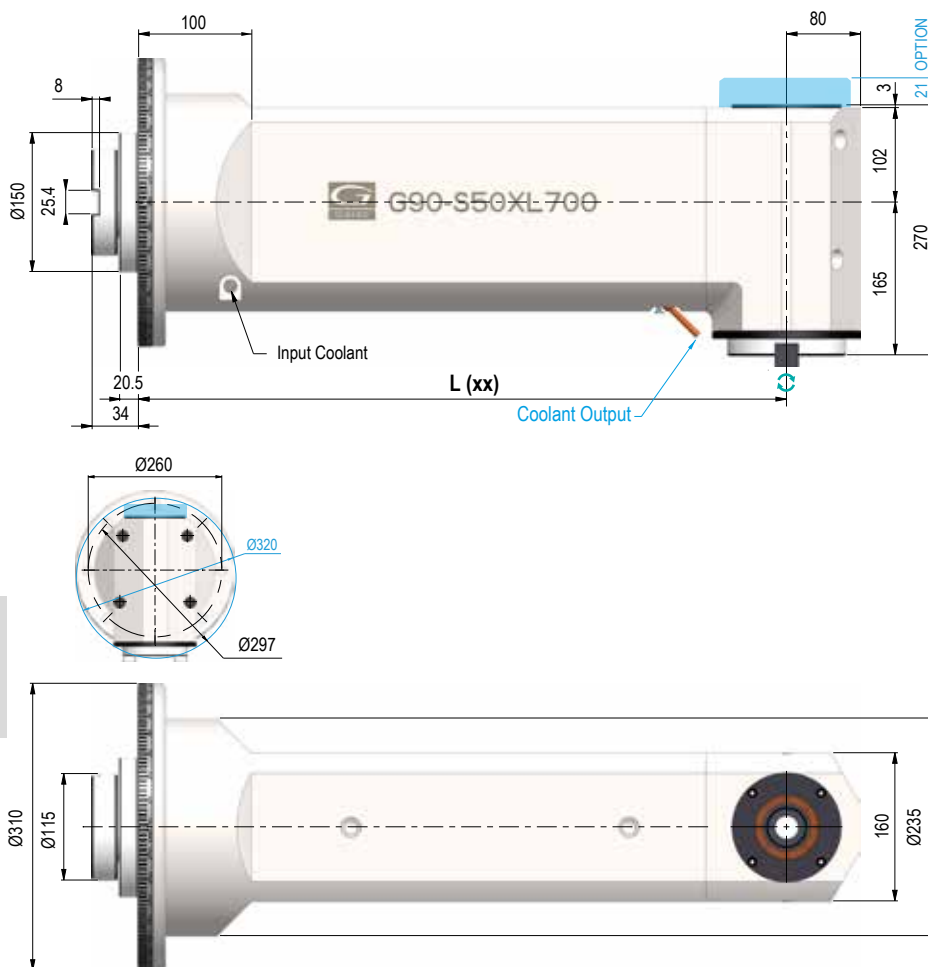

Rpm
 3.000

Ø45

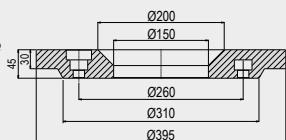
N 3.300

M36

Nm 400

**ISO /CAT
 BT 50**

SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE

Coni Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623	ISO DIN 2080
Grandezza - Size	40 50	40 50	40 50	63 80 100	C5 C6 C8	40 50
Prezzo EXTRA Price €	std std	std std	std std	opt. opt. opt.	optional	optional optional

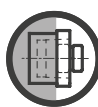
Flangia Universale
Universal Flange
TIPO - TYPE 6

DOTAZIONE STANDARD
STANDARD EQUIPMENT

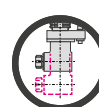
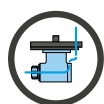
Cassa in legno - Flangia universale - Ghiera ER -
 Cono - Chiavi di servizio - Tubetto di
 grasso - Libro istruzioni
 Wood box - Universal flange - ER nut - Wrenches -
 Grease tube - Shank - Instruction book

IMBALLO & PESO
PACK & WEIGHT: Max. Kg

OPZIONI - OPTIONS

ALTA VELOCITÀ
HIGH SPEED
 4.000 Rpm

optional

USCITA
OUTPUT
 HSK 63

optional

LUNGHEZZE SPECIALI
SPECIAL LENGHT
optional

REFR. DAL DISTRIBUTORE
COOLANT THROUGH ROTATING
DISTRIBUTOR
DRY RUNNING
POSSIBLE Max 10 bar

optional

USCITA
OUTPUT
C6 C8
optional

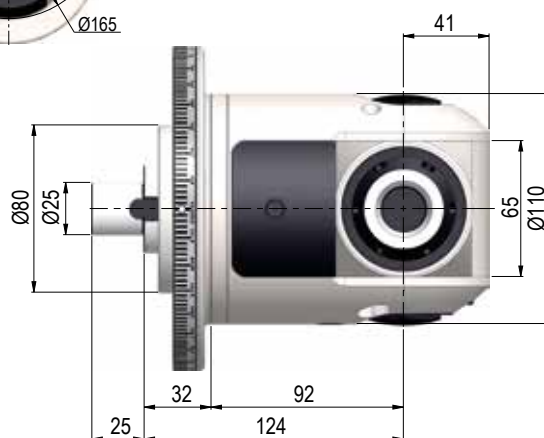
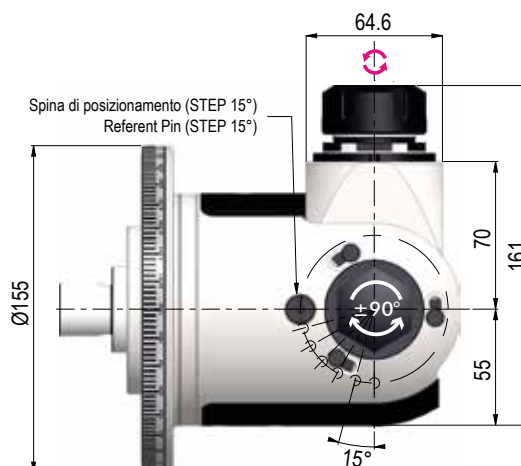
GMU-20

TYPE 2

Code:

9.GMU.20001

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 13



Rpm
4.000



Ø20



N 715



M16



Nm 32



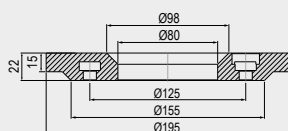
ER32
Ø2/20



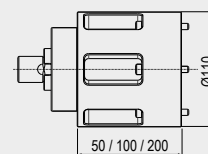
SENDO DI ROTAZIONE CONTRARIO AL MANDRINO - DIRECTION OF ROTATION OPPOSITE TO THE MACHINE SPINDLE

Coni Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623		
Grandezza - Size	30	40	50	30	40	50	30	40	50	63	80	100	C5	C6	C8
Prezzo EXTRA Price €	opt.	std	std	opt.	std	std	opt.	std	std	opt.	opt.	opt.	optional		

Flangia Universale Universal Flange TIPO - TYPE 2



Prolunga Extension TIPO - TYPE 2



Dotazione Standard Standard Equipment

Valigetta - Flangia universale - Ghiera ER -
Corno - Chiavi di servizio - Tubetto di
grasso - Libro Istruzioni
Special bag - Universal flange - ER nut - Shank -
Wrenches - Grease tube - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED

6.000 Rpm

optional



USCITA
OUTPUT

Weldon Max Ø20

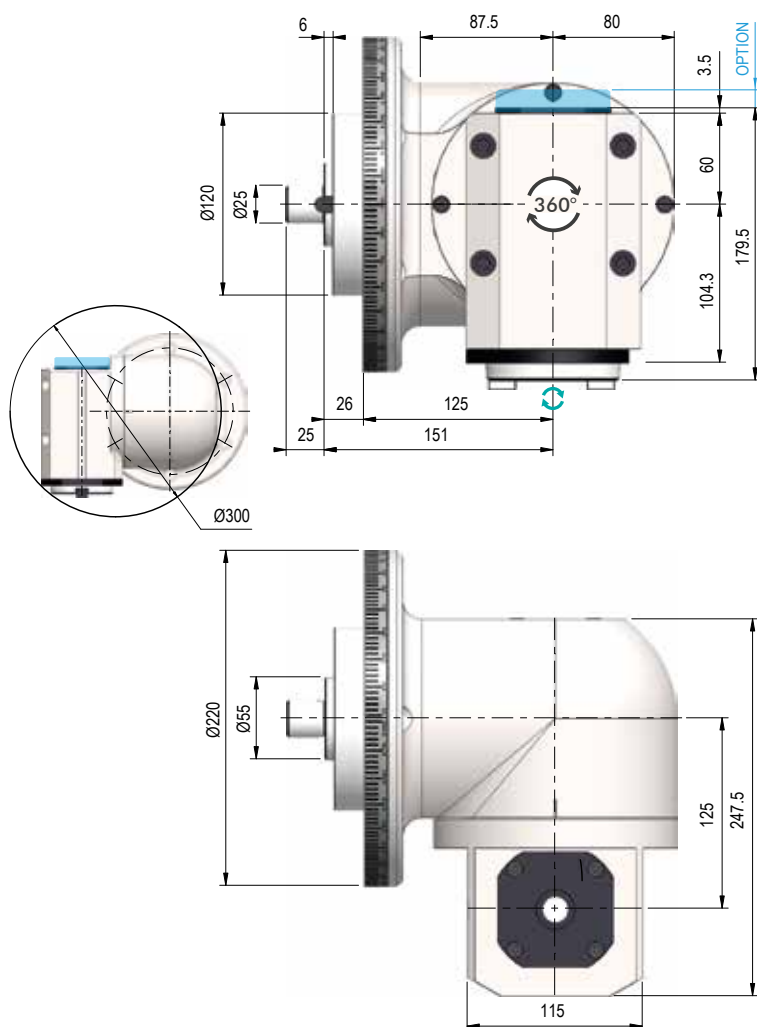
optional



SPINA POSIZIONE RAPIDA
QUICK POSITIONING PIN

Angolazioni personalizzate
Customized angles

optional



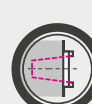
GMU-S40-125 TYPE 6

Code: 9.G90.S4001.125

Price:



Dati tecnici - Technical data

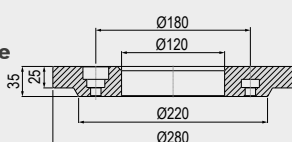
	Ratio 1:1		Kg 59,3
	Rpm 3.000		Ø30
	N 2.400		M22
	Nm 100		ISO /CAT BT 40



