

MATRIC



■ MAX MATRIC

Drilling units / Unità di foratura 4

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DU10P.100 8

DU20P.100 10

DU20P.150 12

CNC units / Unità CNC

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DU10E.100 16

DU20E.100 18

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Tapping units / Unità di maschiatura 22

TM10.60 24

TM10P.90 26

TM20.80 28

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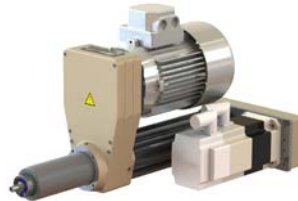
Drill & Tap units / Unità fora-maschia

FM10P.50 32

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**Working units / Unità di lavoro** 40

SU20 42

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Hydrochecks / Regolatori idraulici 60**Multispindle heads / Teste multiple** 61**Accessories series 10 / Accessori serie 10** 62**Accessories series 20 / Accessori serie 20** 64

drilling units



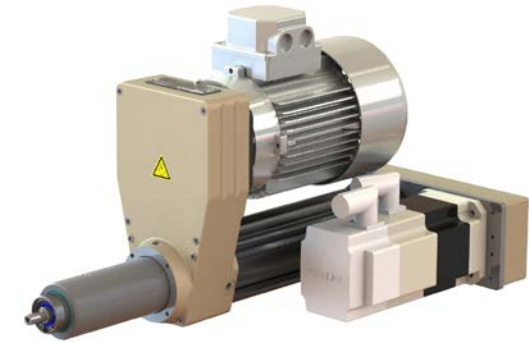
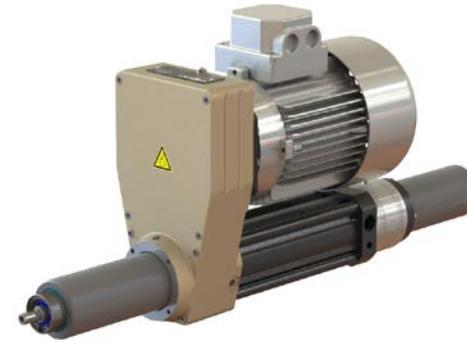
unità di foratura

- Quill drilling units suitable to work many materials type.
- Working stroke from 0 to 150 mm in accordance with the model.
- Pneumatic feeding.
- Hydrocheck feed control coaxial to the spindle for pneumatic versions.
- Fast and slow advance separately adjustable.
- Integral spindle to improve accuracy runout and stiffness .
- Ready to install hydrocheck peck feeding device.
- All units are equipped of 2 limit switches.
- Mechanical end-stop to guarantee position repeatability.
- Ready to install multispindle heads.

Units are available with ball screw feed and prearranged for customer's servomotor.

- Unità di foratura a canotto idonee alla lavorazione di molteplici materiali.
- Corsa di lavoro da 0 a 150 mm in base al modello.
- Avanzamento pneumatico.
- Regolatore idraulico di velocità coassiale al mandrino per le versioni pneumatiche.
- Avanzamenti rapido e lento regolabili separatamente.
- Mandrino integrale per garantire maggior precisione e rigidità.
- Possibilità di predisposizione dell'unità per lo scarico del truciolo.
- Tutte le unità sono dotate di 2 fine corsa di posizione.
- Battuta meccanica per garantire la ripetibilità della posizione.
- Possibilità di installazione teste multimandrino.

Disponibili versioni con avanzamento a vite con ricircolo di sfere e predisposizione per l'installazione del servomotore del cliente.





MATERIALE MATERIAL		DIAMETRO DI FORATURA / DRILLING DIAMETER									
		2	4	6	8	10	12	14	16	18	20
Acciao Steel ≤ 500 Nmm ²	Rpm	4000	2500	1500	1250	1000	800	700	500	500	
	mm / U	0,05	0,07	0,12	0,14	0,16	0,18	0,2	0,22	0,22	
	N →	200	500	800	1200	1600	1800	2000	3000	3500	
	Kw	0,03	0,11	0,25	0,48	0,55	0,75	0,75	1,10	1,50	
Acciao Steel ≤ 700 Nmm ²	Rpm	2500	2000	1500	1000	800	700	500			
	mm / U	0,05	0,08	0,10	0,12	0,14	0,16	0,18			
	N →	300	600	1000	1800	2500	3200	4000			
	Kw	0,03	0,08	0,20	0,40	0,60	0,75	1,10			
Acciao Steel ≤ 1000 Nmm ²	Rpm	1500	1500	1000	800	500	500				
	mm / U	0,03	0,05	0,08	0,08	0,10	0,12				
	N →	230	680	1200	1600	2400	3200				
	Kw	0,02	0,05	0,20	0,30	0,60	0,75				
Ghisa Grey Iron ≤ 250 Nmm ²	Rpm	2500	1500	1000	750	500	500	500			
	mm / U	0,06	0,10	0,15	0,18	0,20	0,25	0,30			
	N →	150	400	800	1200	1600	2300	2900			
	Kw	0,02	0,06	0,20	0,25	0,50	0,75	1,10			
Ottone Brass	Rpm	5000	4000	2500	1500	1250	1100	1100	800		
	mm / U	0,06	0,10	0,15	0,18	0,20	0,20	0,25	0,30		
	N →	150	600	800	1000	1200	1600	2400	3000		
	Kw	0,02	0,20	0,40	0,50	0,60	0,75	1,10	1,50		
Alluminio Aluminium	Rpm	5000	4000	2500	1500	1500	1500	1250	1100	800	500
	mm / U	0,06	0,10	0,15	0,18	0,18	0,20	0,20	0,30	0,35	0,40
	N →	90	200	400	600	800	1000	1300	2000	2400	3000
	Kw	0,02	0,06	0,15	0,25	0,30	0,55	0,75	1,10	1,50	2,20
Lega 2011 Alloy 2011	Rpm	6000	5000	4000	2500	1500	1500	1500	1100	800	500
	mm / U	0,08	0,12	0,15	0,20	0,20	0,20	0,20	0,30	0,30	0,35
	N →	150	350	600	1000	1100	1400	1800	2400	3000	3400
	Kw	0,03	0,10	0,25	0,35	0,40	0,55	0,75	1,10	1,50	2,20

DU10
DE10

DU20
DE20

Rpm	Giri mandrino Spindle Rpm	mm/U	Avanz. mm/giro Feed mm/rev.	N →	Spinta avanzamento Feed avance	Kw	Potenza motore Motor power
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The exposed data refer to the use of tools in HSS and are purely indicative and non-binding. Such data may undergo considerable variations depending on the material, working conditions and others cause.

To drill with multispindle head, the values must be multiplied for the number of spindle of the multispindle head.

I dati esposti fanno riferimento all'utilizzo di utensili in HSS e sono puramente indicativi e non vincolanti. Tali dati possono subire notevoli variazioni in funzione del materiale, delle condizioni di lavoro ed altri fattori.

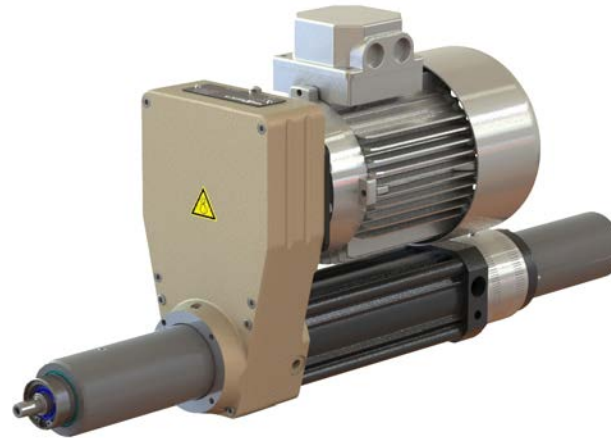
Per forature con teste multiple, i valori indicati vanno moltiplicati per il numero di mandrini della testa.

drilling units

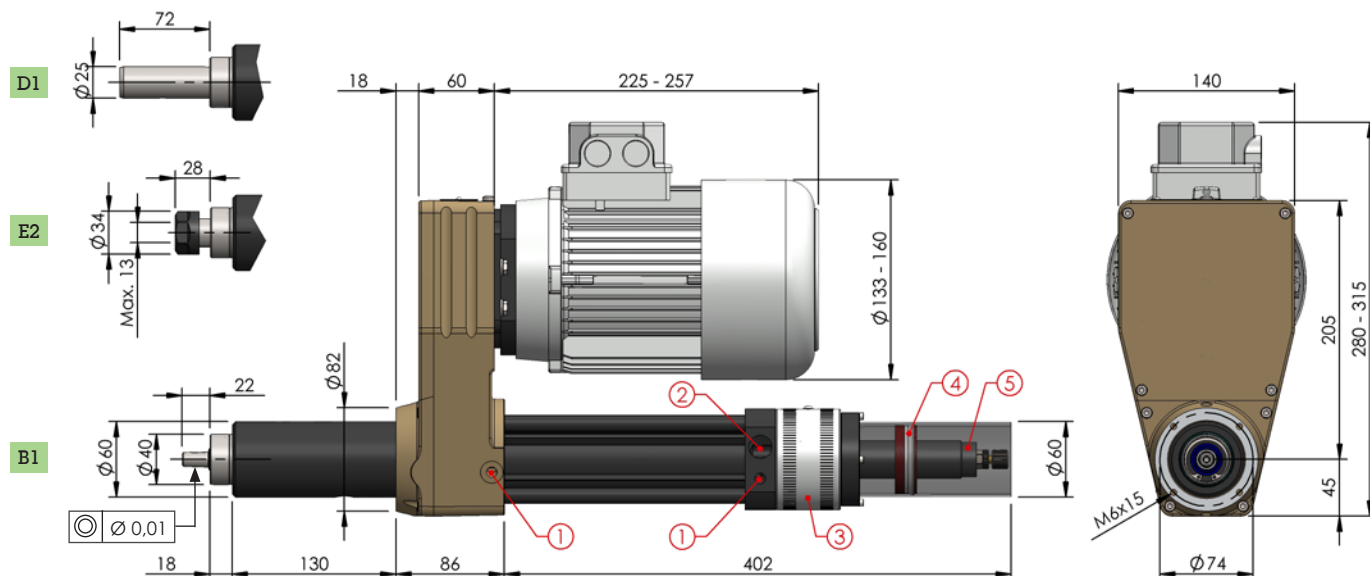


unità di foratura

DU10P.50	
Feed Avanzamento	pneumatic pneumatico
Stroke Corsa	50 mm 50 mm
Drilling Capacity Capacità di foratura	ø10 on steel Rm50 ø10 su acciaio Rm50
Thrust at 6 bar Spinta a 6 bar	1200 N 122 Kg
Spindle speed Velocità mandrino	from 500 to 9000 rpm da 500 a 9000 g/l'
Motor Power Potenza Motore	from 0.37 to 1.1 Kw da 0.37 a 1.1 Kw



- Pneumatic cylinder ø63.
- Air inlet (1) G1/8.
- Air consumption 1,10NL/cycle.
- Spindle concentricity 0,01.
- Electric wires connections M16x1,5 (2).
- Internal limit switches (3)
Optional: pneumatic limit switches or inductive sensors.
- Feed hydrocheck (5) in line with spindle.
Optional: peck feed hydrocheck.
- Fast/slow stroke separately adjustable (4) with mechanical stop.
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 15 to 22 Kg



- Cilindro pneumatico ø63.
- Ingressi aria (1) G1/8.
- Consumo aria 1,10NL/ciclo.
- Concentricità mandrino 0,01.
- Ingresso cavi elettrici M16x1,5 (2).
- Fine corsa di posizione elettrici interni (3)
Su richiesta fine corsa pneumatici o sensori induttivi.
- Regolatore idraulico di avanzamento (5)
in linea con il mandrino.
Su richiesta regolatore per scarico truciolo.
- Corse rapido/lento regolabili separatamente (4) con battuta meccanica.
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 15 a 22 Kg

DU10P 50

stroke / corsa

	spindle / mandrino
B1	B12 DIN 238
E2	ER20 DIN 6499
D1	ø16 DIN 55058

	rpm	
	50Hz	60Hz
05	500	600
07	750	900
10	1000	1200
12	1250	1500
15	1500	1800
20	2000	2400
25	2500	3000
30	3000	3600
50	5000	6000
70	7000	8400
90	9000	10800

	motor / motore
036	80 B14 0,37Kw 6 poles
056	80 B14 0,55Kw 6 poles
076	80 B14 0,75Kw 6 poles
034	71 B14 0,37Kw 4 poles
054	80 B14 0,55Kw 4 poles
074	80 B14 0,75Kw 4 poles
032	71 B14 0,37Kw 2 poles
052	71 B14 0,55Kw 2 poles
072	80 B14 0,75Kw 2 poles
112	80 B14 1,10Kw 2 poles

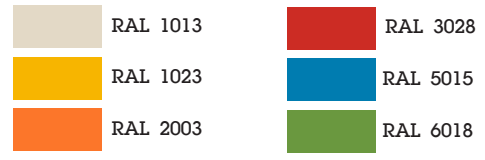
	motor type / tipo motore
S	230-400V-50/60Hz
A	brake motor autofrenante
V	forced ventilation servovenilato
AV	brake motor + forced ventilation autofrenante + servovenilato

	hydrocheck / regolatore
45H	standard
45HS	with oil bowl con serbatoio olio
75HP	peck feed scarico trucioli

STANDARD COLOR

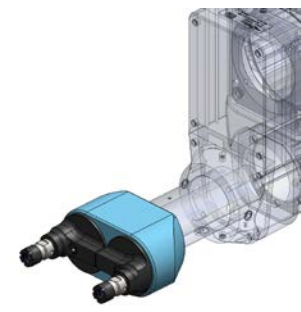
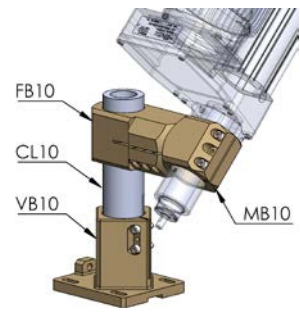
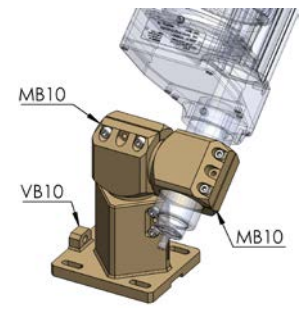
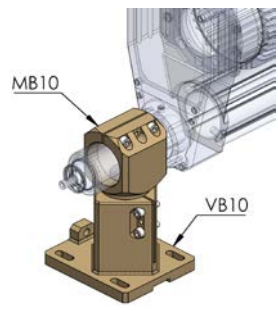
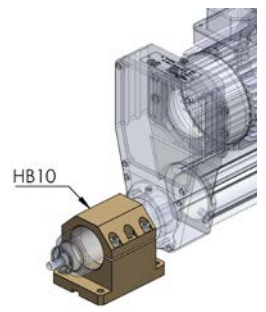


OPTIONAL COLORS



optional :

accessories for easy installation
accessori per una facile installazione



multispindle head
teste multiple

drilling units



unità di foratura

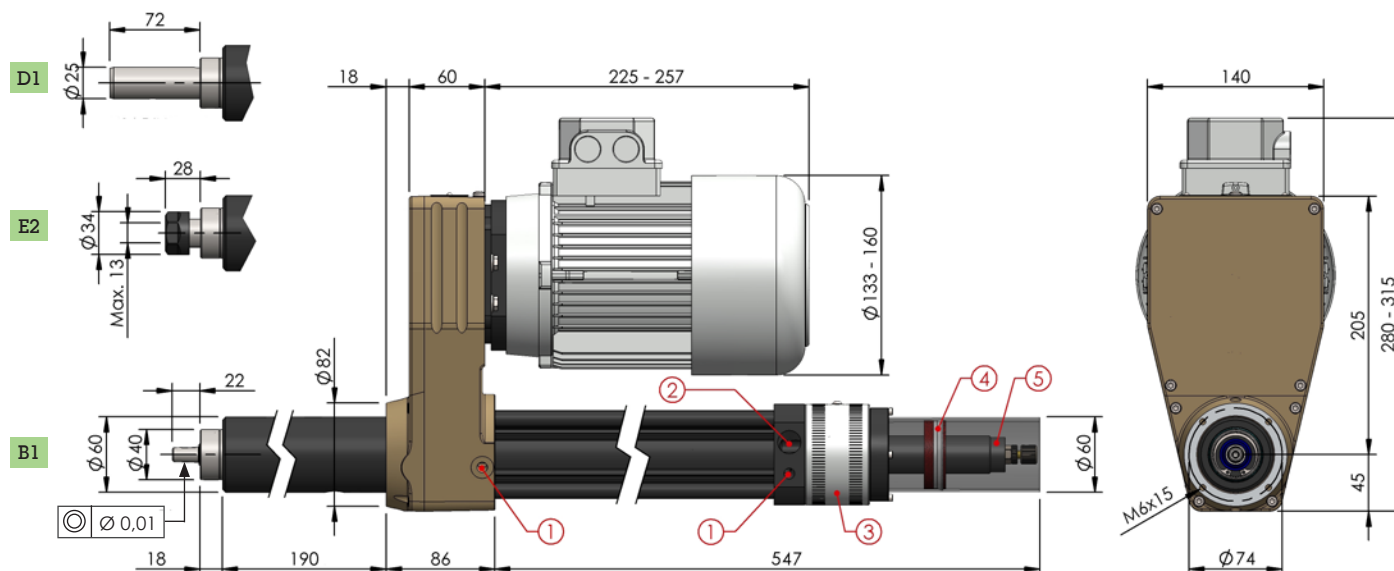
DU10P.100	
Feed Avanzamento	pneumatic pneumatico
Stroke Corsa	100 mm 100 mm
Drilling Capacity Capacità di foratura	ø10 on steel Rm50 ø10 su acciaio Rm50
Thrust at 6 bar Spinta a 6 bar	1200 N 122 Kg
Spindle speed Velocità mandrino	from 500 to 9000 rpm da 500 a 9000 g/l'
Motor Power Potenza Motore	from 0.37 to 1.1 Kw da 0.37 a 1.1 Kw



- Pneumatic cylinder ø63.
- Air inlet (1) G1/8.
- Air consumption 2,20NL/cycle.
- Spindle concentricity 0,01.
- Electric wires connections M16x1,5 (2).
- Internal limit switches (3)
Optional: pneumatic limit switches or inductive sensors.
- Feed hydrocheck (5) in line with spindle.
Optional: peck feed hydrocheck.
- Fast/slow stroke separately adjustable (4) with mechanical stop.
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 17 to 25 Kg



- Cilindro pneumatico ø63.
- Ingressi aria (1) G1/8.
- Consumo aria 2,20NL/ciclo.
- Concentricità mandrino 0,01.
- Ingresso cavi elettrici M16x1,5 (2).
- Fine corsa di posizione elettrici interni (3).
Su richiesta fine corsa pneumatici o sensori induttivi.
- Regolatore idraulico di avanzamento (5) in linea con il mandrino.
Su richiesta regolatore per scarico truciolo.
- Corse rapido/lento regolabili separatamente (4) con battuta meccanica.
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 17 a 25 Kg



DU10P

100

stroke / corsa

	spindle / mandrino
B1	B12 DIN 238
E2	ER20 DIN 6499
D1	ø16 DIN 55058

	rpm	
	50Hz	60Hz
05	500	600
07	750	900
10	1000	1200
12	1250	1500
15	1500	1800
20	2000	2400
25	2500	3000
30	3000	3600
50	5000	6000
70	7000	8400
90	9000	10800

	motor / motore
036	80 B14 0,37Kw 6 poles
056	80 B14 0,55Kw 6 poles
076	80 B14 0,75Kw 6 poles
034	71 B14 0,37Kw 4 poles
054	80 B14 0,55Kw 4 poles
074	80 B14 0,75Kw 4 poles
032	71 B14 0,37Kw 2 poles
052	71 B14 0,55Kw 2 poles
072	80 B14 0,75Kw 2 poles
112	80 B14 1,10Kw 2 poles

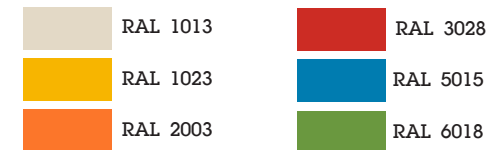
	motor type / tipo motore
S	230-400V-50/60Hz
A	brake motor autofrenante
V	forced ventilation servoventilato
AV	brake motor + forced ventilation autofrenante + servoventilato

	hydrocheck / regolatore
75H	standard
75HS	with oil bowl con serbatoio olio
100HP	peck feed scarico trucioli

STANDARD COLOR

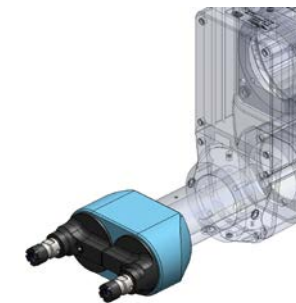
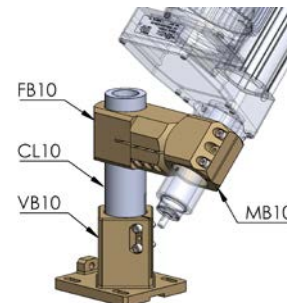
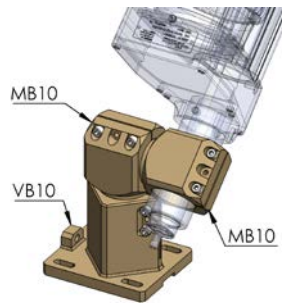
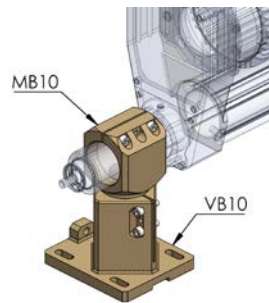
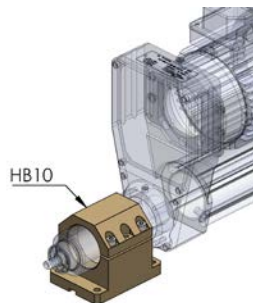


OPTIONAL COLORS



optional :

accessories for easy installation
accessori per una facile installazione



multispindle head
teste multiple

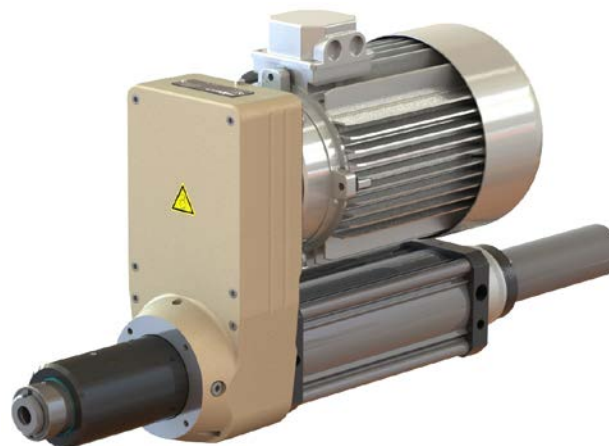
drilling units



unità di foratura

DU20P.100

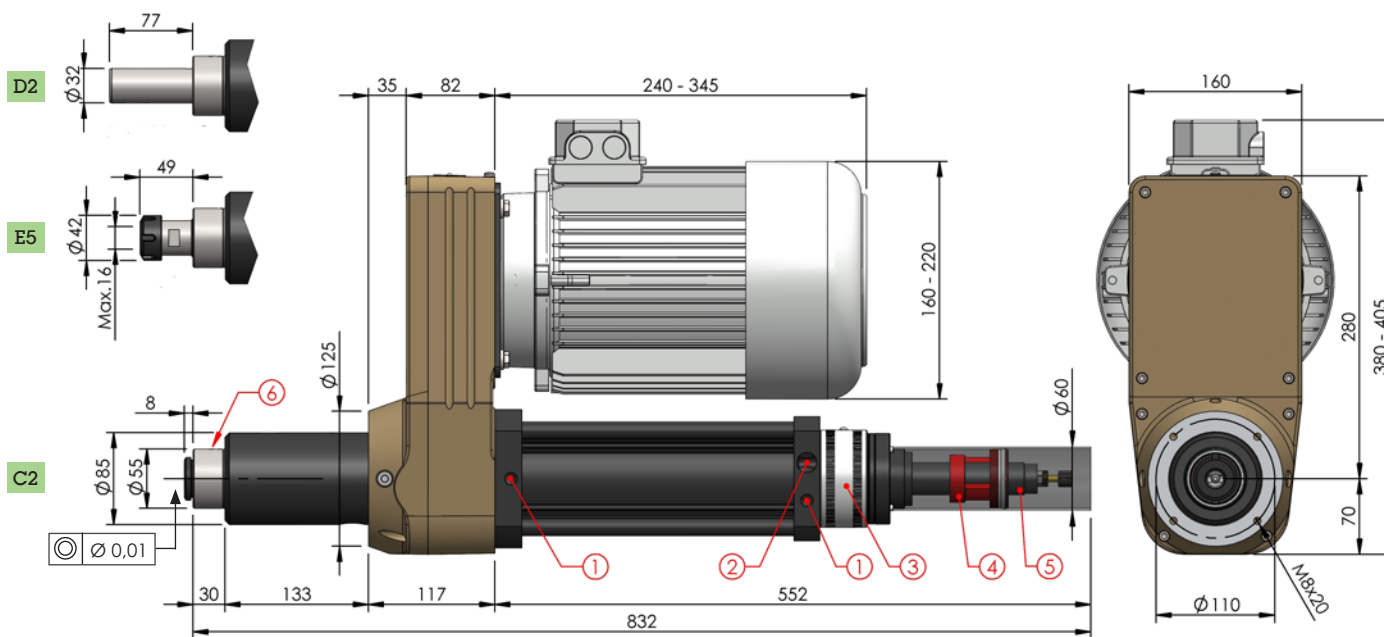
Feed Avanzamento	pneumatic pneumatico
Stroke Corsa	100 mm 100 mm
Drilling Capacity Capacità di foratura	ø18 on steel Rm50 ø18 su acciaio Rm50
Thrust at 6 bar Spinta a 6 bar	3700 N 375 Kg
Spindle speed Velocità mandrino	from 100 to 4500 rpm da 100 a 4500 g/1'
Motor Power Potenza Motore	from 0.75 to 3.00 Kw da 0.75 a 3.00 Kw



- Pneumatic cylinder ø100.
- Air inlet (1) G1/4.
- Air consumption 5,00NL/cycle.
- Spindle concentricity 0,01.
- Electric wires connections M16x1,5 (2).
- Internal limit switches (3)
Optional: pneumatic or inductive sensors.
- Feed hydrocheck (5) in line with spindle.
Optional: peck feed hydrocheck.
- Fast/slow stroke separately adjustable (4) with mechanical stop.
- Air inlet 0.5bar for internal spindle pressurization (6).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 35 to 50 Kg



- Cilindro pneumatico ø100.
- Ingressi aria (1) G1/4.
- Consumo aria 5,00NL/ciclo.
- Concentricità mandrino 0,01.
- Ingresso cavi elettrici M16x1,5 (2).
- Fine corsa di posizione elettrici interni (3)
Su richiesta fine corsa pneumatici o sensori induttivi.
- Regolatore idraulico di avanzamento (5) in linea con il mandrino.
Su richiesta regolatore per scarico truciolo.
- Corse rapido/lento regolabili separatamente (4) con battuta meccanica.
- Ingresso aria 0.5bar per pressurizzazione interna del mandrino (6).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 35 a 50 Kg



DU20P

100

stroke / corsa

	spindle / mandrino
C2	MT2 DIN 228
E5	ER25 DIN 6499
D2	ø20 DIN 55058

	rpm	
	50Hz	60Hz
01	100	120
02	200	240
03	300	360
05	500	600
07	700	840
08	800	960
11	1100	1320
15	1500	1800
22	2200	2640
30	3000	3600
45	4500	5400

	motor / motore
80...	motor reducer 0,75Kw 4 poles
81...	motor reducer 1,50Kw 4 poles
076	90 B14 0,75Kw 6 poles
116	90 B14 1,10Kw 6 poles
156	100 B14 1,50Kw 6 poles
226	112 B14 2,20Kw 6 poles
074	80 B14 0,75Kw 4 poles
114	90 B14 1,10Kw 4 poles
154	90 B14 1,50Kw 4 poles
224	100 B14 2,20Kw 4 poles
304	100 B14 3,00Kw 4 poles
072	80 B14 0,75Kw 2 poles
112	80 B14 1,10Kw 2 poles
152	90 B14 1,50Kw 2 poles
222	90 B14 2,20Kw 2 poles
302	100 B14 3,00Kw 2 poles

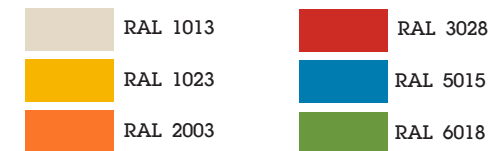
	motor type / tipo motore
S	230-400V-50/60Hz
A	brake motor autofrenante
V	forced ventilation servoventilato
AV	brake motor + forced ventilation autofrenante + servoventilato

	hydrocheck / regolatore
75H	standard
75HS	with oil bowl con serbatoio olio
100HP	peck feed scarico trucioli

STANDARD COLOR

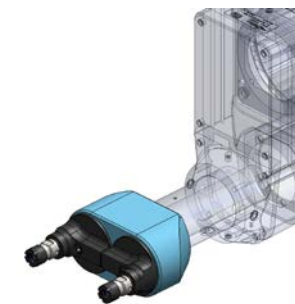
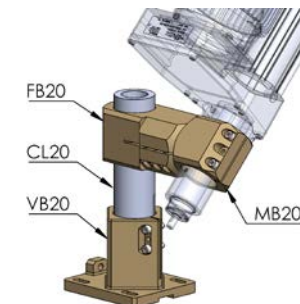
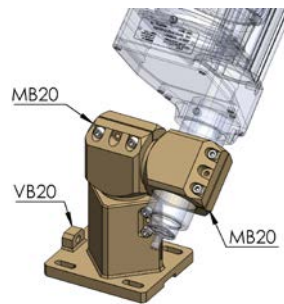
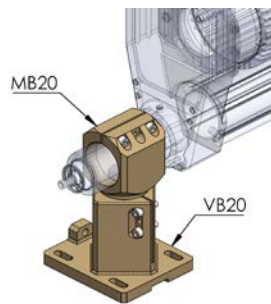
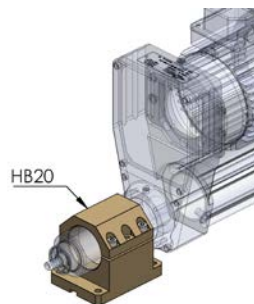


