

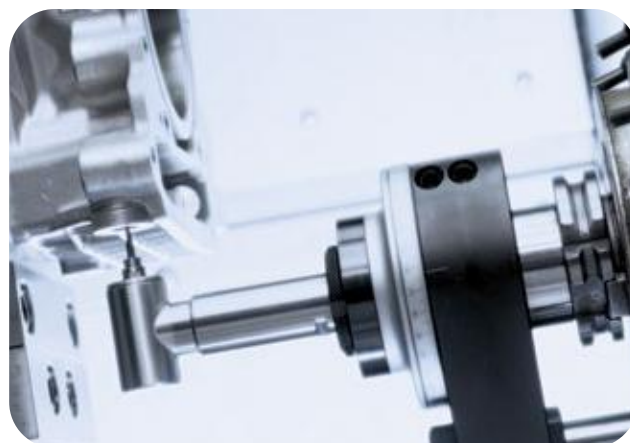


LINEA HIGH SPEED

MOLTIPLICATORE. *SPINDLE SPEEDER*



MOLTIPLICATORE MECCANICO
MECHANICAL SPINDLE SPEEDER
Max 25.000 RPM

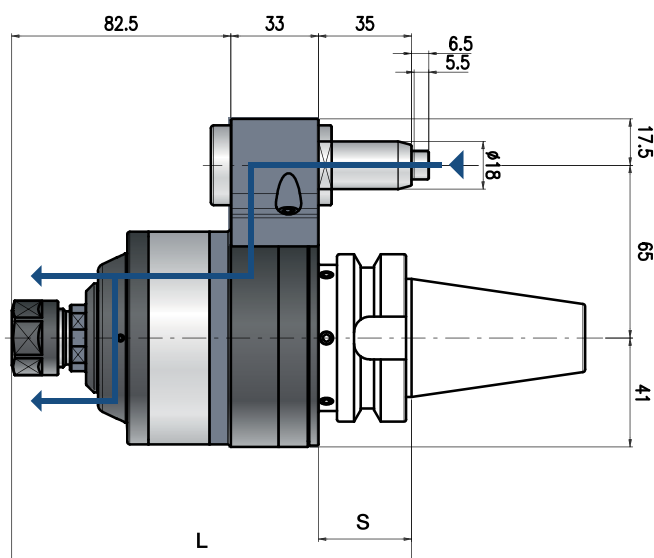


MOLTIPLICATORE AD ARIA
AIR DRIVEN SPEEDER
Max 60.000 RPM

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

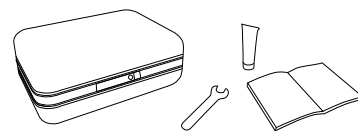
Fori per raffreddamento ad aria o acqua
Bores for air-water cooling system

Entrata aria acqua
Air-coolant input

Pinza ER 16
ER 16 collet

Gruppo perno modulare
Interchangeable pitch dimension

*** STANDARD EQUIPMENT includes:**



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

*optional

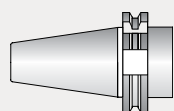
Non interchangeable input drive shank / Coni di attacco non intercambiabili

