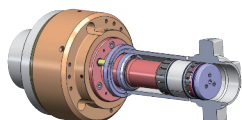
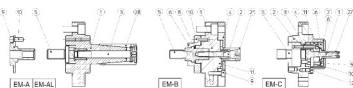
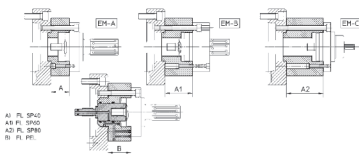
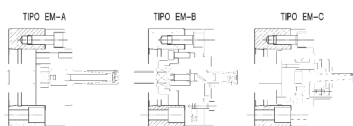
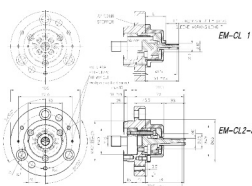
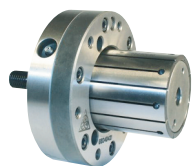


Mandrini ad espansione

Clamping mandrels



EM-A

Mandrino espansibile a comando automatico con pinze autostaffanti
Power operated clamping mandrel with pull-down sleeves

Pag. 88

EM-AL

Mandrino espansibile con pinze autostaffanti allungate
Clamping mandrel with lengthened pull-down sleeves

Pag. 89

EM-B

Mandrino espansibile a comando automatico
Power operated clamping mandrel

Pag. 92

EM-C

Mandrino espansibile a comando automatico con pinze autostaffanti, Ø piccoli
Power operated clamping mandrel with pull-down sleeves, small Ø

Pag. 94

EM-CL

Mandrino espansibile a comando automatico con pinze autostaffanti lunghe
Power operated clamping mandrel with long pull-down sleeves

Pag. 95

Flange EM-A/EM-B/EM-C - EM-A/EM-B/EM-C Adapters

Flange ISO-A per mandrini portapinze espansibili
ISO-A adapters for clamping mandrels

Pag. 96

Flange PEL - Workpiece Control Adapters

Pag. 97

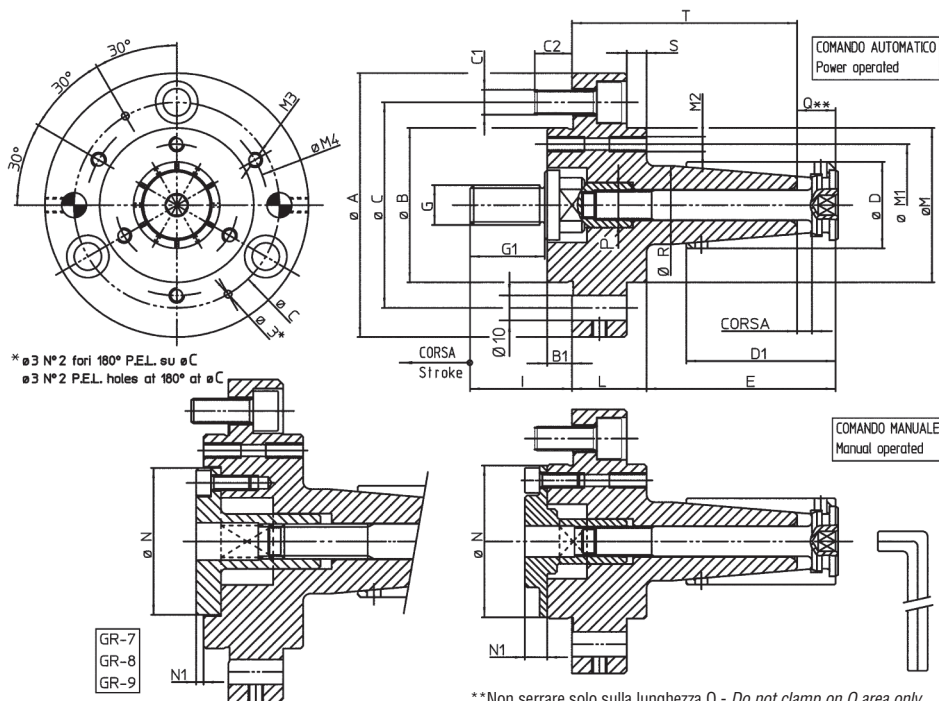
Lista parti di ricambio - Spare Parts list

Pag. 98

EM

Esempi di applicazioni
Application examples

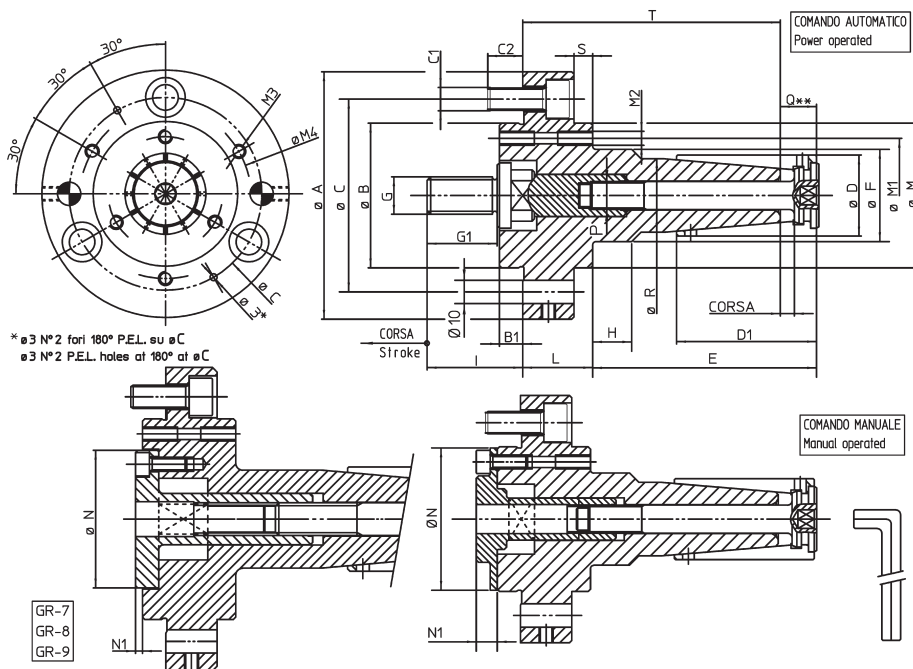
Pag. 99



**Non serrare solo sulla lunghezza Q - Do not clamp on Q area only
Soggetto a cambiamenti tecnici - Subject to technical changes