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE

Coni Shanks	 SK DIN 69871	 CAT ANSI B5.50	 BT MAS 403	 HSK DIN 69893	 C. ISO 26623	 ISO DIN 2080							
Grandezza - Size	40	50	40	50	40	50	63	80	100	C6	C8	40	50
Prezzo EXTRA Price €	std	std	std	std	std	std	opt.	opt.	opt.	optional		optional	optional

Flangia Universale Universal Flange TIPO - TYPE 6



Dotazione Standard Standard Equipment

Cassa in legno - Flangia universale - Ghiera ER -
Cono - Chiavi di servizio - Tubetto di
grasso - Libro istruzioni
Wood box - Universal flange - ER nut - Wrenches -
Grease tube - Shank - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED

4.000 Rpm

optional

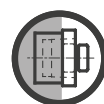


REFR. DAL DISTRIBUTORE
COOLANT THROUGH ROTATING DISTRIBUTOR

DRY RUNNING POSSIBLE

Max 10 bar

optional



USCITA
OUTPUT

HSK 63

optional



USCITA
OUTPUT

C4

optional

GMU-S40

TYPE 5

Code: 9.G90.S4001

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 49,5



Rpm
3.000



Ø 30



N 2.400



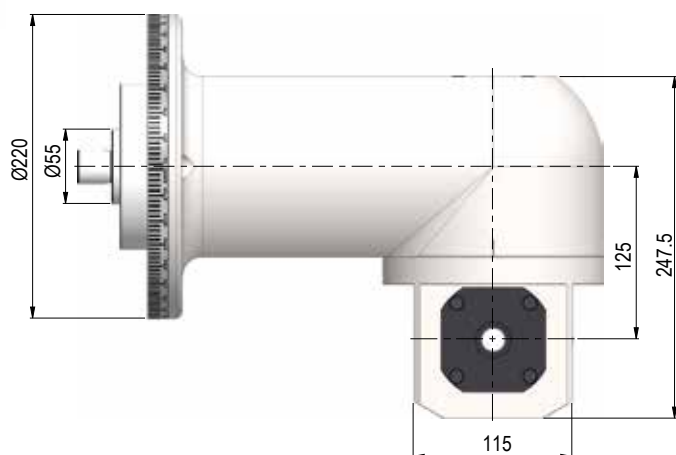
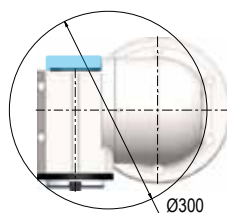
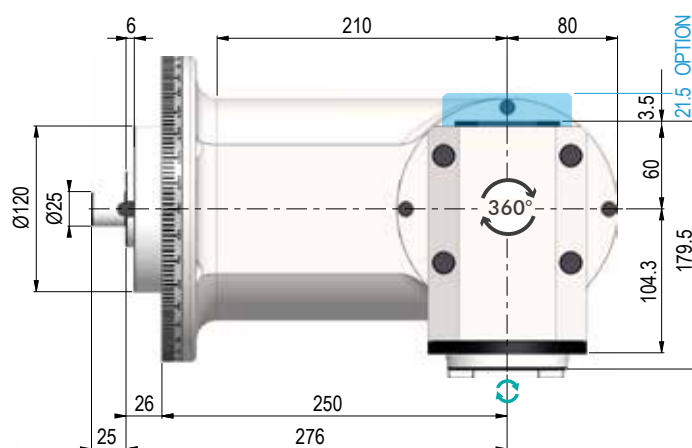
M 22



Nm 100



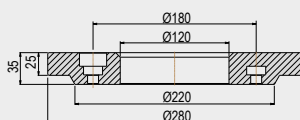
ISO /CAT
BT 40



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE

Coni Shanks	 SK DIN 69871	 CAT ANSI B5.50	 BT MAS 403	 HSK DIN 69893	 C. ISO 26623	 ISO DIN 2080							
Grandezza - Size	40	50	40	50	40	50	63	80	100	C6	C8	40	50
Prezzo EXTRA Price €	std	std	std	std	std	std	opt.	opt.	opt.	optional		optional	optional

Flangia Universale Universal Flange TIPO - TYPE 5



Dotazione Standard Standard Equipment

Cassa in legno - Flangia universale - Ghiera ER -
Corno - Chiavi di servizio - Tubetto di
grasso - Libro istruzioni
Wood box - Universal flange - ER nut - Wrenches -
Grease tube - Shank - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED

4.000 Rpm

optional



REFR. DAL DISTRIBUTORE
COOLANT THROUGH ROTATING DISTRIBUTOR

DRY RUNNING POSSIBLE

Max 10 bar

optional



USCITA
OUTPUT

HSK 63

optional



USCITA
OUTPUT

C4

optional

GMU-S50

TYPE 6

Code:

9.GMU.S5001

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 121



Rpm
3.000



Ø45



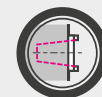
N 3.300



M36



Nm 220



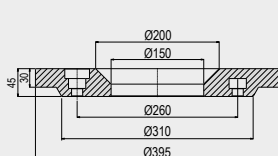
ISO /CAT
BT 40



SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE

Coni Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623	ISO DIN 2080
Grandezza - Size	40 50	40 50	40 50	63 80 100	C5 C6 C8	40 50
Prezzo EXTRA Price €	std std	std std	std std	opt. opt. opt.	optional	optional optional

Flangia Universale Universal Flange TIPO - TYPE 6



Dotazione Standard Standard Equipment

Cassa in legno - Flangia universale - Ghiera ER -
Cono - Chiavi di servizio - Tubetto di
grasso - Libro istruzioni
Wood box - Universal flange - ER nut - Wrenches -
Grease tube - Shank - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED

4.000 Rpm

optional



REFR. DAL DISTRIBUTORE
COOLANT THROUGH ROTATING DISTRIBUTOR

DRY RUNNING POSSIBLE

Max 10 bar

optional



USCITA
OUTPUT

HSK 63

optional



USCITA
OUTPUT

C6

optional

1

G90-16 2U

TYPE 1

Code:

9.G90.162U01

Price:

NEW



Dati tecnici - Technical data



Ratio
1:1



Kg 5,6



Rpm
4.000



Ø 16



N 510



M 12



Nm 24



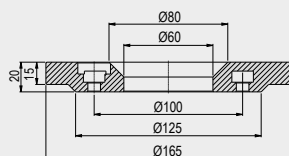
ER-25
Ø1/16



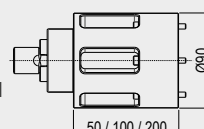
SENDO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE
SENDO DI ROTAZIONE CONTRARIO AL MANDRINO - DIRECTION OF ROTATION OPPOSITE TO THE MACHINE SPINDLE

Coni Shanks	SK DIN 69871	CAT ANSI B5.50	BT MAS 403	HSK DIN 69893	C. ISO 26623	ISO DIN 2080
Grandezza - Size	40 50	40 50	40 50	63 80 100	C5 C6 C8	40 50
Prezzo EXTRA Price €	std std	std std	std std	std std std	std	std std

Flangia Universale Universal Flange TIPO - TYPE 1



Prolunga Extension TIPO - TYPE 1



Dotazione Standard Standard Equipment

Valigetta - Flangia universale - Ghiera ER -
Corno - Chiavi di servizio - Tubetto di
grasso - Libro Istruzioni
Special bag - Universal flange - ER nut - Shank -
Wrenches - Grease tube - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED

8.000 Rpm

optional



USCITA
OUTPUT

Weldon Max Ø16 (X2)

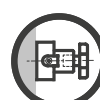
optional



USCITA
OUTPUT

HSK 32 (X2)

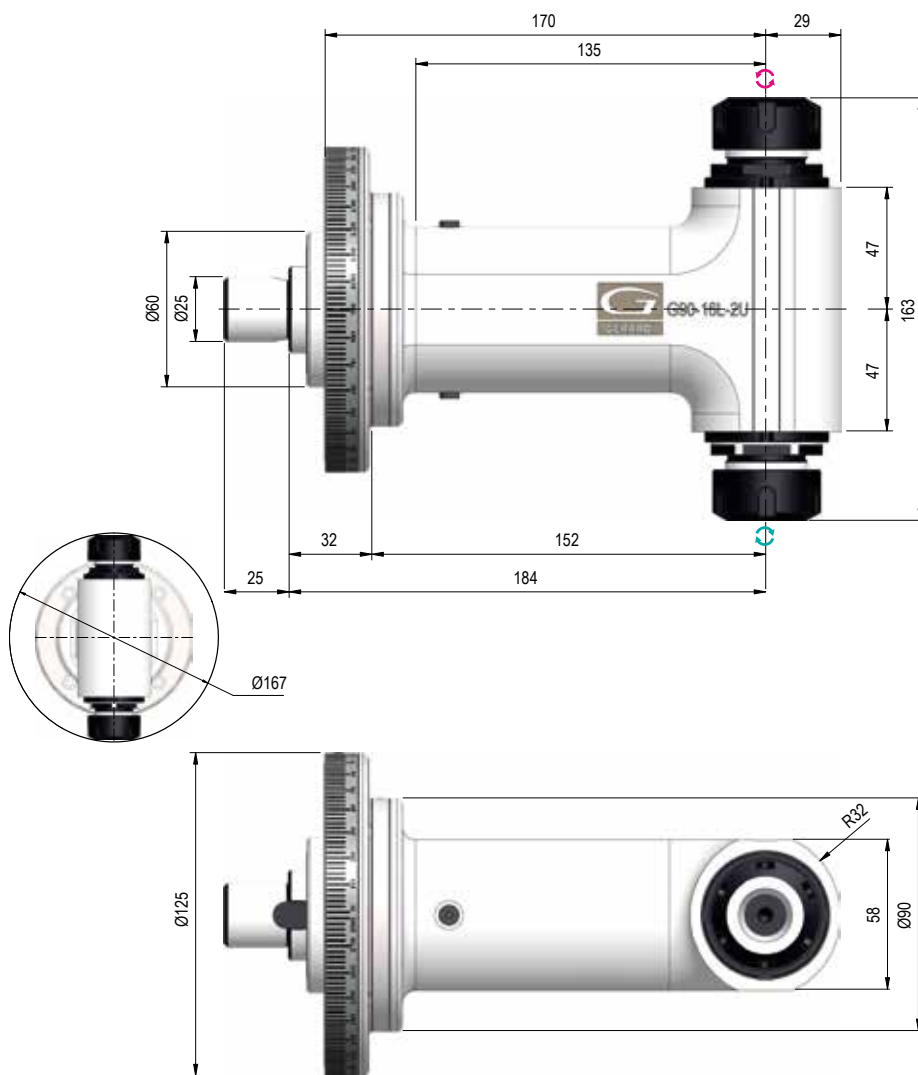
optional



USCITA
OUTPUT

Portafresa
Toolholder Ø16 (X2)

optional



G90-16L 2U

TYPE 1

Code:

9.G90.16L2U1

Price:



Dati tecnici - Technical data



Ratio
1:1



Kg 6,1



Rpm
4.000



Ø 16



N 510



M 12



Nm 24



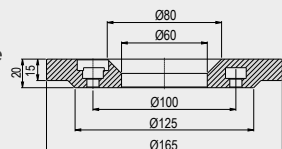
ER-25
Ø1/16



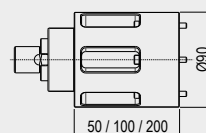
SENSO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE
SENSO DI ROTAZIONE CONTRARIO AL MANDRINO - DIRECTION OF ROTATION OPPOSITE TO THE MACHINE SPINDLE

Coni Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN 2080	
Grandezza - Size	30	40	50	30	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Prezzo EXTRA Price €	opt.	std	std	opt.	std	std	opt.	std	std	opt.	opt.	opt.	optional			optional	optional

Flangia Universale Universal Flange TIPO - TYPE 1



Prolunga Extension TIPO - TYPE 1



Dotazione Standard Standard Equipment

Valigetta - Flangia universale - Ghiera ER - Cono std - Chiavi di servizio - Tubetto di grasso - Libro istruzioni
Special bag - Universal flange - ER nut - Shank - Wrenches - Grease tube - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED

8.000 Rpm

optional



USCITA
OUTPUT

Weldon Max Ø16 (X2)

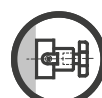
optional



USCITA
OUTPUT

HSK 32 (X2)

optional



USCITA
OUTPUT

Portafresa
Toolholder Ø16 (X2)

optional

1

G90-20 2U

TYPE 2

Code:

9.G90.202U01

Price:

NEW



Dati tecnici - Technical data



Ratio
1:1



Kg 14



Rpm
4.000



Ø 20



N 1.250



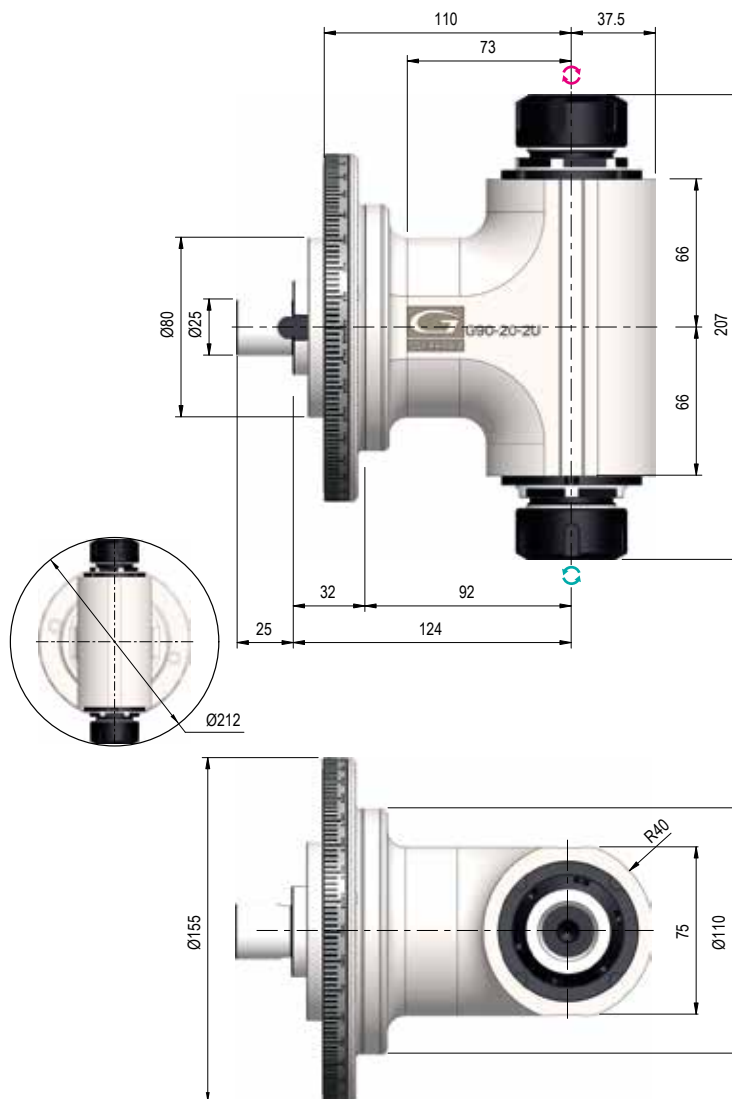
M 16



Nm 40



ER-32
Ø2/20



SENDO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE
SENDO DI ROTAZIONE CONTRARIO AL MANDRINO - DIRECTION OF ROTATION OPPOSITE TO THE MACHINE SPINDLE

Coni Shanks



Grandezza - Size

30

40

50

30

40

50

30

40

50

63

80

100

C5

C6

C8

40

50

Prezzo EXTRA Price €

opt.

std

std

opt.

std

std

opt.

std

std

opt.

opt.

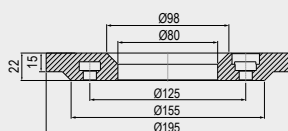
opt.

optional

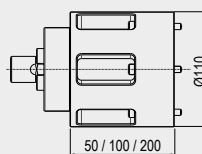
optional

optional

Flangia Universale Universal Flange TIPO - TYPE 2



Prolunga Extension TIPO - TYPE 2



Dotazione Standard Standard Equipment

Valigetta - Flangia universale - Ghiera ER -
Cono - Chiavi di servizio - Tubetto di
grasso - Libro Istruzioni
Special bag - Universal flange - ER nut - Shank -
Wrenches - Grease tube - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED

6.000 Rpm

optional



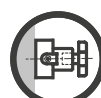
USCITA
OUTPUT
Weldon Max Ø20 (X2)

optional



USCITA
OUTPUT
HSK 40 (X2)

optional



USCITA
OUTPUT
Portafresa
Toolholder Ø20 (X2)

optional



1

G90-30 2U

TYPE 3

Code:

9.G90.302U01

Price:

NEW



Dati tecnici - Technical data



Ratio
1:1



Kg 20



Rpm
4.000



Ø 30



N 1.750



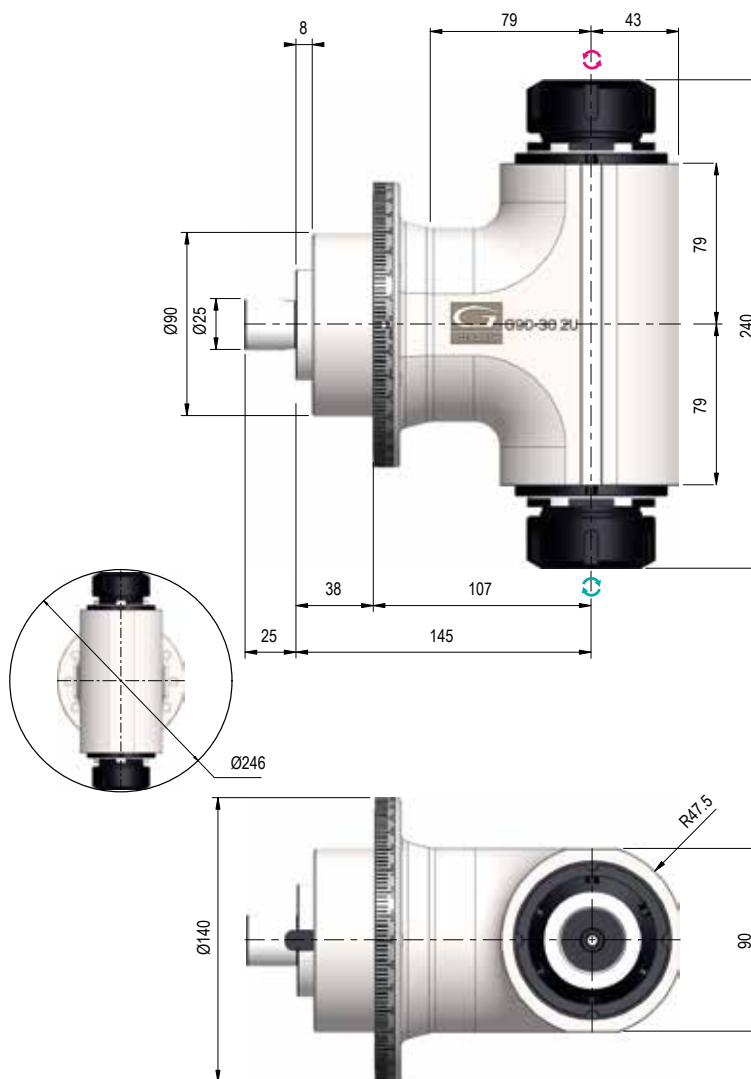
M 20



Nm 75



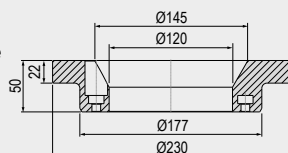
ER-40
Ø3/30



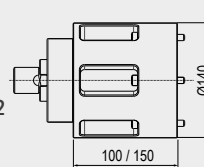
SENDO DI ROTAZIONE UGUALE AL MANDRINO - DIRECTION OF ROTATION SAME AS MACHINE SPINDLE
SENDO DI ROTAZIONE CONTRARIO AL MANDRINO - DIRECTION OF ROTATION OPPOSITE TO THE MACHINE SPINDLE

Coni Shanks	SK DIN 69871			CAT ANSI B5.50			BT MAS 403			HSK DIN 69893			C. ISO 26623			ISO DIN 2080	
Grandezza - Size	30	40	50	30	40	50	30	40	50	63	80	100	C5	C6	C8	40	50
Prezzo EXTRA Price €	opt.	std	std	opt.	std	std	opt.	std	std	opt.	opt.	opt.	optional			optional	optional

Flangia Universale Universal Flange TIPO - TYPE 3



Prolunga Extension TIPO - TYPE 2



Dotazione Standard Standard Equipment

Cassa in legno - Flangia universale - Ghiera ER -
Corno - Chiavi di servizio - Tubetto di
grasso - Libro Istruzioni
Wood box - Universal flange - ER nut - Wrenches -
Grease tube - Shank - Instruction book

IMBALLO & PESO

PACK & WEIGHT: Max. Kg



Opzioni - Options



ALTA VELOCITÀ
HIGH SPEED

6.000 Rpm

optional



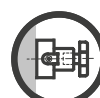
USCITA
OUTPUT
Weldon Max Ø25 (X2)

optional



USCITA
OUTPUT
HSK 40 (X2)

optional



USCITA
OUTPUT
Portafresa
Toolholder Ø27 (X2)

optional



ACCESSORI ATC & MTC

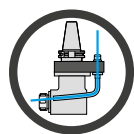
ATC & MTC ACCESSORIES

1



OPZIONE REFRIGERANTE INTERNO INTERNAL COOLANT OPTION

Opzione B
B option



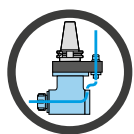
10bar



Perno » Utensile
Positioning Pin » Tool

Passaggio refrigerante esterno all'utensile 10bar
External coolant 10bar through the tool