albertiumberto.com

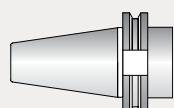


Teste con **MOTORE AD ARIA.**

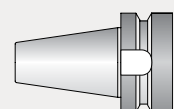
Air Driven angle heads



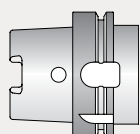
DIN-69871
ISO 40/50



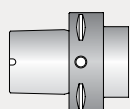
CAT
40/50



MAS-BT
40/50

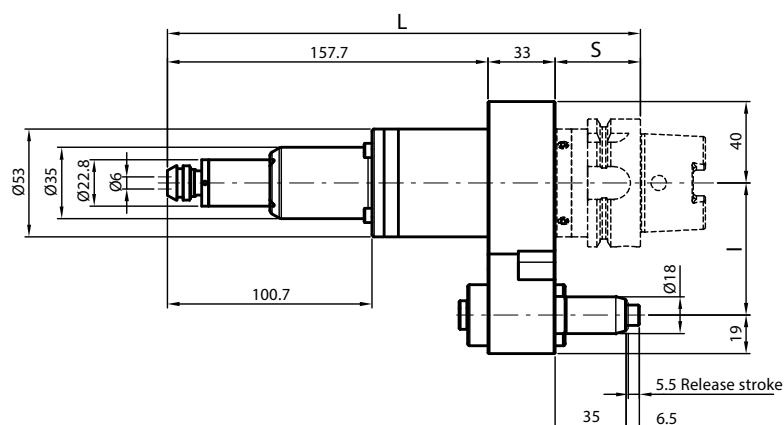


HSK
63/80/100



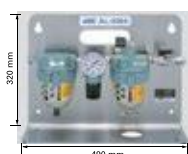
CAPTO
63/80/100

Turboflex 30.000 RPM AXIAL



Turboflex 30.000 RPM RADIAL

Air line kit / Filtro regolatore aria

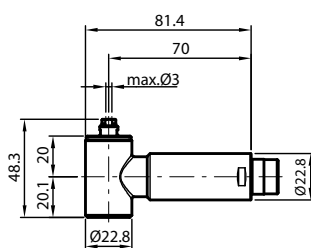
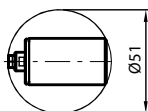


Retaining block /
Tassello di ritegno /
Stop-Block

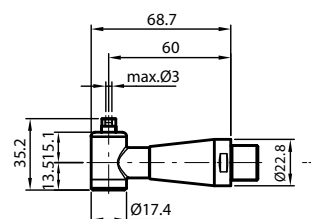
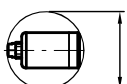


NOT INCLUDED / NON INCLUSO

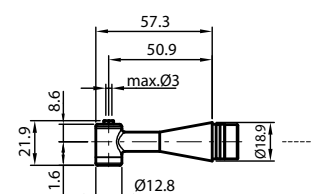
RA-100



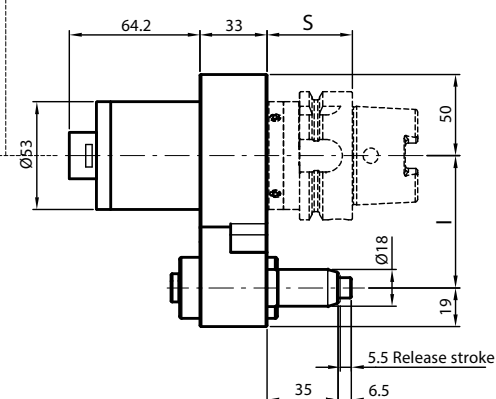
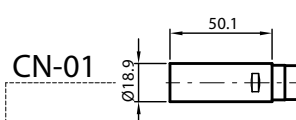
RA-200



IC-300



CN-01



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	NI/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	NI/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.



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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

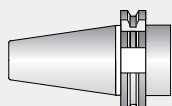


Teste con **MOTORE AD ARIA.**

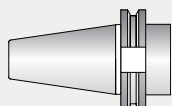
Air Driven angle heads

OPTIONAL DRIVE SHANK*

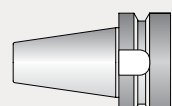
Non interchangeable
input drive shank /
Coni non intercambiabili



