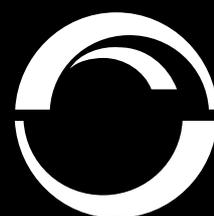




CATALOGO | **2024**
CATALOGUE

Technology heads for **FUTURE**

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



Alberti[®]
Technology heads for future

albertiumberto.com





Teste angolari / Angle heads

INDEX

	Presentazione azienda <i>Alberti Company</i>	6 - 7
	Caratteristiche tecniche <i>Technical data</i>	8 - 9
	Esempi di lavorazione standard <i>Examples of standard machining</i>	10 - 11
	Come scegliere la testa in base alla grandezza del portautensile <i>How to choose your head according to the size of the toolholder</i>	12
	Come scegliere la testa in base alla grandezza del cono <i>How to choose your head according to the size of the shank</i>	13
	Dati tecnici <i>Technical data</i>	14
	Per una corretta ordinazione <i>Data sheet form</i>	15
	Linea Control <i>Control line</i>	16 - 68
	Esempi di Stop Block <i>Examples of Stop Block and pins</i>	18 - 19
	Linea Smart Change <i>Line Smart Change</i>	51 - 58
	Teste con prolunga <i>Extended Heads</i>	69 - 71
	Linea Index <i>Index line</i>	72 - 75
	Linea Ultralim <i>Ultralim line</i>	76 - 83
	Linea Aluminum <i>Aluminum line</i>	84 - 89
	Linea High Speed <i>Line High Speed</i>	90 - 103
	Accessori <i>Accessories</i>	104
	Linea Modular <i>Modular line</i>	105 - 125
	Moduli e flange <i>Extensions and flanges</i>	106 - 107
	Linea P - Modular <i>Line P - Modular</i>	126 - 135
	I nostri servizi <i>Our services</i>	137

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 m2 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 40 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 40 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.

ALBERO CON CONO SPINDLE W/ARBOR



Corpo testa in ghisa sferoidale GS-600 stabilizzata per un assorbimento totale delle vibrazioni. Stabilità termica e rigidità superiori ad altri materiali (es. acciaio e alluminio). Cromatura opaca sul corpo e sedi dei cuscinetti interamente rettificate.

Casting made of GS 600 stabilized spheroidal cast iron to better absorb vibrations. Increased thermal stability and rigidity compared to materials such as steel and aluminum. Mat chromed finishing outside and ground bearing housing

CORPO TESTA BODY



Cuscinetti a contatto obliquo 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.

CUSCINETTI BEARINGS



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.

GUARNIZIONI SEALS



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 spiroidale 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.

INGRANAGGI GEARS



Tutti i particolari sono caratterizzati da nostro logo e codice per garantirne 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.



**FASCE LAPPATE
LAPPED SURFACE**

Fasce lappate per il corretto allineamento dell'utensile

Lapped side surface for correct alignment of the tool.

**QR CODE
QR CODE**

Le nostre teste dispongono di un QR Code per consentirne una facile e rapida identificazione.

Our angular heads have a QR Code that enables an easy and quick identification.

**MANDRINO
SPINDLE**

Albero porta-utensile in acciaio legato, temperato e con doppio labirinto. Completamente rettificato, con tolleranze inferiori ai 5 micron, per garantire una durata maggiore dell'utensile in lavorazione.

Output spindle made of hardened alloyed steel with double labyrinth seal. Completely ground with tolerance lower than 5 micron to ensure a longer tool life.

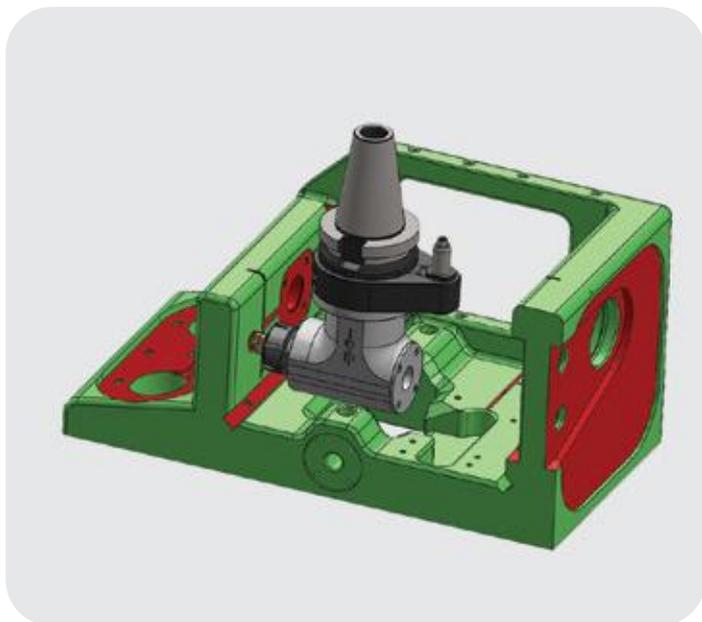


Nuovo e pratico sistema che facilita l'operazione di serraggio utensile sfruttando una chiave di contrasto da inserire sull'albero in modo da avere una mano libera.

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.

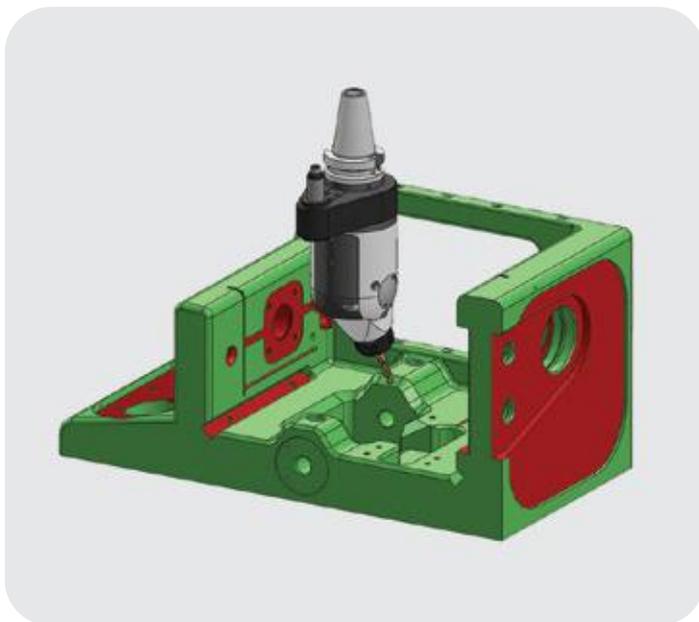
Esempi di **LAVORAZIONE STANDARD.**

Examples of standard machining



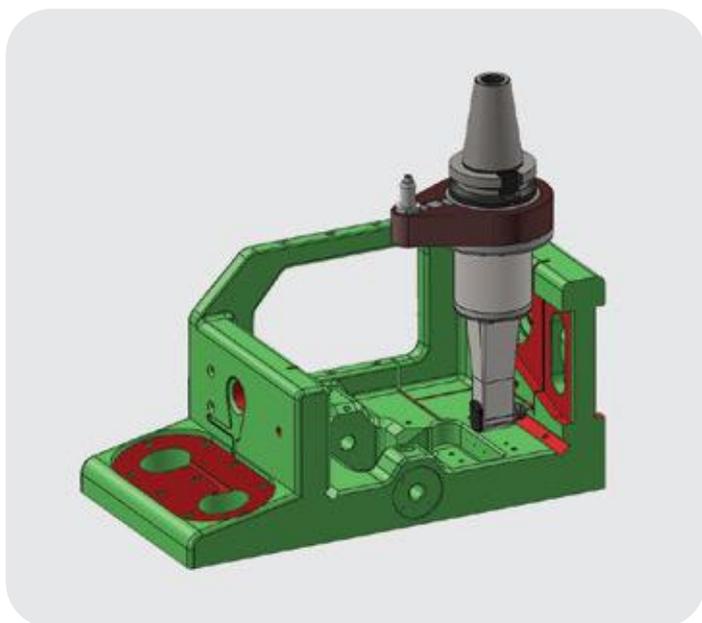
Testa a 90°

90° head



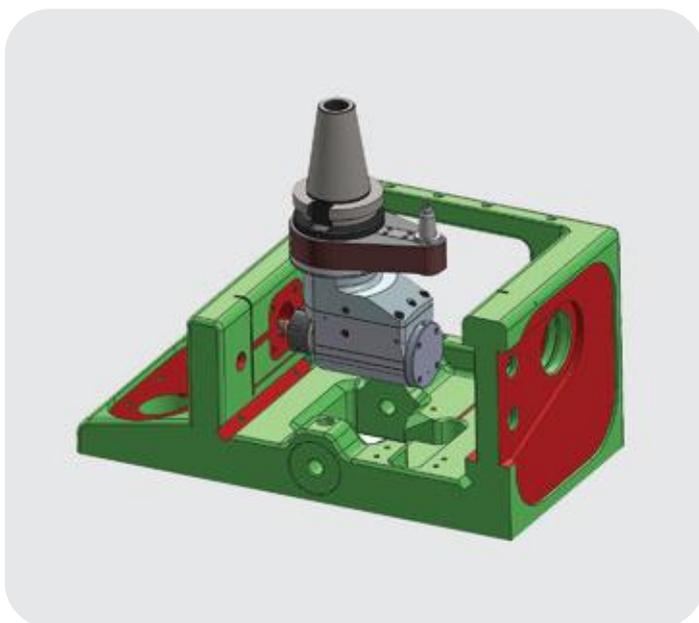
Testa ad inclinazione regolabile

Head with adjustable angle +/- 90°



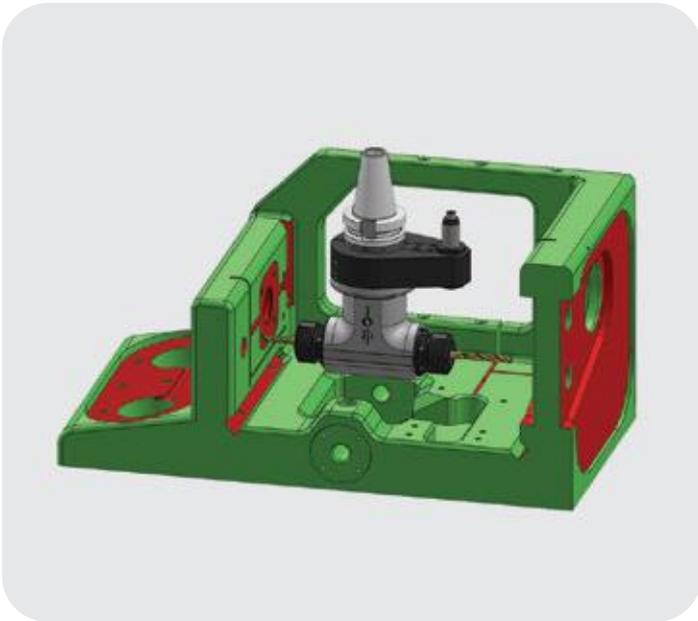
Testa a 90° prolungata

Extended length head



Testa con refrigerante

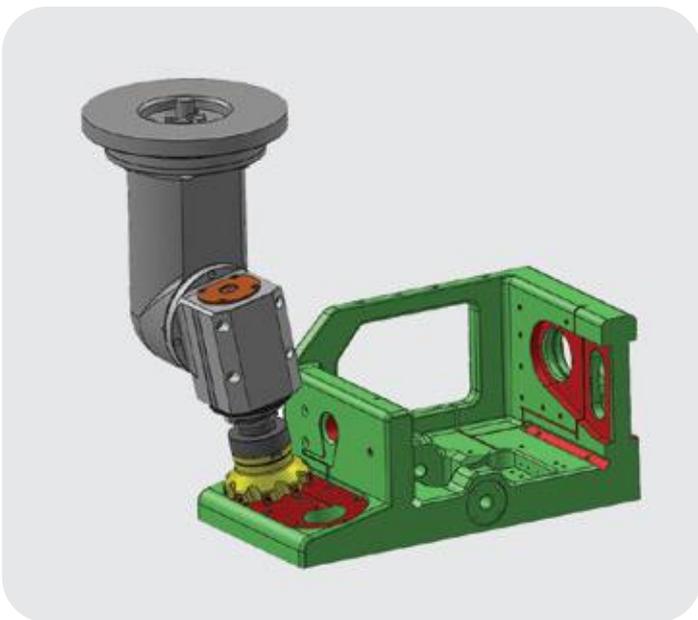
Head with internal coolant



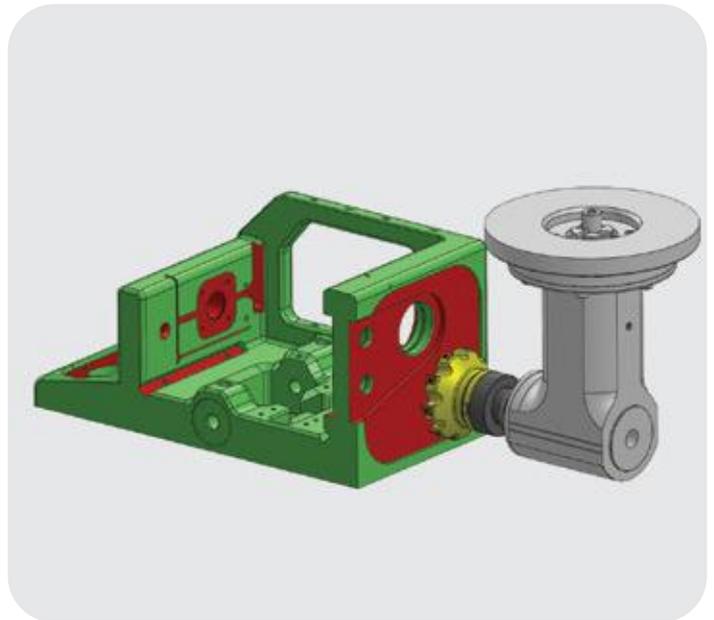
Testa con uscita doppia (180°)
Dual output head (180°)



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

SCEGLIERE LA TESTA in base alla grandezza del portautensile.

How to choose your head according to the size of the toolholder



SHAUBLIN

PINZA/COLLET ER-8 WELDON Ø 6 mm P6 (0,5-4,5 mm)

Testa/Head	Pag
T90cn-0.4	20
TR90cn-0.4	21
T90-0.4	108



PINZA/COLLET ER-11 WELDON Ø 6 mm

Testa/Head	Pag
T90cn-0.5 C NEO	22
T90cn-0.5 C NEO IC	23
T90cn-0.5 L NEO	24
T90cn-0.5 L NEO IC	25
TR90cn-0.5 (ER-AX 11)	26
T90cn-0.5M	86
TCUcn-0.5M	87
T90-0.5C NEO (modular)	109
T90-0.5L NEO (modular)	110



PINZA/COLLET ER-16 WELDON Ø 10 mm PORTAFRESA/SHELL MILL HOLDER 10 mm

Testa/Head	Pag
T90cn-1.5C NEO	27
T90cn-1.5C NEO IC	28
T90cn-1.5L NEO	29
T90cn-1.5L NEO IC	30
T90cn-1.5 2U NEO	31
TR90cn-1.5 (ER-AX-16)	32
THRcn-1.5 NEO IC	33
TCUcn-1.5 NEO	34
T90cn-1.5M	88
T90-1.5 NEO (modular)	111
T90-1.5L NEO (modular)	112
T90-1.5 2U NEO (modular)	113

PINZA/COLLET ER-25 WELDON Ø 16 mm PORTAFRESA/SHELL MILL HOLDER 16 mm

T90cn-2.5C NEO	35
T90cn-2.5C NEO IC	36
T90cn-2.5L NEO	37
T90cn-2.5L NEO IC	38
T90cn-2.5 2U NEO	39
TR90cn-2.5 (ER-AX 25)	40
THRcn-2.5 NEO IC	41
TCUcn-2.5 NEO	42
T90-2.5 NEO (modular)	114
T90-2.5L NEO (modular)	115
T90-2.5 2U NEO (modular)	116
TCU-2.5 NEO (modular)	117



PINZA/COLLET ER-32 WELDON Ø 20 mm PORTAFRESA/SHELL MILL HOLDER 27 mm

Testa/Head	Pag
T90cn-3.5C NEO	43
T90cn-3.5C NEO IC	44
T90cn-3.5L NEO	45
T90cn-3.5L NEO IC	46
T90cn-3.5 2U NEO	47
TR90cn-3.5 (ER-AX 32)	48
THRcn-3.5 NEO IC	49
TCUcn-3.5 NEO	50
T90cn-3.5 SC	56
T90cn-3.5 ALLUMINIUM SC	57
TCUcn-3.5 NEO SC	58
T90-3.5 NEO (modular)	118
T90-3.5L NEO (modular)	119
T90-3.5 2U NEO (modular)	120
TCU-3.5 NEO (modular)	121

PINZA/COLLET ER-40 WELDON Ø 25 mm PORTAFRESA/SHELL MILL HOLDER 27 mm

T90cn-4.5C NEO	59
T90cn-4.5C NEO IC	60
T90cn-4.5L NEO	61
T90cn-4.5L NEO IC	62
T90cn-4.5 2U NEO	63
TR90cn-4.5	64
T90-4.5C NEO (modular)	122
T90-4.5L NEO (modular)	123
T90-4.5 XL (modular)	123 bis



PINZA/COLLET ISO40 DIN69871 - BT40 - CAT40 CAPTO C4 HSK63

Testa/Head	Pag
T90cn-5C NEO	65
T90cn-5C NEO IC	66
T90cn-5L NEO	67
T90cn-5L NEO IC	68
T90-5C NEO	124
T90-5L NEO	125
T90-5XL	125 bis
T90-8 NEO	126
TDU-8	127
T90-8 XL NEO	128 - 129
TCU-8 IC 15 BAR	130

PINZA/COLLET ISO50 DIN69871 - BT50 - CAT50 HSK63

T90-10 NEO IC	131
TDU-10	132
TCU-10 IC 15 BAR	133
TR90-15	134 - 135

SCEGLIERE LA TESTA in base alla grandezza del cono.

How to choose your head according to the size of the shank

CONO/SPINDLE ISO/BT 30

Testa/Head	Pag
T90cn-0.5M	86
TCUcn-0.5M	87
T90cn-1.5M	88
Turbodrill	98 - 99

CONO/SPINDLE ISO/BT/CAT 40

Testa/Head	Pag
SLIMLINE	78 - 79
ULTRASLIM	80 - 83
T90cn-0.4	20
TR90cn-0.4	21
T90cn-0.5C NEO	22
T90cn-0.5C NEO IC	23
T90cn-0.5L NEO	24
T90cn-0.5L NEO IC	25
TR90cn-0.5	26
T90cn-1.5C NEO	27
T90cn-1.5C NEO IC	28
T90cn-1.5L NEO	29
T90cn-1.5L NEO IC	30
T90cn-1.5 2U NEO	31
TR90cn-1.5 (ER-AX-16)	32
THRcn-1.5 NEO IC	33
TCUcn-1.5 NEO	34
T90cn-2.5C NEO	35
T90cn-2.5C NEO IC	36
T90cn-2.5L NEO	37
T90cn-2.5L NEO IC	38
T90cn-2.5 2U NEO	39
TR90cn-2.5 (ER-AX 25)	40
THRcn-2.5 NEO IC	41
TCUcn-2.5 NEO	42
T90cn-3.5 ALLUMINIUM SC	57
Tutte le teste Modular All modular heads	108 - 135
High Speed Line	90 - 96

CONO/SPINDLE HSK63

Testa/Head	Pag
SLIMLINE	78 - 79
ULTRASLIM	80 - 83
T90cn-0.4	20
TR90cn-0.4	21
T90cn-0.5C NEO	22
T90cn-0.5C NEO IC	23
T90cn-0.5L NEO	24
T90cn-0.5L NEO IC	25
TR90cn-0.5	26
T90cn-1.5C NEO	27
T90cn-1.5C NEO IC	28
T90cn-1.5L NEO	29

CONO/SPINDLE HSK63

Testa/Head	Pag
T90cn-1.5L NEO IC	30
T90cn-1.5 2U NEO	31
TR90cn-1.5 (ER-AX-16)	32
THRcn-1.5 NEO IC	33
TCUcn-1.5 NEO	34
T90cn-2.5C NEO	35
T90cn-2.5C NEO IC	36
T90cn-2.5L NEO	37
T90cn-2.5L NEO IC	38
T90cn-2.5 2U NEO	39
TR90cn-2.5 (ER-AX 25)	40
THRcn-2.5 NEO IC	41
TCUcn-2.5 NEO	42
T90cn-3.5C NEO	43
T90cn-3.5C NEO IC	44
T90cn-3.5L NEO	45
T90cn-3.5L NEO IC	46
T90cn-3.5 2U NEO	47
TR90cn-3.5 (ER-AX 32)	48
THRcn-3.5 NEO IC pag 49	49
TCUcn-3.5 NEO pag 50	50
T90cn-3.5 NEO SC pag 56	56
TCUcn-3.5 NEO SC pag 58	58
Tutte le teste Modular All modular heads	108 - 135
High Speed Line	90 - 96

CONO/SPINDLE ISO/BT/CAT 50 HSK 80/100

Testa/Head	Pag	Pag
SLIMLINE	78 - 79	78 - 79
ULTRASLIM	80 - 83	80 - 83
T90cn-0.4	20	20
TR90cn-0.4	21	21
T90cn-0.5C NEO	22	22
T90cn-0.5C NEO IC	23	23
T90cn-0.5L NEO	24	24
T90cn-0.5L NEO IC	25	25
TR90cn-0.5	26	26
T90cn-1.5C NEO	27	27
T90cn-1.5C NEO IC	28	28
T90cn-1.5L NEO	29	29
T90cn-1.5L NEO IC	30	30
T90cn-1.5 2U NEO	31	31
TR90cn-1.5 (ER-AX-16)	32	32
THRcn-1.5 NEO IC	33	33
TCUcn-1.5 NEO	34	34
T90cn-2.5C NEO	35	35
T90cn-2.5C NEO IC	36	36
T90cn-2.5L NEO	37	37

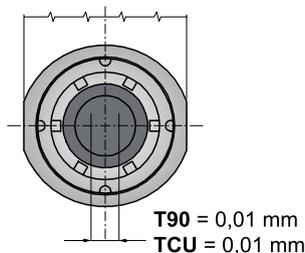
CONO/SPINDLE

ISO/BT/
CAT 50 HSK
80/100

Testa/Head	Pag	Pag
T90cn-2.5L NEO IC	38	38
T90cn-2.5 2U NEO	39	39
TR90cn-2.5 (ER-AX 25)	40	40
THRcn-2.5 NEO IC	41	41
TCUcn-2.5 NEO	42	42
T90cn-3.5C NEO	43	43
T90cn-3.5C NEO IC	44	44
T90cn-3.5L NEO	45	45
T90cn-3.5L NEO IC	46	46
T90cn-3.5 2U NEO	47	47
TR90cn-3.5 (ER-AX 32)	48	48
THRcn-3.5 NEO IC	49	49
TCUcn-3.5 NEO	50	50
T90cn-3.5 NEO SC	56	56
TCUcn-3.5 NEO SC	58	58
T90cn-4.5C NEO	59	59
T90cn-4.5C NEO IC	60	60
T90cn-4.5L NEO	61	61
T90cn-4.5L NEO IC	62	62
T90cn-4.5 2U NEO	63	63
TR90cn-4.5	64	64
T90cn-5C NEO	65	65
T90cn-5C NEO IC	66	66
T90cn-5L NEO	67	67
T90cn-5L NEO IC	68	68
Tutte le teste Modular All modular heads	108 - 135	108 - 135
High Speed Line	90 - 96	90 - 96

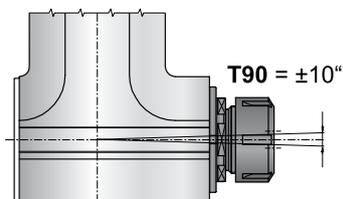
DATI TECNICI.

Technical Data



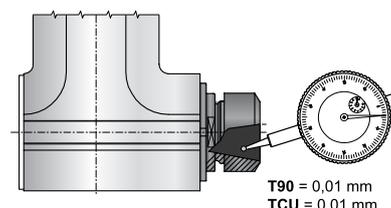
Disassamento tra albero in entrata e mandrino portautensile

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.

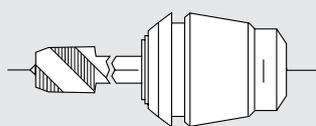
Tapping

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
T90-1,5	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



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

.....

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

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



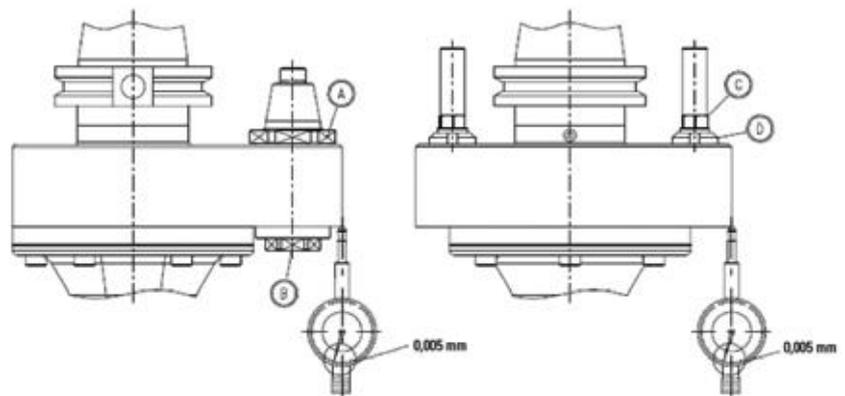
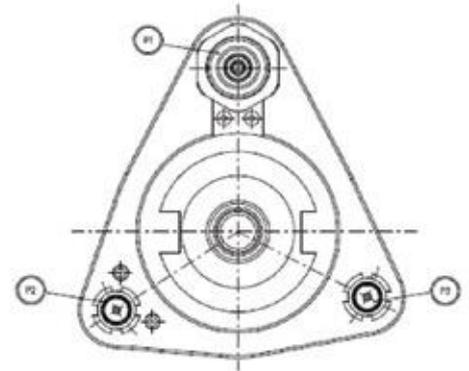
SUPPORTO 3 PUNTI.

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: 595180006

*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

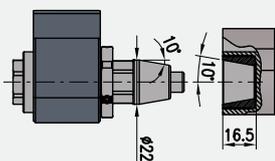
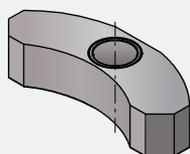
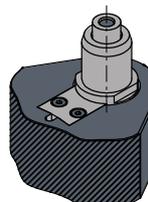
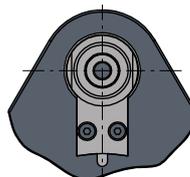
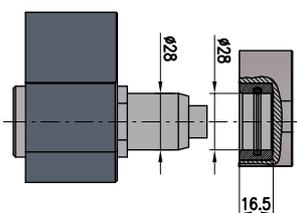
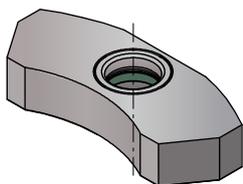
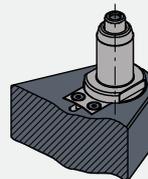
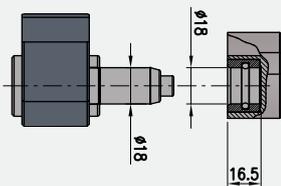
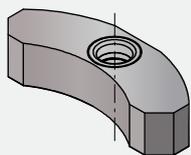
*Perno flottante
Floating pin*

F

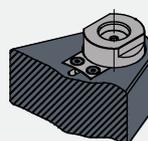
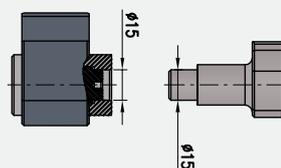
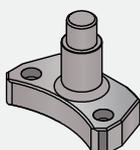
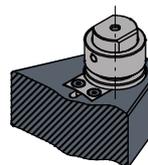
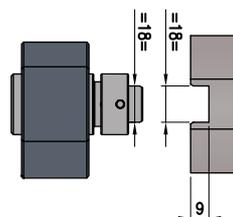
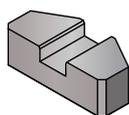
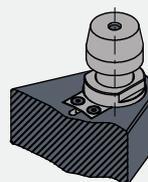
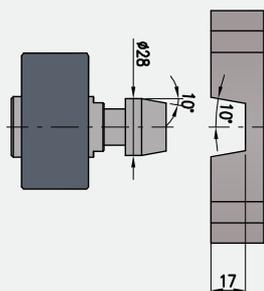
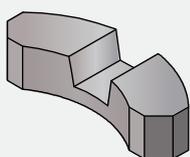
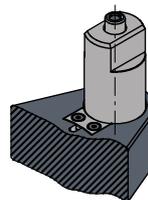
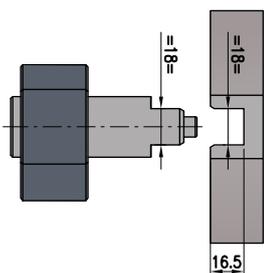
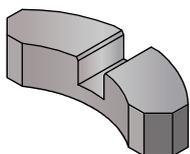
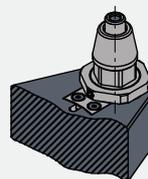
*Perno maschio speciale
Special male pin*

G

*Perno femmina speciale
Special female pin*



Perno regolabile
Adjustable pin



T90cn-0.4C

ACT9004C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
10.000 min⁻¹



Max. axial load
Max. carico assiale
100 N



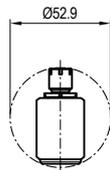
Torque
Momento torcente
4 Nm



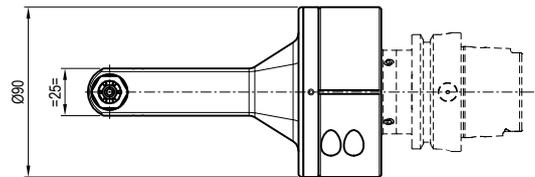
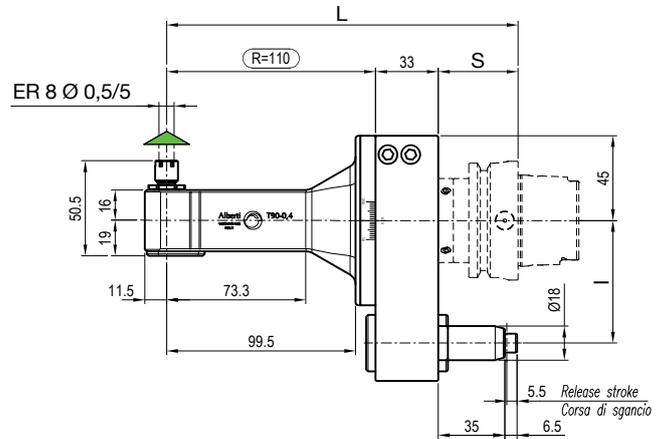
Weight
Peso
4 kg



Collet
Pinza
ER-8 (ø 0,5/5 mm)



Minimum diameter without tool
Diametro minimo senza utensile



*** STANDARD EQUIPMENT includes:**

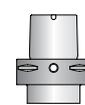
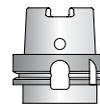


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



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



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

Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

Opzione / Option



bar max
12

Coolant through pin
Adduzione refrigerante attraverso il perno



Ø mm max.
6

Welding output
Weldon

TR90cn-0.4

ACTR904C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:2.375 SPEEDER



RPM
Velocità
8.000 min⁻¹ OUTPUT



Max. axial load
Max. carico assiale
135 N



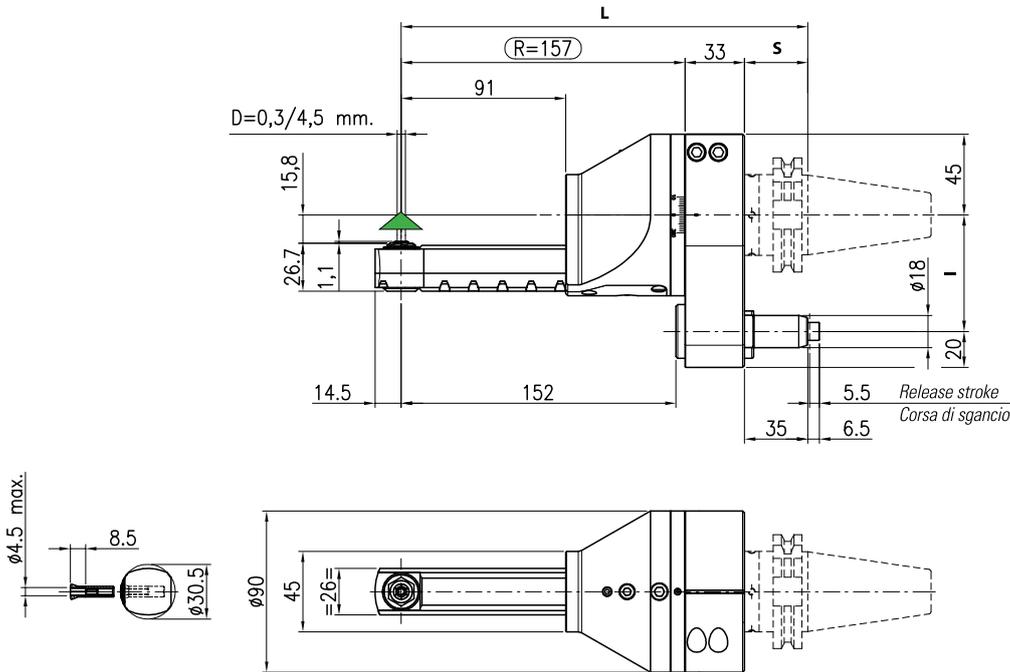
Torque
Momento torcente
8 Nm



Weight
Peso
4.5 kg



Collet
Pinza
SCHAUBLIN P6



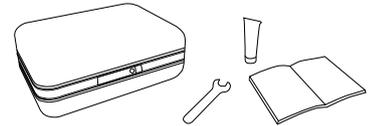
Minimum diameter without tool
Diametro minimo senza utensile

*** 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



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

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⁻¹



Max. axial load
Max. carico assiale
150 N



Torque
Momento torcente
12 Nm



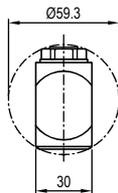
Weight
Peso
4 kg



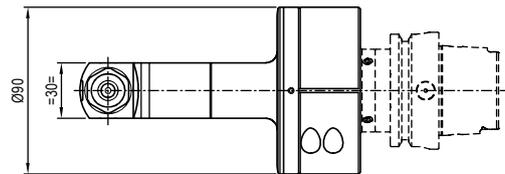
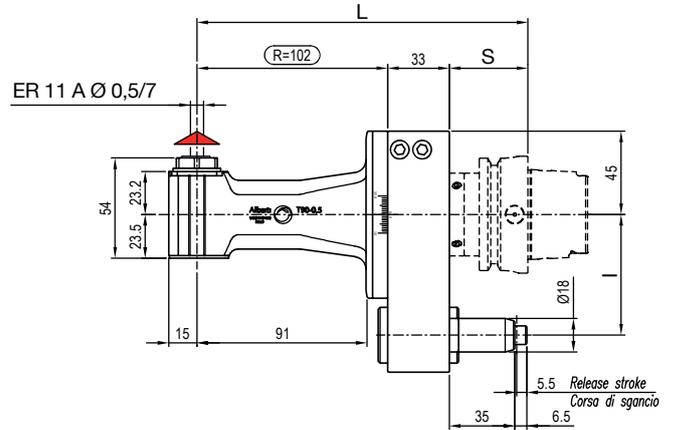
Tapping
Maschiatura
Max. M5



Collet
Pinza
ER-11A (ø 0,5/7 mm)



Minimum diameter without tool
Diametro minimo senza utensile



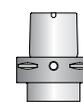
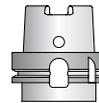
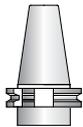
*** STANDARD EQUIPMENT includes:**

Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino
Dry rotation is possible / rotazione a secco possibile



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

Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Option / Opzione



bar max
12

Coolant through pin
Refrigerante attraverso il perno

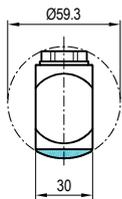


Ø mm max.
6

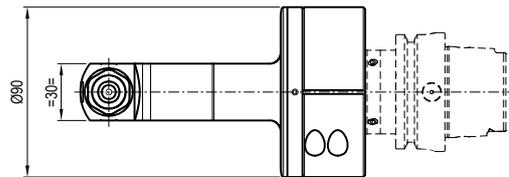
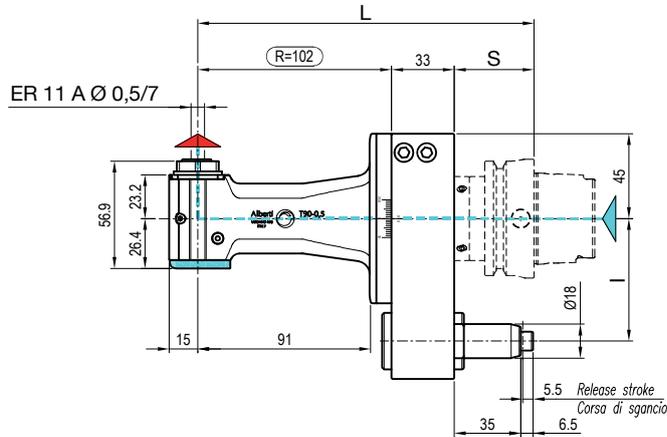
Weldon output
Weldon

T90cn-0.5C Neo IC

ACT9005C.IC



Minimum diameter without tool
Diametro minimo senza utensile



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

- Direction of rotation opposite as machine spindle / *sensò di rotazione contrario al mandrino*
Dry rotation is possible / *rotazione a secco possibile*
- Input coolant max. 1450 PSI / *ingresso refrigerante max. 100 bar*

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
10.000 min⁻¹ | **DRY**
Running
8.000 min⁻¹



Max. axial load
Max. carico assiale
150 N



Torque
Momento torcente
12 Nm



Weight
Peso
4 kg

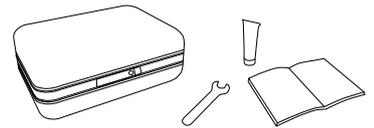


Tapping
Maschiatura
Max. M5



Collet
Pinza
ER-11A (Ø 0,5/7 mm)

*** STANDARD EQUIPMENT includes:**



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

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⁻¹



Max. axial load
Max. carico assiale
150 N



Torque
Momento torcente
12 Nm



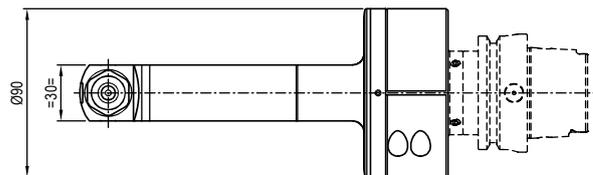
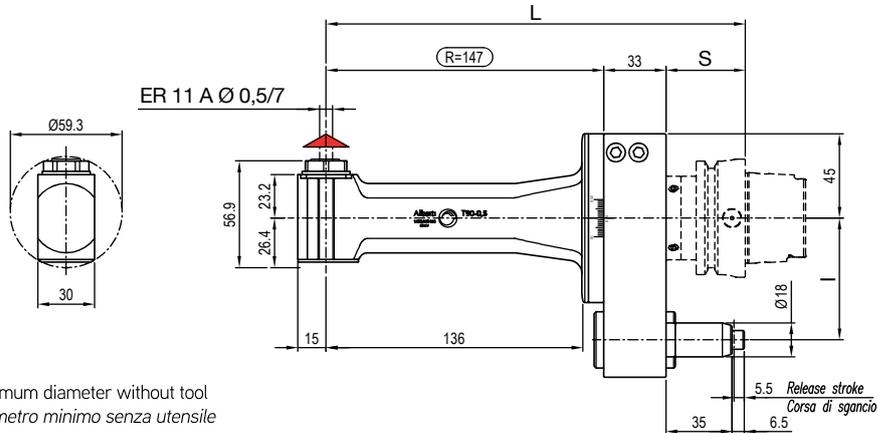
Weight
Peso
4.4 kg



Tapping
Maschiatura
Max. M5

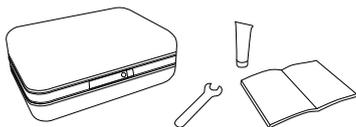


Collet
Pinza
ER-11A (ø 0,5/7 mm)

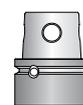
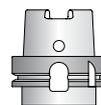


*** STANDARD EQUIPMENT includes:**

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



▲ Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino
Dry rotation is possible / rotazione a secco possibile



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

Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Option / Opzione



bar max
12

Coolant through pin
Refrigerante attraverso il perno

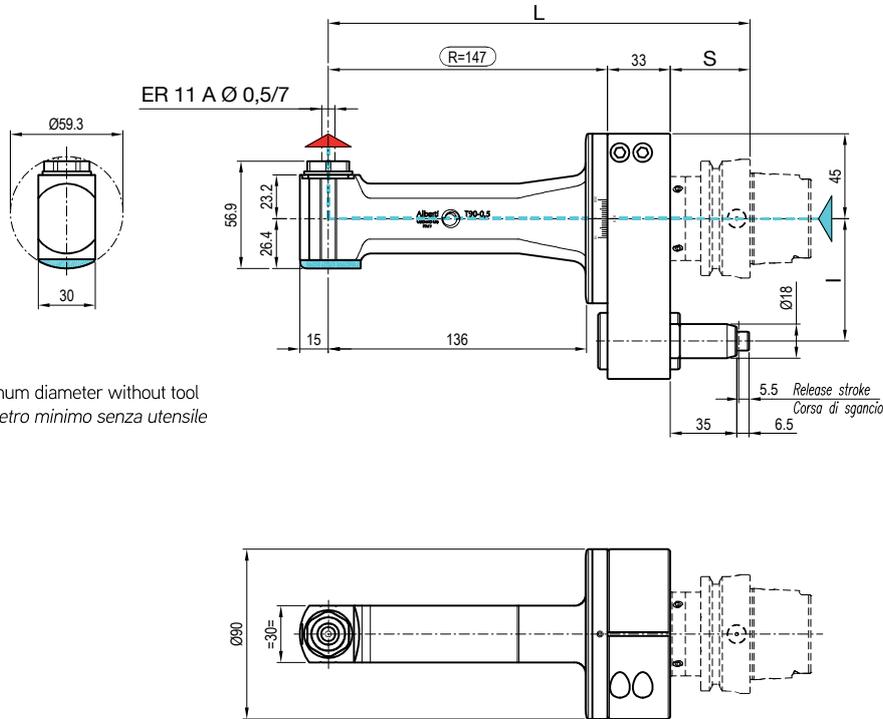


Ø mm max.
6

Welding output
Welding

T90cn-0.5L Neo IC

ACT9005L.IC



Minimum diameter without tool
Diametro minimo senza utensile

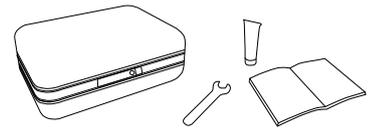
Technical data Caratteristiche tecniche

- Ratio**
Rapporto
1:1
- RPM**
Velocità
10.000 min⁻¹ | **DRY**
Running
8.000 min⁻¹
- Max. axial load**
Max. carico assiale
150 N
- Torque**
Momento torcente
12 Nm
- Weight**
Peso
4.4 kg
- Tapping**
Maschiatura
Max. M5
- Collet**
Pinza
ER-11A (ø 0,5/7 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
Dry rotation is possible / rotazione a secco possibile
- Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar



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

Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Option / Opzione



Ø mm max.