MPT tipo EM-A Type EM-A MPT		GR-1	GR-2	GR-3	GR-4	GR-5	GR-6	GR-7	GR-8	GR-9	GR-10	GR-11
A	mm	106	106	106	106	106	106	130	130	130	130	130
B	g5 mm	62	62	62	62	62	62	86	86	86	86	86
B1	mm	10	10	10	10	10	10	10	10	10	10	10
C	mm	82.6	82.6	82.6	82.6	82.6	82.6	104.8	104.8	104.8	104.8	104.8
C1	mm	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10
C2	mm	15	15	15	15	15	15	15	15	15	17	17
D	mm	Vedi tabelle - See tables										
D1	mm	35	40	46	50	60	60	80	90	100	122	140
E	mm	51	56	62	66	76	76	102	112	122	144	165
G	mm	M16	M16	M16	M16	M16	M16	M16	M16	M16	M16	M16
G1	mm	30	30	30	30	30	30	30	30	30	30	30
I	mm	41	41	41	41	41	41	41	41	41	41	41
L	mm	30	30	30	30	30	30	30	30	30	30	30
M	h7 mm	62	62	62	62	62	62	86	86	86	130	130
M1	mm	49	49	49	49	49	49	73	73	73	100	100
M2	mm	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6
M3	mm	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6
M4	mm	82.6	82.6	82.6	82.6	82.6	82.6	100	100	100	100	100
N	mm	61.5	61.5	61.5	61.5	61.5	61.5	59	59	59	85.5	85.5
N1	mm	9	9	9	9	9	9	3	3	3	11	11
P	mm	M6	M8	M10	M11x1.5	M12	M14	M14	M14	M14	M20	M20
Q	mm	12.5	14.5	14.5	15	15.5	16	24	26	26.5	27.5	32
R	mm	14	19	23	27	31.5	36	42	50	60	73	86
S	mm	8	8	8	8	8	8	8	8	8	-	-
T	mm	68.5	71.5	77.5	81	90.5	90	108	116	125.5	146.5	163

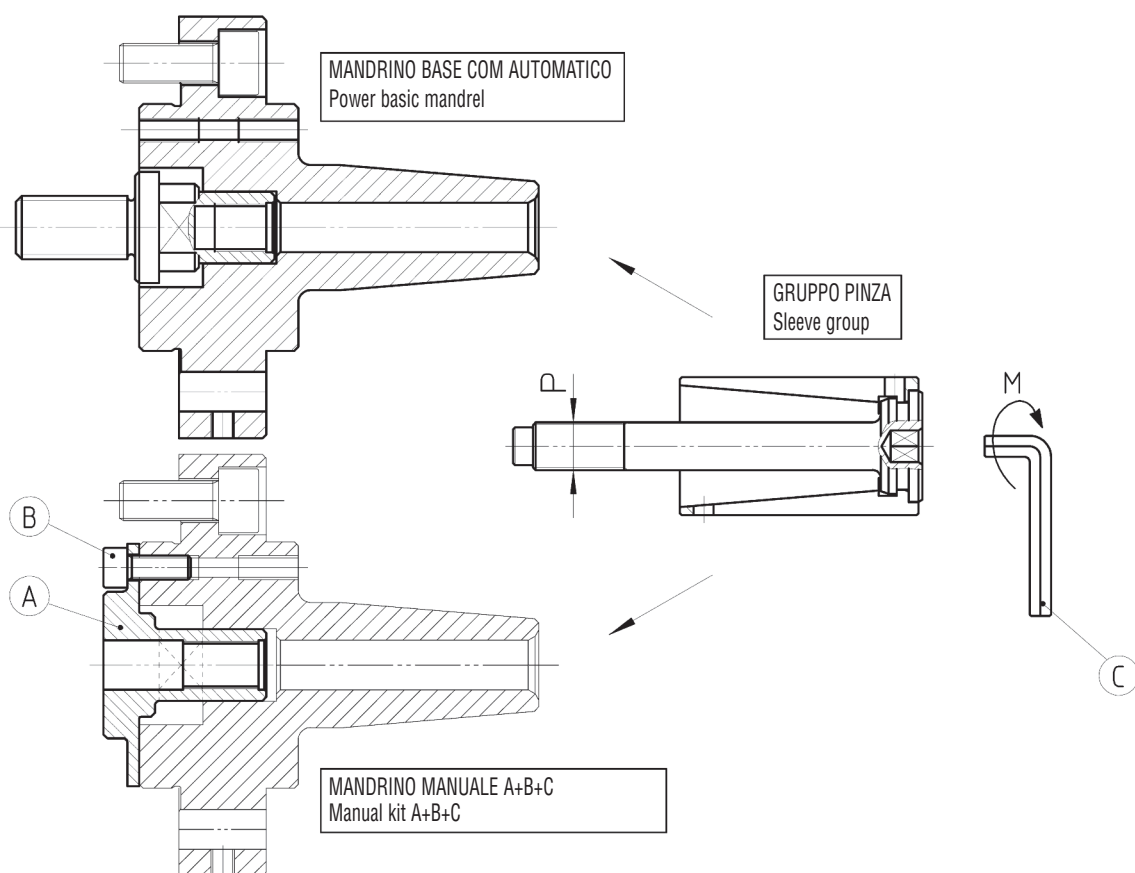
Corsa assiale - Axial stroke	mm	6	6	6	6	6	6	12	12	12	12	12
Espansione pinza sul ø Sleeve expansion on ø	mm	1	1	1	1	1	1	2	2	2	2	2
Campo di bloccaggio ø Clamping range ø	mm	14.7	19.7	24.7	29.7	34.7	39.7	44.7	54.7	64.7	81.7	101.7
Forza max. assiale - Max axial force	kN	5	7	12	12	15	20	20	20	25	25	30
Cilindri consigliati Recommended cylinders	CSN	100	150	200	200	200	200	200	200	250	250	250
	SIN-S	70	70	70	70	85	85	85	85	100	100	125



* 3 N°2 fori 180° P.E.L. su C
3 N°2 P.E.L. holes at 180° at C

** Non serrare solo sulla lunghezza Q - Do not clamp on Q area only
Soggetto a cambiamenti tecnici - Subject to technical changes

MPT tipo EM-AL Type EM-AL MPT		GR-1	GR-2	GR-3	GR-4	GR-5	GR-6	GR-7	GR-8	GR-9	GR-10	GR-11	
A	mm	106	106	106	106	106	106	130	130	130	130	130	
B	g5 mm	62	62	62	62	62	62	86	86	86	86	86	
B ₁	mm	10	10	10	10	10	10	10	10	10	10	10	
C	mm	82.6	82.6	82.6	82.6	82.6	82.6	104.8	104.8	104.8	104.8	104.8	
C ₁	mm	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	3 x M10	
C ₂	mm	15	15	15	15	15	15	15	15	15	17	17	
D	mm	Vedi tabelle - See tables											
D ₁	mm	35	40	46	50	60	60	80	90	100	122	140	
E	mm	76	86	97	106	116	116	152	158	192	218	245	
F	mm	22	23	26	-	-	-	-	-	-	-	-	
G	mm	M16	M16	M16	M16	M16	M16	M16	M16	M16	M16	M16	
G ₁	mm	30	30	30	30	30	30	30	30	30	30	30	
H	mm	25	30	35	-	-	-	-	-	-	-	-	
I	mm	41	41	41	41	41	41	41	41	41	41	41	
L	mm	30	30	30	30	30	30	30	30	30	30	30	
M	h7 mm	62	62	62	62	62	62	86	86	86	130	130	
M ₁	mm	49	49	49	49	49	49	73	73	73	100	100	
M ₂	mm	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	
M ₃	mm	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	3 x M6	
M ₄	mm	82.6	82.6	82.6	82.6	82.6	82.6	100	100	100	100	100	
N	mm	61.5	61.5	61.5	61.5	61.5	61.5	59	59	59	85.5	85.5	
N ₁	mm	9	9	9	9	9	9	3	3	3	11	11	
P	mm	M6	M8	M10	M11x1.5	M12	M14	M14	M14	M14	M20	M20	
Q	mm	12.5	14.5	14.5	15	15.5	16	24	26	26.5	27.5	32	
R	mm	14	19	23	27	31.5	36	42	50	60	73	86	
S	mm	8	8	8	8	8	8	8	8	8	-	-	
T	mm	93.5	101.5	112.5	121	130.5	130	158	162	195.5	220.5	243	
Allungamento rispetto a EM-A Elongation compared to EM-A		mm	+25	+30	+35	+40	+40	+40	+50	+46	+70	+74	+80
Corsa assiale - Axial stroke		mm	6	6	6	6	6	6	12	12	12	12	
Espansione pinza sul ø Sleeve expansion on ø		mm	1	1	1	1	1	1	2	2	2	2	
Campo di bloccaggio ø Clamping range ø		mm	14.7 19.7	19.7 24.7	24.7 29.7	29.7 34.7	34.7 39.7	39.7 44.7	44.7 54.7	54.7 64.7	64.7 82.7	81.7 101.7	101.7 131.7
Forza max. assiale - Max axial force		kN	5	7	12	12	15	20	20	20	25	25	30
Cilindri consigliati Recommended cylinders		CSN	100	150	200	200	200	200	200	200	250	250	250
		SIN-S	70	70	70	70	85	85	85	85	100	100	125

