



ELTE[®]



catalogo
catalogue

Serie completa per lavorazioni ad alta precisione
con cambio utensile manuale e automatico

Complete series for high precision processings
with manual and automatic tool change

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AF_{cu}

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Bilanciatura Standard con 1/2 chiavetta per utensile ad una cava

Standard balance with half key for one slots tool.

A richiesta bilanciatura con chiavetta intera per utensile a due cave

On request balance with full key for two slots tool.

Si raccomanda l'uso di utensili bilanciati

We strictly recommend the use of balanced tools.

Tutti i motori vengono forniti privi di pressacavo

All motors are supplied without plastic gland.

È importante in sede d'ordine specificare il tipo di motore completo di Tensione, Frequenza, Potenza.

When ordering please specify the Voltage, Frequency and Power of the motor.

In tutti i motori sono montati cuscinetti per alte velocità ingrassati a vita.

All motors are equipped with bearings for high speeds and do not require any additional lubrication.

Tutti i motori sono a normativa europea [marchio CE].

All motors conform to the European EC standard.

UNI EN 12100-1:2005, UNI EN 12100-2:2005, CEI EN 60034-7, CEI EN 60034-9,

EN 55011, CEI EN 61000-6-4:2002, CEI EN 61000-6-2:2000

Direttiva compatibilità elettromagnetica EMC (89/336/CEE).

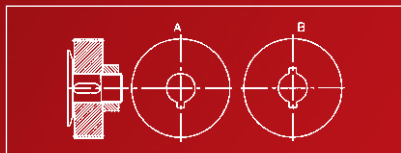
All motors conform to the electromagnetic compatibility directive EMC (89/336/CEE).

Direttiva bassa tensione (73/23/CEE).

All motors conform to the "low voltage directive" 73/23/CEE.

Tutti i motori (a specifica richiesta) possono essere documentati con bollettini di collaudo.

(On request) all motors can be supplied with a test certificate.

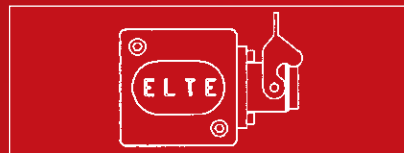


Bilanciatura asse

Standard con 1/2 chiavetta per utensile a una cava (A). Richiesta con chiavetta intera per utensile a due cave (B).

Axyz balance

Standard with 1/2 key for one slot tool (A). On request with full key for two slots tool (B).



A richiesta coprimorsettiera in alluminio 57x57 con connettore esterno come da disegno.

On request aluminium cable box 57x57 with external connector.

A blurred image of a man in a blue suit running on a red arrow graphic. The background is a textured, mottled blue and grey. The man is in motion, running towards the right. The red arrow is large and points towards the right. The text is overlaid on the right side of the image.

la nostra sfida...
l'alta velocità

our challenge...
high speed

PE

serie
standard

series
standard

KNS21

PE0

PE4

STK21

PE1-2

PE5

EVS31/40

PE3

□ Motori con attacco manuale per lavorazioni dove l'utensile viene caricato con una forza radiale. Ad esempio: bordatrici, intestatrici, scontornatici e rifilatrici.

Motors with manual coupling for use with radial loads. Typical applications: beading, facing, roughing, trimming, edge banding.

La serie di elettromandrini standard è stata progettata con dimensioni particolarmente ridotte, per soddisfare le richieste dei clienti. Dovendo eseguire lavorazioni sempre più complesse questi elettromandrini sono costruiti con tolleranze molto strette. Per raggiungere tale risultato ELTE® si è attrezzata con macchinari di alta precisione.

This series of electric spindles, equipped with various shafts, has been designed with reduced overall dimensions while still maintaining excellent efficiency. These motors are built to strict tolerances and applied to operations that require smooth finishes. ELTE®'s modern, precision machinery assures the highest quality products.

motori
motors

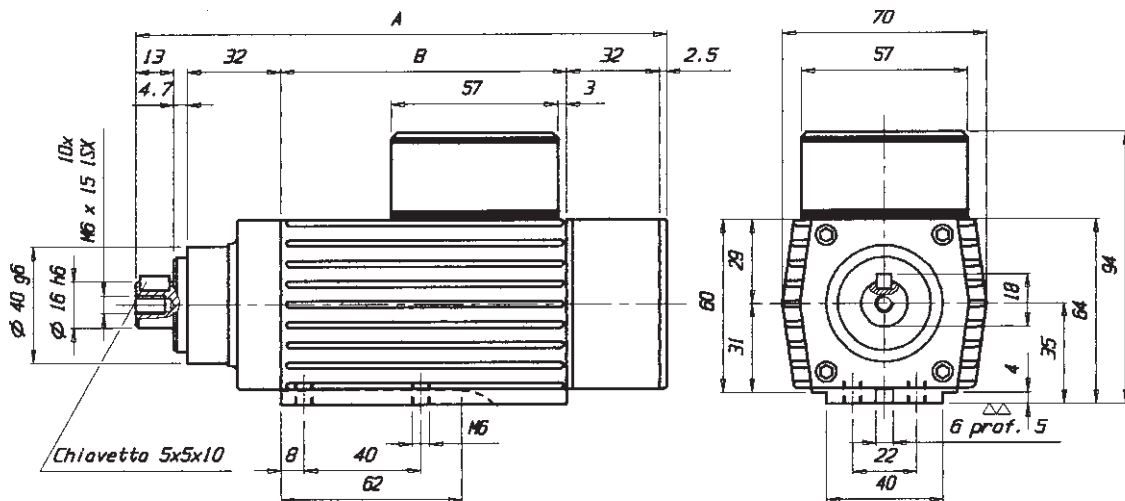
KNS21



Tipo Type	Tensione Voltage (Volt)			Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)			COS φ	Peso Weight (Kg)
	Standard	a richiesta on request					Standard	a richiesta on request			
KNS21 6/2	380	220	220/380	100	6000	0.09	0.40	0.7	0.7/0.40	0.65	1.8
KNS21 6/2	220	380	220/380	200	12000	0.16	1.10	0.64	1.10/0.64	0.70	1.8
KNS21 6/2	380	220	220/380	300	18000	0.22	1.00	1.73	1.73/1.00	0.70	1.8
KNS21 7/2	380	220	220/380	100	6000	0.11	0.49	0.85	0.85/0.49	0.65	2
KNS21 7/2	220	380	220/380	200	12000	0.22	1.50	0.85	1.50/0.85	0.70	2
KNS21 7/2	380	220	220/380	300	18000	0.33	1.20	2.10	2.10/1.20	0.70	2
KNS21 8.5/2	380	220	220/380	100	6000	0.22	0.86	1.50	1.50/0.86	0.65	2.5
KNS21 8.5/2	220	380	220/380	200	12000	0.37	2.30	1.30	2.30/1.30	0.70	2.5
KNS21 8.5/2	380	220	220/380	300	18000	0.55	1.85	3.20	3.20/1.85	0.70	2.5

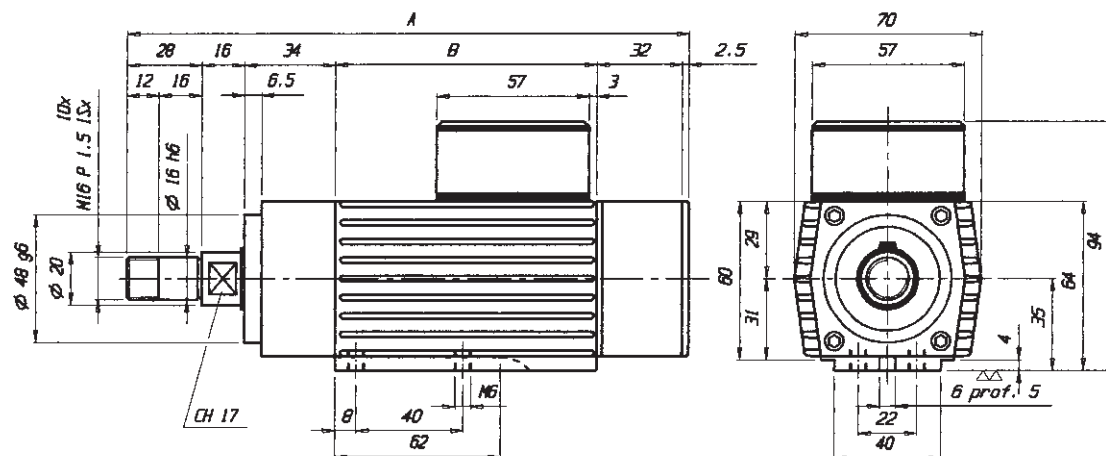
Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

KNS



Sporgenza SC
Nose type SC

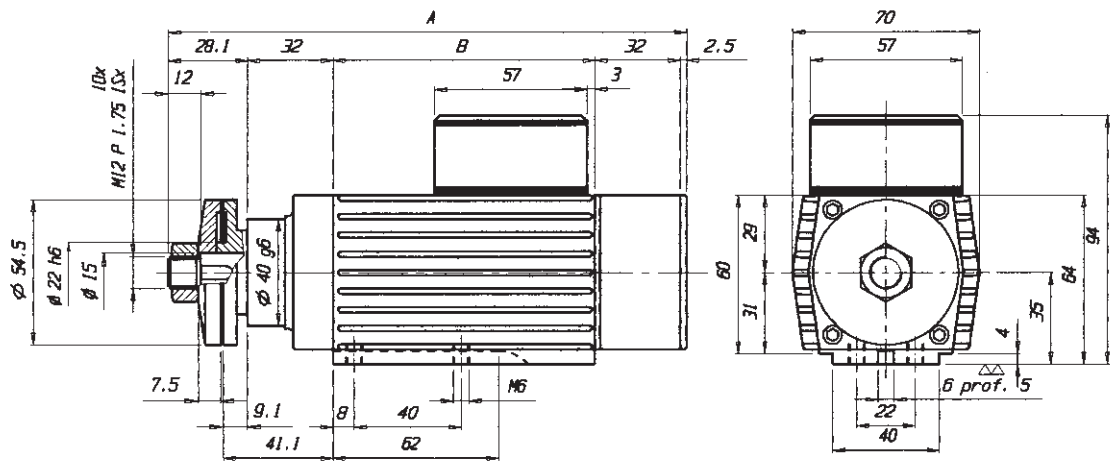
Tipo/Type	A	B
KNS21 6/2	182	98
KNS21 7/2	182	98
KNS21 8.5/2	217	133



Sporgenza SF
Nose type SF

Tipo/Type	A	B
KNS21 6/2	210.5	98
KNS21 7/2	210.5	98
KNS21 8.5/2	245.5	133

dimensioni



Sporgenza SCF
Nose type SCF

Tipo/Type	A	B
KNS21 6/2	192.5	98
KNS21 7/2	192.5	98
KNS21 8.5/2	227.5	133

dimensioni

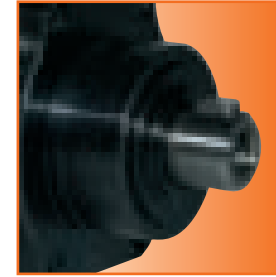
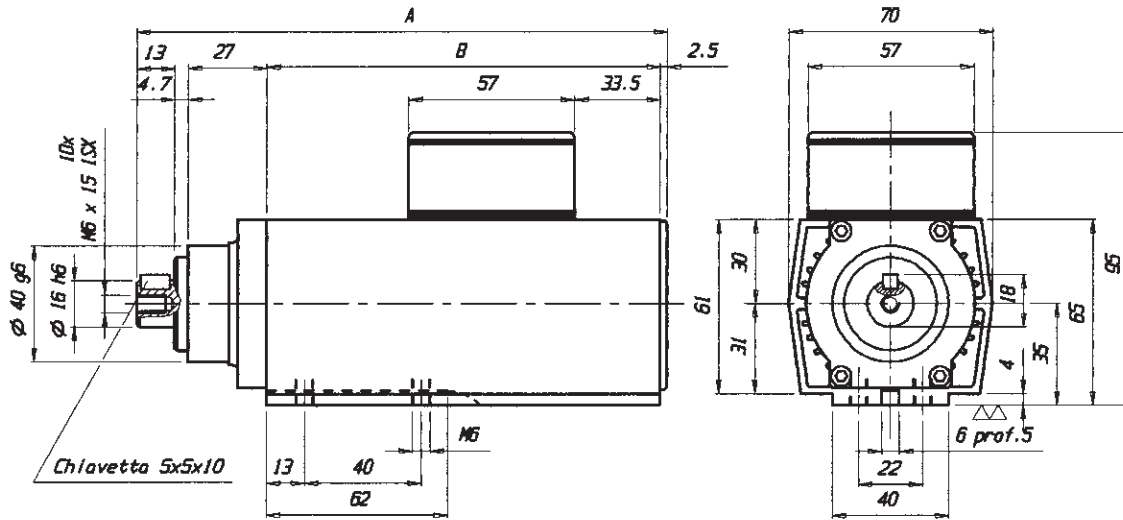
motori
motors

STK21



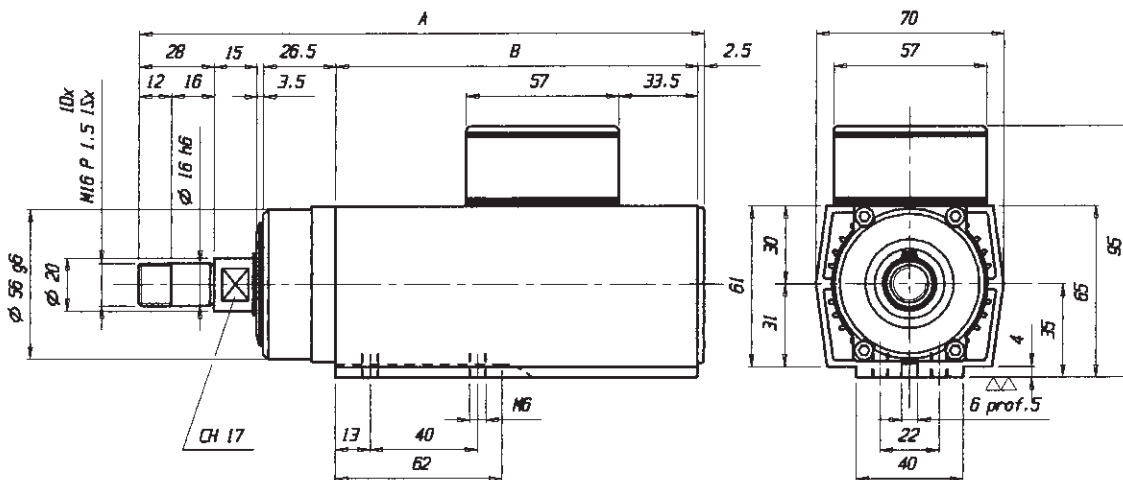
Tipo Type	Tensione Voltage (Volt)			Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)			COS φ	Peso Weight (Kg)
	Standard	a richiesta on request					Standard	a richiesta on request			
STK21 6.5/2	380	220	220/380	100	6000	0.13	0.58	1.00	1.00/0.58	0.63	2.5
STK21 6.5/2	220	380	220/380	200	12000	0.35	2.00	1.16	2.00/1.16	0.69	2.5
STK21 6.5/2	380	220	220/380	300	18000	0.41	1.27	2.20	2.20/1.27	0.70	2.5
STK21 9/2	380	220	220/380	100	6000	0.22	0.85	1.47	1.47/0.85	0.65	2.8
STK21 9/2	220	380	220/380	200	12000	0.55	2.55	1.50	2.55/1.50	0.70	2.8
STK21 9/2	380	220	220/380	300	18000	0.75	2.14	3.70	3.70/2.14	0.71	2.8

Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.



Sporgenza SC
Nose type SC

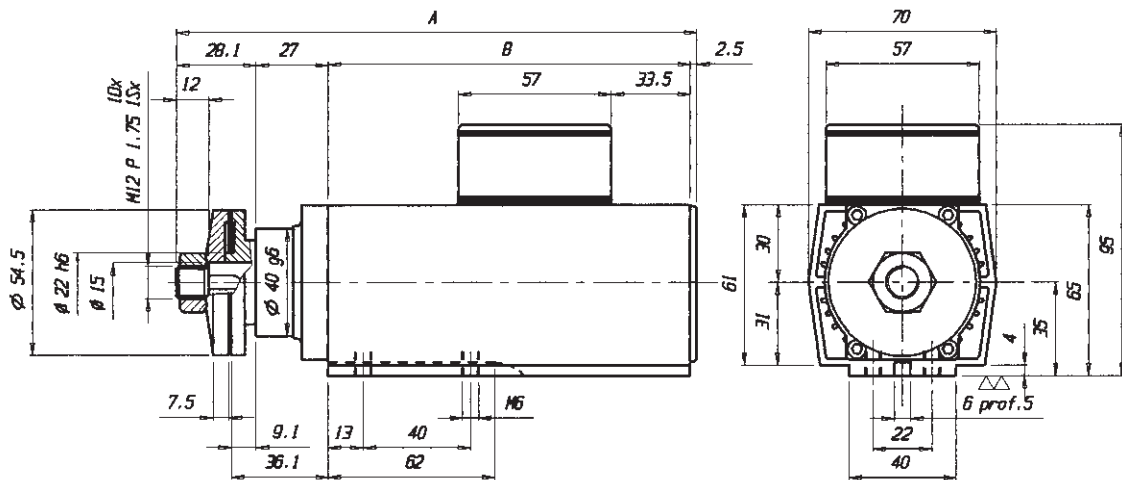
Tipo/Type	A	B
STK21 6.5/2	182	135
STK21 9/2	217	170



Sporgenza SF
Nose type SF

Tipo/Type	A	B
STK21 6.5/2	210.5	135
STK21 9/2	245.5	170

dimensioni



Sporgenza SCF
Nose type SCF

Tipo/Type	A	B
STK21 6.5/2	192.5	135
STK21 9/2	227.5	170

dimensioni

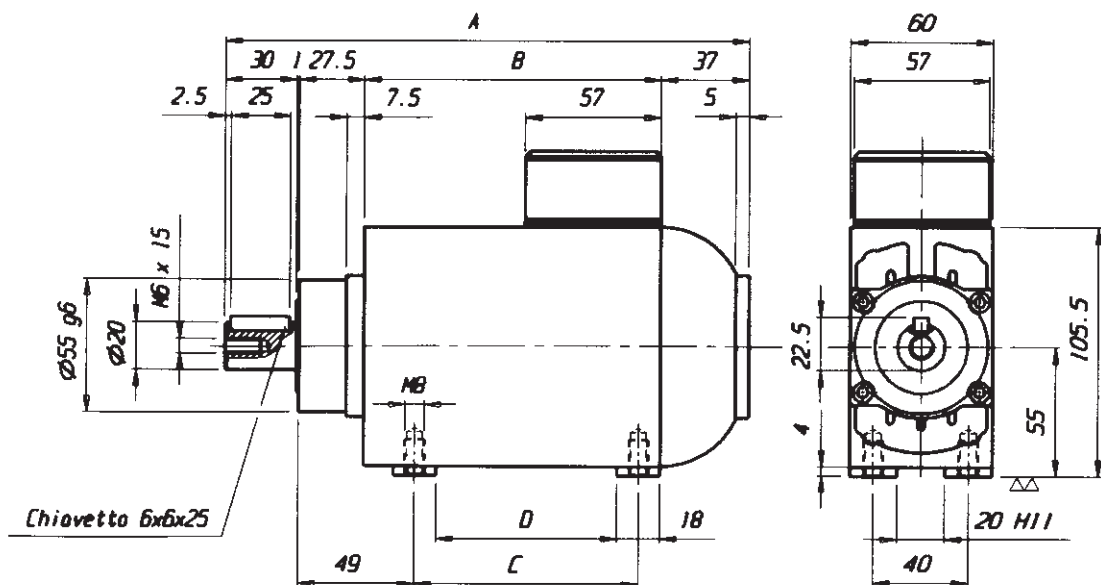
motori
motors

EVS31 EVS40



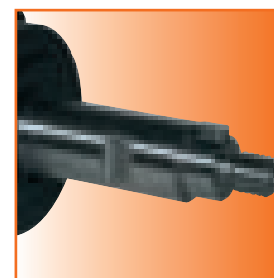
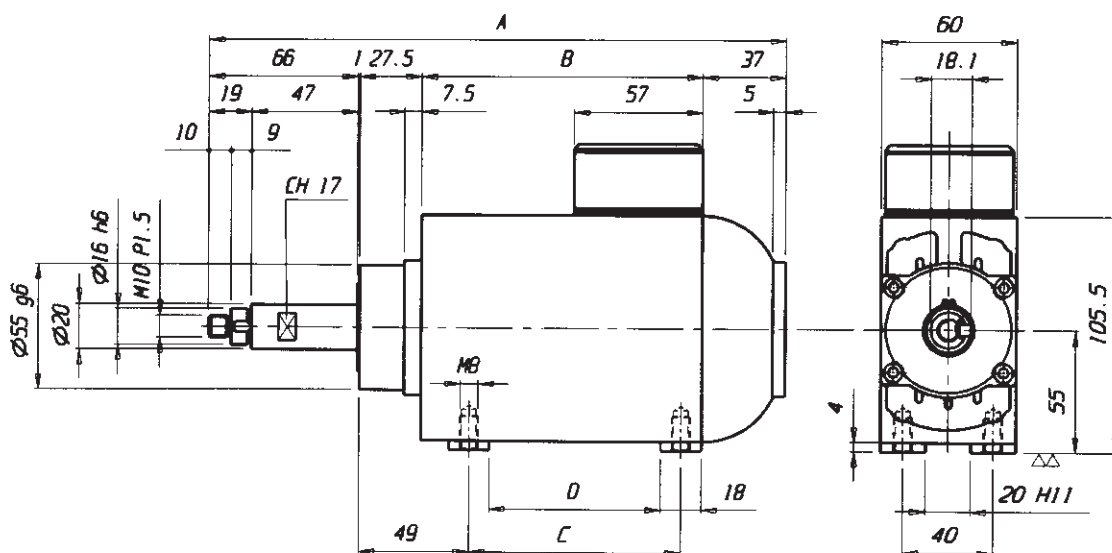
Tipo Type	Tensione Voltage (Volt)		Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)		COS φ	Peso Weight (Kg)
	Standard	a richiesta on request				Standard	a richiesta on request		
EVS31 6.5/2	380	220 220/380	100	6000	0.13	0.58	1.00 1.00/0.58	0.63	2.8
EVS31 6.5/2	220	380 220/380	200	12000	0.35	2.00	1.16 2.00/1.16	0.69	2.8
EVS31 6.5/2	380	220 220/380	300	18000	0.41	1.27	2.20 2.20/1.27	0.70	2.8
EVS31 9/2	380	220 220/380	100	6000	0.22	0.85	1.47 1.47/0.85	0.65	3.4
EVS31 9/2	220	380 220/380	200	12000	0.55	2.55	1.50 2.55/1.50	0.70	3.4
EVS31 9/2	380	220 220/380	300	18000	0.75	2.14	3.70 3.70/2.14	0.71	3.4
EVS40 9/2	220/380	220 380	50	3000	0.20	1.50/0.90	1.50 0.90	0.70	5.8
EVS40 9/2	380	220 220/380	100	6000	0.45	1.40	2.40 2.40/1.40	0.75	5.8
EVS40 9/2	220	380 220/380	200	12000	0.75	4.00	2.30 4.00/2.30	0.75	5.8
EVS40 9/2	380	220 220/380	300	18000	1.00	3.20	5.50 5.50/3.20	0.75	5.8
EVS40 12/2	220/380	220 380	50	3000	0.30	1.70/1.00	1.70 1.00	0.70	7
EVS40 12/2	380	220 220/380	100	6000	0.75	1.90	3.30 3.30/1.90	0.75	7
EVS40 12/2	220	380 220/380	200	12000	1.50	6.30	3.60 6.30/3.60	0.79	7
EVS40 12/2	380	220 220/380	300	18000	2.00	5.20	9.00 9.00/5.20	0.80	7
EVS40 14/2	220/380	220 380	50	3000	0.45	2.78/1.60	2.78 1.60	0.68	8.2
EVS40 14/2	380	220 220/380	100	6000	0.95	2.52	4.36 4.36/2.52	0.73	8.2
EVS40 14/2	220	380 220/380	200	12000	1.80	8.20	4.70 8.20/4.70	0.70	8.2
EVS40 14/2	380	220 220/380	300	18000	2.20	5.80	10.00 10.00/5.80	0.73	8.2

Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.



Sporgenza SC
Nose type SC

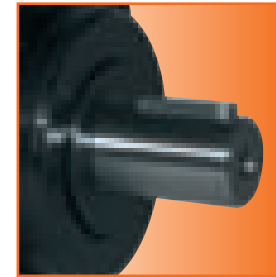
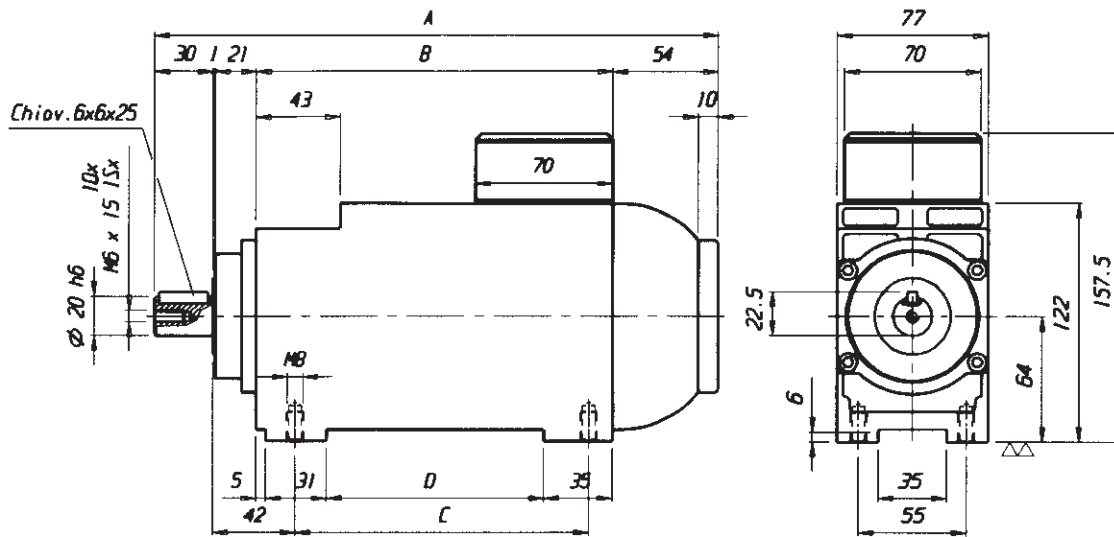
Tipo/Type	A	B	C	D
EVS31 6.5/2	215	119.5	90	72
EVS31 9/2	245	149.5	120	102



Sporgenza SLF
Nose type SLF

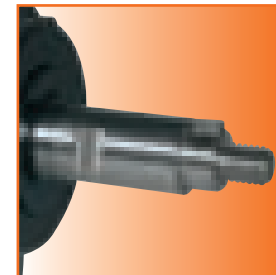
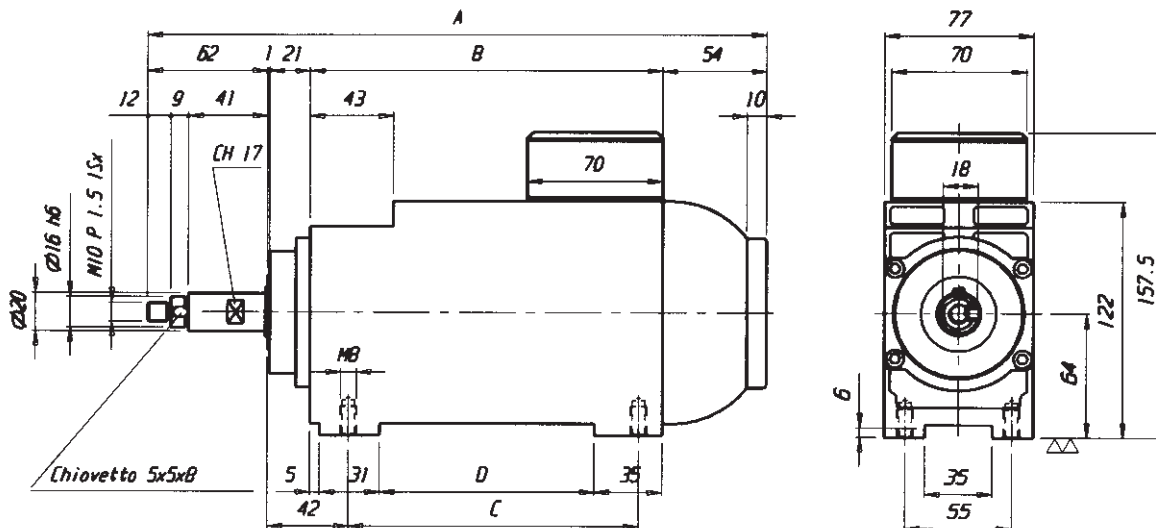
Tipo/Type	A	B	C	D
EVS31 6.5/2	251	119.5	90	72
EVS31 9/2	281	149.5	120	102

dimensioni



Sporgenza SC
Nose type SC

Tipo/Type	A	B	C	D
EVS40 9/2	288	182	150	111
EVS40 12/2	348	242	210	171
EVS40 14/2	348	242	210	171



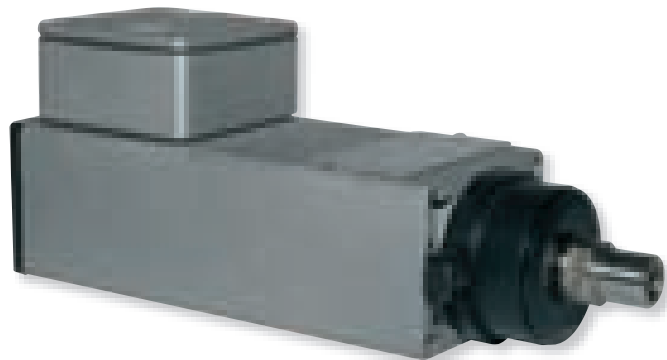
Sporgenza SLF
Nose type SLF

Tipo/Type	A	B	C	D
EVS40 9/2	320	182	150	111
EVS40 12/2	380	242	210	171
EVS40 14/2	380	242	210	171

dimensioni

motori
motors

PEO

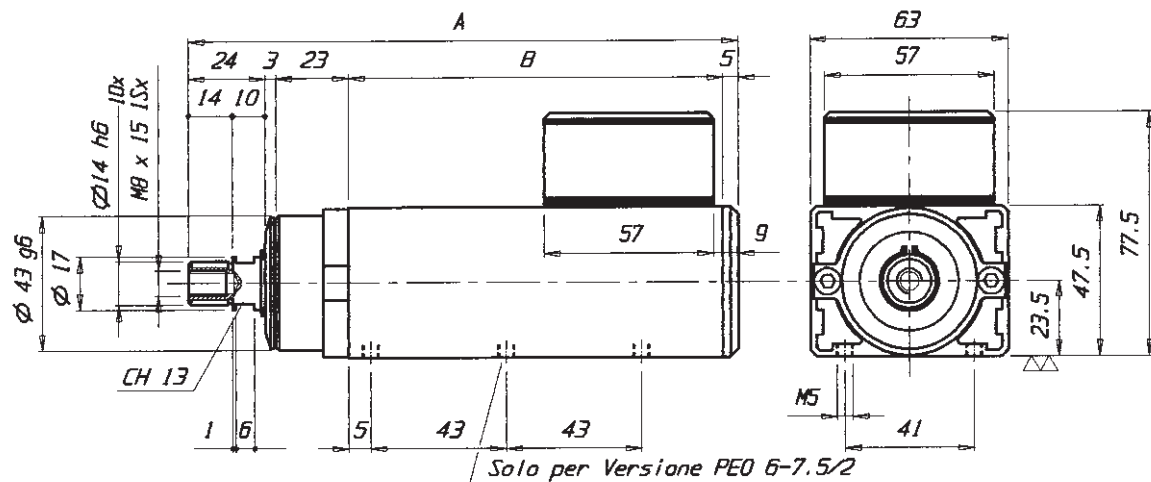


Tipo Type	Tensione Voltage (Volt)			Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)			COS φ	Peso Weight (Kg)
	Standard	a richiesta on request					Standard	a richiesta on request			
PEO 3.5/2	220	380	220/380	200	12000	0.08	0.60	0.34	0.60/0.34	0.65	1.2
PEO 3.5/2	380	220	220/380	300	18000	0.12	0.45	0.78	0.78/0.45	0.69	1.2
PEO 6/2	380	220	220/380	100	6000	0.05	0.26	0.45	0.45/0.26	0.61	1.5
PEO 6/2	220	380	220/380	200	12000	0.15	0.80	0.45	0.80/0.45	0.68	1.5
PEO 6/2	380	220	220/380	300	18000	0.30	1.00	1.70	1.70/1.00	0.70	1.5
PEO 8/2	380	220	220/380	100	6000	0.07	0.32	0.55	0.55/0.32	0.61	1.8
PEO 8/2	220	380	220/380	200	12000	0.18	1.20	0.69	1.20/0.69	0.64	1.8
PEO 8/2	380	220	220/380	300	18000	0.35	1.00	1.70	1.70/1.00	0.70	1.8

Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

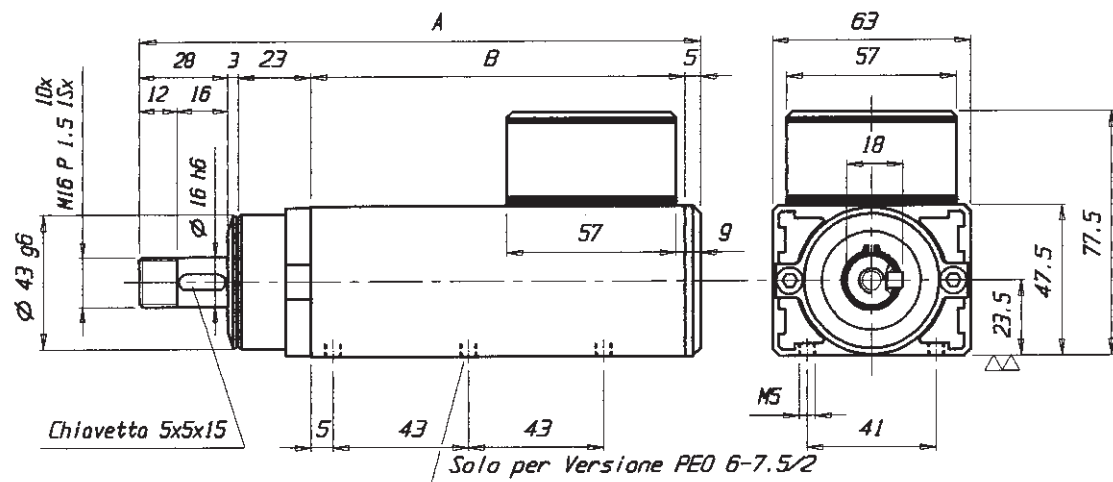
Per frequenze superiori contattare nostro ufficio tecnico.
For higher frequencies please contact our technical dept.

PEO



Sporgenza SL
Nose type SL

Tipo/Type	A	B
PEO 3.5/2	174	119
PEO 6/2	199	144
PEO 8/2	214	159



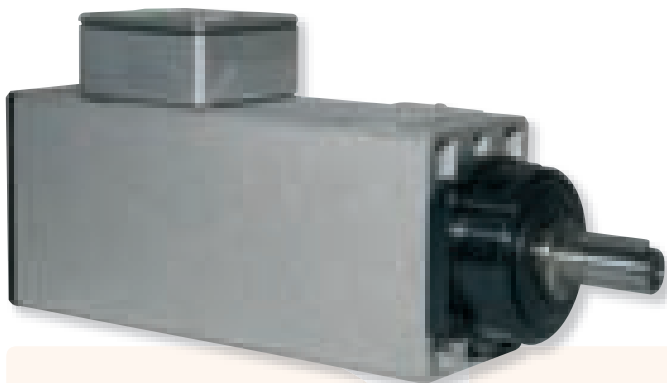
Sporgenza SF
Nose type SF

Tipo/Type	A	B
PEO 3.5/2	178	119
PEO 6/2	203	144
PEO 8/2	218	159

dimensioni

motori
motors

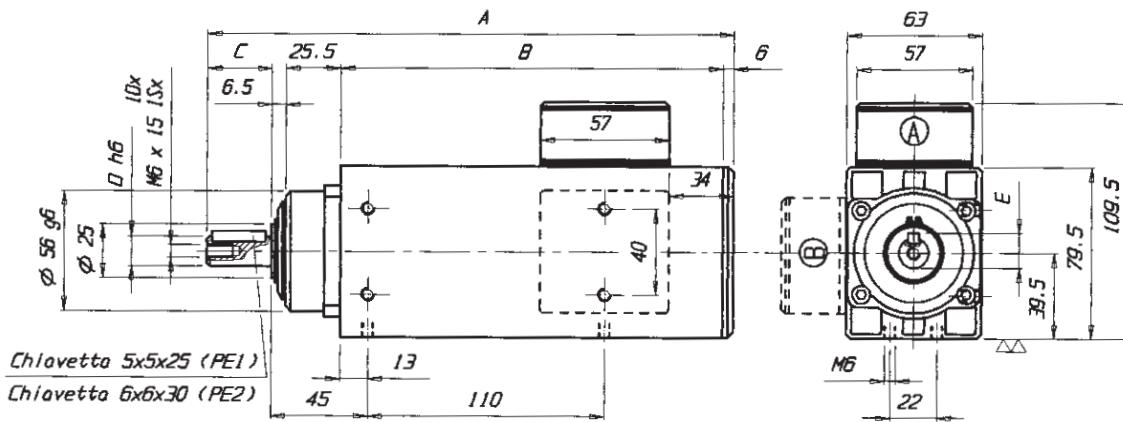
PE1-2



Tipo Type	Tensione Voltage (Volt)		Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)			COS φ	Peso Weight (Kg)
	Standard	a richiesta on request				Standard	a richiesta on request			
PE1 6/2	380	220 220/380	100	6000	0.07	0.25	0.43	0.43/0.25	0.70	2.7
PE1 6/2	220	380 220/380	200	12000	0.16	1.35	0.78	1.35/0.78	0.70	2.7
PE1 6/2	380	220 220/380	300	18000	0.22	1.25	2.20	2.20/1.25	0.70	2.7
PE1 7/2	380	220 220/380	100	6000	0.10	0.40	0.70	0.70/0.40	0.70	3
PE1 7/2	220	380 220/380	200	12000	0.22	1.65	0.95	1.65/0.95	0.70	3
PE1 7/2	380	220 220/380	300	18000	0.33	1.40	2.40	2.40/1.40	0.70	3
PE1 8.5/2	380	220 220/380	100	6000	0.22	0.78	1.35	1.35/0.78	0.68	3.3
PE1 8.5/2	220	380 220/380	200	12000	0.37	2.00	1.15	2.00/1.15	0.69	3.3
PE1 8.5/2	380	220 220/380	300	18000	0.55	1.73	3.00	3.00/1.73	0.70	3.3
PE2 9/2	220/380	220 380	50	3000	0.10	0.85/0.50	0.85	0.50	0.60	3.5
PE2 9/2	380	220 220/380	100	6000	0.22	0.85	1.47	1.47/0.85	0.65	3.5
PE2 9/2	220	380 220/380	200	12000	0.55	2.60	1.50	2.60/1.50	0.73	3.5
PE2 9/2	380	220 220/380	300	18000	0.75	3.70	1.70	3.70/2.15	0.71	3.5

Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

Per frequenze superiori contattare nostro ufficio tecnico.
For higher frequencies please contact our technical dept.