ROTAZIONE A SECCO - DRY RUNNING
POSSIBILE - POSSIBLE



10bar

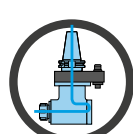


Perno » Distributore » Utensile
Positioning Pin » Rotating Distributor » Tool

Passaggio refrigerante interno all'utensile 10bar dal perno attraverso distributore rotante
Internal coolant 10bar through the tool from positioning pin and through rotating distributor

ROTAZIONE A SECCO - DRY RUNNING
POSSIBILE - POSSIBLE

Opzione RI
RI option



UP TO 70bar

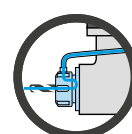


Cono » Distributore » Utensile
Shank » Rotating Distributor » Tool

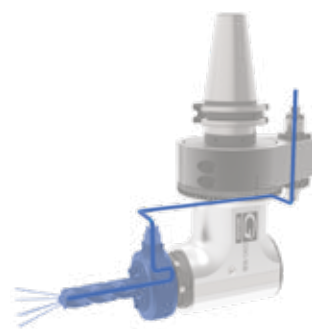
Passaggio refrigerante interno all'utensile da 30 a 70 bar dal cono e attraverso il distributore rotante
Internal coolant through the tool from 30 to 70 bar from the shank and through the rotating distributor

ROTAZIONE A SECCO - DRY RUNNING
NON POSSIBILE - NOT POSSIBLE

Opzione Re-Cool
Re-Cool option



10bar

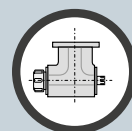


Perno » Ghiera ReCool » Utensile
Positioning Pin » ReCool Nut » Tool

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

PAG. 1.77 - PAG. 1.77

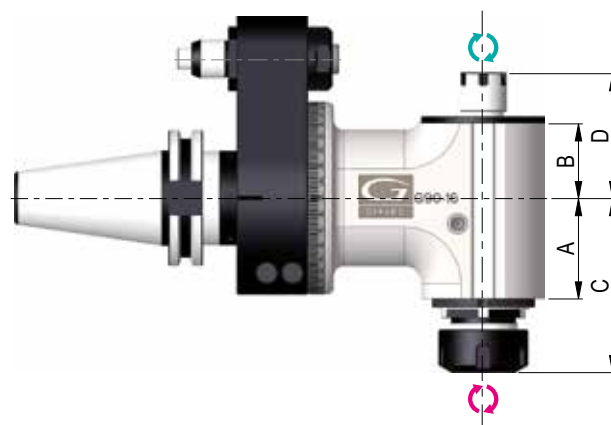
OPZIONE DOPPIA USCITA DOUBLE OUTPUT OPTION



Disponibile per i modelli - Available for following types:

MODELLO MODEL	USCITA OUTPUT	A	B	C	D
GL90-7	ER-11 ER-8 MINI	20	20	38	34
G90-5 / G90-7 / G90-7L					
GL90-10	ER-16 ER-11 MINI	37	28	52	44,5
G90-10 / G90-10L					
GL90-16	ER-25 ER-16 MINI	47	35	81,5	58,5
G90-16 / G90-16L					
G90-20 / G90-20L	ER-32 ER-20 MINI	66	46	103,5	72,5
G90-30 / G90-30L	ER-40 ER-25 MINI	79	53	120	82

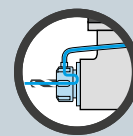
Teste angolari ATC doppia uscita
Double output ATC angle heads



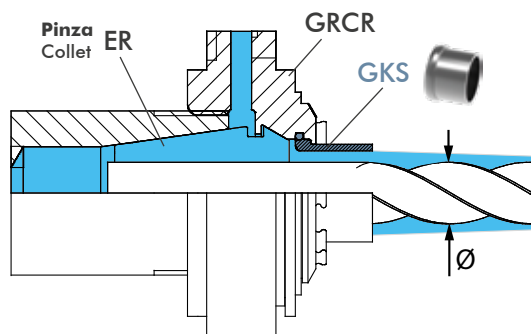
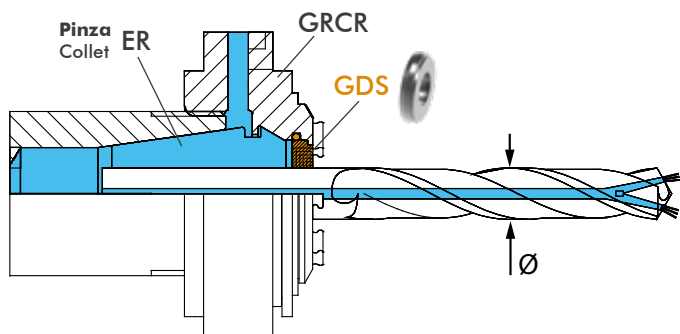
GHIERE ER ReCool

ReCool ER NUTS

Con queste ghiera speciali è possibile ottenere il passaggio refrigerante tramite utensile anche su teste che non prevedono questa opzione.
With these special nuts it is possible to get coolant through the tool even on angle heads which do not have this option.



1



GRCR
(Ghiera / Nut)



GDS
(Disco di tenuta / Sealing ring)



GKS
(Disco di tenuta / Sealing ring)



AX (EXTRA)

MODELLO TESTA ANGOLARE ANGLE HEADS TYPE	Pinza Collet	Ghiera Nut	
		Code	
G90-10 / 10L GL90-10 /	ER16	GRCR16	
		9.GR.CR16	
GMU-13	ER20	GRCR20	
		9.GR.CR20	
G90-16 / 16L GL90-16 / GMU-16	ER25	GRCR25	
		9.GR.CR25	
G90-20 / 20L GMU-20	ER32	GRCR32	
		9.GR.CR32	
G90-S40	ER40	GRCR40	
		9.GR.CR40	

Disco di tenuta per refr.interno Sealing ring for int. coolant	
Code	
GDS16	
9.GD.S16/...	
GDS20	
9.GD.S20/...	
GDS 25	
9.GD.S25/...	
GDS32	
9.GD.S32/...	
GDS40	
9.GD.S40/...	

Disco di tenuta per refr. esterno Sealing ring for est. coolant	
Code	
GKS16	
9.GK.S16/...	
GKS20	
9.GK.S20	
GKS 25	
9.GK.S25	
GKS32	
9.GK.S32	

Chiavi Wrenches	
Code	
CH-16AX	
9.CH.16AX	
CH-20AX	
9.CH.20AX	
CH-25AX	
9.CH.25AX	
CH-32AX	
9.CH.32AX	
CH-40AX	
9.CH.40AX	

INDICARE SEMPRE IN FASE D'ORDINE Ø UTENSILE - IN CASE OF ORDER SPECIFY THE Ø TOOL

■ **ER:** Pinza ER / ER Collet ■ **GRCR:** Ghiera / Nut ■ **GDS:** Disco di tenuta / Sealing ring ■ **GKS:** Disco di tenuta / Sealing ring

Dotazione Standard

Standard Equipment



- 1 - Ghiera con anello esterno
Clamping nut with outer ring.
- 2 - Tubo refrigerante con protezione Ø6mm, 400mm
Coolant pipe with protector Ø6mm, 400mm
- 3 - Raccordi dritti da 1/8"
Fitting 1/8" straight
- 4 - Raccordi a 90° da 1/8"
Fitting 1/8" 90° elbow



Tipo di ghiera Nut type	≤3000 Rpm	≤6000 Rpm	≤9000 Rpm
GRCR16	5 bar	7,5 bar	10 bar
GRCR20	5 bar	7,5 bar	10 bar
GRCR25	5 bar	7,5 bar	10 bar
GRCR32	5 bar	10 bar	15 bar
GRCR40	5 bar	10 bar	-

Il tubo e gli accessori in dotazione sono progettati e testati per la pressione massima del refrigerante di 58 bar / 840 PSI.
Maggiore pressione del refrigerante su richiesta.

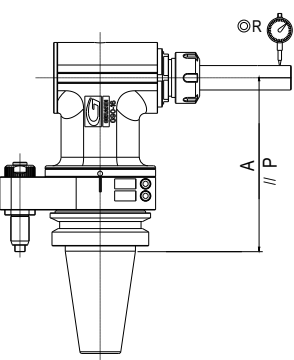
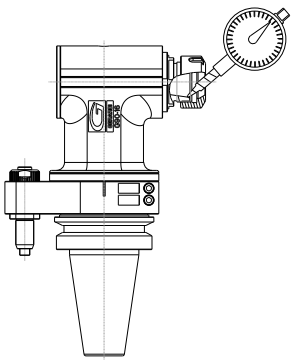
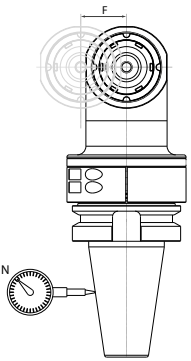
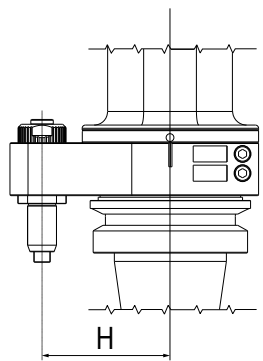
The supplied hose and fittings are designed and tested for maximum coolant pressure of 58 bar / 840 PSI.
Higher coolant pressure on request.

