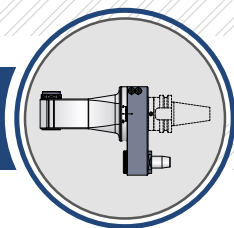


Linea Aluminum

Light heads series - Linea di teste leggere

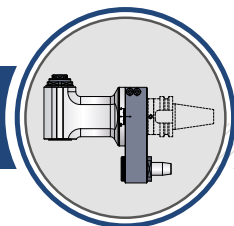


ISO30 DIN-69871 / BT-30



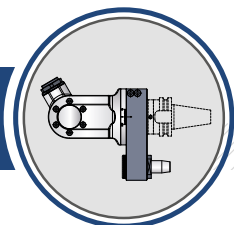
T90cn-0,5M

pag.3



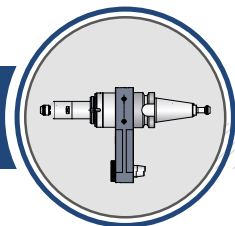
T90cn-1,5M

pag.4



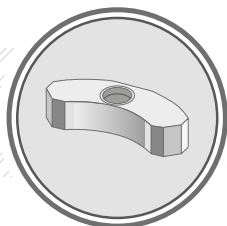
TCUcn-0,5M

pag.5



TURBODRILL

pag.6

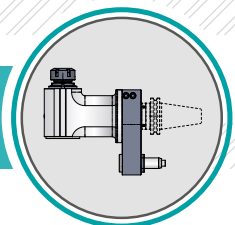


STOPBLOCK

pag.7

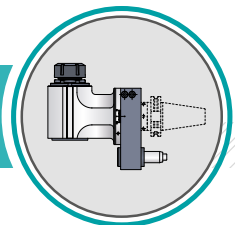


ISO40 DIN-69871 / BT-40



T90cn-2,5M

pag.8



T90cn-3,5M

pag.9



The heads of the series Aluminum 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 (i.e. Fanuc Robodrill, Brother, Haas...). For the BT 30 heads, Alberti can also offer an air driven unit, Turbodrill, capable of 60.000RPM, while on 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 for mechanical heads and up to 60.000RPM for air driven units
- Customized stop block for different machine type for an easy installation



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 (es Fanuc Robodrill, Brother, Haas...). Per la serie BT 30 si aggiunge anche la possibilità di avere un moltiplicatore di giri ad aria, Turbodrill, con velocità fino a 60.000RPM mentre 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 per teste meccaniche e 60.000RPM per teste ad aria
- Stop block personalizzato a seconda della macchina per una facile installazione

Winkelköpfe von der Linie Aluminum sind aus leichter Materialien und mit beschränkten Ausmaßen gebildet um das niedrigste Gewicht mit den selben Qualität und Zuverlässigkeit aller Alberti Produkten einzuhalten. Solchen Köpfen der Linie Aluminum sind für leichte bzw. kleine Maschinen mit ISO BT 30 oder 40 besonders geeignet, wo das Gewicht auf dem Werkzeugwechsler sehr wichtig und begrenzt ist. (z.B. Fanuc Robodrill, Brother, Haas...) Für die Serie mit BT 30 hat Alberti einen Kopf mit innenliegende Luftmotor – Turbodrill –, der bis auf 60.000RPM laufen kann, während für die Linie mit BT 40, ist unser neue Schnellwechselsystem SMART CHANGE vorgesehen.

- Gehäuse aus Aluminium um das Gewicht einzuschränken
- Kleinste Ausmaßen um auf kleiner Maschinen einzupasse
- Innerkühlmittelzufuhr möglich
- Hochgeschwindigkeit bis auf 10.000RPM für standard Köpfe und bis auf 60.000RPM für Luftköpfe
- Stop Block nach Maschinentyp für eine einfachste Installation