6

Weldon output
Weldon

TR90cn-0.5

ACTR905C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:2



RPM
Velocità
8.000 min⁻¹



Max. axial load
Max. carico assiale
250 N



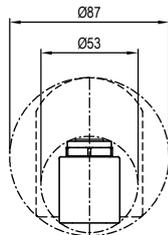
Torque
Momento torcente
20 Nm



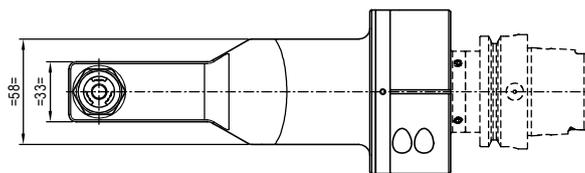
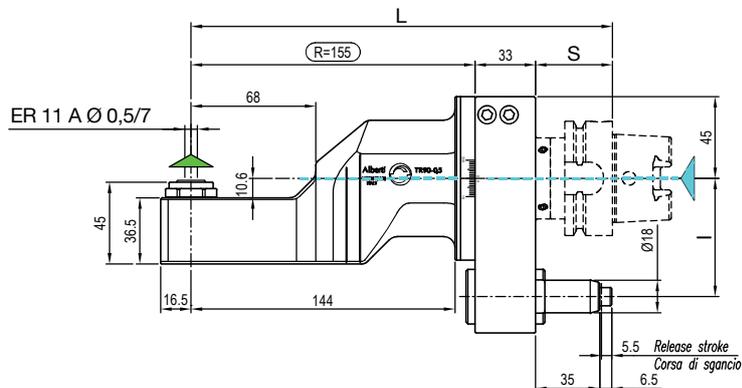
Weight
Peso
6 kg



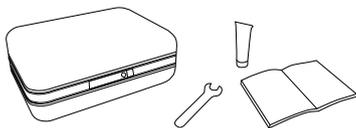
Collet
Pinza
ER-AX-11 (ø 0,5/7 mm)



Minimum diameter without tool
Diametro minimo senza utensile



*** STANDARD EQUIPMENT includes:**

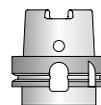


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



- Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
- Dry rotation is possible / rotazione a secco possibile
- Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar



Shank / Cono	DIN-69871		CAT		MAS-BT		HSK		CAPTO		KM
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8	63		
I	65-80	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)		
S	35	35	35	41	42	45	38	40	40		
L	218,875	218,875	218,875	224,875	225,875	228,875	221,875	223,875	223,875		

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⁻¹



Max. axial load
Max. carico assiale
250 N



Torque
Momento torcente
25 Nm



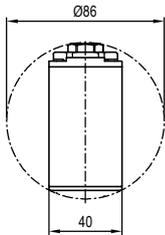
Weight
Peso
4.3 kg



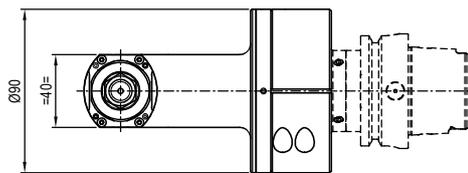
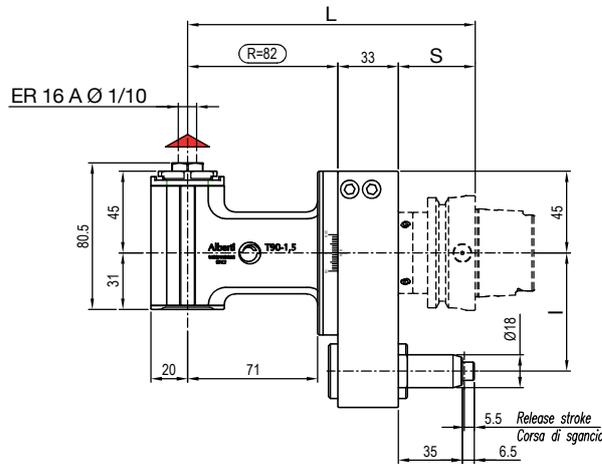
Tapping
Maschiatura
Max. M6



Collet
Pinza
ER-16A (ø 1/10 mm)



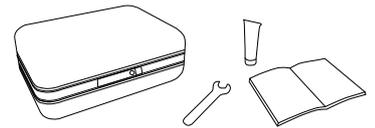
Minimum diameter without tool
Diametro minimo senza utensile



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
Dry rotation is possible / rotazione a secco possibile



Spindle / Cono	DIN-69871		CAT		MAS-BT		HSK		CAPTO		KM
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8	50-63		
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)		
S	35	35	35	41	42	45	38	40	40		
L	150	150	150	156	157	160	153	155	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⁻¹ | **DRY**
Running
8.000 min⁻¹



Max. axial load
Max. carico assiale
250 N



Torque
Momento torcente
25 Nm



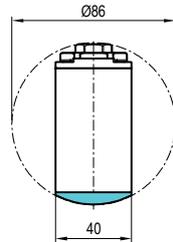
Weight
Peso
4.3 kg



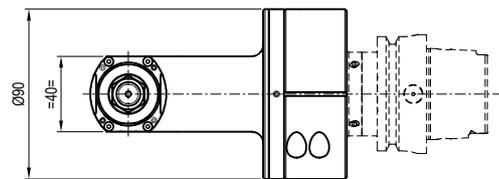
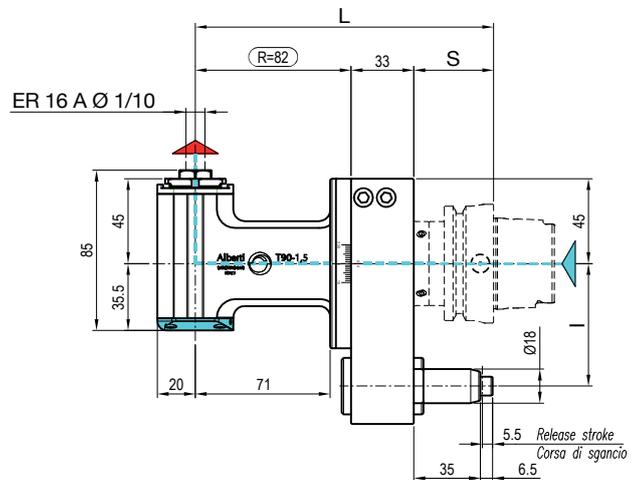
Tapping
Maschiatura
Max. M6



Collet
Pinza
ER-16A (ø 1/10 mm)



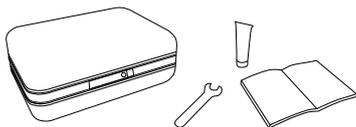
Minimum diameter without tool
Diametro minimo senza utensile



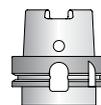
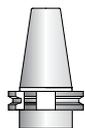
*** STANDARD EQUIPMENT includes:**

Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



- Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino
Dry rotation is possible / rotazione a secco possibile
- Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar



Spindle / Cono	DIN-69871		CAT		MAS-BT		HSK		CAPTO		KM
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8	50-63		
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)
S	35	35	35	41	42	45	38	40	40		
L	150	150	150	156	157	160	153	155	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⁻¹



Max. axial load
Max. carico assiale
250 N



Torque
Momento torcente
25 Nm



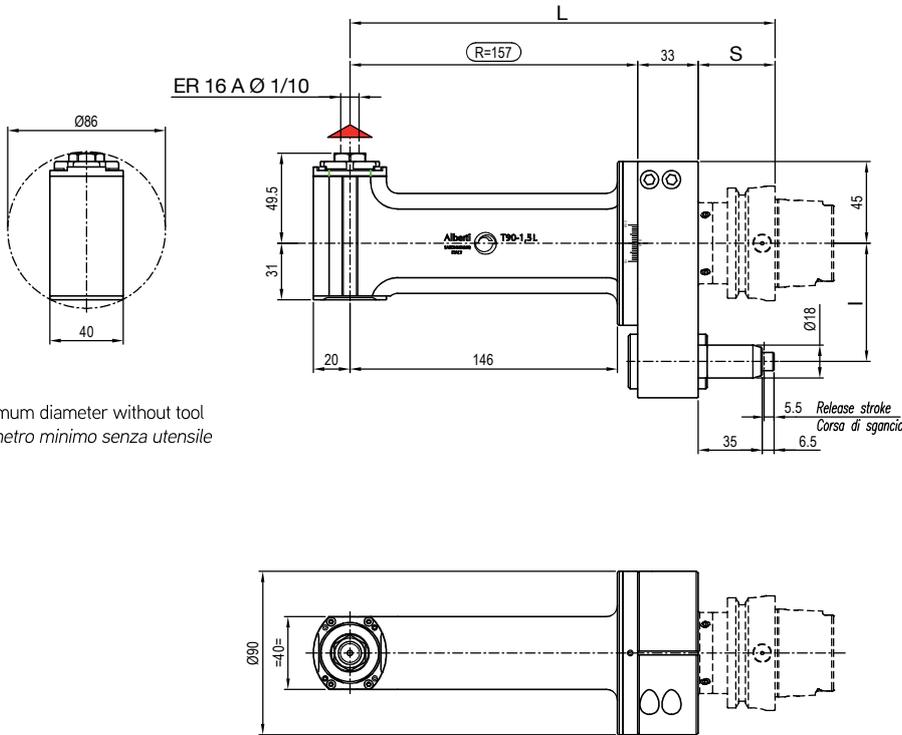
Weight
Peso
5.2 kg



Tapping
Maschiatura
Max. M6



Collet
Pinza
ER-16A (ø 1/10 mm)



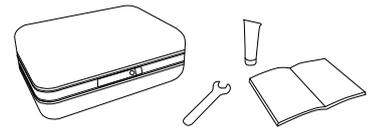
Minimum diameter without tool
Diametro minimo senza utensile



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
Dry rotation is possible / rotazione a secco possibile



Spindle / Cono	DIN-69871		CAT		MAS-BT		HSK		CAPTO		KM
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8	50-63		
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)		
S	35	35	35	41	42	45	38	40	40		
XL	225	225	225	231	232	235	228	230	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⁻¹ | **DRY**
Running
8.000 min⁻¹



Max. axial load
Max. carico assiale
250 N



Torque
Momento torcente
25 Nm



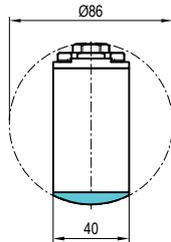
Weight
Peso
5.2 kg



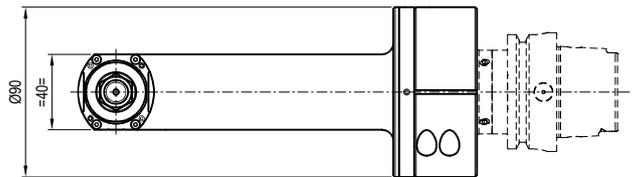
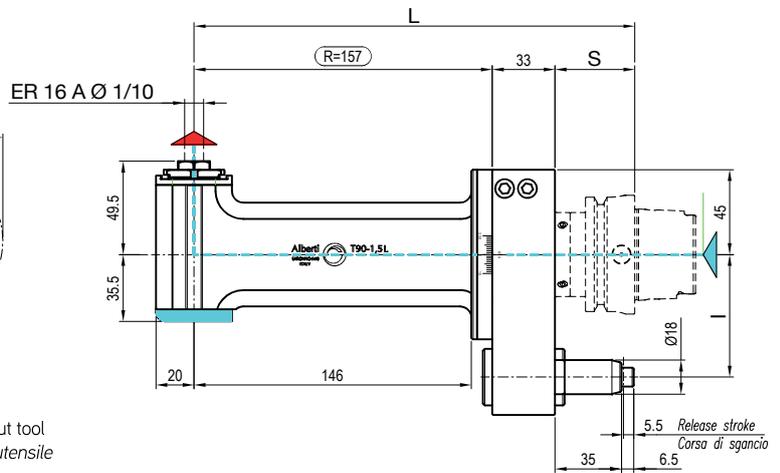
Tapping
Maschiatura
Max. M6



Collet
Pinza
ER-16A (Ø 1/10 mm)



Minimum diameter without tool
Diametro minimo senza utensile



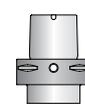
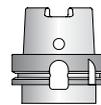
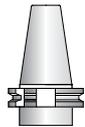
*** STANDARD EQUIPMENT includes:**

Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



- Direction of rotation opposite as machine spindle / *senso di rotazione contrario al mandrino*
Dry rotation is possible / *rotazione a secco possibile*
- Input coolant max. 1450 PSI / *ingresso refrigerante max. 100 bar*



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

Dual contact spindles available/Disponibilità coni a doppio contatto

*optional

Option / Opzione



Ø mm
13

Arbor output
Porta fresa

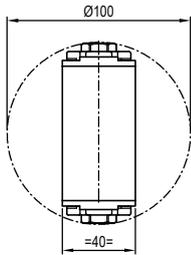


Ø mm max.
10

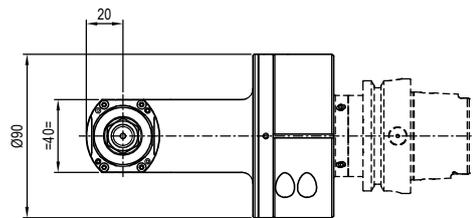
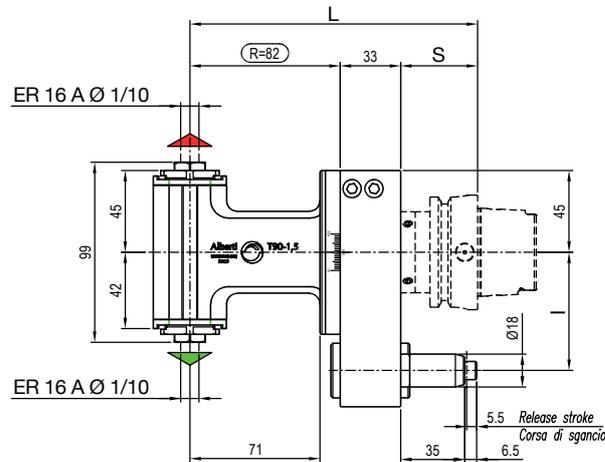
Weldon output
Weldon

T90cn-1.5 2U Neo

ACT9015D



Minimum diameter without tool
Diametro minimo senza utensile



Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
8.000 min⁻¹



Max. axial load
Max. carico assiale
250 N



Torque
Momento torcente
25 Nm



Weight
Peso
4.3 kg

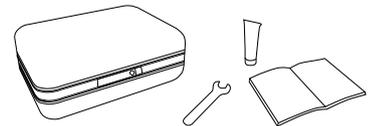


Collet
Pinza
ER-16A (ø 1/10 mm)

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

Shank / Cono	DIN-69871		CAT		MAS-BT		HSK		CAPTO		KM
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8	50-63		
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)		
S	35	35	35	41	42	45	38	40	40		
L	153	153	153	159	160	163	156	158	158		

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

ACTR915C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
8.000 min⁻¹



Max. axial load
Max. carico assiale
350 N



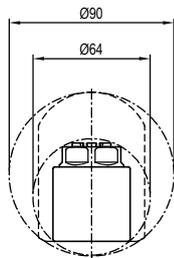
Torque
Momento torcente
15 Nm



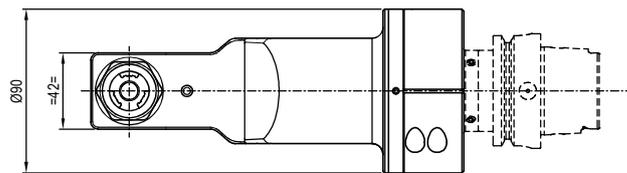
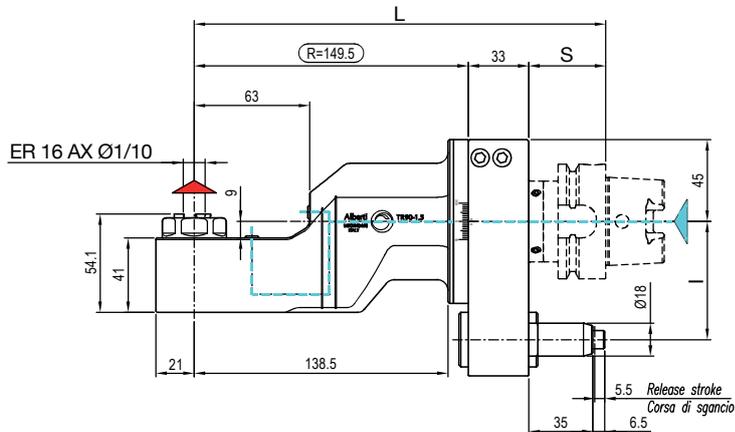
Weight
Peso
7 kg



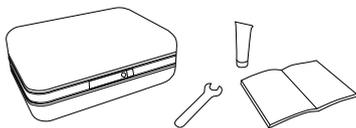
Collet
Pinza
ER-AX-16 (ø 1/10 mm)



Minimum diameter without tool
Diametro minimo senza utensile



*** STANDARD EQUIPMENT includes:**

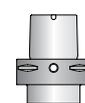
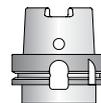
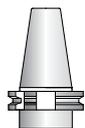


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



- Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino
Dry rotation is possible / rotazione a secco possibile
- Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar



Shank / Cono	DIN-69871		CAT		MAS-BT		HSK		CAPTO		KM
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8	63		
I	65-80	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)		
S	35	35	35	41	42	45	38	40	40		
L	218,875	218,875	218,875	224,875	225,875	228,875	221,875	223,875	223,875		

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
Addizione refrigerante attraverso il perno



bar max
100

Coolant through spindle
Addizione refrigerante attraverso il cono

THRcn-1.5 Neo IC

ACTHR915C.IC

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
10.000 min⁻¹ | **DRY**
Running
8.000 min⁻¹



Max. axial load
Max. carico assiale
250 N



Torque
Momento torcente
20 Nm



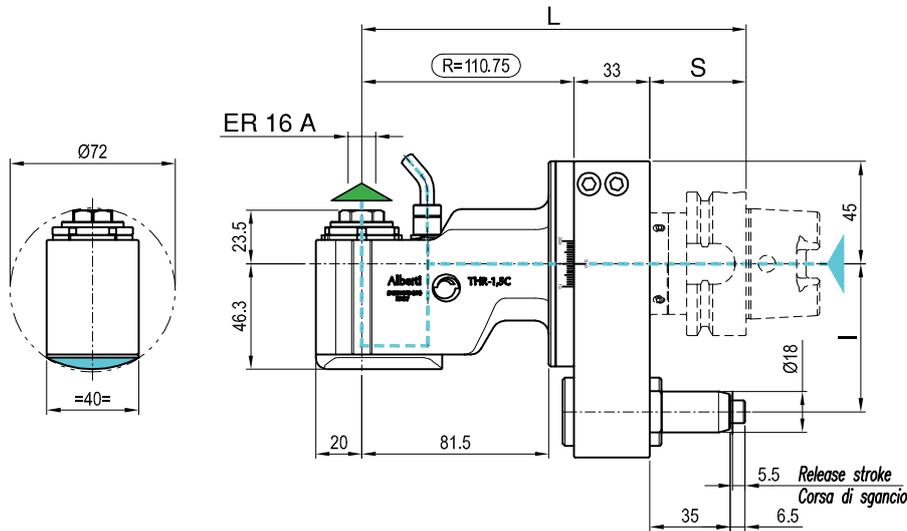
Weight
Peso
4.2 kg



Tapping
Maschiatura
Max. M6



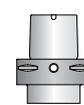
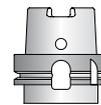
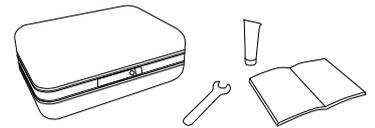
Collet
Pinza
ER-16A (ø 1/10 mm)



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

- Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
Dry rotation is possible / rotazione a secco possibile
- Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar

*** STANDARD EQUIPMENT includes:**



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

Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Option / Opzione

TCUcn-1.5 Neo

ACTCU15C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
4.000 min⁻¹



Max. axial load
Max. carico assiale
450 N



Torque
Momento torcente
15 Nm



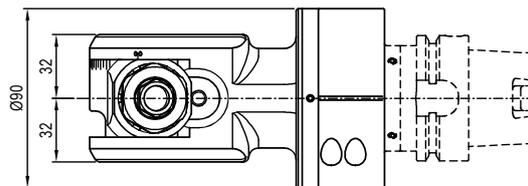
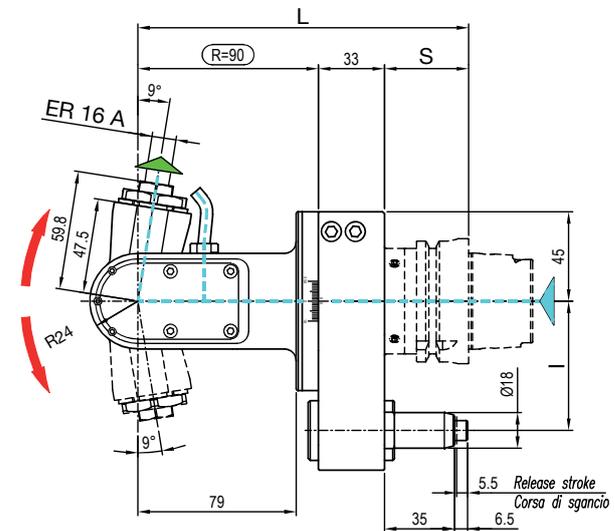
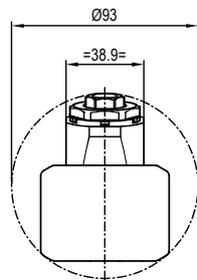
Weight
Peso
4.5 kg



Tapping
Maschiatura
Max. M6



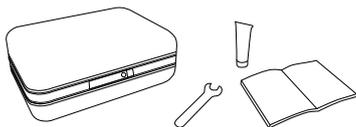
Collet
Pinza
ER-16A (ø 1/10 mm)



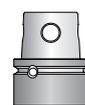
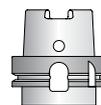
*** STANDARD EQUIPMENT includes:**

Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



- ▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
Dry rotation is possible / rotazione a secco possibile
- ▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar



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

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



min⁻¹
8.000

RPM max.
RPM max.



+/- 95°

Angle
Angolo

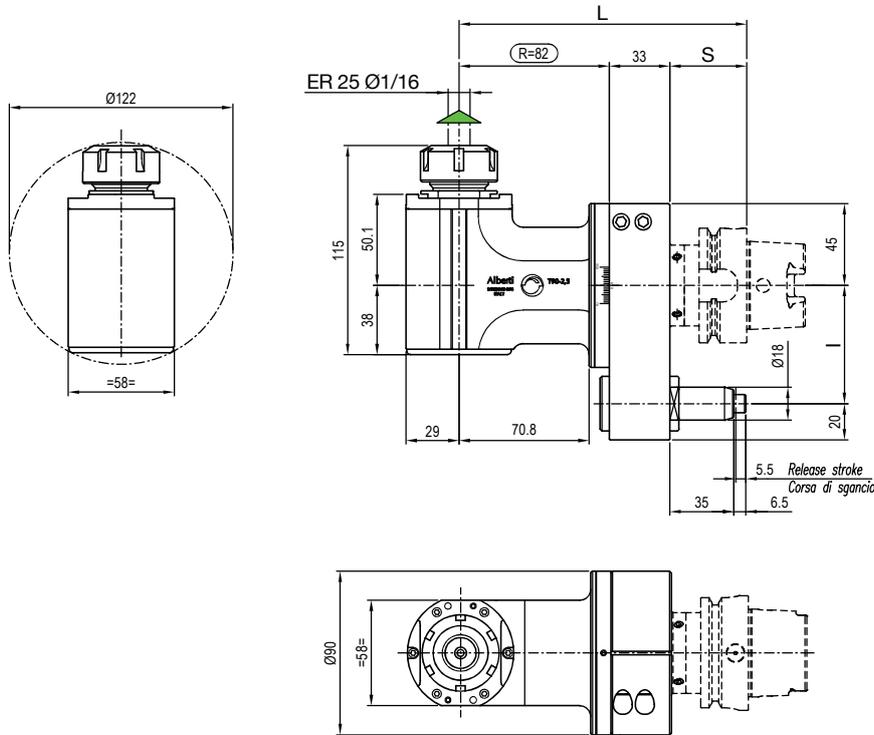


every
5°

Fixed positioning
Posizionamento fisso

T90cn-2.5C Neo

ACT9025C



Technical data

Caratteristiche tecniche

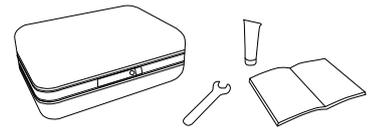
- Ratio
Rapporto
1:1
- RPM
Velocità
6.000 min⁻¹
- Max. axial load
Max. carico assiale
510 N
- Torque
Momento torcente
50 Nm
- Weight
Peso
5.4 kg
- Tapping
Maschiatura
Max. M12
- Collet
Pinza
ER-25 (ø 1/16 mm)



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		MAS-BT		HSK		CAPTO		KM
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8	63
I	65-80	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)
S	35	35	35	41	42	45	38	40	40
L	150	150	150	156	157	160	153	155	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
16

Arbor output
Porta fresa



Ø mm max.
16

Weldon output
Weldon



HSK-32

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⁻¹ | **DRY**
Running
6.000 min⁻¹



Max. axial load
Max. carico assiale
510 N



Torque
Momento torcente
50 Nm



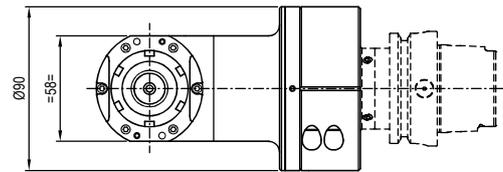
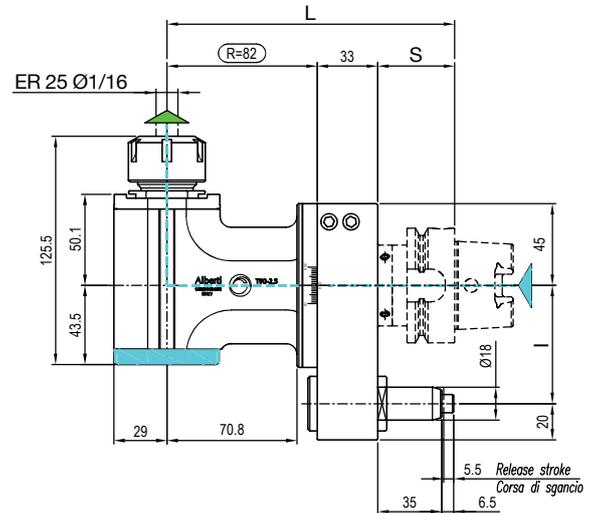
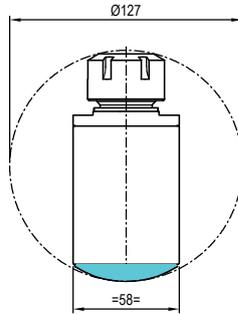
Weight
Peso
5.4 kg



Tapping
Maschiatura
Max. M12



Collet
Pinza
ER-25 (ø 1/16 mm)



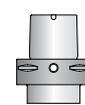
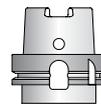
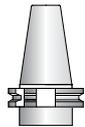
*** STANDARD EQUIPMENT includes:**

Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



- ▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
Dry rotation is possible / rotazione a secco possibile
- ▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar



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

Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Option / Opzione



Ø mm
16

Arbor output
Porta fresa



Ø mm max.
16

Weldon output
Weldon

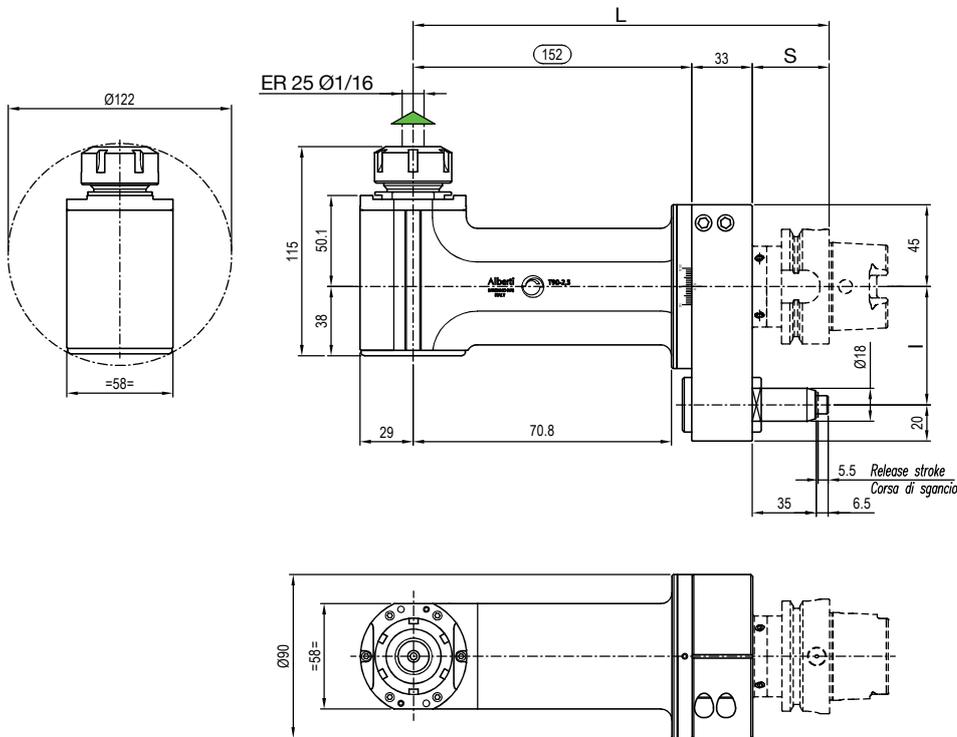


HSK-32

Quick Change
Attacco rapido

T90cn-2.5L Neo

ACT9025L



Technical data

Caratteristiche tecniche

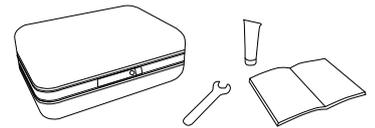
- Ratio
Rapporto
1:1
- RPM
Velocità
6.000 min⁻¹
- Max. axial load
Max. carico assiale
510 N
- Torque
Momento torcente
50 Nm
- Weight
Peso
6.7 kg
- Tapping
Maschiatura
Max. M12
- Collet
Pinza
ER-25 (ø 1/16 mm)



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		KM
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8	63		
I	65-80	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)		
S	35	35	35	41	42	45	38	40	40		
XL	220	220	220	226	227	230	223	225	225		

Dual contact spindles available/Disponibilità con a doppio contatto

*optional

Option / Opzione



bar max
12

Coolant through pin
Refrigerante attraverso il perno



Ø mm
16

Arbor output
Porta fresa



Ø mm max.
16

Weldon output
Weldon



HSK-32

Quick Change
Attacco rapido



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⁻¹ | DRY Running
6.000 min⁻¹



Max. axial load
Max. carico assiale
510 N



Torque
Momento torcente
50 Nm



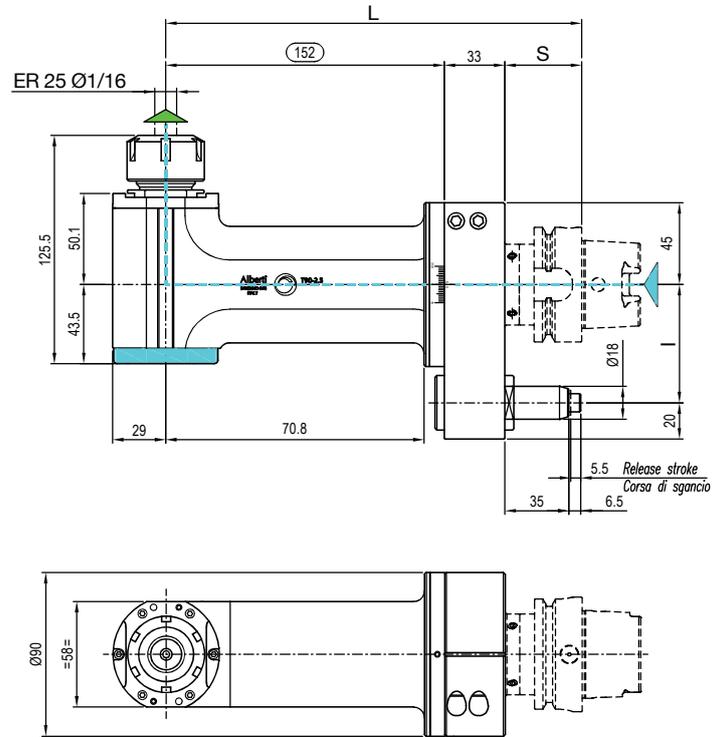
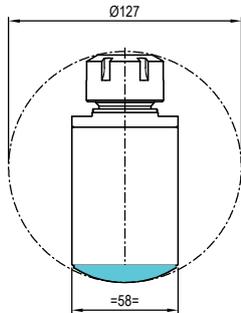
Weight
Peso
6.7 kg



Tapping
Maschiatura
Max. M12



Collet
Pinza
ER-25 (ø 1/16 mm)



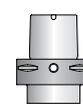
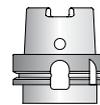
*** STANDARD EQUIPMENT includes:**

Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



- ▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
Dry rotation is possible / rotazione a secco possibile
- ▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar



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

Dual contact spindles available/Disponibilità coni a doppio contatto

*optional

Option / Opzione



Ø mm
16

Arbor output
Porta fresa



Ø mm max.
16

Weldon output
Weldon

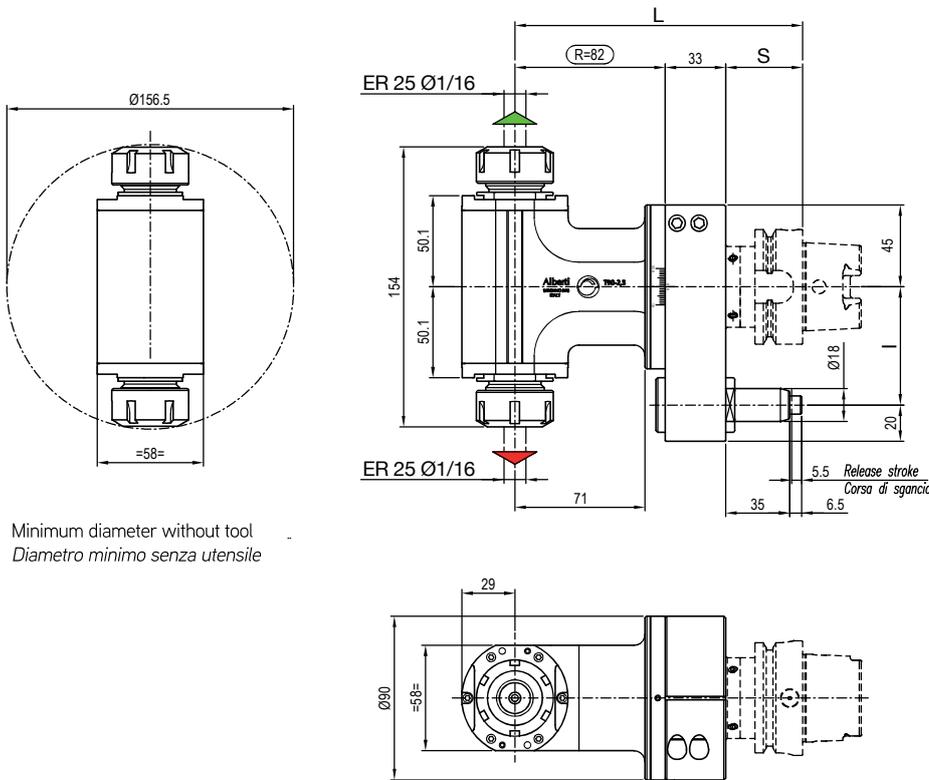


HSK-32

Quick Change
Attacco rapido

T90cn-2.5 2U Neo

ACT9025D



Minimum diameter without tool
Diametro minimo senza utensile

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
6.000 min⁻¹



Max. axial load
Max. carico assiale
510 N



Torque
Momento torcente
50 Nm



Weight
Peso
6.4 kg

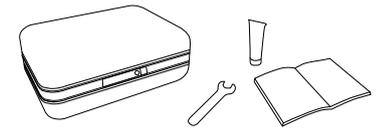


Collet
Pinza
ER-25 (Ø 1/16 mm)



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

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



Ø mm
16

Arbor output
Porta fresa



Ø mm max.
16

Weld on output
Weld on

TR90cn-2.5

ACTR925C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM OUTPUT
Velocità
6.000 min⁻¹



Max. axial load
Max. carico assiale
510 N



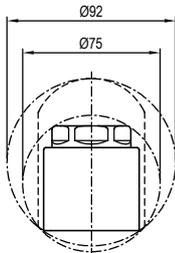
Torque
Momento torcente
30 Nm



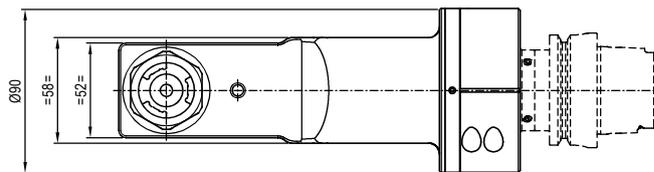
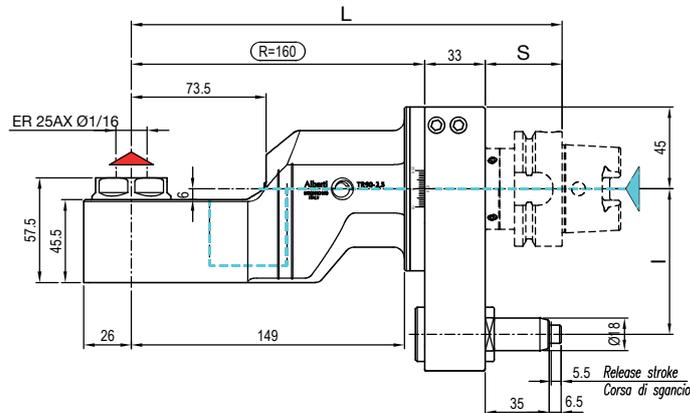
Weight
Peso
7.5 kg



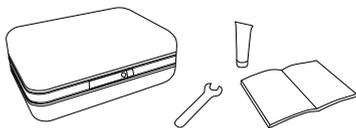
Collet
Pinza
ER-AX 25 (Ø 1-16 mm)



Minimum diameter without tool
Diametro minimo senza utensile



*** STANDARD EQUIPMENT includes:**

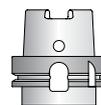
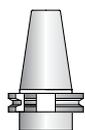


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



- Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino
Dry rotation is possible / rotazione a secco possibile
- Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar



Shank / Cono	DIN-69871		CAT		MAS-BT		HSK		CAPTO		KM
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8	50-63		
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)		
S	35	35	35	41	42	45	38	40	40		
L	219	219	219	225	226	229	222	224	224		

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



min⁻¹
8.000

RPM max.
RPM max.