Esempio di ordine Ghiera: GRCR16 (Cod. 9.GR.CR16) - Disco tenuta: GDS16-Ø10 (Cod. 9.GD.S16/10)
Example of order Nut: GRCR16 (Code 9.GR.CR16) - Sealing ring: GDS16-Ø10 (Code 9.GD.S16/10)

1

ESEMPIO SCHEDA DI COLLAUDO INSPECTION SHEET EXAMPLE

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

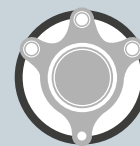
TIPO DI CONTROLLO Test type	RAFFIGURAZIONE Drawing	ERRORE Error	TIPO DI CONTROLLO Test type	RAFFIGURAZIONE Drawing	ERRORE Error
Quota e parallelismo da filo cono ad asse principale. Oscillazione asse utensile. Height and parallelism from gauge line to main axis. Runout cutter axis.		Ammesso Allowed $A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

RODAGGIO TESTA - RUN-IN

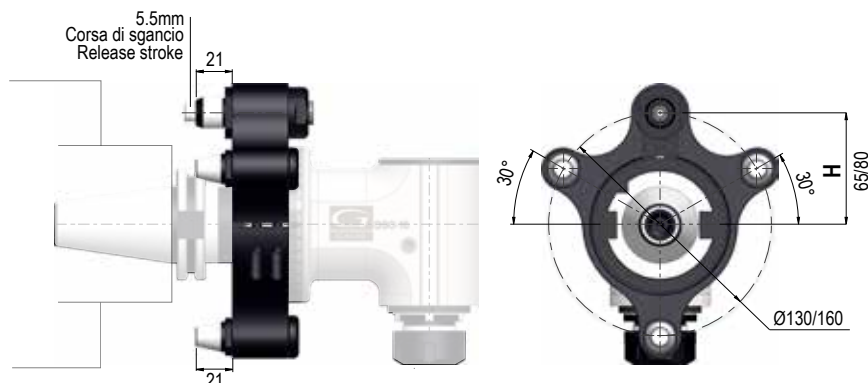
RPM in entrata RPM	Durata Time	Temperatura Ambiente Room Temperature	Temperatura Sonda Sensor Temperature	Note Notes
1000	00:10:00	22°	27°	
2000	00:10:00		32°	
3000	00:05:00		36°	
4000	00:05:00		42°	
5000				
6000				

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

SISTEMA ANTIROTANTE MULTIPOINT MULTIPOINT ANTIROTATION SYSTEM



1



TYPE 1

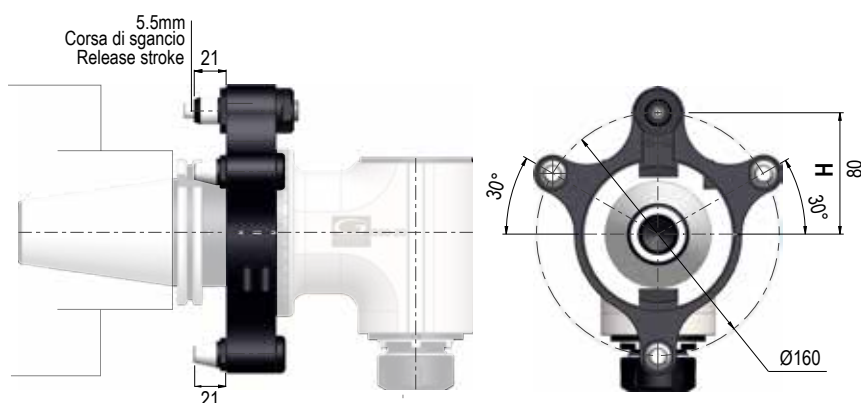
Code 9.G90.16T00/...*

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

Prezzo Extra €
Extra Price €

Solo flangia A richiesta
Only flange** On request

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



TYPE 2

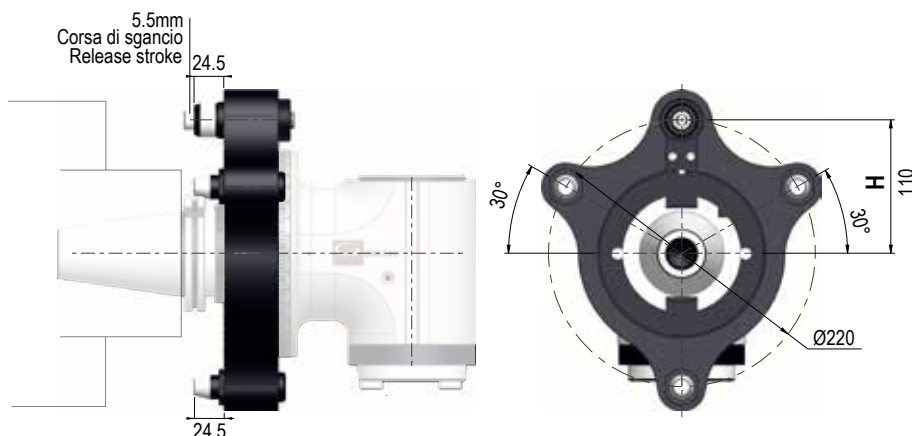
Code 9.G90.20T00/...*

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

Prezzo Extra €
Extra Price €

Solo flangia A richiesta
Only flange** On request

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



TYPE 3

Code 9.G90.S40T0/...*

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

Prezzo Extra €
Extra Price €

Solo flangia A richiesta
Only flange** 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 fase di ordine specificare tipo di cono e grandezza

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

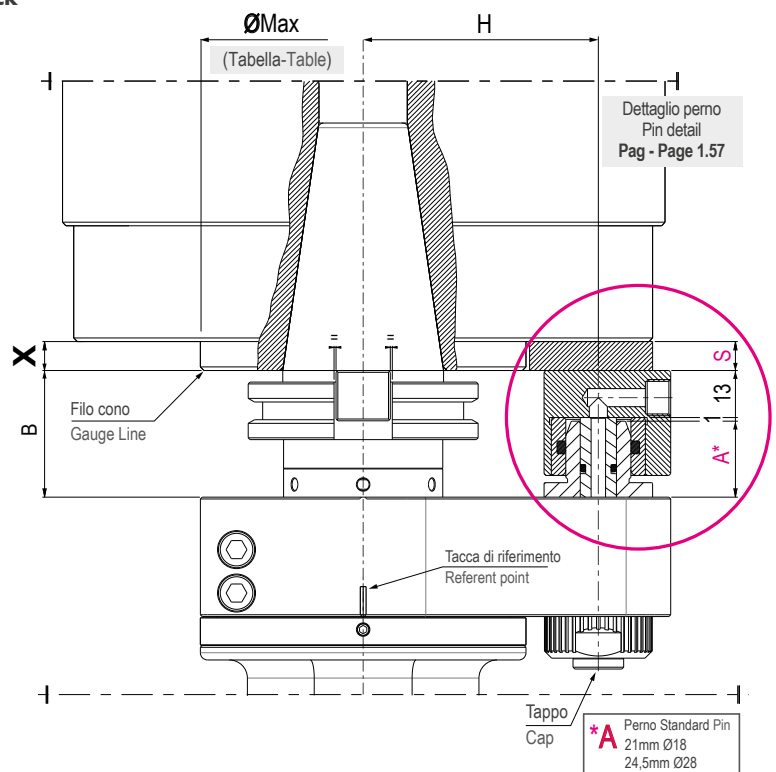
- For Gerardi items, please indicate the type of Angle Head, the H dimension, the pin diameter and height.
- For non-Gerardi items, please send us the stop-block and the machine spindle drawings in order to design the right pin. If possible, we suggest you to use Gerardi standard stop block, taking off 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. 3.25)

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. 1.83)



$$S = X + B - 35$$

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

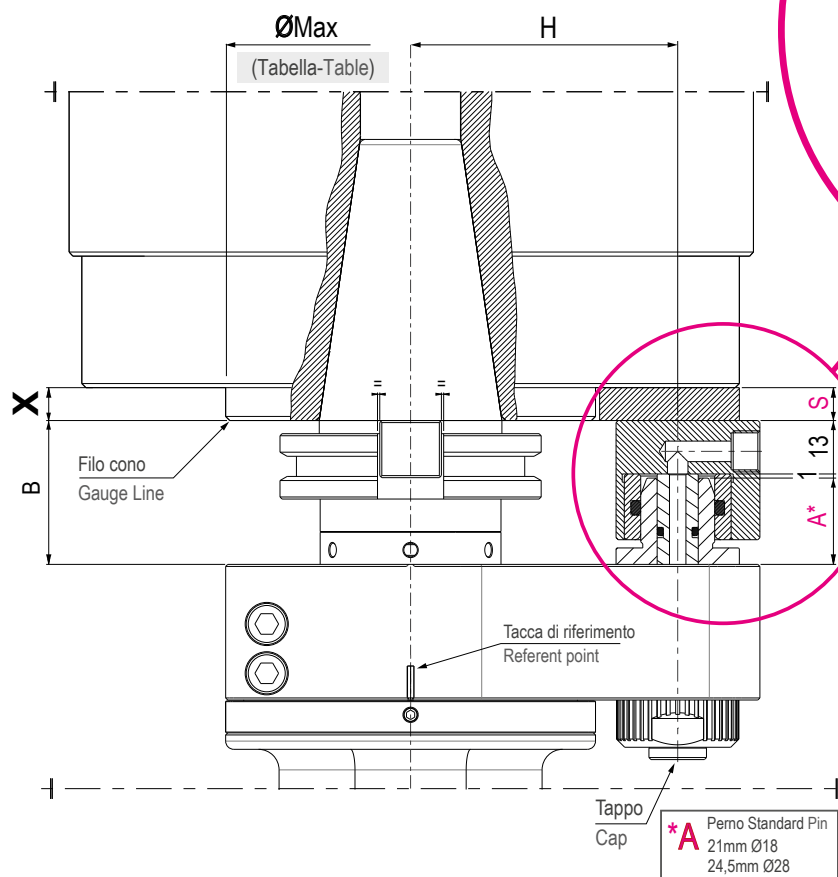
1

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



15 = Ø18 Perno Tipo 0-1-2-3
23 = Ø28 Perno Tipo 4

Perno di sgancio
Release pin

Dettaglio perno
Pin detail



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.

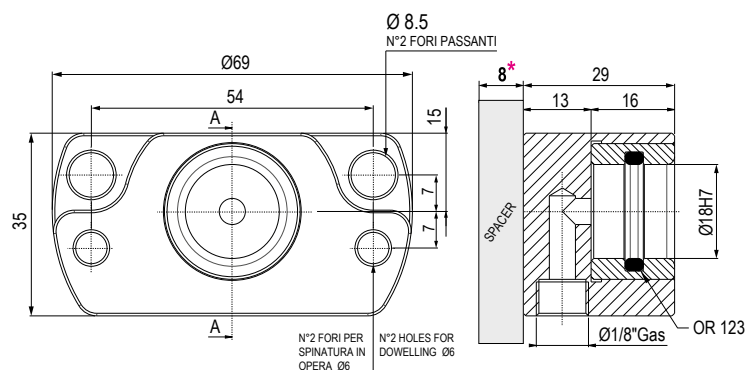
STOP-BLOCK Standard



Ø18

Con bussola temprata - with hardened bushing

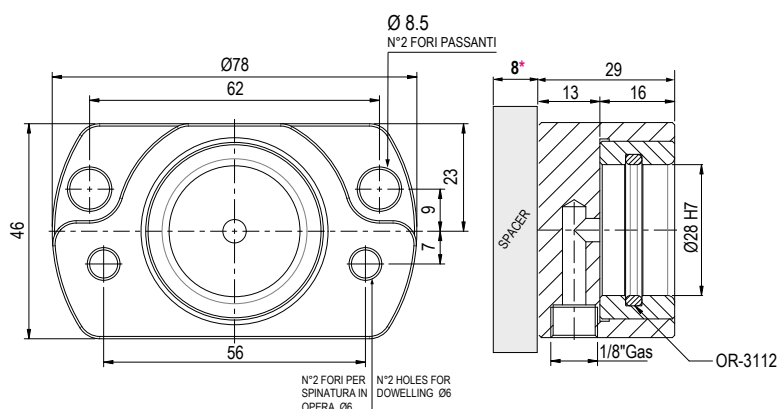
STOP BLOCK Code	
9.INDEX.18	
NO STOP BLOCK INCLUDED	
BUSHING Code	
9.G18.INDEX.2	



