

# CATALOGO CATALOGUE

# 2024

Technology heads for **FUTURE**

Teste Angolari *Angle Heads*  
Motorizzati *Live Tools*  
Cambio Rapido *Smart Change*  
Alta Velocità *High Speed*







Alberti

# Teste angolari / Angle heads

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# IL METODO ALBERTI



Il Metodo Alberti si fonda su **5 step fondamentali** che portano passo passo il cliente dalla richiesta alla consegna della testa angolare perfetta per la sua applicazione.

È la modalità di lavoro che **ci ha resi famosi nel mondo** e che caratterizza quello che ci piace definire il nostro **Made in Italy**.

*The Alberti Method is based on **5 fundamental steps** that guide the customer step by step from the simple inquiry to the delivery of the most suitable angle head for their application.*

*Thanks to this meticulous method Alberti has become famous worldwide and appreciated for the **made in italy** quality.*



- 1** | Analisi  
*Analysis*



- 2** | Progettazione  
*Study and design*



- 3** | Creazione  
*Creation*



- 4** | Produzione  
*Production*



- 5** | Assistenza  
*Assistance*



## 1970

L'azienda Alberti S.r.l. nasce per la costruzione di modelli da fonderia. Quando Umberto – il fondatore – rileva l'azienda del padre si trova a progettare e costruire la sua prima testa angolare non essendoci nulla di simile in commercio.

*The company Alberti S.r.l. was originally founded for the construction of foundry models. When Umberto – the founder – took over his father's company, he started to design and build his first angle head as he couldn't find anything similar on the market.*

## 1980

Alberti S.r.l. inizia a pensare e produrre su larga scala. Vengono acquistati i primi macchinari: il primo centro di lavoro Olivetti e i primi torni Biglia e Mori Seiki. Nasce la rete distributiva internazionale per ampliare le vendite e far arrivare la tecnologia anche all'estero.

*Alberti S.r.l. began to think and produce on a large scale. The first machine was purchased: the first Olivetti machining center and the first Biglia and Mori Seiki lathes. The international distribution network was established to expand sales and get the technology abroad.*

## 1990

La Alberti si trasferisce a Saronno: cresce di dimensione e inizia a diversificare la produzione, introducendo alcune linee di motorizzati e la customizzazione per alcuni prodotti.

*Alberti S.r.l. moved to Saronno: it grew in size and began to diversify production by introducing some live tools and customization for some products.*

## 2000

La produzione si arricchisce delle teste angolari ad alta velocità con motori ad aria ed elettrici.  
*Production now included high-speed angle heads with air and electric motors.*

## 2010

È l'anno del trasferimento nella nuova sede e del progressivo ampliamento del parco macchine. L'azienda consolida la rete distributiva con centri di riparazione e service in Usa, Cina e India.

*The company moved to the new headquarters and expanded its range of machines. The company consolidated its distribution network with repair and service centers in the USA, China, and India.*

## 2020

Negli ultimi 10 anni raddoppia la dimensione aziendale. Viene aggiunto il sistema di prototipazione in 3D. Ad oggi, tra produzione e ufficio tecnico, si contano 35 persone.

*In the last 10 years, the company has doubled in size. The 3D prototyping system has been added. Today there are overall 35 employees in the production and technical department.*



## CHI SIAMO

Alberti Umberto S.r.l. è un'azienda innovativa - 4000 mq dedicati all'avanguardia della tecnologia grazie a un reparto produttivo ampio per ospitare tutto il parco macchine, un reparto di logistica capillare e un magazzino ricambi decisamente strutturato per rispondere alle eventuali necessità di oltre 60.000 prodotti consegnati nel mondo.

*Alberti Umberto S.r.l. is an innovative company - 4000 m<sup>2</sup> dedicated to cutting-edge technology thanks to a large production department which accommodates a good number of machining centers, a logistics department and a well structured spare parts warehouse to quickly respond to any needs for the over 60,000 products delivered worldwide.*

## MISSION

Siamo il partner ideale per chiunque necessiti di soluzioni complete di alta qualità. Mettiamo la genialità e la tecnica al servizio della produzione, ampliando e ottimizzando le capacità della macchina con una diminuzione sostanziale dei tempi di attrezzamento.

Da oltre 45 anni siamo il punto di riferimento di chi cerca l'eccellenza in questo settore.

*We are the ideal partner for anyone needing a complete solution with high quality products. Our expertise and know how is supporting the production, expanding and optimizing the capacity of the machine with a substantial reduction of setup times.*

*For over 45 years we have been a reference point for those looking for excellence in this sector.*



# CARATTERISTICHE TECNICHE Teste Alberti

## Technical Data

Albero con cono in acciaio cementato e temperato. Realizzato in un solo pezzo per aumentare il carico alla flessione del 25%, interamente rettificato ed equilibrato a 6,3G. Riesce a raggiungere alte velocità senza vibrazioni.

*Spindle with arbor made as one solid piece of hardened steel to increase resistance to bending stress up to 25%. Completely ground and balanced at 6,3G. Possibility to reach higher RPM without vibrations.*

Corpo testa in acciaio ottimizzato per adduzione refrigerante interna ad alta pressione fino a 100 bar per teste di piccola dimensione e lavorazione in alta velocità. Ghisa sferoidale GS-600 per tutte le teste di medie e grosse dimensioni per garantire miglior stabilità e assorbimento delle vibrazioni.

*Steel head body optimized for internal high pressure coolant supply up to 100 bar for small sized heads and high speed machining. G5-600 ductile iron for all medium and large heads to ensure the best stability and vibration absorption.*

Cuscinetti a contatto obliqui precaricati in ABEC7-ABEC9. Con le sedi rettificate del corpo permettono una perfetta concentricità e stabilità di tutti gli organi rotanti, necessaria per raggiungere performance di lavorazioni superiori.

*Angular contact super precision bearings with ABEC 7 and 9 accuracy rate. Mounted in ground bearing housing inside of the body, they ensure a perfect concentricity and stability during machining.*

Sia le tenute standard realizzate in mescola speciale a bassissimo coefficiente d'attrito che quelle per adduzione refrigerante fino a 100bar sono state studiate e costruite internamente all'azienda e con la possibilità di avere un numero di giri più elevato e l'utilizzo anche a secco.

*Either the standard seals made of a special material with low-friction capability and the new high pressure seals up to 100 bar are studied and developed by Alberti with possibility of increased RPM and dry running.*

Ingranaggi realizzati superleghe di acciaio vengono trattati con lucidatura isotropica che conferisce una rugosità pari a 0,01Ra e un abbattimento notevole del calore e delle vibrazioni. Le nuove coppie – rigorosamente a dentatura spiroideale conica con evolvente rettificato – si differenziano per un modulo maggiorato con un conseguente aumento del torque e un sistema di trascinamento a rullini.

*Gears made of steel superalloy are treated with isotropic polishing which allows to reach 0,01Ra roughness with dramatic reduction of the vibration and friction. The new spiral bevel gears with ground involute are manufactured with bigger module to increase dramatically the torque and a new driving system with pins without the use of any key.*

ALBERO CON CONO  
SPINDLE W/ARBOR



CORPO TESTA  
BODY



CUSCINETTI  
BEARINGS



GUARNIZIONI  
SEALS



INGRANAGGI  
GEARS



Tutti i particolari sono caratterizzati da nostro logo e codice per garantire l'autenticità del prodotto e facilitare la ricerca dei particolari di ricambio. Tutti i controlli sono affidati alla macchina di misura di alta precisione in camera controllata.

All spare parts are laser marked with Alberti logo to guarantee the authenticity and simplify the recognition of each single item. All parts are measured with our new high precision 3D measuring machine inside a controlled room temperature.

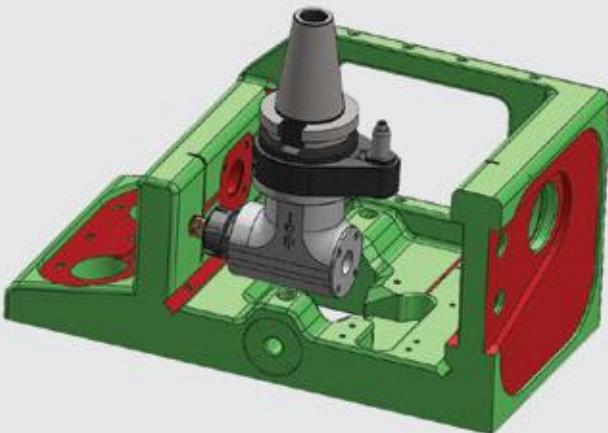


Nuovo e pratico sistema che facilita l'operazione di serraggio utensile sfruttando una chiave di contrasto da inserire sull'albero in modo da avere una mano libera.

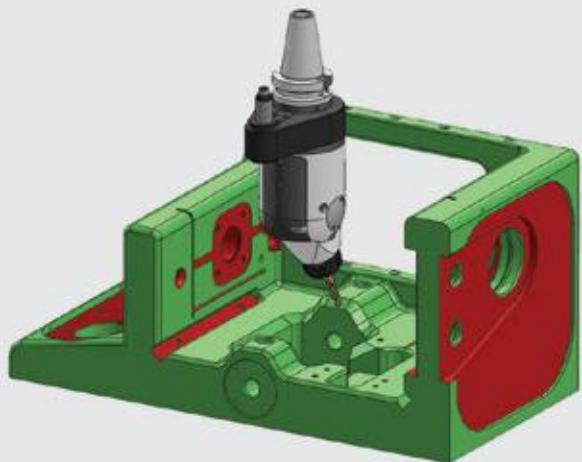
An easy-to-use system made of one special wrench to be fitted in the toolholder enabling the use of both hands to tighten the tool.

# Esempi di **LAVORAZIONE STANDARD**

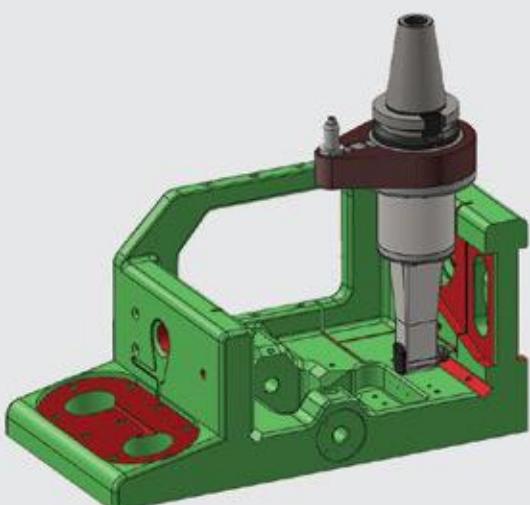
## *Examples of standard machining*



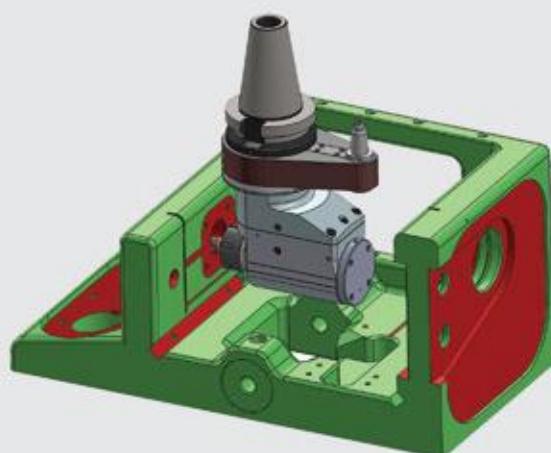
Testa a 90°  
*90° head*



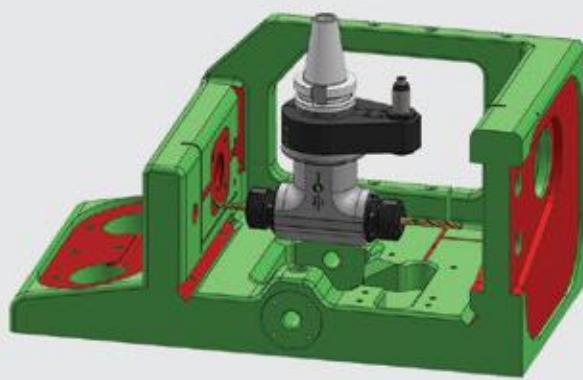
Testa ad inclinazione regolabile  
*Head with adjustable angle +/- 90°*



Testa a 90° prolungata  
*Extended lenght head*

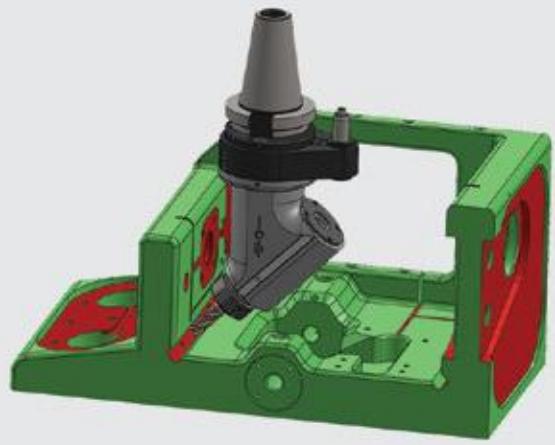


Testa con refrigerante  
*Head with internal coolant*



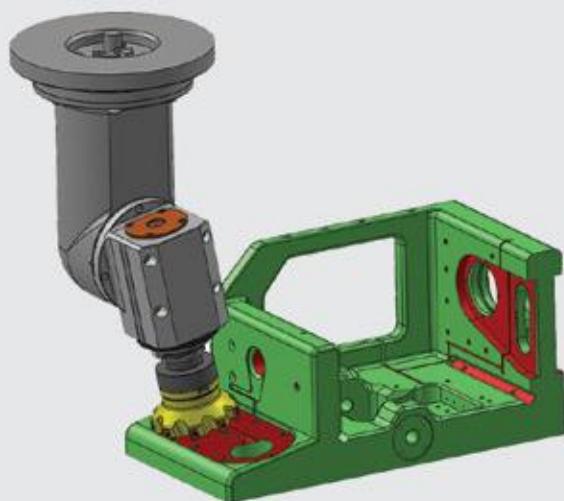
Testa con uscita doppia (180°)

*Dual output head (180°)*



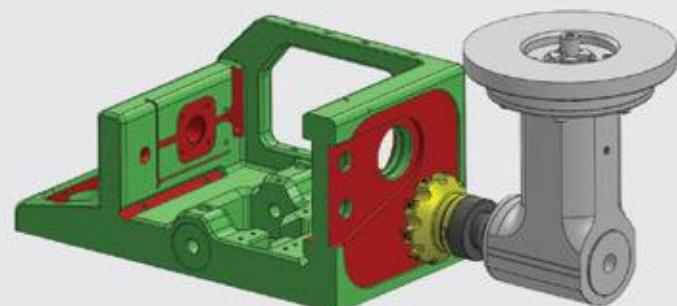
Testa ad inclinazione fissa

*Head with special fixed angle*



Testa orientabile di grosse dimensioni con montaggio manuale

*Big sized adjustable head with manual mounting*



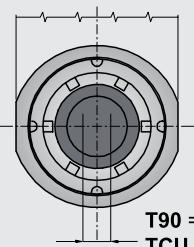
Testa fissa di grosse dimensioni con montaggio manuale

*Big sized fixed head with manual mounting*



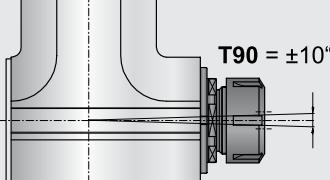
## DATI TECNICI

### Technical Data



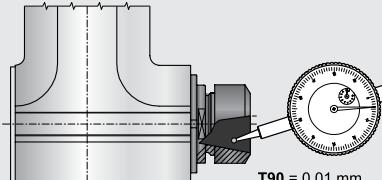
Disassamento tra albero in entrata e mandrino portautensile

*Maximum misalignment of input and output drive spindle*



Errore angolare del mandrino portautensile rispetto al 90° teorici

*Tool spindle angular variation relative to 90° (theoretical value)*



Oscillazione mandrino portautensile con testa in rotazione

*Maximum runout of output spindle*

## MASCHIATURA

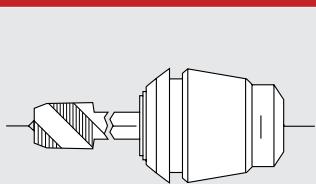
### Tapping

Per le operazioni di maschiatura, tutte le teste standard possono utilizzare le **pinze compensate**. Queste pinze sono **perfettamente intercambiabili con le normali pinze elastiche** utilizzate per le altre operazioni, e permettono ai maschi di avere una corsa assiale di compensazione per eventuali errori di avanzamento e per l'inversione della rotazione.

La stessa testa, quindi, può essere impiegata sia per forare che per maschiare compatibilmente alla capacità della relativa pinza.

For tapping operations, all standard heads can be equipped with **axially-compensating collets**. These collets are **fully interchangeable with the normal collets** and allow the tap to move axially thereby compensating for any feed error and facilitating reversal of direction of rotation.

A single head can therefore be used for both drilling and tapping, up to the diameter allowed by the collet.



Head / Tipo testa	Collet / Tipo Pinza	Capacity / Capacità	Shift / Corsa
T90-0,5	ET-1-12	M0.5-M4	5.5 mm
T90-1,5	ET-1-16	M1-M6	7 mm
T90/TCU-2,5	ET-1-25	M1-M12	8 mm
T90/TCU-3,5	ET-1-32	M4-M16	10 mm
T90-4,5	ET-1-40	M6-M20	13 mm

**NOTE:** Ogni pinza può portare una sola grandezza di maschio. Perciò sarà necessario specificare, in sede di ordine, il diametro del gambo del maschio che si intende utilizzare. *Each collet is designed to accommodate an individual tap size. Therefore, please specify the tap shank diameter when ordering collets.*

# Per una CORRETTA ORDINAZIONE

## Data sheet form



**TESTA PER  
CAMBIO UTENSILE  
AUTOMATICO**

*Angle head for  
automatic tool change*

1. Tipo di portautensile e diametro utensile  
*Type of tool holder and cutting tool diameter*

2. Cono di attacco alla macchina  
*Machine spindle*

3. Distanza tra perno e cono attacco testa  
*Distance between pin and spindle*

4. Tipo di macchina e peso al cambio utensile  
*Type of the machine and weight at tool change*

5. **Stop Block**  
Già presente in macchina oppure da realizzare  
*Already installed or to be manufactured*

### OPTION

- Refrigerante interno  
*Internal coolant*

- Doppia uscita  
*Dual output*

- Portautensile diverso  
*Different tool holder*

- Lunghezza extra  
*Extra length*



**TESTA PER  
MONTAGGIO  
MANUALE**

*Angle head for  
manual mounting*

1. Tipo di portautensile e diametro utensile  
*Type of tool holder and cutting tool diameter*

2. Cono di attacco alla macchina  
*Machine spindle*

### OPTION

- Refrigerante interno  
*Internal coolant*

- Doppia uscita  
*Dual output*

- Portautensile diverso  
*Different tool holder*

- Lunghezza extra  
*Extra length*

# LINEA CONTROL



La **LINEA CONTROL** comprende una serie di teste angolari adatte ad essere montate nel magazzino utensile e quindi essere scambiate automaticamente. La corretta installazione prevede il montaggio di uno **stop block** a bordo macchina. Per una maggior rigidità il cono di attacco alla macchina è realizzato in un unico pezzo con l'albero principale.

*CONTROL LINES include a wide range of angle heads to be used on machining centres with ATC and therefore can be mounted in the tool magazine and automatically exchanged in the machine spindle. A **stop block** mounted on the machine spindle ensure a correct positioning and prevents rotation. The input spindle is one solid piece with the main shaft to grant a higher rigidity.*

**SCANNERIZZA IL QR CODE**  
per le istruzioni di montaggio

**SCAN THE QR CODE**  
for the set-up instructions



**Dimensione STOP BLOCK per teste**  
Dimensions STOP BLOCK for heads

T90cn-0,4 / 0,5 / 1,5 / 2,5 / 3,5 / 4,5



**Dimensione STOP BLOCK per teste**  
Dimensions STOP BLOCK for heads

T90cn-5



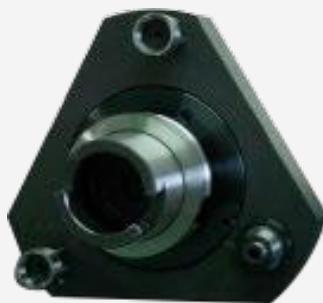
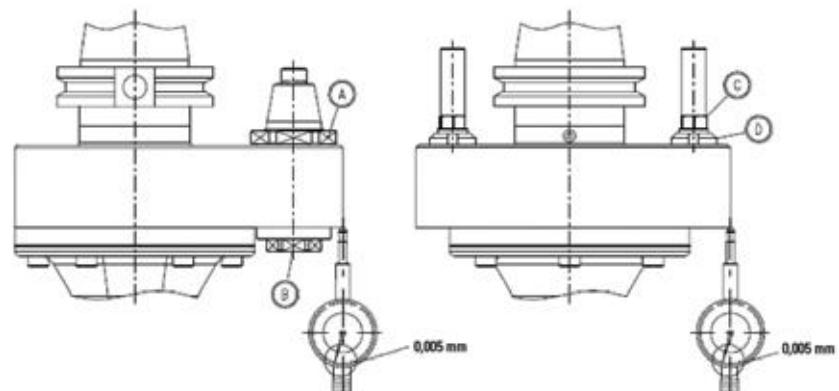
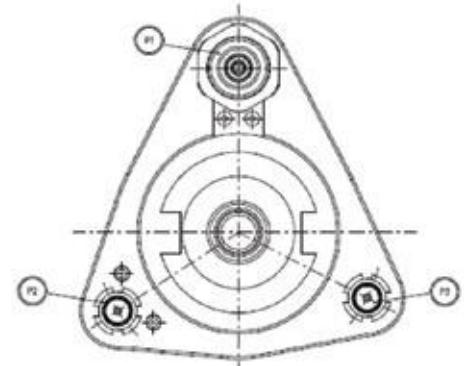
## SUPPORTO 3 PUNTI

### *3 point support*

Per aumentare la rigidità e stabilità durante la lavorazione, è possibile realizzare una **flangia con 3 punti di supporto**. La flangia viene realizzata su misura a seconda delle dimensioni del mandrino macchina. Solitamente per questo tipo di realizzazione si prevede un magazzino esterno o una stazione pick up per accogliere la testa.

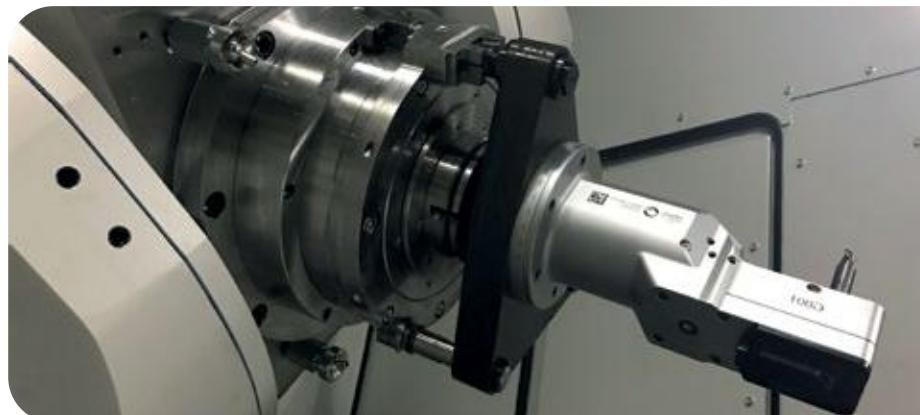
Ogni flangia con 3 punti di appoggio viene **realizzata ad hoc** in base al mandrino macchina pertanto non esiste uno standard. I punti di appoggio sono tutti regolabili e devono essere registrati durante la prima installazione.

*In order to increase rigidity and stability during machining, Alberti can build a **special flange with 3 point support system**. The flange is custom-made according to the dimension of the machine spindle. With this system the head cannot be loaded into the tool magazine but requires an external uploading or pick up station.*



**SCANNERIZZA  
IL QR CODE**  
per le istruzioni  
di montaggio

**SCAN THE  
QR CODE**  
for the set-up  
instructions





## Esempi di **STOP BLOCK E PERNO**

*Examples of stop blocks and pins*



In caso non fosse possibile utilizzare uno dei perni o stop block già disponibili, Alberti fornisce tutta l'assistenza necessaria per **realizzare uno stop block ad hoc per la propria macchina**. Di seguito alcuni esempi.

*In case the customer cannot use any of the pins or stop block already available, Alberti will help in finding the correct solution and **provide the customized stop block for the machine**. Following few examples.*

**A**

Cod: 5951800001

Perno e stop block  
Alberti standard  
Alberti standard  
Pin and Block

**B**

Cod: 59518006

Perno e stop block  
Alberti standard  
Alberti standard  
pin and block

**C**

Cod: 5951800073

Perno e stop block conico  
regolabile standard  
Standard conical pin  
and stop block

**D**

Cod: 4951800091

Perno e stop block  
prismatico  
Prismatic pin  
and stop block

**E**

Perno flottante  
Floating pin

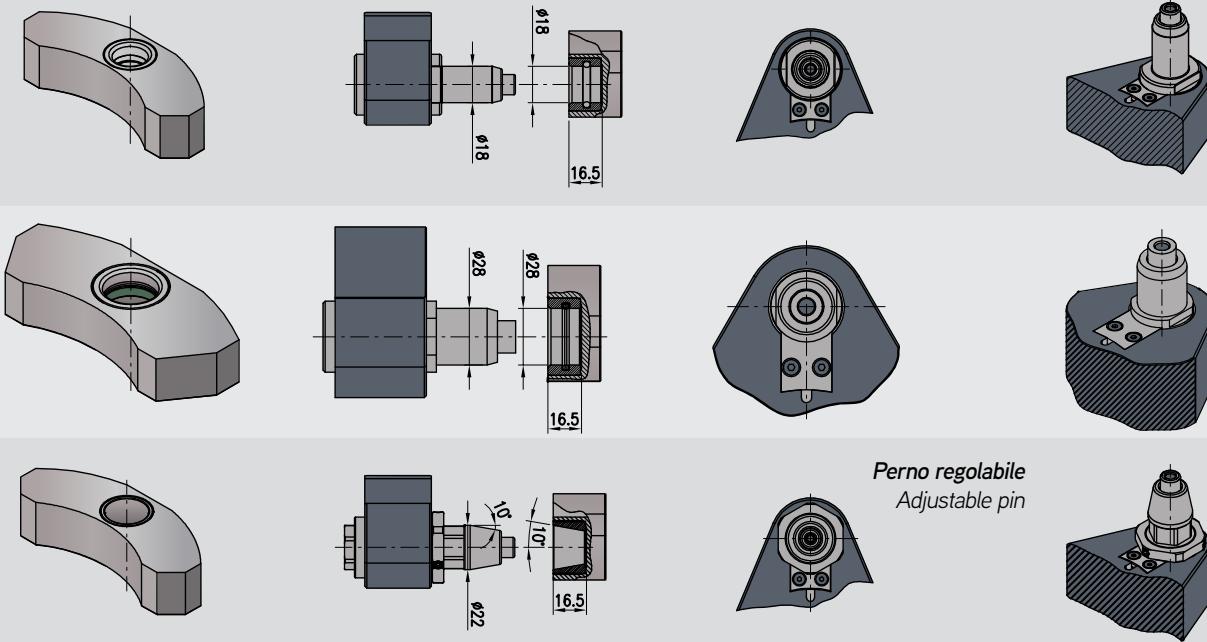
**F**

Perno maschio speciale  
Special male pin

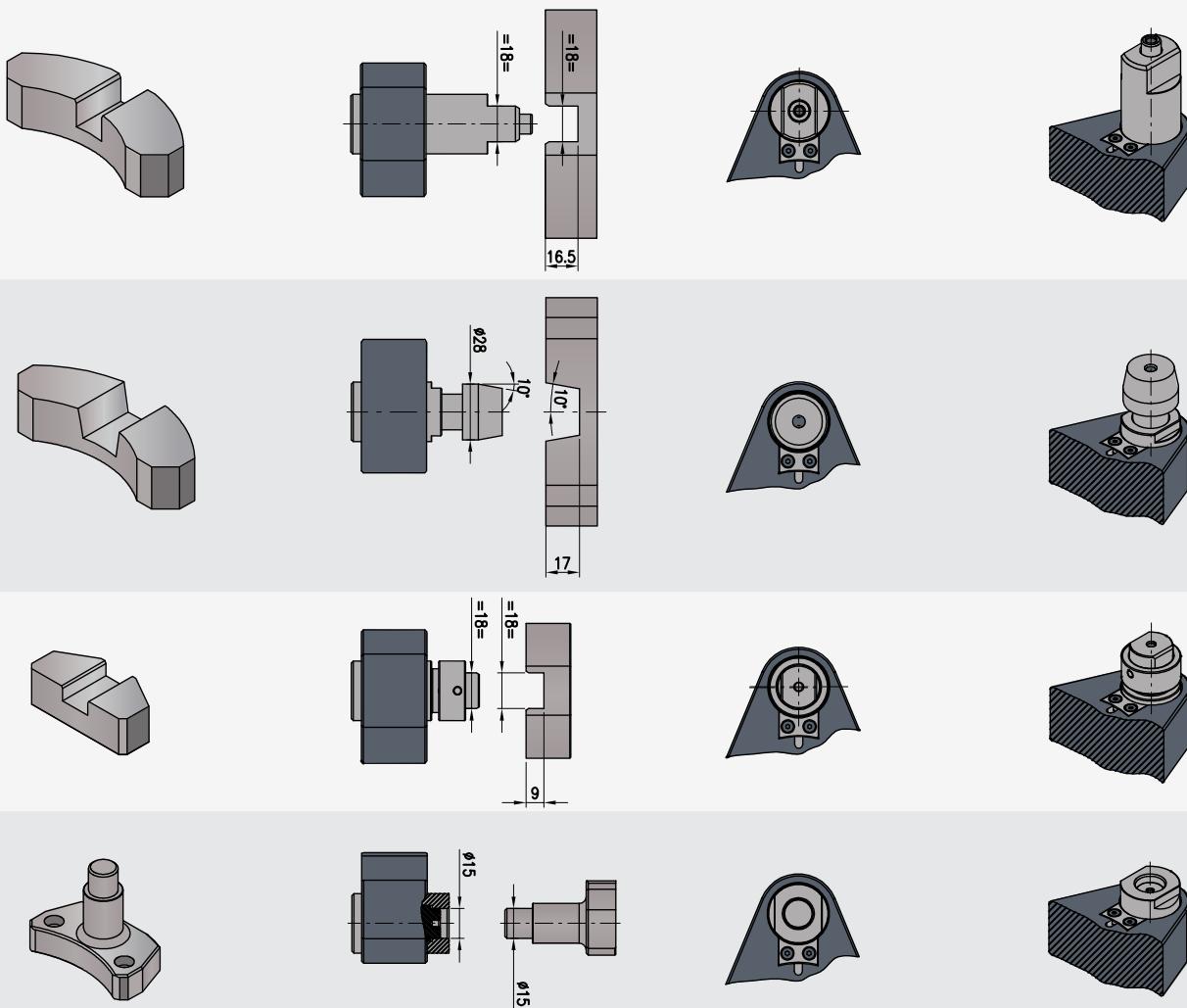
**G**

Perno femmina speciale  
Special female pin

*Stop block e perni di fornitura Alberti - Stop block and Pin manufactured by Alberti*



*Perno per stop block speciali già montati in macchina - Special Pin for pre mounted stop block*



# T90cn-0.4C

ACT9004C

**Technical data**

Caratteristiche tecniche



Ratio  
Rapporto  
**1:1**



RPM  
Velocità  
**10.000 min<sup>-1</sup>**



Max. axial load  
Max. carico assiale  
**100 N**



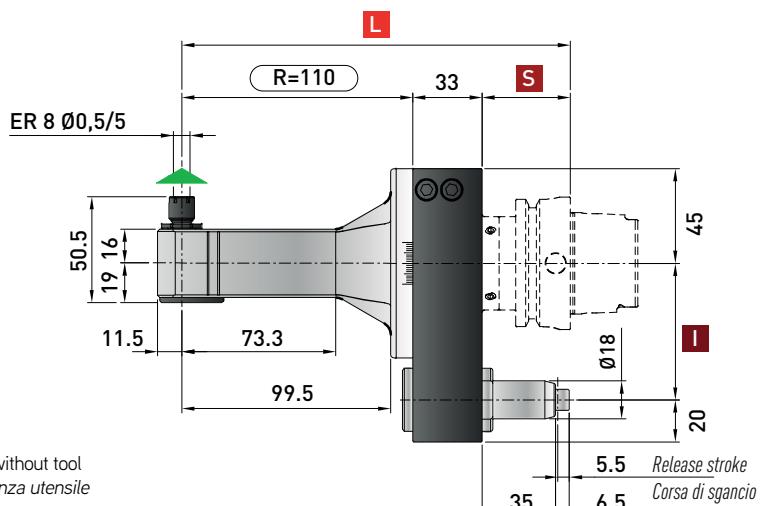
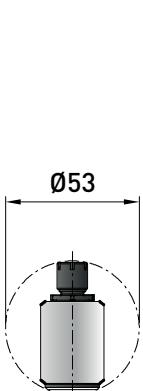
Torque  
Momento torcente  
**4 Nm**



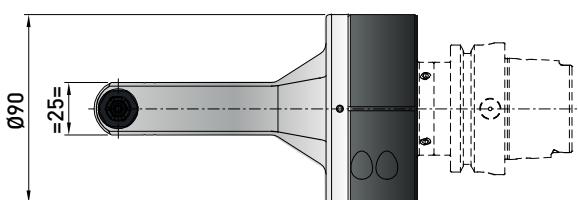
Weight  
Peso  
**4 kg**



Collet  
Pinza  
**ER-8 (ø 0,5/5 mm)**



Minimum diameter without tool  
Diametro minimo senza utensile

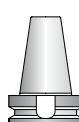
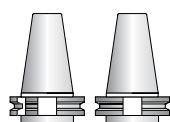
**\* STANDARD EQUIPMENT**  
includes:

Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino



Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	178	178	178	184	185	188	181	183

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

**Option / Opzione**

bar max

**12**

Coolant through pin

Adduzione refrigerante attraverso il perno



Ø mm max.

**4-6**

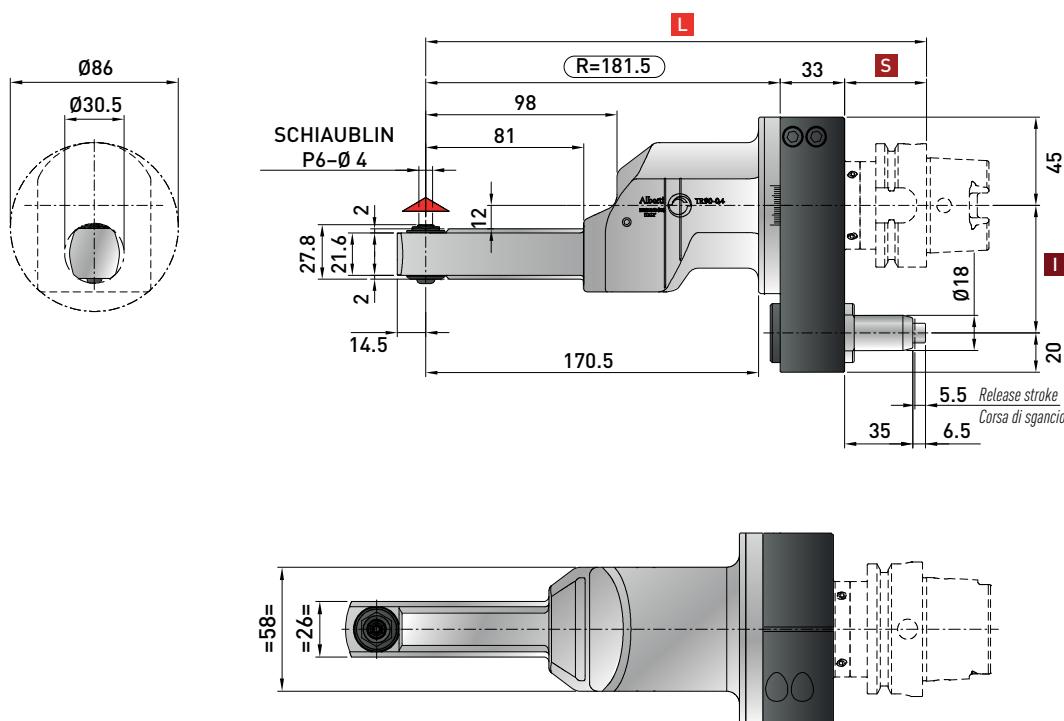
Weldon output

Weldon

# TR90cn-0.4 Neo

**ACTR904C**
**Technical data**

Caratteristiche tecniche



Minimum diameter without tool  
Diametro minimo senza utensile

**Torque**  
Momento torcente  
**4 Nm**

**Weight**  
Peso  
**5 kg**

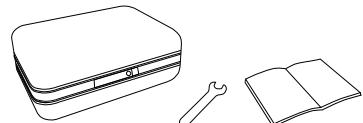
**Collet**  
Pinza  
**SCHAUBLIN P6**

\* **STANDARD EQUIPMENT**  
includes:



Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	249.5	249.5	249.5	255.5	256.5	259.5	252.5	254.5

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

**Option / Opzione**


bar max  
**100**

Coolant through spindle

Adduzione refrigerante attraverso il cono



bar max  
**12**

Coolant through pin

Adduzione refrigerante attraverso il perno

# T90cn-0.5C Neo

ACT9005C

**Technical data**

Caratteristiche tecniche



Ratio

Rapporto

1:1



RPM

Velocità

8.000 min<sup>-1</sup>

Max. axial load

Max. carico assiale

150 N



Torque

Momento torcente

10 Nm



Weight

Peso

4 kg



Tapping

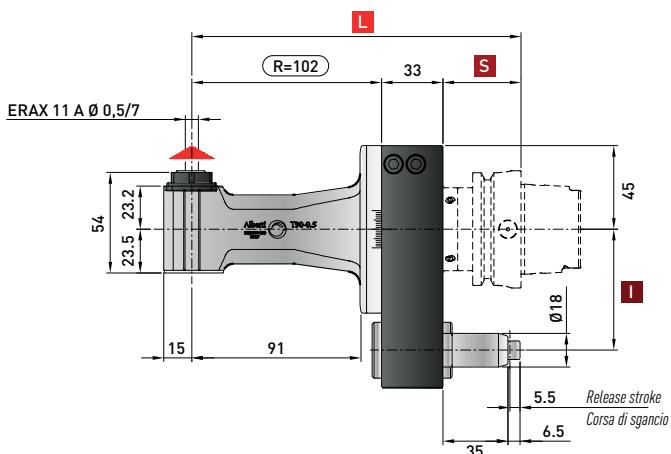
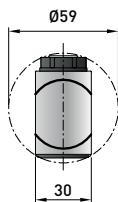
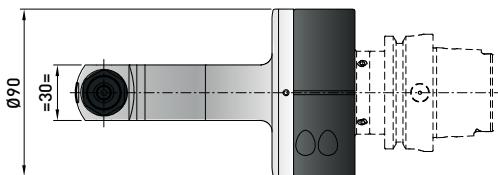
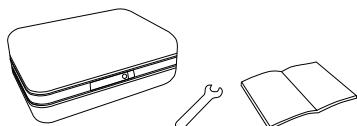
Maschiatura

Max. M5



Collet

Pinza

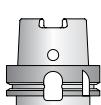
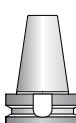
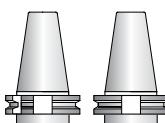
ERAX-11 ( $\varnothing$  0,5/7 mm)Minimum diameter without tool  
Diametro minimo senza utensile**\* STANDARD EQUIPMENT includes:**

Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino



Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	170	170	170	176	177	180	173	175

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**

bar max

12

Coolant through pin  
Refrigerante attraverso il perno

Ø mm max.

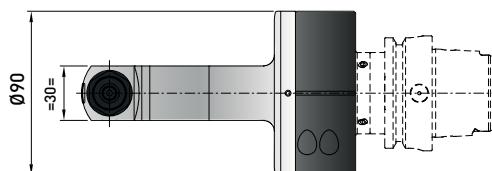
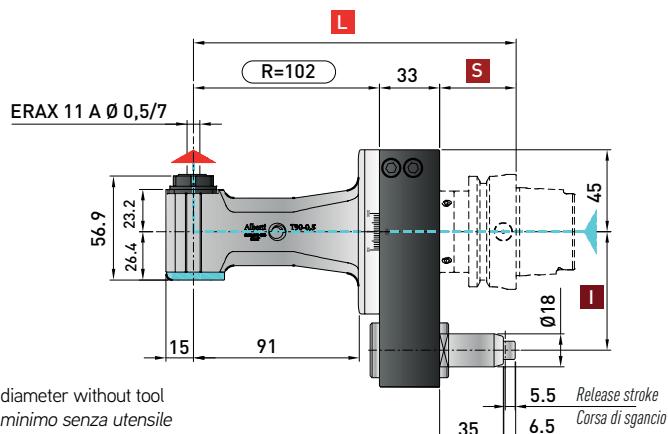
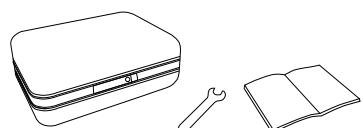
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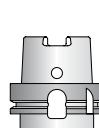
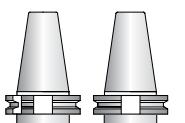
Weldon output  
Weldon

# T90cn-0.5C Neo IC

**ACT9005C.IC**
**Technical data**

Caratteristiche tecniche


**Retaining block / Tassello di ritegno / Stop-Block**
**NOT INCLUDED - NON INCLUSO**
 Ratio  
Rapporto  
**1:1**
 RPM  
Velocità  
**10.000 min<sup>-1</sup>** | DRY Running  
**8.000 min<sup>-1</sup>**
 Max. axial load  
Max. carico assiale  
**150 N**
 Torque  
Momento torcente  
**10 Nm**
 Weight  
Peso  
**4 kg**
 Tapping  
Maschiatura  
**Max. M5**
 Collet  
Pinza  
**ERAX-11 (Ø 0,5/7 mm)**
**\* STANDARD EQUIPMENT includes:**

 Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino

 Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile


Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	170	170	170	176	177	180	173	175

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**


Ø mm max.

6

Weldon output  
Weldon

# T90cn-0.5L Neo

ACT9005L

**Technical data**

Caratteristiche tecniche



Ratio

Rapporto

1:1



RPM

Velocità

8.000 min<sup>-1</sup>

Max. axial load

Max. carico assiale

150 N



Torque

Momento torcente

10 Nm



Weight

Peso

4.5 kg



Tapping

Maschiatura

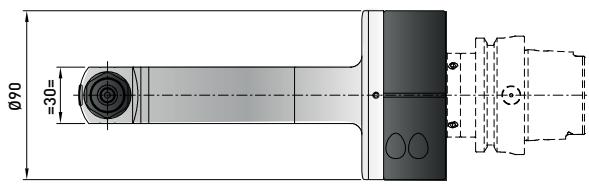
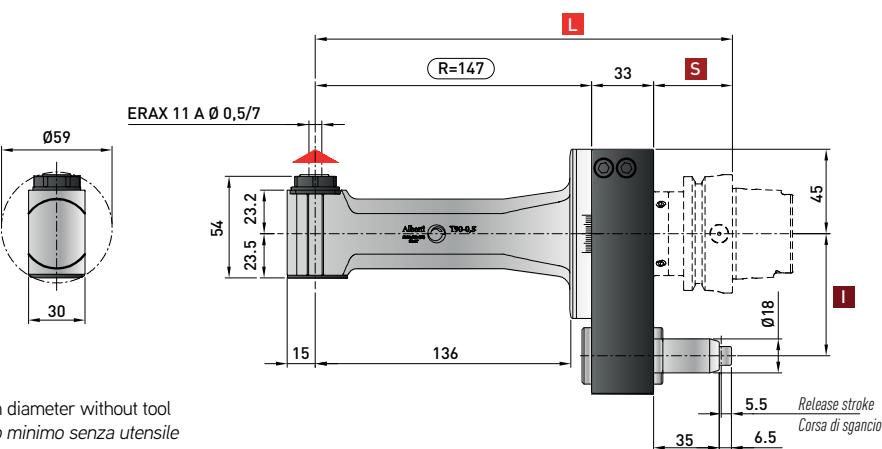
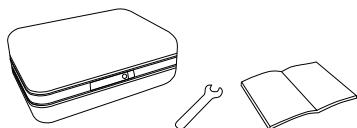
Max. M5



Collet

Pinza

ERAX-11 (Ø 0,5/7 mm)

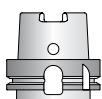
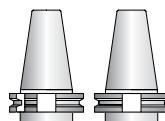

**\* STANDARD EQUIPMENT includes:**


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino



Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	215	215	215	221	222	225	218	220

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**

bar max

12

Coolant through pin  
Refrigerante attraverso il perno



Ø mm max.

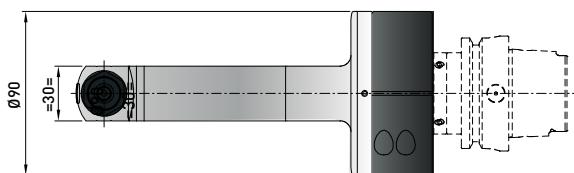
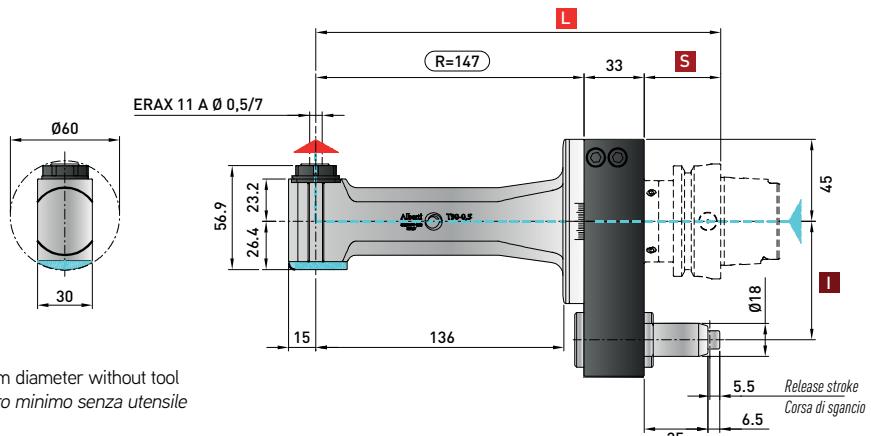
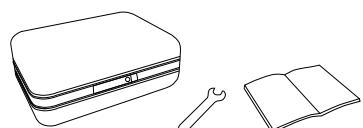
6

Weldon output  
Weldon

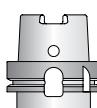
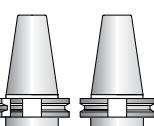
# T90cn-0.5L Neo IC

**ACT9005L.IC**
**Technical data**

Caratteristiche tecniche


**Retaining block / Tassello di ritegno / Stop-Block**
**NOT INCLUDED - NON INCLUSO**
**\* STANDARD EQUIPMENT**  
**includes:**


Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino

 Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile


Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	215	215	215	221	222	225	218	220

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**


Ø mm max.