OPTIONAL COLORS



optional :

accessories for easy installation
accessori per una facile installazione

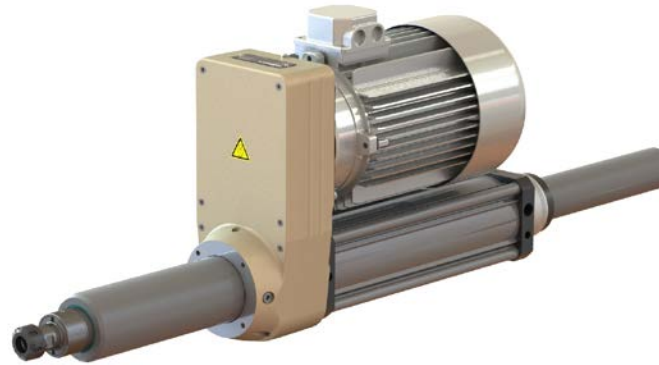


multispindle head
teste multiple



DU20P.150

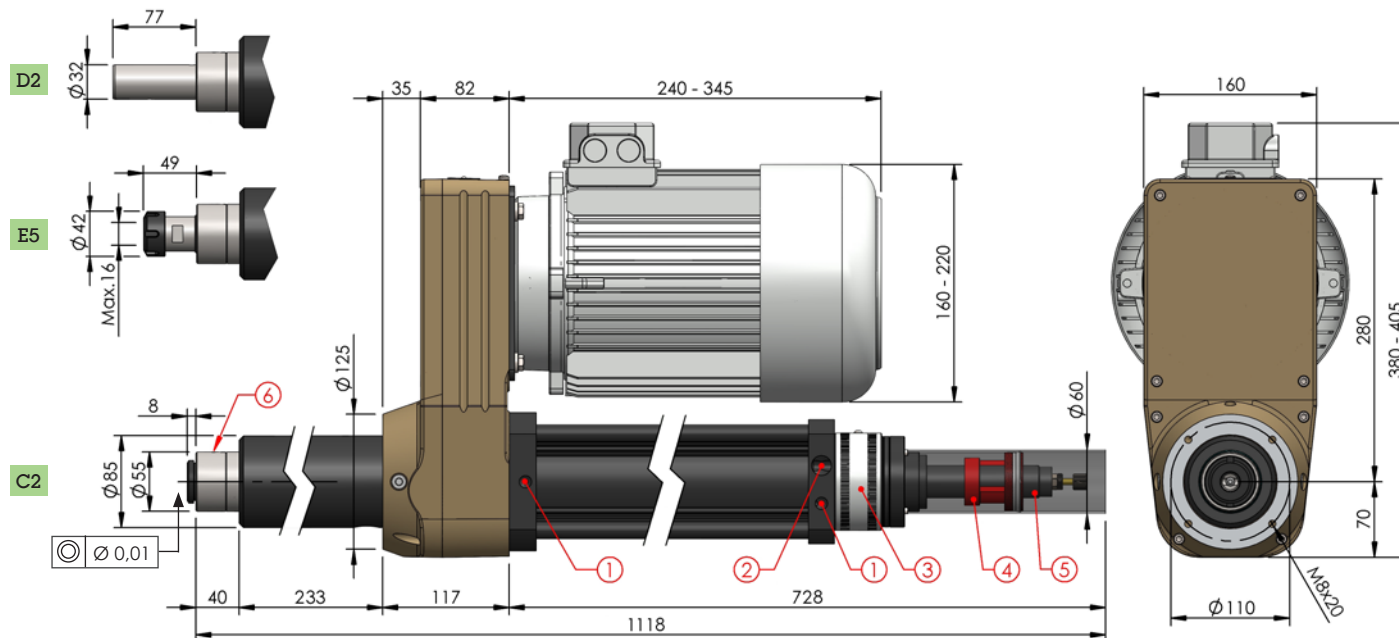
Feed Avanzamento	pneumatic pneumatico
Stroke Corsa	150 mm 150 mm
Drilling Capacity Capacità di foratura	ø18 on steel Rm50 ø18 su acciaio Rm50
Thrust at 6 bar Spinta a 6 bar	3700 N 375 Kg
Spindle speed Velocità mandrino	from 100 to 4500 rpm da 100 a 4500 g/l'
Motor Power Potenza Motore	from 0.75 to 3.00 Kw da 0.75 a 3.00 Kw



- Pneumatic cylinder ø100.
- Air inlet (1) G1/4.
- Air consumption 7,50NL/cycle.
- Spindle concentricity 0,01.
- Electric wires connections M16x1,5 (2).
- Internal limit switches (3)
Optional: pneumatic or inductive sensors.
- Feed hydrocheck (5) in line with spindle.
Optional: peck feed hydrocheck.
- Fast/slow stroke separately adjustable (4) with mechanical stop.
- Air inlet 0.5bar for internal spindle pressurization (6).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 42 to 57 Kg



- Cilindro pneumatico ø100.
- Ingressi aria (1) G1/4.
- Consumo aria 7,50NL/ciclo.
- Concentricità mandrino 0,01.
- Ingresso cavi elettrici M16x1,5 (2).
- Fine corsa di posizione elettrici interni (3)
Su richiesta fine corsa pneumatici o sensori induttivi.
- Regolatore idraulico di avanzamento (5) in linea con il mandrino.
- Corsa del regolatore idraulico 100mm.
Su richiesta regolatore per scarico truciolo.
- Corse rapido/lento regolabili separatamente (4) con battuta meccanica.
- Ingresso aria 0.5bar per pressurizzazione interna del mandrino (6).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 42 a 57 Kg



DU20P

150

stroke / corsa

	spindle / mandrino
C2	MT2 DIN228
E5	ER25 DIN 6499
D2	ø20 DIN 55058

	rpm	
	50Hz	60Hz
01	100	120
02	200	240
03	300	360
05	500	600
07	700	840
08	800	960
11	1100	1320
15	1500	1800
22	2200	2640
30	3000	3600
45	4500	5400

	motor / motore
80...	motor reducer 0,75Kw 4 poles
81...	motor reducer 1,50Kw 4 poles
076	90 B14 0,75Kw 6 poles
116	90 B14 1,10Kw 6 poles
156	100 B14 1,50Kw 6 poles
226	112 B14 2,20Kw 6 poles
074	80 B14 0,75Kw 4 poles
114	90 B14 1,10Kw 4 poles
154	90 B14 1,50Kw 4 poles
224	100 B14 2,20Kw 4 poles
304	100 B14 3,00Kw 4 poles
072	80 B14 0,75Kw 2 poles
112	80 B14 1,10Kw 2 poles
152	90 B14 1,50Kw 2 poles
222	90 B14 2,20Kw 2 poles
302	100 B14 3,00Kw 2 poles

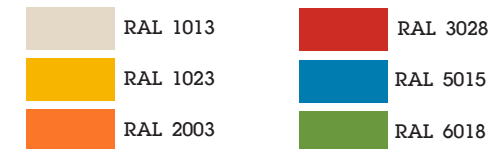
	motor type / tipo motore
S	230-400V-50/60Hz
A	brake motor autofrenante
V	forced ventilation servoventilato
AV	brake motor + forced ventilation autofrenante + servoventilato

	hydrocheck / regolatore
100H	standard
100HS	with oil bowl con serbatoio olio
150HP	peck feed scarico trucioli

STANDARD COLOR

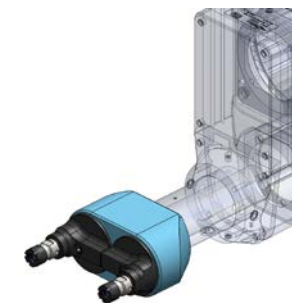
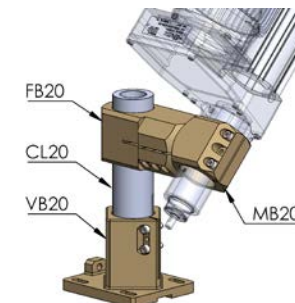
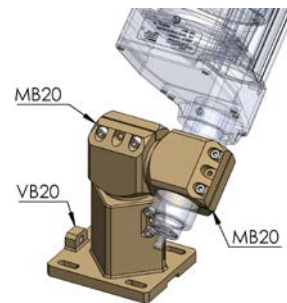
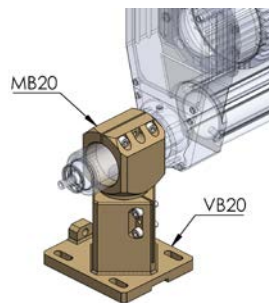
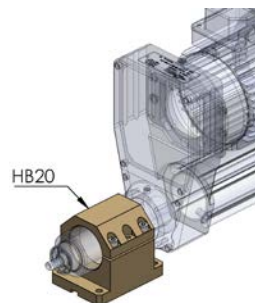


OPTIONAL COLORS



optional :

accessories for easy installation
accessori per una facile installazione



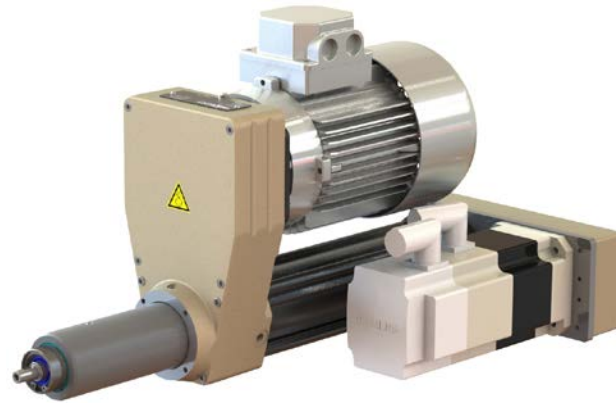
multispindle head
teste multiple



unità cnc

DU10E.50

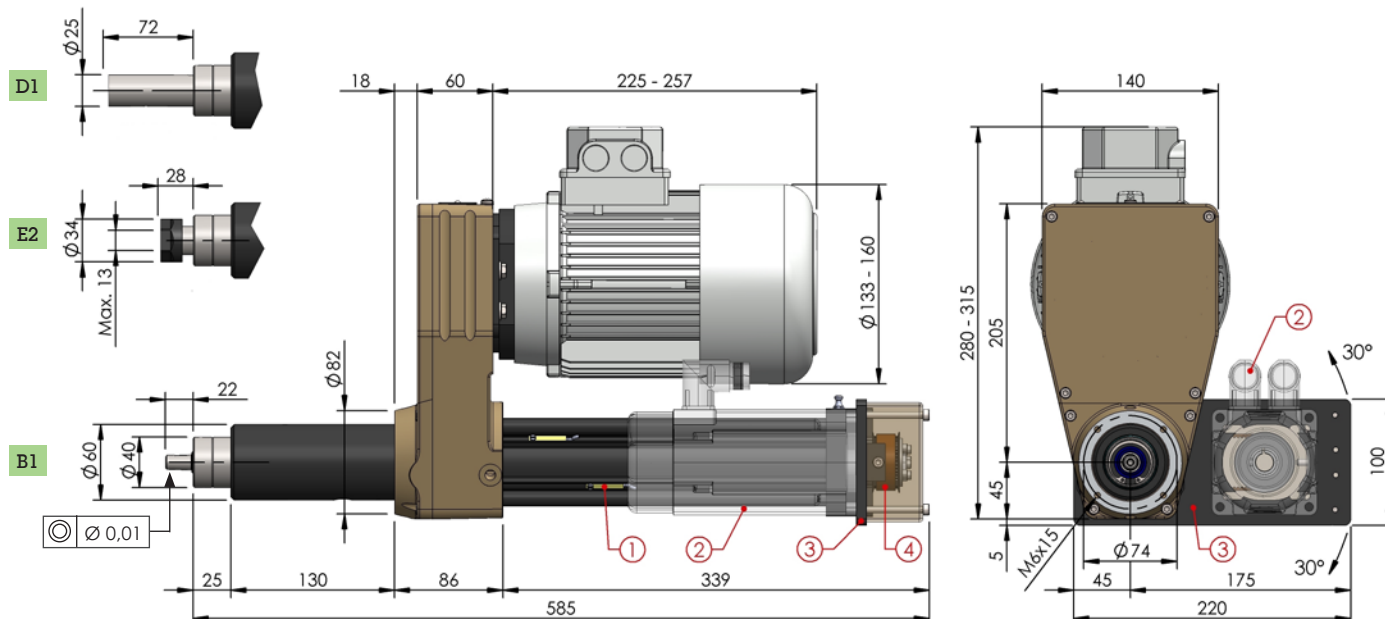
Feed Avanzamento	balls screw $\varnothing 16 \times 5$ vite a sfere $\varnothing 16 \times 5$
Working stroke Corsa utile	50 mm 50 mm
Drilling Capacity Capacità di foratura	$\varnothing 10$ on steel Rm50 $\varnothing 10$ su acciaio Rm50
Max thrust Spinta massima	1500 N 153 Kg
Spindle speed Velocità mandrino	from 500 to 9000 rpm da 500 a 9000 g/1'
Motor Power Potenza Motore	from 0.37 to 1.1 Kw da 0.37 a 1.10 Kw



- Advance by ball screw $\varnothing 16 \times 5$, preloaded nut to "0" back lash.
- Spindle concentricity 0,01.
- N. 3 magnetic limit switches (1): front, rear and "0" position.
- Working stroke 50mm.
- Feed servomotor not included (2).
- Predisposition for customer's servomotor (3).
- Servomotor-ball screw transmission (4) by thoused belt HTD, ratio 1:1 or 1:2.
- Servomotor torque:
ratio 1:1 max 1,5N/m
ratio 1:2 max 0,75N/m
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 17 to 24 Kg



- Avanzamento con vite a ricircolo di sfere $\varnothing 16 \times 5$, chiodola precaricata a gioco "0".
- Concentricità mandrino 0,01.
- N. 3 sensori magnetici (1): fine corsa posizione "0", fine corsa avanti, fine corsa indietro.
- Corsa utile 50mm.
- Servomotore avanzamento non fornito (2).
- Predisposizione per servomotore cliente (3).
- Trasmissione servomotore-vite (4) con cinghia dentata HTD, rapporto 1:1 o 1:2.
- Coppia servomotore:
rapporto 1:1 max 1,5N/m
rapporto 1:2 max 0,75N/m
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 17 a 24 Kg



DU10E

50

stroke / corsa

	spindle / mandrino
B1	B12 DIN 238
E2	ER20 DIN 6499
D1	ø16 DIN 55058

	rpm	
	50Hz	60Hz
05	500	600
07	750	900
10	1000	1200
12	1250	1500
15	1500	1800
20	2000	2400
25	2500	3000
30	3000	3600
50	5000	6000
70	7000	8400
90	9000	10800

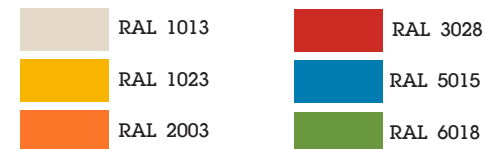
	motor / motore
036	80 B14 0,37Kw 6 poles
056	80 B14 0,55Kw 6 poles
076	80 B14 0,75Kw 6 poles
034	71 B14 0,37Kw 4 poles
054	80 B14 0,55Kw 4 poles
074	80 B14 0,75Kw 4 poles
032	71 B14 0,37Kw 2 poles
052	71 B14 0,55Kw 2 poles
072	80 B14 0,75Kw 2 poles
112	80 B14 1,10Kw 2 poles

	motor type / tipo motore
S	230-400V-50/60Hz
A	brake motor autofrenante
V	forced ventilation servoventilato
AV	brake motor + forced ventilation autofrenante + servoventilato

STANDARD COLOR

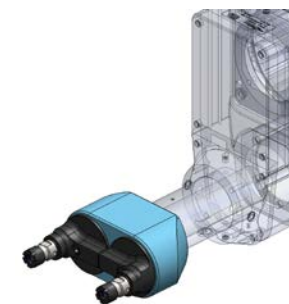
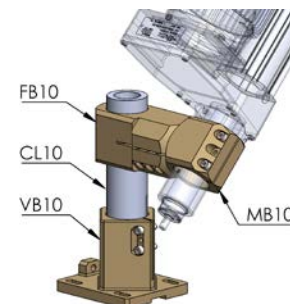
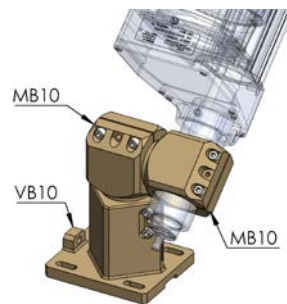
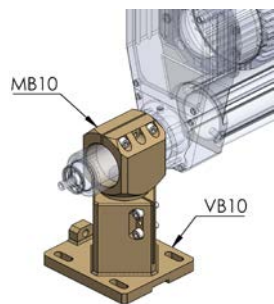
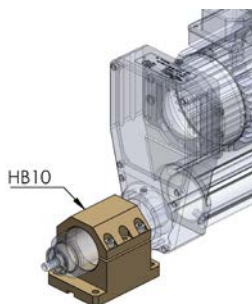


OPTIONAL COLORS



optional :

accessories for easy installation
accessori per una facile installazione

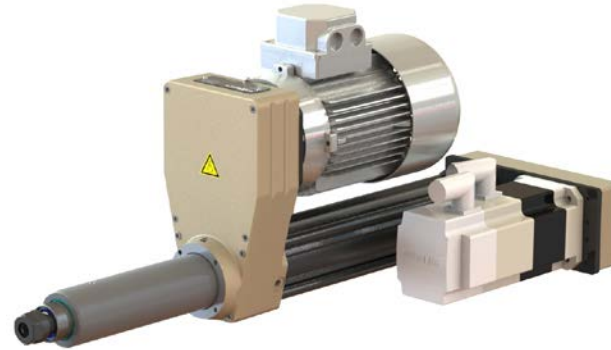


multispindle head
teste multiple

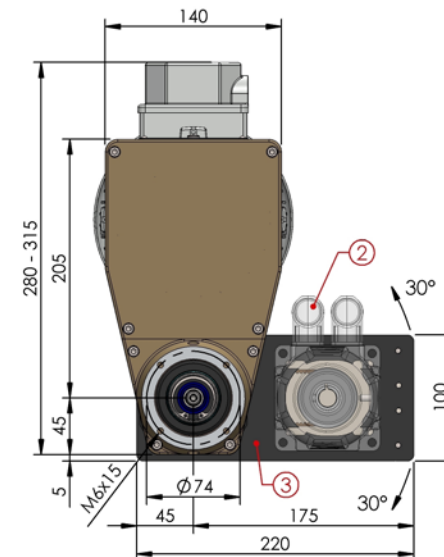
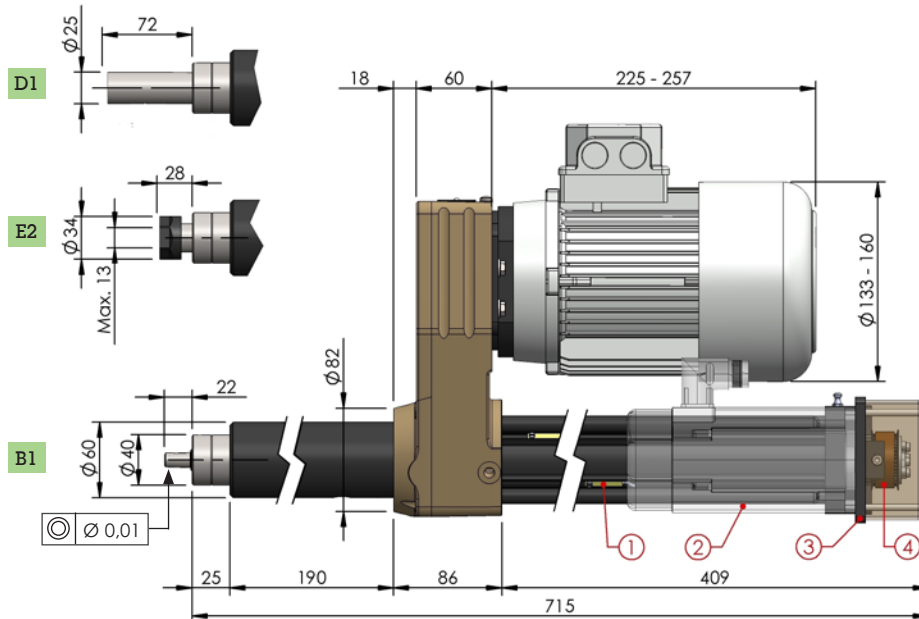


DU10E.100

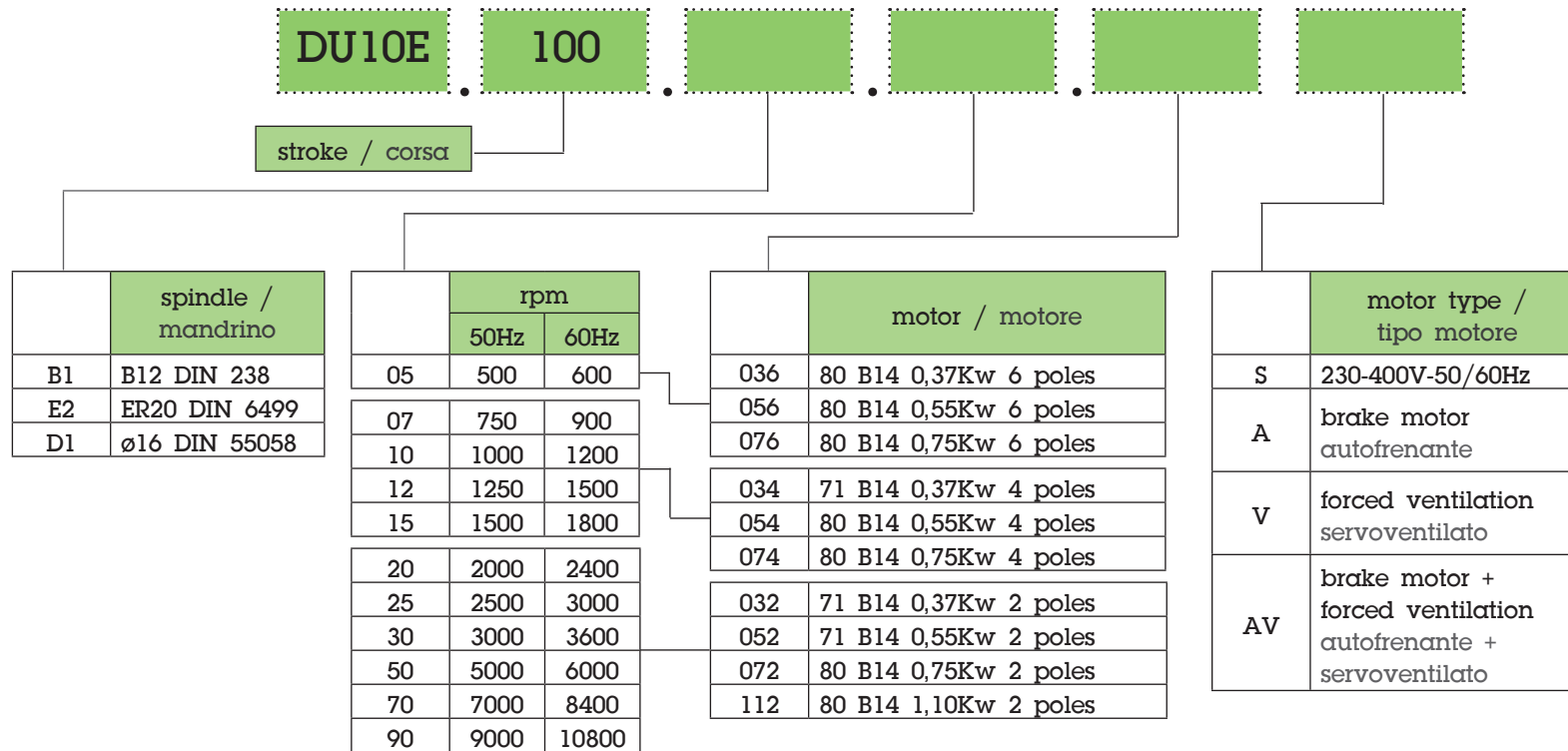
Feed Avanzamento	balls screw $\varnothing 16 \times 5$ vite a sfere $\varnothing 16 \times 5$
Working stroke Corsa utile	90 mm 90 mm
Drilling Capacity Capacità di foratura	$\varnothing 10$ on steel Rm50 $\varnothing 10$ su acciaio Rm50
Max thrust Spinta massima	1500 N 153 Kg
Spindle speed Velocità mandrino	from 500 to 9000 rpm da 500 a 9000 g/l'
Motor Power Potenza Motore	from 0.37 to 1.10 Kw da 0.37 a 1.10 Kw



- Advance by ball screw $\varnothing 16 \times 5$, preloaded nut to "0" back lash.
- Spindle concentricity 0,01.
- N. 3 magnetic limit switches (1): front, rear and "0" position.
- Working stroke 90mm.
- Feed servomotor not included (2).
- Predisposition for customer's servomotor (3).
- Servomotor-ball screw transmission (4) by thoused belt HTD, ratio 1:1 or 1:2.
- Servomotor torque:
ratio 1:1 max 1,5N/m
ratio 1:2 max 0,75N/m
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 19 to 27 Kg

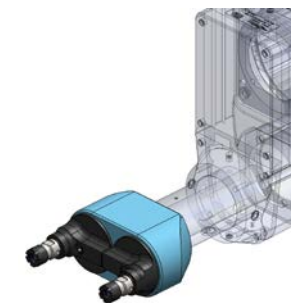
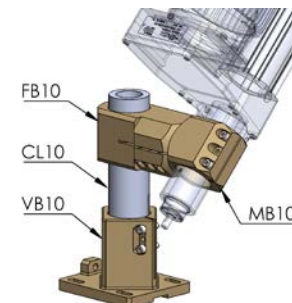
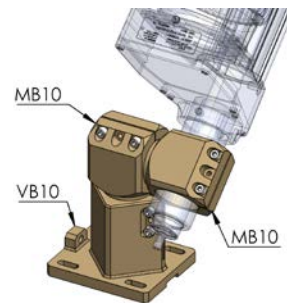
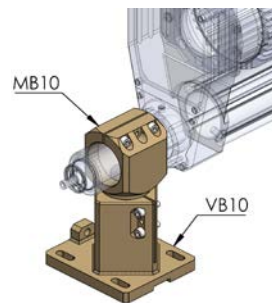
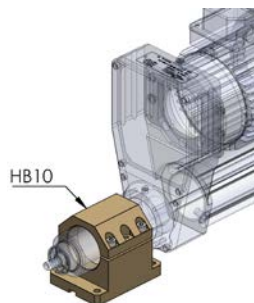


- Avanzamento con vite a ricircolo di sfere $\varnothing 16 \times 5$, chiocciola precaricata a gioco "0".
- Concentricità mandrino 0,01.
- N. 3 sensori magnetici (1): fine corsa posizione "0", fine corsa avanti, fine corsa indietro.
- Corsa utile 90mm.
- Servomotore avanzamento non fornito (2).
- Predisposizione per servomotore cliente (3).
- Trasmissione servomotore-vite (4) con cinghia dentata HTD, rapporto 1:1 o 1:2.
- Coppia servomotore:
rapporto 1:1 max 1,5N/m
rapporto 1:2 max 0,75N/m
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 19 a 27 Kg




optional :

accessories for easy installation
accessori per una facile installazione









multispindle head
teste multiple

STANDARD COLOR

 RAL 1001

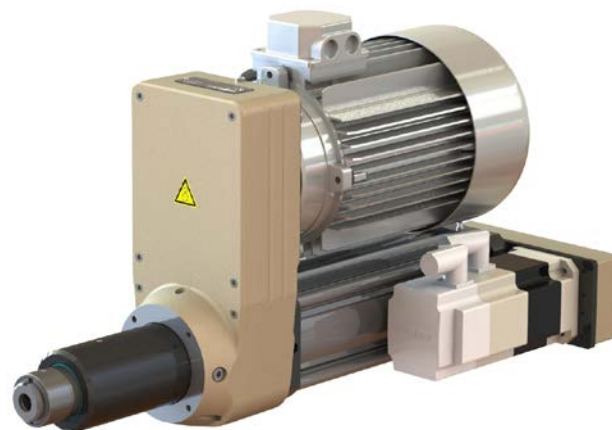
OPTIONAL COLORS

	RAL 1013		RAL 3028
	RAL 1023		RAL 5015
	RAL 2003		RAL 6018



DU20E.100

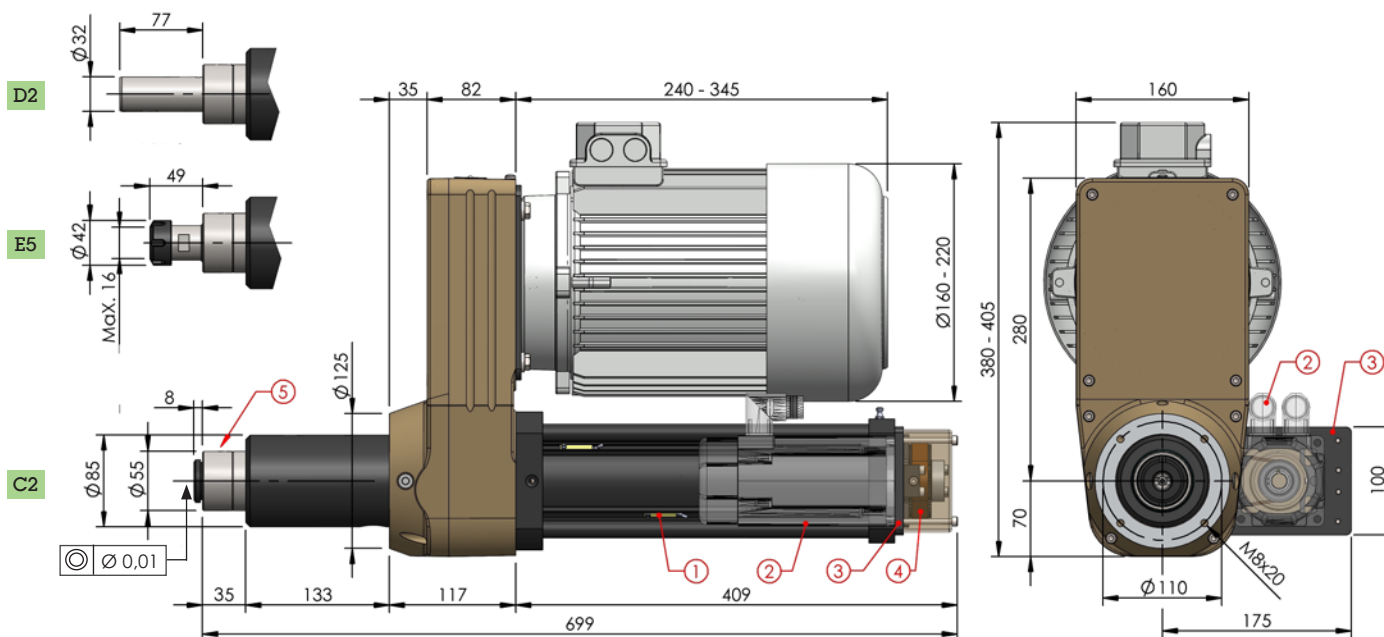
Feed Avanzamento	balls screw $\varnothing 16 \times 5$ vite a sfere $\varnothing 16 \times 5$
Working stroke Corsa utile	90 mm 90 mm
Drilling Capacity Capacità di foratura	$\varnothing 18$ on steel Rm50 $\varnothing 18$ su acciaio Rm50
Max thrust Spinta massima	4000 N 407 Kg
Spindle speed Velocità mandrino	from 100 to 4500 rpm da 100 a 4500 g/1'
Motor Power Potenza Motore	from 0.75 to 3.00 Kw da 0.75 a 3.00 Kw



- Advance by ball screw $\varnothing 16 \times 5$, preloaded nut to "0" backlash.
- Spindle concentricity 0,01.
- N. 3 magnetic limit switches (1): front, rear and "0" position.
- Working stroke 90mm.
- Feed servomotor not included (2).
- Predisposition for customer's servomotor (3).
- Servomotor-ball screw transmission (4) by thoused belt HTD, ratio 1:1 or 1:2.
- Servomotor torque:
ratio 1:1 max 4,0N/m
ratio 1:2 max 2,0N/m
- Air inlet 0.5bar for internal spindle pressurization (5).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 37 to 52 Kg



- Avanzamento con vite a ricircolo di sfere $\varnothing 16 \times 5$, chiocciola precaricata a gioco "0".
- Concentricità mandrino 0,01.
- N. 3 sensori magnetici (1): fine corsa posizione "0", fine corsa avanti, fine corsa indietro.
- Corsa utile 90mm.
- Servomotore avanzamento non fornito (2).
- Predisposizione per servomotore cliente (3).
- Trasmissione servomotore-vite (4) con cinghia HTD, rapporto 1:1 o 1:2.
- Coppia servomotore:
rapporto 1:1 max 4,0N/m
rapporto 1:2 max 2,0N/m
- Ingresso aria 0.5bar per pressurizzazione interna del mandrino (5).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 37 a 52 Kg