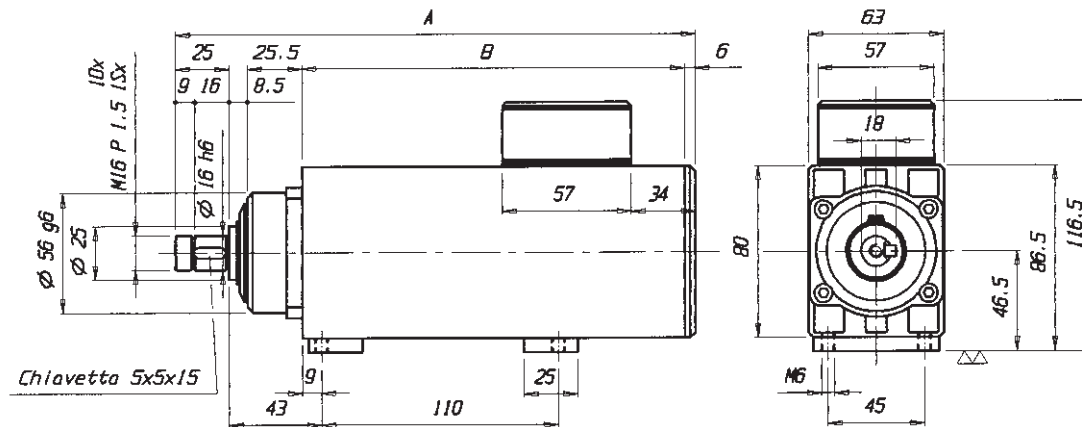


NB: Posizione morsettieria standard come da posizione "A" con forature lato stretto. Su richiesta in posizione "B" con forature lato largo.
 NB: Standard terminal box in "A" position with fixing holes on narrow part. On request terminal box in "B" position with fixing holes on wide part.



Sporgenza SC
Nose type SC

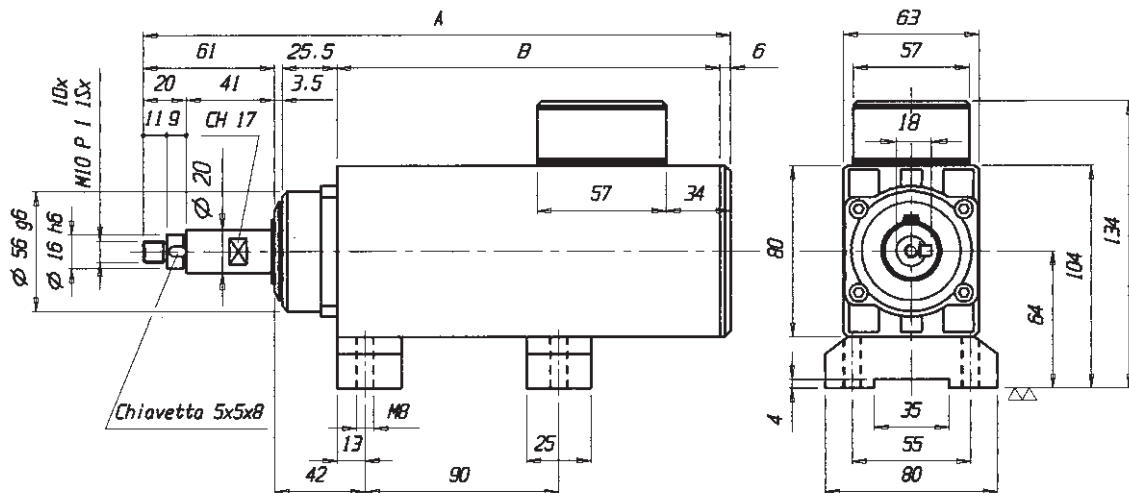
Tipo/Type	A	B	C	D	E
PE1 6/2	246	178	30	14	16
PE1 7/2	246	178	30	14	16
PE1 8.5/2	246	178	30	14	16
PE2 9/2	275	197	40	20	22.5



Sporgenza SF
Nose type SF

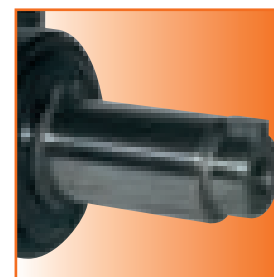
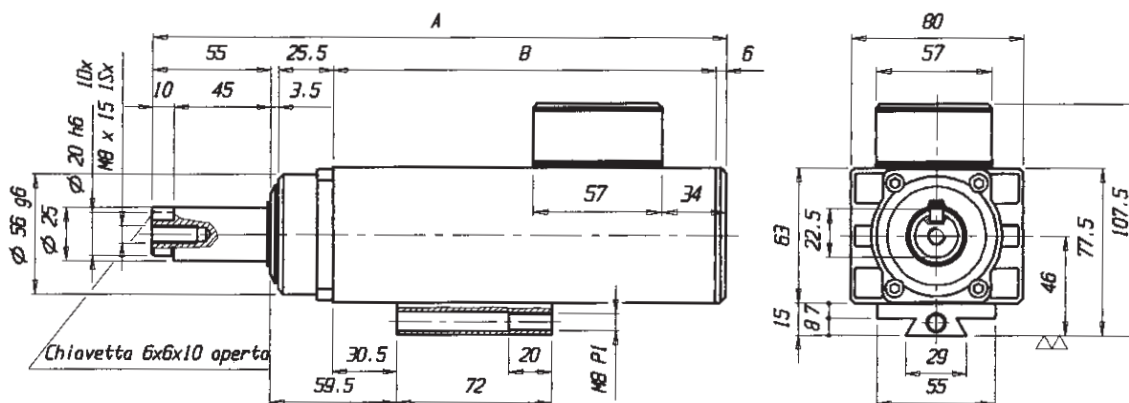
Tipo/Type	A	B
PE1 6/2	243	178
PE1 7/2	243	178
PE1 8.5/2	243	178
PE2 9/2	262	197

dimensioni



Sporgenza SLF
Nose type SLF

Tipo/Type	A	B
PE1 6/2	274	178
PE1 7/2	274	178
PE1 8.5/2	274	178
PE2 9/2	293	197



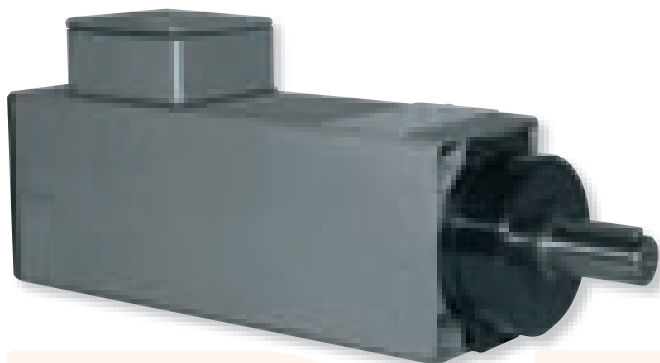
Sporgenza SL
Nose type SL

Tipo/Type	A	B
PE1 6/2	268	178
PE1 7/2	268	178
PE1 8.5/2	268	178
PE2 9/2	287	197

dimensioni

motori
motors

PE3



Tipo Type	Tensione Voltage (Volt)			Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)			COS φ	Peso Weight (Kg)
	Standard	a richiesta on request					Standard	a richiesta on request			
PE3 7/2	220/380	220	380	50	3000	0.15	1.35/0.78	0.35	0.78	0.68	3.7
PE3 7/2	380	220	220/380	100	6000	0.30	1.00	1.73	1.73/1.00	0.68	3.7
PE3 7/2	220	380	220/380	200	12000	0.60	3.41	1.97	3.41/1.97	0.68	3.7
PE3 7/2	380	220	220/380	300	18000	0.85	2.70	4.60	4.60/2.70	0.70	3.7
PE3 9/2	220/380	220	380	50	3000	0.20	1.50/0.90	1.50	0.90	0.70	4.8
PE3 9/2	380	220	220/380	100	6000	0.45	1.40	2.40	2.40/1.40	0.75	4.8
PE3 9/2	220	380	220/380	200	12000	0.75	4.00	2.30	4.00/2.30	0.75	4.8
PE3 9/2	380	220	220/380	300	18000	1.00	3.20	5.50	5.50/3.20	0.75	4.8
PE3 12/2	220/380	220	380	50	3000	0.30	1.70/1.00	1.70	1.00	0.70	6.5
PE3 12/2	380	220	220/380	100	6000	0.75	1.90	3.30	3.30/1.90	0.75	6.5
PE3 12/2	220	380	220/380	200	12000	1.50	6.30	3.60	6.30/3.60	0.79	6.5
PE3 12/2	380	220	220/380	300	18000	2.00	5.20	9.00	9.00/5.20	0.80	6.5
PE3 14/2	220/380	220	380	50	3000	0.45	2.78/1.60	2.78	1.60	0.68	7.5
PE3 14/2	380	220	220/380	100	6000	0.95	2.52	4.36	4.36/2.52	0.73	7.5
PE3 14/2	220	380	220/380	200	12000	1.80	8.20	4.70	8.20/4.70	0.70	7.5
PE3 14/2	380	220	220/380	300	18000	2.20	5.80	10.00	10.00/5.80	0.73	7.5

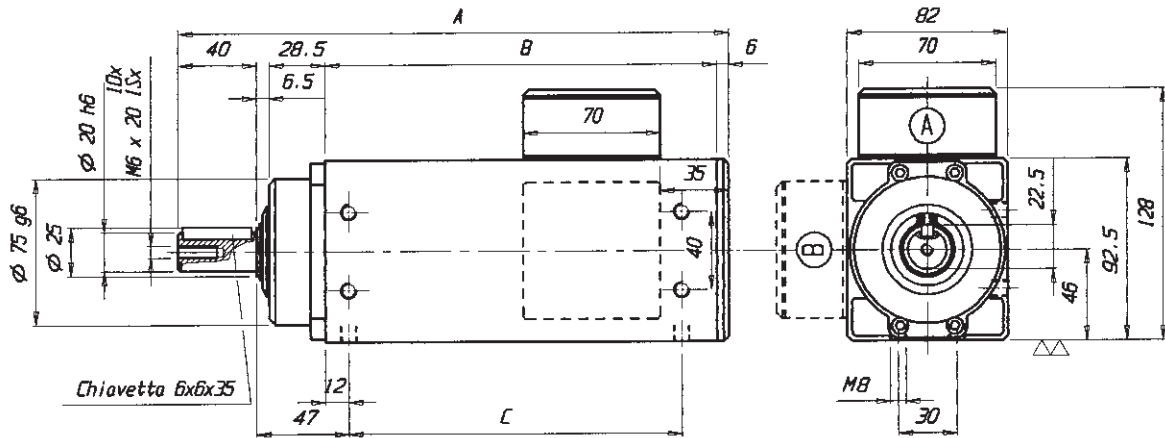
Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.

For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

Per frequenze superiori contattare nostro ufficio tecnico.

For higher frequencies please contact our technical dept.

PE3

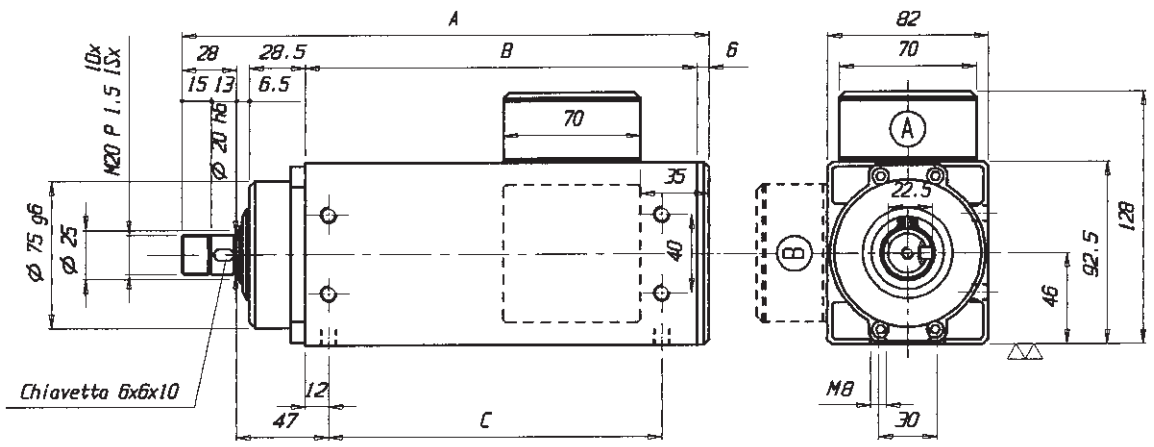


NB: Posizione morsetteria standard come da posizione "A" con forature lato stretto. Su richiesta in posizione "B" con forature lato largo.
 NB: Standard terminal box in "A" position with fixing holes on narrow part. On request terminal box in "B" position with fixing holes on wide part.



Sporgenza SC
 Nose type SC

Tipo/Type	A	B	C
PE3 7/2	261	180	150
PE3 9/2	281	200	170
PE3 12/2	321	240	170
PE3 14/2	321	240	170



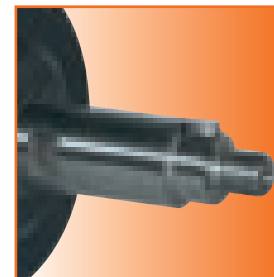
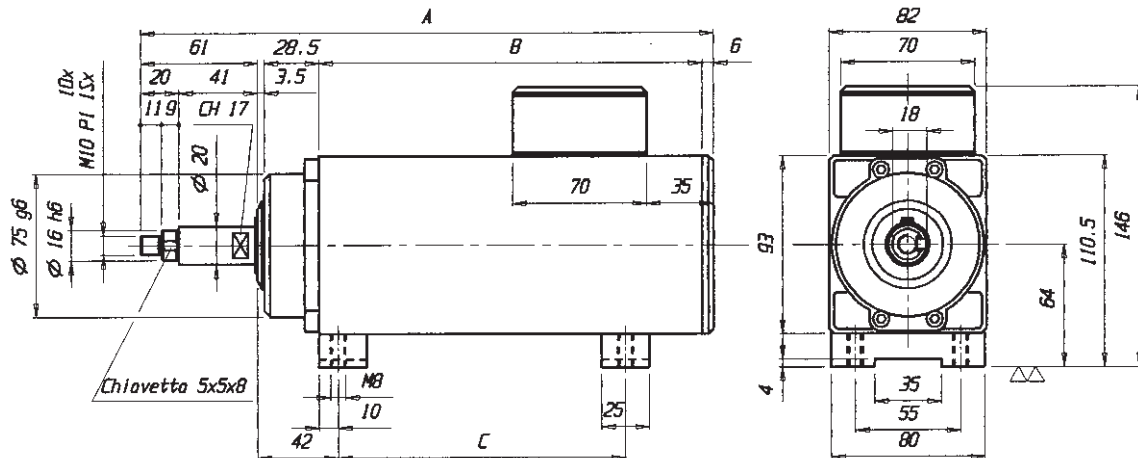
NB: Posizione morsetteria standard come da posizione "A" con forature lato stretto. Su richiesta in posizione "B" con forature lato largo.
 NB: Standard terminal box in "A" position with fixing holes on narrow part. On request terminal box in "B" position with fixing holes on wide part.



Sporgenza SF
 Nose type SF

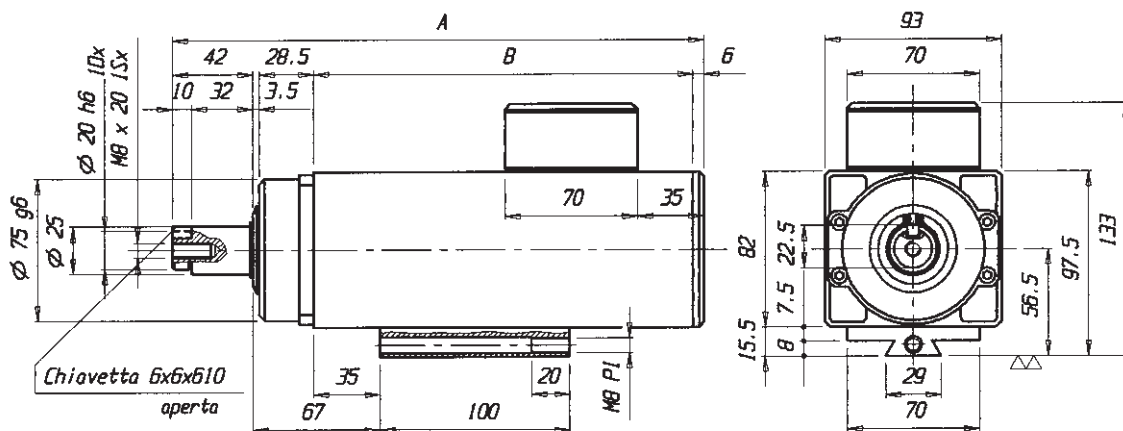
Tipo/Type	A	B	C
PE3 7/2	249	180	150
PE3 9/2	269	200	170
PE3 12/2	309	240	170
PE3 14/2	309	240	170

dimensioni



Sporgenza SLF
Nose type SLF

Tipo/Type	A	B	C
PE3 7/2	279	180	90
PE3 9/2	299	200	150
PE3 12/2	339	240	150
PE3 14/2	339	240	150



Sporgenza SL
Nose type SL

Tipo/Type	A	B
PE3 7/2	260	180
PE3 9/2	280	200
PE3 12/2	320	240
PE3 14/2	320	240

dimensioni

motori
motors

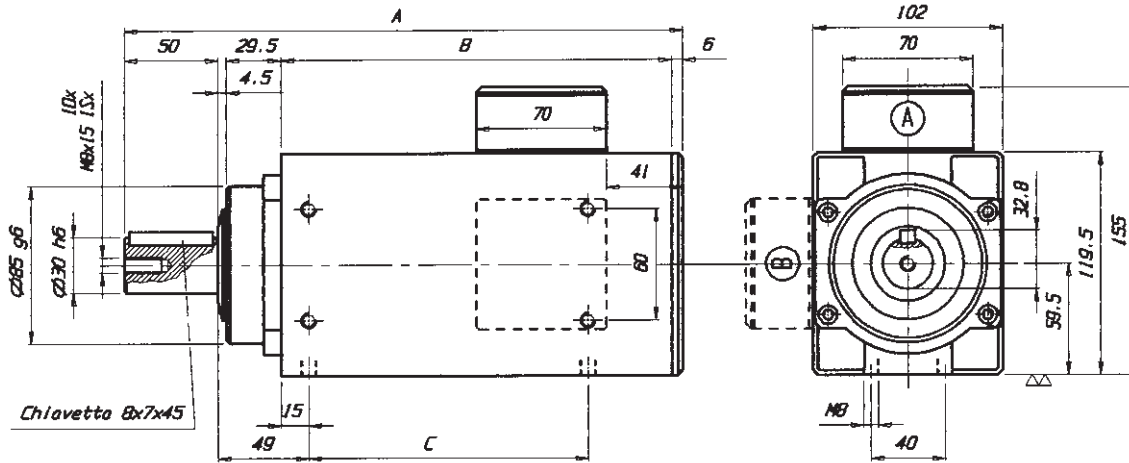
PE4



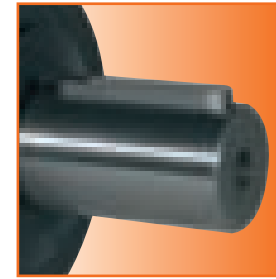
Tipo Type	Tensione Voltage (Volt)		Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)		COS φ	Peso Weight (Kg)
	Standard	a richiesta on request				Standard	a richiesta on request		
PE4 10/2	220/380	220 380	50	3000	0.65	3.30/1.90	3.30 1.90	0.72	9
PE4 10/2	380	220 220/380	100	6000	1.10	2.80	4.90 4.90/2.80	0.77	9
PE4 10/2	220	380 220/380	200	12000	2.20	9.70	5.60 9.70/5.60	0.77	9
PE4 10/2	380	220 220/380	300	18000	3.30	7.90	13.70 13.70/7.90	0.80	9
PE4 11/2	220/380	220 380	50	3000	0.75	3.50/2.00	3.50 2.00	0.74	9.8
PE4 11/2	380	220 220/380	100	6000	1.50	3.80	6.60 6.60/3.80	0.75	9.8
PE4 11/2	220	380 220/380	200	12000	2.60	10.40	6.00 10.40/6.00	0.83	9.8
PE4 11/2	380	220 220/380	300	18000	3.30	7.80	13.40 13.40/7.80	0.82	9.8
PE4 13/2	220/380	220 380	50	3000	1.00	4.90/2.85	4.90 2.85	0.77	11.2
PE4 13/2	380	220 220/380	100	6000	2.00	4.45	7.70 7.70/4.45	0.82	11.2
PE4 13/2	220	380 220/380	200	12000	3.00	12.50	7.20 12.50/7.20	0.80	11.2
PE4 13/2	380	220 220/380	300	18000	4.00	9.50	16.40 16.40/9.50	0.80	11.2
PE4 14/2	220/380	220 380	50	3000	1.10	5.50/3.15	5.50 3.15	0.72	12
PE4 14/2	380	220 220/380	100	6000	2.20	5.50	9.50 9.50/5.50	0.77	12
PE4 14/2	220	380 220/380	200	12000	3.70	15.00	8.70 15.00/8.70	0.78	12
PE4 14/2	380	220 220/380	300	18000	5.60	11.50	20.00 20.00/11.50	0.85	12

Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

Per frequenze superiori contattare nostro ufficio tecnico.
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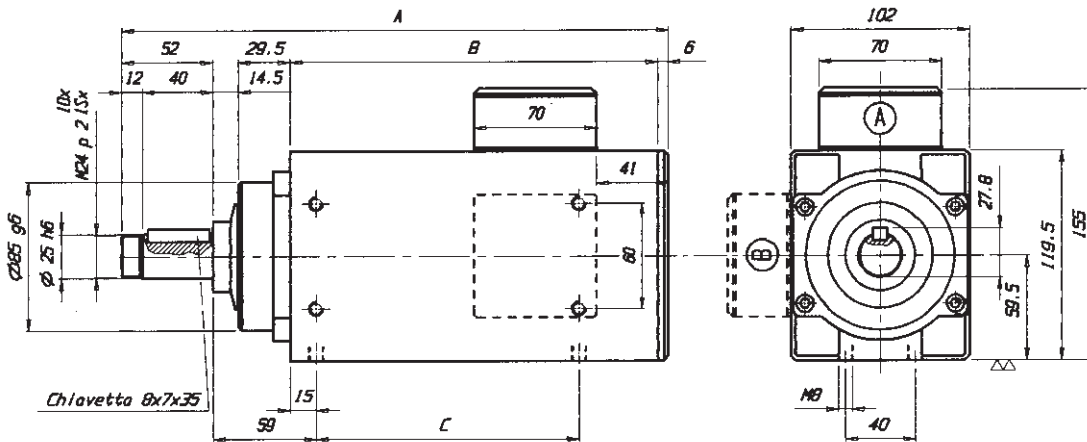


NB: Posizione morsettiera standard come da posizione "A" con forature lato stretto. Su richiesta in posizione "B" con forature lato largo.
 NB: Standard terminal box in "A" position with fixing holes on narrow part. On request terminal box in "B" position with fixing holes on wide part.



Sporgenza SC
 Nose type SC

Tipo/Type	A	B	C
PE4 10/2	300	210	150
PE4 11/2	340	250	200
PE4 13/2	340	250	200
PE4 14/2	340	250	200



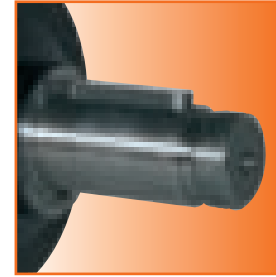
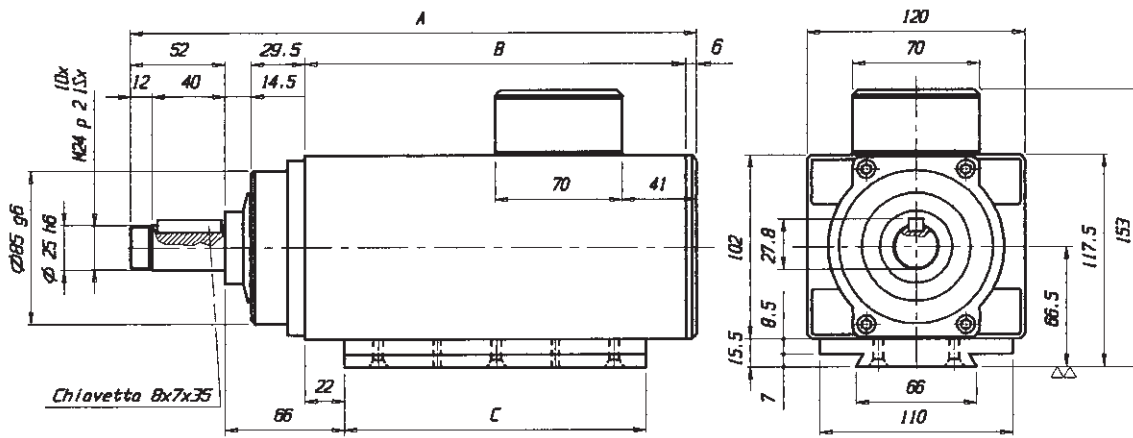
NB: Posizione morsettiera standard come da posizione "A" con forature lato stretto. Su richiesta in posizione "B" con forature lato largo.
 NB: Standard terminal box in "A" position with fixing holes on narrow part. On request terminal box in "B" position with fixing holes on wide part.



Sporgenza SF
 Nose type SF

Tipo/Type	A	B	C
PE4 10/2	312	210	150
PE4 11/2	352	250	200
PE4 13/2	352	250	200
PE4 14/2	352	250	200

dimensioni



Sporgenza SFC
Nose type SFC

Tipo/Type	A	B	C
PE4 10/2	312	210	165
PE4 11/2	352	250	205
PE4 13/2	352	250	205
PE4 14/2	352	250	205

dimensioni

motori
motors

PE5



Tipo Type	Tensione Voltage (Volt)			Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)			COS φ	Peso Weight (Kg)
	Standard	a richiesta on request					Standard	a richiesta on request			
PE5 10/2	220/380	220	380	50	3000	1.25	5.60/3.20	5.60	3.20	0.78	12.5
PE5 10/2	380	220	220/380	100	6000	1.90	4.35	7.55	7.55/4.35	0.83	12.5
PE5 10/2	220	380	220/380	200	12000	3.00	12.3	7.10	12.3/7.10	0.80	12.5
PE5 10/2	380	220	220/380	300	18000	4.50	10	18	18/10	0.81	12.5
PE5 14/2	220/380	220	380	50	3000	3.00	11.5/6.60	11.50	6.60	0.82	20
PE5 14/2	380	220	220/380	100	6000	4.00	8.80	15.2	15.2/8.80	0.84	20
PE5 14/2	220	380	220/380	200	12000	4.50	18.2	10.60	18.2/10.60	0.85	20
PE5 14/2	380	220	220/380	300	18000	7.00	14.50	25.00	25.00/14.50	0.86	20

Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

Per frequenze superiori contattare nostro ufficio tecnico.
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PE5

nomenclatura parti motore serie PE

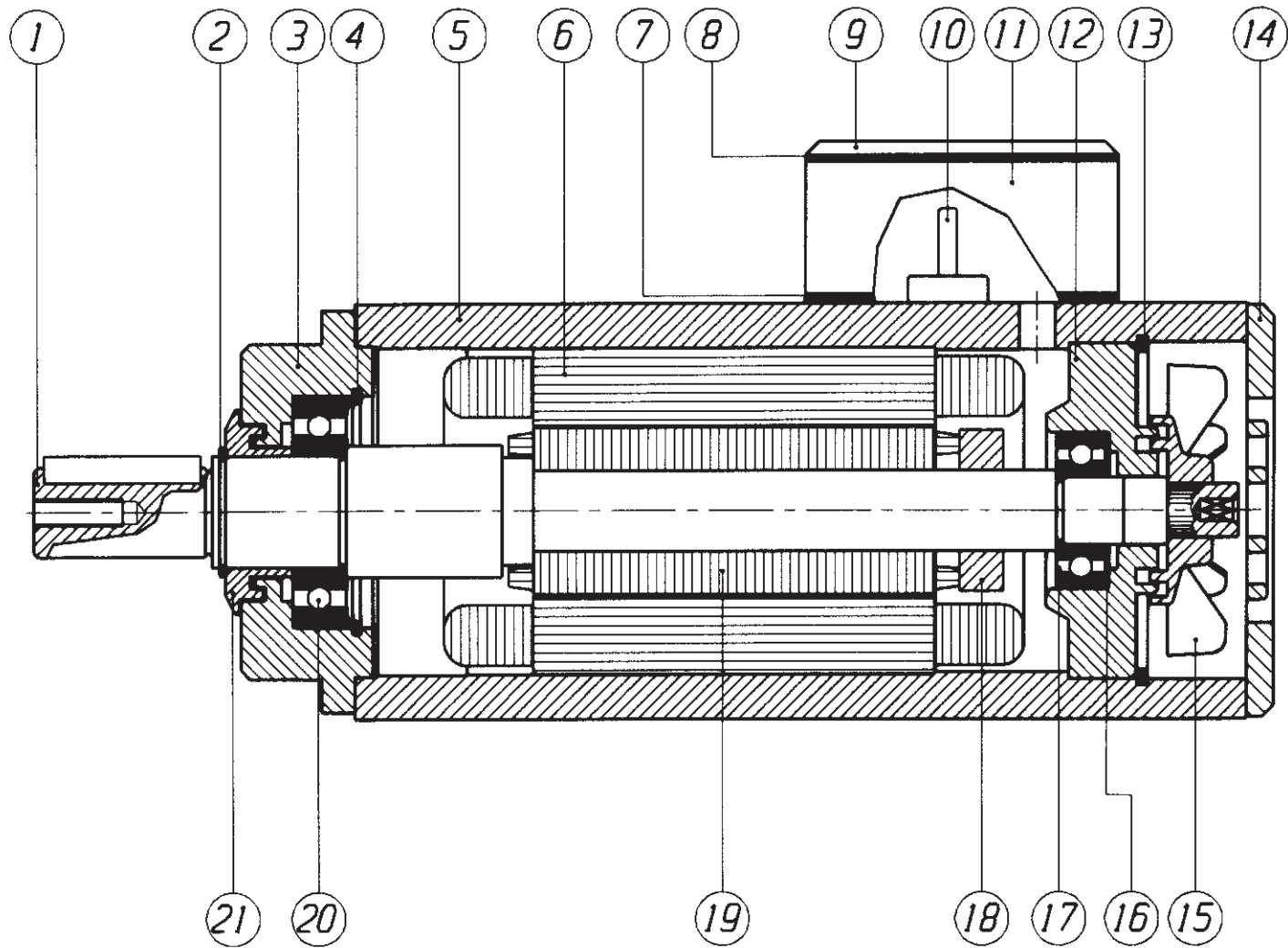
parts nomenclature series PE

Descrizione del particolare

1	Albero
2	Seeger
3	Coperchio anteriore
4	Seeger per interni
5	Carcassa
6	Statore avvolto
7	Guarnizione base
8	Guarnizione coperchio
9	Coperchio coprimorsettiera
10	Morsettiera
11	Coprimorsettiera
12	Coperchio posteriore
13	Seeger per interni
14	Piastrina copriventola
15	Ventola
16	Molla di compensazione
17	Cuscinetto posteriore
18	Bussola di bilanciatura
19	Rotore
20	Cuscinetto anteriore
21	Labirinto

Descriptions of the part

1	Shaft
2	Snap ring
3	Front cover
4	Internal snap ring
5	Frame
6	Wound stator
7	Gasket
8	Cover gasket
9	Terminal board cover
10	Terminal board
11	Terminal cover
12	Rear cover
13	Internal snap ring
14	Fan cover plate
15	Fan
16	Compensation spring
17	Rear bearing
18	Balancing bush
19	Rotor
20	Front bearing
21	Labirynth seal





TMPE

serie
con attacco a pinza

collet interface
series

□ Motori per impieghi con carichi assiali e radiali dell'utensile.
Ad esempio: foratrici, levigatrici, fresatrici, scanalatrici.

Motors for use with axial and radial tool loads.
Typical applications: Drilling, Grinding, Milling, Routing.

La serie con attacco a pinza si rivolge ad una clientela che deve eseguire lavorazioni particolarmente gravose con alta precisione. Per sopportare carichi assiali e radiali elevati e per ottenere grande precisione, questi elettromandri vengono assemblati utilizzando coppie di cuscinetti a contatto obliquo, dotate di grande precisione e resistenza. Questi elettromandri sono predisposti per l'accoppiamento con pinze elastiche e relative ghiera che ELTE® fornisce bilanciate e rettificate.

This series of electric spindles, equipped for ER collets, is used in applications for and mills, drills, and cutters. They are equipped with 2 sets of high precision angular ball bearings to support heavy axial and radial loads. These spindles can be supplied with a balanced collet ring nut as an option.

TMPE0

TMPE3

TMPE5

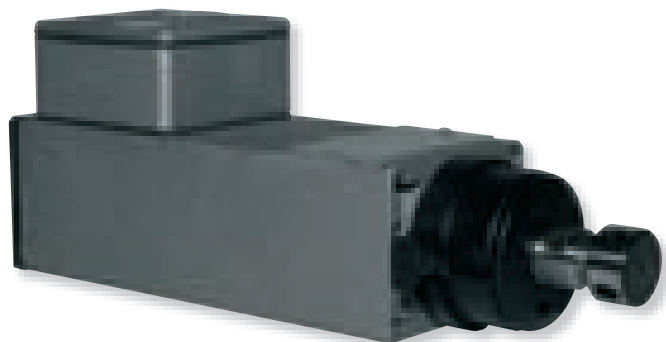
TMPE1/2

TMPE4

TMPE6

elettromandrini
electric spindles

TMPEO

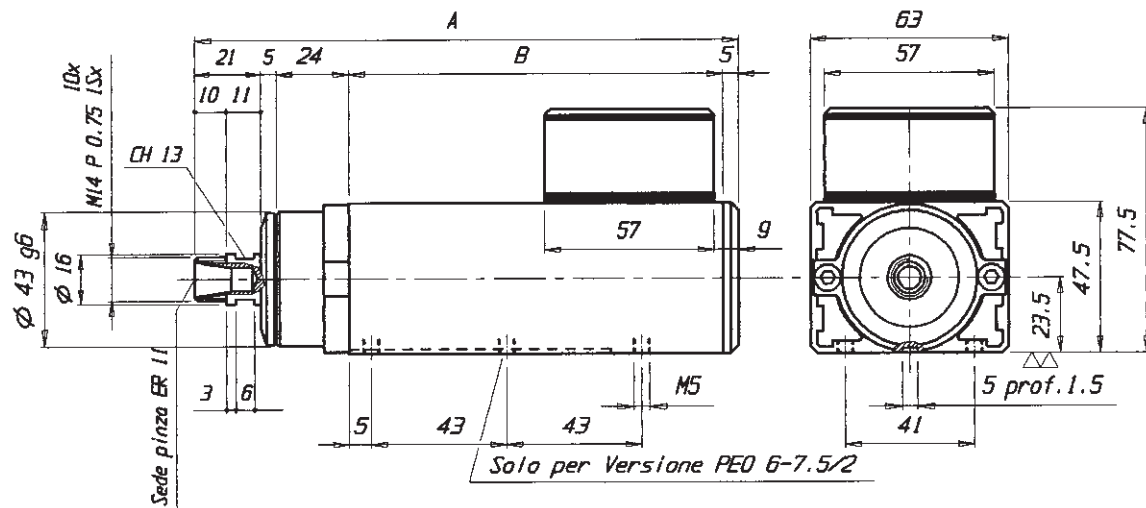


Tipo Type	Tensione Voltage (Volt)		Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)		COS φ	Peso Weight (Kg)
	Standard	a richiesta on request				Standard	a richiesta on request		
TMPEO 3.5/2	220	380 220/380	200	12000	0.08	0.60	0.34 0.60/0.34	0.65	1.4
TMPEO 3.5/2	380	220 220/380	300	18000	0.12	0.45	0.78 0.78/0.45	0.69	1.4
TMPEO 3.5/2	380	220 220/380	400	24000	0.15	0.52	0.90 0.90/0.52	0.70	1.4
TMPEO 6/2	380	220 220/380	100	6000	0.05	0.26	0.45 0.45/0.26	0.61	1.7
TMPEO 6/2	220	380 220/380	200	12000	0.15	0.80	0.45 0.80/0.45	0.68	1.7
TMPEO 6/2	380	220 220/380	300	18000	0.30	1.00	1.70 1.70/1.00	0.70	1.7
TMPEO 6/2	380	220 220/380	400	24000	0.35	1.10	1.90 1.90/1.10	0.70	1.7
TMPEO 8/2	380	220 220/380	100	6000	0.07	0.32	0.55 0.55/0.32	0.61	2
TMPEO 8/2	220	380 220/380	200	12000	0.18	1.20	0.69 1.20/0.69	0.64	2
TMPEO 8/2	380	220 220/380	300	18000	0.35	1.00	1.70 1.70/1.00	0.70	2
TMPEO 8/2	380	220 220/380	400	24000	0.40	1.20	2.10 2.10/1.20	0.70	2

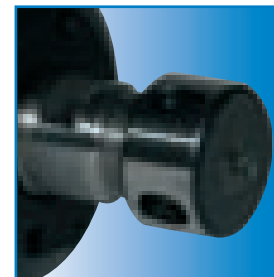
Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

Per frequenze superiori contattare nostro ufficio tecnico.
For higher frequencies please contact our technical dept.