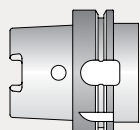
DIN-69871
ISO 40/50



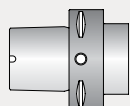
CAT
40/50



MAS-BT
40/50

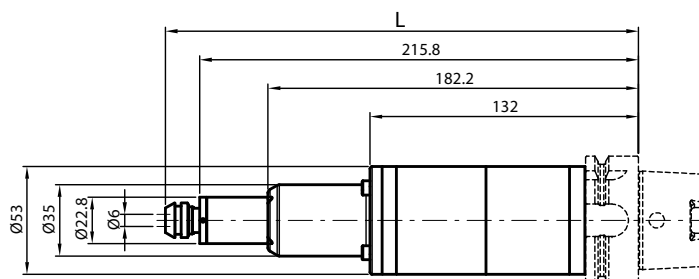


HSK
63/80/100



CAPTO
63/80/100

Turboflex 30.000 RPM AXIAL



Turboflex 30.000 RPM RADIAL

Air line kit / Filtro regolatore aria

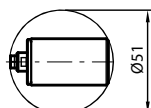


Retaining block /
Tassello di ritegno /
Stop-Block

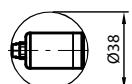


NOT INCLUDED / NON INCLUSO

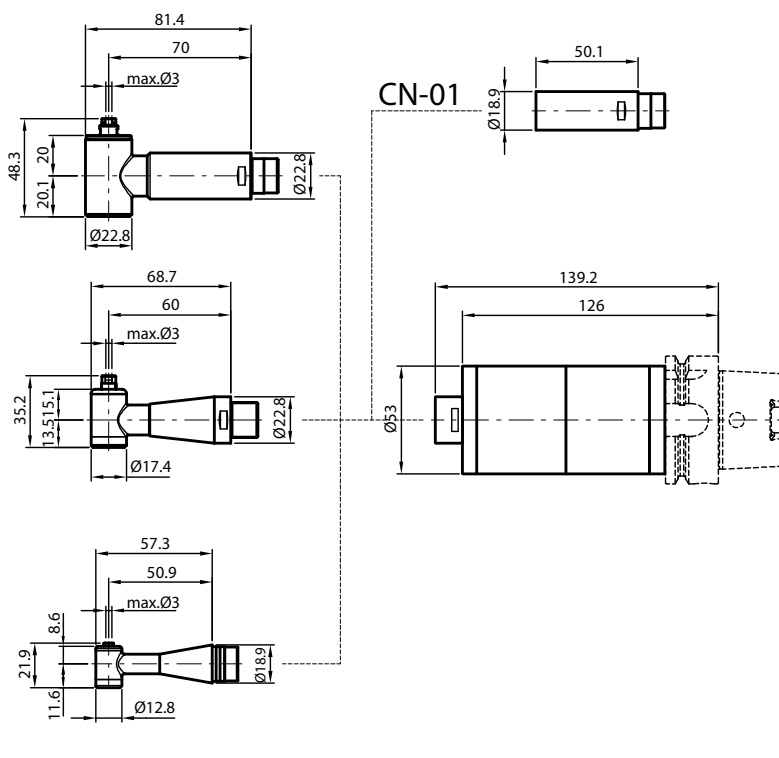
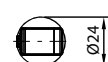
RA-100



RA-200



IC-300



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	NI/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	NI/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

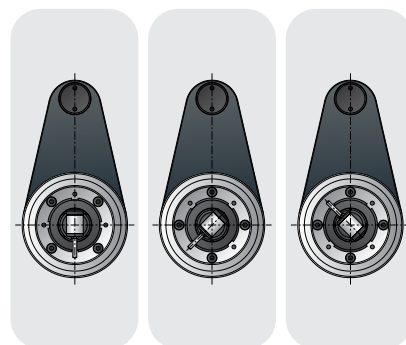
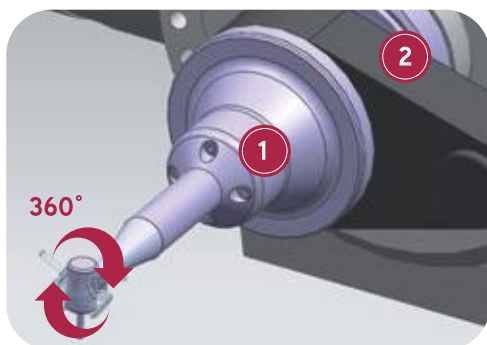
Il mandrino può essere posizionato su 360° grazie all'indexaggio dell'asse C della macchina, mentre la rotazione è assicurata dalla presenza del motore ad aria.