6

Weldon output  
Weldon

# TR90cn-0.5 Neo

ACTR905C

**Technical data**

Caratteristiche tecniche



**Ratio**  
Rapporto  
**1:2 SPEEDER**



**RPM**  
Velocità  
**8.000 min<sup>-1</sup> OUTPUT**



**Max. axial load**  
Max. carico assiale  
**200 N**



**Torque**  
Momento torcente  
**10 Nm**



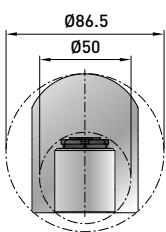
**Weight**  
Peso  
**5.6 kg**



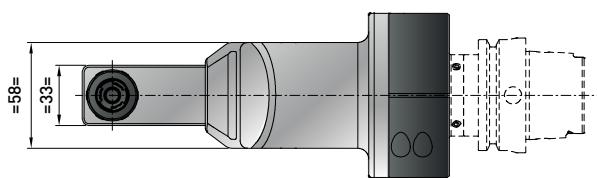
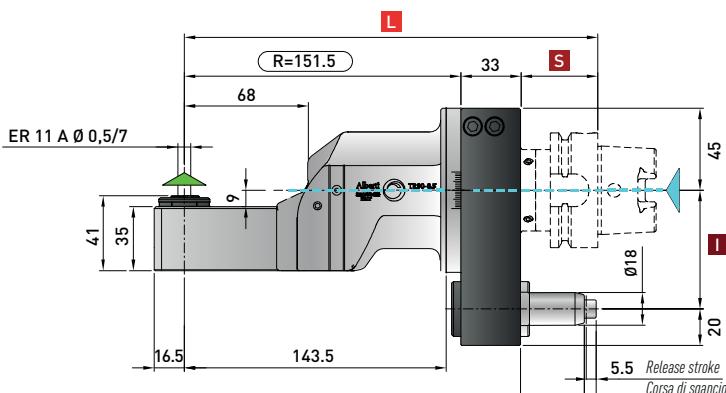
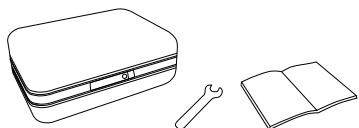
**Tapping**  
Maschiatura  
**Max. M5**



**Collet**  
Pinza  
**ERAx-11 (ø 0,5/7 mm)**



Minimum diameter without tool  
Diametro minimo senza utensile


**\* STANDARD EQUIPMENT includes:**


Retaining block / Tassello di ritegno / Stop-Block



NOT INCLUDED - NON INCLUSO

Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

Spindle / Cono	DIN69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	219.5	219.5	219.5	225.5	226.5	229.5	222.5	224.5

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

**Option / Opzione**

bar max  
**12**

Coolant through pin

Adduzione refrigerante attraverso il perno



bar max  
**100**

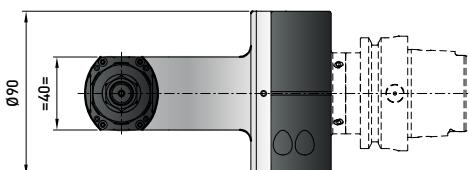
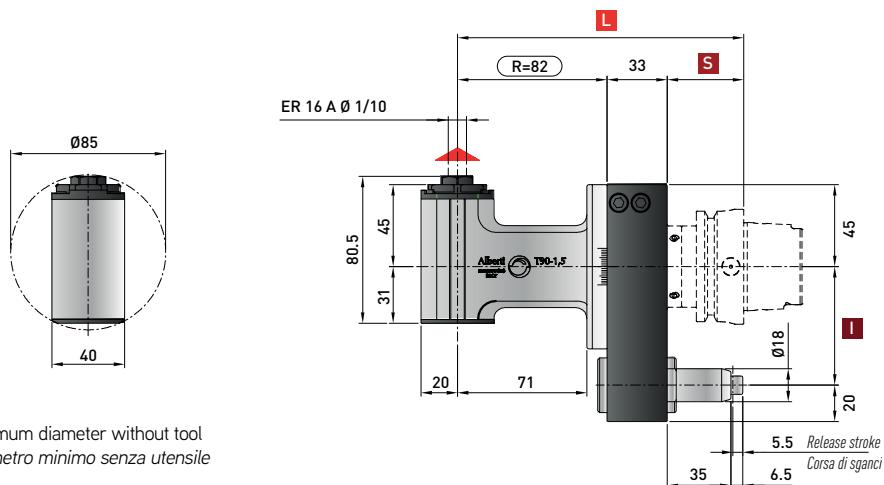
Coolant through spindle

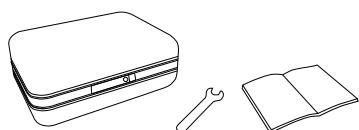
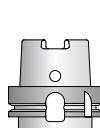
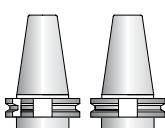
Adduzione refrigerante attraverso il cono

# T90cn-1.5C Neo

**ACT9015C**
**Technical data**

Caratteristiche tecniche


 Ratio  
Rapporto  
**1:1**
 RPM  
Velocità  
**8.000 min<sup>-1</sup>**
 Max. axial load  
Max. carico assiale  
**250 N**
 Torque  
Momento torcente  
**25 Nm**
 Weight  
Peso  
**4.3 kg**
 Tapping  
Maschiatura  
**Max. M6**
 Collet  
Pinza  
**ER-16A (ø 1/10 mm)**

**Retaining block / Tassello di ritegno / Stop-Block**
**NOT INCLUDED - NON INCLUSO**
**\* STANDARD EQUIPMENT**  
includes:

 Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino


Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	150	150	150	156	157	160	153	155

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**

bar max  
**12**

Coolant through pin  
Refrigerante attraverso il perno

Ø mm  
**13**

Arbor output  
Porta fresa

Ø mm max.  
**10**

Weldon output  
Weldon

**ER-16/ER-11**

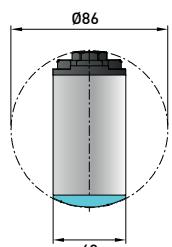
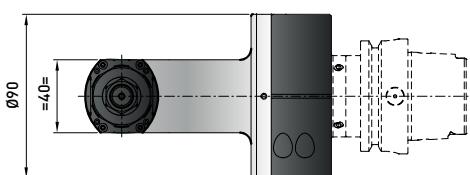
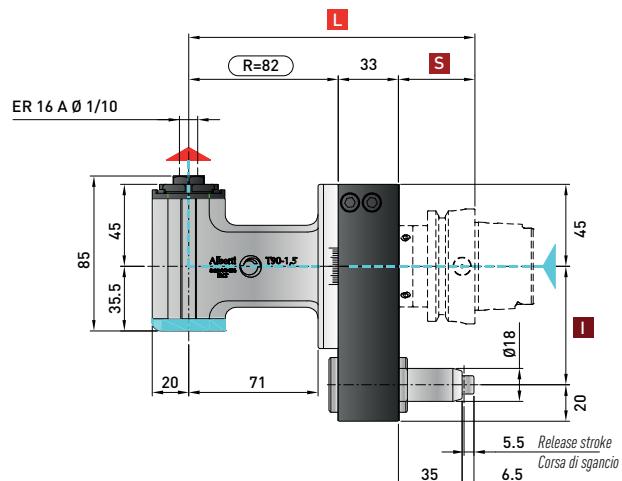
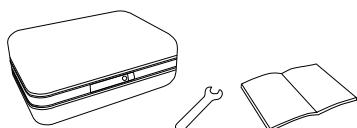
Double output  
Doppia uscita

# T90cn-1.5C Neo IC

ACT9015C.IC

**Technical data**

Caratteristiche tecniche

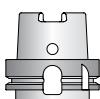
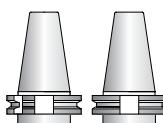
Ratio  
Rapporto  
**1:1**RPM  
Velocità  
**10.000 min<sup>-1</sup>** DRY  
Running  
**8.000 min<sup>-1</sup>**Max. axial load  
Max. carico assiale  
**250 N**Torque  
Momento torcente  
**25 Nm**Weight  
Peso  
**4.3 kg**Tapping  
Maschiatura  
**Max. M6**Collet  
Pinza  
**ER-16A (ø 1/10 mm)**Minimum diameter without tool  
Diametro minimo senza utensile**\* STANDARD EQUIPMENT includes:**

Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino

▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	150	150	150	156	157	160	153	155

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**

Ø mm

13

Arbor output  
Porta fresa

Ø mm max.

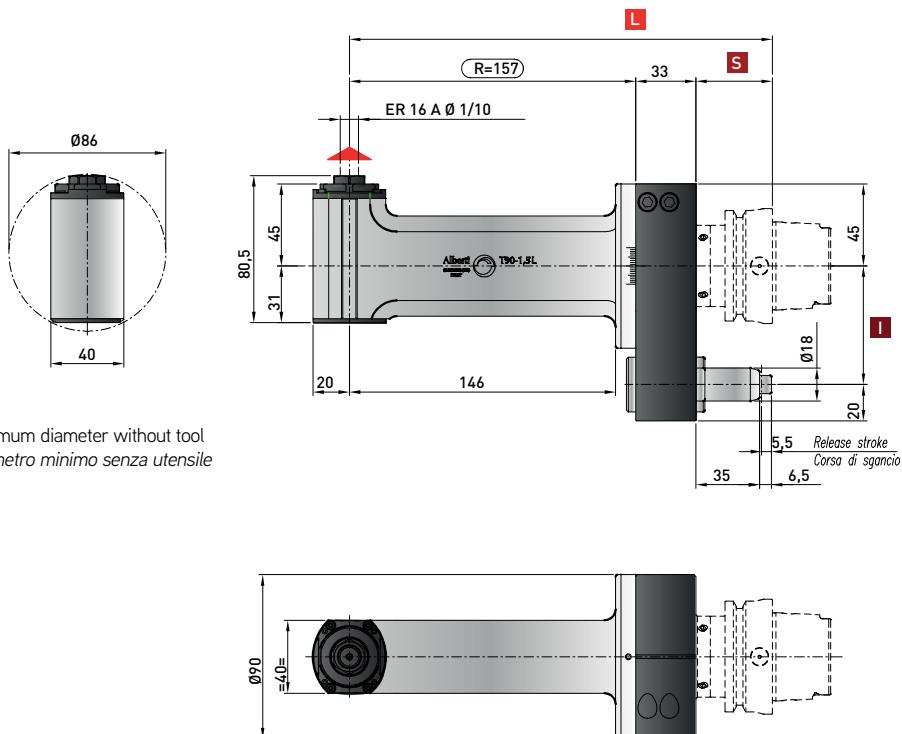
10

Weldon output  
Weldon

# T90cn-1.5L Neo

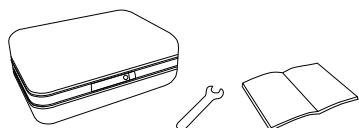
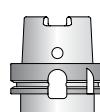
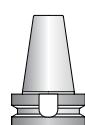
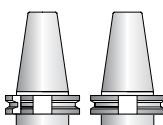
**ACT9015L**
**Technical data**

Caratteristiche tecniche


 Ratio  
Rapporto  
**1:1**
 RPM  
Velocità  
**8.000 min<sup>-1</sup>**
 Max. axial load  
Max. carico assiale  
**250 N**
 Torque  
Momento torcente  
**25 Nm**
 Weight  
Peso  
**5.2 kg**
 Tapping  
Maschiatura  
**Max. M6**
 Collet  
Pinza  
**ER-16A (Ø 1/10 mm)**


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO

**\* STANDARD EQUIPMENT**  
includes:

 Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino


Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	225	225	225	231	232	235	228	230

Dual contact spindles available/Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**

bar max  
**12**

Coolant through pin  
Refrigerante attraverso il perno

Ø mm  
**13**

Arbor output  
Porta fresa

Ø mm max.  
**10**

Weldon output  
Weldon

**ER-16/ER-11**

Double output  
Doppia uscita

# T90cn-1.5L Neo IC

ACT9015L.IC

**Technical data**

Caratteristiche tecniche



**Ratio**  
Rapporto  
**1:1**



**RPM**  
Velocità  
**10.000 min<sup>-1</sup>** **DRY** Running  
**8.000 min<sup>-1</sup>**



**Max. axial load**  
Max. carico assiale  
**250 N**



**Torque**  
Momento torcente  
**25 Nm**



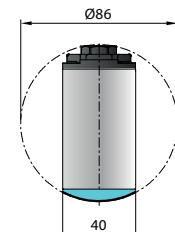
**Weight**  
Peso  
**5.2 kg**



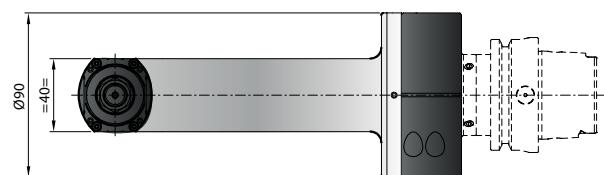
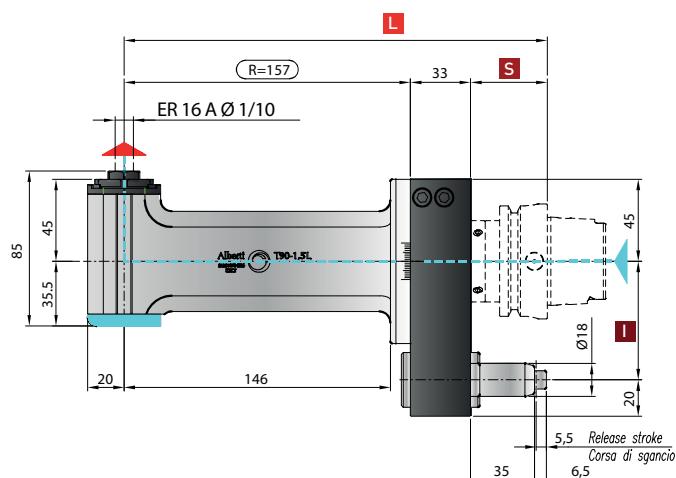
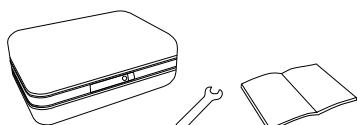
**Tapping**  
Maschiatura  
**Max. M6**



**Collet**  
Pinza  
**ER-16A (ø 1/10 mm)**



Minimum diameter without tool  
Diametro minimo senza utensile

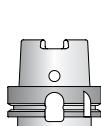
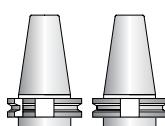

**\* STANDARD EQUIPMENT includes:**


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino

▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	225	225	225	231	232	235	228	230

Dual contact spindles available/Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**

Ø mm

13

Arbor output  
Porta fresa



Ø mm max.

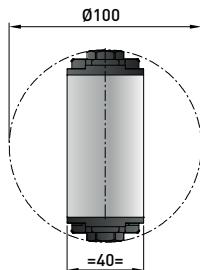
10

Weldon output  
Weldon

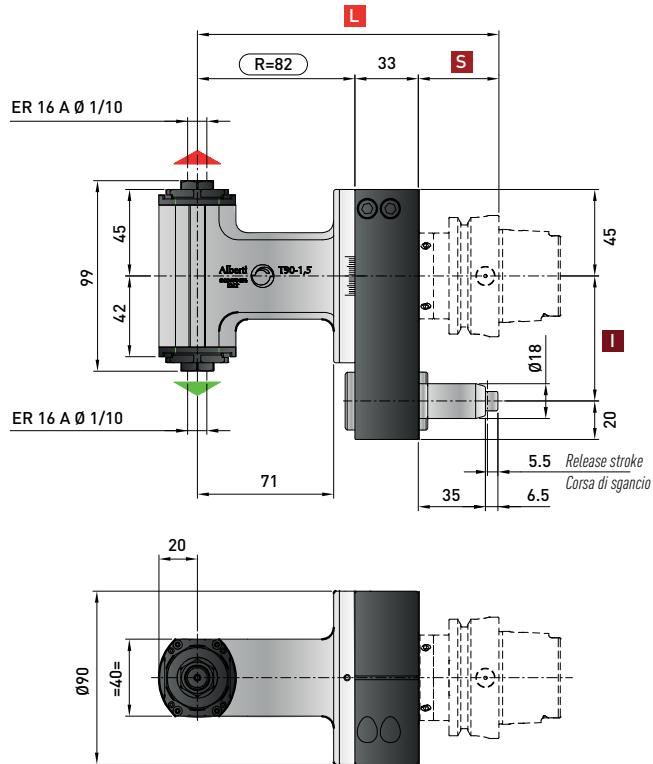
# T90cn-1.5 2U

**ACT9015D**
**Technical data**

Caratteristiche tecniche



Minimum diameter without tool  
Diametro minimo senza utensile

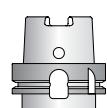
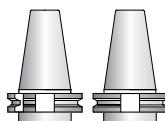
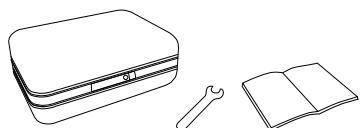


Retaining block / Tassello di ritegno / Stop-Block

**NOT INCLUDED - NON INCLUSO**

- ▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
- ▲ Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino

\* STANDARD EQUIPMENT includes:



Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	150	150	150	156	157	160	153	155

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

*Non interchangeable input drive shank / Coni di attacco non intercambiabili*

**Option / Opzione**


bar max

12

Coolant through pin  
Refrigerante attraverso il perno

# TR90cn-1.5 Neo

ACTR915C

**Technical data**

Caratteristiche tecniche



Ratio  
Rapporto  
**1.3:1 SPEEDER**



RPM  
Velocità  
**8.000 min<sup>-1</sup> OUTPUT**



Max. axial load  
Max. carico assiale  
**450 N**



Torque  
Momento torcente  
**15 Nm**



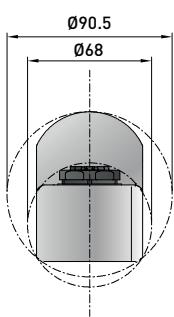
Weight  
Peso  
**7 kg**



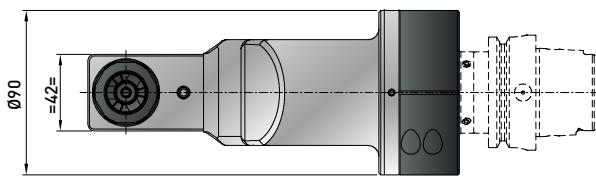
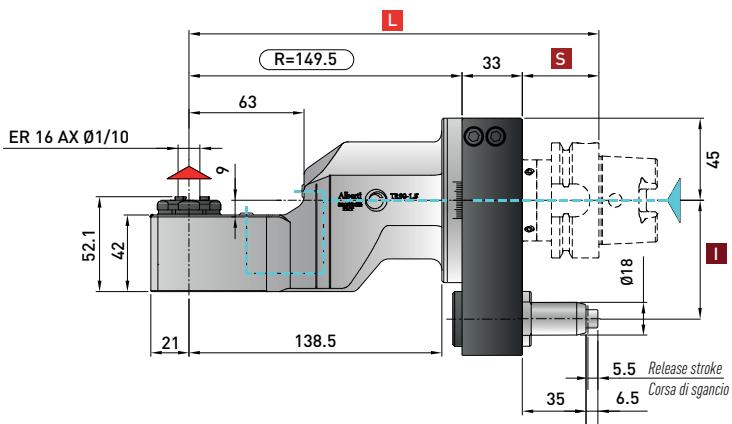
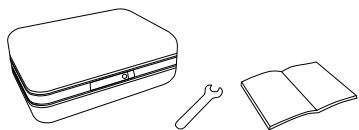
Tapping  
Maschiatura  
**Max. M6**



Collet  
Pinza  
**ERAX-16 (ø 1/10 mm)**



Minimum diameter without tool  
Diametro minimo senza utensile

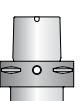
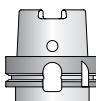

**\* STANDARD EQUIPMENT includes:**


Retaining block / Tassello di ritegno / Stop-Block



NOT INCLUDED - NON INCLUSO

▲ Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino

▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	217.5	217.5	217.5	223.5	224.5	227.5	220.5	222.5

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

## Option / Opzione



bar max  
**12**

Coolant through pin  
Adduzione refrigerante attraverso il perno



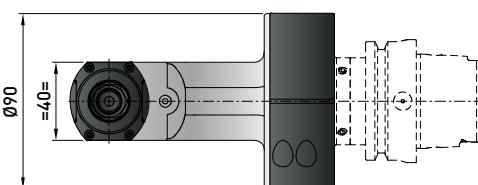
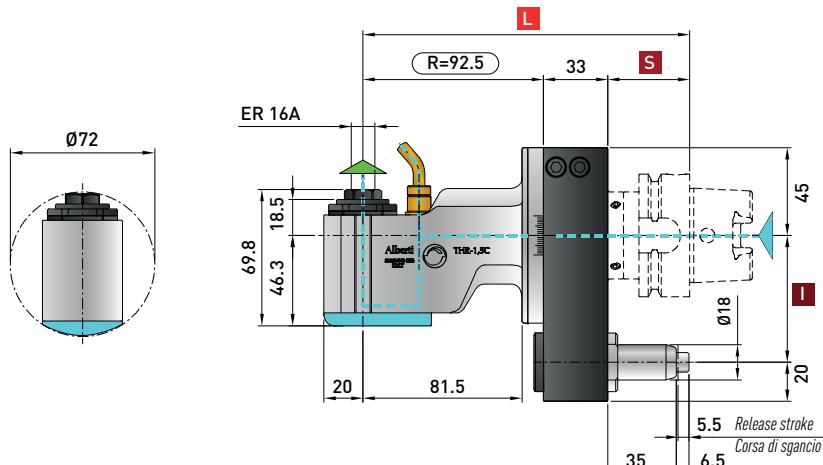
bar max  
**100**

Coolant through spindle  
Adduzione refrigerante attraverso il cono

# THRcn-1.5 Neo IC

**ACTHR915C.IC**
**Technical data**

Caratteristiche tecniche


**Ratio**

Rapporto  
1:1

**RPM**

Velocità  
10.000 min<sup>-1</sup> DRY  
8.000 min<sup>-1</sup> Running

**Max. axial load**

Max. carico assiale  
250 N

**Torque**

Momento torcente  
15 Nm

**Weight**

Peso  
4.2 kg

**Tapping**

Maschiatura  
Max. M6

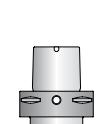
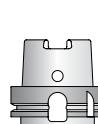
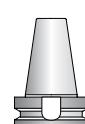
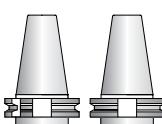
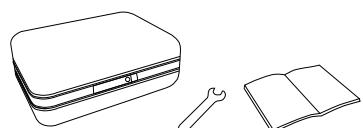
**Collet**

Pinza  
ER-16A (Ø 1/10 mm)

**Retaining block / Tassello di ritegno / Stop-Block**
**NOT INCLUDED - NON INCLUSO**

Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

 Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

**\* STANDARD EQUIPMENT includes:**


Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	160,5	160,5	160,5	166,5	167,5	170,5	163,5	165,5

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**


Ø mm

13

Arbor output  
Porta fresa


Ø mm max.

10

Weldon output  
Weldon

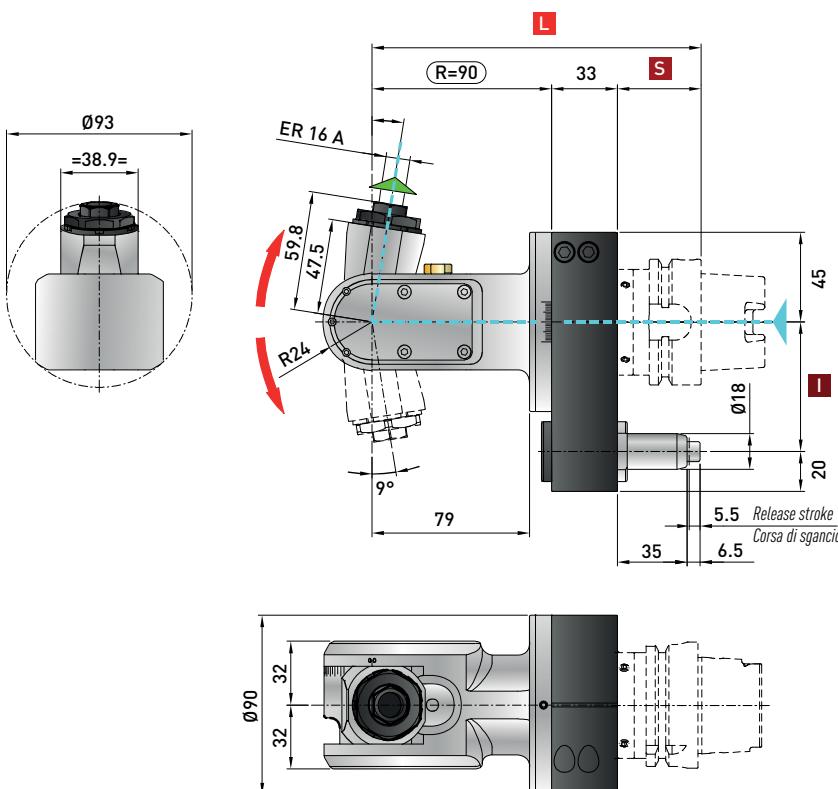
# TCUcn-1.5 Neo

ACTCU15C

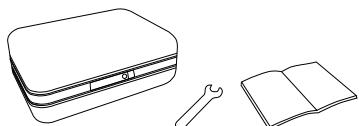
## Technical data

Caratteristiche tecniche

	Ratio Rapporto <b>1:1</b>
	RPM Velocità <b>4.000 min<sup>-1</sup></b>
	Max. axial load Max. carico assiale <b>250 N</b>
	Torque Momento torcente <b>12 Nm</b>
	Weight Peso <b>4.5 kg</b>
	Tapping Maschiatura <b>Max. M6</b>
	Collet Pinza <b>ER-16A (<math>\varnothing</math> 1/10 mm)</b>



## \* STANDARD EQUIPMENT includes:



Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK	CAPTO
Size / Grandezza	40-50	40-50	63-80	100
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	41	45
L	158	158	164	168

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

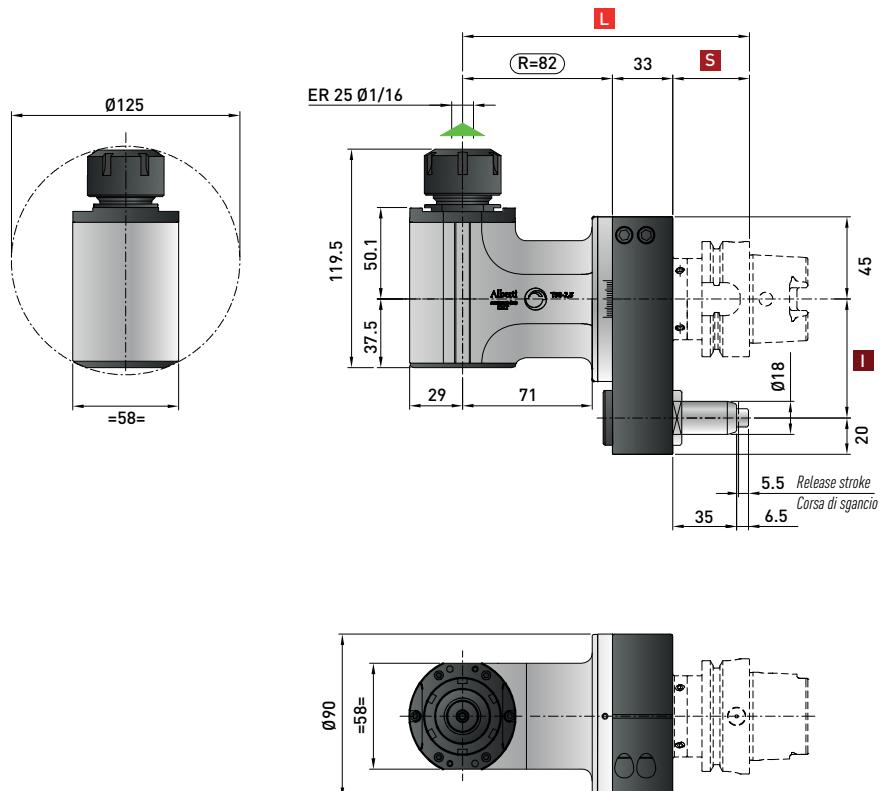
## Option / Opzione

bar max  
**12**Coolant through pin  
Refrigerante attraverso il pernobar max  
**100**Coolant through spindle  
Adduzione refrigerante attraverso il cono**+/- 95°**Angle  
Angoloevery  
**5°**Fixed positioning  
Posizionamento fisso

# T90cn-2.5C Neo

**ACT9025C**
**Technical data**

Caratteristiche tecniche


 Ratio  
Rapporto 1:1

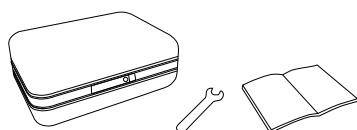
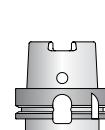
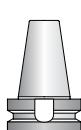
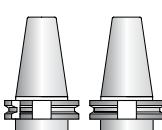
 RPM  
Velocità 6.000 min<sup>-1</sup>
 Max. axial load  
Max. carico assiale 510 N

 Torque  
Momento torcente 50 Nm

 Weight  
Peso 5.4 kg

 Tapping  
Maschiatura Max. M12

 Collet  
Pinza ER-25 (Ø 1/16 mm)

**Retaining block / Tassello di ritegno / Stop-Block**
**NOT INCLUDED - NON INCLUSO**
**\* STANDARD EQUIPMENT includes:**

 Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino


Spindle / Cono	DIN 69871-CAT		MAS-BT		HSIK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	150	150	150	156	157	160	153	155

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**

bar max  
**12**

**ER 32**

Coolant through pin  
Refrigerante attraverso il perno

Ø mm  
**16**

Arbor output  
Porta fresa

Ø mm max.  
**16**

Weldon output  
Weldon

**HSK-32**  
Smart Change

Quick Change  
Attacco rapido

**ER 25/ER 16**

Double output  
Doppia uscita

# T90cn-2.5C Neo IC

ACT9025C.IC

**Technical data**

Caratteristiche tecniche



**Ratio**  
Rapporto  
**1:1**



**RPM**  
Velocità  
**9.000 min<sup>-1</sup>** DRY Running **6.000 min<sup>-1</sup>**



**Max. axial load**  
Max. carico assiale  
**510 N**



**Torque**  
Momento torcente  
**50 Nm**



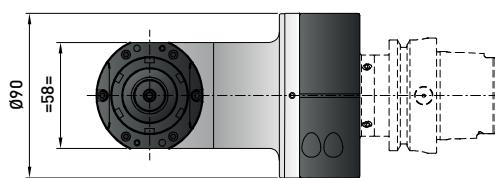
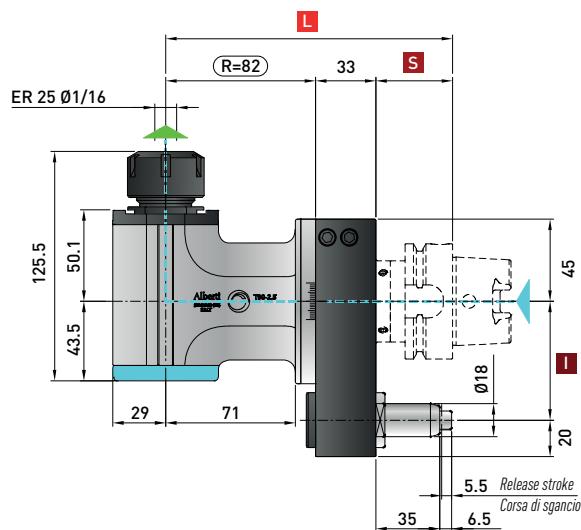
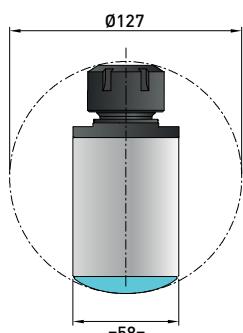
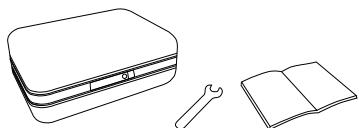
**Weight**  
Peso  
**5.4 kg**



**Tapping**  
Maschiatura  
**Max. M12**



**Collet**  
Pinza  
**ER-25 (Ø 1/16 mm)**

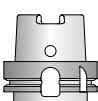
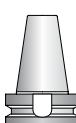
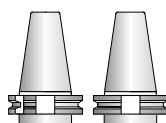

**\* STANDARD EQUIPMENT**  
includes:


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
I	40-50	40-50	40	50	63-80	100	C5-C6	C8
	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
	35	35	35	41	42	45	38	40
S	150	150	150	156	157	160	153	155
L								

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

## Option / Opzione



Ø mm  
**16**

Arbor output  
Porta fresa**ER 32**Collet  
Pinza

Ø mm max.  
**16**

Weldon output  
Weldon

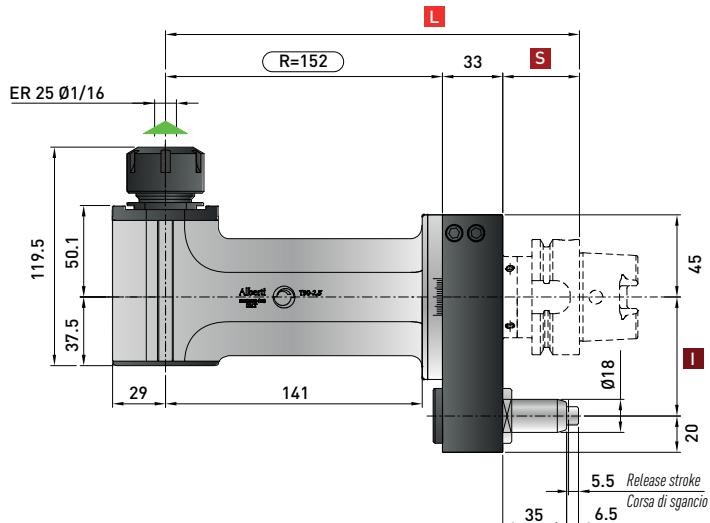
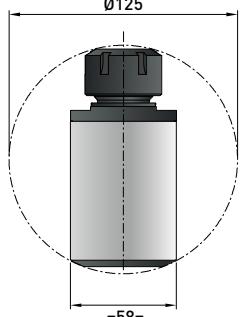
**HSK-32**  
Smart Change

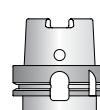
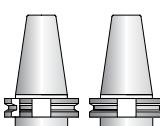
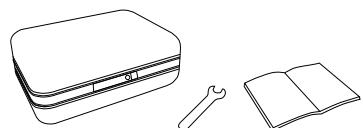
Quick Change  
Attacco rapido

# T90cn-2.5L Neo

**ACT9025L**
**Technical data**

Caratteristiche tecniche


**Retaining block / Tassello di ritegno / Stop-Block**
**NOT INCLUDED - NON INCLUSO**
 Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

**\* STANDARD EQUIPMENT includes:**


Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	220	220	220	226	227	230	223	225

Dual contact spindles available/Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**

bar max  
12


ER 32

Coolant through pin  
Refrigerante attraverso il perno

Ø mm  
16

Arbor output  
Porta fresa

Ø mm max.  
16

Weldon output  
Weldon

HSK-32  
Smart Change

ER 25/ER 16  
Double output  
Doppia uscita

# T90cn-2.5L Neo IC

ACT9025L.IC

## Technical data

Caratteristiche tecniche



Ratio  
Rapporto  
**1:1**



RPM  
Velocità  
**9.000 min<sup>-1</sup>** DRY  
Running  
**6.000 min<sup>-1</sup>**



Max. axial load  
Max. carico assiale  
**510 N**



Torque  
Momento torcente  
**50 Nm**



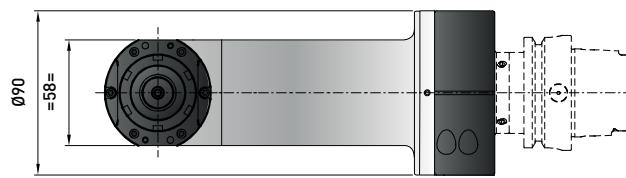
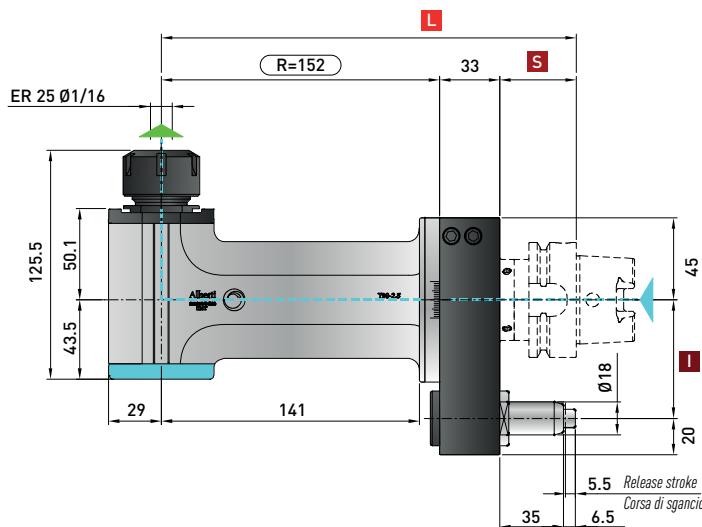
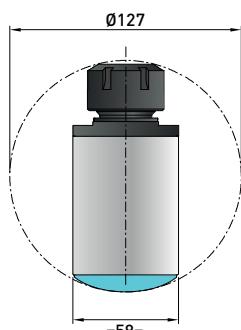
Weight  
Peso  
**6.7 kg**



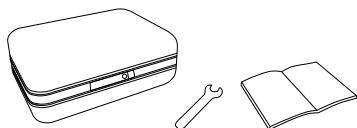
Tapping  
Maschiatura  
**Max. M12**



Collet  
Pinza  
**ER-25 (Ø 1/16 mm)**



## \* STANDARD EQUIPMENT includes:



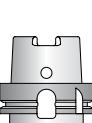
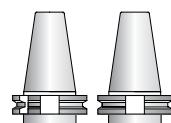
Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile



Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	220	220	220	226	227	230	223	225

Dual contact spindles available/Disponibilità coni a doppio contatto

\*optional

## Option / Opzione



Ø mm  
**16**

Arbor output  
Porta fresa



ER 32

Collet  
Pinza



Ø mm max.  
**16**

Weldon output  
Weldon



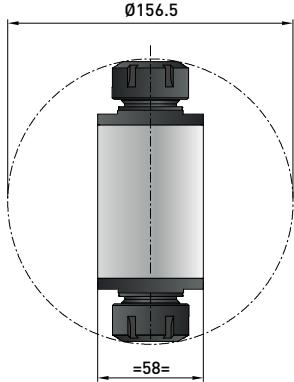
**HSK-32**  
Smart Change

Quick Change  
Attacco rapido

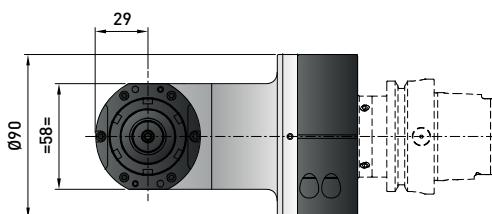
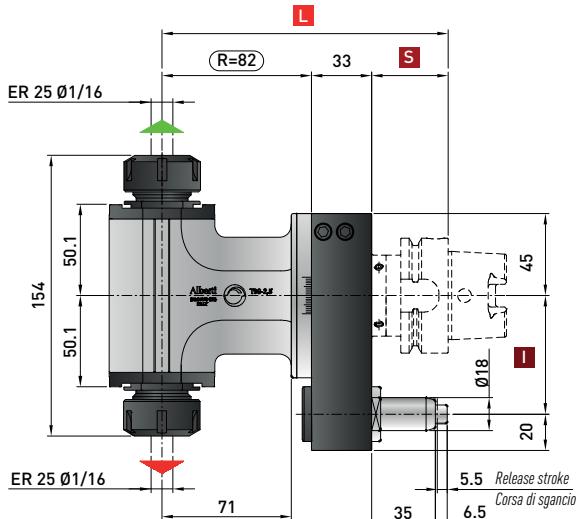
# T90cn-2.5 2U Neo

**ACT9025D**
**Technical data**

Caratteristiche tecniche



Minimum diameter without tool  
Diametro minimo senza utensile



Ratio  
Rapporto  
1:1



RPM  
Velocità  
6.000 min<sup>-1</sup>



Max. axial load  
Max. carico assiale  
510 N



Torque  
Momento torcente  
50 Nm



Weight  
Peso  
6.4 kg



Tapping  
Maschiatura  
Max. M12



Collet  
Pinza  
ER-25 (Ø 1/16 mm)  
ER-25 (Ø 1/16 mm)

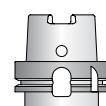
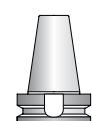
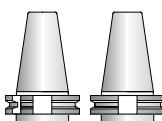
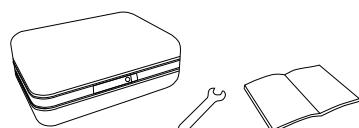


Retaining block / Tassello di ritegno / Stop-Block

**NOT INCLUDED - NON INCLUSO**

- ▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
- ▲ Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino

\* STANDARD EQUIPMENT includes:



Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	150	150	150	156	157	160	153	155

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

**Option / Opzione**


Ø mm  
**16**

Arbor output  
Porta fresa



**ER 32**

Collet  
Pinza



Ø mm max.  
**16**

Weldon output  
Weldon



bar max  
**12**

Coolant through pin  
Refrigerante attraverso il perno

# TR90cn-2.5 Neo

ACTR925C

**Technical data**

Caratteristiche tecniche



Ratio

Rapporto

1:1



RPM

Velocità

6.000 min<sup>-1</sup>

Max. axial load

Max. carico assiale

510 N



Torque

Momento torcente

30 Nm



Weight

Peso

6.5 kg



Tapping

Maschiatura

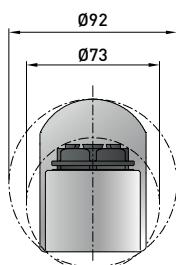
Max. M12



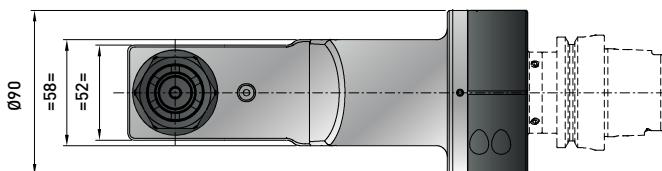
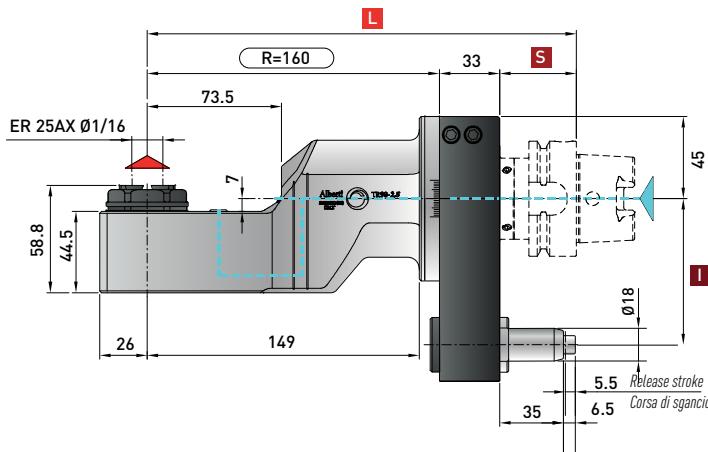
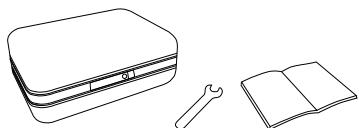
Collet

Pinza

ERAX-25 (ø 1-16 mm)



Minimum diameter without tool  
Diametro minimo senza utensile


**\* STANDARD EQUIPMENT includes:**


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino

▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	228	228	228	234	235	238	231	233

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

**Option / Opzione**

bar max

12

Coolant through pin  
Adduzione refrigerante attraverso il perno



bar max

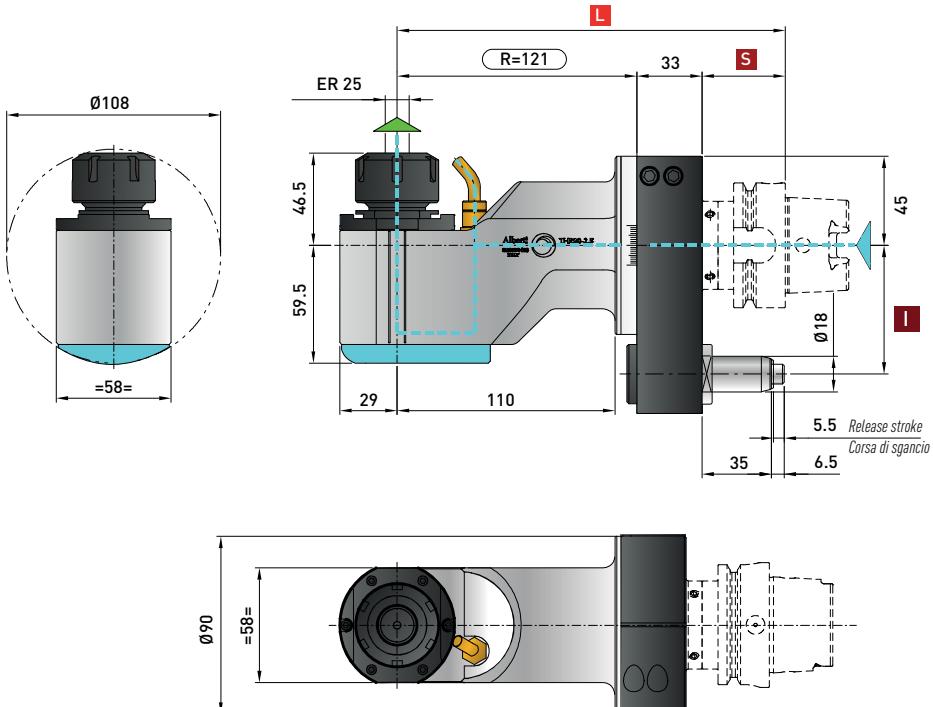
100

Coolant through spindle  
Refrigerante attraverso il cono

# THRcn-2.5 Neo IC

**ACTHR925C.IC**
**Technical data**

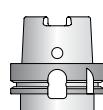
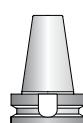
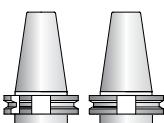
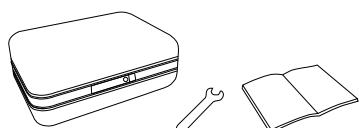
Caratteristiche tecniche



	Ratio Rapporto <b>1:1</b>
	RPM Velocità <b>9.000 min<sup>-1</sup></b> DRY Running <b>6.000 min<sup>-1</sup></b>
	Max. axial load Max. carico assiale <b>510 N</b>
	Torque Momento torcente <b>30 Nm</b>
	Weight Peso <b>6.5 kg</b>
	Tapping Maschiatura <b>Max. M12</b>
	Collet Pinza <b>ER-25 (Ø 1/16 mm)</b>


**Retaining block / Tassello di ritegno / Stop-Block**
**NOT INCLUDED - NON INCLUSO**

 Direction of rotation same as machine spindle / *senso di rotazione uguale al mandrino*

 Input coolant max. 1450 PSI / *ingresso refrigerante max. 100 bar*  
Dry rotation is possible / *rotazione a secco possibile*
**\* STANDARD EQUIPMENT includes:**


Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	189	189	189	195	196	199	192	194

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**


Ø mm

16

Arbor output  
Porta fresa


ER 32

Collet  
Pinza


Ø mm max.

