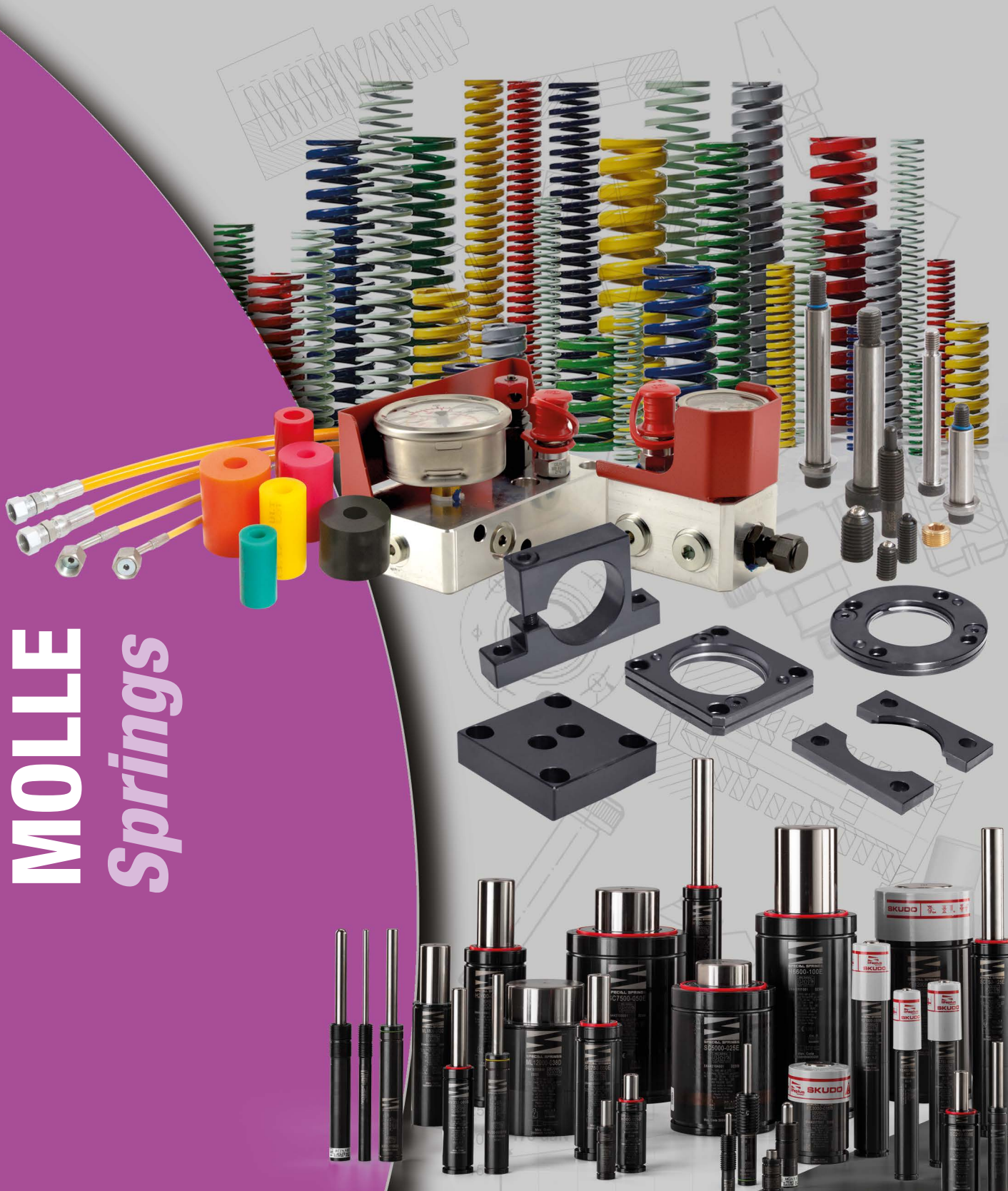




MOLLE *Springs*



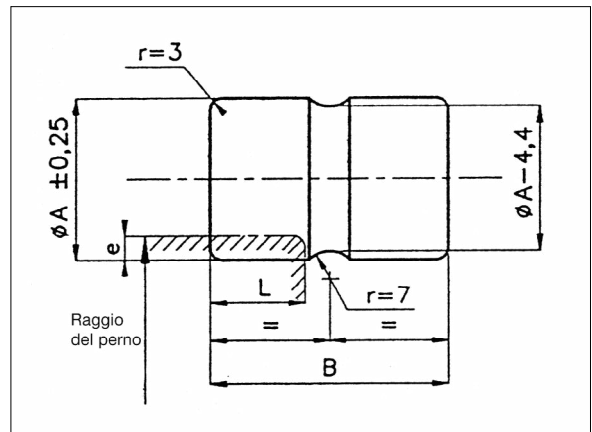
A519  Ammortizzatore Shock absorber pag. 4.4	A518  Ammortizzatore Shock absorber pag. 4.4	385M 386M 387M 388M  Molle forate per stampi in poliuretano Elastomer springs-hollow pag. 4.5	385F 386F 387F 388F  Barre forate per stampi Elastomer hollow bars pag. 4.6	385P 386P 387P 388P  Barre piene per stampi Elastomer solid bars pag. 4.6	389  Sede metalliche Metal seats pag. 4.6	384R  Rondelle per molle in poliuretano Washer for elastomer springs pag. 4.6
399  Colonnine di guida per molle in elastomero Guide bolts pag. 4.7	384F  Perno di supporto per molle in poliuretano Retainer bolt pag. 4.7	384P  Perno per tasselli Retainer bolt pag. 4.7	382  Tassello attenuazione rumorosità Block attenuation noisiness pag. 4.8	T38 T39  Tassello attenuazione rumorosità Block attenuation noisiness (stripper) pag. 4.8	390  Puntalini Elastomer ejector pins pag. 4.8	383  Estrattori per punzoni (92 shore) Strippers for punches pag. 4.9
384  Tassello per ammortizzamento (90 shore) Block for cushioning pag. 4.9	DIAGRAMMI  Diagrammi di carico per molle in elastomero - Forate Load diagrams for elastomer springs - Hollow pag. 4.10 / 4.11	391  Serie verde Molle carico leggero Light load springs pag. 4.12 / 4.13	392  Serie blu Molle carico medio Medium load springs pag. 4.14 / 4.15	393  Serie rossa Molle carico forte Strong load springs pag. 4.16 / 4.17	394  Serie gialla Molle carico extra-forte Extra-strong load springs pag. 4.18 / 4.19	396  Viti a colletto con distanziale rettificato Shoulder screws with ground spacer pag. 4.20
397  Viti a testa cilindrica con gambo rettificato codolo filettato ed esagono incassato pag. 4.21	X346  Gruppi molla precompressi Precompressed unit pag. 4.22 / 4.23	X346  Gruppi molla precompressi Precompressed unit pag. 4.23	398  Posizionatori con sfera e intaglio per cacciavite Spring plungers, with ball and slot pag. 4.24	22070-....  Espulsori EH 22070 Esecuzione lunga Spring plunger, long pag. 4.24	22060-....  Posizionatori con esagono incassato Spring plunger with internal hexagon pag. 4.25	M314  Espulsore a molla Spring plunger pag. 4.25
M314-03  Espulsore a molla Spring plunger pag. 4.26	S504-03  Espulsore a molla VDI 3004 Spring plunger VDI 3004 pag. 4.26	22070-....  Espulsori EH 22070 esecuzione liscia Spring plungers, smooth pag. 4.26	MOLL  Molle a filo tondo speciali Special spring pag. 4.26	SPECIAL SPRINGS  Cilindri molla ad azoto Nitrogen Gas Springs pag. 4.27	SPECIAL SPRINGS  Gamma cilindri Selection tab pag. 4.28	Serie NE - NG  Espulsori a gas Gas ejector pag. 4.29
NE 16 x 1,5  Espulsori a gas Gas ejector pag. 4.30	NE 16 x 2  Espulsori a gas Gas ejector pag. 4.31	NE 24 x 1,5  Espulsori a gas Gas ejector pag. 4.32	NG 16 x 1,5  Espulsori a gas Gas ejector pag. 4.33	NG 24 x 1,5  Espulsori a gas Gas ejector pag. 4.34	Serie M  Cilindri molla ad azoto Nitrogen gas spring pag. 4.35	M 50  Cilindri molla ad azoto Nitrogen gas spring pag. 4.36
M 50 TBI threaded  Cilindri molla ad azoto Nitrogen gas spring pag. 4.37	M 50 TBM1 threaded  Cilindri molla ad azoto Nitrogen gas spring pag. 4.38	M 50 TBM2 threaded  Cilindri molla ad azoto Nitrogen gas spring pag. 4.39	M 50 TEM threaded  Cilindri molla ad azoto Nitrogen gas spring pag. 4.40	M 70  Cilindri molla ad azoto Nitrogen gas spring pag. 4.41	M 90  Cilindri molla ad azoto Nitrogen gas spring pag. 4.42	M 90 TBM threaded  Cilindri molla ad azoto Nitrogen gas spring pag. 4.43
M 90 TEM threaded  Cilindri molla ad azoto Nitrogen gas spring pag. 4.44	M 90 TBI threaded  Cilindri molla ad azoto Nitrogen gas spring pag. 4.45	M 200  Cilindri molla ad azoto Nitrogen gas spring pag. 4.46	M 300  Cilindri molla ad azoto Nitrogen gas spring pag. 4.47	Serie RV  Cilindri molla ad azoto Nitrogen gas spring pag. 4.48	RV 170  Cilindri molla ad azoto Nitrogen gas spring pag. 4.49	RV 320  Cilindri molla ad azoto Nitrogen gas spring pag. 4.50

Ammortizzatori in poliuretano

Shock absorber



Ammortizzatore



Codice	Materiale	Quota senza tolleranza
Cod. A519	Poliuretano 92 Shore	$\pm 0,5$

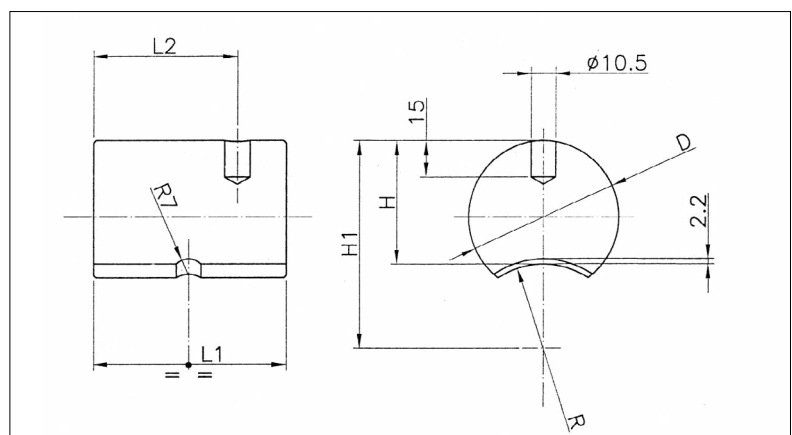
Codice	ϕA	B	Compressione massima		Lunghezza appoggio L	Codice PSA
			%	e		
A519-25	25	45	12	3	17	Z000404675
A519-32	32	50	18	6	17	Z000404676
A519-40	40	60	15	6	18	X346563970
A519-50	50	70	16	8	25	Z000404677
A519-63	63	80	12	8	30	X346564970
A519-80	80	90	12	10	34	Z000404678

PSA PEUGEOT CITROËN

Esempio di ordinazione/Order example: A 519 - 25 (codice)

MOLLE
Springs

Ammortizzatore



Codice	Materiale
Cod. A518	Poliuretano 92 Shore

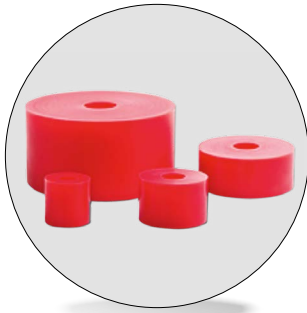
Codice	Tipo	D	H	H1	L1	L2	R
A518 - 2	2	40	32	50	60	45	18
A518 - 3	3	50	40	63	80	60	23
A518 - 4	4	63	51	86	80	60	35

Esempio di ordinazione/Order example: A 518 - 2 (codice)

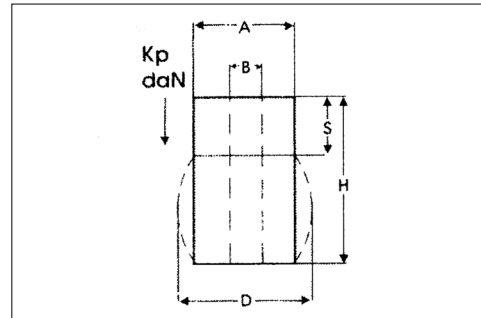
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Molle forate per stampi in poliuretano

Elastomer springs-hollow



Codice
Cod. 385M Ultraflex 92 (Pronte)
Cod. 386M Ultraflex 82
Cod. 387M Adipol 90
Cod. 388M Ultraflex 94



Compressione massima	ULTRAFLEX 82					ULTRAFLEX 92			ADIPOL 90			ULTRAFLEX 94			
	A	B	H	S	D	KP	S	D	KP	S	D	KP	S	D	KP
16	6,5	16	5,6				4,8			4,8			4		
16	6,5	20	7				6			6			5		
16	6,5	25	8,7	22		80	7,5	19	130	7,5	20	140	6,2	19	160
16	6,5	32	11,2				9,6			9,6			8		
20	8,5	16	5,6				4,8			4,8			4		
20	8,5	20	7				6			6			5		
20	8,5	25	8,7	28		150	7,5	26	200	7,5	27	210	6,2	25	325
20	8,5	32	11,2				9,6			9,6			8		
20	8,5	40	14				12			12			10		
25	10,5	16	5,6				4,8			4,8			4		
25	10,5	20	7				6			6			5		
25	10,5	25	8,7	33		210	7,5	30	300	7,5	31	310	6,2	29	450
25	10,5	32	11,2				9,6			9,6			8		
25	10,5	40	14				12			12			10		
25	10,5	50	17,5				15			15			12,5		
32	13,5	16	5,6				4,8			4,8			4		
32	13,5	20	7				6			6			5		
32	13,5	25	8,7	43		360	7,5	41	580	7,5	40	580	6,2	38	800
32	13,5	32	11,2				9,6			9,6			8		
32	13,5	40	14				12			12			10		
32	13,5	50	17,5				15			15			12,5		
32	13,5	63	22				19			19			15,7		
40	13,5	20	7				6			6			5		
40	13,5	25	8,7				7,5			7,5			6,2		
40	13,5	32	11,2	54		650	9,6	50	1200	9,6	50	900	8	47	1500
40	13,5	40	14				12			12			10		
40	13,5	50	17,5				15			15			12,5		
40	13,5	63	22				19			19			15,7		
40	13,5	80	28				24			24			20		
40	13,5	80	28				24			24			20		
50	17	25	8,7				7,5			7,5			6,2		
50	17	32	11,2				9,6			9,6			8		
50	17	40	14				12			12			10		
50	17	50	17,5	65		1100	15	62	1700	15	62	1600	12,5	60	2000
50	17	63	22				19			19			15,7		
50	17	80	28				24			24			20		
50	17	100	35				30			30			25		
63	17	32	11,2				9,6			9,6			8		
63	17	40	14				12			12			10		
63	17	50	17,5	81		1600	15	78	2500	15	76	2500	12,5	74	3500
63	17	63	22				19			19			15,7		
63	17	80	28				24			24			20		
63	17	100	35				30			30			25		
63	17	125	43,7				37,5			37,5			31,2		
80	21	40	14				12			12			10		
80	21	50	17,5				15			15			12,5		
80	21	63	22				19			19			15,7		
80	21	80	28	103		2600	24	98	4300	24	98	4000	20	95	6000
80	21	100	35				30			30			25		
80	21	125	43,7				37,5			37,5			31,2		
80	21	160	56				48			48			40		
100	21	50	17,5				15			15			12,5		
100	21	63	22				19			19			15,7		
100	21	80	28				24			24			20		
100	21	100	35	126		4300	30	120	6500	30	123	5600	25	120	10000
100	21	125	43,7				37,5			37,5			31,2		
100	21	160	56				48			48			40		
125	27	63	22				19			19			15,7		
125	27	80	28				24			24			20		
125	27	100	35	160		6400	30	152	10500	30	155	9000	25	150	15000
125	27	125	43,7				37,5			37,5			31,2		
125	27	160	56				48			48			40		
125	27	200	70				60			60			50		

Esempio di ordinazione/Order example = 385M - 40x50 (AxH)

CF Torino - È vietata la riproduzione, anche parziale, del presente catalogo.

MOLLE Springs

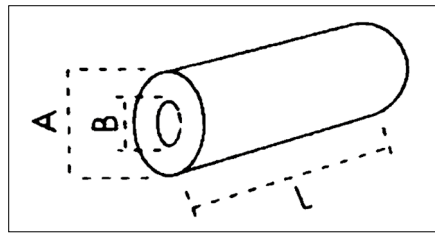
INDEX

Elementi normalizzati per stampi

Standard parts for Die and Mold

Barre forate in poliuretano per stampi

Hollow polyurethane bars



Codice	
Cod. 385F	(Forate 92 shore A)
Cod. 386F	(Forate 82 shore A)
Cod. 387F	(Forate 90 shore A)
Cod. 388F	(Forate 94 shore A)

A mm	B mm	L mm
16	6,5	250
20	8,5	250
25	10,5	250
32	13,5	500
40	13,5	500

A mm	B mm	L mm
50	17	500
63	17	500
80	21	500
100	21	500
125	27	500

Esempio di ordinazione/Order example = 385F - 40x500 (codice + AxL)

Barre piene in poliuretano per stampi

Solid polyurethane bars

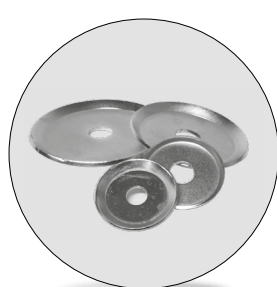


Codice	
Cod. 385P	(Piene 92 shore A)
Cod. 386P	(Piene 82 shore A)
Cod. 387P	(Piene 90 shore A)
Cod. 388P	(Piene 94 shore A)

A mm	L mm
16	250
20	250
25	250
32	500
40	500

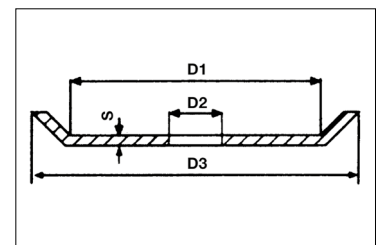
A mm	L mm
50	500
63	500
80	500
100	500
125	500

Possiamo fornire listelli, piastre, tubi e bastoni di varie misure. Interpellate il nostro ufficio vendite.



Sedi metalliche Metal seats

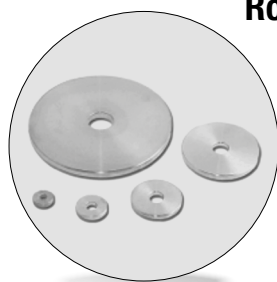
Codice	D mm	D1 mm	D2 mm	D3 mm	S mm
389-16	16	17	6,5	22	1,2
389-20	20	21	8,5	27	1,2
389-25	25	26	10,5	31	1,8
389-32	32	34	13,5	42	2
389-40	40	42	13,5	52	2
389-50	50	52	16,5	64	2
389-63	63	65	16,5	77	2
389-80	80	82	20,5	95	2,5
389-100	100	103	20,5	118	2,5



D = diametro della molla

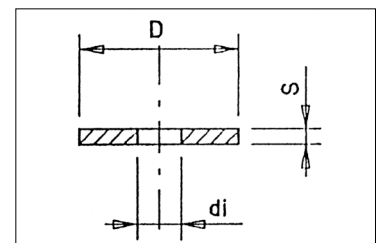
Codice	
Cod. 389	

Esempio di ordinazione/Order example = 389-25 (codice)



Rondelle per molle in poliuretano Washer for elastomer springs

Codice	
Cod. 384R	



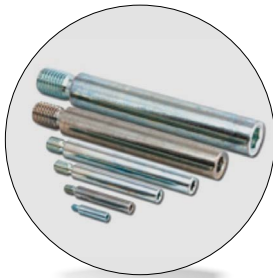
TIPO	A	B	C	D	E	F	G	H	I	L
D	20	25	30	40	50	60	80	100	120	150
Ø Molla	16	20	25	32	40	50	63	80	100	125
Ø i	6,5	8,5	10,5	13,5	13,5	16,5	16,5	20,5	20,5	26
S	4	4	5	5	5	6	6	8	8	8

Esempio di ordinazione/Order example: 384R-A (codice + tipo)

Elementi normalizzati per stampi

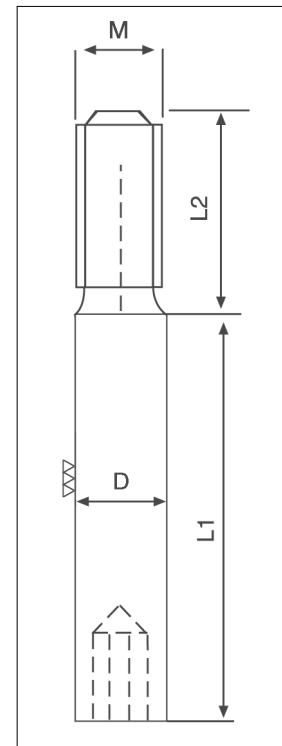
Standard parts for Die and Mold

Colonnine di guida per molle in elastomero *Guide bolts*



Codice	Materiale	Rettificato
Cod. 399	acciaio ISO 12.9	h8

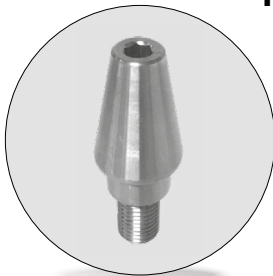
Ressitenza alla rottura per trazione	Limite di elasticità	Allungamento
110-120 Kg/mm	90/kg/mm min.	9% min.



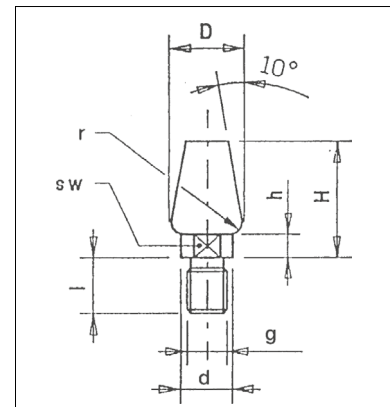
Ø D	6	8	10	13	16	20	25
L2	6	9	15	15	18	25	30
M	M4	M6	M8	M10	M12	M16	M20
Esagono	3	4	5	6	8	10	14
L1 + 0/+0,05							
15	•	•	•	•			
20	•	•	•	•	•		
25	•	•	•	•	•	•	
32	•	•	•	•	•	•	•
40	•	•	•	•	•	•	•
50	•	•	•	•	•	•	•
63		•	•	•	•	•	•
80		•	•	•	•	•	•
95			•	•	•	•	•
118				•	•	•	•
140					•	•	•
180						•	•
200							•

Esempio di ordinazione/Order example = 399 16 x 140 (cod. + D x L1)

Perno di supporto per molle in poliuretano *Retainer bolt*



Codice
Cod. 384F



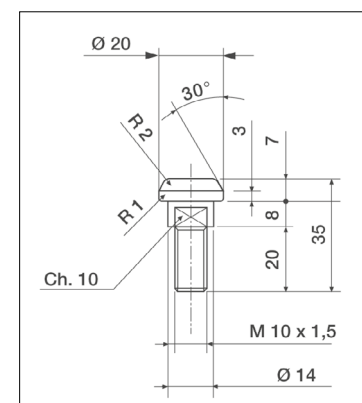
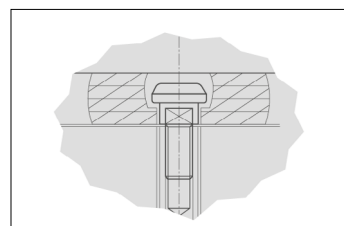
Codice	Tipo	Per molle		D	d	H	h	l	r	g	SW
		Ø E	Ø i								
384F-1	1	63	17	28	19	38	8	18	4,5	M 12	17
384F-2	2	80/100	21	32	22	50	10	24	5	M 16	19
384F-3	3	125	27	38	28	70	15	30	5	M 20	24

Esempio di ordinazione/Order example = 384F - 1 (codice)

Perno per tasselli *Retainer bolt*



Codice
Cod. 384P



NB.: Su richiesta forniamo perno con taglio cacciavite cod. 384C.

