



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

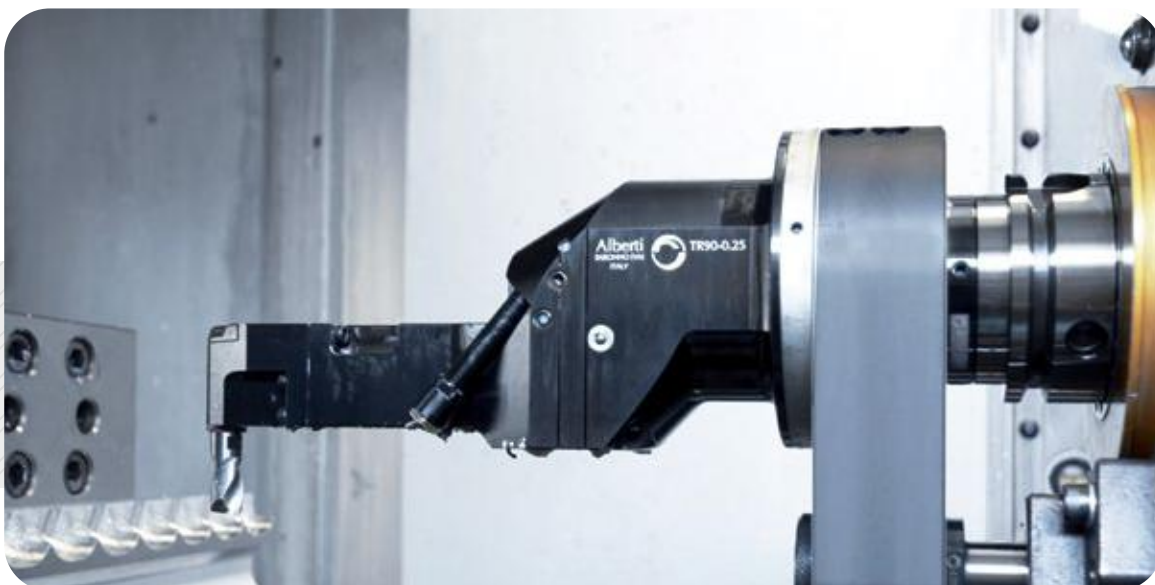
La nuova serie di teste Ultraslim è stata progettata per offrire soluzioni standardizzate adatte a diverse **applicazioni in spazi molto ridotti**, come lavorazioni di piccole tasche oppure operazioni molto vicine a pareti laterali del pezzo. Il loro particolare design prevede la **parte superiore del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

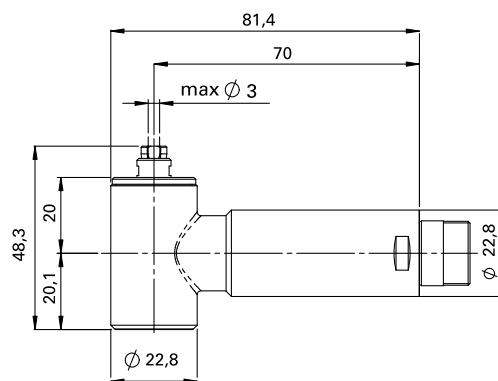
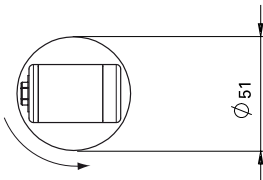
RA-100

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



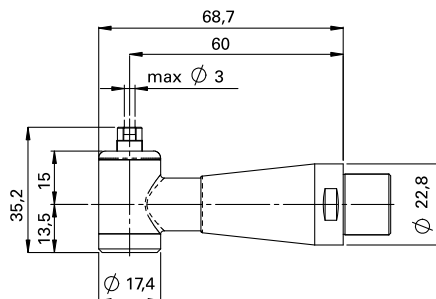
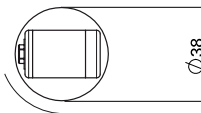
RA-200

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



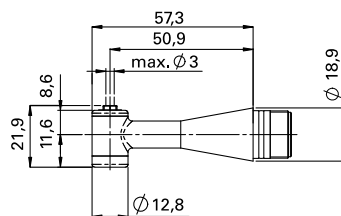
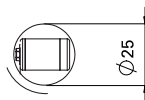
IC-300

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



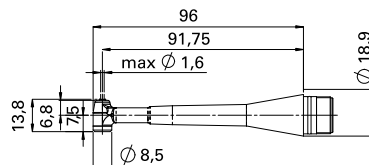
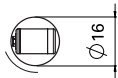
MFC-300 S

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.
<i>Spindle accuracy</i>		0,002 mm



COOLANT OPTION

Consentito usare refrigerante esterno durante la lavorazione.