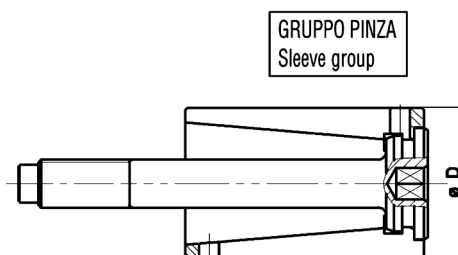


EM-A	P	M (N.m)
1	M6	9.5
2	M8	23
3	M10	45
4	M11x1,5	45
5	M12	70
6-9	M14	125
10-11	M20	300

Grandezza - Size 1		Grandezza - Size 2		Grandezza - Size 3		Grandezza - Size 4		Grandezza - Size 5		Grandezza - Size 6	
Gruppo pinza - Sleeve group		Gruppo pinza - Sleeve group		Gruppo pinza - Sleeve group		Gruppo pinza - Sleeve group		Gruppo pinza - Sleeve group		Gruppo pinza - Sleeve group	
D18.7	68300187	D23.7	68300237	D28.7	68300287	D33.7	68300337	D38.7	68300387	D43.7	68300437
D17.7	68300177	D22.7	68300227	D27.7	68300277	D32.7	68300327	D37.7	68300377	D42.7	68300427
D16.7	68300167	D21.7	68300217	D26.7	68300267	D31.7	68300317	D36.7	68300367	D41.7	68300417
D15.7	68300157	D20.7	68300207	D25.7	68300257	D30.7	68300307	D35.7	68300357	D40.7	68300407
D14.7	68300147	D19.7	68300197	D24.7	68300247	D29.7	68300297	D34.7	68300347	D39.7	68300397
Mandrino base automatico Power basic mandrel EM-A: 68100110 EM-AL: 68100111		Mandrino base automatico Power basic mandrel EM-A: 68100210 EM-AL: 68100211		Mandrino base automatico Power basic mandrel EM-A: 68100310 EM-AL: 68100311		Mandrino base automatico Power basic mandrel EM-A: 68100410 EM-AL: 68100411		Mandrino base automatico Power basic mandrel EM-A: 68100510 EM-AL: 68110511		Mandrino base automatico Power basic mandrel EM-A: 68100610 EM-AL: 68100611	
Kit comando manuale Manual kit EM-A: 68110110 EM-AL: 68110111		Kit comando manuale Manual kit EM-A: 68110210 EM-AL: 68110211		Kit comando manuale Manual kit EM-A: 68110310 EM-AL: 68110311		Kit comando manuale Manual kit EM-A: 68110410 EM-AL: 68110411		Kit comando manuale Manual kit EM-A: 68110510 EM-AL: 68110511		Kit comando manuale Manual kit EM-A: 68110610 EM-AL: 68110611	

Grandezza - Size 7		Grandezza - Size 8		Grandezza - Size 9		Grandezza - Size 10		Grandezza - Size 11	
Gruppo pinza - Sleeve group		Gruppo pinza - Sleeve group		Gruppo pinza - Sleeve group		Gruppo pinza - Sleeve group		Gruppo pinza - Sleeve group	
D52.7	68300527	D62.7	68300627	D80.7	68300807	D99.7	68300997	D129.7	68301297
D50.7	68300507	D60.7	68300607	D78.7	68300787	D97.7	68300977	D127.7	68301277
D49.7	68300497	D59.7	68300597	D76.7	68300767	D95.7	68300957	D125.7	68301257
D48.7	68300487	D58.7	68300587	D74.7	68300747	D93.7	68300937	D123.7	68301237
D46.7	68300467	D56.7	68300567	D72.7	68300727	D91.7	68300917	D121.7	68301217
D44.7	68300447	D54.7	68300547	D70.7	68300707	D89.7	68300897	D119.7	68301197
Mandrino base automatico Power basic mandrel EM-A: 68100710 EM-AL: 68100711		Mandrino base automatico Power basic mandrel EM-A: 68100810 EM-AL: 68100811		Mandrino base automatico Power basic mandrel EM-A: 68100910 EM-AL: 68100911		Mandrino base automatico Power basic mandrel EM-A: 68101010 EM-AL: 68101011		Mandrino base automatico Power basic mandrel EM-A: 68101110 EM-AL: 68101111	
Kit comando manuale Manual kit EM-A: 68110710 EM-AL: 68110711		Kit comando manuale Manual kit EM-A: 68110810 EM-AL: 68110811		Kit comando manuale Manual kit EM-A: 68110810 EM-AL: 68110811		Kit comando manuale Manual kit EM-A: 68111010 EM-AL: 68111011		Kit comando manuale Manual kit EM-A: 68111110 EM-AL: 68111111	

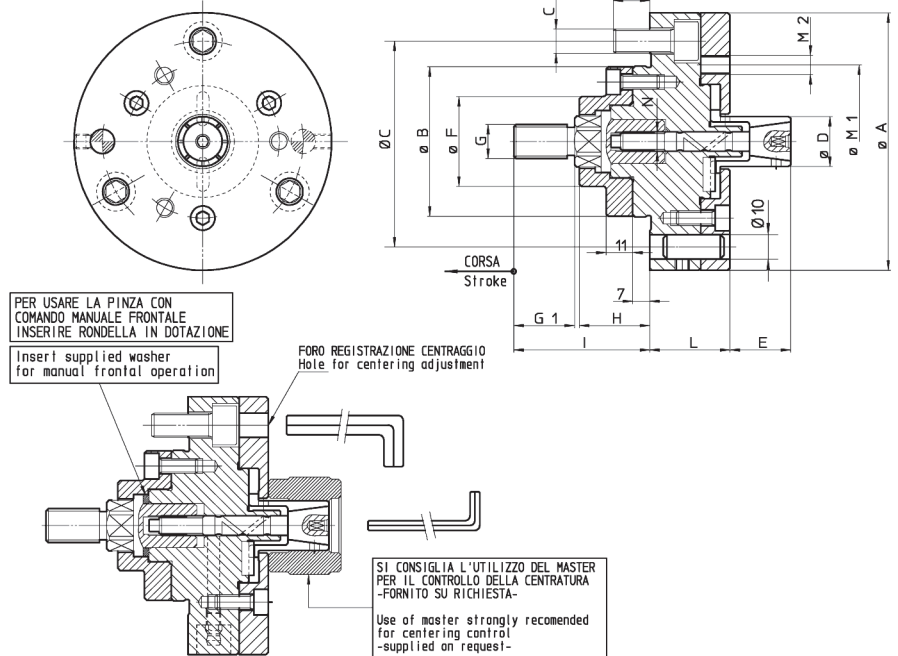
Pinze speciali con diametro maggiorato per mandrini a espansione tipo EM-A e EM-AL rettificabili a misura
Special increased pull-down sleeves for EM-A and EM-AL type clamping mandrels