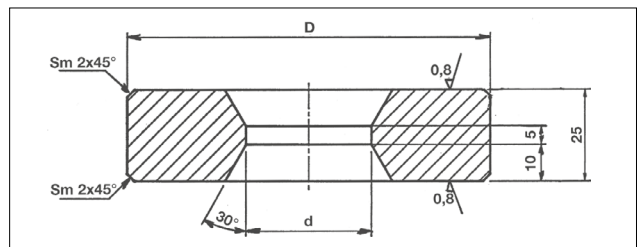
Esempio di ordinazione/Order example = 384P (codice)

Elementi normalizzati per stampi

Standard parts for Die and Mold



Tassello attenuazione rumorosità *Block attenuation noisiness*

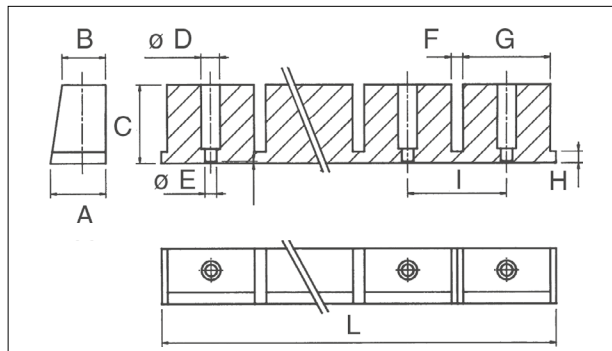
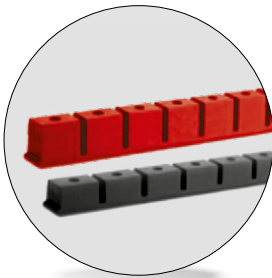


Codice	Materiale
Cod. 382	Poliuretano 92 Shore A

Codice	D	d
382-01	100	34,7
382-02	120	39,7
382-03	140	44,7

Esempio di ordinazione/Order example = 382-01 (codice)

Tassello attenuazione rumorosità *Block attenuation noisiness (stripper)*



Codice	T38	T39
A	19	32
B	15	22
C	27	65
D	7,5	9,5
E	4	-
F	4	6
G	30	44
H	4	8
I	34	50
L	306	400

Codice	Materiale	Durezza
Cod. T38	gomma/poliuretano	70 shore A
Cod. T39	gomma/poliuretano	92 shore A

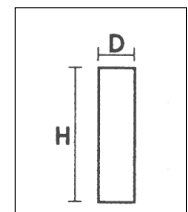
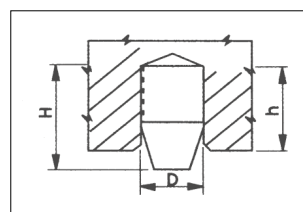
Esempio di ordinazione/Order example = T 38 (codice)

PSA PEUGEOT CITROËN X346538770 (x T39)

MOLLE
Springs

INDEX

Puntalini *Elastomer ejector pins*



Codice
Cod. 390

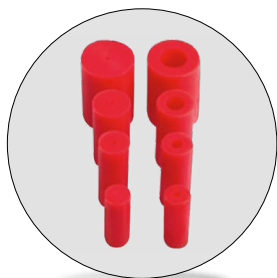
Codice
Cod. 390

Codice	D mm	H mm	h mm
390-1922	6	10	8
390-1928	10,3	15	13
390-1936	16,4	25	21
390-1943	24,7	25	21
390-1945	30	35	30
390-1947	32	32	26
390-1948	40,8	40	35

Codice	D mm	H mm
390-1900	2	15
390-1907	3	15
390-1913	4,5	15
390-1921	6	20

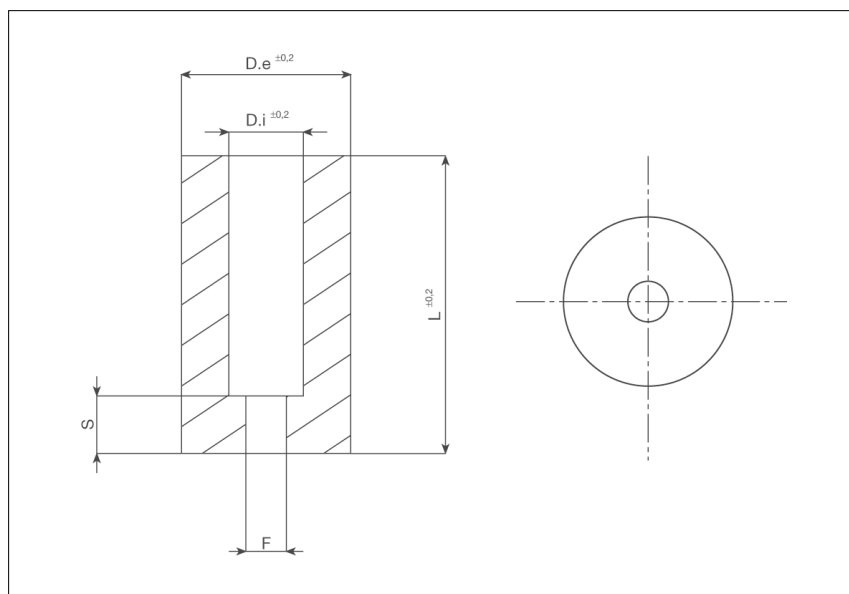
Esempio di ordinazione/Order example = 390-1913 (codice)

Estrattori per punzoni (92 shore) *Strippers for punches*



Codice

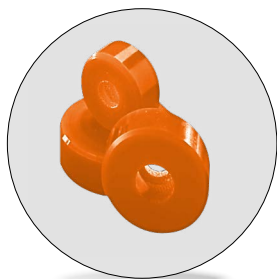
Cod. **383**



Codice	S	D.i.	D.e.	L.	F
383-E005	5,8	5	18	55	1,5
383-E006	6,3	6	19	65	1,5
383-E008	6,3	8	21	75	1,5
383-E010	6,3	10	23	75	2,5
383-E013	6,3	13	26	75	3
383-E016	6,3	16	30	75	3
383-E020	6,3	20	38	75	3
383-E025	6,3	25	50	75	3

Esempio di ordinazione/Order example = 383 - E005 (codice)

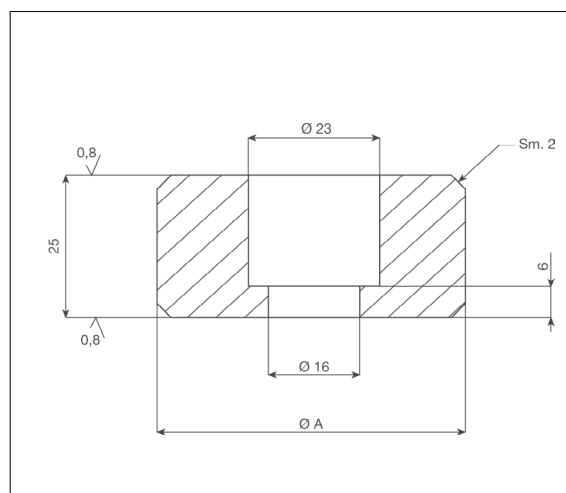
Tassello per ammortizzamento (90 shore) *Block for cushioning*



Codice

Cod. **384**

Codice	ØA
384-TA 050025	50
384-TA 063025	63
384-TA 080025	80
384-TA 100025	100
384-TA 125025	125



Esempio di ordinazione/Order example = 384-TA050025 (codice)

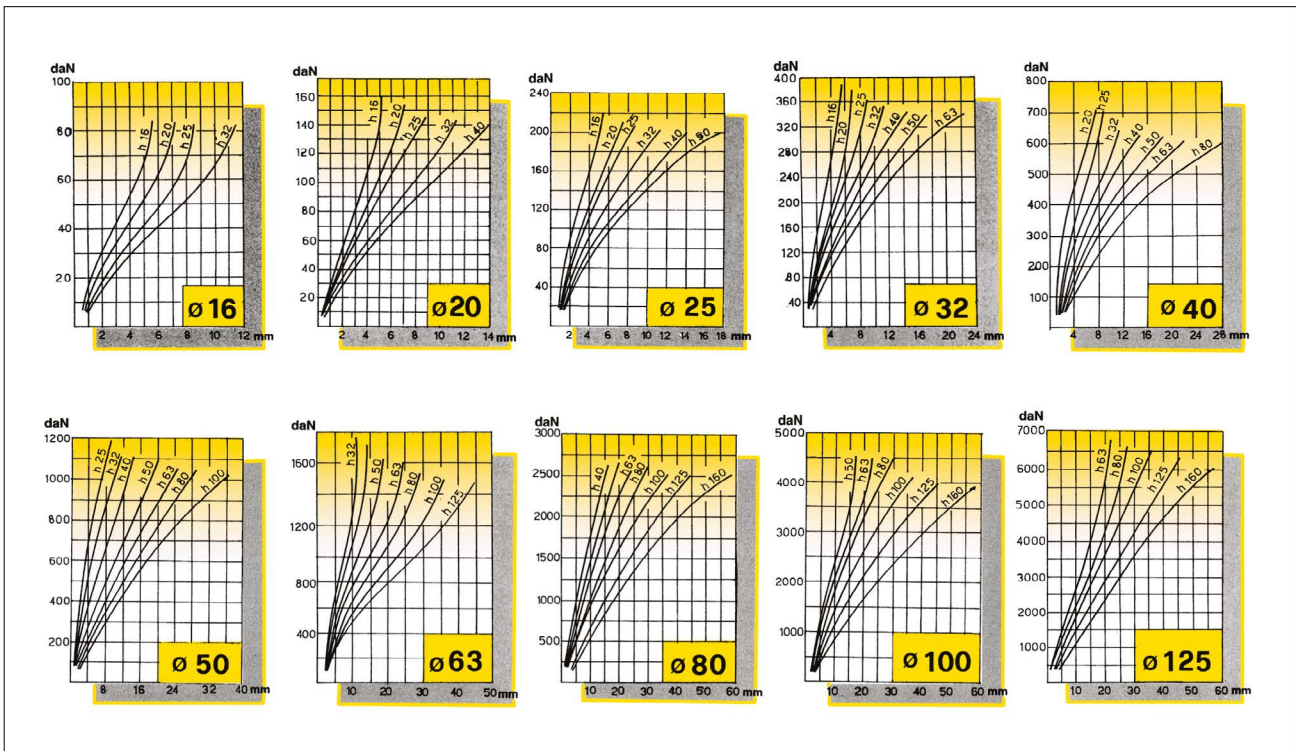
Diagrammi di carico per molle in elastomero - Forate

Load diagrams for elastomer springs - Hollow



Diagrammi per ULTRAFLEX 82 Shore. Compressione max. 35%.

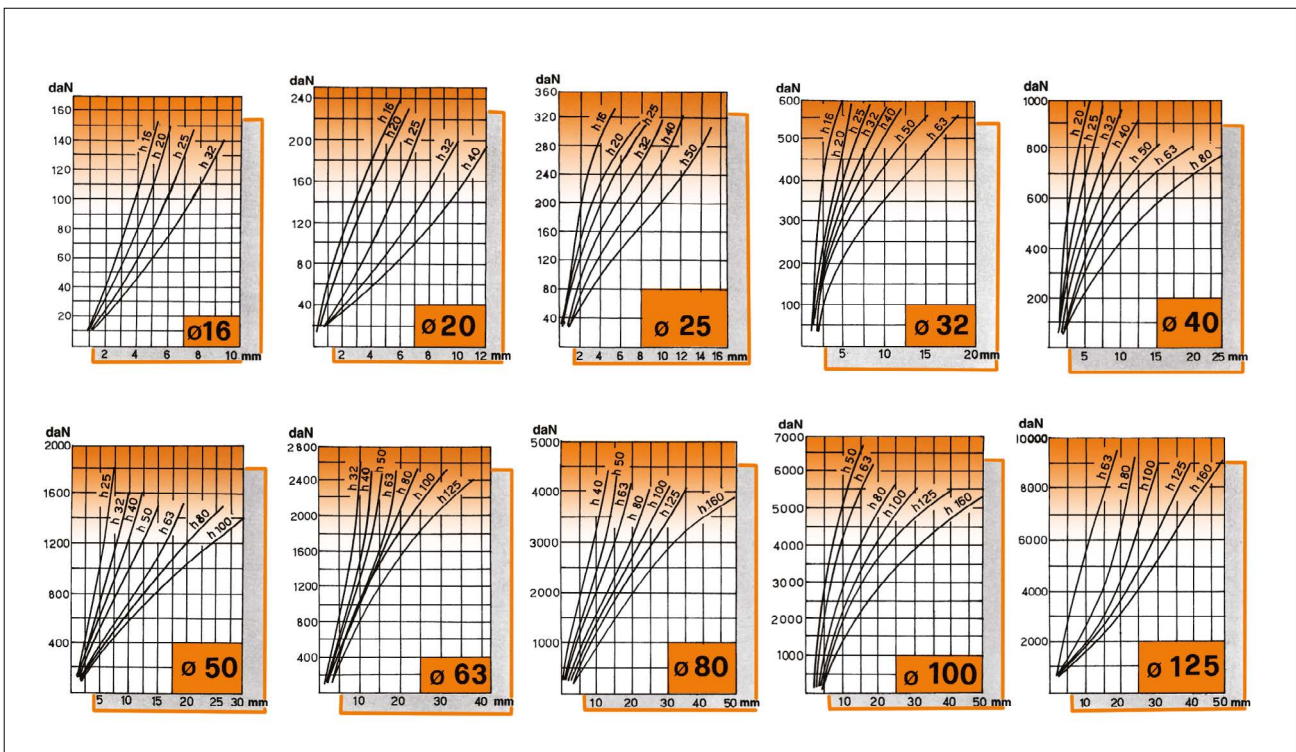
Diagrams for ULTRAFLEX 82 Shore. Compression max. 35%



MOLLE
Springs

Diagrammi per ADIPOL 90 Shore. Compressione max. 30%.

Diagrams for ADIPOL 90 Shore. Compression max. 30%



INDEX

CF Torino - È vietata la riproduzione, anche parziale, del presente catalogo.

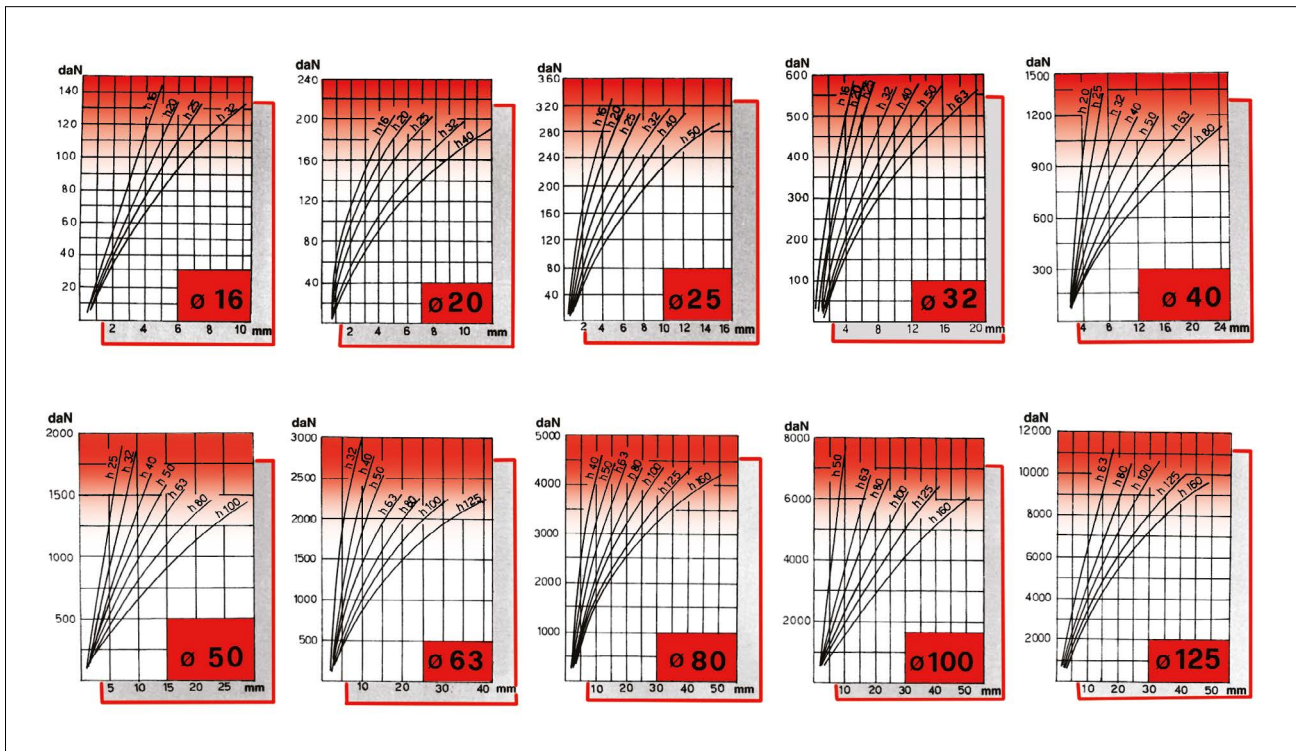
Diagrammi di carico per molle in elastomero - Forate

Load diagrams for elastomer springs - Hollow



Diagrammi per ULTRAFLEX 92 Shore. Compressione max. 30%.

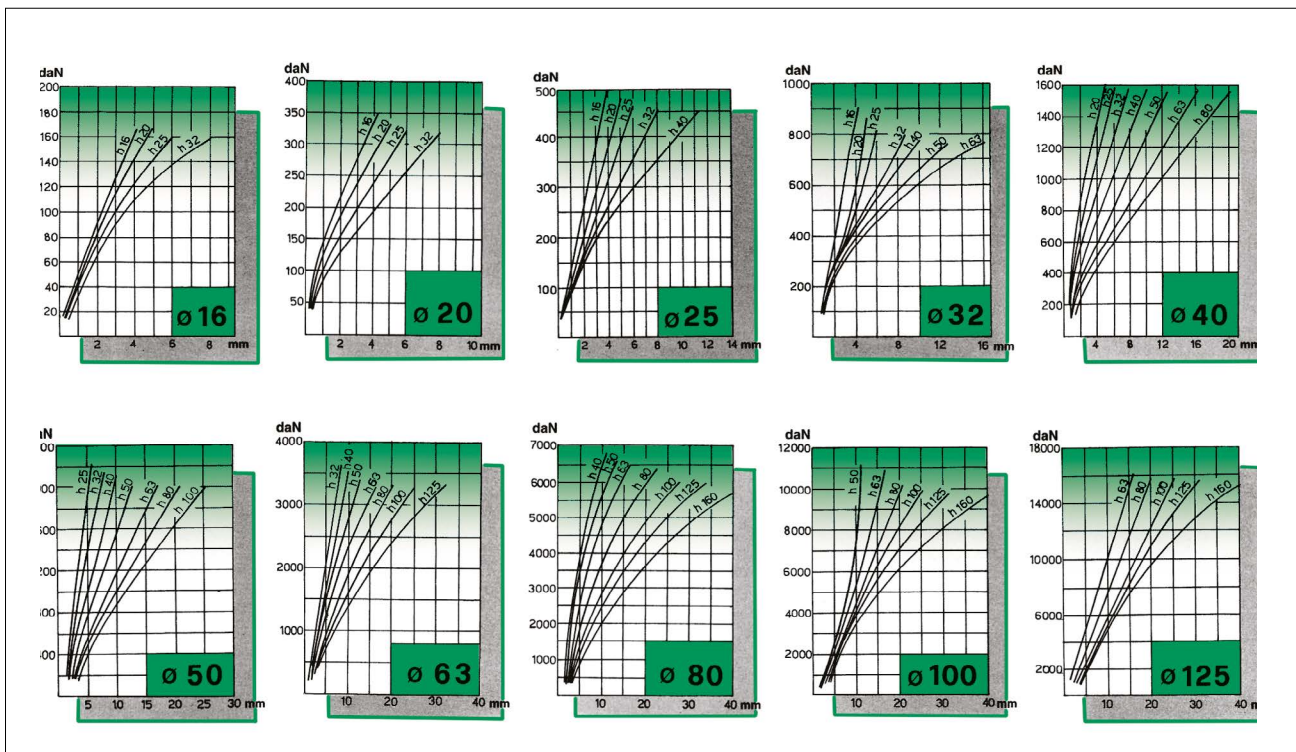
Diagrams for ULTRAFLEX 92 Shore. Compression max. 30%.



MOLLE
Springs

Diagrammi per ULTRAFLEX 94 Shore. Compressione max. 25%.

Diagrams for ULTRAFLEX 94 Shore. Compression max. 25%.



INDEX

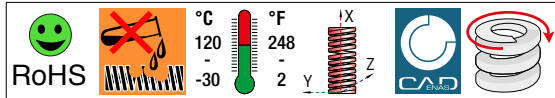
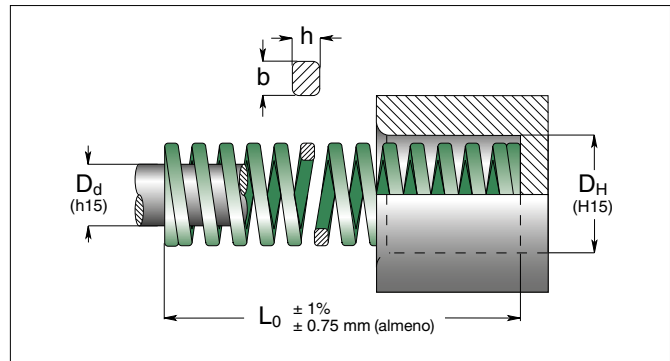
CF Torino - È vietata la riproduzione, anche parziale, del presente catalogo.

Serie verde - Molle carico leggero *Light load springs*

ISO 10243 : 2010



Codice
Cod. **391**



N. di catalogo	D _H Ø del foro		D _d Ø dello stelo	L ₀ lungh. libera	R rigidità ± 10%	A 25% L ₀		B 30% L ₀		C 35% L ₀		D 40% L ₀		E	
	b x h					mm	N/m	mm	N	mm	N	mm	N		
V 10 - 025	10	5	1.7 x 1.1	25	10	6.3	63	7.5	75	8.8	88	10.0	100	13.5	50
V 10 - 032				32	8.5	8.0	68	9.6	82	11.2	95	12.8	109	17.5	50
V 10 - 038				38	6.8	9.5	65	11.4	78	13.3	90	15.2	103	20.8	50
V 10 - 044				44	6.0	11.0	66	13.2	79	15.4	92	17.6	106	23.9	50
V 10 - 051				51	5.0	12.8	64	15.3	77	17.9	89	20.4	102	28.9	25
V 10 - 064				64	4.3	16.0	69	19.2	83	22.4	96	25.6	110	36.1	25
V 10 - 076				76	3.2	19.0	61	22.8	73	26.6	85	30.4	97	43.2	25
V 10 - 305			305	1.1	76.3	84	91.5	101	107	117	122	134	178	10	
V 13 - 025	12,5	6,3	2.4 x 1.4	25	17.9	6.3	113	7.5	134	8.8	157	10.0	179	13.2	50
V 13 - 032				32	16.4	8.0	131	9.6	157	11.2	184	12.8	210	18.0	50
V 13 - 038				38	13.6	9.5	129	11.4	155	13.3	181	15.2	207	21.0	50
V 13 - 044				44	12.1	11.0	133	13.2	160	15.4	186	17.6	213	24.0	25
V 13 - 051				51	11.4	12.8	146	15.3	174	17.9	203	20.4	233	28.7	25
V 13 - 064				64	9.3	16.0	149	19.2	179	22.4	208	25.6	238	35.8	25
V 13 - 076				76	7.1	19.0	135	22.8	162	26.6	189	30.4	216	42.7	25
V 13 - 089	89	5.4	22.3	120	26.7	144	31.2	168	35.6	192	50.4	20			
V 13 - 102	102	4.1	25.5	105	30.6	125	35.7	146	40.8	167	58.4	10			
V 13 - 305			305	1.4	76.3	107	91.5	128	107	149	122	171	172	10	
V 16 - 025	16	8	3.2 x 1.5	25	23.4	6.3	147	7.5	176	8.8	205	10.0	234	12.6	50
V 16 - 032				32	22.9	8.0	183	9.6	220	11.2	256	12.8	293	16.4	50
V 16 - 038				38	19.3	9.5	183	11.4	220	13.3	257	15.2	293	19.7	25
V 16 - 044				44	17.1	11.0	188	13.2	226	15.4	263	17.6	301	22.5	25
V 16 - 051				51	15.7	12.8	201	15.3	240	17.9	280	20.4	320	26.3	25
V 16 - 064				64	10.7	16.0	171	19.2	205	22.4	240	25.6	274	33.3	25
V 16 - 076				76	10.0	19.0	190	22.8	228	26.6	266	30.4	304	40.2	20
V 16 - 089	89	8.6	22.3	192	26.7	230	31.2	268	35.6	306	47.6	20			
V 16 - 102	102	7.8	25.5	199	30.6	239	35.7	278	40.8	318	55.4	20			
V 16 - 115	115	6.6	28.8	190	34.5	228	40.3	266	46.0	304	60.8	10			
V 16 - 305			305	2.5	76.3	191	91.5	229	107	267	122	305	165	10	
V 20 - 025	20	10	4.0 x 2.1	25	55.8	6.3	352	7.5	419	8.8	488	10.0	558	12.1	50
V 20 - 032				32	45.0	8.0	360	9.6	432	11.2	504	12.8	576	15.3	50
V 20 - 038				38	33.3	9.5	316	11.4	380	13.3	443	15.2	506	18.9	25
V 20 - 044				44	30.0	11.0	330	13.2	396	15.4	462	17.6	528	21.5	25
V 20 - 051				51	24.5	12.8	314	15.3	375	17.9	437	20.4	500	25.0	25
V 20 - 064				64	20.0	16.0	320	19.2	384	22.4	448	25.6	512	31.1	25
V 20 - 076				76	16.0	19.0	304	22.8	365	26.6	426	30.4	486	37.3	25
V 20 - 089	89	14.0	22.3	312	26.7	374	31.2	436	35.6	498	44.5	20			
V 20 - 102	102	12.0	25.5	306	30.6	367	35.7	428	40.8	490	51.1	20			
V 20 - 115	115	10.9	28.8	314	34.5	376	40.3	439	46.0	501	58.2	10			
V 20 - 127	127	9.5	31.8	302	38.1	362	44.5	422	50.8	483	64.9	10			
V 20 - 139	139	8.4	35.0	294	42.0	353	48.7	409	56.0	470	71.5	10			
V 20 - 152	152	7.5	38.0	285	45.6	342	53.2	399	60.8	456	78.8	10			
V 20 - 305			305	4.0	76.3	305	91.5	366	107	427	122	488	157	10	

MOLLE Springs

INDEX

CF Torino - È vietata la riproduzione, anche parziale, del presente catalogo.