It is possible to use external coolant during the machining.



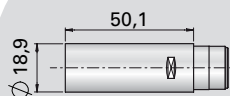
COLLET

RA-100 | mm | CH8: $\varnothing$ 3 mm every 0,1 mm $\varnothing$ 3mm

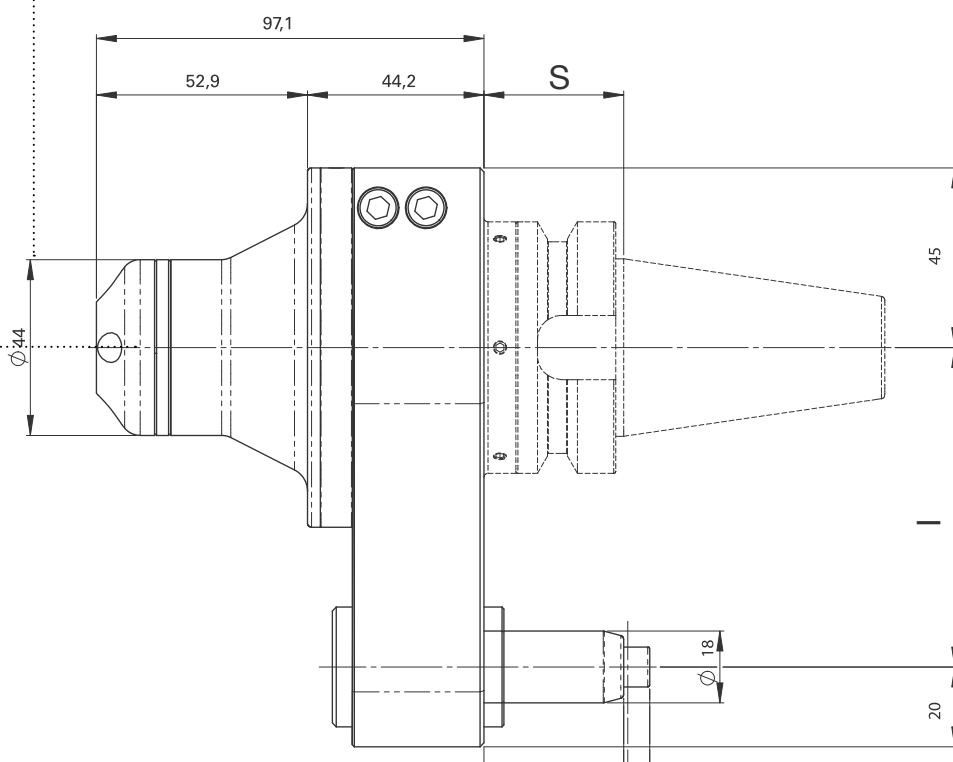
RA-200 | mm |
CHS: $\varnothing$ 3mm, 2.35 every 1.6 and $\varnothing$ 2.35, $\varnothing$ 3.175

IC-300 | mm |
CHC: $\varnothing$ 3mm, $\varnothing$ 2,35mm, $\varnothing$ 1,6 mm, $\varnothing$ 2,00mm and $\varnothing$ 3,175 mm
MFC-300 | mm | K252 $\varnothing$ 1,6mm

CN-01



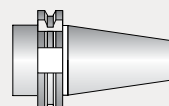
*Extension between spindle and heads /
Prolunga da inserire tra il manipolo e la testa*



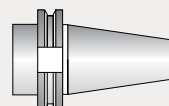
OPTIONAL DRIVE SHANK*

*Non interchangeable input drive shank
Coni non intercambiabili*

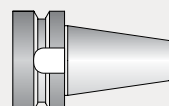
**DIN-69871
ISO 40/50**



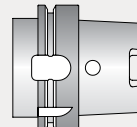
**CAT
40/50**



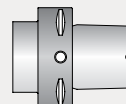
**MAS-BT
40/50**



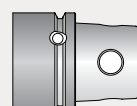
**HSK
63/80/100**



**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

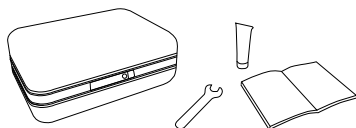


Weight
Peso
7.3 kg

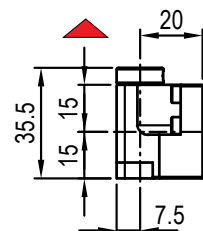


Collet
Pinza
**WELDON 4mm / 5mm
M4**

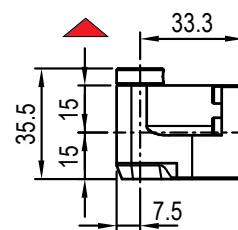
*** STANDARD EQUIPMENT**
includes:



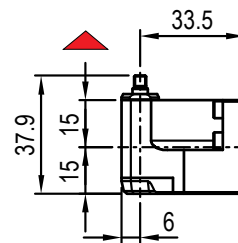
DH-001



DH-002

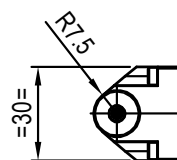


DH-003

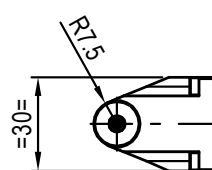


Utensili speciali
Special cutting tool

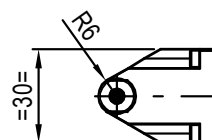
DH-001



DH-002



DH-003



Option / Opzione



bar max
100

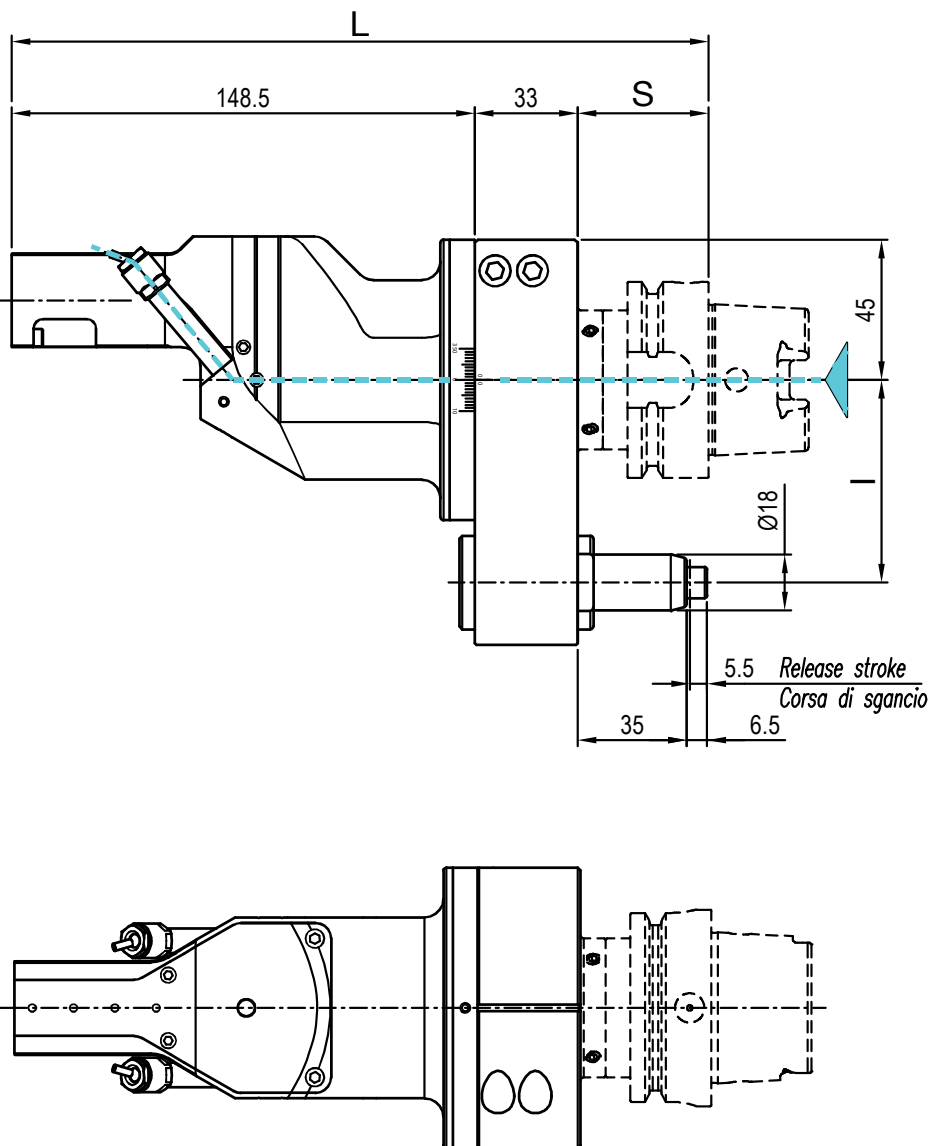
Coolant through flange and output spindle
Refrigerante attraverso la flangia e il mandrino di uscita