16

Weldon output  
Weldon


HSK-32

Quick Change  
Attacco rapido

# TCUcn-2.5 Neo

ACTCU25C

## Technical data

Caratteristiche tecniche



**Ratio**  
Rapporto  
**1:1**



**RPM**  
Velocità  
**4.000 min<sup>-1</sup>**



**Max. axial load**  
Max. carico assiale  
**510 N**



**Torque**  
Momento torcente  
**25 Nm**



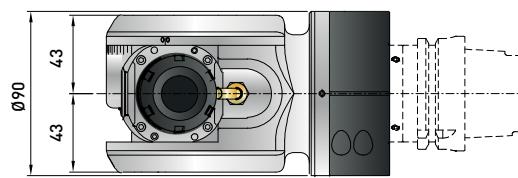
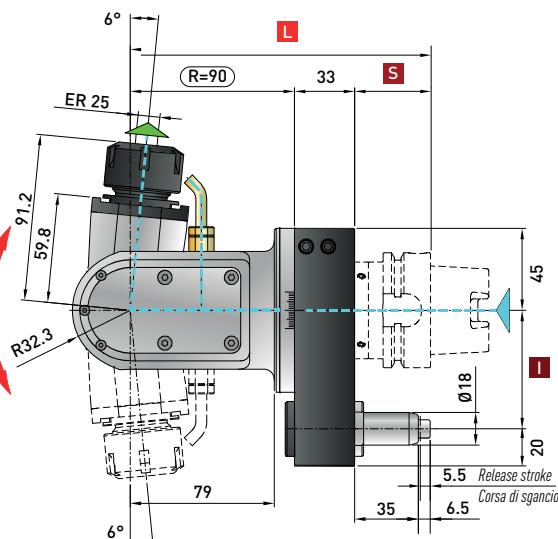
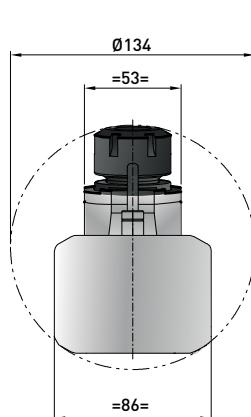
**Weight**  
Peso  
**7 kg**



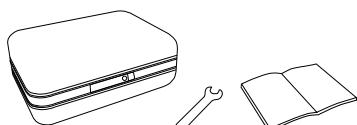
**Tapping**  
Maschiatura  
**Max. M12**



**Collet**  
Pinza  
**ER-25 (ø 1/16 mm)**



## \* STANDARD EQUIPMENT includes:

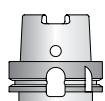
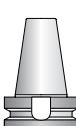
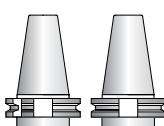


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	158	158	158	164	165	168	161	163

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

## Option / Opzione



bar max  
**12**

Coolant through pin  
Refrigerante attraverso il perno



bar max  
**100**

Coolant through spindle  
Adduzione refrigerante attraverso il cono



**+/- 95°**

Angle  
Angolo



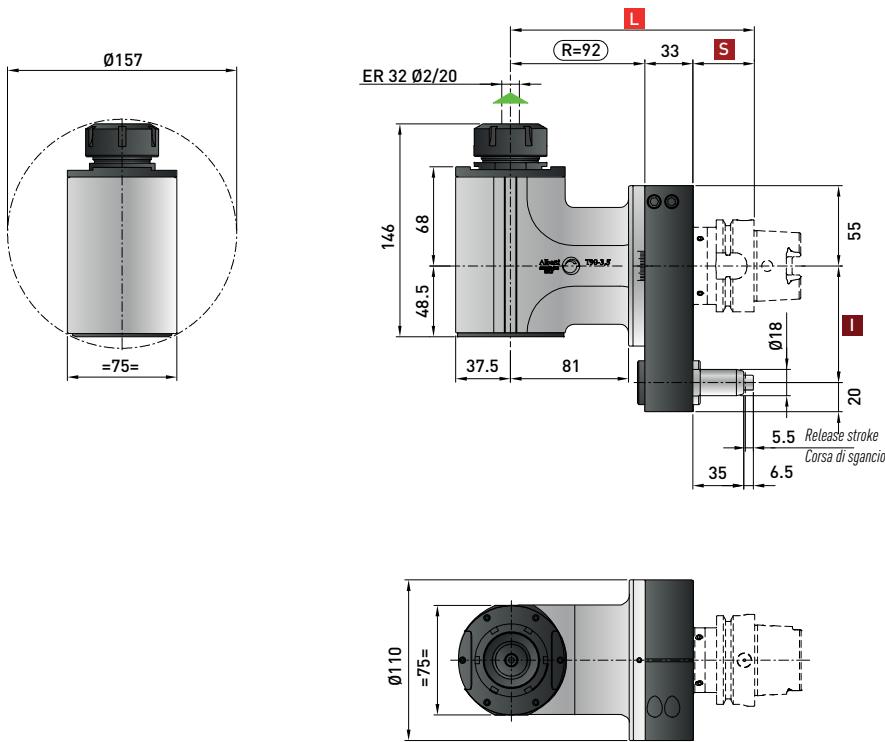
every  
**5°**

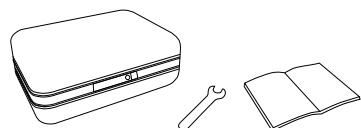
Fixed positioning  
Posizionamento fisso

# T90cn-3.5C Neo

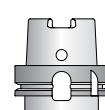
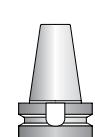
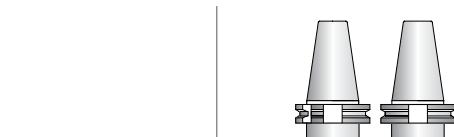
**ACT9035C**
**Technical data**

Caratteristiche tecniche


 Ratio  
Rapporto  
**1:1**
 RPM  
Velocità  
**5.000 min<sup>-1</sup>**
 Max. axial load  
Max. carico assiale  
**1.250 N**
 Torque  
Momento torcente  
**70 Nm**
 Weight  
Peso  
**11 kg**
 Tapping  
Maschiatura  
**Max. M16**
 Collet  
Pinza  
**ER-32 (Ø 2/20 mm)**

**Retaining block / Tassello di ritegno / Stop-Block**
**NOT INCLUDED - NON INCLUSO**
**\* STANDARD EQUIPMENT**  
**includes:**


Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino



Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK	CAPTO
Size / Grandezza	50	50	63-80	100
I	80-110	80-110	80-110	80-110
S	35	41	42	45
L	160	166	167	170

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**

bar max  
**12**

Coolant through pin  
Refrigerante attraverso il perno

Ø mm  
**22-27**

Arbor output  
Porta fresa

Ø mm max.  
**20**

Weldon output  
Weldon

**ISO-30 HSK-40**

Quick Change  
Attacco rapido  
Smart Change

**ER 32/ER 20**

Double output  
Doppia uscita

# T90cn-3.5C Neo IC

ACT9035C.IC

**Technical data**

Caratteristiche tecniche



**Ratio**  
Rapporto  
**1:1**



**RPM**  
Velocità  
**8.000 min<sup>-1</sup>** **DRY** Running  
**5.000 min<sup>-1</sup>**



**Max. axial load**  
Max. carico assiale  
**1.250 N**



**Torque**  
Momento torcente  
**70 Nm**



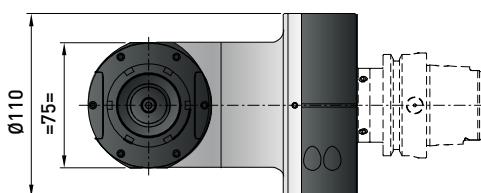
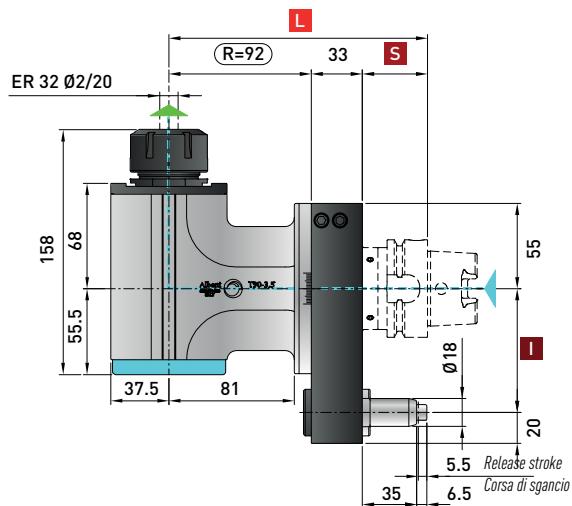
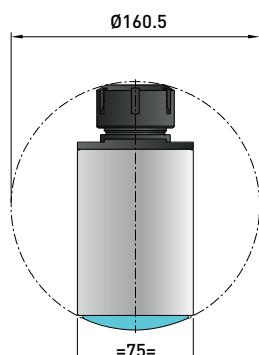
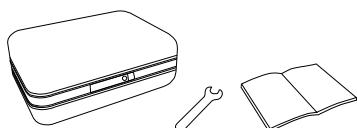
**Weight**  
Peso  
**11 kg**



**Tapping**  
Maschiatura  
**Max. M16**



**Collet**  
Pinza  
**ER-32 (ø 2/20 mm)**


**\* STANDARD EQUIPMENT includes:**


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO
Size / Grandezza	50	50	63-80	100	C6
I	80-110	80-110	80-110	80-110	80-110
S	35	41	42	45	38
L	160	166	167	170	163

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

## Option / Opzione



Ø mm  
**22-27**

Arbor output  
Porta fresa



Ø mm max.  
**20**

Weldon output  
Weldon

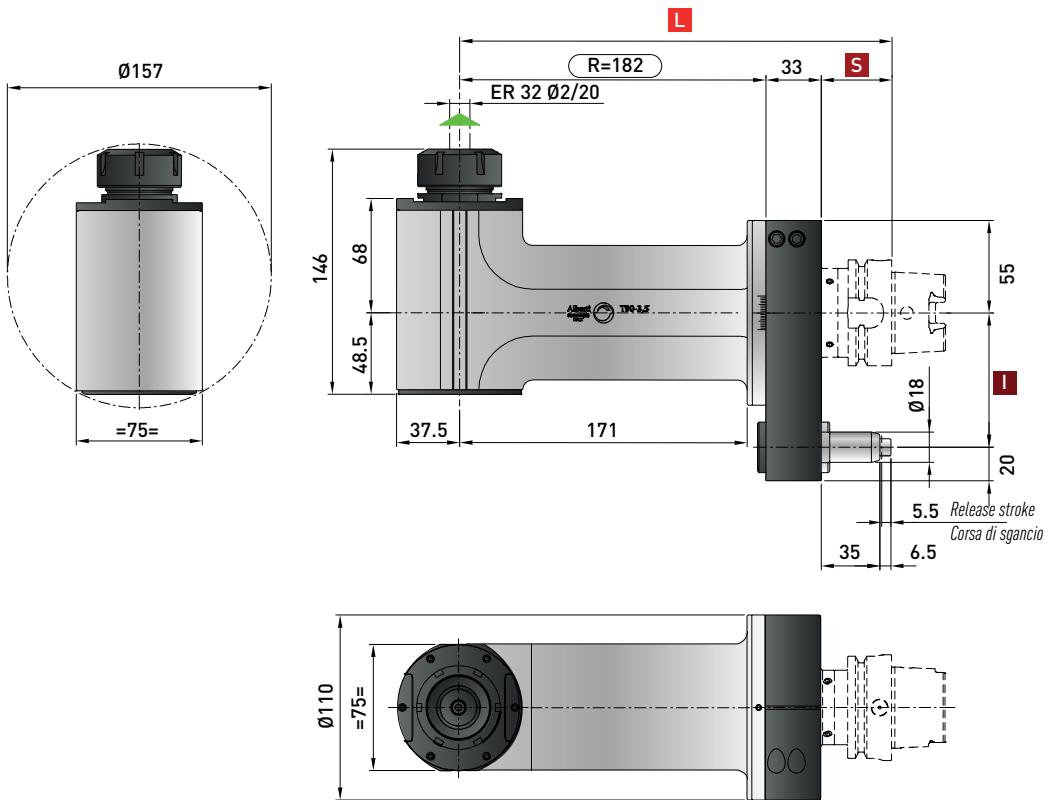
**ISO-30 HSK-40**

Quick Change  
Attacco rapido  
Smart Change

# T90cn-3.5L Neo

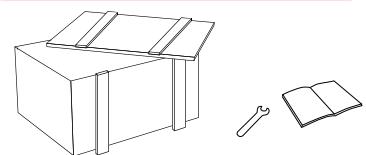
**ACT9035L**
**Technical data**

Caratteristiche tecniche


 Ratio  
Rapporto  
**1:1**
 RPM  
Velocità  
**5.000 min<sup>-1</sup>**
 Max. axial load  
Max. carico assiale  
**1.250 N**
 Torque  
Momento torcente  
**70 Nm**
 Weight  
Peso  
**13.2 kg**
 Tapping  
Maschiatura  
**Max. M16**
 Collet  
Pinza  
**ER-32 (Ø 2/20 mm)**


Retaining block / Tassello di ritegno / Stop-Block

**NOT INCLUDED - NON INCLUSO**
 Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

**\* STANDARD EQUIPMENT**  
includes:


Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK	CAPTO
Size / Grandezza	50	50	63-80	100
I	80-110	80-110	80-110	80-110
S	35	41	42	38
L	250	256	257	253

Dual contact spindles available/Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**

bar max  
**12**

Coolant through pin  
Refrigerante attraverso il perno

Ø mm  
**22-27**

Arbor output  
Porta fresa

Ø mm max.  
**20**

Weldon output  
Weldon


ISO-30 HSK-40

Quick Change  
Attacco rapido  
Smart Change


ER 32/ER 20

Double output  
Doppia uscita

# T90cn-3.5L Neo IC

ACT9035L.IC

## Technical data

Caratteristiche tecniche



Ratio  
Rapporto  
**1:1**



RPM  
Velocità  
**8.000 min<sup>-1</sup>** | DRY  
Running  
**5.000 min<sup>-1</sup>**



Max. axial load  
Max. carico assiale  
**1.250 N**



Torque  
Momento torcente  
**70 Nm**



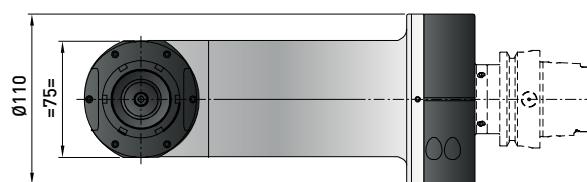
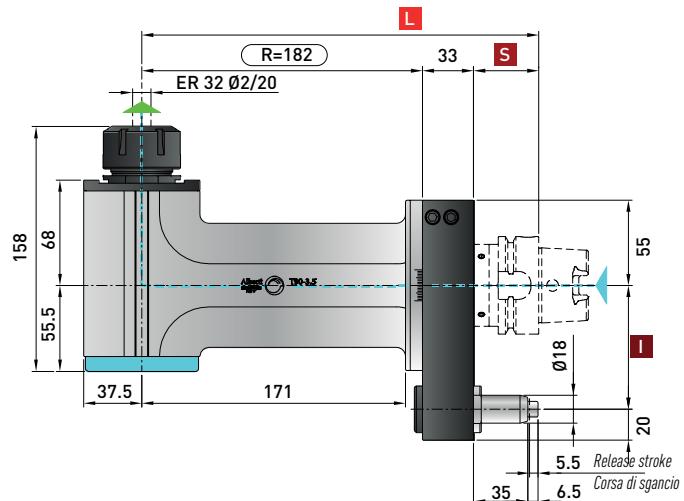
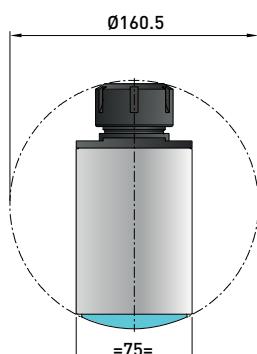
Weight  
Peso  
**13.2 kg**



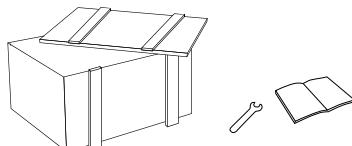
Tapping  
Maschiatura  
**Max. M16**



Collet  
Pinza  
**ER-32 (ø 2/20 mm)**



## \* STANDARD EQUIPMENT includes:

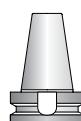
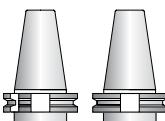


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO	
Size / Grandezza	50	50	63-80	100	C6	C8
I	80-110	80-110	80-110	80-110	80-110	80-110
S	35	41	42	45	38	40
L	250	256	257	260	253	255

Dual contact spindles available/Disponibilità coni a doppio contatto

\*optional

## Option / Opzione



Ø mm  
**22-27**

Arbor output  
Porta fresa



Ø mm max.  
**20**

Weldon output  
Weldon

**ISO-30 HSK-40**

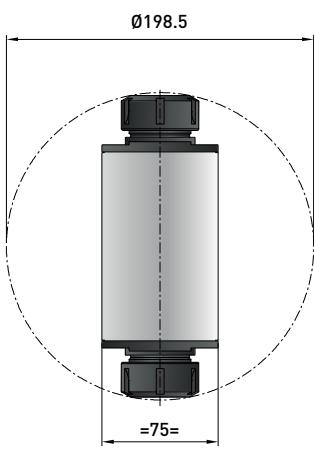
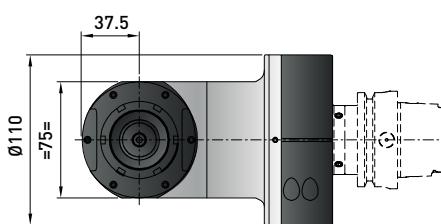
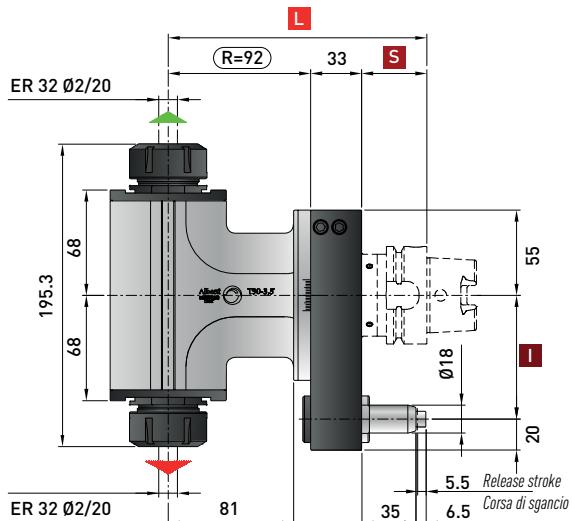
Quick Change  
Attacco rapido  
**Smart Change**

# T90cn-3.5 2U Neo

**ACT9035D**
**Technical data**

Caratteristiche tecniche

	Ratio Rapporto <b>1:1</b>
	RPM Velocità <b>4.000 min<sup>-1</sup></b>
	Max. axial load Max. carico assiale <b>1.250 N</b>
	Torque Momento torcente <b>70 Nm</b>
	Weight Peso <b>12 kg</b>
	Tapping Maschiatura <b>Max. M16</b>
	Collet Pinza <b>ER-32 (ø 2/20 mm)</b> <b>ER-32 (ø 2/20 mm)</b>


Minimum diameter without tool  
Diametro minimo senza utensile


Retaining block / Tassello di ritegno / Stop-Block

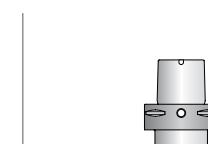
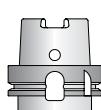
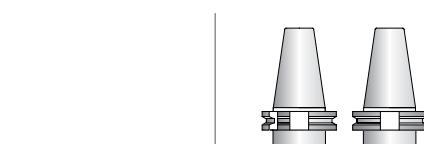
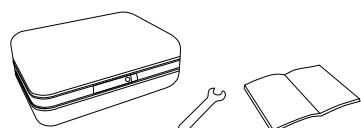
NOT INCLUDED - NON INCLUSO



Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino



Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino

**\* STANDARD EQUIPMENT**  
includes:


Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO	
Size / Grandezza	50	50	63-80	100	C6	C8
I	80-110	80-110	80-110	80-110	80-110	80-110
S	35	41	42	45	38	40
L	160	166	167	170	163	165

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

*Non interchangeable input drive shank / Coni di attacco non intercambiabili*
**Option / Opzione**

bar max  
**12**

Coolant through pin  
Refrigerante attraverso il perno

Ø mm  
**22-27**

Arbor output  
Porta fresa

Ø mm max.  
**20**

Weldon output  
Weldon

**HSK-40**

Quick Change  
Attacco rapido  
Smart Change

# TR90cn-3.5 Neo

ACTR935C

**Technical data**

Caratteristiche tecniche



Ratio  
Rapporto  
**1:1**



RPM  
Velocità  
**4.000 min<sup>-1</sup>**



Max. axial load  
Max. carico assiale  
**910 N**



Torque  
Momento torcente  
**70 Nm**



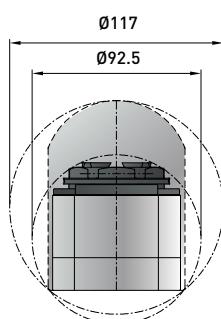
Weight  
Peso  
**10 kg**



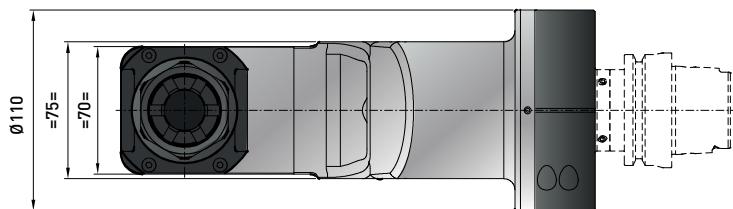
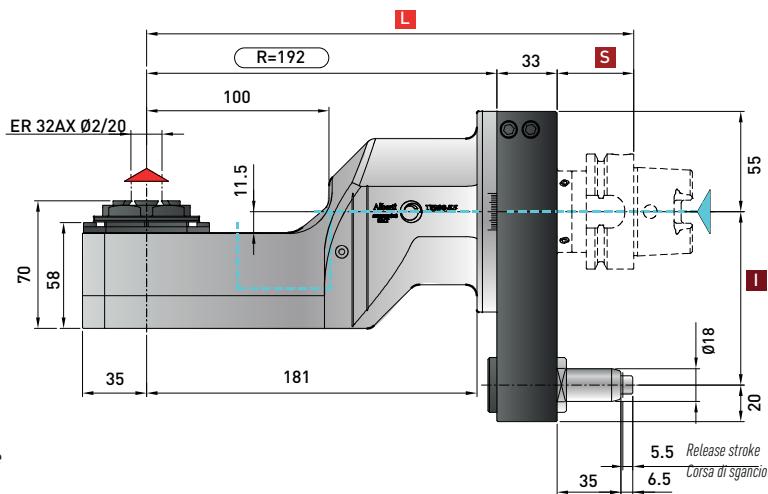
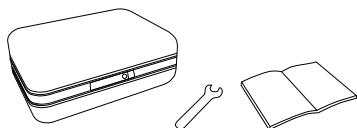
Tapping  
Maschiatura  
**Max. M16**



Collet  
Pinza  
**ER-32 (ø 2-20 mm)**



Minimum diameter without tool  
Diametro minimo senza utensile


**\* STANDARD EQUIPMENT includes:**


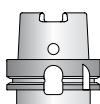
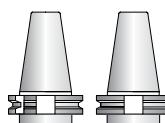
Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino

▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile



Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO	
Size / Grandezza	50	50	63-80	100	C6	C8
I	80-110	80-110	80-110	80-110	80-110	80-110
S	35	41	42	45	38	40
L	260	266	267	270	263	265

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

## Option / Opzione

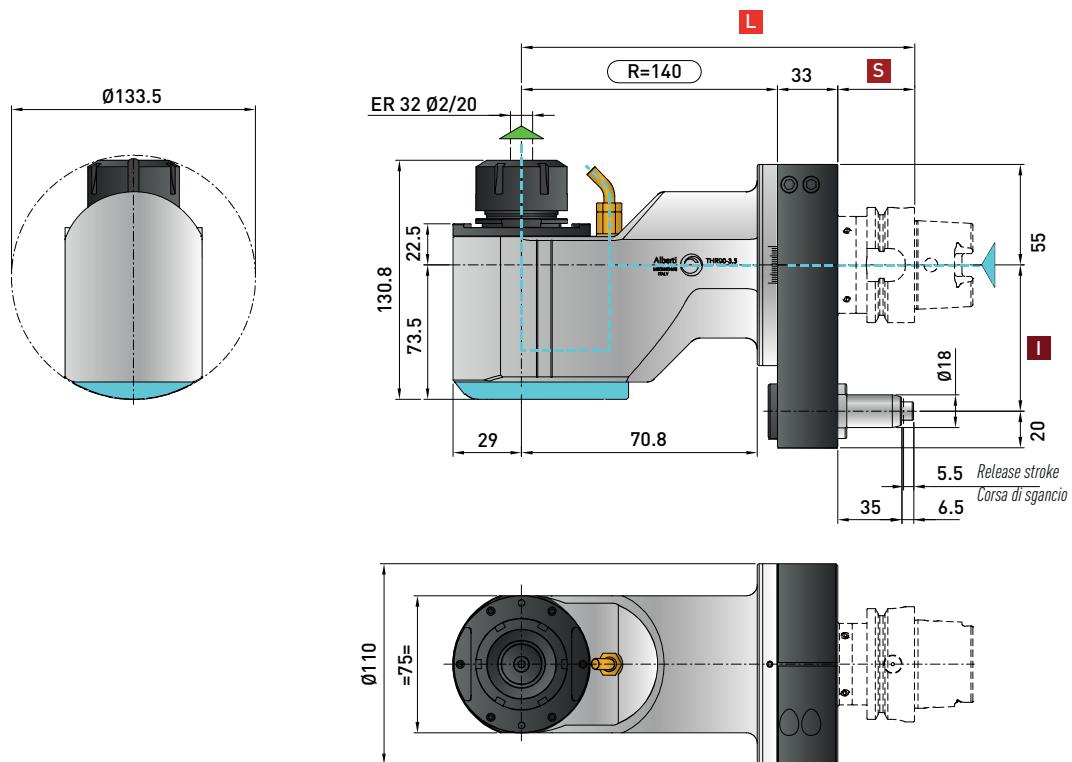


bar max

100

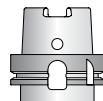
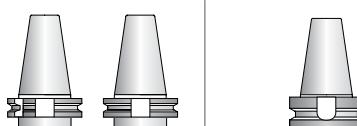
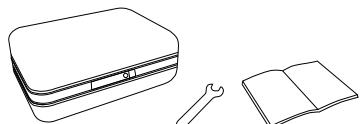
Coolant through spindle  
Refrigerante attraverso il cono

# THRcn-3.5 Neo IC

**ACTHR935C.IC**

**Technical data**

Caratteristiche tecniche

	Ratio Rapporto <b>1:1</b>
	RPM Velocità <b>8.000 min<sup>-1</sup></b>   DRY <b>5.000 min<sup>-1</sup></b>
	Max. axial load Max. carico assiale <b>1250 N</b>
	Torque Momento torcente <b>70 Nm</b>
	Weight Peso <b>11.5 kg</b>
	Tapping Maschiatura <b>Max. M16</b>
	Collet Pinza <b>ER-32 (Ø 2/20 mm)</b>


**Retaining block / Tassello di ritegno / Stop-Block**
**NOT INCLUDED - NON INCLUSO**
 Direction of rotation same as machine spindle / *senso di rotazione uguale al mandrino*
 Input coolant max. 1450 PSI / *ingresso refrigerante max. 100 bar*  
Dry rotation is possible / *rotazione a secco possibile*
**\* STANDARD EQUIPMENT includes:**


Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO	
Size / Grandezza	50	50	63-80	100	C6	C8
I	80-110	80-110	80-110	80-110	80-110	80-110
S	35	41	42	45	38	40
L	208	214	215	218	211	213

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**

Ø mm  
**22-27**

Arbor output  
Porta fresa

Ø mm max.  
**20**

Weldon output  
Weldon

**ISO-30 HSK-40**

Quick Change  
Attacco rapido  
Smart Change

# TCUcn-3.5 Neo

ACTCU35C

## Technical data

Caratteristiche tecniche



**Ratio**  
Rapporto  
**1:1**



**RPM**  
Velocità  
**4.000 min<sup>-1</sup>**



**Max. axial load**  
Max. carico assiale  
**700 N**



**Torque**  
Momento torcente  
**50 Nm**



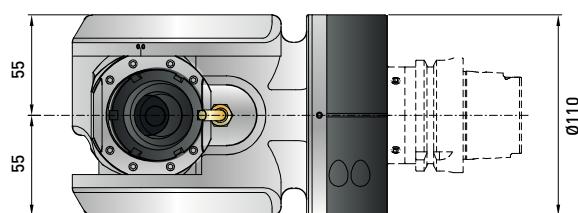
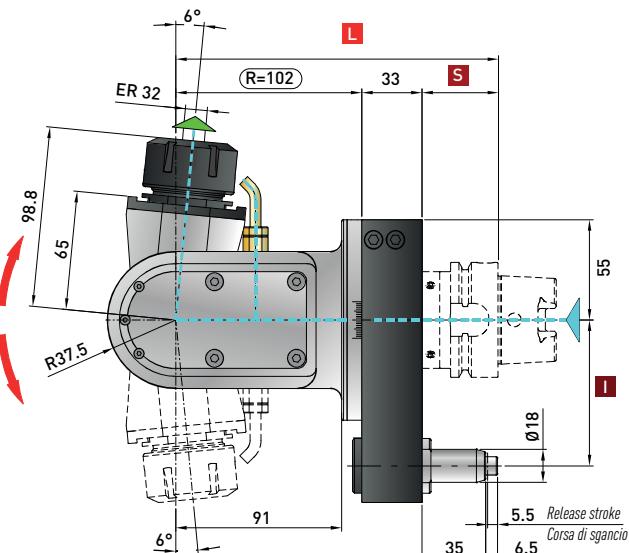
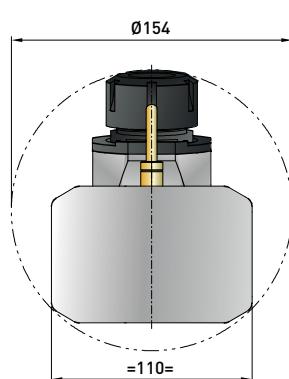
**Weight**  
Peso  
**13 kg**



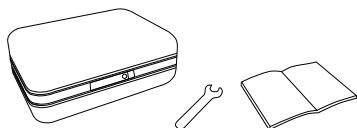
**Tapping**  
Maschiatura  
**Max. M16**



**Collet**  
Pinza  
**ER-32 (ø 2/20 mm)**



## \* STANDARD EQUIPMENT includes:



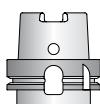
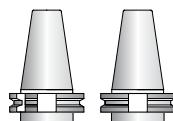
Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile



Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO	
Size / Grandezza	50	50	63-80	100	C6	C8
I	80-110	80-110	80-110	80-110	80-110	80-110
S	35	41	42	45	38	40
L	170	176	177	180	173	175

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

## Option / Opzione



bar max

**12**

Coolant through pin  
Refrigerante attraverso il perno

**Smart Change**

Quick change  
Attacco rapido

**+/- 95°**

Angle  
Angolo



every

**5°**

Fixed positioning  
Posizionamento fisso



## LINEA Smart Change

**Smart Change** è un sistema facile e innovativo, compatto nel design e veloce da utilizzare, che, grazie ad un triplo contatto, riesce a garantire una maggior rigidità e permette una miglior precisione durante la lavorazione. La modularità del sistema dà quindi la possibilità all'utilizzatore di poter usufruire di un'ampia gamma di adattori di diversa dimensione che possono essere presettati fuori macchina in tempo mascherato, aumentando così la produttività e diminuendo tempi e costi di attrezzamento macchina.

*Smart Change is an easy and innovative system, compact in design and quick to use, which, thanks to a triple contact, manages to ensure greater rigidity and allows better precision during the processing. The modularity of the system therefore gives the user the possibility to take advantage of a wide range of different size adapters that can be pre-set off the machine in masked time, thus increasing productivity and decreasing tooling times and costs machine.*

### PRESETTAGGIO fuori macchina.

*Outside presetting*



Una volta montato l'utensile è possibile **presettare la cartuccia utilizzando l'apposito adattatore**.

*Once the cutting tool is mounted, it is possible to preset the adapter in the presetter thanks to the Smart Change adapter.*



**Adattatori disponibili**

ISO -BT 40 / 50 -  
HSK 63 / 100

*Available adapters  
ISO -BT 40 / 50 -  
HSK 63 / 100*

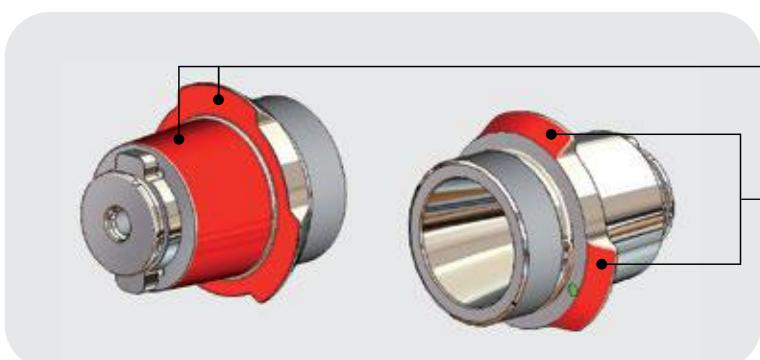
Ciò permette di **ridurre i tempi e i costi** legati all'attrezzamento macchina che avverrà in tempo mascherato, **aumentando notevolmente la produttività**.

*This system allows to reduce time and costs for the set up with tremendous increase in the productivity.*

## Perchè 3 VOLTE SMART...

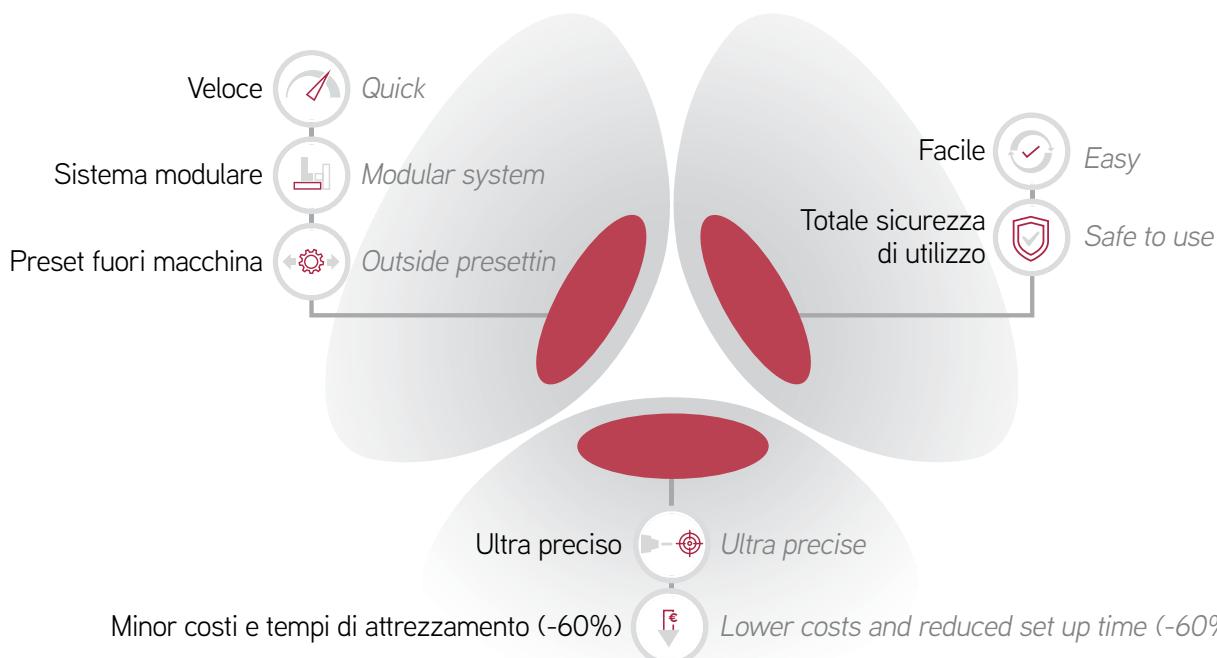
*Why 3 times smart...*

Il sistema **Smart Change** sfrutta ben **3 superfici di contatto** per una maggior precisione e ripetibilità.  
Our Smart Change system features **3 contact surfaces** as shown for a higher precision and accuracy.



Conicità + Piano inferiore  
Taper + Underneath

Conicità superiore  
Upper tapered surface



**INCREMENTO DELLA PRODUTTIVITÀ**  
**INCREASED PRODUCTIVITY**

# COME È FATTO

*How it is made*

- Chiave di riscontro SmartChange  
(permette montaggio con una sola mano)  
*SmartChange Wrench  
(one-hand handling)*

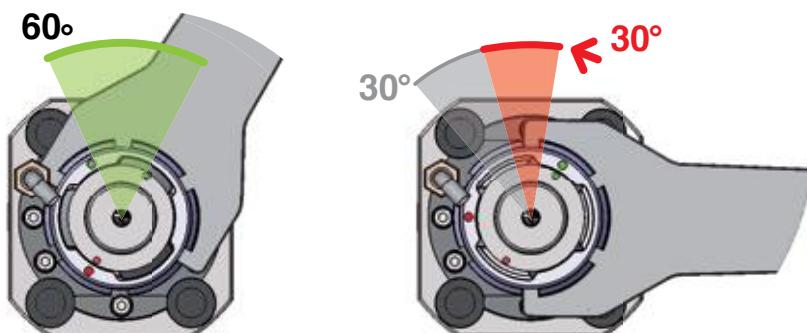
- Ghiera SmartChange brevettata  
(fissata al corpo principale)  
*Patented SmartChange nut  
(fixed on the main body)*



# COME FUNZIONA

*How it works*

- Bloccaggio Ghiera  
*Clamping nut*
- Sbloccaggio  
*Unclamping*
- Estrazione  
*Pull out*



Tempo massimo di sostituzione cartucce  
*Time to change front end*

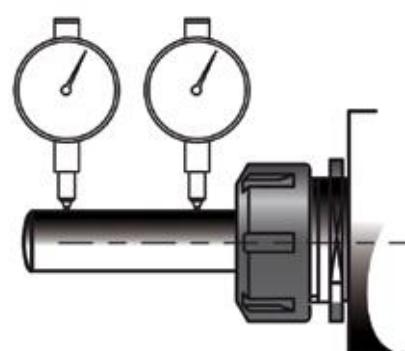
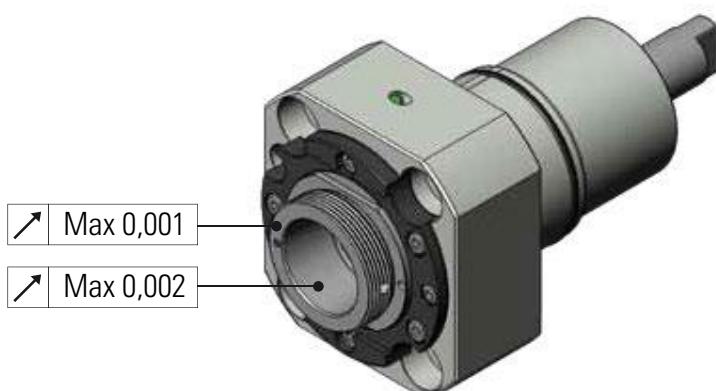
20"

Precisione con barra inserita nel mandrino  
*Accuracy with gauge bar inserted in the collet chuck*

Ripetibilità / *Repeatability*

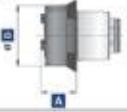
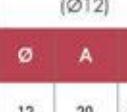
0,003 mm

a 40mm = 0.008 mm | at 40mm = 0.008 mm  
a 120mm = 0.01 mm | at 120mm = 0.01 mm

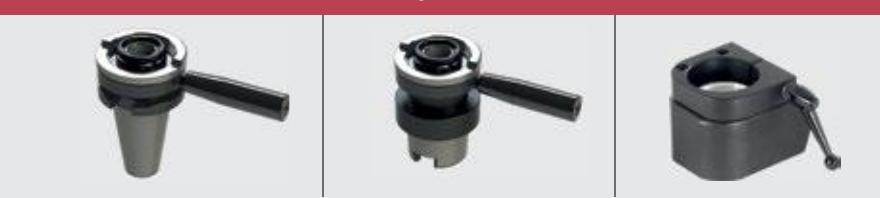


# DATI TECNICI

## Technical Data

PORTAPINZA INCASSATO IN-BUILT COLLET	ER-20A ( $\varnothing 1/13\text{mm}$ )	ER-25A ( $\varnothing 1/16\text{mm}$ )													
	$\varnothing$	A	D	$\varnothing$	A	D									
	1/13	21.5	36.8	1/16	32.4	41									
PORTAPINZA / COLLET	ER-20 ( $\varnothing 1/13\text{mm}$ )	ER-25 ( $\varnothing 1/17\text{mm}$ )	ER-32 ( $\varnothing 2/22\text{mm}$ )												
	$\varnothing$	A	D	$\varnothing$	A	D	$\varnothing$	A	D						
	1/13	28.5	34	1/16	30.5	42	2/20	41.5	50						
WELDON	( $\varnothing 6$ )		( $\varnothing 5$ )		( $\varnothing 10$ )		( $\varnothing 12$ )		( $\varnothing 16$ )						
	$\varnothing$	A	D	$\varnothing$	A	D	$\varnothing$	A	D	$\varnothing$	A	D			
	6	20	36.8	8	20	36.8	10	20	36.8	12	20	36.8			
PORTAFRESA / SHELL MILL	( $\varnothing 13$ )		( $\varnothing 16$ )		( $\varnothing 22$ )										
	$\varnothing$	A	H	$\varnothing$	A	H	$\varnothing$	A	H						
	13	24.5	13	16	30.5	17	22	32.5	19						
CALETTAMENTO / SHRINK FIT	( $\varnothing 3\text{mm}$ )		( $\varnothing 4\text{mm}$ )		( $\varnothing 6\text{mm}$ )		( $\varnothing 8\text{mm}$ )		( $\varnothing 10\text{mm}$ )		( $\varnothing 12\text{mm}$ )		( $\varnothing 16\text{mm}$ )		
	$\varnothing$	A	D	$\varnothing$	A	D	$\varnothing$	A	D	$\varnothing$	A	D	$\varnothing$	A	D
	3	40	13	4	40	15	6	40	21	8	40	21	10	40	24
WELDON POLICI / INCH	( $\varnothing 1/4''$ )		( $\varnothing 3/8''$ )		ER-20 ( $\varnothing 1/2''$ )		( $\varnothing 5/8''$ )		( $\varnothing 3/4''$ )						
	$\varnothing$	A	D	$\varnothing$	A	D	$\varnothing$	A	D	$\varnothing$	A	D	$\varnothing$	A	D
	1/4"	20	36,8	3/8"	20	36,8	1/2"	20	36,8	5/8"	20	36,8	3/4"	20	36,8
PORTAFRESA POLICI / SHELL MILL INCH	( $\varnothing 3/4''$ )		( $\varnothing 1''$ )												
	$\varnothing$	A	H	$\varnothing$	A	H									
	3/4"	31	17,5	1"	30,77	17,27									
SEMILAVORATO / BLANK	BLANK														
	$\varnothing$	A	D												
	/	81	52												

### Accessori / Accessories



Adattatore preset ISO/BT  
Preset adapter ISO/BT

Adattatore preset HSK  
Preset adapter HSK

Tool boy



TOOL ID



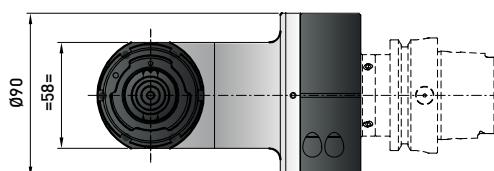
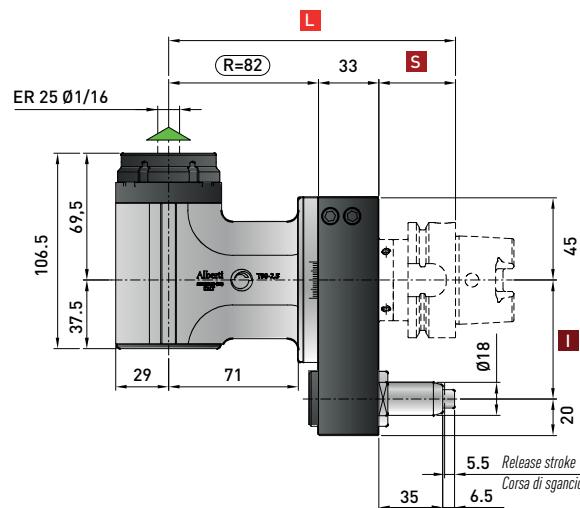
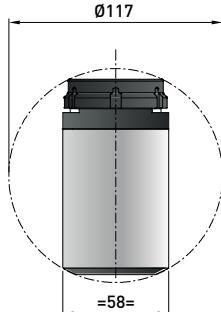
# T90cn-2.5C Neo

## SMART CHANGE

AST9025C

**Technical data**

Caratteristiche tecniche


 Ratio  
Rapporto 1:1

 RPM  
Velocità 6.000 min<sup>-1</sup>
 Max. axial load  
Max. carico assiale 510 N

 Torque  
Momento torcente 50 Nm

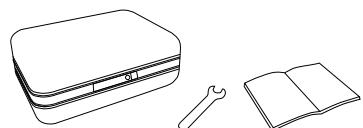
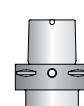
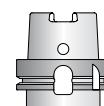
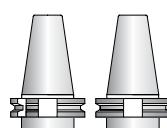
 Weight  
Peso 5.4 kg

 Tapping  
Maschiatura Max. M12

 Collet  
Pinza Smart Change


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO

**\* STANDARD EQUIPMENT**  
includes:

 Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino


Spindle / Cono	DIN 69871-CAT		MAS-BT		HSIK		CAPTO	
Size / Grandezza	40-50	40-50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)
S	35	35	35	41	42	45	38	40
L	150	150	150	156	157	160	153	155

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**

bar max

12

Coolant through pin

Adduzione refrigerante attraverso il perno



bar max

100

Coolant through spindle

Refrigerante attraverso il cono

## T90cn-3.5 Neo

AST9035C

## Technical data

Caratteristiche tecniche



Ratio  
Rapporto  
**1:1**



RPM  
Velocità  
**5.000 min<sup>-1</sup>**



Max. axial load  
Max. carico assiale  
**1.250 N**



Torque  
Momento torcente  
**70 Nm**



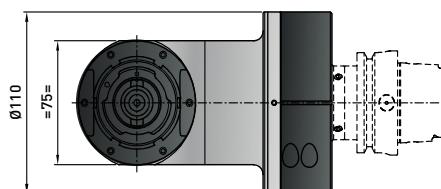
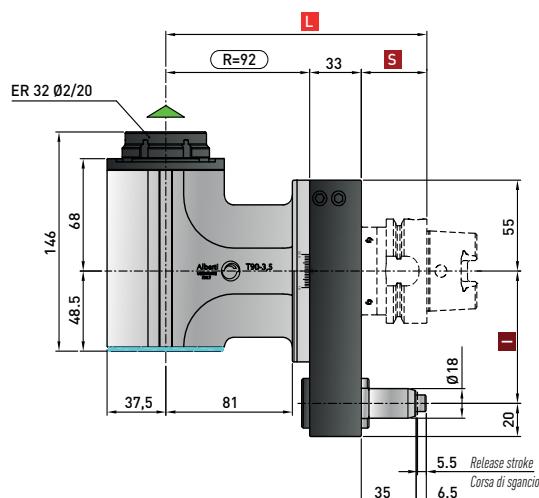
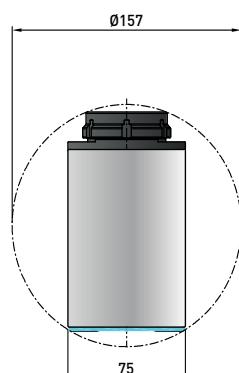
Weight  
Peso  
**11 kg**



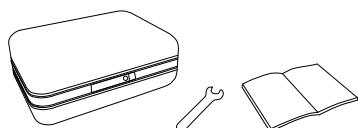
Tapping  
Maschiatura  
**Max. M16**



Collet  
Pinza  
**Smart Change**



## \* STANDARD EQUIPMENT includes:

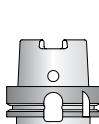


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino



Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO	
Size / Grandezza	50	50	63-80	100	C6	C8
I	80-110	80-110	80-110	80-110	80-110	80-110
S	35	41	42	45	38	40
L	160	166	167	170	163	165

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

## Option / Opzione



bar max  
**12**

Coolant through pin and spindle  
Refrigerante interno attraverso utensile



bar max  
**100**

Coolant through spindle  
Refrigerante attraverso il cono



min<sup>-1</sup>  
**9.000**

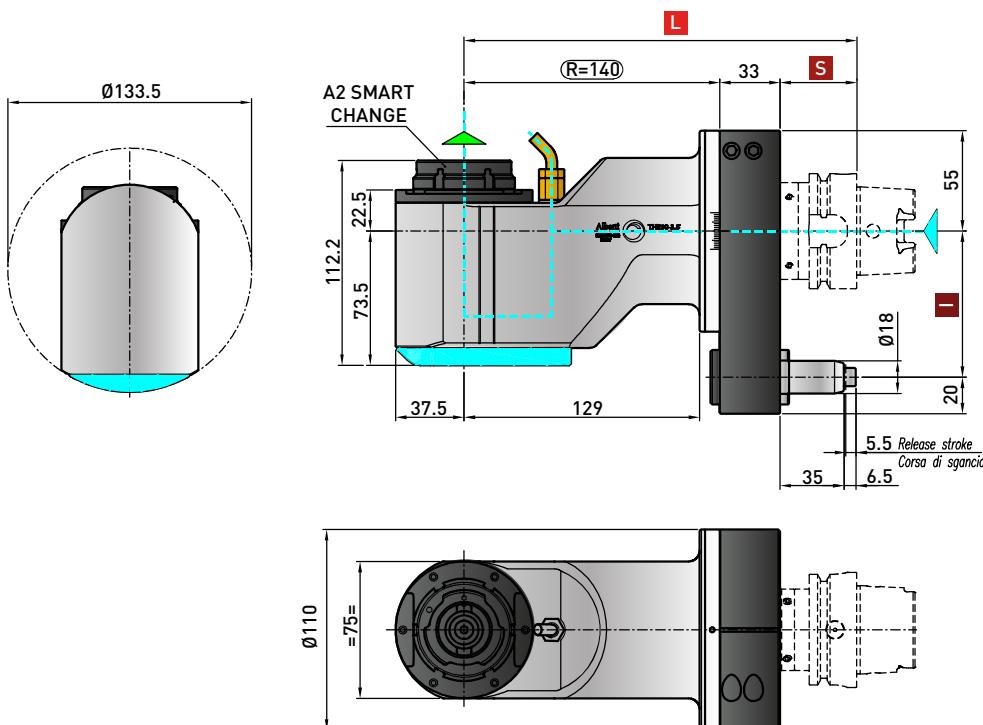
High speed optional RPM max.  
Opzione alta velocità RPM max.