T90cn-0,5M



Ratio
Rapporto / Verhältnis
1:1



RPM
Velocità / Drehzahl max.
10.000 min⁻¹



Max. axial load
Max. carico assiale / Max. Axialbelastung
120 N



Torque
Momento torcente / Drehmoment
8 Nm



Weight
Peso / Gewicht
2,7 kg



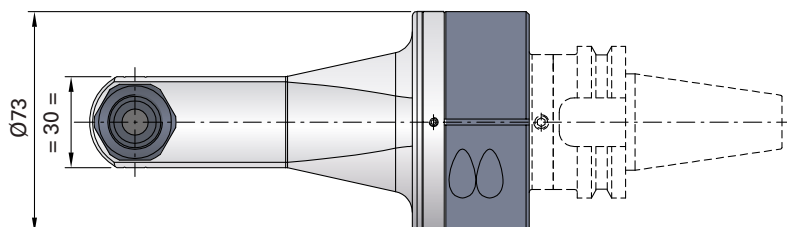
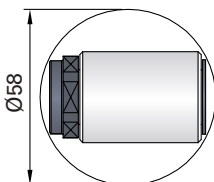
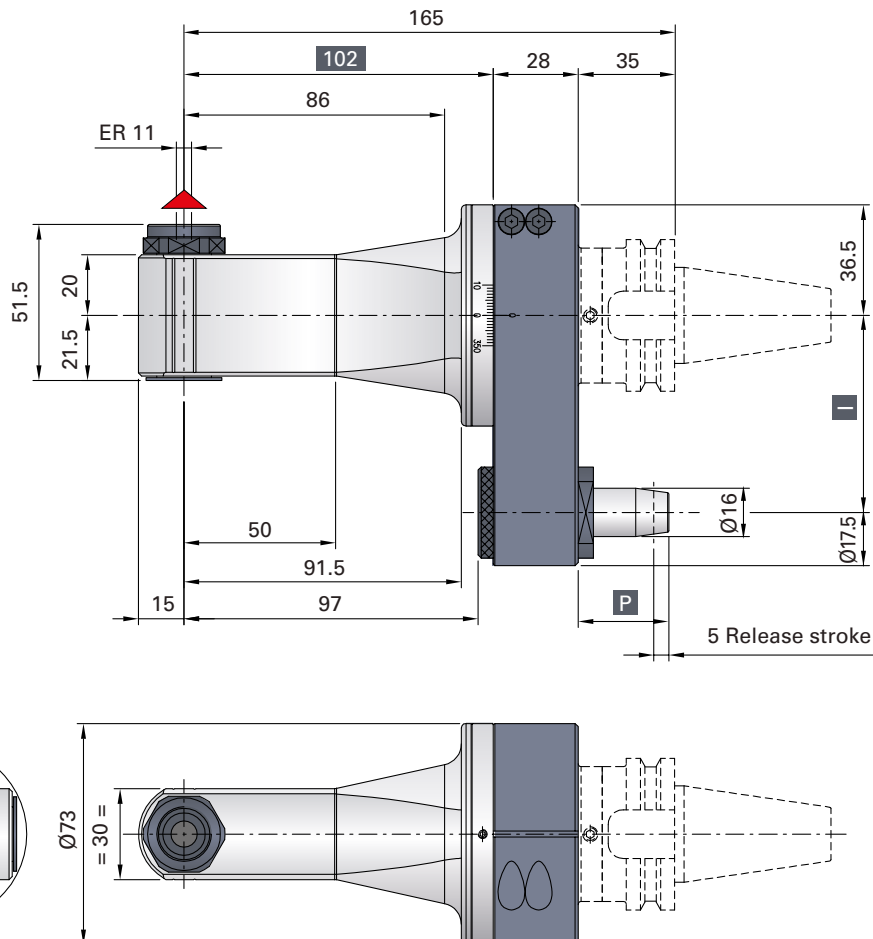
Collet
Pinza / Spannzange
ERAX-11 (0,5-7 mm)



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

*** STANDARD EQUIPMENT INCLUDES:**

- Instruction book / wrenches / special bag
- Libro istruzioni / chiavi di servizio / bauletto