bar max
12

Coolant through pin
Refrigerante attraverso il perno

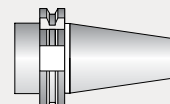
TR90CN-0.25DH



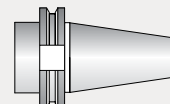
OPTIONAL DRIVE SHANK*

Non interchangeable input drive shank
Coni non intercambiabili

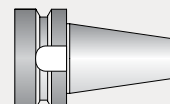
DIN-69871
ISO 40/50



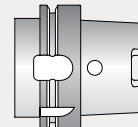
CAT
40/50



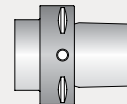
MAS-BT
40/50



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	63-80 (110*) 80-110	63-80 80-110 100	C5-C6 C8
I	65-80-(110*)	80-110	65-80-(110*)	65-80-(110*)	80-(110*)
S	35	35	41	42	38
L	216.5	216.5	222.5	223.5	219.5

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



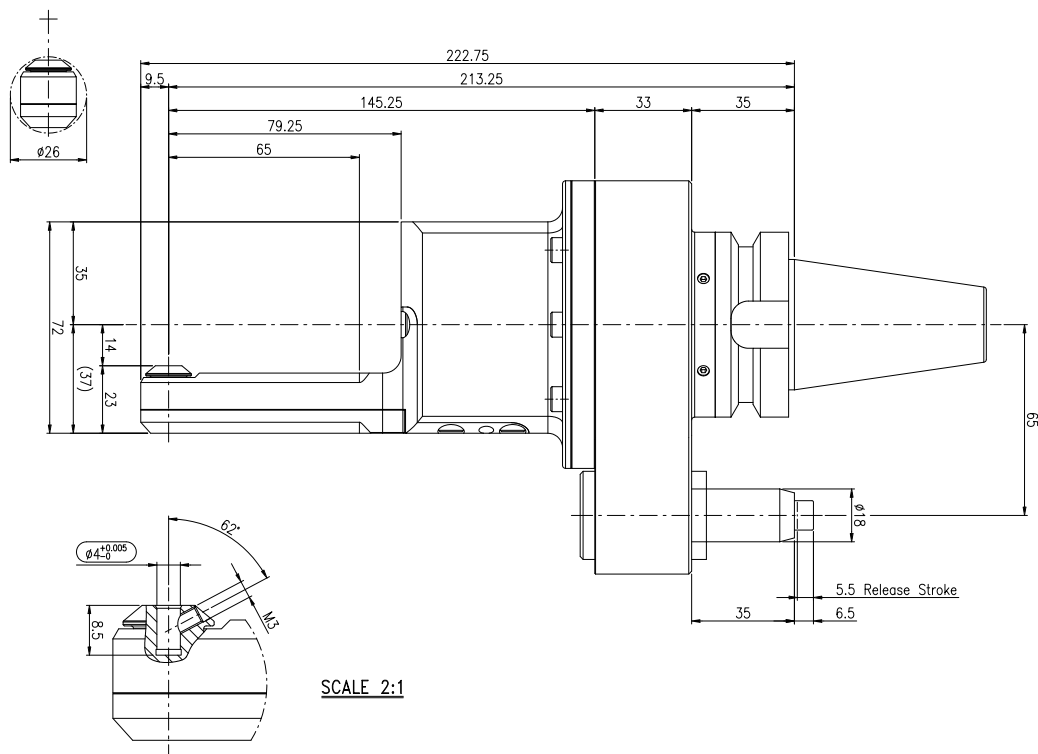
Torque
Momento torcente
4 Nm



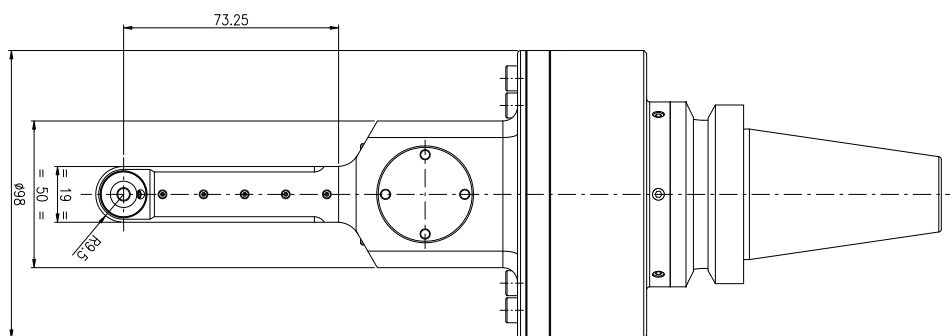
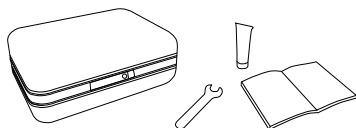
Weight
Peso
7 kg