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.



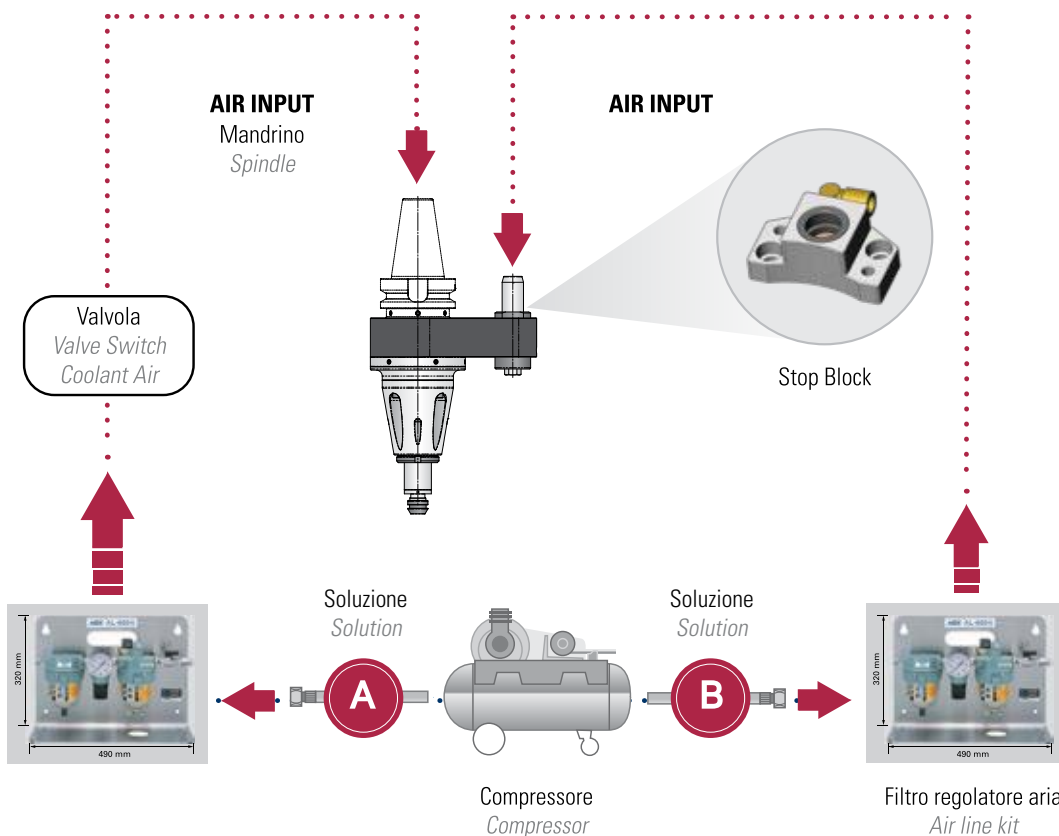
Come funziona TURBOFLEX.

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.