- Bedienungsanleitung / Schraubenschlüssel / koffer



For the application on the machine please refer to page 7 / Per applicazione in macchina vedere pag 7 / Für die Anwendung auf der Maschine sehen Sie auf Seite 7

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

Option / **Opzione** / Option



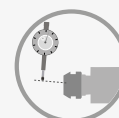
AIR/OIL

Oil lubrication
Lubrificazione
Ölschmierung



bar max
12

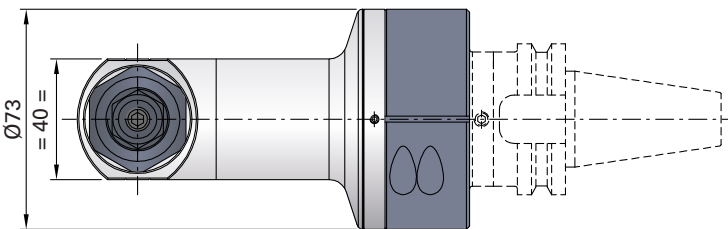
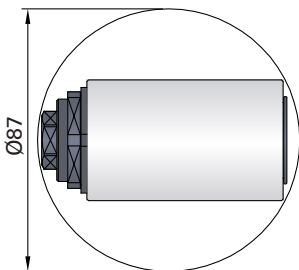
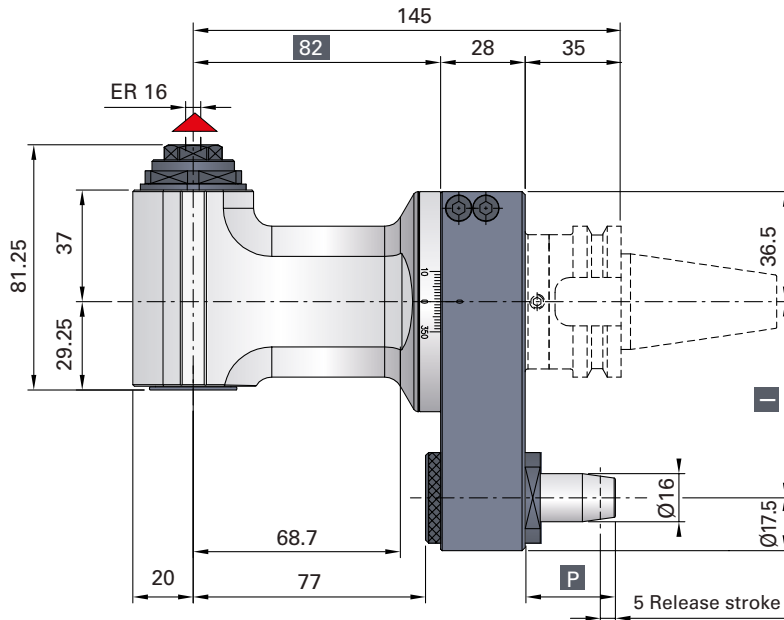
Coolant through pin
Refrigerante attraverso il perno
Kühlmittelzufuhr durch Bolzen