Collet
Pinza
WELDON 4mm / 5mm



*** STANDARD EQUIPMENT includes:**



Option / Opzione



bar max
100

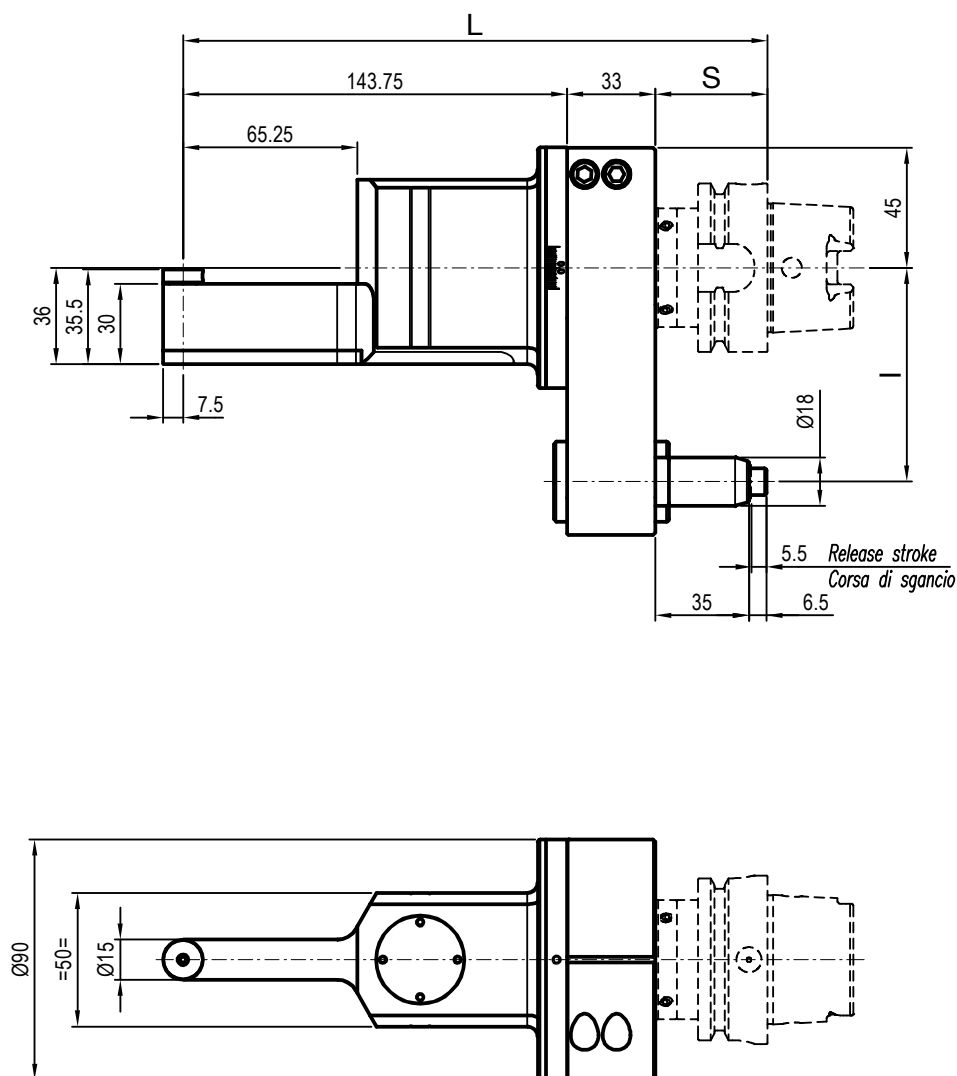
Coolant through flange and output spindle
Refrigerante attraverso la flangia e il mandrino di uscita



bar max
12

Coolant through pin
Refrigerante attraverso il perno

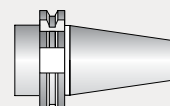
TR90CN-0.25US



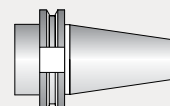
OPTIONAL DRIVE SHANK*

Non interchangeable input drive shank
Coni non intercambiabili

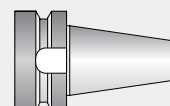
DIN-69871
ISO 40/50



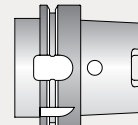
CAT
40/50



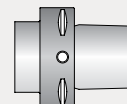
MAS-BT
40/50



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