Esempio di ordinazione/Order example =
391 - V 10 x 025 (cod. + N. di catalogo)

1 N = 0.1 daN = 0.102 kgf Carico (N) = R (N/mm) x Deflessione (mm)

Cod. **391**

Serie verde - Molle carico leggero *Light load springs*

ISO 10243 : 2010

N. di catalogo	D _H	D _d	L ₀ lungh. libera	R rigidità ± 10%	A		B		C		D		E	pz		
	Ø del foro	Ø dello stelo			25% L ₀	30% L ₀	35% L ₀	40% L ₀	non usare							
b x h																
mm																
V 25 - 025	25	12,5	25	100	6.3	630	7.5	750	8.8	875	10.0	1000	11.9	50		
V 25 - 032			32	80.3	8.0	642	9.6	771	11.2	899	12.8	1028	16.0	25		
V 25 - 038			38	62.0	9.5	589	11.4	707	13.3	825	15.2	942	18.3	25		
V 25 - 044			44	52.9	11.0	582	13.2	698	15.4	815	17.6	931	21.4	25		
V 25 - 051			51	44.0	12.8	563	15.3	673	17.9	785	20.4	898	24.9	25		
V 25 - 064			64	35.2	16.0	563	19.2	676	22.4	788	25.6	901	31.4	25		
V 25 - 076			76	28.0	19.0	532	22.8	638	26.6	745	30.4	851	37.5	20		
V 25 - 089			89	24.0	22.3	535	26.7	641	31.2	748	35.6	854	43.5	20		
V 25 - 102			102	21.1	25.5	538	30.6	646	35.7	753	40.8	861	51.1	20		
V 25 - 115			115	18.7	28.8	539	34.5	645	40.3	753	46.0	860	58.1	10		
V 25 - 127			127	16.7	31.8	531	38.1	636	44.5	742	50.8	848	64.1	10		
V 25 - 139			139	15.3	35.0	536	42.0	643	48.7	744	56.0	857	70.4	10		
V 25 - 152			152	14.0	38.0	532	45.6	638	53.2	745	60.8	851	77.1	10		
V 25 - 178			178	12.5	44.5	556	53.4	668	62.3	779	71.2	890	93.1	10		
V 25 - 203			203	10.4	50.8	528	60.9	633	71.1	739	81.2	844	103	10		
V 25 - 305			305	7.0	76.3	534	91.5	641	107	747	122	854	156	5		
V 32 - 038	32	16	38	94.0	9.5	893	11.4	1072	13.3	1250	15.2	1429	18.3	20		
V 32 - 044			44	79.5	11.0	875	13.2	1049	15.4	1224	17.6	1399	21.5	20		
V 32 - 051			51	67.0	12.8	858	15.3	1025	17.9	1196	20.4	1367	25.5	20		
V 32 - 064			64	53.0	16.0	848	19.2	1018	22.4	1187	25.6	1357	31.9	20		
V 32 - 076			76	44.0	19.0	836	22.8	1003	26.6	1170	30.4	1338	38.6	20		
V 32 - 089			89	37.2	22.3	830	26.7	993	31.2	1159	35.6	1324	46.5	10		
V 32 - 102			102	32.0	25.5	816	30.6	979	35.7	1142	40.8	1306	53.2	10		
V 32 - 115			115	29.0	28.8	835	34.5	1001	40.3	1167	46.0	1334	60.0	10		
V 32 - 127			127	25.0	31.8	795	38.1	953	44.5	1111	50.8	1270	66.7	10		
V 32 - 139			139	23.0	35.0	805	42.0	966	48.7	1119	56.0	1288	71.8	10		
V 32 - 152			152	21.5	38.0	817	45.6	980	53.2	1144	60.8	1307	78.5	10		
V 32 - 178			178	18.2	44.5	810	53.4	972	62.3	1134	71.2	1296	94.4	5		
V 32 - 203			203	15.8	50.8	803	60.9	962	71.1	1123	81.2	1283	107	5		
V 32 - 254			254	12.5	63.5	794	76.2	953	88.9	1111	102	1270	136	5		
V 32 - 305			305	10.3	76.3	786	91.5	942	107	1100	122	1257	163	5		
V 40 - 051			40	20	51	92.0	12.8	1178	15.3	1408	17.9	1642	20.4	1877	25.5	20
V 40 - 064	64	73.0			16.0	1168	19.2	1402	22.4	1635	25.6	1869	31.4	10		
V 40 - 076	76	63.0			19.0	1197	22.8	1436	26.6	1676	30.4	1915	37.8	10		
V 40 - 089	89	51.0			22.3	1137	26.7	1362	31.2	1589	35.6	1816	44.3	10		
V 40 - 102	102	43.0			25.5	1097	30.6	1316	35.7	1535	40.8	1754	50.7	10		
V 40 - 115	115	39.6			28.8	1140	34.5	1366	40.3	1594	46.0	1822	58.1	10		
V 40 - 127	127	37.0			31.8	1177	38.1	1410	44.5	1645	50.8	1880	64.6	5		
V 40 - 139	139	32.0			35.0	1120	42.0	1344	48.7	1557	56.0	1792	70.1	5		
V 40 - 152	152	28.0			38.0	1064	45.6	1277	53.2	1490	60.8	1702	76.6	5		
V 40 - 178	178	25.2			44.5	1121	53.4	1346	62.3	1570	71.2	1794	90.4	5		
V 40 - 203	203	22.7			50.8	1153	60.9	1382	71.1	1613	81.2	1843	102	5		
V 40 - 254	254	17.0			63.5	1080	76.2	1295	88.9	1511	102	1727	129	2		
V 40 - 305	305	14.8			76.3	1129	91.5	1354	107	1580	122	1806	156	2		
V 50 - 064	50	25			64	156	16.0	2496	19.2	2995	22.4	3494	25.6	3994	31.0	5
V 50 - 076					76	125	19.0	2375	22.8	2850	26.6	3325	30.4	3800	37.2	5
V 50 - 089					89	109	22.3	2431	26.7	2910	31.2	3395	35.6	3880	43.6	5
V 50 - 102			102	94.0	25.5	2397	30.6	2876	35.7	3356	40.8	3835	50.3	5		
V 50 - 115			115	81.0	28.8	2333	34.5	2795	40.3	3260	46.0	3726	58.1	5		
V 50 - 127			127	71.0	31.8	2258	38.1	2705	44.5	3156	50.8	3607	63.7	5		
V 50 - 139			139	66.5	35.0	2328	42.0	2793	48.7	3235	56.0	3724	69.5	5		
V 50 - 152			152	60.0	38.0	2280	45.6	2736	53.2	3192	60.8	3648	76.5	2		
V 50 - 178			178	52.0	44.5	2314	53.4	2777	62.3	3240	71.2	3702	91.9	2		
V 50 - 203			203	44.0	50.8	2235	60.9	2680	71.1	3126	81.2	3573	105	2		
V 50 - 254			254	35.0	63.5	2223	76.2	2667	88.9	3112	102	3556	131	2		
V 50 - 305			305	28.5	76.3	2175	91.5	2608	107	3042	122	3477	155	2		
V 63 - 076			63	38	76	189	19.0	3591	22.8	4309	26.6	5027	30.4	5746	36.5	5
V 63 - 089					89	158	22.3	3523	26.7	4219	31.2	4922	35.6	5625	43.4	5
V 63 - 102					102	131	25.5	3341	30.6	4009	35.7	4677	40.8	5345	49.7	5
V 63 - 115					115	116	28.8	3341	34.5	4002	40.3	4669	46.0	5336	55.6	5
V 63 - 127	127	103			31.8	3275	38.1	3924	44.5	4578	50.8	5232	62.7	2		
V 63 - 152	152	84.3			38.0	3203	45.6	3844	53.2	4485	60.8	5125	77.1	2		
V 63 - 178	178	71.5			44.5	3182	53.4	3818	62.3	4454	71.2	5091	92.2	2		
V 63 - 203	203	61.7			50.8	3134	60.9	3758	71.1	4384	81.2	5010	103	2		
V 63 - 254	254	47.0			63.5	2985	76.2	3581	88.9	4178	102	4775	130	2		
V 63 - 305	305	38.2			76.3	2915	91.5	3495	107	4078	122	4660	157	2		

Esempio di ordinazione/Order example =
391 - V 25 x 025 (cod. + N. di catalogo)

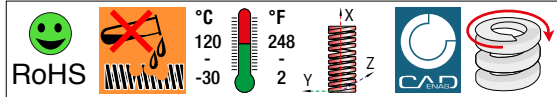
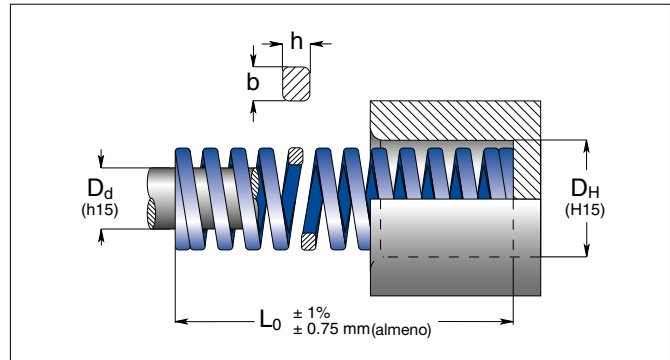
1 N = 0.1 daN = 0.102 kgf Carico (N) = R (N/mm) x Deflessione (mm)

Serie blu - Molle carico medio *Medium load springs*

ISO 10243 : 2010



Codice
Cod. **392**



N. di catalogo	D _H / D _d		L ₀ / lung. libera	R / rigidità ± 10%	A / 25% L ₀		B / 30% L ₀		C / 33.75% L ₀		D / 37.5% L ₀		E / approx. non usare	pz
	Ø del foro	Ø dello stelo			mm	N	mm	N	mm	N	mm	N		
B 10 - 025	10	5	25	16.0	6.3	101	7.5	120	8.4	135	9.4	150	10.2	50
B 10 - 032			32	13.0	8.0	104	9.6	125	10.8	140	12.0	156	14.2	50
B 10 - 038			38	11.9	9.5	113	11.4	136	12.8	153	14.3	170	16.8	50
B 10 - 044			44	10.3	11.0	113	13.2	136	14.9	153	16.5	170	19.4	50
B 10 - 051			51	8.9	12.8	114	15.3	136	17.2	153	19.1	170	23.4	25
B 10 - 064			64	7.5	16.0	120	19.2	144	21.6	162	24.0	180	28.2	25
B 10 - 076			76	5.3	19.0	101	22.8	121	25.7	136	28.5	151	34.2	25
B 10 - 305			1.9 x 1.3		305	1.6	76.3	122	91.5	146	103	165	114	183
B 13 - 025	12.5	6.3	25	30.0	6.3	189	7.5	225	8.4	253	9.4	282	11.9	50
B 13 - 032			32	24.8	8.0	198	9.6	238	10.8	268	12.0	298	16.2	50
B 13 - 038			38	21.4	9.5	203	11.4	244	12.8	274	14.3	306	18.7	50
B 13 - 044			44	18.5	11.0	204	13.2	244	14.9	275	16.5	305	21.3	25
B 13 - 051			51	15.5	12.8	198	15.3	237	17.2	267	19.1	296	25.6	25
B 13 - 064			64	12.1	16.0	194	19.2	232	21.6	261	24.0	290	32.4	25
B 13 - 076			76	10.2	19.0	194	22.8	233	25.7	262	28.5	291	39.0	25
B 13 - 089			89	8.4	22.3	187	26.7	224	30.0	252	33.4	281	45.9	20
B 13 - 102	102	6.3	25.5	161	30.6	193	34.4	217	38.3	241	52.3	10		
B 13 - 305	2.5 x 1.5		305	2.1	76.3	160	91.5	192	103	216	114	240	153	10
B 16 - 025	16	8	25	49.4	6.3	311	7.5	371	8.4	417	9.4	464	10.5	50
B 16 - 032			32	37.1	8.0	297	9.6	356	10.8	401	12.0	445	13.2	50
B 16 - 038			38	33.9	9.5	322	11.4	386	12.8	435	14.3	485	17.2	25
B 16 - 044			44	30.0	11.0	330	13.2	396	14.9	446	16.5	495	19.4	25
B 16 - 051			51	26.4	12.8	338	15.3	404	17.2	454	19.1	504	24.2	25
B 16 - 064			64	20.5	16.0	328	19.2	394	21.6	443	24.0	492	29.2	25
B 16 - 076			76	17.8	19.0	338	22.8	406	25.7	457	28.5	507	36.3	20
B 16 - 089			89	15.2	22.3	339	26.7	406	30.0	457	33.4	508	41.7	20
B 16 - 102	102	13.5	25.5	344	30.6	413	34.4	465	38.3	517	48.9	20		
B 16 - 115	115	11.8	28.8	340	34.5	407	38.8	458	43.1	509	53.1	10		
B 16 - 305	3.2 x 2.0		305	4.8	76.3	366	91.5	439	103	494	114	549	142	10
B 20 - 025	20	10	25	98.0	6.3	617	7.5	735	8.4	827	9.4	921	10.5	50
B 20 - 032			32	72.6	8.0	581	9.6	697	10.8	784	12.0	871	13.9	50
B 20 - 038			38	56.0	9.5	532	11.4	638	12.8	718	14.3	801	16.6	25
B 20 - 044			44	47.5	11.0	523	13.2	627	14.9	705	16.5	784	18.8	25
B 20 - 051			51	41.7	12.8	534	15.3	638	17.2	718	19.1	796	23.1	25
B 20 - 064			64	32.3	16.0	517	19.2	620	21.6	698	24.0	775	27.5	25
B 20 - 076			76	25.1	19.0	477	22.8	572	25.7	644	28.5	715	33.8	25
B 20 - 089			89	22.0	22.3	491	26.7	587	30.0	661	33.4	735	39.7	20
B 20 - 102			102	19.8	25.5	505	30.6	606	34.4	682	38.3	758	47.3	20
B 20 - 115			115	18.1	28.8	521	34.5	624	38.8	703	43.1	780	52.5	10
B 20 - 127			127	16.6	31.8	528	38.1	632	42.9	712	47.6	790	56.9	10
B 20 - 139			139	15.1	35.0	529	42.0	634	46.9	708	52.5	793	62.1	10
B 20 - 152			152	13.2	38.0	500	45.6	600	51.3	677	57.0	750	67.6	10
B 20 - 305			4.1 x 2.4		305	6.1	76.3	465	91.5	558	103	628	114	698

Esempio di ordinazione/Order example =
392 - B 10 x 025 (cod. + N. di catalogo)

1 N = 0.1 daN = 0.102 kgf Carico (N) = R (N/mm) x Deflessione (mm)

Cod. **392**

Serie blu - Molle carico medio *Medium load springs*

ISO 10243 : 2010

N. di catalogo	D _H	D _d	L ₀	R	A	B	C	D	E	pz						
	Ø del foro	Ø dello stelo	lungh. libera	rigidità	25% L ₀	30% L ₀	33.75% L ₀	37.5% L ₀	non usare							
b x h				± 10%	+3.000.000	~1.500.000	300 - 500.000	100 - 200.000								
mm	mm	mm	mm	N/m	mm	N	mm	N	mm	N						
B 25 - 025	25	12.5	25	147	6.3	926	7.5	1103	8.4	1240	9.4	1382	10.2	50		
B 25 - 032			32	118	8.0	944	9.6	1133	10.8	1274	12.0	1416	13.7	25		
B 25 - 038			38	93.0	9.5	884	11.4	1060	12.8	1193	14.3	1330	15.7	25		
B 25 - 044			44	80.8	11.0	889	13.2	1067	14.9	1200	16.5	1333	18.2	25		
B 25 - 051			51	68.6	12.8	878	15.3	1050	17.2	1181	19.1	1310	21.7	25		
B 25 - 064			64	53.0	16.0	848	19.2	1018	21.6	1145	24.0	1272	26.0	25		
B 25 - 076			76	43.2	19.0	821	22.8	985	25.7	1108	28.5	1231	32.3	20		
B 25 - 089			89	38.2	22.3	852	26.7	1020	30.0	1147	33.4	1276	38.0	20		
B 25 - 102			102	33.0	25.5	842	30.6	1010	34.4	1136	38.3	1264	43.0	20		
B 25 - 115			115	28.0	28.8	806	34.5	966	38.8	1087	43.1	1207	48.6	10		
B 25 - 127			127	25.9	31.8	824	38.1	987	42.9	1110	47.6	1233	53.7	10		
B 25 - 139			139	23.2	35.0	812	42.0	974	46.9	1088	52.5	1218	59.4	10		
B 25 - 152			152	20.8	38.0	790	45.6	948	51.3	1067	57.0	1186	63.8	10		
B 25 - 178			178	17.8	44.5	792	53.4	951	60.1	1069	66.8	1189	76.6	10		
B 25 - 203			203	15.8	50.8	803	60.9	962	68.5	1082	76.1	1202	88.4	10		
B 25 - 305	305	10.2	76.3	778	91.5	933	103	1050	114	1167	135	5				
B 32 - 038	32	16	38	185	9.5	1758	11.4	2109	12.8	2373	14.3	2646	16.3	20		
B 32 - 044			44	158	11.0	1738	13.2	2086	14.9	2346	16.5	2607	18.9	20		
B 32 - 051			51	134	12.8	1715	15.3	2050	17.2	2306	19.1	2559	23.1	20		
B 32 - 064			64	99.0	16.0	1584	19.2	1901	21.6	2138	24.0	2376	28.5	20		
B 32 - 076			76	80.5	19.0	1530	22.8	1835	25.7	2065	28.5	2294	34.2	20		
B 32 - 089			89	69.1	22.3	1541	26.7	1845	30.0	2076	33.4	2308	40.4	10		
B 32 - 102			102	58.8	25.5	1499	30.6	1799	34.4	2024	38.3	2252	48.0	10		
B 32 - 115			115	51.5	28.8	1483	34.5	1777	38.8	1999	43.1	2220	54.3	10		
B 32 - 127			127	44.8	31.8	1425	38.1	1707	42.9	1920	47.6	2132	59.2	10		
B 32 - 139			139	42.3	35.0	1481	42.0	1777	46.9	1984	52.5	2221	65.3	10		
B 32 - 152			152	37.8	38.0	1436	45.6	1724	51.3	1939	57.0	2155	73.0	10		
B 32 - 178			178	32.5	44.5	1446	53.4	1736	60.1	1952	66.8	2171	84.5	5		
B 32 - 203			203	28.9	50.8	1468	60.9	1760	68.5	1980	76.1	2199	96.9	5		
B 32 - 254			254	21.4	63.5	1359	76.2	1631	85.7	1835	95.3	2039	121	5		
B 32 - 305			305	18.3	76.3	1396	91.5	1674	103	1884	114	2094	147	5		
B 40 - 051	40	20	51	182	12.8	2330	15.3	2785	17.2	3130	19.1	3476	21.4	20		
B 40 - 064			64	140	16.0	2240	19.2	2688	21.6	3024	24.0	3360	26.8	10		
B 40 - 076			76	108	19.0	2052	22.8	2462	25.7	2770	28.5	3078	32.7	10		
B 40 - 089			89	90.7	22.3	2023	26.7	2422	30.0	2724	33.4	3029	39.0	10		
B 40 - 102			102	81.0	25.5	2066	30.6	2479	34.4	2788	38.3	3102	44.1	10		
B 40 - 115			115	71.8	28.8	2068	34.5	2477	38.8	2787	43.1	3095	50.6	10		
B 40 - 127			127	62.7	31.8	1994	38.1	2389	42.9	2687	47.6	2985	55.9	5		
B 40 - 139			139	57.5	35.0	2013	42.0	2415	46.9	2697	52.5	3019	61.8	5		
B 40 - 152			152	51.6	38.0	1961	45.6	2353	51.3	2647	57.0	2941	67.5	5		
B 40 - 178			178	44.1	44.5	1962	53.4	2355	60.1	2649	66.8	2946	77.2	5		
B 40 - 203			203	36.7	50.8	1864	60.9	2235	68.5	2514	76.1	2793	91.8	5		
B 40 - 254			254	30.1	63.5	1911	76.2	2294	85.7	2580	95.3	2869	113	2		
B 40 - 305			305	24.6	76.3	1877	91.5	2251	103	2532	114	2814	138	2		
B 50 - 064			50	25	64	209	16.0	3344	19.2	4013	21.6	4514	24.0	5016	28.2	5
B 50 - 076					76	168	19.0	3192	22.8	3830	25.7	4309	28.5	4788	34.9	5
B 50 - 089	89	140			22.3	3122	26.7	3738	30.0	4205	33.4	4676	39.2	5		
B 50 - 102	102	119			25.5	3035	30.6	3641	34.4	4097	38.3	4558	47.3	5		
B 50 - 115	115	106			28.8	3053	34.5	3657	38.8	4114	43.1	4569	52.6	5		
B 50 - 127	127	97.0			31.8	3085	38.1	3696	42.9	4158	47.6	4617	59.8	5		
B 50 - 139	139	87.0			35.0	3045	42.0	3654	46.9	4081	52.5	4568	65.1	5		
B 50 - 152	152	80.0			38.0	3040	45.6	3648	51.3	4104	57.0	4560	70.8	2		
B 50 - 178	178	69.5			44.5	3093	53.4	3711	60.1	4175	66.8	4643	84.2	2		
B 50 - 203	203	59.8			50.8	3038	60.9	3642	68.5	4097	76.1	4551	96.5	2		
B 50 - 229	229	50.9			57.3	2917	68.7	3497	77.3	3934	85.9	4372	108	2		
B 50 - 254	254	43.9			63.5	2788	76.2	3345	85.7	3763	95.3	4184	122	2		
B 50 - 305	305	38.6			76.3	2945	91.5	3532	103	3973	114	4416	147	2		
B 63 - 076	63	38			76	312	19.0	5928	22.8	7114	25.7	8003	28.5	8892	30.7	5
B 63 - 089					89	260	22.3	5798	26.7	6942	30.0	7810	33.4	8684	36.5	5
B 63 - 102			102	221	25.5	5636	30.6	6763	34.4	7608	38.3	8464	43.6	5		
B 63 - 115			115	187	28.8	5386	34.5	6452	38.8	7258	43.1	8060	48.9	5		
B 63 - 127			127	168	31.8	5342	38.1	6401	42.9	7201	47.6	7997	54.2	2		
B 63 - 152			152	136	38.0	5168	45.6	6202	51.3	6977	57.0	7752	65.7	2		
B 63 - 178			178	114	44.5	5073	53.4	6088	60.1	6849	66.8	7615	76.5	2		
B 63 - 203			203	100	50.8	5080	60.9	6090	68.5	6851	76.1	7610	88.0	2		
B 63 - 229			229	89.2	57.3	5111	68.7	6128	77.3	6894	85.9	7662	104	2		
B 63 - 254			254	78.4	63.5	4978	76.2	5974	85.7	6721	95.3	7472	112	2		
B 63 - 305			305	64.7	76.3	4937	91.5	5920	103	6660	114	7402	134	2		

Esempio di ordinazione/Order example =
392 - B 25 x 025 (cod. + N. di catalogo)

1 N = 0.1 daN = 0.102 kgf Carico (N) = R (N/mm) x Deflessione (mm)

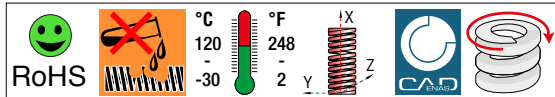
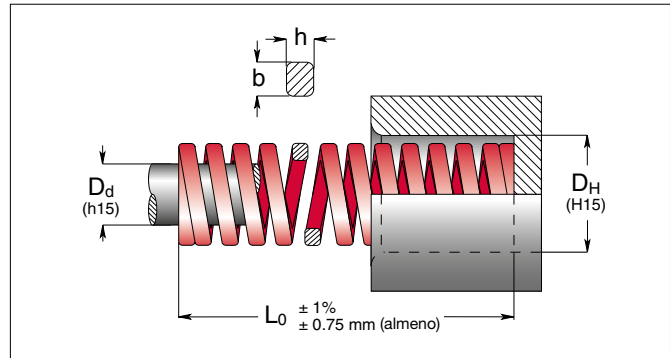


Serie rossa - Molle carico forte *Strong load springs*

ISO 10243 : 2010



Codice
Cod. **393**



N. di catalogo	D _H Ø del foro		D _d Ø dello stelo	L ₀ lungh. libera	R rigidità ± 10%	A 20% L ₀		B 25% L ₀		C 27.5% L ₀		D 30% L ₀		E non usare approx.	pz
	b x h					mm	N/m	mm	N	mm	N	mm	N		
R 10 - 025	10	5	5	25	22.1	5.0	111	6.3	139	6.9	152	7.5	166	9.2	50
R 10 - 032				32	17.5	6.4	112	8.0	140	8.8	154	9.6	168	12.1	50
R 10 - 038				38	17.1	7.6	130	9.5	162	10.5	179	11.4	195	13.2	50
R 10 - 044				44	15.0	8.8	132	11.0	165	12.1	182	13.2	198	15.1	50
R 10 - 051				51	12.8	10.2	131	12.8	164	14.0	180	15.3	196	19.5	25
R 10 - 064				64	10.7	12.8	137	16.0	171	17.6	188	19.2	205	21.8	25
R 10 - 076				76	7.5	15.2	114	19.0	143	20.9	157	22.8	171	27.9	25
R 10 - 305				1.9 x 1.5		305	2.1	61.0	128	76.3	160	83.9	176	91.5	192
R 13 - 025	12,5	6,3	6,3	25	42.1	5.0	211	6.3	265	6.9	289	7.5	316	9.8	50
R 13 - 032				32	33.2	6.4	212	8.0	266	8.8	292	9.6	319	13.6	50
R 13 - 038				38	29.3	7.6	223	9.5	278	10.5	306	11.4	334	14.6	50
R 13 - 044				44	24.6	8.8	216	11.0	271	12.1	298	13.2	325	18.1	25
R 13 - 051				51	19.6	10.2	200	12.8	251	14.0	275	15.3	300	22.3	25
R 13 - 064				64	15.0	12.8	192	16.0	240	17.6	264	19.2	288	27.3	25
R 13 - 076				76	13.2	15.2	201	19.0	251	20.9	276	22.8	301	33.1	25
R 13 - 089				89	11.4	17.8	203	22.3	254	24.5	279	26.7	304	38.9	20
R 13 - 102	102	8.4	20.4	171	25.5	214	28.1	236	30.6	257	43.8	10			
R 13 - 305	2.4 x 1.9		305	2.8	61.0	171	76.3	214	83.9	235	91.5	256	140	10	
R 16 - 025	16	8	8	25	75.7	5.0	379	6.3	477	6.9	520	7.5	568	8.4	50
R 16 - 032				32	52.8	6.4	338	8.0	422	8.8	465	9.6	507	10.5	50
R 16 - 038				38	48.5	7.6	369	9.5	461	10.5	507	11.4	553	13.6	25
R 16 - 044				44	42.8	8.8	377	11.0	471	12.1	518	13.2	565	15.9	25
R 16 - 051				51	37.1	10.2	378	12.8	475	14.0	520	15.3	568	18.9	25
R 16 - 064				64	30.3	12.8	388	16.0	485	17.6	533	19.2	582	24.9	25
R 16 - 076				76	25.7	15.2	391	19.0	488	20.9	537	22.8	586	29.2	20
R 16 - 089				89	21.7	17.8	386	22.3	484	24.5	531	26.7	579	34.5	20
R 16 - 102	102	19.3	20.4	394	25.5	492	28.1	541	30.6	591	39.1	20			
R 16 - 115	115	15.7	23.0	361	28.8	452	31.6	497	34.5	542	44.0	10			
R 16 - 305	3.1 x 1.5		305	7.1	61.0	433	76.3	542	83.9	596	91.5	650	104	10	
R 20 - 025	20	10	10	25	216	5.0	1080	6.3	1361	6.9	1485	7.5	1620	8.3	50
R 20 - 032				32	168	6.4	1075	8.0	1344	8.8	1478	9.6	1613	10.9	50
R 20 - 038				38	129	7.6	980	9.5	1226	10.5	1348	11.4	1471	12.5	25
R 20 - 044				44	112	8.8	986	11.0	1232	12.1	1355	13.2	1478	15.0	25
R 20 - 051				51	94.0	10.2	959	12.8	1203	14.0	1318	15.3	1438	17.6	25
R 20 - 064				64	72.1	12.8	923	16.0	1154	17.6	1269	19.2	1384	22.6	25
R 20 - 076				76	59.7	15.2	907	19.0	1134	20.9	1248	22.8	1361	27.5	25
R 20 - 089				89	50.5	17.8	899	22.3	1126	24.5	1236	26.7	1348	31.7	20
R 20 - 102				102	44.2	20.4	902	25.5	1127	28.1	1240	30.6	1353	37.5	20
R 20 - 115				115	38.4	23.0	883	28.8	1106	31.6	1214	34.5	1325	42.6	10
R 20 - 127				127	34.1	25.4	866	31.8	1084	34.9	1191	38.1	1299	45.5	10
R 20 - 139				139	31.0	28.0	868	35.0	1085	38.2	1185	42.0	1302	50.1	10
R 20 - 152				152	28.2	30.4	857	38.0	1072	41.8	1179	45.6	1286	55.8	10
R 20 - 305				4.0 x 3.3		305	15.0	61.0	915	76.3	1145	83.9	1258	91.5	1373

MOLLE Springs



INDEX

Esempio di ordinazione/Order example =
393 - R 10 x 025 (cod. + N. di catalogo)