Spindle precision
Precisione del mandrino
Spindelpräzision

0,002 mm / 0,00008 inch.

T90cn-1,5M



- Ratio**
Rapporto / Verhältnis
1:1
- RPM**
Velocità / Drehzahl max.
8.000 min⁻¹
- Max. axial load**
Max. carico assiale / Max. Axialbelastung
250 N
- Torque**
Momento torcente / Drehmoment
15 Nm
- Weight**
Peso / Gewicht
2,9 kg
- Collet**
Pinza / Spannzange
ER 16 (1-10 mm)
- Shank**
Cono / Aufnahme
ISO 30DIN-69871/BT-30

*** STANDARD EQUIPMENT INCLUDES:**

- Instruction book / wrenches / special bag
- Libro istruzioni / chiavi di servizio / bauletto
- Bedienungsanleitung / Schraubenschlüssel / koffer

For the application on the machine please refer to page 7 / Per applicazione in macchina vedere pag 7 / Für die Anwendung auf der Maschine sehen Sie auf Seite 7

Direction of rotation opposite to machine spindle / *senso di rotazione contrario al mandrino* / Drehrichtung entgegen Antriebsspindel

Option / *Opzione* / Option



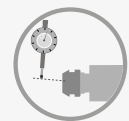
AIR/OIL

Oil lubrication
Lubrificazione
Ölschmierung



bar max
40

Coolant through spindle
Refrigerante attraverso il cono
Kühlmittelzufuhr durch Spindel



Spindle precision
Precisione del mandrino
Spindelpräzision

0,002 mm / 0,00008 inch.

TCUcn-0,5M



Ratio
Rapporto / Verhältnis
1.5:1 (speeder)



RPM
Velocità / Drehzahl max.
6.000 min⁻¹



Max. axial load
Max. carico assiale / Max. Axialbelastung
215 N



Torque
Momento torcente / Drehmoment
8 Nm



Weight
Peso / Gewicht
2,8 kg



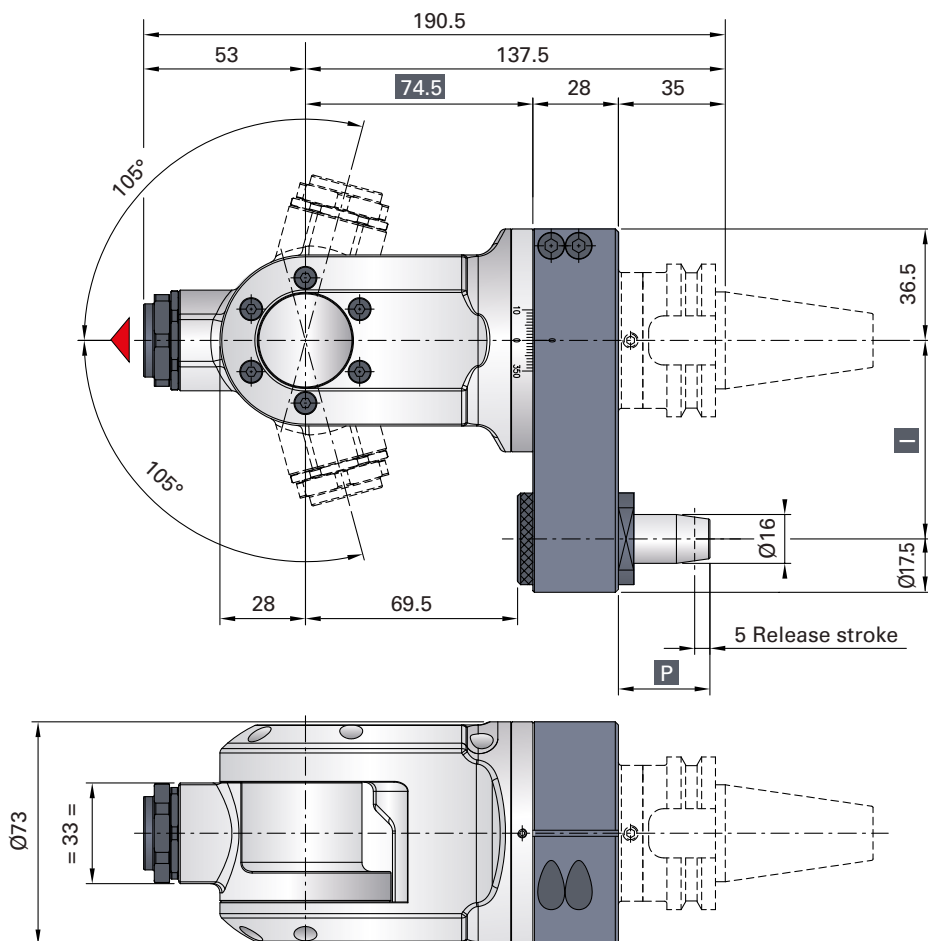
Collet
Pinza / Spannzange
ERAX-11 (0.5-7 mm)