# THRcn-3.5 Neo IC

## SMART CHANGE

**ASTHR935C.IC**
**Technical data**

Caratteristiche tecniche

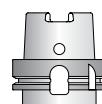
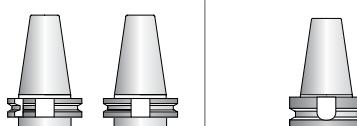
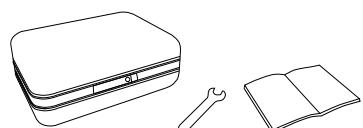


	Ratio Rapporto <b>1:1</b>
	RPM Velocità <b>8.000 min<sup>-1</sup></b>   DRY Running <b>5.000 min<sup>-1</sup></b>
	Max. axial load Max. carico assiale <b>1250 N</b>
	Torque Momento torcente <b>70 Nm</b>
	Weight Peso <b>11.5 kg</b>
	Tapping Maschiatura Max. M16
	Collet Pinza Smart Change


**Retaining block / Tassello di ritegno / Stop-Block**
**NOT INCLUDED - NON INCLUSO**

Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

 Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

**\* STANDARD EQUIPMENT includes:**


Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO	
Size / Grandezza	50	50	63-80	100	C6	C8
I	80-110	80-110	80-110	80-110	80-110	80-110
S	35	41	42	45	38	40
L	208	214	215	218	211	213

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**


bar max

**12**
**Coolant through pin**  
Adduzione refrigerante attraverso il perno


bar max

**100**
**Coolant through spindle**  
Refrigerante attraverso il cono

## TCUcn-3.5 Neo

ASTCU35C

## Technical data

Caratteristiche tecniche



**Ratio**  
Rapporto  
**1:1**



**RPM**  
Velocità  
**4.000 min<sup>-1</sup>**



**Max. axial load**  
Max. carico assiale  
**700 N**



**Torque**  
Momento torcente  
**50 Nm**



**Weight**  
Peso  
**13 kg**

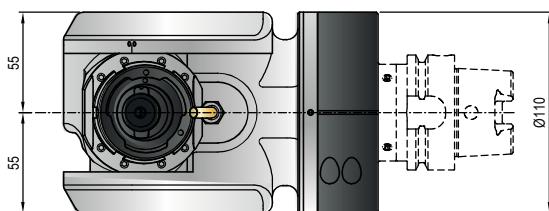
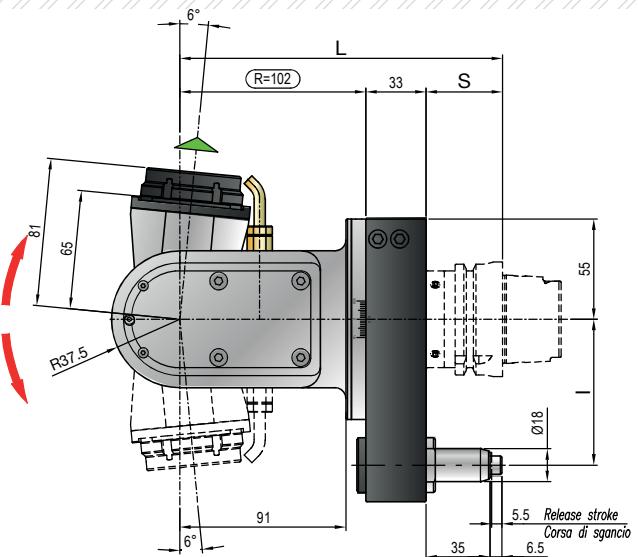
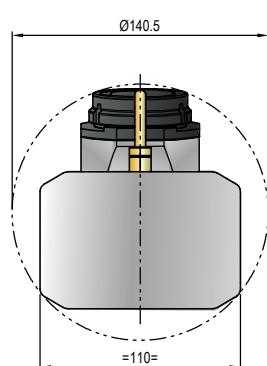


**Tapping**  
Maschiatura  
**Max. M16**



**Collet**  
Pinza  
**Smart Change**

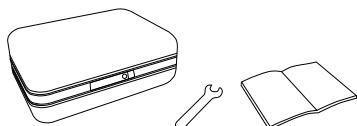
## SMART CHANGE



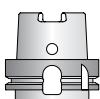
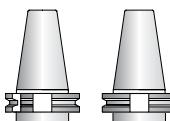
## \* STANDARD EQUIPMENT includes:

Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino



Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO	
Size / Grandezza	50	50	63-80	100	C6	C8
I	80-110	80-110	80-110	80-110	80-110	80-110
S	35	41	42	45	38	40
L	170	176	177	180	173	175

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

## Option / Opzione



bar max  
**12**

Coolant through pin  
Refrigerante attraverso il perno



bar max  
**100**

Coolant through spindle  
Adduzione refrigerante interna



+/- 95°

Angle  
Angolo



every  
**5°**

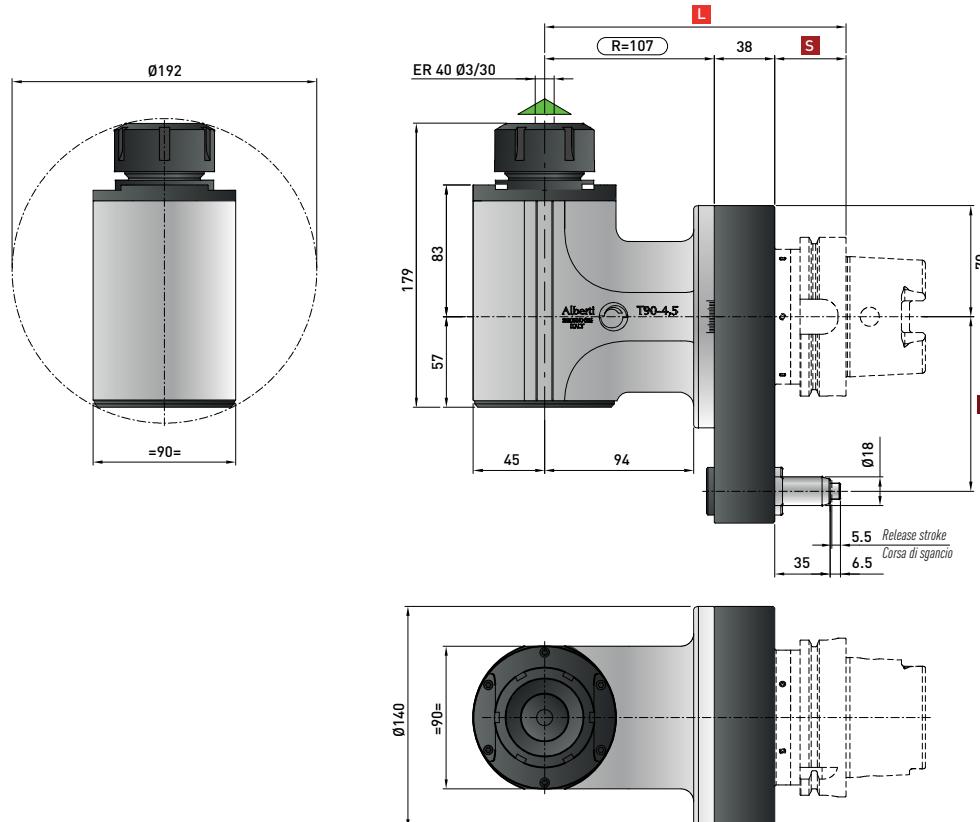
Fixed positioning  
Posizionamento fisso

# T90cn-4.5C Neo

ACT9045C

## Technical data

Caratteristiche tecniche

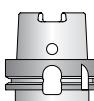
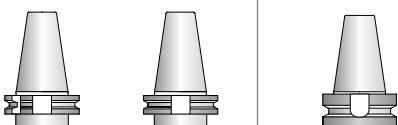
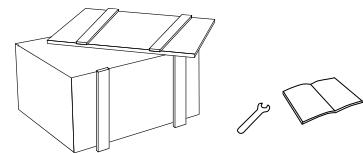


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO

▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

### \* STANDARD EQUIPMENT includes:



Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO
Size / Grandezza	50	50	80	100	C8
I	80-110	80-110	80-110	80-110	80-110
S	35	41	42	45	40
L	180	186	187	190	185

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

## Option / Opzione

bar max  
12Coolant through pin  
Refrigerante attraverso il pernoØ mm  
27Arbor output  
Porta fresaØ mm max.  
25Weldon output  
Weldon

HSK-50 / CAPTO C4

Quick Change  
Attacco rapido

ER 40/ER 25

Double output  
Doppia uscita

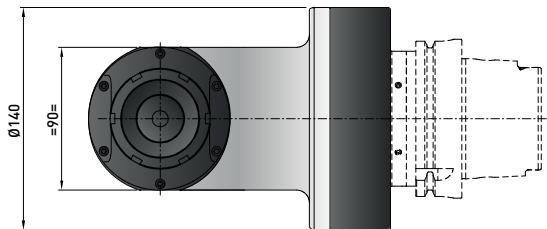
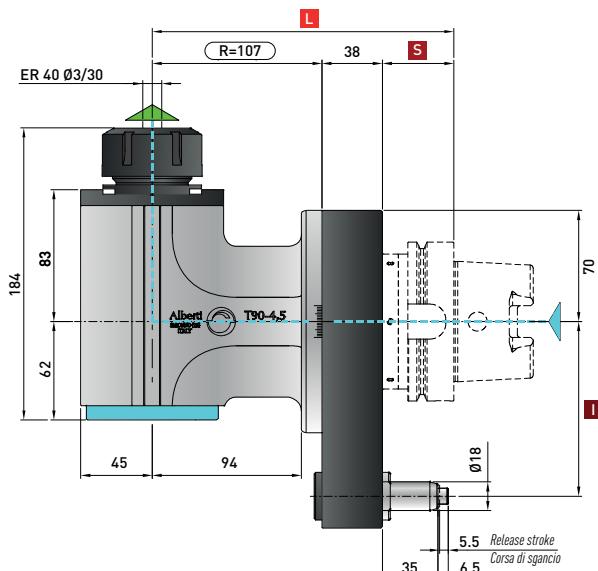
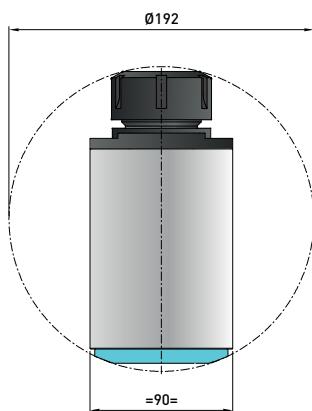
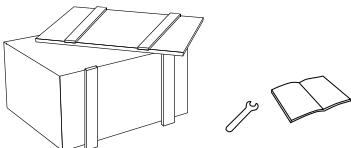
# T90cn-4.5C Neo IC

ACT9045C.IC

**Technical data**

Caratteristiche tecniche

	Ratio Rapporto <b>1:1</b>
	RPM Velocità <b>6.000 min<sup>-1</sup></b>
	Max. axial load Max. carico assiale <b>1.750 N</b>
	Torque Momento torcente <b>120 Nm</b>
	Weight Peso <b>17 kg</b>
	Tapping Maschiatura <b>Max. M20</b>
	Collet Pinza <b>ER-40 (ø 3/30 mm)</b>

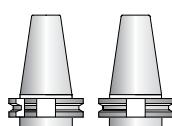
**\* STANDARD EQUIPMENT includes:**

Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO
Size / Grandezza	50	50	80	100	C8
I	80-110	80-110	80-110	80-110	80-110
S	35	41	42	45	40
L	180	186	187	190	185

Dual contact spindles available / Disponibilità coni a doppio contatto

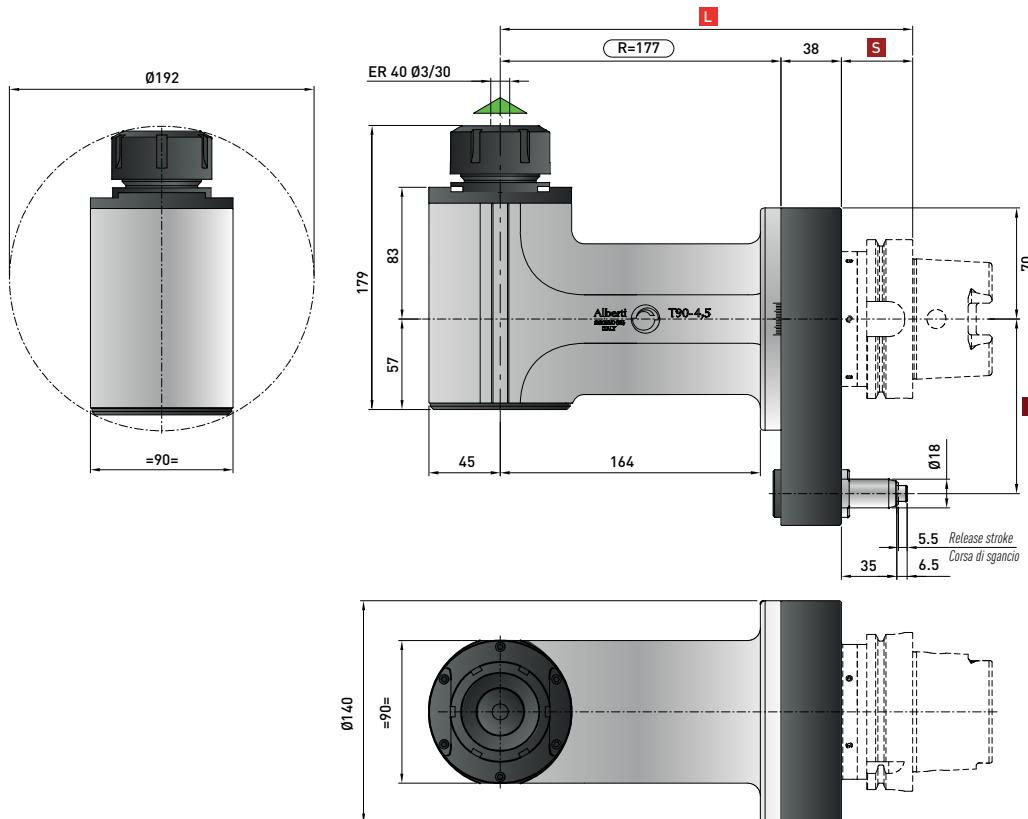
\*optional

**Option / Opzione**Ø mm  
**27**Arbor output  
Porta fresaØ mm max.  
**25**Weldon output  
Weldon**HSK-50 / CAPTO C4**Quick Change  
Attacco rapido

# T90cn-4.5L Neo

**ACT9045L**
**Technical data**

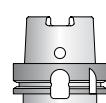
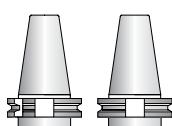
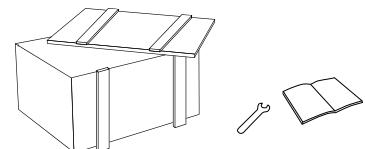
Caratteristiche tecniche



Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO

Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

**\* STANDARD EQUIPMENT**  
includes:


Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO
Size / Grandezza	50	50	80	100	C8
I	80-110	80-110	80-110	80-110	80-110
S	35	41	42	45	40
L	250	256	257	260	255

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**

bar max  
12

Coolant through pin  
Refrigerante attraverso il perno

Ø mm  
27

Arbor output  
Porta fresa

Ø mm max.  
25

Weldon output  
Weldon


HSK-50 / CAPTO C4

Quick Change  
Attacco rapido


ER 40/ER 25

Double output  
Doppia uscita

# T90cn-4.5L Neo IC

ACT9045L.IC

**Technical data**

Caratteristiche tecniche



**Ratio**  
Rapporto  
**1:1**



**RPM**  
Velocità  
**6.000 min<sup>-1</sup>** | **DRY**  
Running  
**4.000 min<sup>-1</sup>**



**Max. axial load**  
Max. carico assiale  
**1.750 N**



**Torque**  
Momento torcente  
**120 Nm**



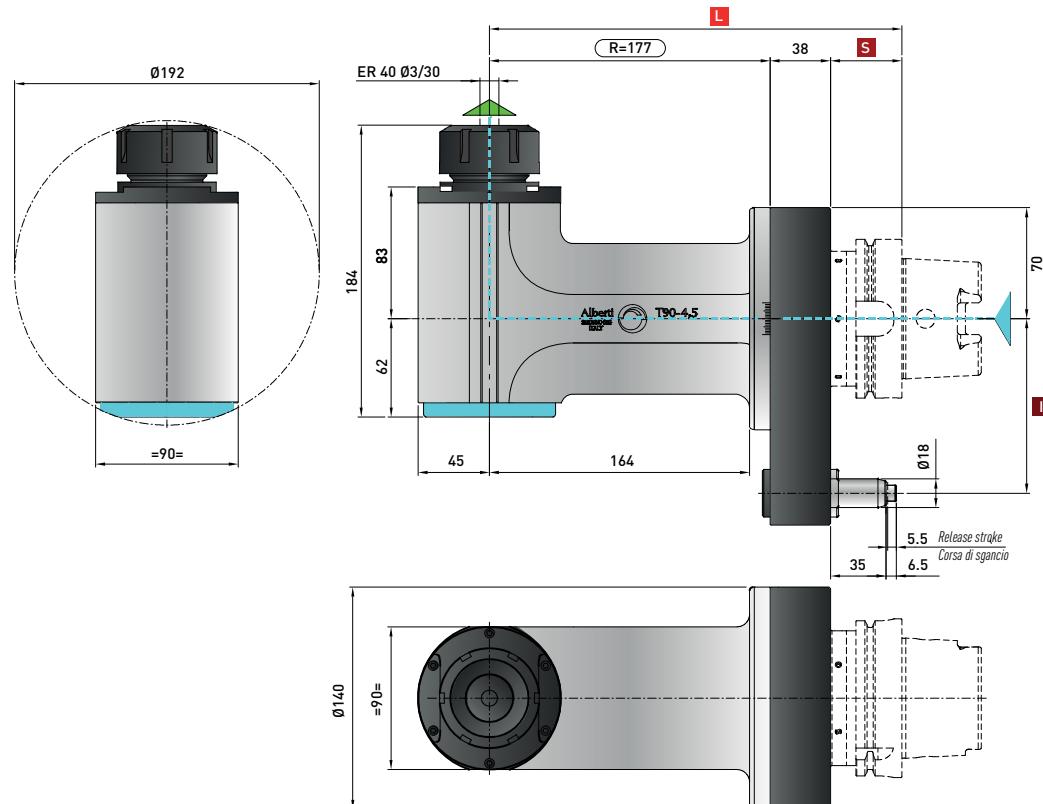
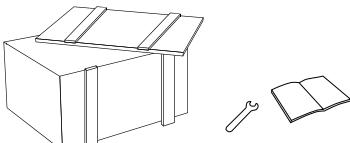
**Weight**  
Peso  
**20 kg**



**Tapping**  
Maschiatura  
**Max. M20**



**Collet**  
Pinza  
**ER-40 (ø 3/30 mm)**


**\* STANDARD EQUIPMENT includes:**


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO
Size / Grandezza	50	50	80	100	C8
I	80-110	80-110	80-110	80-110	80-110
S	35	41	42	45	40
L	250	256	257	260	255

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**

Ø mm  
**27**

Arbor output  
Porta fresa



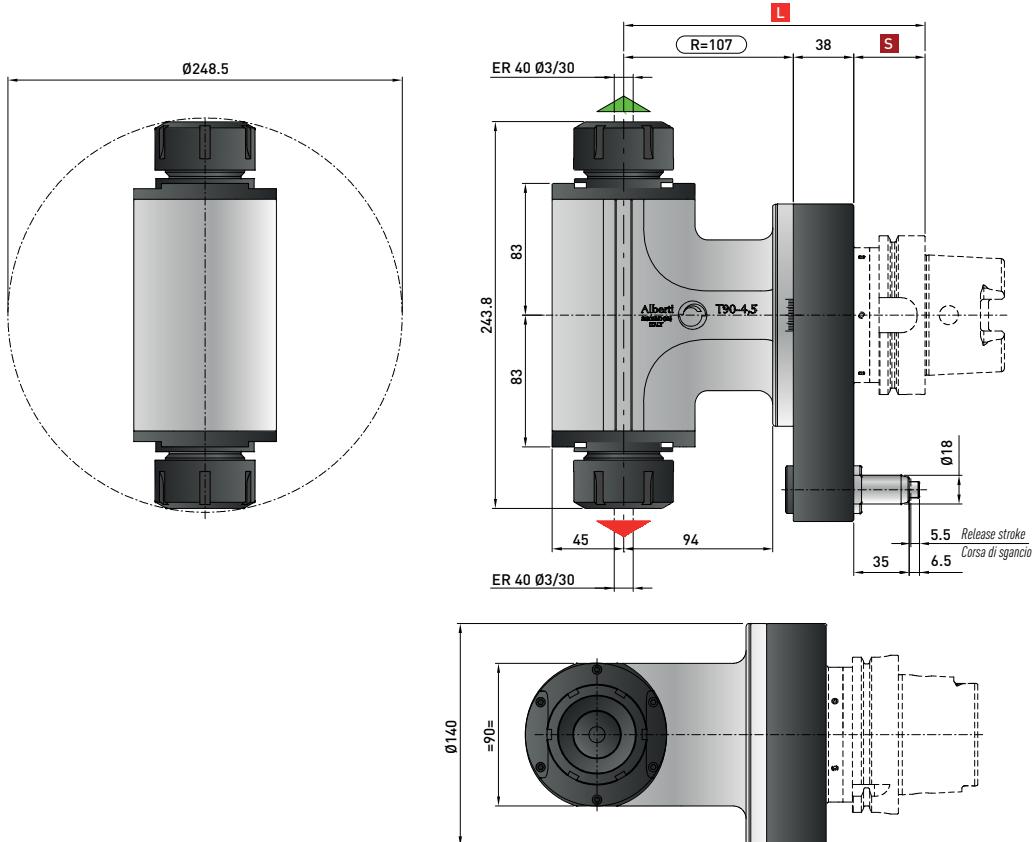
Ø mm max.  
**25**

Weldon output  
Weldon

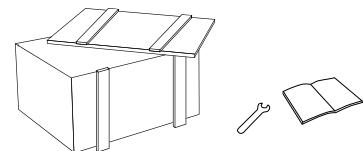
**HSK-50 / CAPTO C4**

Quick Change  
Attacco rapido

# T90cn-4.5 2U Neo

**ACT9045D**

**Retaining block / Tassello di ritegno / Stop-Block**
**NOT INCLUDED - NON INCLUSO**

- ▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino  
 ▲ Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino

**\* STANDARD EQUIPMENT includes:**


Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK	CAPTO
Size / Grandezza	50	50	80	100
I	80-110	80-110	80-110	80-110
S	35	41	42	45
L	180	186	187	190

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**

 bar max  
**12**

 Coolant through pin  
 Refrigerante attraverso il perno

 Ø mm  
**27**

 Arbor output  
 Porta fresa

 Ø mm max.  
**25**

 Weldon output  
 Weldon

**HSK-40**  
 Quick Change  
 Attacco rapido

# TR90cn-4.5 Neo

ACTR945C

## Technical data

Caratteristiche tecniche



Ratio  
Rapporto  
**1:1**



RPM  
Velocità  
**4.000 min<sup>-1</sup>**



Max. axial load  
Max. carico assiale  
**1.750 N**



Torque  
Momento torcente  
**120 Nm**



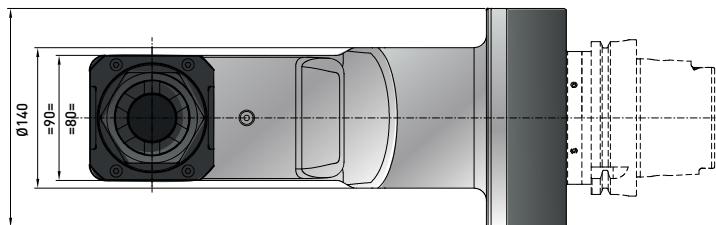
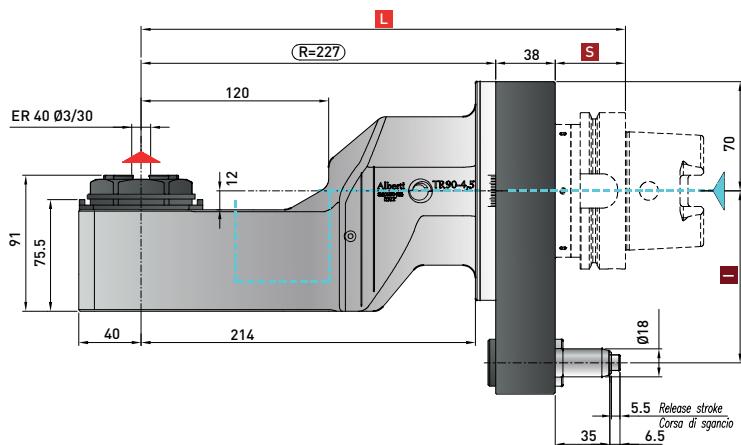
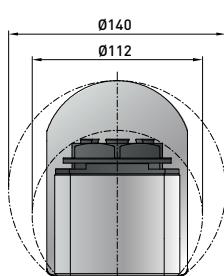
Weight  
Peso  
**20 kg**



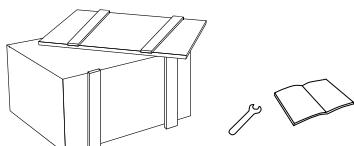
Tapping  
Maschiatura  
**Max. M20**



Collet  
Pinza  
**ER-40 (ø 3/30 mm)**



## \* STANDARD EQUIPMENT includes:



Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO
Size / Grandezza	50	50	80	100	C8
I	80-110	80-110	80-110	80-110	80-110
S	35	41	42	45	40
L	300	306	307	310	305

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

## Option / Opzione



bar max

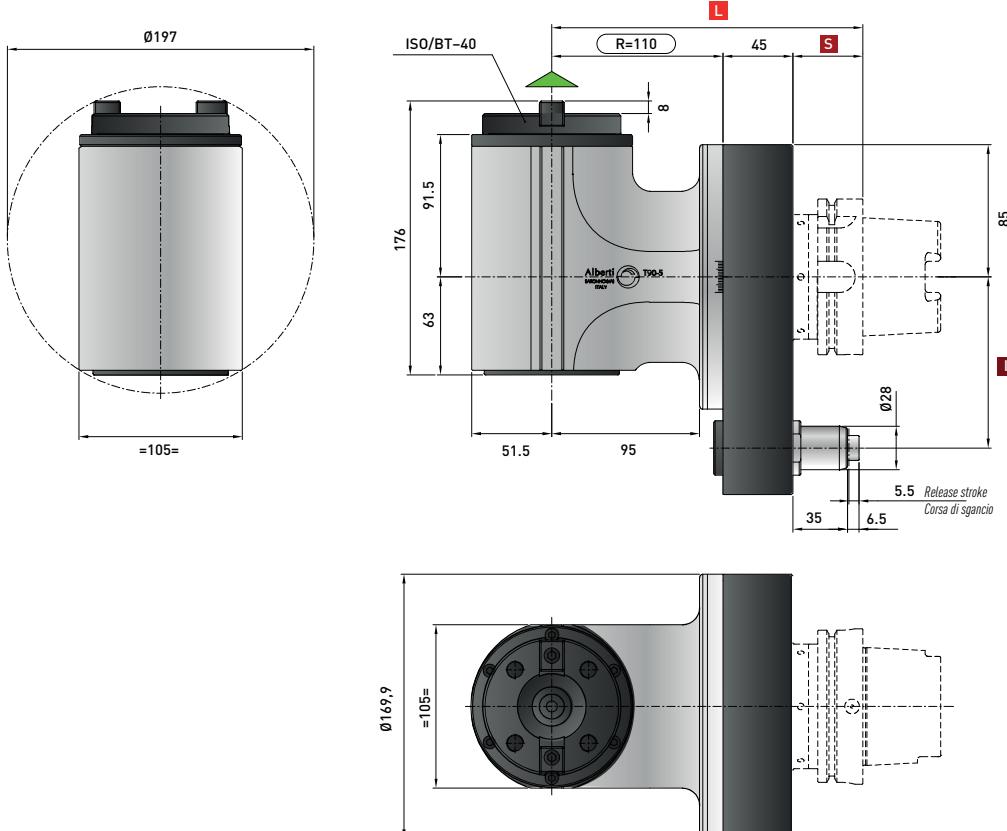
**100**

Coolant through spindle  
Refrigerante attraverso il cono

# T90cn-5 Neo

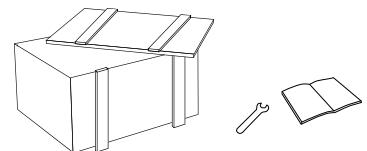
**ACT905HP**
**Technical data**

Caratteristiche tecniche


 Ratio  
Rapporto  
**1:1**
 RPM  
Velocità  
**3.000 min<sup>-1</sup>**
 Max. axial load  
Max. carico assiale  
**1.800 N**
 Torque  
Momento torcente  
**160 Nm**
 Weight  
Peso  
**22 kg**
 Tapping  
Maschiatura  
**Max. M24**
 Collet  
Pinza  
**ISO/BT 40**
**\* STANDARD EQUIPMENT**  
includes:


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO

 Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino


Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK	CAPTO
Size / Grandezza	50	50	100	C8
I	110	110	110	110
S	35	41	45	40
L	190	196	200	195

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**


bar max

12

Coolant through pin  
Refrigerante attraverso il perno

**HSK-63 / CAPTO C4 C5 C6**

Quick Change  
Attacco rapido

# T90cn-5C Neo IC

ACT905HP.IC

## Technical data

Caratteristiche tecniche



**Ratio**  
Rapporto  
**1:1**



**RPM**  
Velocità  
**5.000 min<sup>-1</sup>** | **DRY** Running  
**3.000 min<sup>-1</sup>**



**Max. axial load**  
Max. carico assiale  
**1.800 N**



**Torque**  
Momento torcente  
**160 Nm**



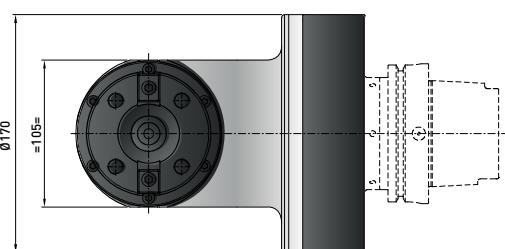
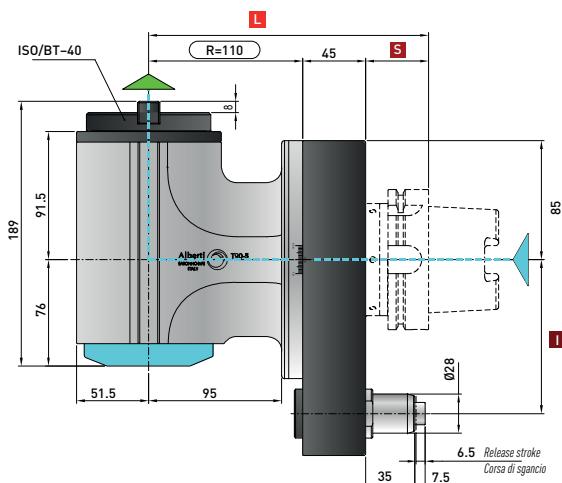
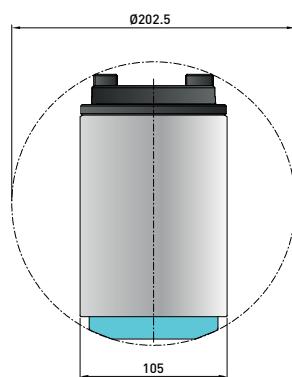
**Weight**  
Peso  
**22 kg**



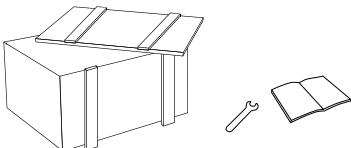
**Tapping**  
Maschiatura  
**Max. M24**



**Collet**  
Pinza  
**ISO/BT 40**



## \* STANDARD EQUIPMENT includes:



Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO
Size / Grandezza	50	50	80	100	C8
I	110	110	110	110	110
S	35	41	42	45	40
L	190	196	197	200	195

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

## Option / Opzione



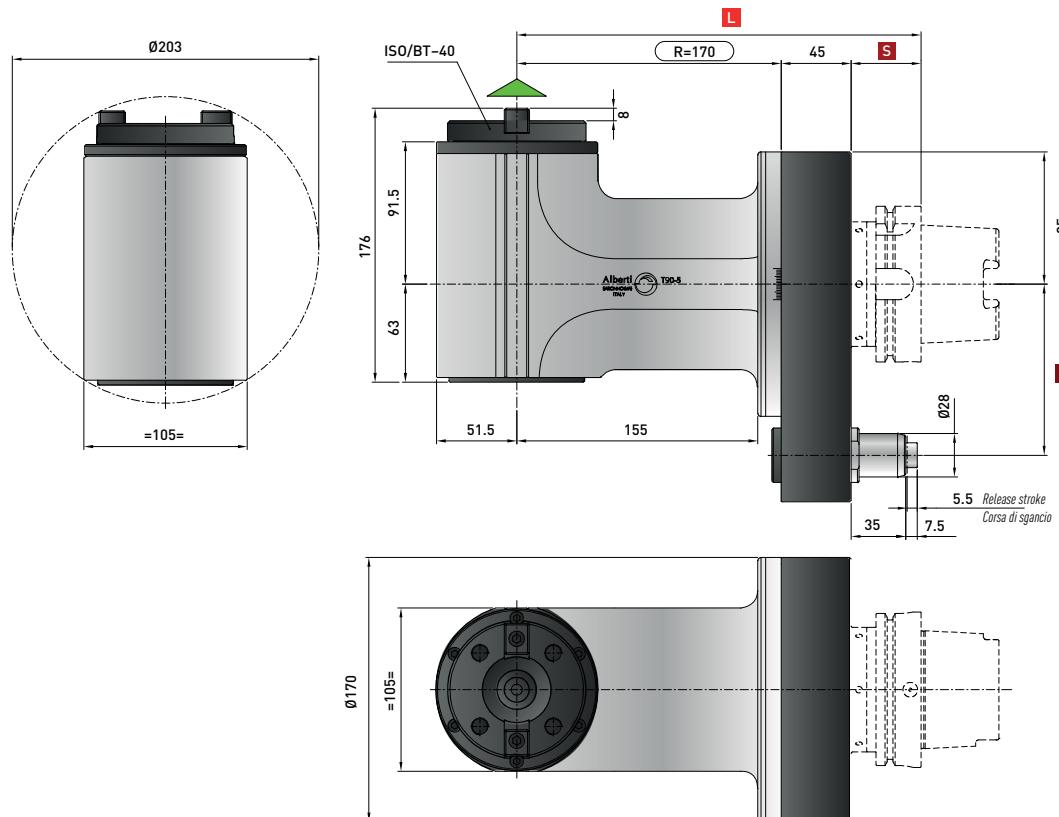
HSK-63 / CAPTO C4 C5 C6

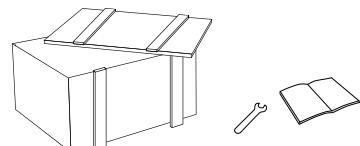
Quick Change  
Attacco rapido

# T90cn-5L Neo

**ACT905LHP**
**Technical data**

Caratteristiche tecniche


**Retaining block / Tassello di ritegno / Stop-Block**
**NOT INCLUDED - NON INCLUSO**
 Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

**\* STANDARD EQUIPMENT**  
**includes:**


Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK	CAPTO
Size / Grandezza	50	50	100	C8
I	110	110	110	110
S	35	41	45	40
L	250	256	260	255

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**Option / Opzione**


bar max

12

Coolant through pin  
Refrigerante attraverso il perno

**HSK-63 / CAPTO C4 C5 C6**

Quick Change  
Attacco rapido

# T90cn-5L Neo IC

ACT905LHP.IC

## Technical data

Caratteristiche tecniche



Ratio  
Rapporto  
**1:1**



RPM  
Velocità  
**5.000 min<sup>-1</sup>** DRY  
Running  
**3.000 min<sup>-1</sup>**



Max. axial load  
Max. carico assiale  
**1.800 N**



Torque  
Momento torcente  
**160 Nm**



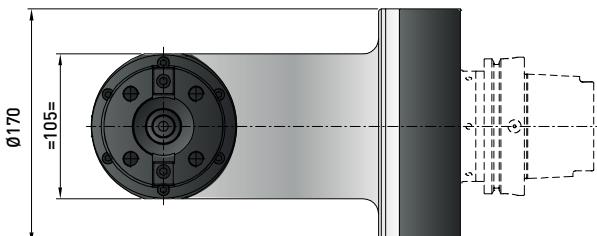
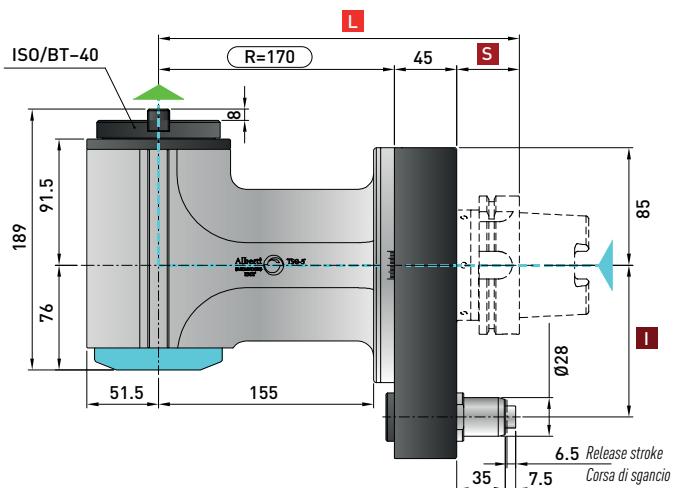
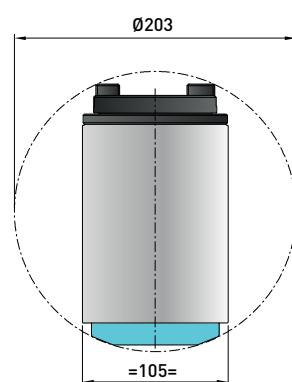
Weight  
Peso  
**26,2 kg**



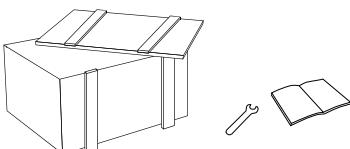
Tapping  
Maschiatura  
**Max. M24**



Collet  
Pinza  
**ISO/BT 40**



## \* STANDARD EQUIPMENT includes:



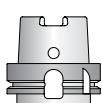
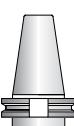
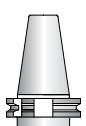
Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

△ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile



Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK	CAPTO
Size / Grandezza	50	50	100	C8
I	110	110	110	110
S	35	41	45	40
L	250	256	260	255

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

## Option / Opzione



HSK-63 / CAPTO C4 C5 C6

Quick Change  
Attacco rapido



## TESTE EXTENDED

Le TESTE CON PROLUNGA sono composte da un **blocco modulo di prolunga** sul quale vengono montate una selezione di teste standard.

Grazie alle **teste Extended** è possibile **variare la lunghezza utile della testa** senza ricorrere ad una soluzione speciale per realizzare lavorazioni che richiedono una lunghezza maggiorata.

The **EXTENDED HEADS** are made up by a **portion of extension spacer** where it is possible to mount different standard heads.

Thanks to the **Extended heads** it is possible to **adjust the overall length of the head** without having a special solution. These heads are mainly used in all applications where the needed length must be extended compared to the standard offering.



Grazie all'utilizzo di un materiale differente siamo inoltre riusciti a **contenere notevolmente il peso** rispetto alla precedente versione.

Un **sistema modulare componibile**, rende possibile variare la lunghezza del corpo testa aggiungendo l'**elemento di prolunga**.

Thanks to a different material used we could also **reduce considerably the total weight**.

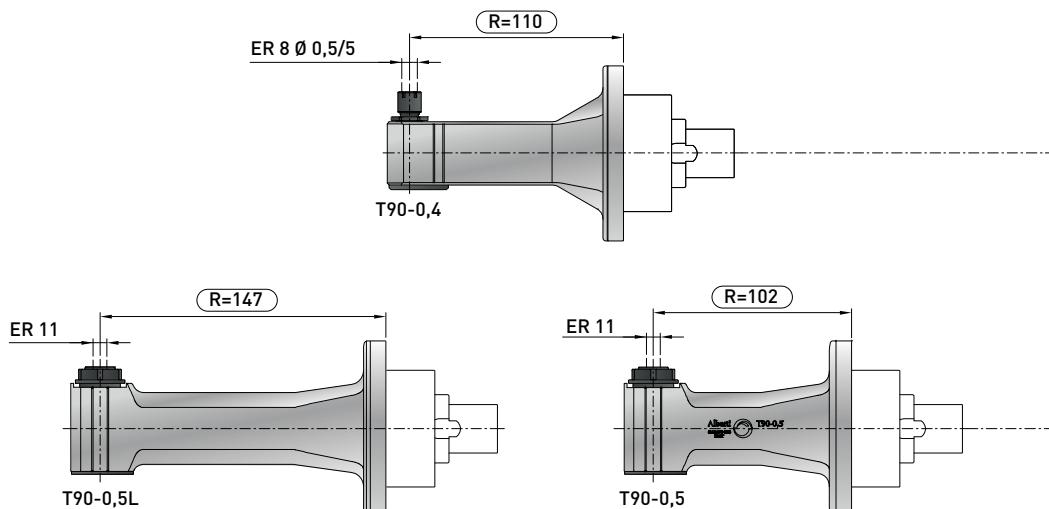
The **modular system** makes it possible to extend the length of the body by **adding a spacer**.



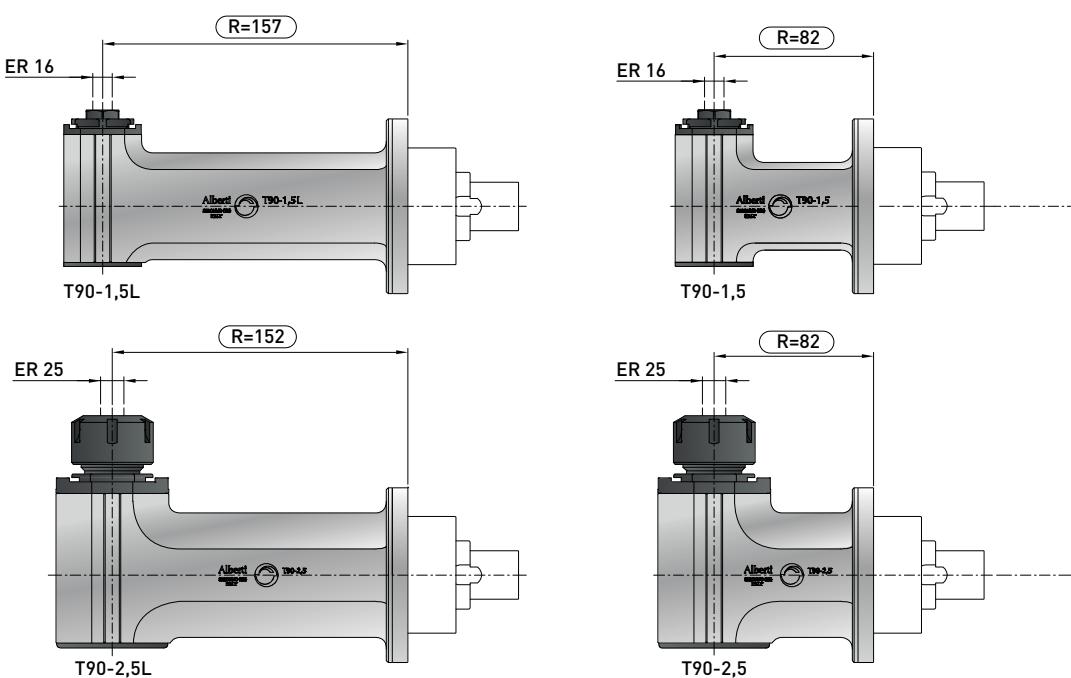
## Teste con PROLUNGA

Extended heads

8.000 Rpm



6.000 Rpm



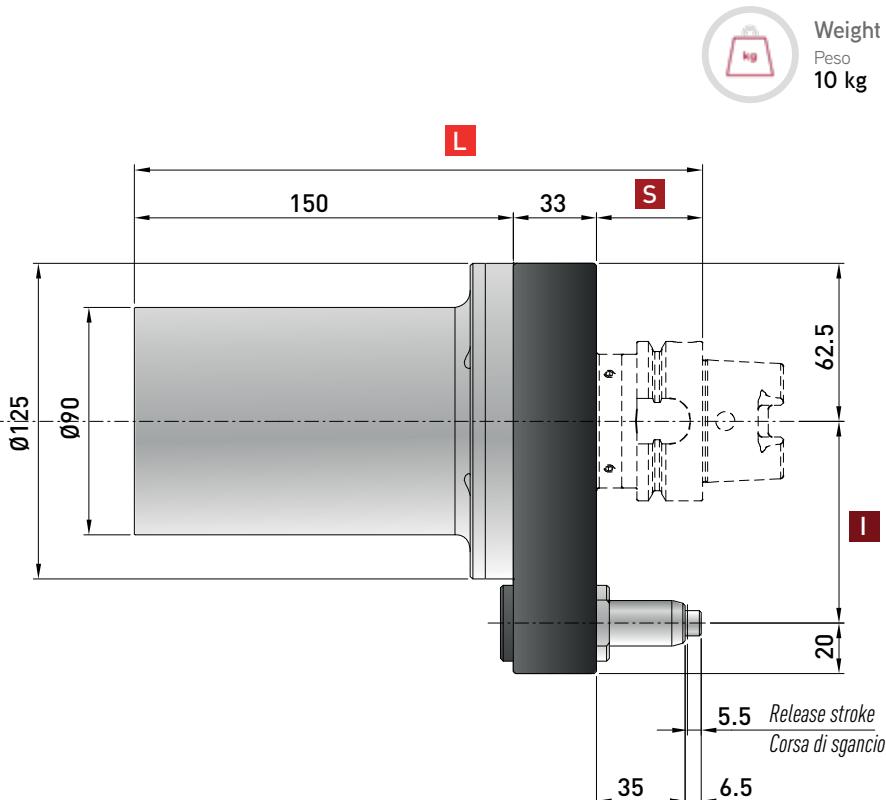
TECHNICAL DATA PAGE / CARATTERISTICHE TECNICHE A PAGINA

Testa / Head	Pagina / Page
T90-0,4	106
T90-0,5	107
T90-0,5L	108
T90-1,5	109
T90-1,5L	110
T90-2,5	112
T90-2,5L	113

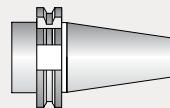
# Teste con PROLUNGA

## Extended heads

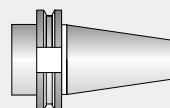
**OPTIONAL DRIVE SHANK\***  
 Non interchangeable input drive shank  
 Coni non intercambiabili



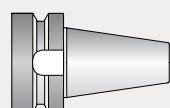
DIN-69871  
ISO 50



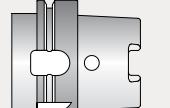
CAT  
50



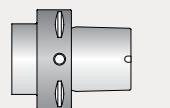
MAS-BT  
50



HSK  
63/80/100



CAPTO  
C6/C8

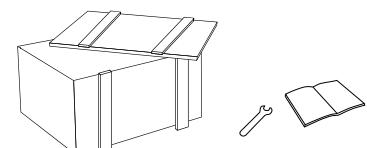


\* STANDARD EQUIPMENT includes:



Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO	
Size / Grandezza	50	50	63-80	100	C6	C8
I	80-110	80-110	80-(110*)	80-110	80-(110*)	80-110
S	35	41	42	45	38	40
L	218	224	225	228	221	223

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

**TOTAL LENGTH (R+L) / LUNGHEZZA TOTALE TESTA (R+L)**

Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO	
Size / Grandezza	50	50	63-80	100	C6	C8
T90-0.4 mm	328	334	335	338	331	333
T90-0.5C mm	320	326	327	330	323	325
T90-0.5L mm	365	371	372	375	368	370
T90-1.5 mm	300	306	307	310	303	305
T90-1.5L mm	375	381	382	385	378	380
T90-2.5 mm	300	306	307	310	303	305
T90-2.5L mm	370	376	377	380	373	375



# LINEA INDEX

Posizionamento automatico del portautensile su 360° tramite mandrino macchina  
tramite un sistema di frizione interno attivato da aria compressa max 6 bar.

**NESSUNA POSIZIONE FISSA. ORIENTAMENTO SU TUTTI  
GLI ANGOLI.**

*Automatic positioning of the cutting holder around  
360° by using machine spindle through an internal  
clutch mechanism activated by compressed  
air max 6 bar. NO FIXED POSITION.  
ANY ANGLE POSSIBLE.*

## FAMIGLIA TESTE INDEX

*Index heads*



QR CODE SCAN



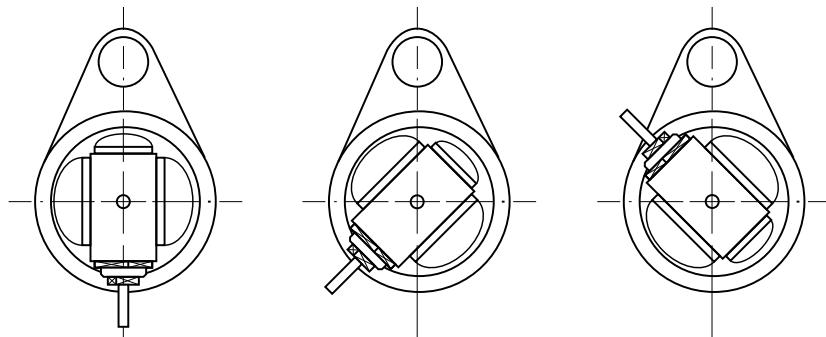


## Linea INDEX

### INDEX Line

Le teste della **Linea INDEX** consentono di posizionare il portautensile in modo automatico sui 360° utilizzando l'asse controllato della macchina utensile. **Possono quindi essere montate SOLAMENTE su macchine con asse controllato e aria esterna (max 6 bar) tramite lo Stop Block.**

With the **INDEX Line** it is possible to orientate and position automatically over 360° the output of the head by using the controlled axis of the machine center. This line **CAN ONLY** be mounted on machines with controlled C axis and external air through the Stop Block (max 6 bar).



- 1** | Porzione di testa modular standard posizionabile su 360°.