1 N = 0.1 daN = 0.102 kgf Carico (N) = R (N/mm) x Deflessione (mm)

Cod. **393**

Serie rossa - Molle carico forte *Strong load springs*

ISO 10243 : 2010

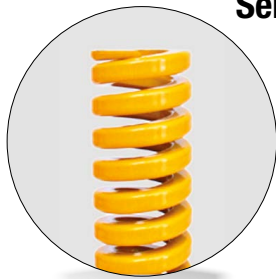
N. di catalogo	D _H	D _d	L ₀ lungh. libera	R rigidità ± 10%	A 20% L ₀		B 25% L ₀		C 27.5% L ₀		D 30% L ₀		E non usare	pz		
	∅ del foro	∅ dello stelo			+3.000.000		~1.500.000		300 - 500.000		100 - 200.000				mm	
	b x h		mm	N/m	mm	N	mm	N	mm	N	mm	N	mm			
R 25 - 025	25	12,5	25	375	5.0	1875	6.3	2363	6.9	2578	7.5	2813	8.5	50		
R 25 - 032			32	297	6.4	1901	8.0	2376	8.8	2614	9.6	2851	11.0	25		
R 25 - 038			38	219	7.6	1664	9.5	2081	10.5	2289	11.4	2497	12.6	25		
R 25 - 044			44	187	8.8	1646	11.0	2057	12.1	2263	13.2	2468	14.8	25		
R 25 - 051			51	156	10.2	1591	12.8	1997	14.0	2188	15.3	2387	17.9	25		
R 25 - 064			64	123	12.8	1574	16.0	1968	17.6	2165	19.2	2362	23.1	25		
R 25 - 076			76	99.0	15.2	1505	19.0	1881	20.9	2069	22.8	2257	26.3	20		
R 25 - 089			89	84.0	17.8	1495	22.3	1873	24.5	2056	26.7	2243	30.5	20		
R 25 - 102			102	73.0	20.4	1489	25.5	1862	28.1	2048	30.6	2234	37.3	20		
R 25 - 115			115	65.0	23.0	1495	28.8	1872	31.6	2056	34.5	2243	41.9	10		
R 25 - 127			127	57.7	25.4	1466	31.8	1835	34.9	2015	38.1	2198	46.2	10		
R 25 - 139			139	52.7	28.0	1476	35.0	1845	38.2	2014	42.0	2213	49.3	10		
R 25 - 152			152	47.8	30.4	1453	38.0	1816	41.8	1998	45.6	2180	55.7	10		
R 25 - 178			178	41.0	35.6	1460	44.5	1825	49.0	2007	53.4	2189	65.1	10		
R 25 - 203			203	35.8	40.6	1453	50.8	1819	55.8	1999	60.9	2180	74.5	10		
R 25 - 305			305	22.9	61.0	1397	76.3	1747	83.9	1921	91.5	2095	110	5		
R 32 - 038	32	16	38	388	7.6	2949	9.5	3686	10.5	4055	11.4	4423	12.5	20		
R 32 - 044			44	324	8.8	2851	11.0	3564	12.1	3920	13.2	4277	14.9	20		
R 32 - 051			51	272	10.2	2774	12.8	3482	14.0	3815	15.3	4162	17.8	20		
R 32 - 064			64	212	12.8	2714	16.0	3392	17.6	3731	19.2	4070	22.4	20		
R 32 - 076			76	172	15.2	2614	19.0	3268	20.9	3595	22.8	3922	26.1	20		
R 32 - 089			89	141	17.8	2510	22.3	3144	24.5	3451	26.7	3765	30.8	10		
R 32 - 102			102	122	20.4	2489	25.5	3111	28.1	3422	30.6	3733	36.8	10		
R 32 - 115			115	107	23.0	2461	28.8	3082	31.6	3384	34.5	3692	41.4	10		
R 32 - 127			127	93.0	25.4	2362	31.8	2957	34.9	3248	38.1	3543	44.4	10		
R 32 - 139			139	86.0	28.0	2408	35.0	3010	38.2	3287	42.0	3612	48.5	10		
R 32 - 152			152	78.0	30.4	2371	38.0	2964	41.8	3260	45.6	3557	54.8	10		
R 32 - 178			178	67.2	35.6	2392	44.5	2990	49.0	3289	53.4	3588	63.6	5		
R 32 - 203			203	59.1	40.6	2399	50.8	3002	55.8	3299	60.9	3599	72.5	5		
R 32 - 254			254	46.4	50.8	2357	63.5	2946	69.9	3241	76.2	3536	92.8	5		
R 32 - 305			305	38.0	61.0	2318	76.3	2899	83.9	3187	91.5	3477	112	5		
R 40 - 051			40	20	51	350	10.2	3570	12.8	4480	14.0	4909	15.3	5355	17.0	20
R 40 - 064	64	269			12.8	3443	16.0	4304	17.6	4734	19.2	5165	21.9	10		
R 40 - 076	76	219			15.2	3329	19.0	4161	20.9	4577	22.8	4993	26.7	10		
R 40 - 089	89	190			17.8	3382	22.3	4237	24.5	4650	26.7	5073	31.3	10		
R 40 - 102	102	163			20.4	3325	25.5	4157	28.1	4572	30.6	4988	37.1	10		
R 40 - 115	115	142			23.0	3266	28.8	4090	31.6	4491	34.5	4899	41.0	10		
R 40 - 127	127	128			25.4	3251	31.8	4070	34.9	4470	38.1	4877	46.5	5		
R 40 - 139	139	115			28.0	3220	35.0	4025	38.2	4396	42.0	4830	53.1	5		
R 40 - 152	152	105			30.4	3192	38.0	3990	41.8	4389	45.6	4788	56.1	5		
R 40 - 178	178	89			35.6	3168	44.5	3961	49.0	4357	53.4	4753	67.4	5		
R 40 - 203	203	77			40.6	3126	50.8	3912	55.8	4299	60.9	4689	76.2	5		
R 40 - 254	254	61			50.8	3099	63.5	3874	69.9	4261	76.2	4648	96.2	2		
R 40 - 305	305	51			61.0	3111	76.3	3891	83.9	4278	91.5	4667	115	2		
R 50 - 064	50	25			64	413	12.8	5286	16.0	6608	17.6	7269	19.2	7930	22.4	5
R 50 - 076					76	339	15.2	5153	19.0	6441	20.9	7085	22.8	7729	26.5	5
R 50 - 089					89	288	17.8	5126	22.3	6422	24.5	7049	26.7	7690	31.5	5
R 50 - 102			102	245	20.4	4998	25.5	6248	28.1	6872	30.6	7497	37.6	5		
R 50 - 115			115	215	23.0	4945	28.8	6192	31.6	6799	34.5	7418	42.7	5		
R 50 - 127			127	192	25.4	4877	31.8	6106	34.9	6706	38.1	7315	47.5	5		
R 50 - 139			139	168	28.0	4704	35.0	5880	38.2	6422	42.0	7056	51.8	5		
R 50 - 152			152	154	30.4	4682	38.0	5852	41.8	6437	45.6	7022	57.8	2		
R 50 - 178			178	134	35.6	4770	44.5	5963	49.0	6559	53.4	7156	68.5	2		
R 50 - 203			203	117	40.6	4750	50.8	5944	55.8	6532	60.9	7125	77.6	2		
R 50 - 254			254	89	50.8	4521	63.5	5652	69.9	6217	76.2	6782	97.9	2		
R 50 - 305			305	73	61.0	4453	76.3	5570	83.9	6123	91.5	6680	121	2		
R 63 - 076			63	38	76	618	15.2	9394	19.0	11742	20.9	12916	22.8	14090	24.7	5
R 63 - 089					89	515	17.8	9167	22.3	11485	24.5	12605	26.7	13751	30.0	5
R 63 - 102					102	438	20.4	8935	25.5	11169	28.1	12286	30.6	13403	35.1	5
R 63 - 115					115	370	23.0	8510	28.8	10656	31.6	11701	34.5	12765	37.5	5
R 63 - 127	127	333			25.4	8458	31.8	10589	34.9	11630	38.1	12687	45.9	2		
R 63 - 152	152	269			30.4	8178	38.0	10222	41.8	11244	45.6	12266	56.5	2		
R 63 - 178	178	226			35.6	8046	44.5	10057	49.0	11063	53.4	12068	66.8	2		
R 63 - 203	203	198			40.6	8039	50.8	10058	55.8	11053	60.9	12058	78.8	2		
R 63 - 254	254	155			50.8	7874	63.5	9843	69.9	10827	76.2	11811	102	2		
R 63 - 305	305	128			61.0	7808	76.3	9766	83.9	10736	91.5	11712	122	2		

Durata stimata 100.000 cicli

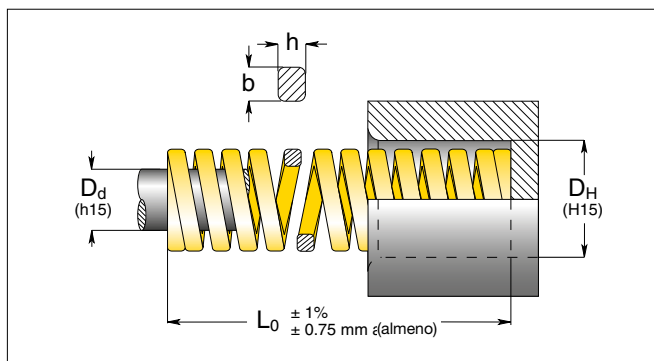
Esempio di ordinazione/Order example =
393 - R 25 x 025 (cod. + N. di catalogo)

1 N = 0.1 daN = 0.102 kgf Carico (N) = R (N/mm) x Deffessione (mm)

Serie gialla - Molle carico extra-forte *Extra-strong load springs* ISO 10243 : 2010



Codice
Cod. **394**



N. di catalogo	D _H / D _d		L ₀ / lung. libera	R / rigidità ± 10%	A / 17% L ₀		B / 20% L ₀		C / 22,5% L ₀		D / 25% L ₀		E / non usare	pz
	Ø del foro	Ø dello stelo			mm	N	mm	N	mm	N	mm	N		
G 10 - 025	10	5	25	36.8	4.3	158	5.0	184	5.6	207	6.3	232	7.7	50
G 10 - 032			32	27.9	5.4	151	6.4	179	7.2	201	8.0	223	10.6	50
G 10 - 038			38	23.7	6.5	154	7.6	180	8.6	203	9.5	225	12.6	50
G 10 - 044			44	19.2	7.5	144	8.8	169	9.9	190	11.0	211	13.8	50
G 10 - 051			51	16.5	8.7	144	10.2	168	11.5	189	12.8	211	16.2	25
G 10 - 064			64	13.2	10.9	144	12.8	169	14.4	190	16.0	211	20.4	25
G 10 - 076			76	10.9	12.9	141	15.2	166	17.1	186	19.0	207	25.2	25
G 10 - 305			1.9 x 1.6		305	2.6	51.9	135	61.0	159	68.6	178	76.3	198
G 13 - 025	12,5	6,3	25	58.5	4.3	252	5.0	293	5.6	329	6.3	369	8.1	50
G 13 - 032			32	43.9	5.4	237	6.4	281	7.2	316	8.0	351	9.9	50
G 13 - 038			38	36.0	6.5	234	7.6	274	8.6	308	9.5	342	12.9	50
G 13 - 044			44	30.3	7.5	227	8.8	267	9.9	300	11.0	333	14.1	25
G 13 - 051			51	26.2	8.7	228	10.2	267	11.5	301	12.8	335	17.4	25
G 13 - 064			64	21.2	10.9	231	12.8	271	14.4	305	16.0	339	21.0	25
G 13 - 076			76	17.1	12.9	221	15.2	260	17.1	292	19.0	325	26.4	25
G 13 - 089			89	14.5	15.1	219	17.8	258	20.0	290	22.3	323	31.5	20
G 13 - 102	102	12.7	17.3	220	20.4	259	23.0	291	25.5	324	36.0	10		
G 13 - 305	2.6 x 2.0		305	4.3	51.9	223	61.0	262	68.6	295	76.3	328	111	10
G 16 - 025	16	8	25	118	4.3	507	5.0	590	5.6	664	6.3	743	8.5	50
G 16 - 032			32	89.0	5.4	481	6.4	570	7.2	641	8.0	712	11.0	50
G 16 - 038			38	72.1	6.5	469	7.6	548	8.6	616	9.5	685	13.2	25
G 16 - 044			44	60.9	7.5	457	8.8	536	9.9	603	11.0	670	14.7	25
G 16 - 051			51	52.3	8.7	455	10.2	533	11.5	600	12.8	669	17.7	25
G 16 - 064			64	41.2	10.9	449	12.8	527	14.4	593	16.0	659	21.9	25
G 16 - 076			76	34.1	12.9	440	15.2	518	17.1	583	19.0	648	27.8	20
G 16 - 089			89	29.5	15.1	445	17.8	525	20.0	591	22.3	658	31.2	20
G 16 - 102	102	25.6	17.3	443	20.4	522	23.0	588	25.5	653	37.9	20		
G 16 - 115	115	22.4	19.6	439	23.0	515	25.9	580	28.8	645	44.5	10		
G 16 - 305	3.2 x 2.9		305	8.4	51.9	436	61.0	512	68.6	576	76.3	641	113	10
G 20 - 025	20	10	25	293	4.3	1260	5.0	1465	5.6	1648	6.3	1846	6.9	50
G 20 - 032			32	224	5.4	1210	6.4	1434	7.2	1613	8.0	1792	9.4	50
G 20 - 038			38	177	6.5	1151	7.6	1345	8.6	1513	9.5	1682	12.0	25
G 20 - 044			44	149	7.5	1118	8.8	1311	9.9	1475	11.0	1639	13.5	25
G 20 - 051			51	128	8.7	1114	10.2	1306	11.5	1469	12.8	1638	16.2	25
G 20 - 064			64	99.0	10.9	1079	12.8	1267	14.4	1426	16.0	1584	21.2	25
G 20 - 076			76	81.7	12.9	1054	15.2	1242	17.1	1397	19.0	1552	24.7	25
G 20 - 089			89	69.5	15.1	1049	17.8	1237	20.0	1392	22.3	1550	28.8	20
G 20 - 102			102	60.6	17.3	1048	20.4	1236	23.0	1391	25.5	1545	34.8	20
G 20 - 115			115	53.0	19.6	1039	23.0	1219	25.9	1371	28.8	1526	39.0	10
G 20 - 127			127	47.5	21.6	1026	25.4	1207	28.6	1357	31.8	1511	43.0	10
G 20 - 139			139	43.0	23.8	1023	28.0	1204	31.3	1345	35.0	1505	45.3	10
G 20 - 152			152	39.0	25.8	1006	30.4	1186	34.2	1334	38.0	1482	50.4	10
G 20 - 305			4.1 x 3.8		305	21.2	51.9	1100	61.0	1293	68.6	1455	76.3	1618

MOLLE Springs



INDEX

Esempio di ordinazione/Order example =
394 - G 10 x 025 (cod. + N. di catalogo)

1 N = 0.1 daN = 0.102 kgf Carico (N) = R (N/mm) x Deflessione (mm)

Cod. **394**

Serie gialla - Molle carico extra-forte *Extra-strong load springs*

ISO 10243 : 2010

N. di catalogo	D _H	D _d	L ₀ lungh. libera	R rigidità ± 10%	A 17% L ₀		B 20% L ₀		C 22,5% L ₀		D 25% L ₀		E non usare	pz			
	Ø del foro	Ø dello stelo			mm	N	mm	N	mm	N	mm	N			mm	N	
b x h																	
mm																	
G 25 - 025	25	12,5	25	459	4.3	1974	5.0	2295	5.6	2582	6.3	2892	7.3	50			
G 25 - 032			32	374	5.4	2020	6.4	2394	7.2	2693	8.0	2992	10.7	25			
G 25 - 038			38	300	6.5	1950	7.6	2280	8.6	2580	9.5	2850	12.0	25			
G 25 - 044			44	244	7.5	1830	8.8	2147	9.9	2416	11.0	2684	14.4	25			
G 25 - 051			51	208	8.7	1810	10.2	2122	11.5	2392	12.8	2662	17.4	25			
G 25 - 064			64	161	10.9	1755	12.8	2061	14.4	2318	16.0	2576	21.4	25			
G 25 - 076			76	131	12.9	1690	15.2	1991	17.1	2240	19.0	2489	26.9	20			
G 25 - 089			89	111	15.1	1676	17.8	1976	20.0	2220	22.3	2475	30.9	20			
G 25 - 102			102	96.3	17.3	1666	20.4	1965	23.0	2210	25.5	2456	36.7	20			
G 25 - 115			115	85.7	19.6	1680	23.0	1971	25.9	2217	28.8	2468	40.3	10			
G 25 - 127			127	76.3	21.6	1648	25.4	1938	28.6	2180	31.8	2426	45.1	10			
G 25 - 139			139	66.0	23.8	1571	28.0	1848	31.3	2066	35.0	2310	47.6	10			
G 25 - 152			152	63.5	25.8	1638	30.4	1930	34.2	2172	38.0	2413	53.5	10			
G 25 - 178			178	53.9	30.3	1633	35.6	1919	40.1	2159	44.5	2399	63.9	10			
G 25 - 203			203	47.0	34.5	1622	40.6	1908	45.7	2147	50.8	2388	70.2	10			
G 25 - 305			305	30.9	51.9	1604	61.0	1885	68.6	2121	76.3	2358	110	5			
G 32 - 038	32	16	38	480	6.5	3120	7.6	3648	8.6	4128	9.5	4560	11.4	20			
G 32 - 044			44	390	7.5	2925	8.8	3432	9.9	3861	11.0	4290	13.7	20			
G 32 - 051			51	320	8.7	2784	10.2	3264	11.5	3680	12.8	4096	15.6	20			
G 32 - 064			64	269	10.9	2934	12.8	3446	14.4	3876	16.0	4307	20.0	20			
G 32 - 076			76	219	12.9	2825	15.2	3329	17.1	3745	19.0	4161	24.4	20			
G 32 - 089			89	180	15.1	2723	17.8	3209	20.0	3611	22.3	4021	29.7	10			
G 32 - 102			102	155	17.3	2682	20.4	3162	23.0	3557	25.5	3953	35.1	10			
G 32 - 115			115	140	19.6	2744	23.0	3220	25.9	3623	28.8	4032	39.0	10			
G 32 - 127			127	124	21.6	2678	25.4	3150	28.6	3543	31.8	3943	42.8	10			
G 32 - 139			139	112	23.8	2673	28.0	3144	31.3	3512	35.0	3931	48.6	10			
G 32 - 152			152	102	25.8	2632	30.4	3101	34.2	3488	38.0	3876	52.4	10			
G 32 - 178			178	88.2	30.3	2672	35.6	3140	40.1	3532	44.5	3925	60.9	5			
G 32 - 203			203	76.0	34.5	2622	40.6	3086	45.7	3471	50.8	3861	69.2	5			
G 32 - 254			254	60.8	43.2	2627	50.8	3089	57.2	3475	63.5	3861	88.1	5			
G 32 - 305			305	49.0	51.9	2543	61.0	2989	68.6	3363	76.3	3739	104	5			
G 40 - 051			40	20	51	628	8.7	5464	10.2	6406	11.5	7206	12.8	8038	15.0	20	
G 40 - 064	64	487			10.9	5308	12.8	6234	14.4	7013	16.0	7792	19.5	10			
G 40 - 076	76	379			12.9	4889	15.2	5761	17.1	6481	19.0	7201	23.3	10			
G 40 - 089	89	321			15.1	4847	17.8	5714	20.0	6428	22.3	7158	26.7	10			
G 40 - 102	102	281			17.3	4861	20.4	5732	23.0	6449	25.5	7166	33.8	10			
G 40 - 115	115	245			19.6	4802	23.0	5635	25.9	6339	28.8	7056	36.2	10			
G 40 - 127	127	221			21.6	4774	25.4	5613	28.6	6315	31.8	7028	40.7	5			
G 40 - 139	139	195			23.8	4641	28.0	5460	31.3	6103	35.0	6825	44.5	5			
G 40 - 152	152	168			25.8	4334	30.4	5107	34.2	5746	38.0	6384	49.6	5			
G 40 - 178	178	150			30.3	4545	35.6	5340	40.1	6015	44.5	6675	59.9	5			
G 40 - 203	203	132			34.5	4554	40.6	5359	45.7	6029	50.8	6706	67.1	5			
G 40 - 254	254	107			43.2	4622	50.8	5436	57.2	6115	63.5	6795	86.3	2			
G 40 - 305	305	87.8			51.9	4557	61.0	5356	68.6	6025	76.3	6699	104	2			
G 50 - 064	50	25			64	709	10.9	7728	12.8	9075	14.4	10210	16.0	11344	19.3	5	
G 50 - 076					76	572	12.9	7379	15.2	8694	17.1	9781	19.0	10868	24.2	5	
G 50 - 089					89	475	15.1	7173	17.8	8455	20.0	9512	22.3	10593	28.0	5	
G 50 - 102			102	405	17.3	7007	20.4	8262	23.0	9295	25.5	10328	33.5	5			
G 50 - 115			115	352	19.6	6899	23.0	8096	25.9	9108	28.8	10138	38.6	5			
G 50 - 127			127	316	21.6	6826	25.4	8026	28.6	9030	31.8	10049	41.4	5			
G 50 - 139			139	289	23.8	6878	28.0	8092	31.3	9046	35.0	10115	47.3	5			
G 50 - 152			152	239	25.8	6166	30.4	7266	34.2	8174	38.0	9082	50.2	2			
G 50 - 178			178	215	30.3	6515	35.6	7654	40.1	8611	44.5	9568	61.1	2			
G 50 - 203			203	187	34.5	6452	40.6	7592	45.7	8541	50.8	9500	67.7	2			
G 50 - 254			254	153	43.2	6610	50.8	7772	57.2	8744	63.5	9716	87.0	2			
G 50 - 305			305	127	51.9	6591	61.0	7747	68.6	8715	76.3	9690	104	2			
G 63 - 076			63	38	76	952	12.9	12280	15.2	14470	-	-	-	-	15.5	5	
G 63 - 089					89	819	15.1	12360	17.8	14580	-	-	-	-	-	20.0	5
G 63 - 102					102	700	17.3	12110	20.4	14280	23.0	16065	25.5	17850	30.7	5	
G 63 - 115					115	620	19.6	12152	23.0	14260	25.9	16043	28.8	17860	34.9	5	
G 63 - 127	127	565			21.6	12204	25.4	14351	28.6	16145	31.8	17967	38.0	2			
G 63 - 152	152	458			25.8	11816	30.4	13923	34.2	15664	38.0	17404	47.2	2			
G 63 - 178	178	384			30.3	11635	35.6	13670	40.1	15379	44.5	17088	55.8	2			
G 63 - 203	203	337			34.5	11627	40.6	13682	45.7	15392	50.8	17120	64.8	2			
G 63 - 254	254	263			43.2	11362	50.8	13360	57.2	15030	63.5	16701	86.7	2			
G 63 - 305	305	218			51.9	11314	61.0	13298	68.6	14960	76.3	16633	106	2			

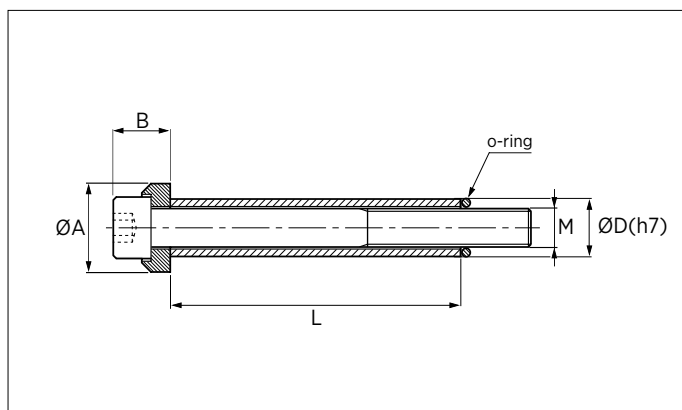
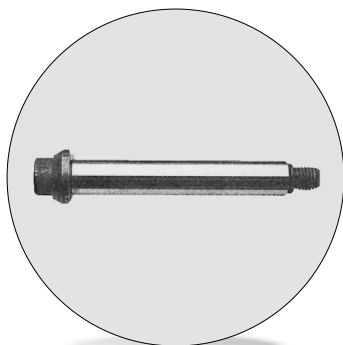
Durata stimata 100.000 cicli

Esempio di ordinazione/Order example =
394 - G 25 x 025 (cod. + N. di catalogo)

1 N = 0.1 daN = 0.102 kgf Carico (N) = R (N/mm) x Deflessione (mm)

Viti a colletto con distanziale rettificato

Shoulder screws with ground spacer



Codice	Vite	Tolleranza di rettifica	Rondella	Resistenza	Distanziale
Cod. 396	qualità 12.9 UNI 5931	D="h7"	Acciaio temprato, brillantata.	100 Kg/mm2	Acciaio temprato e rettificato

L (lunghezza distanziale)	M	M 6	M 8	M 10	M 12	M 16	M 20
	D	10	12,5	15	17,5	23	30
	A	15	19	23	27	34	42
	B	10	13	15	18	24	13
	L ± 0,05 mm						
15	•						
20	•	•		•			
25	•	•	•	•			
30	•	•	•	•	•		
35	•	•	•	•	•		
40	•	•	•	•	•	•	•
45	•	•	•	•	•	•	•
50	•	•	•	•	•	•	•
55	•	•	•	•	•	•	•
60	•	•	•	•	•	•	•
65	•	•	•	•	•	•	•
70	•	•	•	•	•	•	•
80	•	•	•	•	•	•	•
90	•	•	•	•	•	•	•
100	•	•	•	•	•	•	•
110	•	•	•	•	•	•	•
120		•	•	•	•	•	•
130		•	•	•	•	•	•
140		•	•	•	•	•	•
150			•	•	•	•	•
160			•	•	•	•	•
180			•	•	•	•	•
200			•	•	•	•	•
220				•	•	•	•
230					•	•	•

Esempio di ordinazione/Order example = 396 - M 6 x 20 (cod. + M x L)

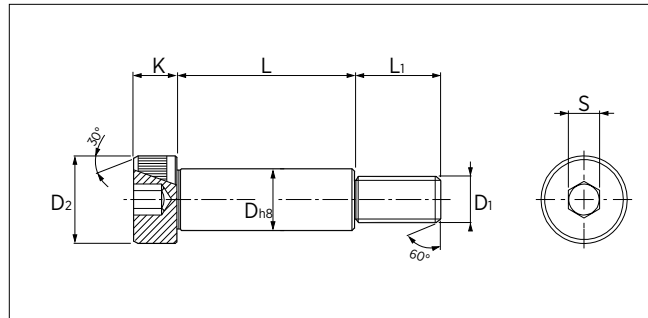
MOLLE
Springs

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Viti a gambo rettificato

Shoulder screws with ground shaft

Viti a testa cilindrica con gambo rettificato codolo filettato ed esagono incassato



Codice	Normativa	Materiale acciaio	Tolleranza gambo rettificato	Resistenza alla trazione	Limite di elasticità	Allungamento
Cod. 397	• ISO 7379	ISO 12.9	“h8”	110 - 120 Kg/mm ²	90 Kg/mm min.	9% min.
Cod. 397X	♦ ISO 7379	Inox AISI 304 (A2)	“h8”	600-850 Rm(MPa) min.		25% min.