DU20E 100

stroke / corsa

	spindle / mandrino
C2	MT2 DIN 228
E5	ER25 DIN 6499
D2	ø20 DIN 55058

	rpm	
	50Hz	60Hz
01	100	120
02	200	240
03	300	360
05	500	600
07	700	840
08	800	960
11	1100	1320
15	1500	1800
22	2200	2640
30	3000	3600
45	4500	5400

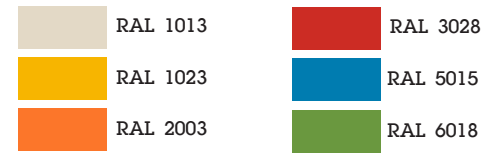
	motor / motore
80...	motor reducer 0,75Kw 4 poles
81...	motor reducer 1,50Kw 4 poles
076	90 B14 0,75Kw 6 poles
116	90 B14 1,10Kw 6 poles
156	100 B14 1,50Kw 6 poles
226	112 B14 2,20Kw 6 poles
074	80 B14 0,75Kw 4 poles
114	90 B14 1,10Kw 4 poles
154	90 B14 1,50Kw 4 poles
224	100 B14 2,20Kw 4 poles
304	100 B14 3,00Kw 4 poles
072	80 B14 0,75Kw 2 poles
112	80 B14 1,10Kw 2 poles
152	90 B14 1,50Kw 2 poles
222	90 B14 2,20Kw 2 poles
302	100 B14 3,00Kw 2 poles

	motor type / tipo motore
S	230-400V-50/60Hz
A	brake motor autofrenante
V	forced ventilation servoventilato
AV	brake motor + forced ventilation autofrenante + servoventilato

STANDARD COLOR

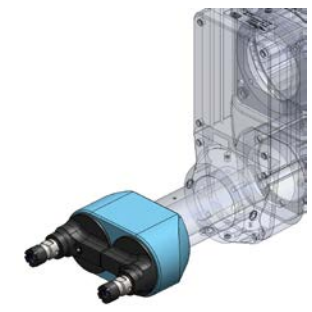
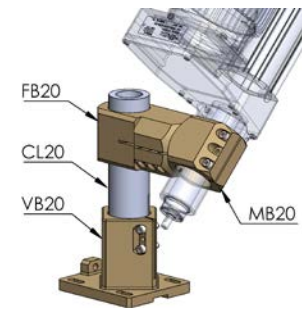
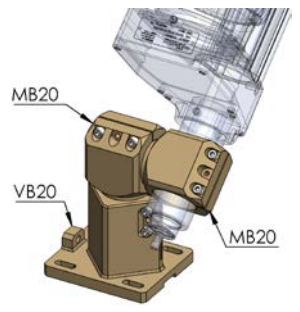
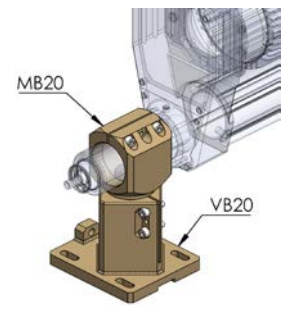
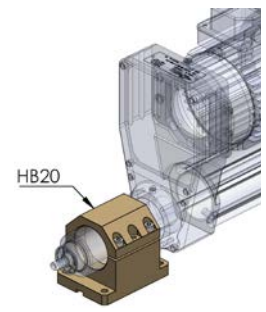


OPTIONAL COLORS



optional :

accessories for easy installation
accessori per una facile installazione

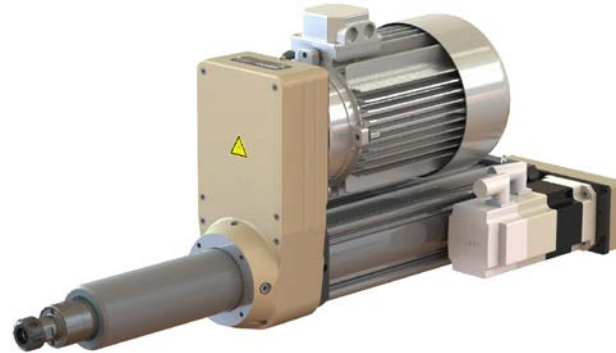


multispindle head
teste multiple



DU20E.150

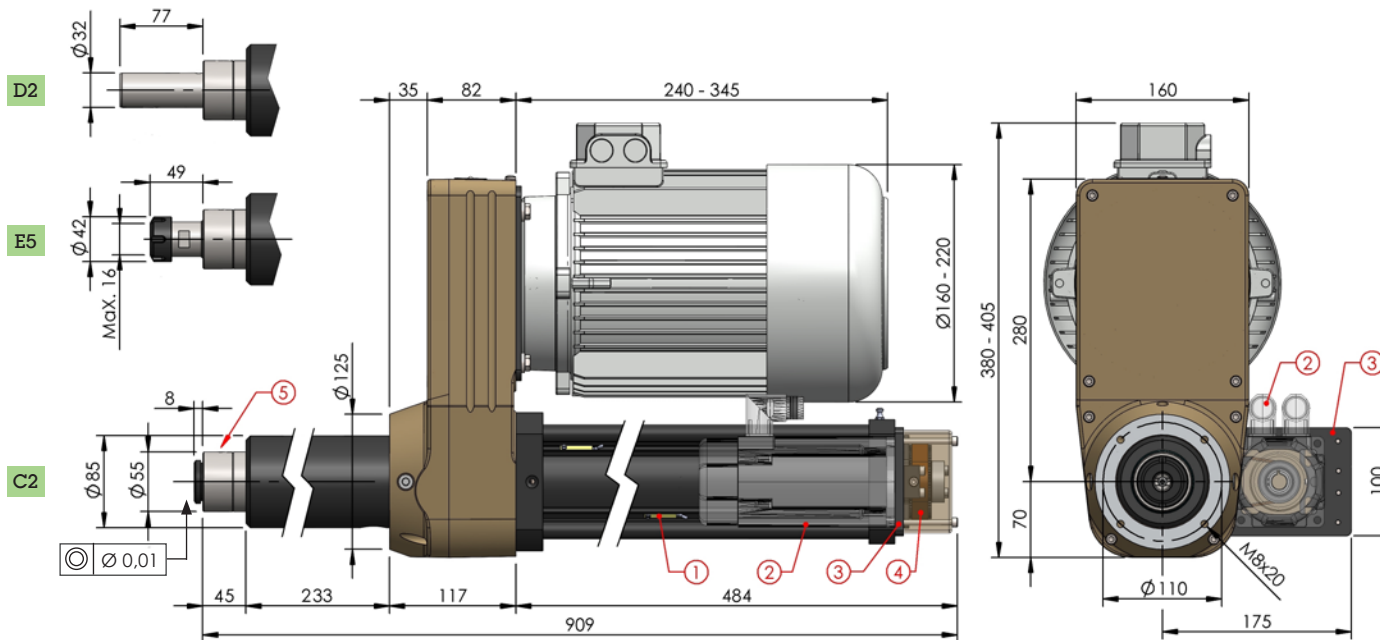
Feed Avanzamento	balls screw $\varnothing 16 \times 5$ vite a sfere $\varnothing 16 \times 5$
Working stroke Corsa utile	140 mm 140 mm
Drilling Capacity Capacità di foratura	$\varnothing 18$ on steel Rm50 $\varnothing 18$ su acciaio Rm50
Max thrust Spinta massima	4000 N 407 Kg
Spindle speed Velocità mandrino	from 100 to 4500 rpm da 100 a 4500 g/l'
Motor Power Potenza Motore	from 0.75 to 3.00 Kw da 0.75 a 3.00 Kw



- Advance by ball screw $\varnothing 16 \times 5$, preloaded nut to "0" backlash.
- Spindle concentricity 0,01.
- N. 3 magnetic limit switches (1): front, rear and "0" position.
- Working stroke 140mm.
- Feed servomotor not included (2).
- Predisposition for customer's servomotor (3).
- Servomotor-ball screw transmission (4) by toothed belt HTD, ratio 1:1 or 1:2.
- Servomotor torque:
ratio 1:1 max 4,0N/m
ratio 1:2 max 2,0N/m
- Air inlet 0.5bar for internal spindle pressurization (5).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 44 to 59 Kg



- Avanzamento con vite a ricircolo di sfere $\varnothing 16 \times 5$, chiocciola precaricata a gioco "0".
- Concentricità mandrino 0,01.
- N. 3 sensori magnetici (1): fine corsa posizione "0", fine corsa avanti, fine corsa indietro.
- Corsa utile 140mm.
- Servomotore avanzamento non fornito (2).
- Predisposizione per servomotore cliente (3).
- Trasmissione servomotore-vite (4) con cinghia dentata HTD, rapporto 1:1 o 1:2.
- Coppia servomotore:
rapporto 1:1 max 4,0N/m
rapporto 1:2 max 2,0N/m
- Ingresso aria 0.5bar per pressurizzazione interna del mandrino (5).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 44 a 59 Kg



DU20E 150

stroke / corsa

	spindle / mandrino
C2	MT2 DIN 228
E5	ER25 DIN 6499
D2	ø20 DIN 55058

	rpm	
	50Hz	60Hz
01	100	120
02	200	240
03	300	360
05	500	600
07	700	840
08	800	960
11	1100	1320
15	1500	1800
22	2200	2640
30	3000	3600
45	4500	5400

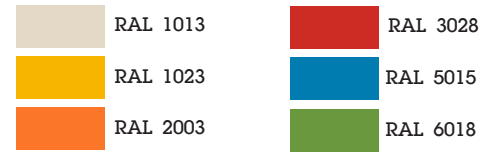
	motor / motore
80...	motor reducer 0,75Kw 4 poles
81...	motor reducer 1,50Kw 4 poles
076	90 B14 0,75Kw 6 poles
116	90 B14 1,10Kw 6 poles
156	100 B14 1,50Kw 6 poles
226	112 B14 2,20Kw 6 poles
074	80 B14 0,75Kw 4 poles
114	90 B14 1,10Kw 4 poles
154	90 B14 1,50Kw 4 poles
224	100 B14 2,20Kw 4 poles
304	100 B14 3,00Kw 4 poles
072	80 B14 0,75Kw 2 poles
112	80 B14 1,10Kw 2 poles
152	90 B14 1,50Kw 2 poles
222	90 B14 2,20Kw 2 poles
302	100 B14 3,00Kw 2 poles

	motor type / tipo motore
S	230-400V-50/60Hz
A	brake motor autofrenante
V	forced ventilation servoventilato
AV	brake motor + forced ventilation autofrenante + servoventilato

STANDARD COLOR

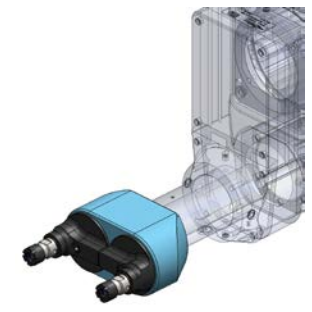
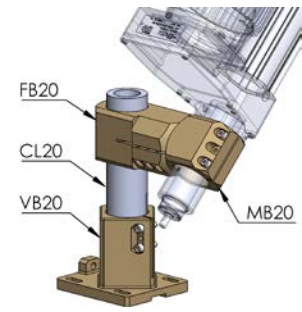
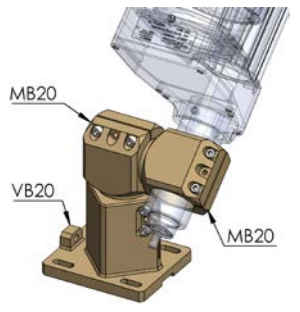
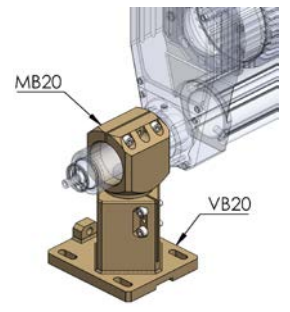
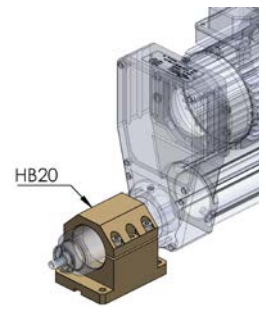


OPTIONAL COLORS



optional :

accessories for easy installation
accessori per una facile installazione



multispindle head
teste multiple

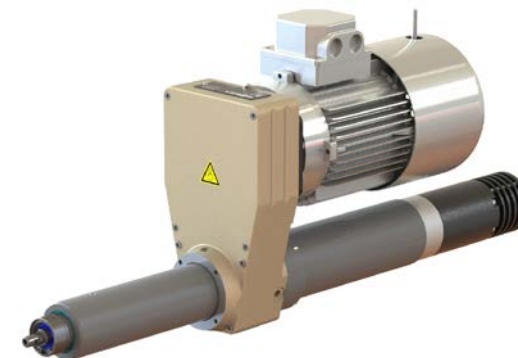
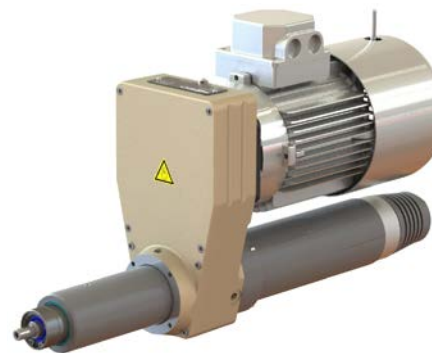
tapping units



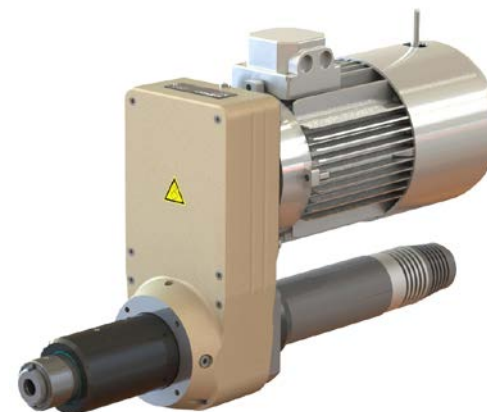
unità di maschiatura



- Quill tapping units suitable to work many materials type.
- Working stroke from 0 to 80 mm in accordance with the model.
- Feed advance by lead screw.
- Oil-bath lubrication lead screw.
- Units are available with pneumatic fast approach .
- All units are equipped of 2 limit switches and one safety switch.
- Ready to install multispindle heads.



- Unità di maschiatura a canotto idonee alla lavorazione di molteplici materiali.
- Corsa di lavoro da 0 a 80 mm in base al modello.
- Avanzamento con patrona.
- Lubrificazione patrona a bagno d'olio.
- Possibilità di accostamento rapido ad azionamento pneumatico.
- Tutte le unità sono dotate di 2 fine corsa di posizione ed un fine corsa di sicurezza.
- Possibilità di installazione teste multimandrino.





tapping units

unità di maschiatura

MATERIALE MATERIAL		DIAMETRO DI MASCHIATURA / TAPPING DIAMETER									
		M3	M4	M5	M6	M8	M10	M12	M16	M18	M20
Acciao Steel ≤ 500 Nmm ²	Rpm	1500	1500	1250	1250	1000	750	500	300	200	100
	mm / ⌀	0,50	0,70	0,80	1,00	1,25	1,50	1,75	2,00	2,50	2,50
	Kw	0,15	0,25	0,35	0,45	0,60	0,75	1,10	1,5	1,50	1,50
Acciao Steel ≤ 700 Nmm ²	Rpm	1500	1250	1250	1000	450	450	500	300	200	
	mm / ⌀	0,50	0,70	0,80	1,00	1,25	1,50	1,75	2,00	2,50	
	Kw	0,15	0,25	0,35	0,50	0,60	0,75	1,5	1,50	1,50	
Acciao Steel ≤ 1000 Nmm ²	Rpm	1500	1000	750	450	450	300	200	200		
	mm / ⌀	0,50	0,70	0,80	1,00	1,25	1,50	1,5	2,0		
	Kw	0,15	0,25	0,35	0,50	0,65	1,10	1,5	1,5		
Ghisa Grey Iron ≤ 250 Nmm ²	Rpm	1500	1000	1000	1000	750	450	300	200	100	
	mm / ⌀	0,50	0,70	0,80	1,00	0,20	1,50	1,75	2,0	2,50	
	Kw	0,15	0,20	0,30	0,40	0,50	0,75	1,10	1,50	1,50	
Ottone Brass	Rpm	2000	1500	1500	1250	1000	750	450	500	300	300
	mm / ⌀	0,50	0,70	0,80	1,00	1,25	1,50	1,75	2,00	2,5	2,5
	Kw	0,15	0,30	0,35	0,60	0,75	0,75	1,10	1,50	1,5	1,5
Alluminio Aluminium	Rpm	2000	1250	1250	1000	1000	750	600	500	300	300
	mm / ⌀	0,50	0,70	0,80	1,00	1,25	1,50	1,75	2,00	2,50	2,50
	Kw	0,15	0,20	0,25	0,30	0,45	0,55	0,75	1,50	1,50	2,20
Lega 2011 Alloy 2011	Rpm	2500	2000	1500	1250	1000	750	600	500	300	300
	mm / ⌀	0,50	0,70	0,80	1,00	1,25	1,50	1,75	2,00	2,50	2,50
	Kw	0,15	0,20	0,25	0,35	0,40	0,55	0,75	1,10	1,50	1,50

	TM10		TM20
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Rpm	Giri mandrino Spindle Rpm	mm/⌀	Avanz. mm/giro Feed mm/rev.	Kw	Potenza motore Motor power
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The exposed data refer to the use of tools in HSS and are purely indicative and non-binding. Such data may undergo considerable variations depending on the material, working conditions and others cause.

To drill with multispindle head, the values must be multiplied for the number of spindle of the multispindle head.

I dati esposti fanno riferimento all'utilizzo di utensili in HSS e sono puramente indicativi e non vincolanti. Tali dati possono subire notevoli variazioni in funzione del materiale, delle condizioni di lavoro ed altri fattori.

Per forature con teste multiple i valori indicati vanno moltiplicati per il numero di mandrini della testa.

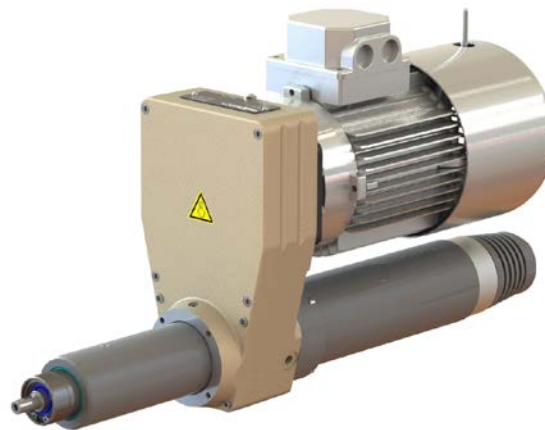
tapping units



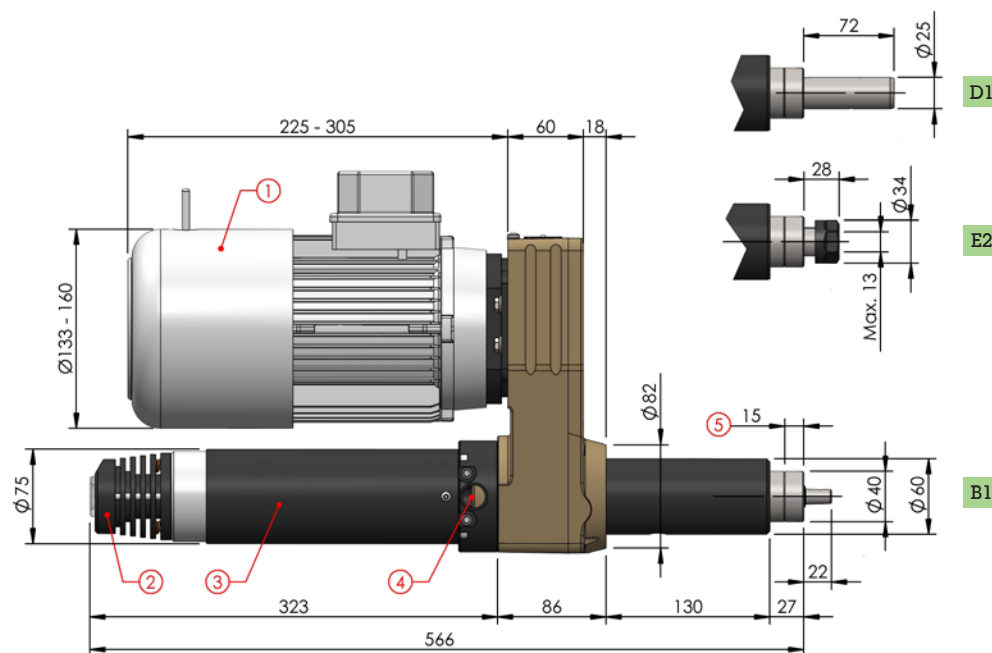
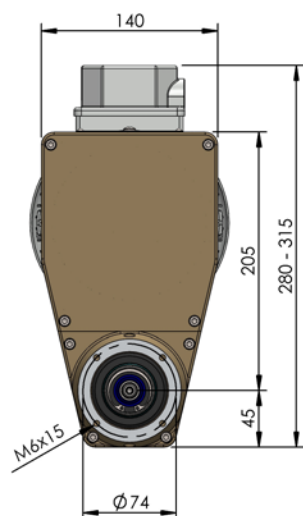
unità di maschiatura

TM10.60

Feed Avanzamento	by lead screw con patrona
Tapping stroke Corsa di maschiatura	0 - 60 mm 0 - 60 mm
Tapping Capacity Capacità di maschiatura	M10 on steel Rm50 M10 su acciaio Rm50
Spindle speed Velocità mandrino	from 500 to 3000 rpm da 500 a 3000 g/1'
Motor Power Potenza Motore	from 0.37 to 1.10 Kw da 0.37 a 1.10 Kw



- Motor for inverter use (1).
Optional: brake motor.
- Oil bath lubrication lead screw (2).
- N. 3 limit switches (3):
front, rear position and lead screw safety.
Optional: inductive sensors.
- Electric wires connections M16x1,5 (4).
- Overall dimensions for multispindle head installation (5).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 15 to 25 Kg



- Motore per uso con inverter (1).
Su richiesta motore autofrenante.
- Patrona a bagno d'olio (2).
- N. 3 fine corsa di posizione elettrici (3):
fine corsa avanti, fine corsa indietro e
fine corsa di sicurezza patrona.
Su richiesta sensori induttivi.
- Ingresso cavi elettrici M16x1,5 (4).
- Ingombro massimo per installazione
teste multiple (5).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 15 a 25 Kg

TM10 60

stroke / corsa

	spindle / mandrino
B1	B12 DIN 238
E2	ER20 DIN 6499
D1	ø16 DIN 55058

	rpm	
	50Hz	60Hz
05	500	600
07	750	900
10	1000	1200
12	1250	1500
15	1500	1800
20	2000	2400
25	2500	3000
30	3000	3600

	motor / motore
036	80 B14 0,37Kw 6 poles
056	80 B14 0,55Kw 6 poles
076	80 B14 0,75Kw 6 poles
034	71 B14 0,37Kw 4 poles
054	80 B14 0,55Kw 4 poles
074	80 B14 0,75Kw 4 poles
032	71 B14 0,37Kw 2 poles
052	71 B14 0,55Kw 2 poles
072	80 B14 0,75Kw 2 poles
112	80 B14 1,10Kw 2 poles

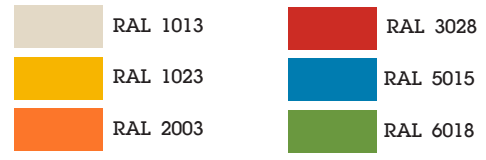
	motor type / tipo motore
S	230-400V-50/60Hz
A	brake motor autofrenante
V	forced ventilation servovenilato
AV	brake motor + forced ventilation autofrenante + servovenilato

standard lead screw pitch passi patrona standard	
metric / metrico	0,5 / 0,7 / 0,75 / 0,8 / 1,0 / 1,25 / 1,5 / 1,75 / 2,0
inch / pollici	40 / 32 / 28 / 19 / 14 / 11
other pitches or left pitch on request passi diversi o sinistri su richiesta	

STANDARD COLOR

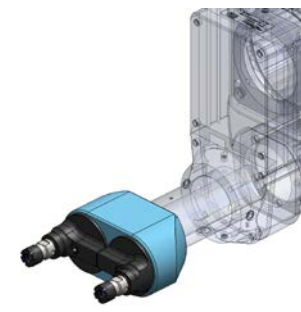
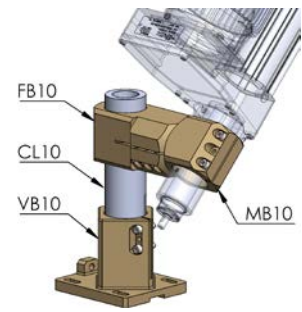
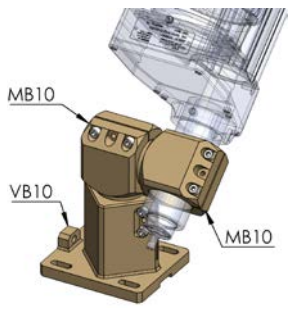
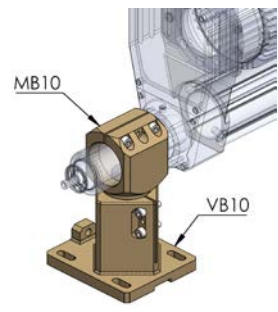
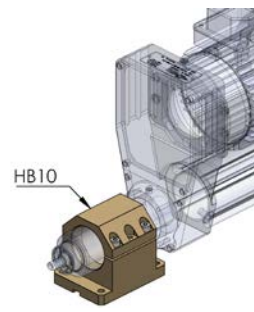


OPTIONAL COLORS



optional :

accessories for easy installation
accessori per una facile installazione



multispindle head
teste multiple

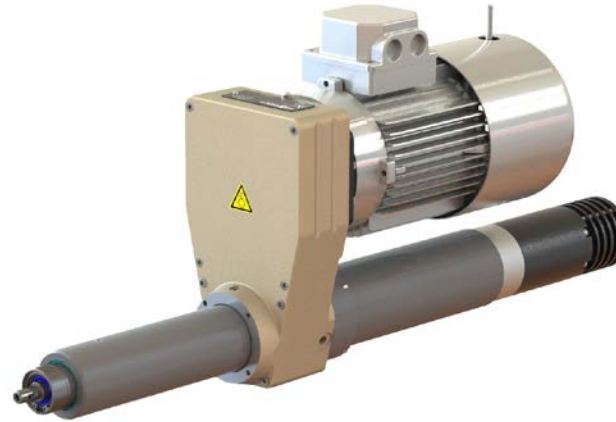
tapping units



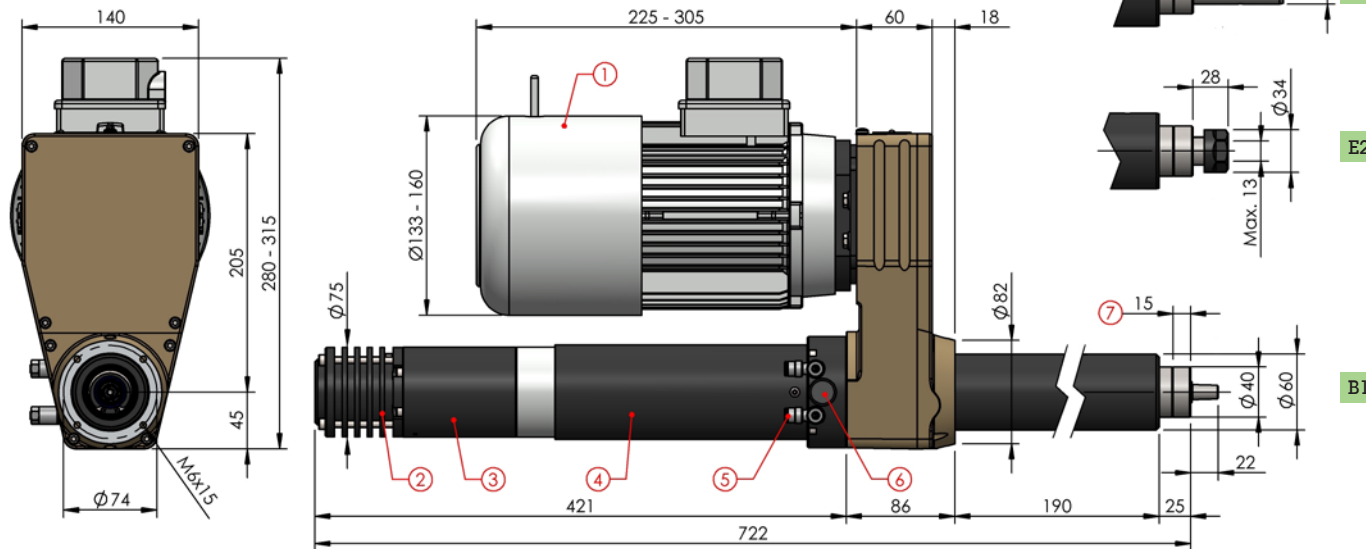
unità di maschiatura

TM10P.90

Feed Avanzamento	by lead screw con patrona
Fast approach (pneumatic) Corsa rapida (pneumatica)	50 mm
Tapping stroke Corsa di maschiatura	0 - 40 mm
Tapping capacity Capacità di maschiatura	M10 on steel Rm50 M10 su acciaio Rm50
Spindle speed Velocità mandrino	from 500 to 3000 rpm da 500 a 3000 g/1'
Motor Power Potenza Motore	from 0.37 to 1.10 Kw da 0.37 a 1.10 Kw



- Motor for inverter use (1).
Optional: brake motor.
- Oil bath lubrication lead screw (2).
- Pneumatic cylinder for fast approach (3),
air pressure 6 bar, air consumption
0,8NL/cycle.
- N. 3 limit switches and 1 lead screw
safety switch (4).
Optional: inductive sensors.
- Air inlet $\phi 6$ (5).
- Electric wires connections M16x1,5 (6).
- Overall dimensions for multispindle head
installation (7).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 18 to 27 Kg.



- Motore per uso con inverter (1).
Su richiesta motore autofrenante.
- Patrona a bagno d'olio (2).
- Cilindro pneumatico per avvicinamento
rapido (3), pressione 6 bar, consumo aria
0,8NL/ciclo.
- N. 3 fine corsa di posizione elettrici e
n. 1 fine corsa di sicurezza patrona (4).
Su richiesta sensori induttivi.
- Ingresso aria $\phi 6$ (5)
- Ingresso cavi elettrici M16x1,5 (6).
- Ingombro massimo per installazione
teste multiple (7).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 18 a 27 Kg.