MPT tipo EM-A Type EM-A MPT	Codice gruppo pinza Sleeve group code	Diametro nominale pinza Nominal sleeve diameter	Campo di riduzione diametro Diameter reduction range	
			da / from	a / to
Grandezza / Size 1	01 8941 21	D 23.7	D 23.7	D 19
Grandezza / Size 2	01 8941 22	D 28.7	D 28.7	D 24
Grandezza / Size 3	01 8941 23	D 33.7	D 33.7	D 29
Grandezza / Size 4	01 8941 24	D 38.7	D 38.7	D 34
Grandezza / Size 5	01 8941 25	D 43.7	D 43.7	D 39
Grandezza / Size 6	01 8941 26	D 52.7	D 52.7	D 44
Grandezza / Size 7	01 8941 27	D 62.7	D 62.7	D 53
Grandezza / Size 8	01 8941 28	D 77.7	D 77.7	D 63
Grandezza / Size 9	01 8941 29	D 95.7	D 95.7	D 81
Grandezza / Size 10	01 8941 30	D 114.7	D 114.7	D 100
Grandezza / Size 11	01 8941 31	D 145.7	D 145.7	D 130

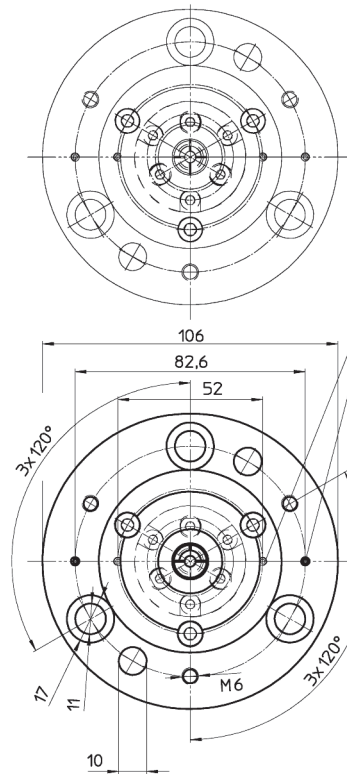
ATTENZIONE: Il Codice Gruppo Pinza si riferisce al Diametro Nominale Pinza. La codifica di un gruppo pinza rettificato viene effettuata al momento dell'ordine.

WARNING: The Sleeve Group Code refers to the Nominal Sleeve Diameter. The grinded sleeve group coding is done when ordering.



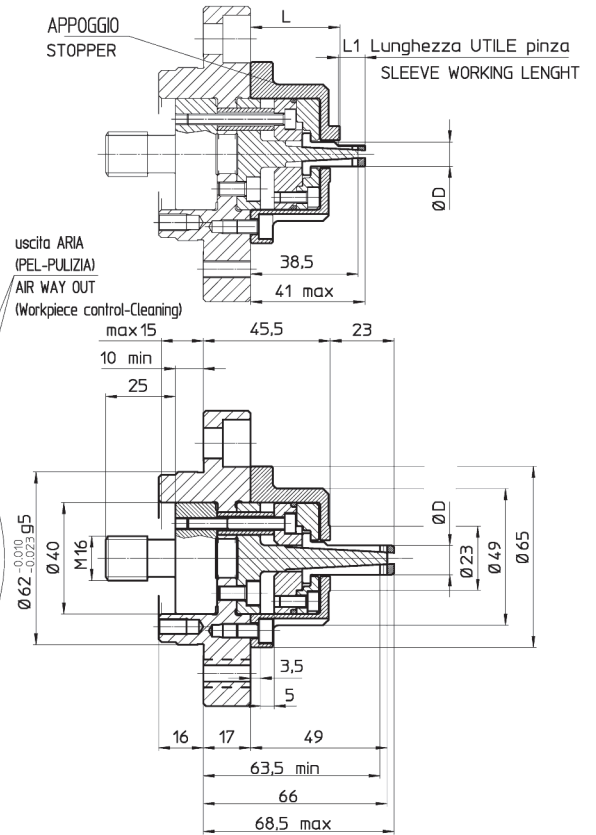
Soggetto a cambiamenti tecnici - Subject to technical changes

MPT tipo EM-B Type EM-B MPT		GR-0	GR-1	GR-2	GR-3	GR-4	
A	mm	106	106	106	125	180	
B	g5 mm	62	62	62	62	86	
C	mm	82.6	82.6	82.6	82.6	133.4	
C1	mm	3 x M10	3 x M10	3 x M10	3 x M10	3 x M12	
C2	mm	16	16	16	16	15	
D	mm	Vedi tabelle - See tables					
E	mm	23	28	43	58	85	
F	mm	37	37	37	37	55	
G	mm	M16	M16	M16	M16	M16	
G1	mm	25	25	25	25	25	
H	mm	29	29	29	29	36	
I	mm	56	56	56	56	62	
L	mm	35	37	37	37	50	
M1	mm	63	68	85	104	162	
M2	mm	3 x M8	3 x M8	3 x M8	6 x M8	6 x M8	
N	mm	M8	M10	M14	M14	M18	
Foro registrazione centraggio Hole for centering adjustment		SI/YES	SI/YES	SI/YES	da/from D55 a/to D66	da/from D80 a/to D108.5	
Corsa assiale - Axial stroke		mm	2.5	2.5	2.5	5	6.5
Espansione pinza sul \varnothing Sleeve expansion on \varnothing		mm	0.5	0.5	0.5	1	1.5
Campo di bloccaggio \varnothing - Clamping range \varnothing		mm	16 - 25.5	20 - 40.5	35 - 60.5	55 - 81	80 - 131
Forza max. assiale - Max axial force		kN	7	12	20	20	25
Cilindri consigliati Recommended cylinders		CSN	150	200	200	200	250
		SIN-S	70	70	85	85	100