Nuovo codice • Alternativa disponibile ♦

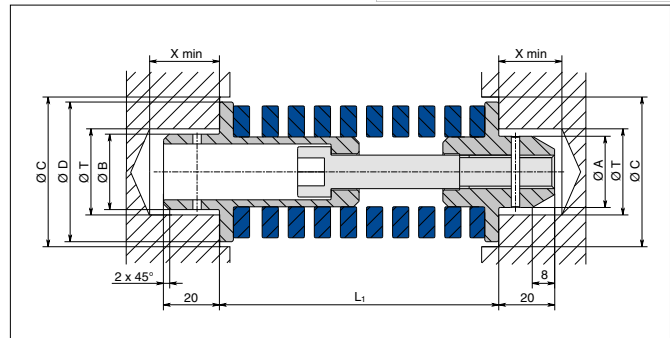
D	4	5	6	8	10	12	16	20	24
D1	M3	M4	M5	M6	M8	M10	M12	M16	M20
D2	7	8	10	13	16	18	24	30	36
k max	3	4	4,5	5,5	7	9	11	14	16
L1	7	8	9,5	11	13	16	18	22	27
S	2	2,5	3	4	5	6	8	10	12
L +0/+0,1 mm									
6	♦ •	♦ •	♦ •						
8	♦ •	♦ •	♦ •	♦ •					
10	♦ •	♦ •	♦ •	♦ •	♦ •	•			
12	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •			
15	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •		
16	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •		
20	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	
25	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	
30	•	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •
35		♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •
40		♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •
45		♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •
50		♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •
55			♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •
60			♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •
65			♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •
70			♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •
80			♦ •	♦ •	♦ •	♦ •	♦ •	♦ •	♦ •
90				♦ •	♦ •	♦ •	♦ •	♦ •	♦ •
100				♦ •	♦ •	♦ •	♦ •	♦ •	♦ •
110					•	•	♦ •	♦ •	♦ •
120					•	•	♦ •	♦ •	♦ •
130					•	•	♦ •	♦ •	♦ •
140						•	♦ •	♦ •	♦ •
150						•	•	•	•
160							•	•	•
180							•	•	•
200							•	•	•

Esempio di ordinazione/Order example = 397 - 10x50 (cod. + DxL)

PSA PEUGEOT CITROËN

Carico medio, doppia spina

Medium load, double pin



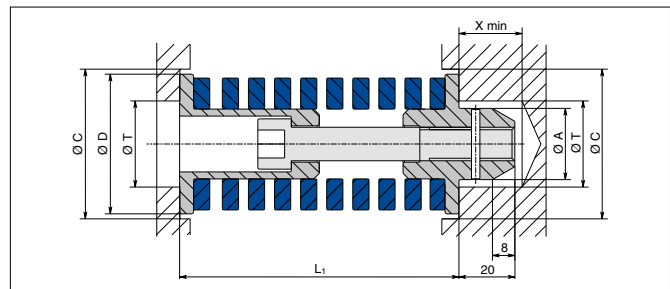
Codice PSA Mabec	L1	ØA	ØB	ØD	Forza iniziale	25% L _o	32% L _o	ØC	ØT	X min	Dati della molla					
											D _H	L _o	R			
	mm	mm	mm	mm	mm	N	mm	N	mm	N	mm	mm	mm	mm	N/mm	
X 346 590 070	69	20.5	22	40	17	1836	3	2160	8	2700	42	22.5	25	40	76	108
X 346 590 071	76				10	1080	10	2160	15	2700					76	108
X 346 590 072	100				12	972	13	2025	20	2592					102	81
X 346 590 073	122				15	941	17	2006	25	2508					127	62.7
X 346 590 074	143				19	981	19	1961	30	2528					152	51.6
X 346 590 075	188				25	918	25	1835	40	2373					203	36.7
X 346 590 076	88	25.5	27	50	24	2856	-	-	8	3808	52	27.5	25	50	102	119
X 346 590 077	100				12	1428	13	2975	20	3808					102	119
X 346 590 078	122				15	1455	17	3104	25	3880					127	97
X 346 590 079	143				19	1520	19	3040	30	3920					152	80
X 346 590 080	188				25	1495	25	2990	40	3887					203	59.8
X 346 590 081	232				32	1405	31	2766	50	3600					254	43.9
X 346 590 082	105	36.5	38	63	32	5376	-	-	8	6720	65	38.5	25	63	127	168
X 346 590 083	122				15	2520	17	5376	25	6720					127	168
X 346 590 084	143				19	2584	19	5168	30	6664					152	136
X 346 590 085	188				25	2500	25	5000	40	6500					203	100
X 346 590 086	232				32	2509	31	4939	50	6429					254	78.4
X 346 590 087	277				38	2459	38	4917	60	6341					305	64.7

MOLLE
Springs



Carico medio, spina singola

Medium load, single pin



INDEX

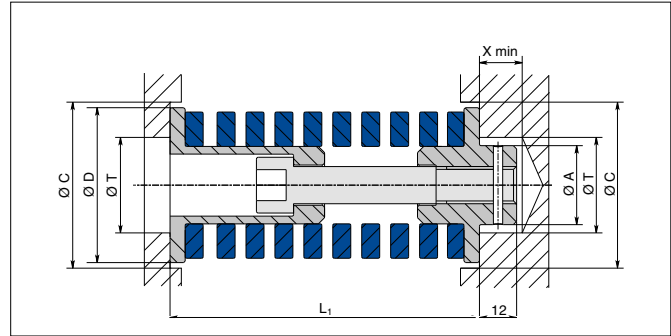
Codice PSA Mabec	L1	ØA	ØB	ØD	Forza iniziale	25% L _o	32% L _o	ØC	ØT	X min	Dati della molla					
											D _H	L _o	R			
	mm	mm	mm	mm	mm	N	mm	N	mm	N	mm	mm	mm	mm	N/mm	
X 346 590 063	69	20.5	-	40	17	1836	3	2160	8	2700	42	22.5	25	40	76	108
X 346 590 062	76				10	1080	10	2160	15	2700					76	108
X 346 590 061	100				12	972	13	2025	20	2592					102	81
X 346 590 059	143				19	980	19	1961	30	2528					152	51.6
X 346 590 058	188				25	918	25	1835	40	2386					203	36.7
X 346 590 057	88				25.5	-	50	24	2856	-					-	8
X 346 590 056	100	12	1428	13				2975	20	3808	102	119				
X 346 590 054	143	19	1520	19				3040	30	3920	152	80				
X 346 590 053	188	25	1495	25				2990	40	3887	203	59.8				
X 346 590 052	232	32	1405	31				2766	50	3600	254	43.9				
X 346 590 051	105	32	5376	-				-	8	6720	127	168				
X 346 590 049	143	36.5	-	63	19	2584	19	5168	30	6664	65	38.5	25	63	152	136
X 346 590 048	188				25	2500	25	5000	40	6500					203	100
X 346 590 047	232				32	2509	31	4939	50	6429					254	78.4
X 346 590 046	277				38	2459	38	4917	60	6341					305	64.7

Esempio di ordinazione/Order example = X 346 590 070 (codice)

1 N = 0.1 daN = 0.102 kgf

Carico medio, spina singola corta

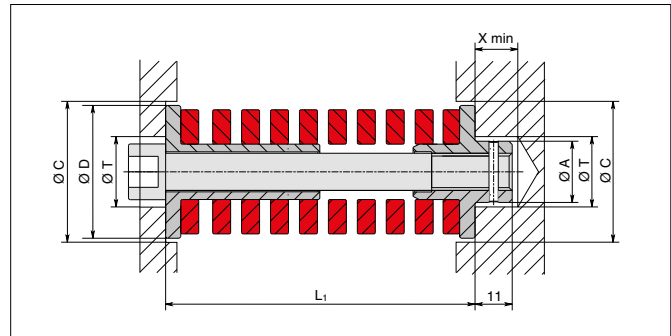
Medium load, short single pin



Codice PSA Mabec	L1	ØA	ØB	ØD	Forza iniziale	25% L _o	32% L _o	ØC	ØT	X min	Dati della molla					
											D _H	L _o	R			
	mm	mm	mm	mm	mm	N	mm	N	mm	N	mm	mm	mm	mm	N/mm	
X 346 590 060	122	20.5	-	40	15	940	17	2006	25	2508	42	22.5	13	40	127	62.7
X 346 590 055	122	25.5	-	50	15	1455	17	3104	25	3880	52	27.5	13	50	127	97
X 346 590 050	122	36.5	-	63	15	2520	17	5376	25	6720	65	38.5	13	63	127	168

Carico forte Ø25

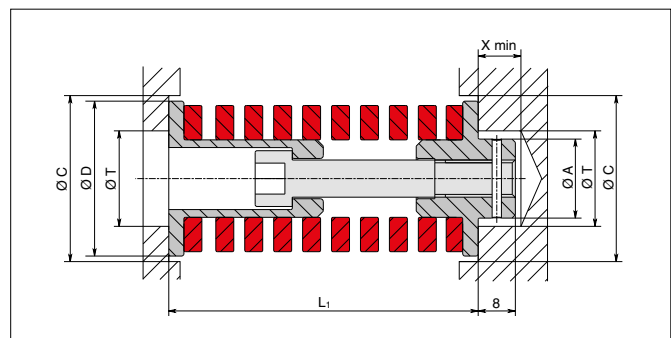
Strong load, Ø25



Codice PSA Mabec	L1	ØA	ØB	ØD	Forza iniziale	20% L _o	28% L _o	ØC	ØT	X min	Dati della molla					
											D _H	L _o	R			
	mm	mm	mm	mm	mm	N	mm	N	mm	N	mm	mm	mm	mm	N/mm	
X 346 590 045	69	13	-	25	2	246	11	1599	16	2214	27	14	14	25	64	123

Carico forte Ø32

Strong load, Ø32



Codice PSA Mabec	L1	ØA	ØB	ØD	Forza iniziale	20% L _o	28% L _o	ØC	ØT	X min	Dati della molla				
											D _H	L _o	R		
	mm	mm	mm	mm	mm	N	mm	N	mm	N	mm	mm	mm	mm	N/mm
X 346 590 044	88	13	-	33	21	2562	-	8	3528	34	14	8	32	102	122
X 346 590 043	108				14	1498	9	2461	18					3424	115

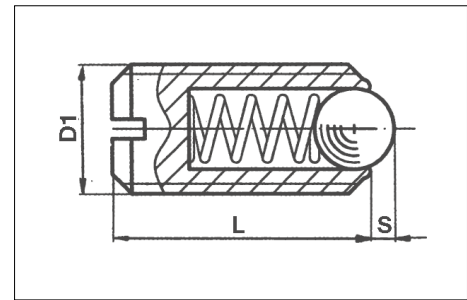
Esempio di ordinazione/Order example = X 346 590 060 (codice)

1 N = 0.1 daN = 0.102 kgf

Posizionatori con sfera e intaglio per cacciavite *Spring plungers, with ball and slot*



Codice
Cod. **398**



Esecuzione

Corpo: in acciaio automatico brunito oppure inox
Sfera: in acciaio da cuscinetti temprato oppure inox temprato
Molla: in acciaio inox

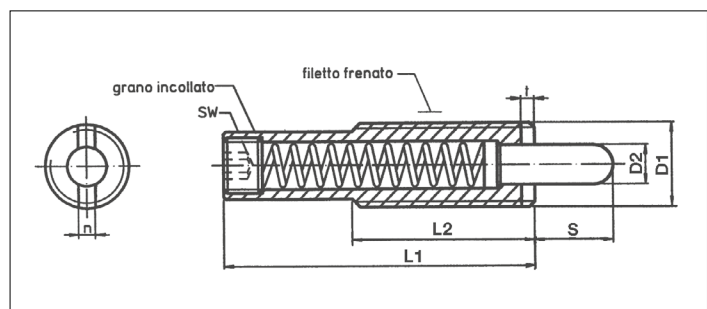
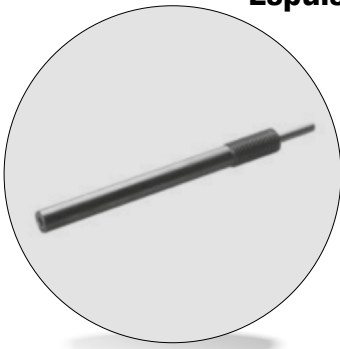
Nota:

questi posizionatori sono usati, per es., come arresti o espulsori.
L'esecuzione inox resiste fino a 250 °C.

Codice	D1	L	S	Ø sfera	Spinta		Peso g.
					inizio N≈	fine N≈	
398-M3	M3	7	0,4	1,5	3	4,5	0,2
398-M4	M4	9	0,8	2,5	8,5	14	0,4
398-M5	M5	12	0,9	3	8	14	0,9
398-M6	M6	14	1	3,5	11	18	1,5
398-M8	M8	16	1,5	5	18	31	3,5
398-M10	M10	19	2	6	24	45	6,6
398-M12	M12	22	2,5	8	26	49	11
398-M16	M16	24	3,5	10	41	86	23
398-M20	M20	30	4,5	12	56	111	45
398-M24	M24	34	5,5	15	81	151	72

Esempio di ordinazione/Order example = 398 - M10 (codice)

Espulsori EH 22070 - Esecuzione lunga *Spring plunger, long*



Codice
Cod. **22070-....**

Esecuzione

Corpo: in acciaio automatico brunito
Molla: in acciaio inox
Puntale: acciaio cmt.-tmp brunito

Codice	D1	S	D2	L1	L2	n	t	SW	Spinta		Peso g.
									inizio N≈	fine N≈	
22070-0512	M12	10	5,5	43	35	2,7	2	4	7	46	23
22070-0536	M16	15	8	58	35	3,2	3	6	10	57	55
22070-0550	M16	30	8	98	35	3,2	3	6	20	80	83
22070-0580	M24	15	10	60	45	3,7	3	8	24	192	134

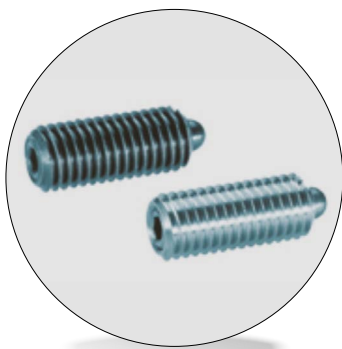
N.B.:

sono disponibili su richiesta espulsori con corse e passi diversi.

Esempio di ordinazione/Order example = 22070 - 0512 (codice)

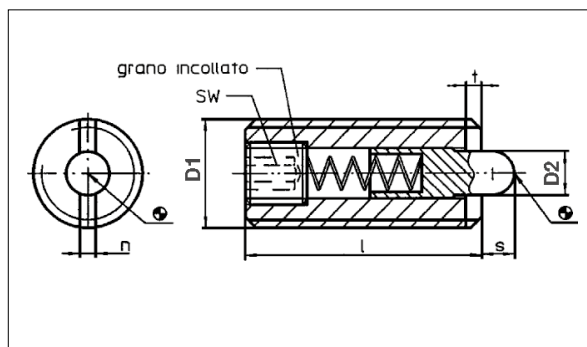
Nota: vengono impiegati nella costruzione di stampi di imbutitura, per facilitare il distacco del pezzo, che viene poi estratto a mano o con l'apposito attrezzo.
Il montaggio avviene sia tramite l'esagono incassato, che tramite l'intaglio frontale. Sono disponibili gli appositi cacciaviti.

Posizionatori con esagono incassato *Spring plunger with internal hexagon*



Codice
Cod. **22060-....**

Esecuzione
Corpo: Acciaio automatico brunito
Puntale: Acciaio automatico temprato
Molla: Inox
Temperatura massima di esercizio: +250° C



Spinta normale	Spinta maggiorata								Spinta normale	Spinta maggiorata		
Codice	Codice	D1	D2	l	n	s	t	SW	Inizio N≈	Fine N≈	Inizio N≈	Fine N≈
22060.0003	-	M 3	1,0	12	0,4	1,0	0,5	0,7	2,0	4	-	-
22060.0004	-	M 4	1,5	15	0,6	1,5	0,6	1,3	4,5	16	-	-
22060.0005	22060.0105	M 5	2,4	18	1,2	2,3	0,8	1,5	6,0	19	11,0	40
22060.0006	22060.0106	M 6	2,7	20	1,3	2,5	0,9	2,0	6,0	19	15,0	43
22060.0008	22060.0108	M 8	3,5	22	1,5	3,0	1,4	2,5	10,0	39	20,0	75
22060.0010	22060.0110	M 10	4,0	22	1,5	3,0	1,4	3,0	10,0	39	20,0	75
22060.0012	22060.0112	M 12	6,0	28	2,7	4,0	2,0	4,0	12,0	53	45,0	120
22060.0016	22060.0116	M 16	7,5	32	3,2	5,0	2,5	5,0	45,0	100	64,0	160
22060.0020	22060.0120	M 20	10,0	40	3,7	7,0	3,0	6,0	52,0	125	75,0	195
22060.0024	22060.0124	M 24	12,0	52	3,7	10,0	3,0	8,0	70,0	170	75,0	245

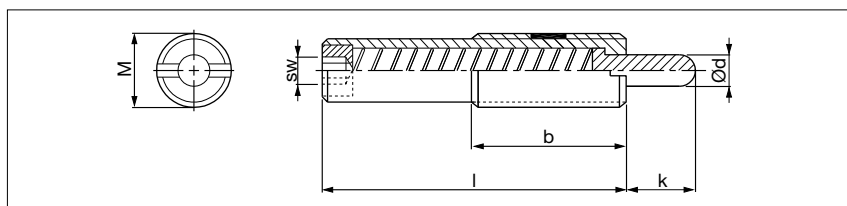
Cacciaviti					
Codice	d1	b	d	l	
22060.0908	M8	60	6,45	70	39
22060.0910	M10	80	8,00	80	66
22060.0912	M12	80	9,80	80	72
22060.0916	M16	100	13,50	105	144



Nota:
Questi posizionatori sono usati, p.es., come arresti o espulsori. Possono essere montati e smontati sia tramite l'esagono incassato posteriore, che tramite l'intaglio frontale. Sono disponibili gli appositi cacciaviti.

Esempio di ordinazione/Order example = 22060.0003 (codice/code)

Espulsore a molla *Spring plunger*



Tipo	Materiale
M314	perno: 1-1273 (90Mn4) HRC 36-40; corpo: 1.7220 (34CrMo4); brunito

Codice	M	k	l	b	d	sw	Initial force N (Kgf)	Final force N (Kgf)
*M314-04-002	M12x1,75	10	43	35	5,5	4	6,8 (0,7)	39,2 (4)
M314-04-004	M16x2,0	10	50	35	8	5	19,6 (2)	98,0 (10)
M314-04-006	M16x2,0	10	60	35	8	5	26,4 (2,7)	78,4 (8)
*M314-04-008	M16x2,0	15	60	35	8	5	14,7 (1,5)	78,4 (8)
M314-04-010	M16x2,0	20	85	35	8	5	16,6 (1,7)	78,4 (8)
*M314-04-012	M16x2,0	30	125	35	8	5	19,6 (2)	78,4 (8)
M314-04-014	M16x2,0	50	155	35	8	8	29,4 (3)	98,0 (10)
*M314-04-016	M24x3,0	15	60	45	10	8	39,2 (4)	196,1 (20)
M314-04-018	M30x3,5	20	70	45	15	12	49,0 (5)	294,1 (30)

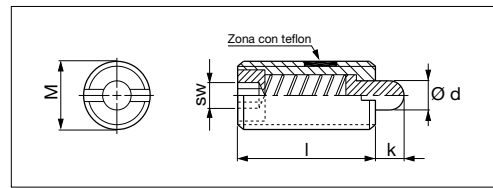
Esempio di ordinazione/Order example = M314-04-002 (codice)

* pezzi pronti a magazzino



Espulsore a molla Spring plunger

Tipo	Materiale
M314-03	perno: 1-1273 (90Mn4) HRC 36-40; corpo: 1.7220 (34CrMo4); brunito



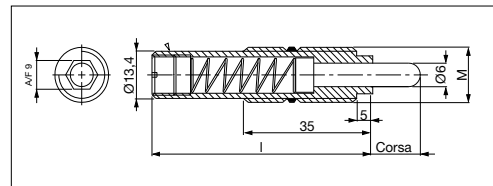
Codice	M	k	l	d	sw	Initial force N (Kgf)	Final force N (Kgf)
M314-03-011	M10x1,5	5,0	30	3,8	3,0	9,8 (1,0)	49,0 (5,0)

Esempio di ordinazione/Order example = M314-03-011 (codice)



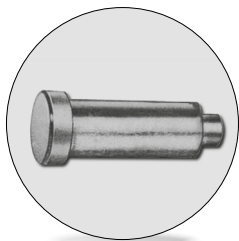
Espulsore a molla VDI 3004 Spring plunger VDI 3004

Tipo	Materiale
S504-03	perno: 1-1273 (90Mn4) HRC 36-40; corpo: 1.7220 (34CrMo4); brunito



Codice	M	corsa	l	Spring Force N /mm	Initial force N (Kgf)	Final force N (Kgf)
S504-03-020080	M16x1,5	20	80	1,38	6,9	34,5
S504-03-030080	M16x1,5	30	80	1,30	6,5	45,5
S504-03-050150	M16x1,5	50	150	0,6	13,2	43,2

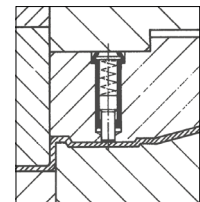
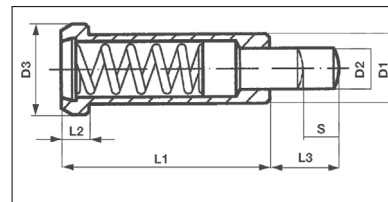
Esempio di ordinazione/Order example = S504-03-020080 (codice)



Espulsori EH 22070 esecuzione liscia Spring plungers, smooth

Codice
Cod. 22070-....

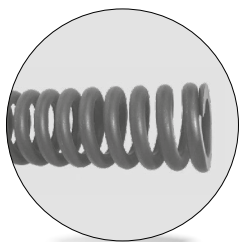
Esecuzione
Corpo: in acciaio automatico brunito.
Molla: in acciaio inox.
Puntale: in acciaio cementato, brunito.



Codice	D1	D2	D3	L1	L2	L3	Corsa	Spinta		Peso g.
								inizio N _≈	fine N _≈	
22070-0006	6	2,7	8	20	3,2	6	3,5	10	22	4,2
22070-0008	8	3,9	10	24	3,2	8	4,5	30	88	7,7
22070-0010	10	5,9	13	30	4	10	5,5	42	110	16
22070-0012	12	7,9	16	36	5	12	6,5	50	130	27

Nota: sono generalmente usati negli stampi come espulsori o fermi.
La loro forma ne impedisce l'uscita dalla sede.
Temperatura massima di esercizio = +250° C.

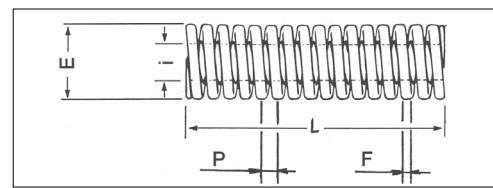
Esempio di ordinazione/Order example = 22070.0006 (codice)



Molle a filo tondo speciali Special spring

Codice
Cod. MOLL

Eseguiamo molle a compressione spianate a filo tondo con materiali e dimensioni a Vs. disegno.



N° pz.	Ø F (filo)	Ø E (est.)	Ø i (int.)	P (passo)	LL (lunghezza libera)	Materiale

Esempio di ordinazione/Order example = Moll + dati tabelle

Cilindri ad azoto

Gas Springs



Cilindri ad azoto

Gas Springs

MOLLE
Springs

INDEX



CF Torino - È vietata la riproduzione, anche parziale, del presente catalogo.

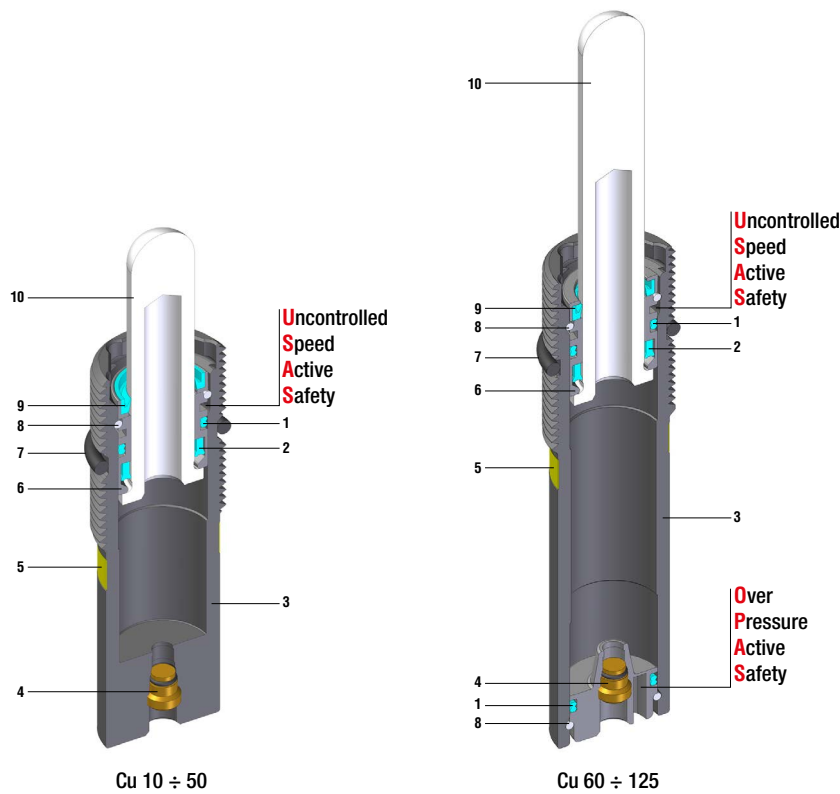
0	42 50	70 90	150 200	260 320	360 480	490 680	740 780	900 1000	1046 1410	1530 2000
12	M 50									
15		M 70								
M 16 x 1,5	NG 16 x 1,5 NE 16 x 1,5									
M 16 x 2	NE 16 x 2									
19		M 90 MS 90	MP 150 RV 170 RS 170							
M 24 x 1,5		M 90 TBM M 90 TEM	NG 24 x 1,5 NE 24 X 1,5							
1"- 8 UNC		M 90 TBI								
25			M 200 MS 200	MP 300 ML 300 RV 320 RS 320	KE 400					
32			SC 150 SC 200	M 300 H 300	RV 350 RS 350 RT 350	ML 500 MP 500 MQ 700	KE 750			
38				SC 250	H 500 HT 500 T2 RV 500 RS 500 RT 500	HT 500 T1		ML 1000 MP 1000	KE 1000	
M 38 x 1,5				SCF 250	HF 500					
45					S 500 SC 500	H 700	HT 700 T1 HT 700 T2 RV 750 RS 750 RF 750 RT 750 RG 750			
50							SC 750 S 750	H 1000 HT 1000 T1 HT 1000 T2 RV 1000 RS 1000 RF 1000 RT 1000 RG 1000	RV 1200 RS 1200 RF 1200 RT 1200	KE 1800 ML 1800 MP 2000
63										RV 1500 RS 1500 RF 1500 RT 1500 RG 1500 H 1500
75										S 1500 SC 1500 LS 1500

0	2035 2385	2830 3000	3180	4240	4418 4980	6630	7540 7700	9540	10600 12720	18400 19910
63		KE 3000 MP 3000	ML 3000							
75	H 2400 LS 2400 RV 2400 RS 2400 RF 2400 RT 2400 RG 2400				KE 4700 ML 4700					
95		LS 3000 S 3000 SC 3000		H 4200 LS 4200 RV 4200 RS 4200 RT 4200 RG 4200			KE 7500 ML 7500			
120					LS 5000 SC 5000	H 6600 LS 6600 RV 6600 RS 6600 RT 6600 RG 6600			KE 12000 ML 12000	
150							SC 7500 LS 7500	H 9500 LS 9500 RV 9500 RS 9500 RT 9500	RV 12000	KE 18500
195									SC 10000	RV 20000 H 18500 H 20000

MOLLE
Springs

INDEX

CF Torino - È vietata la riproduzione, anche parziale, del presente catalogo.