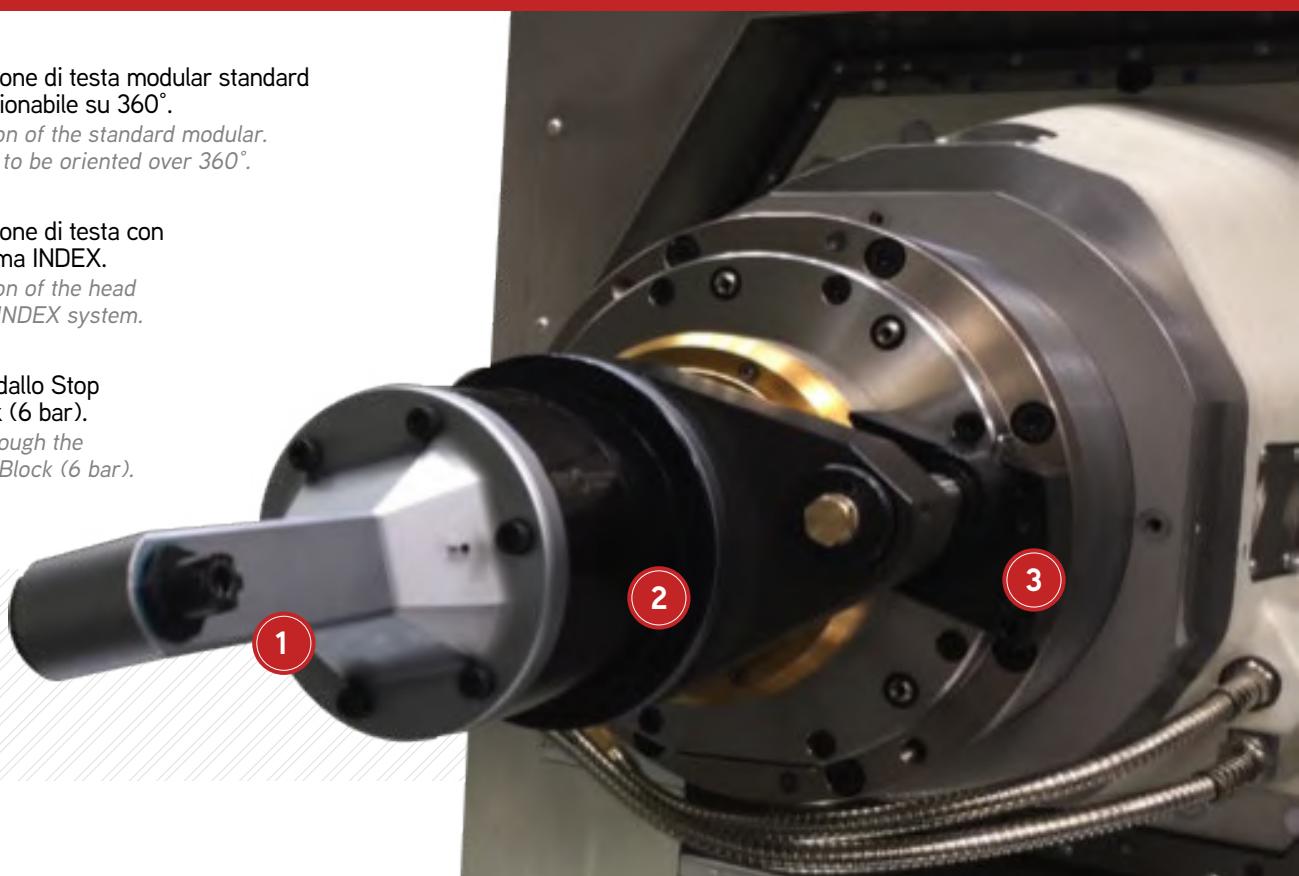
*Portion of the standard modular head to be oriented over 360°.*

- 2** | Porzione di testa con sistema INDEX.

*Portion of the head with INDEX system.*

- 3** | Aria dallo Stop Block (6 bar).

*Air trough the Stop Block (6 bar).*





## Linea INDEX

### INDEX Line

#### T90-0.3 SLIMLINE

##### Technical data / Dati tecnici

RPM max. / Max. Velocità input	min <sup>-1</sup>	15.000
Ratio (reduction)		3:4
Weight / Peso	Kg	3
Collet / Pinza		3 mm

Ø23.5

R=115

#### T90-0.4

##### Technical data / Dati tecnici

RPM max. / Max. Velocità input	min <sup>-1</sup>	10.000
Ratio		1:1
Weight / Peso	Kg	4
Collet / Pinza		ER-8 0,5/5 mm

Ø53

R=110

#### T90-0.5

##### Technical data / Dati tecnici

RPM max. / Max. Velocità input	min <sup>-1</sup>	10.000
Ratio		1:1
Weight / Peso	Kg	4
Collet / Pinza		ER-11 0,5/7 mm

Ø59

R=102

#### T90-1.5

##### Technical data / Dati tecnici

RPM max. / Max. Velocità input	min <sup>-1</sup>	8.000
Ratio		1:1
Weight / Peso	Kg	4.3
Collet / Pinza		ER-16 1/10 mm

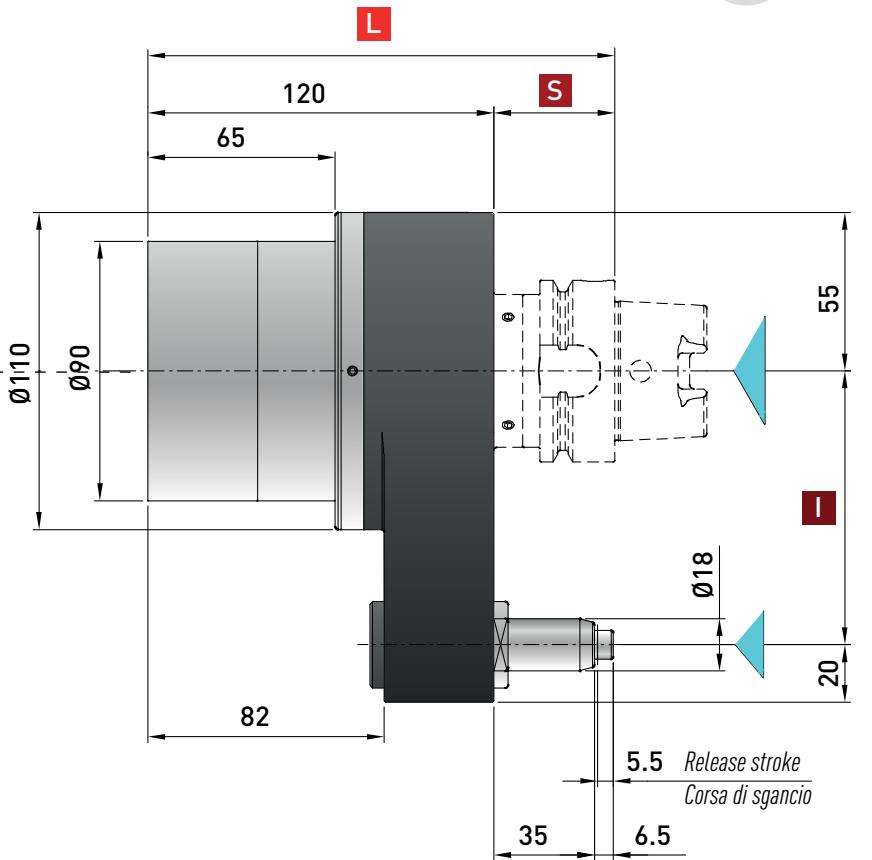
Ø85

R=82

# Linea INDEX

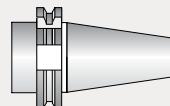
## INDEX Line

 Air Input max. 6 bar to activate Index system  
ingresso aria max. 6 bar per attivazione sistema Index

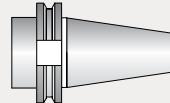


**OPTIONAL DRIVE SHANK\***  
Non interchangeable input drive shank  
Coni non intercambiabili

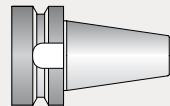
DIN-69871  
ISO 40/50



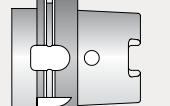
CAT  
40/50



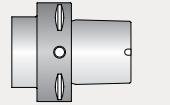
MAS-BT  
40/50



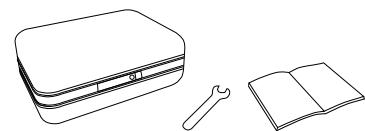
HSK  
63/80/100



CAPTO  
C6/C8



\* STANDARD EQUIPMENT includes:



Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8
I	80-(110*)	80-110	80-(110*)	80-110	80-(110*)	80-110	80-(110*)	80-110
S	35	35	35	41	42	45	38	40
L	155	155	155	161	162	165	158	160

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

### TOTAL LENGTH (R+L) / LUNGHEZZA TOTALE TESTA

Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8
T90-0.3 SLIMLINE	mm	270	270	270	276	277	280	273
T90-0.4	mm	265	265	265	271	272	275	268
T90-0.5	mm	257	257	257	263	264	267	260
T90-1.5	mm	237	237	237	243	244	247	240



## LINEA ULTRASLIM

### Teste **SLIMLINE** *Slimline heads*

**Teste ad alta velocità** di dimensioni molto piccole, prendono il moto direttamente dalla macchina. Progettate per cambio utensile automatico sono **adatte per microlavorazioni** con utensili da 0,1 a 3mm.

Very small **high speed mechanical angle heads**. They can be automatically exchanged by ATC and **can fit in confined spaces for high speed machining** with cutting tool size from 1,6mm to 3mm.



### Teste **ULTRASLIM** *Ultraslim heads*

La nuova serie di teste Ultraslim è stata progettata per offrire soluzioni standardizzate adatte a diverse **applicazioni in spazi molto ridotti**, come lavorazioni di piccole tasche oppure operazioni molto vicine a pareti laterali del pezzo. Il loro particolare design prevede la **parte superiore del porta utensile intercambiabile** con una serie di modelli studiati ad hoc.

Disponibili in 2 principali modelli, possono essere utilizzate sia in foratura che in fresatura con capacità in pinza fino a 6mm.

New series of Ultraslim angle head was designed to offer standardized solution **for application in confined spaces** or very close to the wall.

For its particular design, the **top portion of the head can be easily replaced and exchanged** with a range of different models. Available in 2 different line-up these heads can be used for drilling or milling and collect capacity up to 6mm.

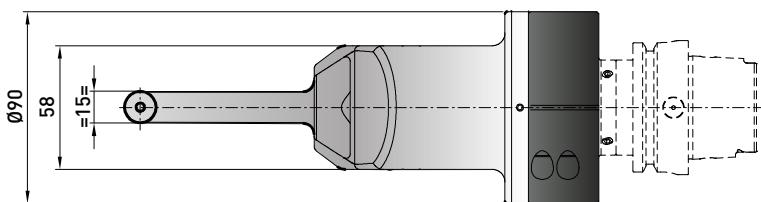
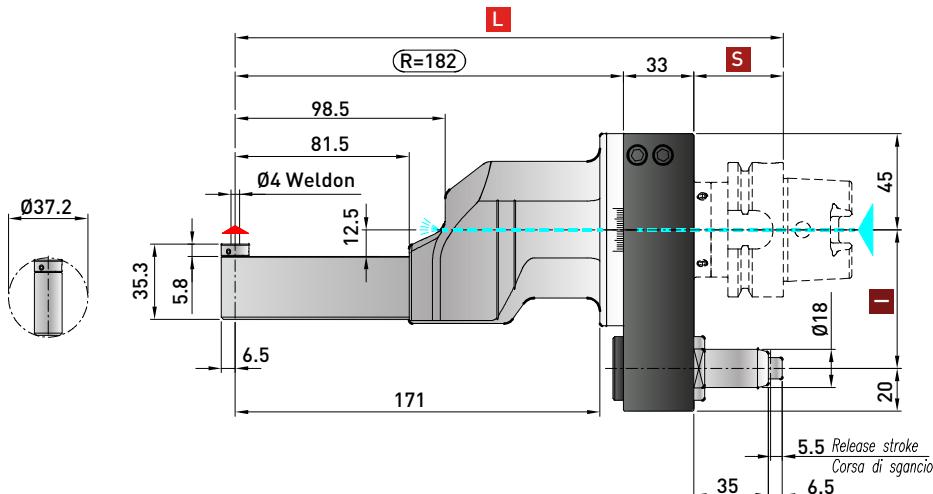
Also available with high pressure internal coolant from the input spindle.

# TR90cn-0.25US

## Technical data

Caratteristiche tecniche

	Ratio Rapporto <b>1:2 SPEEDER</b>
	RPM Velocità <b>10.000 min<sup>-1</sup></b>
	Max. axial load Max. carico assiale <b>100 N</b>
	Torque Momento torcente <b>4 Nm</b>
	Weight Peso <b>7 kg</b>
	Collet Pinza <b>WELDON 4mm / 5mm</b>



\* STANDARD EQUIPMENT includes:



Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-110	65-80-(110*)	80-110	65-80-(110*)	80-110	80-(110*)	80-110
S	35	35	35	41	42	45	38	40

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

## Option / Opzione



bar max

12

Coolant through pin  
Refrigerante attraverso il perno

# Linea ULTRASLIM

## Ultraslim Line

### Technical data

Caratteristiche tecniche



Ratio  
Rapporto  
**1:4 SPEEDER**



RPM  
Velocità  
**10.000 min<sup>-1</sup>** DRY  
Running  
**6.000 min<sup>-1</sup>**



Max. axial load  
Max. carico assiale  
**150 N**



Torque  
Momento torcente  
**4 Nm**

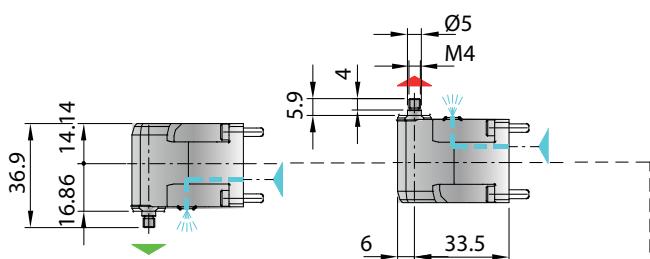


Weight  
Peso  
**7.3 kg**

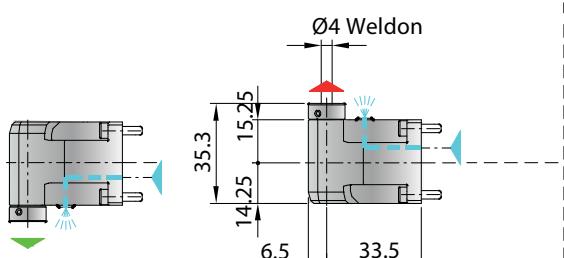


Collet  
Pinza  
**WELDON 4mm / 5mm**  
**M4**

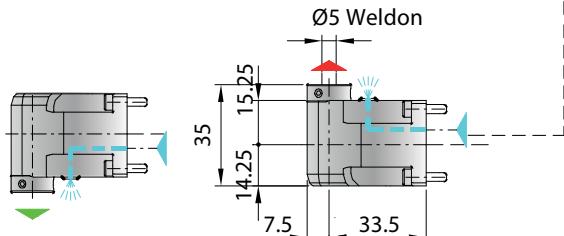
**DH-001**



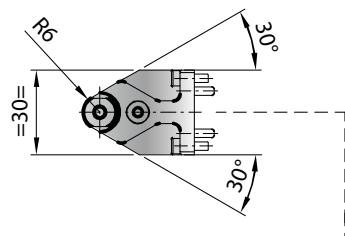
**DH-002**



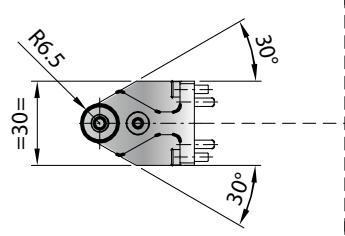
**DH-003**



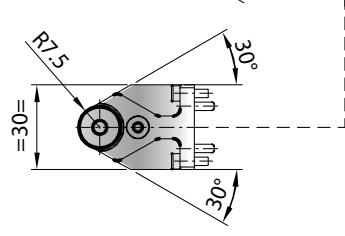
**DH-001**



**DH-002**



**DH-003**



Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

### Option / Opzione



bar max  
**100**

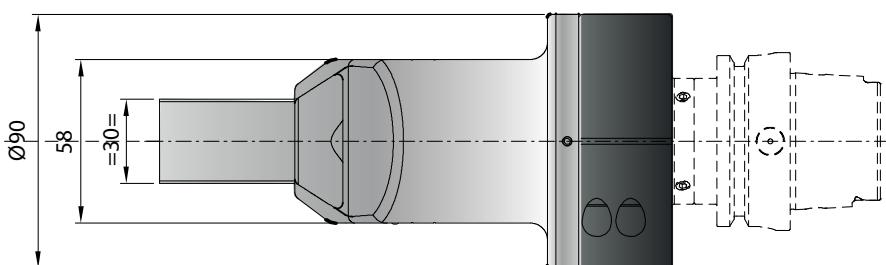
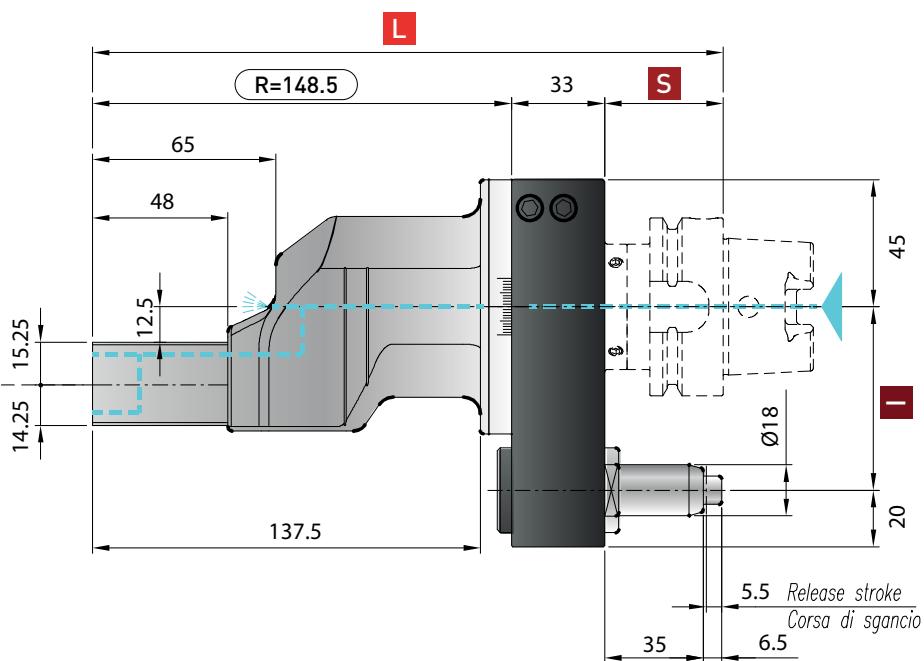
Coolant through flange and output spindle  
Refrigerante attraverso la flangia e il mandrino di uscita



bar max  
**12**

Coolant through pin  
Refrigerante attraverso il perno

## TR90CN-0.25DH



 Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar  
Dry rotation is possible / rotazione a secco possibile

Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40	50	40	50	63-80	100	C6	C8
I	65-80-(110*)	80-110	65-80-(110*)	80-110	65-80-(110*)	80-110	80-(110*)	80-110
S	35	35	35	41	42	45	38	40
L	216.5	216.5	216.5	222.5	223.5	226.5	219.5	221.5

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional



## Rotazione con **MANDRINO MACCHINA - SLIMLINE**

*Spindle Driven*

### RA-100

#### Technical data / Dati tecnici

RPM max. input / Max. Velocità input

15.000

Rt. reduction / Rt. in riduzione

Kg 1/2,67

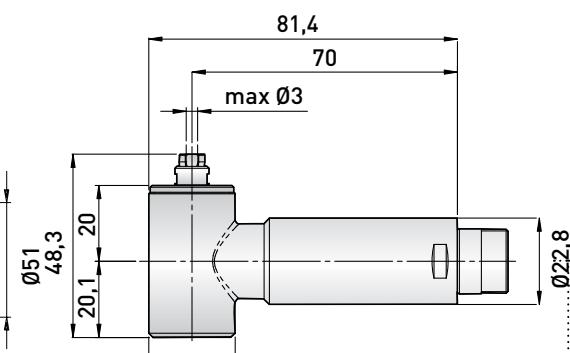
Weight / Peso

3.5

Diameter without tool with RA-100  
Diametro senza utensile con RA-100

RPM max. output  
Max. Velocità output

5.620 rpm



### RA-200

#### Technical data / Dati tecnici

RPM max. input / Max. Velocità input

15.000

Rt. reduction / Rt. in riduzione

1/1,5

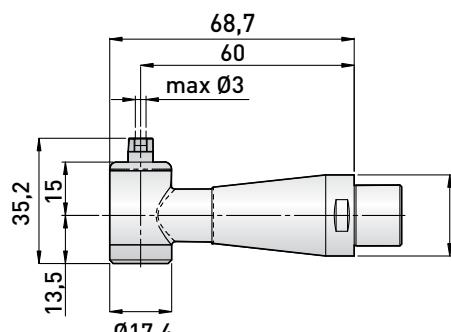
Weight / Peso

Kg 3,5

Diameter without tool with RA-200  
Diametro senza utensile con RA-200

RPM max. output  
Max. Velocità output

10.000 rpm



### IC-300

#### Technical data / Dati tecnici

RPM max. input / Max. Velocità input

15.000

Rt. reduction / Rt. in riduzione

3/4

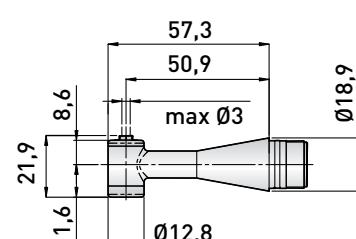
Weight / Peso

Kg 3

Diameter without tool with IC-300  
Diametro senza utensile con IC-300

RPM max. output  
Max. Velocità output

11.250 rpm



### MFC-300 S

#### Technical data / Dati tecnici

RPM max. input / Max. Velocità input

15.000

Rt. reduction / Rt. in riduzione

1/1

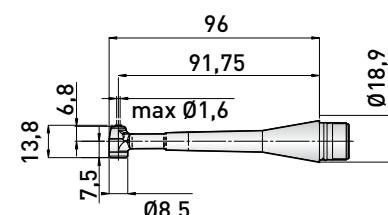
Weight / Peso

Kg 3

Diameter without tool with MFC-300 S  
Diametro senza utensile con MFC-300 S

RPM max. output  
Max. Velocità output

15.000 rpm



#### SPINDLE RUNOUT

Precisione del Mandrino | 0,00008 inch.  
Spindle accuracy | 0,002 mm



#### COOLANT OPTION

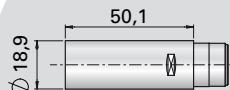
Consentito usare refrigerante esterno durante la lavorazione.

*It is possible to use external coolant during the machining.*

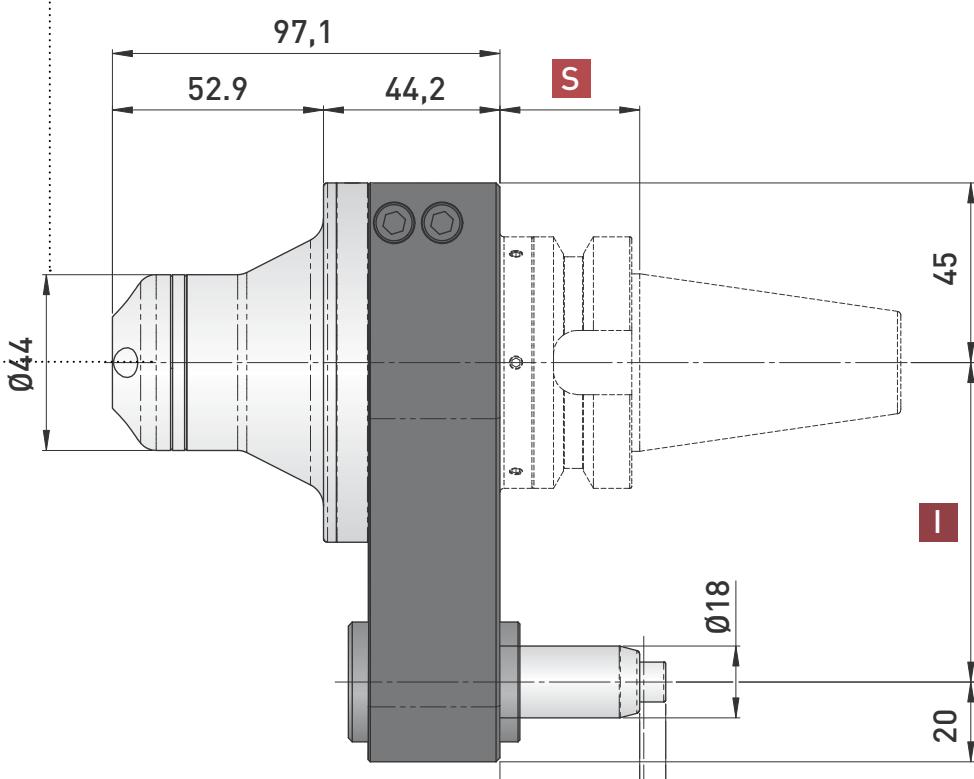


#### COLLET

RA-100 | mm | CHS: Ø 3 mm every 1 mm Ø 3mm  
RA-200 | mm | CHS: Ø 3 mm, 2,35 every 1mm and Ø 2,35, Ø 3,175  
IC-300 | mm | CHC: Ø 3 mm, Ø 2,35mm, Ø 1,6 mm, Ø 2,00mm and Ø 3,175 mm  
MFC-300S | mm | K252 Ø 1,6mm

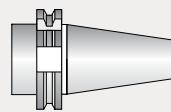
**CN-01**

*Extension between spindle and heads /  
Prolunga da inserire tra il manipolo e la testa*

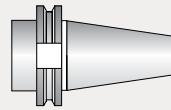


**OPTIONAL DRIVE SHANK\***  
*Non interchangeable input drive shank  
Coni non intercambiabili*

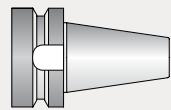
DIN-69871  
ISO 40/50



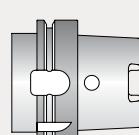
CAT  
40/50



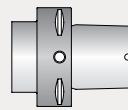
MAS-BT  
40/50



HSK  
63/80/100



CAPTO  
C6/C8



Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-110	65-80-(110*)	80-110	65-80-(110*)	80-110	65-80-(110*)	80-110
S	35	35	35	41	42	45	38	40

\*optional

**ACCESSORIES / ACCESSORI**

*Retaining block /  
Tassello di ritegno /  
Stop-Block*

	RA-100	RA-200	IC-300	MFC-300 S
Retaining block / Tassello di ritegno	ø 18 mm	ø 18 mm	ø 18 mm	ø 18 mm
Extension / Prolunga	CN-01	CN-01	CN-01	CN-01



**NOT INCLUDED / NON INCLUSO**

# LINEA ALUMINUM



Le teste della **linea Aluminium** sono state studiate con **materiali più leggeri e con dimensioni esterne ridotte** in modo da contenere al massimo il peso, pur mantenendo le caratteristiche di qualità e affidabilità tipici delle teste Alberti. Le teste della linea Aluminium sono particolarmente **adatte ad essere montate su macchine leggere e di piccole dimensioni** con coni ISO BT 30 e 40 che hanno una limitazione di peso al cambio utensile.

*The heads of the series **Aluminium** have been developed with **lighter materials and reduced overall dimensions** compared to the standard offering, in order to reduce the weight as much as possible, thus keeping the same characteristics of quality and reliability. The line of heads are suitable for all those **lighter and smaller machines** with ISO BT 30 and 40 whose toolchanger can only handle limited weight.*

## STOP BLOCK customizzati

Per macchine BT-30 / For BT-30 machines

FANUC ROBODRILL



59516006

I 65  
P 24

BROTHER S2D



59516003

I 80  
P 24

BROTHER TC-32



59516008

I 80  
P 30

BROTHER R450X1-R650X1



59516009

I 50  
P 24

BROTHER S500-S700-S1000-W1000



59516010

I 80  
P 25,75

DMG MORI MILLTAP 700 - DMP70



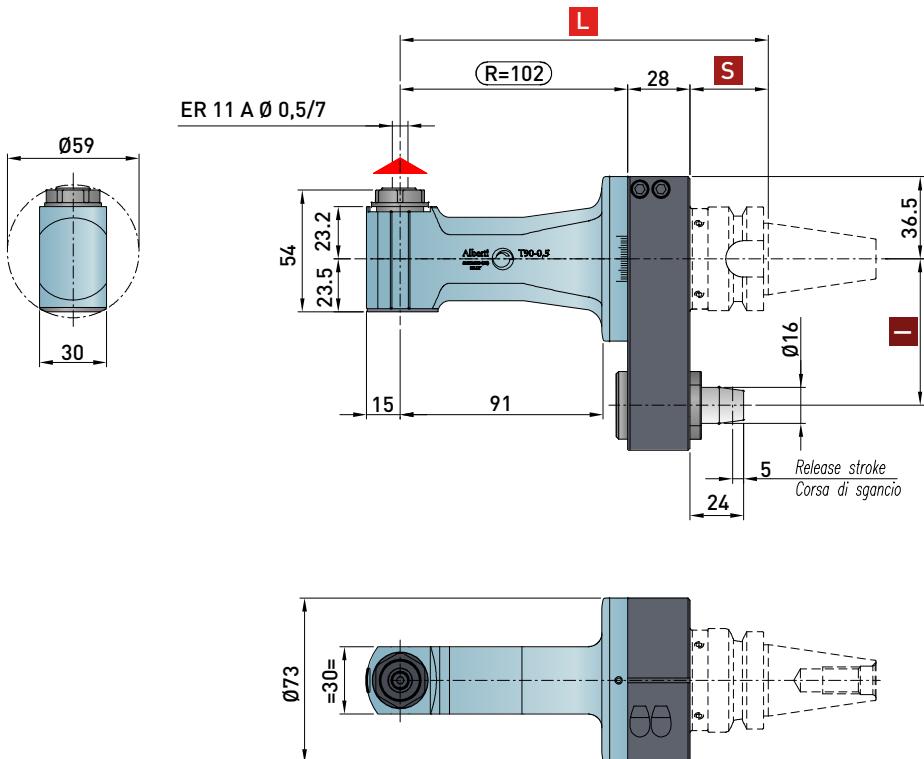
59516007

I 65  
P 24

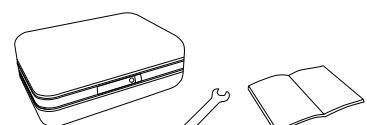
# T90cn-0.5M ALUMINUM

**ACT9005C.ALU**
**Technical data**

Caratteristiche tecniche


 Ratio  
Rapporto  
**1:1**
 RPM  
Velocità  
**8.000 min<sup>-1</sup>**
 Max. axial load  
Max. carico assiale  
**150 N**
 Torque  
Momento torcente  
**10 Nm**
 Weight  
Peso  
**2.7 kg**
 Tapping  
Maschiatura  
**Max. M5**
 Collet  
Pinza  
**ERAX-11 (Ø 0,5/7 mm)**
 Shank  
Cono  
**ISO 30DIN-69871/  
BT-30**
**\* STANDARD EQUIPMENT**  
includes:

Retaining block / Tassello di ritegno / Stop-Block

**NOT INCLUDED - NON INCLUSO**
 Direction of rotation opposite to machine spindle / senso di rotazione contrario al mandrino


	FANUC ROBODRILL	BROTHER S2D	BROTHER TC-32	BROTHER R450X1 R650X1	BROTHER S500 S700 S1000 W1000	DMG MORI MILLTAP 700
I	65	80	80	50	80	65
P	24	24	30	24	25,75	24
L	165	165	165	165	165	165

Dual contact spindles available / Disponibilità coni a doppio contatto

## Option / Opzione

**AIR/OIL**Air / Oil lubrication  
Lubrificazione aria / olio

bar max

**12**Coolant through pin  
Refrigerante attraverso il perno

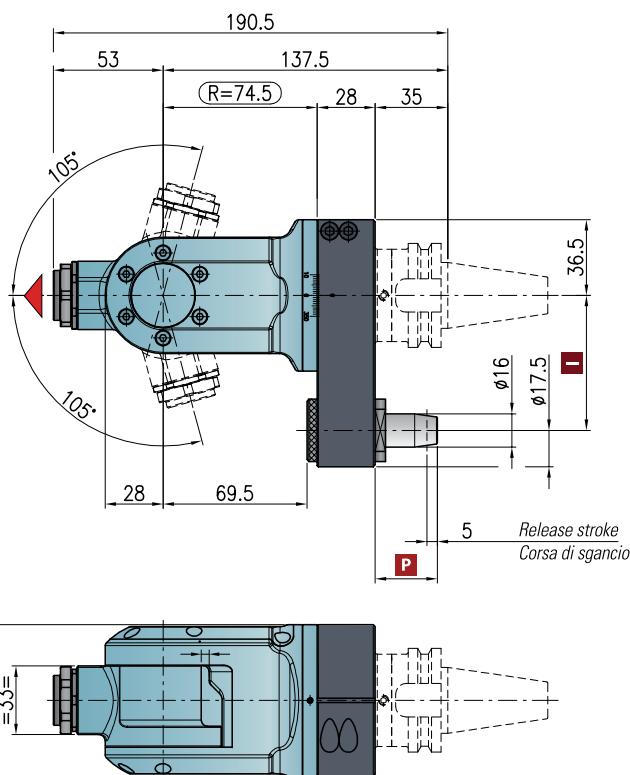
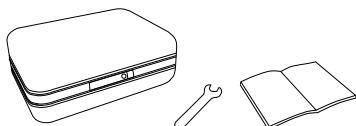
# TCUcn-0.5M ALUMINUM

ACTCU05C.ALU

**Technical data**

Caratteristiche tecniche

	Ratio Rapporto <b>1:1.5 SPEEDER</b>
	RPM Velocità <b>6.000 min<sup>-1</sup> OUTPUT</b>
	Max. axial load Max. carico assiale <b>200 N</b>
	Torque Momento torcente <b>10 Nm</b>
	Weight Peso <b>2.8 kg</b>
	Tapping Maschiatura <b>Max. M5</b>
	Collet Pinza <b>ERAX-11 (ø 0,5/7 mm)</b>
	Shank Cono <b>ISO 30DIN-69871/ BT-30</b>


**\* STANDARD EQUIPMENT**  
includes:


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO

▲ Direction of rotation opposite to machine spindle / senso di rotazione contrario al mandrino

FANUC ROBODRILL	BROTHER S2D	BROTHER TC-32	BROTHER R450X1 R650X1	BROTHER S500 S700 S1000 W1000	DMG MORI MILLTAP 700
I 65	80	80	50	80	65
P 24	24	30	24	25,75	24

Dual contact spindles available / Disponibilità coni a doppio contatto

## Option / Opzione



bar max

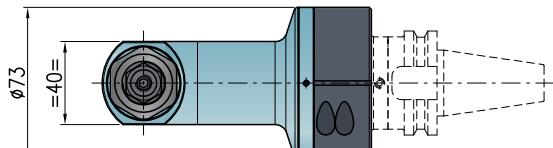
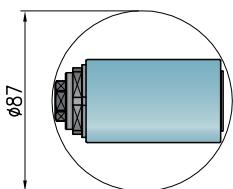
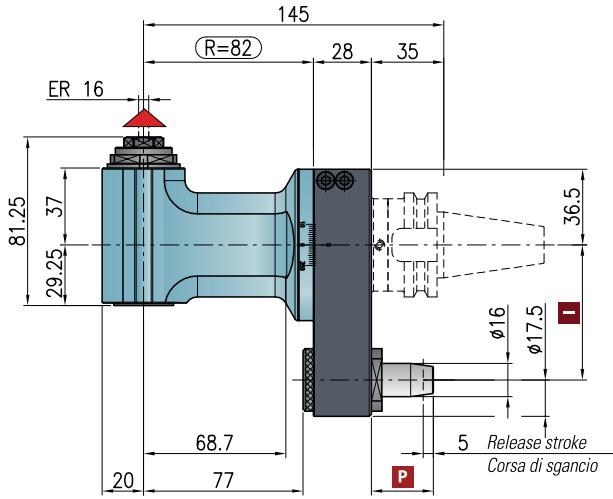
12

Coolant through pin  
Refrigerante attraverso il perno

# T90cn-1.5M ALUMINUM

**ACT9015C.ALU**
**Technical data**

Caratteristiche tecniche



Ratio

Rapporto

1:1

RPM

Velocità

 8.000 min<sup>-1</sup>

Max. axial load

Max. carico assiale

250 N

Torque

Momento torcente

15 Nm

Weight

Peso

2.9 kg

Tapping

Maschiatura

Max. M6

Collet

Pinza

ER 16A (ø 1-10 mm)

Shank

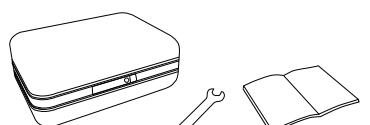
Cono

 ISO 30DIN-69871/  
BT-30

**\* STANDARD EQUIPMENT**  
 includes:

Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



Internal coolant / Possibilità refrigerante

 Direction of rotation opposite to machine spindle / senso di rotazione contrario al mandrino

FANUC ROBODRILL	BROTHER S2D	BROTHER TC-32	BROTHER R450X1 R650X1	BROTHER S500 S700 S1000 W1000	DMG MORI MILLTAP 700
I 65	80	80	50	80	65
P 24	24	30	24	25,75	24

Dual contact spindles available / Disponibilità coni a doppio contatto

**Option / Opzione**

**AIR/OIL**

 Air / Oil lubrication  
 Lubrificazione aria / olio


bar max

40

 Coolant through spindle  
 Refrigerante attraverso il cono



# LINEA HIGH SPEED

## MOLTIPLICATORE SPINDLE SPEEDER



MOLTIPLICATORE MECCANICO  
MECHANICAL SPINDLE SPEEDER  
Max 25.000 RPM

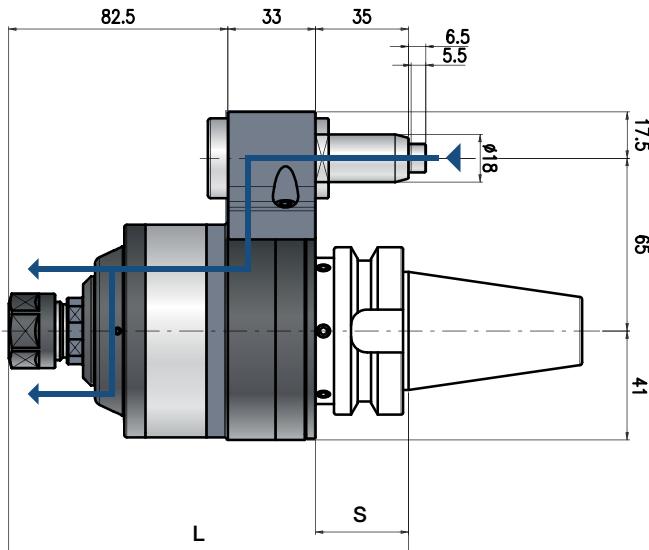


MOLTIPLICATORE AD ARIA  
AIR DRIVEN SPEEDER  
Max 60.000 RPM

MOLTIPLICATORE  
ELETTRICO  
ELECTROSPINDLE  
Max 80.000 RPM



# MOLTIPLICATORE SPEEDER ACWSPEED



## Technical data Caratteristiche tecniche

	Ratio Rapporto <b>1:5</b>
	RPM Velocità <b>25.000 min<sup>-1</sup></b>
	Max. axial load Max. carico assiale <b>60 N</b>
	Torque Momento torcente <b>4 Nm</b>
	Weight Peso <b>4 kg</b>
	Collet Pinza <b>ER-16 ø 1/10 mm</b>

\* STANDARD EQUIPMENT  
includes:

Corpo principale con sistema di raffreddamento ad aria  
Main body with air-water cooling system

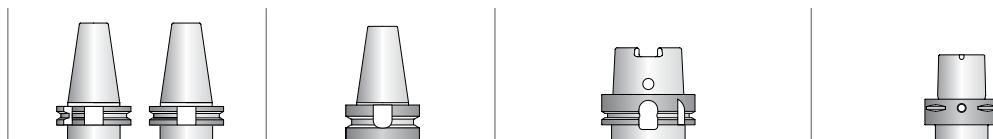
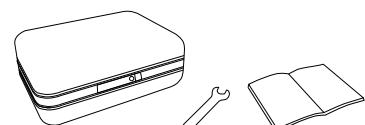
Fori per raffreddamento ad aria o acqua  
Bores for air-water cooling system

Entrata aria acqua  
Air-coolant input



Pinza ER 16  
ER 16 collet

Gruppo perno modulare  
Interchangeable pitchdimension



Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO	
Size / Grandezza	40-50	40-50	63-80	100	C6	C8
I	80-100	80-100	80-100	80-100	80-100	80-100
S	35	41	42	45	38	40
L	150.5	156.5	157.5	160.5	153.5	155.5

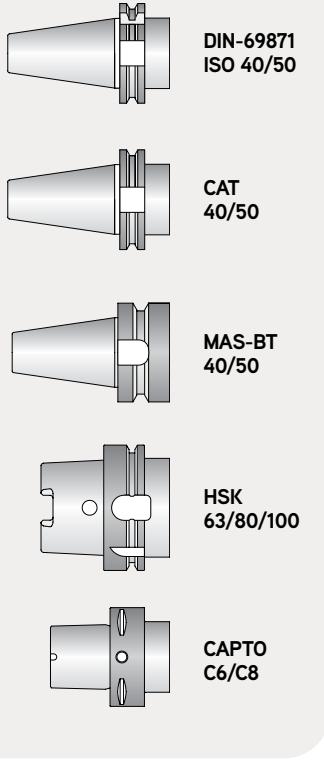
\*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

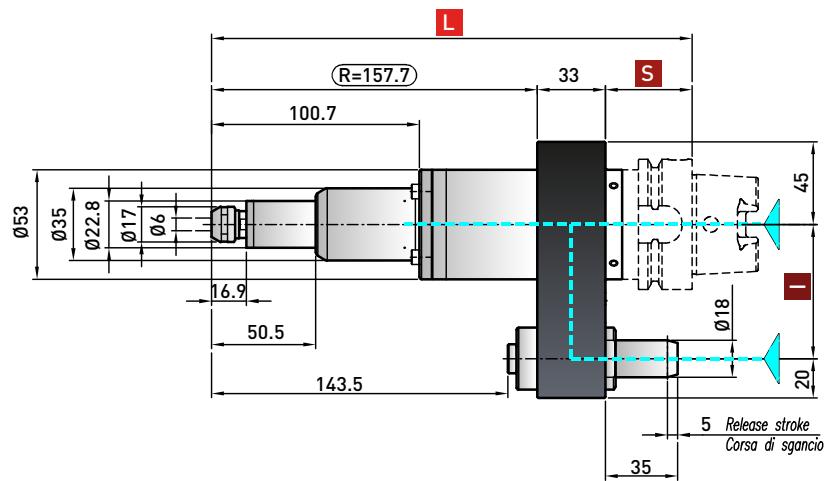


# Teste con **MOTORE AD ARIA**

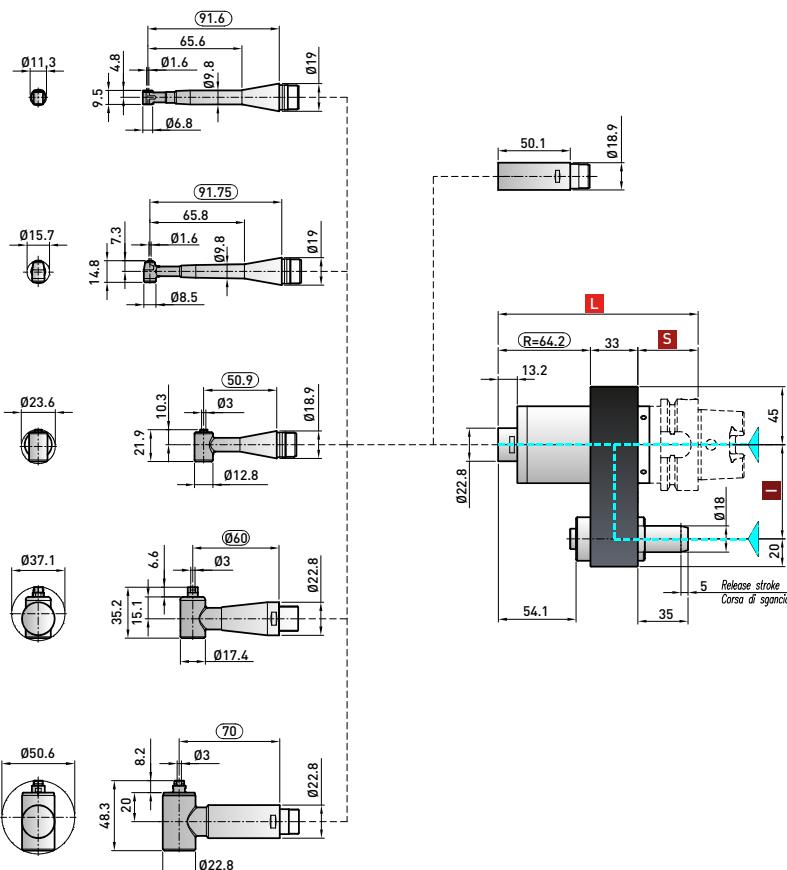
## *Air Driven angle heads*



## Turboflex 30.000 RPM AXIAL



# Turboflex 30.000 RPM RADIAL



#### *Air line kit / Filtro regolatore aria*



*Retaining block /  
Tassello di ritegno /  
**Stop-Block***



**NOT INCLUDED / NON INCLUSO**

# DATI TECNICI

## Technical Data

### NR-303

#### Technical data / Dati tecnici

RPM max. / Max. Velocità	min <sup>-1</sup>	30.000 ± 10%
Type motor / Tipo di motore		AM-310
Power / Potenza	W	108
Air pressure / Pressione aria	bar	max. 6 (max. 90 Psi)
Air consumption / Consumo aria	Nl/min	226
Weight / Peso	Kg	4

Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-110	65-80-(110*)	80-110	65-80-(110*)	80-110	65-80-110	80-110
S	35	35	35	41	42	42	38	40

\*optional



#### COLLET

NR-303

mm

CHK: ø 0,5 - max 6mm every 0,1



#### COOLANT OPTION

Consentito usare refrigerante esterno durante la lavorazione.

*It is possible to use external coolant during the machining.*



#### SPINDLE RUNOUT

Spindle accuracy  
*Precisione del Mandrino*

0,002 mm  
0,00008 inch.



È severamente vietato far ruotare il mandrino macchina causa danneggiamento della testa

*It is strictly forbidden to rotate the machine spindle as it may cause damage to the head*

### RA-100

### RA-200

### IC-300

#### Technical data / Dati tecnici

RPM max. / Max. Velocità	min <sup>-1</sup>	30.000 ± 10%	30.000 ± 10%	30.000 ± 10%
Type motor / Tipo di motore		AM-310	AM-310	AM-310
Power / Potenza	W	108	108	108
Air pressure / Pressione aria	bar	max. 6 (max. 90 Psi)	max. 6 (max. 90 Psi)	max. 6 (max. 90 Psi)
Air consumption / Consumo aria	Nl/min	226	226	226
Output RPM / N° Giri in uscita	min <sup>-1</sup>	11.230 ± 10%	20.000 ± 10%	22.000 ± 10%
Rt. reduction / Rt. in riduzione		1/2,67	1/1,5	3/4
Weight / Peso	Kg	4	4	4

Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-110	65-80-(110*)	80-110	65-80-110	80-110	65-80-110	80-110
S	35	35	35	41	42	42	38	40

\*optional



#### COLLET

RA-100

mm

CH8: ø 0,8 ø 3 every 0,1 and ø 2,35 - ø 3,175



#### COLLET

RA-200

mm

CH8: ø 0,8 ø 3 every 0,1 and ø 2,35 - ø 3,175



#### COLLET

IC-300

mm

CH8: ø 0,8 ø 3 every 0,1 and ø 2,35 - ø 3,175



#### SPINDLE RUNOUT

Spindle accuracy  
*Precisione del Mandrino*

0,002 mm  
0,00008 inch.



#### COOLANT OPTION

Consentito usare refrigerante esterno durante la lavorazione.