Soggetto a cambiamenti tecnici
Subject to technical changes

EM-C 1



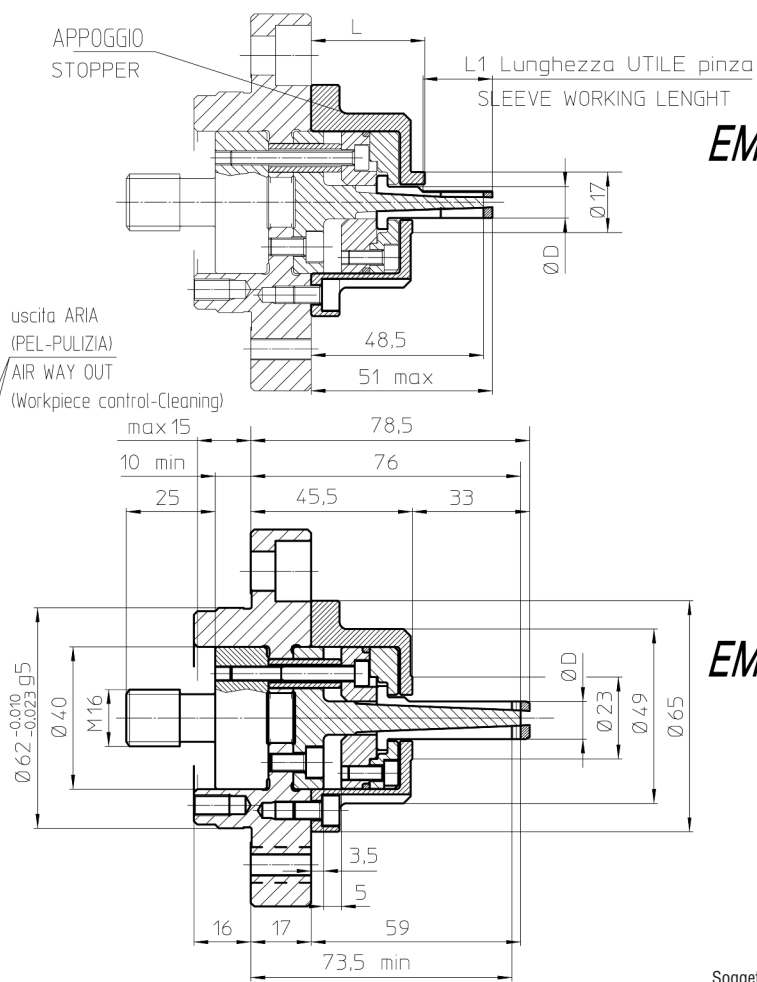
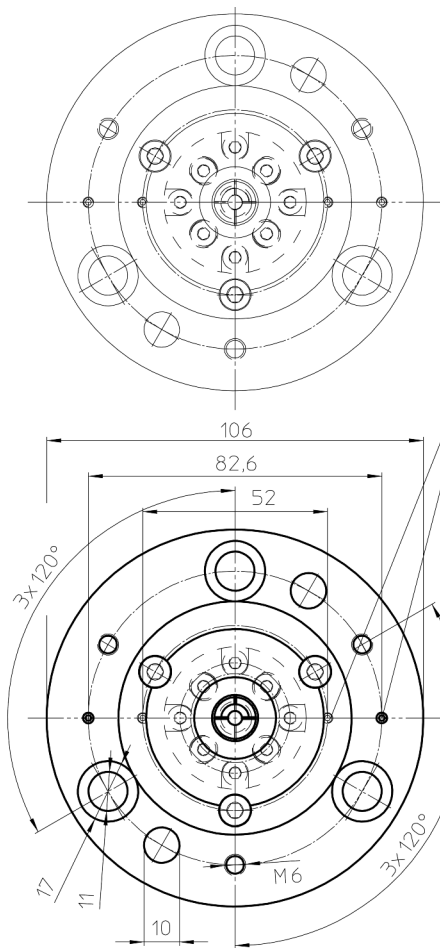
EM-C 2-3

EM-C 1				EM-C 2			EM-C 3			
Cod. Mandrino Chuck Code	D	L	L1	Cod. Pinza Sleeve Code	Cod. Mandrino Chuck Code	D	Cod. Pinza Sleeve Code	Cod. Mandrino Chuck Code	D	Cod. Pinza Sleeve Code
EM-C1.1	5.8			68270058	68100230	9.3	68270093	68100330	12.3	68270123
68100130	6.3	32	9.5	68270063		9.8	68270098		12.8	68270128
	6.8			68270068		10.3	68270103		13.3	68270133
	7.3			68270073		10.8	68270108		13.8	68270138
EM-C1.2	7.8	28.5	13	68270078		11.3	68270113		14.3	68270143
68110130	8.3			68270083	11.8	68270118	14.8	68270148		
	8.8			68270088			15.3	68270153		
							15.8	68270158		

Corsa assiale - Axial stroke	mm	5	5	5
Forza max. assiale Max axial force	kN	1	2	3
Espansione pinza sul ø Sleeve expansion on ø	mm	0.5	0.5	0.5
Campo di bloccaggio ø Clamping range ø	mm	5.8 - 9.3	9.3 - 12.3	12.3 - 16.3
Cilindri consigliati Recommended cylinders	CSN SIN-S	100 70	100 70	100 70

Per flange di attacco vedi pagina 96.
Per applicazioni speciali contattare il nostro ufficio tecnico.

For adapters see page 96.
For customized applications please call our technical office.



EM-CL 1

EM-CL2-3

Soggetto a cambiamenti tecnici
Subject to technical changes

EM-CL 1					EM-CL 2			EM-CL 3		
Cod. Mandrino Chuck Code	D	L	L1	Cod. Pinza Sleeve Code	Cod. Mandrino Chuck Code	D	Cod. Pinza Sleeve Code	Cod. Mandrino Chuck Code	D	Cod. Pinza Sleeve Code
EM-C1.1	5.8			68260058	68100240	9.3	68260093	68100340	12.3	68260123
68100140	6.1			68260061		9.6	68260096		12.6	68260126
	6.4	32	19.5	68260064		9.9	68260099		12.9	68260129
	6.7			68260067		10.2	68260102		13.2	68260132
	7.0			68260070		10.5	68260105		13.5	68260135
	7.3			68260073		10.8	68260108		13.8	68260138
EM-C1.2	7.6	28.5	23	68260076		11.1	68260111		14.1	68260141
68110140	7.9			68260079		11.4	68260114		14.4	68260144
	8.2			68260082		11.7	68260117		14.7	68260147
	8.5			68260085		12.0	68260120		15.0	68260150
	8.8			68260088			15.3	68260153		
	9.1			68260091			15.6	68260156		
							15.9	68260159		
							16.2	68260162		

Corsa assiale - Axial stroke	mm	5	5	5
Forza max. assiale Max axial force	kN	1	2	3
Espansione pinza sul ø Sleeve expansion on ø	mm	0.3	0.3	0.3
Campo di bloccaggio ø Clamping range ø	mm	5.8 - 9.4	9.3 - 12.3	12.3 - 16.5
Cilindri consigliati Recommended cylinders	CSN SIN-S	100 70	100 70	100 70

Per flange di attacco vedi
pagina 96.
Per applicazioni speciali
contattare il nostro ufficio
tecnico.

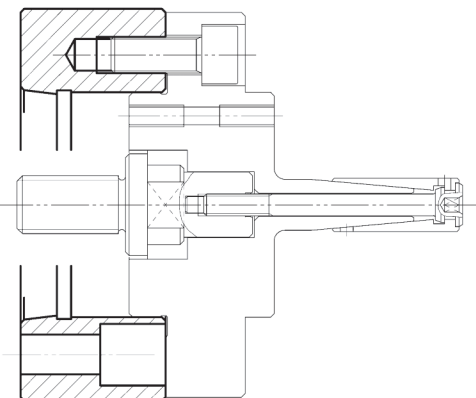
*For adapters see page 96.
For customized applications
please call our technical
office.*

Flange EM-A/B/C

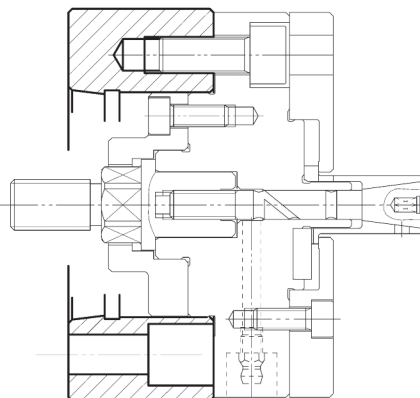
EM-A/B/C chuck adapters

Mandrino espansibile con pinze autostaffanti
Clamping mandrel with pull-down sleeves