Sealing	Design
ROD SEAL	BUSH - BODY DESIGN

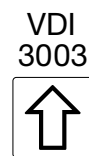
1	Dual ring seal	6	Bush
2	Rod seal	7	Locking ring
3	Body	8	Retaining ring
4	Valve	9	Rod wiper
5	Force color code	10	Rod (nitrited superfinished)

Codice Code	Corpo Body Ø		Corsa Stroke Cu		Forza iniziale Initial force FO		OSAS	USAS	OPAS
	mm	inch	mm	inch	daN	lb			
NE 16 x 1,5	M 16 x 1,5	M 16 x 1,5	10 - 125	0.39 - 4.92	3 - 42	7 - 95	-	●	-
NE 16 x 2	M 16 x 2	M 16 x 2	10 - 125	0.39 - 4.92	3 - 42	7 - 95	-	●	-
NG 16 x 1,5	M 16 x 1,5	M 16 x 1,5	10 - 100	0.39 - 3.94	3 - 42	7 - 95	-	●	-
NE 24 x 1,5	M 24 x 1,5	M 24 x 1,5	10 - 50	0.39 - 1.97	11 - 170	25 - 382	-	●	-
NE 24 x 1,5	M 24 x 1,5	M 24 x 1,5	60 - 125	2.36 - 4.92	11 - 170	25 - 382	-	●	●
NG 24 x 1,5	M 24 x 1,5	M 24 x 1,5	10 - 50	0.39 - 1.97	11 - 170	25 - 382	-	●	-
NG 24 x 1,5	M 24 x 1,5	M 24 x 1,5	60 - 100	2.36 - 3.94	11 - 170	25 - 382	-	●	●



OSAS

Sicurezza Attiva Oltre Corsa
Over Stroke Active Safety



USAS

Sicurezza Attiva Ritorno Incontrollato
Uncontrolled Speed Active Safety



OPAS

Sicurezza Attiva Oltre Pressione
Over Pressure Active Safety

NE 16 x 1,5

***F₁** = Forza finale isoteramica con 100% Cu
Isothermal end force at 100% Cu

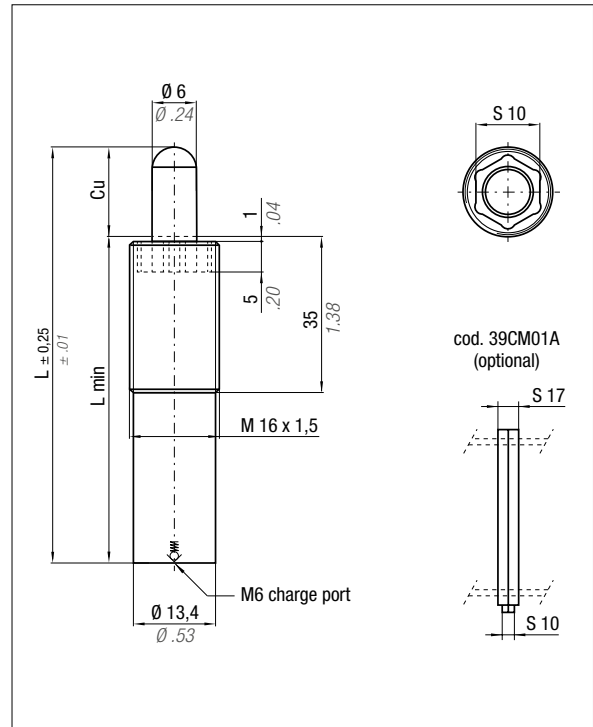
****F_{1p}** = Forza finale politropica con 100% Cu
Polytrophic end force at 100% Cu

Colore forza Force color code	P		F ₀ Forza iniziale Initial force ± 5% +20°C +68°F		F _{1_i} Forza finale* End force*	F _{1_p} Forza finale** End force**
	bar	psi	daN	lb		
PR	12	174	4	9	1,57 x F ₀	2,03 x F ₀
GR	20	290	6	14	1,57 x F ₀	2,03 x F ₀
BU	40	580	11	25	1,57 x F ₀	2,03 x F ₀
RD	75	1088	21	47	1,57 x F ₀	2,03 x F ₀
YW	150	2175	42	95	1,57 x F ₀	2,03 x F ₀
BK	10-150	145-2175	3-42	7-95	1,57 x F ₀	2,03 x F ₀

Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

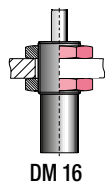
P = pressione di carico nominale. P = nominal charging pressure



		ΔP ± 0,33 %/°C	P max 150 bar 2175 psi	P min 10 bar 145 psi	S 0,28 cm ² 0.043 in ²	SPM ~ 50 - 100 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione Monouso Maintenance kit Disposable
--	--	---------------------------	-------------------------------------	-----------------------------------	---	---------------------------------------	---	--

Codice Code	Cu		L		L min		~Kg	~lb	
	mm	inch	mm	inch	mm	inch			
NE 16 x 1,5-010 -...	10	0.39	65	2.56	55	2.17	0,05	0.11	●
NE 16 x 1,5-020 -...	20	0.79	85	3.35	65	2.56	0,06	0.13	●
NE 16 x 1,5-030 -...	30	1.18	105	4.13	75	2.95	0,07	0.15	●
NE 16 x 1,5-040 -...	40	1.57	125	4.92	85	3.35	0,07	0.15	●
NE 16 x 1,5-050 -...	50	1.97	145	5.71	95	3.74	0,08	0.18	●
NE 16 x 1,5-060 -...	60	2.36	165	6.50	105	4.13	0,08	0.18	●
NE 16 x 1,5-070 -...	70	2.76	185	7.28	115	4.53	0,09	0.20	●
NE 16 x 1,5-080 -...	80	3.15	205	8.07	125	4.92	0,10	0.22	●
NE 16 x 1,5-100 -...	100	3.94	245	9.65	145	5.71	0,11	0.24	●
NE 16 x 1,5-125 -...	125	4.92	295	11.61	170	6.69	0,12	0.26	●

Esempio di ordinazione/Order example = NE 16x1,5-10-BU (codice/code + colore forza/force color code)



DM 16

Fissaggi Flange mounts

NE 16 x 2

ACTIVE SAFETY



***F₁** =
Forza finale isotermaica
con 100% Cu
Isothermal end force at 100% Cu

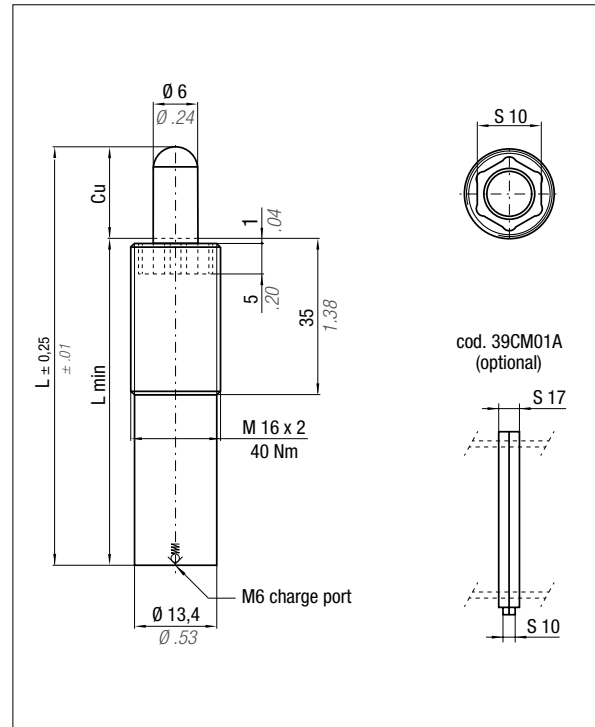
****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytrophic end force at 100% Cu

Colore forza Force color color code	P		F ₀ Forza iniziale Initial force ± 5% +20°C +68°F		F _{1i} Forza finale* End force*	F _{1p} Forza finale** End force**
	bar	psi	daN	lb		
PR	12	174	4	9	1,57 x F ₀	2,03 x F ₀
GR	20	290	6	14	1,57 x F ₀	2,03 x F ₀
BU	40	580	11	25	1,57 x F ₀	2,03 x F ₀
RD	75	1088	21	47	1,57 x F ₀	2,03 x F ₀
YW	150	2175	42	95	1,57 x F ₀	2,03 x F ₀
BK	10-150	145-2175	3-42	7-95	1,57 x F ₀	2,03 x F ₀

Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

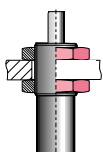
P = pressione di carico nominale. P = nominal charging pressure



	0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 150 bar 2175 psi	P min 10 bar 145 psi	S 0,28 cm ² 0.043 in ²	SPM ~ 50 - 100 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione Monouso Maintenance kit Disposable
--	--------------------------	-------------------	------------------------------	----------------------------	--	--------------------------------	---	--

Codice Code	Cu		L		L min		~Kg	~lb	PED 2014/68/EU
	mm	inch	mm	inch	mm	inch			
NE 16 x 2-010 -...	10	0.39	65	2.56	55	2.17	0,05	0.11	●
NE 16 x 2-020 -...	20	0.79	85	3.35	65	2.56	0,06	0.13	●
NE 16 x 2-030 -...	30	1.18	105	4.13	75	2.95	0,07	0.15	●
NE 16 x 2-040 -...	40	1.57	125	4.92	85	3.35	0,07	0.15	●
NE 16 x 2-050 -...	50	1.97	145	5.71	95	3.74	0,08	0.18	●
NE 16 x 2-060 -...	60	2.36	165	6.50	105	4.13	0,08	0.18	●
NE 16 x 2-070 -...	70	2.76	185	7.28	115	4.53	0,09	0.20	●
NE 16 x 2-080 -...	80	3.15	205	8.07	125	4.92	0,10	0.22	●
NE 16 x 2-100 -...	100	3.94	245	9.65	145	5.71	0,11	0.24	●
NE 16 x 2-125 -...	125	4.92	295	11.61	170	6.69	0,12	0.26	●

Esempio di ordinazione/Order example = NE 16x2-10-BU (codice/code + colore forza/force color code)



39DM16X2A

Fissaggi Flange mounts

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NE 24 x 1,5

ACTIVE SAFETY



USAS

OPAS

***F₁** =
Forza finale isoteramica
con 100% Cu
Isothermal end force at 100% Cu

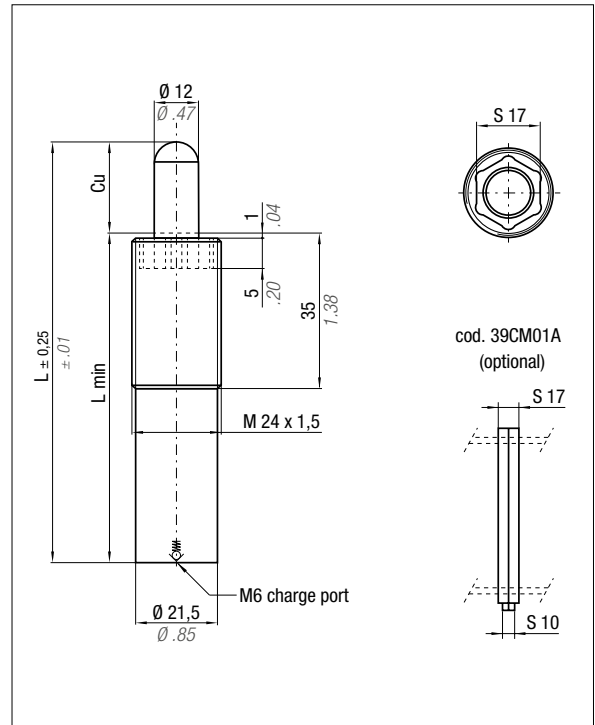
****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytrophic end force at 100% Cu

Colore forza Force color color code	P		F ₀ Forza iniziale Initial force ± 5% +20°C +68°F daN lb		F _{1i} Forza finale* End force*	F _{1p} Forza finale** End force**
	bar	psi				
GR	20	290	23	52	1,86 x F ₀	2,54 x F ₀
BU	40	580	45	101	1,86 x F ₀	2,54 x F ₀
RD	75	1088	85	191	1,86 x F ₀	2,54 x F ₀
YW	150	2175	170	382	1,86 x F ₀	2,54 x F ₀
BK	10-150	145-2175	11-170	25-382	1,86 x F ₀	2,54 x F ₀

Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

P = pressione di carico nominale. P = nominal charging pressure

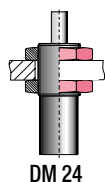


cod. 39CM01A
(optional)

		ΔP ± 0,33 %/°C	P max 150 bar 2175 psi	P min 10 bar 145 psi	S 1,113 cm ² 0.175 in ²	SPM ~ 50 - 100 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione Monouso Maintenance kit Disposable
--	--	---------------------------	------------------------------	----------------------------	---	--------------------------------	---	--

Codice Code	Cu		L		L min		~Kg ~lb		PED 2014/68/EU
	mm	inch	mm	inch	mm	inch			
NE 24 x 1,5-010 -...	10	0.39	65	2.56	55	2.17	0,16	0.35	●
NE 24 x 1,5-020 -...	20	0.79	85	3.35	65	2.56	0,18	0.40	●
NE 24 x 1,5-030 -...	30	1.18	105	4.13	75	2.95	0,20	0.44	●
NE 24 x 1,5-040 -...	40	1.57	125	4.92	85	3.35	0,23	0.51	●
NE 24 x 1,5-050 -...	50	1.97	145	5.71	95	3.74	0,25	0.55	●
NE 24 x 1,5-060 -...	60	2.36	165	6.50	105	4.13	0,27	0.59	●
NE 24 x 1,5-070 -...	70	2.76	185	7.28	115	4.53	0,29	0.64	●
NE 24 x 1,5-080 -...	80	3.15	205	8.07	125	4.92	0,30	0.66	●
NE 24 x 1,5-100 -...	100	3.94	245	9.65	145	5.71	0,33	0.73	●
NE 24 x 1,5-125 -...	125	4.92	295	11.61	170	6.69	0,35	0.77	●

Esempio di ordinazione/Order example = NE 24x1,5-10-BU (codice/code + colore forza/force color code)



DM 24

Fissaggi Flange mounts

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NG 16 x 1,5

***F_{1i}** =
Forza finale isoteramica
con 100% Cu
Isothermal end force at 100% Cu

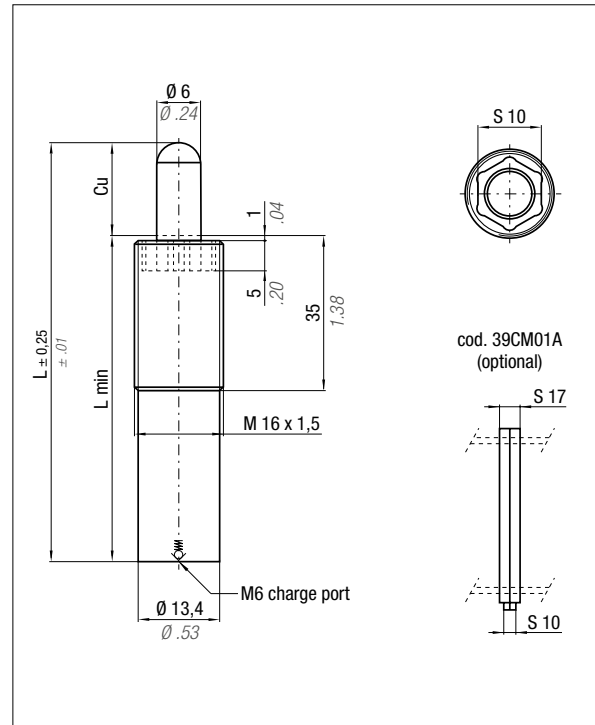
****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytrophic end force at 100% Cu

Colore forza Force color code	P		F ₀ Forza iniziale Initial force ± 5% +20°C +68°F		F _{1i} Forza finale* End force*	F _{1p} Forza finale** End force**
	bar	psi	daN	lb		
GR	20	290	6	13	1,41 x F ₀	1,72 x F ₀
BU	40	580	11	25	1,41 x F ₀	1,72 x F ₀
RD	75	1088	21	47	1,41 x F ₀	1,72 x F ₀
YW	150	2175	42	94	1,41 x F ₀	1,72 x F ₀
BK	10-150	145-2175	3-42	7-95	1,41 x F ₀	1,72 x F ₀

Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

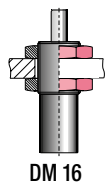
P = pressione di carico nominale. P = nominal charging pressure



		ΔP ± 0,33 %/°C	P max 150 bar 2175 psi	P min 10 bar 145 psi	S 0,28 cm ² 0.043 in ²	SPM ~ 50 - 100 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione Monouso Maintenance kit Disposable
--	--	---------------------------	-------------------------------------	-----------------------------------	---	---------------------------------------	--	---

Codice Code	Cu		L		L min		~Kg	~lb	PED 2014/68/EU
	mm	inch	mm	inch	mm	inch			
NG 16 x 1,5-010 -...	10	0.39	80	3.15	70	2.76	0,05	0.11	●
NG 16 x 1,5-020 -...	20	0.79	100	3.94	80	3.15	0,06	0.13	●
NG 16 x 1,5-030 -...	30	1.18	120	4.72	90	3.54	0,07	0.15	●
NG 16 x 1,5-040 -...	40	1.57	140	5.51	100	3.94	0,07	0.15	●
NG 16 x 1,5-050 -...	50	1.97	160	6.30	110	4.33	0,08	0.18	●
NG 16 x 1,5-060 -...	60	2.36	180	7.09	120	4.72	0,08	0.18	●
NG 16 x 1,5-070 -...	70	2.76	200	7.87	130	5.12	0,09	0.20	●
NG 16 x 1,5-080 -...	80	3.15	220	8.66	140	5.51	0,10	0.22	●
NG 16 x 1,5-100 -...	100	3.94	260	10.24	160	6.30	0,11	0.24	●

Esempio di ordinazione/Order example = NG 16x1,5-10-BU (codice/code + colore forza/force color code)



Fissaggi Flange mounts

MOLLE Springs

INDEX

NG 24 x 1,5

ACTIVE SAFETY



USAS

OPAS

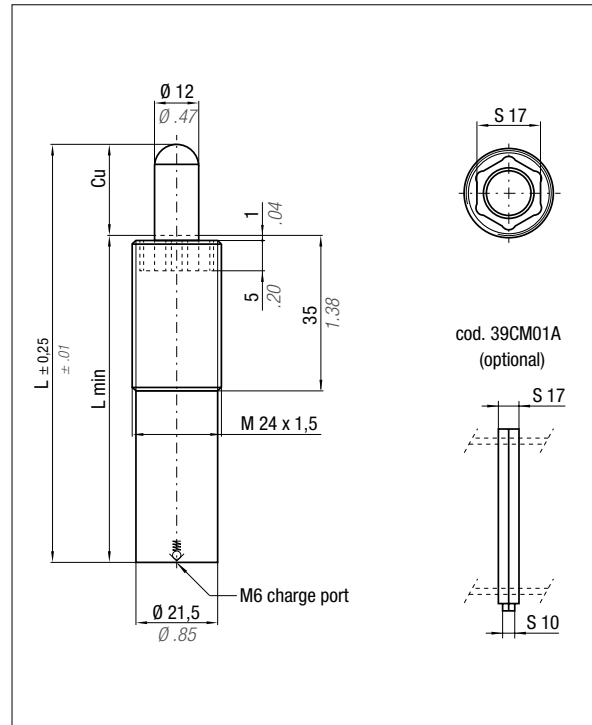
*F₁ = Forza finale isotermica con 100% Cu <i>Isothermal end force at 100% Cu</i>	**F_{1p} = Forza finale politropica con 100% Cu <i>Polytrophic end force at 100% Cu</i>
---	---

Colore forza Force color code	P		F ₀ Forza iniziale Initial force ± 5% +20°C +68°F daN lb		F _{1i} Forza finale* End force*	F _{1p} Forza finale** End force**
	bar	psi				
GR	20	290	23	52	1,57 x F ₀	2,01 x F ₀
BU	40	580	45	101	1,57 x F ₀	2,01 x F ₀
BR	60	870	67	151	1,57 x F ₀	2,01 x F ₀
RD	75	1088	85	191	1,57 x F ₀	2,01 x F ₀
YW	150	2175	170	382	1,57 x F ₀	2,01 x F ₀
BK	10-150	145-2175	11-170	25-382	1,57 x F ₀	2,01 x F ₀

Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

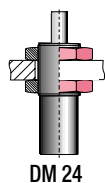
P = pressione di carico nominale. P = nominal charging pressure



		ΔP ± 0,33 %/°C	P max 150 bar 2175 psi	P min 10 bar 145 psi	S 1,13 cm ² 0.175 in ²	SPM ~ 50 - 100 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione Monouso Maintenance kit Disposable
--	--	---------------------------	-------------------------------------	-----------------------------------	---	---------------------------------------	---	--

Codice Code	Cu		L		L min		~Kg	~lb	
	mm	inch	mm	inch	mm	inch			
NG 24 x 1,5-010 -...	10	0.39	80	3.15	70	2.76	0,15	0.33	●
NG 24 x 1,5-020 -...	20	0.79	100	3.94	80	3.15	0,17	0.37	●
NG 24 x 1,5-030 -...	30	1.18	120	4.72	90	3.54	0,19	0.42	●
NG 24 x 1,5-040 -...	40	1.57	140	5.51	100	3.94	0,22	0.49	●
NG 24 x 1,5-050 -...	50	1.97	160	6.30	110	4.33	0,24	0.53	●
NG 24 x 1,5-060 -...	60	2.36	180	7.09	120	4.72	0,26	0.57	●
NG 24 x 1,5-070 -...	70	2.76	200	7.87	130	5.12	0,28	0.62	●
NG 24 x 1,5-080 -...	80	3.15	220	8.66	140	5.51	0,29	0.64	●
NG 24 x 1,5-100 -...	100	3.94	260	10.24	160	6.30	0,31	0.68	●

Esempio di ordinazione/Order example = NG 24x1,5-10-BU (codice/code + colore forza/force color code)

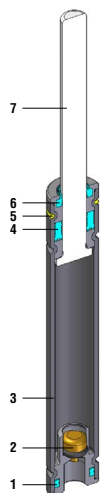


DM 24

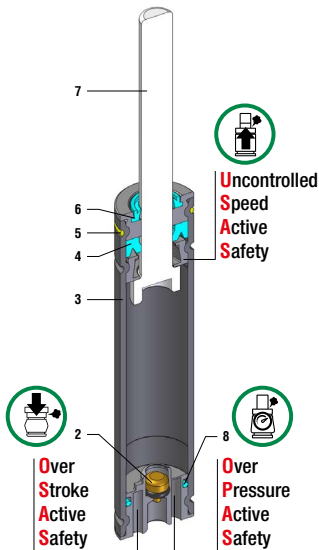
Fissaggi Flange mounts

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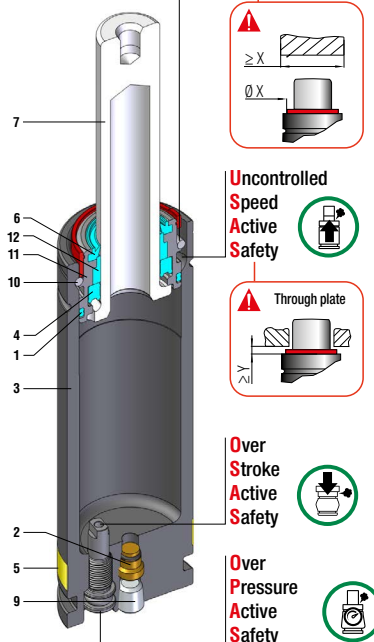
M 50 - M 70



M 90 - M 200



M 300



Sealing
ROD SEAL
Design
RETAINING GROOVE DESIGN
BUSH - BODY DESIGN (M300 only)

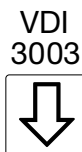
1	Dual ring seal	5	Force color code	9	Stopper
2	Valve	6	Rod wiper	10	Retaining ring
3	Body	7	Rod (Nitrited Superfinished)	11	Bush
4	Rod seal	8	O-ring	12	Guide ring

Codice Code	Corpo Body Ø		Corsa Stroke Cu		Forza iniziale Initial force FO		OSAS	USAS	OPAS
	mm	inch	mm	inch	daN	lb			
M 50 -...	12	0.47	7 - 125	0.28 - 4.92	6 - 50	13 - 112	-	-	-
M 50 TBI -...	5/8" 11 UNC		7 - 125	0.28 - 4.92	6 - 50	13 - 112	-	-	-
M 50 TBM1 -...	M 16 X 1,5		7 - 125	0.28 - 4.92	6 - 50	13 - 112	-	-	-
M 50 TBM2 -...	M 16 X 2		7 - 125	0.28 - 4.92	6 - 50	13 - 112	-	-	-
M 50 TEM -...	M 16 X 2		7 - 125	0.28 - 4.92	6 - 50	13 - 112	-	-	-
M 70 -...	15	0.59	7 - 125	0.28 - 4.92	8 - 70	18 - 157	-	-	-
M 90 -...	19	0.75	7 - 125	0.28 - 4.92	5 - 90	11 - 202	●	●	●
M 90 TBM -...	M 24 X 1,5		7 - 125	0.28 - 4.92	5 - 90	11 - 202	●	●	●
M 90 TEM -...	M 24 X 1,5		7 - 125	0.28 - 4.92	5 - 90	11 - 202	●	●	●
M 90 TBI -...	1" 8 UNC		7 - 125	0.28 - 4.92	5 - 90	11 - 202	●	●	●
M 200 -...	25	0.98	7 - 200	0.28 - 7.87	17 - 200	38 - 450	●	●	●
M 300 -...	32	1.26	7 - 125	0.28 - 4.92	80 - 320	180 - 719	●	●	●

● Integrato di serie / Built-in as standard



OSAS
Sicurezza Attiva Oltre Corsa
Over Stroke Active Safety



USAS
Sicurezza Attiva Ritorno Incontrollato
Uncontrolled Speed Active Safety



OPAS
Sicurezza Attiva Oltre Pressione
Over Pressure Active Safety

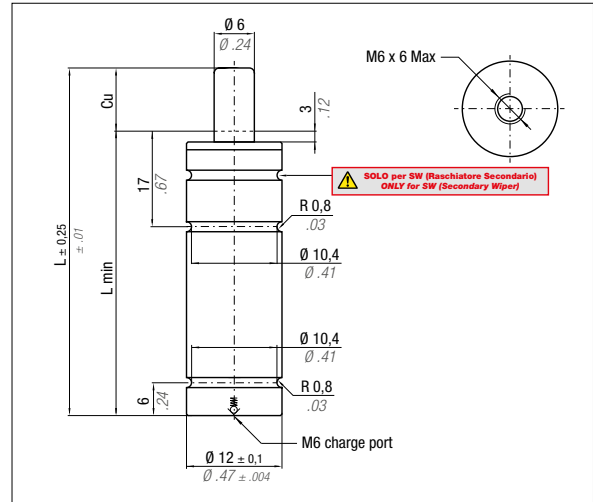


M 50

***F₁** = Forza finale isoteramica con 100% Cu
Isothermal end force at 100% Cu

****F_{1p}** = Forza finale politropica con 100% Cu
Polytropic end force at 100% Cu

Colore forza Forces color code	P		F ₀ Forza iniziale Initial force ± 5% +20°C +68°F	
	bar	psi	daN	lb
GR	45	653	13	29
BU	90	1305	25	56
RD	135	1958	38	85
YW	180	2610	50	112
BK	20-180	290-2610	6-50	13-112



Collegabile con tubi
Linkable with hoses

Micro 32°

Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

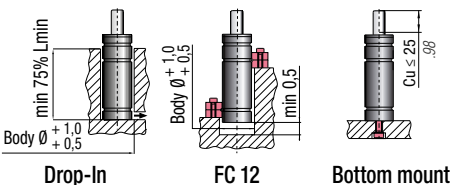
Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