TM10P . 90

stroke / corsa

	spindle / mandrino
B1	B12 DIN 238
E2	ER20 DIN 6499
D1	ø16 DIN 55058

	rpm	
	50Hz	60Hz
05	500	600
07	750	900
10	1000	1200
12	1250	1500
15	1500	1800
20	2000	2400
25	2500	3000
30	3000	3600

	motor / motore
036	80 B14 0,37Kw 6 poles
056	80 B14 0,55Kw 6 poles
076	80 B14 0,75Kw 6 poles
034	71 B14 0,37Kw 4 poles
054	80 B14 0,55Kw 4 poles
074	80 B14 0,75Kw 4 poles
032	71 B14 0,37Kw 2 poles
052	71 B14 0,55Kw 2 poles
072	80 B14 0,75Kw 2 poles
112	80 B14 1,10Kw 2 poles

	motor type / tipo motore
S	230-400V-50/60Hz
A	brake motor autofrenante
V	forced ventilation servoventilato
AV	brake motor + forced ventilation autofrenante + servoventilato

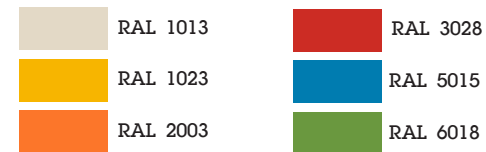
standard lead screw pitch passi patrona standard	
metric / metrico	0,5 / 0,7 / 0,75 / 0,8 / 1,0 / 1,25 / 1,5 / 1,75 / 2,0
inch / pollici	40 / 32 / 28 / 19 / 14 / 11
other pitches or left pitch on request passi diversi o sinistri su richiesta	

STANDARD COLOR



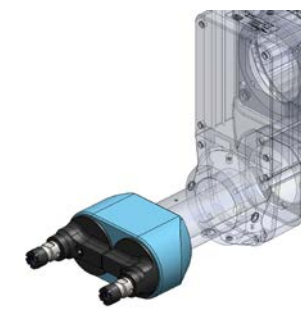
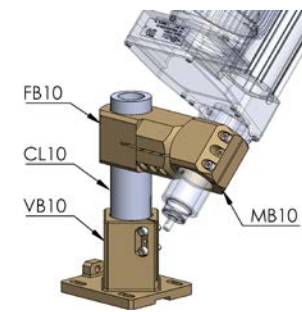
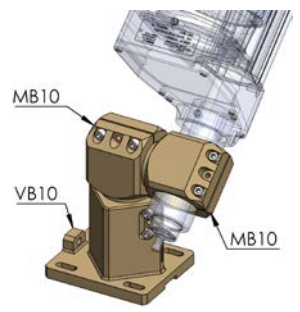
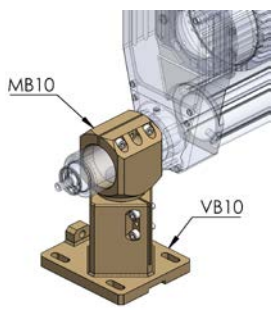
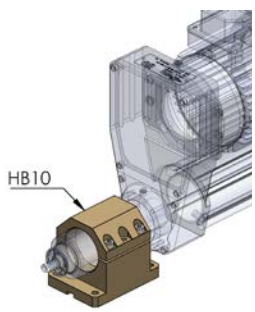
RAL 1001

OPTIONAL COLORS



optional :

accessories for easy installation
accessori per una facile installazione



multispindle head
teste multiple

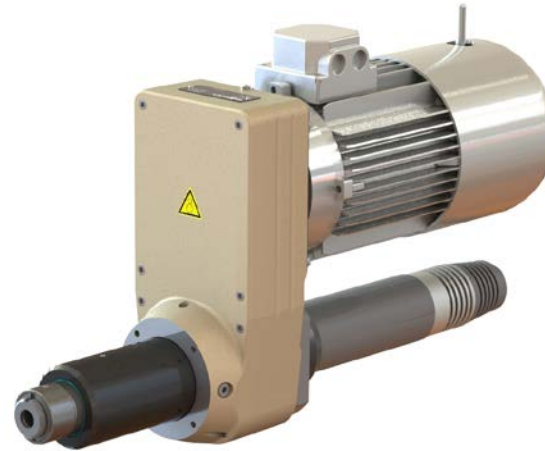
tapping units



unità di maschiatura

TM20.80

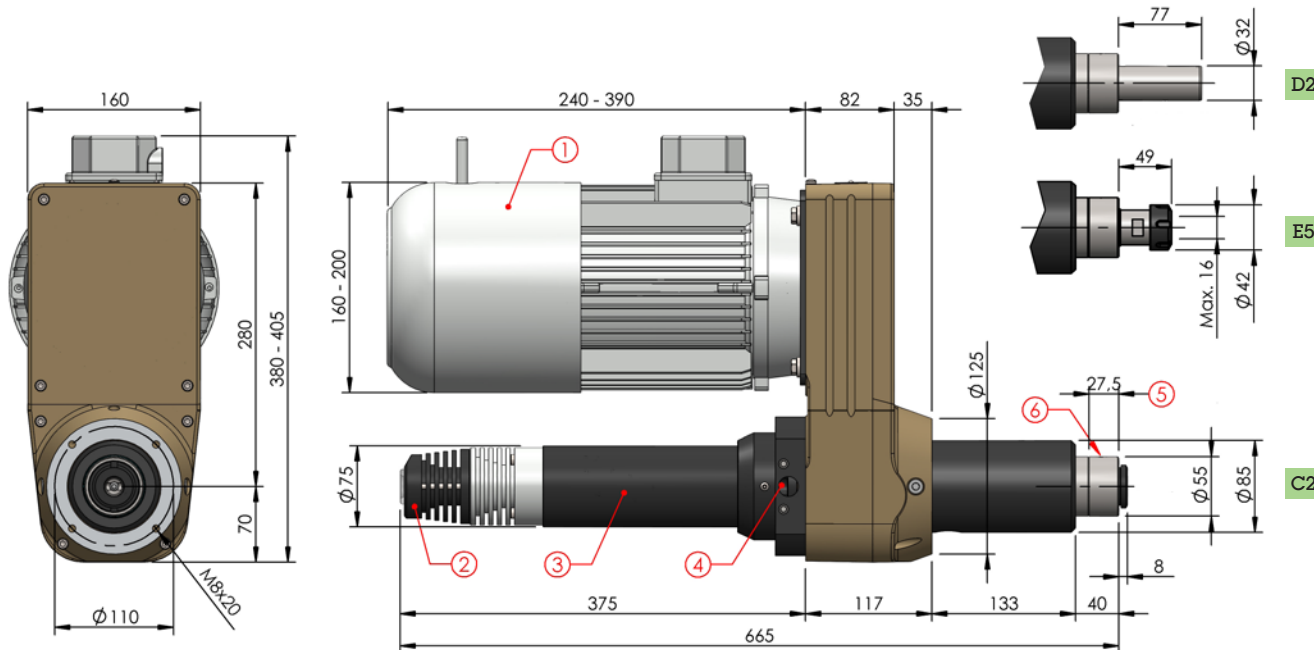
Feed Avanzamento	by lead screw con patrona
Tapping stroke Corsa di maschiatura	0 - 80 mm 0 - 80 mm
Tapping Capacity Capacità di maschiatura	M20 on steel Rm50 M20 su acciaio Rm50
Spindle speed Velocità mandrino	from 100 to 1500 rpm da 100 a 1500 g/l'
Motor Power Potenza Motore	from 0.75 to 3.00 Kw da 0.75 a 3.00 Kw



- Motor for inverter use (1).
Optional: brake motor.
- Oil bath lubrication lead screw (2).
- N. 3 limit switches (3):
front, rear position and lead screw safety.
Optional: inductive sensors.
- Electric wires connections M16x1,5 (4).
- Overall dimensions for multispindle head installation (5).
- Air inlet at 0,5bar for internal spindle pressurization (6).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 30 to 55 Kg.



- Motore per uso con inverter (1).
Su richiesta motore autofrenante.
- Patrona a bagno d'olio (2).
- N. 3 fine corsa di posizione elettrici (3):
fine corsa avanti, fine corsa indietro e fine corsa di sicurezza patrona.
Su richiesta sensori induttivi.
- Ingresso cavi elettrici M16x1,5 (4).
- Ingombro massimo per installazione teste multiple (5).
- Ingresso aria 0.5bar per pressurizzazione interna del mandrino (6).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 30 a 55 Kg.



TM20 80

stroke / corsa

	spindle / mandrino
C2	MT2 DIN 228
E5	ER25 DIN 6499
D2	ø20 DIN 55058

	rpm	
	50Hz	60Hz
01	100	120
02	200	240
03	300	360
05	500	600
07	700	840
08	800	960
11	1100	1320
15	1500	1800

	motor / motore
80...	motor reducer 0,75Kw 4 poles
81...	motor reducer 1,50Kw 4 poles
076	90 B14 0,75Kw 6 poles
116	90 B14 1,10Kw 6 poles
156	100 B14 1,50Kw 6 poles
226	112 B14 2,20Kw 6 poles
074	80 B14 0,75Kw 4 poles
114	90 B14 1,10Kw 4 poles
154	90 B14 1,50Kw 4 poles
224	100 B14 2,20Kw 4 poles
304	100 B14 3,00Kw 4 poles

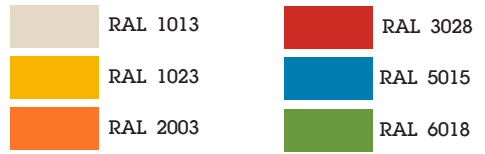
	motor type / tipo motore
S	230-400V-50/60Hz
A	brake motor autofrenante
V	forced ventilation servovenilato
AV	brake motor + forced ventilation autofrenante + servovenilato

standard lead screw pitch passi patrona standard	
metric / metrico	0,5 / 0,7 / 0,75 / 0,8 / 1,0 / 1,25 / 1,5 / 1,75 / 2,0
inch / pollici	40 / 32 / 28 / 19 / 14 / 11
other pitches or left pitch on request passi diversi o sinistri su richiesta	

STANDARD COLOR

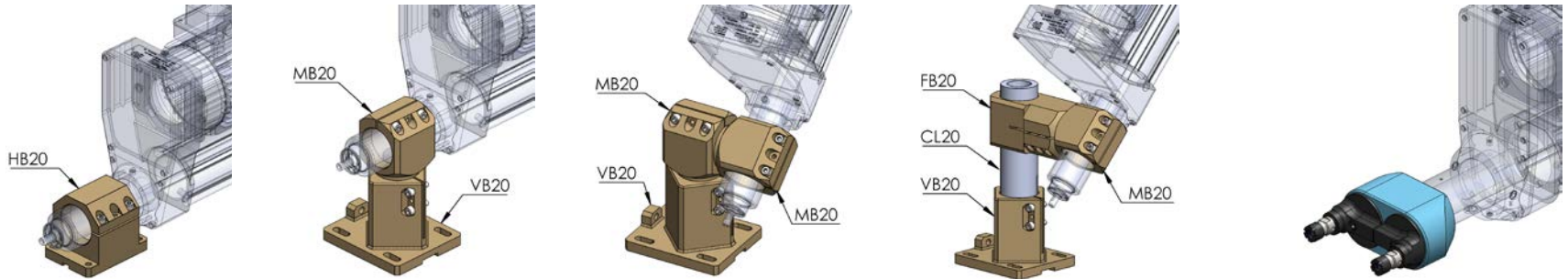


OPTIONAL COLORS



optional :

accessories for easy installation
accessori per una facile installazione



multispindle head
teste multiple

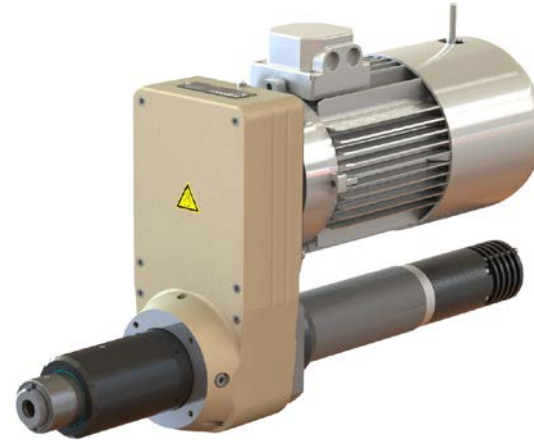
tapping units



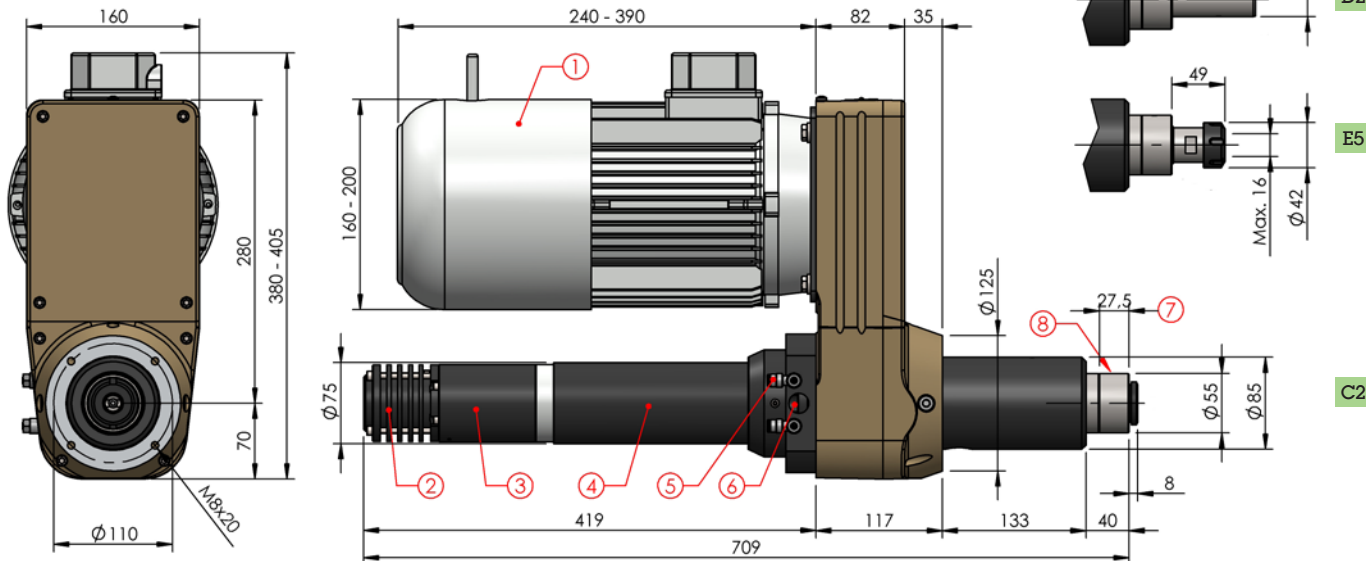
unità di maschiatura

TM20P.90

Feed Avanzamento	by lead screw con patrona
Fast approach (pneumatic) Corsa rapida (pneumatica)	50 mm
Tapping stroke Corsa di maschiatura	0 - 40 mm
Tapping Capacity Capacità di maschiatura	M20 on steel Rm50 M20 su acciaio Rm50
Spindle speed Velocità mandrino	from 100 to 1500 rpm da 100 a 1500 g/1'
Motor Power Potenza Motore	from 0.75 to 3.00 Kw da 0.75 a 3.00 Kw



- Motor for inverter use (1).
Optional: brake motor.
- Oil bath lubrication lead screw (2).
- Pneumatic cylinder for fast approach (3),
air pressure 6 bar, air consumption
0,8NL/cycle.
- N. 3 limit switches (3) and 1 lead screw
safety switch (4).
Optional: inductive sensors.
- Air inlet $\varnothing 6$ (5).
- Electric wires connections M16x1,5 (6).
- Overall dimensions for multispindle head
installation (7).
- Air inlet at 0,5bar for internal spindle
pressurization (8).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 35 to 60 Kg.



- Motore per uso con inverter (1).
Su richiesta motore autofrenante.
- Patrona a bagno d'olio (2).
- Cilindro pneumatico per avanzamento
rapido (3), pressione 6 bar, consumo
aria 0,8NL/ciclo
- N. 3 fine corsa di posizione elettrici e
n. 1 fine corsa di sicurezza patrona (4).
Su richiesta sensori induttivi.
- Ingresso aria $\varnothing 6$ (5).
- Ingresso cavi elettrici M16x1,5 (6).
- Ingombro massimo per installazione
teste multiple (7).
- Ingresso aria 0.5bar per pressurizzazione
interna del mandrino (8).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 35 a 60 Kg.

D2

E5

C2

TM20P

90

stroke / corsa

	spindle / mandrino
C2	MT2 DIN 228
E5	ER25 DIN 6499
D2	ø20 DIN 55058

	rpm	
	50Hz	60Hz
01	100	120
02	200	240
03	300	360
05	500	600
07	700	840
08	800	960
11	1100	1320
15	1500	1800

	motor / motore
80...	motor reducer 0,75Kw 4 poles
81...	motor reducer 1,50Kw 4 poles
076	90 B14 0,75Kw 6 poles
116	90 B14 1,10Kw 6 poles
156	100 B14 1,50Kw 6 poles
226	112 B14 2,20Kw 6 poles
074	80 B14 0,75Kw 4 poles
114	90 B14 1,10Kw 4 poles
154	90 B14 1,50Kw 4 poles
224	100 B14 2,20Kw 4 poles
304	100 B14 3,00Kw 4 poles

	motor type / tipo motore
S	230-400V-50/60Hz
A	brake motor autofrenante
V	forced ventilation servoventilato
AV	brake motor + forced ventilation autofrenante + servoventilato

standard lead screw pitch passi patrona standard	
metric / metrico	0,5 / 0,7 / 0,75 / 0,8 / 1,0 / 1,25 / 1,5 / 1,75 / 2,0
inch / pollici	40 / 32 / 28 / 19 / 14 / 11
other pitches or left pitch on request passi diversi o sinistri su richiesta	

STANDARD COLOR



RAL 1001

OPTIONAL COLORS



RAL 1013



RAL 3028



RAL 1023



RAL 5015



RAL 2003

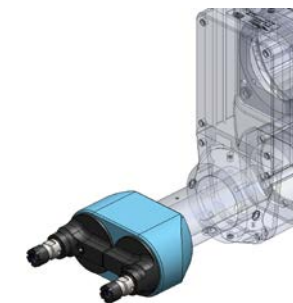
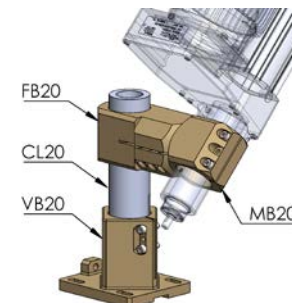
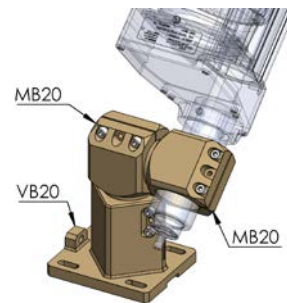
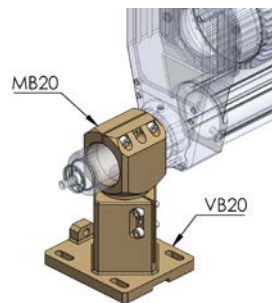
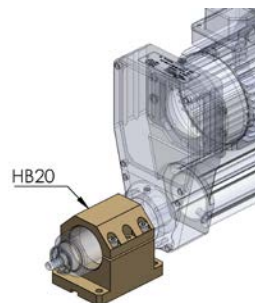


RAL 6018

optional :

accessories for easy installation

accessori per una facile installazione



multispindle head
teste multiple

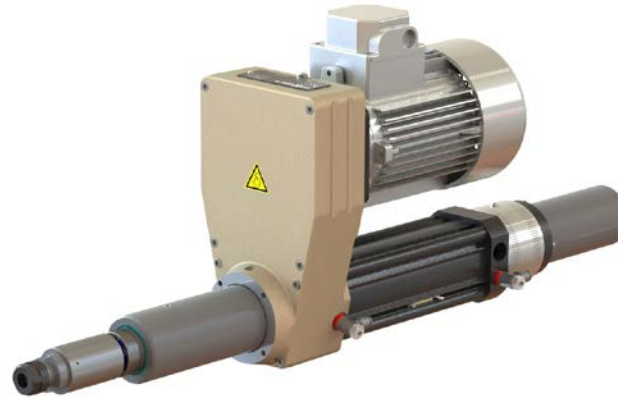
drill & tap units



unità di foratura/maschiatura

FM10P.50

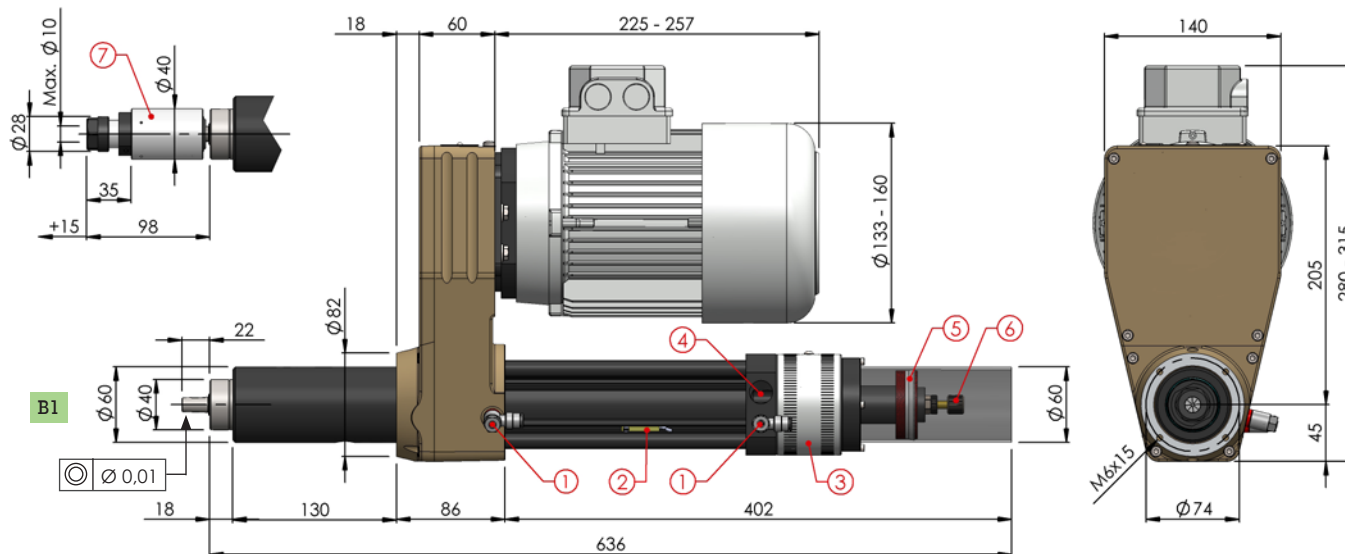
Feed Avanzamento	pneumatic pneumatico
Stroke Corsa	50 mm 50 mm
Tapping Capacity Capacità di maschiatura	M10 on steel Rm50 M10 su acciaio Rm50
Thrust at 6 bar Spinta a 6 bar	1200 N 122 Kg
Spindle speed Velocità mandrino	from 500 to 2500 rpm da 500 a 2500 g/1'
Motor Power Potenza Motore	from 0.37 to 1.10 Kw da 0.37 a 1.10 Kw



- Pneumatic cylinder $\varnothing 63$.
- Air inlet $\varnothing 6$ (1).
- Air consumption 1,10NL/ciclo.
- Spindle concentricity 0,01.
- Electric wires connections M16x1,5 (4).
- Internal limit switches (3)
Optional: inductive sensors.
- Magnetic sensor to change spindle speed (2).
- Feed hydrocheck (6) in line with spindle.
- Hydrocheck stroke 45mm.
- Fast/slow stroke separately adjustable (5).
- Toolholder for collet ER16 with axial compensation + 15mm (7).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 15 to 22 Kg



- Cilindro pneumatico $\varnothing 63$.
- Ingressi aria $\varnothing 6$ (1).
- Consumo aria 1,10NL/ciclo.
- Concentricità mandrino 0,01.
- Ingresso cavi elettrici M16x1,5 (4).
- Fine corsa di posizione elettrici interni (3).
Su richiesta sensori induttivi.
- Sensore magnetico per cambio velocità (2).
- Regolatore idraulico di avanzamento (6)
in linea con il mandrino.
- Corsa del regolatore idraulico 45mm.
- Corse rapido/lento regolabili separatamente (5).
- Mandrino portapinzza ER16 con compensazione assiale + 15mm (7).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 15 a 22 Kg



FM10P 50

stroke / corsa

spindle / mandrino	
B1	B12 DIN 238

	rpm	
	50Hz	60Hz
05	500	600
07	750	900
10	1000	1200
12	1250	1500
15	1500	1800
20	2000	2400
25	2500	3000
30	3000	3600

motor / motore	
036	80 B14 0,37Kw 6 poles
056	80 B14 0,55Kw 6 poles
076	80 B14 0,75Kw 6 poles
034	71 B14 0,37Kw 4 poles
054	80 B14 0,55Kw 4 poles
074	80 B14 0,75Kw 4 poles
032	71 B14 0,37Kw 2 poles
052	71 B14 0,55Kw 2 poles
072	80 B14 0,75Kw 2 poles
112	80 B14 1,10Kw 2 poles

053	71 B14 0,55/0,37Kw 2/4poles
083	80 B14 0,80/0,60Kw 2/4poles
113	80 B14 1,10/0,80Kw 2/4poles

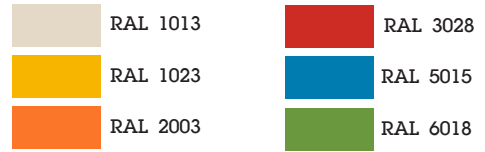
motor type / tipo motore	
S	230-400V-50/60Hz
V	forced ventilation servovenilato

hydrocheck / regolatore	
45H	standard
45HS	with oil bowl con serbatoio olio

STANDARD COLOR

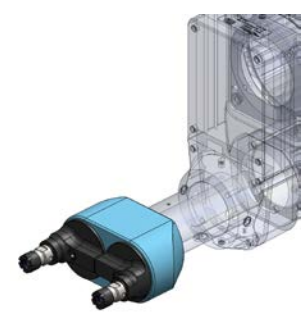
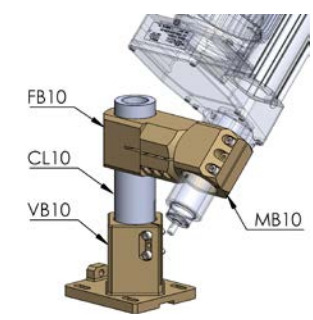
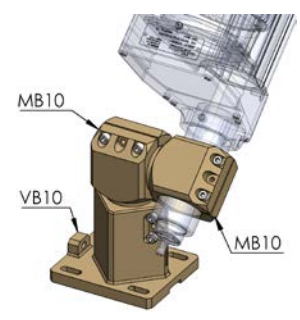
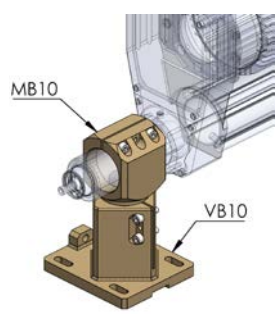
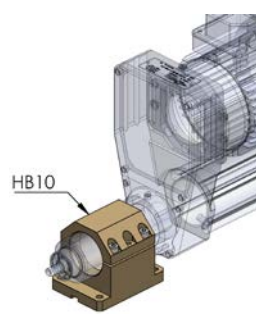


OPTIONAL COLORS



optional :

accessories for easy installation
accessori per una facile installazione



multispindle head
teste multiple

drill & tap units



unità di foratura/maschiatura

FM10P.100

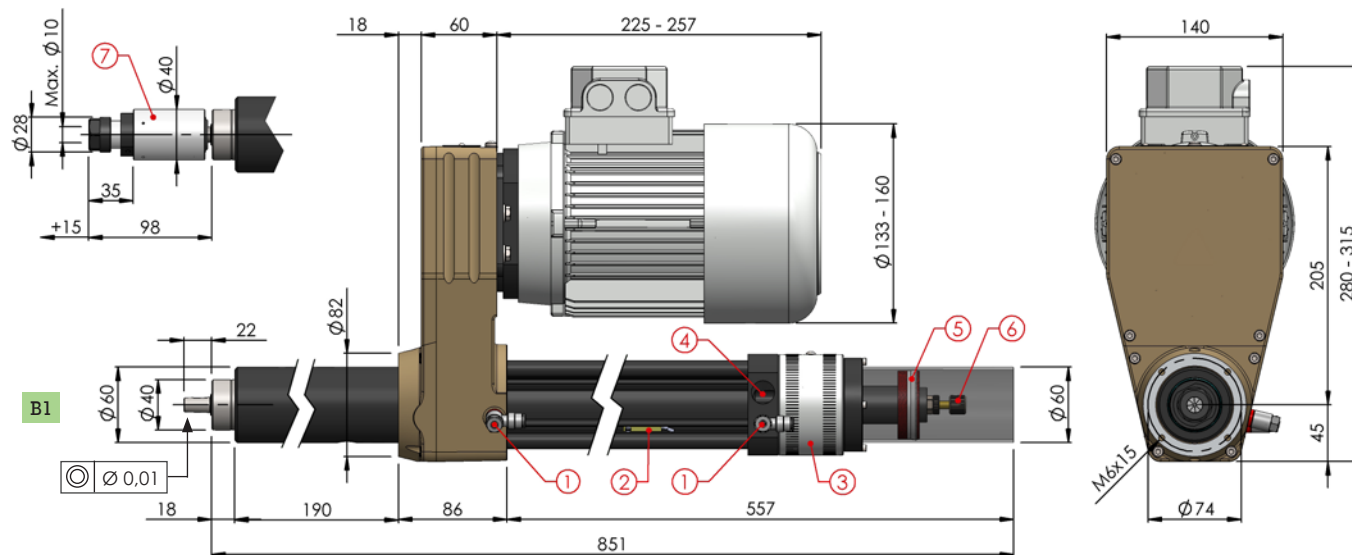
Feed Avanzamento	pneumatic pneumatico
Stroke Corsa	100 mm 100 mm
Tapping Capacity Capacità di maschiatura	M10 on steel Rm50 M10 su acciaio Rm50
Thrust at 6 bar Spinta a 6 bar	1200 N 122 Kg
Spindle speed Velocità mandrino	from 500 to 2500 rpm da 500 a 2500 g/1'
Motor Power Potenza Motore	from 0.37 to 1.10 Kw da 0.37 a 1.10 Kw

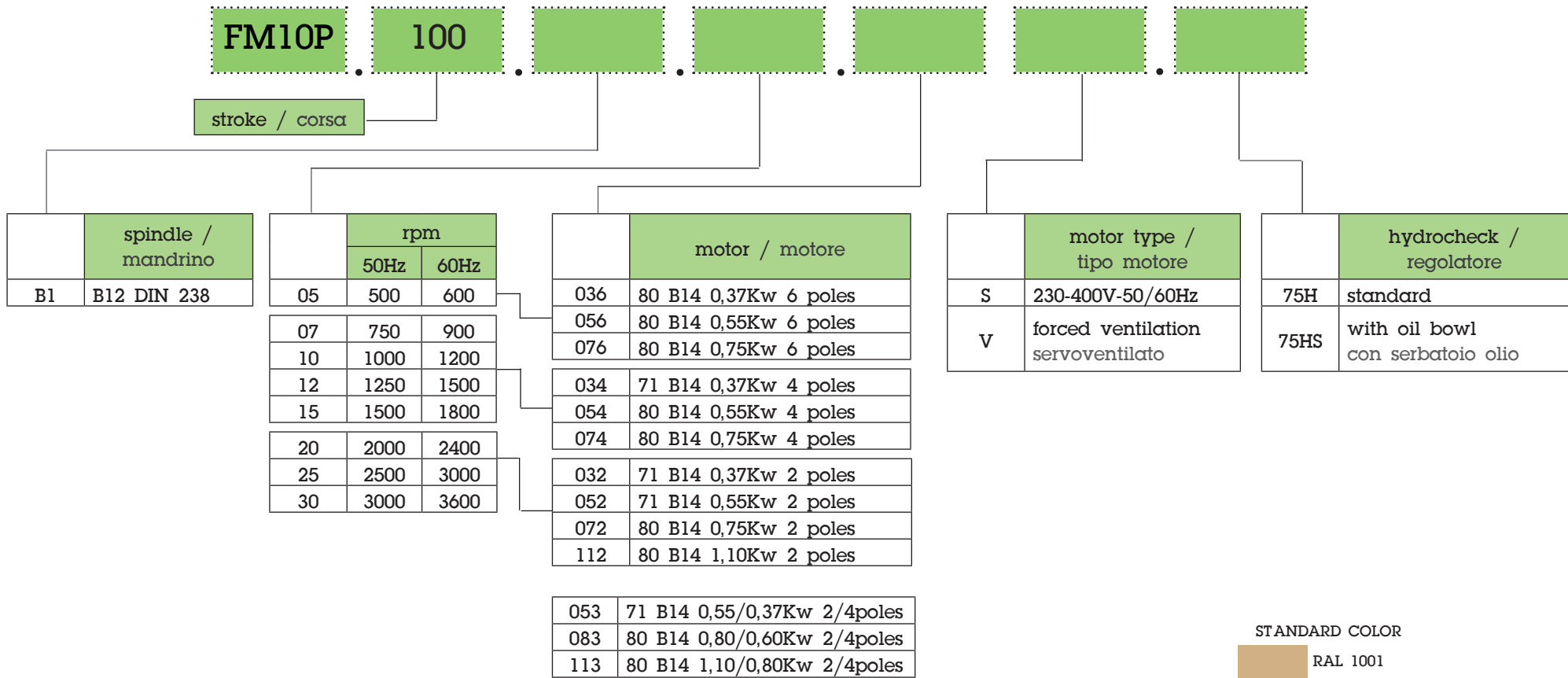


- Pneumatic cylinder ø63.
- Air inlet ø6 (1).
- Air consumption 2,20NL/ciclo.
- Spindle concentricity 0,01.
- Electric wires connections M16x1,5 (4).
- Internal limit switches (3)
Optional: inductive sensors.
- Magnetic sensor to change spindle speed (2).
- Feed hydrocheck (6) in line with spindle.
- Hydrocheck stroke 75mm.
- Fast/slow stroke separately adjustable (5).
- Toolholder for collet ER16 with axial compensation + 15mm (7).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 17 to 25 Kg