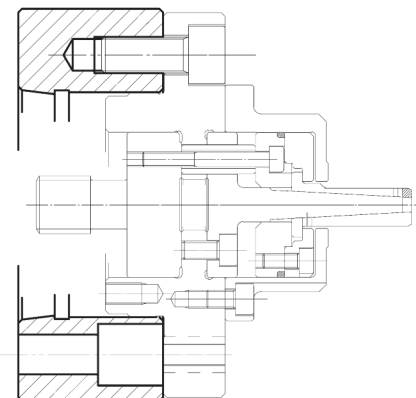
TIPO - Type EM-A



TIPO - Type EM-B

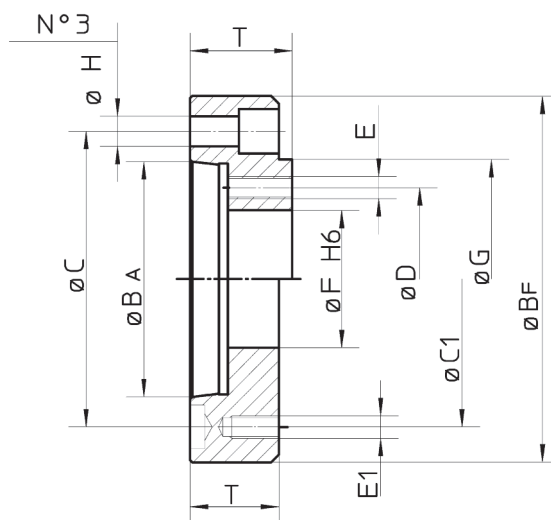


TIPO - Type EM-C



Soggetto a cambiamenti tecnici - Subject to technical changes

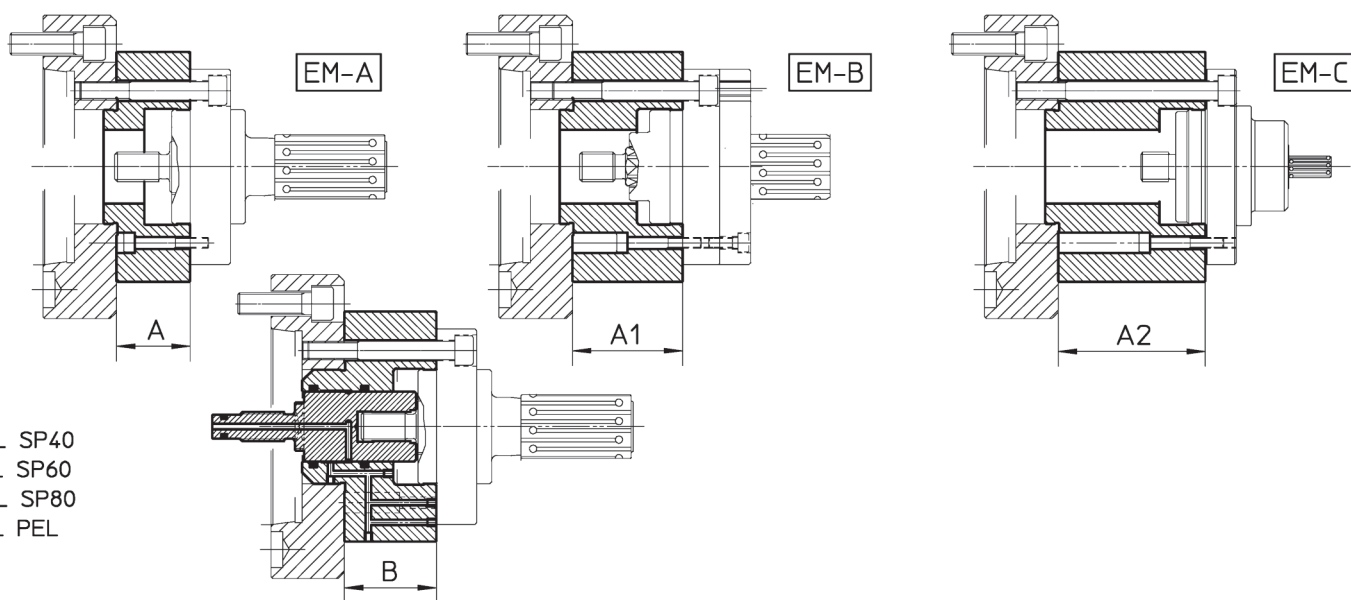
Flangia di attacco Adapter	Tipo - Type EM-A	Tipo - Type EM-B	Tipo - Type EM-C
Flangia ISO-A4 D62 espans EM - Adapter 24140100	1-2-3-4-5-6	0-1-2-3	1-2-3
Flangia ISO-A5 D62 espans EM - Adapter 24150100			
Flangia ISO-A6 D62 espans EM - Adapter 24160100			
Flangia ISO-A8 D62 espans EM - Adapter 24180100			
Flangia ISO-A5 D86 espans EM - Adapter 24150400	7-8-9-10-11	N.D.	N.D.
Flangia ISO-A6 D86 espans EM - Adapter 24160400			
Flangia ISO-A8 D86 espans EM - Adapter 24180400			
Flangia ISO-A11 D86 espans EM - Adapter 24110400			



Flangia no. Adapter Id. no.	Naso macch. Spindle nose	BF mm	BA mm	C mm	C1 mm	D mm	E mm	E1 mm	F mm	G mm	H mm	T mm
24140100	A4	108	63.513	82.6	82.6	-	-	3 x M10	62	-	11	40
24150100	A5	127	82.563	104.8	82.6	-	-	3 x M10	62	-	11.5	40
24160100	A6	165	106.375	133.4	-	82.6	3 x M10	-	62	-	13.5	40
24180100	A8	210	139.719	171.4	-	82.6	3 x M10	-	62	120	17	40
24150400	A5	135	82.563	104.8	104.8	-	-	3 x M10	86	-	12	40
24160400	A6	165	106.375	133.4	133.4	104.8	3 x M10	3 x M12	86	-	13.5	40
24180400	A8	210	139.719	171.4	133.4	104.8	3 x M10	3 x M12	86	-	17	40
24110400	A11	280	196.869	235	133.4	104.8	3 x M10	3 x M12	86	-	21	40