P = pressione di carico nominale. P = nominal charging pressure

		ΔP ± 0,33 %/°C	P max 180 bar 2610 psi	P min 20 bar 290 psi	S 0,28 cm ² 0.043 in ²	SPM ~ 100 - 150 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione Monouso Maintenance kit Disposable
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Codice Code	Cu		L		L min		*F ₁ Forza finale End force		**F _{1p} Forza finale End force		VO		PED 2014/68/EU		
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³		~Kg	~lb
M50 - 007 - ...	7	0.28	56	2.20	49	1.93	1,24 x F ₀		1,41 x F ₀		1,2	0.07	0,03	0.07	●
M50 - 010 - ...	10	0.39	62	2.441	52	2.05	1,30 x F ₀		1,50 x F ₀		1,4	0.09	0,03	0.07	●
M50 - 013 - ...	12,7	0.50	67,4	2.65	54,7	2.15	1,35 x F ₀		1,57 x F ₀		1,6	0.10	0,03	0.07	●
M50 - 015 - ...	15	0.59	72	2.83	57	2.24	1,38 x F ₀		1,62 x F ₀		1,8	0.11	0,03	0.07	●
M50 - 019 - ...	19	0.75	80	3.15	61	2.40	1,42 x F ₀		1,69 x F ₀		2,1	0.13	0,03	0.07	●
M50 - 025 - ...	25	0.98	92	3.62	67	2.64	1,47 x F ₀		1,77 x F ₀		2,5	0.15	0,03	0.07	●
M50 - 038 - ...	38	1.50	118	4.65	80	3.15	1,53 x F ₀		1,88 x F ₀		3,5	0.21	0,04	0.09	●
M50 - 050 - ...	50	1.97	142	5.59	92	3.62	1,57 x F ₀		1,95 x F ₀		4,4	0.27	0,05	0.11	●
M50 - 063 - ...	63,5	2.50	172	6.77	108,5	4.27	1,57 x F ₀		1,93 x F ₀		5,6	0.34	0,06	0.13	●
M50 - 075 - ...	75	2.95	195	7.68	120	4.72	1,59 x F ₀		1,97 x F ₀		6,5	0.40	0,06	0.13	●
M50 - 080 - ...	80	3.15	205	8.07	125	4.92	1,59 x F ₀		1,98 x F ₀		6,9	0.42	0,07	0.15	●
M50 - 100 - ...	100	3.94	245	9.65	145	5.71	1,62 x F ₀		2,02 x F ₀		8,4	0.51	0,08	0.18	●
M50 - 125 - ...	125	4.92	295	11.61	170	6.69	1,64 x F ₀		2,06 x F ₀		10,2	0.62	0,09	0.20	●

Esempio di ordinazione/Order example = M 50-007-BU (codice/code + colore forza/force color code)



Fissaggi Flange mounts

pag./page 4.63 ÷ 4.74

M 50 TBI threaded

***F_{1i}** =
Forza finale isoteramica
con 100% Cu
Isothermal end force at 100% Cu

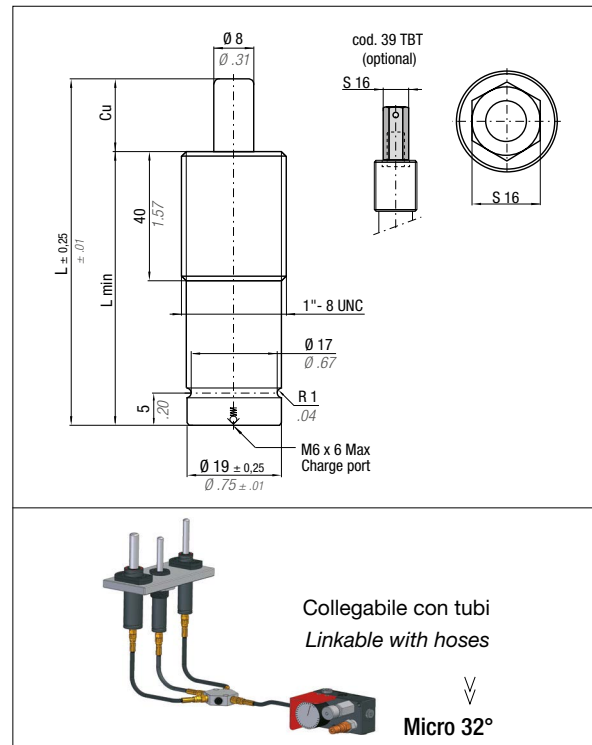
****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytrophic end force at 100% Cu

Colore forza Force color color code	P		F0 Forza iniziale Initial force ± 5% +20°C +68°F	
	bar	psi	daN	lb
GR	45	653	13	29
BU	90	1305	25	56
RD	135	1958	38	85
YW	180	2610	50	112
BK	20-180	290-2610	6-50	13-112

Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

P = pressione di carico nominale. P = nominal charging pressure



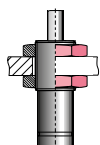
Collegabile con tubi
Linkable with hoses

Micro 32°

N ₂	0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 180 bar 2610 psi	P min 20 bar 290 psi	S 0,28 cm ² 0.043 in ²	SPM ~ 100 - 150 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione Monouso Maintenance kit Disposable
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Codice Code		Cu		L		*F _{1i} Forza finale End force		**F _{1p} Forza finale End force		VO			2014/68/EU	
		mm	inch	mm	inch	mm	inch	daN	lb	daN	lb			cm ³
M50 - 007 -...- TBI		7	0.28	56	2.20	49	1.93	1,24 x F0	1,41 x F0	1,2	0.07	0,03	0.07	●
M50 - 010 -...- TBI		10	0.39	62	2.441	52	2.05	1,30 x F0	1,50 x F0	1,4	0.09	0,03	0.07	●
M50 - 013 -...- TBI		12,7	0.50	67,4	2.65	54,7	2.15	1,35 x F0	1,57 x F0	1,6	0.10	0,03	0.07	●
M50 - 015 -...- TBI		15	0.59	72	2.83	57	2.24	1,38 x F0	1,62 x F0	1,8	0.11	0,03	0.07	●
M50 - 019 -...- TBI		19	0.75	80	3.15	61	2.40	1,42 x F0	1,69 x F0	2,1	0.13	0,03	0.07	●
M50 - 025 -...- TBI		25	0.98	92	3.62	67	2.64	1,47 x F0	1,77 x F0	2,5	0.15	0,03	0.07	●
M50 - 038 -...- TBI		38	1.50	118	4.65	80	3.15	1,53 x F0	1,88 x F0	3,5	0.21	0,04	0.09	●
M50 - 050 -...- TBI		50	1.97	142	5.59	92	3.62	1,57 x F0	1,95 x F0	4,4	0.27	0,05	0.11	●
M50 - 063 -...- TBI		63,5	2.50	172	6.77	108,5	4.27	1,57 x F0	1,93 x F0	5,6	0.34	0,06	0.13	●
M50 - 075 -...- TBI		75	2.95	195	7.68	120	4.72	1,59 x F0	1,97 x F0	6,5	0.40	0,06	0.13	●
M50 - 080 -...- TBI		80	3.15	205	8.07	125	4.92	1,59 x F0	1,98 x F0	6,9	0.42	0,07	0.15	●
M50 - 100 -...- TBI		100	3.94	245	9.65	145	5.71	1,62 x F0	2,02 x F0	8,4	0.51	0,08	0.18	●
M50 - 125 -...- TBI		125	4.92	295	11.61	170	6.69	1,64 x F0	2,06 x F0	10,2	0.62	0,09	0.20	●

Esempio di ordinazione/Order example = M 50-007-BU-TBI (codice/code + colore forza/force color code)



39DI5/8-11A

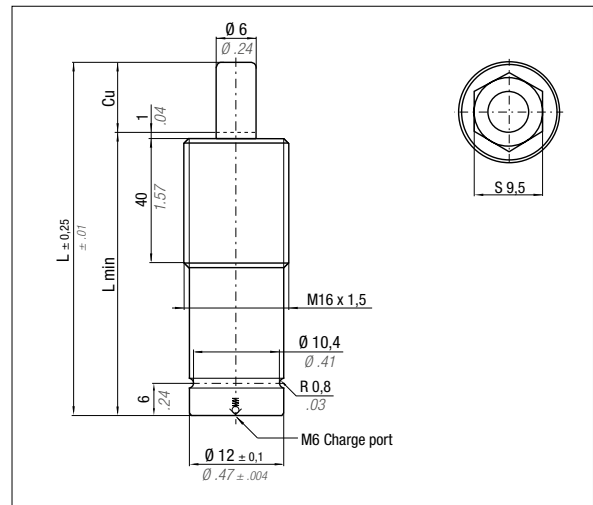
Fissaggi Flange mounts

pag./page 4.63 ÷ 4.74

M 50 TBM1 threaded

*F₁ = Forza finale isotermaica con 100% Cu <i>Isothermal end force at 100% Cu</i>	**F_{1p} = Forza finale politropica con 100% Cu <i>Polytropic end force at 100% Cu</i>
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Colore forza Force color code	P		F0 Forza iniziale Initial force ± 5% +20°C +68°F	
	bar	psi	daN	lb
GR	45	653	13	29
BU	90	1305	25	56
RD	135	1958	38	85
YW	180	2610	50	112
BK	20-180	290-2610	6-50	13-112



Collegabile con tubi
Linkable with hoses

Micro 32°

Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

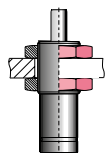
Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

P = pressione di carico nominale. P = nominal charging pressure

		ΔP ± 0,33 %/°C	P max 180 bar 2610 psi	P min 20 bar 290 psi	S 0,28 cm ² 0.043 in ²	SPM ~ 100 - 150 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione Monouso Maintenance kit Disposable
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Codice Code	Cu	L		L min		*F ₁ Forza finale End force		**F _{1p} Forza finale End force		VO		~Kg ~lb	PED 2014/68/EU
		mm	inch	mm	inch	mm	inch	daN	lb	daN	lb		
M50 - 007 -...- TBM1	7	0.28	56	2.20	49	1.93	1,24 x F0	1,41 x F0	1,2	0.07	0,03	0.07	●
M50 - 010 -...- TBM1	10	0.39	62	2.441	52	2.05	1,30 x F0	1,50 x F0	1,4	0.09	0,03	0.07	●
M50 - 013 -...- TBM1	12,7	0.50	67,4	2.65	54,7	2.15	1,35 x F0	1,57 x F0	1,6	0.10	0,03	0.07	●
M50 - 015 -...- TBM1	15	0.59	72	2.83	57	2.24	1,38 x F0	1,62 x F0	1,8	0.11	0,03	0.07	●
M50 - 019 -...- TBM1	19	0.75	80	3.15	61	2.40	1,42 x F0	1,69 x F0	2,1	0.13	0,03	0.07	●
M50 - 025 -...- TBM1	25	0.98	92	3.62	67	2.64	1,47 x F0	1,77 x F0	2,5	0.15	0,03	0.07	●
M50 - 038 -...- TBM1	38	1.50	118	4.65	80	3.15	1,53 x F0	1,88 x F0	3,5	0.21	0,04	0.09	●
M50 - 050 -...- TBM1	50	1.97	142	5.59	92	3.62	1,57 x F0	1,95 x F0	4,4	0.27	0,05	0.11	●
M50 - 063 -...- TBM1	63,5	2.50	172	6.77	108,5	4.27	1,57 x F0	1,93 x F0	5,6	0.34	0,06	0.13	●
M50 - 075 -...- TBM1	75	2.95	195	7.68	120	4.72	1,59 x F0	1,97 x F0	6,5	0.40	0,06	0.13	●
M50 - 080 -...- TBM1	80	3.15	205	8.07	125	4.92	1,59 x F0	1,98 x F0	6,9	0.42	0,07	0.15	●
M50 - 100 -...- TBM1	100	3.94	245	9.65	145	5.71	1,62 x F0	2,02 x F0	8,4	0.51	0,08	0.18	●
M50 - 125 -...- TBM1	125	4.92	295	11.61	170	6.69	1,64 x F0	2,06 x F0	10,2	0.62	0,09	0.20	●

Esempio di ordinazione/Order example = M 50-007-BU-TBM1 (codice/code + colore forza/force color code)



DM 16

Fissaggi Flange mounts

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M 50 TBM2 threaded

***F_{1i}** =
Forza finale isoteramica
con 100% Cu
Isothermal end force at 100% Cu

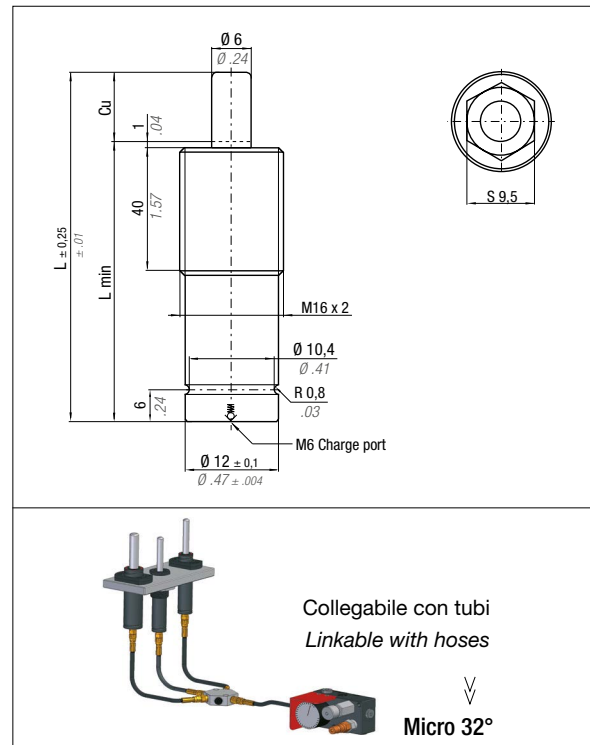
****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytropic end force at 100% Cu

Colore forza Force color color code	P		F0 Forza iniziale Initial force ± 5% +20°C +68°F	
	bar	psi	daN	lb
GR	45	653	13	29
BU	90	1305	25	56
RD	135	1958	38	85
YW	180	2610	50	112
BK	20-180	290-2610	6-50	13-112

Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

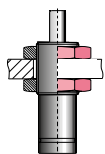
P = pressione di carico nominale. P = nominal charging pressure



	0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 180 bar 2610 psi	P min 20 bar 290 psi	S 0,28 cm ² 0.043 in ²	SPM ~ 100 - 150 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione Monouso Maintenance kit Disposable
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Codice Code	Cu	L	L min	*F _{1i} Forza finale End force		**F _{1p} Forza finale End force		VO		~Kg	~lb	PED 2014/68/EU	
				mm	inch	daN	lb	daN	lb				cm ³
M50 - 007 -...- TBM2	7	0.28	56	2.20	49	1.93	1,24 x F0	1,41 x F0	1,2	0.07	0,03	0.07	●
M50 - 010 -...- TBM2	10	0.39	62	2.441	52	2.05	1,30 x F0	1,50 x F0	1,4	0.09	0,03	0.07	●
M50 - 013 -...- TBM2	12,7	0.50	67,4	2.65	54,7	2.15	1,35 x F0	1,57 x F0	1,6	0.10	0,03	0.07	●
M50 - 015 -...- TBM2	15	0.59	72	2.83	57	2.24	1,38 x F0	1,62 x F0	1,8	0.11	0,03	0.07	●
M50 - 019 -...- TBM2	19	0.75	80	3.15	61	2.40	1,42 x F0	1,69 x F0	2,1	0.13	0,03	0.07	●
M50 - 025 -...- TBM2	25	0.98	92	3.62	67	2.64	1,47 x F0	1,77 x F0	2,5	0.15	0,03	0.07	●
M50 - 038 -...- TBM2	38	1.50	118	4.65	80	3.15	1,53 x F0	1,88 x F0	3,5	0.21	0,04	0.09	●
M50 - 050 -...- TBM2	50	1.97	142	5.59	92	3.62	1,57 x F0	1,95 x F0	4,4	0.27	0,05	0.11	●
M50 - 063 -...- TBM2	63,5	2.50	172	6.77	108,5	4.27	1,57 x F0	1,93 x F0	5,6	0.34	0,06	0.13	●
M50 - 075 -...- TBM2	75	2.95	195	7.68	120	4.72	1,59 x F0	1,97 x F0	6,5	0.40	0,06	0.13	●
M50 - 080 -...- TBM2	80	3.15	205	8.07	125	4.92	1,59 x F0	1,98 x F0	6,9	0.42	0,07	0.15	●
M50 - 100 -...- TBM2	100	3.94	245	9.65	145	5.71	1,62 x F0	2,02 x F0	8,4	0.51	0,08	0.18	●
M50 - 125 -...- TBM2	125	4.92	295	11.61	170	6.69	1,64 x F0	2,06 x F0	10,2	0.62	0,09	0.20	●

Esempio di ordinazione/Order example = M 50-007-BU-TBM2 (codice/code + colore forza/force color code)



39DM16X2A

Fissaggi Flange mounts

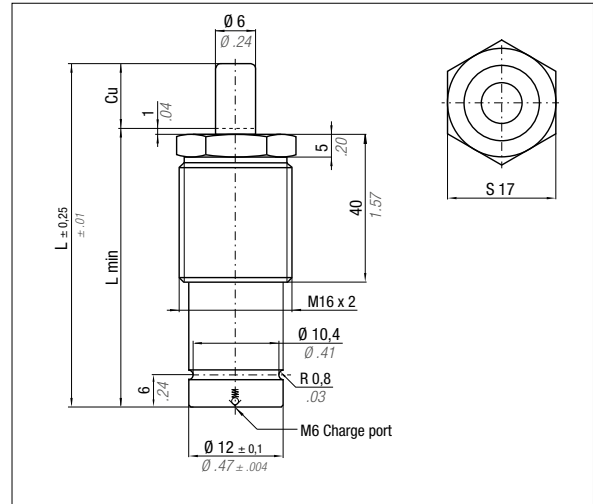
pag./page 4.63 ÷ 4.74

M 50 TEM threaded

***F₁** =
Forza finale isoterma
con 100% Cu
Isothermal end force at 100% Cu

****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytropic end force at 100% Cu

Colore forza Forces color code	P		F ₀ Forza iniziale Initial force ± 5% +20°C +68°F	
	bar	psi	daN	lb
GR	45	653	13	29
BU	90	1305	25	56
RD	135	1958	38	85
YW	180	2610	50	112
BK	20-180	290-2610	6-50	13-112



Collegabile con tubi
Linkable with hoses

Micro 32°

Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

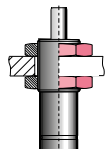
Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

P = pressione di carico nominale. P = nominal charging pressure

		ΔP $\pm 0,33 \text{ \%}/^{\circ}\text{C}$	P max 180 bar 2610 psi	P min 20 bar 290 psi	S 0,28 cm ² 0.043 in ²	SPM ~ 100 - 150 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione Monouso Maintenance kit Disposable
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Codice Code	Cu		L		L min		*F ₁	**F _{1p}	VO		~Kg	~lb	PED 2014/68/EU
	mm	inch	mm	inch	mm	inch	daN	lb	cm ³	in ³			
M50 - 007 -...- TEM	7	0.28	56	2.20	49	1.93	1,24 x F ₀	1,41 x F ₀	1,2	0.07	0,03	0.07	●
M50 - 010 -...- TEM	10	0.39	62	2.441	52	2.05	1,30 x F ₀	1,50 x F ₀	1,4	0.09	0,03	0.07	●
M50 - 013 -...- TEM	12,7	0.50	67,4	2.65	54,7	2.15	1,35 x F ₀	1,57 x F ₀	1,6	0.10	0,03	0.07	●
M50 - 015 -...- TEM	15	0.59	72	2.83	57	2.24	1,38 x F ₀	1,62 x F ₀	1,8	0.11	0,03	0.07	●
M50 - 019 -...- TEM	19	0.75	80	3.15	61	2.40	1,42 x F ₀	1,69 x F ₀	2,1	0.13	0,03	0.07	●
M50 - 025 -...- TEM	25	0.98	92	3.62	67	2.64	1,47 x F ₀	1,77 x F ₀	2,5	0.15	0,03	0.07	●
M50 - 038 -...- TEM	38	1.50	118	4.65	80	3.15	1,53 x F ₀	1,88 x F ₀	3,5	0.21	0,04	0.09	●
M50 - 050 -...- TEM	50	1.97	142	5.59	92	3.62	1,57 x F ₀	1,95 x F ₀	4,4	0.27	0,05	0.11	●
M50 - 063 -...- TEM	63,5	2.50	172	6.77	108,5	4.27	1,57 x F ₀	1,93 x F ₀	5,6	0.34	0,06	0.13	●
M50 - 075 -...- TEM	75	2.95	195	7.68	120	4.72	1,59 x F ₀	1,97 x F ₀	6,5	0.40	0,06	0.13	●
M50 - 080 -...- TEM	80	3.15	205	8.07	125	4.92	1,59 x F ₀	1,98 x F ₀	6,9	0.42	0,07	0.15	●
M50 - 100 -...- TEM	100	3.94	245	9.65	145	5.71	1,62 x F ₀	2,02 x F ₀	8,4	0.51	0,08	0.18	●
M50 - 125 -...- TEM	125	4.92	295	11.61	170	6.69	1,64 x F ₀	2,06 x F ₀	10,2	0.62	0,09	0.20	●

Esempio di ordinazione/Order example = M 50-007-BU-TEM (codice/code + colore forza/force color code)



39DM16X2A

Fissaggi Flange mounts

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M 70

***F_{1i}** =
Forza finale isoteramica
con 100% Cu
Isothermal end force at 100% Cu

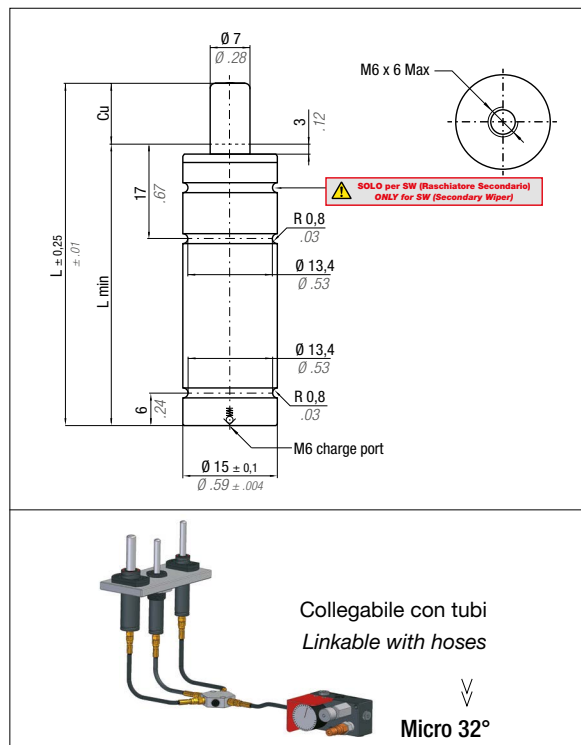
****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytropic end force at 100% Cu

Colore forza Force color code	P		F0 Forza iniziale Initial force ± 5% +20°C +68°F	
	bar	psi	daN	lb
GR	45	653	18	40
BU	90	1305	35	79
RD	135	1958	50	112
YW	180	2610	70	157
BK	20-180	290-2610	8-70	18-157

Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

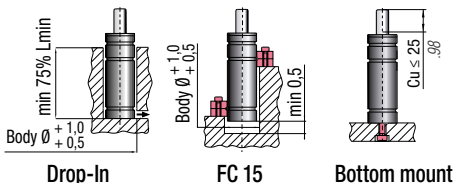
P = pressione di carico nominale. P = nominal charging pressure



	0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 180 bar 2610 psi	P min 20 bar 290 psi	S 0,38 cm ² 0.059 in ²	SPM ~ 100 - 150 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione Monouso Maintenance kit Disposable
--	--------------------------	-------------------	------------------------------	----------------------------	--	---------------------------------	---	--

Codice Code	Cu		L		L min		*F _{1i} Forza finale End force	**F _{1p} Forza finale End force	VO		~Kg ~lb		PED 2014/68/EU
	mm	inch	mm	inch	mm	inch	daN	lb	cm ³	in ³			
M70 - 007 - ...	7	0.28	56	2.20	49	1.93	1,19 x F0	1,33 x F0	1,9	0.12	0,04	0.09	●
M70 - 010 - ...	10	0.39	62	2.44	52	2.05	1,24 x F0	1,41 x F0	2,2	0.13	0,05	0.11	●
M70 - 013 - ...	12,7	0.50	67,4	2.65	54,7	2.15	1,27 x F0	1,46 x F0	2,6	0.16	0,05	0.11	●
M70 - 015 - ...	15	0.59	72	2.83	57	2.24	1,30 x F0	1,51 x F0	2,8	0.17	0,05	0.11	●
M70 - 019 - ...	19	0.75	80	3.15	61	2.40	1,34 x F0	1,57 x F0	3,2	0.20	0,05	0.11	●
M70 - 025 - ...	25	0.98	92	3.62	67	2.64	1,38 x F0	1,64 x F0	3,9	0.24	0,06	0.13	●
M70 - 038 - ...	38	1.50	118	4.65	80	3.15	1,44 x F0	1,73 x F0	5,3	0.32	0,07	0.15	●
M70 - 050 - ...	50	1.97	142	5.59	92	3.62	1,48 x F0	1,79 x F0	6,6	0.40	0,08	0.18	●
M70 - 063 - ...	63,5	2.50	172	6.77	108,5	4.27	1,47 x F0	1,79 x F0	8,5	0.52	0,09	0.20	●
M70 - 075 - ...	75	2.95	195	7.68	120	4.72	1,49 x F0	1,82 x F0	9,7	0.59	0,10	0.22	●
M70 - 080 - ...	80	3.15	205	8.071	125	4.92	1,50 x F0	1,83 x F0	10,3	0.63	0,10	0.22	●
M70 - 100 - ...	100	3.94	245	9.65	145	5.71	1,52 x F0	1,87 x F0	12,5	0.76	0,12	0.26	●
M70 - 125 - ...	125	4.92	295	11.61	170	6.69	1,54 x F0	1,90 x F0	15,2	0.93	0,14	0.31	●

Esempio di ordinazione/Order example = M 70-007-BU (codice/code + colore forza/force color code)



Fissaggi Flange mounts

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M 90

ACTIVE SAFETY



OSAS



USAS



OPAS

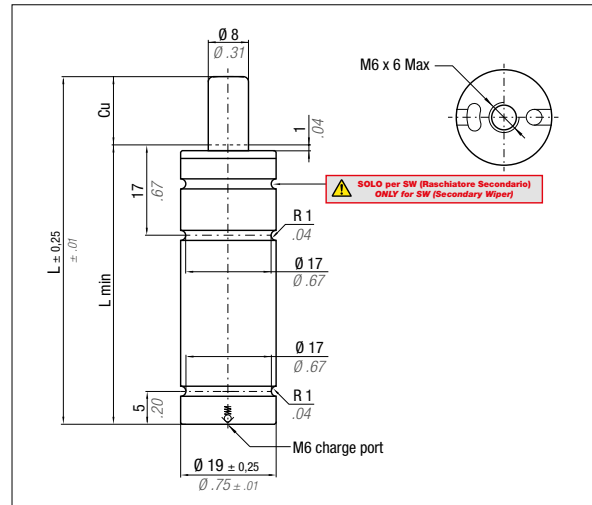
<p>*F₁ = Forza finale isoteramica con 100% Cu <i>Isothermal end force at 100% Cu</i></p>	<p>**F_{1p} = Forza finale politropica con 100% Cu <i>Polytrophic end force at 100% Cu</i></p>
--	---

Colore forza Force color code	P		F ₀ Forza iniziale Initial force ± 5% +20°C +68°F	
	bar	psi	daN	lb
OR	10	145	5	11
PR	20	290	10	22
GR	60	870	30	67
BU	100	1450	50	112
RD	140	2030	70	157
YW	180	2610	90	202
BK	10-180	145-2610	5-90	11-202

Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

P = pressione di carico nominale. P = nominal charging pressure



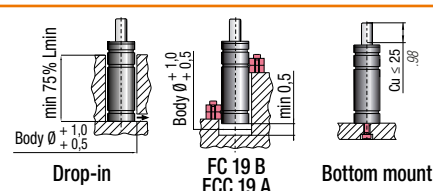
Collegabile con tubi
Linkable with hoses

