



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.

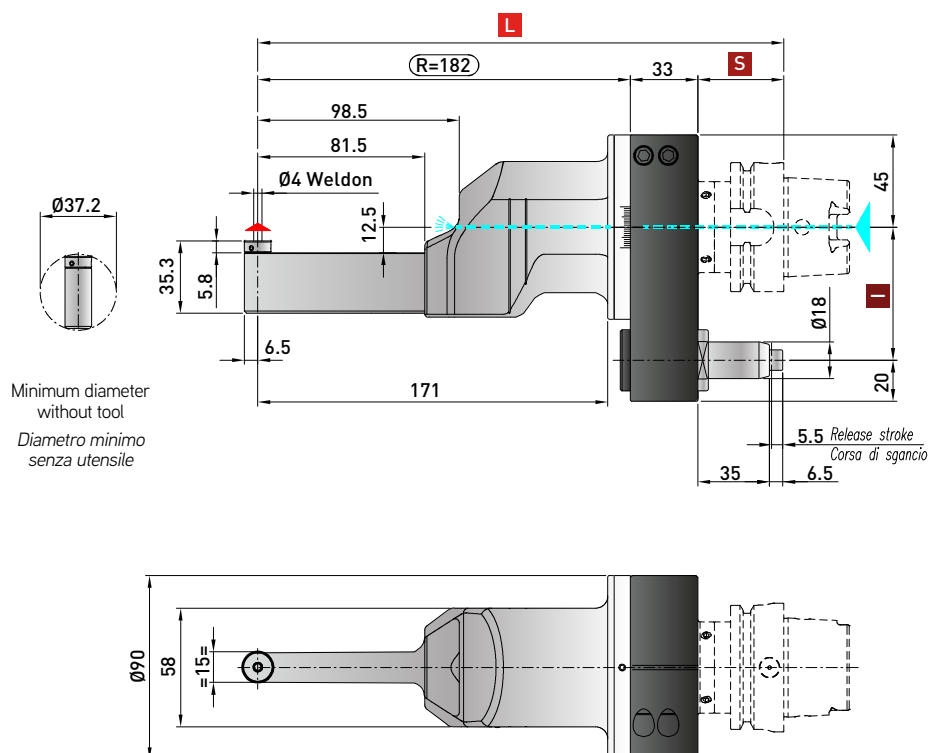


*New series of Ultraslim angle head was designed to offer standardized solution **for application in confined spaces** or very close to the wall.*

*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.

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:**



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

Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Option / Opzione



bar max
12

Coolant through pin
Refrigerante attraverso il perno

Linea **ULTRASLIM**

Ultraslim Line

Technical data

Caratteristiche tecniche



Ratio
Rapporto
1:4 SPEEDER



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



Max. axial load
Max. carico assiale
150 N



Torque
Momento torcente
4 Nm

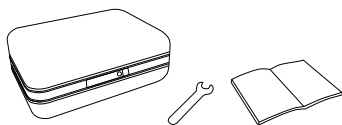


Weight
Peso
7.3 kg

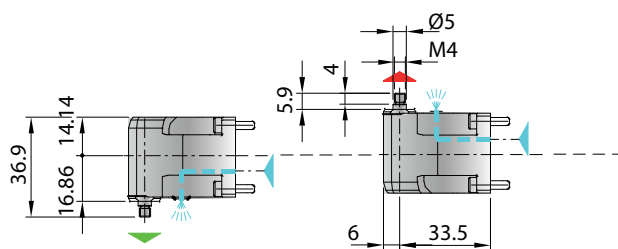


Collet
Pinza
WELDON 4mm / 5mm
M4

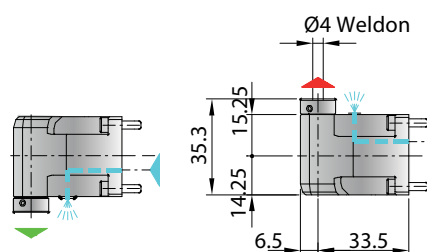
*** STANDARD EQUIPMENT**
includes:



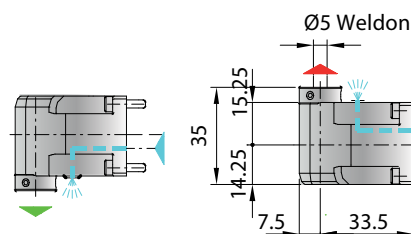
DH-001



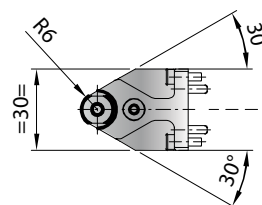
DH-002



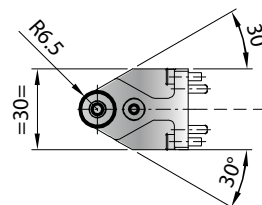
DH-003



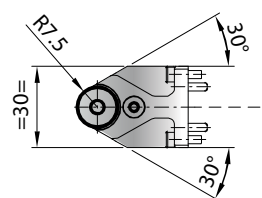
DH-001



DH-002



DH-003



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

Option / Opzione



bar max
100

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



bar max
12

Coolant through pin
Refrigerante attraverso il perno

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

RA-100

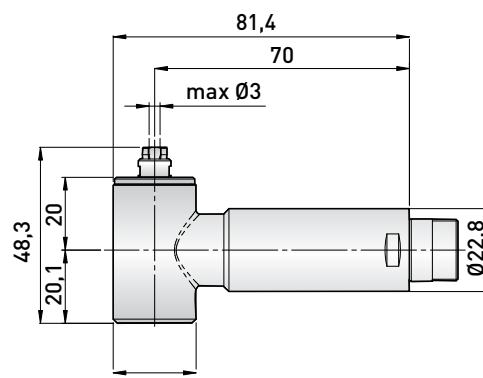
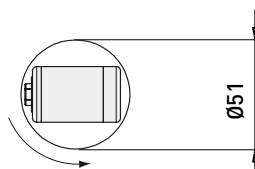
Technical data / Dati tecnici