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

*** STANDARD EQUIPMENT INCLUDES:**

- Instruction book / wrenches / special bag
- Libro istruzioni / chiavi di servizio / bauletto
- Bedienungsanleitung / Schraubenschlüssel / koffer



For the application on the machine please refer to page 7 / Per applicazione in macchina vedere pag 7 / Für die Anwendung auf der Maschine sehen Sie auf Seite 7

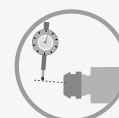
▲ Direction of rotation opposite to machine spindle / senso di rotazione contrario al mandrino / Drehrichtung entgegen Antriebsspindel

Option / **Opzione** / Option



bar max
12

Coolant through pin
Refrigerante attraverso il perno
Kühlmittelzufuhr durch Bolzen



Spindle precision
Precisione del mandrino
Spindelpräzision

0,002 mm / 0,00008 inch.

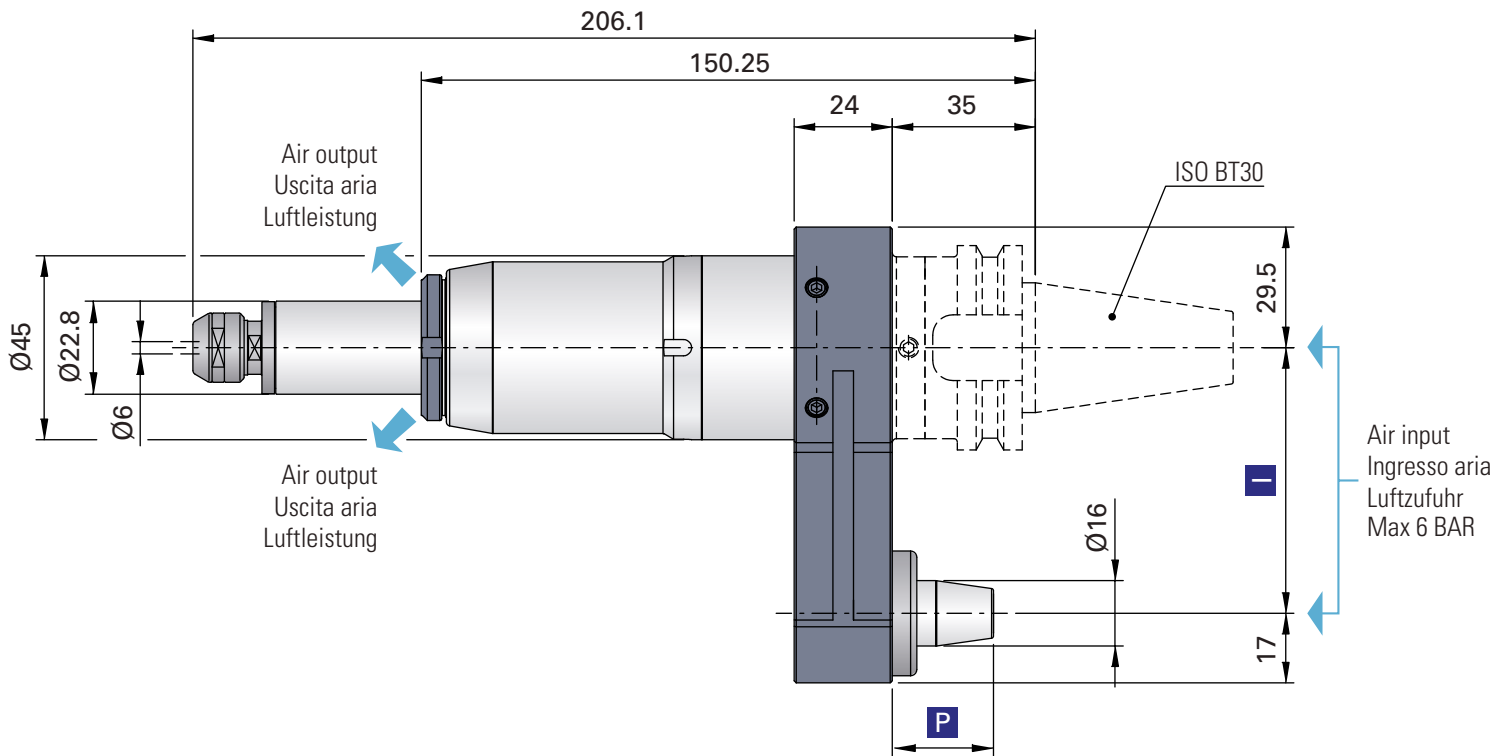
TURBODRILL NR-2351

Driven through air motor / Azionamento con motore ad aria / Durch Luftmotor angetrieben



Machine spindle must not rotate

Il mandrino macchina non deve assolutamente girare / Maschinenspindel soll nicht drehen

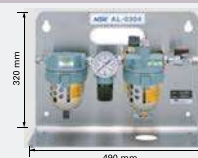


Possibility of order TURBODRILL without flange and pin with air through spindle

Possibilità di avere TURBODRILL senza flangia e perno con presa aria / TURBODRILL ohne Flansch auch möglich

- Per other applications with air motor with ISO/BT40-50 please refer to Slimline Catalogue
- Per le soluzioni ad aria con coni ISO/BT40-50 fare riferimento al catalogo Slimline
- Für Anwendungen mit luftangetriebenen köpfen mit SK/BT40-50 bitte sehen Sie Slimline Katalog

Air line kit / Filtro regolatore aria / Luftsysteem



STANDARD EQUIPMENT INCLUDES:

- NAKANISHI Kit / Angle head / Collet $\varnothing 3$ mm / Wrenches / Instruction book / Case
- Testa / Manipolo NAKANISHI / Pinza $\varnothing 3$ mm / Chiavi di servizio / Libro istruzioni / Bauletto
- Köpfe / NAKANISHI spindel / Spannzange $\varnothing 3$ mm / Schlüssel / Gebrauchsanweisungen / Koffer

Performance / Prestazioni

Technical Data / Dati Tecnici		
RPM max. / Max. Velocità	min ⁻¹	58.000
Type motor / Tipo di motore		AM-600
Type spindle / Tipo di manipolo		NR-2351
Power / Potenza	W	76
Air pressure / Pressione Aria	Bar	max. 6 (max. 90 Psi)
Air consumption / consumo d'aria	NI/min	160
Weight / Peso	Kg	2



CHK $\varnothing 0,5$ - max 6mm

every/ogni/jeder 0,1 mm

Collet
Pinza
Spannzange



Collant option

Refrigerante opzionale/ Kühlmittel optional

It is possible to use coolant external during the machining.
Consentito usare refrigerante esterno durante la lavorazione.
Extern Kühlmittelleinsatz möglich