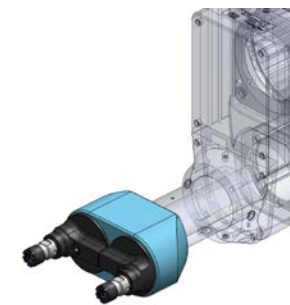
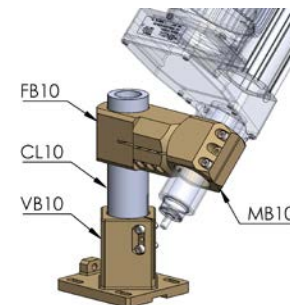
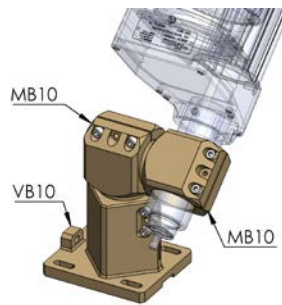
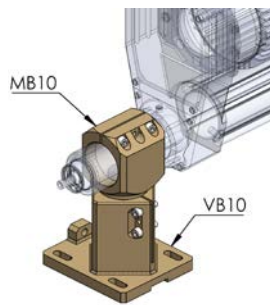
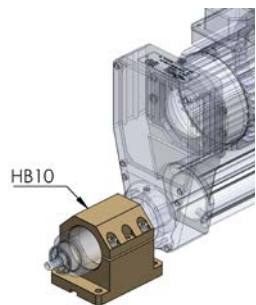
- Cilindro pneumatico ø63.
- Ingressi aria ø6 (1).
- Consumo 2,20NL/ciclo.
- Concentricità mandrino 0,01.
- Ingresso cavi elettrici M16x1,5 (4).
- Fine corsa di posizione elettrici interni (3).
Su richiesta sensori induttivi.
- Sensore magnetico per cambio velocità (2).
- Regolatore idraulico di avanzamento (6)
in linea con il mandrino.
- Corsa del regolatore idraulico 75mm.
- Corse rapido/lento regolabili
separatamente (5).
- Mandrino portapinzza ER16 con
compensazione assiale + 15mm (7).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 17 a 25 Kg





optional :

accessories for easy installation
accessori per una facile installazione



multispindle head
teste multiple

drill & tap units



unità di foratura/maschiatura

FM20P.100

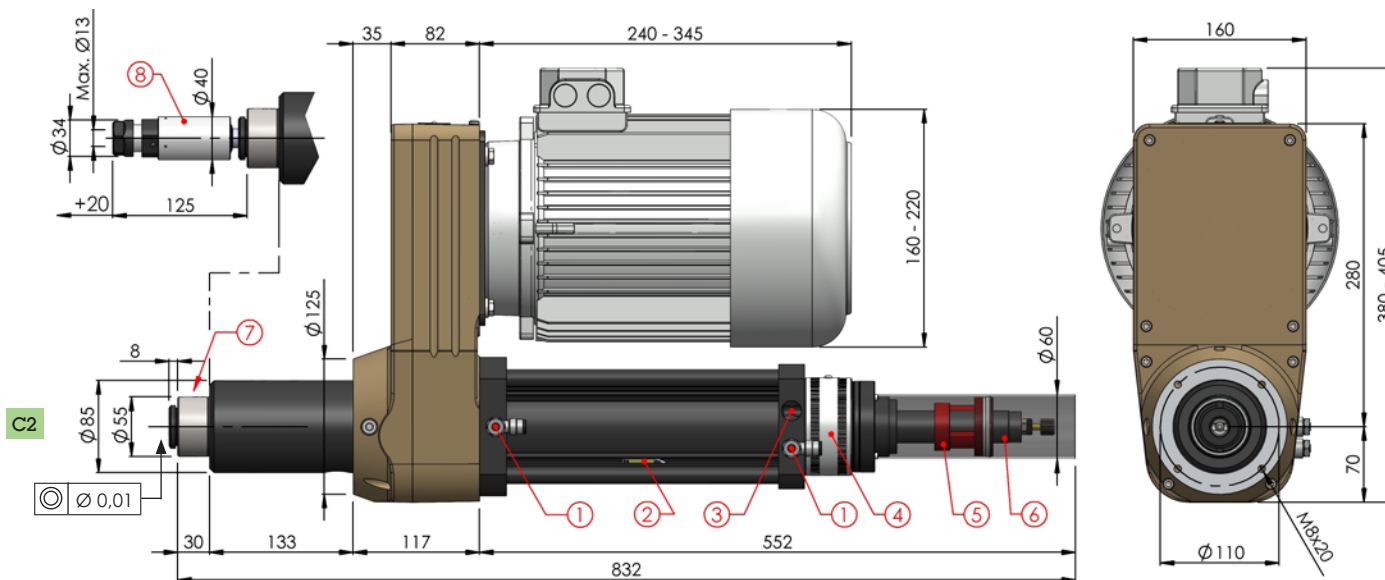
Feed Avanzamento	pneumatic pneumatico
Stroke Corsa	100 mm 100 mm
Tapping Capacity Capacità di maschiatura	M20 on steel Rm50 M20 su acciaio Rm50
Thrust at 6 bar Spinta a 6 bar	3700 N 375 Kg
Spindle speed Velocità mandrino	from 100 to 1500 rpm da 100 a 1500 g/l'
Motor Power Potenza Motore	from 0.75 to 3.00 Kw da 0.75 a 3.00 Kw

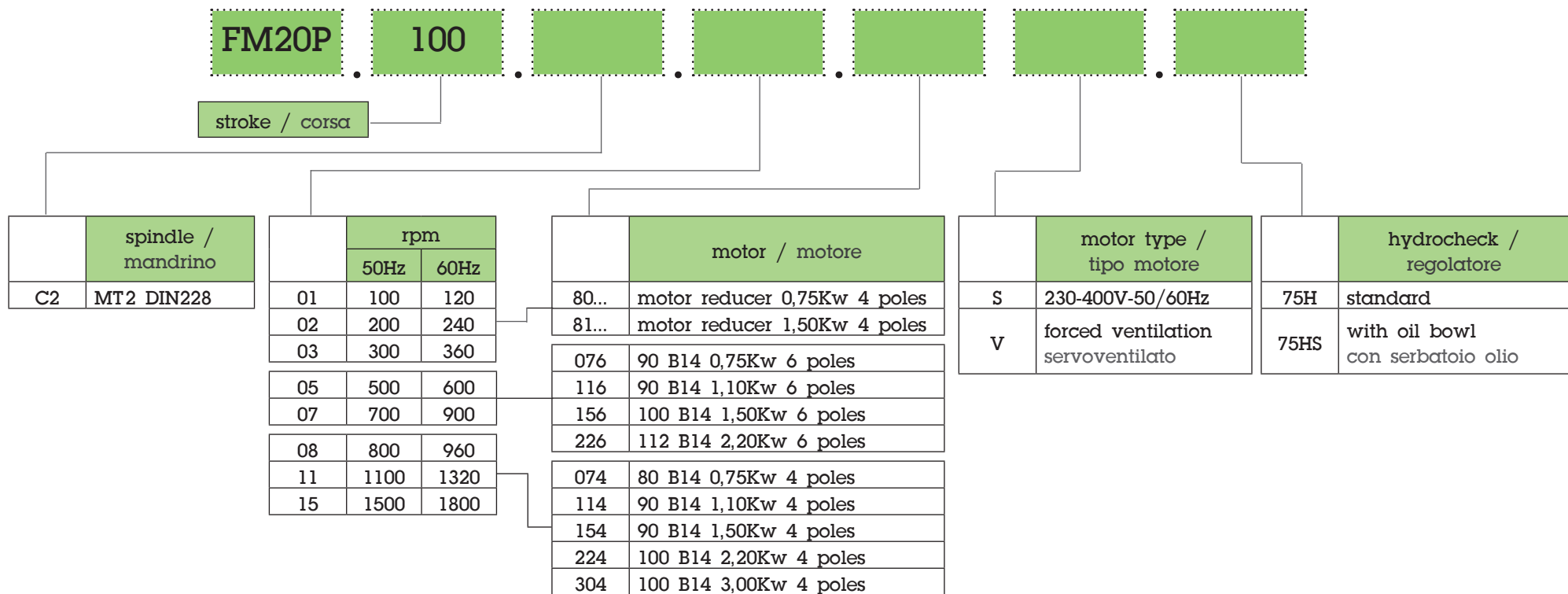


- Pneumatic cylinder ø100.
- Air inlet ø8 (1).
- Air consumption 5,00NL/ciclo.
- Spindle concentricity 0,01.
- Electric wires connections M16x1,5 (3).
- Internal limit switches (4)
Optional: inductive sensors.
- Magnetic sensor to change spindle speed (2).
- Feed hydrocheck (6) in line with spindle.
- Hydrocheck stroke 75mm.
- Fast/slow stroke separately adjustable (5).
- Air inlet 0.5bar for internal spindle pressurization (7).
- Toolholder for collet ER20 with axial compensation + 20mm (8).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 35 to 50 Kg



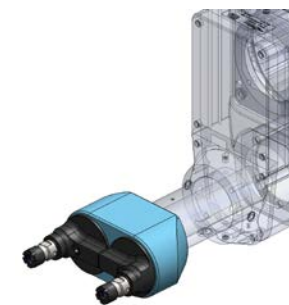
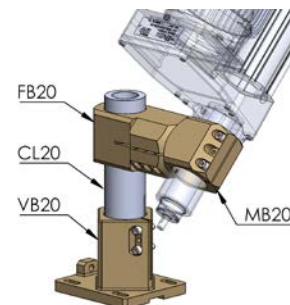
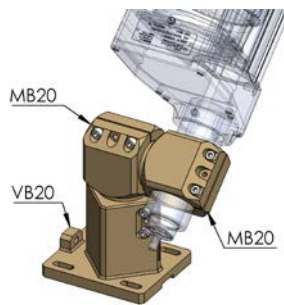
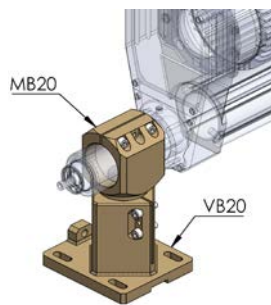
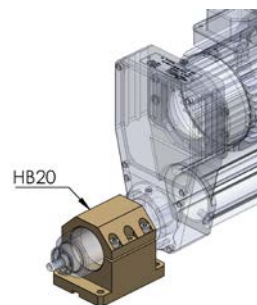
- Cilindro pneumatico ø100.
- Ingressi aria ø8 (1).
- Consumo aria 5,00NL/ciclo.
- Concentricità mandrino 0,01.
- Ingresso cavi elettrici M16x1,5 (3).
- Fine corsa di posizione elettrici interni (4).
Su richiesta sensori induttivi.
- Sensore magnetico per cambio velocità (2).
- Regolatore idraulico di avanzamento (6)
in linea con il mandrino.
- Corsa del regolatore idraulico 75mm.
- Corse rapido/lento regolabili separatamente (5).
- Ingresso aria 0.5bar per pressurizzazione interna del mandrino (7).
- Mandrino portapinzza ER20 con compensazione assiale + 20mm (8).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 35 a 50 Kg





optional :

accessories for easy installation
accessori per una facile installazione



multispindle head
teste multiple

STANDARD COLOR

RAL 1001

OPTIONAL COLORS

	RAL 1013		RAL 3028
	RAL 1023		RAL 5015
	RAL 2003		RAL 6018

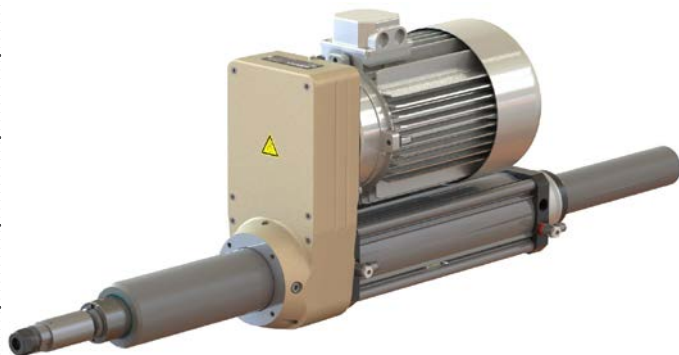
drill & tap units



unità di foratura/maschiatura

FM20P.150

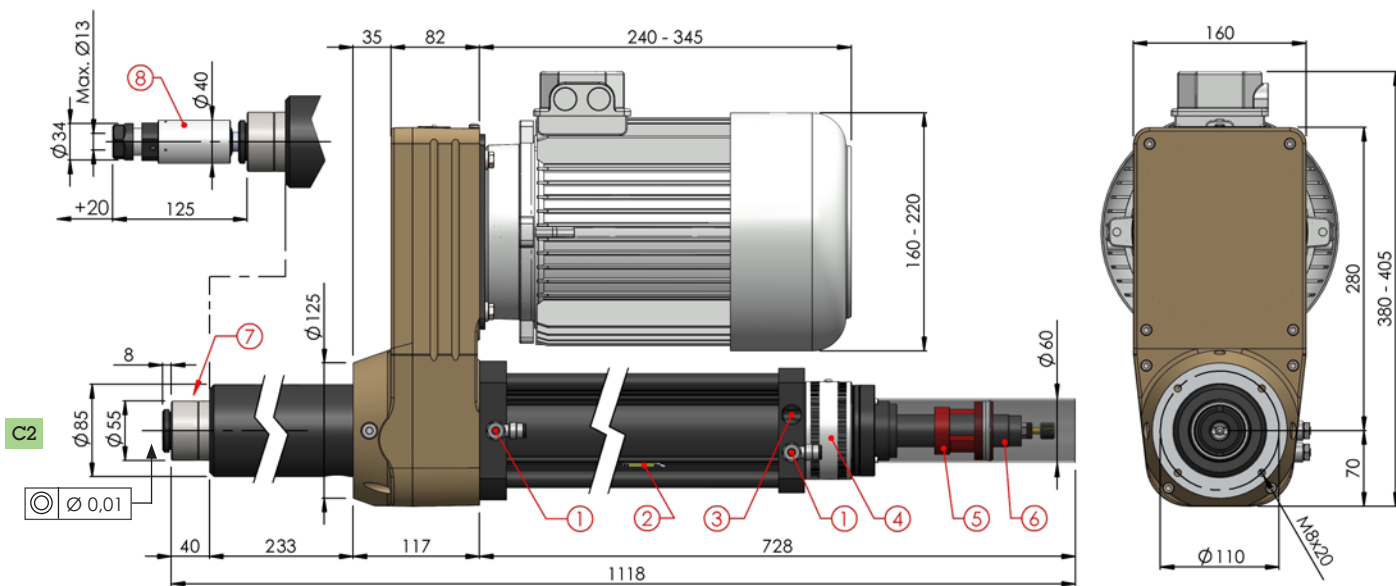
Feed Avanzamento	pneumatic pneumatico
Stroke Corsa	150 mm 150 mm
Tapping Capacity Capacità di maschiatura	M20 on steel Rm50 M20 su acciaio Rm50
Thrust at 6 bar Spinta a 6 bar	3700 N 375 Kg
Spindle speed Velocità mandrino	from 100 to 1500 rpm da 100 a 1500 g/l'
Motor Power Potenza Motore	from 0.75 to 3.00 Kw da 0.75 a 3.00 Kw



- Pneumatic cylinder $\varnothing 100$.
- Air inlet $\varnothing 8$ (1).
- Air consumption 7,50NL/ciclo.
- Spindle concentricity 0,01.
- Electric wires connections M16x1,5 (3).
- Internal limit switches (4).
- Optional: inductive sensors.
- Magnetic sensor to change spindle speed (2).
- Feed hydrocheck (6) in line with spindle.
- Hydrocheck stroke 100mm.
- Fast/slow stroke separately adjustable (5).
- Air inlet 0.5bar for internal spindle pressurization (7).
- Toolholder for collet ER20 with axial compensation + 20mm (8).
- Standard color: Beige RAL 1001.
- Other colors on request.
- Weight from 42 to 57 Kg



- Cilindro pneumatico $\varnothing 100$.
- Ingressi aria $\varnothing 8$ (1).
- Consumo aria 7,50NL/ciclo.
- Concentricità mandrino 0,01.
- Ingresso cavi elettrici M16x1,5 (3).
- Fine corsa di posizione elettrici interni (4).
- Su richiesta sensori induttivi.
- Sensore magnetico per cambio velocità (2).
- Regolatore idraulico di avanzamento (6) in linea con il mandrino.
- Corsa del regolatore idraulico 100mm.
- Corse rapido/lento regolabili separatamente (5).
- Ingresso aria 0.5bar per pressurizzazione interna del mandrino (7).
- Mandrino portapinzza ER20 con compensazione assiale + 20mm (8).
- Colore standard: Beige RAL 1001.
- Altri colori su richiesta.
- Peso da 42 a 57 Kg



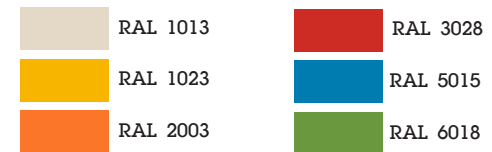
FM20P		150								
		stroke / corsa								
spindle / mandrino		rpm		motor / motore		motor type / tipo motore		hydrocheck / regolatore		
			50Hz	60Hz						
C2	MT2 DIN228	01	100	120	80...	motor reducer 0,75Kw 4 poles	S	230-400V-50/60Hz	100H	standard
		02	200	240	81...	motor reducer 1,50Kw 4 poles	V	forced ventilation servoventilato	100HS	with oil bowl con serbatoio olio
		03	300	360	076	90 B14 0,75Kw 6 poles				
		05	500	600	116	90 B14 1,10Kw 6 poles				
		07	700	840	156	100 B14 1,50Kw 6 poles				
		08	800	960	226	112 B14 2,20Kw 6 poles				
		11	1100	1320	074	80 B14 0,75Kw 4 poles				
		15	1500	1800	114	90 B14 1,10Kw 4 poles				
					154	90 B14 1,50Kw 4 poles				
					224	100 B14 2,20Kw 4 poles				
					304	100 B14 3,00Kw 4 poles				

STANDARD COLOR



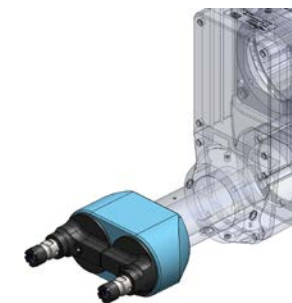
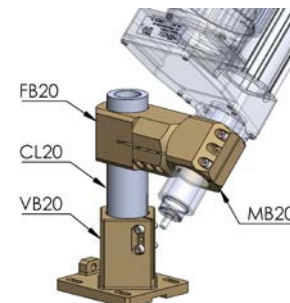
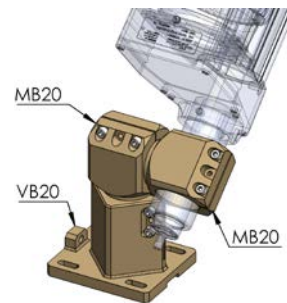
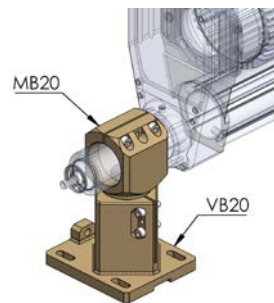
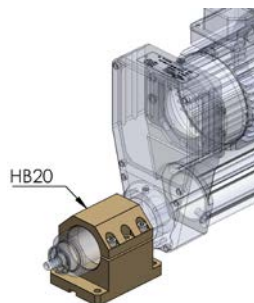
RAL 1001

OPTIONAL COLORS



optional :

accessories for easy installation
accessori per una facile installazione



multispindle head
teste multiple



unità di lavoro

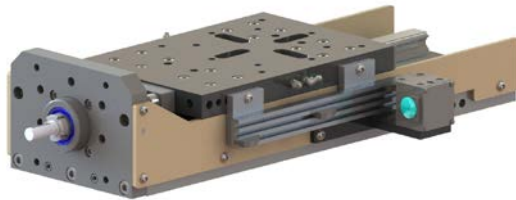


- Working units suitable to work many materials type.
- This units can be used for various machining, for example drilling, milling, boring, turning and others.
- Motor power from 0,75 to 9,20 Kw
- Motor for inverter use.
- Spindle speed at 50 Hz:
 - 100 ÷ 4000 Taper roller bearings version (standard).
 - 100 ÷ 9000 Precision angular contact balls bearings version.
- Available with different output spindle mount ISO30, ISO40, HSK63.
- Coolant through spindle (CTS) ready to install.
- Air inlet at 0.5 bar for internal pressurisation.
- Ready to install multispindle heads.
- Ready to install facing head and tapping attachment.



- Unità di lavoro idonee alla lavorazione di molteplici materiali.
- Adatte all'esecuzione di varie lavorazioni, quali foratura, fresatura, barenatura, tornitura e altre.
- Potenza motore da 0,75 a 9,20 Kw
- Motori per uso con inverter.
- Velocità mandrino a 50 Hz
 - 100 ÷ 4000 Versione con cuscinetti a rulli conici (standard).
 - 100 ÷ 9000 Versione con cuscinetti a sfera di precisione con contatto obliquo.
- Mandrino con attacco ISO30, ISO40, HSK63.
- Mandrino forato per passaggio lubrorefrigerante.
- Ingresso aria a 0,5 bar per pressurizzazione interna mandrino.
- Possibilità di installazione teste multimandrino.
- Possibilità di installazione teste di tornitura o di filettatura.





- Slide units on four ball rows pads.
On request, is available roller pads version.
- Stroke from 150 to 400 mm in accordance with the model.
- Suitable for the installation of working units.
Working units can be mounted parallel or perpendicular to the line feed.
- Feed is provided by ball screw or with pneumatic cylinder.
Ball screw pitch 5 mm with preloded nut at "0" backlash.
- 3 contact limit switch pack included.

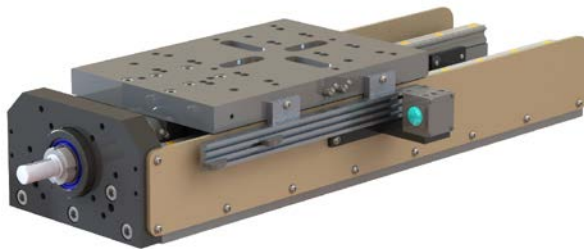
Ball screw feed version is supplied without brushless servomotor.
On request, is possible to prearrange the slide for the installation of customer's servomotor in line or off-set belt drive with toothed belt HTD ratio 1:2.



- Slitte di avanzamento su quattro pattini a sfere.
Su richiesta, possono essere equipaggiate con quattro pattini a rulli.
- Corsa da 150 a 400 mm in base al modello.
- Idonee per l'abbinamento con unità di lavoro.
Le unità di lavoro possono essere installate parallele o perpendicolari all'asse di alimentazione.
- Movimentazione con vite a ricircolo di sfere o con cilindro pneumatico.
Vite a sfere passo 5 mm con chiocciola precaricata a gioco "0".
- Le slitte sono equipaggiate con fine corsa multiplo a 3 contatti.

La versione con avanzamento con vite a ricircolo di sfere è fornita senza servomotore brushless.

Su richiesta è possibile predisporre la slitta per l'installazione del servomotore del cliente in linea o rinviata con cinghia HTD rapporto 1:2.



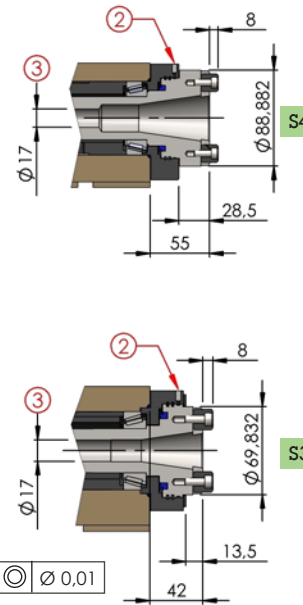
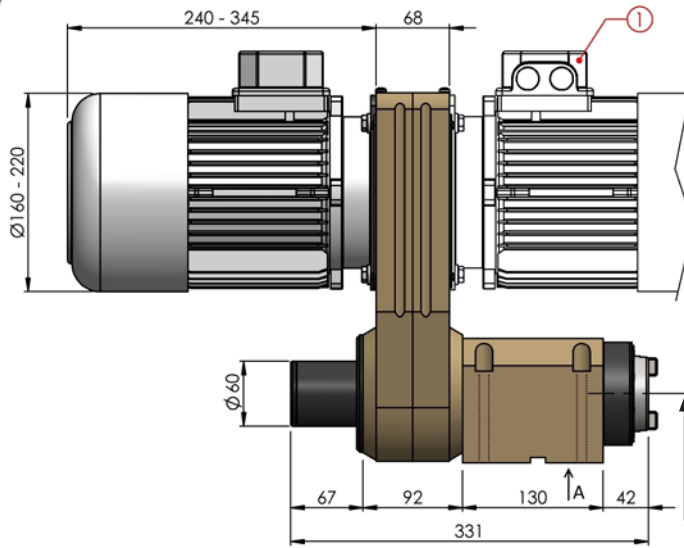
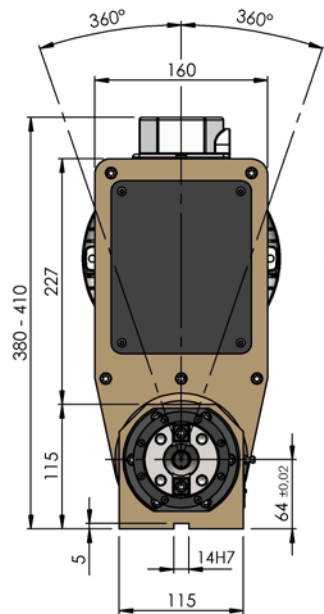
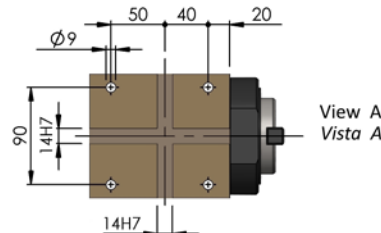


SU20

Drilling Capacity Capacità di foratura	ø20 on steel Rm50 ø20 su acciaio Rm50
Spindle Mandrino	ISO30 DIN2079 ISO40 DIN2079
Spindle speed Velocità mandrino	from 100 to 8500 rpm da 100 a 8500 g/l'
Motor Power Potenza Motore	from 0.75 to 3.00 Kw da 0.75 a 3.00 Kw

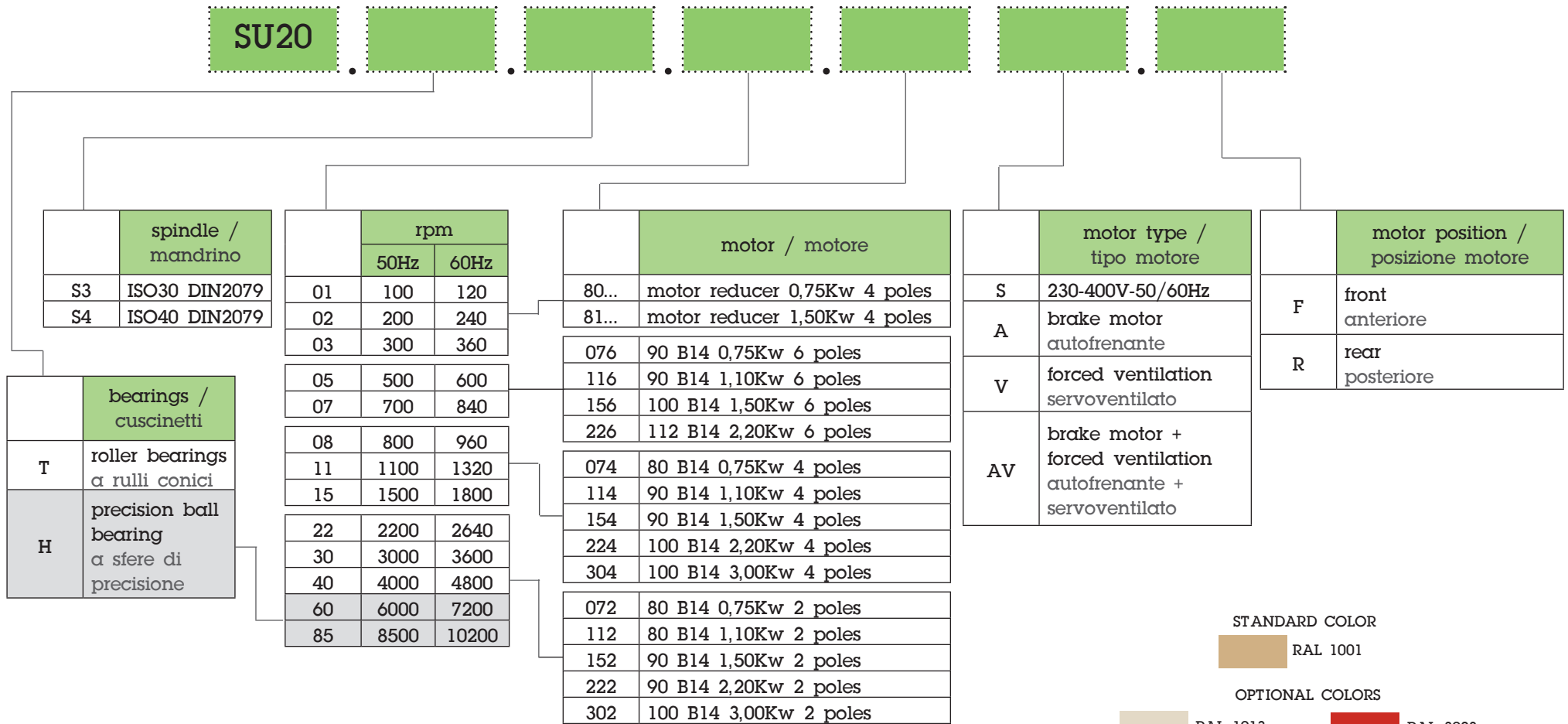


- Working unit suitable for drilling, milling, reaming and boring.
- Prearranged for installation on slides type SL30.
- Taper roller bearings.
Optional: precision angular contact ball bearings.
- Installation of motor in front/rear position (1).
Transmission housing can be rotated on 360°.
- Spindle concentricity 0,01.
- Air inlet 0.5bar for internal spindle pressurization (2).
- Spindle with bore for toolholder drawbar (3).
Optional: coolant through drawbar and rotary union.
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 25 to 45 Kg