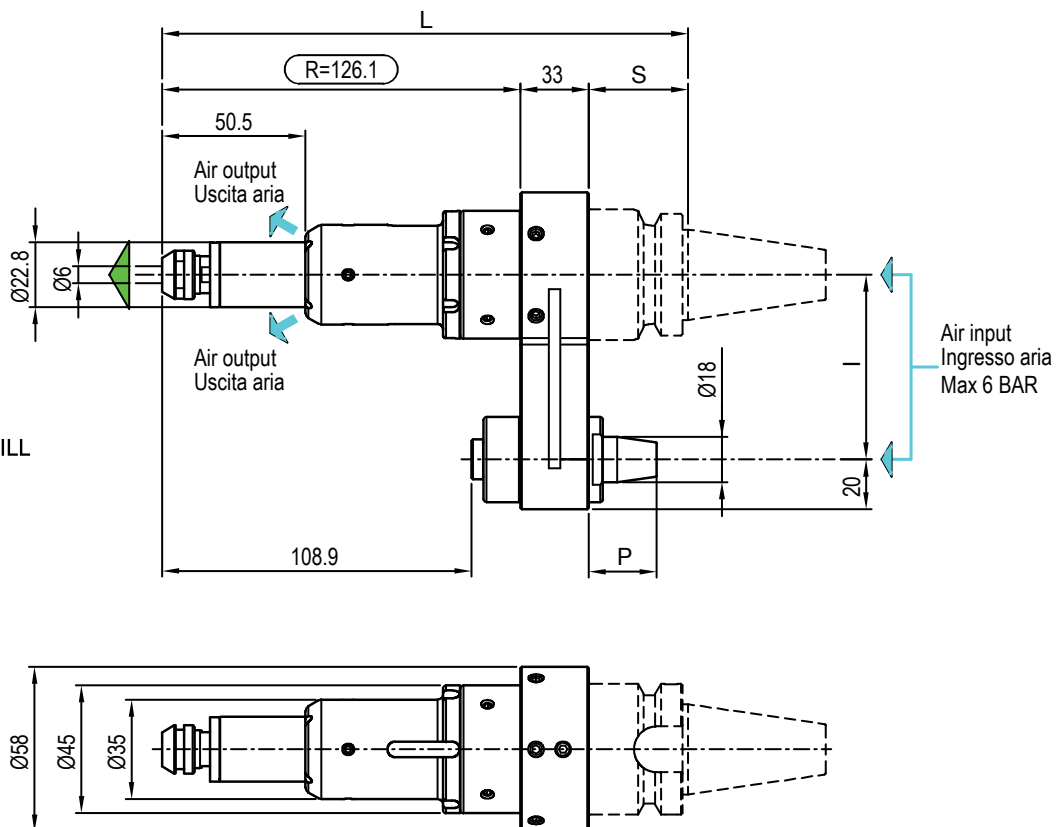
Azionamento con motore ad aria / Driven through air motor



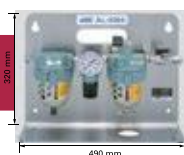
Il mandrino macchina non deve assolutamente girare
Machine spindle must not rotate