THRcn-2.5 Neo IC

ACTHR925C.IC

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
9.000 min⁻¹ | **DRY**
Running
6.000 min⁻¹



Max. axial load
Max. carico assiale
510 N



Torque
Momento torcente
40 Nm



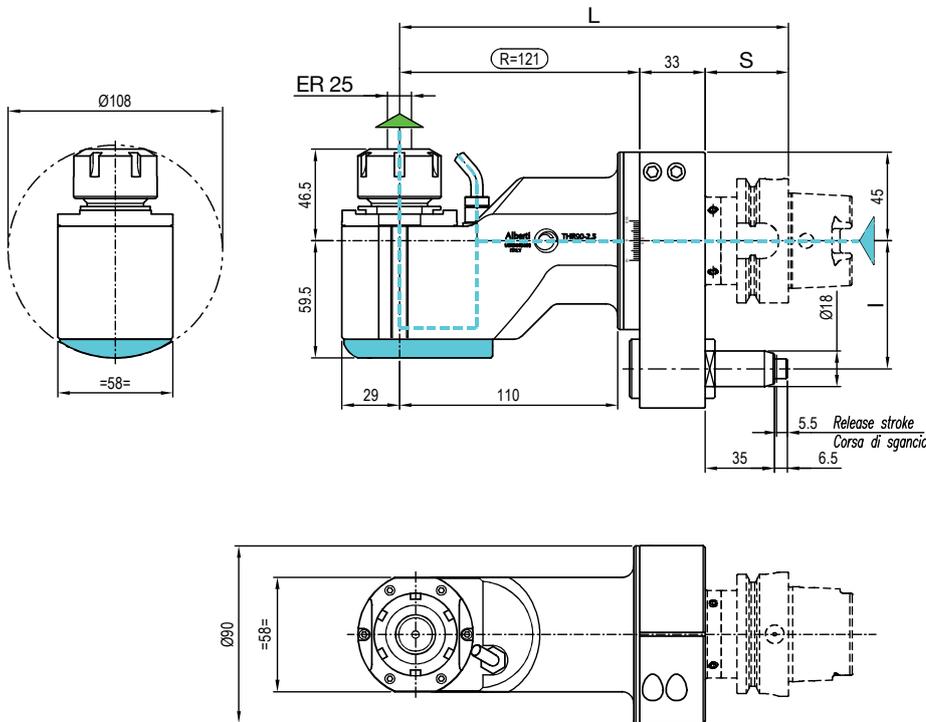
Weight
Peso
6.5 kg



Tapping
Maschiatura
Max. M12



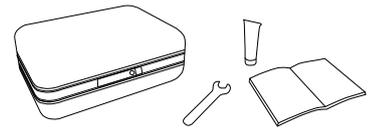
Collet
Pinza
ER-25 (ø 1/16 mm)



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

- Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
Dry rotation is possible / rotazione a secco possibile
- Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar

*** STANDARD EQUIPMENT includes:**



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

Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Option / Opzione

TCUcn-2.5 Neo

ACTCU25C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
4.000 min⁻¹



Max. axial load
Max. carico assiale
510 N



Torque
Momento torcente
30 Nm



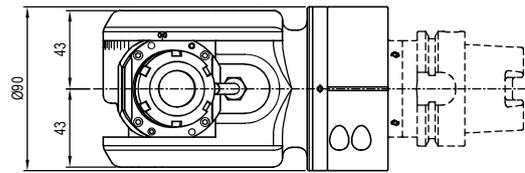
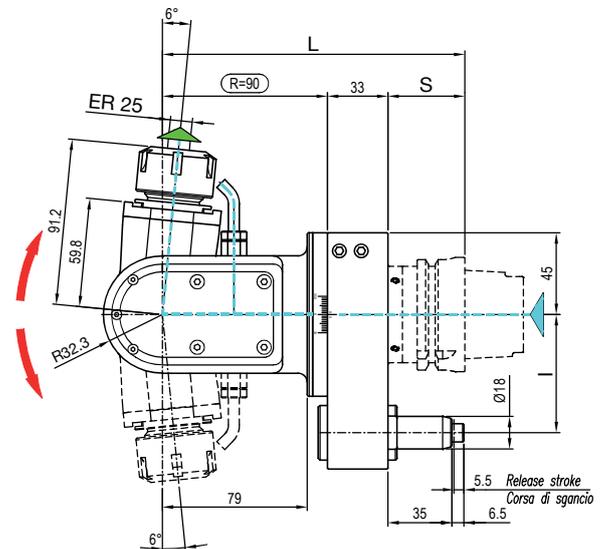
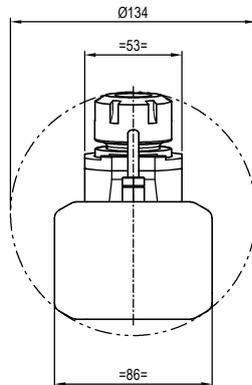
Weight
Peso
7 kg



Tapping
Maschiatura
Max. M12



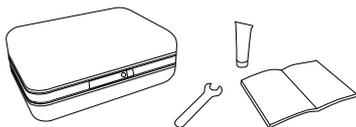
Collet
Pinza
ER-25 (ø 1/16 mm)



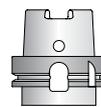
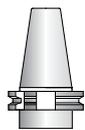
*** STANDARD EQUIPMENT includes:**

Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
Dry rotation is possible / rotazione a secco possibile



Spindle / Cono	DIN-69871		CAT		MAS-BT		HSK		CAPTO		KM
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8	50-63		
I	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)	80-(110*)	65-80-(110*)		
S	35	35	35	41	42	45	38	40	40		
L	158	158	158	164	165	168	221	163	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



min⁻¹
6.000

RPM max.
RPM max.



+/- 95°

Angle
Angolo

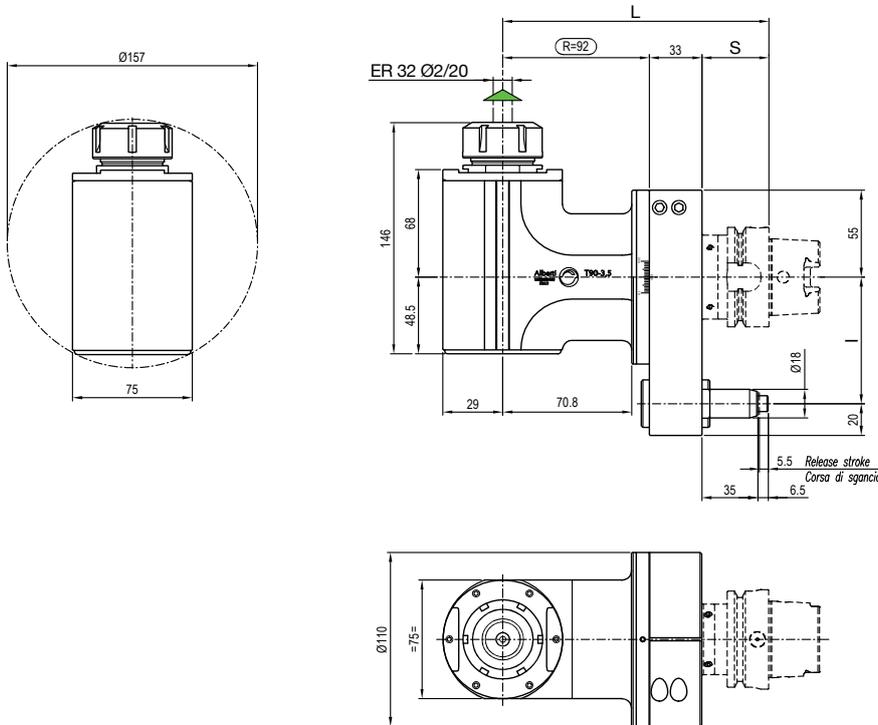


every
5°

Fixed positioning
Posizionamento fisso

T90cn-3.5C Neo

ACT9035C



Technical data

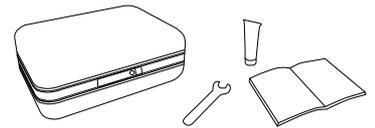
Caratteristiche tecniche

- Ratio**
Rapporto **1:1**
- RPM**
Velocità **5.000 min⁻¹**
- 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

Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
Dry rotation is possible / rotazione a secco possibile

*** STANDARD EQUIPMENT includes:**



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

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.
20

Weldon output
Weldon



ISO-30 HSK-40

Quick Change
Attacco rapido



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
9.000 min⁻¹ | **DRY**
Running
5.000 min⁻¹



Max. axial load
Max. carico assiale
1.250 N



Torque
Momento torcente
70 Nm



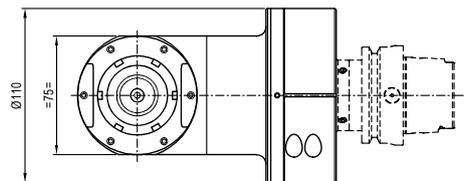
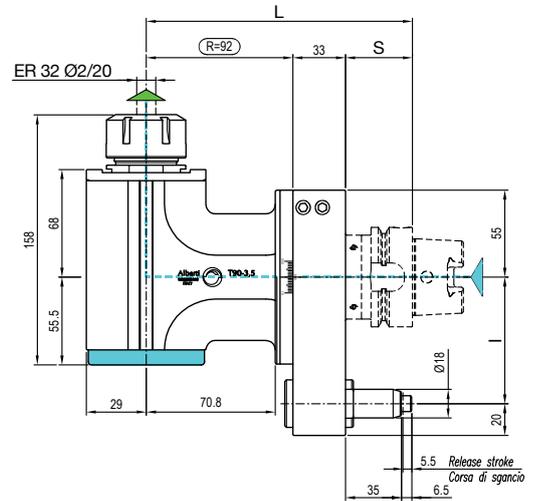
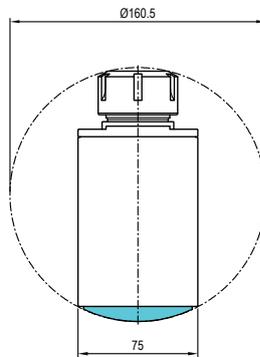
Weight
Peso
11 kg



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

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

Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Option / Opzione



Ø mm
27

Arbor output
Porta fresa



Ø mm max.
20

Weldon output
Weldon

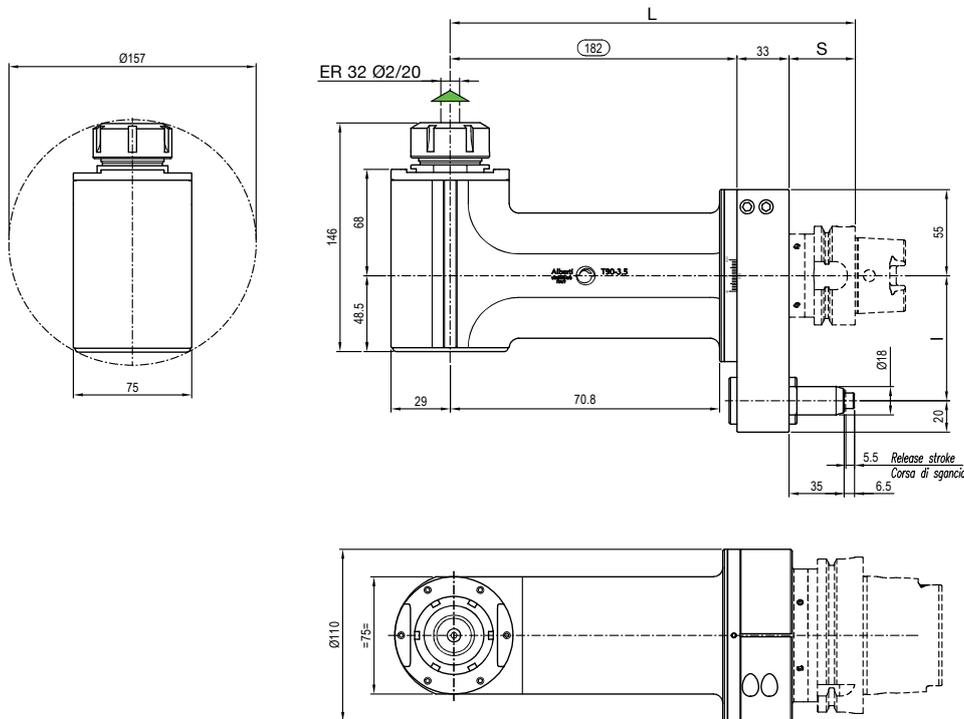


ISO-30 HSK-40

Quick Change
Attacco rapido

T90cn-3.5L Neo

ACT9035L



Technical data

Caratteristiche tecniche

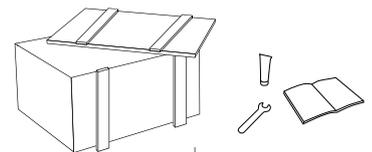
- Ratio**
Rapporto **1:1**
- RPM**
Velocità **5.000 min⁻¹**
- Max. axial load**
Max. carico assiale **1.250 N**
- Torque**
Momento torcente **70 Nm**
- Weight**
Peso **13.2 kg**
- Tapping**
Maschiatura **Max. M16**
- Collet**
Pinza **ER-32 (ø 2/20 mm)**



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

Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
Dry rotation is possible / rotazione a secco possibile

*** STANDARD EQUIPMENT includes:**



Spindle / Cono	DIN-69871	CAT	MAS-BT	HSK		CAPTO		KM
Size / Grandezza	50		63-80	63-80	100	C6	C8	63
I	80-110		80-110	80-110	80-110	80-110	80-110	80-110
S	35		41	42	45	38	40	40
XL	250		256	257	260	253	255	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.
20

Weldon output
Weldon



ISO-30 HSK-40

Quick Change
Attacco rapido



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⁻¹ | DRY
Running
5.000 min⁻¹



Max. axial load
Max. carico assiale
1.250 N



Torque
Momento torcente
70 Nm



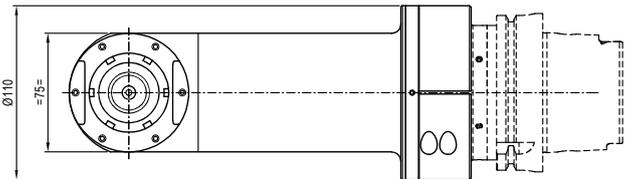
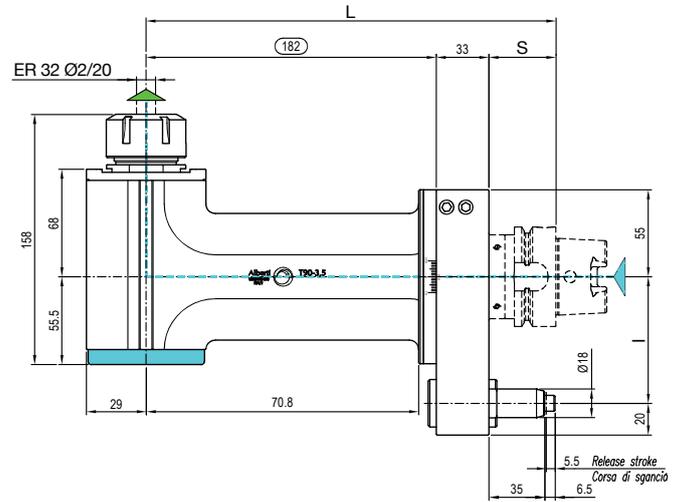
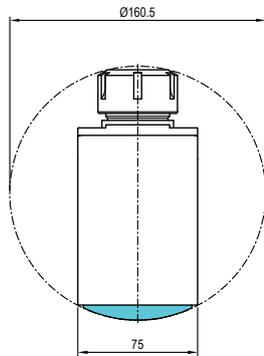
Weight
Peso
13.2 kg



Tapping
Maschiatura
Max. M16



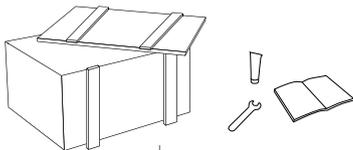
Collet
Pinza
ER-32 (ø 2/20 mm)



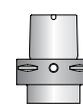
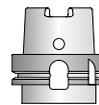
*** STANDARD EQUIPMENT includes:**

Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



- ▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
Dry rotation is possible / rotazione a secco possibile
- ▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar



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

Dual contact spindles available/Disponibilità con i doppi contatto

*optional

Option / Opzione



Ø mm
27

Arbor output
Porta fresa



Ø mm max.
20

Weldon output
Weldon

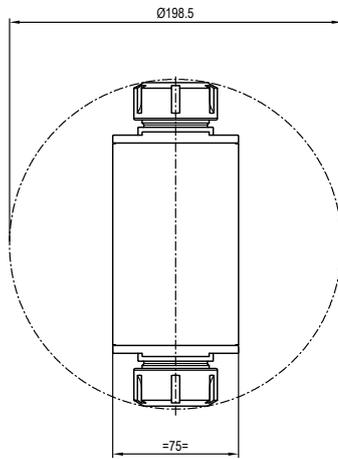


ISO-30 HSK-40

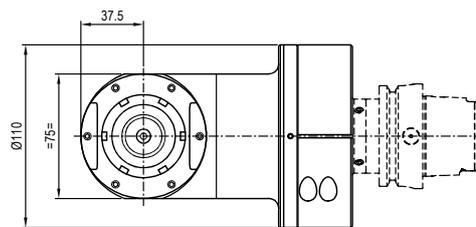
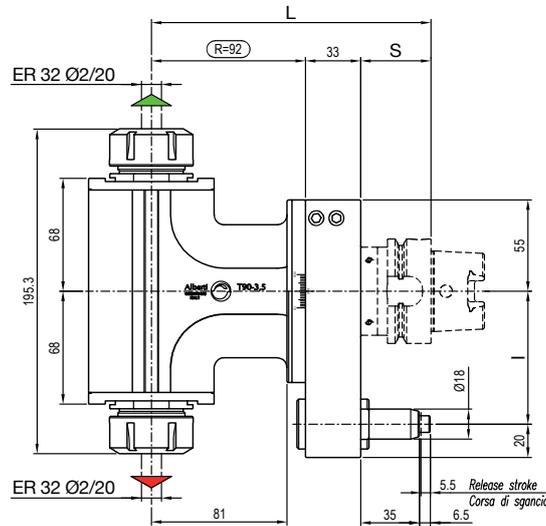
Quick Change
Attacco rapido

T90cn-3.5 2U Neo

ACT9035D



Minimum diameter without tool
Diametro minimo senza utensile



Technical data Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
4.000 min⁻¹



Max. axial load
Max. carico assiale
1.250 N



Torque
Momento torcente
70 Nm



Weight
Peso
12 kg

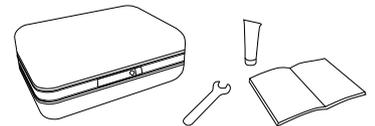


Collet
Pinza
ER-32 (Ø 2/20 mm)

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

Shank / Cono	DIN-69871	CAT	MAS-BT	HSK		CAPTO		KM
Size / Grandezza	50		50	63-80	100	C6	C8	63
I	80-110		80-110	80-110	80-110	80-110	80-110	80-110
S	35		41	42	45	38	40	40
L	160		166	167	170	163	165	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
27

Arbor output
Porta fresa



Ø mm max.
20

Weldon output
Weldon



HSK-40

Quick Change
Attacco rapido

TR90cn-3.5

ACTR935C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
4.000 min⁻¹



Max. axial load
Max. carico assiale
910 N



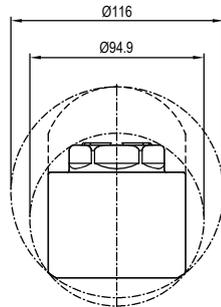
Torque
Momento torcente
50 Nm



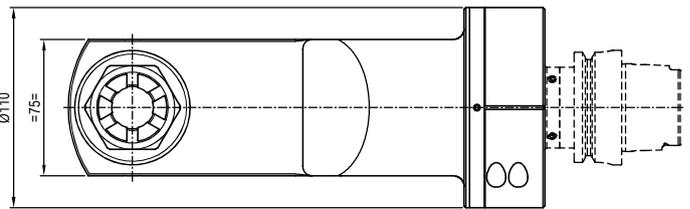
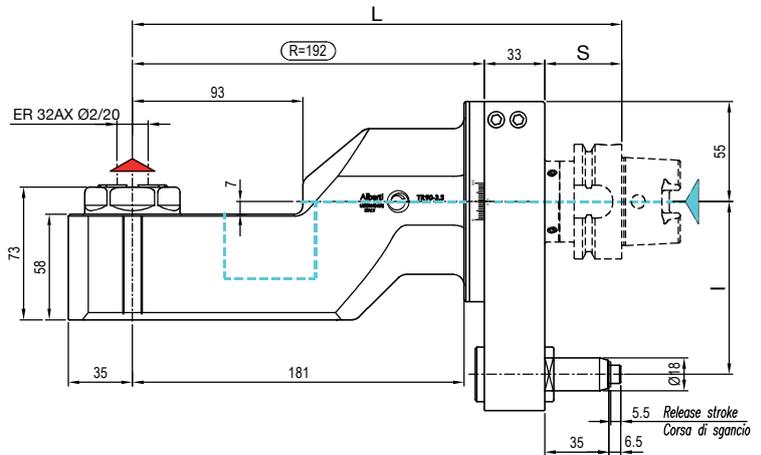
Weight
Peso
10 kg



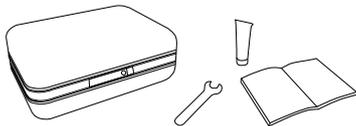
Collet
Pinza
ER-AX 32 (ø 2-20 mm)



Minimum diameter without tool
Diametro minimo senza utensile



*** STANDARD EQUIPMENT includes:**

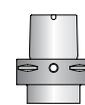
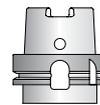
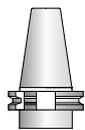


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



- Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino
Dry rotation is possible / rotazione a secco possibile
- Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar



Shank / Cono	DIN-69871	CAT	MAS-BT	HSK	CAPTO	KM
Size / Grandezza	50		50	63-80 100	C6 C8	63
I	80-110		80-110	80-110 80-110	80-110 80-110	80-110
S	35		41	42 45	38 40	40
L	261		267	268 271	264 266	266

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

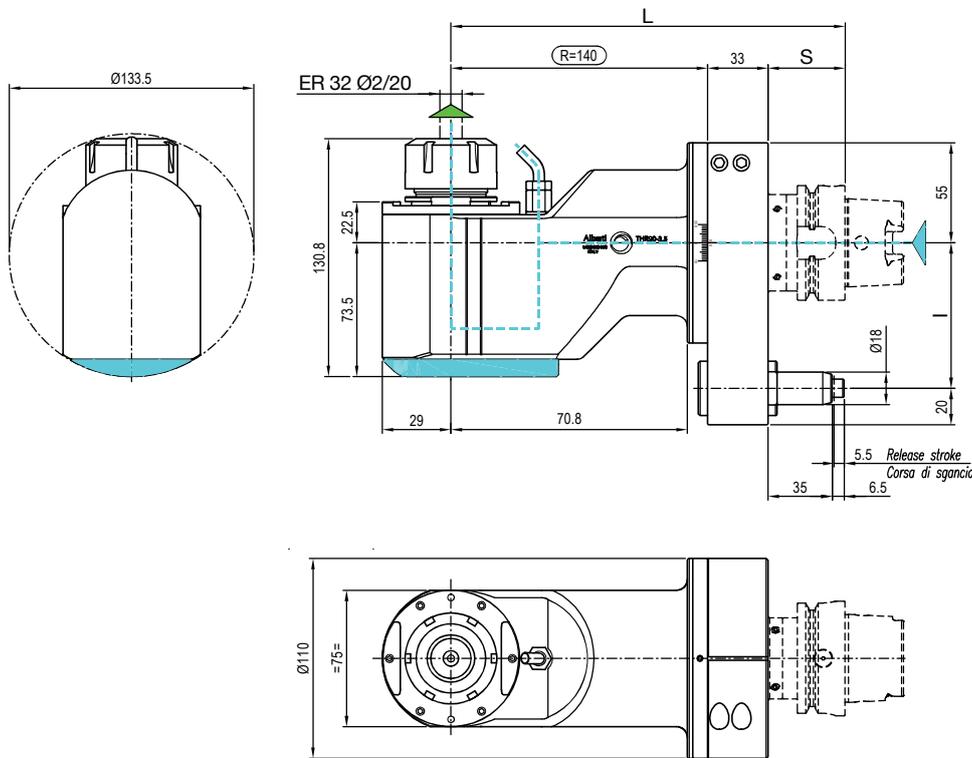


min⁻¹
6.000

RPM max.
RPM max.

THRcn-3.5 Neo IC

ACTHR935C.IC



Technical data

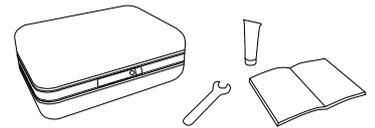
Caratteristiche tecniche

- Ratio**
Rapporto **1:1**
- RPM**
Velocità **8.000 min⁻¹** | **DRY**
Running **5.000 min⁻¹**
- Max. axial load**
Max. carico assiale **1250 N**
- Torque**
Momento torcente **70 Nm**
- Weight**
Peso **11.5 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
Dry rotation is possible / rotazione a secco possibile
- Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar

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

Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Option / Opzione

TCUcn-3.5 Neo

ACTCU35C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
4.000 min⁻¹



Max. axial load
Max. carico assiale
715 N



Torque
Momento torcente
50 Nm



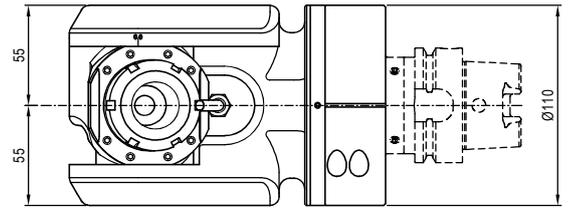
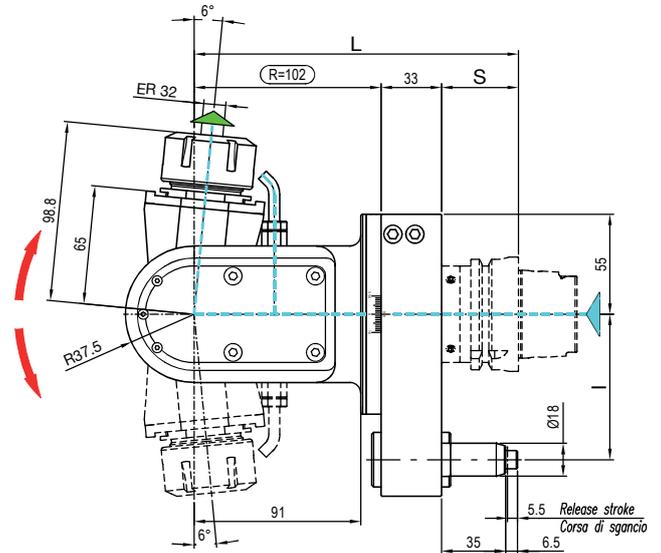
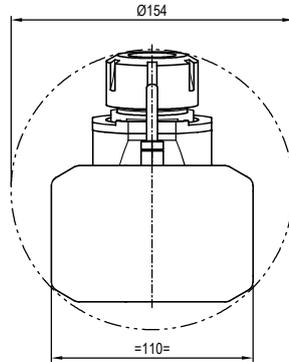
Weight
Peso
13 kg



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

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

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



min⁻¹
6.000

RPM max.
RPM max.



+/- 95°

Angle
Angolo



every
5°

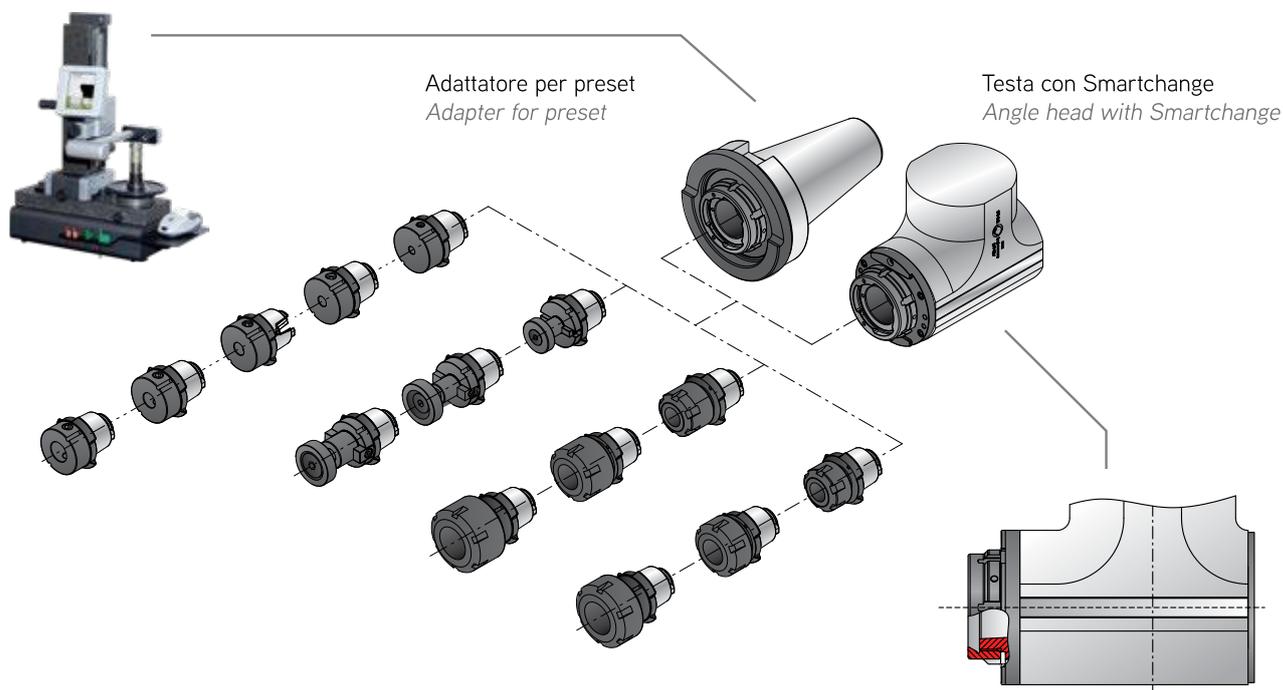
Fixed positioning
Posizionamento fisso



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.



 **TOOL ID**



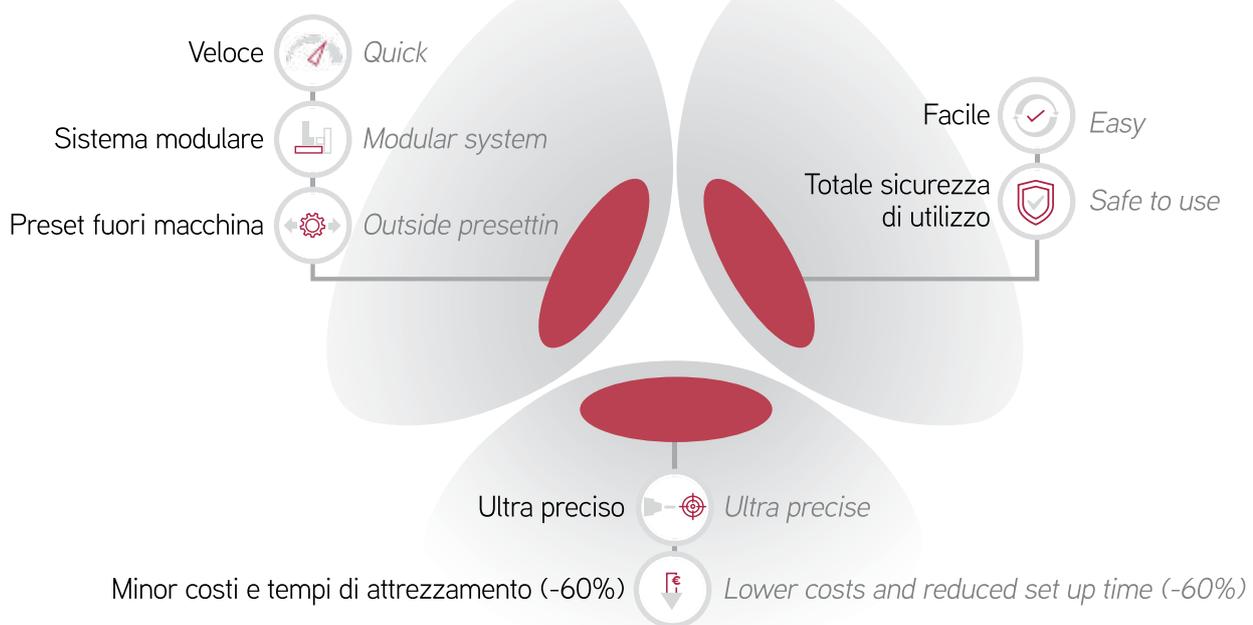
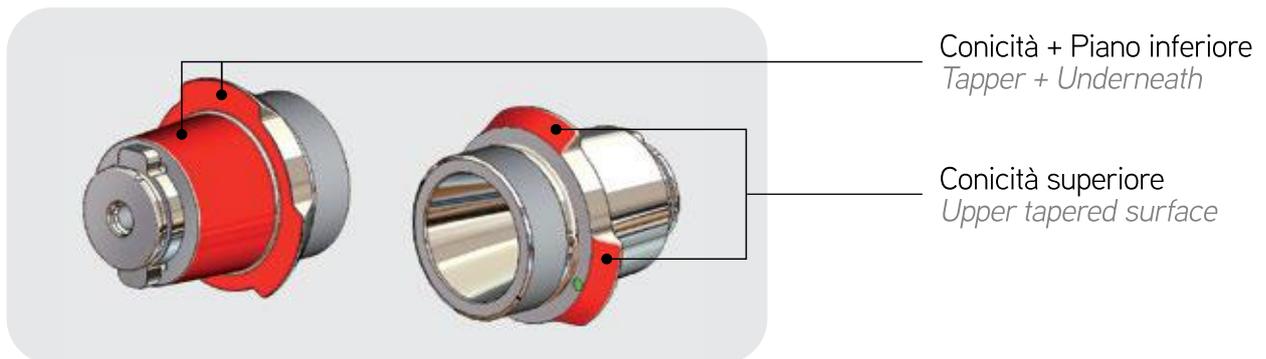
Le cartucce **Smart Change** sono provviste di **DATAMATRIX** per l'identificazione e la gestione utensile in modo automatico. Il codice univoco è identificativo della cartuccia con il suo utensile.

Smart Change adapters are marked with DATAMATRIX for the automatic tool identification and management. The unique code identify the adapter a long with its cutting tool.

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.



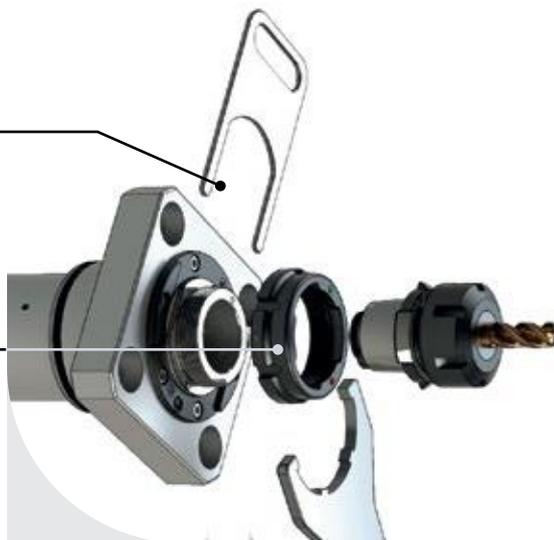
INCREMENTO DELLA PRODUTTIVITÀ
INCREASED PRODUCTIVITY

COME È FATTO.

How it is made

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

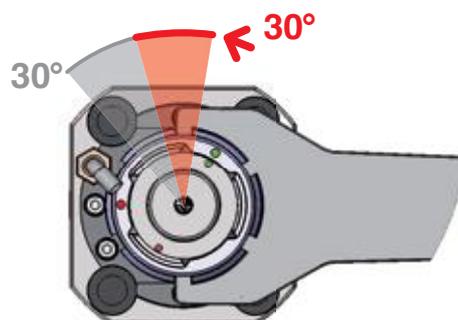
- **Ghiera SmartChange brevettata**
(fissata al corpo principale)
Patented SmartChange nut
(fixed on the main body)



COME FUNZIONA.