Ø28

Con bussola temprata - with hardened bushing

STOP BLOCK Code	
9.INDEX.28	
NO STOP BLOCK INCLUDED	
BUSHING Code	
9.G28.INDEX.2	



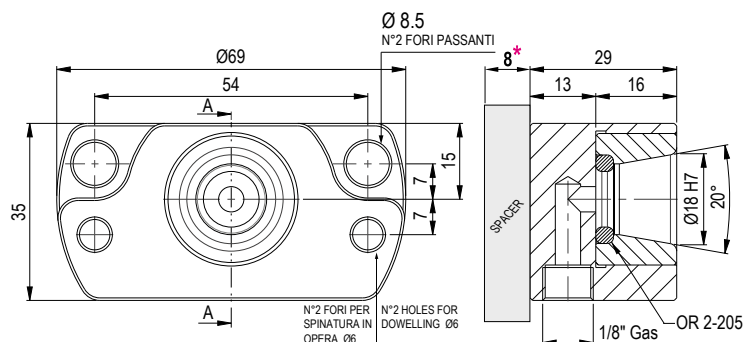
STOP-BLOCK Conico - Conical



Ø18

Con bussola temprata - with hardened bushing

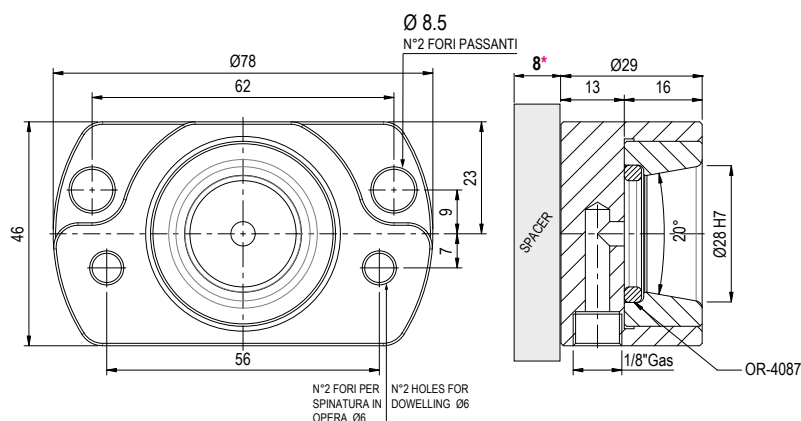
STOP BLOCK Code	
9.INDEX.18C	
NO STOP BLOCK INCLUDED	
BUSHING Code	
9.G18.INDEX.2C	



Ø28

Con bussola temprata - with hardened bushing

STOP BLOCK Code	
9.INDEX.28C	
NO STOP BLOCK INCLUDED	
BUSHING Code	
9.G18.INDEX.2C	



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

STOP-BLOCK Lavorabile** - Machineable**

1

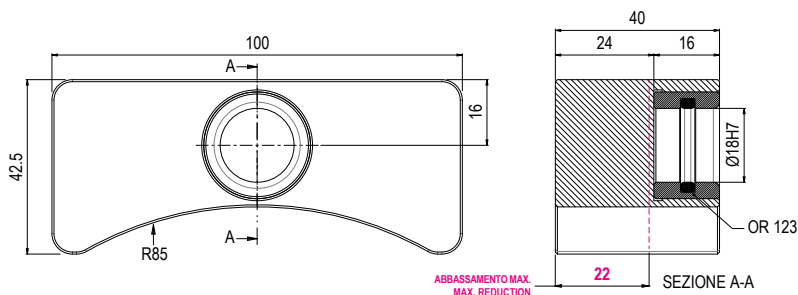


Ø18

Con bussola temprata - with hardened bushing

STOP BLOCK Code	
9.G18.INDEX	
NO STOP BLOCK INCLUDED	

BUSHING Code	
9.G18.INDEX.2	

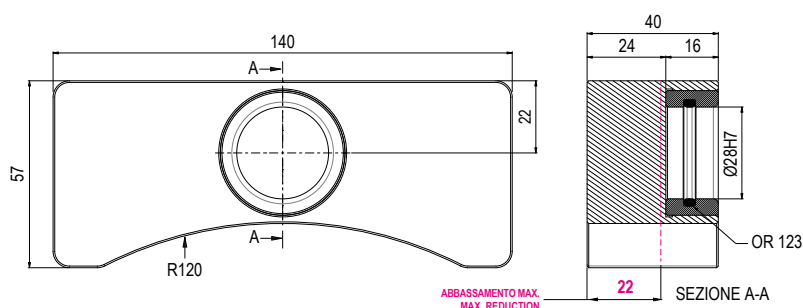


Ø28

Con bussola temprata - with hardened bushing

STOP BLOCK Code	
9.G28.INDEX	
NO STOP BLOCK INCLUDED	

BUSHING Code	
9.G28.INDEX.2	



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

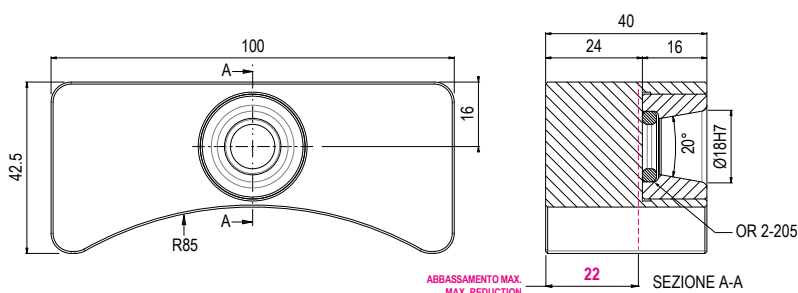


Ø18

Con bussola temprata - with hardened bushing

STOP BLOCK Code	
9.G18.INDEXC	
NO STOP BLOCK INCLUDED	

BUSHING Code	
9.G18.INDEX.2C	

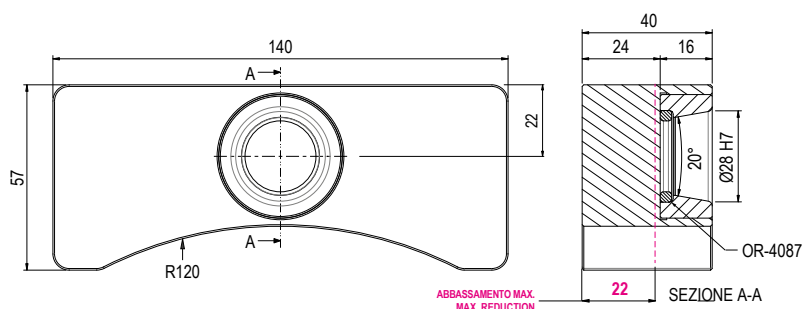


Ø28

Con bussola temprata - with hardened bushing

STOP BLOCK Code	
9.G28.INDEXC	
NO STOP BLOCK INCLUDED	

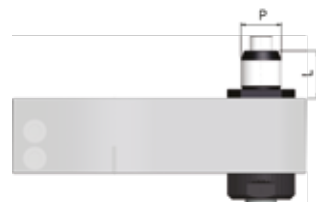
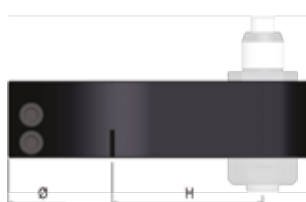
BUSHING Code	
9.G28.INDEX.2C	



** A richiesta
** On request

1

GRUPPO ANTIROTANTE ANTI-ROTATION GROUP



TESTA ANGOLARE ANGLE HEADS

GRUPPO ANTIROTANTE ANTI-ROTATION GROUP

FLANGIA INTEGRALE INTEGRAL FLANGE

GRUPPO PERNO PIN GROUP

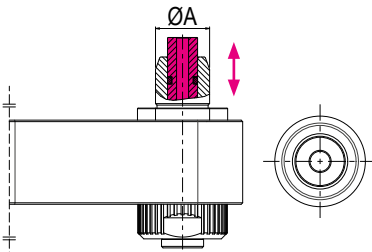
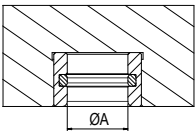
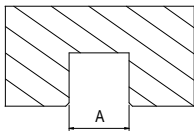
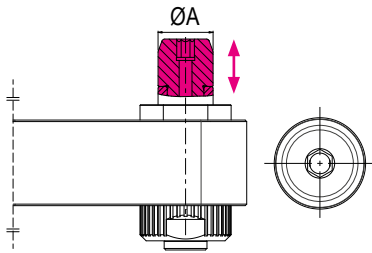
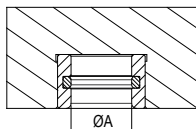
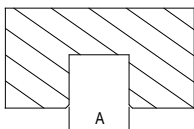
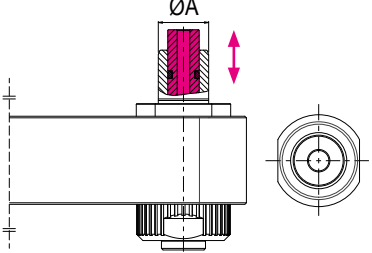
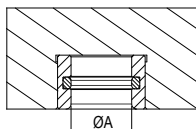
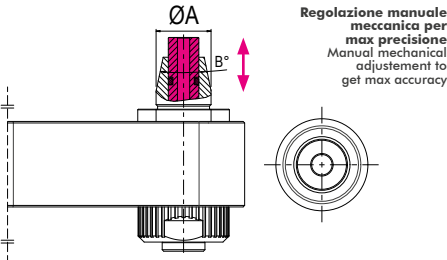
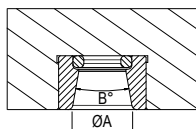
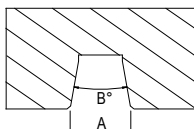
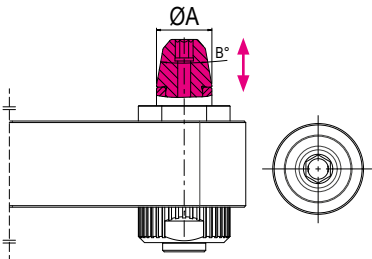
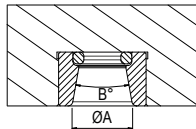
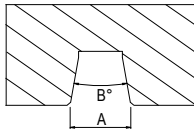
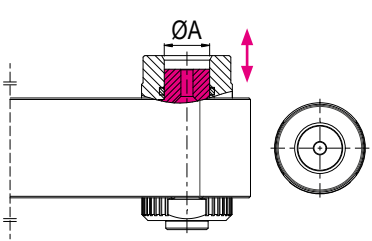
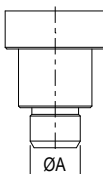
MODELLO Model	TIPO Type	Code		Code	Ø	H		Code	FORMA Shape	P	L	
GL90-7	0 (Ø73)	9.GMU.13050C/65		9.GMU.13030/65		65		9.GMU.13070/E12	E	Ø18	21	
GL90-10		9.GMU.13050C/80										
GL90-16		9.GMU.13050C/110		9.GMU.13030/80	(Ø73)	80		9.GMU.13070/E13	E	Ø18	35	
GTU-10		9.GMU.13050/65						9.GMU.13070/A12	A	Ø18	21	
GMU 13 / 13L		9.GMU.13050/80		9.GMU.13030/110		110		9.GMU.13070/A13	A	Ø18	35	
		9.GMU.13050/110										
G90-5	1 (Ø90)	9.G90.16050/65		9.G90.16030/65		65						
G90-7 / 7L								9.G90.16070/A12	A	Ø18	21	
G90-7 / 7L 2U												
G90-10 / 10L												
G90-10 / 10L 2U		9.G90.16050/80		9.G90.16030/80	(Ø90)	80						
G90-16 / 16L												
G90-16 / 16L 2U												
GMU-16												
GR90-5		9.G90.16050/110		9.G90.16030/110		110		9.G90.16070/A13	A	Ø18	35	
GR90-10												
GR90-16												
		9.G90.20050/80		9.G90.20030/80		80						
G90-20 / 20L	2 (Ø110)				(Ø110)							
G90-20 / 20L 2U								9.G90.16070/A24	A	Ø28	24,5	
GMU 20		9.G90.20050/110		9.G90.20030/110		110						
G90-30 / 30L	3 (Ø140)	9.G90.30050/110		9.G90.30030/110	(Ø140)	110		9.G90.16070/A23	A	Ø28	35	
G90-30 / 30L 2U												
G90-S40	4 (Ø170)	9.G90.S4050/110		9.G90.S4023/110	(Ø170)	110		9.G90.S4070/A24	A	Ø28	24,5	
G90-S40L												
GR90-S40								9.G90.S4070/A23	A	Ø28	35	