TMPEO



NB: Pinza e ghiera vengono fornite a richiesta.
 NB: Collet and ring nut only on your request.



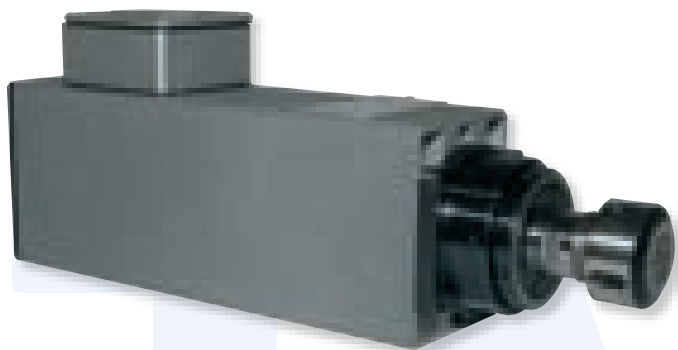
Sporgenza per pinza ER 11
 Nose type for collet ER 11

Tipo/Type	A	B
TMPEO 3.5/2	174	119
TMPEO 6/2	199	144
TMPEO 8/2	214	159

dimensioni

elettromandrini electric spindles

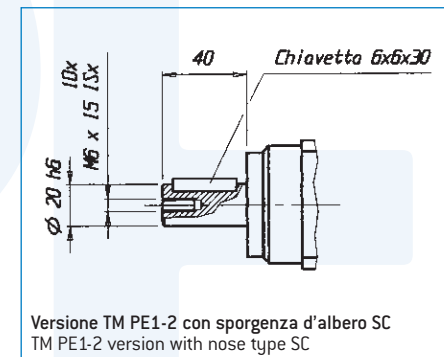
TMPE1 TMPE2

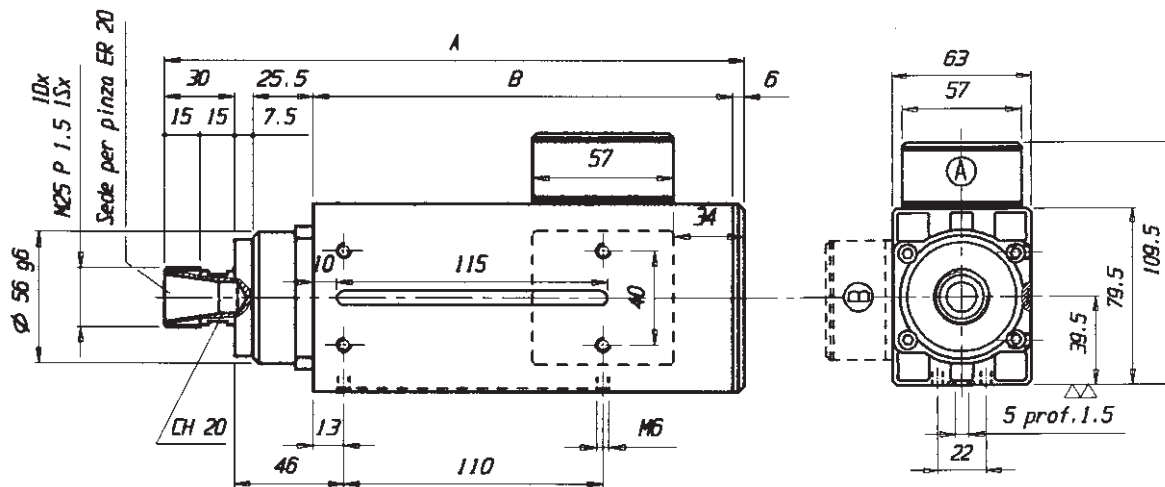


Tipo Type	Tensione Voltage (Volt)			Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)			COS φ	Peso Weight (Kg)
	Standard	a richiesta on request					Standard	a richiesta on request			
TMPE1 6.5/2	380	220	220/380	100	6000	0.13	0.58	1.00	0.58/1.00	0.63	3.3
TMPE1 6.5/2	220	380	220/380	200	12000	0.35	2.00	1.16	2.00/1.16	0.69	3.3
TMPE1 6.5/2	380	220	220/380	300	18000	0.41	1.27	2.20	2.20/1.27	0.70	3.3
TMPE1 6.5/2	380	220	220/380	400	24000	0.41	1.27	2.20	2.20/1.27	0.70	3.3
TMPE2 9/2	220/380	220	380	50	3000	0.10	0.85/0.50	0.85	0.50	0.60	3.7
TMPE2 9/2	380	220	220/380	100	6000	0.22	0.85	1.47	1.47/0.85	0.65	3.7
TMPE2 9/2	220	380	220/380	200	12000	0.55	2.60	1.50	2.60/1.50	0.73	3.7
TMPE2 9/2	380	220	220/380	300	18000	0.75	2.15	3.70	3.70/2.15	0.71	3.7
TMPE2 9/2	380	220	220/380	400	24000	0.75	2.40	4.10	4.10/2.40	0.71	3.7

Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

Per frequenze superiori contattare nostro ufficio tecnico.
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Sporgenza per pinza ER 20
Nose type for collet ER 20

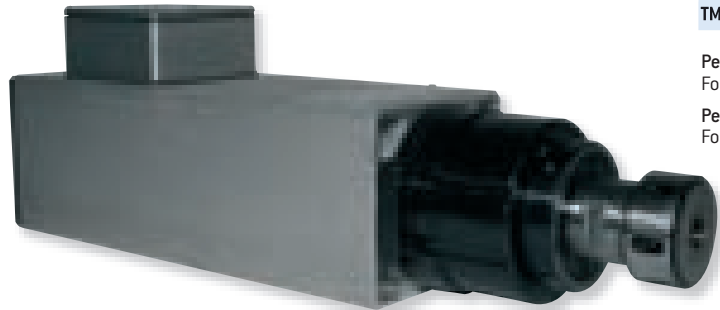
Tipo/Type	A	B
TMPE1 6.5/2	254	185
TMPE2 9/2	274	205

NB: Posizione morsettiera standard come da posizione "A" con forature lato stretto. Su richiesta in posizione "B" con forature lato largo.
 NB: Standard terminal box in "A" position with fixing holes on narrow part. On request terminal box in "B" position with fixing holes on wide part.
 NB: Pinza e ghiera vengono fornite a richiesta.
 NB: Collet and ring nut only on your request.

dimensioni

elettromandrini electric spindles

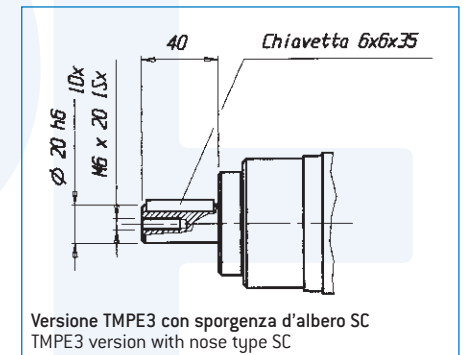
TMPE3

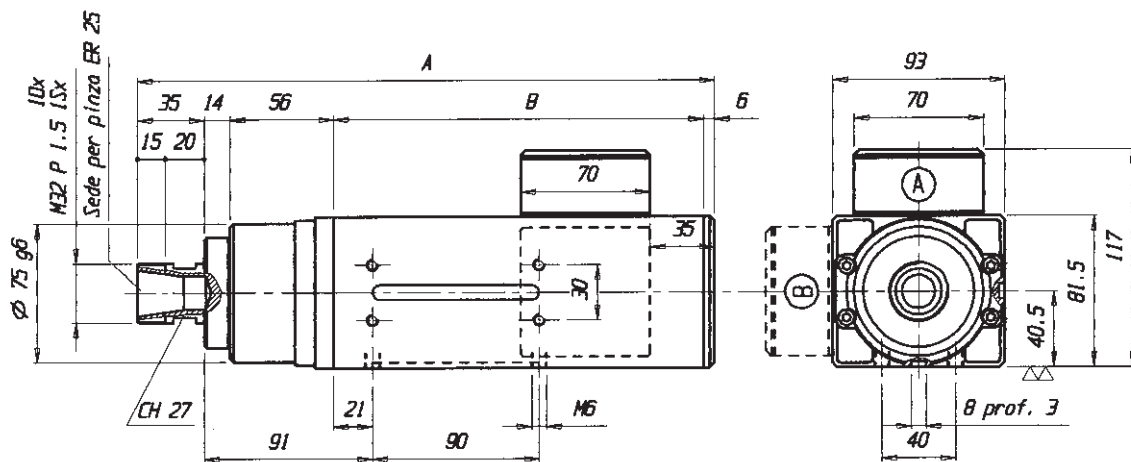


Tipo Type	Tensione Voltage (Volt)			Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)			COS φ	Peso Weight (Kg)
	Standard	a richiesta on request					Standard	a richiesta on request			
TMPE3 9/2	220/380	220	380	50	3000	0.20	1.50/0.90	1.50	0.90	0.70	5.5
TMPE3 9/2	380	220	220/380	100	6000	0.45	1.40	2.40	2.40/1.40	0.75	5.5
TMPE3 9/2	220	380	220/380	200	12000	0.75	4.00	2.30	4.00/2.30	0.75	5.5
TMPE3 9/2	380	220	220/380	300	18000	1.00	3.20	5.50	5.50/3.20	0.75	5.5
TMPE3 9/2	380	220	220/380	400	24000	1.00	3.20	5.50	5.50/3.20	0.75	5.5
TMPE3 12/2	220/380	220	380	50	3000	0.30	1.70/1.00	1.70	1.00	0.70	8
TMPE3 12/2	380	220	220/380	100	6000	0.75	1.90	3.30	3.30/1.90	0.75	8
TMPE3 12/2	220	380	220/380	200	12000	1.50	6.30	3.60	6.30/3.60	0.79	8
TMPE3 12/2	380	220	220/380	300	18000	2.00	5.20	9.00	9.00/5.20	0.80	8
TMPE3 12/2	380	220	220/380	400	24000	2.20	5.50	9.50	9.50/5.50	0.80	8

Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

Per frequenze superiori contattare nostro ufficio tecnico.
For higher frequencies please contact our technical dept.



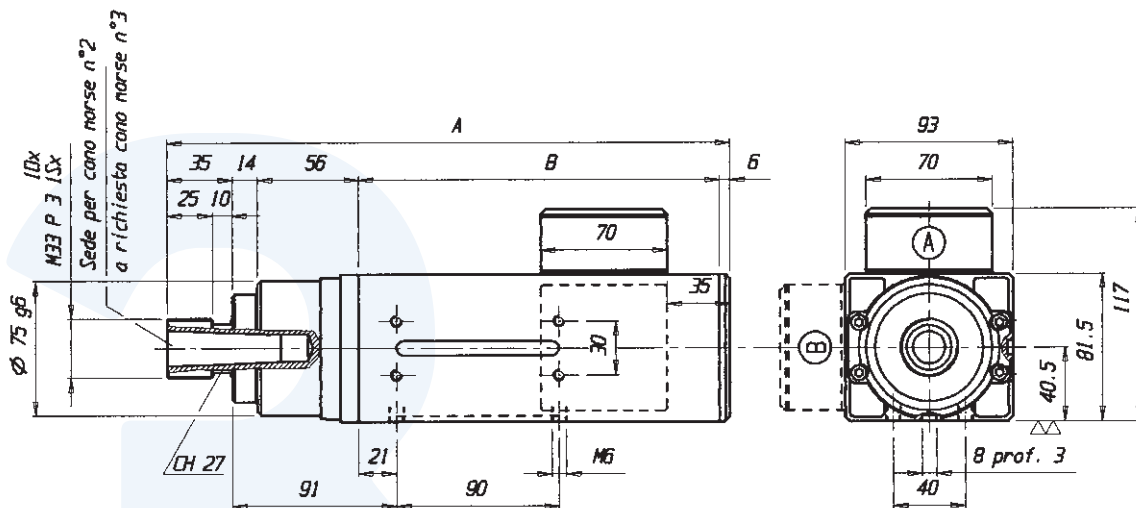


NB: Pinza e ghiera vengono fornite a richiesta.
 NB: Collet and ring nut only on your request.



Sporgenza per pinza ER 25
 Nose type for collet ER 25

Tipo/Type	A	B
TMPE3 9/2	311	200
TMPE3 12/2	351	240



NB: Posizione morsetteria standard come da posizione "A" con forature lato largo. Su richiesta in posizione "B" con forature lato stretto.
 NB: Standard terminal box in "A" position with fixing holes on wide part. On request terminal box in "B" position with fixing holes on narrow part.



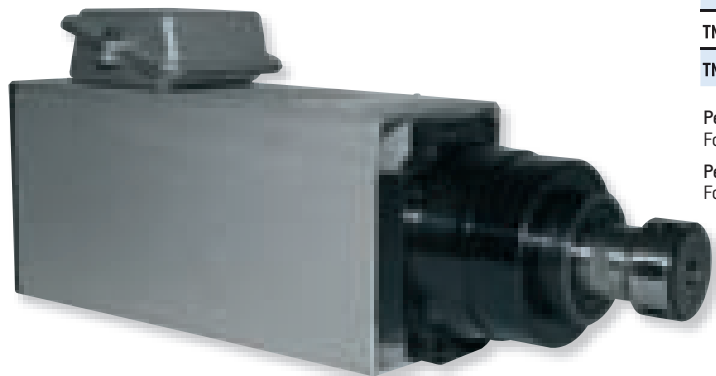
Sporgenza per cono morse 2-3
 Nose type for MK 2-3

Tipo/Type	A	B
TMPE3 9/2	311	200
TMPE3 12/2	351	240

dimensioni

elettromandrini electric spindles

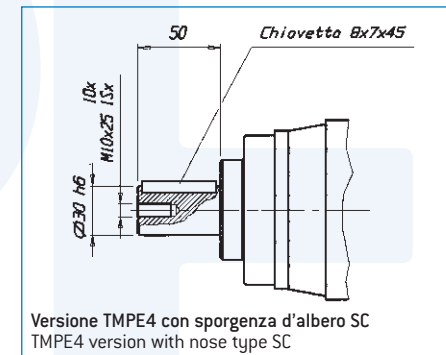
TMPE4

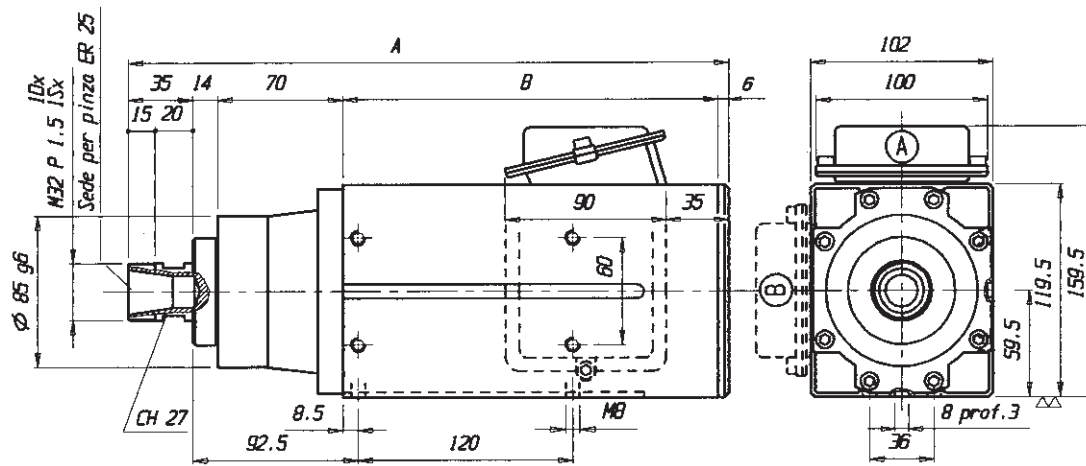


Tipo Type	Tensione Voltage (Volt)			Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)			COS φ	Peso Weight (Kg)
	Standard	a richiesta on request					Standard	a richiesta on request			
TMPE4 10/2	220/380	220	380	50	3000	0.65	3.30/1.90	3.30	1.90	0.72	11.8
TMPE4 10/2	380	220	220/380	100	6000	1.10	2.80	4.90	4.90/2.80	0.77	11.8
TMPE4 10/2	220	380	220/380	200	12000	2.20	9.70	5.60	9.70/5.60	0.77	11.8
TMPE4 10/2	380	220	220/380	300	18000	3.30	7.90	13.70	13.70/7.90	0.80	11.8
TMPE4 10/2	380	220	220/380	400	24000	3.30	7.90	13.70	13.70/7.90	0.80	11.8
TMPE4 14/2	220/380	220	380	50	3000	1.10	5.50/3.15	5.50	3.15	0.72	13.8
TMPE4 14/2	380	220	220/380	100	6000	2.20	5.50	9.50	9.50/5.50	0.77	13.8
TMPE4 14/2	220	380	220/380	200	12000	3.70	15.00	8.70	15.00/8.70	0.78	13.8
TMPE4 14/2	380	220	220/380	300	18000	5.60	11.50	20.00	20.00/11.5	0.85	13.8
TMPE4 14/2	380	220	220/380	400	24000	5.60	11.50	20.00	20.00/11.5	0.85	13.8

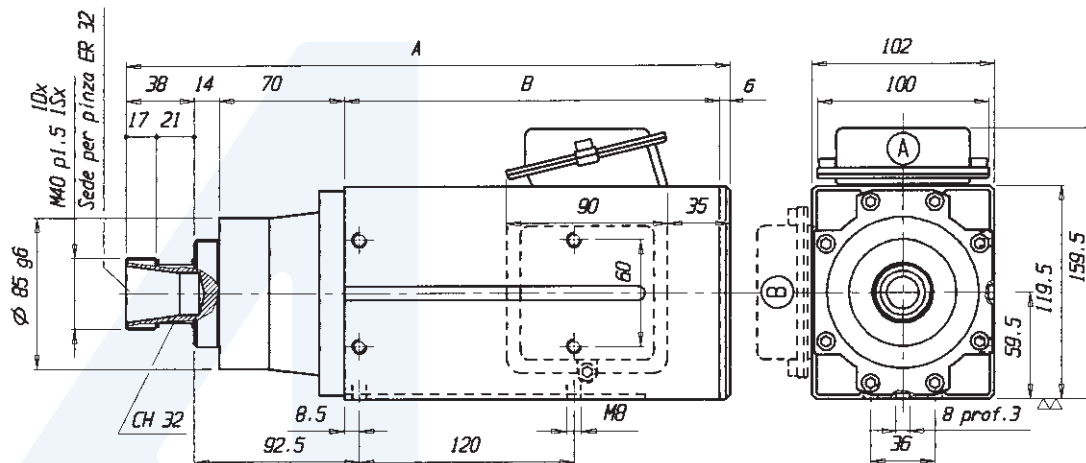
Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

Per frequenze superiori contattare nostro ufficio tecnico.
For higher frequencies please contact our technical dept.





NB: Pinza e ghiera vengono fornite a richiesta.
 NB: Collet and ring nut only on your request.



NB: Posizione morsetti standard come da posizione "A" con forature lato stretto. Su richiesta in posizione "B" con forature lato largo.
 NB: Standard terminal box in "A" position with fixing holes on narrow part. On request terminal box in "B" position with fixing holes on wide part.



Sporgenza per pinza ER 25
 Nose type for collet ER 25

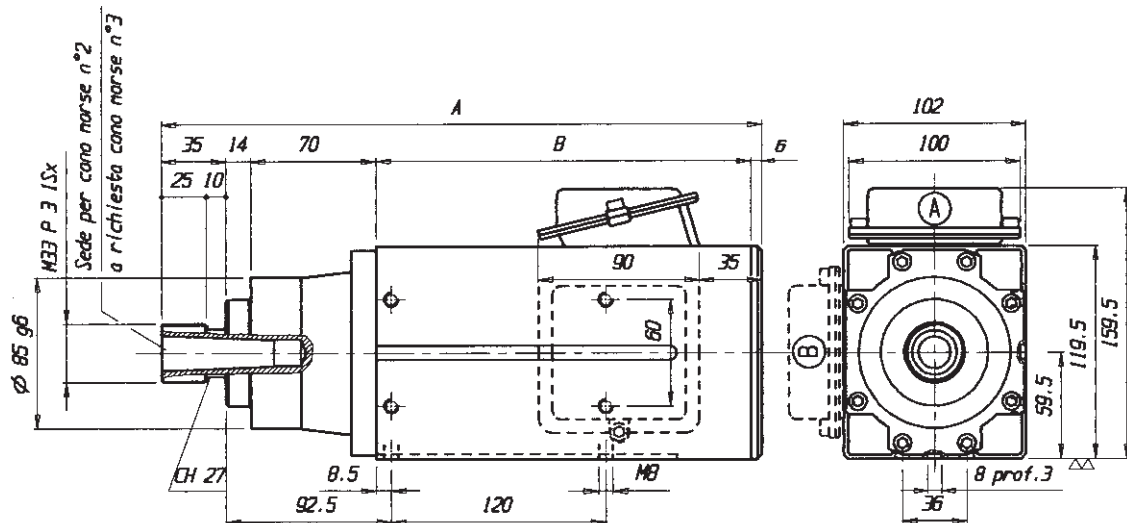
Tipo/Type	A	B
TMPE4 10/2	335	210
TMPE4 14/2	375	250



Sporgenza per pinza ER 32
 Nose type for collet ER 32

Tipo/Type	A	B
TMPE4 10/2	338	210
TMPE4 14/2	378	250

dimensioni



- NB: Posizione morsetteria standard come da posizione "A" con forature lato stretto. Su richiesta in posizione "B" con forature lato largo.
 NB: Standard terminal box in "A" position with fixing holes on narrow part. On request terminal box in "B" position with fixing holes on wide part.
 NB: Pinza e ghiera vengono fornite a richiesta.
 NB: Collet and ring nut only on your request.



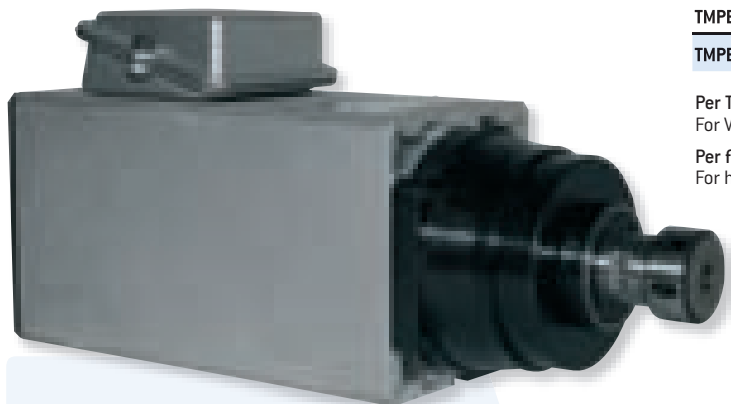
Sporgenza per cono morse 2-3
 Nose type for MK 2-3

Tipo/Type	A	B
TMPE4 10/2	335	210
TMPE4 14/2	375	250

dimensioni

elettromandrini electric spindles

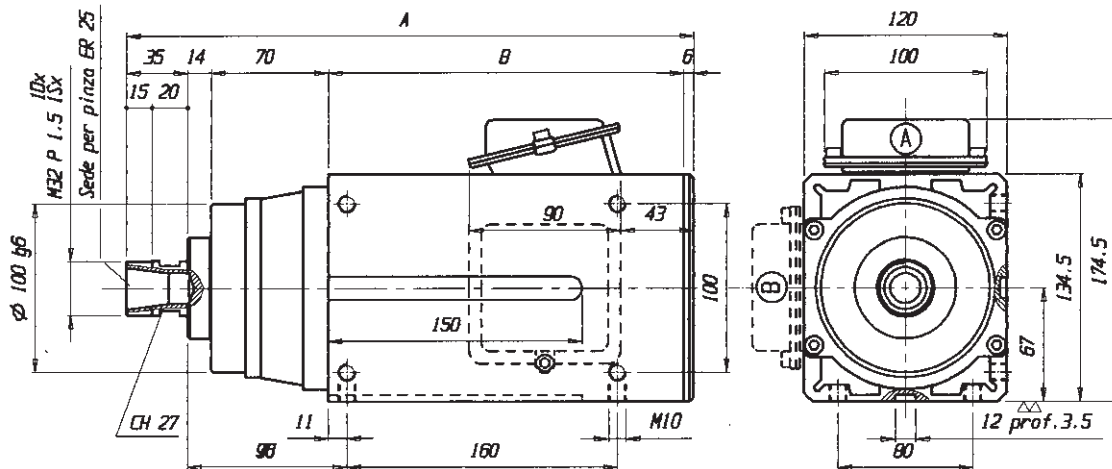
TMPE5



Tipo Type	Tensione Voltage (Volt)			Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)			COS φ	Peso Weight (Kg)
	Standard	a richiesta on request					Standard	a richiesta on request			
TMPE5 10/2	220/380	220	380	50	3000	1.25	5.60/3.20	5.60	3.20	0.78	12
TMPE5 10/2	380	220	220/380	100	6000	1.90	4.35	7.55	7.55/4.35	0.83	12
TMPE5 10/2	220	380	220/380	200	12000	3.00	12.3	7.10	12.3/7.10	0.80	12
TMPE5 10/2	380	220	220/380	300	18000	4.50	10.0	18.0	18.0/10.0	0.81	12
TMPE5 10/2	380	220	220/380	400	24000	4.50	10.0	18.0	18.0/10.0	0.91	12
TMPE5 14/2	220/380	220	380	50	3000	3.00	11.5/6.60	11.50	6.60	0.82	19.5
TMPE5 14/2	380	220	220/380	100	6000	4.00	8.80	15.2	15.2/8.80	0.84	19.5
TMPE5 14/2	220	380	220/380	200	12000	4.50	18.2	10.60	18.2/10.60	0.85	19.5
TMPE5 14/2	380	220	220/380	300	18000	7.00	14.50	25.00	25.00/14.50	0.86	19.5
TMPE5 14/2	380	220	220/380	400	24000	7.00	14.50	25.00	25.00/14.50	0.86	19.5

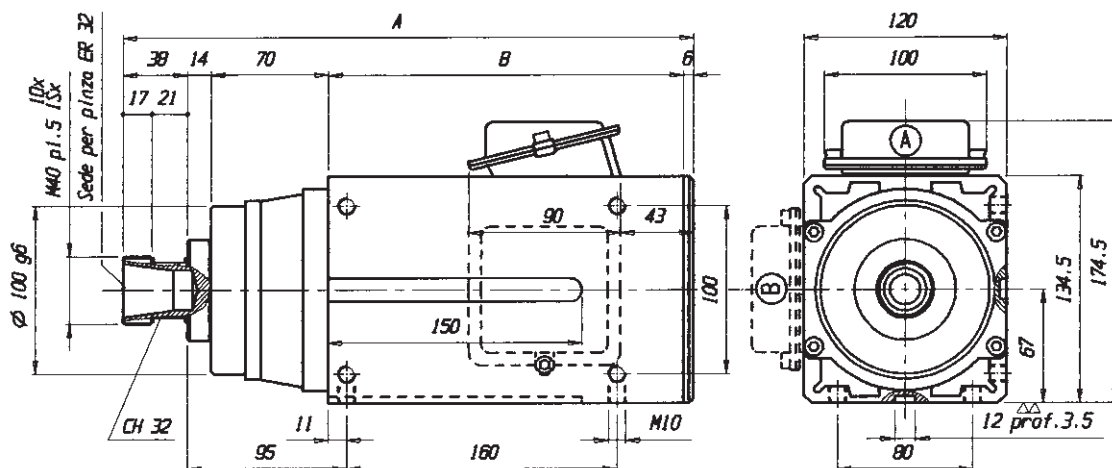
Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

Per frequenze superiori contattare nostro ufficio tecnico.
For higher frequencies please contact our technical dept.



NB: Pinza e ghiera vengono fornite a richiesta.

NB: Collet and ring nut only on your request.



NB: Posizione morsetteria standard come da posizione "A" con forature lato stretto. Su richiesta in posizione "B" con forature lato largo.

NB: Standard terminal box in "A" position with fixing holes on narrow part. On request terminal box in "B" position with fixing holes on wide part.



Sporgenza per pinza ER 25

Nose type for collet ER 25

Tipo/Type	A	B
TMPE5 10/2	335	210
TMPE5 14/2	375	250

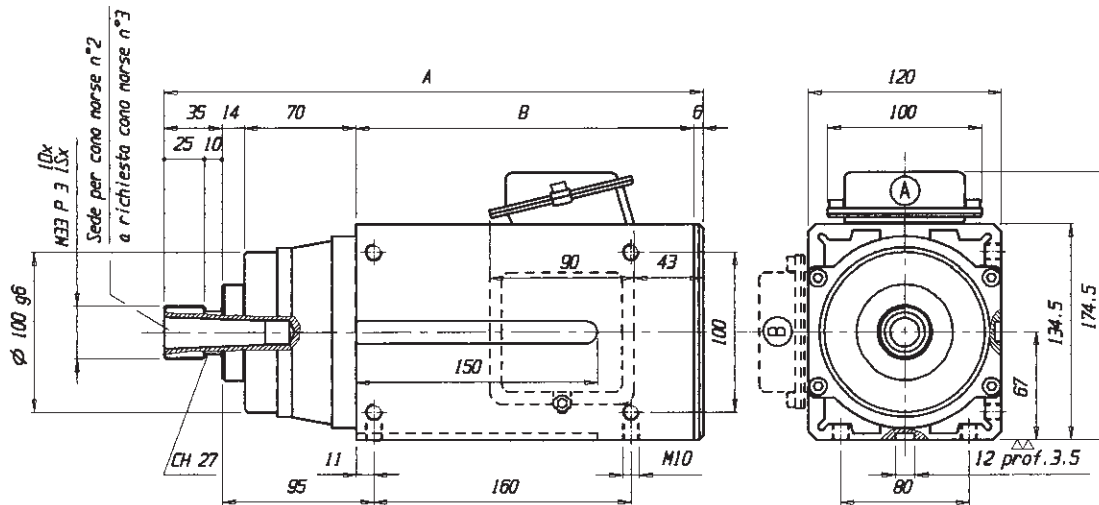


Sporgenza per pinza ER 32

Nose type for collet ER 32

Tipo/Type	A	B
TMPE5 10/2	338	210
TMPE5 14/2	378	250

dimensioni



- NB: Posizione morsetteria standard come da posizione "A" con forature lato stretto. Su richiesta in posizione "B" con forature lato largo.
 NB: Standard terminal box in "A" position with fixing holes on narrow part. On request terminal box in "B" position with fixing holes on wide part.
 NB: Pinza e ghiera vengono fornite a richiesta.
 NB: Collet and ring nut only on your request.



Sporgenza per cono morse 2-3
 Nose type for MK 2-3

Tipo/Type	A	B
TMPE5 10/2	335	210
TMPE5 14/2	375	250

dimensioni

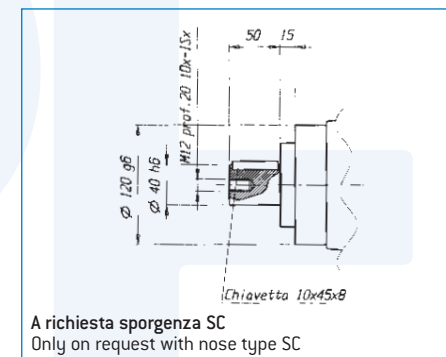
elettromandrini electric spindles

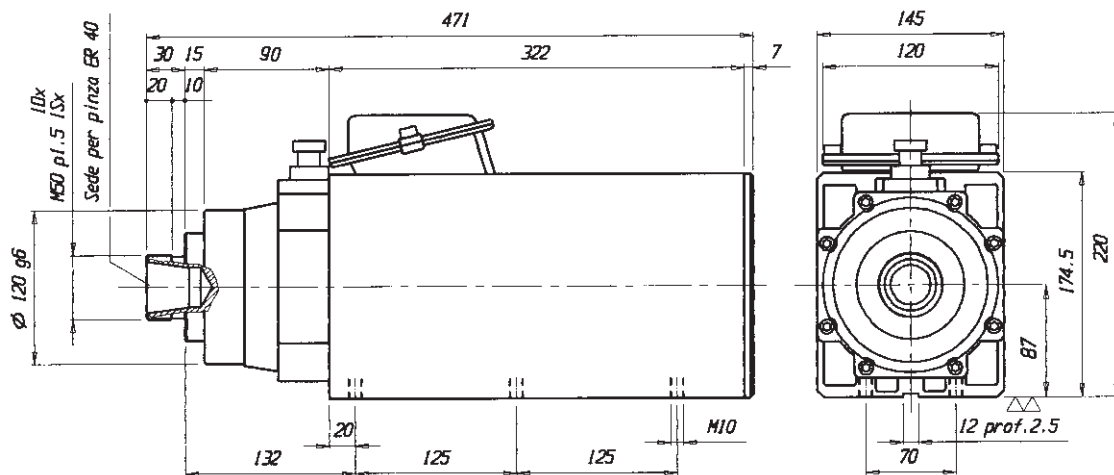
TMPE6



Tipo Type	Tensione Voltage (Volt)			Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)			COS φ	Peso Weight (Kg)
	Standard	a richiesta on request					Standard	a richiesta on request			
TMPE6 15/2	220/380	220	380	50	3000	3.40	13.6/780	13.6	780	0.83	28
TMPE6 15/2	380	220	220/380	100	6000	5.60	11.5	19.9	19.9/11.5	0.84	28
TMPE6 15/2	220	380	220/380	200	12000	8.50	32.7	18.9	32.7/18.9	0.84	28
TMPE6 15/2	380	220	220/380	300	18000	9.50	21.00	36.40	36.40/21.0	0.84	28

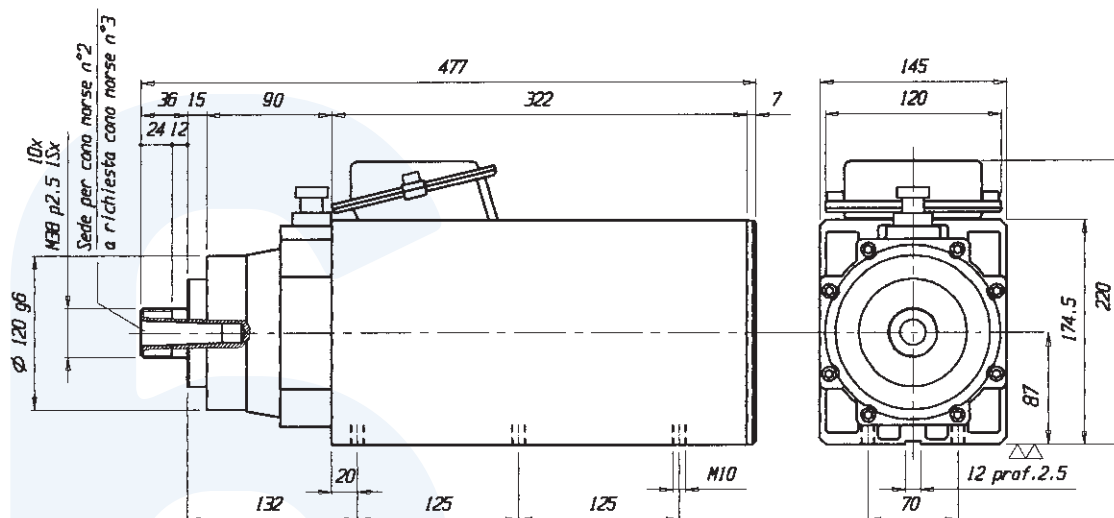
Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.