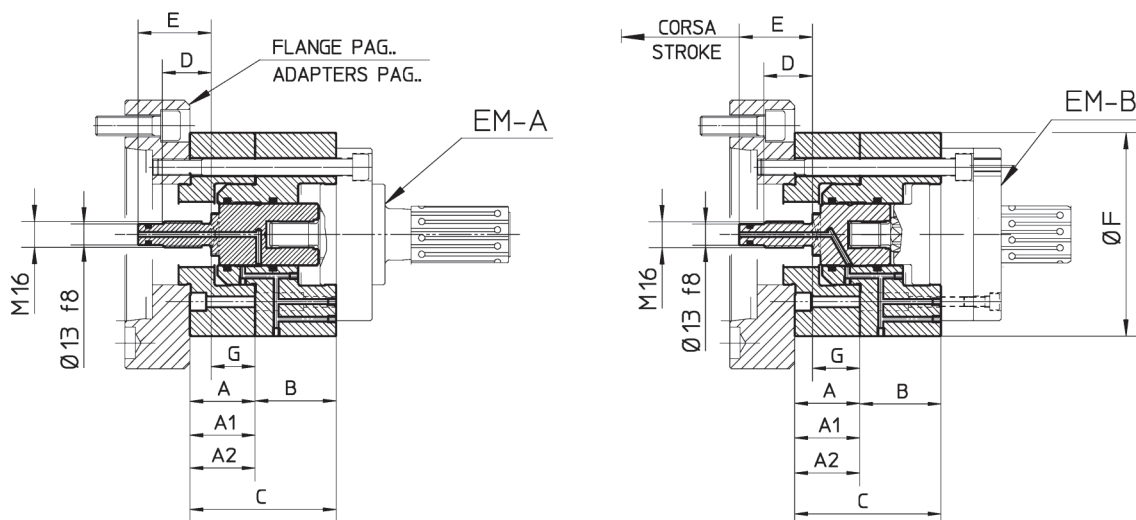
Flange PEL Workpiece chuck adapters

Flange PEL + distanziali per mandrini espansibili
Workpiece control + extended adapters for clamping mandrels



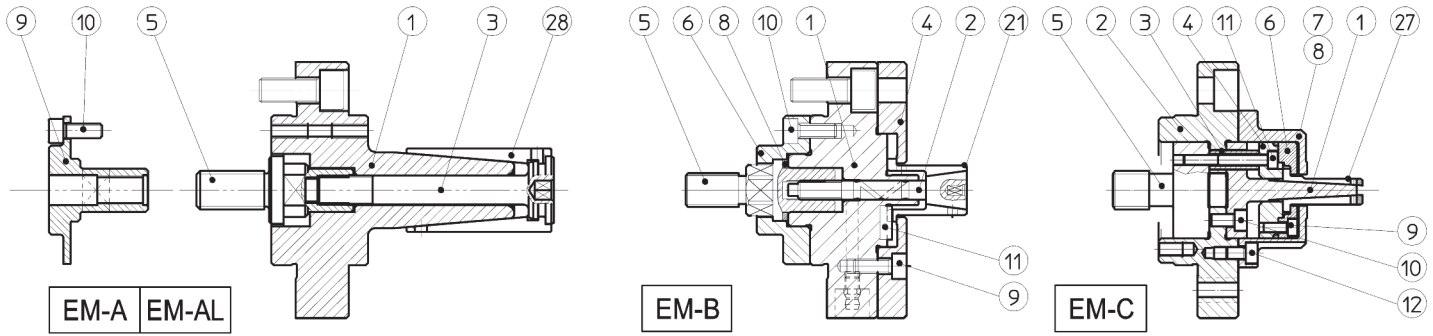
EM-A	EM-B	EM-C	A	A1	A2	B (PEL)	C	D	E	ØF	G
Grandezza/Size											EM-A EM-B
1÷6	0÷3	1÷3	40	60	80	50	A+B = 90 (PEL) A1+B = 110 (PEL) A2+B = 130 (PEL) A+A = 80 A+A1 = 100	30	45	125	27 29
Codice/Code			68610110	68620110	68630110	EM-A 68600110 EM-B 68600120	A1+A1 = 120 A2+A1 = 140				
7÷11	-	-	40	60	-	55	A+B = 95 (PEL) A1+B = 115 (PEL) A+A = 80 A+A1 = 100	30	45	130	22
Codice/Code			68610710	68620710	-	68600710	A1+A1 = 120				
-	4	-	40	60	-	60	A+B = 100 (PEL) A1+B = 120 (PEL) A+A = 80 A+A1 = 100	30	45	180	25
Codice/Code			68614020	68624020	-	68604020	A1+A1 = 120				

ESEMPI DI MONTAGGIO - ASSEMBLY EXAMPLES



Lista parti di ricambio

Spare parts list



EM-A Grandezza/Size

Part. no.	GR. 1	GR. 2	GR. 3	GR. 4	GR. 5	GR. 6	GR. 7	GR. 8	GR. 9	GR. 10	GR. 11
1	68010110	68010210	68010310	68010410	68010510	68010610	68010710	68010810	68010910	68011010	68011110
3	68030110	68030210	68030310	68030410	68030510	68030610	68030710	68030810	68030910	68031010	68031110
5	68050110	68050210	68050310	68050410	68050510	68050610	68050710	68050710	68050710	68051010	68051110
9	68090110	68090210	68090310	68090410	68090510	68090610	68090710	68090710	68090710	68091010	68091110
10	3-M6x16										
3 - 28	Gruppo pinza - per i ricambi vedi catalogo pag. 90 / Sleeve group - see catalogue page 90 for spares										

EM-AL Grandezza/Size

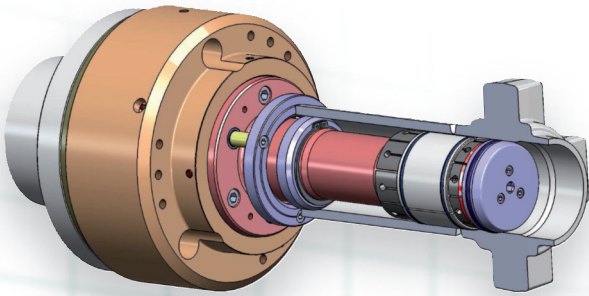
Part. no.	GR. 1	GR. 2	GR. 3	GR. 4	GR. 5	GR. 6	GR. 7	GR. 8	GR. 9	GR. 10	GR. 11
1	68010111	68010211	68010311	68010411	68010511	68010611	68010711	68010811	68010911	68011011	68011111
3	68030110	68030210	68030310	68030410	68030510	68030610	68030710	68030810	68030910	68031010	68031110
5	68050111	68050211	68050311	68050411	68050511	68050611	68050711	68050811	68050911	68051011	68051111
9	68090111	68090211	68090311	68090411	68090511	68090611	68090711	68090811	68090911	68091011	68091111
10	3-M6x16										
3 - 28	Gruppo pinza - per i ricambi vedi catalogo pag. 90 / Sleeve group - see catalogue page 90 for spares										

EM-B Grandezza/Size

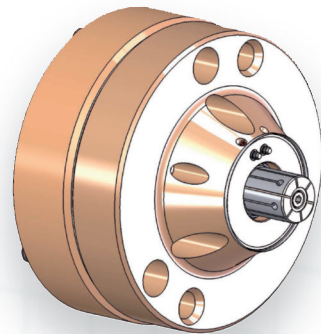
Part. no.	GR. 0	GR. 1	GR. 2	GR. 3	GR. 4	
1	68010021	68011021	68012021	68013021	68014021	
5	68050021	68051021	68052021	68053021	68054021	
6	68060020		68063020		68064020	
8	68080020		68082020	68083020	68084020	
9		3-M6x16		6-M6x16	6-M8x20	
10			6-M6x12			
11		71231137		71231140	68094020 + 71113310	
2 - 4 - 21	Per i ricambi del disco, del cono e della pinza - vedi catalogo pag. 93 / For disk, taper and sleeve spares - see catalogue page 93					