* Con l'acquisto della flangia universale il kit di 4 dadi è già incluso nel prezzo
* The nuts kit is just included in the price of the flange purchase

GRUPPO PERNO SPECIALE

SPECIAL PIN GROUP

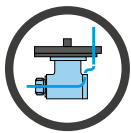
1

FORMA Shape	TIPI DI PERNI Pin Types		TIPI DI STOP-BLOCK Stop-block Types	
Cilindrico standard Cylindrical standard A			Standard con bussola cilindrica Standard with cylindric bushing 	Prismatico Prismatic 
Cilindrico flottante Cylindrical floating B			Standard con bussola cilindrica Standard with cylindric bushing 	Prismatico Prismatic 
Prismatico Prismatic C			Bussola prismatica Prismatic bushing 	
Conico regolabile Adjustable conic D			Bussola conica Conic bushing 	Prismatico conico Conic prismatic 
Conico flottante Sliding conical E			Bussola conica Conic bushing 	Prismatico conico Conic prismatic 
Cilindrico femmina Female cylindric F			Cilindrico maschio Cylindric male 	

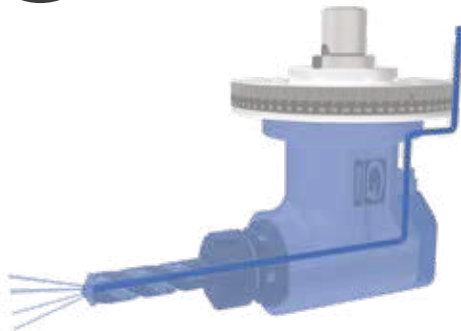
* Extra prezzo perno speciale
* Extra price special pin

OPZIONE REFRIGERANTE INTERNO INTERNAL COOLANT OPTION

Opzione B
B option



Up to 40bar



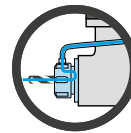
Mandrino macchina » Distributore » Utensile
Machine spindle » Rotating Distributor » Tool

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

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

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

Opzione Re-Cool
Re-Cool option



10bar

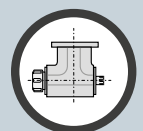


Perno » Ghiera ReCool » Utensile
Positioning Pin » ReCool Nut » Tool

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

PAG. 1.77 - PAG. 1.77

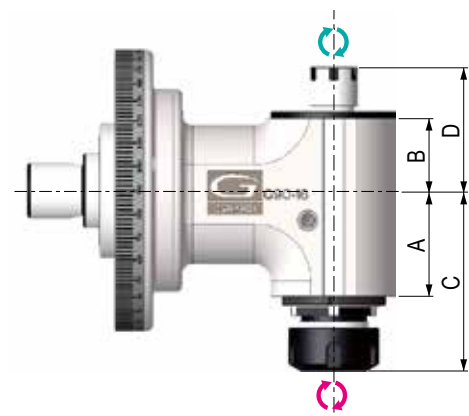
OPZIONE DOPPIA USCITA serie MTC DOUBLE OUTPUT OPTION MTC series



Disponibile per i modelli - Available for following types:

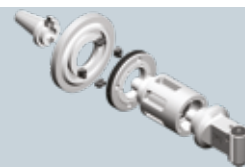
MODELLO MODEL	USCITA OUTPUT	A	B	C	D
G90-5 / G90-7 / G90-7L	ER-11 ER-8 MINI	20	20	38	34
G90-10 / G90-10L	ER-16 ER-11 MINI	37	28	52	44,5
G90-16 / G90-16L	ER-25 ER-16 MINI	47	35	81,5	58,5
G90-20 / G90-20L	ER-32 ER-20 MINI	66	46	103,5	72,5
G90-30 / G90-30L	ER-40 ER-25 MINI	79	53	120	82

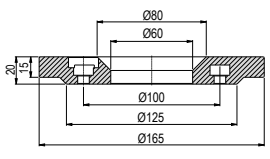
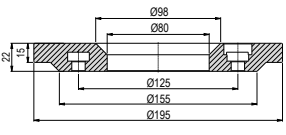
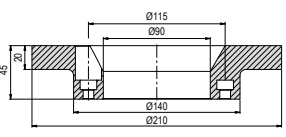
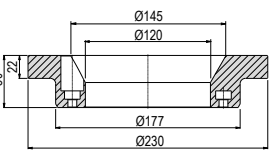
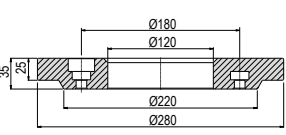
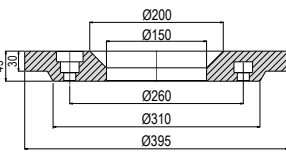
Teste angolari MTC doppia uscita
Double output MTC angle heads



CONI / FLANGE / PROLUNGHE

SHANKS / FLANGES / EXTENSIONS


1

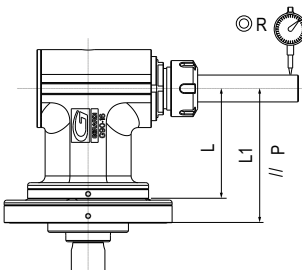
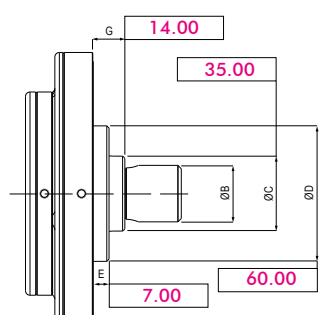
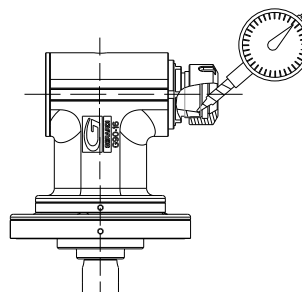
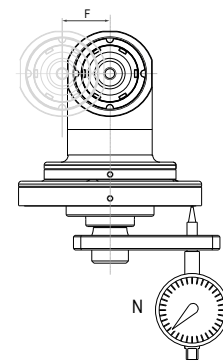
TESTA ANGOLARE ANGLE HEADS		FLANGIA UNIVERSALE UNIVERSAL FLANGE		PROLUNGA EXTENSION		CONO MODULARE MODULAR SHANK	
MODELLO MODEL	TIPO TYPE	Code		H	Code	Code	MODELLO MODEL
G90-5 G90-7 / 7L G90-10 / 10L G90-16 / 16L GMU-16 G90-16 / 16L 2U	1	9.UF.00001 NO FLANGE		50 100 200	9.GEX.10050 9.GEX.10100 9.GEX.10200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