Sporgenza per pinza ER 40
Nose type for collet ER 40

NB: Pinza e ghiera vengono fornite a richiesta.
NB: Collet and ring nut only on your request.



Sporgenza per cono morse 2-3
Nose type for MK 2-3

NB: Pinza e ghiera vengono fornite a richiesta.
NB: Collet and ring nut only on your request.

dimensioni

nomenclatura parti motore serie TMPE

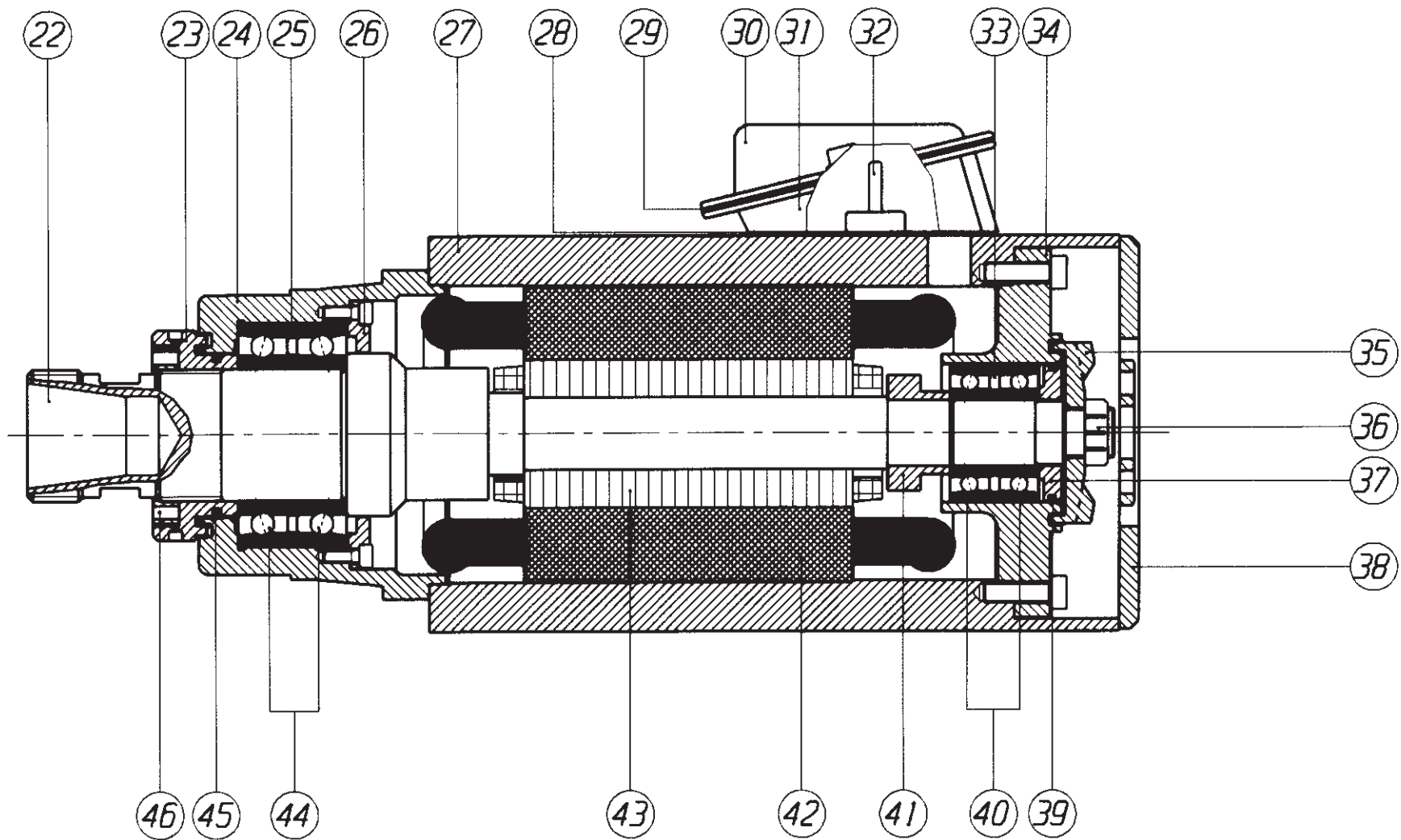
parts nomenclature series TMPE


Descrizione del particolare

22	Albero
23	Labirinto
24	Coperchio anteriore
25	Distanziale
26	Ghiera blocca coppia
27	Carcassa
28	Guarnizione base
29	Guarnizione coperchio
30	Coperchio coprimorsettiera
31	Coprimorsettiera
32	Morsettiera
33	Distanziale
34	Coperchio posteriore
35	Ventola
36	Ghiera autobloccante
37	Ghiera blocca coppia
38	Piastrina copriventola
39	Segmenti lamellari
40	Coppia cuscinetto posteriore
41	Bussola di bilanciatura
42	Statore avvolto
43	Rotore
44	Coppia cuscinetto anteriore
45	Segmenti lamellari
46	Controghiera anteriore

Descriptions of the part

22	Shaft
23	Labyrinth seal
24	Front cover
25	Distance ring
26	Bearings pair - Locking nut
27	Frame
28	Gasket
29	Cover gasket
30	Terminal board cover
31	Terminal cover
32	Terminal board
33	Distance ring
34	Rear cover
35	Fan
36	Selflocking nut
37	Bearings pair - Locking nut
38	Fan cover plate
39	Lamellar segments
40	Rear pair of bearings
41	Balancing bush
42	Wound stator
43	Rotor
44	Front pair of bearings
45	Lamellar segments
46	Front nut



A person wearing a dark green suit jacket, a white shirt, and a patterned orange tie is holding a glowing blue globe of the Earth with both hands. The globe is centered in the lower half of the frame, showing the continents of Europe and Africa. The background is a textured green surface.

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in continua
espansione**

**a continuously
growing company**

TMPE

serie
bialbero

double
end shaft series



Anche questa serie, come la precedente, si rivolge ad una clientela che deve eseguire lavorazioni particolarmente gravose con alta precisione. Questi elettromandrini sono costruiti per essere accoppiati con pinze elastiche da ambo i lati, pertanto in questa serie è ancora più importante l'utilizzo di coppie di cuscinetti a contatto obliquo, per assicurare precisione e resistenza durante la lavorazione. Per contenere l'ingombro il raffreddamento avviene tramite presa d'aria compressa a 2-3 bar.

This series like the previous one, is equipped for ER collets, but with a spindle on each end (Double Shaft) for different applications. They are also equipped with 2 set of high precision angular ball bearings to support heavy axial and radial loads. These ball bearings are cooled by compressed air 2 to 3 Bar through a fitting on top of the spindle.

TMPE0 6/2

TMPE3

TMPE5

TMPE2 9/2

TMPE4

elettromandrini
electric spindles

TMPEO 6/2

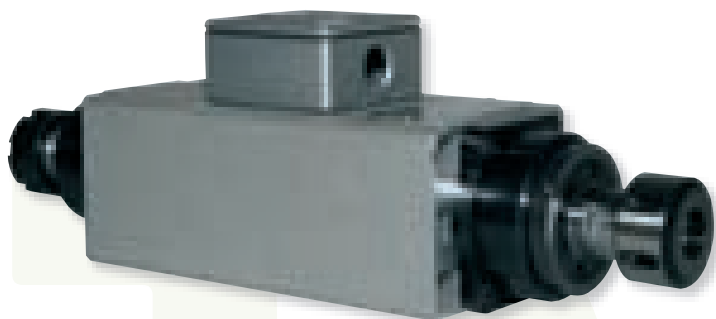


Tipo Type	Tensione Voltage (Volt)			Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)			COS φ	Peso Weight (Kg)
	Standard	a richiesta on request					Standard	a richiesta on request			
TMPEO 6/2	220	380	220/380	200	12000	0.15	0.80	0.45	0.80/0.45	0.70	2
TMPEO 6/2	380	220	220/380	300	18000	0.16	0.70	1.20	1.20/0.70	0.70	2

Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

elettromandrini
electric spindles

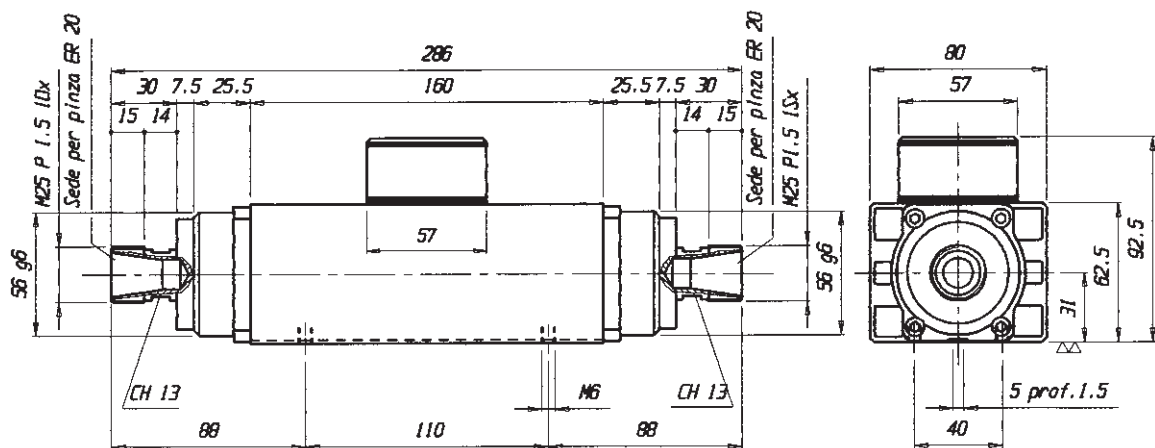
TMPE2 9/2



Tipo Type	Tensione Voltage (Volt)			Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)			COS φ	Peso Weight (Kg)
	Standard	a richiesta on request					Standard	a richiesta on request			
TMPE2 9/2	220	380	220/380	200	12000	0.22	1.30	0.75	1.30/0.75	0.70	4.5
TMPE2 9/2	380	220	220/380	300	18000	0.30	1.05	1.80	1.80/1.05	0.73	4.5

Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

TMPE



Sporgenza per pinza ER 20
Nose type for collet ER 20

NB: Motore senza ventilazione, pinza e ghiera vengono fornite a richiesta.
NB: Motor without ventilation, collet and ring nut only on your request.

dimensioni

elettromandrini
electric spindles

TMPE3

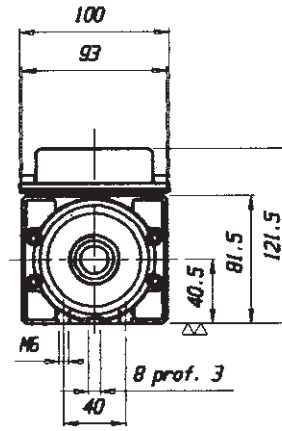
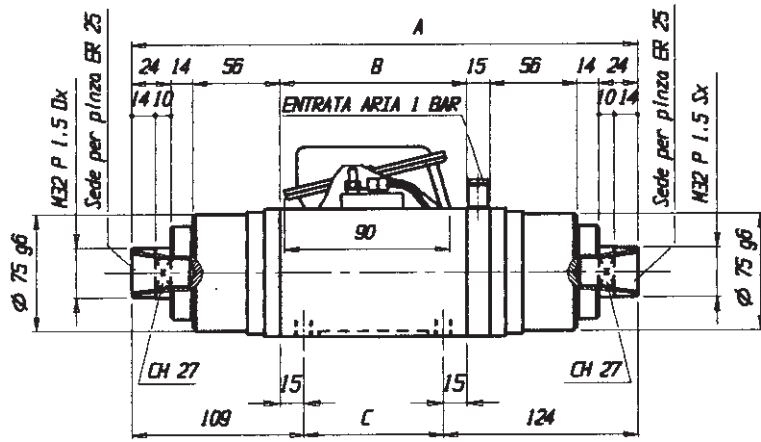


Raffreddamento ad aria compressa
Compressed air cooling

Tipo Type	Tensione Voltage (Volt)			Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)			COS φ	Peso Weight (Kg)
	Standard	a richiesta on request					Standard	a richiesta on request			
TMPE3 9/2	220/380	220	380	50	3000	0.20	1.50/0.90	1.50	0.90	0.70	7.5
TMPE3 9/2	380	220	220/380	100	6000	0.45	1.40	2.40	2.40/1.40	0.75	7.5
TMPE3 9/2	220	380	220/380	200	12000	0.75	4.00	2.30	4.00/2.30	0.75	7.5
TMPE3 9/2	380	220	220/380	300	18000	1.00	3.20	5.50	5.50/3.20	0.75	7.5
TMPE3 12/2	220/380	220	380	50	3000	0.30	1.70/1.00	1.70	1.00	0.70	9
TMPE3 12/2	380	220	220/380	100	6000	0.75	1.90	3.30	3.30/1.90	0.75	9
TMPE3 12/2	220	380	220/380	200	12000	1.50	6.30	3.60	6.30/3.60	0.80	9
TMPE3 12/2	380	220	220/380	300	18000	2.00	5.20	9.00	9.00/5.20	0.80	9

Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

TMPE3



Sporgenza per pinza ER 25
Nose type for collet ER 25

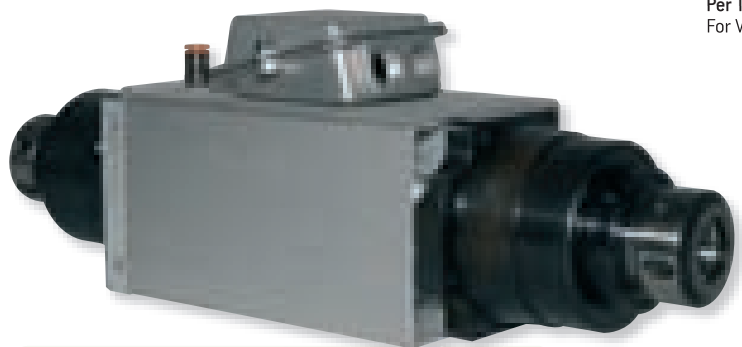
Tipo/Type	A	B	C
TMPE3 9/2	323	120	90
TMPE3 12/2	353	150	120

NB: Pinza e ghiera vengono fornite a richiesta.
NB: Collet and ring nut only on your request.

dimensioni

elettromandrini
electric spindles

TMPE4

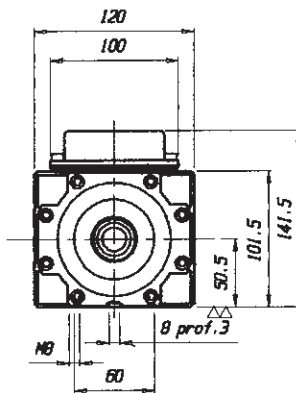
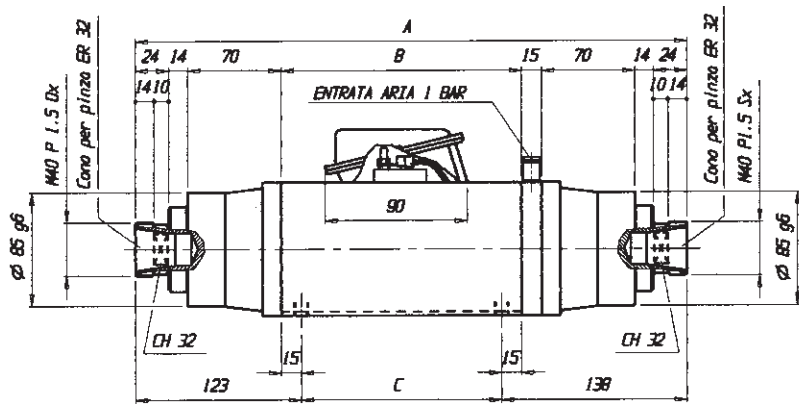


Tipo Type	Tensione Voltage (Volt)			Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)			COS φ	Peso Weight (Kg)
	Standard	a richiesta on request					Standard	a richiesta on request			
TMPE4 10/2	220/380	220	380	50	3000	0.65	3.30/1.90	3.30	1.90	0.72	14.5
TMPE4 10/2	380	220	220/380	100	6000	1.10	2.80	4.90	4.90/2.80	0.77	14.5
TMPE4 10/2	220	380	220/380	200	12000	2.20	9.70	5.60	9.70/5.60	0.77	14.5
TMPE4 10/2	380	220	220/380	300	18000	3.30	7.90	13.70	13.70/7.90	0.88	14.5
TMPE4 14/2	220/380	220	380	50	3000	1.10	5.50/3.15	5.50	3.15	0.72	16
TMPE4 14/2	380	220	220/380	100	6000	2.20	5.50	9.50	9.50/5.50	0.77	16
TMPE4 14/2	220	380	220/380	200	12000	3.70	15.00	8.70	15.00/8.70	0.78	16
TMPE4 14/2	380	220	220/380	300	18000	5.60	11.5	20.00	20.00/11.5	0.85	16

Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

Raffreddamento ad aria compressa
Compressed air cooling





Sporgenza per pinza ER 32
Nose type for collet ER 32

Tipo/Type	A	B	C
TMPE4 10/2	371	140	110
TMPE4 14/2	411	180	150

NB: Pinza e ghiera vengono fornite a richiesta.

NB: Collet and ring nut only on your request.

dimensioni

elettromandrini
electric spindles

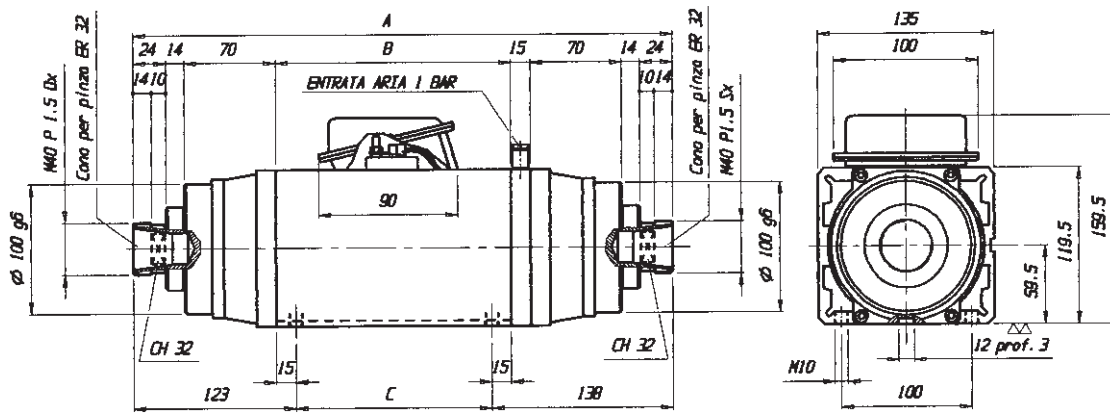
TMPE5



Raffreddamento ad aria compressa
Compressed air cooling

Tipo Type	Tensione Voltage (Volt)			Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)			COS φ	Peso Weight (Kg)
	Standard	a richiesta on request					Standard	a richiesta on request			
TMPE5 10/2	220/380	220	380	50	3000	1.25	5.60/3.20	5.60	3.20	0.78	17.5
TMPE5 10/2	380	220	220/380	100	6000	1.90	4.40	7.55	7.55/4.40	0.83	17.5
TMPE5 10/2	220	380	220/380	200	12000	3.00	12.30	7.10	12.30/7.10	0.80	17.5
TMPE5 10/2	380	220	220/380	300	18000	4.50	10.50	18.00	18.00/10.50	0.81	17.5
TMPE5 14/2	220/380	220	380	50	3000	3.00	11.50/6.60	11.50	6.60	0.82	20.5
TMPE5 14/2	380	220	220/380	100	6000	4.00	8.80	15.2	15.2/8.80	0.84	20.5
TMPE5 14/2	220	380	220/380	200	12000	4.50	18.20	10.60	18.20/10.60	0.85	20.5
TMPE5 14/2	380	220	220/380	300	18000	7.00	14.50	25.00	25.00/14.50	0.86	20.5

Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.




NB: Pinza e ghiera vengono fornite a richiesta.
 NB: Collet and ring nut only on your request.



Sporgenza per pinza ER 32
 Nose type for collet ER 32

Tipo/Type	A	B	C
TMPE5 10/2	371	140	110
TMPE5 14/2	411	180	150

dimensioni

A woman in a dark blazer and light skirt stands on the left side of a seesaw, while a man in a dark suit stands on the right. They are both leaning forward with their arms extended towards each other, as if maintaining balance. The seesaw is supported by a central fulcrum. The background is a dark, textured wall with horizontal lines.

**le bilanciature
lasciatele fare a noi
balancing this is our job**

PE

serie
per squadratrici

series
for squaring machines



Questa serie di elettromandri è costruita con una struttura molto robusta per sopportare sollecitazioni meccaniche molto elevate. A tale scopo sul coperchio anteriore dell'elettromandrino viene montata una coppia di precisione a contatto obliquo in grado di sopportare le sollecitazioni indotte dalle lavorazioni.

This series of electric spindles are made on a very sturdy base to withstand high mechanical stress. These spindles have a front couple sets of angular contact ball bearings with heavy axial and radial pre-load. These features make it a very desirable spindle for heavy cuts with large cutters.

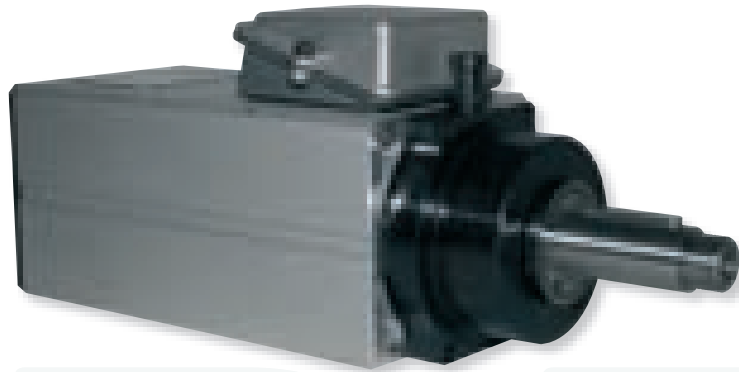
PE5
PE6

PE7
TMPE4

TMPE6
TMPE8

elettromandrini electric spindles

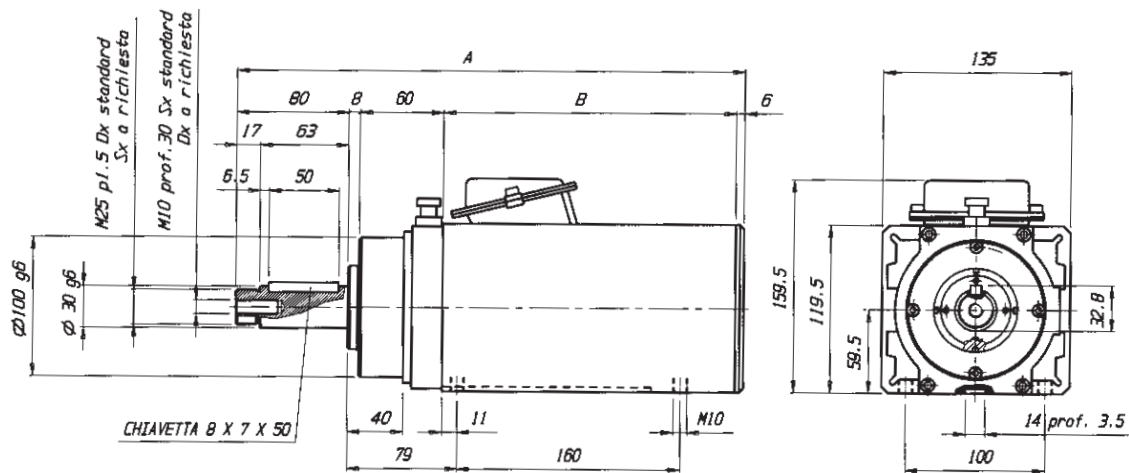
PE5



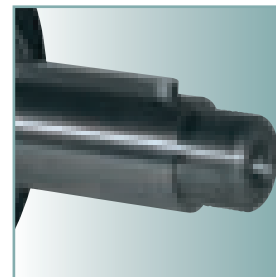
Tipo Type	Tensione Voltage (Volt)	Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS φ	Peso Weight (Kg)
PE5 10/2	220/380 (380 Δ)	50/100	3000/6000	1.25/1.90	5.60/3.20 (4.35 Δ)	0.78	10
PE5 14/2	220/380 (380 Δ)	50/100	3000/6000	3.00/4.00	11.5/6.6 (8.80 Δ)	0.82	17

Solo a richiesta tensioni 230/400. Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
Only on request voltages 230/400. For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

PE5



NB: Solo su richiesta albero $\varnothing 40$.
 NB: Only on request shaft $\varnothing 40$.

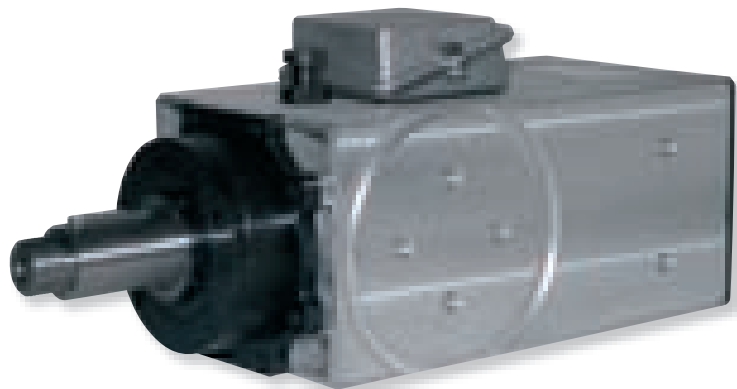


Tipo/Type	A	B
PE5 10/2	364	210
PE5 14/2	404	250

dimensioni

elettromandrini electric spindles

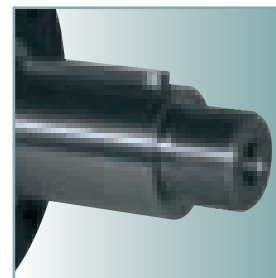
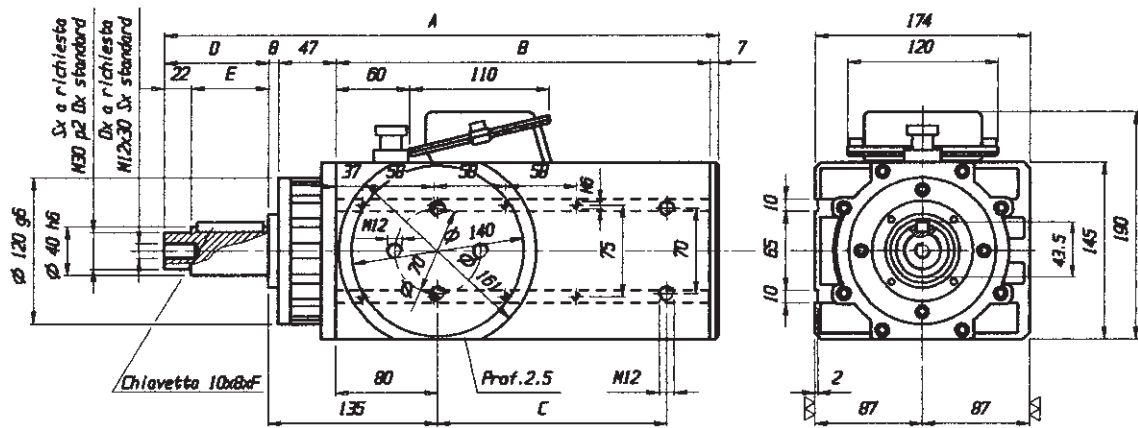
PE6



Tipo Type	Tensione Voltage (Volt)	Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS φ	Peso Weight (Kg)
PE6 11/2	220/380 (380 Δ)	50/100	3000/6000	2.3/4.0	9.5/5.5 (9.1 Δ)	0.82	22
PE6 15/2	220/380 (380 Δ)	50/100	3000/6000	3.4/5.6	13.6/7.8 (11.5 Δ)	0.83	30

Solo a richiesta tensioni 230/400. Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
Only on request voltages 230/400. For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

PE6



Tipo/Type	A	B	C	D	E	F
PE6 11/2	452	305	170	85	63	50
PE6 11/2	482	305	170	115	93	80
PE6 11/2	507	305	170	140	118	100
PE6 15/2	495	348	230	85	63	50
PE6 15/2	525	348	230	115	93	80
PE6 15/2	550	348	230	140	118	100

dimensioni

elettromandrini electric spindles

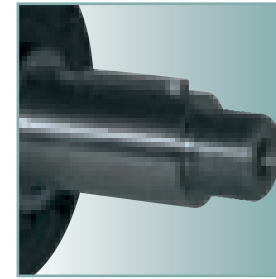
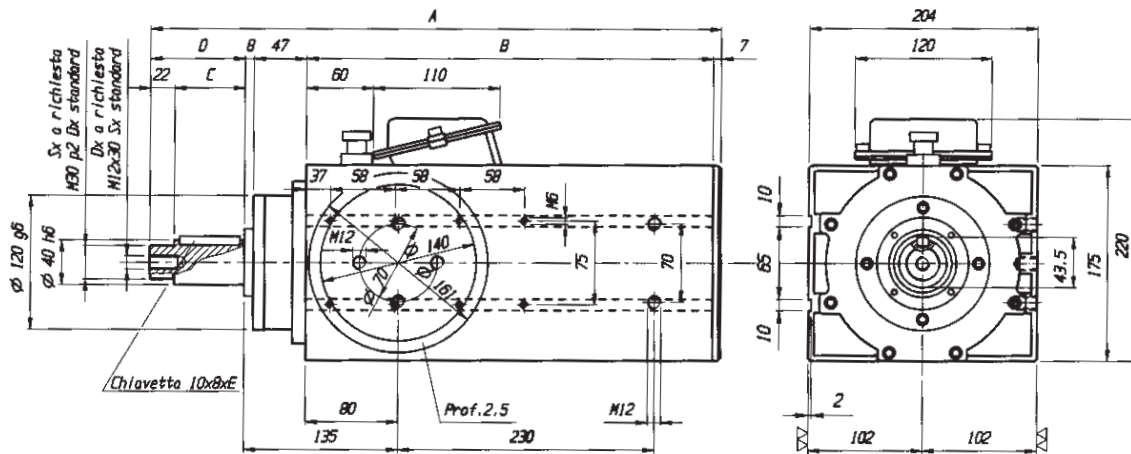
PE7



Tipo Type	Tensione Voltage (Volt)	Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS φ	Peso Weight (Kg)
PE7 11/2	220/380 (380 Δ)	50/100	3000/6000	4.0/5.8	15.7/9.1 (12.9 Δ)	0.82	38
PE7 15/2	220/380 (380 Δ)	50/100	3000/6000	5.6/8.2	20.2/11.7 (17.7 Δ)	0.80	45
PE7 17/2	220/380 (380 Δ)	50/100	3000/6000	6.2/8.8	24.0/13.8 (19.6 Δ)	0.80	50

Solo a richiesta tensioni 230/400. Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
Only on request voltages 230/400. For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

PE7



Tipo/Type	A	B	C	D	E
PE7 11/2	512	365	63	85	50
PE7 11/2	542	365	93	115	80
PE7 11/2	567	365	118	140	100
PE7 15/2	512	365	63	85	50
PE7 15/2	542	365	93	115	80
PE7 15/2	567	365	118	140	100
PE7 17/2	562	415	63	85	50
PE7 17/2	592	415	93	115	80
PE7 17/2	617	415	118	140	100

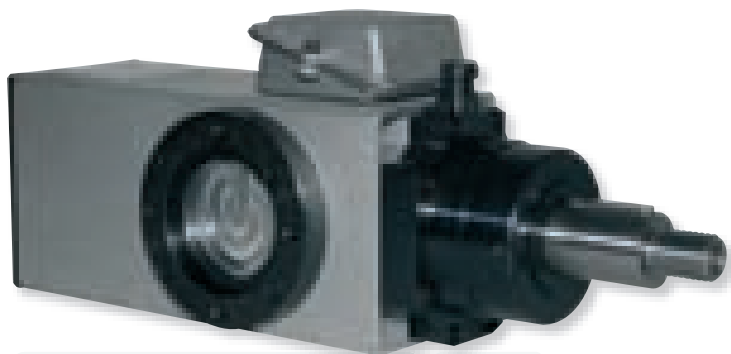
dimensioni

elettromandrini electric spindles

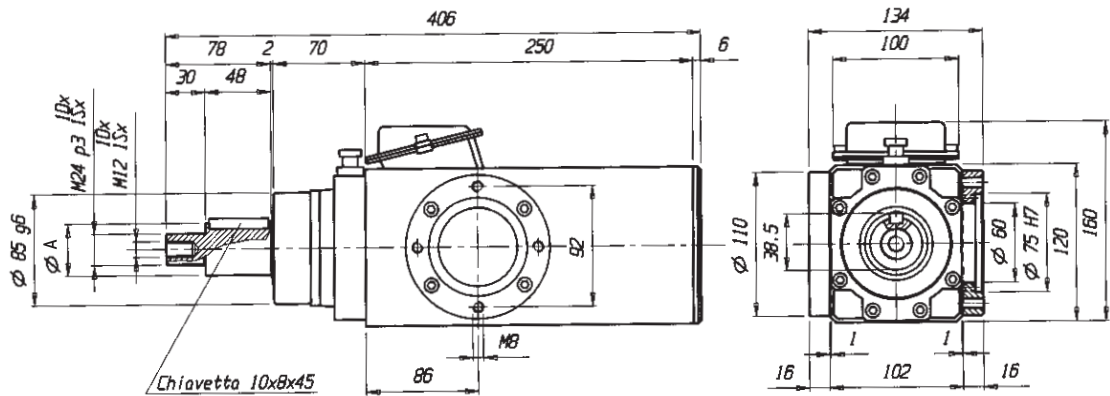
TMPE4

Tipo Type	Tensione Voltage (Volt)	Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS φ	Peso Weight (Kg)
TMPE4 10/2	220/380 (380 Δ)	50/100	3000/6000	0.65/1.10	3.30/1.90 (2.85 Δ)	0.72	9.5
TMPE4 11/2	220/380 (380 Δ)	50/100	3000/6000	0.75/1.50	3.50/2 (3.80 Δ)	0.74	10
TMPE4 13/2	220/380 (380 Δ)	50/100	3000/6000	1.00/2.00	4.90/2.85 (4.45 Δ)	0.77	10.5
TMPE4 14/2	220/380 (380 Δ)	50/100	3000/6000	1.10/2.20	5.50/3.15 (5.50 Δ)	0.77	11

Solo a richiesta tensioni 230/400. Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
Only on request voltages 230/400. For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.



TMPE4



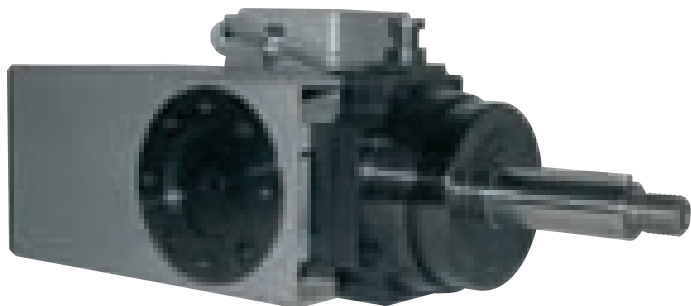
NB: $\varnothing A$ = Versione standard $\varnothing 35$ o $\varnothing 40$, solo su richiesta $\varnothing 25$ o $\varnothing 30$.