EM-C Grandezza/Size

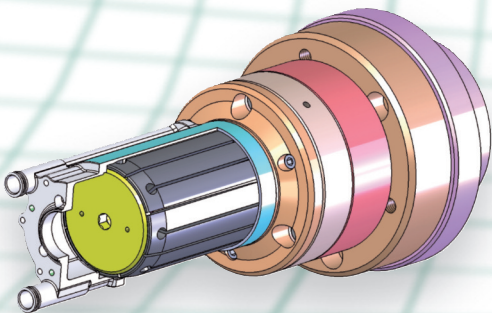
Part. no.	GR. 1.1	GR. 1.2	GR. 2	GR. 3	
1	68010130		68010230	68010330	
2		68020130			
3		68030130			
4		68040130			
5		68050130			
6	68060130		68060230	68060330	
7	68070130	-	68070230	68070330	
8	-	68080130	-	-	
9		3-M4x10			
10		3-M5x10			
11		3-M4x35			
12		3-M5x8			
27	Per i ricambi delle pinze - vedi catalogo pag. 94 / For sleeves spares - see catalogue page 94				

**01 8939 00**

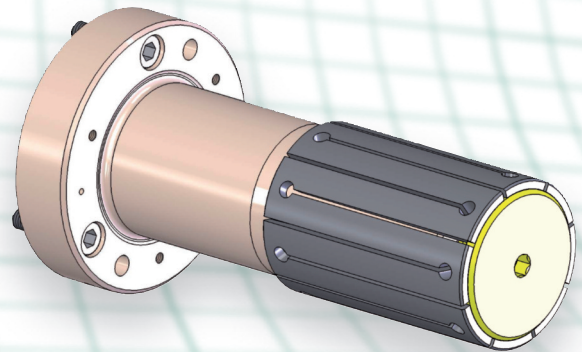
Gruppo pinza speciale EM-AL 10 con appoggio retrattile corsa 25 mm
Special EM-AL-10 mandrel group with retractable locator stroke 25 mm

**01 8855 00**

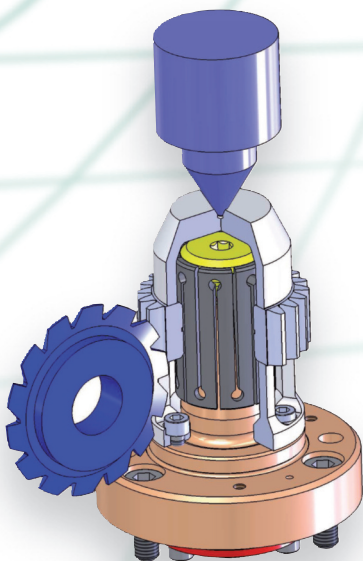
Centraggio interno su finiti d. 22-30 su pinza EM-C con aggancio rapido
Internal centering of machined parts dia. 22-30 on EM-C mandrel with quick mounting

**01 8918 00**

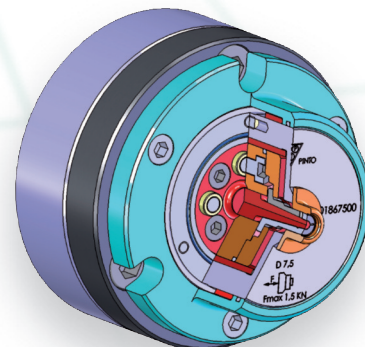
Centraggio interno corpo motore elettrico su EM-A 10 pinza d. 80,7 su testa secondaria
Internal centering of electric motor on EM-A-10 mandrel, sleeve dia. 80,7 on secondary spindle

**01 9085 99**

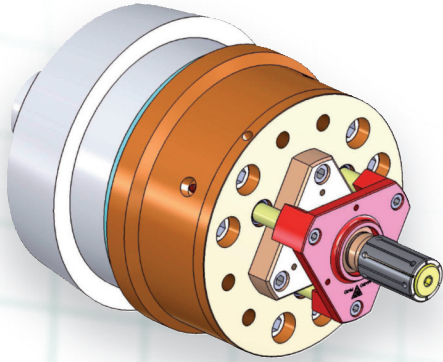
Mandrino portapinze espansibile EM-AL 10 con corpo allungato a 196 mm
Expanding mandrel EM-AL 10 with extended body 196 mm

**01 9008 99**

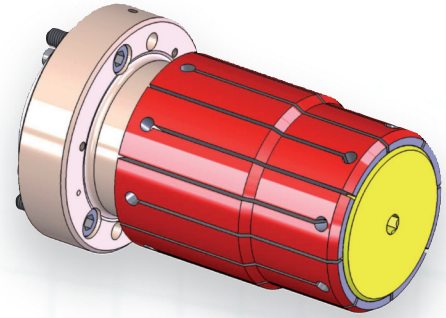
Centraggio interno per presa ingranaggio su dia. primitivo 40 mm. su portapinze tipo EM-A 6
Internal clamping on the 40 mm. pitch diameter of a gear on expanding mandrel EM-A-6

**01 8675 00**

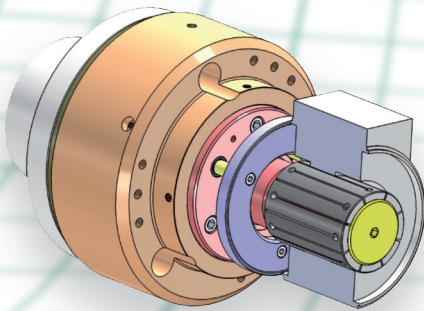
Gruppo pinza speciale EM-C con bloccaggio interno d. 7,5 mm dotato di espulsore
Special EM-C mandrel group with internal clamping d. 7,5 mm, with ejector

**01 8963 62**

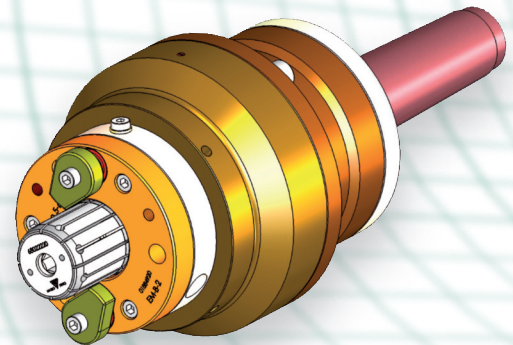
Gruppo pinza speciale EM-A GR5 dotato di appoggio retrattile con corsa 25 mm
EM-A-GR5 special mandrel group, with retractable stop, stroke 25 mm

**01 9018 18**

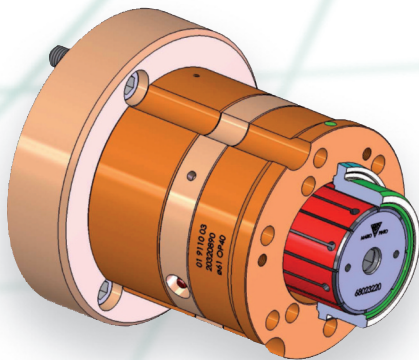
Mandrino portapinze ad espansione tipo EM-A 11 con pinza scaricata d. 107.77 per passaggio utensile
Expanding mandrel EM-A-11 with sleeve ground to dia. 170.77 for tool passage

**01 8988 00**

Gruppo pinza speciale EM-AL GR10 dotato di appoggio retrattile con corsa 25 mm
EM-AL GR10 special mandrel group, with retractable stop, stroke 25 mm

**01 8849 00**

Gruppo pinza speciale EM-A per contropunta con bloccaggio a spinta
Special EM-A mandrel group for tailstock, push-to-close clamping

**01 9110 00**

Centraggio interno boccia d. 61 su mandrino tipo EM-B 3 + passaggio PEL
Internal centering of a dia. 61 bush on mandrel EM-B-3 + air control passage