*It is possible to use external coolant during the machining.*



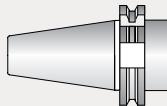
È severamente vietato far ruotare il mandrino macchina causa danneggiamento della testa

*It is strictly forbidden to rotate the machine spindle as it may cause damage to the head*

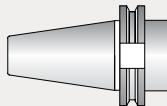
# Teste con MOTORE AD ARIA

## Air Driven angle heads

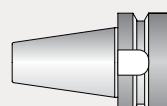
OPTIONAL DRIVE SHANK\*  
Non interchangeable  
input drive shank /  
Coni non intercambiabili



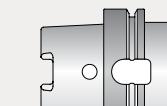
DIN-69871  
ISO 40/50



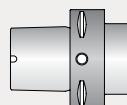
CAT  
40/50



MAS-BT  
40/50



HSK  
63/80/100



CAPTO  
C6/C8

Air line kit / Filtro regolatore aria

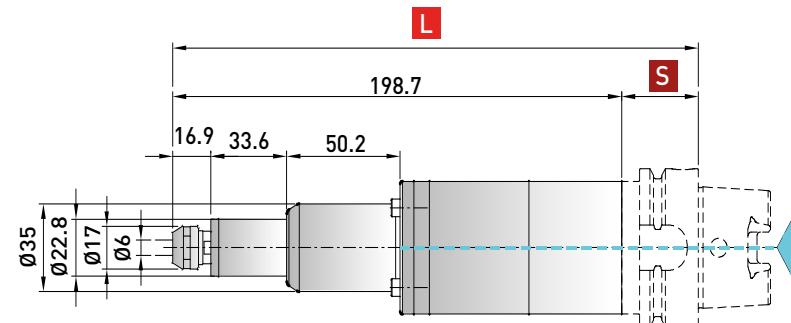


Retaining block /  
Tassello di ritegno /  
Stop-Block

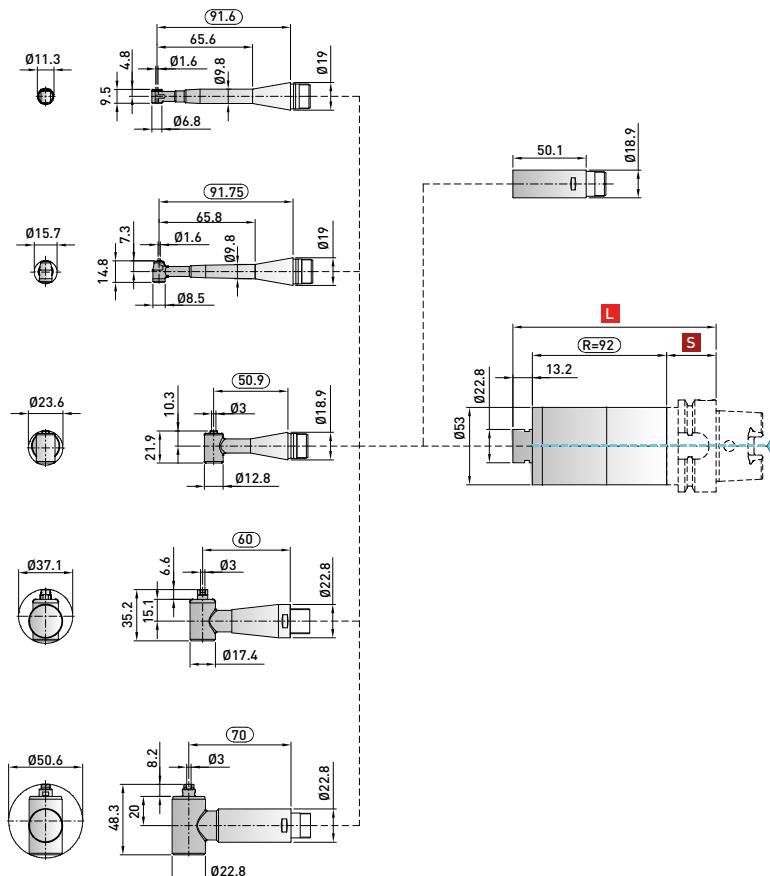


NOT INCLUDED / NON INCLUSO

## Turboflex 30.000 RPM AXIAL



## Turboflex 30.000 RPM RADIAL



# DATI TECNICI

## Technical Data

### NR-303

#### Technical data / Dati tecnici

RPM max. / Max. Velocità	min <sup>-1</sup>	30.000 ± 10%
Type motor / Tipo di motore		AM-310
Power / Potenza	W	108
Air pressure / Pressione aria	bar	max. 6 (max. 90 Psi)
Air consumption / Consumo aria	Nl/min	226
Weight / Peso	Kg	4

Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-110	65-80-(110*)	80-110	65-80-(110*)	80-110	65-80-110	80-110
S	35	35	35	41	42	42	38	40

\*optional



#### COLLET NR-303

mm

CHK: ø 0,5 - max 6mm every 0,1



#### COOLANT OPTION

Consentito usare refrigerante esterno durante la lavorazione.

*It is possible to use external coolant during the machining.*



#### SPINDLE RUNOUT

Spindle accuracy | 0,002 mm  
*Precisione del Mandrino | 0,00008 inch.*



**È severamente vietato far ruotare il mandrino macchina causa danneggiamento della testa**  
*It is strictly forbidden to rotate the machine spindle as it may cause damage to the head*

### RA-100

### RA-200

### IC-300

#### Technical data / Dati tecnici

RPM max. / Max. Velocità	min <sup>-1</sup>	30.000 ± 10%	30.000 ± 10%	30.000 ± 10%
Type motor / Tipo di motore		AM-310	AM-310	AM-310
Power / Potenza	W	108	108	108
Air pressure / Pressione aria	bar	max. 6 (max. 90 Psi)	max. 6 (max. 90 Psi)	max. 6 (max. 90 Psi)
Air consumption / Consumo aria	Nl/min	226	226	226
Output RPM / N° Giri in uscita	min <sup>-1</sup>	11.230 ± 10%	20.000 ± 10%	22.000 ± 10%
Rt. reduction / Rt. in riduzione		1/2,67	1/1,5	3/4
Weight / Peso	Kg	4	4	4

Spindle / Cono	DIN 69871-CAT		MAS-BT		HSK		CAPTO	
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8
I	65-80-(110*)	80-110	65-80-(110*)	80-110	65-80-110	80-110	65-80-110	80-110
S	35	35	35	41	42	42	38	40

\*optional



#### COLLET RA-100

mm

CH8: ø 0,8 ø 3 every 0,1 and ø 2,35 - ø 3,175



#### COLLET RA-200

mm

CH8: ø 0,8 ø 3 every 0,1 and ø 2,35 - ø 3,175



#### COLLET IC-300

mm

CH8: ø 0,8 ø 3 every 0,1 and ø 2,35 - ø 3,175



#### SPINDLE RUNOUT

Spindle accuracy | 0,002 mm  
*Precisione del Mandrino | 0,00008 inch.*



#### COOLANT OPTION

Consentito usare refrigerante esterno durante la lavorazione.

*It is possible to use external coolant during the machining.*



**È severamente vietato far ruotare il mandrino macchina causa danneggiamento della testa**

*It is strictly forbidden to rotate the machine spindle as it may cause damage to the head*

# TURBOFLEX con flangia indexata

## Turboflex with indexing system

Il mandrino può essere posizionato su 360° grazie all'indexaggio dell'asse C della macchina, mentre la rotazione è assicurata dalla presenza del motore ad aria.

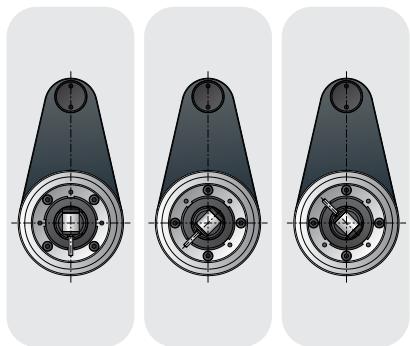
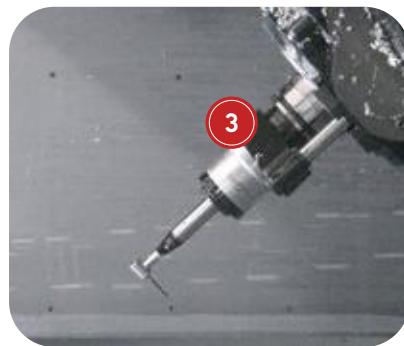
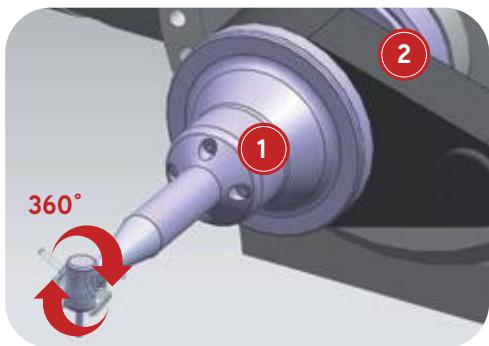
The cutting tool can be positioned over 360 degrees thanks to the indexing of the C axis of the machine while the rotation is given by the air motor mounted inside the head.

**1** Questa parte ruota.  
This portion rotates.

**2** Questa parte resta ferma.  
This portion remains fixed.

**3** L'aria garantisce la rotazione del motore nel corpo.  
Air input from the machine spindle gives the rotation to the motor inside of the body.

Il sistema di indexaggio permette il posizionamento del mandrino su 360°.  
The indexing system allows to self-position the tool without additional positioning.



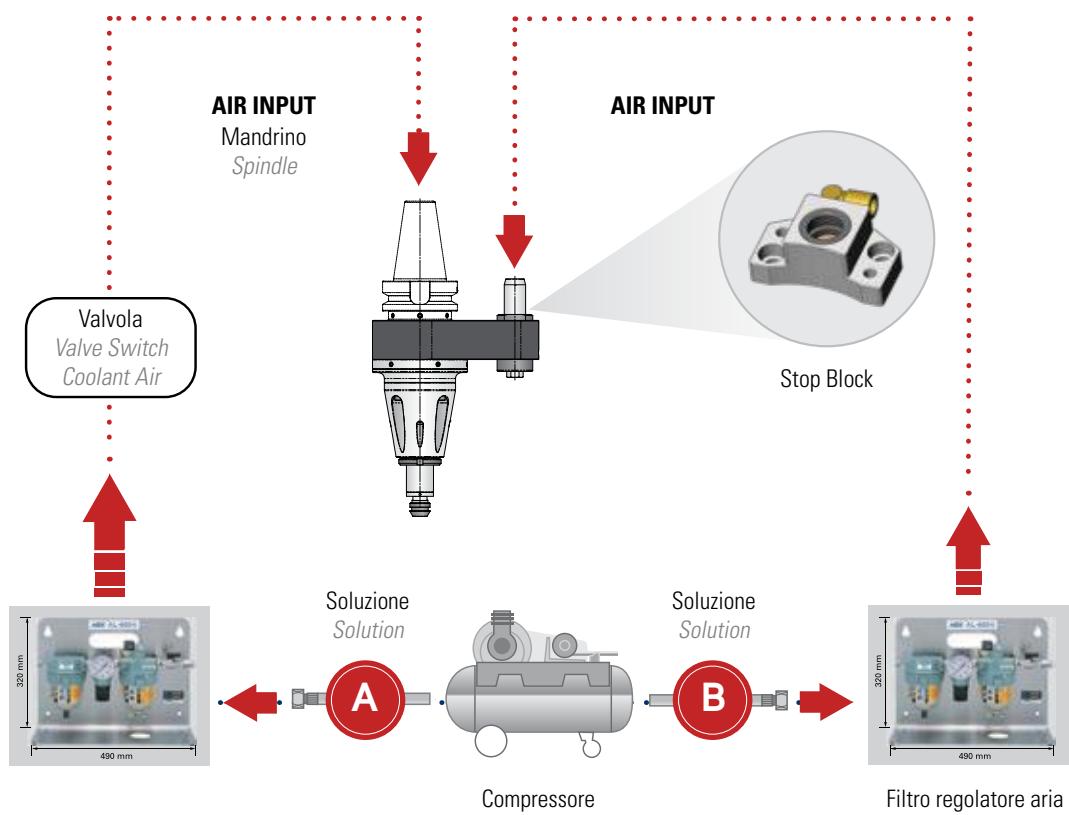
## Come funziona TURBOFLEX

### How it works



È severamente vietato far ruotare il mandrino macchina causa danneggiamento della testa.

It is strictly forbidden to rotate the machine spindle as it may cause damage to the head.







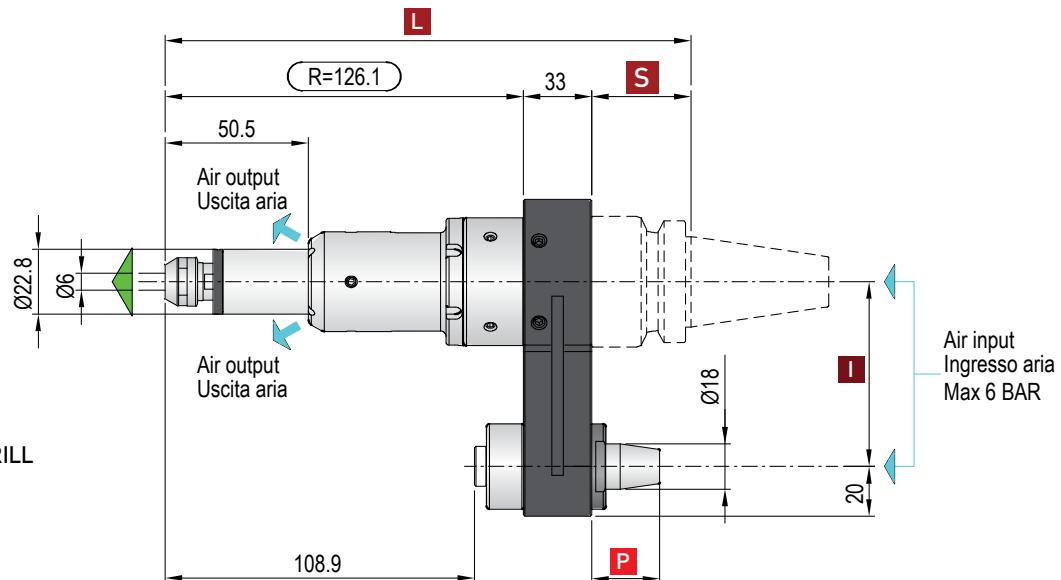
# TURBODRILL NR-303

Azionamento con motore ad aria / Driven through air motor



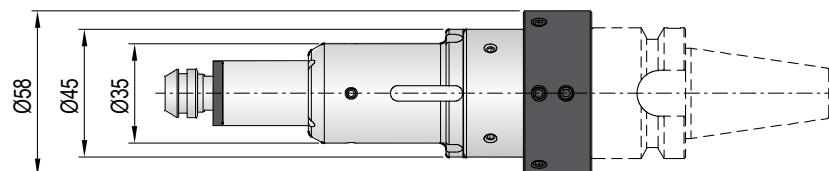
Il mandrino macchina non deve assolutamente girare

Machine spindle must not rotate



Possibilità di avere TURBODRILL  
senza flangia e perno  
con aria dal cono

Possibility of order TURBODRILL  
without flange and pin  
with air through spindle



Air line kit / Filtro regolatore aria



#### STANDARD EQUIPMENT INCLUDES:

- Testa / Manopolo NAKANISHI / Pinza Ø 3 mm / Chiavi di servizio / Libro istruzioni / Bauletto
- NAKANISHI Kit / Angle head / Collet Ø 3 mm / Wrenches / Instruction book / Case

## PERFORMANCE / PRESTAZIONI

## NR-303

#### Technical data / Dati tecnici

RPM max. / Max. Velocità	min <sup>-1</sup>	30.000 ± 10%
Type motor / Tipo di motore	W	AM-310
Power / Potenza	bar	108
Air pressure / Pressione aria	Nl/min	max. 6 (max. 90 Psi)
Air consumption / Consumo aria	Kg	226
Weight / Peso		4



#### COLLET

NR-303

mm

CHK: ø 0,5 - max 6mm every 0,1



#### COOLANT OPTION

Consentito usare refrigerante esterno  
durante la lavorazione.

It is possible to use external coolant  
during the machining.

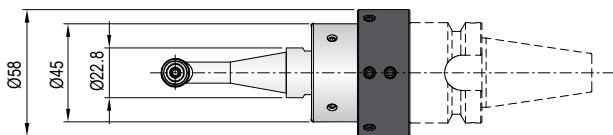
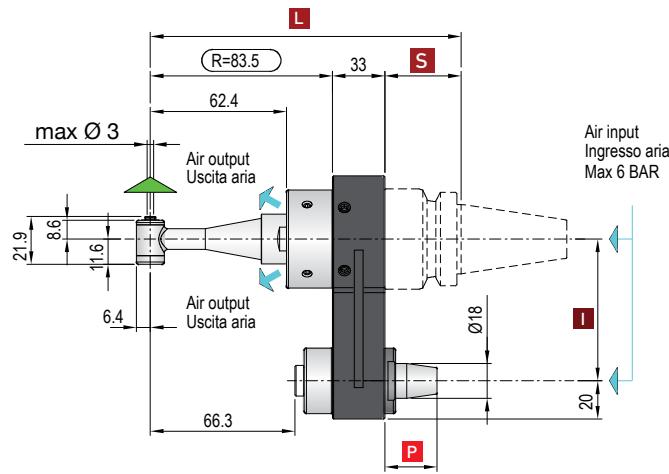
# TURBODRILL

Azionamento con motore ad aria / Driven through air motor

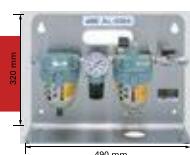


Il mandrino macchina non deve assolutamente girare  
Machine spindle must not rotate

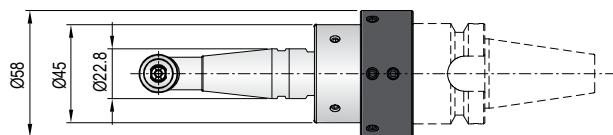
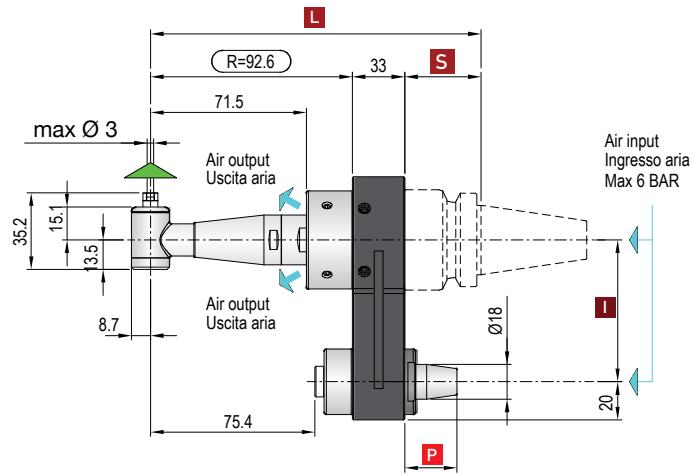
## Turbodrill RADIALE IC 300 NEO



Air line kit / Filtro regolatore aria



## Turbodrill RADIALE RA 200 NEO



### STANDARD EQUIPMENT INCLUDES:

- Testa / Manopolo NAKANISHI / Pinza Ø 3 mm / Chiavi di servizio / Libro istruzioni / Bauletto
- NAKANISHI Kit / Angle head / Collet Ø 3 mm / Wrenches / Instruction book / Case

### PERFORMANCE / PRESTAZIONI

**IC-300**

**RA-200**

#### Technical data / Dati tecnici

RPM max. / Max. Velocità	min <sup>-1</sup>	30.000 ± 10%	30.000 ± 10%
Type motor / Tipo di motore		AM-310	AM-310
Power / Potenza	W	108	108
Air pressure / Pressione aria	bar	max. 6 (max. 90 Psi)	max. 6 (max. 90 Psi)
Air consumption / Consumo aria	Nl/min	226	226
Output RPM / N° Giri in uscita	min <sup>-1</sup>	22.000 ± 10%	20.000 ± 10%
Rt. reduction / Rt. in riduzione		3/4	1/1,5
Weight / Peso	Kg	4	4



**COLLET**  
RA-200  
mm  
CH8: ø 0,8 ø 3 every 0,1  
and ø 2,35 - ø 3,175



**COLLET**  
IC-300  
mm  
CH8: ø 0,8 ø 3 every 0,1  
and ø 2,35 - ø 3,175



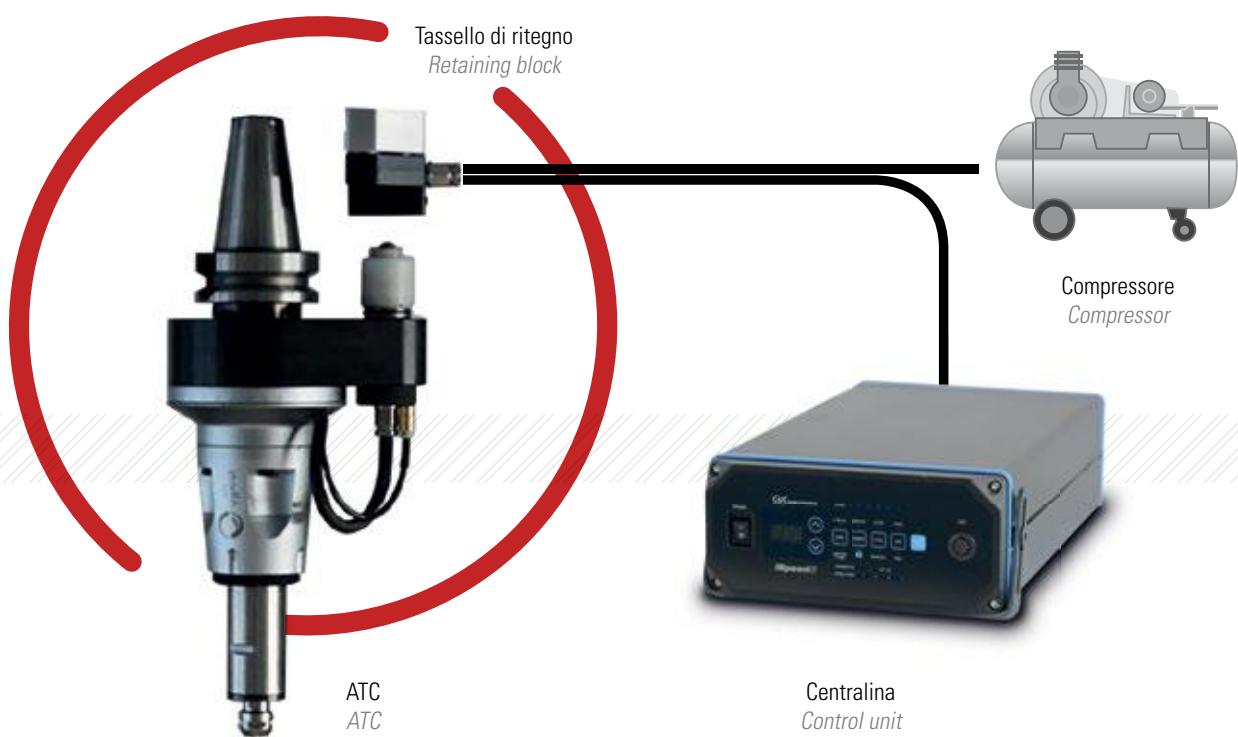
**COOLANT OPTION**  
Consentito usare refrigerante esterno  
durante la lavorazione.  
It is possible to use external coolant  
during the machining.

# LINEA HIGH SPEED *LEONARDO SYSTEM*

**Leonardo** è un elettromandrino con cambio utensile automatico che viene montato sul mandrino macchina tramite Stop Block – da cui prende l'alimentazione – per poi essere scambiato automaticamente nel magazzino utensile. I grossi vantaggi sono la possibilità di regolare la velocità fino a 80.000RPM, l'integrazione completa con la macchina.

*Leonardo System* is an electrospindle with automatic tool change suitable to be mounted on the machine spindle with a Stop Block connected to the controller unit and power supply. Leonardo can be easily exchanged by the toolchanger and the main advantages are the possibility to adjust the RPM up to 80.000RPM and the interface with the machine.

## Schema di **MONTAGGIO** *Assembly Scheme*



# Leonardo **PLUS**

## Leonardo System's Plus



Motori brushless a corrente continua che garantiscono una maggior durata e non necessitano di manutenzione

*Brushless DC motors for longer duty cycle with no maintenance needed*



Velocità fino a 80.000 RPM regolabile

*Adjustable speed up to 80.000 RPM*



Tassello con contatti elettrici completamente protetti da trucioli e completamente pressurizzato - Inclusi 10 mt di cavo

*Stop Block with electric contacts completely protected from chips and pressurized - 10 mt cable included*



Centralina Nakanishi con regolazione di giri e sensore per arresto mandrino

*Nakanishi controller unit with adjustable RPM and sensor to stop machine spindle*



Nessuna dilatazione termica

*No thermal growth*



Cuscinetti ceramici per una miglior tenuta e precisione di lavorazione

*Ceramic bearings for a better performance and precision during machining*



Completemente integrato alla macchina utensile tramite codici M

*Completely integrated with the machine tool with M code*



Gestisce: START & STOP – Variazione RPM – WARNING e segnali allarme – senso di rotazione

*It can control: START & STOP signal – RPM adjustment – Warning and error signal – direction of rotation*



Sistema di frizione interna per prevenire danni al motore e al mandrino macchina

*Internal friction to prevent damage to the motor and machine spindle*



RUN OUT 1 MICRON



## LEONARDO SYSTEM

Solo su richiesta / only on request

ELECTROSPINDLE ATC 60

## Technical data

Caratteristiche tecniche

 Power  
Potenza  
**350 Watt**

 RPM up to  
Velocità fino a  
**60.000 min<sup>-1</sup>**

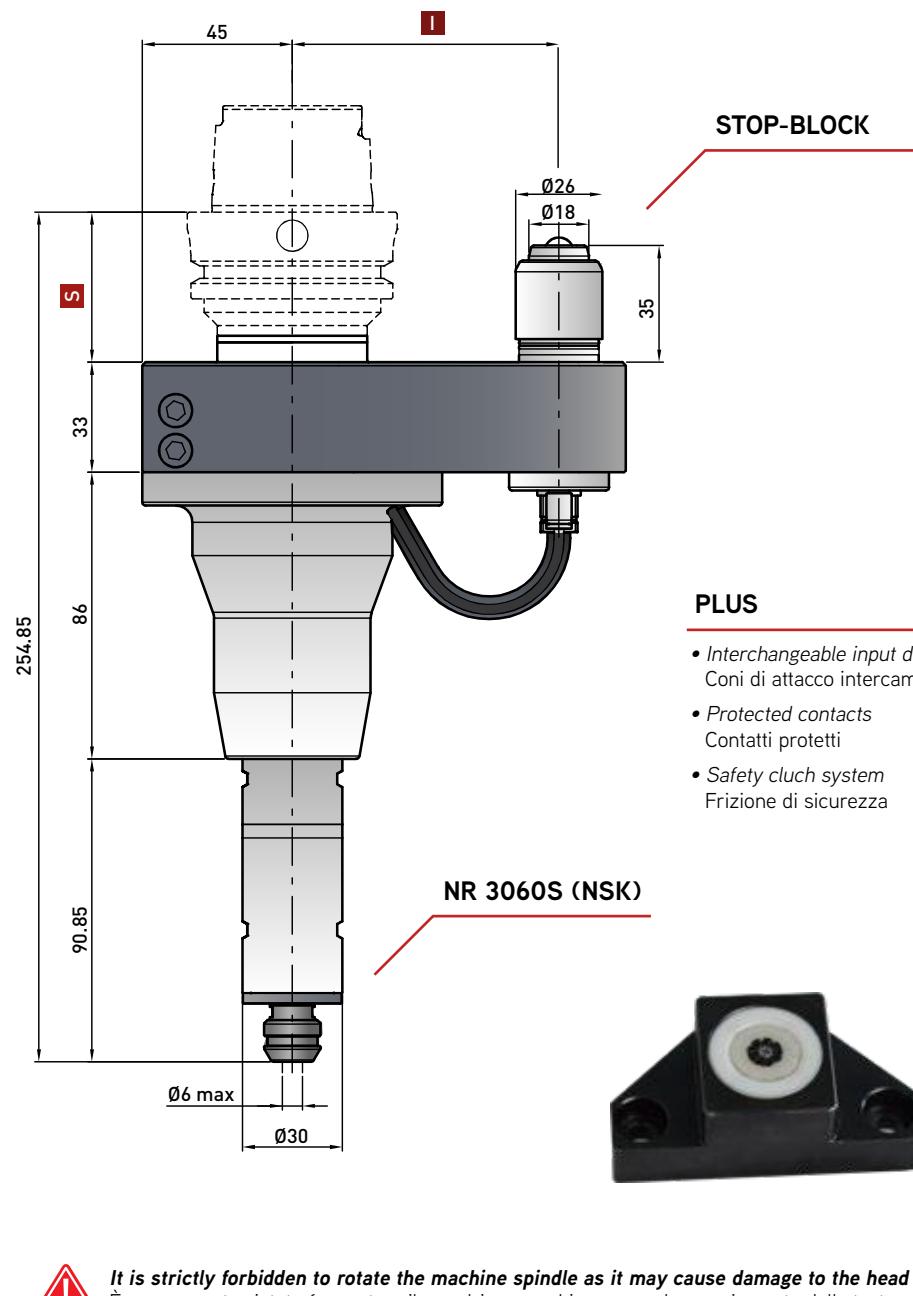
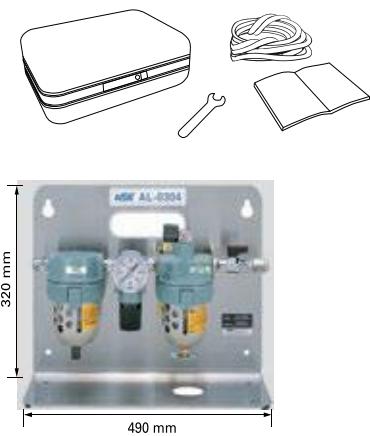
 Weight  
Peso  
**4.8 kg**

 Collet  
Pinza  
**6 mm CHK**  
**Ø 0,8 - Ø 6 mm**

 Spindle accuracy  
Precisione  
**0,002 mm**

 Controller unit  
Centralina  
**ISPEED5**

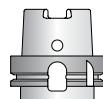
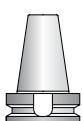
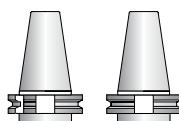
\* STANDARD EQUIPMENT  
includes:

**PLUS**

- Interchangeable input drive shank  
Coni di attacco intercambiabili
- Protected contacts  
Contatti protetti
- Safety clutch system  
Frizione di sicurezza



**It is strictly forbidden to rotate the machine spindle as it may cause damage to the head**  
È severamente vietato far ruotare il mandrino macchina causa danneggiamento della testa



Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO	
Size / Grandezza	50	50	63-80	100	C6	C8
I	80-110	80-110	80-110	80-110	80-110	80-110
S	35	42	42	45	38	40
L	160	166	167	170	163	165

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

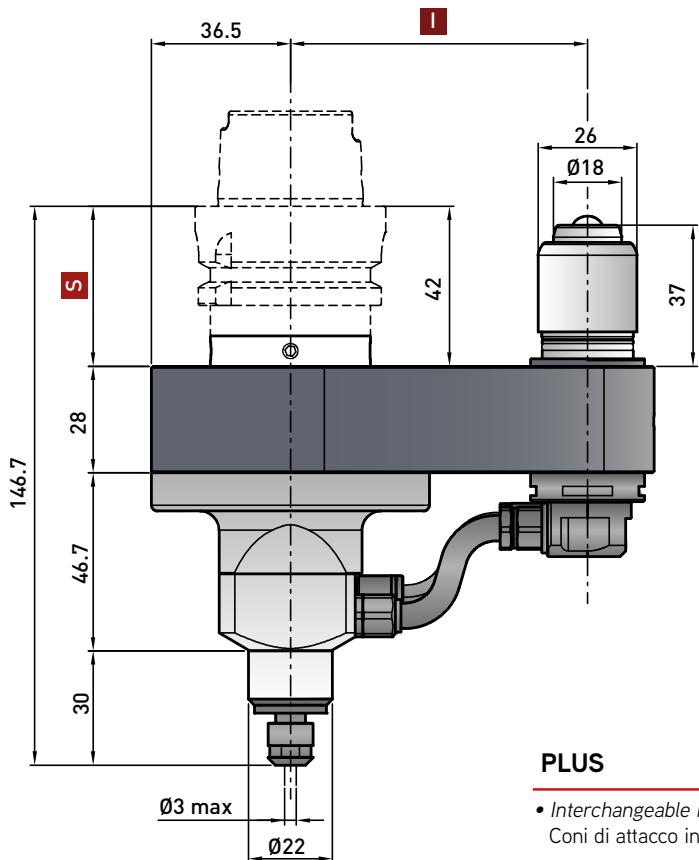
# LEONARDO SYSTEM

Solo su richiesta / only on request

## ELECTROSPINDLE ATC 80

### Technical data

Caratteristiche tecniche



 Power  
Potenza  
**130 Watt**

 RPM up to  
Velocità fino a  
**80.000 min<sup>-1</sup>**

 Weight  
Peso  
**3 kg**

 Collet  
Pinza  
**4 mm CHA  
Ø 0,8 - Ø 4 mm**

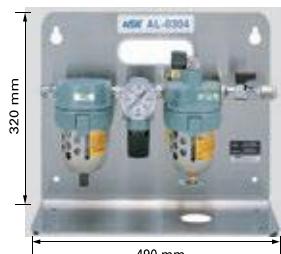
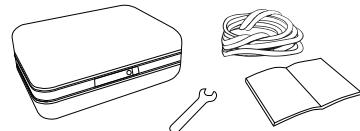
 Spindle accuracy  
Precisione  
**1 µ**

 Controller unit  
Centralina  
**ISPEED3**

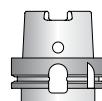
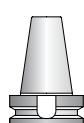
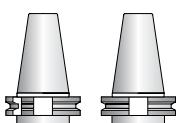
### PLUS

- Interchangeable input drive shank  
Coni di attacco intercambiabili
- Protected contacts  
Contatti protetti
- Safety clutch system  
Frizione di sicurezza

\* STANDARD EQUIPMENT includes:



**It is strictly forbidden to rotate the machine spindle as it may cause damage to the head**  
È severamente vietato far ruotare il mandrino macchina causa danneggiamento della testa



Spindle / Cono	DIN 69871-CAT	MAS-BT	HSK		CAPTO	
Size / Grandezza	50	50	63-80	100	C6	C8
I	80-110	80-110	80-110	80-110	80-110	80-110
S	35	42	42	45	38	40
L	160	166	167	170	163	165

Dual contact spindles available / Disponibilità coni a doppio contatto

\*optional

# ACCESSORI

## Accessories



**GHIERA**  
Clamping nut



**PINZA**  
Collet



**DISCHETTO DI TENUTA**  
Sealing disk



**CHIAVE PER  
GHIERA**  
Pin wrench



**CHIAVE DI  
CONTRASTO**  
Spanner

<b>ER-8 Serie 0.4</b>	ER-8 M	0,5 - 5,0	0,5 mm			30930800	40941700
	33212080			Ø Serraggio min   max	Incremento increase		
<b>ER-11 Serie 0.5</b>	UM/ER-11	0,5 - 7,0	0,5 mm			40941700	40927000
	33213110			Ø Serraggio min   max	Incremento increase		
<b>ER-16 Serie 1.5</b>	ER-16A	0,5 - 10,0	0,5 mm	2,5 - 10,0	0,5 mm	40941700	40932000
	43211161			Ø Serraggio min   max	Incremento increase		
<b>ER-20 TCU-1.5</b>	UM/ER 20	0,5 - 13,0	0,5 mm	2,5 - 13,0	0,5 mm	40930000	40932000
	33214200			Ø Serraggio min   max	Incremento increase		
<b>ER-25 Serie 2.5</b>	UM/ER 25	0,5 - 17,0	0,5 mm			40932500	40939000
	33214250			Ø Serraggio min   max	Incremento increase		
	IC/ER 25	0,5 - 17,0	0,5 mm	2,5 - 16,0	0,5 mm	40932500	40939000
<b>ER-32 Serie 3.5</b>	UM/ER 32	1,0 - 22,0	0,5 mm			40933200	40946000
	33214320			Ø Serraggio min   max	Incremento increase		
	IC/ER 32	1,0 - 22,0	0,5 mm	2,5 - 20,0	0,5 mm	40933200	40946000
<b>ER-40 Serie 4.5</b>	UM/ER 40	2,0 - 30,0	0,5 mm			30934000	40959000
	33214400			Ø Serraggio min   max	Incremento increase		
	IC/ER 40	2,0 - 30,0	0,5 mm	2,5 - 26,0	0,5 mm	30934000	40959000

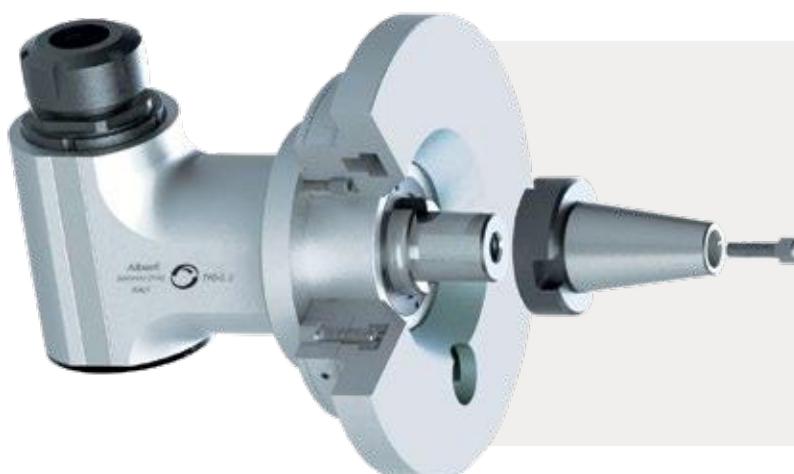


# LINEA MODULAR



Le teste della linea **MODULAR** sono adatte ad essere montate su **macchine utensili tradizionali da fissare al mandrino tramite apposita flangia**. Sono dotate di un cono intercambiabile, una flangia universale e la possibilità di avere alcuni moduli di prolunga per variarne la lunghezza. Per un corretto montaggio, è necessario realizzare una flangia di adattamento da inserire tra la testa e il mandrino.

*Angle heads of the **MODULAR** line are suitable to be mounted on **traditional machine tools and are attached to the spindle through a flange**. They are sold together with an interchangeable shank and a universal flange and they can extend the total length thanks to extension spacers. For a correct mounting, it is necessary to build an adapting flange to be screwed between the head and the machine spindle.*

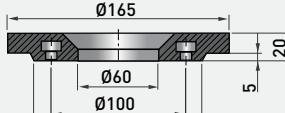
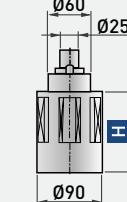
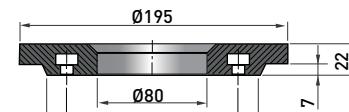
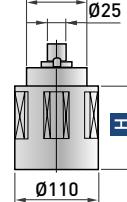
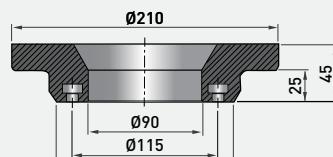
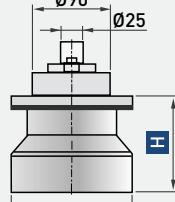
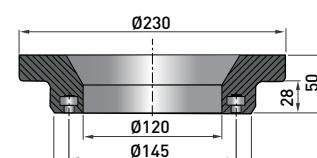
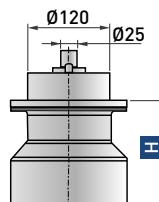


ESEMPIO DI  
MONTAGGIO IN MACCHINA  
*Example of mounting the head*

## Moduli di prolunga: **FLANGIA UNIVERSALE** Extension spacer: *UNIVERSAL FLANGE*

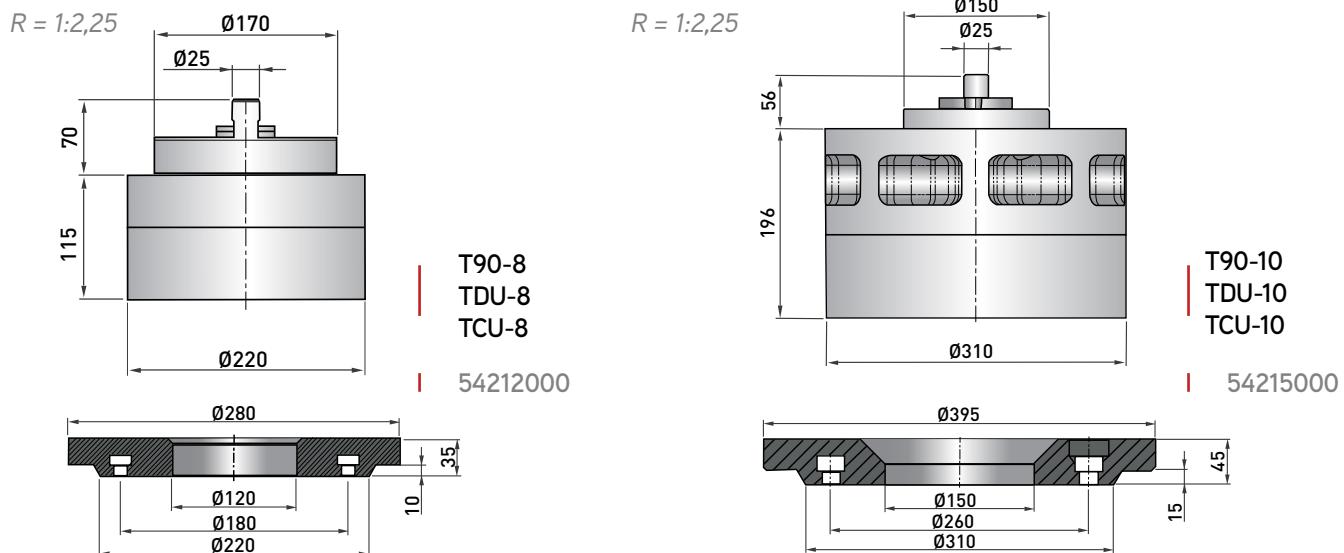
Un sistema modulare componibile, rende possibile variare la lunghezza del corpo testa aggiungendo l'elemento di prolunga. **Modulo, coni e flangia sono modulari e quindi intercambiabili** su tutti i corpi testa appartenenti allo stesso ordine di grandezza.

*The modular system makes it possible to extend the lenght 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.*

FLANGIA <i>Flange</i>	MODULI DI PROLUNGA <i>Extension Spacer</i>	H	CODICI <i>Part number</i>
<b>T90-0,4</b> <b>T90-0,5</b> <b>T90-1,5</b> <b>T90-2,5</b> <b>TCU-2,5</b> <b>TCU-3,5</b>	 54206000		55 mm   90006010 110 mm   90006A1100 150 mm   90006A1500 250 mm   90006A2500
<b>T90-3,5</b>	 54208000		55 mm   90008010 110 mm   90008A1100 150 mm   90008A1500 250 mm   90008A2500 360 mm   90008A3600 450 mm   90008A4500
<b>T90-4,5</b>	 54209001		110 mm   90009000 150 mm   90009050
<b>T90-5</b>	 54212004		150 mm   90012005

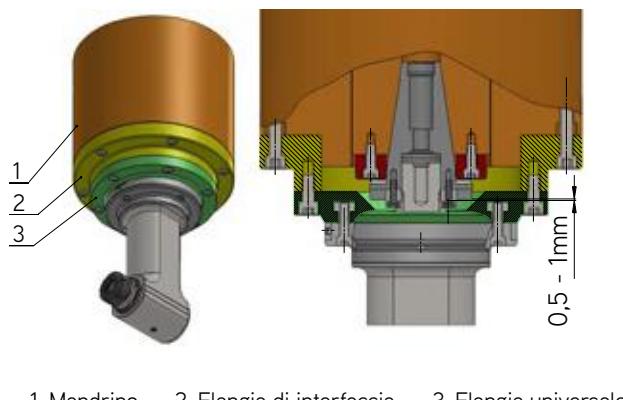
## MODULI DI PROLUNGA per teste linea P moltiplicati.

*Extension spacers for heads linea P with speed increase*



## Esempio di montaggio di una TESTA TIPO MODULAR

*Example of flange mounting for modular head*



1 Mandrino  
Spindle      2 Flangia di interfaccia  
Interface flange      3 Flangia universale  
Universal flange

Per il **corretto montaggio** della testa in macchina, una volta avvitato il cono e la flangia universale sulla testa, è **necessario realizzare un ulteriore flangia di adattamento** tra la testa e il mandrino della macchina seguendo attentamente le istruzioni sul libretto in dotazione.