NB: $\varnothing A$ = Standard version $\varnothing 35$ or $\varnothing 40$, only on request $\varnothing 25$ or $\varnothing 30$.

dimensioni

elettromandrini electric spindles

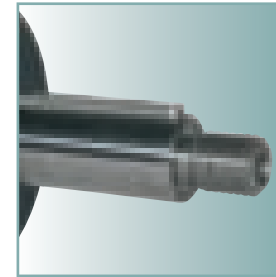
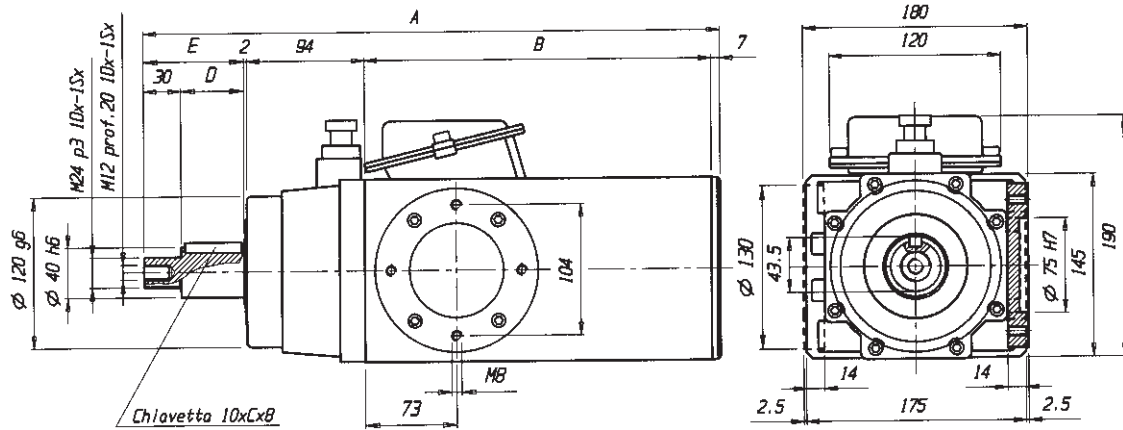
TMPE6



Tipo Type	Tensione Voltage (Volt)	Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS φ	Peso Weight (Kg)
TMPE6 13/2	220/380 (380 Δ)	50/100	3000/6000	2.90/4.80	11.45/6.60 (10.90 Δ)	0.82	28
TMPE6 15/2	220/380 (380 Δ)	50/100	3000/6000	3.40/5.60	13.6/7.8 (11.5 Δ)	0.83	32
TMPE6 17/2	220/380 (380 Δ)	50/100	3000/6000	3.80/6.65	14.90/8.60 (14.90 Δ)	0.83	36

Solo a richiesta tensioni 230/400. Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
Only on request voltages 230/400. For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

TMPE6



Tipo/Type	A	B	C	D	E
TMPE6 13/2	459	276	45	50	80
TMPE6 13/2	499	276	80	90	120
TMPE6 15/2	505	322	45	50	80
TMPE6 15/2	545	322	80	90	120
TMPE6 17/2	555	372	45	50	80
TMPE6 17/2	595	372	80	90	120

dimensioni

elettromandrini
electric spindles

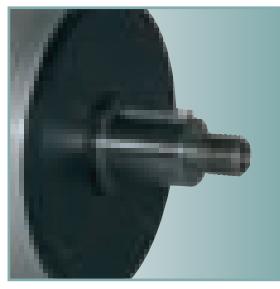
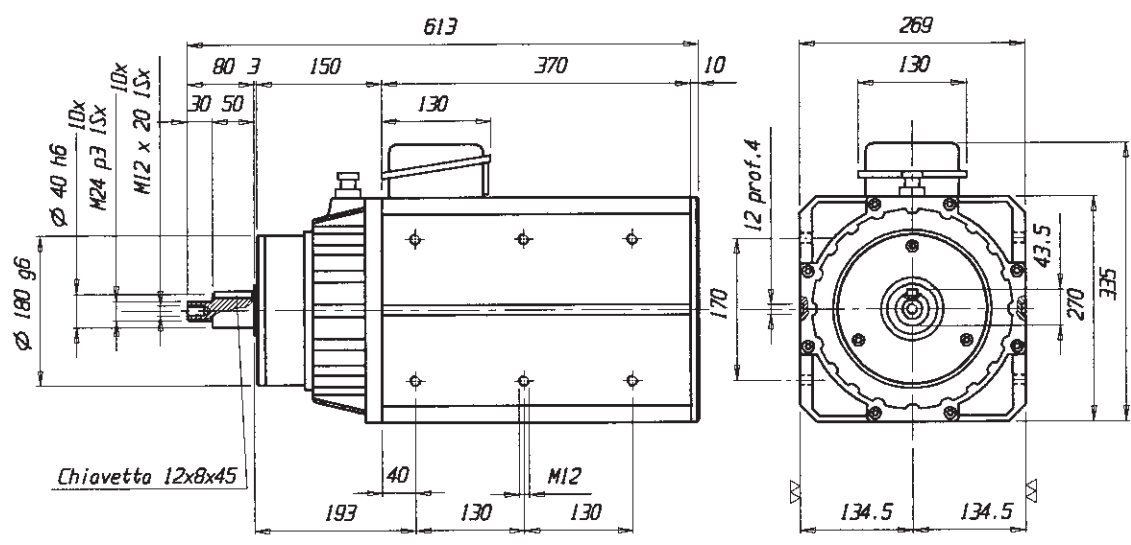
TMPE8



Tipo Type	Tensione Voltage (Volt)	Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS φ	Peso Weight (Kg)
TMPE8 10/2	220/380 (380 Δ)	50/100	3000/6000	8.20/11.2	29.3/16.9 (25.5 Δ)	0.87	60
TMPE8 13/2	220/380 (380 Δ)	50/100	3000/6000	11.2/16.4	37.3/21.5 (32.6 Δ)	0.90	63

Solo a richiesta tensioni 230/400. Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
Only on request voltages 230/400. For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

TMPE



dimensioni



MW200

S

serie per seghe
circolari

series for circular
saws

S1

S3

S2

Elettromandri di forma piatta per lavorazioni di taglio su macchine per seghe circolari. Questi elettromandri vengono assemblati con tenuta antipolvere. Il loro campo di rotazione è tra i 1500 e i 6000 giri/minuto. La forma costruttiva favorisce la profondità di taglio.

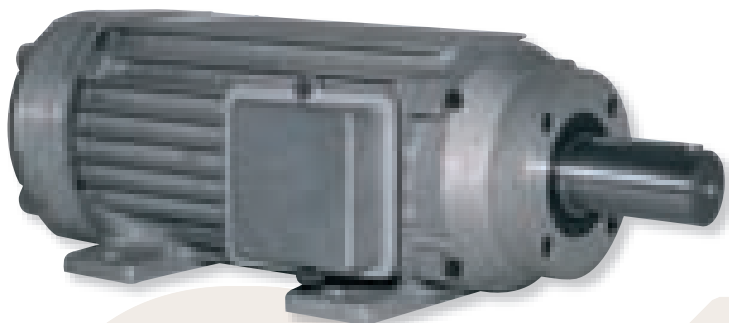
Flat electric spindles for cutting application on circular saws. These electric spindles are equipped with dust proof seals. Rotation field is from 1500 to 6000 rpm. Motor is designed for rough sawing works.

elettromandrini electric spindles

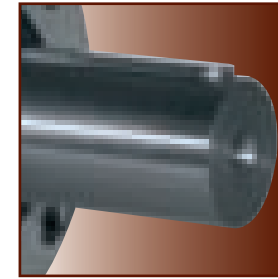
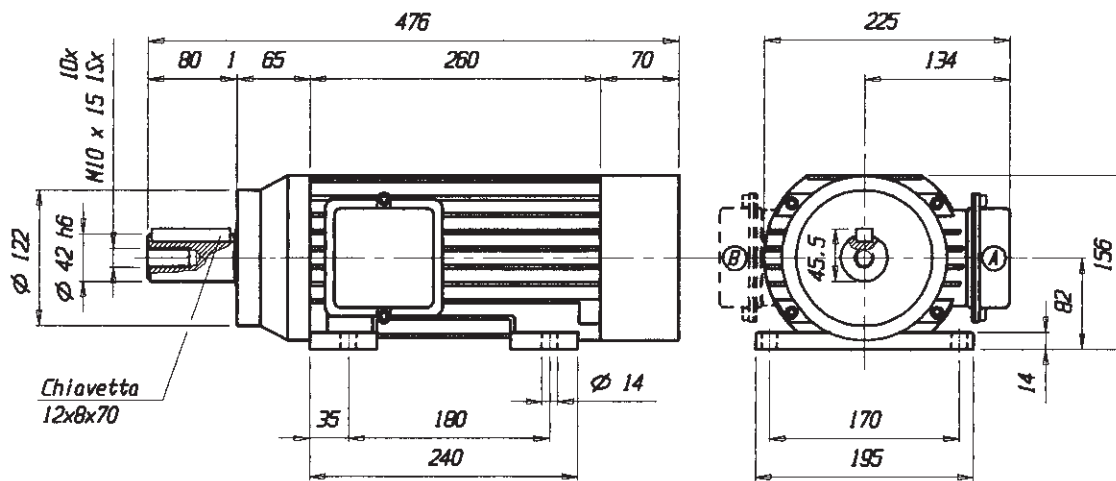
S1

Tipo Type	Tensione Voltage (Volt)	Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS φ	Peso Weight (Kg)
S1 12/2	220/380	50	3000	2.90	11.5/6.60	0.83	25
	380 Δ	100	6000	4.80	10.90	0.83	
S1 14/2	220/380	50	3000	4.00	15.5/8.90	0.83	27
	380 Δ	100	6000	6.65	14.9	0.84	
S1 13/4	220/380	50	1500	2.20	9.30/5.30	0.80	25
	380 Δ	100	3000	3.60	8.20	0.82	
S1 17/4	220/380	50	1500	3.00	11.8/6.80	0.80	27
	380 Δ	100	3000	4.50	10.2	0.82	

Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

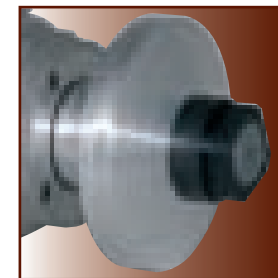
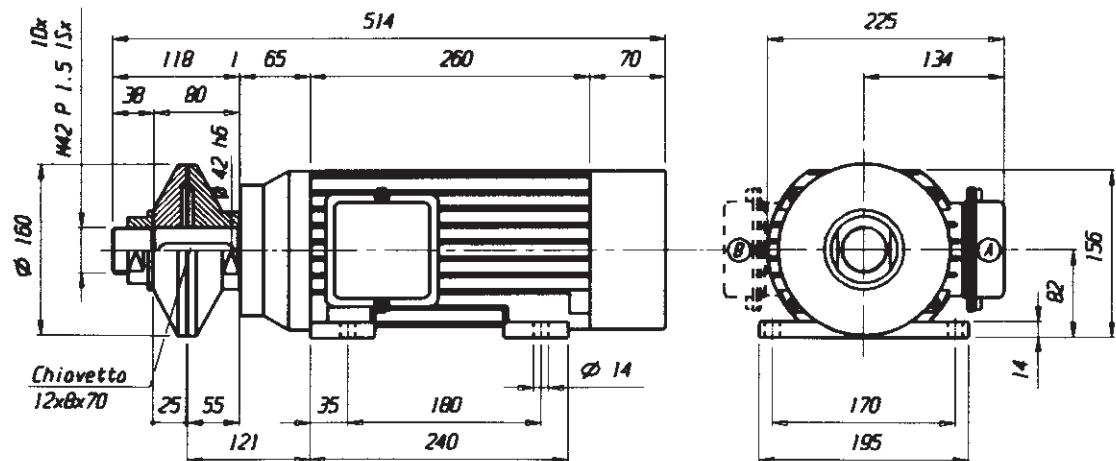


S1



Sporgenza SC
Nose type SC

NB: Posizione morsettiera standard come da posizione "A" con forature lato destro. Su richiesta in posizione "B" con forature lato sinistro.
NB: Standard terminal box in "A" position with fixing holes on right side. On request terminal box in "B" position with fixing holes on left side.



Sporgenza SCF e Flange
Nose type SCF with Flanges

dimensioni

elettromandrini electric spindles

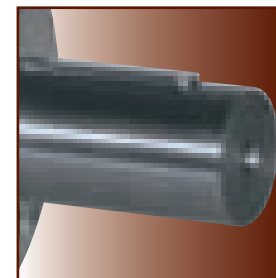
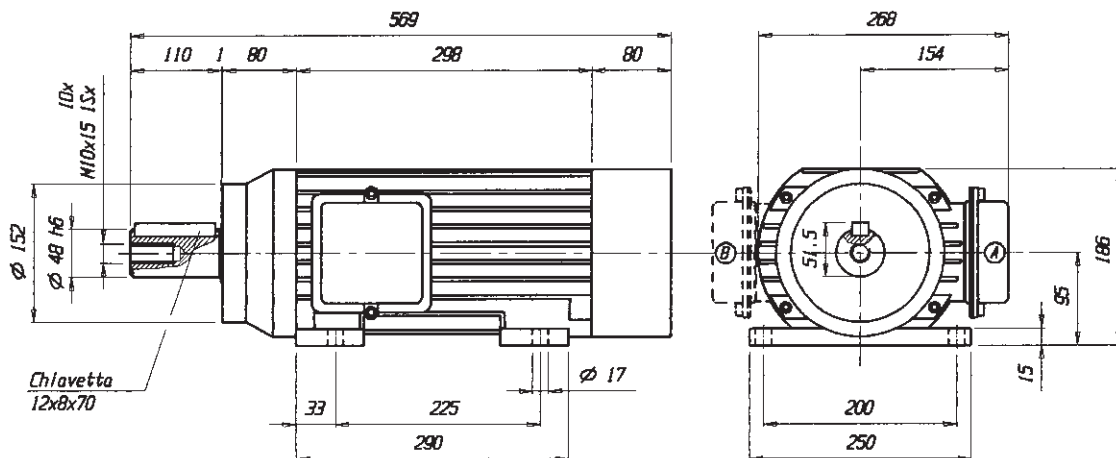
S2



Tipo Type	Tensione Voltage (Volt)	Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS φ	Peso Weight (Kg)
S2 12/2	220/380	50	3000	5.20	20.0/11.4	0.82	45
	380 Δ	100	6000	7.30	16.2	0.83	
S2 15/2	220/380	50	3000	7.00	27.0/15.6	0.82	60
	380 Δ	100	6000	9.20	20.0	0.83	
S2 12/4	220/380	50	1500	3.70	14.9/8.6	0.80	45
	380 Δ	100	3000	5.40	12.0	0.82	
S2 14/4	220/380	50	1500	4.50	17.7/10.2	0.80	60
	380 Δ	100	3000	6.35	14.0	0.82	

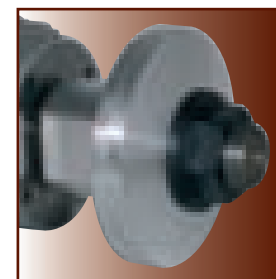
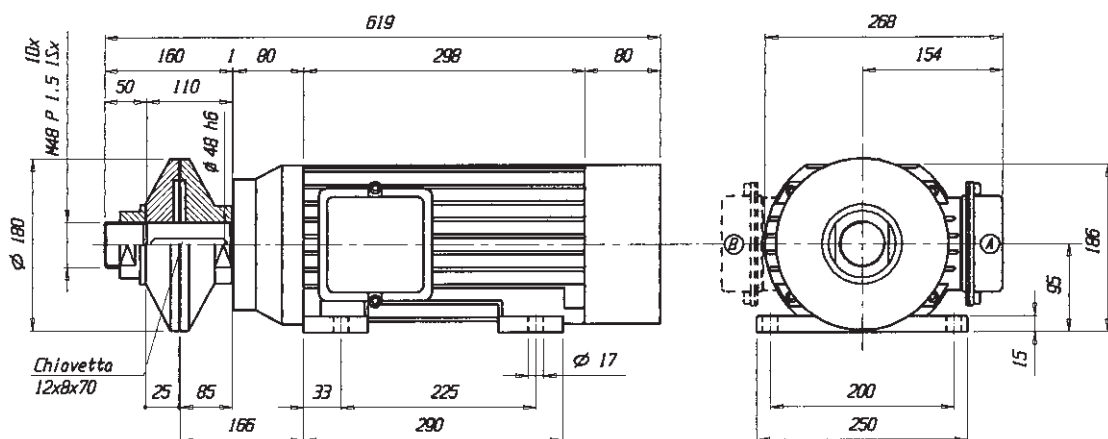
Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

S2



Sporgenza SC
Nose type SC

NB: Posizione morsetteria standard come da posizione "A" con forature lato destro. Su richiesta in posizione "B" con forature lato sinistro.
NB: Standard terminal box in "A" position with fixing holes on right side. On request terminal box in "B" position with fixing holes on left side.

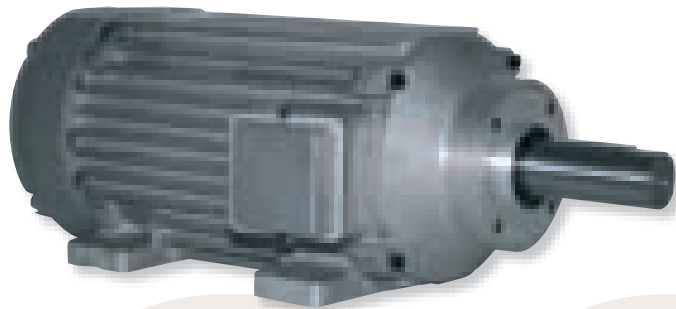


Sporgenza SCF e Flange
Nose type SCF with Flanges

dimensioni

elettromandrini electric spindles

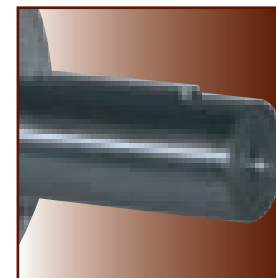
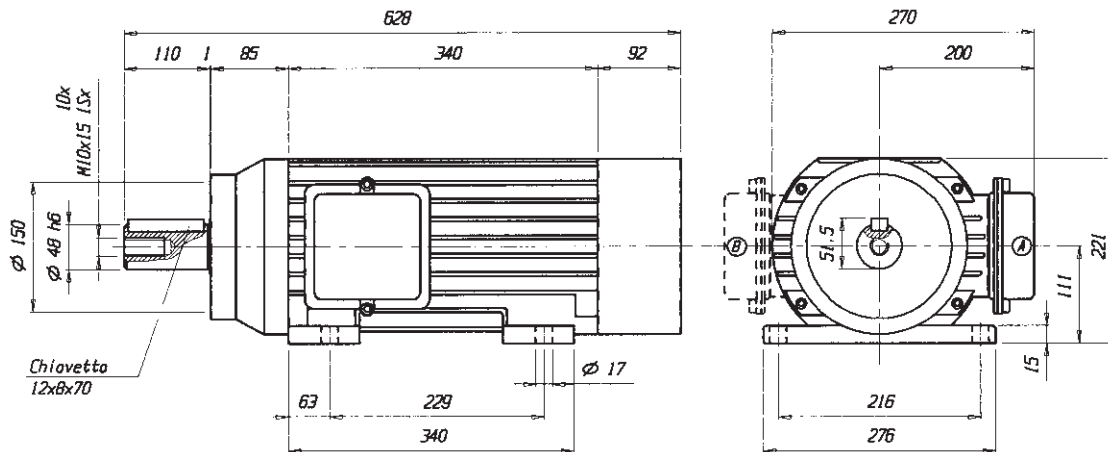
S3



Tipo Type	Tensione Voltage (Volt)	Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS φ	Peso Weight (Kg)
S3 9/2	220/380	50	3000	5.50	20.1/11.6	0.86	55
	380Δ	100	6000	8.50	17.8	0.86	
S3 12/2	220/380	50	3000	7.10	26.0/15.0	0.87	57
	380Δ	100	6000	11.3	23.5	0.87	
S3 14/2	220/380	50	3000	8.80	32.5/18.8	0.87	60
	380Δ	100	6000	12.6	26.5	0.87	
S3 16/2	220/380	50	3000	10.5	39.0/22.5	0.87	62
	380Δ	100	6000	14.3	30.0	0.87	
S3 20/2	220/380	50	3000	14.2	53.7/31.0	0.87	65
	380Δ	100	6000	19.0	40.0	0.87	
S3 12/4	220/380	50	1500	5.20	20.8/12.0	0.83	57
	380Δ	100	3000	6.30	14.0	0.83	
S3 16/4	220/380	50	1500	7.10	27.7/16.0	0.83	60
	380Δ	100	3000	8.40	18.5	0.84	
S3 18/4	220/380	50	1500	8.50	34.6/20.0	0.83	62
	380Δ	100	3000	10.2	23.0	0.84	
S3 20/4	220/380	50	1500	10.5	41.6/24.0	0.83	65
	380Δ	100	3000	12.2	26.9	0.84	

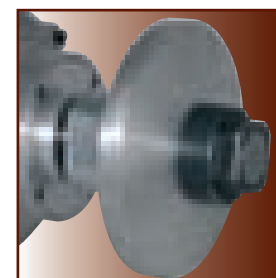
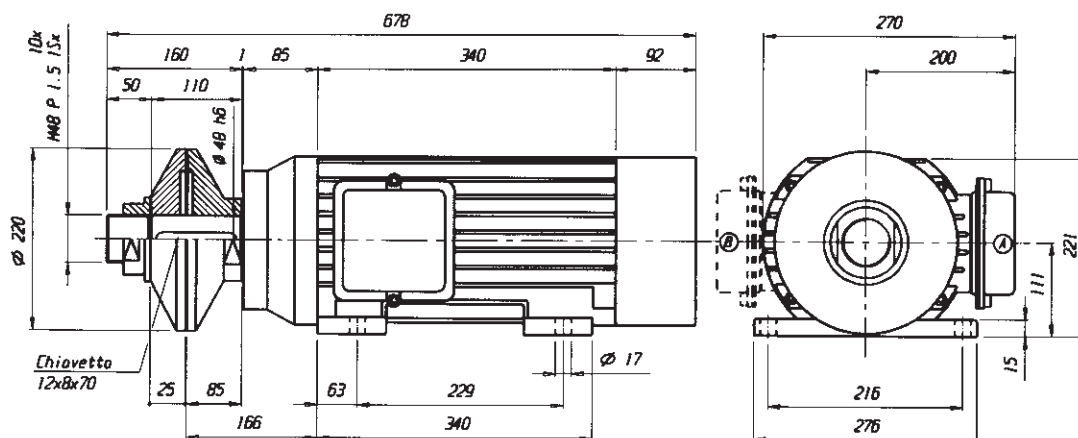
Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

S3



Sporgenza SC
Nose type SC

NB: Posizione morsetteria standard come da posizione "A" con forature lato destro. Su richiesta in posizione "B" con forature lato sinistro.
NB: Standard terminal box in "A" position with fixing holes on right side. On request terminal box in "B" position with fixing holes on left side.



Sporgenza SCF e Flange
Nose type SCF with Flanges

dimensioni



**la velocità...
questione di stile**

**speed...
a matter of style**

TMA

serie cambio utensile
automatico

series with automatic
tool change (ATC)

Questi prodotti d'alta tecnologia sono studiati per essere impiegati su centri di lavoro a controllo numerico. Sono particolarmente robusti per mantenere un'ottima rigidità durante la lavorazione. Questi elettromandrini trovano impiego nel settore della produzione in serie di particolari meccanici particolarmente complessi, garantendo un'ottima qualità nelle finiture. Con questi elettromandrini vengono lavorati materiali termoidurenti, legno, alluminio, plastica e leghe leggere. Vengono raffreddati ad aria compressa o con elettroventola integrata.

These "High Tech" spindles are mainly used for milling, drilling, and routing applications on CNC machines. They are of very sturdy design with excellent rigidity. Mostly, high production, mass produced, complex parts would incorporate this style of spindle for excellent repetitive sizing and finishes. These spindles are cooled by compressed air or integrated electric fan. They are well suited for all types of materials such as wood, aluminium, composites, plastics and light alloys.

TMA3 ISO 20

TMA4 ISO 30

TMA6 ISO 40

TMA4 ISO 20

TMA5 ISO 30

TMA6 HSK F63

elettromandrini
electric spindles

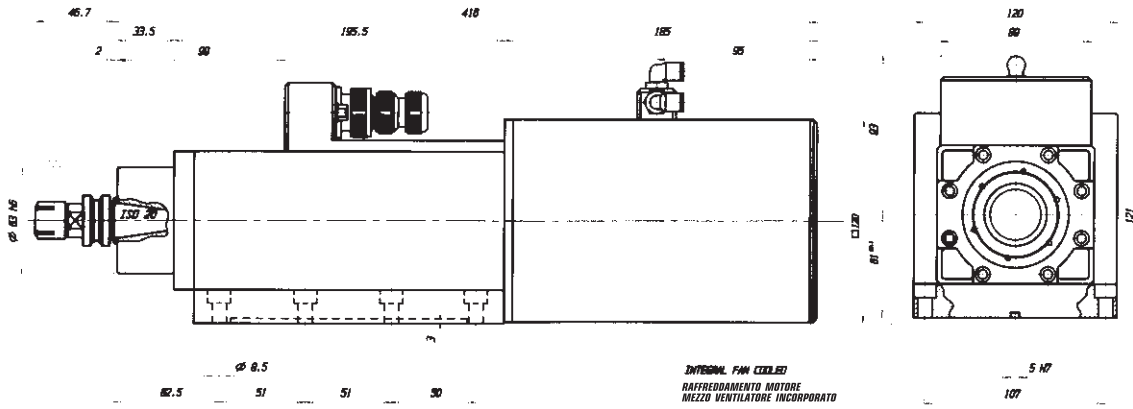
TMA3 ISO 20



Raffreddamento mezzo elettroventola integrata Volts 220/230 - Hz 50/60
Cooled by integrated electric fan Volts 220/230 - Hz 50/60

Tipo Type	Tensione Voltage (Volt)	Frequenza [Hz]	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (ampss)	COS ϕ	Peso Weight (Kg)
TMA3 12/2 ISO 20	350	200/300	12000/18000	1.8	4.9	0.83	12
	350	300/400	18000/24000	1.8	4.7	0.83	12
	350	400/400	24000	2.2	5.8	0.83	12

Solo a richiesta tensioni 230/400. Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
Only on request voltages 230/400. For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

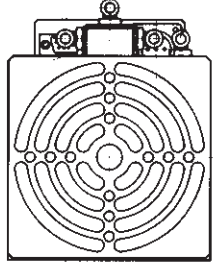


CORSA PISTONE
AVANTI/AIR INLET
TEXT. RELEASE



ENTRATA ARIA
PER PULIZIA COND/AIR INLET
TAPER CLEANING

CORSA PISTONE
INDIETRO/AIR INLET
TEXT. CLAMP



ENTRATA ARIA
PRESSURIZZAZIONE
CIRCUITO ANTERIORE/AIR PURGE
INLET



CONNETTORE PER
ALIMENTAZIONE MOTORE
ED ALIMENTAZIONE
ELETTROVENTILA/POWER SUPPLY
CONNECTOR



A-B-C ALIMENTAZIONE MOTORE/POWER SUPPLY-MOTOR
D1 TERRA/Earth
E-F ALIMENTAZIONE ELETTROVENTILA/POWER SUPPLY-FAN

CONNETTORE A BASSA
TENSIONE 11, 24 VCC
PER CONTROLLO SENSORI/
LOW TENSION CONNECTOR
V. 24 VCC.

dimensioni

elettromandrini
electric spindles

TMA4 ISO 20

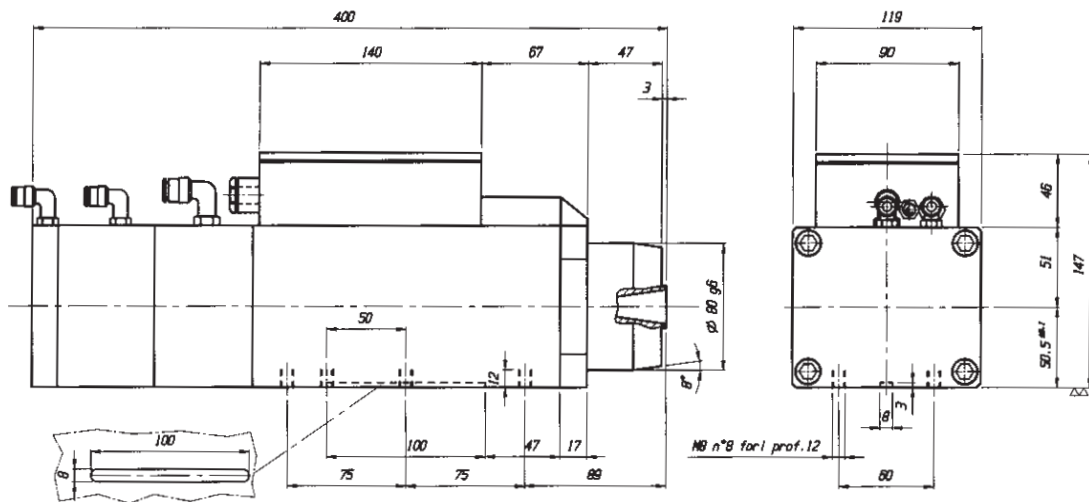


Raffreddamento ad aria compressa
Compressed air cooling

Tipo Type	Tensione Voltage (Volt)	Frequenza [Hz]	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS ϕ	Peso Weight (Kg)
TMA4 10/2 ISO 20	350	400/500	24000/30000	3.6	8.6	0.82	16

Solo a richiesta tensioni 230/400. Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
Only on request voltages 230/400. For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

TMA4



NB: La versione a 24000 giri richiede l'utilizzo di cuscinetti ceramici.
 NB: Ceramic ball bearings required for 24000 rpm.

dimensioni

elettromandrini
electric spindles

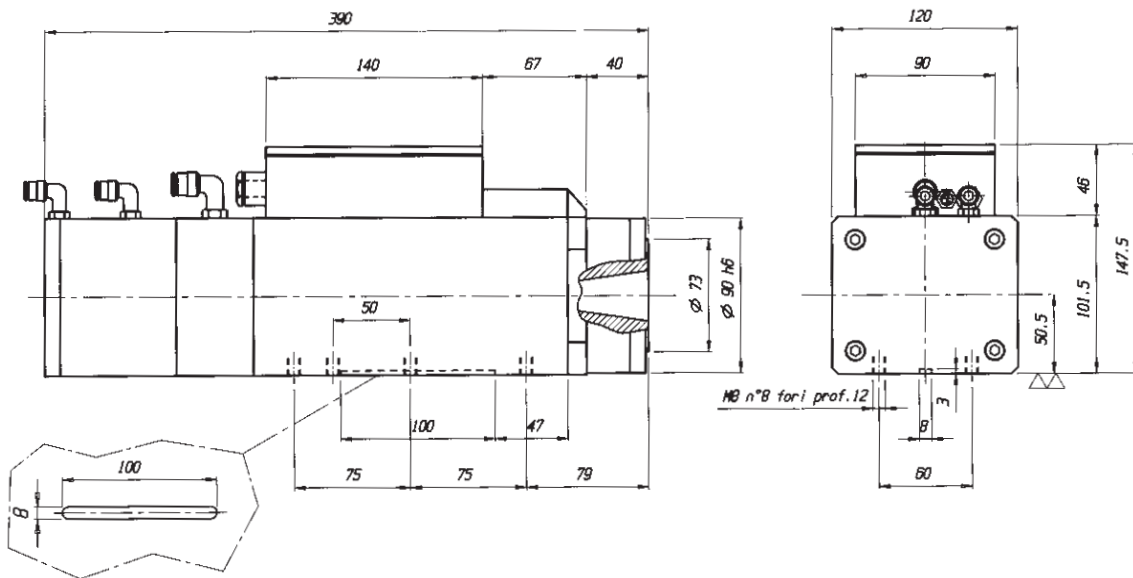
TMA4 ISO 30



Raffreddamento ad aria compressa
Compressed air cooling

Tipo Type	Tensione Voltage [Volt]	Frequenza [Hz]	Giri [rpm]	Potenza resa Out. Power [Kw]	Assorbimento Absorb. [amps]	COS ϕ	Peso Weight [Kg]
TMA4 10/2 ISO 30	350	200/300	12000/18000	3.6	8.6	0.82	16
TMA4 10/2 ISO 30	350	300/400	18000/24000	3.6	8.6	0.82	16

Solo a richiesta tensioni 230/400. Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
Only on request voltages 230/400. For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.



NB: La versione a 24000 giri richiede l'utilizzo di cuscinetti ceramici.
 NB: Ceramic ball bearings required for 24000 rpm.

dimensioni

elettromandrini
electric spindles

TMA5 ISO 30

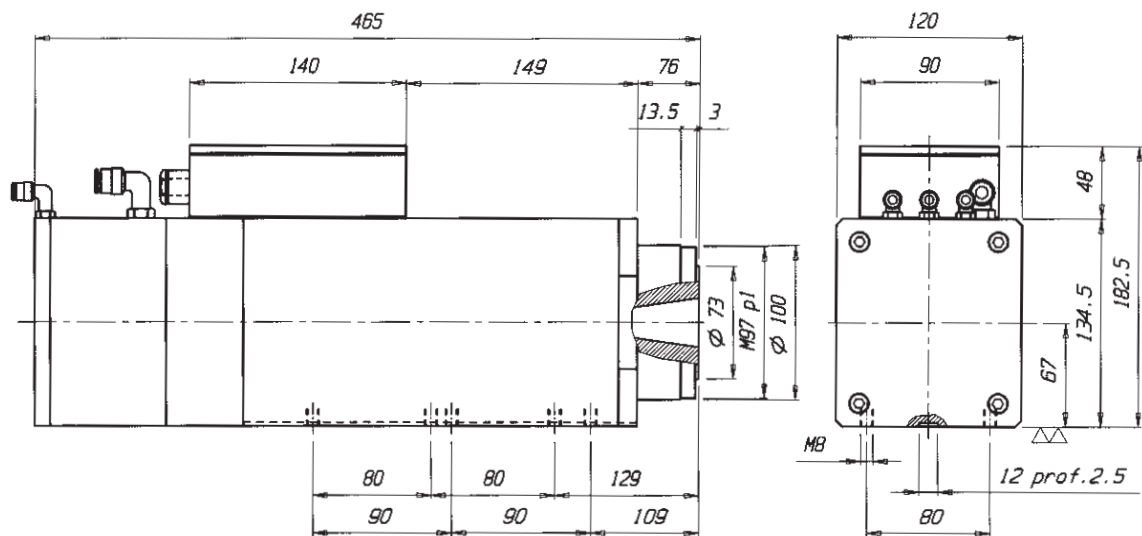


Raffreddamento ad aria compressa
Compressed air cooling

Tipo Type	Tensione Voltage (Volt)	Frequenza [Hz]	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS ϕ	Peso Weight (Kg)
TMA5 14/2 ISO 30	350	200/300	12000/18000	7	16	0.85	25
TMA5 14/2 ISO 30	350	300/400	18000/24000	7	16	0.82	25

Solo a richiesta tensioni 230/400. Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
Only on request voltages 230/400. For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

TMA5



NB: La versione a 24000 giri richiede l'utilizzo di cuscinetti ceramici.
 NB: Ceramic ball bearings required for 24000 rpm.

dimensioni

elettromandrini
electric spindles

TMA6 ISO 40

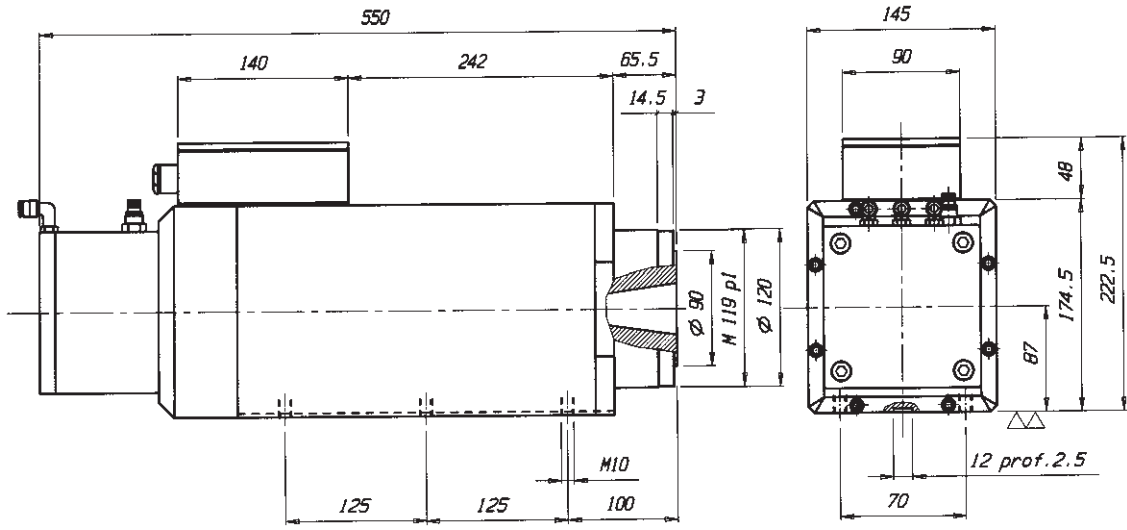


Raffreddamento ad aria compressa
Compressed air cooling

Tipo Type	Tensione Voltage (Volt)	Frequenza [Hz]	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS ϕ	Peso Weight (Kg)
TMA6 17/2 ISO 40	350	200/300	12000/18000	11.0	26.0	0.85	42

Solo a richiesta tensioni 230/400. Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
Only on request voltages 230/400. For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

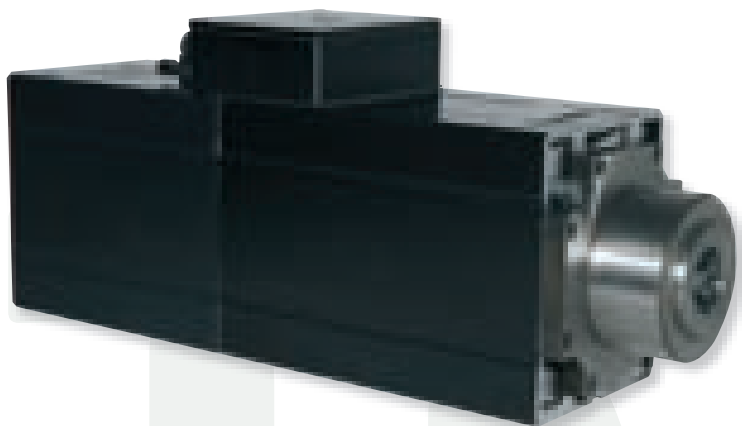
TMA6



ISO 4400 dimensioni

elettromandrini
electric spindles

TMA6 HSK F-63



Raffreddamento mezzo elettroventola integrata Volts 220/230 - Hz 50/60
Cooled by integrated electric fan Volts 220/230 - Hz 50/60

Tipo Type	Tensione Voltage (Volt)	Frequenza [Hz]	Giri Max (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS ϕ	Peso Weight (Kg)
TMA6 12/4 HSK F63	350	400/600	18000	8.80	21.6	0.80	38
TMA6 17/4 HSK F63	350	400/600	18000	12.0	28.5	0.82	43

Solo a richiesta tensioni 230/400. Per Tensioni 230/400 VOLT l'assorbimento amperometrico va moltiplicato per 0.95.
Only on request voltages 230/400. For Voltages 230/400 the amps ABS. has to be multiplied by 0.95.