- Unità di lavoro idonea per foratura, fresatura, alesatura e barenatura.
- Predisposta per installazione su slitte serie SL30.
- Cuscinetti a rulli conici.
Su richiesta cuscinetti a sfere di precisione con contatti obliqui.
- Installazione motore in posizione anteriore o posteriore (1). Carter motore ruotabile a 360°.
- Concentricità mandrino 0,01.
- Ingresso aria 0,5bar per pressurizzazione interna mandrino (2).
- Mandrino forato per passaggio tirante (3).
Su richiesta tirante forato per passaggio lubro-refrigerante e giunto rotante.
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 25 a 45 Kg

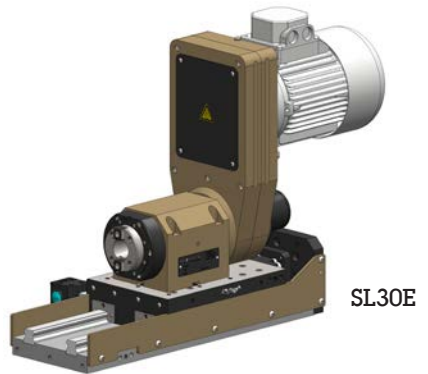
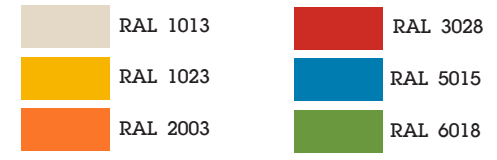
SU20



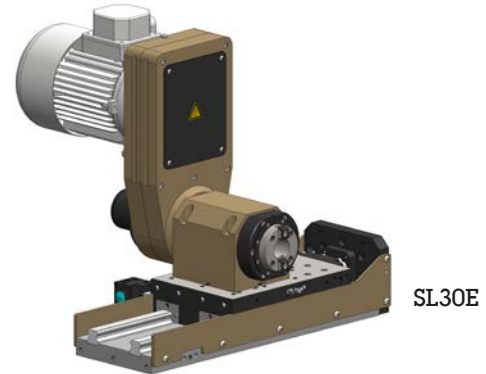
STANDARD COLOR



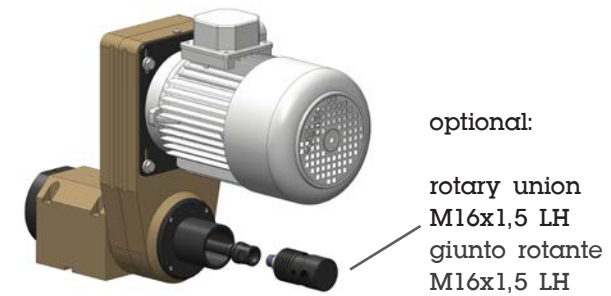
OPTIONAL COLORS



SL30E



SL30E



optional:
rotary union
M16x1,5 LH
giunto rotante
M16x1,5 LH

SU30

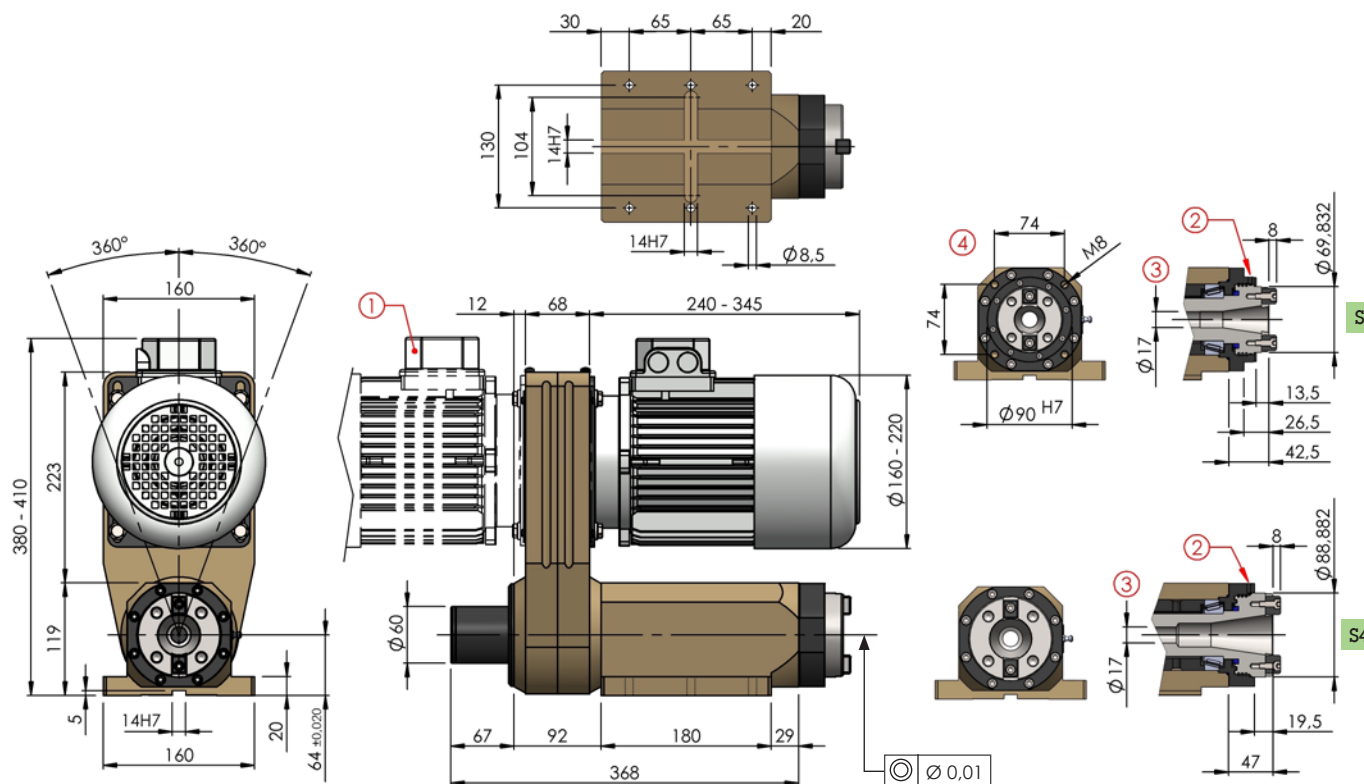
Drilling Capacity Capacità di foratura	ø30 on steel Rm50 ø30 su acciaio Rm50
Spindle Mandrino	ISO30 DIN2079 ISO40 DIN2079
Spindle speed Velocità mandrino	from 100 to 8500 rpm da 100 a 8500 g/l'
Motor Power Potenza Motore	from 0.75 to 4.00 Kw da 0.75 a 4.00 Kw



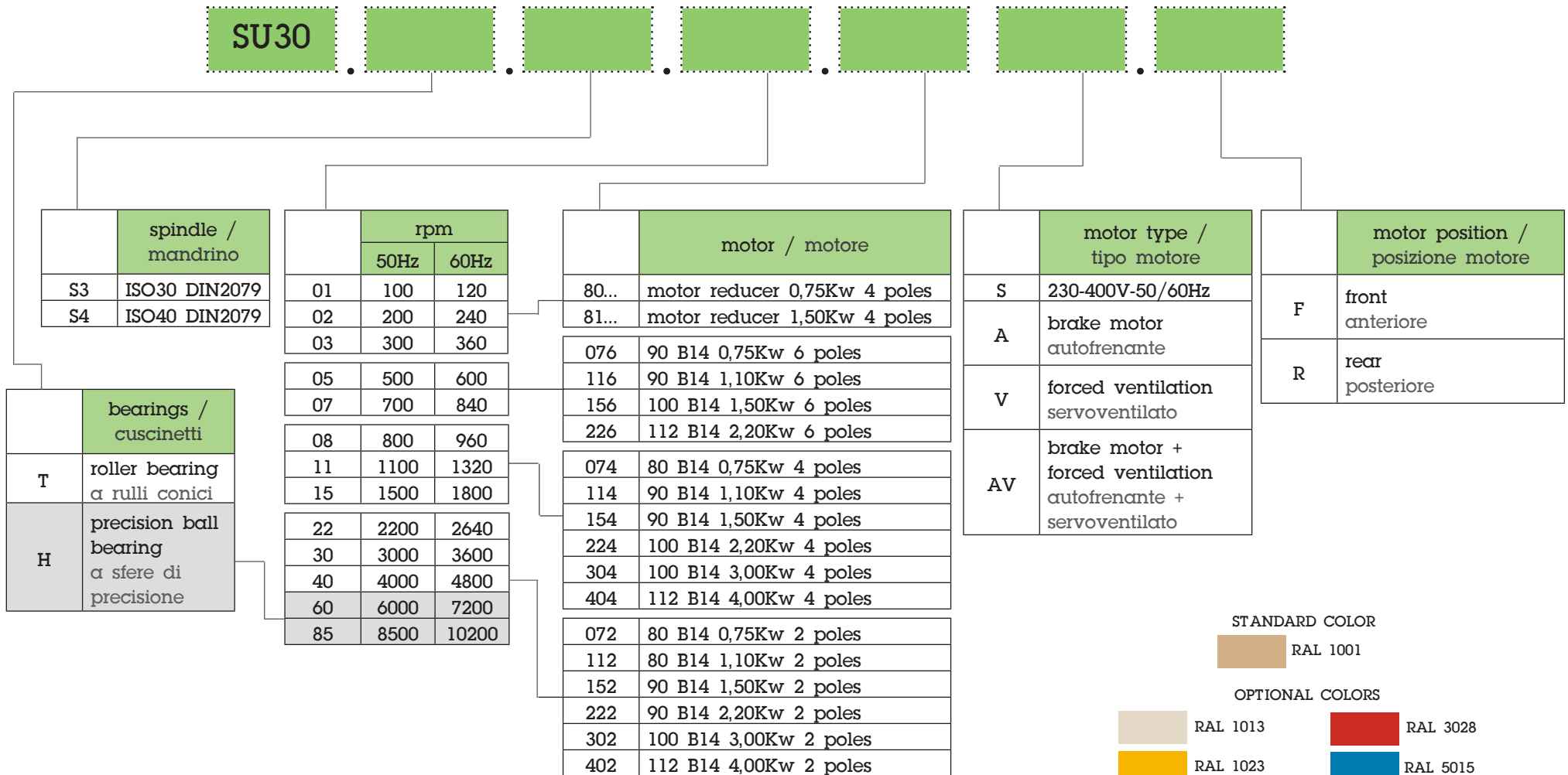
- Working unit suitable for drilling, milling, reaming and boring.
- Prearranged for installation on slides type SL30.
- Taper roller bearings.
Optional: precision angular contact ball bearings.
- Installation of motor in front/rear position (1).
Transmission housing can be rotated on 360°.
- Spindle concentricity 0,01.
- Air inlet 0.5bar for internal spindle pressurization (2).
- Spindle with bore for toolholder drawbar (3).
Optional: coolant through drawbar.
- Installation of multispindle head possible only with spindle ISO30 (4).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 35 to 50 Kg



- Unità di lavoro idonea per foratura, fresatura, alesatura e barenatura.
- Predisposta per installazione su slitte serie SL30.
- Cuscinetti a rulli conici.
Su richiesta cuscinetti a sfere di precisione con contatti obliqui.
- Installazione motore in posizione anteriore o posteriore (1). Carter motore ruotabile a 360°.
- Concentricità mandrino 0,01.
- Ingresso aria 0,5bar per pressurizzazione interna mandrino (2).
- Mandrino forato per passaggio tirante (3).
Su richiesta tirante forato per passaggio lubro-refrigerante.
- Installazione teste multimandrino possibile solo con mandrino ISO30 (4).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 35 a 50 Kg



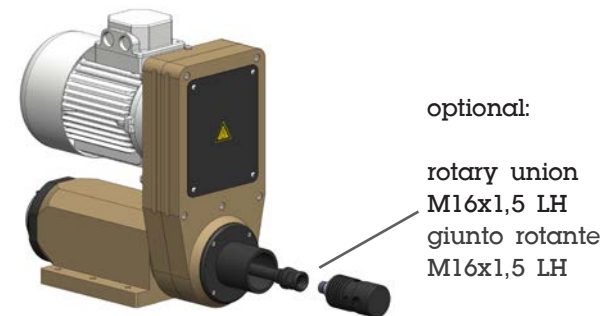
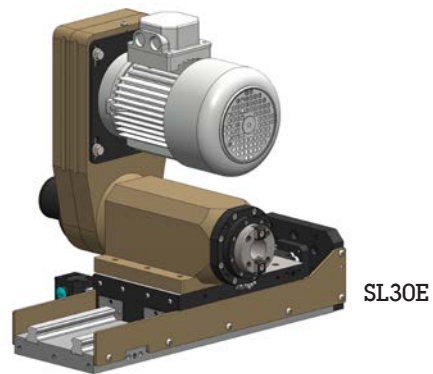
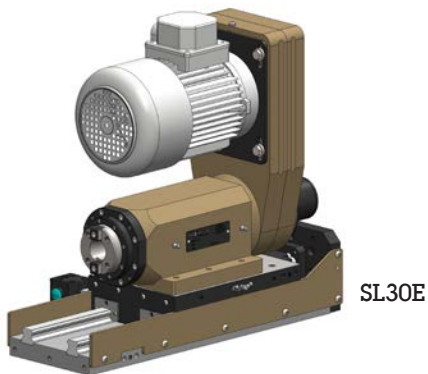
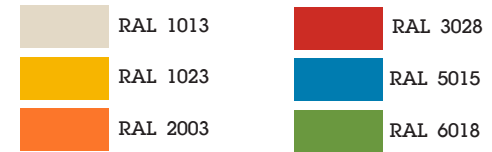
SU30



STANDARD COLOR



OPTIONAL COLORS



SU45

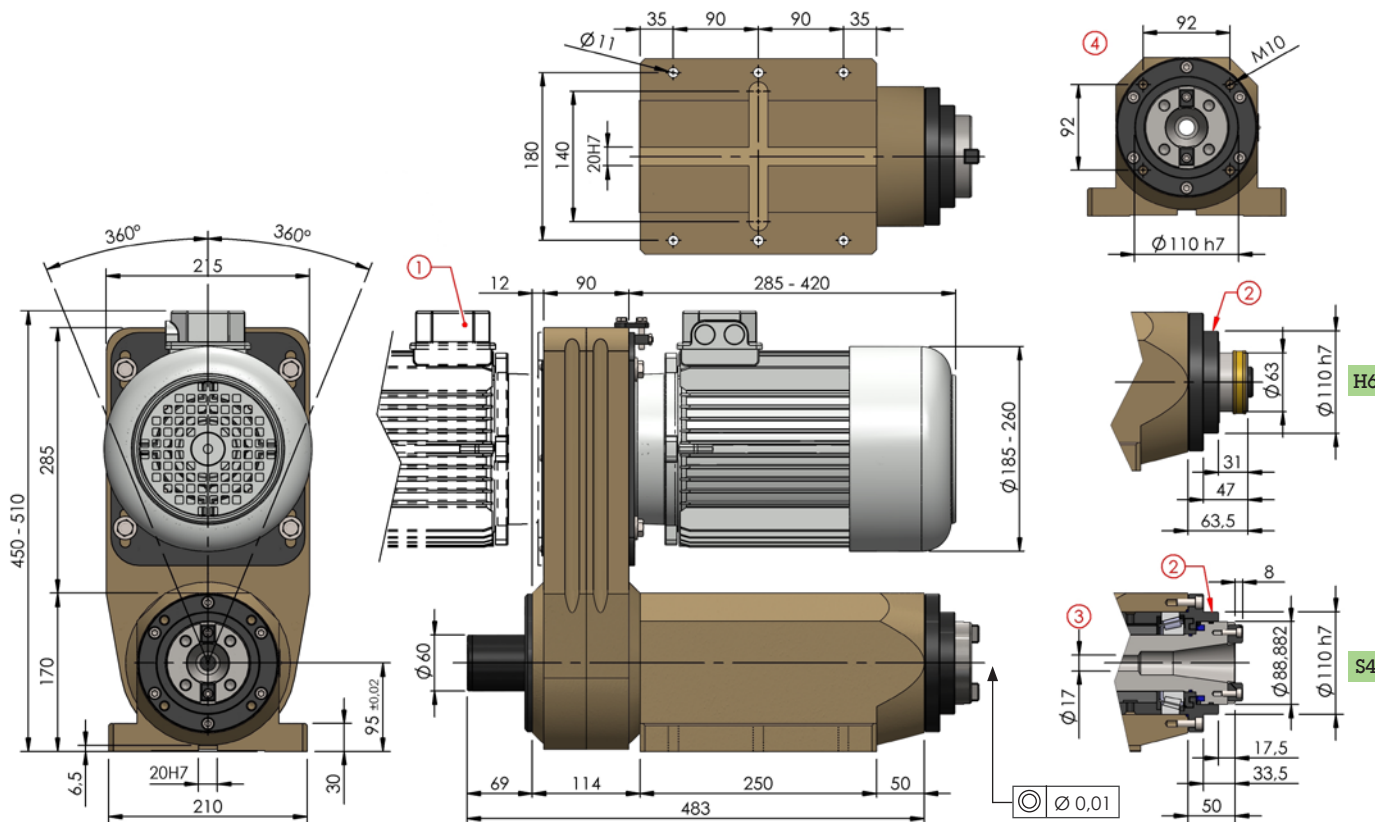
Drilling Capacity Capacità di foratura	ø45 on steel Rm50 ø45 su acciaio Rm50
Spindle Mandrino	ISO40 DIN2079 HSK63C DIN69093
Spindle speed Velocità mandrino	from 100 to 7000 rpm da 100 a 7000 g/1'
Motor Power Potenza Motore	from 1.10 to 7.50 Kw da 1.10 a 7.50 Kw



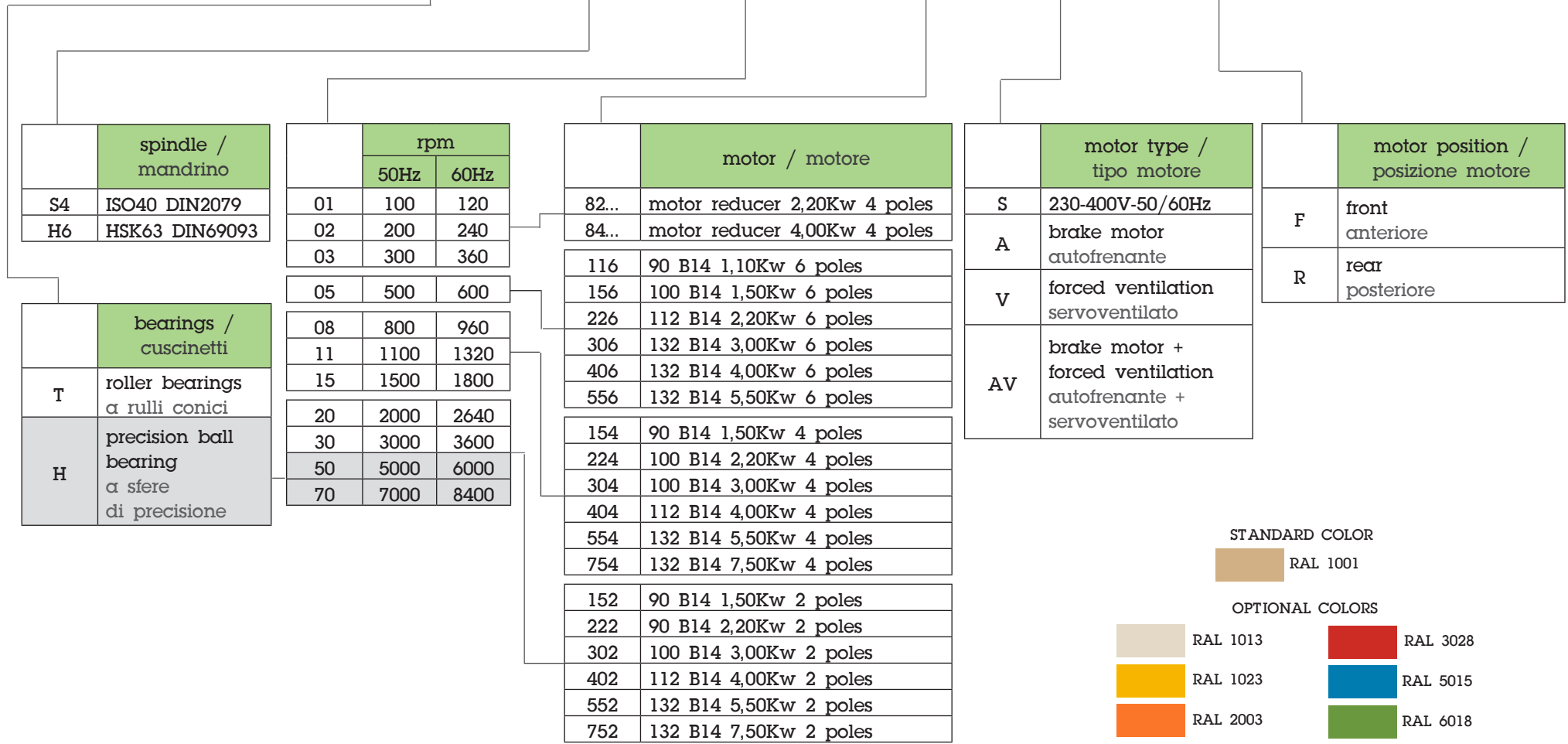
- Working unit suitable for drilling, milling, reaming and boring.
- Taper roller bearings.
Optional: precision angular contact ball bearings.
- Installation of motor in front/rear position (1).
Transmission housing can be rotated on 360°.
- Spindle concentricity 0,01.
- Air inlet 0.5bar for internal spindle pressurization (2).
- Spindle with bore for toolholder drawbar (3).
Optional: coolant through drawbar.
- Installation of multispindle head (4).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 70 to 140 Kg



- Unità di lavoro idonea per foratura, fresatura, alesatura e barenatura.
- Cuscinetti a rulli conici.
Su richiesta cuscinetti a sfere di precisione con contatti obliqui.
- Installazione motore in posizione anteriore o posteriore (1). Carter motore ruotabile a 360°.
- Concentricità mandrino 0,01.
- Ingresso aria 0,5bar per pressurizzazione interna mandrino (2).
- Mandrino forato per passaggio tirante (3).
Su richiesta tirante forato per passaggio lubro-refrigerante.
- Installazione teste multimandrino (4).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso da 75 a 140 Kg



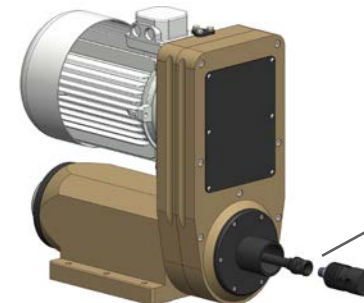
SU45



SL45E



SL45E



optional:

rotary union
M16x1,5 LH
giunto rotante
M16x1,5 LH

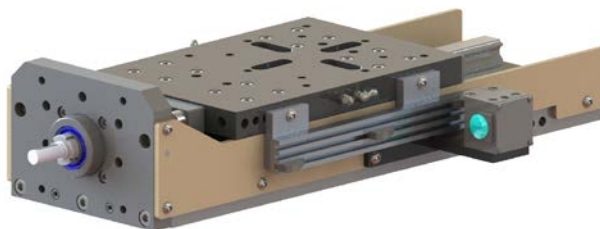
slide units



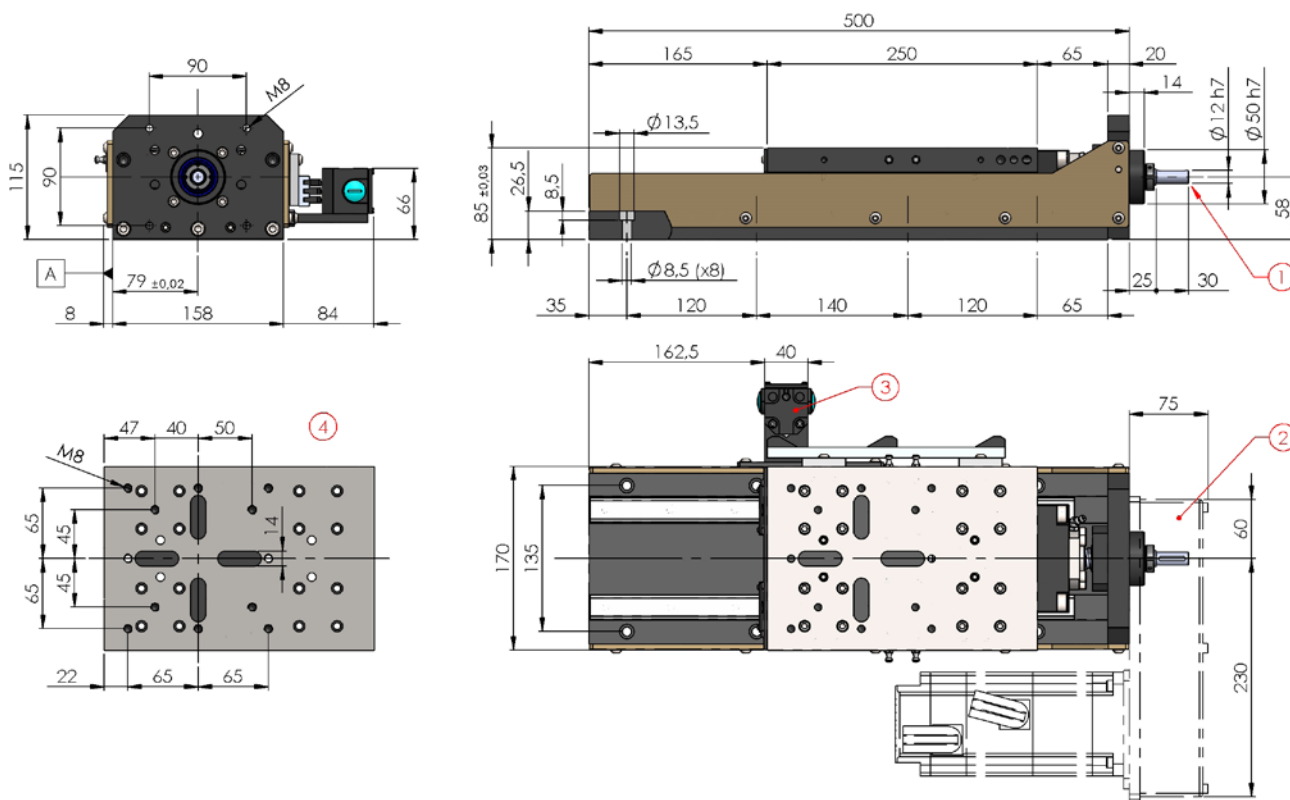
slitte di avanzamento

SL30E.150

Feed Avanzamento	ball screw $\varnothing 20 \times 5$ vite a sfere $\varnothing 20 \times 5$
Stroke Corsa	150 mm 150 mm
Max thrust Spinta massima	5500 N 560 Kg
Servomotor torque Coppia servomotore	ratio/rapporto 1:1 max 5,5 N ratio/rapporto 1:2 max 2,5 N



- CNC slide unit with ball row pads.
On request roller pads.
- Ball screw $\varnothing 20 \times 5$ (1).
- Feed servomotor not supplied.
On request prearranged for customer's servomotor side mounting (max 2,5N) with HTD toothed belt ratio 1:2 (2) or in line mounting (max 5,5N)
- 3 contacts limit switches (3). Standard on right side, on request on left side.
- Prearranged to install SU20 - SU30 (4).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 35 Kg.



- Unità di avanzamento CNC con pattini a ricircolo di sfere. Su richiesta pattini a rulli.
- Vite a ricircolo di sfere $\varnothing 20 \times 5$ (1).
- Servomotore avanzamento non fornito.
Su richiesta predisposizione servomotore cliente, laterale (max 2,5N) con cinghia HTD rapporto 1:2 (2) o in linea (max 5,5N).
- Fine corsa di posizione a 3 contatti (3). Standard su lato destro, a richiesta su lato sinistro.
- Predisposta per installazione mandrini SU20 - SU30 (4).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso 35 Kg.