*For a correct flange mounting on the machine, once you fix the shank and the universal flange on the head, it's necessary to make an adapting spacer between the head and the machine spindle and follow carefully the instruction on the given manual.*

Esempio di montaggio TESTA  
MODULAR con flangia universale  
standard e moduli di prolunga

*Example of flange mounting for MODULAR  
HEADS including extension spacers*



# T90-0.4C Neo

AMT9004C

**Technical data**

Caratteristiche tecniche



Ratio  
Rapporto  
**1:1**



RPM  
Velocità  
**10.000 min<sup>-1</sup>**



Max. axial load  
Max. carico assiale  
**100 N**



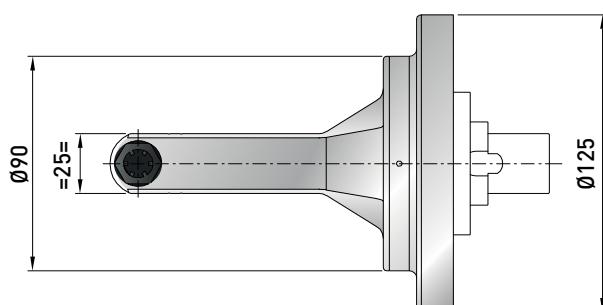
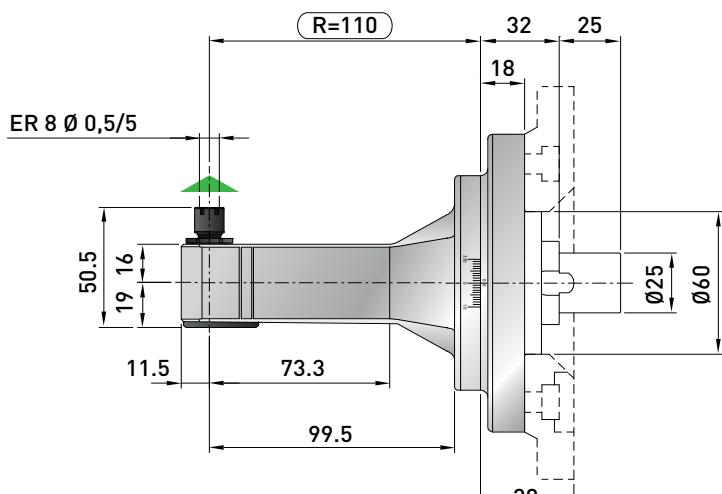
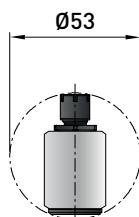
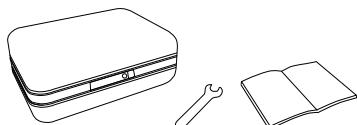
Torque  
Momento torcente  
**4 Nm**



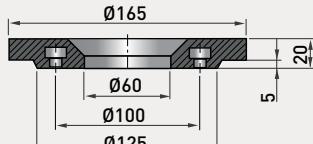
Weight  
Peso  
**4 kg**



Collet  
Pinza  
**ER-8 ( $\phi$  0,5/5 mm)**


**\* STANDARD EQUIPMENT**  
includes:


FLANGIA T90-0.4



Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

	DIN 69871-CAT	MAS-BT		CAPTO
Shank / Cono				

## Option / Opzione



bar max

**12**

Coolant through flange and output spindle  
Refrigerante attraverso la flangia e il mandrino di uscita

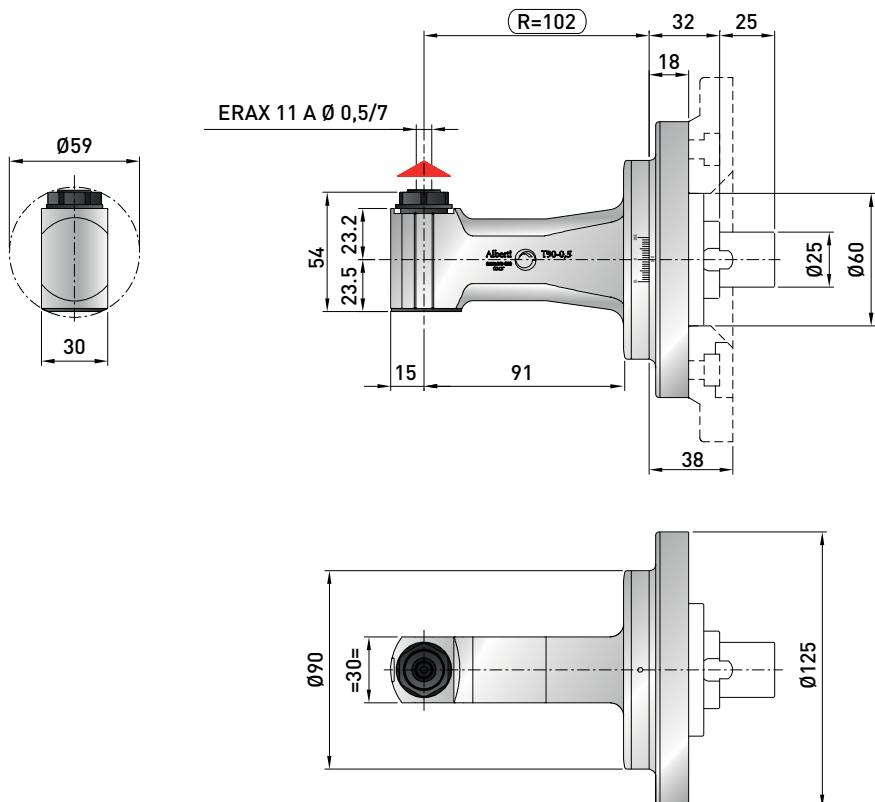
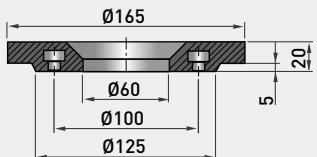
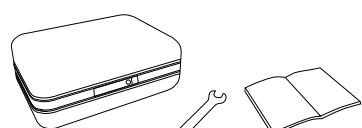
 $\emptyset$  mm max.**6**

Weldon output  
Weldon

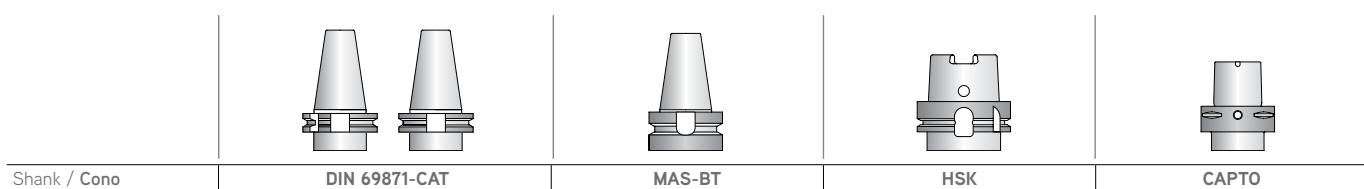
# T90-0.5C Neo

**AMT9005C**
**Technical data**

Caratteristiche tecniche


**FLANGIA T90-0.5**

**\* STANDARD EQUIPMENT**  
includes:


▲ Direction of rotation opposite to machine spindle / senso di rotazione contrario al mandrino


**Option / Opzione**

bar max  
100

Coolant through modular taper  
Adduzione refrigerante attraverso il cono

Ø mm max.  
6  
  
Weldon output  
Weldon

# T90-0.5L Neo

AMT9005L

**Technical data**

Caratteristiche tecniche



Ratio  
Rapporto  
**1:1**



RPM  
Velocità  
**8.000 min<sup>-1</sup>**



Max. axial load  
Max. carico assiale  
**150 N**



Torque  
Momento torcente  
**10 Nm**



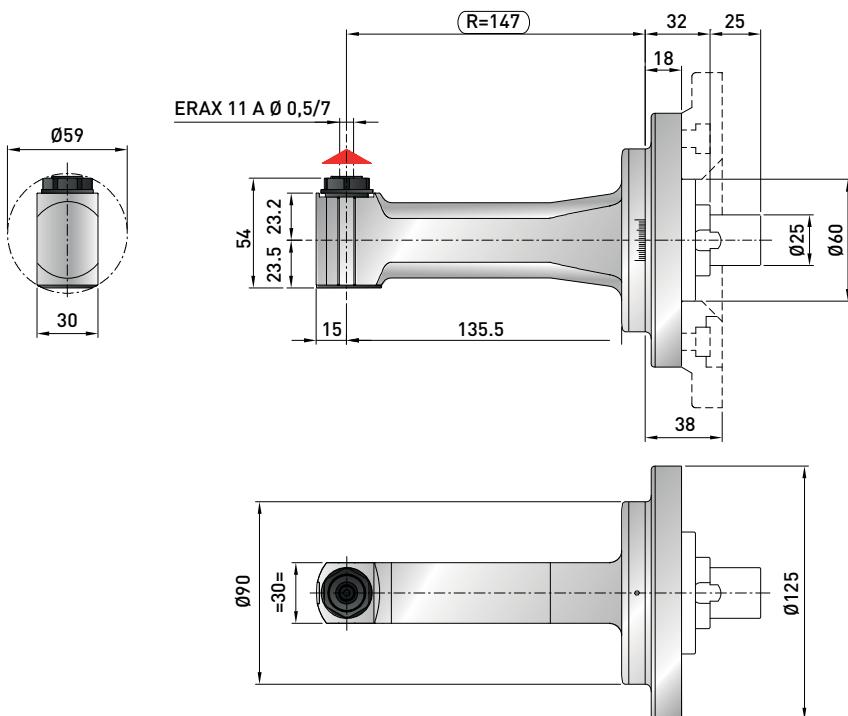
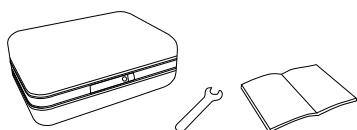
Weight  
Peso  
**4.5 kg**



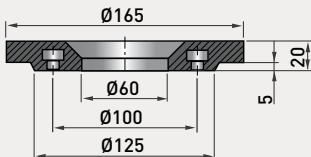
Tapping  
Maschiatura  
**Max. M5**



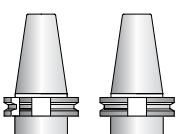
Collet  
Pinza  
**ERAX-11 (ø 0,5/7 mm)**


**\* STANDARD EQUIPMENT**  
includes:


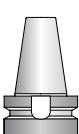
FLANGIA T90-0.5



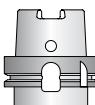
▲ Direction of rotation opposite to machine spindle / senso di rotazione contrario al mandrino



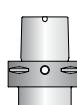
DIN 69871-CAT



MAS-BT



HSK



CAPTO

Shank / Cono

## Option / Opzione



bar max  
**12**

Coolant through flange and output spindle  
Refrigerante attraverso la flangia  
e il mandrino di uscita



bar max  
**100**

Coolant through modular taper  
Adduzione refrigerante attraverso il cono



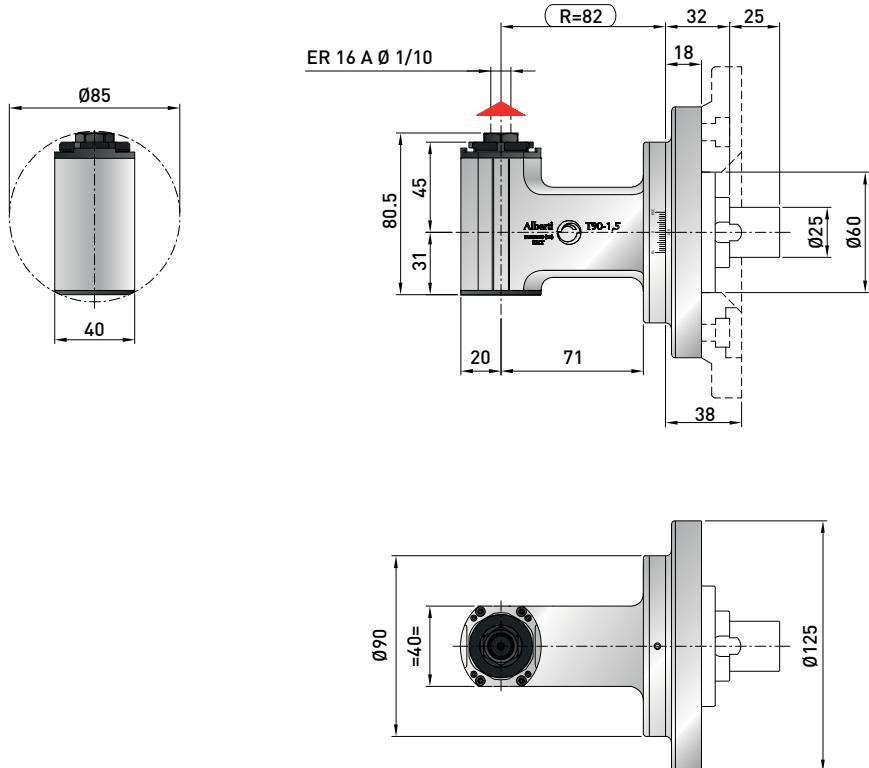
Ø mm max.  
**6**

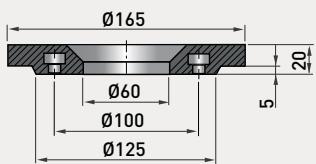
Weldon output  
Weldon

# T90-1.5C Neo

**AMT9015C**
**Technical data**

Caratteristiche tecniche


 Ratio  
Rapporto  
**1:1**
 RPM  
Velocità  
**8.000 min<sup>-1</sup>**
 Max. axial load  
Max. carico assiale  
**250 N**
 Torque  
Momento torcente  
**25 Nm**
 Weight  
Peso  
**4.3 kg**
 Tapping  
Maschiatura  
**Max. M6**
 Collet  
Pinza  
**ER-16A (Ø 1/10 mm)**
**\* STANDARD EQUIPMENT**  
includes:

**FLANGIA T90-1.5**

 Direction of rotation opposite to machine spindle / senso di rotazione contrario al mandrino

Shank / Cono	DIN 69871-CAT	MAS-BT	HSK	CAPTO

**Option / Opzione**

	bar max <b>12</b>
Coolant through flange and output spindle / Refrigerante attraverso la flangia e il mandrino di uscita	

	bar max <b>100</b>
Coolant through modular taper Adduzione refrigerante attraverso lo cono	

	Ø mm <b>13</b>
Arbor output Porta fresa	

	Ø mm max. <b>10</b>
Weldon output Weldon	

	Double output <b>ER 16/ER 11</b>
Double output Doppia uscita	

# T90-1.5L Neo

AMT9015L

**Technical data**

Caratteristiche tecniche



Ratio

Rapporto

1:1



RPM

Velocità

8.000 min<sup>-1</sup>

Max. axial load

Max. carico assiale

250 N



Torque

Momento torcente

25 Nm



Weight

Peso

5.2 kg



Tapping

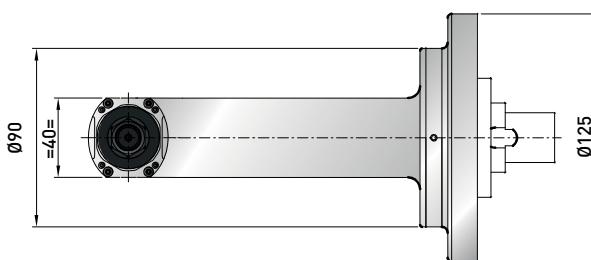
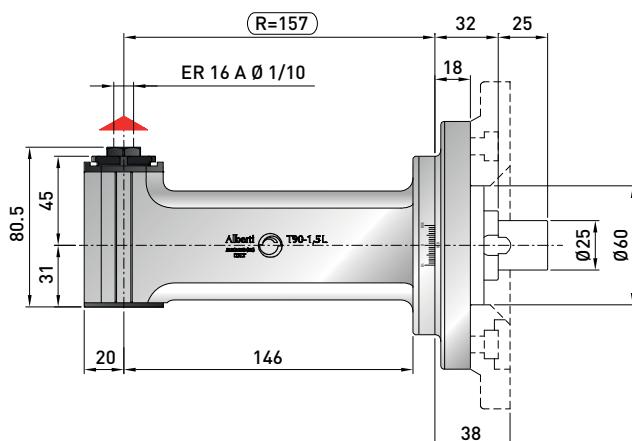
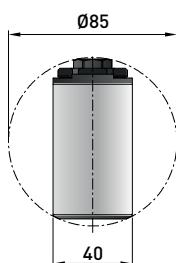
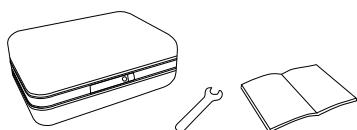
Maschiatura

Max. M6

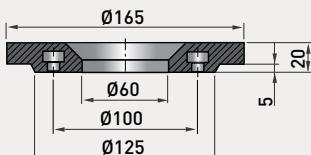


Collet

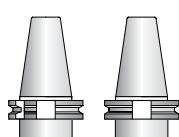
Pinza

ER-16A ( $\varnothing$  1/10 mm)
**\* STANDARD EQUIPMENT**  
includes:


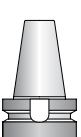
FLANGIA T90-1.5



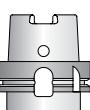
▲ Direction of rotation opposite to machine spindle / senso di rotazione contrario al mandrino



DIN 69871-CAT



MAS-BT



HSK



CAPTO

Shank / Cono

## Option / Opzione

bar max  
12

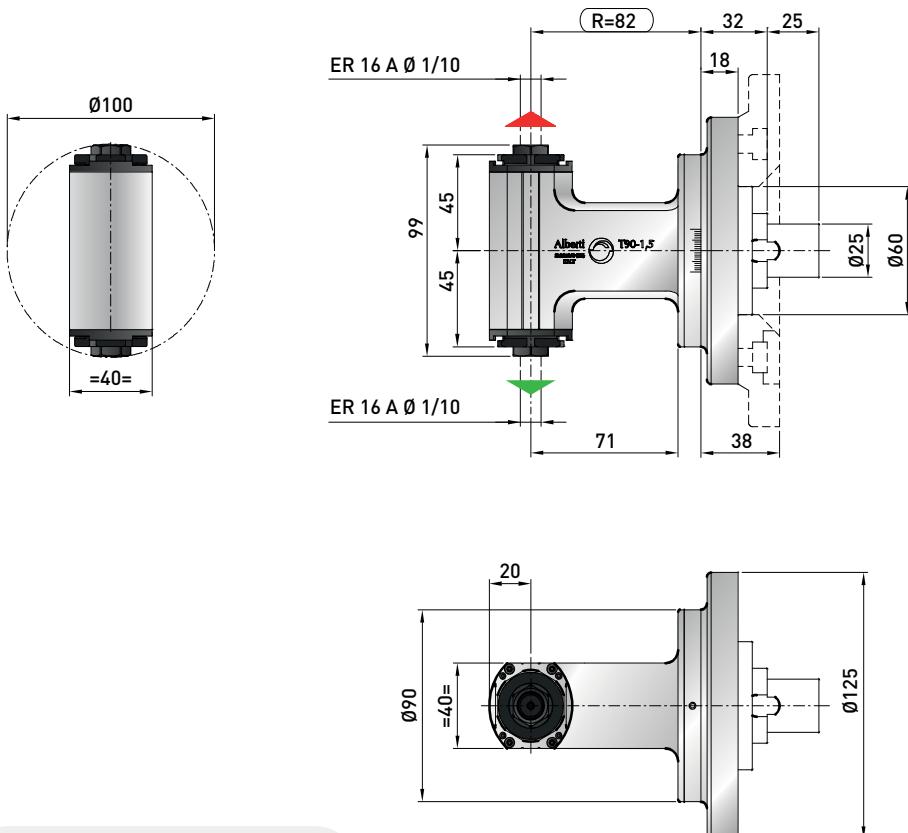
Coolant through flange and output spindle / Refrigerante attraverso la flangia e il mandrino di uscita

bar max  
100Coolant through modular taper  
Adduzione refrigerante  
attraverso il conoØ mm  
13Arbor output  
Porta fresaØ mm max.  
10Weldon output  
WeldonER 16/ER 11  
Double output  
Doppia uscita

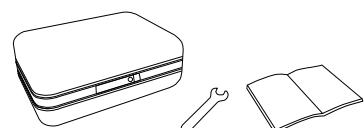
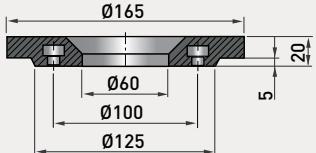
# T90-1.5 2U

**AMT9015D**
**Technical data**

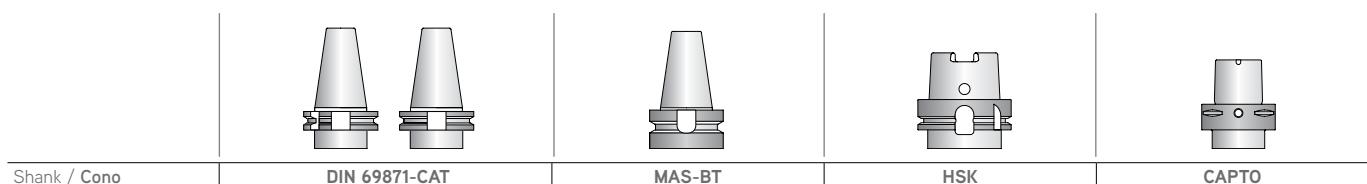
Caratteristiche tecniche



	Ratio Rapporto <b>1:1</b>
	RPM Velocità <b>8.000 min<sup>-1</sup></b>
	Max. axial load Max. carico assiale <b>450 N</b>
	Torque Momento torcente <b>25 Nm</b>
	Weight Peso <b>4.5 kg</b>
	Tapping Maschiatura <b>Max. M6</b>
	Collet Pinza <b>ER-16A (Ø 1/10 mm) ER-16A (Ø 1/10 mm)</b>

**\* STANDARD EQUIPMENT**  
includes:

**FLANGIA T90-1.5**


- ▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino  
 ▲ Direction of rotation opposite to machine spindle / senso di rotazione contrario al mandrino


**Option / Opzione**


bar max

**12**

Coolant through flange and output spindle / Refrigerante attraverso la flangia e il mandrino di uscita



Ø mm

**13**

 Arbor output  
Porta fresa


Ø mm max.

**10**

 Weldon output  
Weldon

# T90-2.5C Neo

AMT9025C

**Technical data**

Caratteristiche tecniche



Ratio  
Rapporto  
**1:1**



RPM  
Velocità  
**6.000 min<sup>-1</sup>**



Max. axial load  
Max. carico assiale  
**510 N**



Torque  
Momento torcente  
**50 Nm**



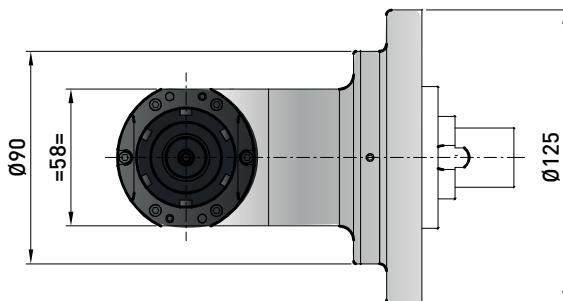
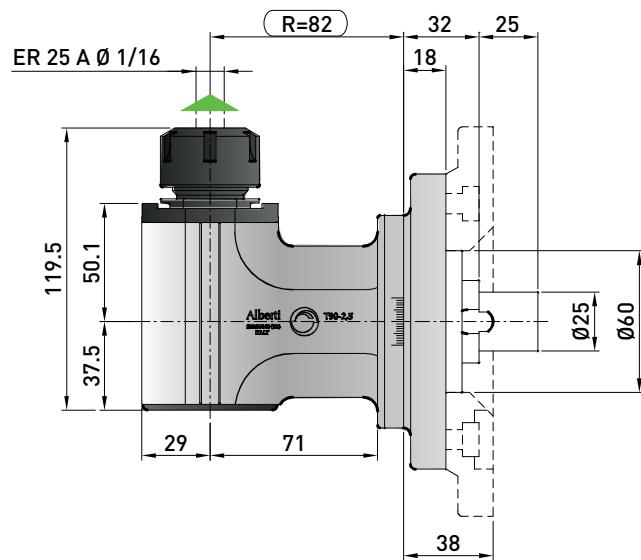
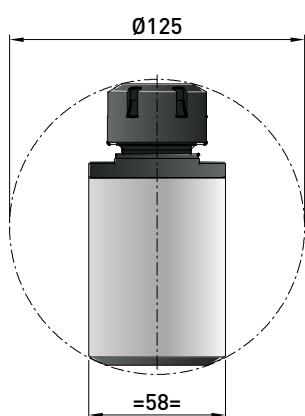
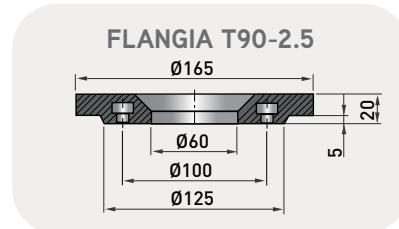
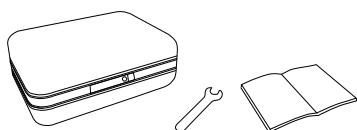
Weight  
Peso  
**5.4 kg**



Tapping  
Maschiatura  
**Max. M12**



Collet  
Pinza  
**ER-25 (ø 1/16 mm)**

**\* STANDARD EQUIPMENT**  
includes:

▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

Shank / Cono	DIN 69871-CAT	MAS-BT	HSK	CAPTO

**Option / Opzione**

bar max  
**12**

Coolant through flange and output spindle / Refrigerante attraverso la flangia e il mandrino di uscita



bar max  
**100**

Coolant through modular taper  
Adduzione refrigerante  
attraverso il cono



Ø mm  
**16**

Arbor output  
Porta fresa



Ø mm max.  
**16**

Weldon output  
Weldon



HSK-32

Quick Change  
Attacco rapido  
**Smart Change**



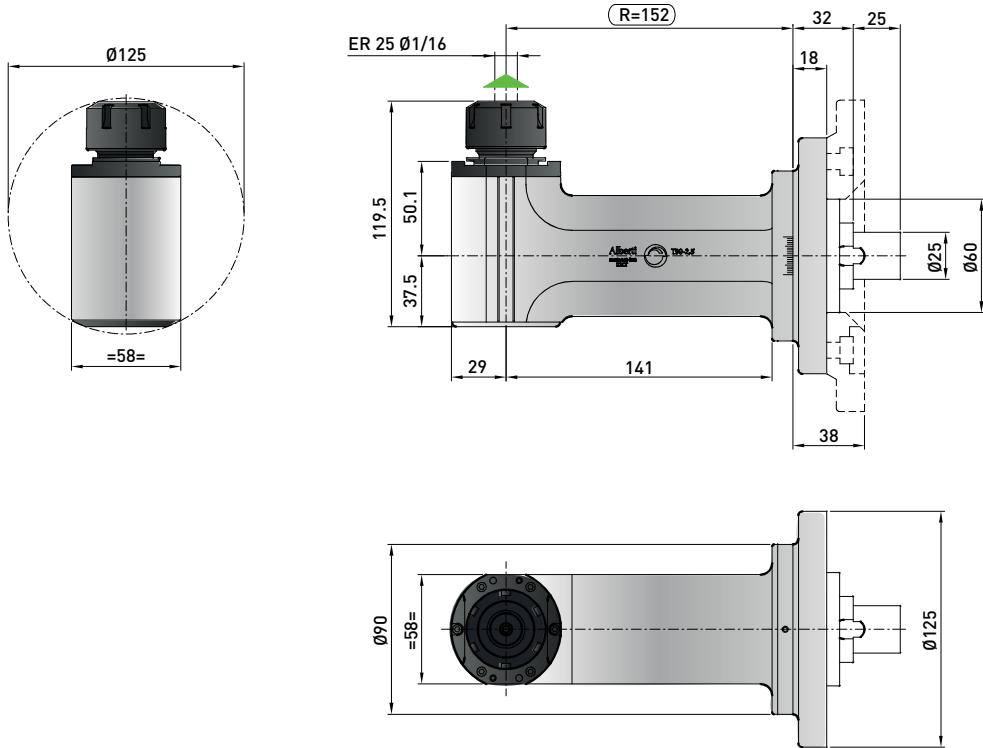
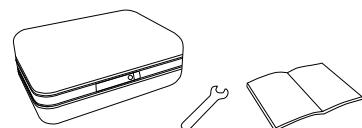
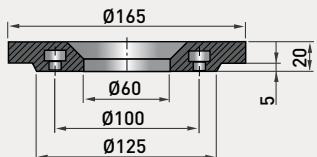
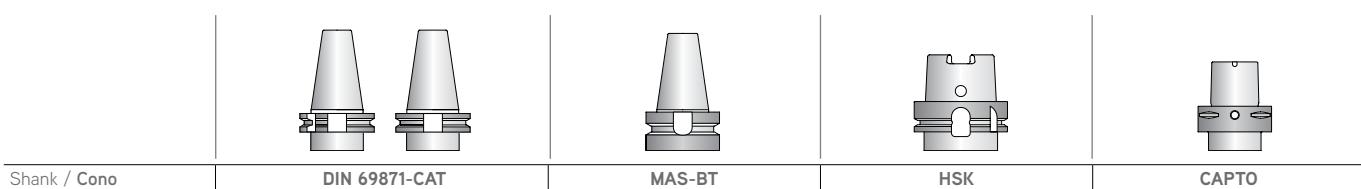
ER 25/ER 16

Double output  
Doppia uscita

# T90-2.5L Neo

**AMT9025L**
**Technical data**

Caratteristiche tecniche


 Ratio  
Rapporto  
**1:1**
 RPM  
Velocità  
**6.000 min<sup>-1</sup>**
 Max. axial load  
Max. carico assiale  
**510 N**
 Torque  
Momento torcente  
**50 Nm**
 Weight  
Peso  
**6.7 kg**
 Tapping  
Maschiatura  
**Max. M12**
 Collet  
Pinza  
**ER-25 (Ø 1/16 mm)**
**\* STANDARD EQUIPMENT**  
includes:

**FLANGIA T90-2.5**

 Direction of rotation same as machine spindle / *senso di rotazione uguale al mandrino*

**Option / Opzione**

bar max  
**12**

Coolant through flange and output spindle / Refrigerante attraverso la flangia e il mandrino di uscita


bar max  
**100**

Coolant through modular taper  
Adduzione refrigerante  
attraverso il cono

Ø mm  
**16**

Arbor output  
Porta fresa

Ø mm max.  
**16**

Weldon output  
Weldon

**HSK-32**  
Quick Change  
Attacco rapido  
**Smart Change**

**ER 25/ER 16**  
Double output  
Doppia uscita

## T90-2.5 2U

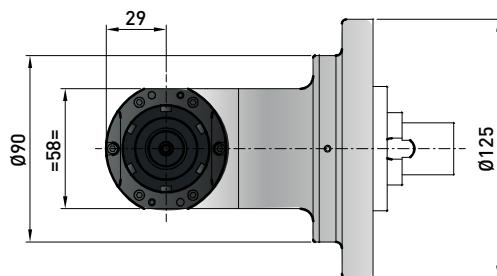
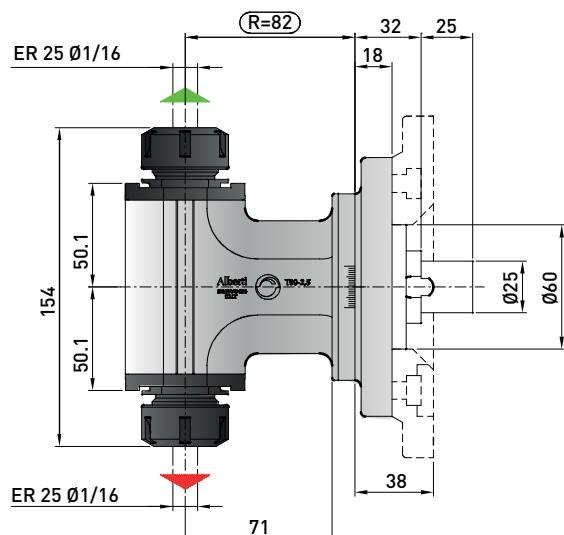
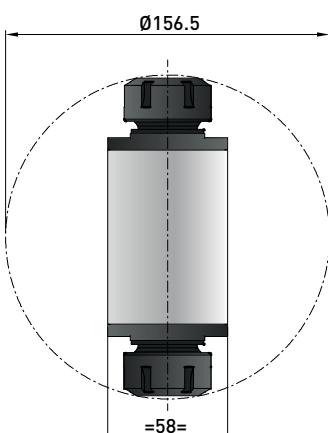
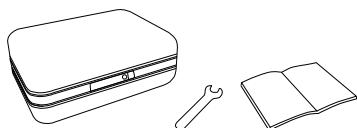
AMT9025D

## Technical data

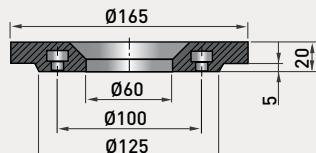
Caratteristiche tecniche

 Ratio  
Rapporto  
**1:1**
 RPM  
Velocità  
**6.000 min<sup>-1</sup>**
 Max. axial load  
Max. carico assiale  
**510 N**
 Torque  
Momento torcente  
**50 Nm**
 Weight  
Peso  
**6.4 kg**
 Tapping  
Maschiatura  
**Max. M12**
 Collet  
Pinza  
**ER-25 (ø 1/16 mm)**  
**ER-25 (ø 1/16 mm)**

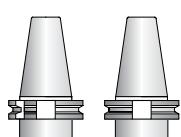
\* STANDARD EQUIPMENT  
includes:



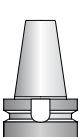
FLANGIA T90-2.5



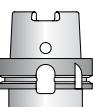
▲ Direction of rotation same as machine spindle / *senso di rotazione uguale al mandrino*  
 ▼ Direction of rotation opposite to machine spindle / *senso di rotazione contrario al mandrino*



Shank / Cono



MAS-BT



HSK



CAPTO

## Option / Opzione



Ø mm

**16**Arbor output  
Porta fresa

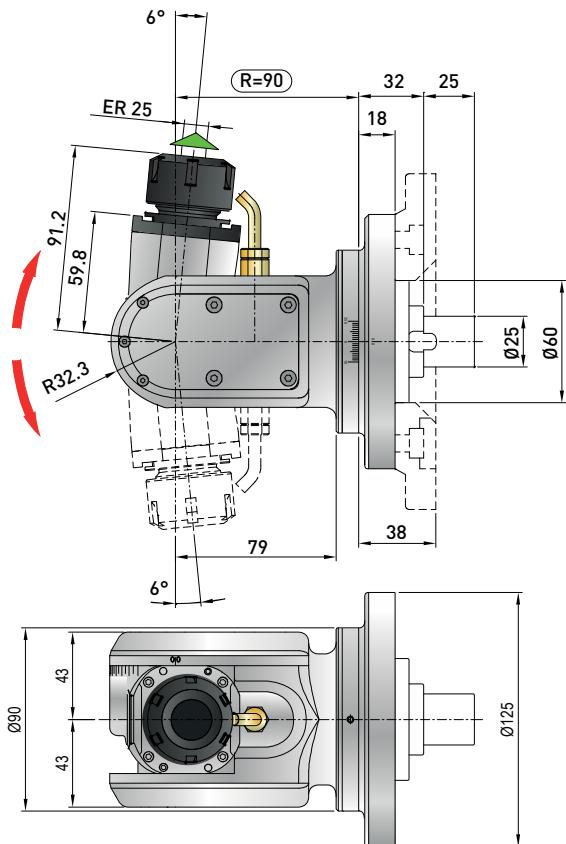
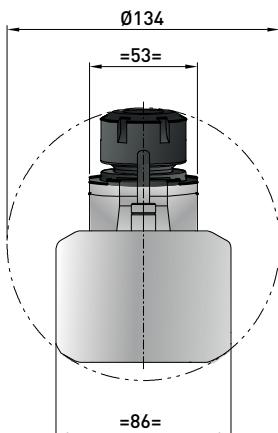
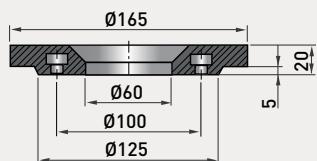
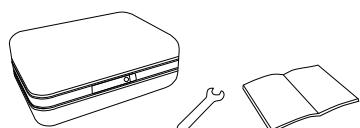
Ø mm max.

**16**Weldon output  
Weldon

# TCU-2.5 Neo

**AMTCU25C**
**Technical data**

Caratteristiche tecniche


**FLANGIA TCU-2.5**

**\* STANDARD EQUIPMENT**  
includes:

 Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

Shank / Cono	DIN 69871-CAT	MAS-BT	HSK	CAPTO

**Option / Opzione**

bar max  
100

Coolant through modular taper  
Adduzione refrigerante  
attraverso il cono

+/- 95°  
Angle  
Angolo

every  
5°  
Fixed positioning  
Posizionamento fisso

Ø mm max.  
16  
Weldon output  
Weldon

# T90-3.5C Neo

AMT9035C

**Technical data**

Caratteristiche tecniche



**Ratio**  
Rapporto  
**1:1**



**RPM**  
Velocità  
**5.000 min<sup>-1</sup>**



**Max. axial load**  
Max. carico assiale  
**1.250 N**



**Torque**  
Momento torcente  
**70 Nm**



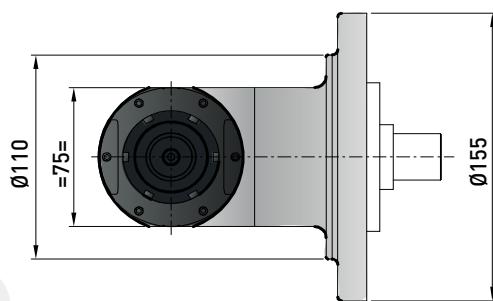
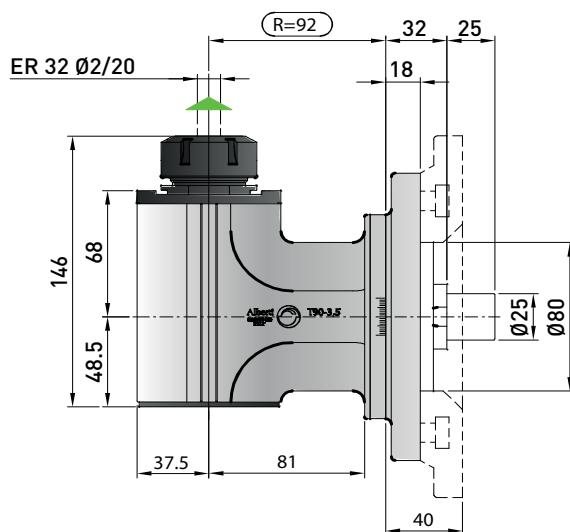
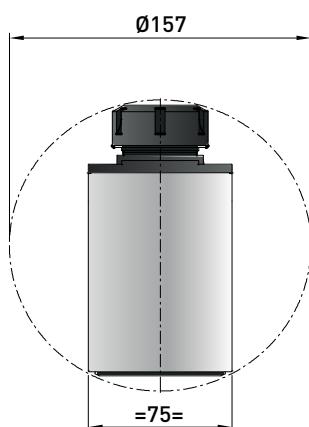
**Weight**  
Peso  
**11 kg**



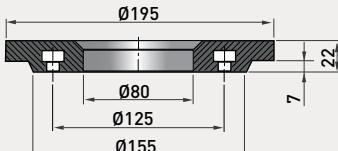
**Tapping**  
Maschiatura  
**Max. M16**



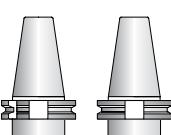
**Collet**  
Pinza  
**ER- 32 (ø 2/20 mm)**



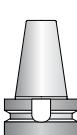
FLANGIA T90-3.5



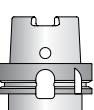
▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino



DIN 69871-CAT



MAS-BT



HSK



CAPTO

Shank / Cono

**Option / Opzione**

bar max  
**12**

Coolant through flange and output spindle / Refrigerante attraverso la flangia e il mandrino di uscita



bar max  
**100**

Coolant through modular taper  
Adduzione refrigerante  
attraverso il cono



Ø mm  
**27**

Arbor output  
Porta fresa



Ø mm max.  
**20**

Weldon output  
Weldon



**ISO-30 HSK-40**

Quick Change  
Attacco rapido  
**Smart Change**



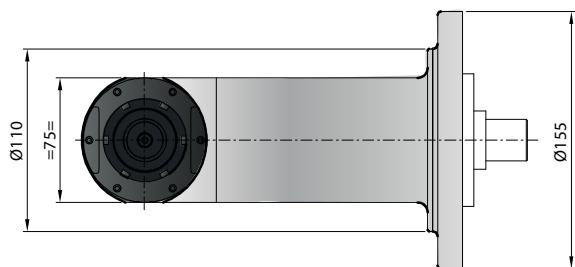
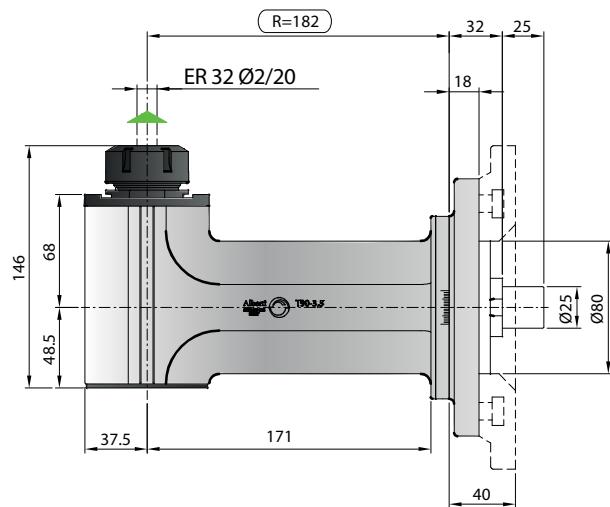
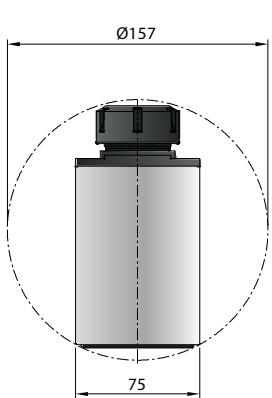
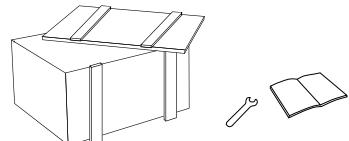
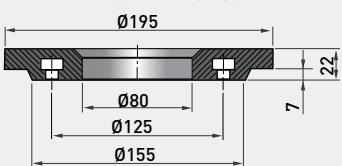
**ER 32/ER 20**

Double output  
Doppia uscita

# T90-3.5L Neo

**AMT9035L**
**Technical data**

Caratteristiche tecniche


 Ratio  
Rapporto  
**1:1**
 RPM  
Velocità  
**5.000 min<sup>-1</sup>**
 Max. axial load  
Max. carico assiale  
**1.250 N**
 Torque  
Momento torcente  
**70 Nm**
 Weight  
Peso  
**13.2 kg**
 Tapping  
Maschiatura  
**Max. M16**
 Collet  
Pinza  
**ER-32 (Ø 2/20 mm)**
**\* STANDARD EQUIPMENT**  
includes:

**FLANGIA T90-3.5**

 Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

**Option / Opzione**

bar max <b>12</b>	bar max <b>100</b>	Ø mm <b>22-27</b>	Ø mm max. <b>20</b>	ISO-30 HSK-40	ER 32/ER 20
Coolant through flange and output spindle / Refrigerante attraverso la flangia e il mandrino di uscita	Coolant through modular taper Adduzione refrigerante attraverso il cono	Arbor output Porta fresa	Weldon output Weldon	Quick Change Attacco rapido Smart Change	Double output Doppia uscita

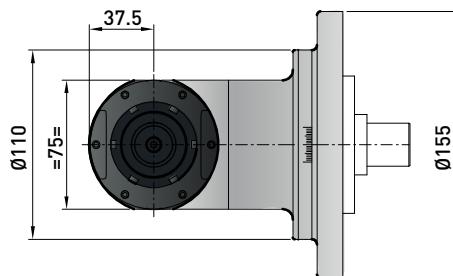
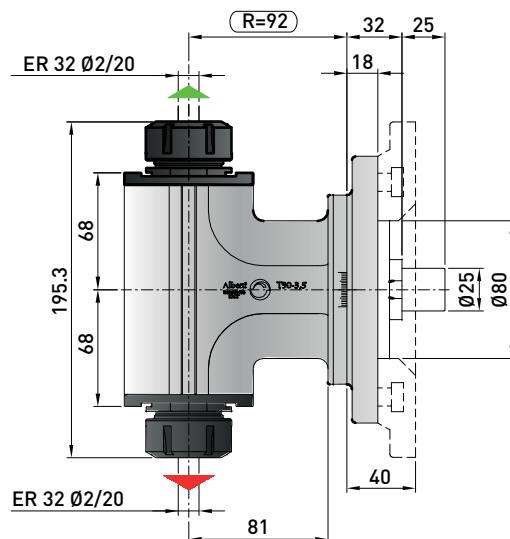
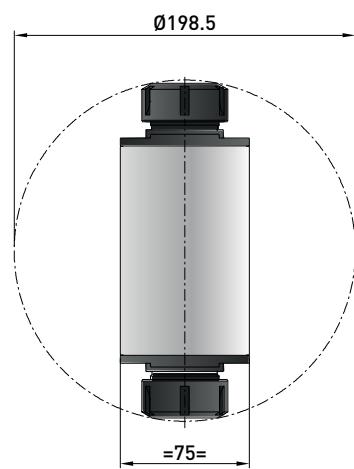
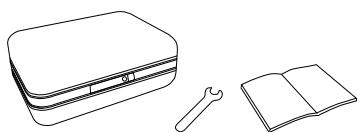
# T90-3.5 2U

AMT9035D

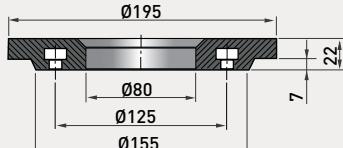
**Technical data**

Caratteristiche tecniche

	Ratio Rapporto <b>1:1</b>
	RPM Velocità <b>4.000 min<sup>-1</sup></b>
	Max. axial load Max. carico assiale <b>1.250 N</b>
	Torque Momento torcente <b>70 Nm</b>
	Weight Peso <b>12 kg</b>
	Tapping Maschiatura <b>Max. M16</b>
	Collet Pinza <b>ER-32 (ø 2/20 mm)</b> <b>ER-32 (ø 2/20 mm)</b>

**\* STANDARD EQUIPMENT**  
includes:

FLANGIA T90-3.5



- ▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino  
 ▲ Direction of rotation opposite to machine spindle / senso di rotazione contrario al mandrino

Shank / Cono	DIN 69871-CAT	MAS-BT	HSK	CAPTO

**Option / Opzione**

Ø mm  
**22-27**

Arbor output  
Porta fresa



Ø mm max.  
**20**

Weldon output  
Weldon



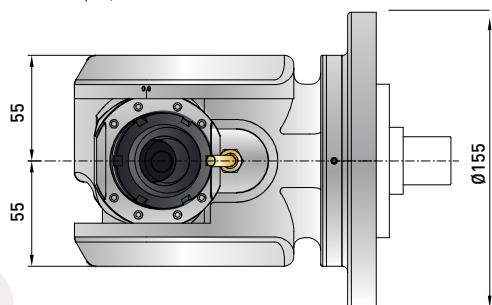
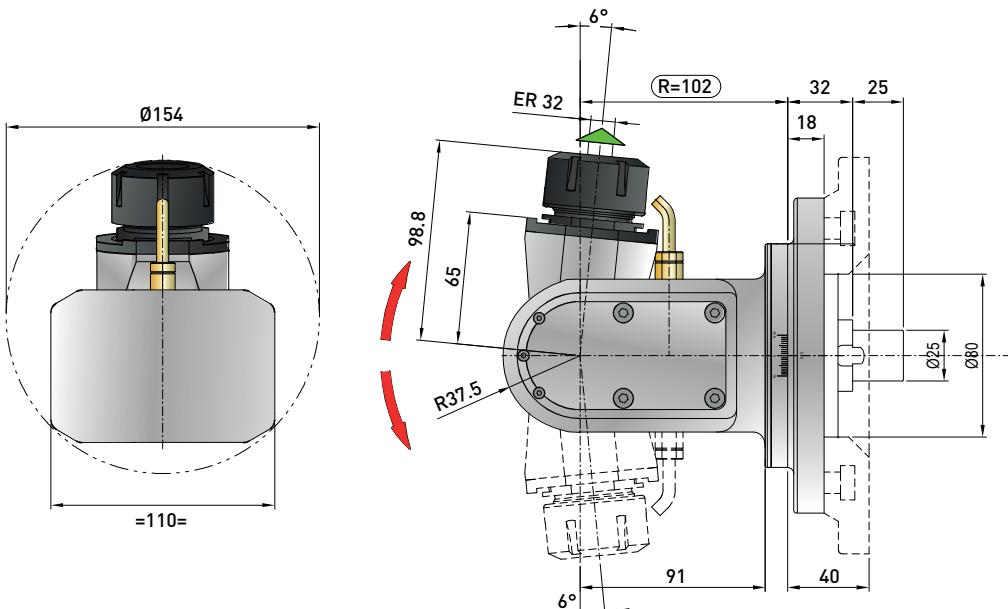
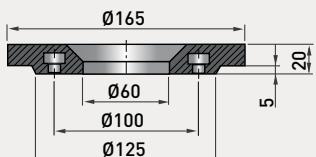
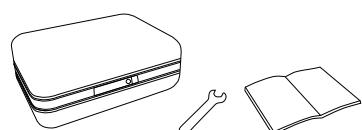
**HSK-40**

Quick Change  
Attacco rapido  
**Smart Change**

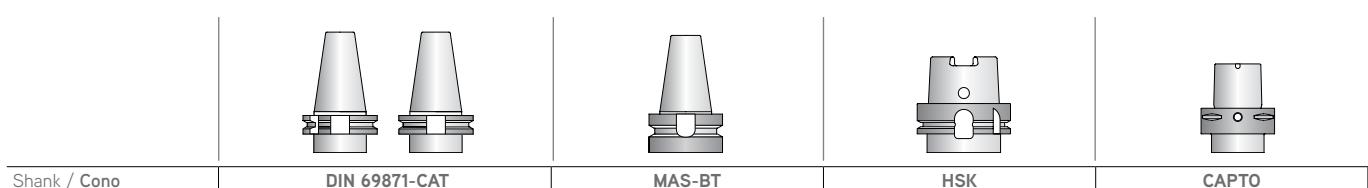
# TCU-3.5 Neo

**AMTCU35C**
**Technical data**

Caratteristiche tecniche


**FLANGIA TCU-3.5**

**\* STANDARD EQUIPMENT**  
includes:


▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino


**Option / Opzione**

bar max  
**100**

Coolant through modular taper  
Adduzione refrigerante  
attraverso il cono

 $+/ - 95^\circ$   
Angle  
Angolo

every  
**5°**  
Fixed positioning  
Posizionamento fisso

Ø mm max.  
**20**  
Weldon output  
Weldon

# T90-4.5C Neo

AMT9045C

**Technical data**

Caratteristiche tecniche



**Ratio**  
Rapporto  
**1:1**



**RPM**  
Velocità  
**4.000 min<sup>-1</sup>**



**Max. axial load**  
Max. carico assiale  
**1.750 N**



**Torque**  
Momento torcente  
**120 Nm**



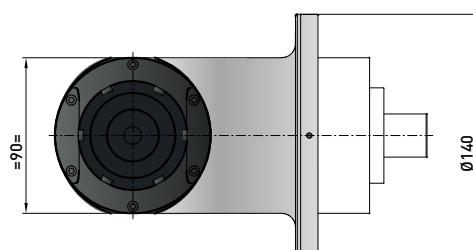
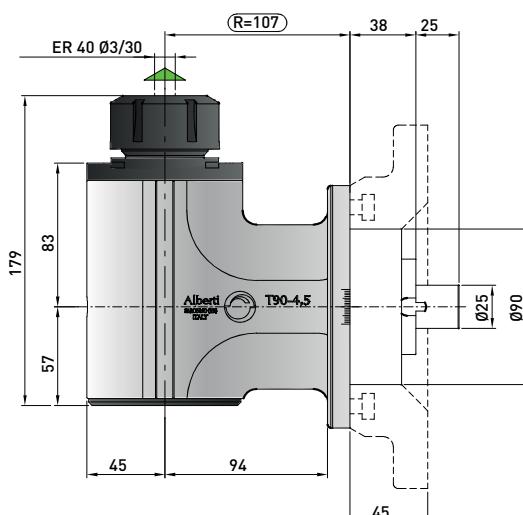
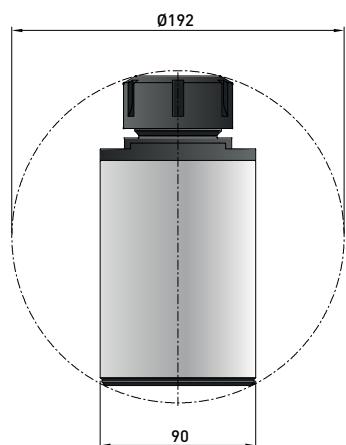
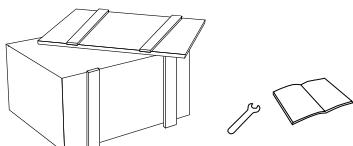
**Weight**  
Peso  
**17 kg**



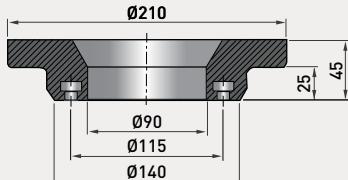
**Tapping**  
Maschiatura  
**Max. M20**



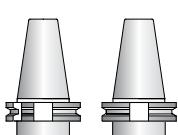
**Collet**  
Pinza  
**ER-40 (ø 3/30 mm)**


**\* STANDARD EQUIPMENT**  
includes:


FLANGIA T90-4.5



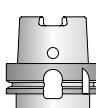
Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino



DIN 69871-CAT



MAS-BT



HSK



CAPTO

Shank / Cono

## Option / Opzione



**bar max**  
**12**

Coolant through flange and output  
spindle / Refrigerante attraverso la  
flangia e il mandrino di uscita