nomenclatura parti motore serie TMA

parts nomenclature series TMA

Descrizione del particolare

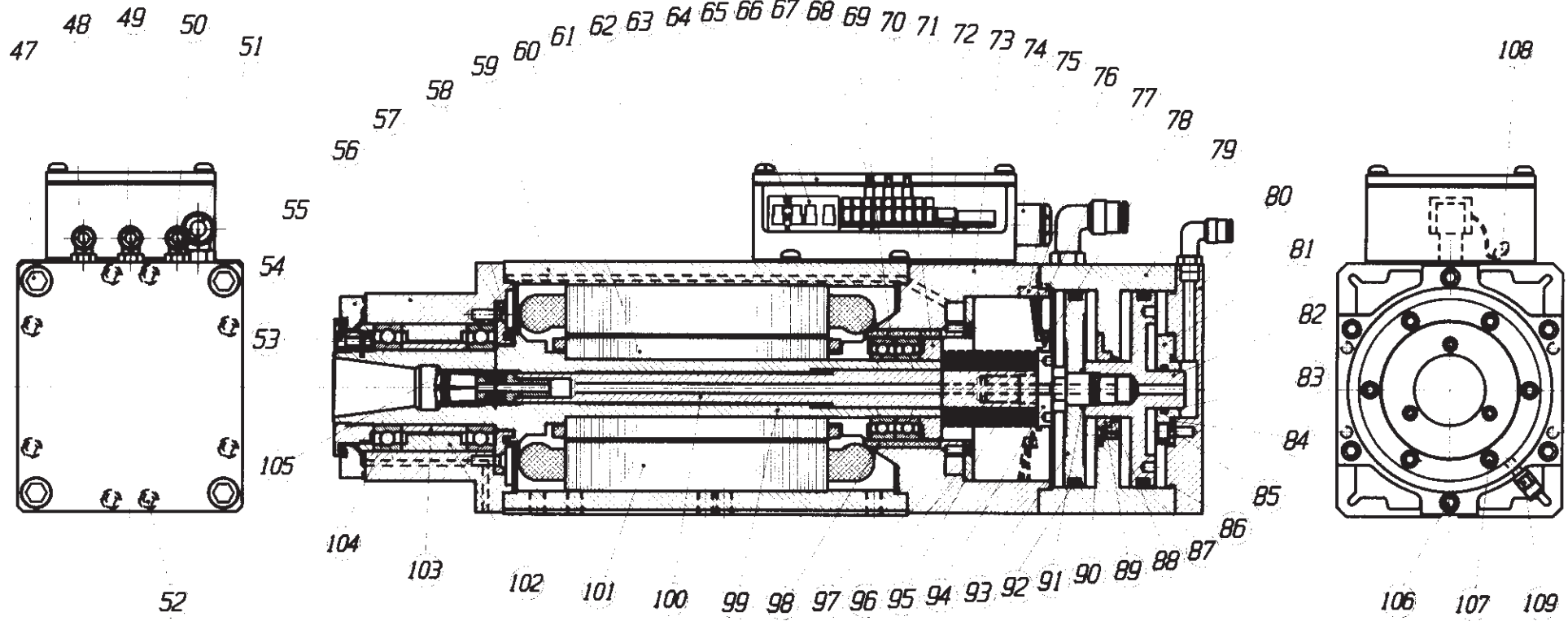
47	Vite M10x100
48	Presa ad angolo 1/8" gas fil.6
49	Presa ad angolo 1/8" gas fil.6
50	Presa ad angolo 1/8" gas fil.6
51	Presa ad angolo 1/4" gas fil.6
52	Vite M6x80
53	Vite M4x14
54	Ghiera labirinto
55	Flangia anteriore
56	Corpo calotta inferiore
57	Flangia posteriore
58	Vite M5x16
59	Carcassa motore
60	Rotore
61	Guarniz. scatola morsettiera
62	Guarnizione. coperchio morsettiera
63	Rondella dentellata
64	Vite M5x14
65	Vite M3x20
66	Morsetto BK4
67	Coperchio morsettiera
68	Led
69	Coppia cuscinetti VEX30
70	Ghiera blocca coppia posteriore
71	Scheda Elettrica
72	Guarnizione OR COD.3037
73	Coperchio posteriore
74	Pressacavo nylon 3/4"
75	Vite M5x12
76	Guarnizione OR COD.2021
77	Interr. di prossimità MB5 26 pfakl

78	Sensore induttivo
79	Calotta cilindro bloccaggio
80	Guarnizione in teflon
81	Pistone superiore
82	Guarnizione OR COD.3081
83	Guarnizione OR COD.3118
84	Vite M5x12
85	Guarnizione OR COD.2400
86	Guarnizione OR COD.6375
87	Guarnizione OR COD.3118
88	Flangia Teflon dm. 30
89	Vite M5x12
90	Guarnizione OR COD.2063
91	Guarnizione OR COD.6375
92	Pistone posteriore
93	Perno di contatto
94	Molle a tazza
95	Flangia chiusura aria
96	Vite M4x10
97	Bussola in acciaio
98	Albero motore fresa
99	Alberino blocc. e sblocc.
101	Statore
102	Distanziale cusc. esterno
103	Distanziale cusc. interno
104	Coppia cuscinetti VEX40
105	Pinza cambio rapido
106	Vite M6x20
107	Vite M5x20
108	Sonda termica
109	Entrata aria per press. Cusc. Anteriore

Descriptions of the part

47	Screw M10x100
48	Elbow intake 1/8" gas thread 6
49	Elbow intake 1/8" gas thread 6
50	Elbow intake 1/8" gas thread 6
51	Elbow intake 1/4" gas thread 6
52	Screw M6x80
53	Screw M4x14
54	Labyrinth ring
55	Front flange
56	Bottom body cover
57	Rear flange
58	Screw M5x16
59	Motor frame
60	Rotor
61	Terminal box gasket
62	Terminal box cover gasket
63	Toothed washer
64	Screw M5x14
65	Screw M3x20
66	Terminal
67	Terminal box cover
68	Led
69	Pair of bearings VEX30
70	Rear pair lock ring
71	Electric Card
72	O-ring Code 3037
73	Rear cover
74	Wire clip nylon 3/4"
75	Screw M5x12
76	O-ring code 2021
77	Switch bracket

78	Proximity switch MB5
79	Cylinder release double cover
80	Cylinder lock cover
81	Teflon gasket
82	Top piston
83	O-ring Code 3081
84	O-ring Code 3118
85	Screw M5x12
86	O-ring Code 2400
87	O-ring Code 6328
88	O-ring Code 3118
89	Teflon flange dia. 30
90	Screw M5x12
91	O-ring Code 2063
92	O-ring Code 6375
93	Rear piston
94	Contact pin
95	Belleville washers
96	Air closure flange
97	Screw M4x10
98	Steel bushing
99	Cutter motor shaft
101	Lock and release shaft
102	Stator
103	Ext. bearing spacer
104	Int. bearing spacer
105	Pair of bearings VEX40
106	Screw M6x20
107	Screw M5x20
108	Heat probe
109	Air inlet for front bearing pressure





AF

serie
raffreddata a liquido

liquid cooled
series

□ Gli elettromandri della serie AF grazie al raffreddamento a liquido possono raggiungere velocità di utilizzo molto elevate (fino a 40,000 giri al minuto) riducendo così i tempi di lavorazione e mantenendo una precisione di lavoro alta. Sono particolarmente adatti per lavorazioni di fresatura, foratura, rettifica, incisione e scontornatura su qualsiasi tipo di materiale.

AF ER Collet Interface Series is made to operate at higher speeds, up to 40,000 RPM, therefore they are Liquid Cooled. Cooling is accomplished by a Refrigeration System or Air/ Water Heat Exchanger. These models can reduce machining time, improve finish, and work to tight tolerances on small part pieces. They are very suitable for milling, drilling, grinding, engraving all types of materials.

AF60 ER 11 AF100 ER 20 AF110 ER 32

AF80 ER 20 AF90 ER 25 AF110 ER 40

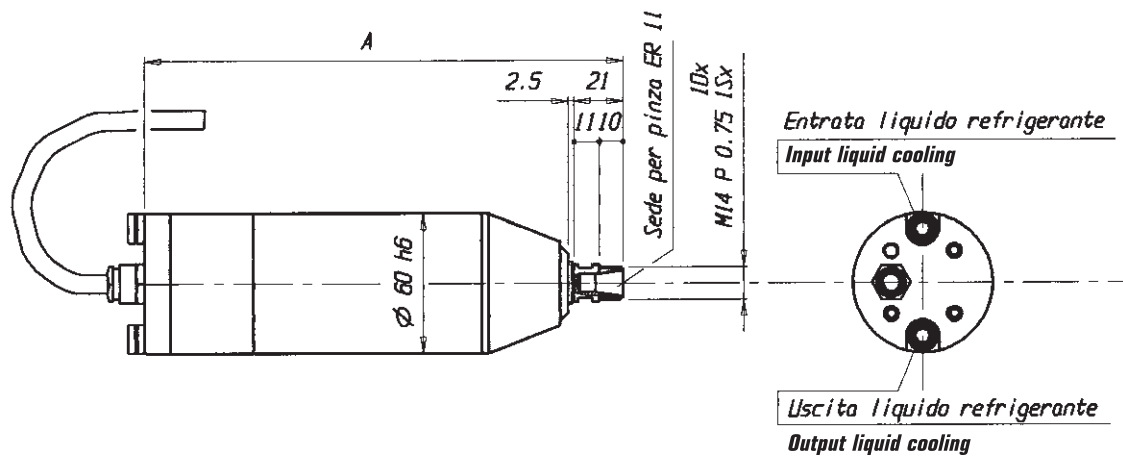
elettromandrini
electric spindles

AF60



Tipo Type	Tensione Voltage [Volt]	Frequenza [Hz]	Giri [rpm]	Potenza resa Out. Power [Kw]	Assorbimento Absorb. [amps]	COS φ	Peso Weight [Kg]
AF60 2.5/2	220	400	24000	0.25	1.8	0.70	2
AF60 2.5/2	380	400	24000	0.25	1.0	0.70	2
AF60 2.5/2	220	670	40000	0.25	1.8	0.70	2
AF60 2.5/2	380	670	40000	0.25	1.0	0.70	2
AF60 6/2	220	400	24000	0.55	2.6	0.75	2.5
AF60 6/2	380	400	24000	0.55	1.5	0.75	2.5
AF60 6/2	220	670	40000	0.55	2.6	0.75	2.5
AF60 6/2	380	670	40000	0.55	1.5	0.75	2.5

AF60



NB: Pinza e ghiera vengono fornite a richiesta.
 NB: Collet and ring nut only on your request.



Sporgenza per pinza ER 11
 Nose type for collet ER 11

Tipo/Type	A
AF60 2.5/2	167.5
AF60 6/2	202.5

dimensioni

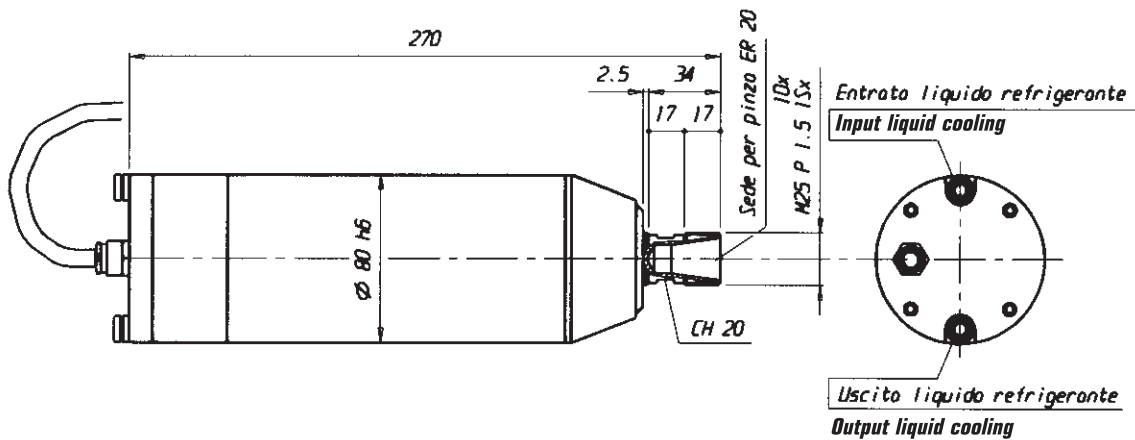
elettromandrini
electric spindles

AF80

Tipo Type	Tensione Voltage (Volt)	Frequenza nominale (Hz)	Frequenza max (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS ϕ	Peso Weight (Kg)
AF80 9/2	220	300	400	24000	1.1	5.2	0.75	6.5
AF80 9/2	380	300	400	24000	1.1	3.0	0.75	6.5
AF80 9/2	220	400	670	40000	1.4	5.8	0.75	6.5
AF80 9/2	380	400	670	40000	1.4	3.3	0.75	6.5



AF80



Sporgenza per pinza ER 20
Nose type for collet ER 20

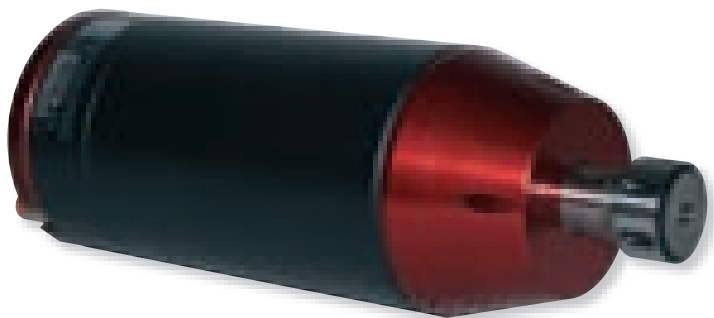
NB: Pinza e ghiera vengono fornite a richiesta.
NB: Collet and ring nut only on your request.

dimensioni

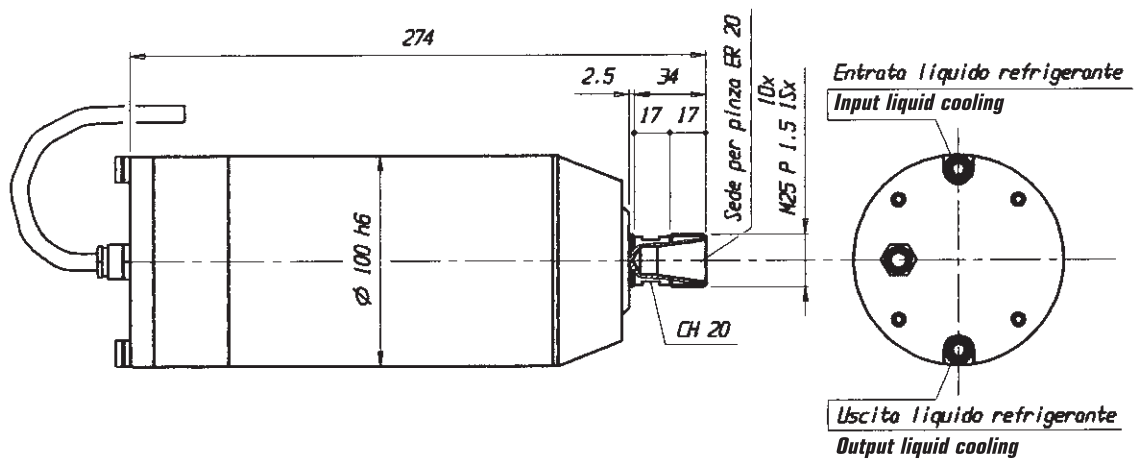
elettromandrini
electric spindles

AF100

Tipo Type	Tensione Voltage (Volt)	Frequenza nominale (Hz)	Frequenza max (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS ϕ	Peso Weight (Kg)
AF100 7/2	220	300	400	24000	1.8	7.8	0.80	8
AF100 7/2	380	300	400	24000	1.8	4.5	0.80	8
AF100 7/2	220	400	670	40000	2.2	8.5	0.80	8
AF100 7/2	380	400	670	40000	2.2	4.9	0.80	8



AF100



Sporgenza per pinza ER 20
Nose type for collet ER 20

NB: Pinza e ghiera vengono fornite a richiesta.
NB: Collet and ring nut only on your request.

dimensioni

elettromandrini
electric spindles

AF90



Tipo Type	Tensione Voltage (Volt)	Frequenza nominale (Hz)	Frequenza max (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS ϕ	Peso Weight (Kg)
AF90 10/2	380	200	300	18000	4.0	8.70	0.81	14
	380	300	400	24000	4.6	11.4	0.82	14

AF90

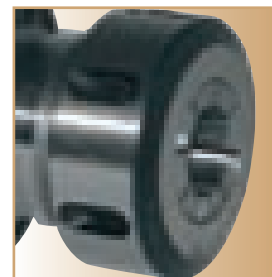
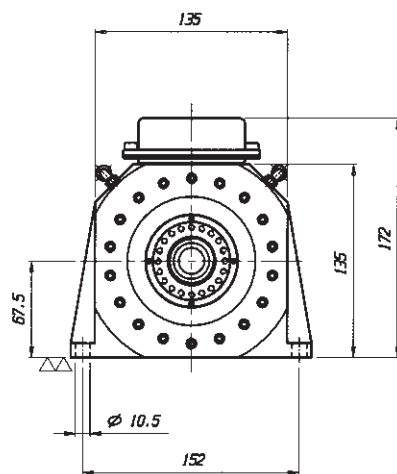
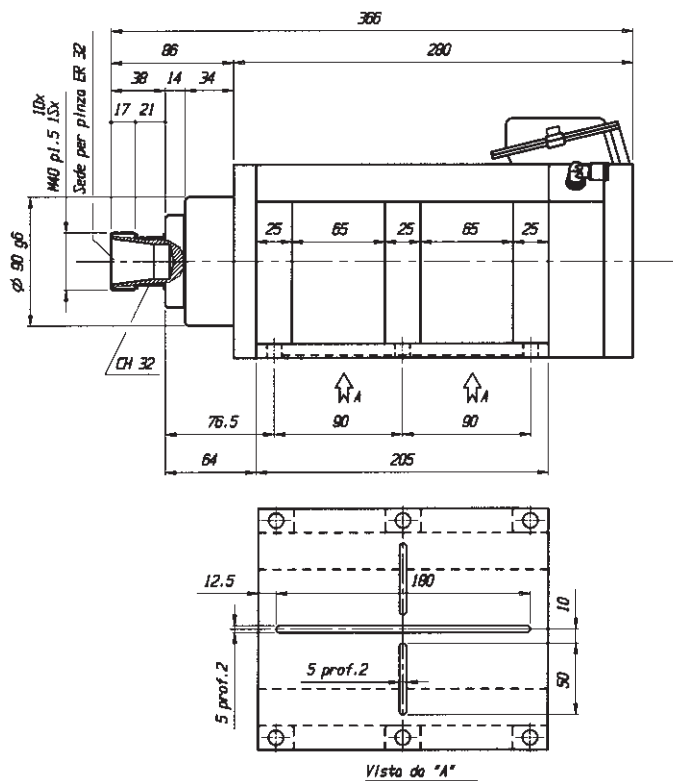
elettromandrini
electric spindles

AF110

Tipo Type	Tensione Voltage (Volt)	Frequenza nominale (Hz)	Frequenza max (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS ϕ	Peso Weight (Kg)
AF110 14/2	380	200	300	18000	7.5	16.8	0.85	28
	380	300	400	24000	8.5	19.4	0.82	28



AF110



Sporgenza per pinza ER 32
Nose type for collet ER 32

NB: Pinza e ghiera vengono fornite a richiesta.
NB: Collet and ring nut only on your request.

dimensioni

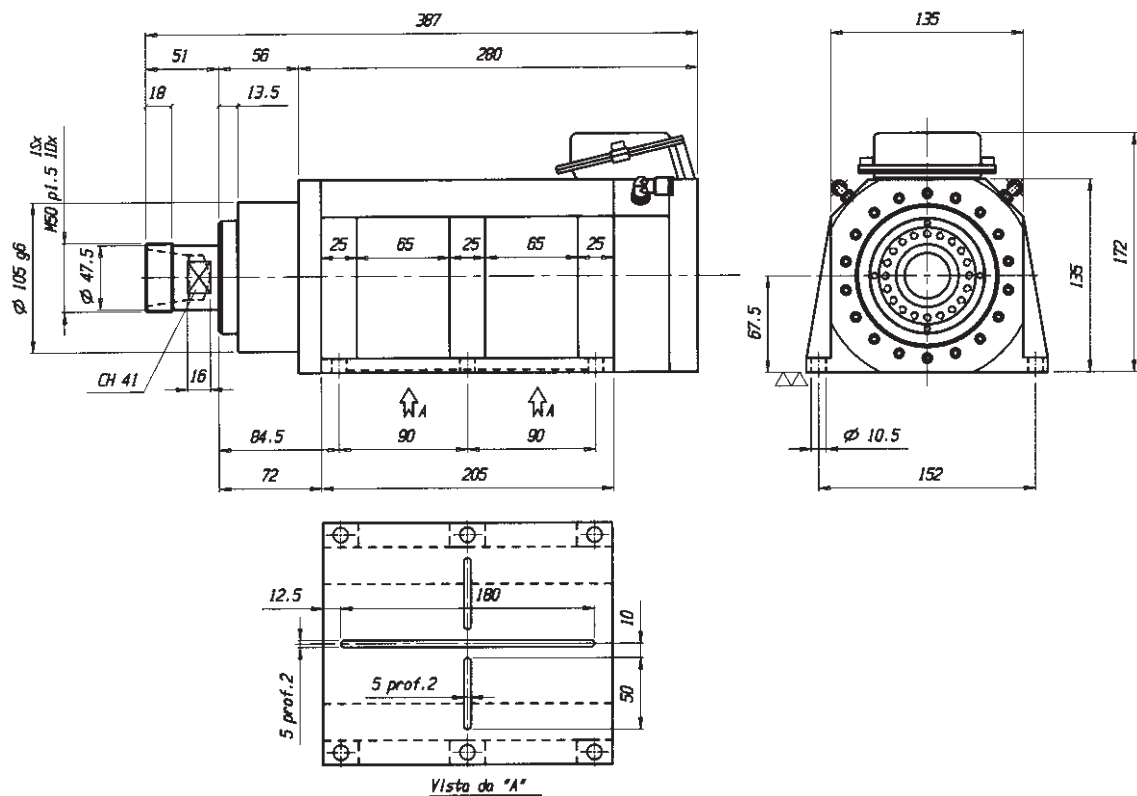
elettromandrini
electric spindles

AF110



Tipo Type	Tensione Voltage (Volt)	Frequenza nominale (Hz)	Frequenza max (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amp)	COS ϕ	Peso Weight (Kg)
AF110 14/2	380	100	200	12000	5.0	10.0	0.82	28
	380	200	300	18000	7.5	16.8	0.85	28

AF110



Sporgenza per pinza ER 40
Nose type for collet ER 40

NB: Pinza e ghiera vengono fornite a richiesta.
NB: Collet and ring nut only on your request.

dimensioni

nomenclatura parti motore serie AF

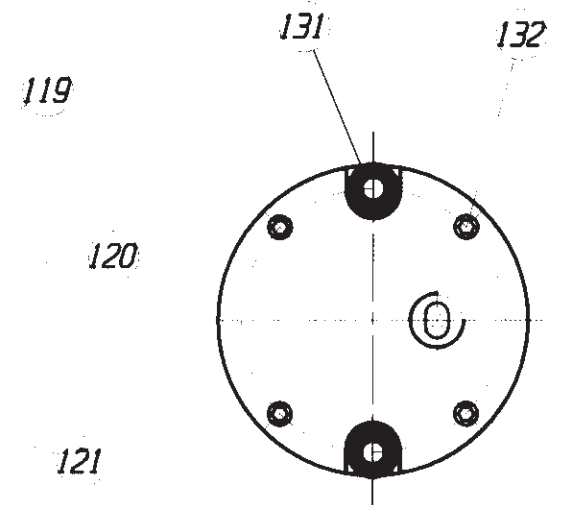
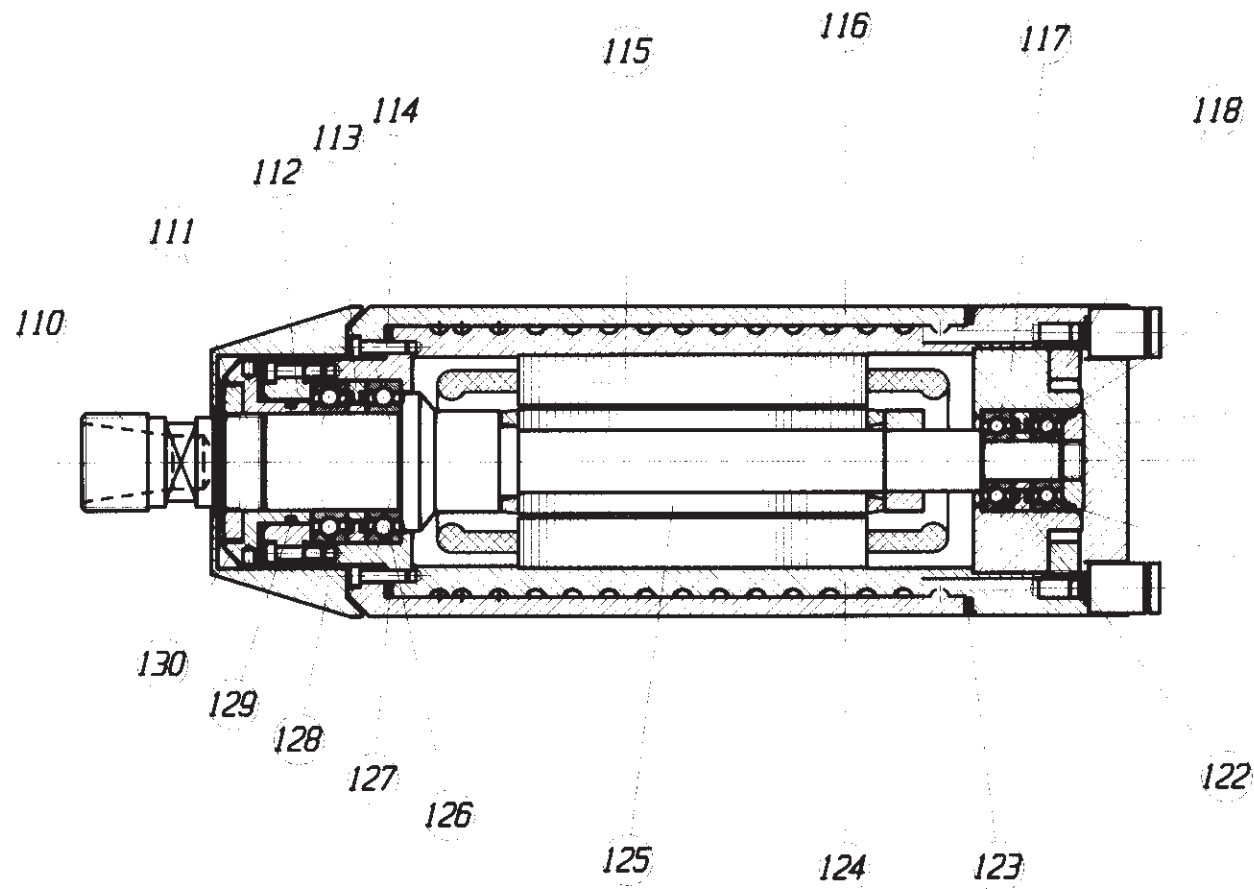
parts nomenclature series AF

Descrizione del particolare

110	Albero
111	Controghiera anteriore
112	Coperchio anteriore
113	Distanziale anteriore
114	Vite
115	Statore
116	Corpo esterno
117	Coperchio posteriore
118	Ghiera posteriore esterna
119	Coppia a contatto obliquo
120	Chiusura posteriore
121	Segmenti lamellari
122	Distanziale posteriore
123	Guarnizione "O" - Ring
124	Carcassa
125	Rotore
126	Coppia a contatto obliquo
127	Guarnizione "O" - Ring
128	Calotta anteriore
129	Segmenti lamellari
130	Labirinto
131	Connettore dritto
132	Vite

Descriptions of the part

110	Shaft
111	Locking nut/Labyrinth seal
112	Locking nut
113	Distance ring
114	Screw
115	Wound stator
116	Body casing
117	Rear cover
118	Rear cover/Locking nut
119	Rear bearings
120	Rear cap
121	Lamellar segment
123	"O" - Ring
124	Motor casing
125	Rotor
126	Front bearings
127	"O" - Ring
128	Front cap
129	Lamellar segment
130	Labyrinth seal
131	Water nipple M6
132	Screw



A computer monitor is the central focus, displaying a blue screen with a faint grid pattern. A large, metallic padlock is attached to the monitor's bezel, and several heavy chains are wrapped around it, extending across the frame. The background is a dark blue with a pattern of glowing, semi-transparent icons including a globe, a magnifying glass, a document, and a network diagram. The overall theme is digital security and protection.

**la nostra
tecnologia è sicura**

**our technology
is safe**

AF_{CU}

serie cambio utensile automatico

series with automatic tool change

□ Questi elettromandrini possono essere utilizzati per lavorazione anche su materiali (dal legno al granito) con durezza superiori ai 52 HRC. Le applicazioni sono svariate; fresatura, foratura, intarsiatura, rettifica, lucidatura, limatura e incisione. Sono particolarmente robusti in modo da evitare dilatazioni termiche mantenendo quote di lavorazione stabili per un tempo molto lungo. Sono raffreddati a liquido mediante refrigeratore oppure scambiatore d'aria/acqua.

These spindles can be used on a wide selection of materials from wood to granite. They have been successful in harder materials than 52 HRC. This is mainly due to the thermo stability of the Liquid Cooling, constant power, higher speeds, and modern tooling. These spindles can be used in a "stand alone" separate application or on CNC machines. These spindles are used on a VERY wide selection of applications, such as Milling, Drilling, Routing, Inlay, Grinding, Polishing, Shaping, and Engraving.

AF80_{CU} ISO 20

AF90_{CU} ISO 20

AF110_{CU} ISO 30

AF100_{CU} ISO 20

AF90_{CU} ISO 30

elettromandrini
electric spindles

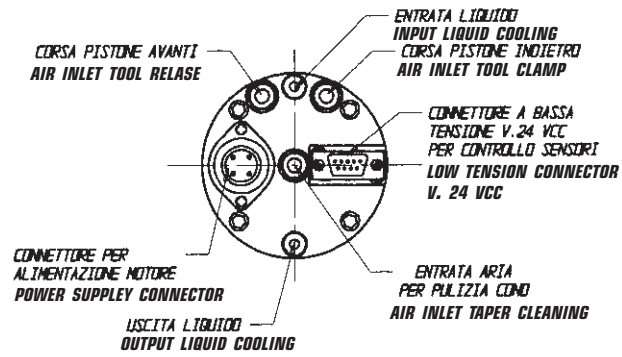
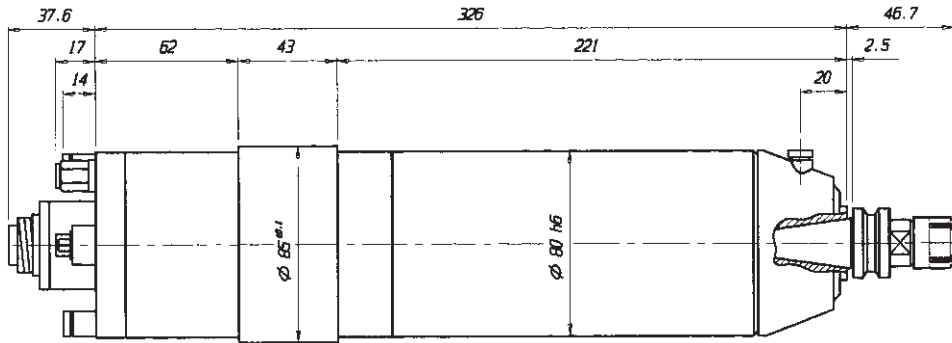
AF80_{CU} ISO 20



Tipo Type	Tensione Voltage (Volt)	Frequenza al ginocchio (Hz)	Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS φ	Peso Weight (Kg)
AF80 9/2	220	300	400	24000	1.1	5.2	0.75	8.5
AF80 9/2	380	300	400	24000	1.1	3.0	0.75	8.5
AF80 9/2	220	400	670	40000	1.4	5.8	0.75	8.5
AF80 9/2	380	400	670	40000	1.4	3.3	0.75	8.5

Elettromandrino con cambio utensile automatico ISO 20.
Electric spindle with automatic tool change ISO 20.

AF80



dimensioni

elettromandrini
electric spindles

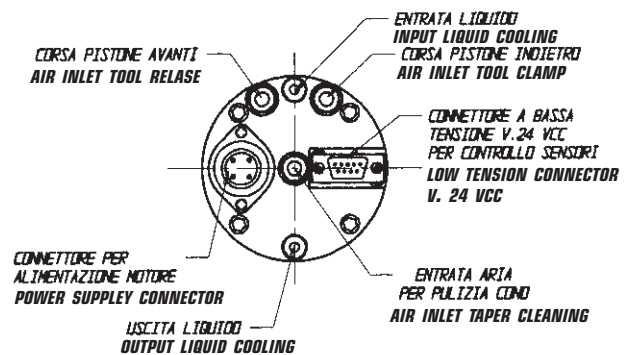
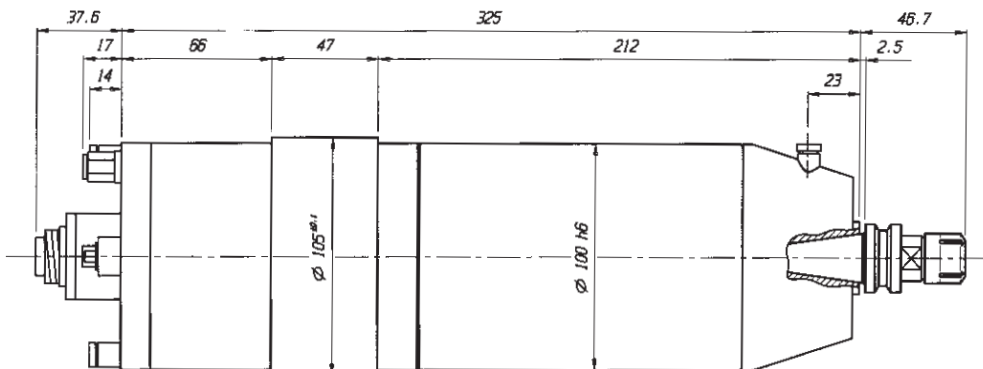
AF100 ISO 20

CU

Tipo Type	Tensione Voltage (Volt)	Frequenza al ginocchio (Hz)	Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS φ	Peso Weight (Kg)
AF100 7/2	220	300	400		1.8	7.8	0.80	12
AF100 7/2	380	300	400		1.8	4.5	0.80	12
AF100 7/2	220	400	670		2.2	8.5	0.80	12
AF100 7/2	380	400	670		2.2	4.9	0.80	12

Elettromandrino con cambio utensile automatico ISO 20.
Electric spindle with automatic tool change ISO 20.