SL30E 150

stroke / corsa

	row pads / pattini
S	ball row pads pattini a sfere
R	roller pads pattini a rulli

	limit switches position / posizione fine corsa
R	cam+switches on right side fine corsa sul lato destro
L	cam+switches on left side fine corsa sul lato sinistro

	front safety guard / protezione anteriore
0	without safety guard senza protezione

	rear safety guard / protezione posteriore
0	without safety guard senza protezione







	servomotor / servomotore
N	without predisposition senza predisposizione
D	in line mounting montaggio in linea
SR	right side mounting montaggio lato dx
SL	left side mounting montaggio lato sx

	ball screw / vite a sfere
01	standard

STANDARD COLOR

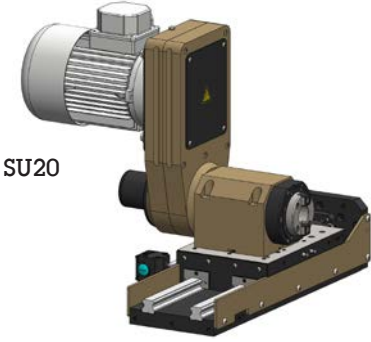
 RAL 1001

OPTIONAL COLORS

 RAL 1013	 RAL 3028
 RAL 1023	 RAL 5015
 RAL 2003	 RAL 6018



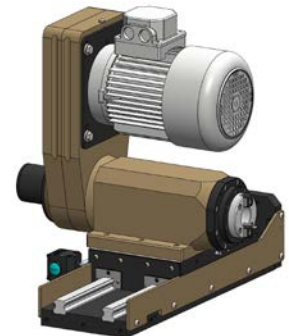
SU20



SU20



SU30



SU30

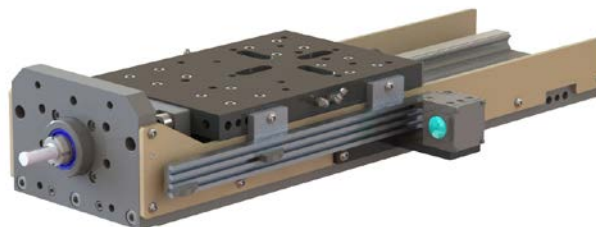
slide units



slitte di avanzamento

SL30E.250

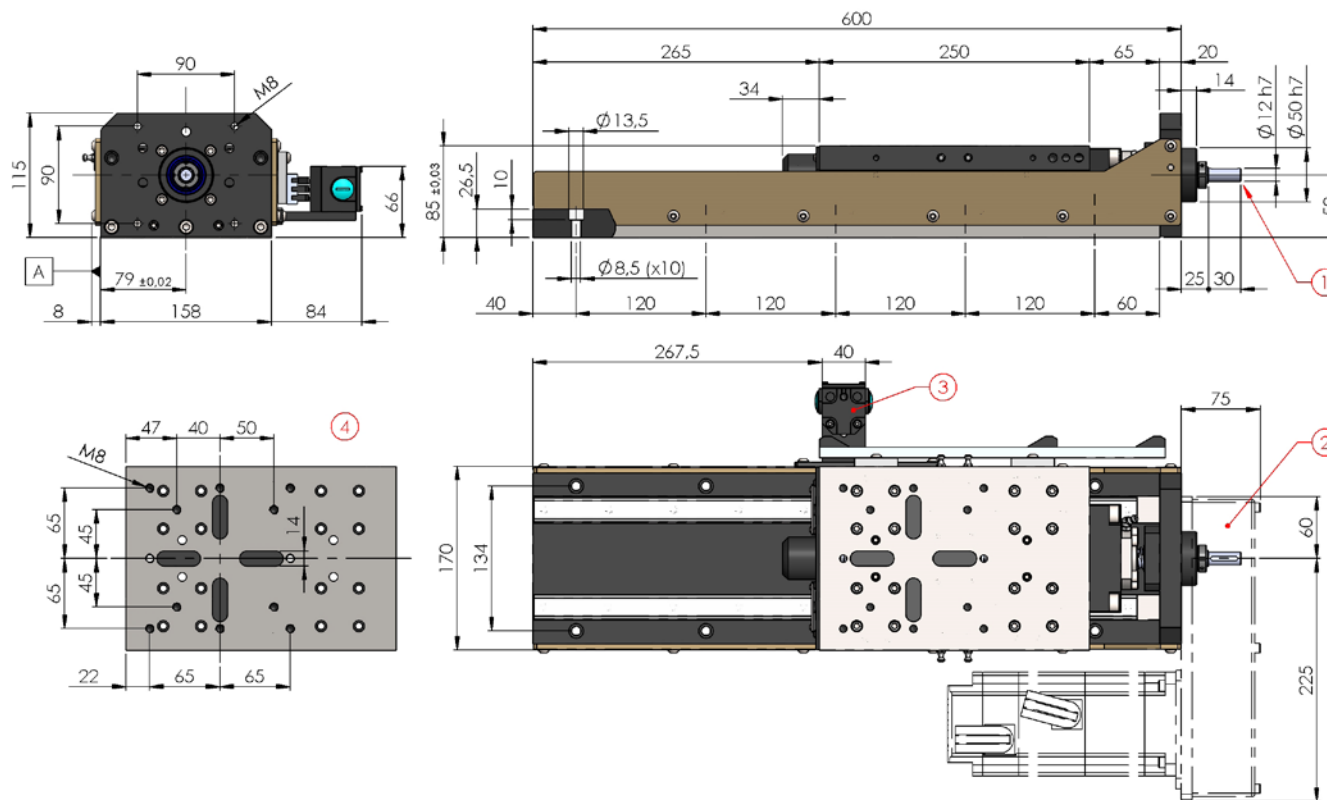
Feed Avanzamento	ball screw $\varnothing 20 \times 5$ vite a sfere $\varnothing 20 \times 5$
Stroke Corsa	250 mm 250 mm
Max thrust Spinta massima	5500 N 560 Kg
Servomotor torque Coppia servomotore	ratio/rapporto 1:1 max 5,5 N ratio/rapporto 1:2 max 2,5 N

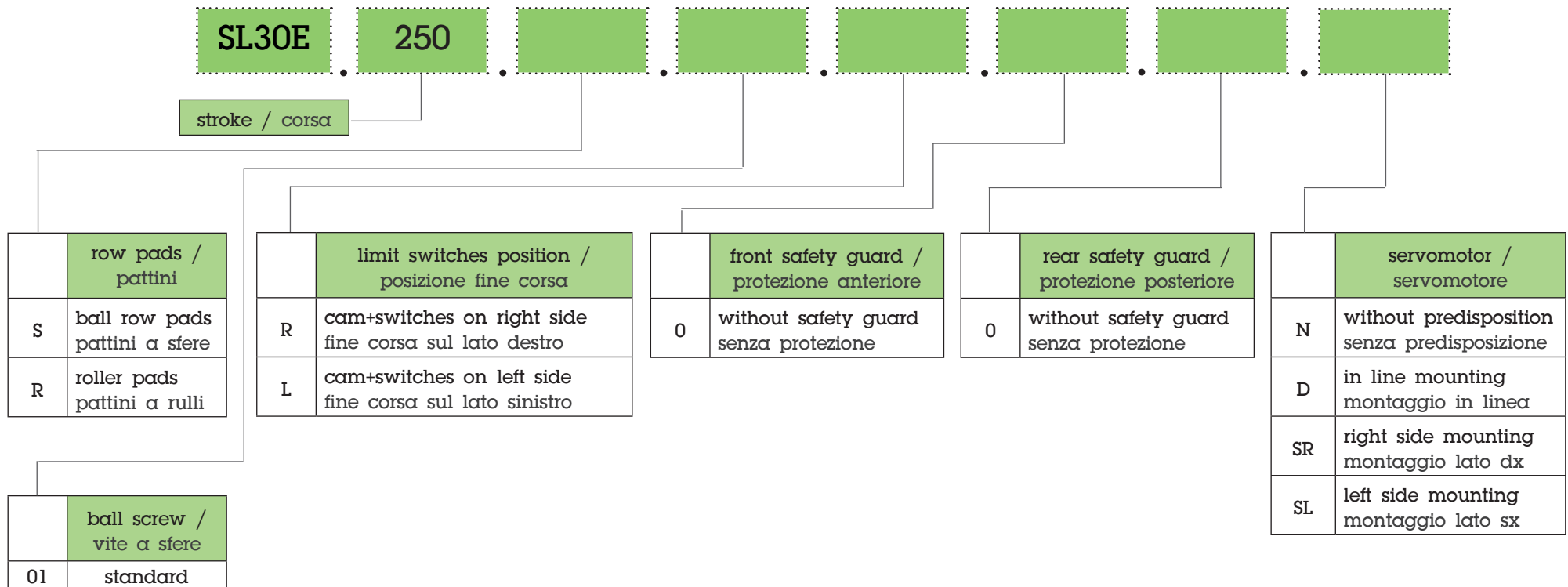


- CNC slide unit with ball row pads.
On request roller pads.
- Ball screw $\varnothing 20 \times 5$ (1).
- Feed servomotor not supplied.
On request prearranged for customer's servomotor, side mounting (max 2,5N) with HTD toothed belt ratio 1:2 (2) or in line mounting (max 5,5N)
- 3 contacts limit switches (3). Standard on right side, on request on left side.
- Prearranged to install SU20 - SU30 (4).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 40 Kg.



- Unità di avanzamento CNC con pattini a ricircolo di sfere. Su richiesta pattini a rulli.
- Vite a ricircolo di sfere $\varnothing 20 \times 5$ (1).
- Servomotore avanzamento non fornito.
Su richiesta predisposizione servomotore cliente, laterale (max 2,5N) con cinghia HTD rapporto 1:2 (2) o in linea (max 5,5N).
- Fine corsa di posizione a 3 contatti (3). Standard su lato destro, a richiesta su lato sinistro.
- Predisposta per installazione mandrini SU20 - SU30 (4).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso 40 Kg.

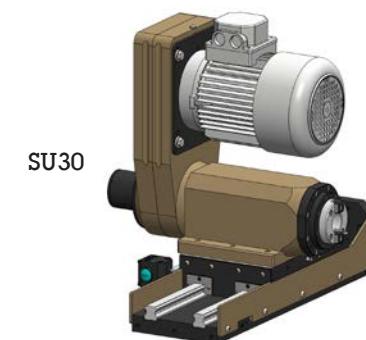
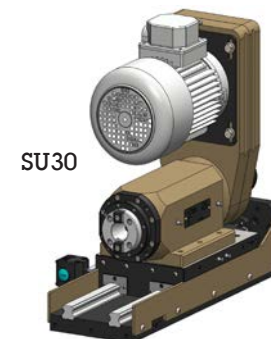
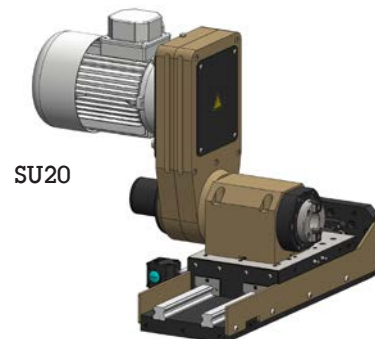
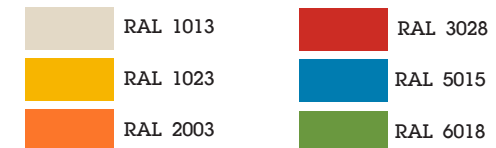




STANDARD COLOR



OPTIONAL COLORS



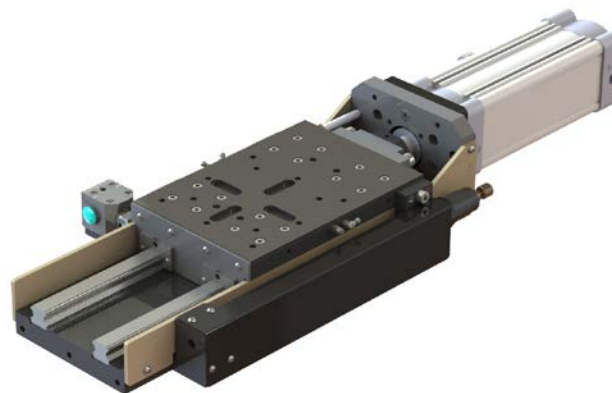
slide units



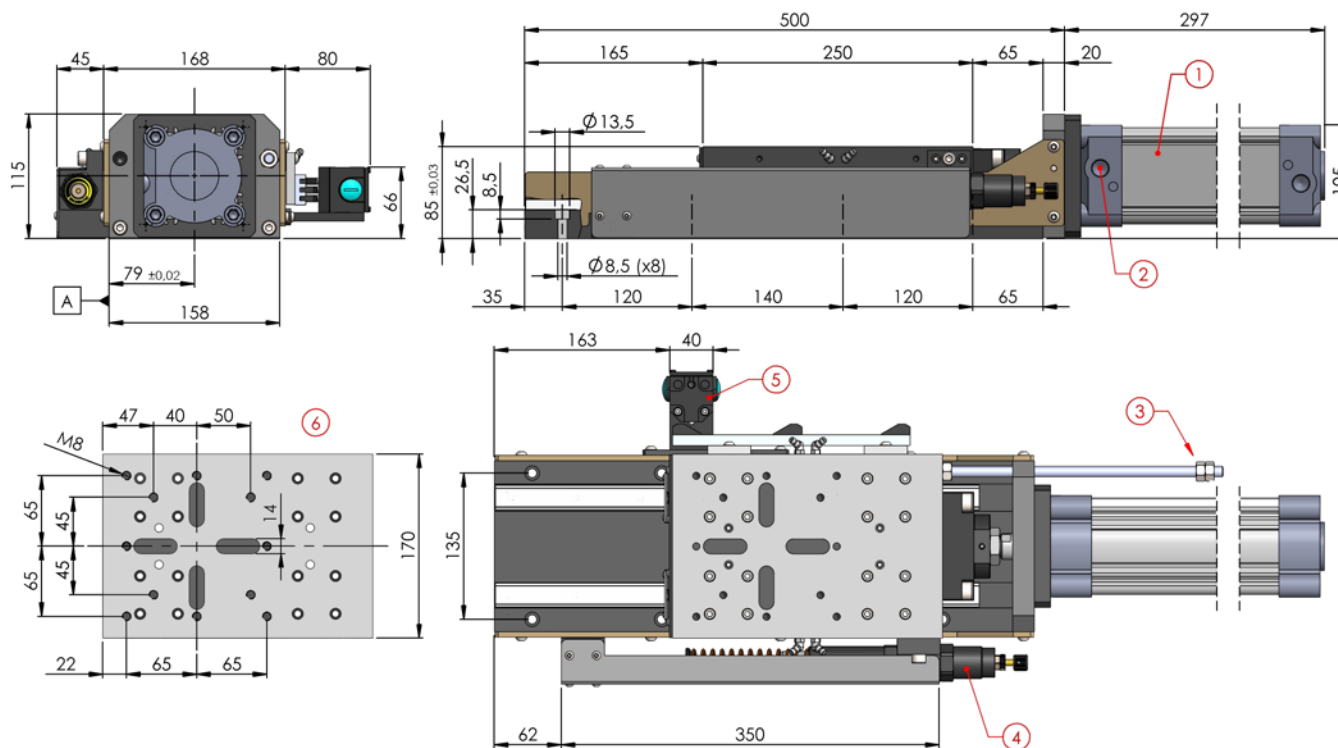
slitte di avanzamento

SL30P.150

Feed Avanzamento	pneumatic pneumatico
Stroke Corsa	150 mm 150 mm
Thrust at 6 bar Spinta a 6 bar	2700 N 275 Kg



- Pneumatic slide unit.
- Pneumatic cylinder $\varnothing 80$ (1).
Optional: pneumatic cylinder $\varnothing 100$.
- Air inlet G3/8 (2).
- Air consumption 8,60NL/cycle.
- Adjustable mechanical stop (3).
- Fast/slow stroke separately adjustable.
- Hydrocheck stroke 75mm (4).
- 3 contacts limit switches (5).
Optional: magnetic sensors.
- Prearranged to install SU20 - SU30 (6).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 38 Kg



- Unità di avanzamento pneumatica.
- Cilindro pneumatico $\varnothing 80$ (1).
Su richiesta cilindro pneumatico $\varnothing 100$.
- Ingressi aria G3/8 (2).
- Consumo aria 8,60NL/ciclo.
- Battuta meccanica regolabile (3).
- Corse rapido/lento regolabili separatamente.
- Regolatore idraulico corsa 75mm (4).
- Fine corsa di posizione a 3 contatti (5).
Su richiesta sensori magnetici.
- Predisposta per installazione mandrini SU20 - SU30 (6).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso 38 Kg

SL30P

150

stroke / corsa

	row pads / pattini
S	ball row pads pattini a sfere
R	roller pads pattini a rulli

	cylinder / cilindro
08	ø 80
10	ø 100

	limit switches position / posizione fine corsa
R	cam+switches on right side, hydrocheck on left side. fine corsa sul lato destro, regolatore sul lato sinistro.
L	cam+switches on left side, hydrocheck on right side. fine corsa sul lato sinistro, regolatore sul lato destro.
MR	magnetic sensor on cylinder, hydrocheck on right side. sensori magnetici sul cilindro, regolatore sul lato destro.
ML	magnetic sensor on cylinder, hydrocheck on left side. sensori magnetici sul cilindro, regolatore sul lato sinistro.

	front safety guard / protezione anteriore
0	without safety guard senza protezione

	rear safety guard / protezione posteriore
0	without safety guard senza protezione

	hydrocheck / regolatore
75H	standard

STANDARD COLOR

 RAL 1001

OPTIONAL COLORS

 RAL 1013

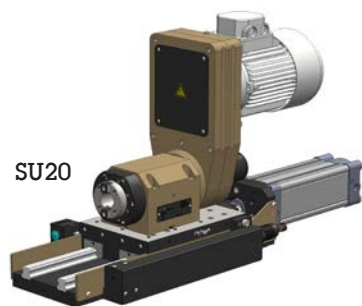
 RAL 3028

 RAL 1023

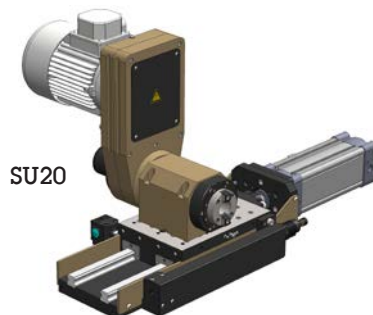
 RAL 5015

 RAL 2003

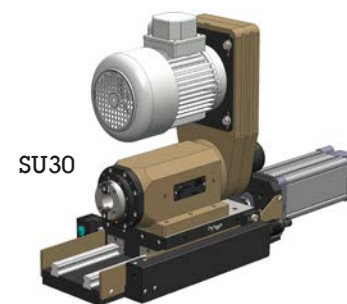
 RAL 6018



SU20



SU20



SU30



SU30

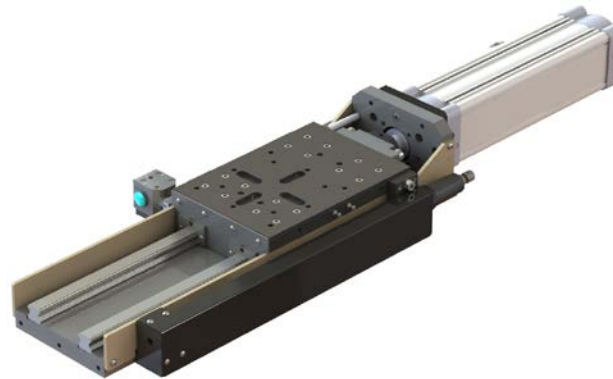
slide units



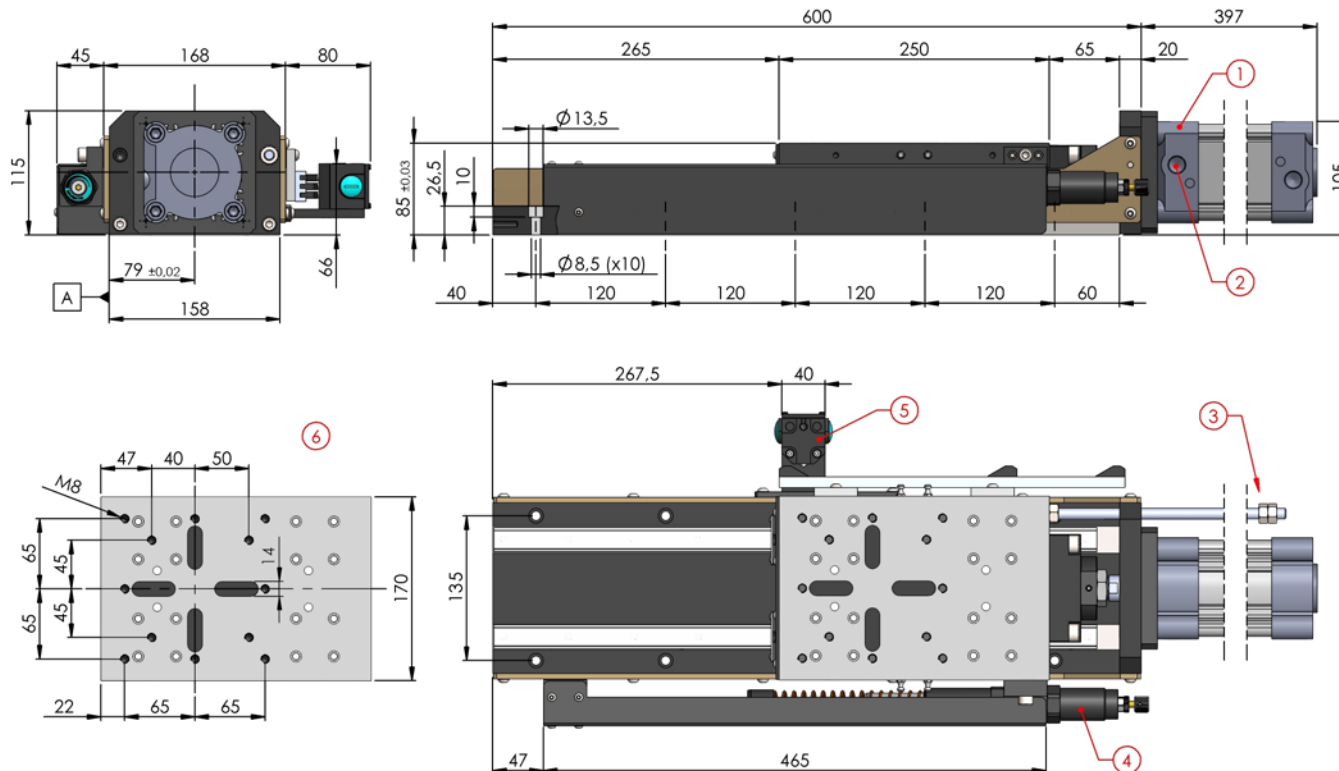
slitte di avanzamento

SL30P.250

Feed Avanzamento	pneumatic pneumatico
Stroke Corsa	250 mm 250 mm
Thrust at 6 bar Spinta a 6 bar	2700 N 275 Kg



- Pneumatic slide unit.
- Pneumatic cylinder ø80 (1).
Optional: pneumatic cylinder ø100.
- Air inlet G3/8 (2).
- Air consumption 14,4NL/cycle.
- Adjustable mechanical stop (3).
- Fast/slow stroke separately adjustable.
- Hydrocheck stroke 100mm (4).
- 3 contacts limit switches (5).
- Optional: magnetic sensors.
- Prearranged to install SU20 - SU30 (6).
- Standard color: Beige RAL 1001.
- Other colors on request.
- Weight from 43 Kg



- Unità di avanzamento pneumatica.
- Cilindro pneumatico ø80 (1).
Su richiesta cilindro pneumatico ø100.
- Ingressi aria G3/8 (2).
- Consumo aria 14,4NL/ciclo.
- Battuta meccanica regolabile (3).
- Corse rapido/lento regolabili separatamente.
- Regolatore idraulico corsa 100mm (4).
- Fine corsa di posizione a 3 contatti (5).
Su richiesta sensori magnetici.
- Predisposta per installazione mandrini SU20 - SU30 (6).
- Colore standard: Beige RAL 1001.
- Altri colori su richiesta.
- Peso 43 Kg

SL30P

250

stroke / corsa

	row pads / pattini
S	ball row pads pattini a sfere
R	roller pads pattini a rulli

	cylinder / cilindro
08	ø 80
10	ø 100

	limit switches position / posizione fine corsa
R	cam+switches on right side, hydrocheck on left side. fine corsa sul lato destro, regolatore sul lato sinistro.
L	cam+switches on left side, hydrocheck on right side. fine corsa sul lato sinistro, regolatore sul lato destro.
MR	magnetic sensor on cylinder, hydrocheck on right side. sensori magnetici sul cilindro, regolatore sul lato destro.
ML	magnetic sensor on cylinder, hydrocheck on left side. sensori magnetici sul cilindro, regolatore sul lato sinistro.

	front safety guard / protezione anteriore
0	without safety guard senza protezione

	rear safety guard / protezione posteriore
0	without safety guard senza protezione

	hydrocheck / regolatore
100H	standard

STANDARD COLOR



RAL 1001

OPTIONAL COLORS



RAL 1013



RAL 3028



RAL 1023



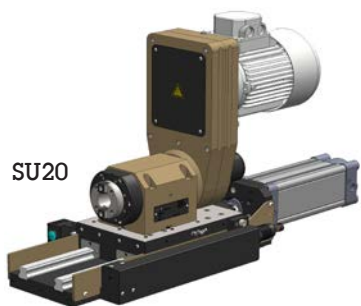
RAL 5015



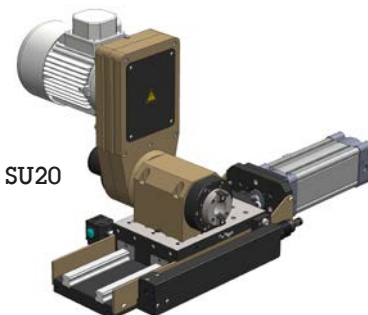
RAL 2003



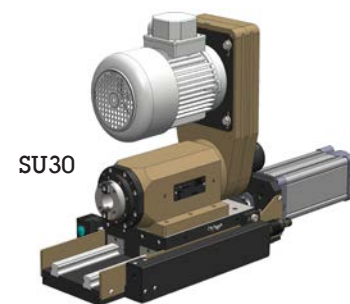
RAL 6018



SU20



SU20



SU30



SU30

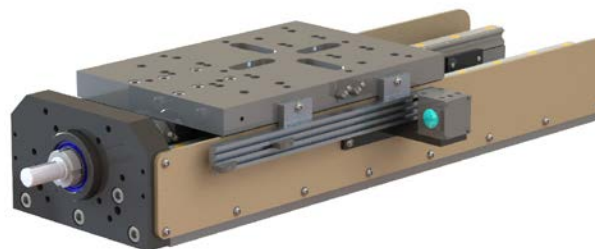
slide units



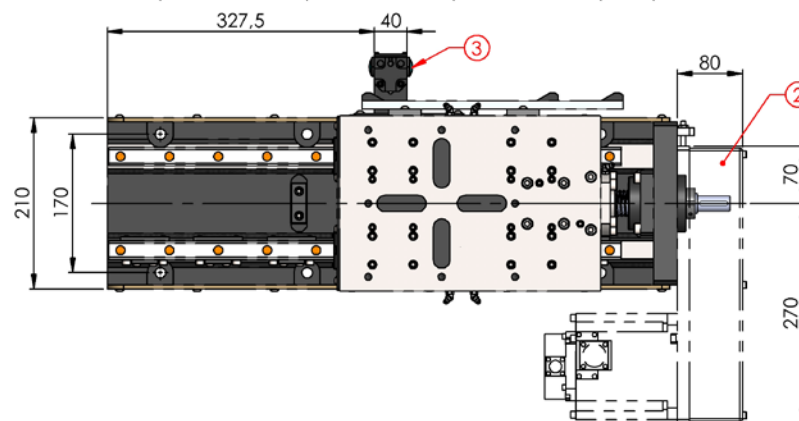
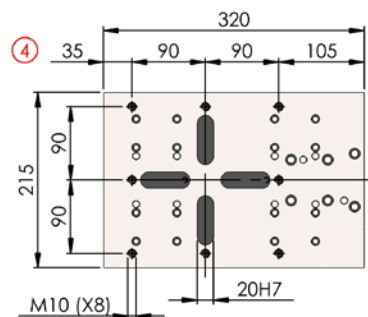
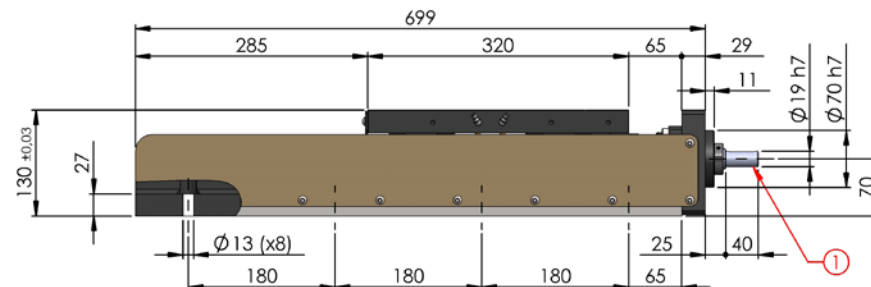
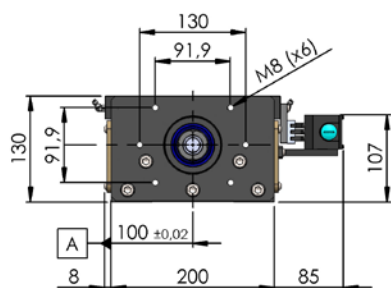
slitte di avanzamento

SL45E.250

Feed Avanzamento	ball screw $\varnothing 32 \times 5$ vite a sfere $\varnothing 32 \times 5$
Stroke Corsa	250 mm 250 mm
Max thrust Spinta massima	9000 N 920 Kg
Servomotor torque Coppia servomotore	ratio/rapporto 1:1 max 9,0 N ratio/rapporto 1:2 max 4,5 N



- CNC slide unit with ball row pads.
On request roller pads.
- Ball screw $\varnothing 32 \times 5$ (1).
- Feed servomotor not supplied.
On request prearranged for customer's servomotor, side mounting (max 4,5N) with HTD toothed belt ratio 1:2 (2) or in line mounting (max 9,0N)
- 3 contacts limit switches (3). Standard on right side, on request on left side.
- Prearranged to install SU45 (4).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 72 Kg.



- Unità di avanzamento CNC con pattini a ricircolo di sfere. Su richiesta pattini a rulli.
- Vite a ricircolo di sfere $\varnothing 32 \times 5$ (1).
- Servomotore avanzamento non fornito.
Su richiesta predisposizione servomotore cliente, laterale (max 4,5N) con cinghia HTD rapporto 1:2 (2) o in linea (max 9,0N).
- Fine corsa di posizione a 3 contatti (3). Standard su lato destro, a richiesta su lato sinistro.
- Predisposta per installazione mandrini SU45 (4).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso 72 Kg.

SL45E 250

stroke / corsa

	row pads / pattini
S	ball row pads pattini a sfere
R	roller pads pattini a rulli

	limit switches position / posizione fine corsa
R	cam+switches on right side fine corsa sul lato destro
L	cam+switches on left side fine corsa sul lato sinistro

	front safety guard / protezione anteriore
0	without safety guard senza protezione

	rear safety guard / protezione posteriore
0	without safety guard senza protezione

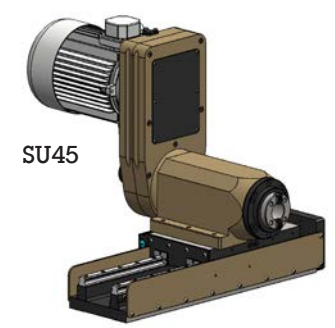
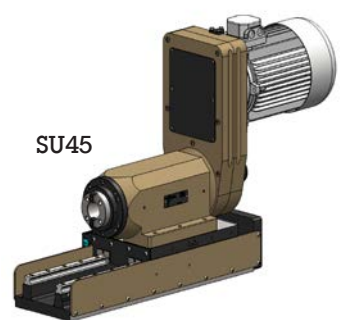
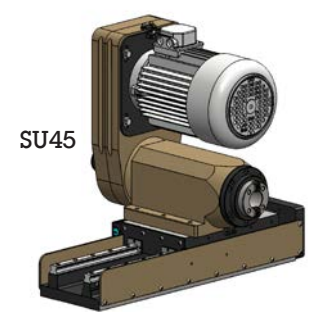
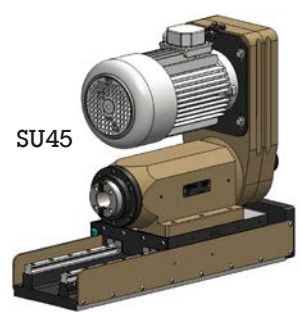
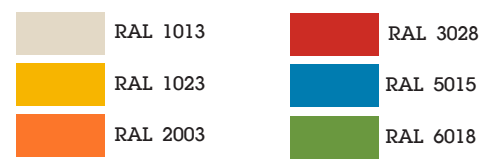
	servomotor / servomotore
N	without predisposition senza predisposizione
D	in line mounting montaggio in linea
SR	right side mounting montaggio lato dx
SL	left side mounting montaggio lato sx

	ball screw / vite a sfere
01	standard

STANDARD COLOR



OPTIONAL COLORS



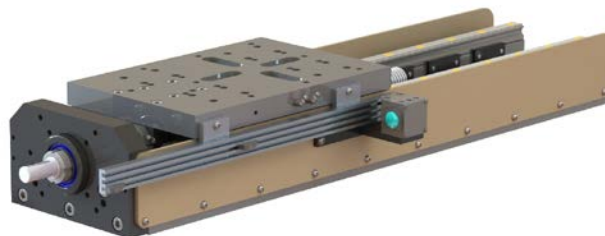
slide units



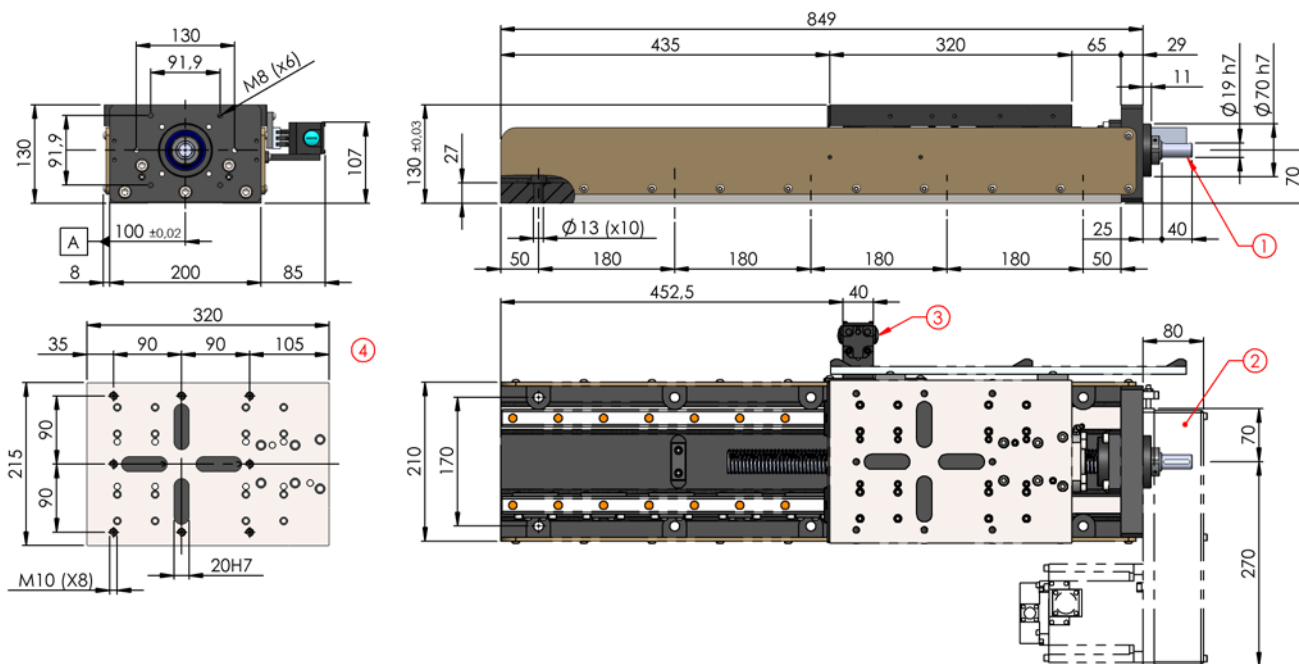
slitte di avanzamento

SL45E.400

Feed Avanzamento	ball screw $\varnothing 32 \times 5$ vite a sfere $\varnothing 32 \times 5$
Stroke Corsa	400 mm 400 mm
Max thrust Spinta massima	9000 N 920 Kg
Servomotor torque Coppia servomotore	ratio/rapporto 1:1 max 9,0 N ratio/rapporto 1:2 max 4,5 N



- CNC slide unit with ball row pads.
On request roller pads.
- Ball screw $\varnothing 32 \times 5$ (1).
- Feed servomotor not supplied.
On request prearranged for customer's servomotor, side mounting (max 4,5N) with HTD toothed belt ratio 1:2 (2) or in line mounting (max 9,0N)
- 3 contacts limit switches (3). Standard on right side, on request on left side.
- Prearranged to install SU45 (4).
- Standard color: Beige RAL 1001.
Other colors on request.
- Weight from 82 Kg.