 Senza cono -100 €
 No shank -100 €

1

ESEMPIO SCHEDA DI COLLAUDO INSPECTION SHEET EXAMPLE

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

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

RODAGGIO TESTA - RUN-IN

RPM in entrata RPM	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

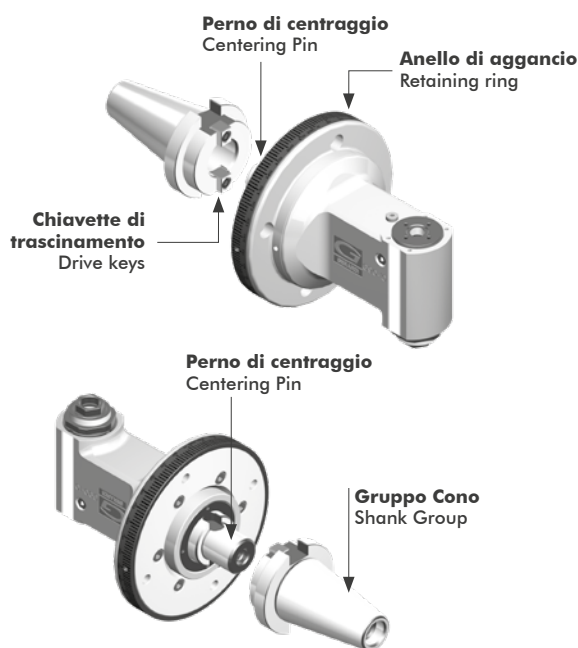
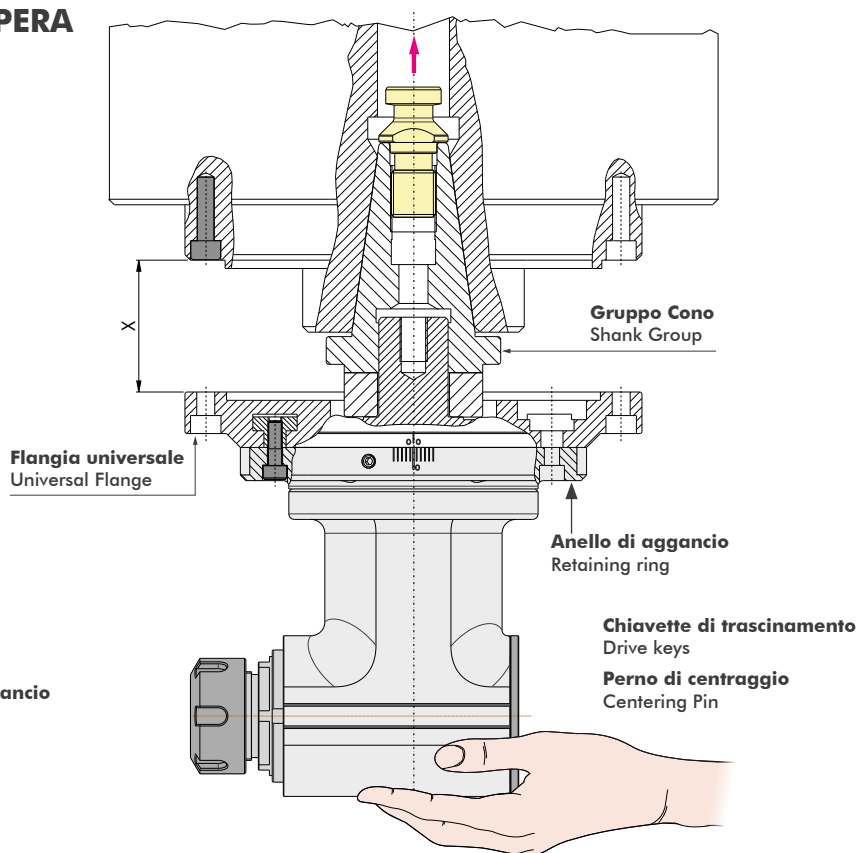
ESEMPIO di MONTAGGIO MOUNTING EXAMPLE

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"

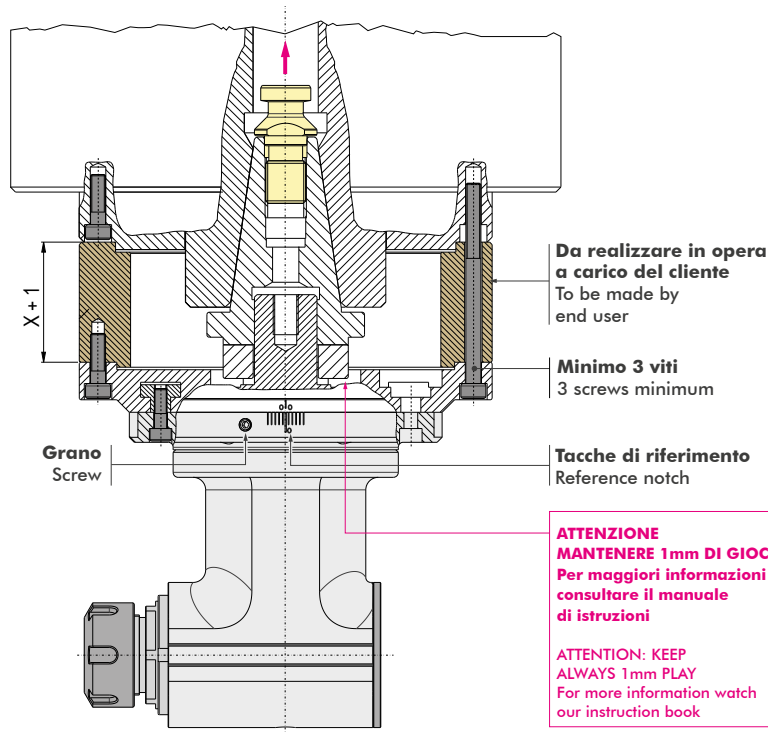
- Mount the retaining ring and the universal flange
- Mount the shank on the Head.
- Mount the head into the machine spindle.
- Check dimension "X"



FASE 2 - STEP 2

- Realizzare un distanziale con spessore $X+1$ mm
- 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 $X + 1$ mm 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
Per maggiori informazioni
consultare il manuale
di istruzioni

ATTENTION: KEEP
ALWAYS 1mm PLAY
For more information watch
our instruction book

PINZE - COLLETS

ER-DIN 6499

ET-1



Foratura-fresatura / drilling-milling

MODELLO MODEL	PINZA COLLET	Ø	Code	
G90-5	ER8	Ø0,5 / 5	9.ER.08000/...	
GL90-7 G90-7 / 7L	ER11	Ø1 / 7	9.ER.11000/...	
GL90-7 G90-7 / 7L	ER11 WP	Ø3 / 7	9.ER.11WP0/...	
GTU 10 GL90-10 G90-10 / 10L GR90-10	ER16	Ø1 / 10	9.ER.16000/...	
GL90-10 / B G90-10 / 10L / B G90-10 / 10L / RI GR90-10 / RI	ER16 WP	Ø1 / 10	9.ER.16WP0/...	
GMU-13 / 13L	ER20	Ø1/13	9.ER.20000/..	
GL90-16 G90-16 / 16L GMU-16 GR90-16 G90-16 / 16L 2U	ER25	Ø1 / 16	9.ER.25000/...	
GL90-16 B / RI G90-16 / 16L / B G90-16 / 16L / RI GR90-16 / RI	ER25 WP	Ø1 / 16	9.ER.25WP0/...	
G90-20 / 20L G90-20L/272 GMU-20 G90-20 / 20L 2U	ER32	Ø2 / 20	9.ER.32000/...	
G90-20 / 20L / B G90-20L/272 / B G90-20 / 20L / RI	ER32 WP	Ø2 / 20	9.ER.32WP0/...	
G90-30 / 30L G90-30 / 30L 2U	ER40	Ø3 / 30	9.ER.40000/...	
G90-30 / 30L / B G90-30 / 30L / RI	ER40 WP	Ø3 / 30	9.ER.40WP0/...	



Maschiatura / tapping

PINZA ET1 (compensate) COLLET ET1 (compensation)	Code	
-	-	
-	-	
-	-	
ET 1-16 (M2 - M8)	9.ET.16000	
-	-	
-	-	
ET 1-25 (M2 - M12)	9.ET.25000	
-	-	
ET 1-32 (M3,5 - M16)	9.ET.32000	
-	-	
-	-	
-	-	

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 ES - STD

CHIAVI - WRENCHES ES - STD



MODELLO MODEL	GHIERA NUT	Code	COPPIA SERRAGGIO CLAMPING FORCE (Nm)	
G90-5	ER8	9.ER.080ES	5 (6)	
GL90-7 G90-7 / 7L	ER11 ES	9.ER.110ES	12 (15)	
GL90-7 G90-7 / 7L	ER11 ES	9.ER.110ES	12 (15)	
GTU 10 GL90-10 G90-10 / 10L GR90-10	ER16 ES	9.ER.170ES/C	24 (30)	
GL90-10 / B G90-10 / 10L / B G90-10 / 10L / RI GR90-10 / RI	ER16 ES	9.ER.160ES	24 (30)	
GMU-13	ER20 STD	9.ER.20STD	28 (35)	
	ER20 AX	9.ER.200AX	52	
GL90-16 G90-16 / 16L GMU-16 GR90-16 G90-16 / 16L 2U	ER25 STD	9.ER.25STD	32 (40)	
	ER25 AX	9.ER.250AX	80	
GL90-16 B / RI G90-16 / 16L / B G90-16 / 16L / RI GR90-16 / RI	ER25 STD	9.ER.25STD	32 (40)	
G90-20 / 20L G90-20L/272 GMU-20 G90-20 / 20L 2U	ER32 STD	9.ER.32STD	136 (70)	
	ER32 AX	9.ER.320AX	104	
G90-20 / 20L / B G90-20L/272 / B G90-20 / 20L / RI	ER32 STD	9.ER.32STD	136 (70)	
G90-30 / 30L G90-30 / 30L 2U	ER40 STD	9.ER.40STD	176 (220)	
G90-30 / 30L / B G90-30 / 30L / RI	ER40 STD	9.ER.40STD	176 (220)	

CHIAVI WRENCHES	Code	
CH-8 STD	9.CH.08STD	
CH-21 ES	9.CH.210ES	
CH-17 ES	9.CH.170ES	
CH-27 ES	9.CH.270ES	
CH-17 ES	9.CH.170ES	
CH-27 ES	9.CH.270ES	
CH-17 ES	9.CH.170ES	
CH-32 ES	9.CH.320ES	
CH-17 ES	9.CH.170ES	
CH-32 ES	9.CH.320ES	
CH-32 ES	9.CH.320ES	
CH-20 STD	9.CH.20STD	
CH-20 AX	9.CH.200AX	
CH-39 ES	9.CH.390ES	
CH-25 STD	9.CH.25STD	
CH-44 ES	9.CH.440ES	
CH-25 AX	9.CH.250AX	
CH-39 ES	9.CH.390ES	
CH-25 STD	9.CH.25STD	
CH-46 ES	9.CH.460ES	
CH-32 STD	9.CH.32STD	
CH-32 AX	9.CH.320AX	
CH-46 ES	9.CH.460ES	
CH-32 STD	9.CH.32STD	
CH-59-ES	9.CH.590ES	
CH-40STD	9.CH.40STD	
CH-59-ES	9.CH.590ES	
CH-40STD	9.CH.40STD	

1

CAMBI RAPIDI MODULARI MODULAR QUICK CHANGE ADAPTORS



Compatibili con tutte le uscite ER - Compatible with all ER outputs

Vedi intera gamma nel capitolo Accessori pag. 5.134 / 5.135 - See the full range in the Accessories chapter at pages 5.134 / 5.135

**TEMPI di INSTALLAZIONE
RIDOTTI e POSSIBILITÀ
di PRE-SETTING A
BORDO MACCHINA**

**REDUCE SET-UP TIME
and ALLOW OFFLINE
TOOL PRESETTING !**

Sono un facile e veloce sistema modulare per il cambio rapido delle diverse tipologie di portautensili con la sede dell'utensile per pinza ER (DIN6499).

Idonei a refrigerazione esterna o interna mantenendo il presetting precedentemente realizzato.

They are a modular toolholder system for the fitting of toolholders in a spindle unit with ER collets (DIN6499) outputs. All Adaptors are suitable for external and internal coolant supply and keep the presetting already done.



Preparazione della Testa Angolare

Preparing the Angle Heads

- 1- **Rimuovere pinza e ghiera di serraggio**
Remove collet and clamping nut
- 2- **Introdurre il cambio rapido**
Introduce the quick change adaptor
- 3- **Stringere la ghiera del cambio rapido**
Lock the quick change nut.