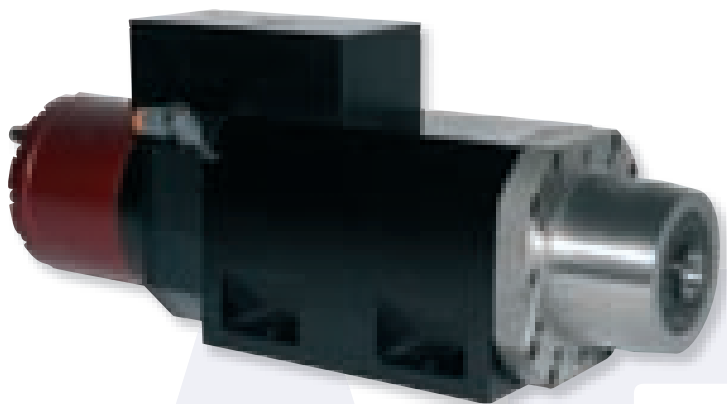




dimensioni

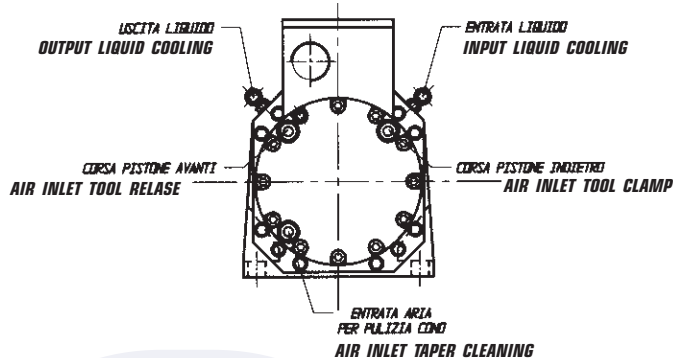
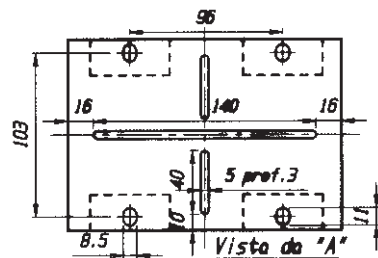
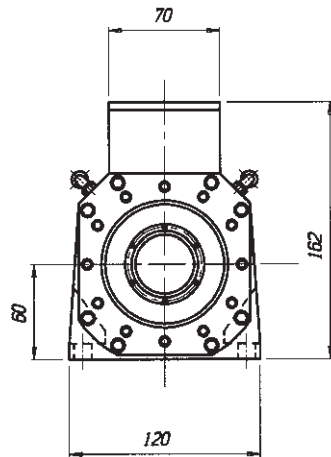
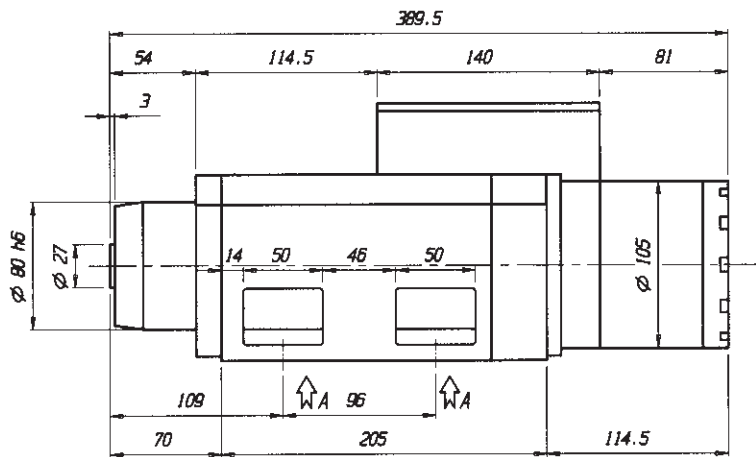
elettromandrini
electric spindles

AF90_{CU} ISO 20



Tipo Type	Tensione Voltage (Volt)	Frequenza al ginocchio (Hz)	Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS φ	Peso Weight (Kg)
AF90 10/2 ISO 20	350	400	500	30000	4.0	9.4	0.80	18

AF90



dimensioni

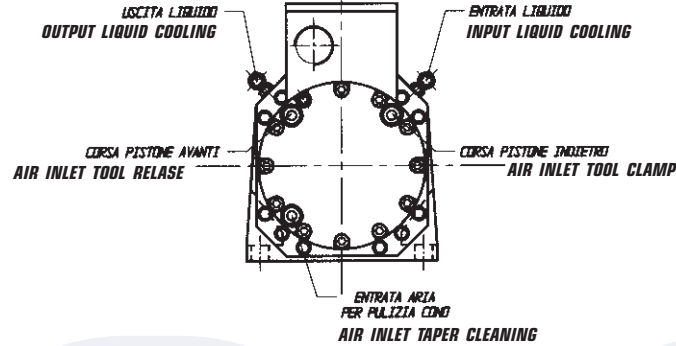
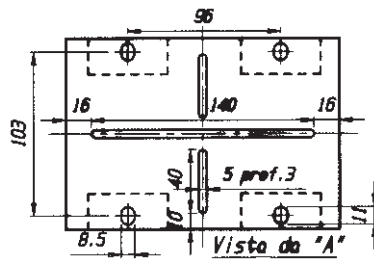
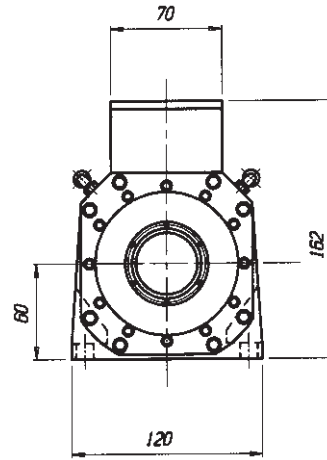
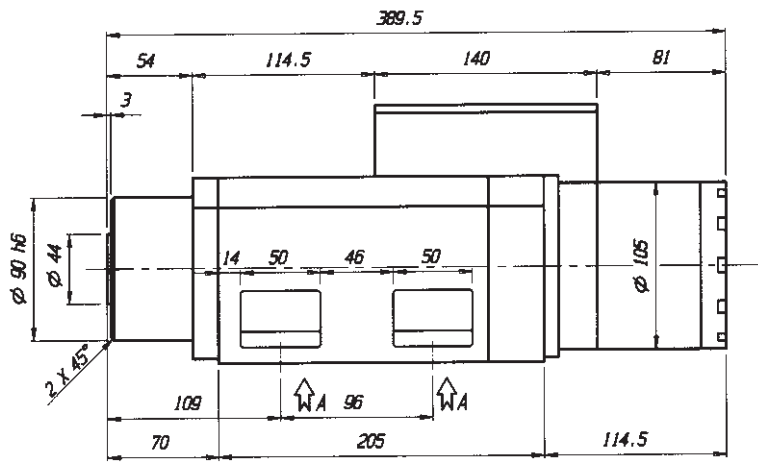
elettromandrini
electric spindles

AF90_{CU} ISO 30



Tipo Type	Tensione Voltage (Volt)	Frequenza al ginocchio (Hz)	Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS ϕ	Peso Weight (Kg)
AF90 10/2 ISO 30	350	300	400	24000	4.0	9.4	0.80	18

AF90



dimensioni

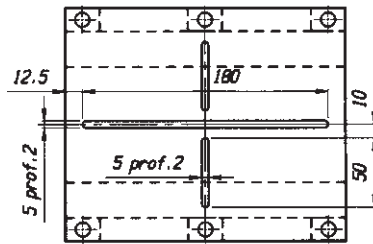
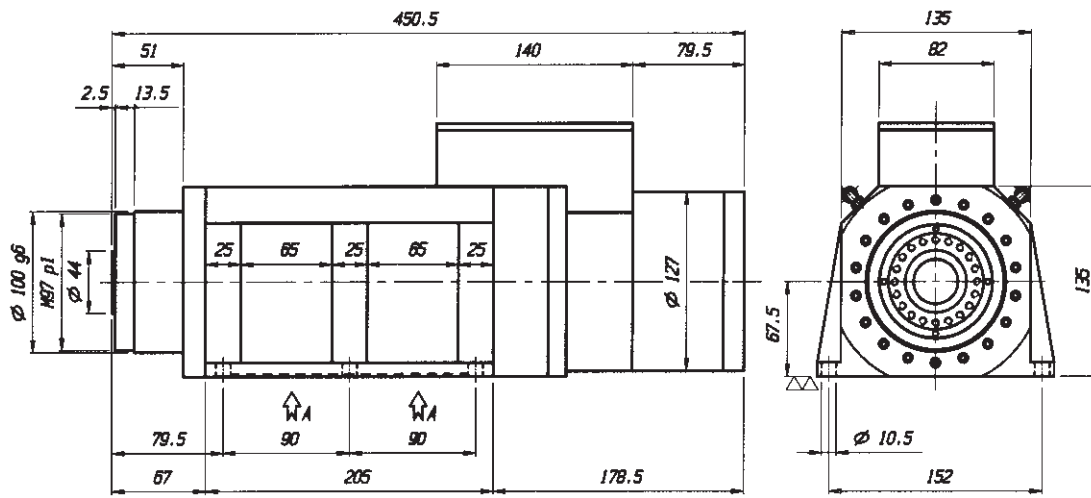
elettromandrini
electric spindles

AF110_{CU} ISO 30

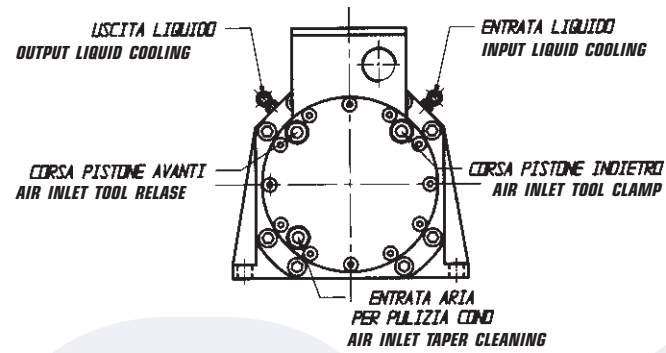


Tipo Type	Tensione Voltage (Volt)	Frequenza al ginocchio (Hz)	Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS ϕ	Peso Weight (Kg)
AF110 14/2 ISO 30	350	200	300	18000	7.5	18.0	0.85	32
	350	300	400	24000	8.5	19.9	0.82	32

AF110



Vista da "A"



dimensioni

nomenclatura parti motore serie AF cu

parts nomenclature series AF cu

Descrizione del particolare

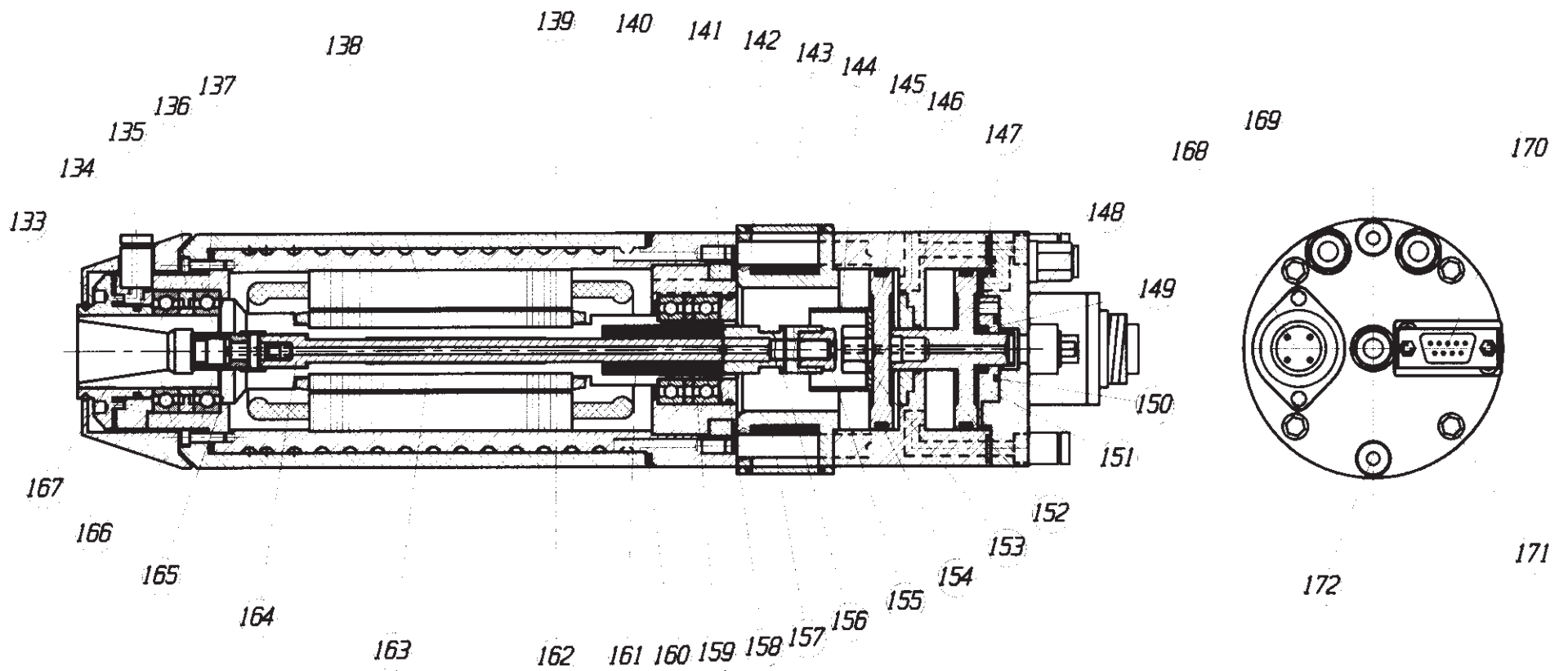
133	Labirinto
134	Coperchio anteriore
135	Attacco aria M6
136	Distanziale
137	Coppia anteriore
138	Statore
139	Corpo esterno
140	Coperchio posteriore
141	Ghiera posteriore esterna
142	Prolunga
143	Copertura
144	Calotta regolazione
145	Pistone inferiore
146	Calotta doppia
147	"0" - Ring
148	Chiusura posteriore
149	"0" - Ring
150	"0" - Ring
151	Guarnizione
152	Pistone

153	Bullone
154	"0" - Ring
155	Bullone interno
156	Perno di contatto
157	Scheda elettrica
158	Ghiera blocca coppia
159	Coppia cuscinetti posteriori
160	"0" - Ring
161	Molla a tazza
162	Carcassa
163	Rotore
164	Albero interno
165	Pinza a petali
166	Calotta anteriore
167	Albero
168	Connettore potenza
169	Attacco aria 1/8 gas
170	Connettore segnali
171	Vite
172	Attacchi liquido

Descriptions of the part

133	Labirynt seal
134	Locking nut
135	Air nipple M6
136	Distance ring
137	Front bearings
138	Wound stator
139	Body casing
140	Rear cover
141	Rear cover/locking nut
142	Inlet water extension
143	Covering
144	Washer
145	Lower piston
146	Top cylinder
147	"0" - Ring
148	Rear cap
149	"0" - Ring
150	"0" - Ring
151	Gasket
152	Piston

153	Piston clamping nut
154	"0" - Ring
155	Springs clamping nut
156	Springs pin
157	Electric card
158	Bearings locking nut
159	Rear bearings
160	"0" - Ring
161	Washer
162	Motor casing
163	Rotor
164	Clamping intr. shaft
165	Spring collet
166	Front cap
167	Shaft
168	Power supply connector
169	Air nipple 1/8 gas
170	Signal connector
171	Screw
172	Water nipple



nomenclatura parti motore serie AF cu

parts nomenclature series AF cu

Descrizione del particolare

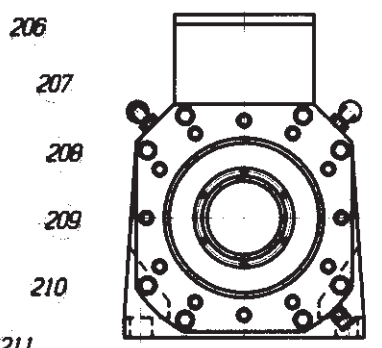
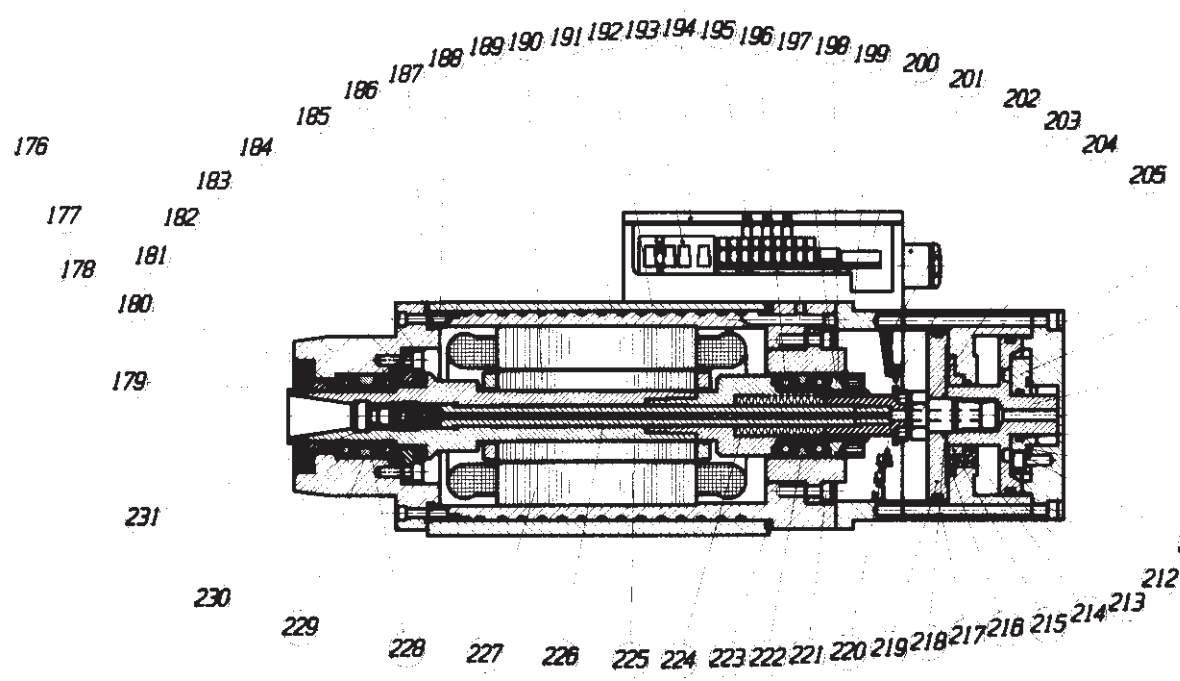
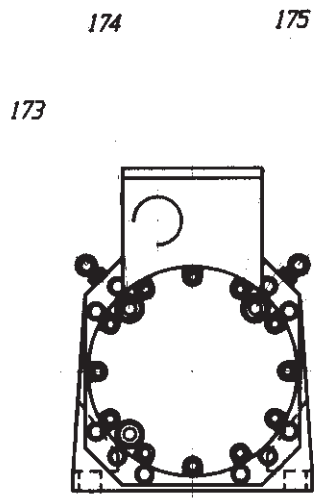
173	Raccordo r20 08x1/8
174	Raccordo aria 06x1/8
175	Vite di fissaggio
176	Raccordo aria 06x1/8
177	Raccordo r20 08x1/8
178	Vite di fissaggio
179	Ghiera labirinto
180	Labirinto
181	Segmenti lamellari
182	Coperchio anteriore
183	Flangia anteriore
184	Vite di fissaggio
185	Vite di fissaggio
186	Guarnizione or
187	Guarnizione or
188	Guarnizione or
189	Guarnizione or
190	Rotore
191	Carcassa interna
192	Carcassa esterna
193	Morsetto bk4
194	Coperchio coprimorsettiera
195	Led di segnalazione
196	Coppia posteriore
197	Ghiera blocca coppia posteriore
198	Segmenti lamellari
199	Base coprimorsettiera
200	Scheda sensori elte 9
201	Pressacavo 3/4
202	Centrale

203	Inter. di prossimità mb5 26 pfakl
204	Bullone posteriore
205	Calotta doppia
206	Chiusura posteriore
207	Guarnizione delrin
208	Pistone superiore
209	Guarnizione or
210	Guarnizione or
211	Vite di fissaggio
212	Guarnizione or
213	Guarnizione or
214	Guarnizione or
215	Flangia delrin
216	Vite di fissaggio
217	Guarnizione or
218	Guarnizione or
219	Pistone superiore
220	Perno di contatto
221	Vite di fissaggio
222	Distanziali posteriori
223	Guarnizione or
224	Molle a tazza
225	Albero esterno
226	Albero interno
227	Statore
228	Distanziale anteriore interno
229	Distanziale anteriore esterno
230	Coppia anteriore
231	Pinza a cambio rapido
232	Raccordo per aria 04 m5

Descriptions of the part

173	Nipple r20 08x1/8
174	Air nipple 06x1/8
175	Screw
176	Air nipple 06x1/8
177	Nipple r20 08x1/8
178	Screw
179	Locking nut
180	Labirynth seal
181	Lamellar segments
182	Front cover
183	Front flange
184	Screw
185	Screw
186	"o" ring
187	"o" ring
188	"o" ring
189	"o" ring
190	Rotor
191	Body casing
192	Body casing
193	Terminal bk4
194	Terminal board cover
195	Led
196	Rear bearings
197	Bearings locking nut
198	Lamellar segments
199	Terminal board casing
200	Electronic card
201	Gland 3/4
202	Central corp

203	Sensor mb5 26 pfakl
204	Piston clamping nut
205	Top cylinder
206	Cover
207	Delrin gasket
208	Piston
209	"o" ring
210	"o" ring
211	Screw
212	"o" ring
213	"o" ring
214	"o" ring
215	Delrin flange
216	Screw
217	"o" ring
218	"o" ring
219	Lower piston
220	Springs pin
221	Screw
222	Distance ring
223	"o" ring
224	Belleville washer
225	Shaft
226	Clamping collet intr.shaft
227	Stator
228	Distance ring (internal)
229	Distance ring (external)
230	Front bearings
231	Spring collet
232	Air nipple 04 m5



232



AF_{CU} novità new

serie per lavorazioni
marmo e vetro

series for glass and
marble processing

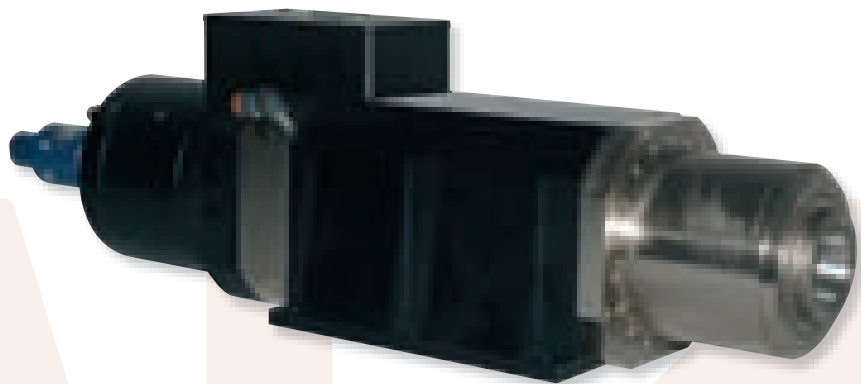
AF110_{CU} ISO 40

Questa serie di elettromandri di recente costruzione è stata progettata per l'installazione su macchine a controllo numerico, per la molatura e lucidatura del bordo su vetri sagomati con curve interne ed esterne, lati rettilinei, spigoli vivi ecc. Oltre alla molatura e lucidatura del bordo è possibile eseguire fori, asole, lavori di fresatura e incisione. L'elettromandrino è predisposto per il passaggio del liquido di refrigerazione attraverso l'asse mandrino e dispone a richiesta di giunto rotante. Possono essere utilizzati anche per le lavorazioni sia su marmo che su granito per lavori di contornatura, foratura, fresatura ecc.

ELTE® is proud to announce a new series of spindles designed for grinding, polishing of glass, machining of marble, granite, and stone products, with all types of profiles. In addition to these operations, they are well suited for drilling, slotting, milling, and engraving. This spindle is liquid cooled and has a hollow shaft, which allows coolant to reach the work piece. Also available, upon request, is a rotary dust collector for dry applications. Although these spindles were designed mainly for CNC machining centres, it is also adaptable to existing machines.

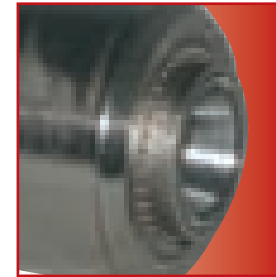
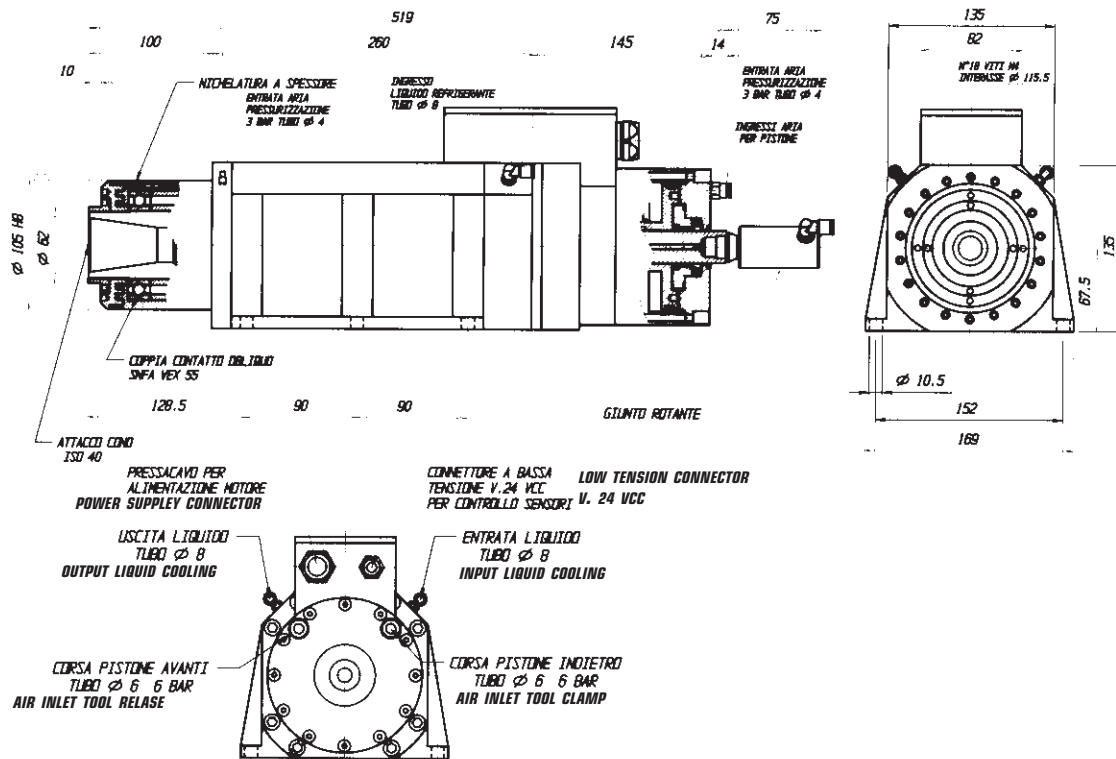
elettromandrini
electric spindles

AF110_{CU} ISO 40



Con passaggio liquido refrigerante attraverso l'albero
With liquid cooling through the shaft

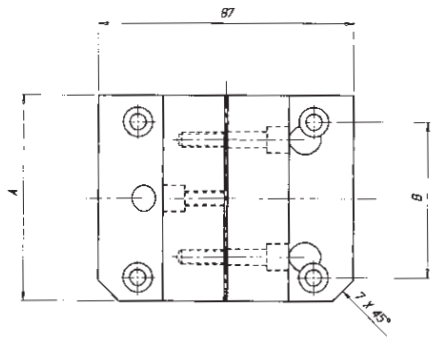
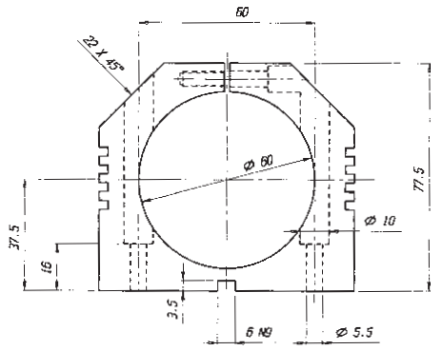
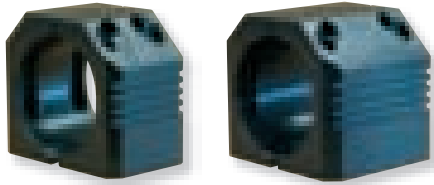
Tipo Type	Tensione Voltage (Volt)	Frequenza al ginocchio (Hz)	Frequenza (Hz)	Giri (rpm)	Potenza resa Out. Power (Kw)	Assorbimento Absorb. (amps)	COS ϕ	Peso Weight (Kg)
AF110 14/4 ISO 40	380	200	400	6000/12000	5.0	11.4	0.86	34



dimensioni

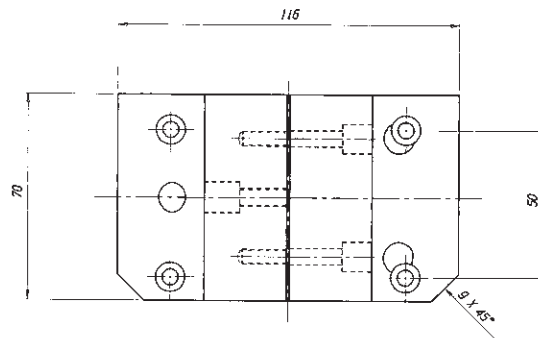
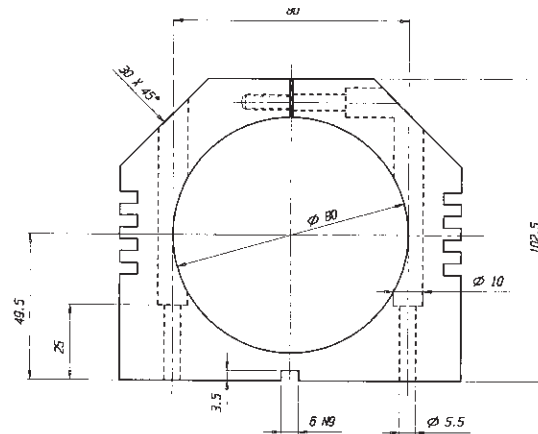
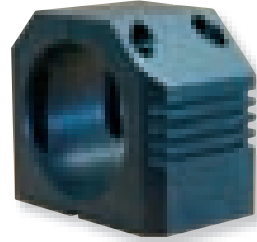
Dimensioni dei supporti per mandrini
Dimensions of spindle holders

AF60

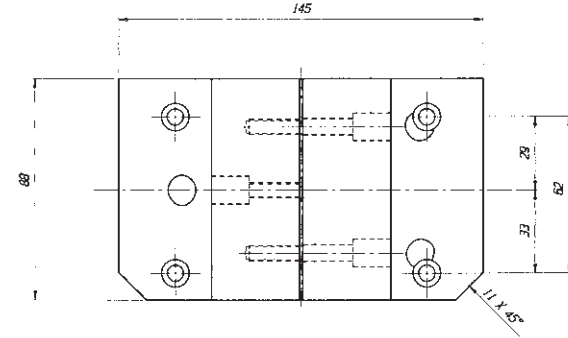
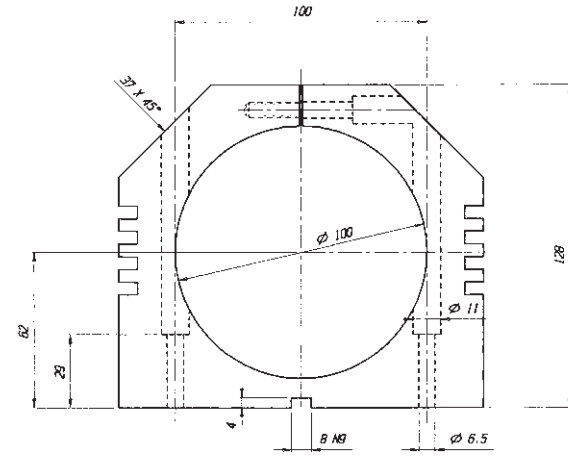


Tipo/Type	A	B
AF60 2.5/2	50	33
AF60 6/2	70	53

AF80
AF80 CU



AF100
AF100 CU

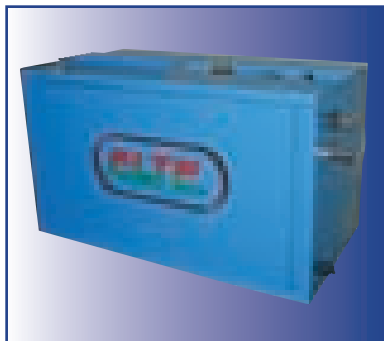


dimensioni

Scambiatore di calore aria-acqua Air-water heat exchanger



RF.005.3R.VE - kg 21

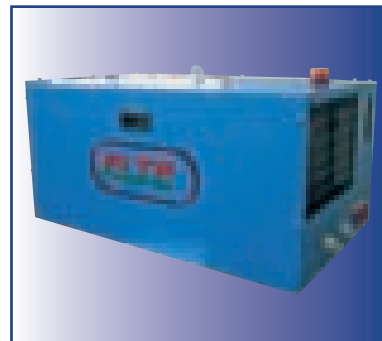


RF.01.4R.VE - kg 31

Tipo/Type	A	B	C
AF60	46	40	26
AF80	46	40	26

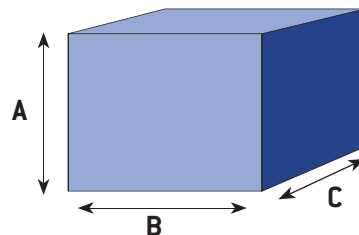
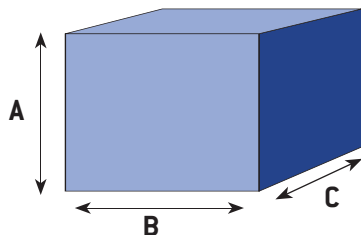
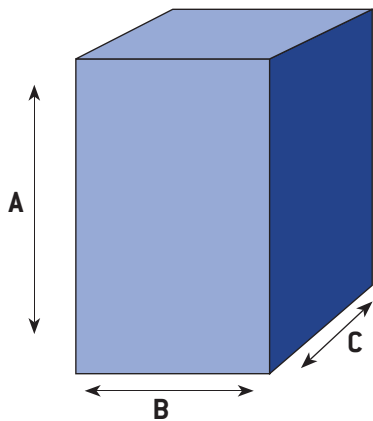
Tipo/Type	A	B	C
AF100	41	65	40
AF80 CU	41	65	40

Refrigeratore d'acqua con vasca e pompa Water chiller unit with tank and pump



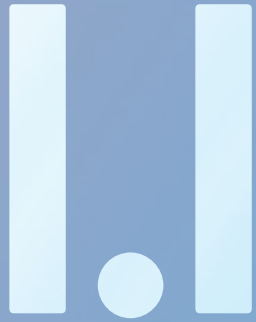
KRA 10 AF - kg 50
KRA 15 AF

Tipo/Type	A	B	C
	33.5	70	42.5



dimensioni





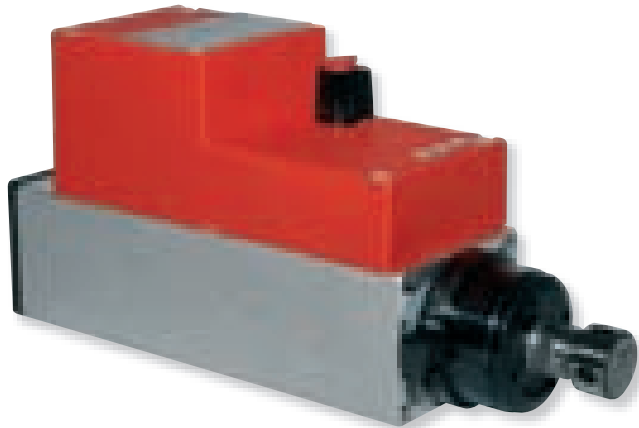
serie elettromandrini semiautomatici con inverter integrato

series of spindles with integrated inverter

Questa serie di elettromandrini con scheda inverter integrata per azionamenti a velocità variabile assicura semplicità di alimentazione ed economicità di applicazione. Vengono notevolmente ridotti i costi di cablaggio, dell'acquisto inverter e cavi schermati, infatti, serve solamente un normale cavo monofase che fornisca dalla rete i 230 V 50/60 Hz. La realizzazione di questa nuova serie di elettromandrini con inverter integrato è possibile su tutte le nostre serie con potenza max di 1,5 Kw e frequenza variabile da 50 a 400 HZ. E' in fase di progettazione un ampliamento della serie fino a 3 Kw e l'alimentazione darà in trifase a V 230 o 400 HZ 50/60.

Spindle with Integrated Inverter, available in all models with spindle shafts or equipped for ER collets with maximum 24,000 RPM and 1.5 kW. This series of spindles has its own Frequency Inverter built INTO the spindle housing. This is a very economical application you only need a single 230V 50/60 Hz single phase Input source. Speeds are controlled by a surface mounted potentiometer. No longer is there a need for a separate Inverter to operate the spindle. Installation is made simple and costs are reduced. We are planning to widen our series to reach the 3 Kw and the feeding will be three-phase V 230 or 400 Hz 50/60.

specifiche tecniche technical features



- Alimentazione scheda monofase 230V (+-20%) frequenza 45-65Hz
- Regolazione della velocità mediante potenziometro
- Tensione frequenza e uscita già tarate
- Controllo della presenza di alimentazione dell'inverter
- Controllo delle fasi in uscita (mancanza fase, assorbimento elevato)
- Protezione per sovra temperatura
- Inversione del senso di rotazione mediante jumper
- Frequenza in uscita da 40 a 400 Hz
- Potenza massima disponibile 1.5 Kw

Offriamo la nostra disponibilità per valutare ulteriori richieste ed eventuali modifiche su specifiche del cliente.

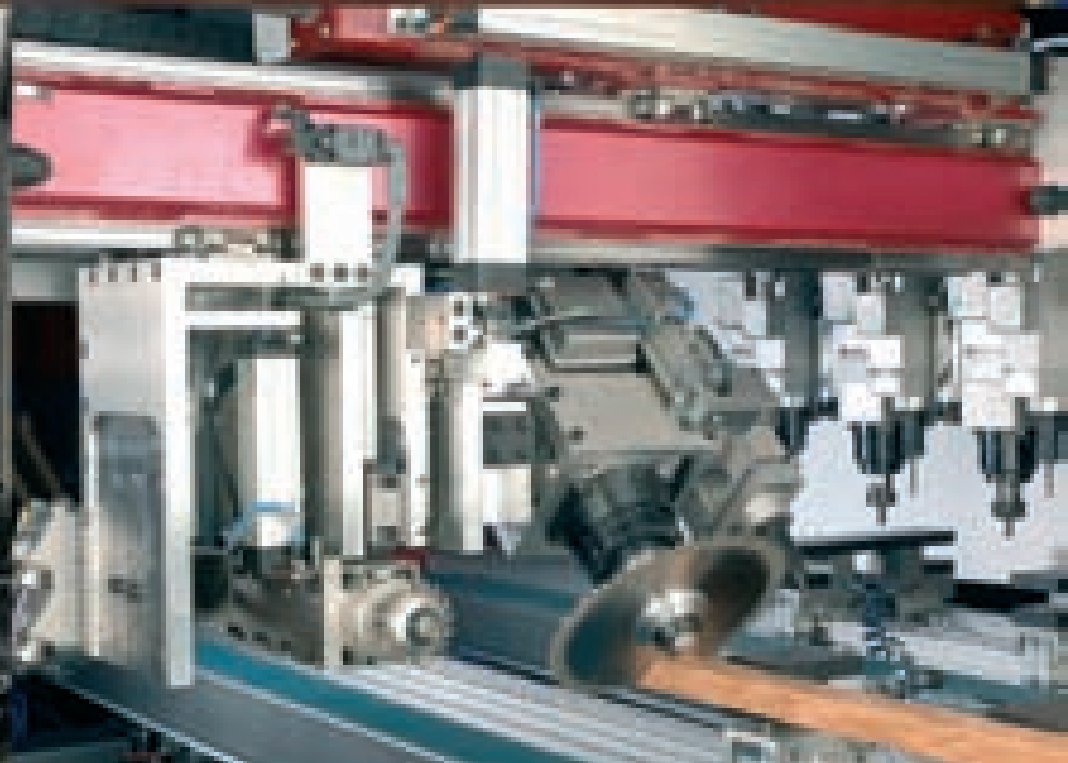
N.B. La realizzazione di questa nuova serie di elettromandrini con inverter integrato è possibile su tutte le nostre serie con potenza max di 1.5 KW e frequenza variabile da 50 a 400 HZ. Siamo in fase di progettazione anche per potenze superiori.