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.*

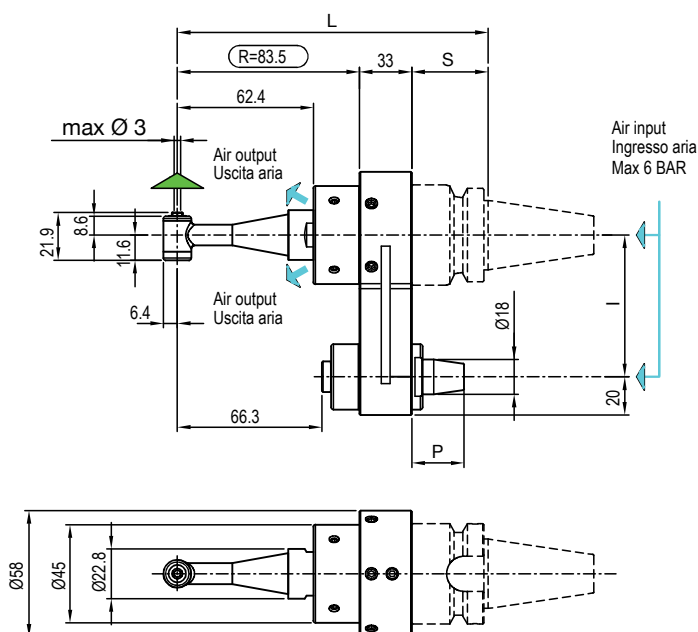
TURBODRILL

Azionamento con motore ad aria / Driven through air motor

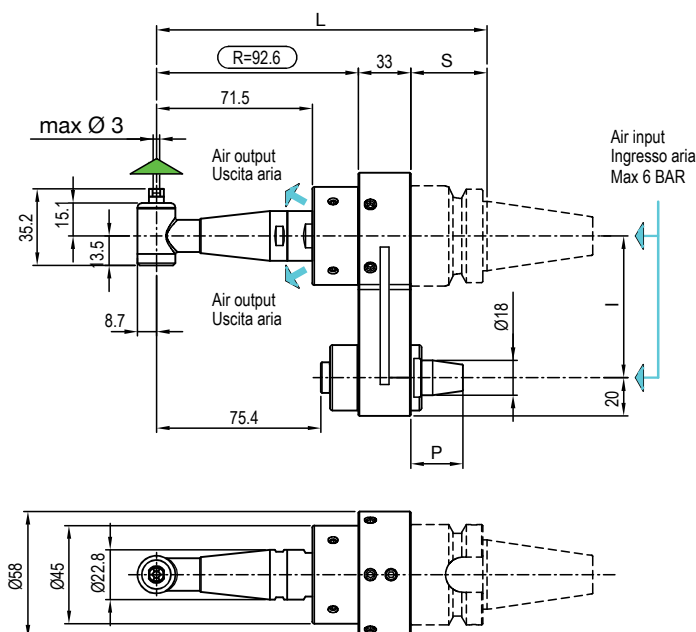


Il mandrino macchina non deve assolutamente girare
Machine spindle must not rotate

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.