MINILINE STOP BLOCK

FANUC ROBODRILL



I	65
P	24

BROTHER S2D



I	80
P	24

BROTHER TC-32



I	80
P	30

BROTHER R450X1



I	50
P	24

BROTHER S500 S700 S1000



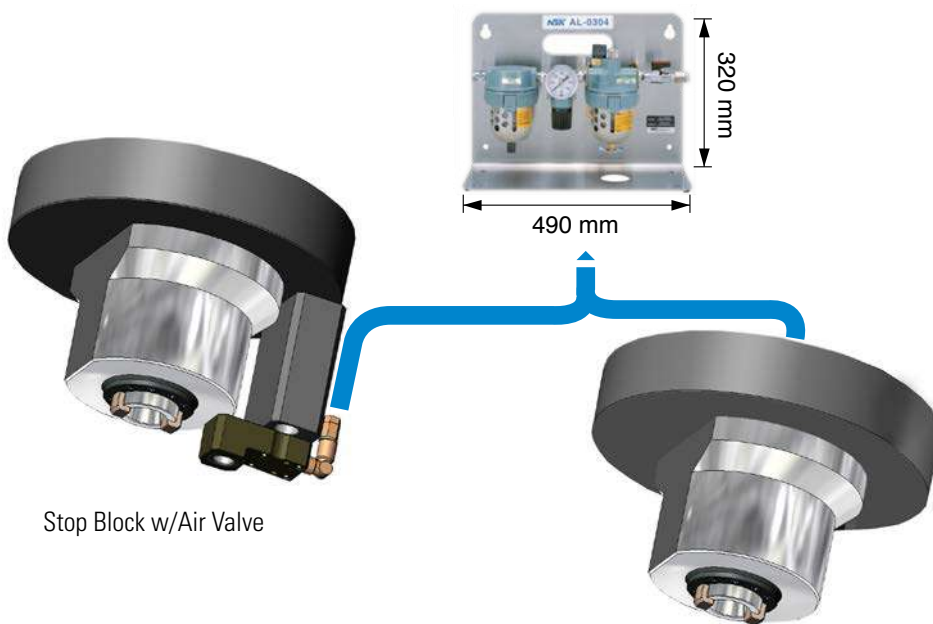
I	80
P	25,75

DMG MORI MILLTAP 700



I	65
P	24

AIR LINE KIT *For Turbodrill only ref. pag.6 / Solo per Turbodrill, rif. Pag 6*

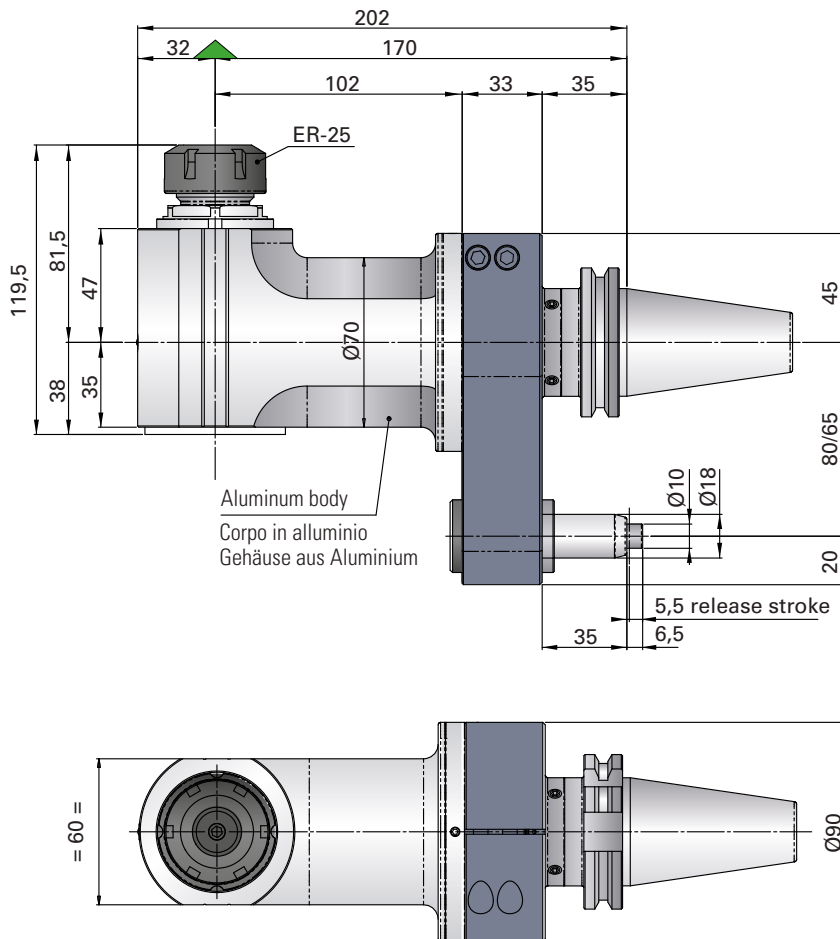


Stop Block w/Air Valve

Air Through Spindle
Aria attraverso il mandrino



T90cn-2,5M



Ratio
Rapporto / Verhältnis
1:1



RPM
Velocità / Drehzahl max.
6.000 min⁻¹



Max. axial load
Max. carico assiale / Max. Axialbelastung
510 N



Torque
Momento torcente / Drehmoment
20 Nm



Weight
Peso / Gewicht
4,9 kg



Collet
Pinza / Spannzange
ER 25 - Ø1-16 mm



Shank
Cono / Aufnahme
ISO40 DIN-69871/BT-40

*** STANDARD EQUIPMENT INCLUDES:**

- Instruction book / wrenches / special bag
- Libro istruzioni / chiavi di servizio / bauletto
- Bedienungsanleitung / Schraubenschlüssel / koffer

▲ Direction of rotation same as machine spindle / senso di rotazione uguale al mandrino / Drehrichtung gleich wie Antriebsspindel

Option / **Opzione** / Option



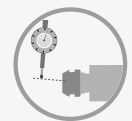
AIR/OIL

Oil lubrication
Lubrificazione
Ölschmierung



bar max
40

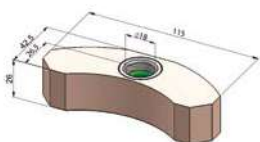
Coolant through spindle
Refrigerante attraverso il cono
Kühlmittelzufuhr durch Spindel



Spindle precision
Precisione del mandrino
Spindelpräzision

0,002 mm / 0,00008 inch.