- Unità di avanzamento CNC con pattini a ricircolo di sfere. Su richiesta pattini a rulli.
- Vite a ricircolo di sfere $\varnothing 32 \times 5$ (1).
- Servomotore avanzamento non fornito. Su richiesta predisposizione servomotore cliente, laterale (max 4,5N) con cinghia HTD rapporto 1:2 (2) o in linea (max 9,0N).
- Fine corsa di posizione a 3 contatti (3). Standard su lato destro, a richiesta su lato sinistro.
- Predisposta per installazione mandrini SU45 (4).
- Colore standard: Beige RAL 1001.
Altri colori su richiesta.
- Peso 82 Kg.

SL45E 400

stroke / corsa

	row pads / pattini
S	ball row pads pattini a sfere
R	roller pads pattini a rulli

	limit switches position / posizione fine corsa
R	cam+switches on right side fine corsa sul lato destro
L	cam+switches on left side fine corsa sul lato sinistro

	front safety guard / protezione anteriore
0	without safety guard senza protezione

	rear safety guard / protezione posteriore
0	without safety guard senza protezione

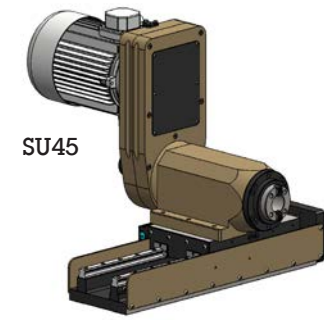
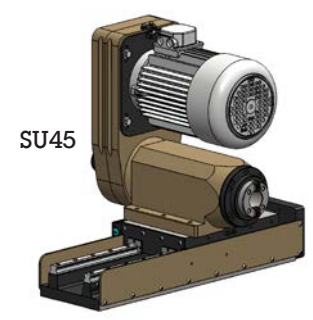
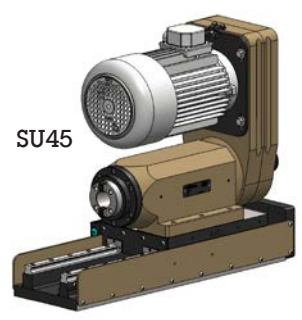
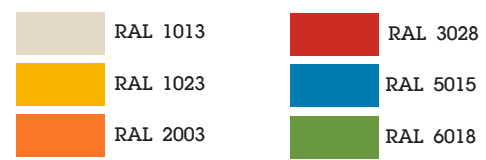
	servomotor / servomotore
N	without predisposition senza predisposizione
D	in line mounting montaggio in linea
SR	right side mounting montaggio lato dx
SL	left side mounting montaggio lato sx

	ball screw / vite a sfere
01	standard

STANDARD COLOR

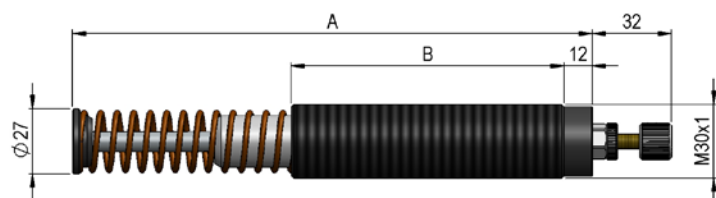


OPTIONAL COLORS



hydrochecks

regolatori idraulici



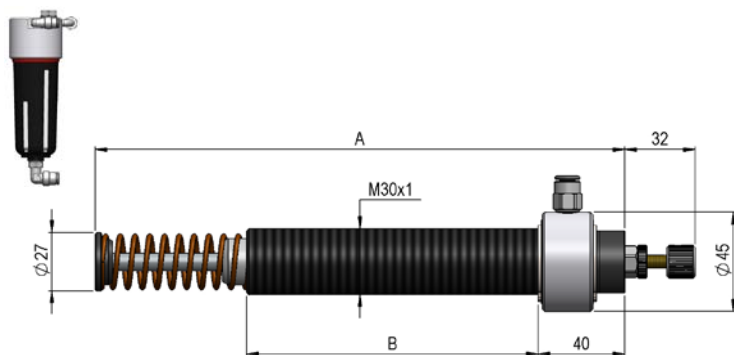
Suitable for feed control of pneumatic units. Closed hydraulic circuit. Spring return.

Per il controllo della velocità di avanzamento delle unità pneumatiche. Circuito idraulico chiuso. Ritorno a molla.

serie H - Adjustable feed control hydrochecks

Regolatori idraulici di avanzamento

type modello	working stroke corsa di lavoro mm	strenght forza di spinta N	feeding speed velocità avanzamento m/min	return time tempo di ritorno sec.	weight peso Kg	A	B
45H	45	6000	0,02 - 3,00	0,30	0,6	212	111
75H	75	5000	0,02 - 3,00	0,45	0,8	287	161
100H	100	4000	0,02 - 3,00	1,00	0,9	343	168



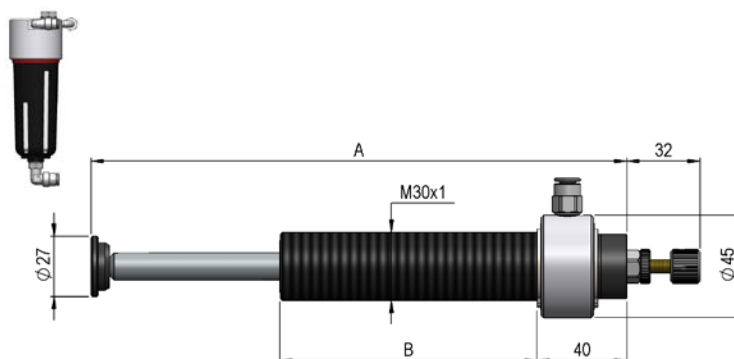
Suitable for feed control of pneumatic units. Hydraulic circuit with external oil bowl. Spring return.

Per il controllo della velocità di avanzamento delle unità pneumatiche. Circuito idraulico con serbatoio esterno. Ritorno a molla.

serie HS - Adjustable feed control hydrochecks with external oil bowl

Regolatori idraulici di avanzamento con serbatoio esterno

type modello	working stroke corsa di lavoro mm	strenght forza di spinta N	feeding speed velocità avanzamento m/min	return time tempo di ritorno sec.	weight peso Kg	A	B
45HS	45	6000	0,02 - 3,00	0,30	0,75	242	133
75HS	75	5000	0,02 - 3,00	0,45	0,85	286	133
100HS	100	4000	0,02 - 3,00	1,00	0,95	343	139



Suitable for feed control of pneumatic units. Hydraulic circuit with external oil bowl. Pneumatic return by compressed air at 6 bar.

It can be used for peek feed control for drilling deep more than 5-6 times their diameter.

Per il controllo della velocità di avanzamento delle unità pneumatiche. Circuito idraulico con serbatoio esterno. Ritorno pneumatico con aria compressa a 6 bar. Può essere utilizzato per lo scarico dei trucioli nelle forature profonde 5-6 volte il loro diametro.

serie HP - Adjustable peck feed control hydrochecks

Regolatori idraulici di avanzamento per scarico trucioli

type modello	working stroke corsa di lavoro mm	strenght forza di spinta N	feeding speed velocità avanzamento m/min	return time tempo di ritorno sec.	weight peso Kg	A	B
75HP	70	2500	0,02 - 3,00	0,50	0,80	236	113
100HP	95	2500	0,02 - 3,00	0,75	0,85	288	139
150HP	145	2500	0,02 - 3,00	1,20	1,05	387	189

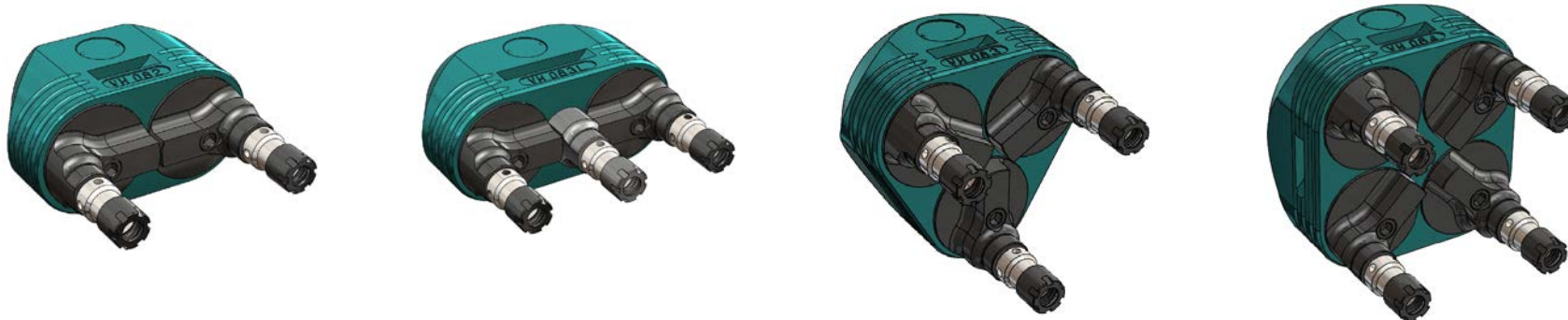
multispindle heads

teste multiple

Drill / Tap	Type	D	Spindle	Type	D	Spindle	Type	ØD	Spindle	Type	ØD	Spindle
Ø5 / M4	VH 042	12 - 72	ER8	VH 043L	12 - 42	ER8	VH 043	18,5 - 78,5	ER8	VH 044	29,5 - 89,5	ER8
Ø7 / M5	VH 062	17 - 93	ER11 / Ø8	VH 063L	17,5 - 55,5	ER11 / Ø8	VH 063	27 - 103	ER11 / Ø8	VH 064	41 - 117	ER11 / Ø8
Ø10 / M6	VH 082	24 - 108	ER16 / Ø10	VH 083L	24 - 66	ER16 / Ø10	VH 083	36 - 120	ER16 / Ø10	VH 084	53,5 - 137,5	ER16 / Ø10
Ø12 / M8	VH 102	28 - 120	ER16 / Ø10	VH 103L	28 - 74	ER16 / Ø10	VH 103	40 - 132	ER16 / Ø10	VH 104	60 - 152	ER16 / Ø10
Ø14 / M12	VH 132	35 - 151	ER20 / Ø16	VH 133L	35 - 93	ER20 / Ø16	VH 133	51 - 167	ER20 / Ø16	VH 134	75 - 191	ER20 / Ø16
Ø20 / M14	VH 182	41 - 173	ER25 / Ø28	VH 183L	41 - 107	ER25 / Ø28	VH 183	59 - 191	ER25 / Ø28	VH 184	56 - 218	ER25 / Ø28

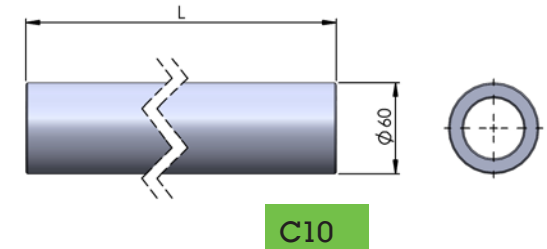
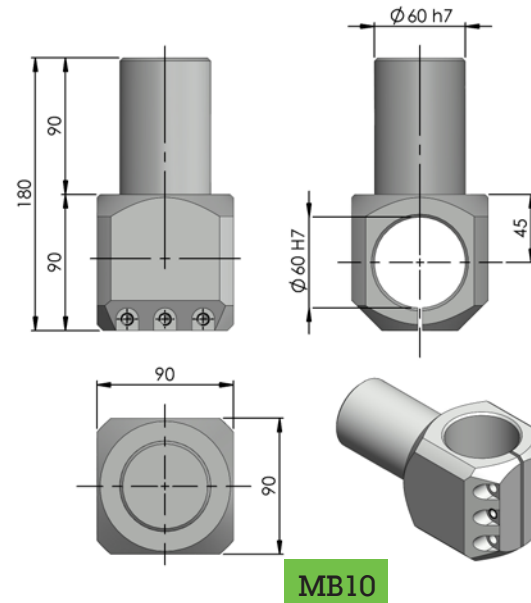
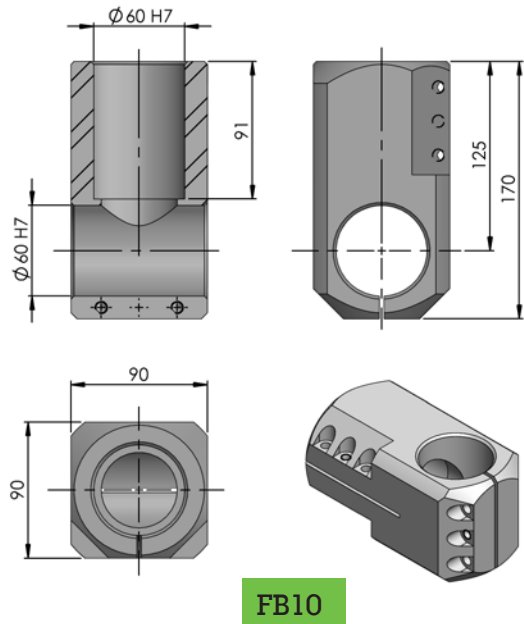
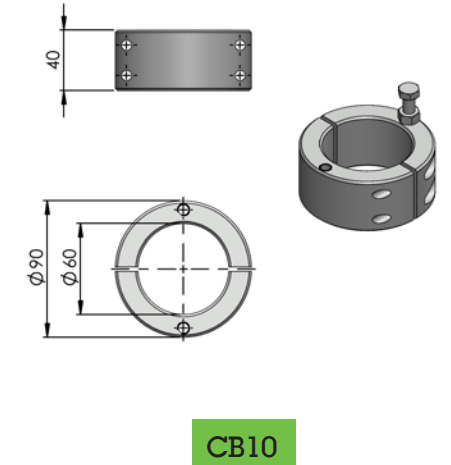
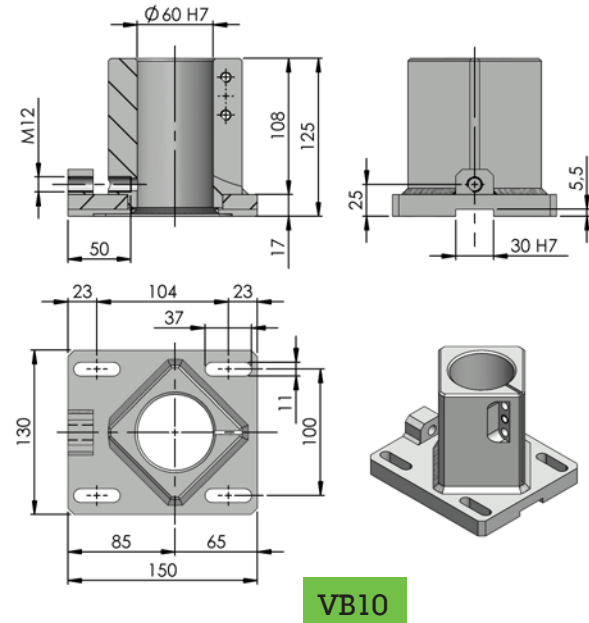
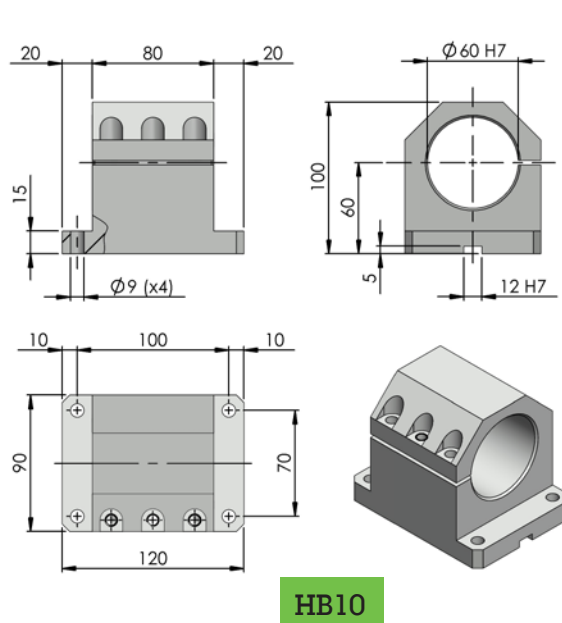


Other models on request / Altri modelli su richiesta



accessories series 10

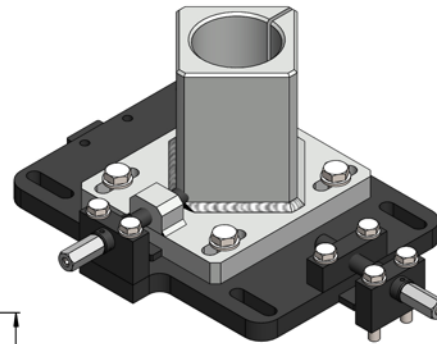
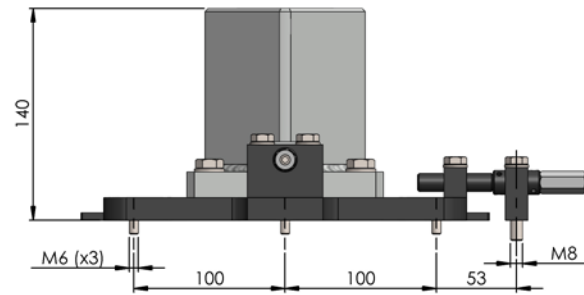
accessori serie 10



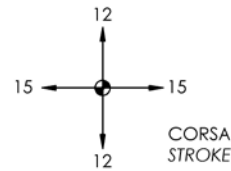
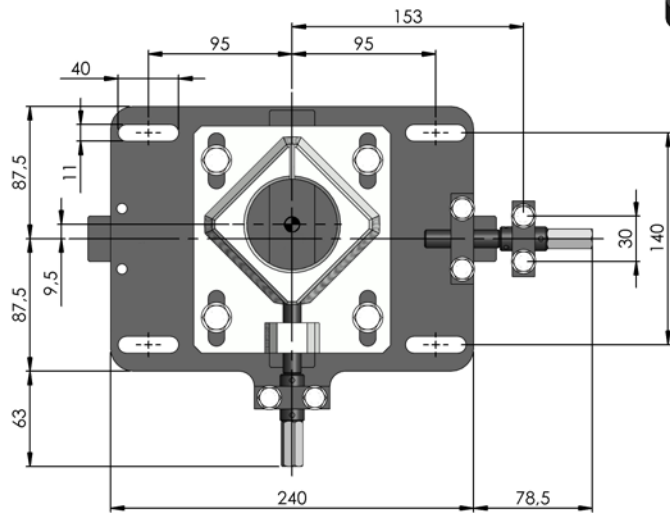
L					
300	400	500	600	700	800

accessories series 10

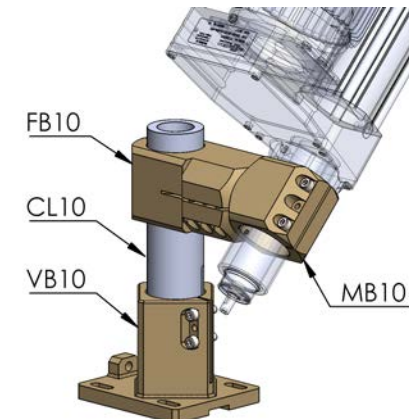
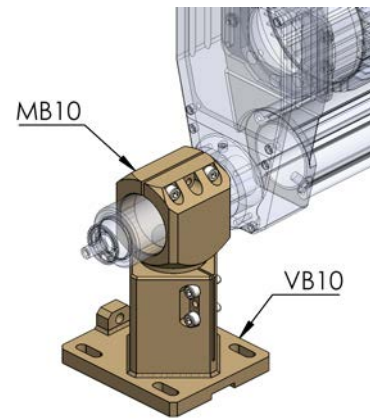
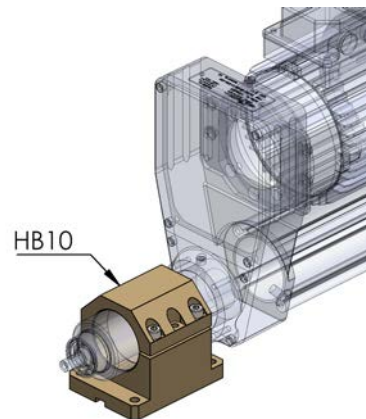
accessori serie 10



RB10

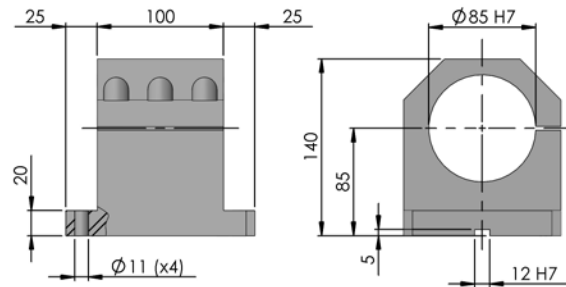


examples of application:
esempi di applicazione:

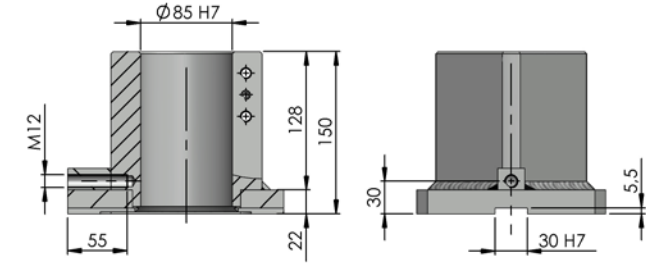
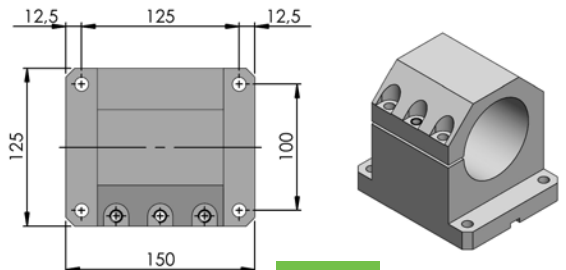


accessories series 20

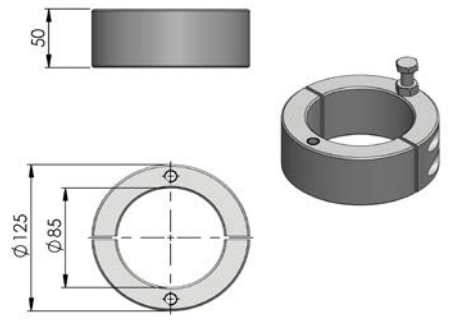
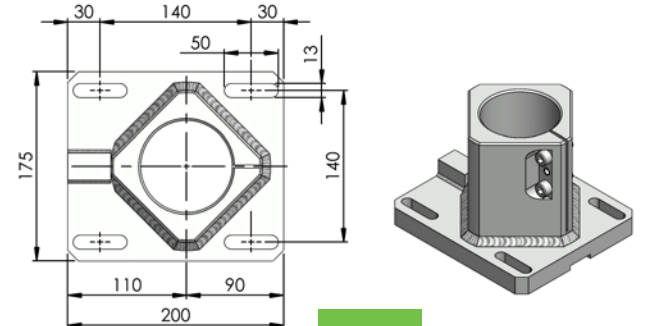
accessori serie 20



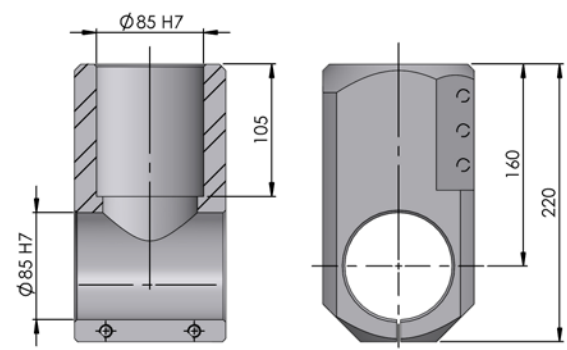
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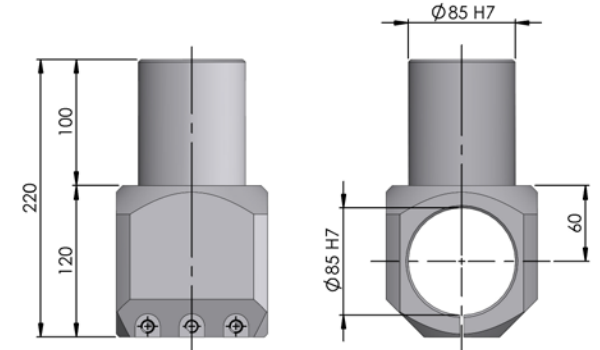
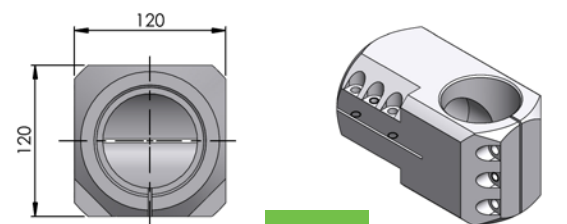
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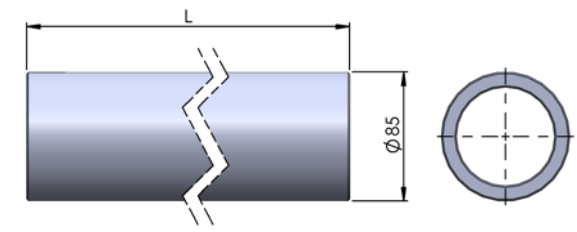
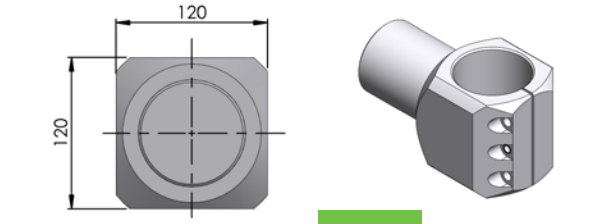
CB20



FB20



MB20

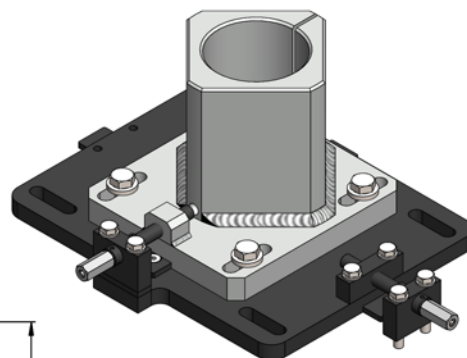
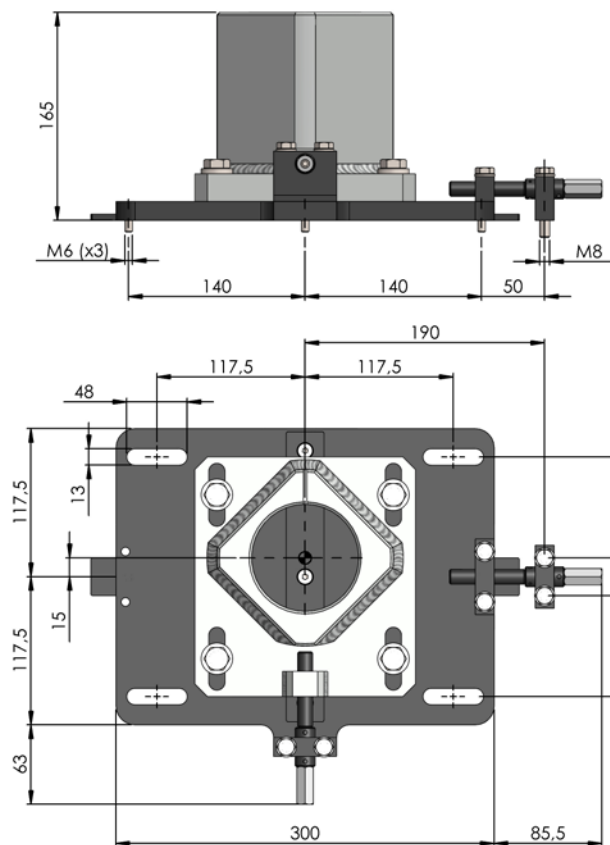


C20

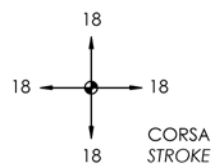
L					
500	600	700	800	900	1000

accessories series 20

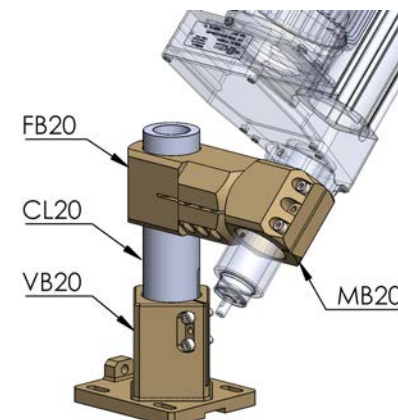
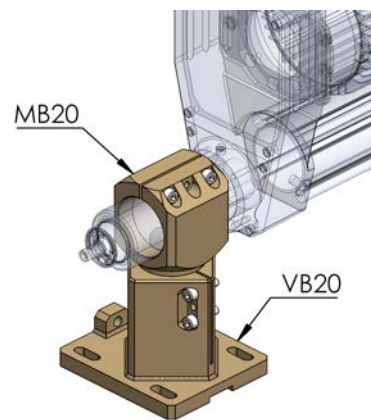
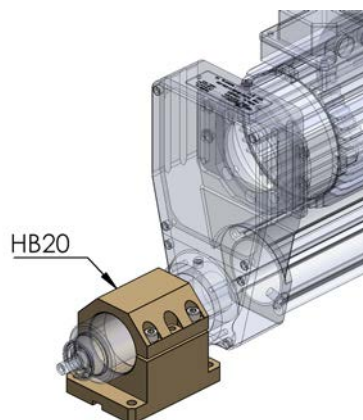
accessori serie 20



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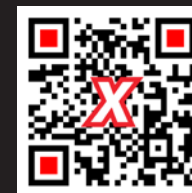
examples of application:
esempi di applicazione:



note



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