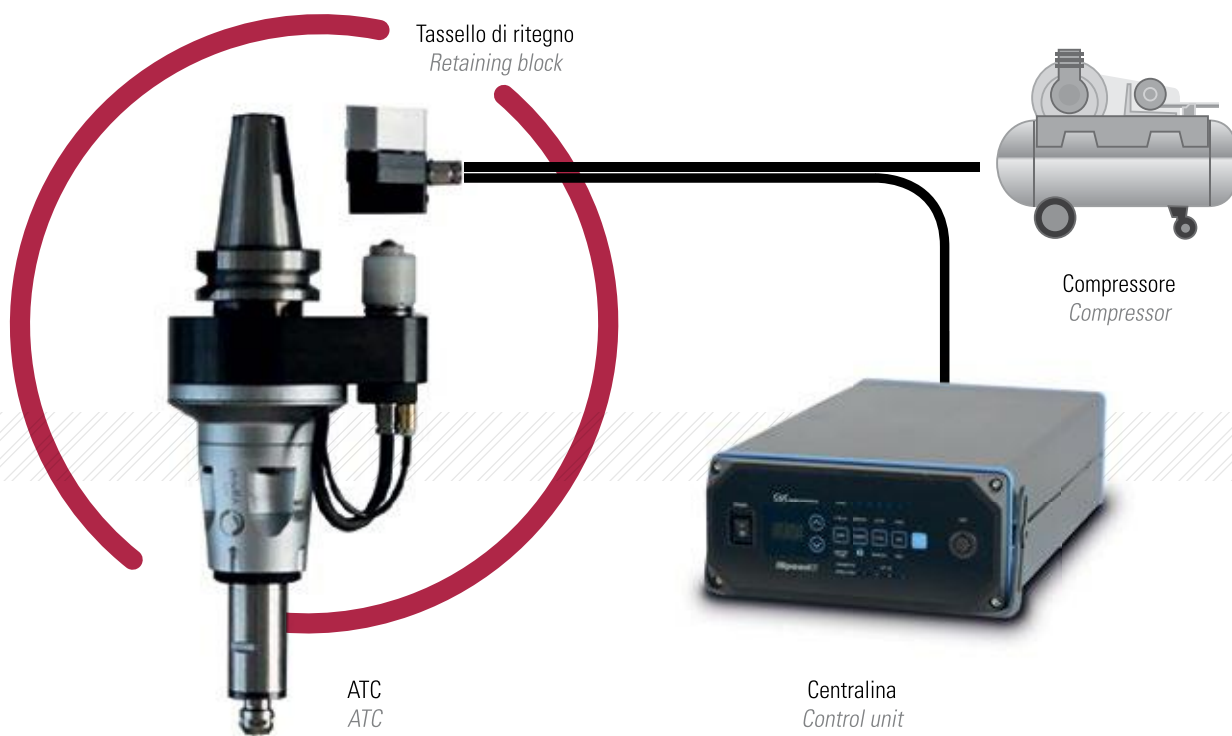
LINEA HIGH SPEED *LEONARDO SYSTEM*

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 electros spindle 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



Cuscinetti ceramici per una miglior tenuta e precisione di lavorazione

Ceramic bearings for a better performance and precision during machining



Velocità fino a 80.000 RPM regolabile

Adjustable speed up to 80.000 RPM



Completamente integrato alla macchina utensile tramite codici M

Completely integrated with the machine tool with M code



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



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



Centralina Nakanishi con regolazione di giri e sensore per arresto mandrino

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



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

Internal friction to prevent damage to the motor and machine spindle



Nessuna dilatazione termica

No thermal growth



RUN OUT 1 MICRON



ELETTROMANDRINO LEONARDO ELECTROSPINDLE ATC 60 SYSTEM

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)**

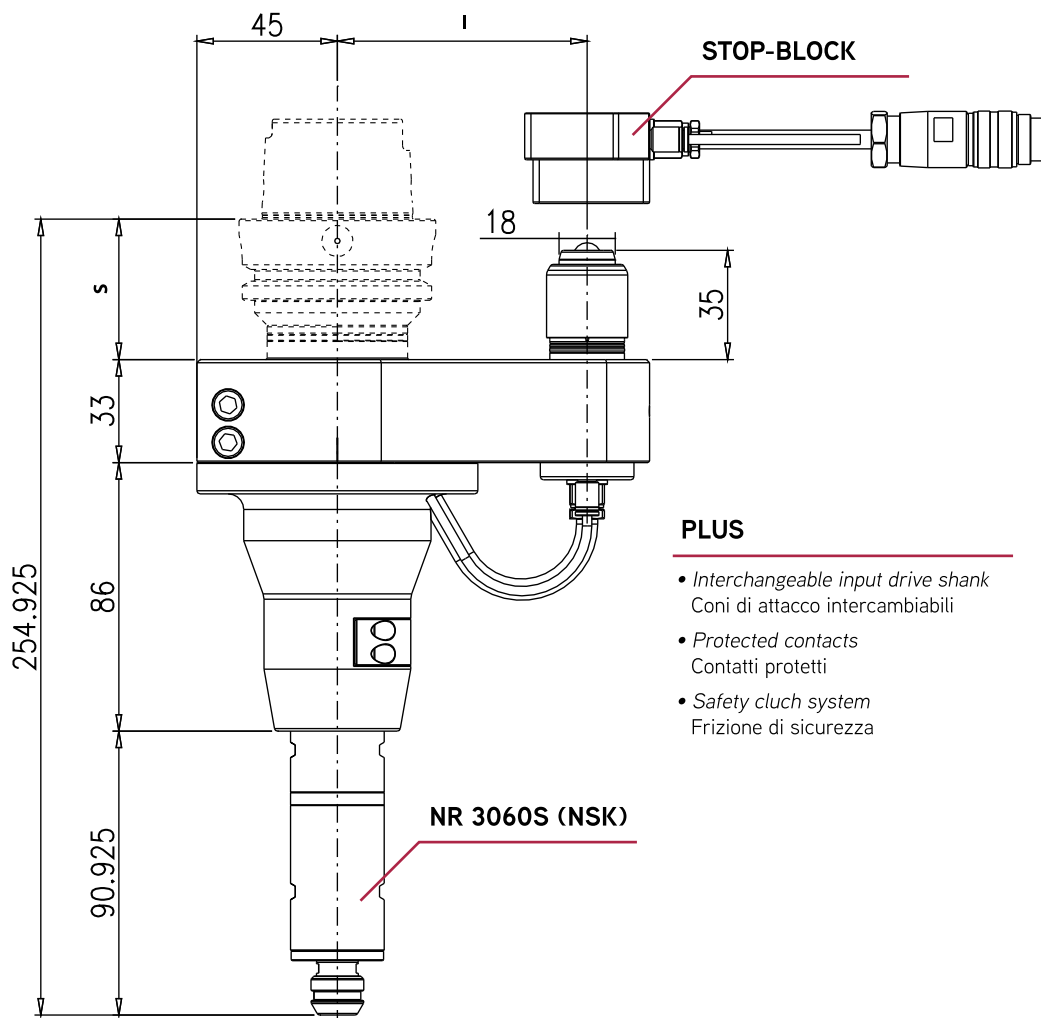
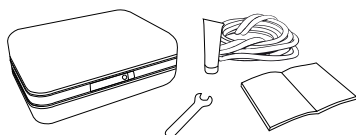