How it works

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



Tempo massimo di sostituzione cartucce
Time to change front end

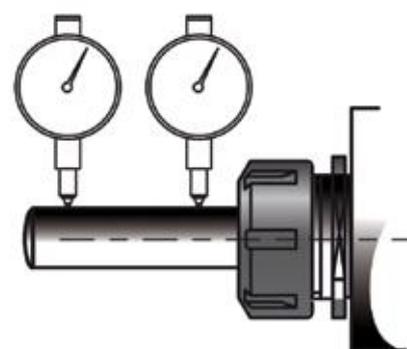
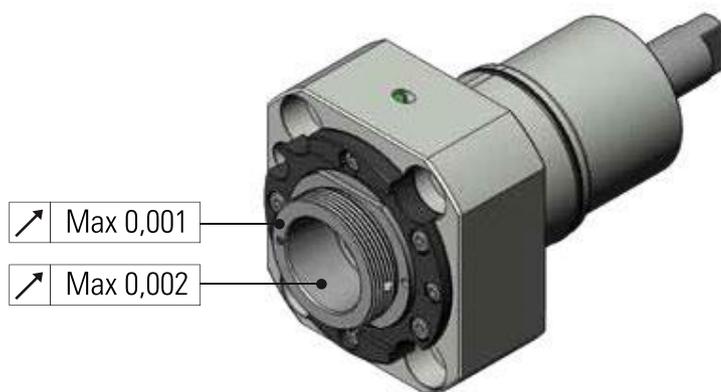
20"

Ripetibilità / *Repeatability*

0,003 mm

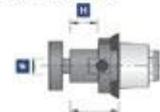
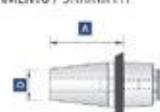
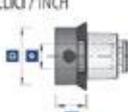
Precisione con barra inserita nel mandrino
Accuracy with gauge bar inserted in the collet chuck

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 (Ø1/13mm)			ER-25A (Ø1/16mm)																						
	Ø	A	D	Ø	A	D																				
	1/13	21.5	36.8	1/16	32.4	41																				
PORTAPINZA / COLLET 	ER-20 (Ø1/13mm)			ER-25 (Ø1/17mm)			ER-32 (Ø2/22mm)			PORTAPINZA / COLLET 	ERC20 (Ø1/13mm)			ERC25 (Ø1/16mm)			ERC32 (Ø2/20mm)									
	Ø	A	D	Ø	A	D	Ø	A	D		Ø	A	D	Ø	A	D	Ø	A	D							
	1/13	28.5	34	1/16	30.5	42	2/20	41.5	50	1/13	33.5	34	1/16	35.5	42	2/20	46.5	50								
WELDON 	(Ø6)			(Ø5)			(Ø10)			(Ø12)			(Ø16)													
	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D					
	6	20	36.8	8	20	36.8	10	20	36.8	12	20	36.8	16	20	36.8											
PORTAFRESA / SHELL MILL 	(Ø13)			(Ø16)			(Ø22)																			
	Ø	A	H	Ø	A	H	Ø	A	H																	
	13	24.5	13	16	30.5	17	22	32.5	19																	
CALETTAMENTO / SHRINK FIT 	(Ø3mm)			(Ø4mm)			(Ø6mm)			(Ø8mm)			(Ø10mm)			(Ø12)			(Ø16)							
	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A
	3	40	13	4	40	15	6	40	21	8	40	21	10	40	24	12	40	24	16	45	27					
WELDON POLLICI / INCH 	(Ø1/4")			(Ø3/8")			ER-20 (Ø1/2")			(Ø5/8")			(Ø3/4")													
	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	A	D	Ø	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 POLLICI SHELL MILL INCH 	(Ø3/4")			(Ø1")																						
	Ø	A	H	Ø	A	H																				
	3/4"	31	17,5	1"	30,77	17,27																				
BLANK 	BLANK																									
	Ø	A	D																							
	/	81	52																							

Accessori / Accessories



Adattatore preset ISO/BT
Preset adapter ISO/BT



Adattatore preset HSK
Preset adapter HSK



Tool boy



Chiavi di servizio
Wrenches

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, **umentando notevolmente la produttività.**

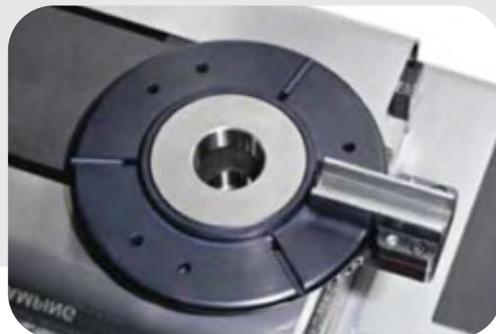
*This system allows to **reduce time and costs** for the set up with **tremendous increase in the productivity.***

Grazie alla **nuova applicazione** è possibile **presettare tutta la testa con una cartuccia montata.** Una particolare attrezzatura su cui è fissato lo Stop Block permette di montare l'intera testa nel preset e rilevare le misure necessarie.

*Thanks to the **new application** it is possible to **preset the complete head with the adapter mounted.** A special fixture with the Stop Block allows to install the head into the presetter to measure the needed dimensions.*

Immagine del presettaggio di una testa angolare regolabile: il preset misura l'angolo, dopo aver identificato i punti destro e sinistro, calcola in automatico il centro di rotazione dell'utensile e il suo diametro.

The picture shows the preset of an adjustable angle head: the preset measures the angle, after habving indentified the right and left points, it calculates autoimatically the rotations centre of the tool and its diameter.



T90cn-3.5 SMART CHANGE

AST9035C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
5.000 min⁻¹



Max. axial load
Max. carico assiale
1.250 N



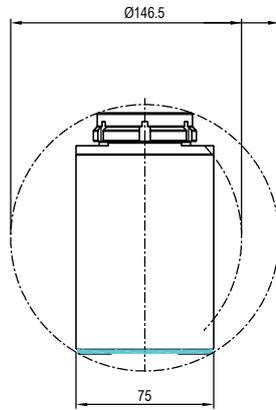
Torque
Momento torcente
70 Nm



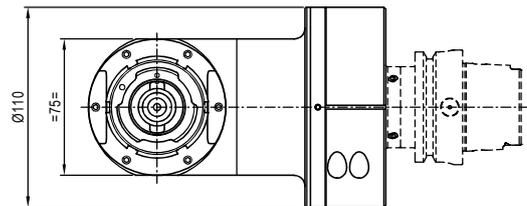
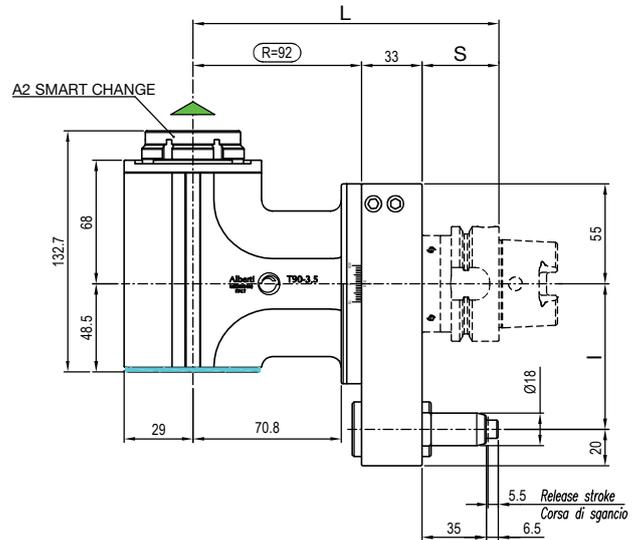
Weight
Peso
11 kg



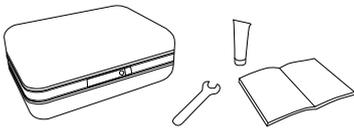
Collet
Pinza
SmartChange System



Minimum diameter without tool
Diametro minimo senza utensile



*** 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	KM
Size / Grandezza	50		50	63-80 100	C6 C8	63
I	80-110		80-110	80-110 80-110	80-110 80-110	80-110
S	35		41	42 45	38 40	40
L	160		166	167 170	163 165	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⁻¹
9.000

RPM max.
RPM max.



min⁻¹
6.000

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

T90cn-3.5 ALUMINIUM SMART CHANGE

AST9035C.ALU

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
5.000 min⁻¹



Max. axial load
Max. carico assiale
1.250 N



Torque
Momento torcente
40 Nm

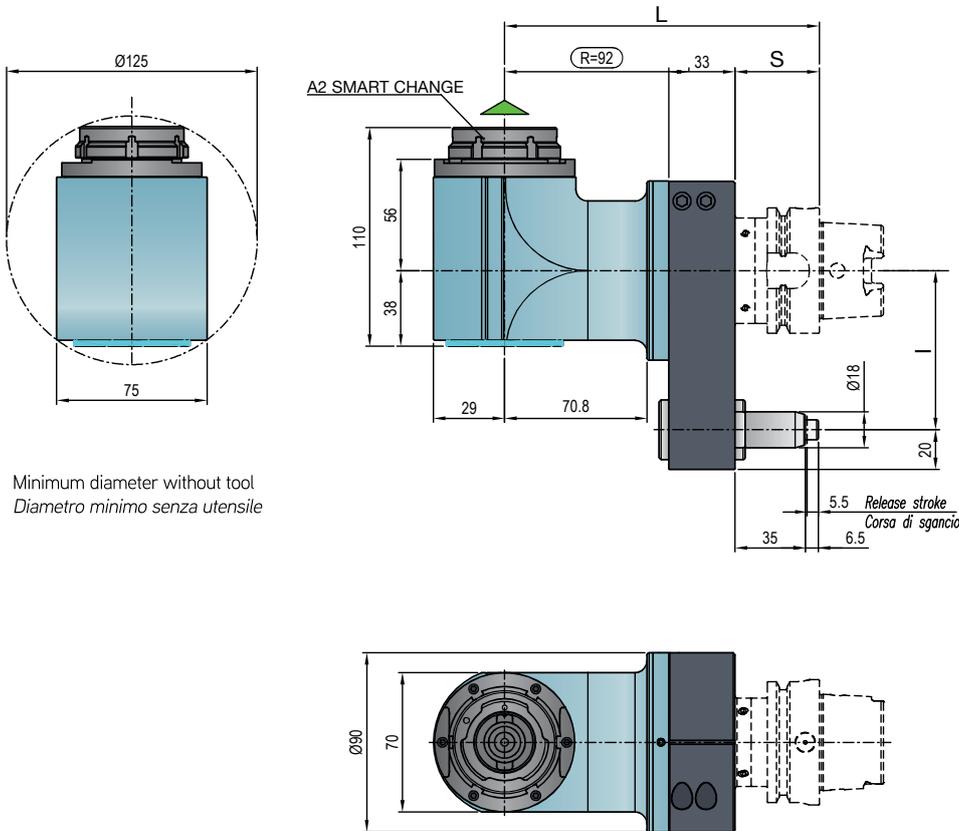
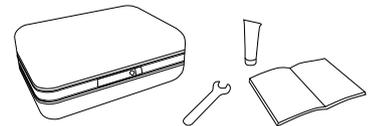


Weight
Peso
5.5 kg



Collet
Pinza
Smart Change

*** STANDARD EQUIPMENT includes:**



Minimum diameter without tool
Diametro minimo senza utensile

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

Shank / Cono	DIN-69871	CAT	MAS-BT	HSK	CAPTO	KM
Size / Grandezza	40		40	63-80	C6	63
I	80-110		80-110	110	80-110	80-110
S	35		41	42	38	40
L	150		156	157	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

TCUcn-3.5 Neo

ASTCU355C

SMART CHANGE

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
4.000 min⁻¹



Max. axial load
Max. carico assiale
715 N



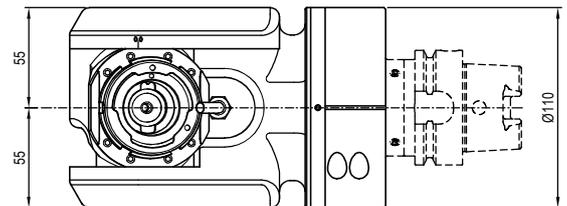
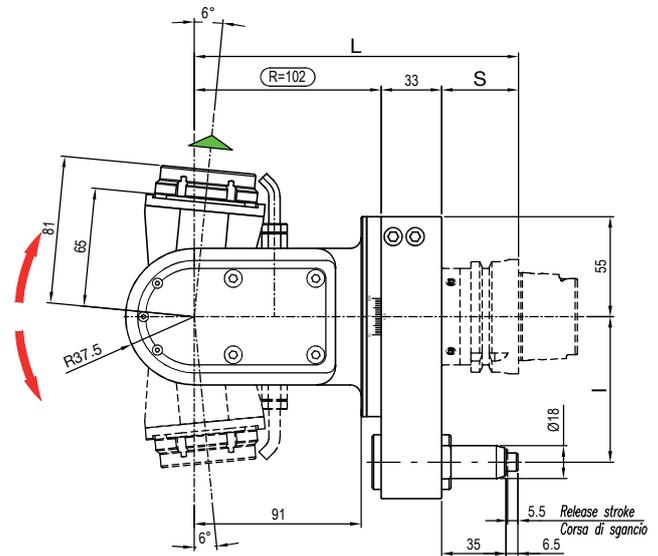
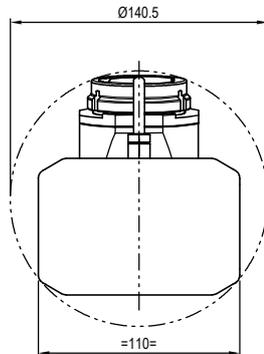
Torque
Momento torcente
50 Nm



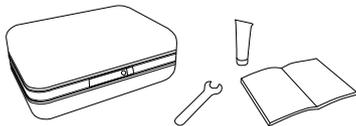
Weight
Peso
13 kg



Collet
Pinza
A2 Smart Change



*** STANDARD EQUIPMENT includes:**



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

Shank / Cono	DIN-69871	CAT	MAS-BT	HSK	CAPTO	KM
Size / Grandezza	50		50	63-80	100	63
I	80-110		80-110	80-110	80-110	80-110
S	35		41	42	45	40
L	160		166	167	170	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



bar max
100

Coolant through spindle
Addizione refrigerante interna



min⁻¹
6.000

RPM max.
RPM max.



+/- 95°

Angle
Angolo

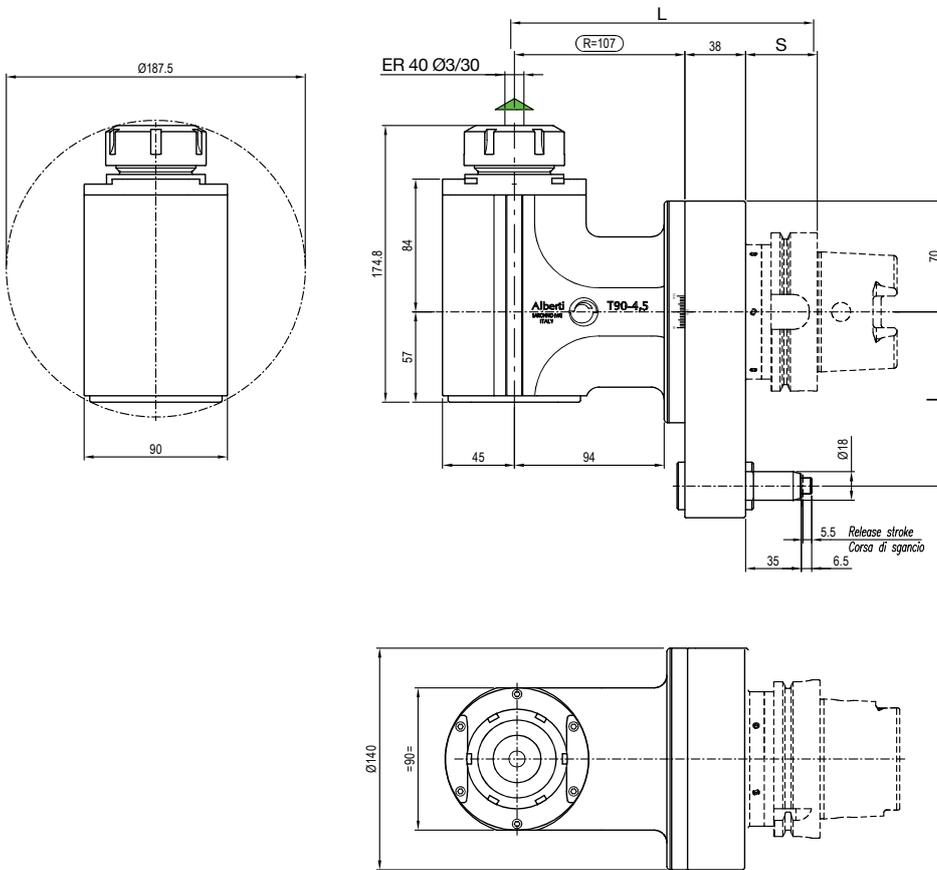


every
5°

Fixed positioning
Posizionamento fisso

T90cn-4.5C Neo

ACT9045C



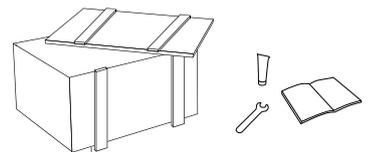
Technical data

Caratteristiche tecniche

- Ratio**
Rapporto
1:1
- RPM**
Velocità
4.000 min⁻¹
- Max. axial load**
Max. carico assiale
1.750 N
- Torque**
Momento torcente
90 Nm
- Weight**
Peso
17 kg
- Tapping**
Maschiatura
Max. M20
- Collet**
Pinza
ER-40 (Ø 3/30 mm)

*** STANDARD EQUIPMENT includes:**

Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
Dry rotation is possible / rotazione a secco possibile



Spindle / Cono	DIN-69871	CAT	MAS-BT	HSK	CAPTO
Size / Grandezza	50	50	50	80	100
I	110	110	110	110	110
S	35	41	41	42	45
L	180	186	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 / 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
1:1



RPM
Velocità
6.000 min⁻¹



Max. axial load
Max. carico assiale
1.750 N



Torque
Momento torcente
90 Nm



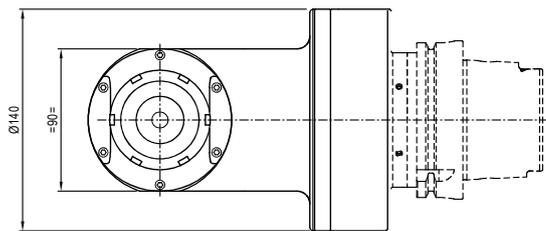
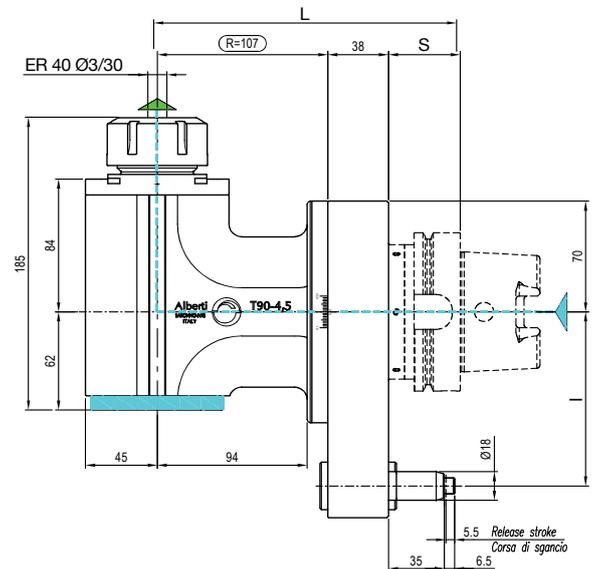
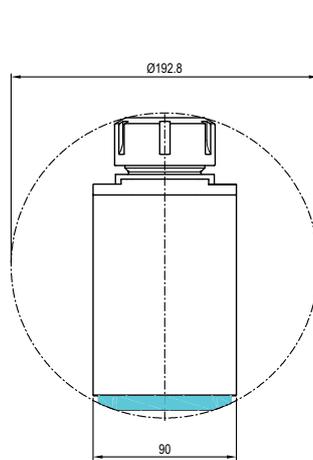
Weight
Peso
17 kg



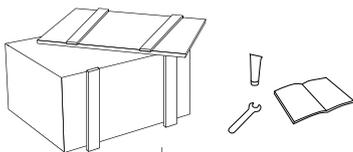
Tapping
Maschiatura
Max. M20



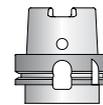
Collet
Pinza
ER-40 (ø 3/30 mm)



*** STANDARD EQUIPMENT includes:**



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
Dry rotation is possible / rotazione a secco possibile
▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar



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

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

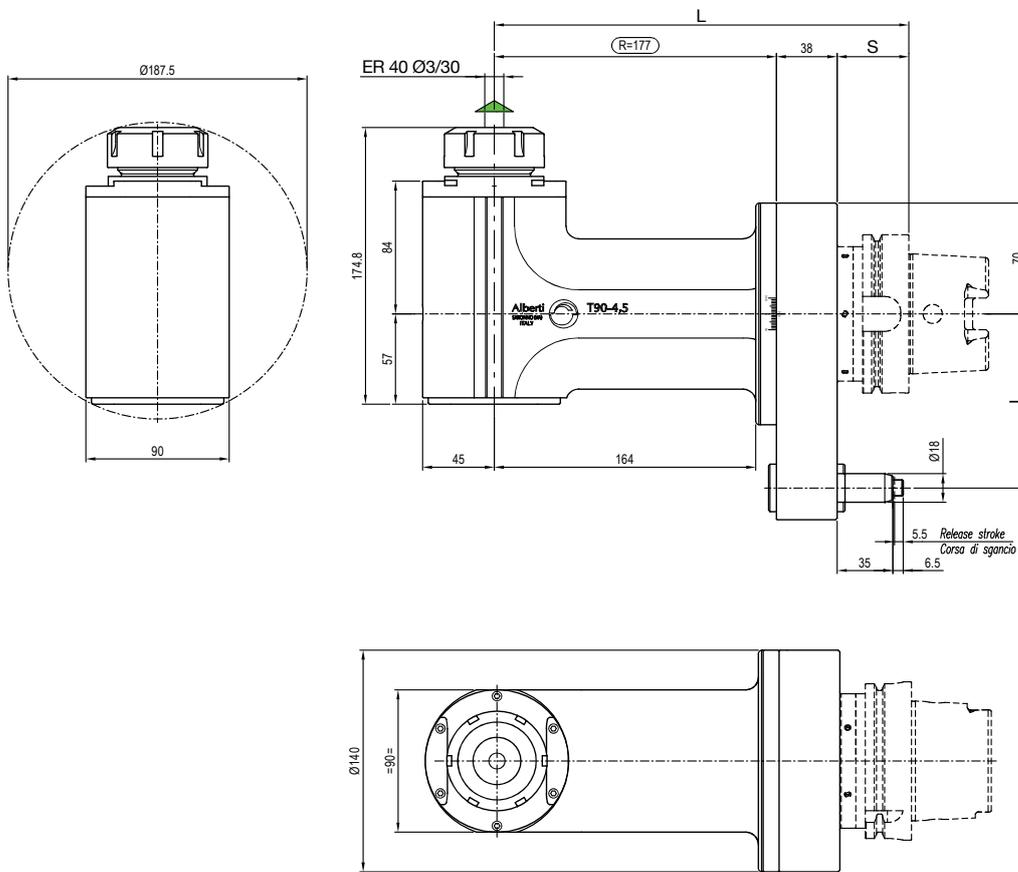


HSK-40 / CAPTO C4

Quick Change
Attacco rapido

T90cn-4.5L Neo

ACT9045L



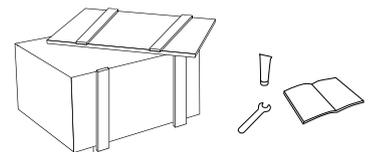
Technical data

Caratteristiche tecniche

- Ratio**
Rapporto **1:1**
- RPM**
Velocità **4.000 min⁻¹**
- Max. axial load**
Max. carico assiale **1.750 N**
- Torque**
Momento torcente **90 Nm**
- Weight**
Peso **20 kg**
- Tapping**
Maschiatura **Max. M20**
- Collet**
Pinza **ER-40 (ø 3/30 mm)**

*** STANDARD EQUIPMENT includes:**

Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
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
XL	180	186	187	190	185

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 / 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⁻¹ | **DRY**
Running
4.000 min⁻¹



Max. axial load
Max. carico assiale
1.750 N



Torque
Momento torcente
90 Nm



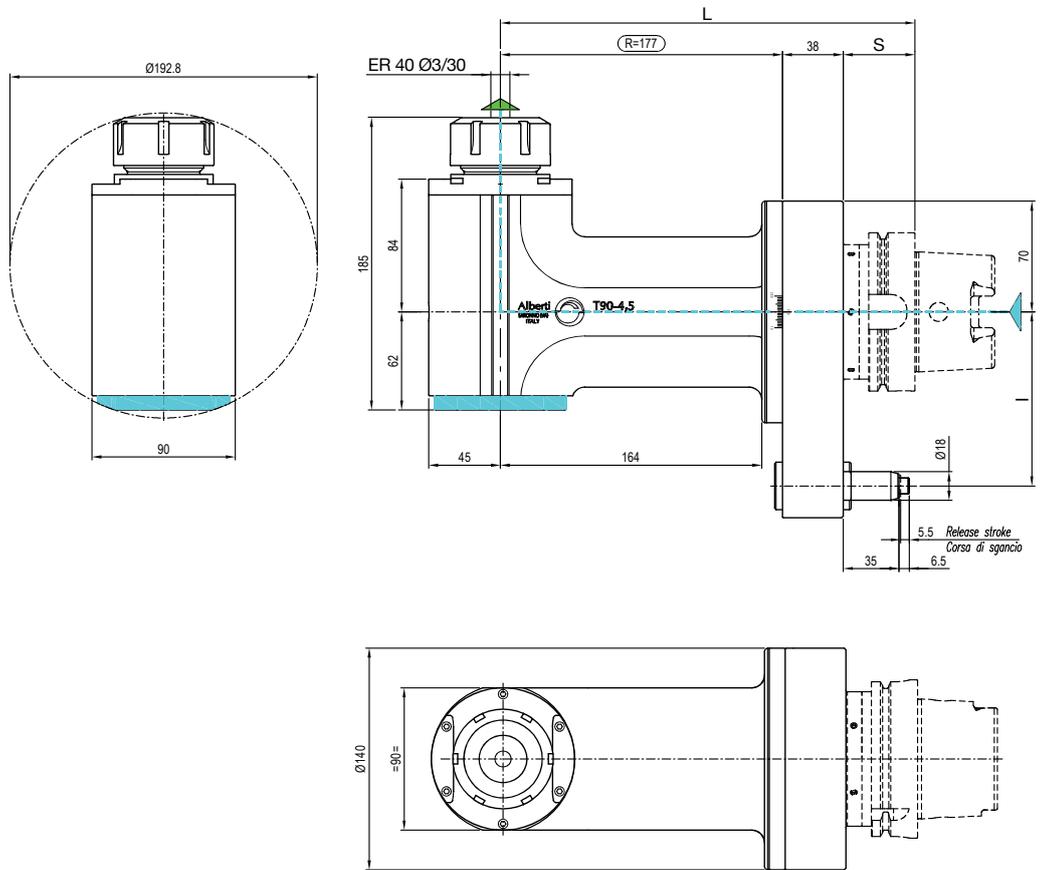
Weight
Peso
20 kg



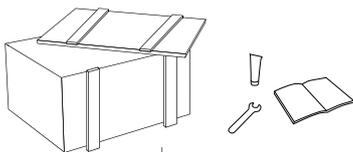
Tapping
Maschiatura
Max. M20



Collet
Pinza
ER-40 (ø 3/30 mm)



*** STANDARD EQUIPMENT includes:**



- ▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
Dry rotation is possible / rotazione a secco possibile
- ▲ Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar



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			
XL	180		186		187	190	185			

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

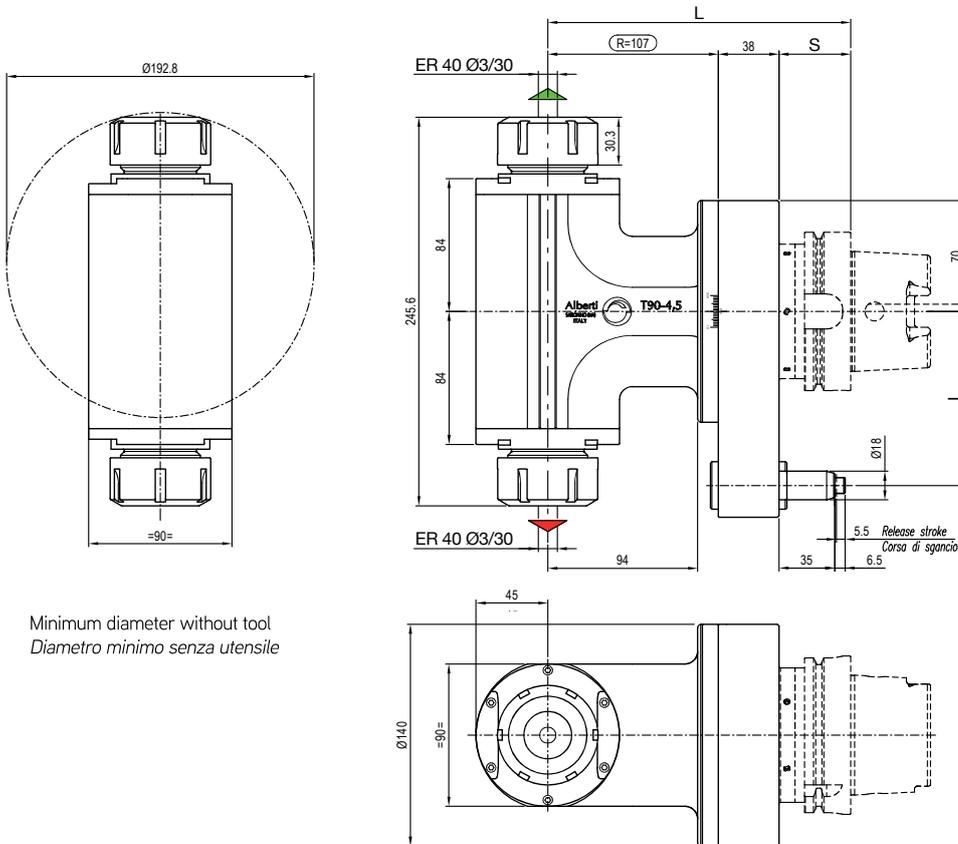


HSK-40 / CAPTO C4

Quick Change
Attacco rapido

T90cn-4.5 2U Neo

ACT9045D



Minimum diameter without tool
Diametro minimo senza utensile

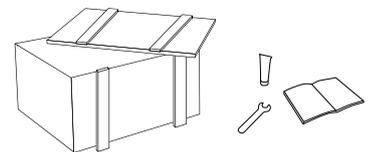


- ▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
- ▲ Direction of rotation opposite as machine spindle / senso di rotazione contrario al mandrino

Technical data Caratteristiche tecniche

- Ratio Rapporto **1:1**
- RPM Velocità **4.000 min⁻¹**
- Max. axial load Max. carico assiale **1.250 N**
- Torque Momento torcente **50 Nm**
- Weight Peso **20 kg**
- Collet Pinza **ER-32 (ø 2/20 mm)**

*** STANDARD EQUIPMENT includes:**



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

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

ACTR945C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
4.000 min⁻¹



Max. axial load
Max. carico assiale
1.750 N



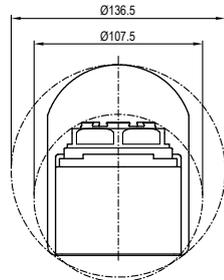
Torque
Momento torcente
90 Nm



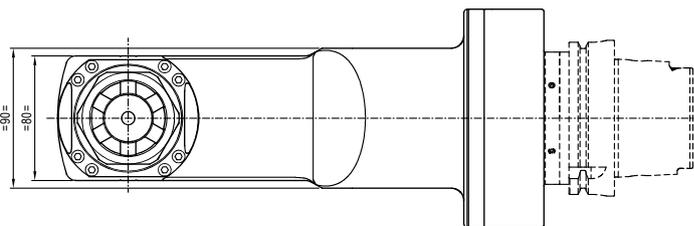
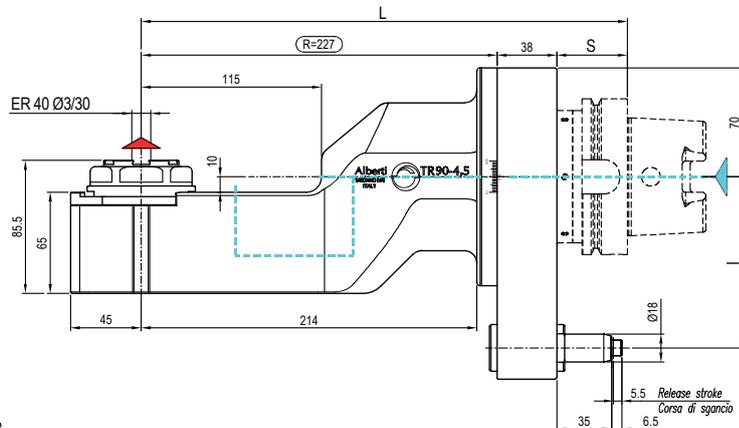
Weight
Peso
20 kg



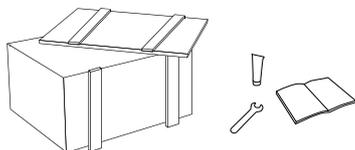
Collet
Pinza
ER-40 (ø 3/30 mm)



Minimum diameter without tool
Diametro minimo senza utensile



*** STANDARD EQUIPMENT includes:**

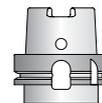


Retaining block / Tassello di ritegno / Stop-Block

NOT INCLUDED - NON INCLUSO



▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
Dry rotation is possible / rotazione a secco possibile



Shank / 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	297,5		303,5		304,5	307,5		302,5		

Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Option / Opzione



bar max
100

Coolant through spindle
Refrigerante attraverso il cono

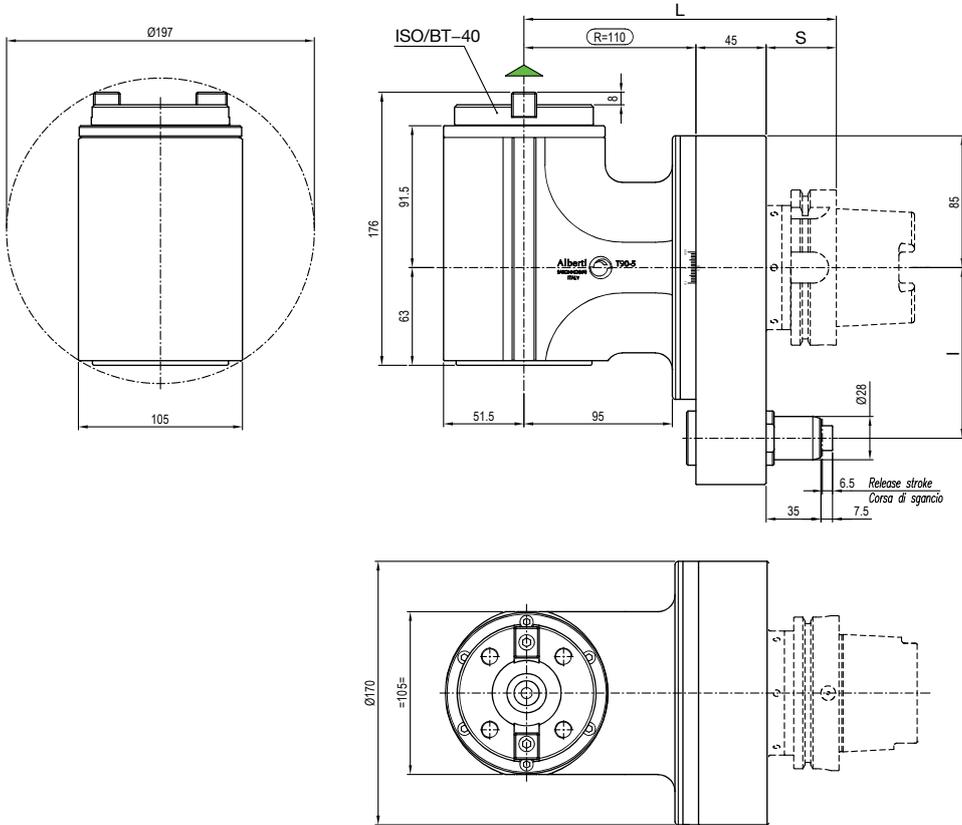


min⁻¹
6.000

RPM max.
RPM max.