- Single phase input 230 V (+-20%) frequency 45-65Hz
- Speed regulation by means of a potentiometer
- Voltage and output frequency are already set
- Checkout of the presence of the inverter feeding
- Checkout of the output phases (missing phase, high absorption)
- Over temperature protection
- Reversal of the direction of rotation by means of a jumper
- Output frequency from 40 to 400 Hz
- Max power available 1.5 Kw

We are at your disposal to value further requests and possible modifications based on customer's specifications.

Important: It is possible to carry out this new brand of electric spindles with incorporated inverter on all our series with max power 1.5 Kw and frequency variable from 50 to 400 Hz. We are working on the same project also for higher power.

serie PE series PE		Tipo Type	Tensione Voltage [Volt]	Frequenza [Hz]	Giri (rpm)	Potenza resa Out. Power [Kw]	Assorbimento Absorb. [amps]	COS ϕ	Peso Weight [Kg]	serie TMPE series TMPE		Tipo Type	Tensione Voltage [Volt]	Frequenza [Hz]	Giri (rpm)	Potenza resa Out. Power [Kw]	Assorbimento Absorb. [amps]	COS ϕ	Peso Weight [Kg]	
		PE0 6/2	220	100	6000	0,05	0,77	0,68	1,5			PE4 13/2	220	100	6000	1,50	22,2	0,61	11,2	
		PE0 6/2	220	200	12000	0,15	2,30	0,68	1,5			PE4 14/2	220	50	3000	1,10	16,0	0,62	12	
		PE0 6/2	220	300	18000	0,30	4,60	0,68	1,5			PE4 14/2	220	100	6000	1,50	21,8	0,62	12	
		PE0 8/2	220	100	6000	0,07	1,10	0,68	1,8											
		PE0 8/2	220	200	12000	0,18	2,80	0,68	1,8			TMPE0 6/2	220	100	6000	0,05	0,77	0,68	1,5	
		PE0 8/2	220	300	18000	0,35	5,40	0,68	1,8			TMPE0 6/2	220	200	12000	0,15	2,30	0,68	1,5	
		PE1 6/2	220	100	6000	0,07	1,20	0,54	2,5			TMPE0 6/2	220	300	18000	0,30	4,60	0,68	1,5	
		PE1 6/2	220	200	12000	0,16	2,80	0,54	2,5			TMPE0 6/2	220	400	24000	0,35	5,40	0,68	1,5	
		PE1 6/2	220	300	18000	0,22	3,80	0,54	2,5			TMPE0 8/2	220	100	6000	0,07	1,10	0,68	1,8	
		PE1 7/2	220	100	6000	0,10	1,70	0,54	2,8			TMPE0 8/2	220	200	12000	0,18	2,80	0,68	1,8	
		PE1 7/2	220	200	12000	0,22	3,80	0,54	2,8			TMPE0 8/2	220	300	18000	0,35	5,40	0,68	1,8	
		PE1 7/2	220	300	18000	0,33	5,70	0,54	2,8			TMPE0 8/2	220	400	24000	0,40	6,30	0,68	1,8	
		PE1 8.5/2	220	100	6000	0,22	3,80	0,56	3,1			TMPE1 6.5/2	220	100	6000	0,10	2,40	0,45	3,1	
		PE1 8.5/2	220	200	12000	0,37	6,40	0,56	3,1			TMPE1 6.5/2	220	200	12000	0,22	5,20	0,45	3,1	
		PE1 8.5/2	220	300	18000	0,55	9,50	0,56	3,1			TMPE1 6.5/2	220	300	18000	0,33	8,00	0,45	3,1	
		PE2 9/2	220	50	3000	0,10	1,50	0,68	3,5			TMPE1 6.5/2	220	400	24000	0,40	9,70	0,45	3,1	
		PE2 9/2	220	100	6000	0,22	3,30	0,68	3,5			TMPE2 9/2	220	50	3000	0,10	1,50	0,68	3,5	
		PE2 9/2	220	200	12000	0,55	8,20	0,68	3,5			TMPE2 9/2	220	100	6000	0,22	3,30	0,68	3,5	
		PE2 9/2	220	300	18000	0,75	10,8	0,68	3,5			TMPE2 9/2	220	200	12000	0,55	8,20	0,68	3,5	
		PE3 7/2	220	50	3000	0,15	2,70	0,58	3,7			TMPE2 9/2	220	300	18000	0,75	10,8	0,68	3,5	
		PE3 7/2	220	100	6000	0,30	5,40	0,58	3,7			TMPE2 9/2	220	400	24000	0,75	10,8	0,68	3,5	
		PE3 7/2	220	200	12000	0,60	10,8	0,58	3,7			TMPE3 9/2	220	50	3000	0,20	3,40	0,57	4,8	
		PE3 7/2	220	300	18000	0,85	15,4	0,58	3,7			TMPE3 9/2	220	100	6000	0,45	7,90	0,57	4,8	
		PE3 9/2	220	50	3000	0,20	3,40	0,57	4,8			TMPE3 9/2	220	200	12000	0,75	14,1	0,57	4,8	
		PE3 9/2	220	100	6000	0,45	7,90	0,57	4,8			TMPE3 9/2	220	300	18000	1,00	17,7	0,57	4,8	
		PE3 9/2	220	200	12000	0,75	14,1	0,57	4,8			TMPE3 12/2	220	50	3000	0,30	5,40	0,56	6,5	
		PE3 9/2	220	300	18000	1,00	17,7	0,57	4,8			TMPE3 12/2	220	100	6000	0,75	13,3	0,56	6,5	
		PE3 12/2	220	50	3000	0,30	5,40	0,56	6,5			TMPE3 12/2	220	200	12000	1,50	26,8	0,56	6,5	
		PE3 12/2	220	100	6000	0,75	13,3	0,56	6,5			TMPE3 12/2	220	300	18000	1,50	26,9	0,56	6,5	
		PE3 12/2	220	200	12000	1,50	26,8	0,56	6,5			TMPE4 10/2	220	50	3000	0,65	10,1	0,58	9	
		PE3 12/2	220	300	18000	1,50	26,9	0,56	6,5			TMPE4 10/2	220	100	6000	1,10	17,1	0,58	9	
		PE3 14/2	220	50	3000	0,45	8,10	0,54	7,5			TMPE4 14/2	220	50	3000	1,10	16,0	0,62	12	
		PE3 14/2	220	100	6000	0,95	16,8	0,54	7,5			TMPE4 14/2	220	100	6000	1,50	21,8	0,62	12	
		PE3 14/2	220	200	12000	1,50	24,9	0,54	7,5											
		PE3 14/2	220	300	18000	1,50	25,1	0,54	7,5											
		PE4 10/2	220	50	3000	0,65	10,1	0,58	9			serie STK series STK	STK21 6.5/2	220	100	6000	0,10	2,40	0,45	1,8
		PE4 10/2	220	100	6000	1,10	17,10	0,58	9			STK21 6.5/2	220	200	12000	0,22	5,20	0,45	1,8	
		PE4 10/2	220	200	12000	1,50	19,9	0,58	9			STK21 6.5/2	220	300	18000	0,33	8,00	0,45	1,8	
		PE4 11/2	220	50	3000	0,75	11,3	0,60	9,8			STK21 9/2	220	50	3000	0,10	1,50	0,68	2,0	
		PE4 11/2	220	100	6000	1,50	22,6	0,60	9,8			STK21 9/2	220	100	6000	0,22	3,30	0,68	2,0	
		PE4 13/2	220	50	3000	1,00	14,8	0,61	11,2			STK21 9/2	220	200	12000	0,55	8,20	0,68	2,0	
												STK21 9/2	220	300	18000	0,75	10,8	0,68	2,0	



NXS

serie convertitori
statici (inverter)
da 0,55 kw a 160 kw

series static converter
(inverter) da 0,55 kw
a 160 kw

□ Testato e marcato ELTE[®] che ne garantisce le massime prestazioni con i propri elettromandri.

Inverter Vettoriale con calcolo del Vettore in automatico ogni millisecondo verso il motore calcolando anche i relativi cavi di connessione utilizzando i valori istantanei misurati. Il processore Vacon si basa sul controllo vettoriale Sensorless con modello matematico di simulazione e sul circuito ASIC. Il controllo vettoriale avviene sfruttando il sistema di coordinate del flusso magnetico di statore. Il calcolo rimane così insensibile alle variazioni delle grandezze elettriche del motore. **Tecnologia affidabile, compatto, robusto, facile da usare.**

Tested under the ELTE[®] trademark to ensure maximum performances with its own electric spindles.

Vector Inverter with automatic vector calculation every millisecond towards the motor, also calculating the related connecting cable using real-time measurements.

The Vacon processor is based on sensorless vector control with mathematical model simulation and ASIC circuit. Vector control is achieved by exploiting the co-ordinate system of stator magnetic flux. The calculation is thereby unaffected by variations in the power levels of the motor. **Tried and tested technology, compact, robust and easy to use.**

caratteristiche tecniche



- L'errore sulla velocità in situazione stazionaria è inferiore a 0,5%.
- Il tempo di risposta della coppia è inferiore a 10 ms.
- Non c'è oscillazione di coppia.
- Non è sensibile a vibrazioni di risonanza.
- Coppia di spunto elevata: 200%.
- Corrente di spunto elevata: 2xI_H.
- Adatto anche a sistemi multi-motore.
- Massima frequenza d'uscita versione da 500 Hz e versione 1000 Hz su richiesta fino a 7200 Hz.
- Filtro "EMC" EN61800-3 (1996)+A11, EN61000-6-4, EN50081-2, EN55011 classe A (interno).
- Reattanza di linea trifase a.c. (interna). Diminuisce le armoniche verso rete del 70%, protegge l'inverter da extracorrenti e impurità di linea, diminuisce la corrente d'ingresso, etc.
- Filtro "EMC" lato motore (interno).
- Chopper di frenatura (interno) dimensionato per frenare fino al 150% in frequenza massima d'uscita fino a 1000 Hz.
- Frequenza di Commutazione verso il motore da 1 a 16 KHz tarabile linearmente da tastiera, rende silenzioso il motore fornendo un'onda sinusoidale senza creare problemi di disturbi.
- Disponibili due relè configurabili STO + altre opzioni schede I/O.
- Tastiera alfanumerica estraibile con memoria multilingua (Tedesco-Italiana-Francese-Inglese-Spagnolo...etc)
- Seriale RS 232 per programmazione/diagnostica da tastiera a PC.
- Possibilità di tarare il motore con tensioni e frequenze d'uscita a scelta (es. un inverter alimentato a 380Vca può alimentare uno o più mandrini a 220Vca 800Hz, ecc) preimpostandole all'interno dell'Inverter fino al massimo di 6 tipi diversi.
- Software per gestione con controllo P.I. interno.
- Applicazione multi-tabella per gestire fino a 6 motori diversi con un unico Inverter.
- L'Inverter permette di usare cavi motore con lunghezza massima fino a 300 mt senza usare nessuna reattanza esterna per l'abbassamento del fattore capacitivo dei cavi.
- Possibilità di avere l'Inverter sia in versione IP-21 che IP-54 con tensioni trifasi da 208 Vca- 15% fino a 690 Vca +10%.
- Tutti gli Inverter Vacon sono marchiati CE UL e c-UL standard produttivo ISO-9001 (soddisfa in termini di sicurezza EN50178, EN60204-1, FI, GOST R + EN60950).
- Basso gradiente di tensione (ridotto stress all'isolamento del motore).

Opzioni a richiesta

- Software speciale per arresto rapido del motore in caso di mancanza rete.
- Disponibile inverter in versione tropicalizzata, con filtri speciali per reti IT, ecc.

inverter NXS vacon

Tipo	Monofase		Trifase		Peso Kg	Induttanza di linea trifase filtro e toroide per EMS unità di frenata interna
	Potenza (Kw)	Corrente motore (A)	Potenza (Kw)	Corrente motore (A)		
NXS00072	0.75	4.80	1.1	6.60	5	INCLUSO
NXS00082	1.1	6.60	1.5	7.80	5	INCLUSO
NXS00112	1.5	7.80	2.2	11.0	5	INCLUSO
NXS00122	2.2	11.0	3.0	12.5	5	INCLUSO
NXS00172	3.0	12.5	4.0	17.5	8.1	INCLUSO
NXS00252	4.0	17.5	5.5	25.6	8.1	INCLUSO
NXS00312	5.5	25.0	7.5	31.0	8.1	INCLUSO

Alimentazione 208-230 volt Hz 50/60 3 -. Uscita inverter 220 volt Hz 1000.

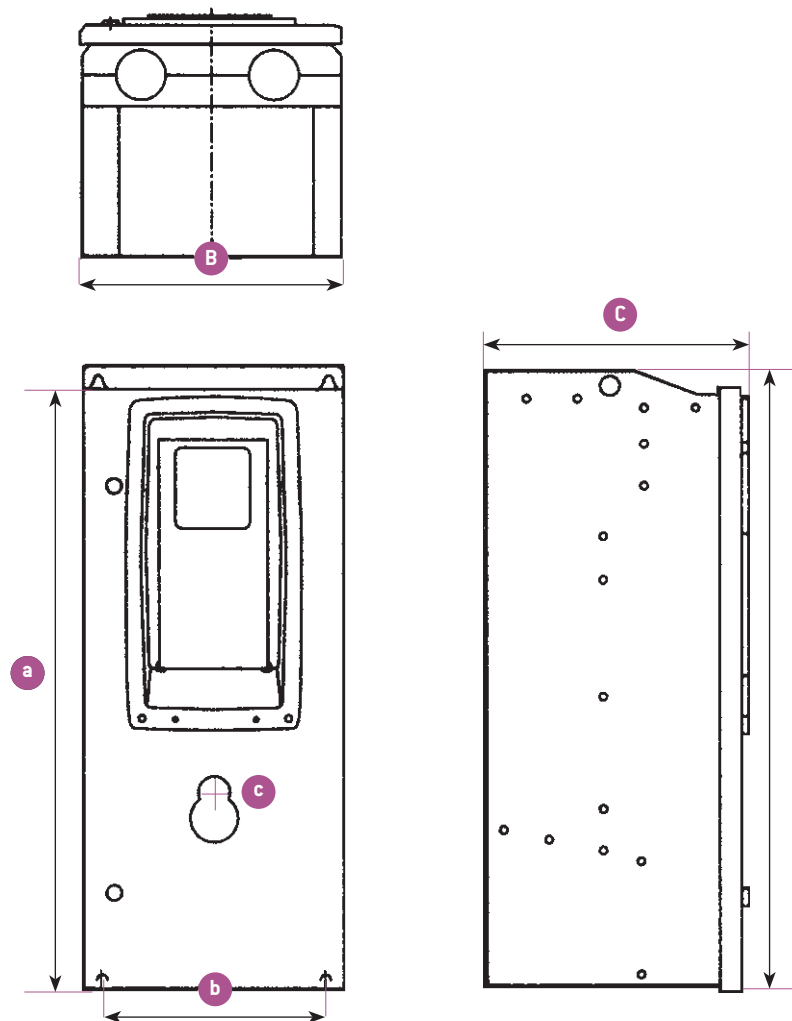
Tipo	Trifase		Peso Kg	Induttanza di linea trifase filtro e toroide per EMS unità di frenata interna	Taglia
	Potenza (Kw)	Corrente motore (A)			
NXS00035	1.10	3.60	5	INCLUSO	FR 4
NXS00045	1.50	4.70	5	INCLUSO	FR 4
NXS00055	2.20	6.20	5	INCLUSO	FR 4
NXS00075	3.00	8.40	5	INCLUSO	FR 4
NXS00095	4.00	9.90	5	INCLUSO	FR 4
NXS00125	5.50	13.2	5	INCLUSO	FR 4
NXS00165	7.50	17.6	8.1	INCLUSO	FR 5
NXS00225	11.0	25.0	8.1	INCLUSO	FR 5
NXS00315	15.0	34.0	8.1	INCLUSO	FR 5
NXS00385	18.5	42.0	18.5	INCLUSO	FR 6
NXS00455	22.0	51.0	18.5	INCLUSO	FR 6

Alimentazione 308-500 volt Hz 50/60 3 -. Uscita inverter 380-500 volt Hz 1000 o Hz 500.

installazione inverter

Raffreddamento

Per assicurare una efficace circolazione dell'aria lo spazio libero attorno all'inverter deve avere determinate dimensioni (vedi Tab.1). Qualora si volessero montare unità multiple una sopra l'altra la distanza deve essere uguale a b+c.



Spazio di installazione e dimensioni di montaggio

Dimensioni	FR 4	FR 5	FR 6	FR 7	FR 8	FR 9	FR 10
A - Altezza	327	419	558	630	755	1150	1130
B - Larghezza	128	144	195	237	285	476	471
C - Profondità	190	214	237	257	312	362	420
Quote di fissaggio							
A - Altezza	313	406	541	614	732	1120	833
B - Larghezza	100	100	148	190	255	400	380
C - Diametro	M6	M6	M8	M8	M8	M8	M10

technical characteristics



- Speed error in stationary conditions is less than 0.5%.
- Torque response is less than 10 ms.
- No torque oscillation.
- Unaffected by resonant vibrations.
- High surge torque: 200%.
- High surge current: 2,5xIH.
- Suitable for multiple motor systems
- Maximum output frequency 500 Hz version and 1,000 Hz version, on request till 7200 Hz.
- “EMC” filter EN61800-3 (1996)+A11, EN61000-6-4, EN50081-2, EN55011 class A (internal).
- Laminated core ac three phase line reactance (internal). This reduces the harmonics towards the mains by 70%, protects the inverter against surge currents and line impurities, reduces the input current, etc.
- Filter on motor side (internal).
- Brake chopper (internal) sized to brake up to 150% in max output frequency till 1000 Hz.
- Commutation frequency towards motor from 1 to 16 kHz with linear calibration by keyboard, silencing the motor by supplying a sinusoidal wave without creating problems of disturbance.
- Two settable relays STO + other optional boards I/O.
- Extractable alphanumeric keyboard with multilingual memory (English-German-Italian-French-Spanish...etc)
- RS 232 serial port for programming/diagnostics from keyboard to PC.
- Possibility of calibrating the motor with a selection of pre-set output voltages and frequencies (e.g. a 380Vac inverter can power one or more spindles at 220Vac 800Hz, etc). Inverter programmable with up to a maximum of 6 different options.
- Management software with built-in P.I. control.
- Multiple table application to manage up to 6 different motors with a single Inverter.
- The Inverter enables motor cable lengths up to max. 300 m without requiring external reactance to counteract cable capacitance
- Inverter with protection rating either IP-21 or IP-54 with three phase voltages from 208 Vac - 15% to 690 Vac +10%.
- All Vacon Inverters have CE UL and c-UL marking and manufactured to ISO-9001 (i.e. meeting safety standards EN50178, EN60204-1, FI, GOST R + EN60950).

Options on request

- Special software for rapid stop of the motor in case of net lack.
- Inverter in tropicalized version on request.

inverter

NXS

vacon

Type	Single phase		Three phase		Weight Kg	Three-phase inductance filter and toroid for EMS internal braking
	Power (Kw)	Current motor (A)	Power (Kw)	Current motor (A)		
NXS00072	0.75	4.80	1.10	6.60	5	INCLUDED
NXS00082	1.10	6.60	1.50	7.80	5	INCLUDED
NXS00112	1.50	7.80	2.20	11.0	5	INCLUDED
NXS00122	2.20	11.0	3.00	12.5	5	INCLUDED
NXS00172	3.00	12.5	4.00	17.5	8.1	INCLUDED
NXS00252	4.00	17.5	5.50	25.6	8.1	INCLUDED
NXS00312	5.50	25.0	7.50	31.0	8.1	INCLUDED

Input 208-230 volt Hz 50/60 3-. Output inverter 220 volt Hz 1000.

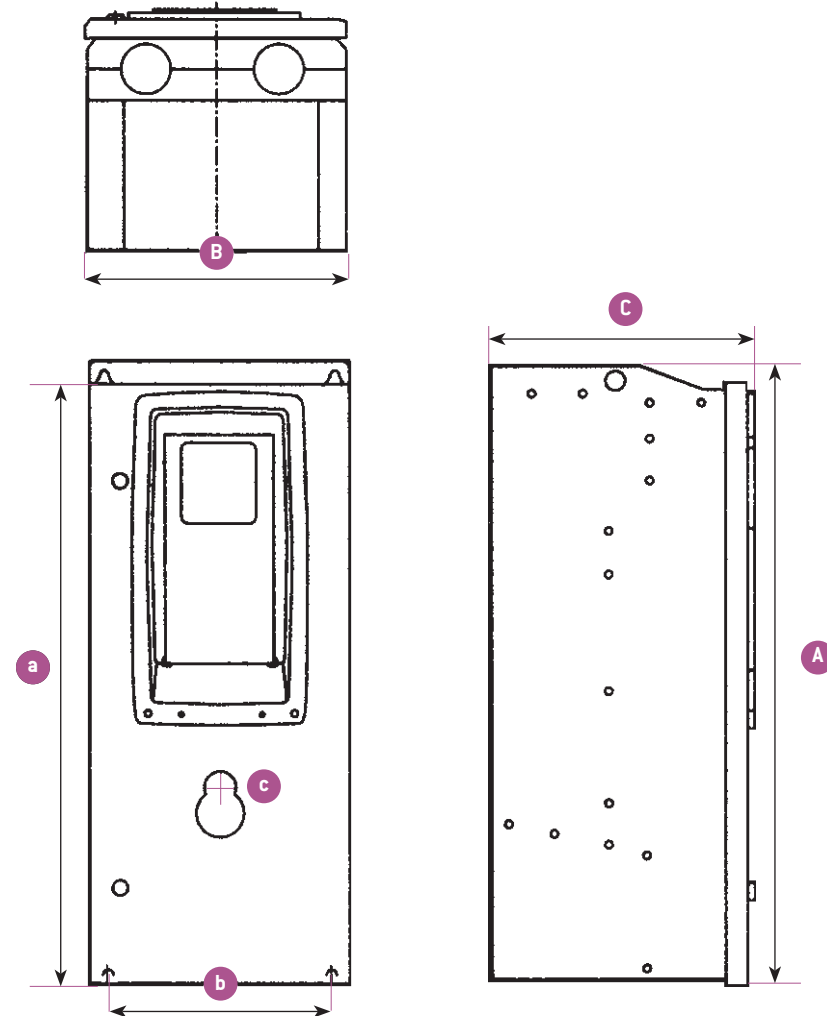
Type	Three phase		Weight Kg	Three-phase inductance filter and toroid for EMS internal braking	Frame size
	Power (Kw)	Current motor (A)			
NXS00035	1.10	3.60	5	INCLUDED	FR 4
NXS00045	1.50	4.70	5	INCLUDED	FR 4
NXS00055	2.20	6.20	5	INCLUDED	FR 4
NXS00075	3.00	8.40	5	INCLUDED	FR 4
NXS00095	4.00	9.90	5	INCLUDED	FR 4
NXS00125	5.50	13.2	5	INCLUDED	FR 4
NXS00165	7.50	17.6	8.1	INCLUDED	FR 5
NXS00225	11.0	25.0	8.1	INCLUDED	FR 5
NXS00315	15.0	34.0	8.1	INCLUDED	FR 5
NXS00385	18.5	42.0	18.5	INCLUDED	FR 6
NXS00455	22.0	51.0	18.5	INCLUDED	FR 6

Input 308-500 volt Hz 50/60 3-. Output inverter 380-500 volt Hz 1000 or Hz 500.

inverters installation

Cooling

For assuring proper cooling air circulation the space around the Inverter should have determinate dimensions. See under mentioned table for dimensions. If multiple units are to be installed above each other, the dimensions must be B + C and air from outlet lower unit must be directed away from inlet of the upper unit.

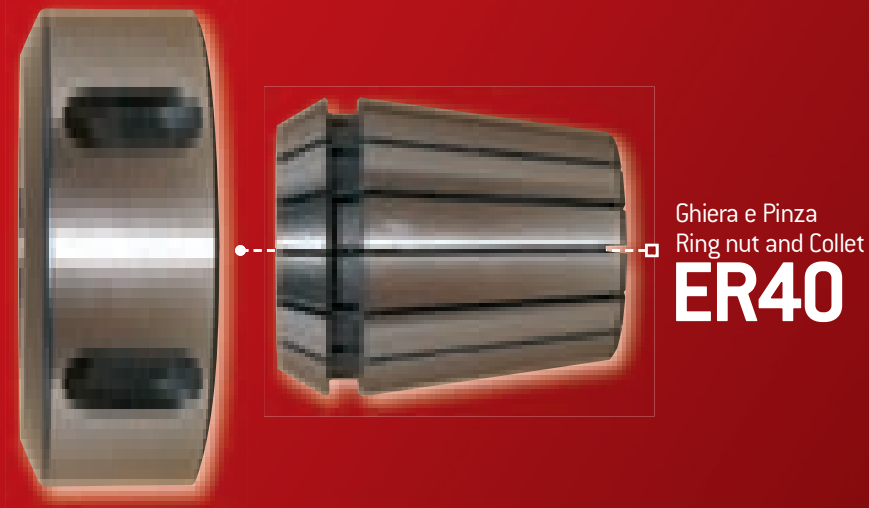
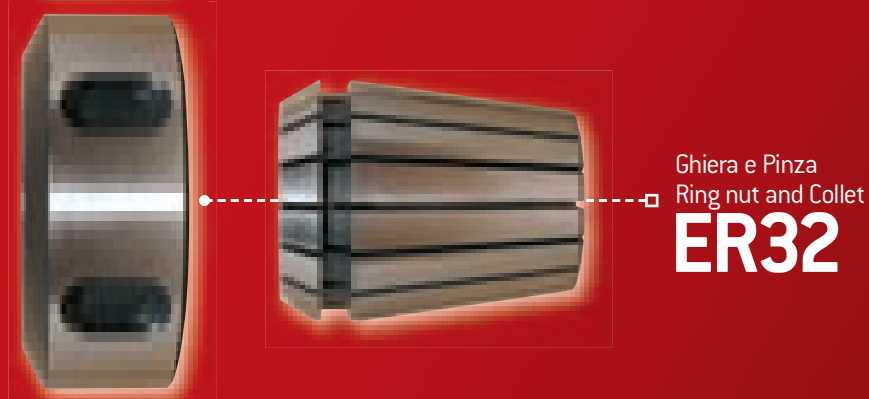
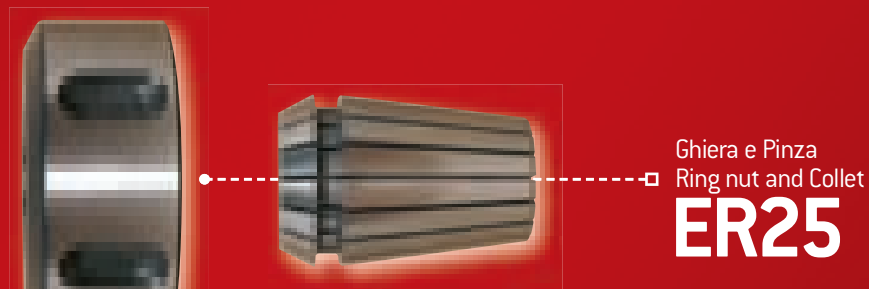
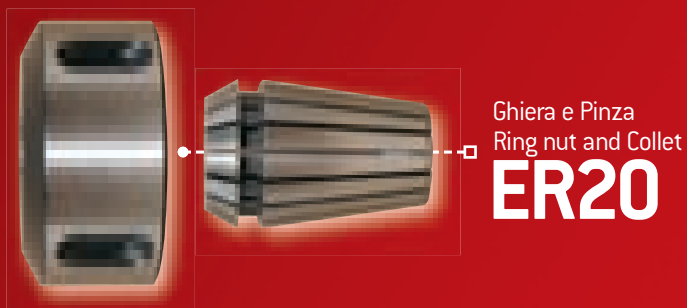
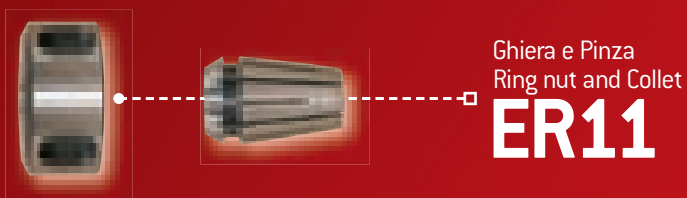


Installation space dimensions e mounting dimensions

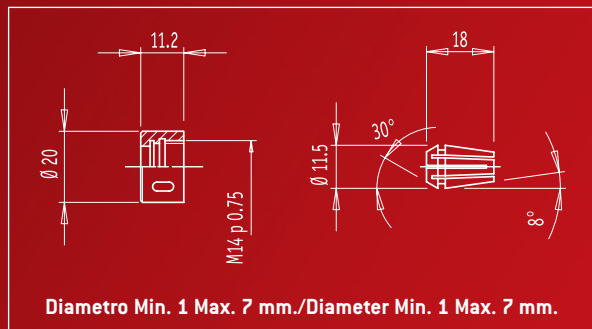
Dimensions	FR 4	FR 5	FR 6	FR 7	FR 8	FR 9	FR 10
A - Height	327	419	558	630	755	1150	1130
B - Width	128	144	195	237	285	476	471
C - Depth	190	214	237	257	312	362	420
Fastening dimensions							
A - Height	313	406	541	614	732	1120	833
B - Width	100	100	148	190	255	400	380
C - Fastening bolt size	M6	M6	M8	M8	M8	M8	M10



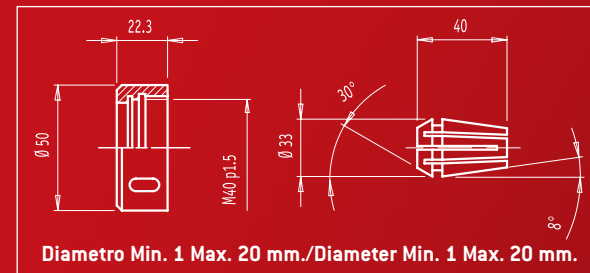
ghiere e pinze ring nuts and collets



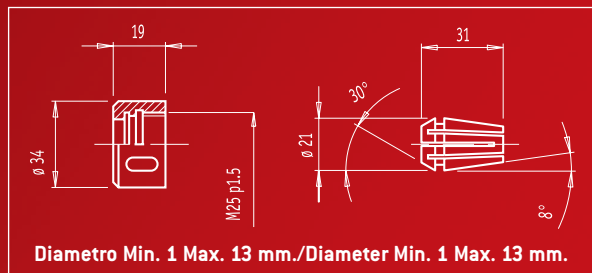
Ghiera e Pinza
Ring nut and Collet
ER11



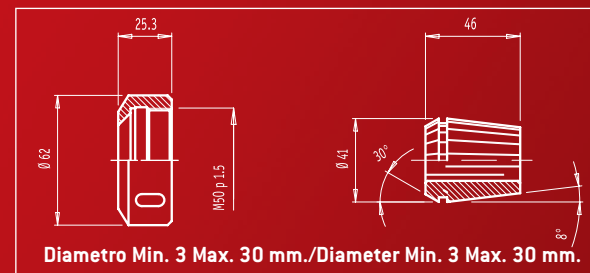
Ghiera e Pinza
Ring nut and Collet
ER32



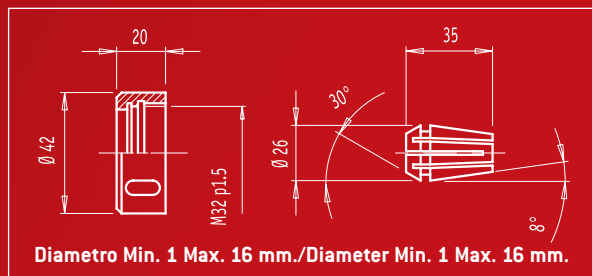
Ghiera e Pinza
Ring nut and Collet
ER20



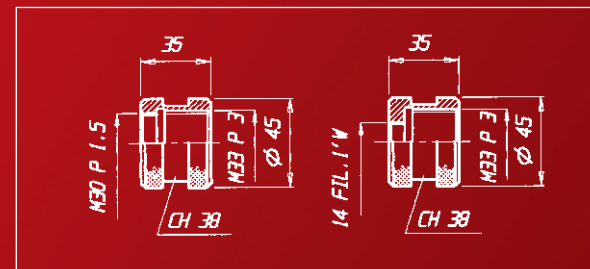
Ghiera e Pinza
Ring nut and Collet
ER40



Ghiera e Pinza
Ring nut and Collet
ER25



Ghiera per cono morse 2-3
Ring nut for MK 2-3
MK 2-3



coni porta utensile tool holder tapers

ISO 20

Cono ISO 20 con attacco
per pinza ER 16 e ghiera
ER 16 MINI
ISO 20 taper for collet ER 16
and ring nut ER 16 MINI



ISO 30

Cono ISO 30 con attacco
per pinza ER 32
ISO 30 taper for collet ER 32



ISO 40

Cono ISO 40 con attacco
per pinza ER 40
ISO 40 taper for collet ER 40



HSK

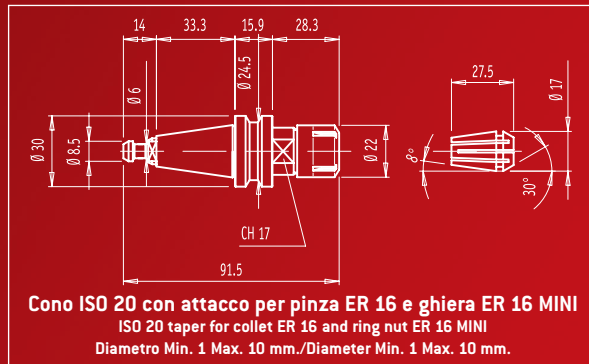
Cono HSK F-63 con attacco
per pinza ER 32-40
HSK F-63 taper for collet ER 32-40



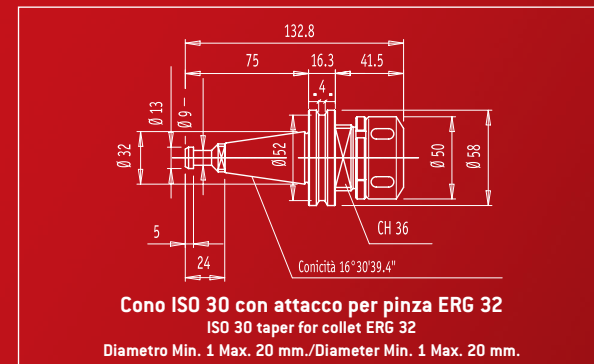
NB: I codoli sono conformi alla normativa DIN 69872
NB: Pull stud bolts comply to DIN 69872

Cono porta utensile HSK F-63 DIN 69893
Tool holder taper HSK F-63 DIN 69893

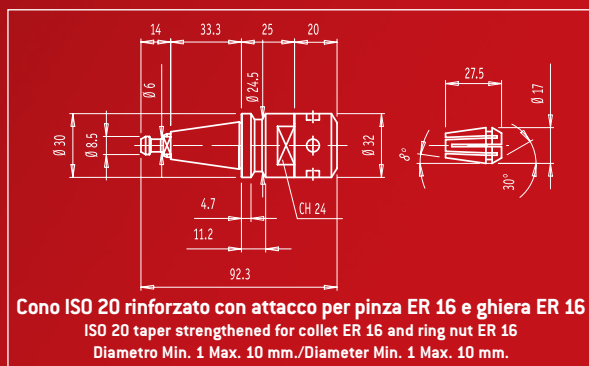
ISO 20



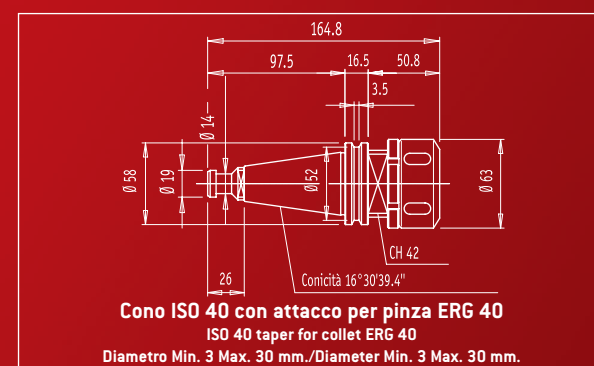
ISO 30



ISO 20



ISO 40





rete di dis

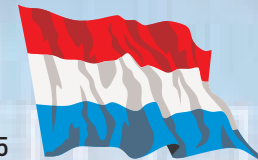
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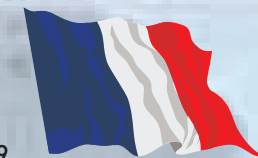
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For Asian business please contact our office in Belgium

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n network