Spindle accuracy
Precisione
0,002 mm



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

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

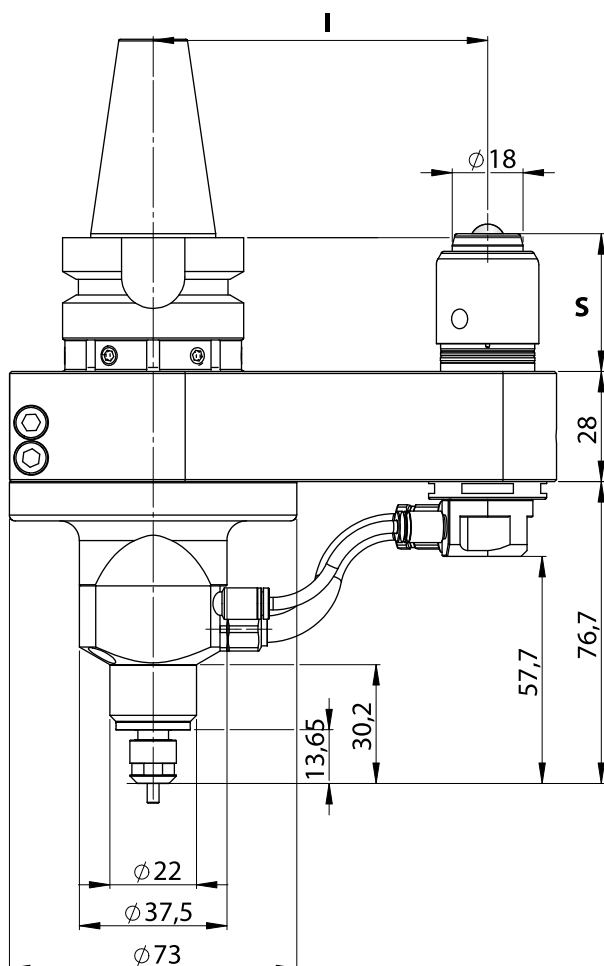
Dual contact spindles available / Disponibilità coni a doppio contatto

*optional

Non interchangeable input drive shank / Coni di attacco non intercambiabili

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)**

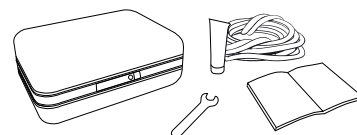


Spindle accuracy
Precisione
1 µ

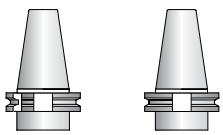
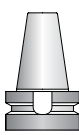
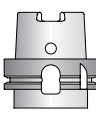
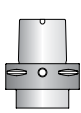
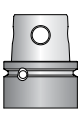


Controller unit
Centralina
ISPEED3

*** 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

								
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