T90cn-5 Neo

ACT905HP



Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
3.000 min⁻¹



Max. axial load
Max. carico assiale
1.800 N



Torque
Momento torcente
160 Nm



Weight
Peso
22 kg



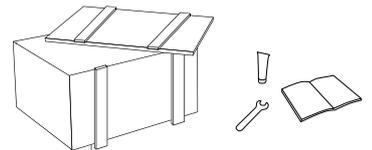
Tapping
Maschiatura
Max. M24



Collet
Pinza
ISO/BT 40

*** STANDARD EQUIPMENT includes:**

Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
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	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⁻¹ | **DRY**
Running
3.000 min⁻¹



Max. axial load
Max. carico assiale
1.800 N



Torque
Momento torcente
160 Nm



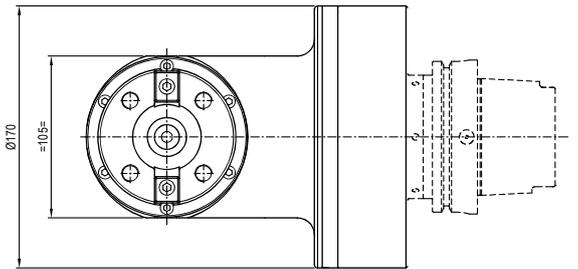
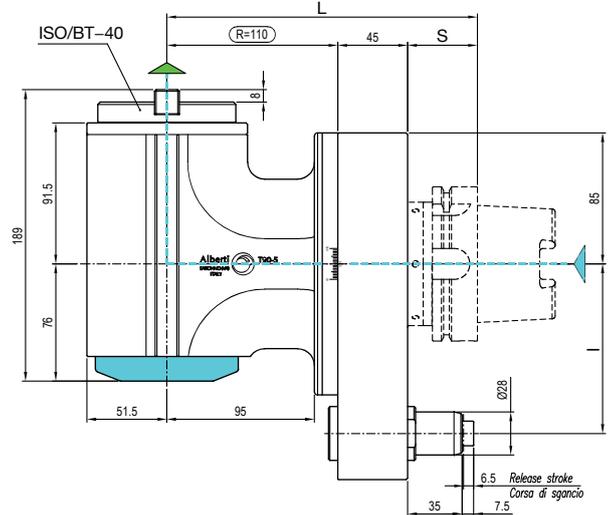
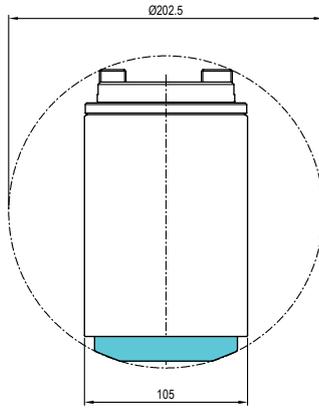
Weight
Peso
22 kg



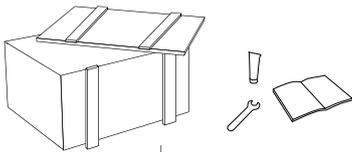
Tapping
Maschiatura
Max. M24



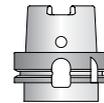
Collet
Pinza
ISO/BT 40



*** STANDARD EQUIPMENT includes:**



- Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
Dry rotation is possible / rotazione a secco possibile
- Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar



Shank / Cono	DIN-69871	CAT	MAS-BT	HSK	CAPTO
Size / Grandezza	50		50	80	C8
I	110		110	110	110
S	35		41	42	40
L	297,5		303,5	304,5	302,5

Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Option / Opzione

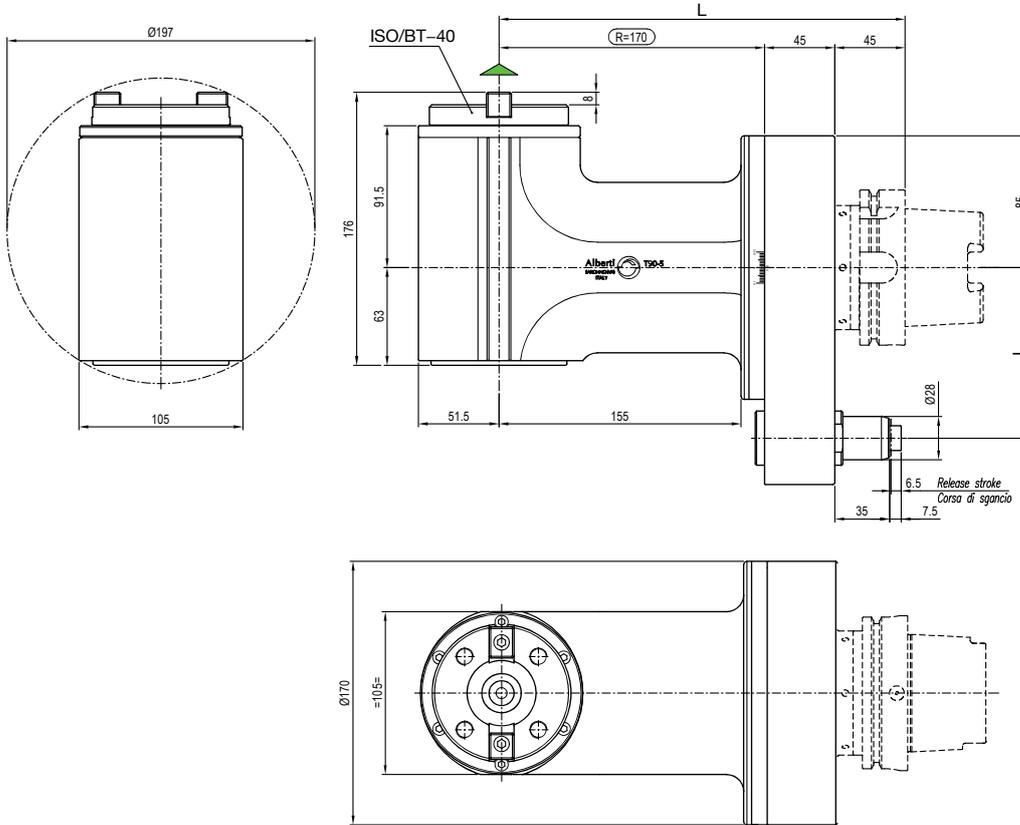


HSK-63 / CAPTO C4 C5 C6

Quick Change
Attacco rapido

T90cn-5L Neo

ACT905LHP



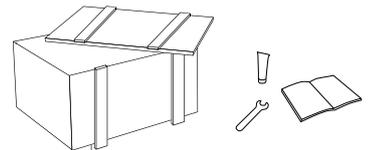
Technical data

Caratteristiche tecniche

- Ratio**
Rapporto
1:1
- RPM**
Velocità
3.000 min⁻¹
- 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:**

Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
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
XL	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-5L Neo IC

ACT905LHP.IC

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
5.000 min⁻¹ | DRY
Running
3.000 min⁻¹



Max. axial load
Max. carico assiale
1.800 N



Torque
Momento torcente
160 Nm



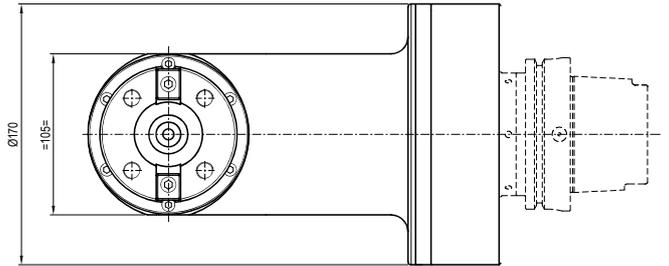
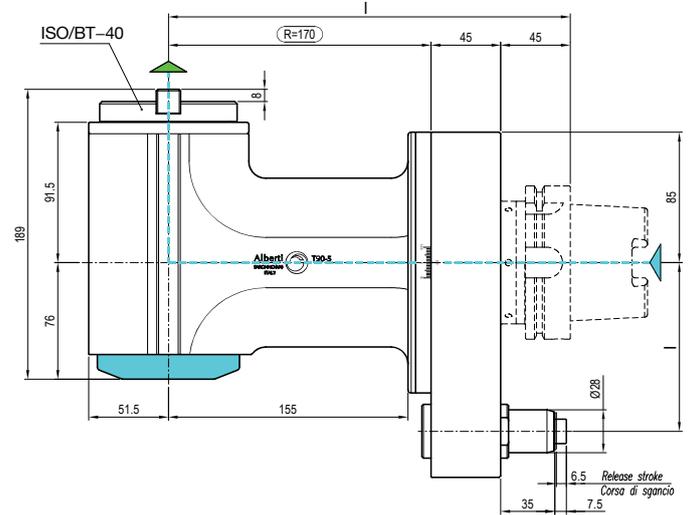
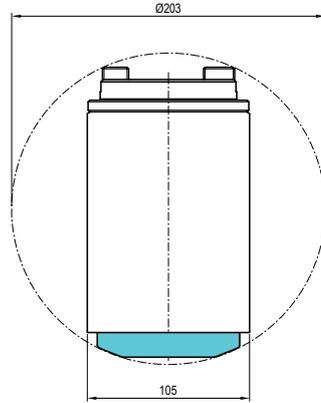
Weight
Peso
26,2 kg



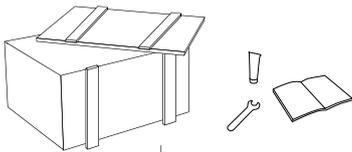
Tapping
Maschiatura
Max. M24



Collet
Pinza
ISO/BT 40

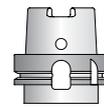
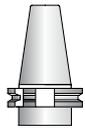


*** STANDARD EQUIPMENT includes:**



Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino
Dry rotation is possible / rotazione a secco possibile

Input coolant max. 1450 PSI / ingresso refrigerante max. 100 bar



Shank / Cono	DIN-69871	CAT	MAS-BT	HSK	CAPTO
Size / Grandezza	50		50	80	C8
I	110		110	110	110
S	35		41	42	40
XL	297,5		303,5	304,5	302,5

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**.*



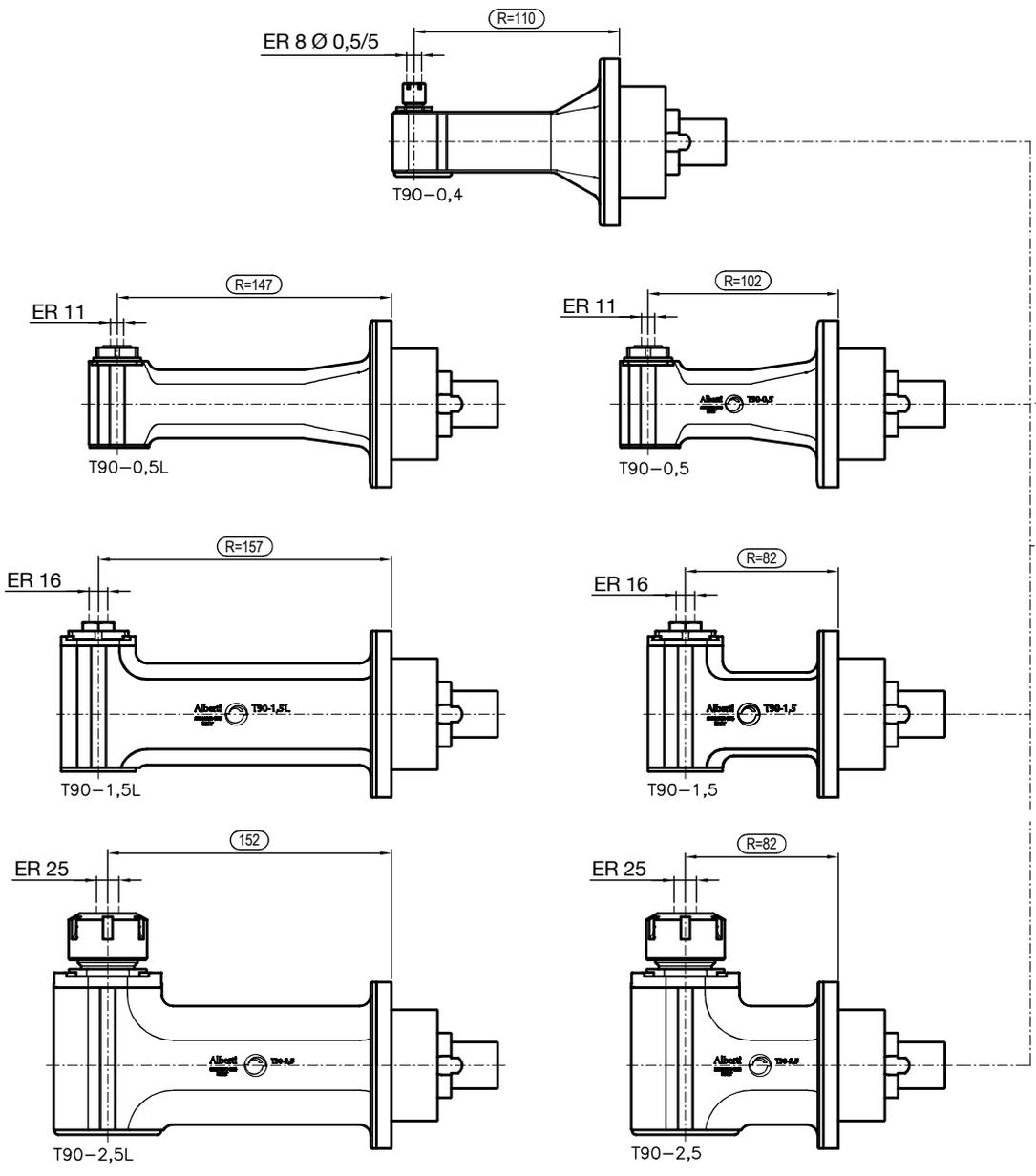


Teste con **PROLUNGA**

Extended heads

8.000 Rpm

6.000 Rpm

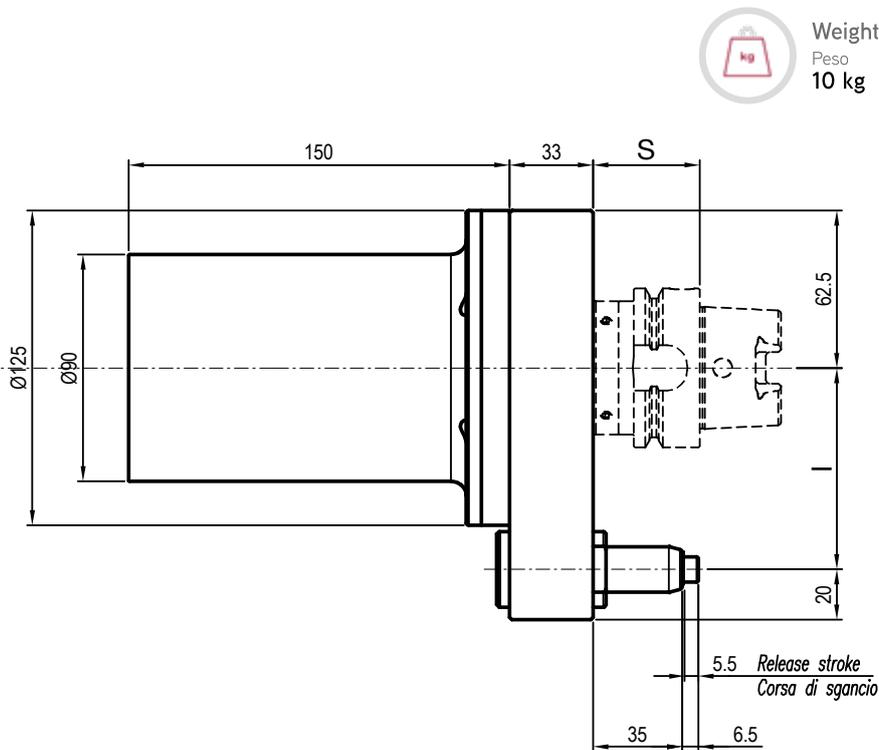


TECHNICAL DATA PAGE / CARATTERISTICHE TECNICHE A PAGINA

Testa / Head	Pagina / Page
T90-0,4	108
T90-0,5	109
T90-0,5L	110
T90-1,5	111
T90-1,5L	112
T90-2,5	114
T90-2,5L	115

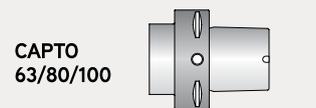
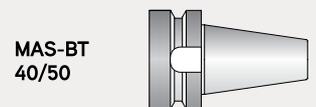
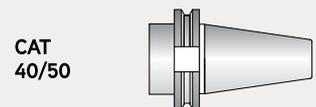
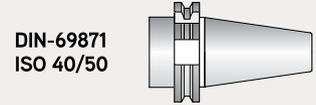
Teste con **PROLUNGA**

Extended heads

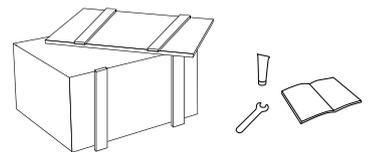


Weight
Peso
10 kg

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



*** 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	218	224		225	228	221	223

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		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

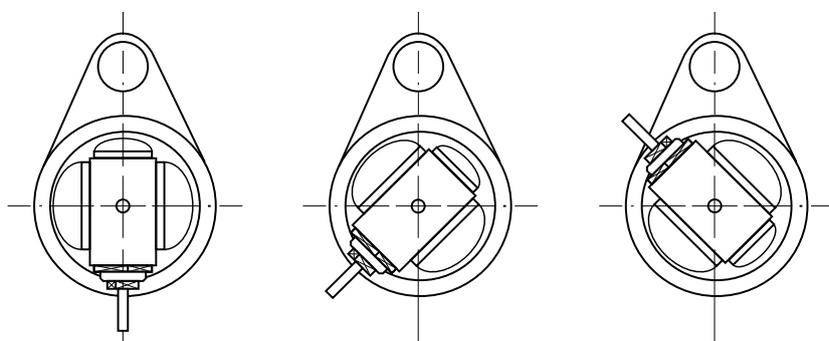


Linea **INDEX.**

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.**

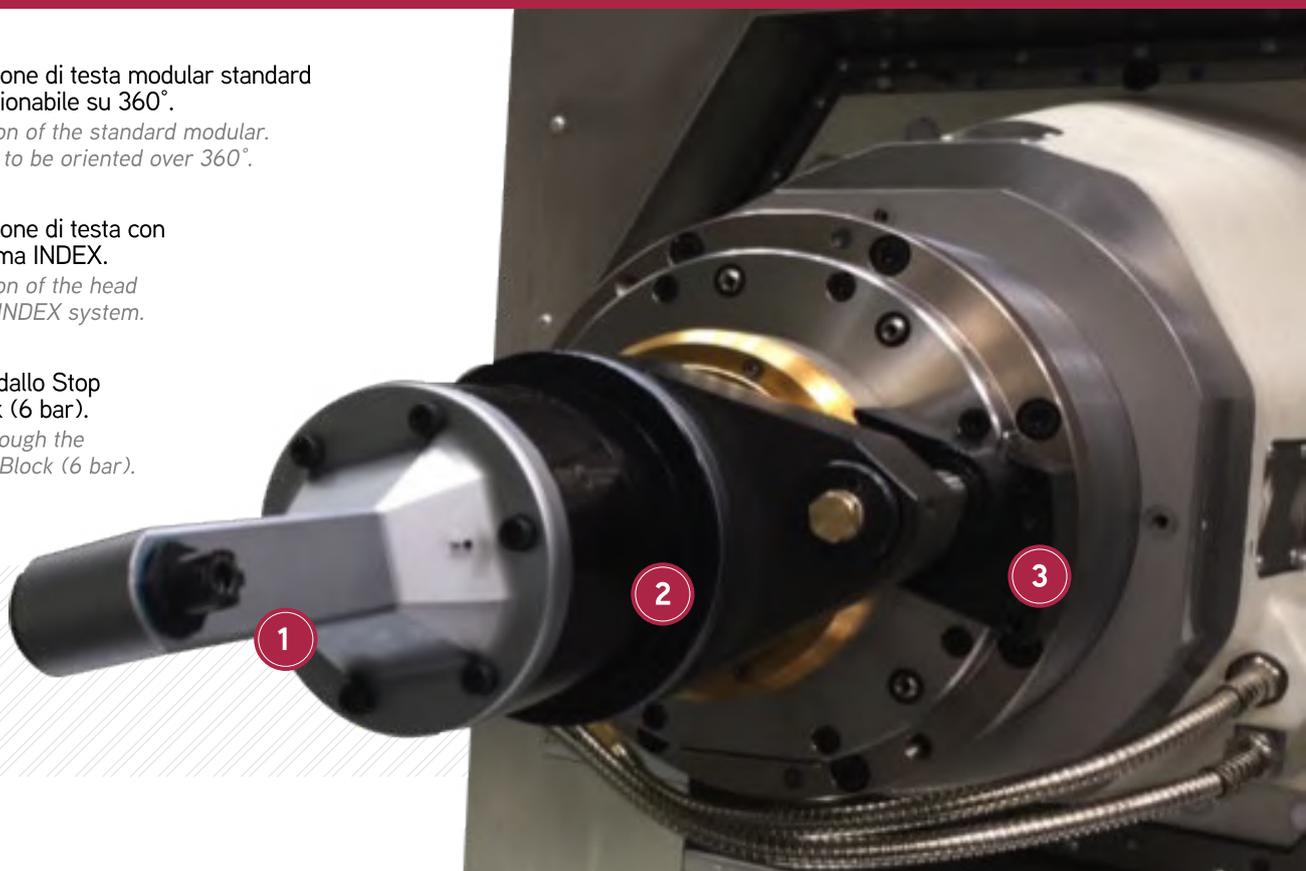
*With the **INDEX Line** it is possible to orientate and position automatically over 360° the output of the head by using the controlled axis of the machine center. This line **CAN ONLY** be mounted on machines with controlled C axis and external air through the Stop Block (max 6 bar).*



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.

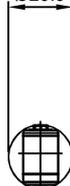
INDEX Line

T90-0.3 SLIMLINE

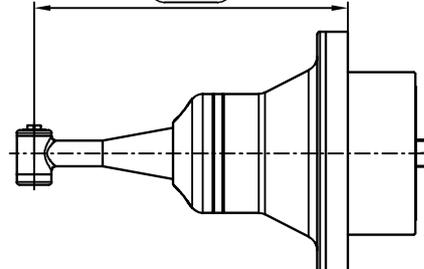
Technical data / Dati tecnici

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

Ø23.5



R=115

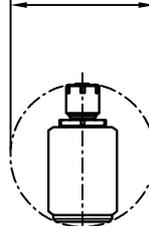


T90-0.4

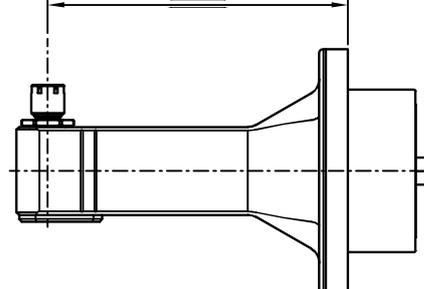
Technical data / Dati tecnici

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

Ø53



R=110

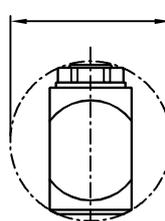


T90-0.5

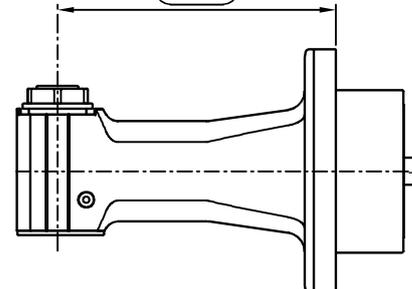
Technical data / Dati tecnici

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

Ø59



R=102

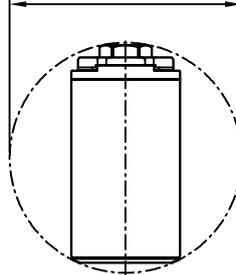


T90-1.5

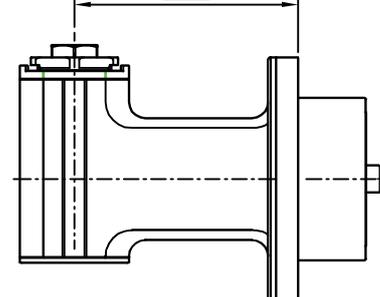
Technical data / Dati tecnici

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

Ø85



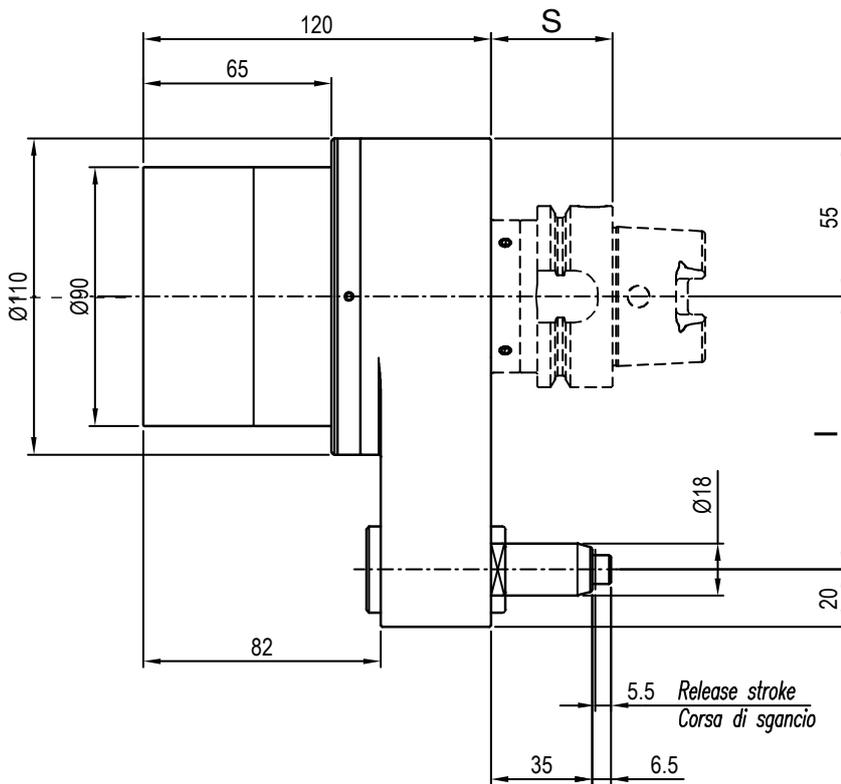
R=82



Linea **INDEX.** INDEX Line

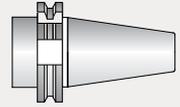


Weight
Peso
7.5 kg

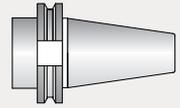


OPTIONAL DRIVE SHANK*
Non interchangeable input drive shank
Coni non intercambiabili

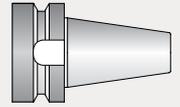
DIN-69871
ISO 40/50



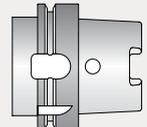
CAT
40/50



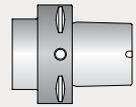
MAS-BT
40/50



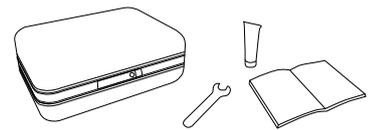
HSK
63/80/100



CAPTO
63/80/100



*** 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	275
T90-0.4	mm	265	265	265	271	272	275	268	270
T90-0.5	mm	257	257	257	263	264	267	260	262
T90-1.5	mm	237	237	237	243	244	247	240	242



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

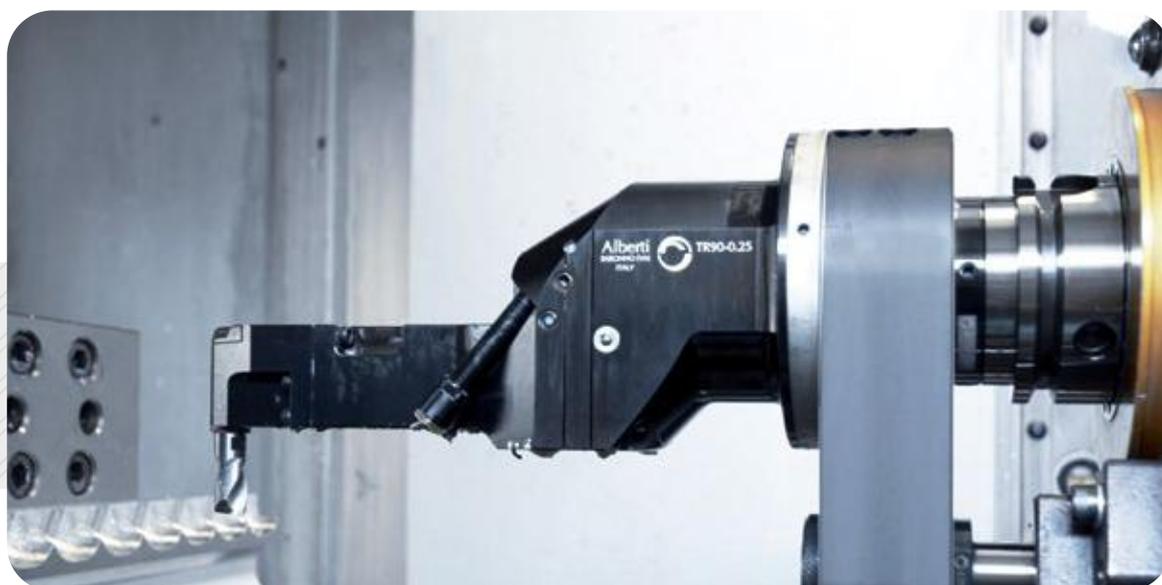
La nuova serie di teste Ultraslim è stata progettata per offrire soluzioni standardizzate adatte a diverse **applicazioni in spazi molto ridotti**, come lavorazioni di piccole tasche oppure operazioni molto vicine a pareti laterali del pezzo. Il loro particolare design prevede la **parte superiore del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



Rotazione con **MANDRINO MACCHINA - SLIMLINE.** Spindle Driven

RA-100

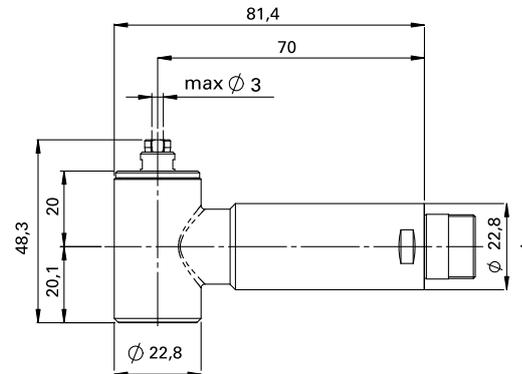
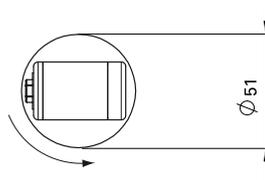
Technical data / Dati tecnici

RPM max. input / Max. Velocità input	15.000
Rt. reduction / Rt. in riduzione	1/2,67
Weight / Peso	Kg 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

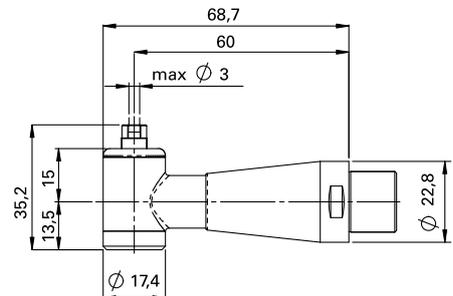
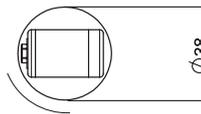
Technical data / Dati tecnici

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

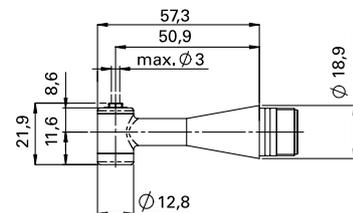
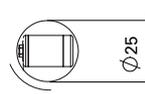
Technical data / Dati tecnici

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

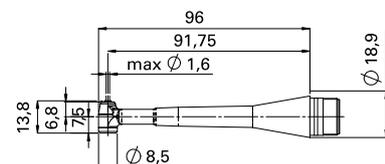
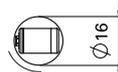
Technical data / Dati tecnici

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 | CH8: ø 3 mm every 0,1 mm ø 3mm

RA-200 | mm |

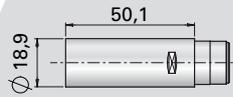
CHS: ø 3mm, 2,35 every 1,6 and ø 2,35, ø 3,175

IC-300 | mm |

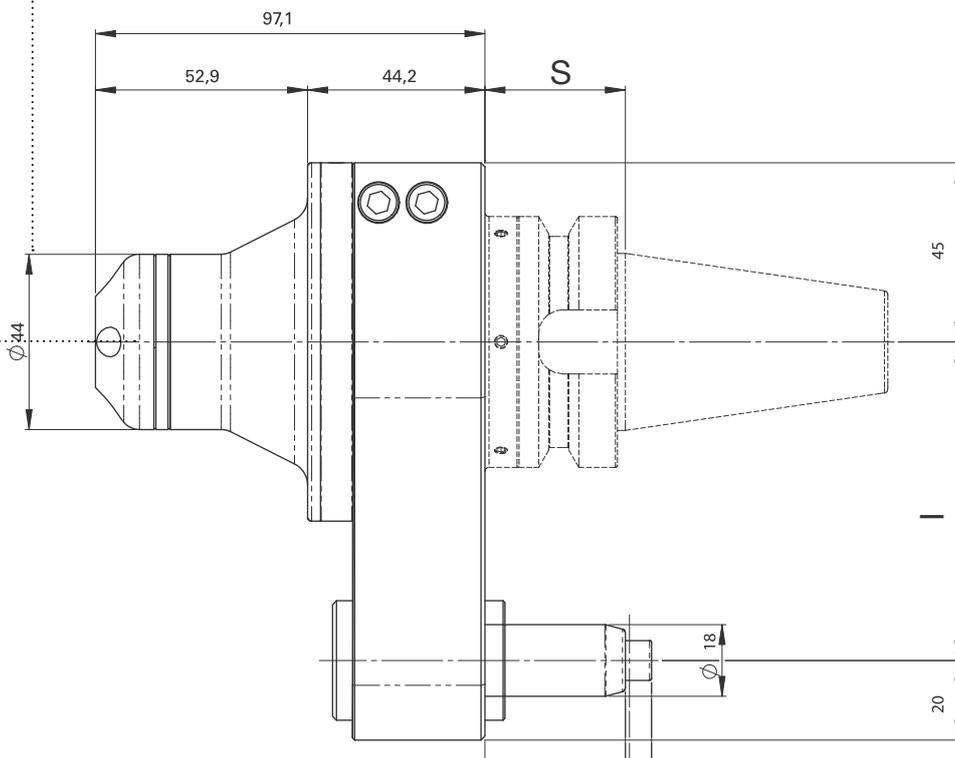
CHC: ø 3mm, ø 2,35mm, ø 1,6 mm, ø 2,00mm and ø 3,175 mm

MFC-300 | mm | K252 ø 1,6mm

CN-01

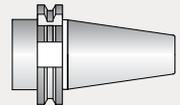


Extension between spindle and heads /
Prolunga da inserire tra il manipolo e la testa

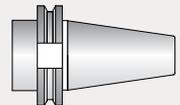


OPTIONAL DRIVE SHANK*
Non interchangeable input drive shank
Coni non intercambiabili

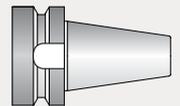
DIN-69871
ISO 40/50



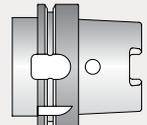
CAT
40/50



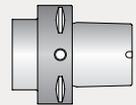
MAS-BT
40/50



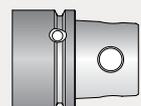
HSK
63/80/100



CAPTO
63/80/100



KM
50/63



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

*optional

ACCESSORIES / ACCESSORI

	RA-100	RA-200	IC-300	MFC-300
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

Retaining block /
Tassello di ritegno /
Stop-Block



NOT INCLUDED / NON INCLUSO

Linea **ULTRASLIM.**

Ultraslim Line

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:4 SPEEDER



RPM
Velocità
10.000 min⁻¹ | DRY
Running
6.000 min⁻¹



Max. axial load
Max. carico assiale
150 N



Torque
Momento torcente
4 Nm

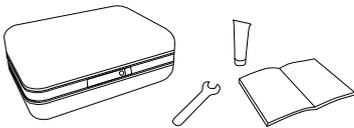


Weight
Peso
7.3 kg

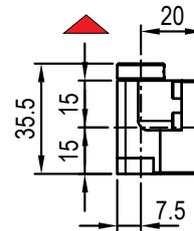


Collet
Pinza
**WELDON 4mm / 5mm
M4**

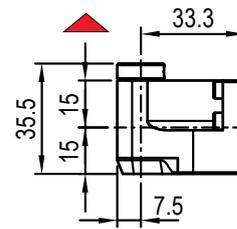
*** STANDARD EQUIPMENT**
includes:



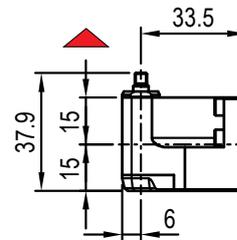
DH-001



DH-002



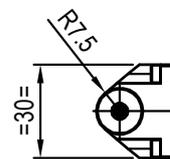
DH-003



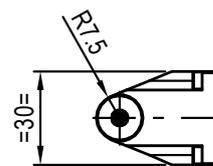
Utensili speciali
Special cuttingtool



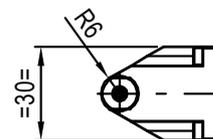
DH-001



DH-002



DH-003



Option / Opzione



bar max
100

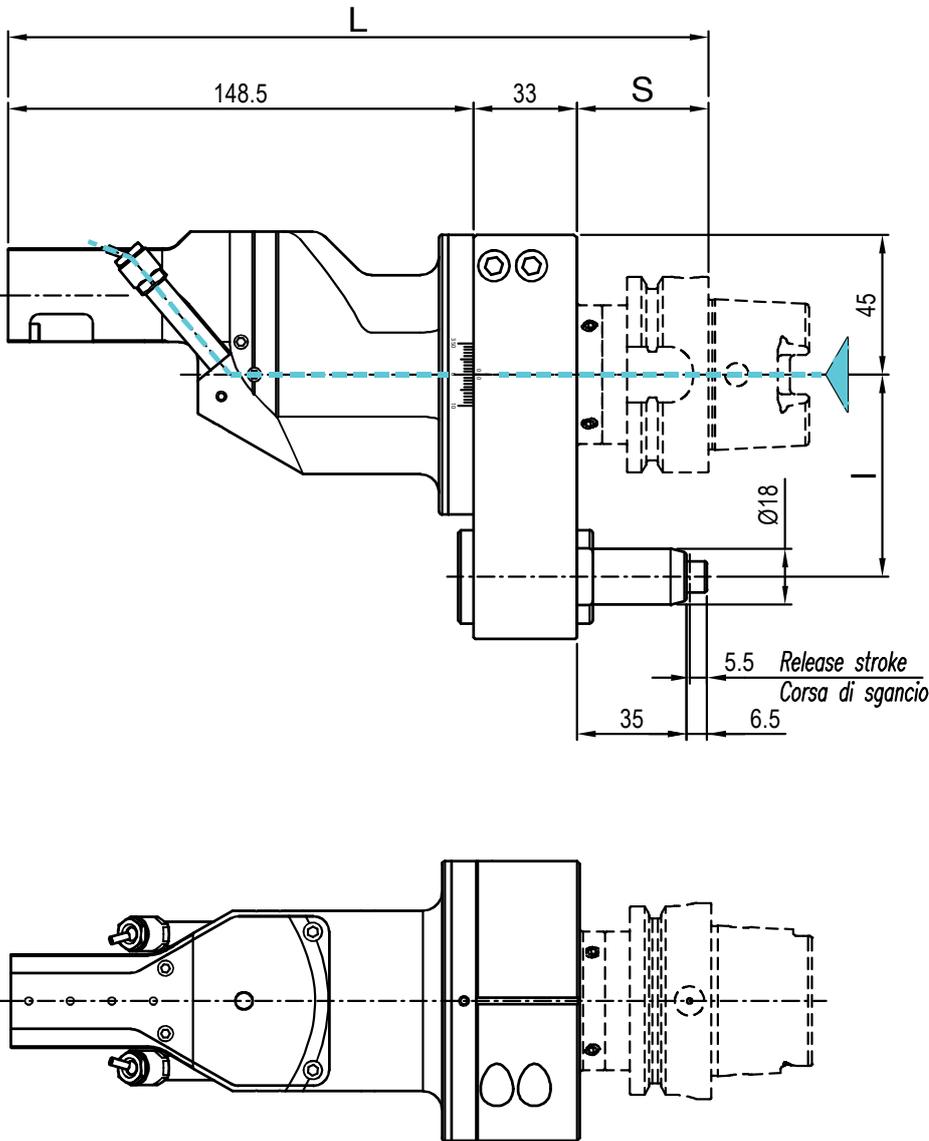
Coolant through flange and output spindle
Refrigerante attraverso la flangia e il mandrino di uscita



bar max
12

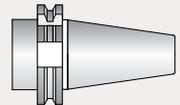
Coolant through pin
Refrigerante attraverso il perno

TR90CN-0.25DH

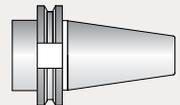


OPTIONAL DRIVE SHANK*
Non interchangeable input drive shank
Coni non intercambiabili

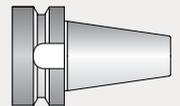
DIN-69871
ISO 40/50



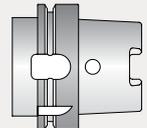
CAT
40/50



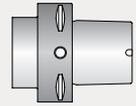
MAS-BT
40/50



HSK
63/80/100



CAPTO
63/80/100



▲ 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	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