STOP BLOCK per teste / STOP BLOCK for heads /
STOP BLOCK für Köpfe



T90cn-3,5M



Ratio
Rapporto / Verhältnis
1:1



RPM
Velocità / Drehzahl max.
4.000 min⁻¹



Max. axial load
Max. carico assiale / Max. Axialbelastung
1250 N



Torque
Momento torcente / Drehmoment
40 Nm



Weight
Peso / Gewicht
5,5 kg



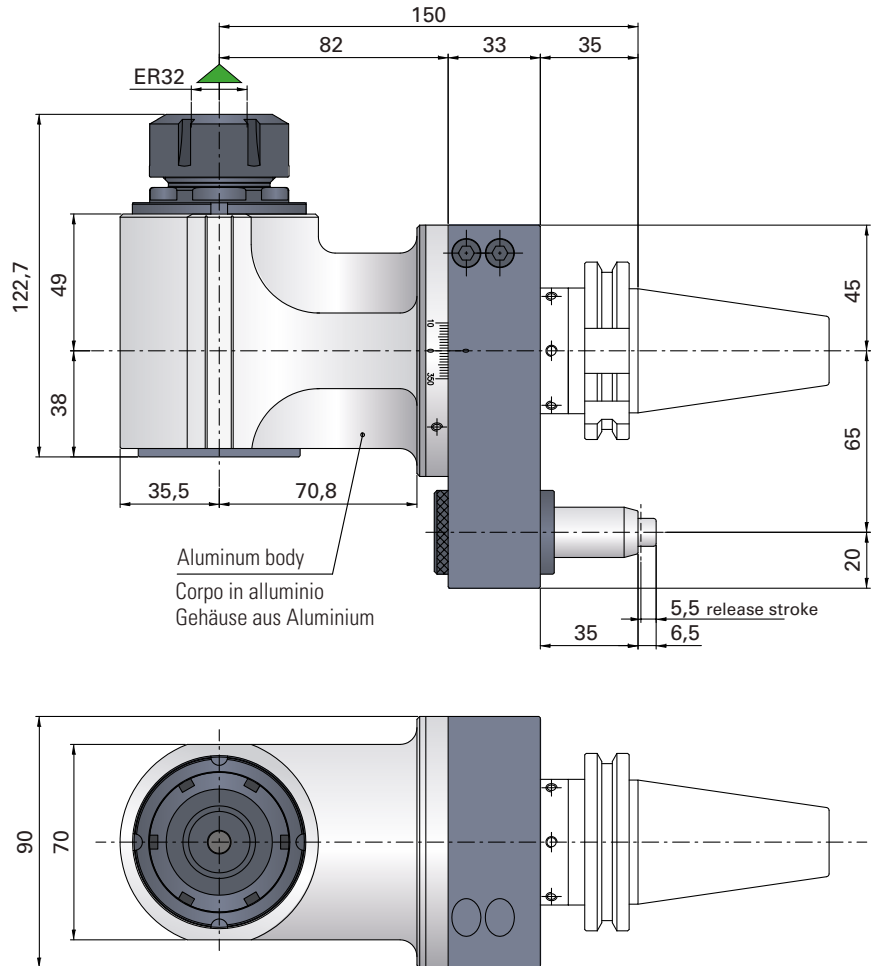
Collet
Pinza / Spannzange
ER 32 - Ø2-20 mm



Shank
Cono / Aufnahme
ISO40 DIN-69871/BT-40

*** STANDARD EQUIPMENT INCLUDES:**

- Instruction book / wrenches / special bag
- Libro istruzioni / chiavi di servizio / bauletto
- Bedienungsanleitung / Schraubenschlüssel / koffer



Direction of rotation same as machine spindle / *senso di rotazione uguale al mandrino* / *Drehrichtung gleich wie Antriebsspindel*

Option / Opzione / Option



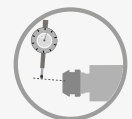
AIR/OIL

Oil lubrication
Lubrificazione
Ölschmierung



bar max
40

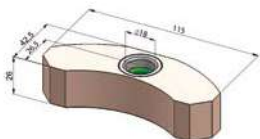
Coolant through pin
Refrigerante attraverso il perno
Kühlmittelzufuhr durch Bolzen



Spindle precision
Precisione del mandrino
Spindelpräzision

0,002 mm / 0,00008 inch.

STOP BLOCK per teste / STOP BLOCK for heads /
STOP BLOCK für Köpfe



The Alberti SmartChange System

New innovative quick change system, SMART CHANGE, entirely developed and patented by Alberti. Thanks to the 3-point contacts it ensures the greatest precision and repeatability... **QUICK • EASY • PRECISE**

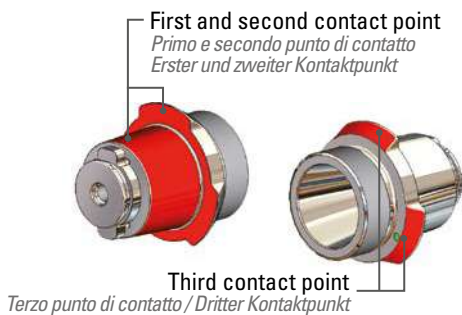
Innovativo sistema di cambio utensile rapido, SMART CHANGE, studiato e brevettato da Alberti. Grazie ai 3 punti di contatto garantisce la massima precisione e ripetibilità... **VELOCE • FACILE • PRECISO**