RPM max. input / Max. Velocità input	15.000
Rt. reduction / Rt. in riduzione	Kg 1/2,67
Weight / Peso	3.5

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

RPM max. output
Max. Velocità output

5.620 rpm



RA-200

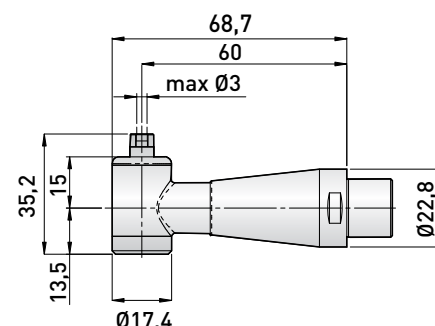
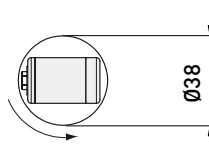
Technical data / Dati tecnici

RPM max. input / Max. Velocità input	15.000
Rt. reduction / Rt. in riduzione	1/1,5
Weight / Peso	Kg 3.5

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

RPM max. output
Max. Velocità output

10.000 rpm



IC-300

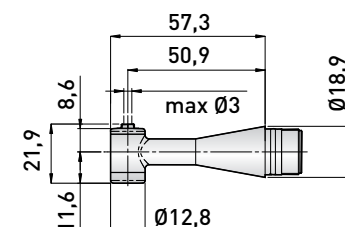
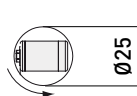
Technical data / Dati tecnici

RPM max. input / Max. Velocità input	15.000
Rt. reduction / Rt. in riduzione	3/4
Weight / Peso	Kg 3

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

RPM max. output
Max. Velocità output

11.250 rpm



MFC-300 S

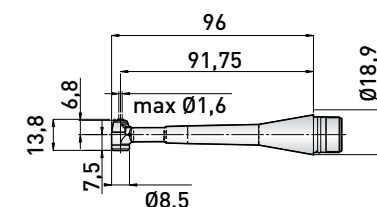
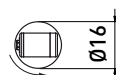
Technical data / Dati tecnici

RPM max. input / Max. Velocità input	15.000
Rt. reduction / Rt. in riduzione	1/1
Weight / Peso	Kg 3

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

RPM max. output
Max. Velocità output

15.000 rpm



SPINDLE RUNOUT

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



COOLANT OPTION

Consentito usare refrigerante esterno durante la lavorazione.

It is possible to use external coolant during the machining.



COLLET

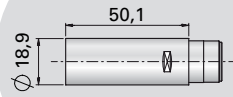
RA-100 | mm | CHS: ø 3 mm every 1 mm ø 3mm

RA-200 | mm | CHS: ø 3mm, 2,35 every 1mm and ø 2,35, ø 3,175

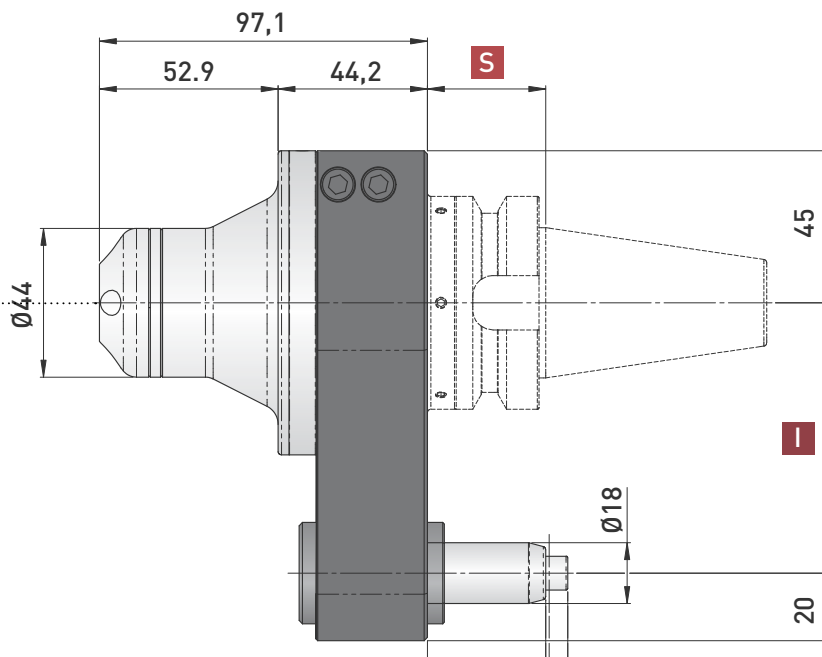
IC-300 | mm |

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

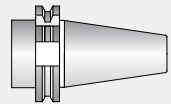
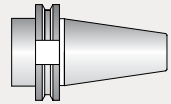
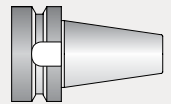
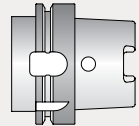
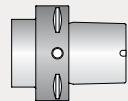
MFC-300S | mm | K252 ø 1,6mm

CN-01


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


OPTIONAL DRIVE SHANK*

Non interchangeable input drive shank
Coni non intercambiabili

DIN-69871
ISO 40/50

CAT
40/50

MAS-BT
40/50

HSK
63/80/100

CAPTO
C6/C8


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

*optional

ACCESSORIES / ACCESSORI

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

Retaining block /
Tassello di ritegno /
Stop-Block



NOT INCLUDED / NON INCLUSO