TR90CN-0.25US

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:2 SPEEDER



RPM
Velocità
10.000 min⁻¹



Max. axial load
Max. carico assiale
100 N



Torque
Momento torcente
4 Nm

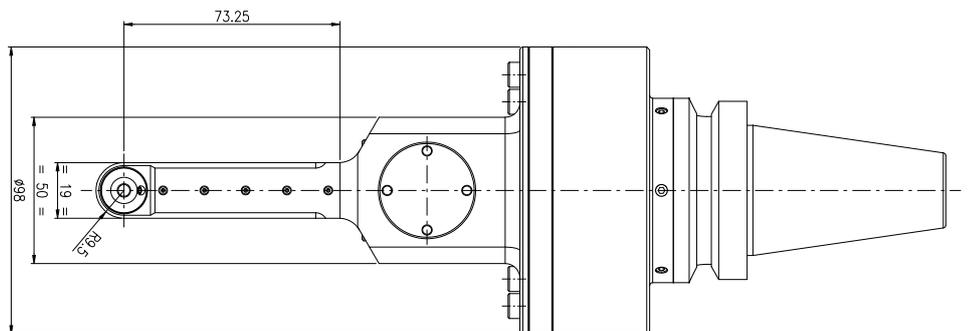
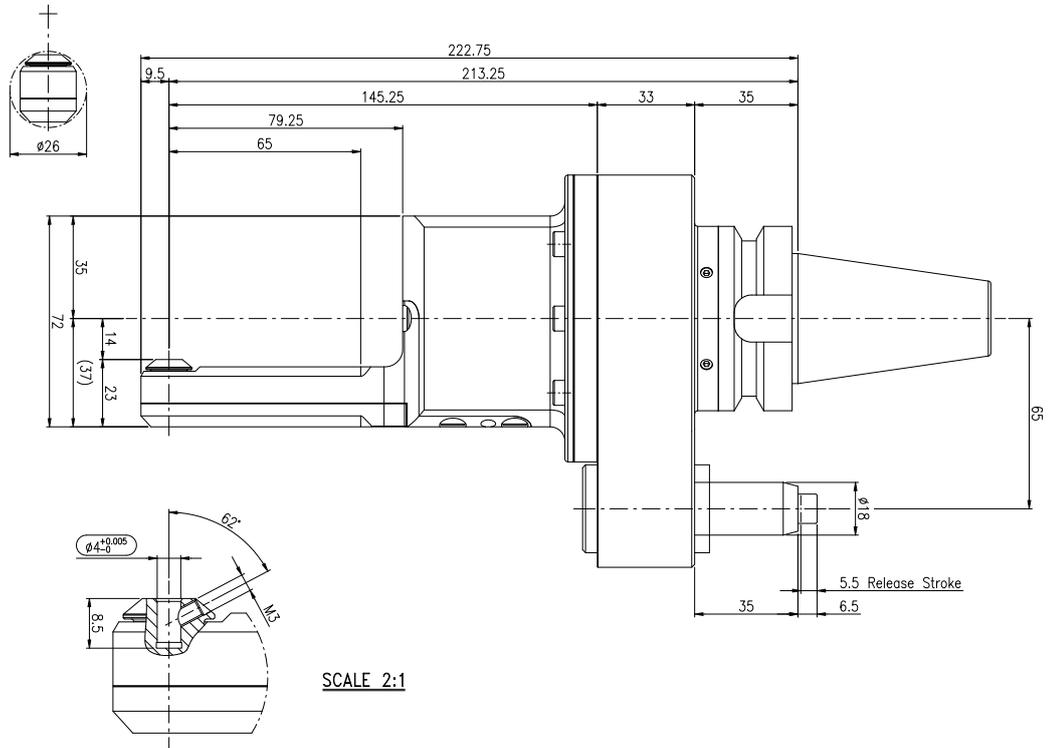
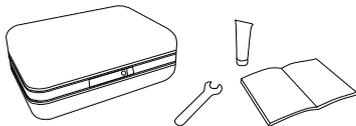


Weight
Peso
7 kg



Collet
Pinza
WELDON 4mm / 5mm

*** STANDARD EQUIPMENT includes:**



Option / Opzione



bar max
100

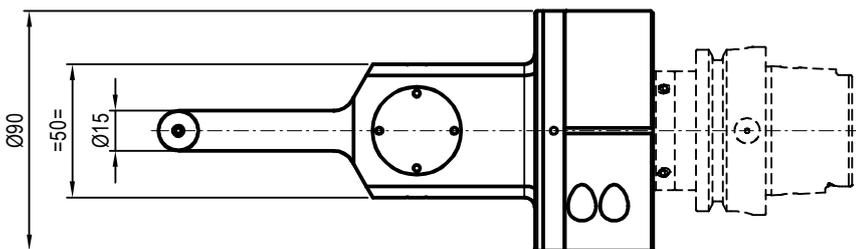
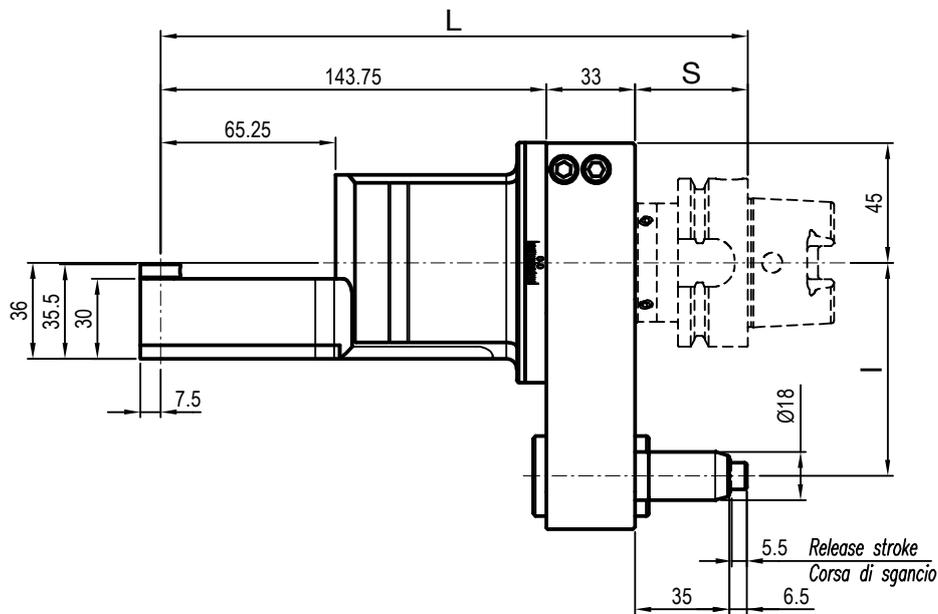
Coolant through flange and output spindle
Refrigerante attraverso la flangia e il mandrino di uscita



bar max
12

Coolant through pin
Refrigerante attraverso il perno

TR90CN-0.25US



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
63/80/100

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



LINEA ALUMINIUM



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.

Sulla serie BT 40, è possibile montare il **nuovo sistema di cambio rapido SMART CHANGE**.

- **Corpo in alluminio** per limitare il peso
- **Dimensioni ridotte** per essere montate su macchine più piccole
- Possibilità di **refrigerante interno**
- **Alta velocità** fino a 10.000RPM
- **Stop block personalizzato** a seconda della macchina per una facile installazione.

*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.*

*For the BT 40 heads customer can mount our **new quick change system, Smart change**.*

- **Aluminum body** for significant weight reduction
- **Reduced overall dimensions** to be mounted on smaller machines
- Possibility of **internal coolant**
- **High speed** up to 10.000RPM
- **Customized stop block** for different machine type for an easy installation.

Customizzazione **STOP BLOCK.**

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



59516009

I 50
P 24

BROTHER S500 S700 S1000



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
10.000 min⁻¹



Max. axial load
Max. carico assiale
120 N



Torque
Momento torcente
8 Nm



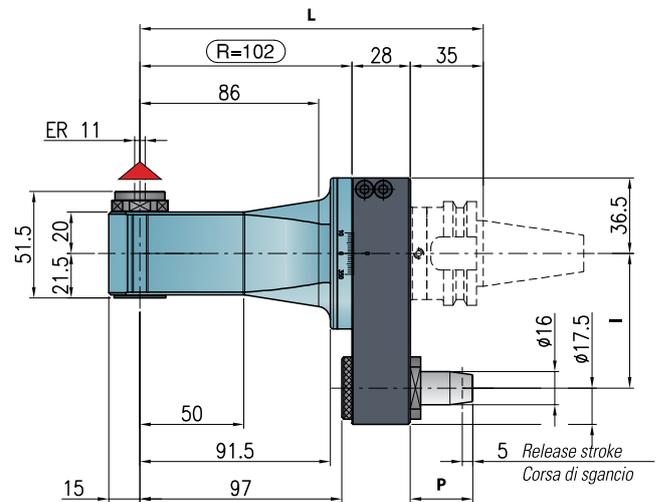
Weight
Peso
2.7 kg



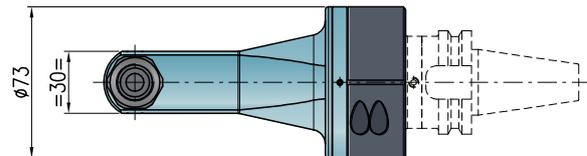
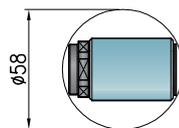
Collet
Pinza
ERAX-11 (ø 0,5/7 mm)



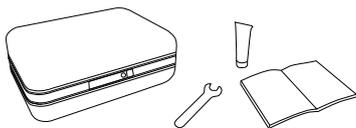
Shank
Cono
**ISO 30DIN-69871/
BT-30**



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 to machine spindle / senso di rotazione contrario al mandrino

	FANUC ROBODRILL	BROTHER S2D	BROTHER TC-32	BROTHER R450X1	BROTHER S500 S700 S1000	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

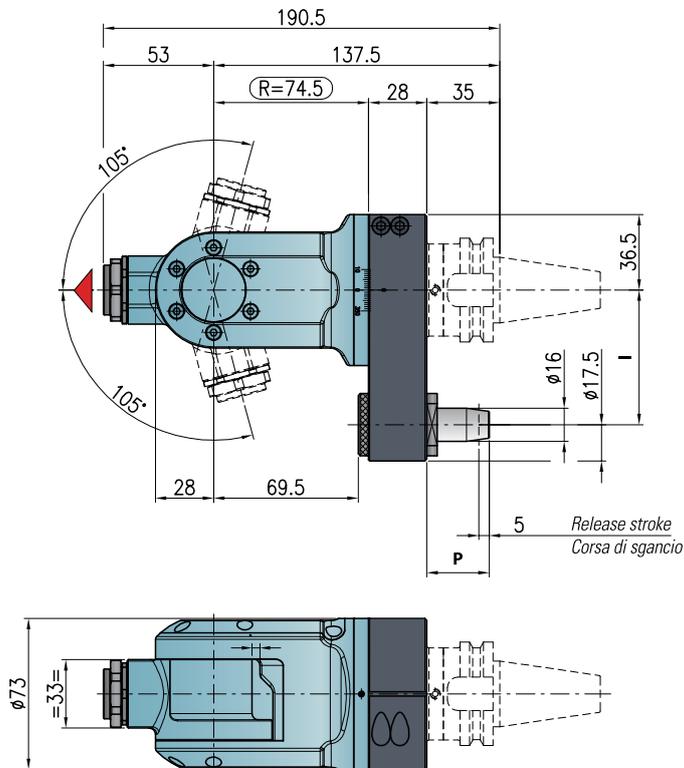


bar max
12

Coolant through pin
Refrigerante attraverso il perno

TCUcn-0.5M ALUMINUM

ACTCU05C.ALU



Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1.5 SPEEDER



RPM
Velocità
6.000 min⁻¹



Max. axial load
Max. carico assiale
215 N



Torque
Momento torcente
8 Nm



Weight
Peso
2.8 kg



Collet
Pinza
ERAX-11 (ø 0,5/7 mm)

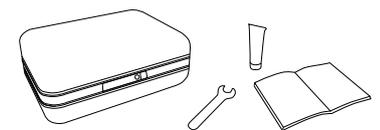


Shank
Cono
**ISO 30DIN-69871/
BT-30**



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

*** STANDARD EQUIPMENT includes:**



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

	FANUC ROBODRILL	BROTHER S2D	BROTHER TC-32	BROTHER R450X1	BROTHER S500 S700 S1000	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⁻¹



Max. axial load
Max. carico assiale
250 N



Torque
Momento torcente
15 Nm



Weight
Peso
2.9 kg

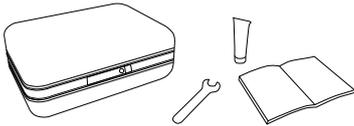


Collet
Pinza
ER 16 (ø 1-10 mm)



Shank
Cono
**ISO 30DIN-69871/
BT-30**

* STANDARD EQUIPMENT includes:

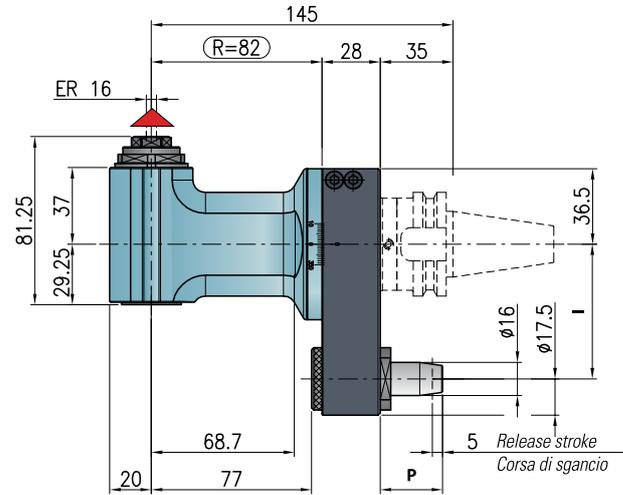


Retaining block / Tassello di ritegno / Stop-Block
NOT INCLUDED - NON INCLUSO

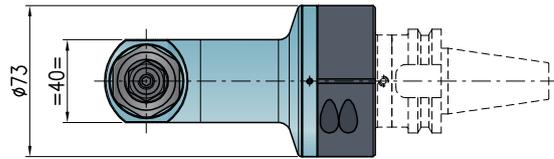
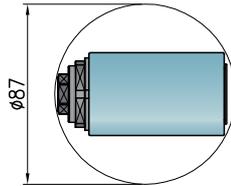


Internal coolant / Possibilità refrigerante

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



Minimum diameter without tool
Diametro minimo senza utensile



	FANUC ROBODRILL	BROTHER S2D	BROTHER TC-32	BROTHER R450X1	BROTHER S500 S700 S1000	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

T90cn-3.5M ALUMINUM

ACT9035C.ALU

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
4.000 min⁻¹



Max. axial load
Max. carico assiale
1250 N



Torque
Momento torcente
40 Nm



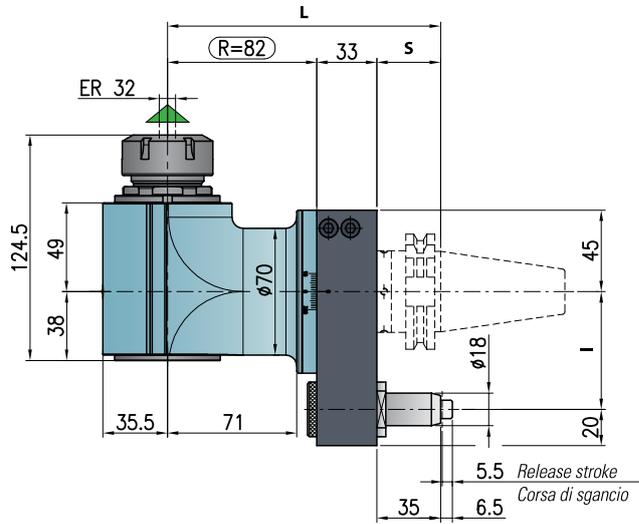
Weight
Peso
5.5 kg



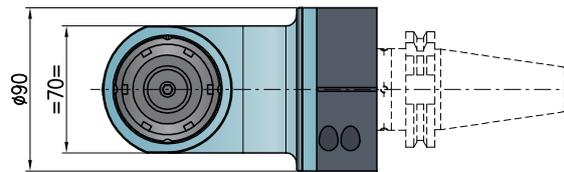
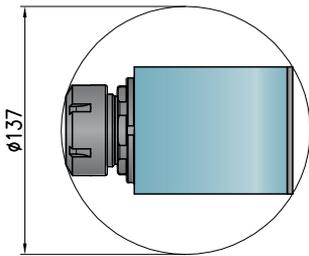
Collet
Pinza
ER 32 (ø 2-20 mm)



Shank
Cono
ISO 40DIN-69871/
BT-40

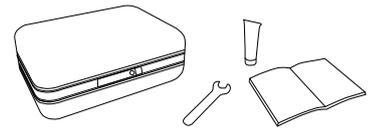


Minimum diameter without tool
Diametro minimo senza utensile



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

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



Shank / Cono	DIN-69871	CAT	MAS-BT
Size / Grandezza	40	40	40
I	65-80	80-(110*)	65-80-(110*)
S	35	35	35
L	150	150	150

Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

Option / Opzione



AIR/OIL

Air / Oil lubrication
Lubrificazione aria / olio



bar max
40

Coolant through spindle
Refrigerante attraverso il cono

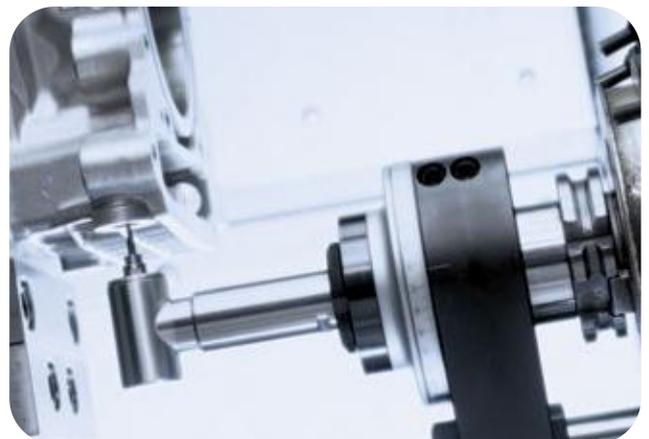


LINEA HIGH SPEED

MOLTIPLICATORE. *SPINDLE SPEEDER*



MOLTIPLICATORE MECCANICO
MECHANICAL SPINDLE SPEEDER
Max 25.000 RPM

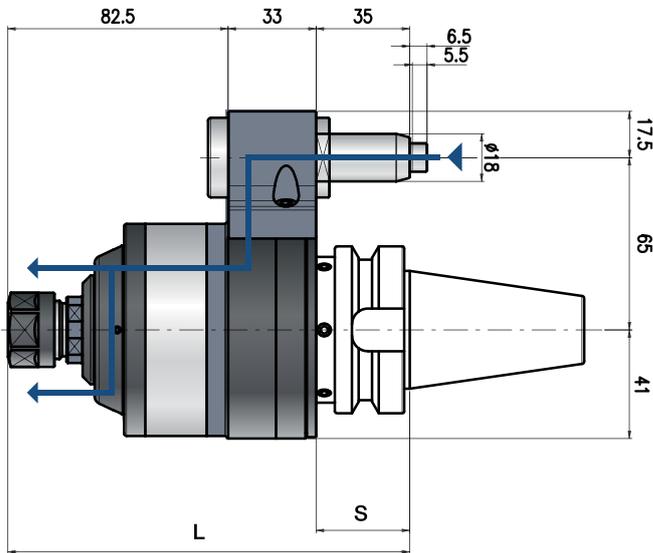


MOLTIPLICATORE AD ARIA
AIR DRIVEN SPEEDER
Max 60.000 RPM

MOLTIPLICATORE ELETTRICO
ELECTROSPINDLE
Max 80.000 RPM



MOLTIPLICATORE. SPEEDER



Technical data Caratteristiche tecniche

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

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

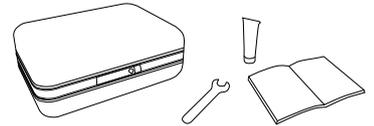
Fori per raffreddamento ad aria o acqua
Bores for air-water cooling system

Entrata aria acqua
Air-coolant input

Pinza ER 16
ER 16 collet

Gruppo perno modulare
Interchangeable pitchdimension

*** STANDARD EQUIPMENT includes:**



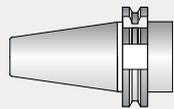
Shank / Cono Size / Grandezza	DIN-69871		CAT	MAS-BT	HSK		CAPTO		KM
	40-50	80-100			63-80	100	C6	C8	
I	80-100	80-100	80-100	80-100	80-100	80-100	80-100	80-100	80-100
S	35	35	41	41	42	45	38	40	40
L	150.5	150.5	156.5	156.5	157.5	160.5	153.5	155.5	155.5

*optional

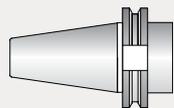
Non interchangeable input drive shank / Coni di attacco non intercambiabili

Teste con **MOTORE AD ARIA.**

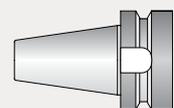
Air Driven angle heads



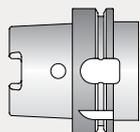
DIN-69871
ISO 40/50



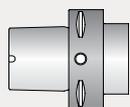
CAT
40/50



MAS-BT
40/50

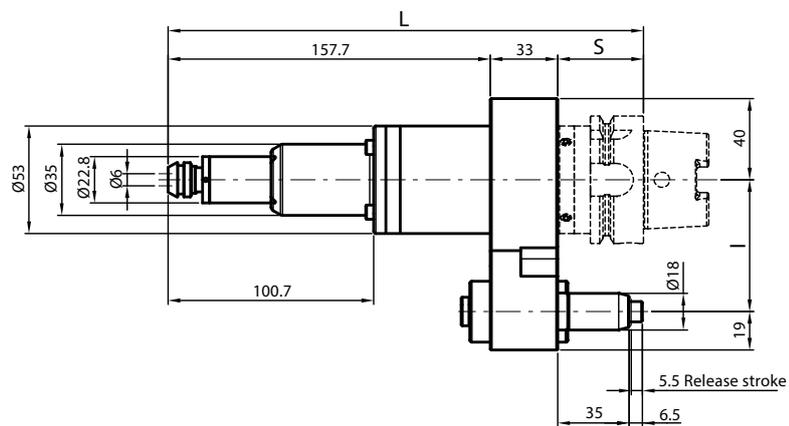


HSK
63/80/100

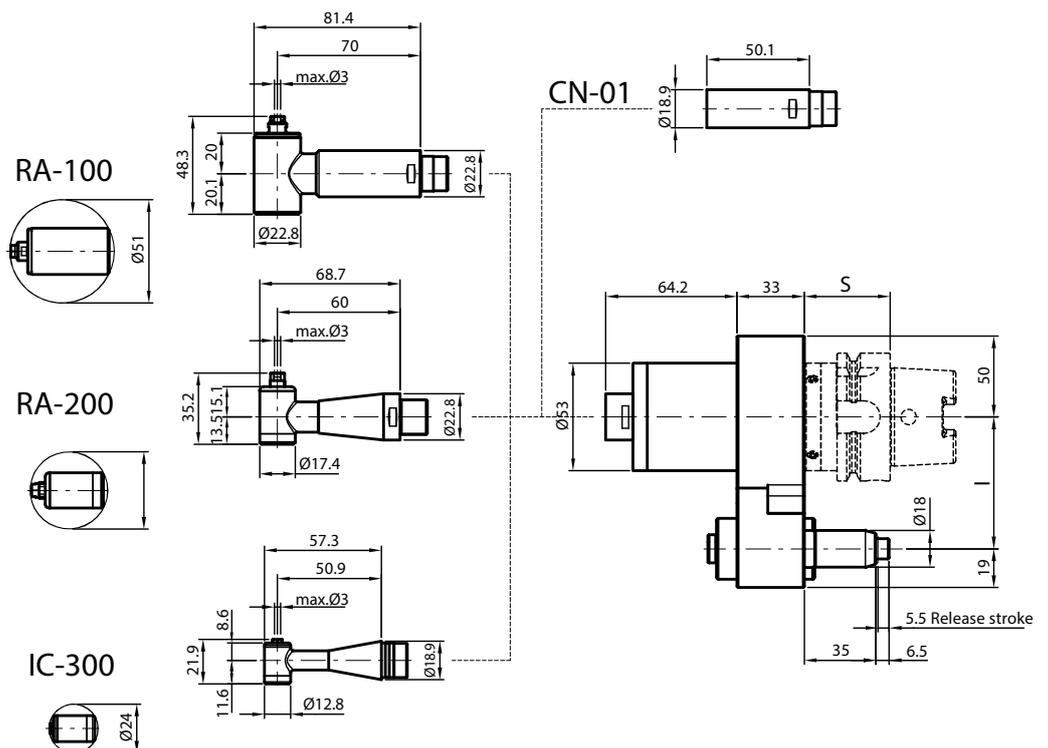


CAPTO
63/80/100

Turboflex 30.000 RPM AXIAL



Turboflex 30.000 RPM RADIAL



Air line kit / Filtro regolatore aria



320 mm

480 mm

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 ⁻¹	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	l/min	226
Weight / Peso	Kg	4

Shank / Cono	DIN-69871	CAT	MAS-BT		HSK		CAPTO		KM
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8	50-63
I	65-80-(110*)	80-110	65-80-(110*)	80-110	65-80-(110*)	80-110	65-80-110	80-110	65-80-110
S	35	35	35	41	42	42	38	40	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 ⁻¹	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	l/min	226	226	226
Output RPM / N° Giri in uscita	min ⁻¹	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



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

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

*optional

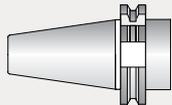


Teste con **MOTORE AD ARIA.**

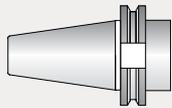
Air Driven angle heads

OPTIONAL DRIVE SHANK*

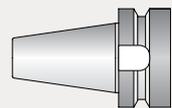
*Non interchangeable
input drive shank /
Coni non intercambiabili*



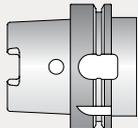
**DIN-69871
ISO 40/50**



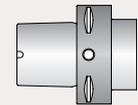
**CAT
40/50**



**MAS-BT
40/50**

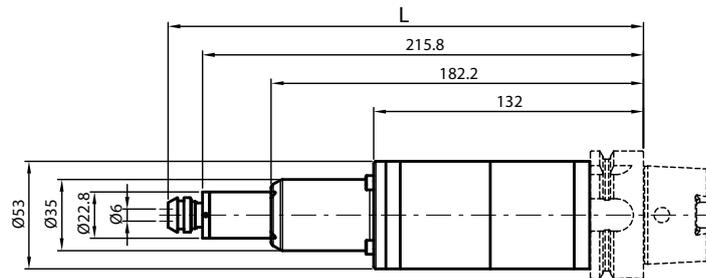


**HSK
63/80/100**

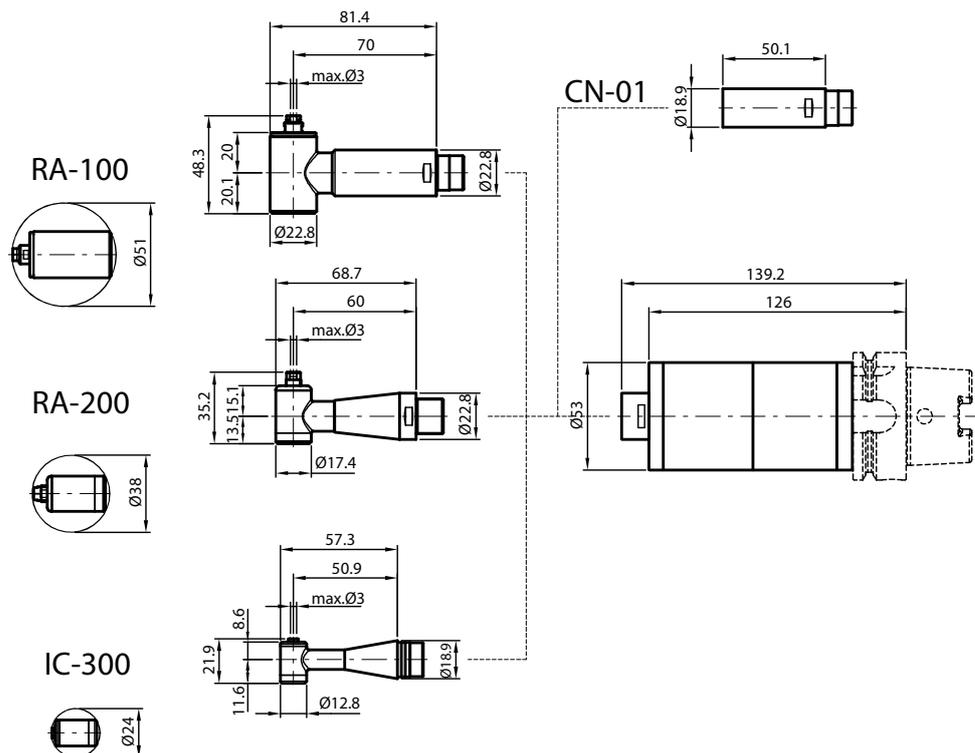


**CAPTO
63/80/100**

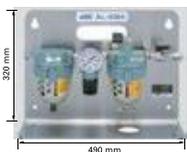
Turboflex 30.000 RPM AXIAL



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 ⁻¹	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	l/min	226
Weight / Peso	Kg	4

Shank / Cono	DIN-69871	CAT	MAS-BT		HSK		CAPTO		KM
Size / Grandezza	40	50	40	50	63-80	100	C5-C6	C8	50-63
I	65-80-(110*)	80-110	65-80-(110*)	80-110	65-80-(110*)	80-110	65-80-110	80-110	65-80-110
S	35	35	35	41	42	42	38	40	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 ⁻¹	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	l/min	226	226	226
Output RPM / N° Giri in uscita	min ⁻¹	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



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

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

*optional

TURBOFLEX con flangia indexata.

Turboflex with indexing system

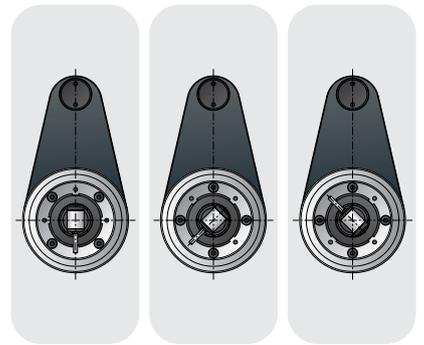
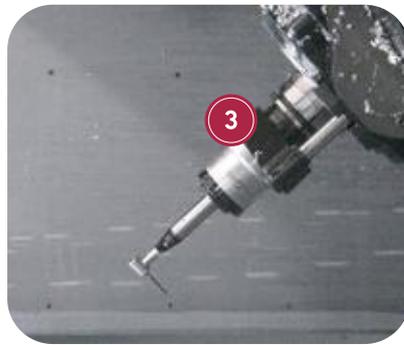
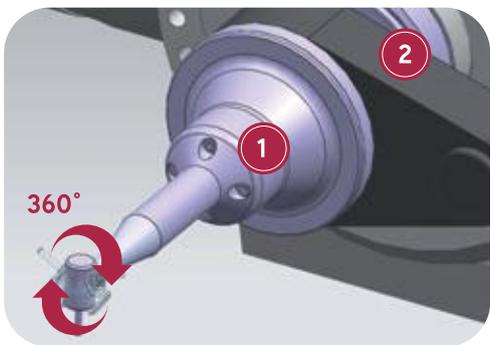
Il mandrino può essere posizionato su 360° grazie all'indexaggio dell'asse C della macchina, mentre la rotazione è assicurata dalla presenza del motore ad aria.

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.



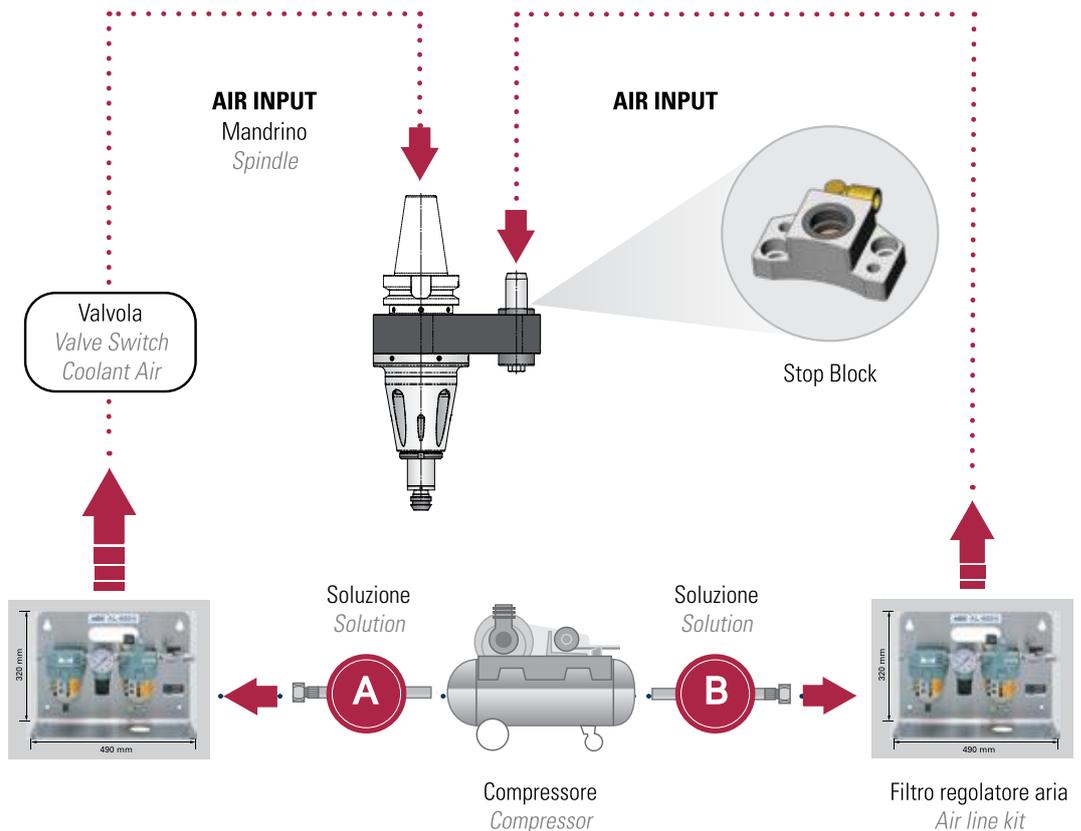
Come funziona TURBOFLEX.

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.



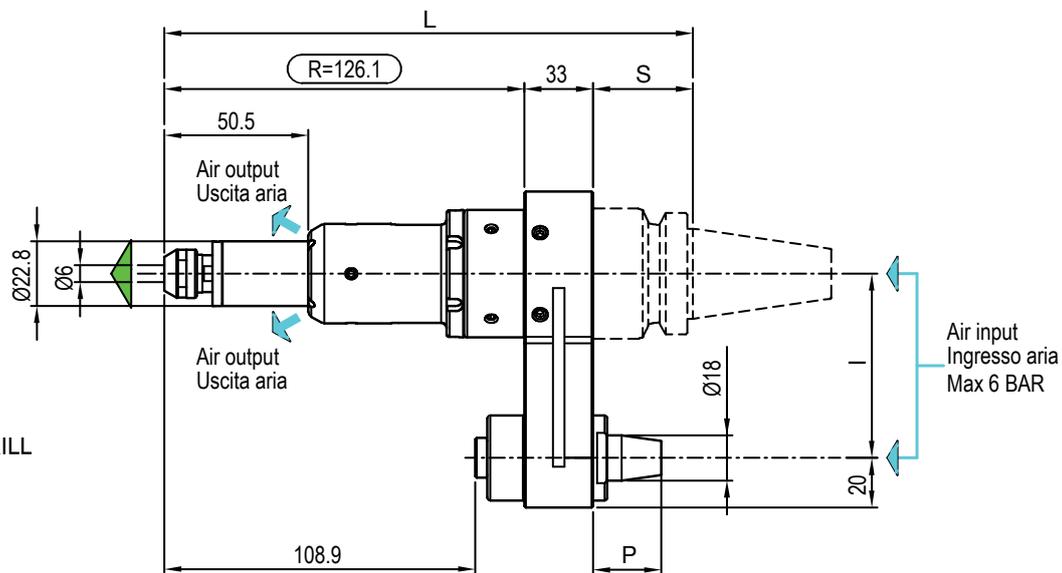


TURBODRILL NR-303.

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 / Manipolo 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 ⁻¹	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	l/min	226
Weight / Peso	Kg	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

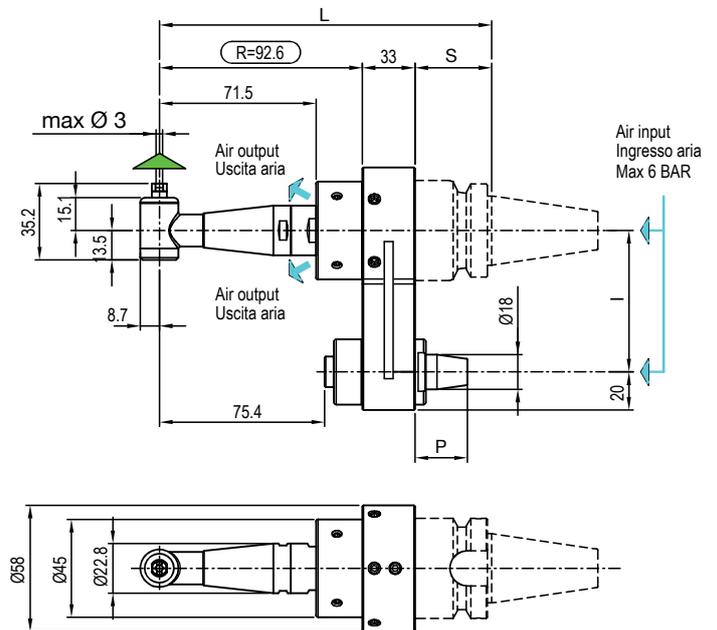
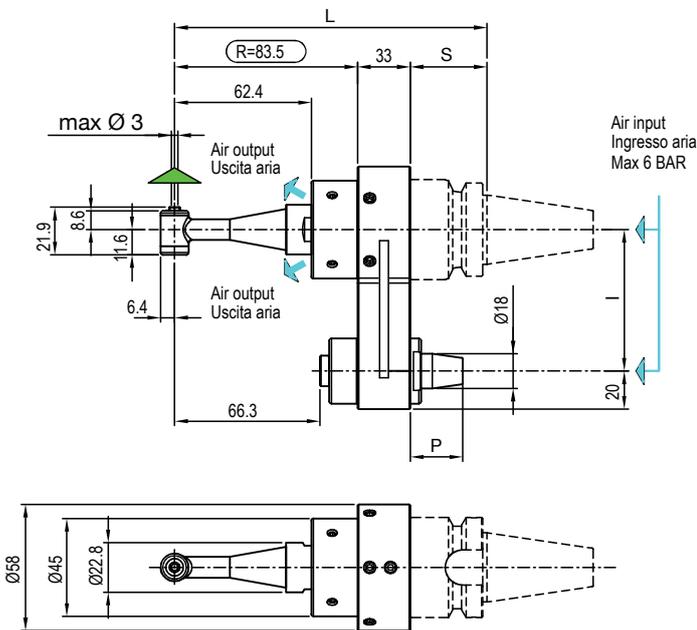
Azionamento con motore ad aria / Driven through air motor



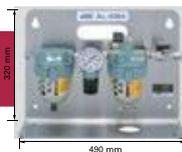
Il mandrino macchina non deve assolutamente girare
Machine spindle must not rotate

Turbodrill RADIALE IC 300 NEO

Turbodrill RADIALE RA 200 NEO



Air line kit / Filtro regolatore aria



STANDARD EQUIPMENT INCLUDES:

- Testa / Manipolo 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 ⁻¹	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	NI/min	226	226
Output RPM / N° Giri in uscita	min ⁻¹	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.