NEU Schnellwechselsystem – SMART CHANGE – von Alberti entwickelt und patentiert. Dank dem 3-Punkte Kontakt versichert unser System die höchste **PRÄZISION und WIEDERHOLGENAUIGKEIT**

Possibility to preset the different adapters outside the machine / Possibilità di presettaggio dei vari adattatori fuori macchina / Voreinstellung außerhalb der Maschine

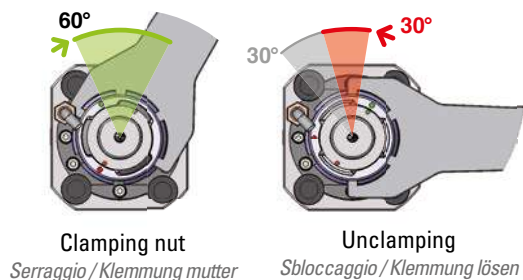
TRIPLE CONTACT SYSTEM

SISTEMA TRIPLO CONTATTO / SYSTEM MIT DREI KONTAKTPUNKTEN



HOW IT WORKS

COME FUNZIONA / SO FUNKTIONIERT ES



HIGHEST ACCURACY AND REPEATABILITY

MASSIMA PRECISIONE E RIPETIBILITÀ / HÖCHSTE PRÄZISION UND WIEDERHOLGENAUIGKEIT

Run-Out of the collet chuck with adapter mounted repeatability <i>Run-Out in pinza con adattore montato</i> <i>Rundlaufgenauigkeit mit Schnittstelle in der Aufnahme</i>	0,005 µm
Adapter change time <i>Tempo di sostituzione</i> <i>Zeit für Schnittstellenwechsel</i>	20 sec.
Repeatability <i>Repetibilità / Wiederholgenauigkeit</i>	0,003 mm 0,0001 in

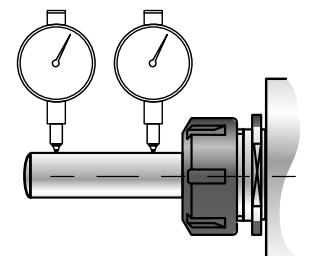
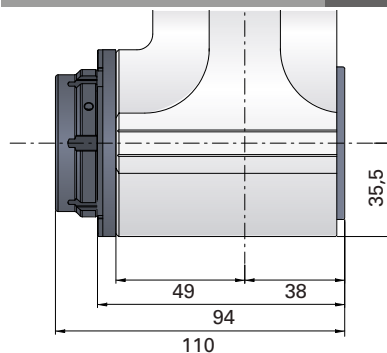
Accuracy with gauge bar inserted in the collet chuck

Precisione con barra inserita nel mandrino

Rundlaufgenauigkeit mit Lehre

at 40 mm = 0,008 mm (1,57 in = 0,0003 in)

at 120 mm = 0,01 mm (4,72 in = 0,0004 in)



SELECTION OF ADAPTERS / SELEZIONE DI ADATTATORI / AUSWAHL VON SCHNITTSTELLEN

	ER-20 (Ø 1/13mm)	ER-25 (Ø 1/17mm)	ER-32 (Ø 2/22mm)	ERC-20 (Ø 1/13mm)	ERC-25 (Ø 1/17mm)	ERC-32 (Ø 2/22mm)
	Ø 1/13	Ø 1/17	Ø 2/22	Ø 1/13	Ø 1/17	Ø 2/22
	A 28.5	A 30.5	A 41.5	A 33.5	A 35.5	A 46.5
	D 34	D 42	D 50	D 34	D 42	D 50
	PORTA FRESA SHELL MILL HOLDER FRÄSDORN	PORTA FRESA SHELL MILL HOLDER FRÄSDORN	PORTA FRESA SHELL MILL HOLDER FRÄSDORN	PORTA FRESA SHELL MILL HOLDER FRÄSDORN	PORTA FRESA SHELL MILL HOLDER FRÄSDORN	PORTA FRESA SHELL MILL HOLDER FRÄSDORN
	Ø 13	Ø 16	Ø 22	Ø 13	Ø 16	Ø 22
	A 24.5	A 30.5	A 32.5	A 24.5	A 30.5	A 32.5
	H 13	H 17	H 19	H 13	H 17	D 19
	WELDON (Ø 6mm)	WELDON (Ø 8mm)	WELDON (Ø 10mm)	WELDON (Ø 12mm)	WELDON (Ø 16mm)	
	Ø 6	Ø 8	Ø 10	Ø 12	Ø 16	
	A 20	A 20	A 20	A 20	A 20	
	D 36.8	D 36.8	D 36.8	D 36.8	D 36.8	



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