**bar max**  
**100**

Coolant through modular taper  
Adduzione refrigerante  
attraverso il cono



**Ø mm**  
**27**

Arbor output  
Porta fresa



**Ø mm max.**  
**25**

Weldon output  
Weldon



**HSK-50**  
**HSK-40 CAPTO C4**

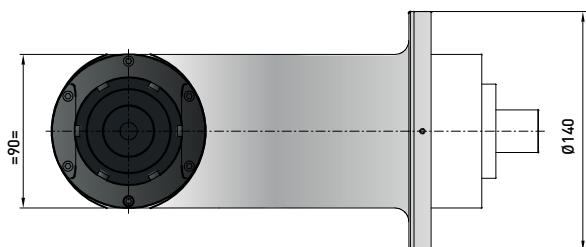
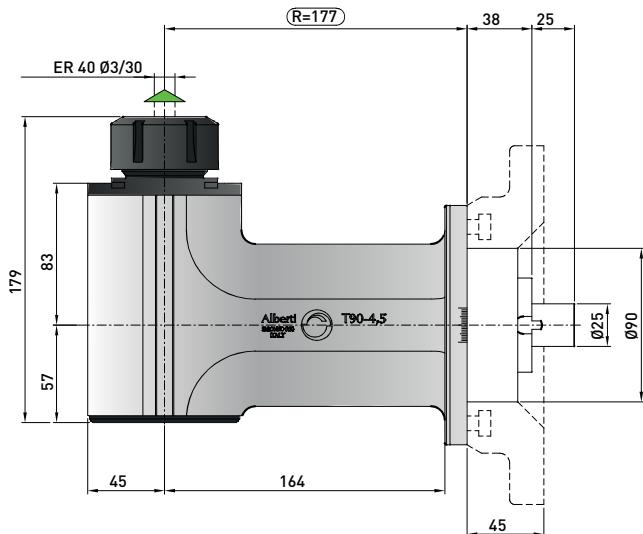
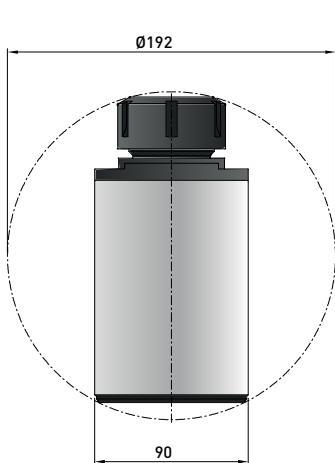
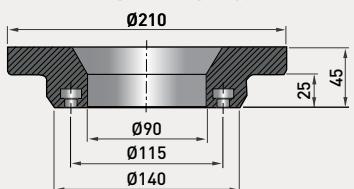
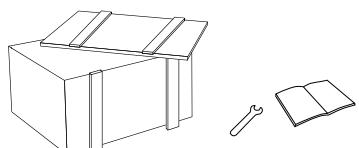
Quick Change  
Attacco rapido



**ER 40/ER 25**

Double output  
Doppia uscita

# T90-4.5L Neo

**AMT9045L**

**FLANGIA T90-4.5**

**\* STANDARD EQUIPMENT**  
includes:


▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino


**Option / Opzione**

bar max  
**12**

Coolant through flange and output spindle / Refrigerante attraverso la flangia e il mandrino di uscita


bar max  
**100**

Coolant through modular taper Adduzione refrigerante attraverso il cono


Ø mm  
**27**  
Arbor output  
Porta fresa

Ø mm max.  
**25**  
Weldon output  
Weldon

**HSK-50**  
**HSK-40 CAPTO C4**  
Quick Change  
Attacco rapido

**ER 40/ER 25**  
Double output  
Doppia uscita

# T90-5C HP Neo

AMT9050HP

**Technical data**

Caratteristiche tecniche



Ratio

Rapporto

1:1



RPM

Velocità

3.000 min<sup>-1</sup>

Max. axial load

Max. carico assiale

1.800 N



Torque

Momento torcente

160 Nm



Weight

Peso

22 kg



Tapping

Maschiatura

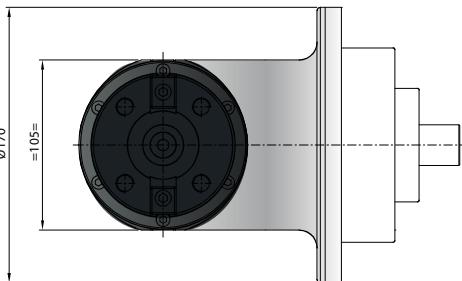
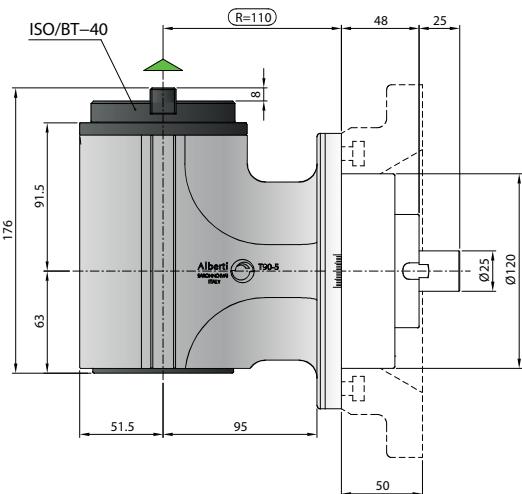
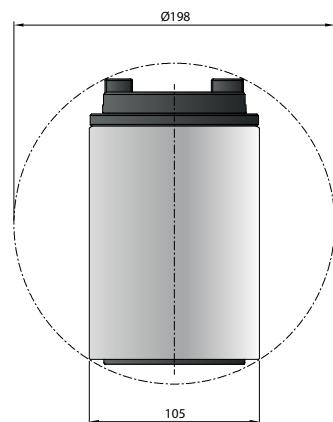
Max. M24



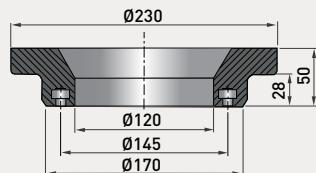
Collet

Pinza

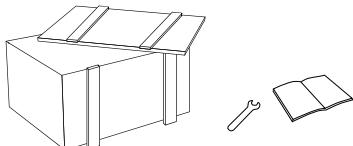
ISO/BT 40



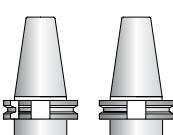
FLANGIA T90-5



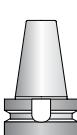
**\* STANDARD EQUIPMENT**  
includes:



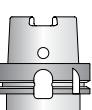
▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino



DIN 69871-CAT



MAS-BT



HSK



CAPTO

**Option / Opzione**bar max  
12

Coolant through flange and output spindle / Refrigerante attraverso la flangia e il mandrino di uscita

bar max  
100Coolant through modular taper  
Adduzione refrigerante  
attraverso il cono

HSK 63 CAPTO C4/C5

Quick Change  
Attacco rapido

AIR/OIL

Air / Oil lubrication  
Lubrificazione aria / olio

# T90-5L HP Neo

**AMT9050LHP**
**Technical data**

Caratteristiche tecniche


Ratio  
Rapporto  
**1:1**

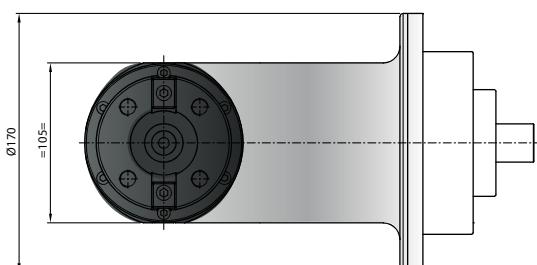
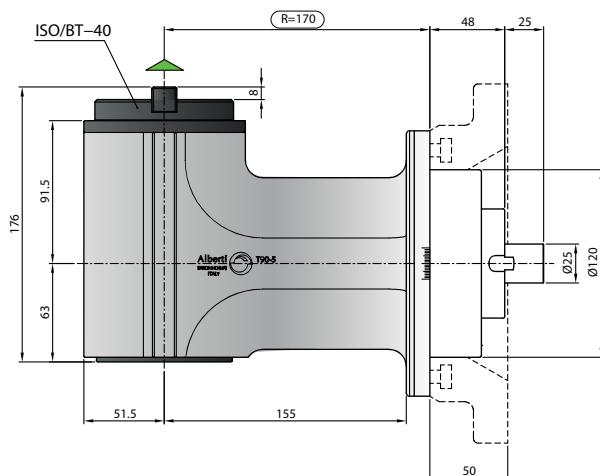
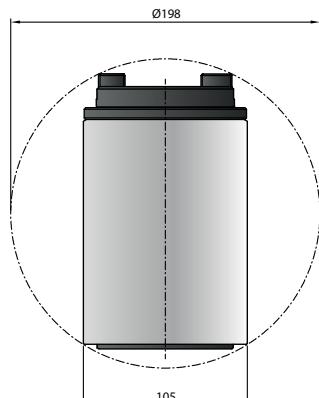
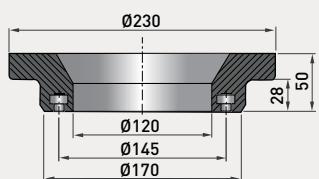
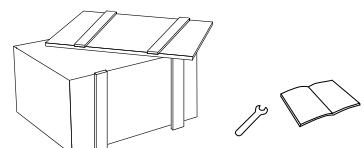
RPM  
Velocità  
**3.000 min<sup>-1</sup>**

Max. axial load  
Max. carico assiale  
**1.800 N**

Torque  
Momento torcente  
**160 Nm**

Weight  
Peso  
**26.2 kg**

Tapping  
Maschiatura  
**Max. M24**

Collet  
Pinza  
**ISO/BT 40**

**FLANGIA T90-5**

**\* STANDARD EQUIPMENT**  
includes:


Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

Shank / Cono	DIN 69871-CAT	MAS-BT	HSK	CAPTO

**Option / Opzione**

bar max  
**12**

Coolant through flange and output spindle / Refrigerante attraverso la flangia e il mandrino di uscita



bar max

**100**

Coolant through modular taper  
Adduzione refrigerante  
attraverso il cono

**HSK 63 CAPTO C4/C5**

Quick Change  
Attacco rapido

**AIR/OIL**

Air / Oil lubrication  
Lubrificazione aria / olio

# T90-8 HP

APT9080P

**Technical data**

Caratteristiche tecniche



**Ratio**  
Rapporto  
**1:1**



**RPM**  
Velocità  
**3.000 min<sup>-1</sup>**



**Max. axial load**  
Max. carico assiale  
**2.400 N**



**Torque**  
Momento torcente  
**250 Nm**



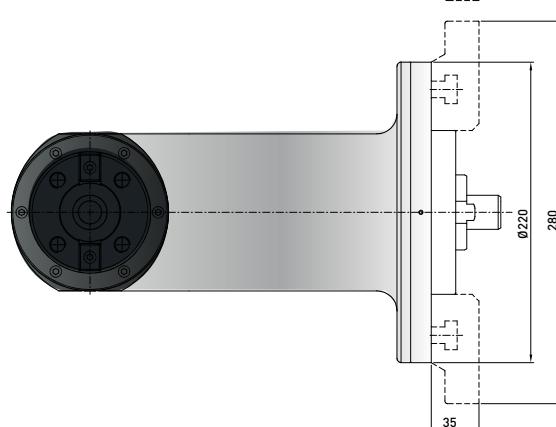
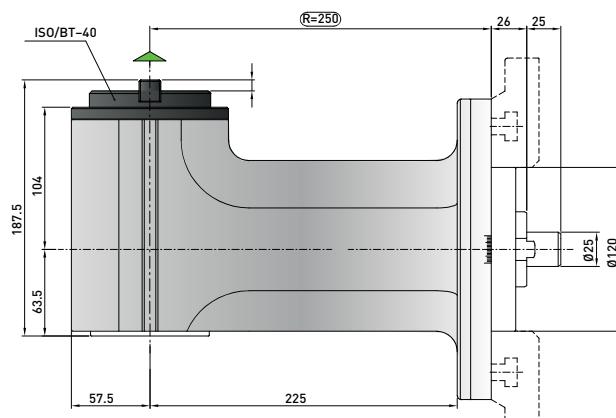
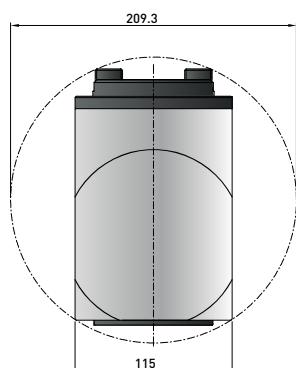
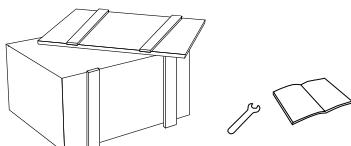
**Weight**  
Peso  
**33 kg**



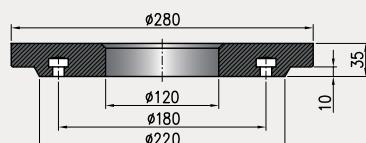
**Tapping**  
Maschiatura  
**Max. M27**



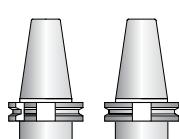
**Collet**  
Pinza  
**ISO/BT 40**

**\* STANDARD EQUIPMENT**  
includes:

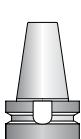
FLANGIA T90-8



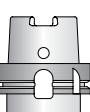
▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino



DIN 69871-CAT



MAS-BT



HSK



CAPTO

Shank / Cono

**Option / Opzione**

bar max  
**100**

Coolant through modular taper  
Adduzione refrigerante attraverso il cono



bar max  
**12**

Coolant through flange and output  
spindle / Refrigerante attraverso la  
flangia e il mandrino di uscita

**HSK 63A CAPTO C4/C5**

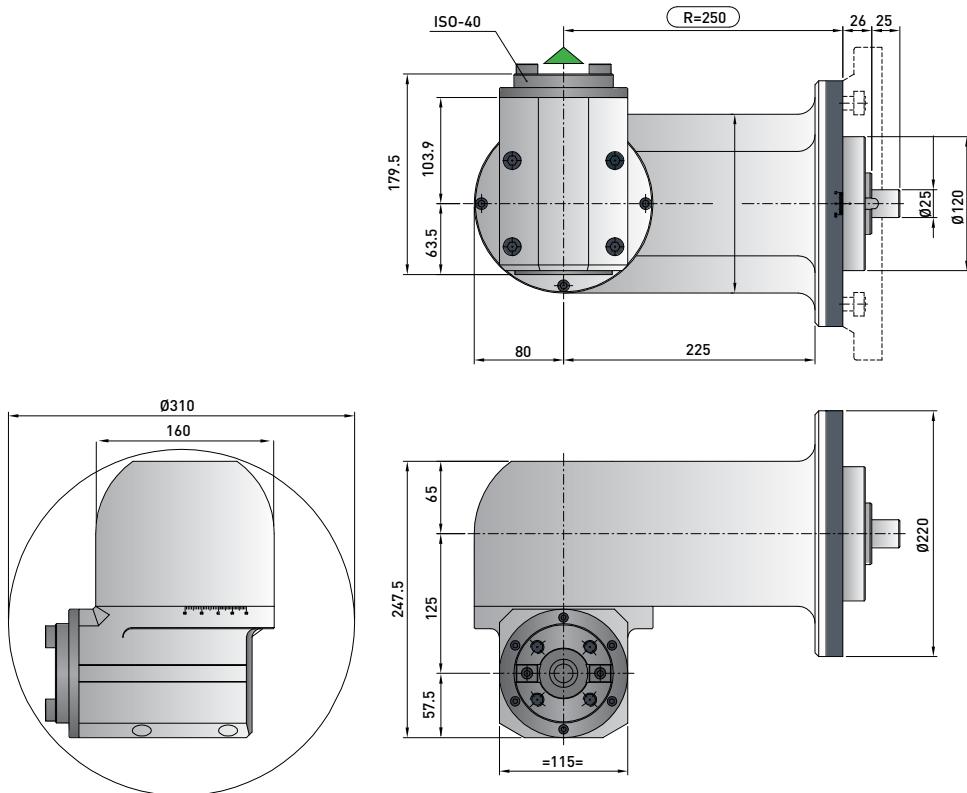
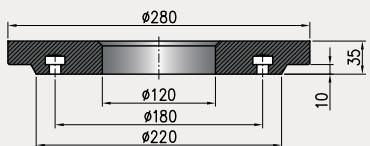
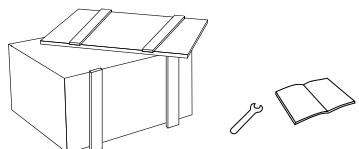
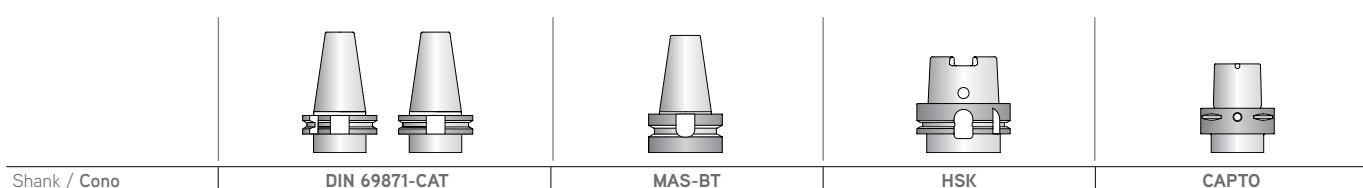
Quick Change  
Attacco rapido

# TDU-8

**APTDU80C**
**Technical data**

Caratteristiche tecniche

	Ratio Rapporto <b>1:1</b>
	RPM Velocità <b>3.000 min<sup>-1</sup></b>
	Max. axial load Max. carico assiale <b>2.400 N</b>
	Torque Momento torcente <b>160 Nm</b>
	Weight Peso <b>50 kg</b>
	Tapping Maschiatura Max. M27
	Collet Pinza ISO/BT 40


**FLANGIA TDU-8**

**\* STANDARD EQUIPMENT**  
includes:

 Direction of rotation same as machine spindle / *senso di rotazione uguale al mandrino*

**Option / Opzione**

bar max  
**100**

Coolant through modular taper  
Adduzione refrigerante attraverso il cono

**HSK 63A CAPTO C4/C5**

Quick Change  
Attacco rapido

**AIR/OIL**

Air / Oil lubrication  
Lubrificazione aria / olio

# T90-8XL

R = 450 / 650 / 850

**Technical data**

Caratteristiche tecniche



Ratio  
Rapporto  
**1:1**



RPM  
Velocità  
**3.000 min<sup>-1</sup>**



Max. axial load  
Max. carico assiale  
**2.400 N**



Torque  
Momento torcente  
**160 Nm**



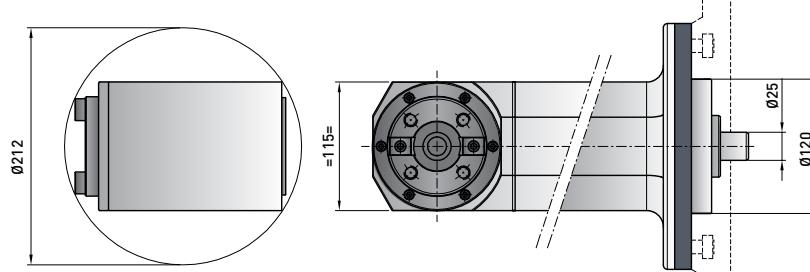
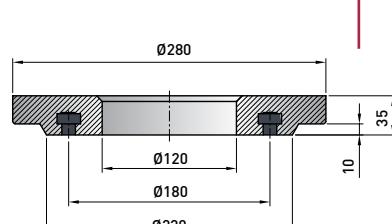
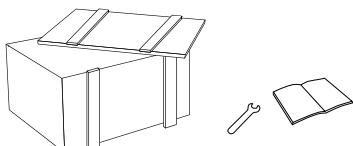
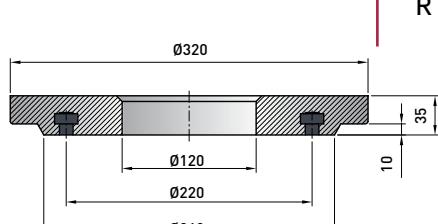
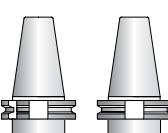
Weight  
Peso  
**62/75/105 kg**



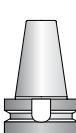
Tapping  
Maschiatura  
**Max. M27**



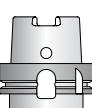
Collet  
Pinza  
**ISO/BT 40**

**\* STANDARD EQUIPMENT**  
includes:**R = 450  
R = 650****R = 850**▲ Direction of rotation same as machine spindle / *senso di rotazione uguale al mandrino*

Shank / Cono



MAS-BT



HSK



CAPTO

**Option / Opzione**bar max  
**12**

Coolant through flange and output spindle  
Refrigerante attraverso la flangia  
e il mandrino di uscita

bar max  
**100**

Coolant through modular taper  
Adduzione refrigerante attraverso il cono

**HSK 63A CAPTO C4/C5**

Quick Change  
Attacco rapido

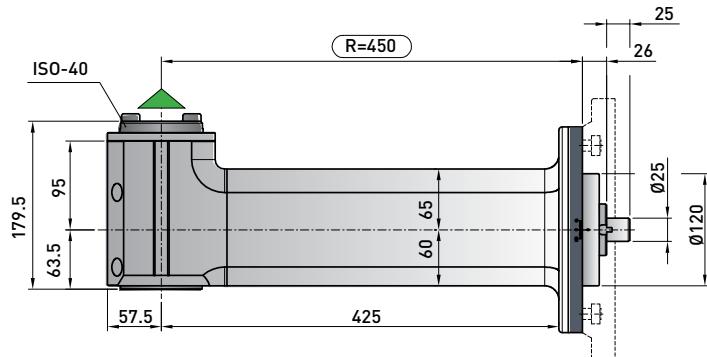
**AIR/OIL**

Air / Oil lubrication  
Lubrificazione aria / olio

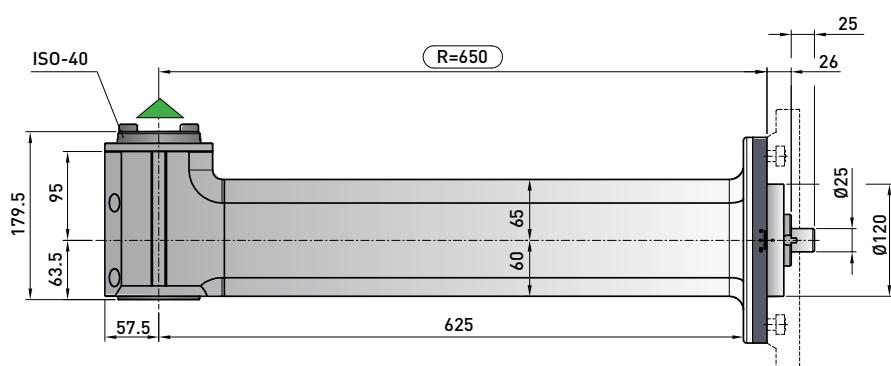
## APT9080P.450 / APT9080P.650 / APT9080P.850



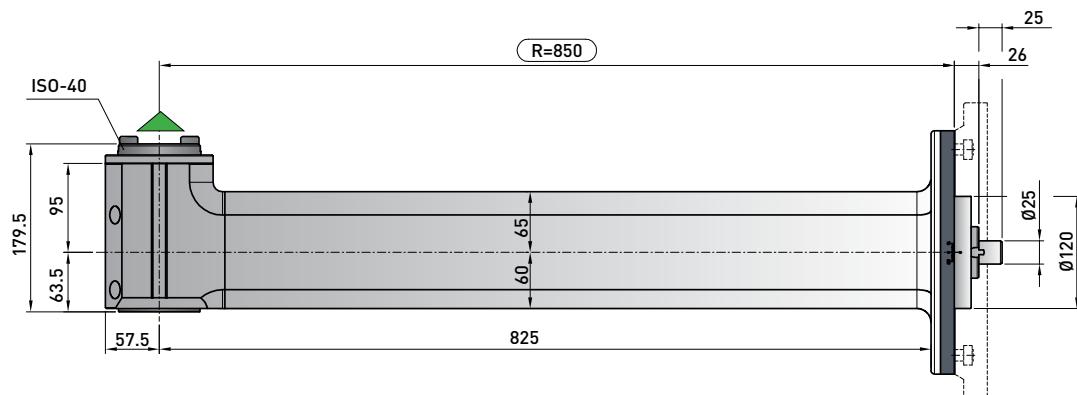
**Weight**  
Peso  
**62 kg**



**Weight**  
Peso  
**75 kg**



**Weight**  
Peso  
**105 kg**



## TCU-8

APTCU80C

## Technical data

Caratteristiche tecniche



Ratio  
Rapporto  
**1:1**



RPM  
Velocità  
**3.000 min<sup>-1</sup>**



Max. axial load  
Max. carico assiale  
**2.400 N**



Torque  
Momento torcente  
**160 Nm**



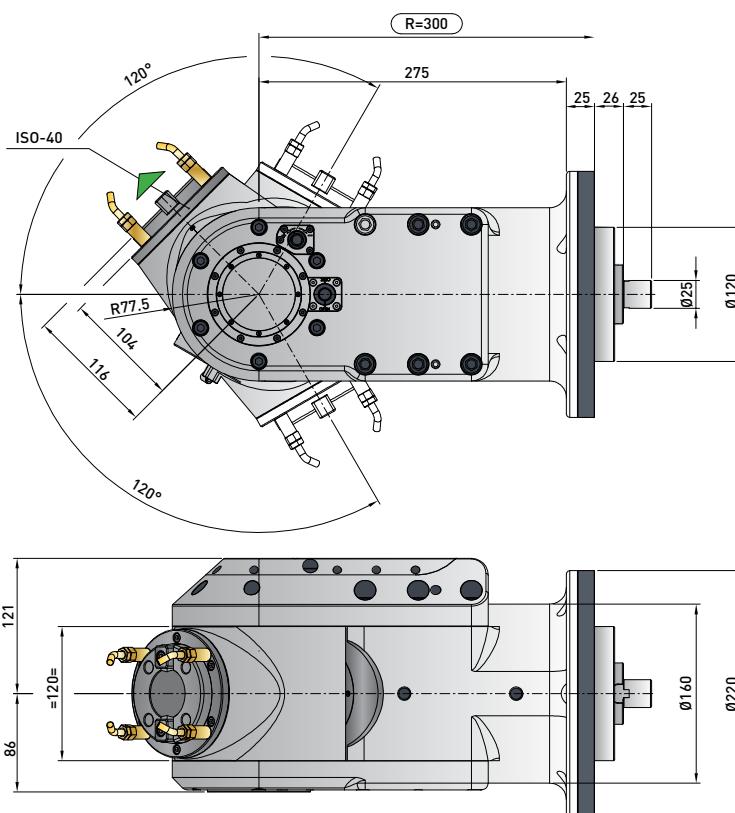
Weight  
Peso  
**72 kg**



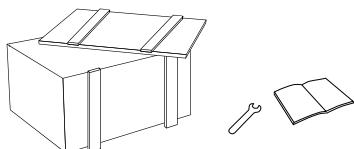
Tapping  
Maschiatura  
**Max. M27**



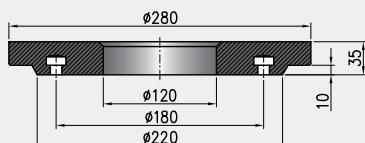
Collet  
Pinza  
**ISO/BT 40**



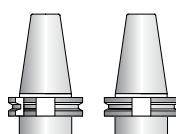
## \* STANDARD EQUIPMENT includes:



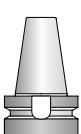
FLANGIA TCU-8



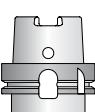
▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino



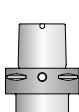
Shank / Cono



MAS-BT



HSK



CAPTO

## Option / Opzione



bar max  
**12**

Coolant through spindle  
Adduzione refrigerante interna



HSK 63

Quick Change  
Attacco rapido

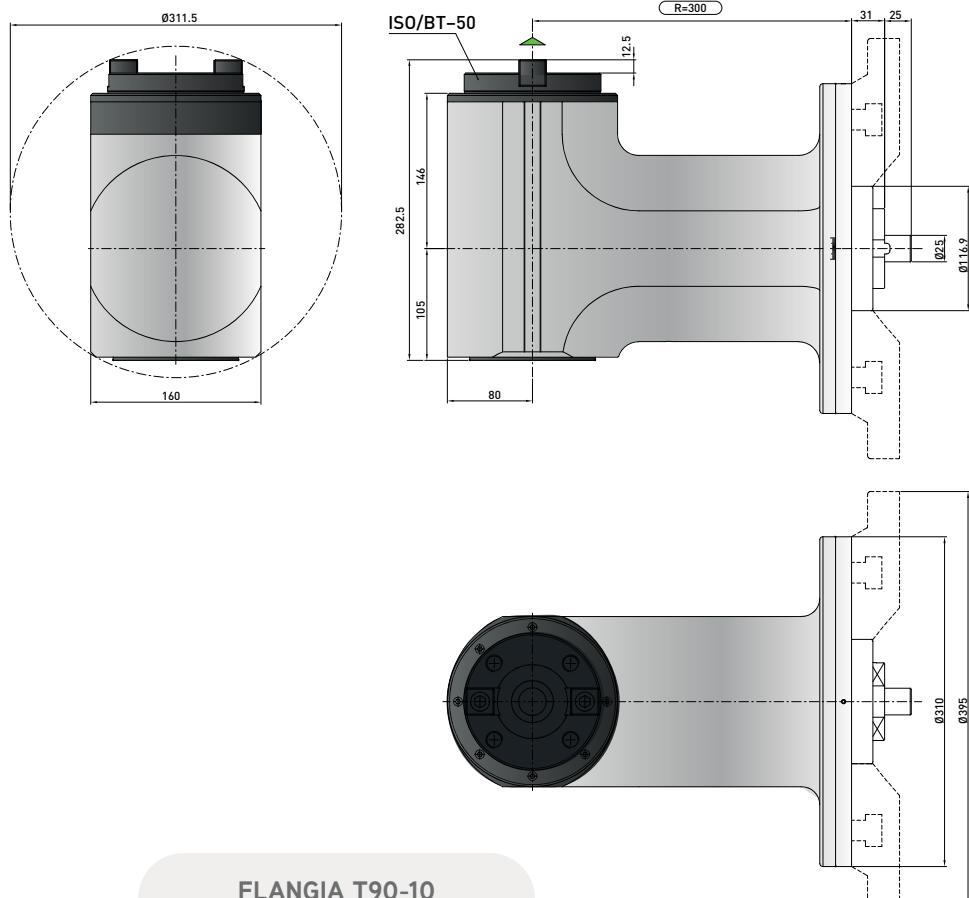


OIL  
Oil lubrication  
Lubrificazione

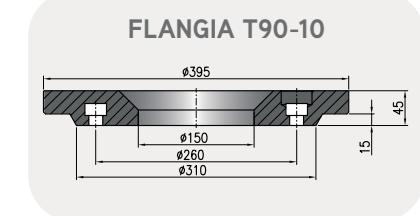
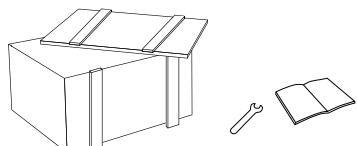
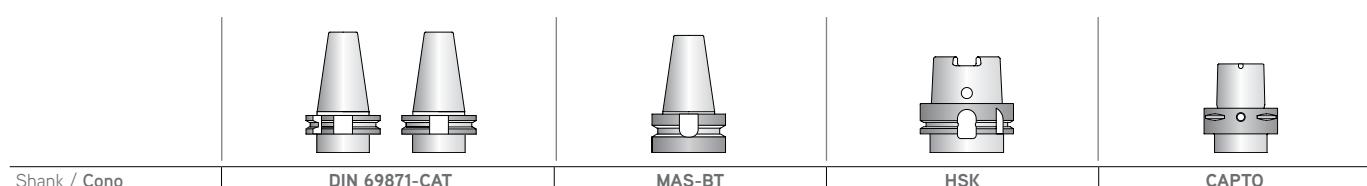
# T90-10

**APT9010C**
**Technical data**

Caratteristiche tecniche



	Ratio Rapporto <b>1:1</b>
	RPM Velocità <b>3.000 min<sup>-1</sup></b>
	Max. axial load Max. carico assiale <b>3.300 N</b>
	Torque Momento torcente <b>400 Nm</b>
	Weight Peso <b>77 kg</b>
	Tapping Maschiatura <b>Max. M33</b>
	Collet Pinza <b>ISO/BT 50</b>

**\* STANDARD EQUIPMENT**  
includes:

 Direction of rotation same as machine spindle / *senso di rotazione uguale al mandrino*

**Option / Opzione**

bar max  
**100**

Coolant through spindle  
Refrigerante interno

## TDU-10

APTDU10C

## Technical data

Caratteristiche tecniche



Ratio

Rapporto

1:1



RPM

Velocità

3.000 min<sup>-1</sup>

Max. axial load

Max. carico assiale

3.300 N



Torque

Momento torcente

400 Nm



Weight

Peso

121 kg



Tapping

Maschiatura

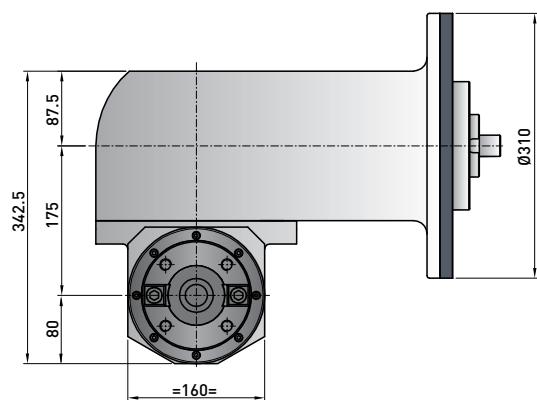
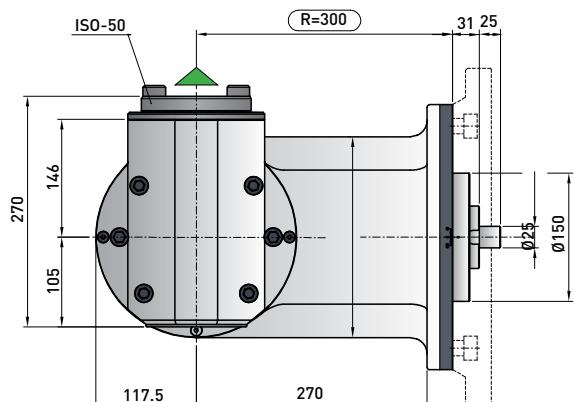
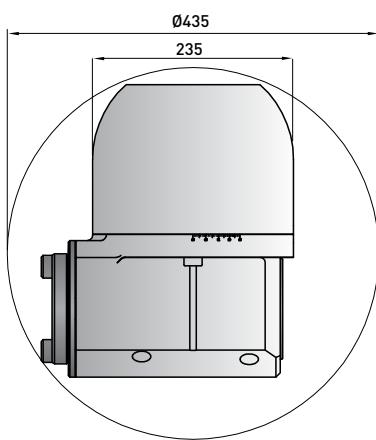
Max. M33



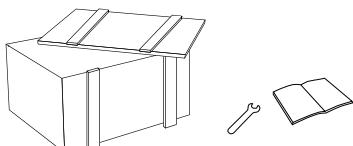
Collet

Pinza

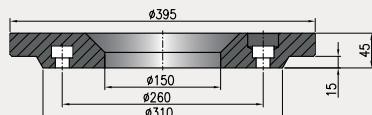
ISO/BT 50



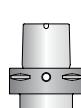
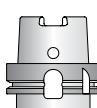
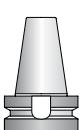
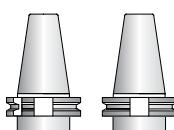
\* STANDARD EQUIPMENT  
includes:



FLANGIA TDU-10



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino



Shank / Cono

DIN 69871-CAT

MAS-BT

HSK

CAPTO

## Option / Opzione



bar max

12

Coolant through flange and output spindle  
Adduzione refrigerante attraverso  
la flangia ed il mandrino di uscita



HSK 100 CAPTO C6/C8

Quick Change  
Attacco rapido



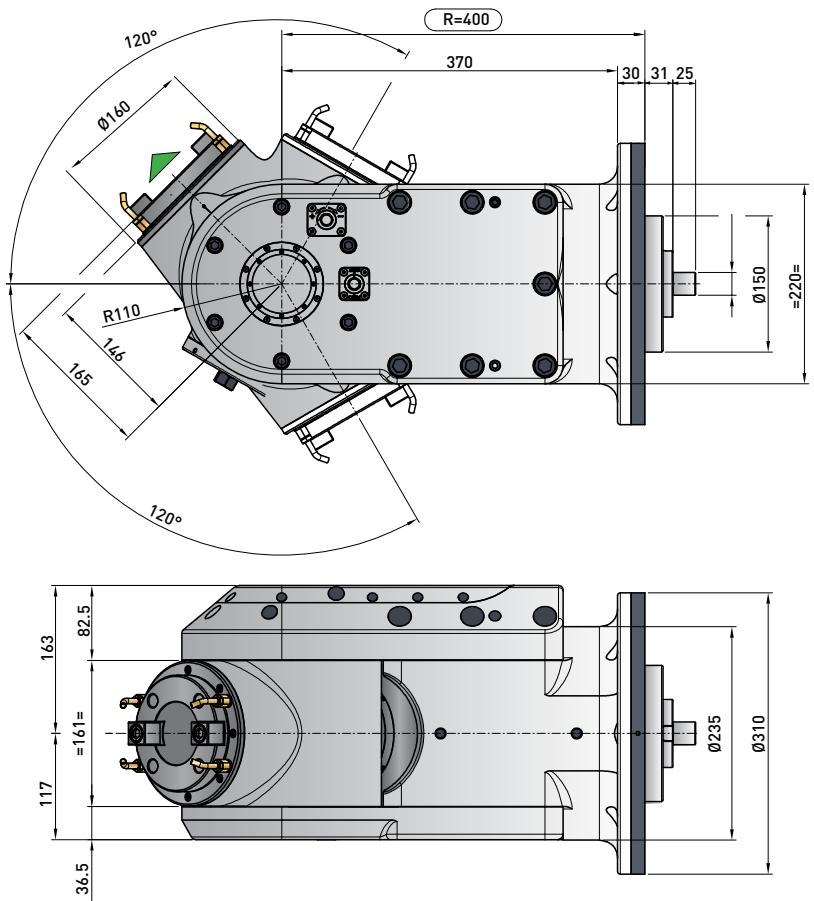
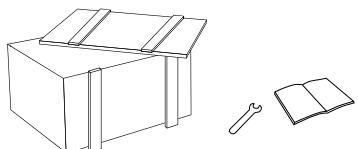
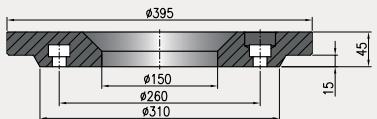
AIR/OIL

Air / Oil lubrication  
Lubrificazione aria / olio

# TCU-10

**APTCU10C**
**Technical data**

Caratteristiche tecniche


 Ratio  
Rapporto  
**1:1**
 RPM  
Velocità  
**3.000 min<sup>-1</sup>**
 Max. axial load  
Max. carico assiale  
**3.300 N**
 Torque  
Momento torcente  
**350 Nm**
 Weight  
Peso  
**194 kg**
 Tapping  
Maschiatura  
**Max. M33**
 Collet  
Pinza  
**ISO/BT 50**
**\* STANDARD EQUIPMENT**  
includes:

**FLANGIA TCU-10**

 Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

Shank / Cono	DIN 69871-CAT	MAS-BT	HSK	CAPTO

**Option / Opzione**


bar max

**12**

Coolant through spindle  
Adduzione refrigerante interna

**HSK 100**

Quick Change  
Attacco rapido

**OIL**  
Oil lubrication  
Lubrificazione

## TR90-15

APTR9015C

## Technical data

Caratteristiche tecniche



Ratio  
Rapporto  
**1.875:1 SPEEDER**



RPM  
Velocità  
**2.500 min<sup>-1</sup> OUTPUT**



Max. axial load  
Max. carico assiale  
**3.900 N**



Torque  
Momento torcente  
**600 Nm**



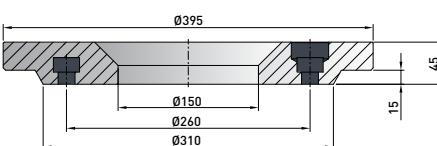
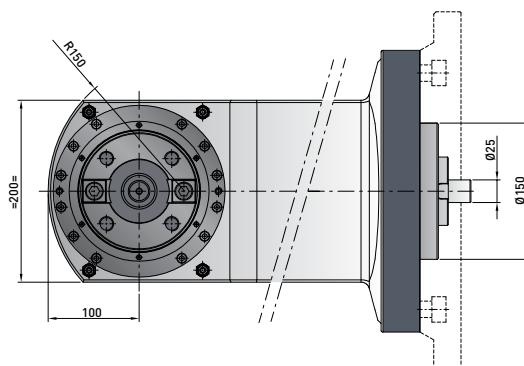
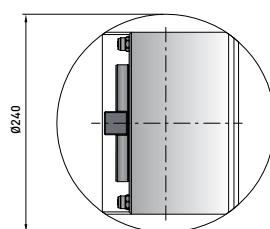
Weight  
Peso  
**110/140/180 kg**



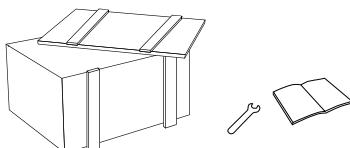
Tapping  
Maschiatura  
**Max. M37**



Collet  
Pinza  
**ISO/BT 50**



\* STANDARD EQUIPMENT  
includes:



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino

Shank / Cono	DIN 69871-CAT	MAS-BT	HSK	CAPTO

## Option / Opzione



bar max  
**12**

Coolant through flange and output spindle  
Adduzione refrigerante attraverso la flangia e il mandrino di uscita



bar max

**100**

Coolant through modular taper  
Adduzione refrigerante attraverso il cono



**HSK 63**

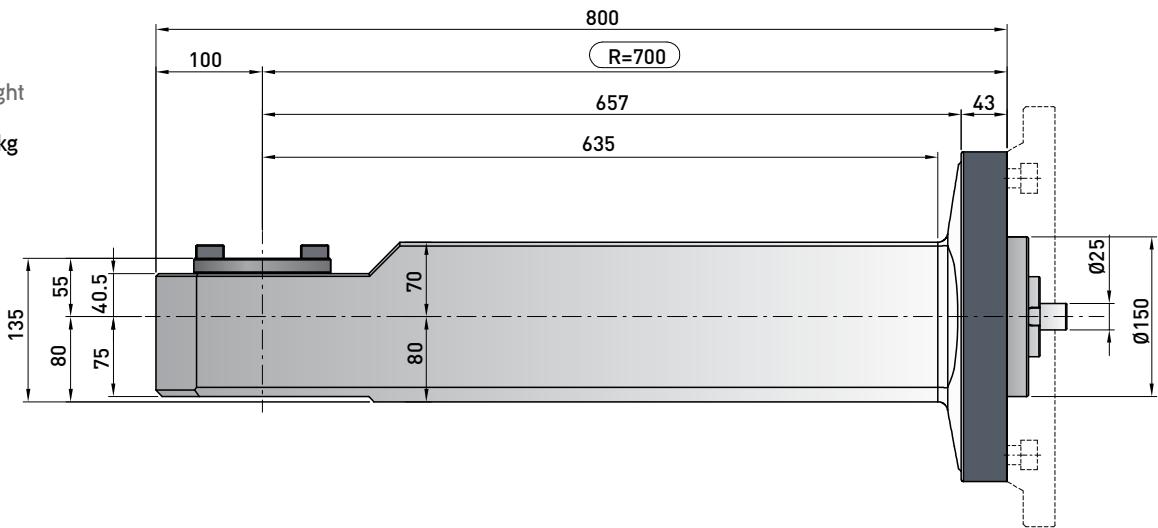
Quick Change  
Attacco rapido



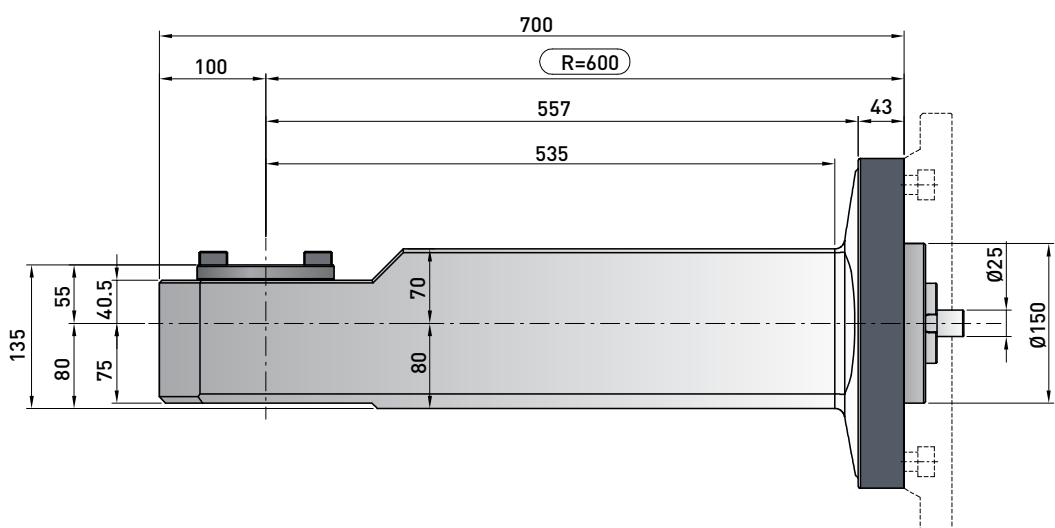
**AIR/OIL**

Air / Oil lubrication  
Lubrificazione aria / olio

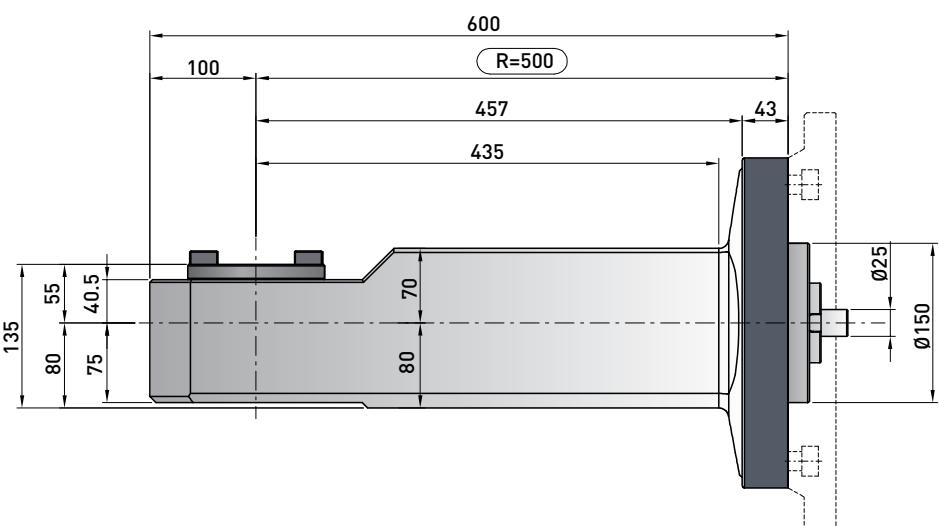
 Weight  
Peso  
**180 kg**



 Weight  
Peso  
**140 kg**



 Weight  
Peso  
**110 kg**



**\* solo su richiesta**  
**only on request**

P100



WABCO  
DRY BRAKING ABS POWERED  
MAX. 300 km/h

# I nostri **SERVIZI**

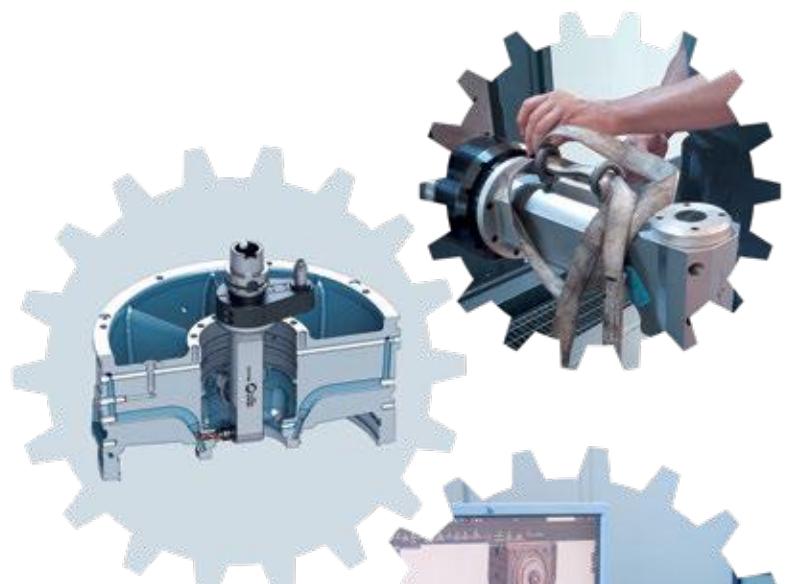
## *Our services*

---



### **DATABASE 3D**

*Database 3D*



### **STOP BLOCK**

studio applicativo

*STOP BLOCK  
application study*



### **ANALISI FATTIBILITÀ** di lavorazione

*Feasibility study design  
and technical proposal*



### **CREAZIONE 3D PRELIMINARE** simulazione nel pezzo

*Preliminary 3d proposal simulation  
in the workpiece*



### **VERIFICA BASE** parametri lavorazione

*Simple check of parameters*



### **VIDEO TUTORIAL** corretto utilizzo teste

*Tutorial video use of the product*



### **HEADS4FUTURE** sito customer service

*HEADS4FUTURE customer service site*



### **LIVE CHAT**

*Live chat*



### **QR CODE** istruzioni sul prodotto

*QR code instructions on product*



### **ASSISTENZA IN LOCO** installazione c/o cliente

*On site service installation at customer site*





Alberti



**ALBERTI UMBERTO S.r.l.**

**HEADQUARTER**

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