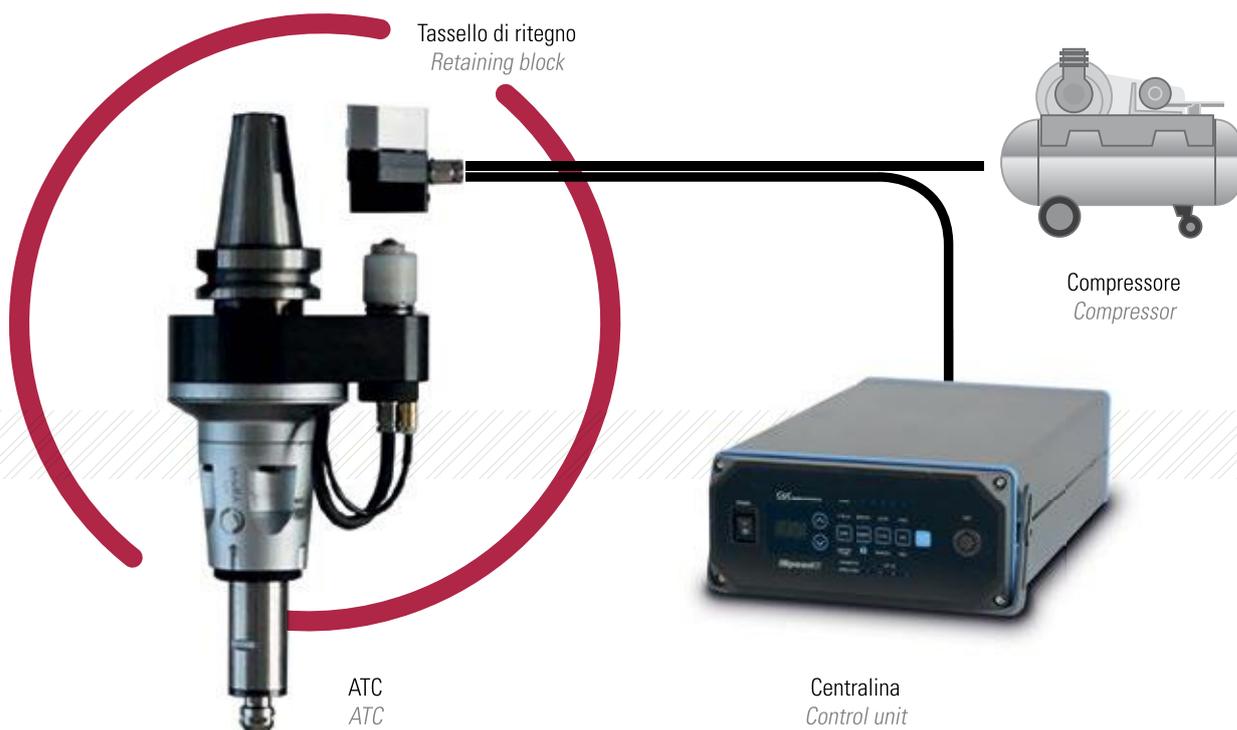
LINEA HIGH SPEED *LEONARDO SYSTEM*

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



Completamente 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



ELETTROMANDRINO LEONARDO SYSTEM ELECTROSPINDLE ATC 60

Technical data

Caratteristiche tecniche



Power
Potenza
350 Watt



RPM up to
Velocità fino a
60.000/80.000 min⁻¹



Weight
Peso
4.8 kg



Collet
Pinza
**6 mm CHK
ø 0,8 - ø 6 mm)**

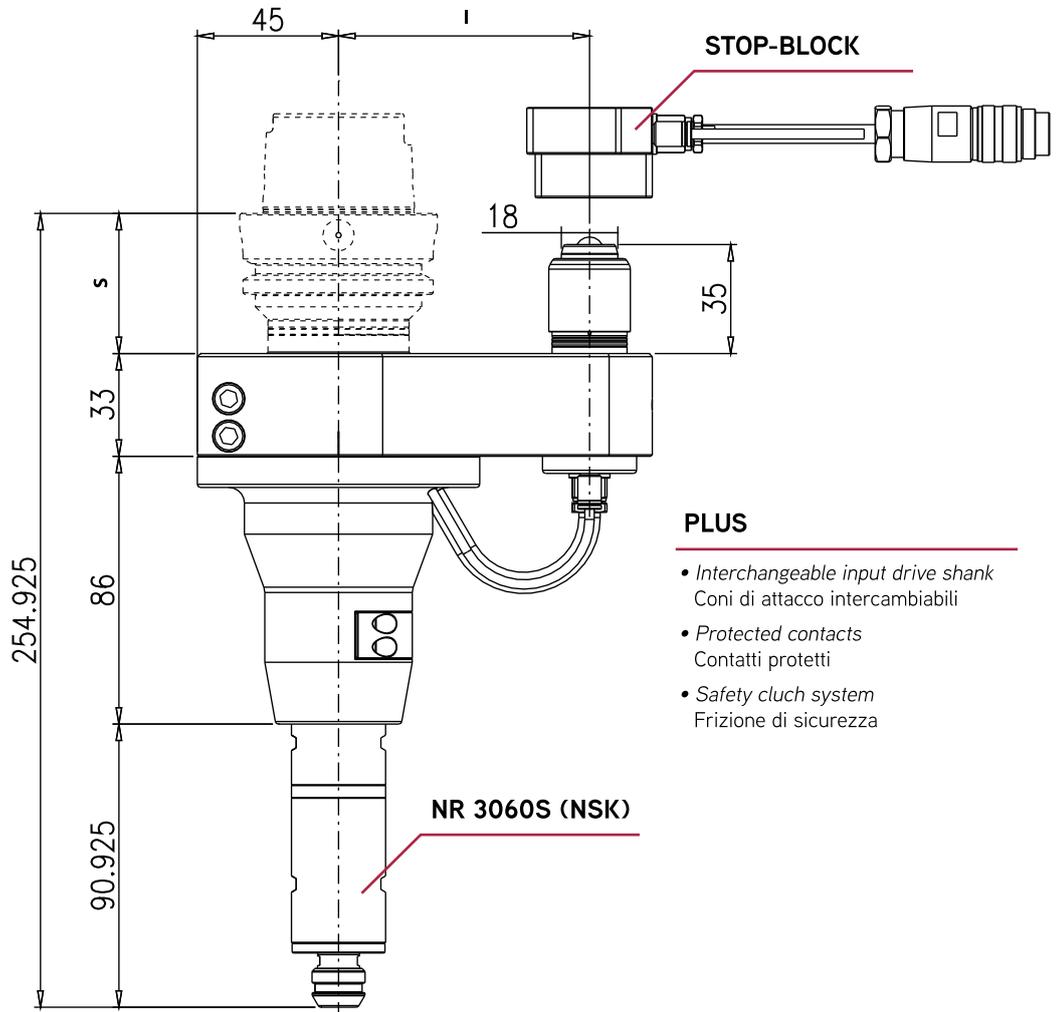


Spindle accuracy
Precisione
0,002 mm



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

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

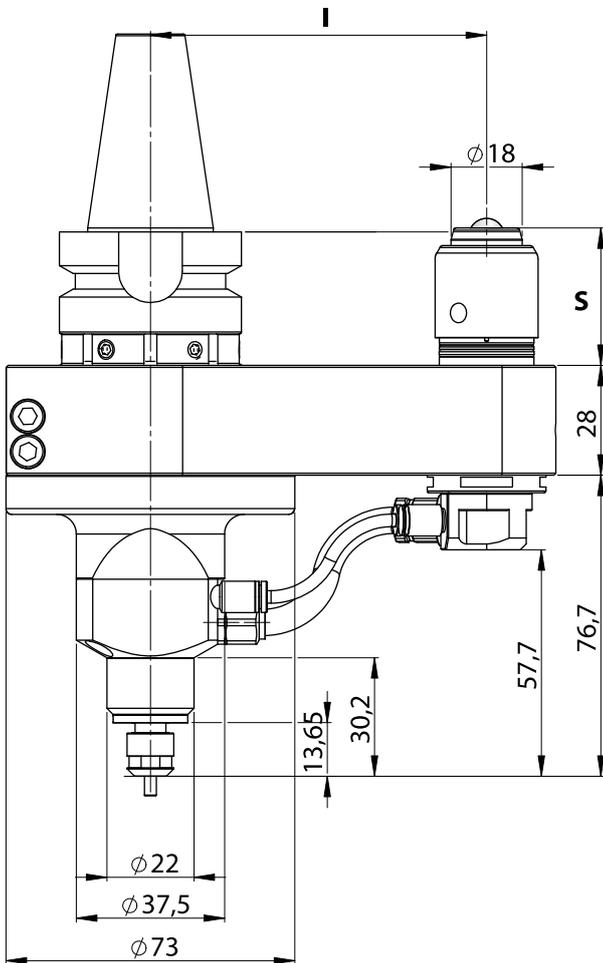
Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

ELETTROMANDRINO LEONARDO SYSTEM

ELECTROSPINDLE ATC 80



PLUS

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

Technical data

Caratteristiche tecniche



Power
Potenza
130 Watt



RPM up to
Velocità fino a
60.000/80.000 min⁻¹



Weight
Peso
3 kg



Collet
Pinza
**4 mm CHA
ø 0,8 - ø 4 mm)**



Spindle accuracy
Precisione
1 µ

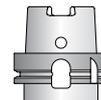


Controller unit
Centralina
ISPEED3

*** 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



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

Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

ACCESSORI.

Accessories



GHIERA
Clamping nut

PINZA
Collet

DISCHETTO DI TENUTA
Sealing disk

**CHIAVE PER
GHIERA**
Pin wrench

**CHIAVE DI
CONTRASTO**
Spanner

Ø Serraggio
min | max

Incremento
increase

Ø Serraggio
min | max

Incremento
increase

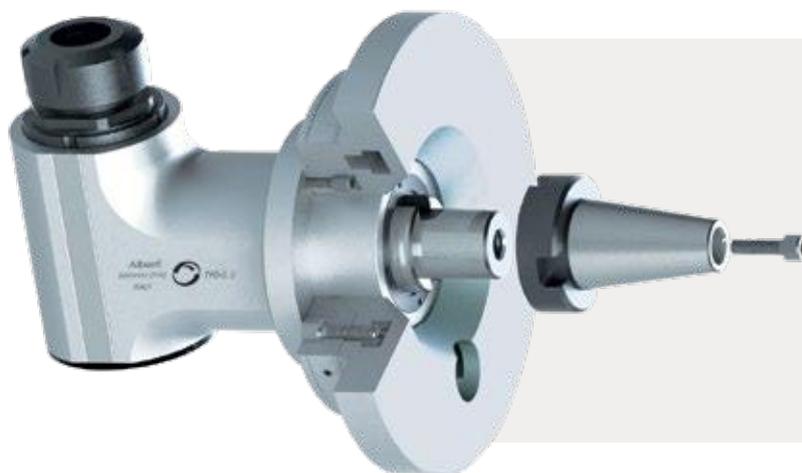
		PINZA		DISCHETTO DI TENUTA		CHIAVE PER GHIERA	CHIAVE DI CONTRASTO
		Ø Serraggio min max	Incremento increase	Ø Serraggio min max	Incremento increase		
ER-8 Serie 0.4	ER-8 M	0,5 - 5,0	0,5 mm			30930800	40941700
	33212080						
ER-11 Serie 0.5	UM/ER-11	0,5 - 7,0	0,5 mm			40941700	40927000
	33213110						
ER-16 Serie 1.5	ER-16A	0,5 - 10,0	0,5 mm	2,5 - 10,0	0,5 mm	40941700	40932000
	43211161						
ER-20 TCU-1.5	UM/ER 20	0,5 - 13,0	0,5 mm	2,5 - 13,0	0,5 mm	40930000	40932000
	33214200						
ER-25 Serie 2.5	UM/ER 25	0,5 - 17,0	0,5 mm			40932500	40939000
	33214250						
	IC/ER 25	0,5 - 17,0	0,5 mm	2,5 - 16,0	0,5 mm	40932500	40939000
	33215250						
ER-32 Serie 3.5	UM/ER 32	1,0 - 22,0	0,5 mm			40933200	40946000
	33214320						
	IC/ER 32	1,0 - 22,0	0,5 mm	2,5 - 20,0	0,5 mm	40933200	40946000
	33215320						
ER-40 Serie 4.5	UM/ER 40	2,0 - 30,0	0,5 mm			30934000	40959000
	33214400						
	IC/ER 40	2,0 - 30,0	0,5 mm	2,5 - 26,0	0,5 mm	30934000	40959000
	33215400						



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 interporre 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

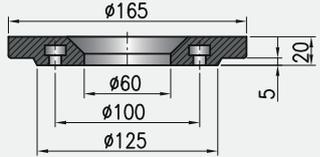
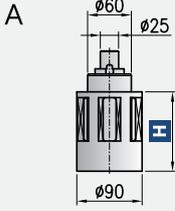
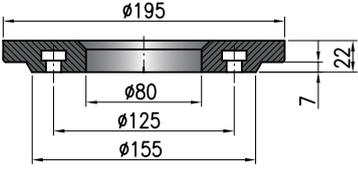
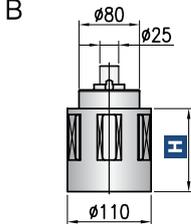
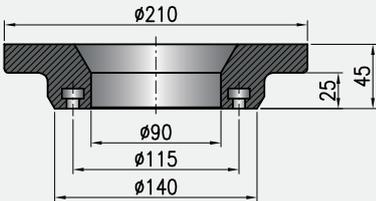
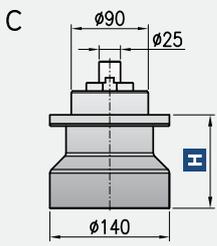
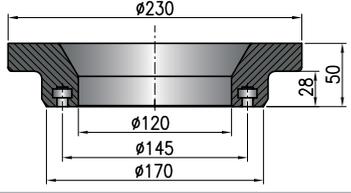
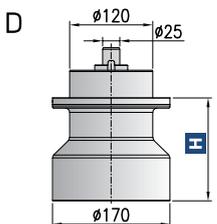
Example of mounting the head

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.

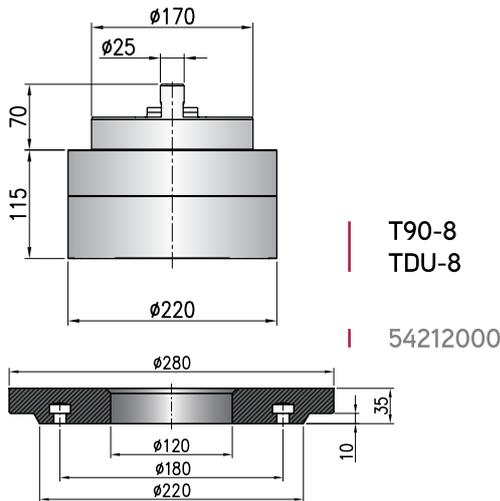
The modular system makes it possible to extend the length of the body by adding a spacer. The extension spacer, drive tapers and universal flange are modular and therefore interchangeable among all the heads of similar size.

	FLANGIA <i>Flange</i>	MODULI DI PROLUNGA <i>Extension Spacer</i>	H	CODICI <i>Part number</i>
T90-0,5 T90-1,5 T90-2,5 TCU-2,5 TCU-3,5	 <p>54206000</p>	A 	55 mm	90006010
			110 mm	90006A11
			150 mm	90006A15
			250 mm	90006A25
T90-3,5	 <p>54208000</p>	B 	55 mm	90008010
			110 mm	90008A11
			150 mm	90008A15
			250 mm	90008A25
			360 mm	90008A36
450 mm	90008A45			
T90-4,5	 <p>54209001</p>	C 	110 mm	90009000
			150 mm	90009050
T90-5	 <p>54212004</p>	D 	150 mm	90012005

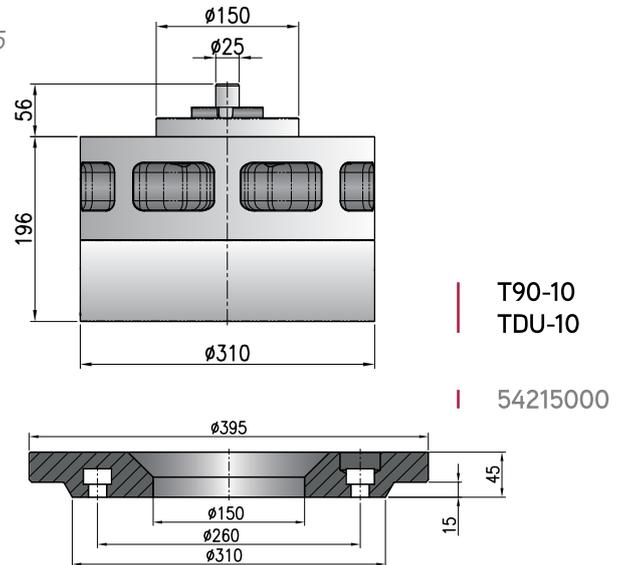
MODULI DI PROLUNGA per teste linea P moltiplicati.

Extension spacers for heads linea P with speed increase

R = 1:2,25

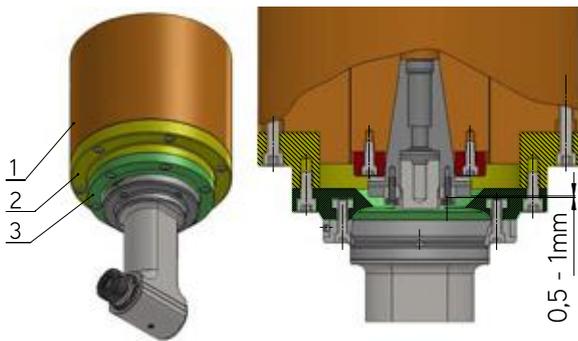


R = 1:2,25



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⁻¹



Max. axial load
Max. carico assiale
100 N



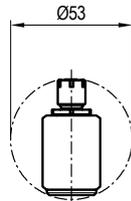
Torque
Momento torcente
4 Nm



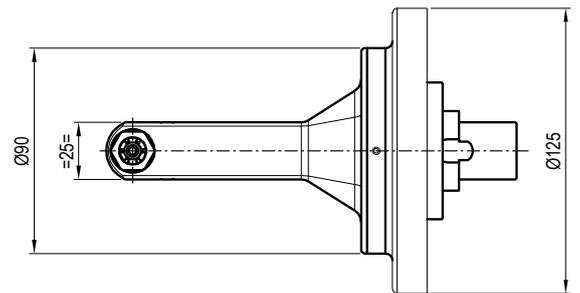
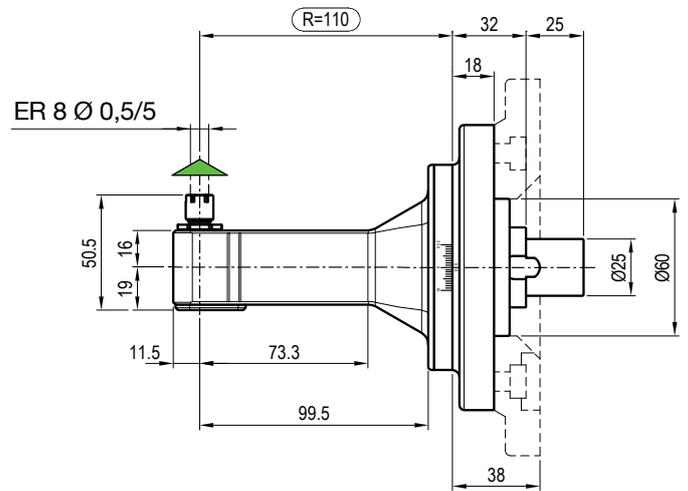
Weight
Peso
4 kg



Collet
Pinza
ER 8 (ø 0,5/5 mm)



Minimum diameter without tool
Diametro minimo senza utensile



*** STANDARD EQUIPMENT includes:**



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

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

Option / Opzione



bar max
12

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

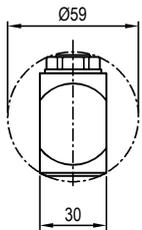


Ø mm max.
6

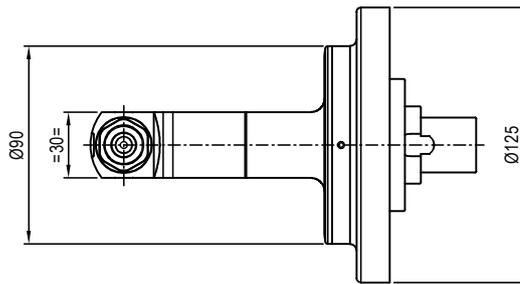
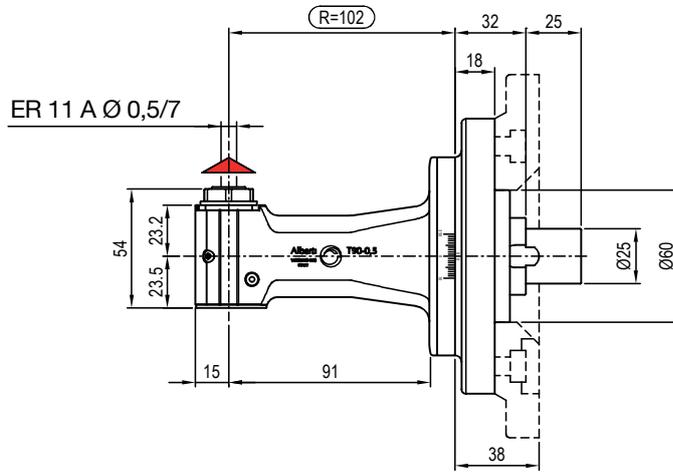
Weldon output
Weldon

T90-0.5C Neo

AMT9005C



Minimum diameter without tool
Diametro minimo senza utensile



Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
10.000 min⁻¹



Max. axial load
Max. carico assiale
150 N



Torque
Momento torcente
8 Nm



Weight
Peso
4 kg



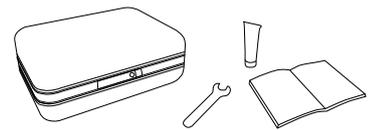
Tapping
Maschiatura
Max. M5



Collet
Pinza
ER 11 (Ø 0,5/7 mm)

*** STANDARD EQUIPMENT includes:**

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



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

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

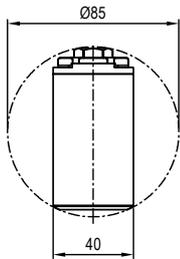


Ø mm max.
6

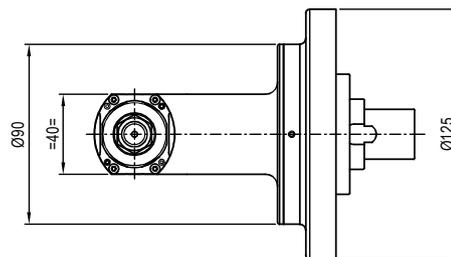
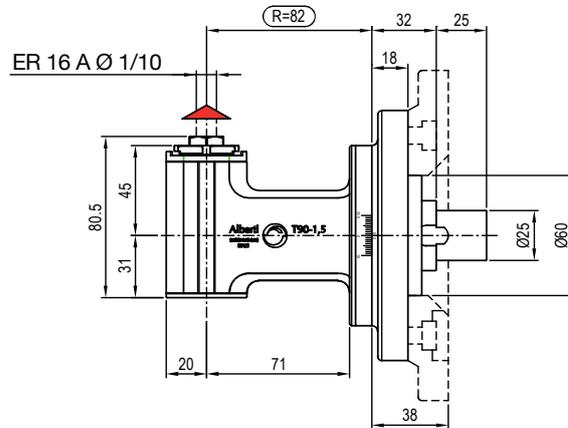
Weld on output
Weld on

T90-1.5C Neo

AMT9015C



Minimum diameter without tool
Diametro minimo senza utensile



Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
8.000 min⁻¹



Max. axial load
Max. carico assiale
250 N



Torque
Momento torcente
15 Nm



Weight
Peso
4.3 kg



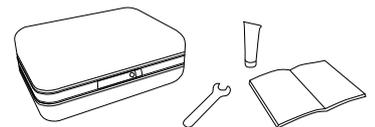
Tapping
Maschiatura
Max. M6



Collet
Pinza
ER 16 (ø 1/10 mm)

*** STANDARD EQUIPMENT includes:**

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



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

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



min⁻¹
10.000

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



Ø mm
13

Arbor output / Porta fresa



Ø mm max.
10

Weldon output / Weldon



ER 16/ER 11

Double output / Doppia uscita

T90-1.5L Neo

AMT9015L

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
8.000 min⁻¹



Max. axial load
Max. carico assiale
250 N



Torque
Momento torcente
15 Nm



Weight
Peso
5.2 kg

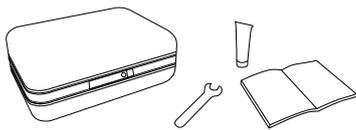


Tapping
Maschiatura
Max. M6

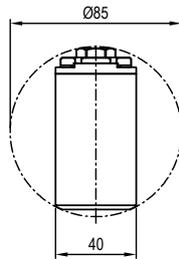


Collet
Pinza
ER 16 (ø 1/10 mm)

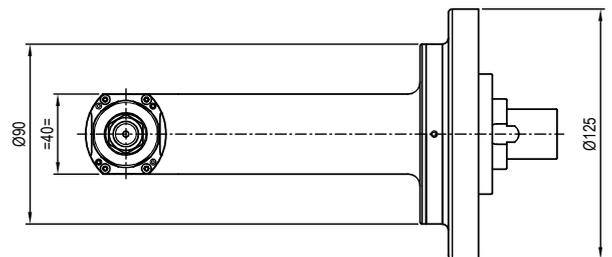
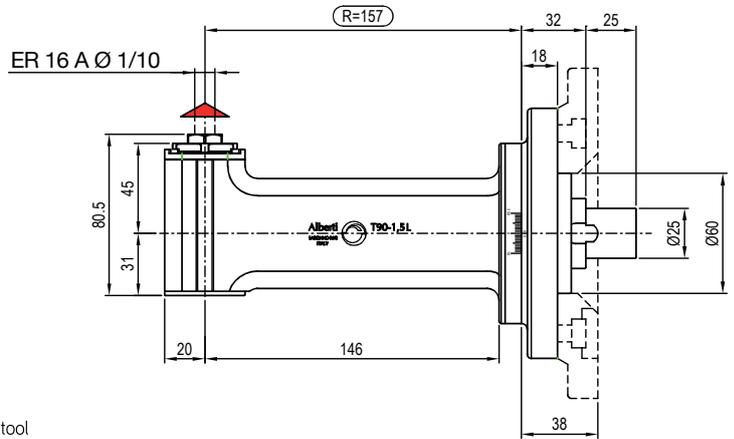
*** STANDARD EQUIPMENT includes:**



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



Minimum diameter without tool
Diametro minimo senza utensile



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

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



min⁻¹
10.000

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



Ø mm
13

Arbor output / Porta fresa



Ø mm max.
10

Weldon output / Weldon



ER 16/ER 11

Double output / Doppia uscita

T90-1.5 2U

AMT9015D

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
6.000 min⁻¹



Max. axial load
Max. carico assiale
510 N



Torque
Momento torcente
30 Nm

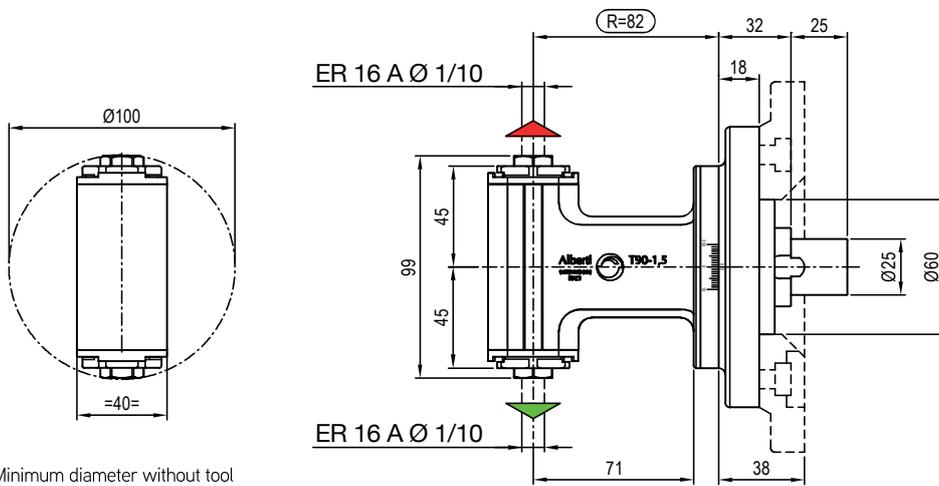
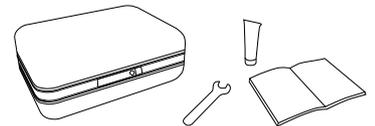


Weight
Peso
5.4 kg

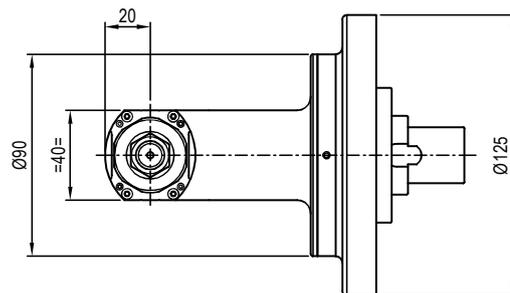


Collet
Pinza
ER 25 (ø 1/16 mm)

*** STANDARD EQUIPMENT includes:**



Minimum diameter without tool
Diametro minimo senza utensile



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

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

Option / Opzione



bar max
12

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



min⁻¹
8.000

High speed RPM max.
Alta velocità RPM max.



Ø mm
16

Arbor output
Porta fresa



Ø mm max.
16

Welding output
Welding



HSK-32

Quick Change
Attacco rapido

T90-2.5C Neo

AMT9025C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
6.000 min⁻¹



Max. axial load
Max. carico assiale
510 N



Torque
Momento torcente
50 Nm



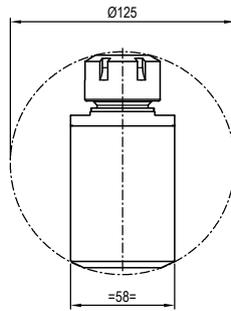
Weight
Peso
5.4 kg



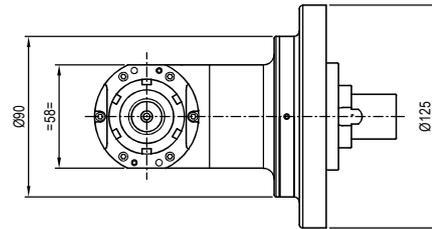
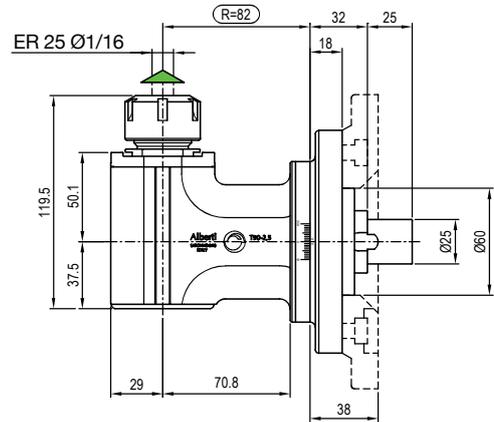
Tapping
Maschiatura
Max. M12



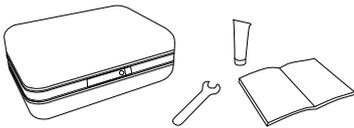
Collet
Pinza
ER 25 (Ø 1/16 mm)



Minimum diameter without tool
Diametro minimo senza utensile



*** 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	KM

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



min⁻¹
9.000

High speed RPM max. / Alta velocità RPM max.



Ø mm
16

Arbor output / Porta fresa



Ø mm max.
16

Welding output / Weldon



HSK-32

Quick Change / Attacco rapido



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⁻¹



Max. axial load
Max. carico assiale
510 N



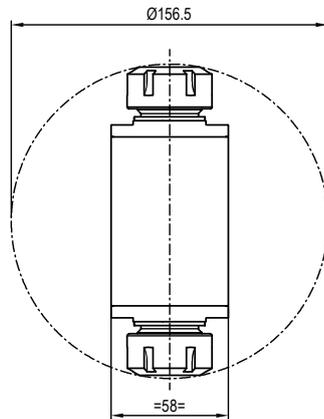
Torque
Momento torcente
30 Nm



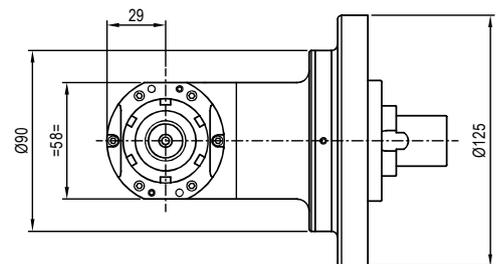
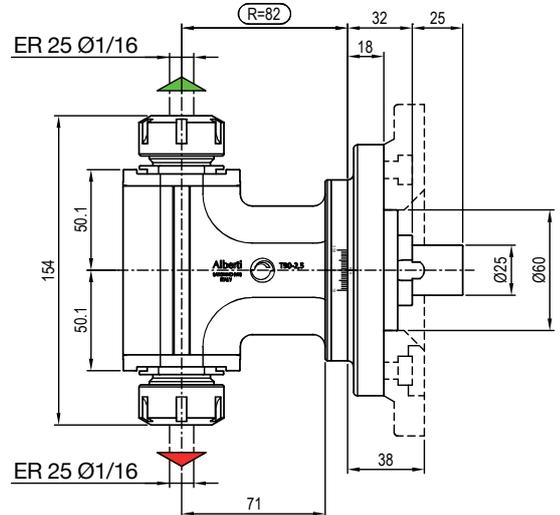
Weight
Peso
6.4 kg



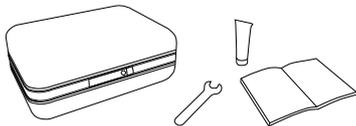
Collet
Pinza
ER 25 (Ø 1/16 mm)



Minimum diameter without tool
Diametro minimo senza utensile



* STANDARD EQUIPMENT includes:



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	KM

Option / Opzione



min⁻¹
8.000

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



Ø mm
16

Arbor output
Porta fresa

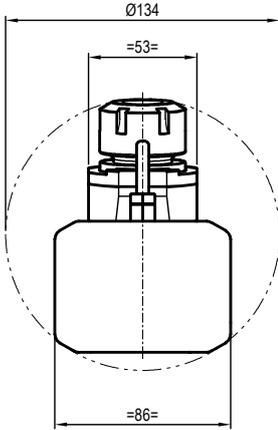


Ø mm max.
16

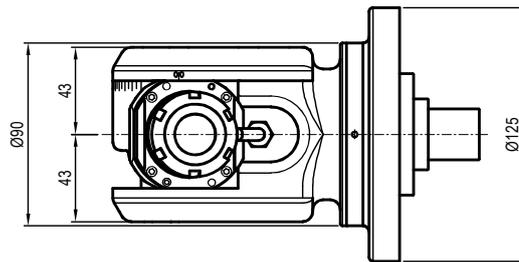
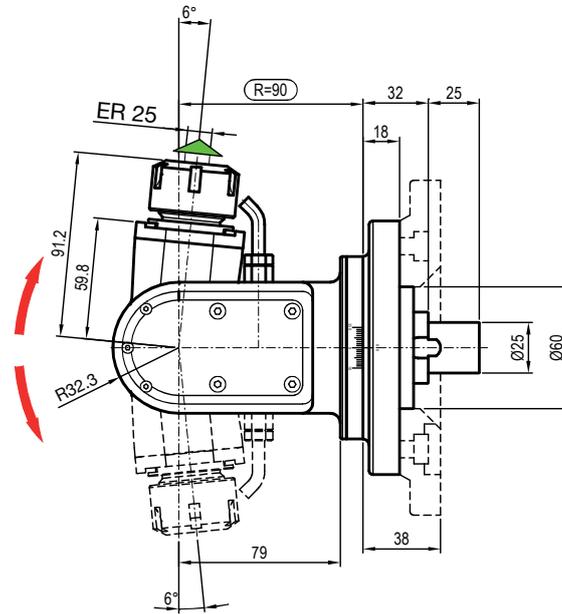
Weldon output
Weldon

TCU-2.5 Neo

AMTCU25C



Minimum diameter without tool
Diametro minimo senza utensile



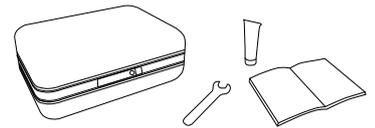
Direction of rotation same as machine spindle / *senso di rotazione uguale al mandrino*

Technical data

Caratteristiche tecniche

- Ratio
Rapporto
1:1
- RPM
Velocità
4.000 min⁻¹
- Max. axial load
Max. carico assiale
510 N
- Torque
Momento torcente
30 Nm
- Weight
Peso
7 kg
- Tapping
Maschiatura
Max. M12
- Collet
Pinza
ER 25 (ø 1/16 mm)

*** STANDARD EQUIPMENT includes:**



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

Option / Opzione

bar max 100	+/- 95°	every 5°	min ⁻¹ 6.000	Ø mm max. 16
Coolant through modular taper Adduzione refrigerante attraverso il cono	Angle Angolo	Fixed positioning Posizionamento fisso	High speed optional RPM max. Opzione alta velocità RPM max.	Welding output Welding

T90-3.5C Neo

AMT9035C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
5.000 min⁻¹



Max. axial load
Max. carico assiale
1.250 N



Torque
Momento torcente
70 Nm



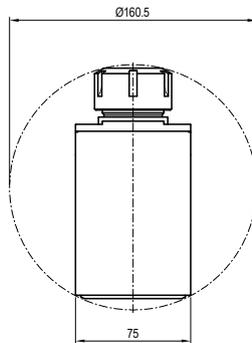
Weight
Peso
11 kg



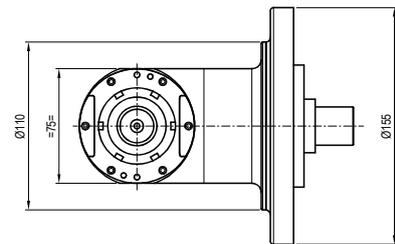
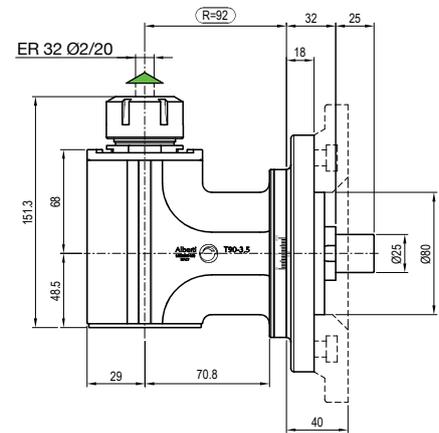
Tapping
Maschiatura
Max. M16



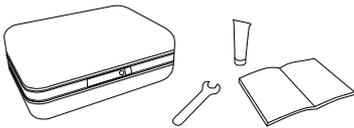
Collet
Pinza
ER 32 (Ø 2/20 mm)



Minimum diameter without tool
Diametro minimo senza utensile



*** 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	KM

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*



min⁻¹
8.000

High speed RPM max. / *Alta velocità RPM max.*



Ø mm
27

Arbor output / *Porta fresa*



Ø mm max.
20

Weldon output / *Weldon*



ISO-30 HSK-40

Quick Change / *Attacco rapido*

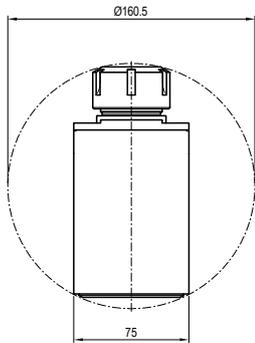


ER 32/ER 20

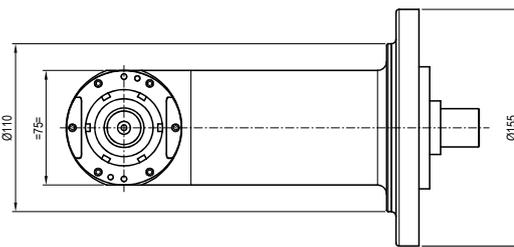
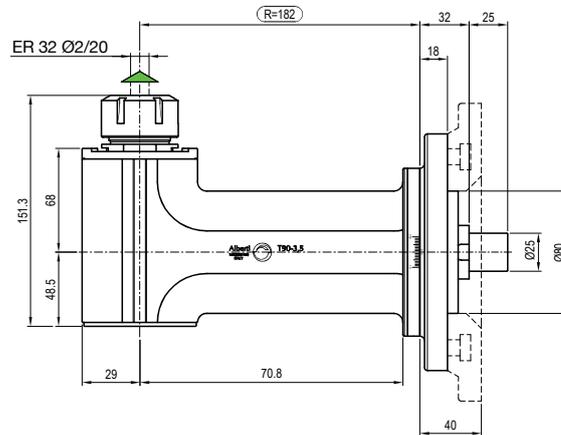
Double output / *Doppia uscita*

T90-3.5L Neo

AMT9035L



Minimum diameter without tool
Diametro minimo senza utensile



Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
5.000 min⁻¹



Max. axial load
Max. carico assiale
1.250 N



Torque
Momento torcente
70 Nm



Weight
Peso
13.2 kg



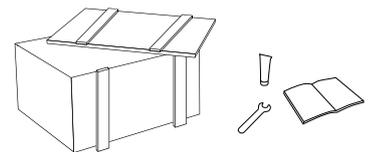
Tapping
Maschiatura
Max. M16



Collet
Pinza
ER 32 (ø 2/20 mm)

*** STANDARD EQUIPMENT includes:**

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



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

Option / Opzione

bar max 12	bar max 100	min ⁻¹ 8.000	Ø mm 27	Ø mm max. 20	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	High speed RPM max. / Alta velocità RPM max.	Arbor output / Porta fresa	Weldon output / Weldon	Quick Change / Attacco rapido	Double output / Doppia uscita

T90-3.5 2U

AMT9035D

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
4.000 min⁻¹



Max. axial load
Max. carico assiale
1.250 N



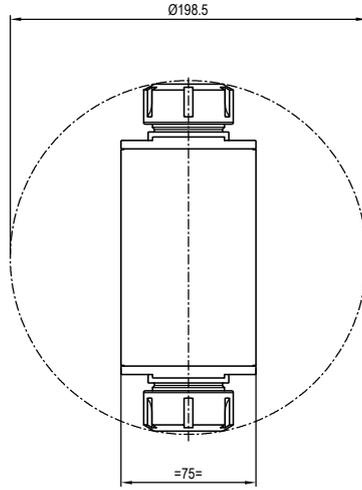
Torque
Momento torcente
50 Nm



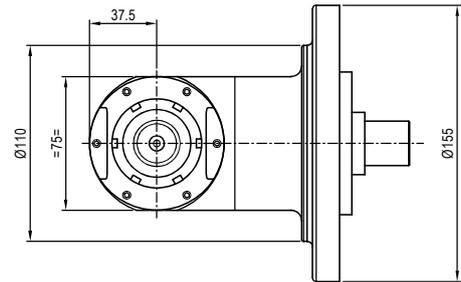
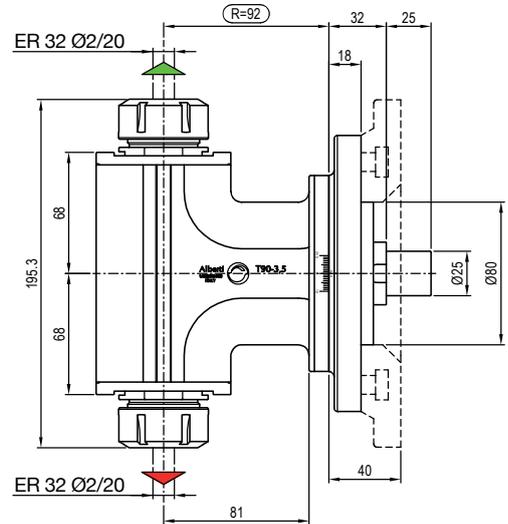
Weight
Peso
12 kg



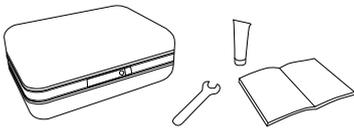
Collet
Pinza
ER 32 (Ø 2/20 mm)



Minimum diameter without tool
Diametro minimo senza utensile



*** STANDARD EQUIPMENT includes:**



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	KM

Option / Opzione



Ø mm
27

Arbor output
Porta fresa



Ø mm max.
20

Weldon output
Weldon

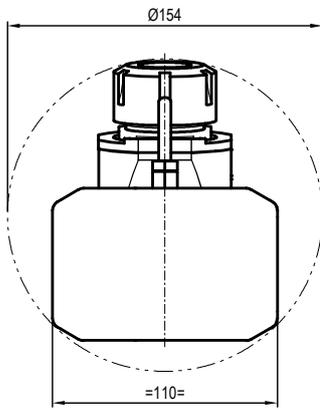


HSK-40

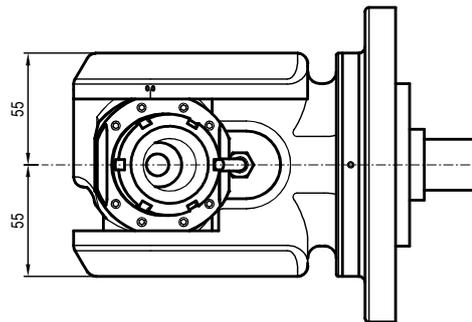
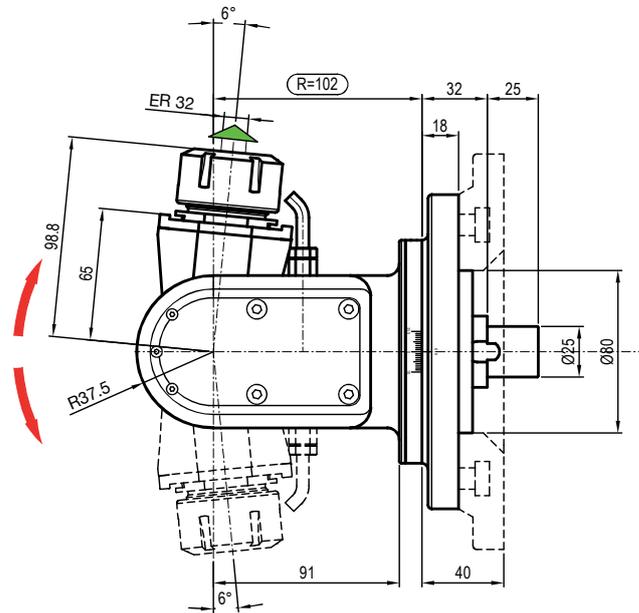
Quick Change
Attacco rapido

TCU-3.5 Neo

AMTCU35C



Minimum diameter without tool
Diametro minimo senza utensile



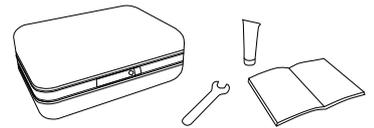
Direction of rotation same as machine spindle / *senso di rotazione uguale al mandrino*

Technical data

Caratteristiche tecniche

- Ratio**
Rapporto
1:1
- RPM**
Velocità
4.000 min⁻¹
- Max. axial load**
Max. carico assiale
715 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:**



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

Option / Opzione

bar max 100	+/- 95°	every 5°	min ⁻¹ 6.000	Ø mm max. 20
Coolant through modular taper Adduzione refrigerante attraverso il cono	Angle Angolo	Fixed positioning Posizionamento fisso	High speed optional RPM max. Opzione alta velocità RPM max.	Welding output Welding

T90-4.5C Neo

AMT9045C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
4.000 min⁻¹



Max. axial load
Max. carico assiale
1.750 N



Torque
Momento torcente
90 Nm



Weight
Peso
17 kg

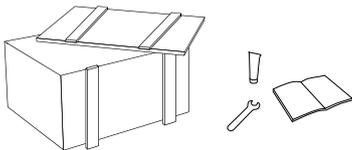


Tapping
Maschiatura

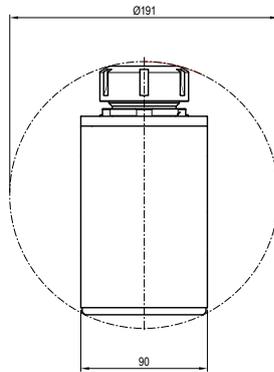


Collet
Pinza
ER 40 (ø 3/30 mm)

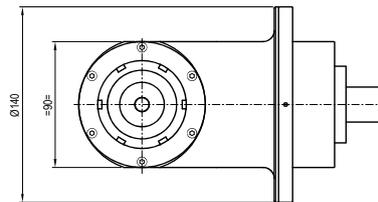
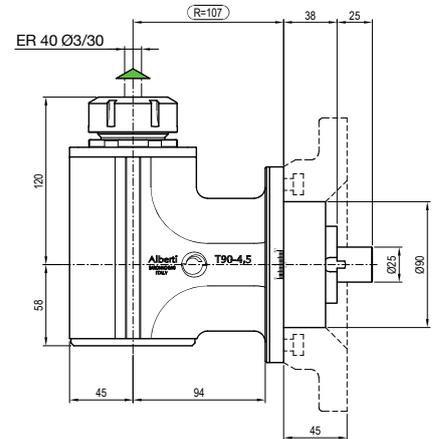
*** STANDARD EQUIPMENT includes:**



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



Minimum diameter without tool
Diametro minimo senza utensile



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

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



min⁻¹
6.000

RPM max.
RPM max.



Ø mm
27

Arbor output
Porta fresa



Ø mm max.
25

Weld on output
Weldon



ISO-30
HSK-40 CAPTO C4

Quick Change
Attacco rapido

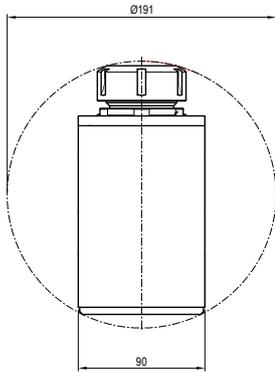


ER 40/ER 25

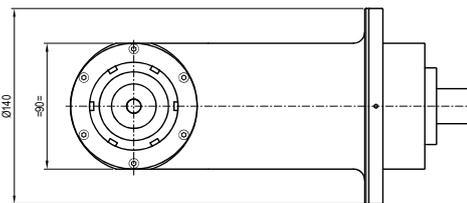
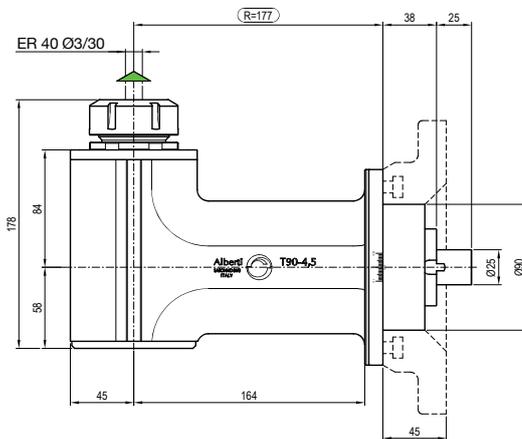
Double output
Doppia uscita

T90-4.5L Neo

AMT9045L



Minimum diameter without tool
Diametro minimo senza utensile



Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
4.000 min⁻¹



Max. axial load
Max. carico assiale
1.750 N



Torque
Momento torcente
90 Nm



Weight
Peso
20 kg



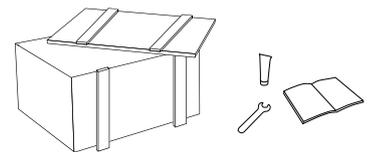
Tapping
Maschiatura



Collet
Pinza
ER 40 (ø 3/30 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	KM

Option / Opzione

bar max 12	bar max 100	min ⁻¹ 6.000	Ø mm 27	Ø mm max. 25	ISO-30 HSK-40 CAPTO C4	ER 40/ER 25
Coolant through flange and output spindle / Refrigerante attraverso la flangia e il mandrino di uscita	Coolant through modular taper / Adduzione refrigerante attraverso il cono	RPM max. RPM max.	Arbor output Porta fresa	Weldon output Weldon	Quick Change Attacco rapido	Double output Doppia uscita

T90-5C HP Neo

AMT9050C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
3.000 min⁻¹



Max. axial load
Max. carico assiale
1.800 N



Torque
Momento torcente
160 Nm



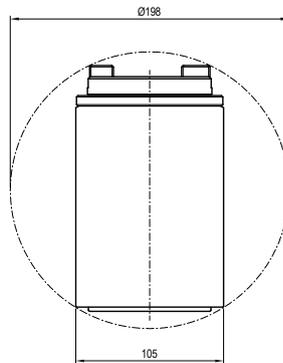
Weight
Peso
22 kg



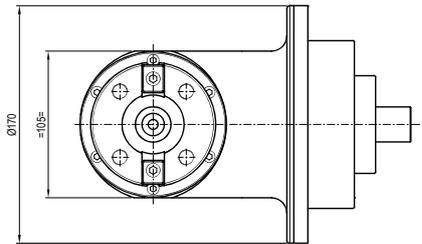
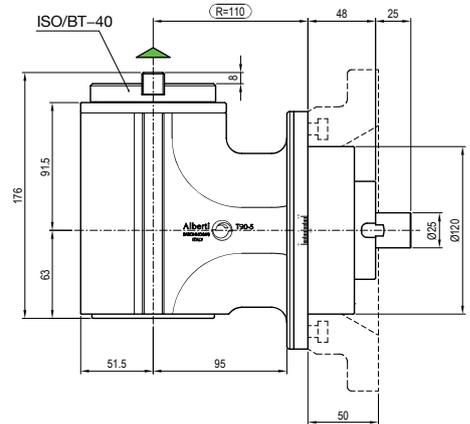
Tapping
Maschiatura



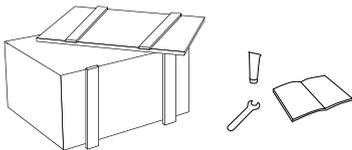
Collet
Pinza
ISO/BT 40



Minimum diameter without tool
Diametro minimo senza utensile



*** 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	KM

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



min⁻¹
6.000

RPM max.
RPM max.



HSK 63 CAPTO C4 C5

Quick Change
Attacco rapido



AIR/OIL

Air / Oil lubrication
Lubrificazione aria / olio

T90-5L HP Neo

AMT9050HP

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
3.000 min⁻¹



Max. axial load
Max. carico assiale
1.800 N



Torque
Momento torcente
160 Nm



Weight
Peso
22 kg

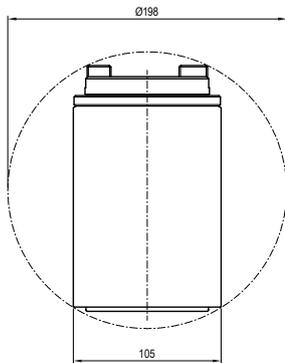
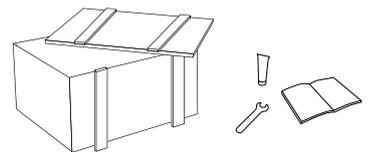


Tapping
Maschiatura

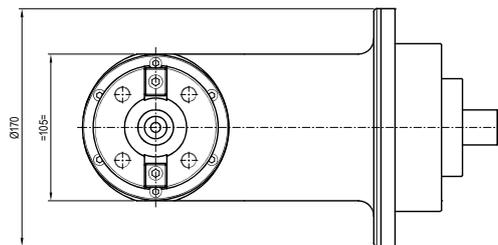
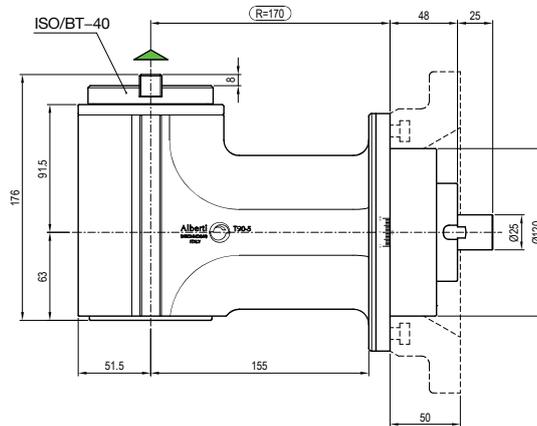


Collet
Pinza
ISO/BT 40

*** STANDARD EQUIPMENT includes:**



Minimum diameter without tool
Diametro minimo senza utensile



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

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

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 Neo

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
3.000 min⁻¹



Max. axial load
Max. carico assiale
2.400 N



Torque
Momento torcente
200 Nm



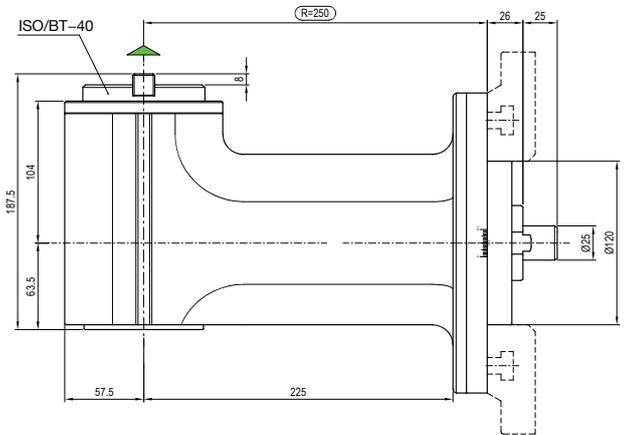
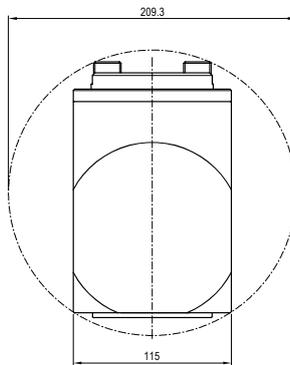
Weight
Peso
33 kg



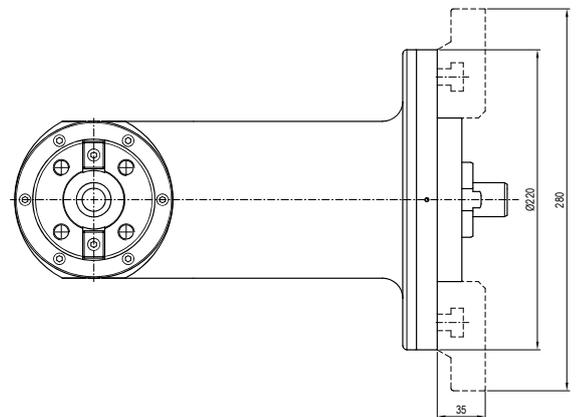
Tapping
Maschiatura
Max. M27



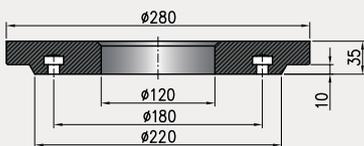
Collet
Pinza
ISO/BT 40



Minimum diameter without tool
Diametro minimo senza utensile



FLANGIA T90-8



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

Spindle / Cono						
	DIN-69871	CAT	MAS-BT	HSK	CAPTO	KM

Option / Opzione



bar max
100

Coolant through spindle
Refrigerante attraverso il cono



min⁻¹
4.000

RPM max.
RPM max.

T90-8XL Neo

R = 450 / 650 / 850

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
3.000 min⁻¹



Max. axial load
Max. carico assiale
2.400 N

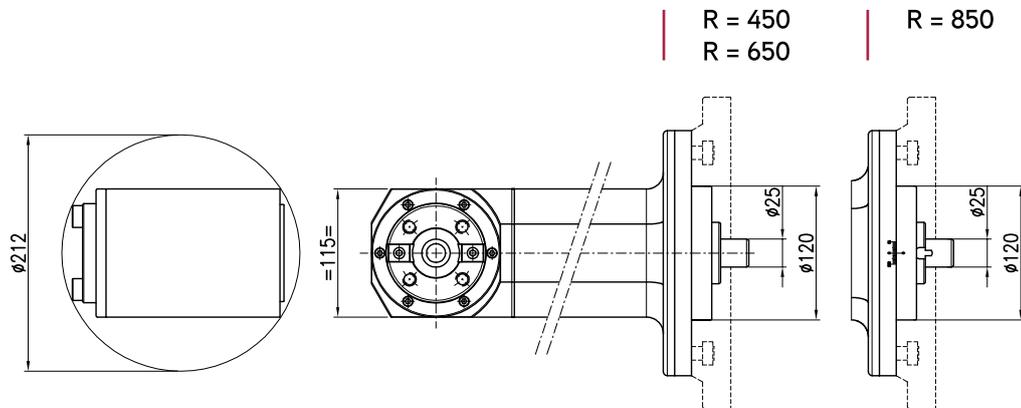
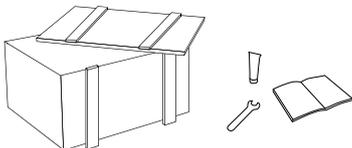


Torque
Momento torcente
100 Nm

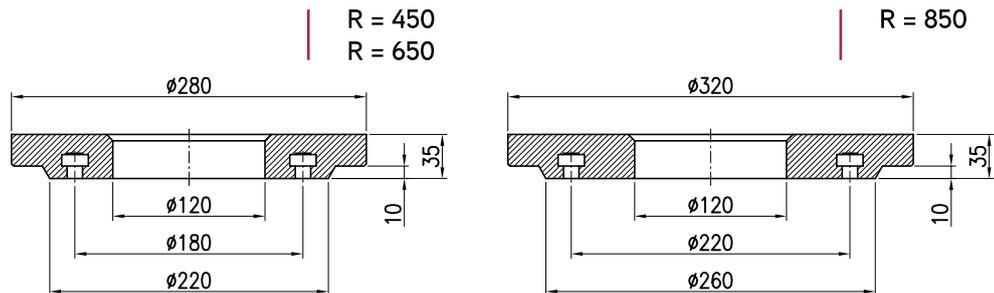


Collet
Pinza
ISO/BT 40

*** STANDARD EQUIPMENT includes:**



Minimum diameter without tool
Diametro minimo senza utensile



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

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

Option / Opzione



bar max
12

Coolant through spindle
Adduzione refrigerante interna



HSK 63A / CAPTO C4 C5

Quick Change
Attacco rapido

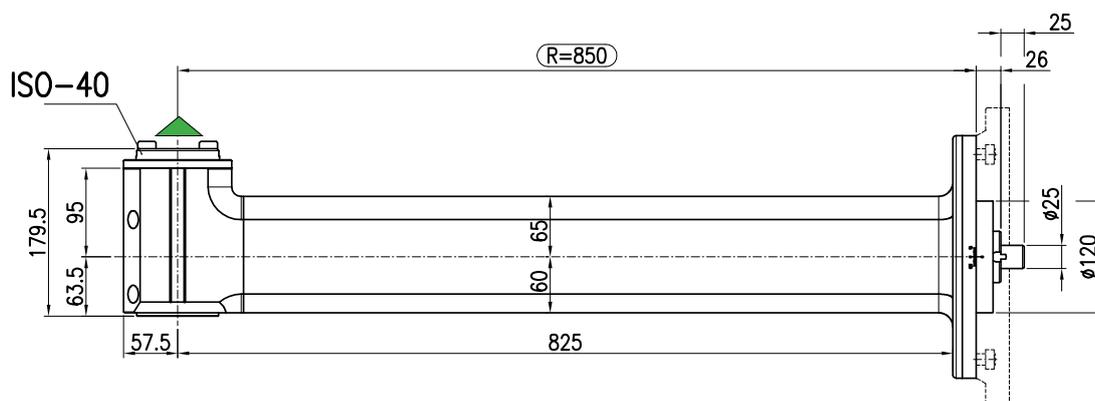


AIR/OIL

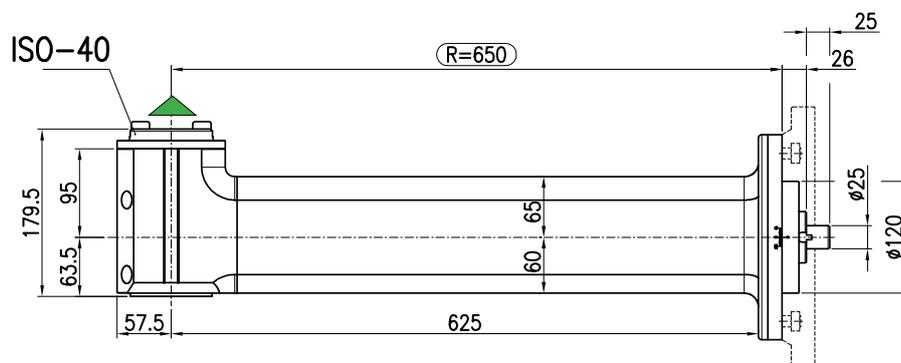
Air / Oil lubrication
Lubrificazione aria / olio

APT9080P.450 / APT9080S.650 / APT9080S.850

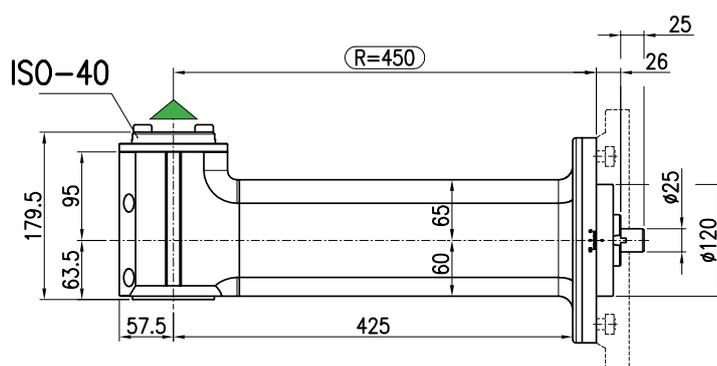
 Weight
Peso
105 kg



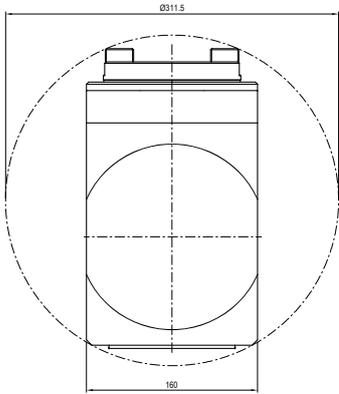
 Weight
Peso
75 kg



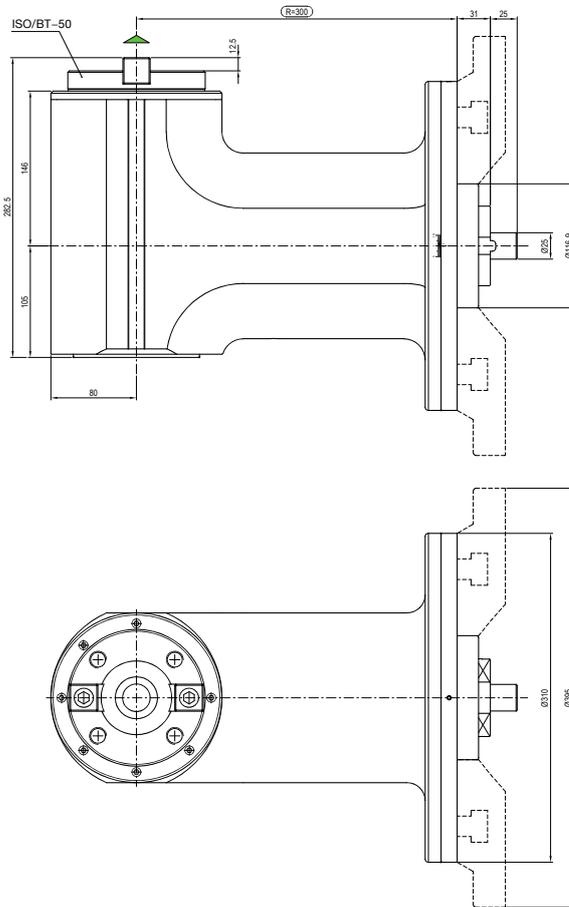
 Weight
Peso
62 kg



T90-10 Neo IC



Minimum diameter without tool
Diametro minimo senza utensile



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

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
3.000 min⁻¹



Max. axial load
Max. carico assiale
3.300 N



Torque
Momento torcente
250 Nm



Weight
Peso
77 kg

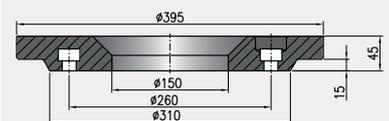


Tapping
Maschiatura
Max. M30



Collet
Pinza
ISO/BT 50

FLANGIA T90-10



Spindle / Cono	DIN-69871	CAT	MAS-BT	HSK	CAPTO	KM

Option / Opzione



bar max
100

Coolant through spindle
Refrigerante interno



min⁻¹
4.000

RPM max.
RPM max.

TDU-10

APTDU10C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:1



RPM
Velocità
3.000 min⁻¹



Max. axial load
Max. carico assiale
3.300 N



Torque
Momento torcente
250 Nm

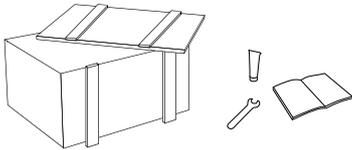


Weight
Peso
121 kg

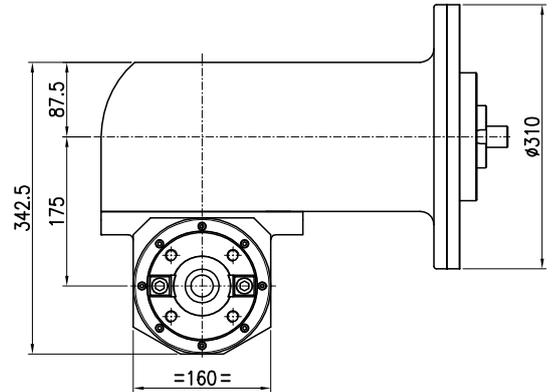
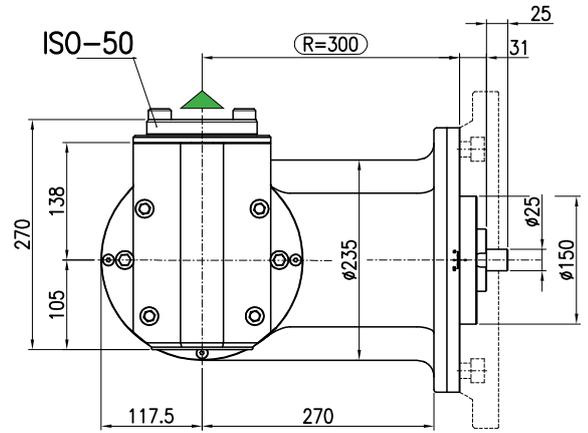
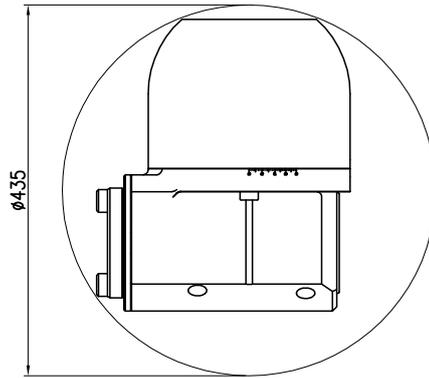


Collet
Pinza
ISO/BT 50

*** STANDARD EQUIPMENT includes:**



Minimum diameter without tool
Diametro minimo senza utensile



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

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

Option / Opzione



bar max
12

Coolant through spindle
Adduzione refrigerante interna



HSK 100

Quick Change
Attacco rapido



AIR/OIL

Air / Oil lubrication
Lubrificazione aria / olio

TR90-15

APTTR9015C

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1.875:1



RPM
Velocità
2.500 min⁻¹



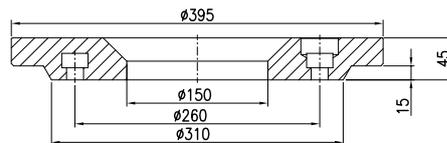
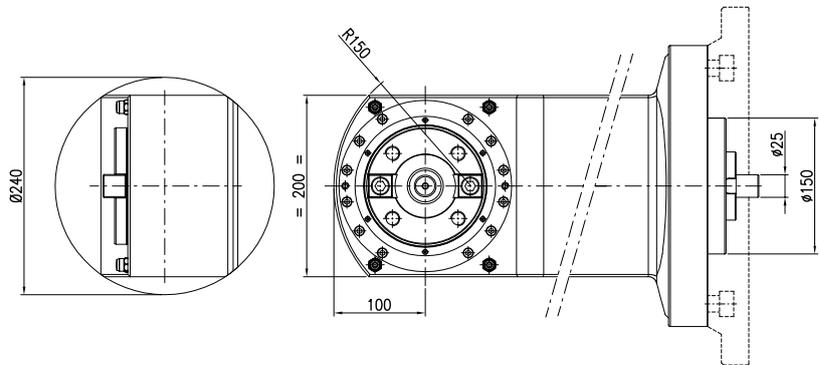
Max. axial load
Max. carico assiale
3.900 N



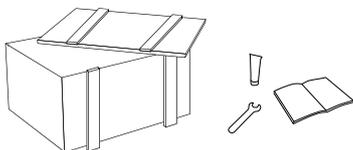
Torque
Momento torcente
600 Nm



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	KM

Option / Opzione



bar max
12

Coolant through spindle
Adduzione refrigerante interna



HSK 63

Quick Change
Attacco rapido

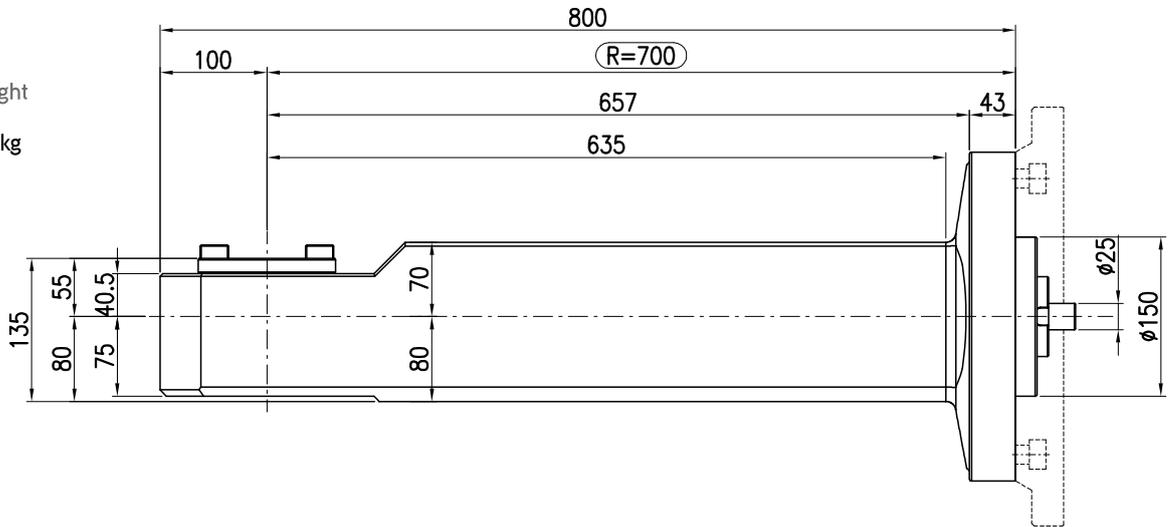


AIR/OIL

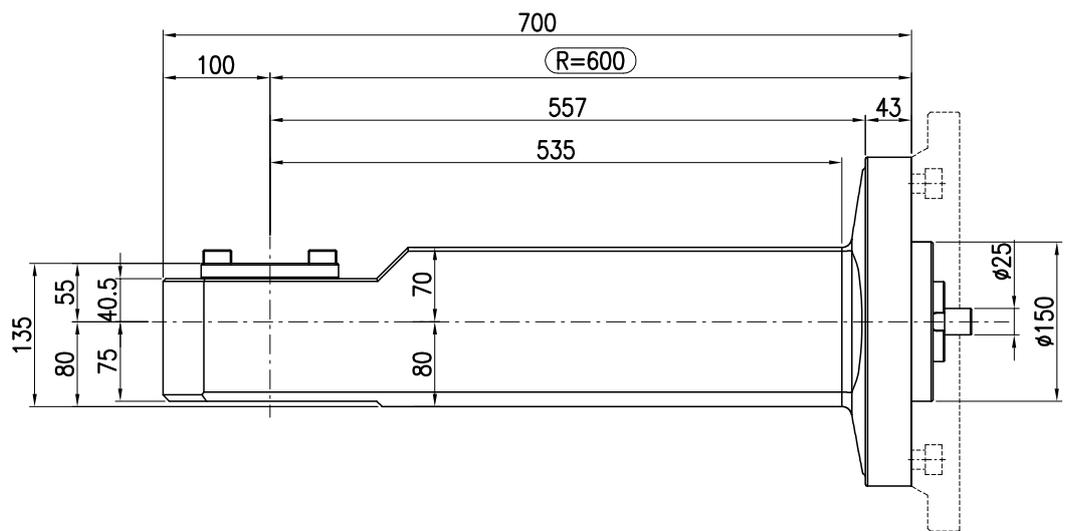
Air / Oil lubrication
Lubrificazione aria / olio



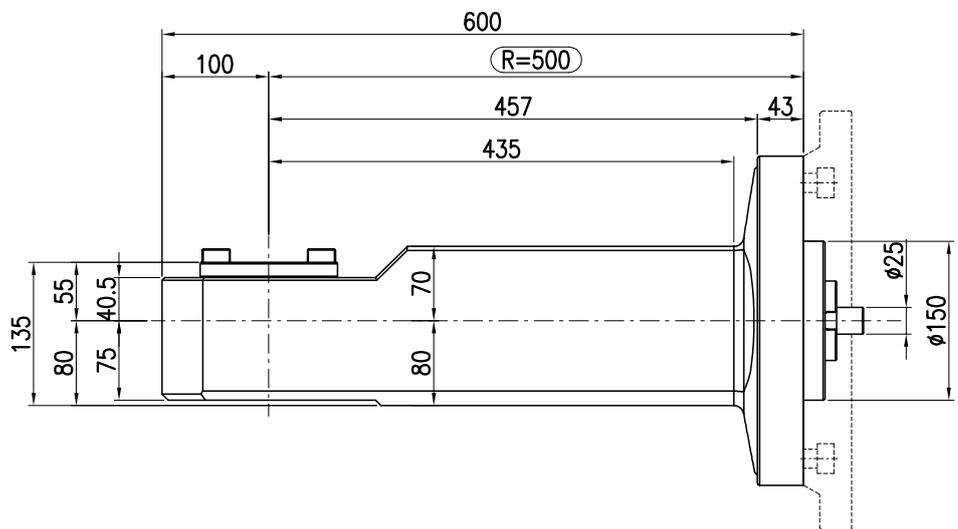
Weight
Peso
180 kg



Weight
Peso
140 kg



Weight
Peso
110 kg





RA 100

0H502761

MAX 20.000 mm



1/1
8

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
Technology heads for future

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