Micro 32°

	 0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 180 bar 2610 psi	P min 10 bar 145 psi	S 0,50 cm ² 0.078 in ²	SPM ~ 100 - 150 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione Monouso Maintenance kit Disposable
--	------------------------------	---------------------------	-------------------------------------	-----------------------------------	---	--	--	---

Codice Code	Cu	L		L min		*F ₁	**F _{1p}	VO		~Kg	~lb	PED 2014/68/EU	
		mm	inch	mm	inch	mm	inch	daN	lb				daN
M90 - 007 - ...	7	0.28	56	2.20	49	1.93	1,21 x F ₀	1,39 x F ₀	2,3	0.14	0,07	0.15	●
M90 - 010 - ...	10	0.39	62	2.44	52	2.05	1,25 x F ₀	1,44 x F ₀	2,9	0.18	0,07	0.15	●
M90 - 013 - ...	12,7	0.50	67,4	2.65	54,7	2.15	1,27 x F ₀	1,48 x F ₀	3,4	0.21	0,08	0.18	●
M90 - 015 - ...	15	0.59	72	2.83	57	2.24	1,28 x F ₀	1,50 x F ₀	3,9	0.24	0,08	0.18	●
M90 - 025 - ...	25	0.98	92	3.62	67	2.64	1,32 x F ₀	1,57 x F ₀	5,8	0.35	0,09	0.20	●
M90 - 038 - ...	38,1	1.50	118,2	4.65	80,1	3.15	1,35 x F ₀	1,60 x F ₀	8,4	0.51	0,11	0.24	●
M90 - 050 - ...	50	1.97	142	5.59	92	3.62	1,36 x F ₀	1,62 x F ₀	10,8	0.66	0,12	0.26	●
M90 - 063 - ...	63,5	2.50	172	6.77	108,5	4.27	1,36 x F ₀	1,62 x F ₀	13,7	0.84	0,14	0.31	●
M90 - 080 - ...	80	3.15	205	8.07	125	4.92	1,37 x F ₀	1,64 x F ₀	17	1.04	0,15	0.33	●
M90 - 100 - ...	100	3.94	245	9.65	145	5.71	1,37 x F ₀	1,65 x F ₀	20,9	1.28	0,17	0.37	●
M90 - 125 - ...	125	4.92	295	11.61	170	6.69	1,38 x F ₀	1,66 x F ₀	25,8	1.57	0,20	0.44	●

Esempio di ordinazione/Order example = M 90-007-BU (codice/code + colore forza/force color code)



Fissaggi Flange mounts

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M 90 TBM threaded

ACTIVE SAFETY



OSAS



USAS

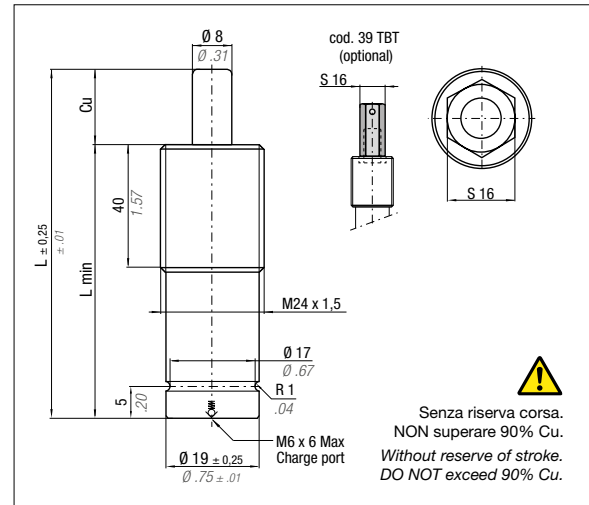


OPAS

***F_i** =
Forza finale isotermaica
con 100% Cu
Isothermal end force at 100% Cu

****F_p** =
Forza finale politropica
con 100% Cu
Polytropic end force at 100% Cu

Colore forza Force color code	P		F0 Forza iniziale Initial force ± 5% +20°C +68°F	
	bar	psi	daN	lb
OR	10	145	5	11
PR	20	290	10	22
GR	60	870	30	67
BU	100	1450	50	112
RD	140	2030	70	157
YW	180	2610	90	202
BK	10-180	145-2610	5-90	11-202



Collegabile con tubi
Linkable with hoses

Micro 32°

Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

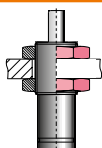
Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

P = pressione di carico nominale. P = nominal charging pressure

	0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 180 bar 2610 psi	P min 10 bar 145 psi	S 0,50 cm ² 0.078 in ²	SPM ~ 100 - 150 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione Monouso Maintenance kit Disposable
--	--------------------------	-------------------	------------------------------	----------------------------	--	---------------------------------	---	--

Codice Code	Cu	L		L min		*F _i	**F _p	VO		~Kg	~lb	PED 2014/68/EU	
		mm	inch	mm	inch	daN	lb	cm ³	in ³				
TBM M90 - 007 -...- TBM	7	0.28	56	2.20	49	1.93	1,21 x F0	1,39 x F0	2,3	0.14	0,07	0.15	●
TBM M90 - 010 -...- TBM	10	0.39	62	2.44	52	2.05	1,25 x F0	1,44 x F0	2,9	0.18	0,07	0.15	●
TBM M90 - 013 -...- TBM	12,7	0.50	67,4	2.65	54,7	2.15	1,27 x F0	1,48 x F0	3,4	0.21	0,08	0.18	●
TBM M90 - 015 -...- TBM	15	0.59	72	2.83	57	2.24	1,28 x F0	1,50 x F0	3,9	0.24	0,08	0.18	●
TBM M90 - 025 -...- TBM	25	0.98	92	3.62	67	2.64	1,32 x F0	1,57 x F0	5,8	0.35	0,09	0.20	●
TBM M90 - 038 -...- TBM	38,1	1.50	118,2	4.65	80,1	3.15	1,35 x F0	1,60 x F0	8,4	0.51	0,11	0.24	●
TBM M90 - 050 -...- TBM	50	1.97	142	5.59	92	3.62	1,36 x F0	1,62 x F0	10,8	0.66	0,12	0.26	●
TBM M90 - 063 -...- TBM	63,5	2.50	172	6.77	108,5	4.27	1,36 x F0	1,62 x F0	13,7	0.84	0,14	0.31	●
TBM M90 - 080 -...- TBM	80	3.15	205	8.07	125	4.92	1,37 x F0	1,64 x F0	17	1.04	0,15	0.33	●
TBM M90 - 100 -...- TBM	100	3.94	245	9.65	145	5.71	1,37 x F0	1,65 x F0	20,9	1.28	0,17	0.37	●
TBM M90 - 125 -...- TBM	125	4.92	295	11.61	170	6.69	1,38 x F0	1,66 x F0	25,8	1.57	0,20	0.44	●

Esempio di ordinazione/Order example = M 90-007-BU-TBM (codice/code + colore forza/force color code)



DM 24

Fissaggi Flange mounts

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M 90 TEM threaded

ACTIVE SAFETY



OSAS



USAS



OPAS

***F₁** =

Forza finale isoteramica
con 100% Cu

Isothermal end force at 100% Cu

****F_{1p}** =

Forza finale politropica
con 100% Cu

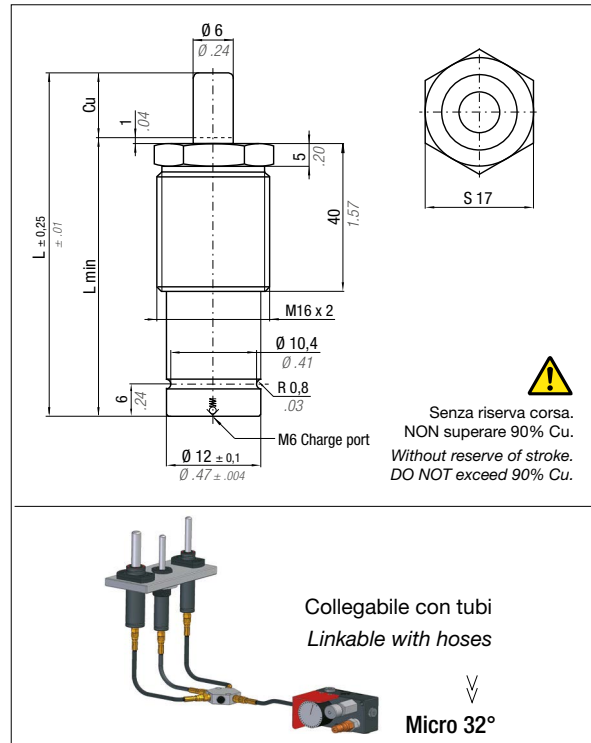
Polytrophic end force at 100% Cu

Colore forza Force color code	P		F ₀ Forza iniziale Initial force ± 5% +20°C +68°F	
	bar	psi	daN	lb
OR	10	145	5	11
PR	20	290	10	22
GR	60	870	30	67
BU	100	1450	50	112
RD	140	2030	70	157
YW	180	2610	90	202
BK	10-180	145-2610	5-90	11-202

Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

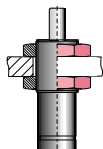
P = pressione di carico nominale. P = nominal charging pressure



	 0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 180 bar 2610 psi	P min 10 bar 145 psi	S 0,50 cm ² 0.078 in ²	SPM ~ 100 - 150 (at 20°C)	Velocità massima <i>Max Speed</i> 1,8 m/s 70.8 in/s	Kit manutenzione Monouso <i>Maintenance kit</i> Disposable
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Codice Code		Cu		L		L min		*F ₁ Forza finale End force		**F _{1p} Forza finale End force		VO			2014/68/EU
		mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³		
M90 - 007 -...- TEM		7	0.28	56	2.20	49	1.93	1,21 x F ₀	1,39 x F ₀	2,3	0.14	0,07	0.15	●	
M90 - 010 -...- TEM		10	0.39	62	2.44	52	2.05	1,25 x F ₀	1,44 x F ₀	2,9	0.18	0,07	0.15	●	
M90 - 013 -...- TEM		12,7	0.50	67,4	2.65	54,7	2.15	1,27 x F ₀	1,48 x F ₀	3,4	0.21	0,08	0.18	●	
M90 - 015 -...- TEM		15	0.59	72	2.83	57	2.24	1,28 x F ₀	1,50 x F ₀	3,9	0.24	0,08	0.18	●	
M90 - 025 -...- TEM		25	0.98	92	3.62	67	2.64	1,32 x F ₀	1,57 x F ₀	5,8	0.35	0,09	0.20	●	
M90 - 038 -...- TEM		38,1	1.50	118,2	4.65	80,1	3.15	1,35 x F ₀	1,60 x F ₀	8,4	0.51	0,11	0.24	●	
M90 - 050 -...- TEM		50	1.97	142	5.59	92	3.62	1,36 x F ₀	1,62 x F ₀	10,8	0.66	0,12	0.26	●	
M90 - 063 -...- TEM		63,5	2.50	172	6.77	108,5	4.27	1,36 x F ₀	1,62 x F ₀	13,7	0.84	0,14	0.31	●	
M90 - 080 -...- TEM		80	3.15	205	8.07	125	4.92	1,37 x F ₀	1,64 x F ₀	17	1.04	0,15	0.33	●	
M90 - 100 -...- TEM		100	3.94	245	9.65	145	5.71	1,37 x F ₀	1,65 x F ₀	20,9	1.28	0,17	0.37	●	
M90 - 125 -...- TEM		125	4.92	295	11.61	170	6.69	1,38 x F ₀	1,66 x F ₀	25,8	1.57	0,20	0.44	●	

Esempio di ordinazione/Order example = M 90-007-BU-TEM (codice/code + colore forza/force color code)



DM 24

Fissaggi Flange mounts

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M 90 TBI threaded

ACTIVE SAFETY



OSAS



USAS

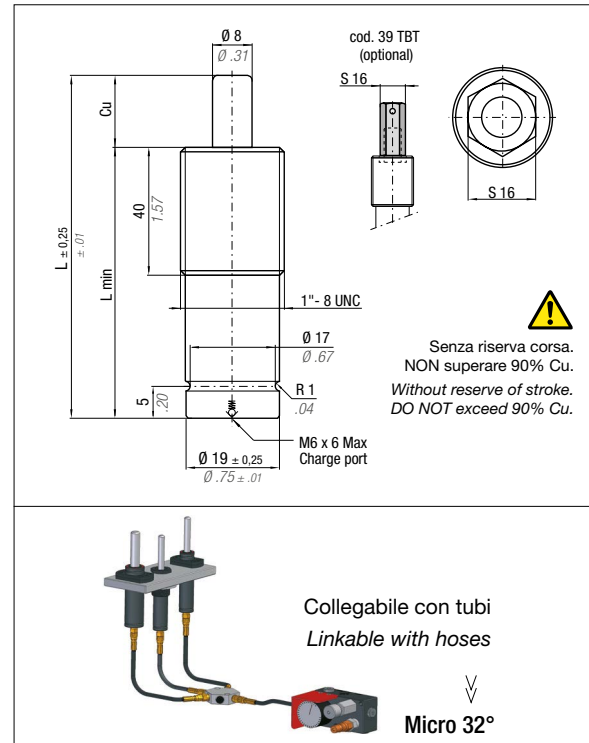


OPAS

***F_i** =
Forza finale isoterma
con 100% Cu
Isothermal end force at 100% Cu

****F_p** =
Forza finale politropica
con 100% Cu
Polytropic end force at 100% Cu

Colore forza Force color code	P		F ₀ Forza iniziale Initial force ± 5% +20°C +68°F	
	bar	psi	daN	lb
OR	10	145	5	11
PR	20	290	10	22
GR	60	870	30	67
BU	100	1450	50	112
RD	140	2030	70	157
YW	180	2610	90	202
BK	10-180	145-2610	5-90	11-202



Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

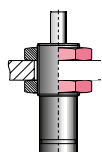
Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

P = pressione di carico nominale. P = nominal charging pressure

	 0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 180 bar 2610 psi	P min 10 bar 145 psi	S 0,50 cm ² 0.078 in ²	SPM ~ 100 - 150 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione Monouso Maintenance kit Disposable
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Codice Code		Cu		L		L min		*F _i Forza finale End force		**F _p Forza finale End force		VO		
		mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³	
M90 - 007 -...- TBI		7	0.28	56	2.20	49	1.93	1,21 x F ₀	1,39 x F ₀	2,3	0.14	0,07	0.15	●
M90 - 010 -...- TBI		10	0.39	62	2.44	52	2.05	1,25 x F ₀	1,44 x F ₀	2,9	0.18	0,07	0.15	●
M90 - 013 -...- TBI		12,7	0.50	67,4	2.65	54,7	2.15	1,27 x F ₀	1,48 x F ₀	3,4	0.21	0,08	0.18	●
M90 - 015 -...- TBI		15	0.59	72	2.83	57	2.24	1,28 x F ₀	1,50 x F ₀	3,9	0.24	0,08	0.18	●
M90 - 025 -...- TBI		25	0.98	92	3.62	67	2.64	1,32 x F ₀	1,57 x F ₀	5,8	0.35	0,09	0.20	●
M90 - 038 -...- TBI		38,1	1.50	118,2	4.65	80,1	3.15	1,35 x F ₀	1,60 x F ₀	8,4	0.51	0,11	0.24	●
M90 - 050 -...- TBI		50	1.97	142	5.59	92	3.62	1,36 x F ₀	1,62 x F ₀	10,8	0.66	0,12	0.26	●
M90 - 063 -...- TBI		63,5	2.50	172	6.77	108,5	4.27	1,36 x F ₀	1,62 x F ₀	13,7	0.84	0,14	0.31	●
M90 - 080 -...- TBI		80	3.15	205	8.07	125	4.92	1,37 x F ₀	1,64 x F ₀	17	1.04	0,15	0.33	●
M90 - 100 -...- TBI		100	3.94	245	9.65	145	5.71	1,37 x F ₀	1,65 x F ₀	20,9	1.28	0,17	0.37	●
M90 - 125 -...- TBI		125	4.92	295	11.61	170	6.69	1,38 x F ₀	1,66 x F ₀	25,8	1.57	0,20	0.44	●

Esempio di ordinazione/Order example = M 90-007-BU-TBI (codice/code + colore forza/force color code)



DI 1"-8

Fissaggi Flange mounts

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M 200

ACTIVE SAFETY



OSAS



USAS



OPAS

***F₁** =

Forza finale isoteramica
con 100% Cu

Isothermal end force at 100% Cu

****F_{1p}** =

Forza finale politropica
con 100% Cu

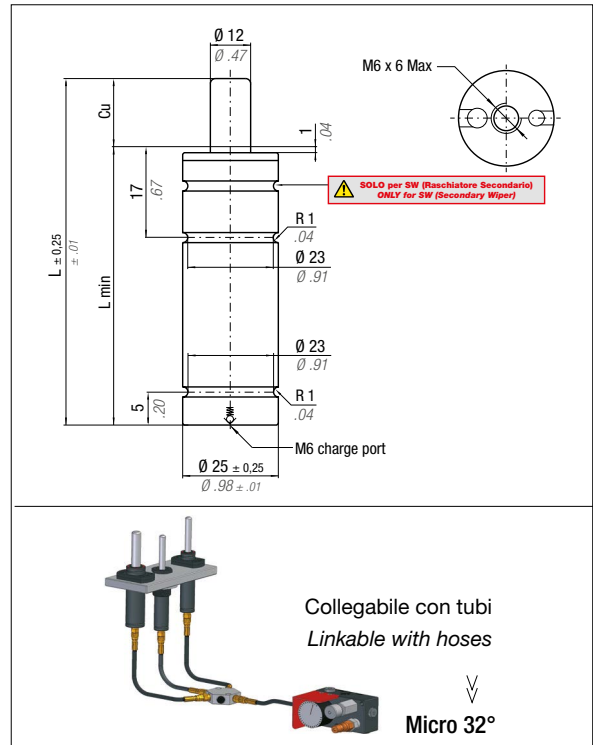
Polytrophic end force at 100% Cu

Colore forza Force color code	P		F ₀ Forza iniziale Initial force ± 5% +20°C +68°F	
	bar	psi	daN	lb
OR	15	218	17	38
PR	25	363	28	63
GR	45	653	50	112
BU	90	1305	100	225
RD	135	1958	150	337
YW	180	2610	200	450
BK	10-180	145-2610	11-200	25-450

Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

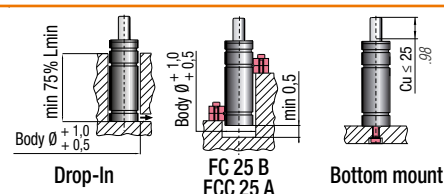
P = pressione di carico nominale. P = nominal charging pressure



		ΔP ± 0,33 %/°C	P max 180 bar 2610 psi	P min 10 bar 145 psi	S 1,13 cm ² 0.175 in ²	SPM ~ 50 - 80 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione Monouso Maintenance kit Disposable
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Codice Code	Cu	L		L min		*F ₁ Forza finale End force		**F _{1p} Forza finale End force		VO		~Kg ~lb	PED 2014/68/EU
		mm	inch	mm	inch	mm	inch	daN	lb	daN	lb		
M200 - 007 - ...	7	0.28	56	2.20	49	1.93	1,30 x F ₀	1,50 x F ₀	4	0.24	0,12	0.26	●
M200 - 010 - ...	10	0.39	62	2.44	52	2.05	1,34 x F ₀	1,57 x F ₀	5,2	0.32	0,13	0.29	●
M200 - 013 - ...	12,7	0.50	67,4	2.65	54,7	2.15	1,37 x F ₀	1,62 x F ₀	6,2	0.38	0,13	0.29	●
M200 - 015 - ...	15	0.59	72	2.83	57	2.24	1,38 x F ₀	1,64 x F ₀	7	0.43	0,14	0.31	●
M200 - 016 - ...	16	0.63	74	2.91	58	2.28	1,39 x F ₀	1,65 x F ₀	7,4	0.45	0,14	0.31	●
M200 - 025 - ...	25	0.98	92	3.62	67	2.64	1,43 x F ₀	1,72 x F ₀	10,8	0.66	0,16	0.35	●
M200 - 038 - ...	38,1	1.50	118,2	4.65	80,1	3.15	1,46 x F ₀	1,77 x F ₀	15,7	0.96	0,19	0.42	●
M200 - 050 - ...	50	1.97	142	5.59	92	3.62	1,47 x F ₀	1,79 x F ₀	20,2	1.23	0,20	0.44	●
M200 - 063 - ...	63,5	2.50	172	6.77	108,5	4.27	1,48 x F ₀	1,81 x F ₀	25,2	1.54	0,23	0.51	●
M200 - 080 - ...	80	3.15	205	8.07	125	4.92	1,49 x F ₀	1,83 x F ₀	31,2	1.90	0,26	0.57	●
M200 - 100 - ...	100	3.94	245	9.65	145	5.71	1,50 x F ₀	1,83 x F ₀	38,7	2.36	0,30	0.66	●
M200 - 125 - ...	125	4.92	295	11.61	170	6.69	1,50 x F ₀	1,84 x F ₀	48,1	2.94	0,34	0.75	●
M200 - 150 - ...	150	5.91	353	13.90	203	7.99	1,57 x F ₀	1,81 x F ₀	59	2.32	0,42	0.93	●
M200 - 160 - ...	160	6.30	373	14.69	213	8.39	1,57 x F ₀	1,81 x F ₀	62,8	2.47	0,45	0.99	●
M200 - 175 - ...	175	6.89	403	15.87	228	8.98	1,57 x F ₀	1,82 x F ₀	68,4	2.69	0,47	1.04	●
M200 - 200 - ...	200	7.87	453	17.83	253	9.96	1,58 x F ₀	1,83 x F ₀	77,8	3.06	0,52	1.15	●

Esempio di ordinazione/Order example = M 200-007-BU (codice/code + colore forza/force color code)



Fissaggi Flange mounts

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M 300

OSAS + OSM = OVER STROKE ACTIVE SAFETY = OVER STROKE MARKER

ACTIVE SAFETY



OSAS



USAS

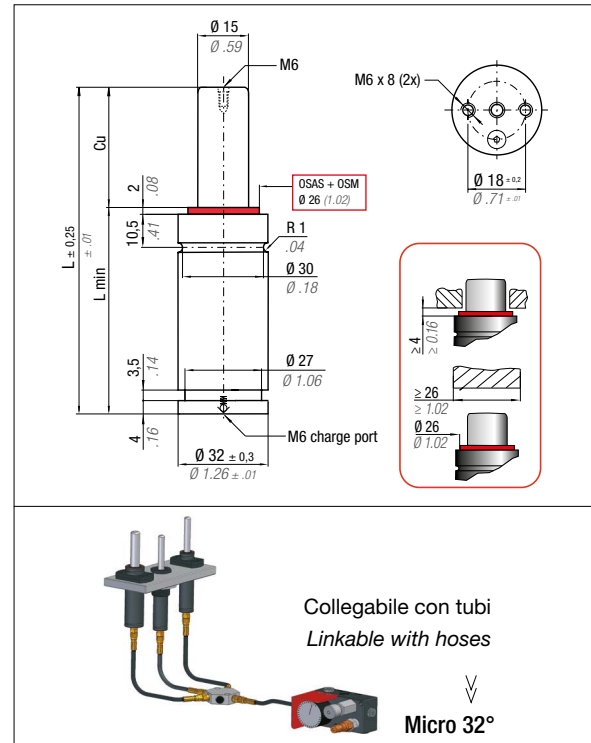


OPAS

***F_i** =
Forza finale isoterma
con 100% Cu
Isothermal end force at 100% Cu

****F_p** =
Forza finale politropica
con 100% Cu
Polytropic end force at 100% Cu

Colore forza Force color code	P		F ₀ Forza iniziale Initial force ± 5% +20°C +68°F	
	bar	psi	daN	lb
GR	45	653	80	180
BU	90	1305	160	360
RD	135	1958	240	540
YW	180	2610	320	719
BK	10-180	145-2610	18-320	40-719



Importante: per la versione BK, indicare la pressione richiesta al momento dell'ordine. Questo garantisce che il cilindro venga consegnato pronto per l'utilizzo.

Important: For the BK version, please indicate the required pressure when placing the order. This ensures your cylinder is delivered ready for use.

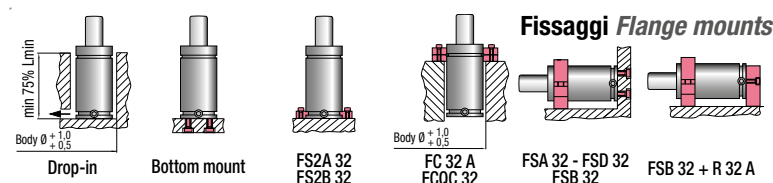
P = pressione di carico nominale. P = nominal charging pressure

	 0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 180 bar 2610 psi	P min 10 bar 145 psi	S 1,77 cm ² 0.274 in ²	SPM ~ 50 - 80 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione 39BMMCI32A Maintenance kit 39BMMCI32A
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Codice Code	Cu	L	L min	*F _i		**F _p		VO		~Kg	~lb	PED 2014/68/EU
				Forza finale End force	daN lb	Forza finale End force	daN lb	cm ³ in ³	cm ³ in ³			
• M300 - 007 - ...	7 0.28	56 2.20	49 1.93	1,20 x F ₀	1,35 x F ₀	8,3 0.51	0,21 0.01	•				
• M300 - 010 - ...	10 0.39	62 2.44	52 2.05	1,24 x F ₀	1,41 x F ₀	10,1 0.62	0,22 0.01	•				
M300 - 013 - ...	12,7 0.50	67,4 2.65	54,7 2.15	1,27 x F ₀	1,46 x F ₀	11,7 0.71	0,23 0.01	•				
M300 - 015 - ...	15 0.59	72 2.83	57 2.24	1,29 x F ₀	1,49 x F ₀	13,1 0.80	0,24 0.01	•				
M300 - 025 - ...	25 0.98	92 3.62	67 2.64	1,35 x F ₀	1,58 x F ₀	19,1 1.17	0,26 0.01	•				
M300 - 038 - ...	38 1.50	118 4.65	80 3.15	1,38 x F ₀	1,64 x F ₀	26,9 1.64	0,30 0.01	•				
M300 - 050 - ...	50 1.97	142 5.59	92 3.62	1,40 x F ₀	1,67 x F ₀	34,1 2.08	0,34 0.01	•				
M300 - 063 - ...	63,5 2.50	172 6.77	108,5 4.27	1,40 x F ₀	1,66 x F ₀	43,8 2.67	0,39 0.02	•				
M300 - 080 - ...	80 3.15	205 8.07	125 4.92	1,41 x F ₀	1,69 x F ₀	53,7 3.28	0,44 0.02	•				
M300 - 100 - ...	100 3.94	245 9.65	145 5.71	1,43 x F ₀	1,71 x F ₀	65,8 4.02	0,50 0.02	•				
M300 - 125 - ...	125 4.92	295 11.61	170 6.69	1,44 x F ₀	1,73 x F ₀	80,8 4.93	0,57 0.02	•				

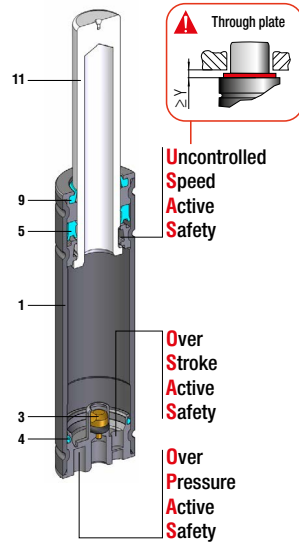
Esempio di ordinazione/Order example = M 300-007-BU (codice/code + colore forza/force color code)

• Monouso / Disposable

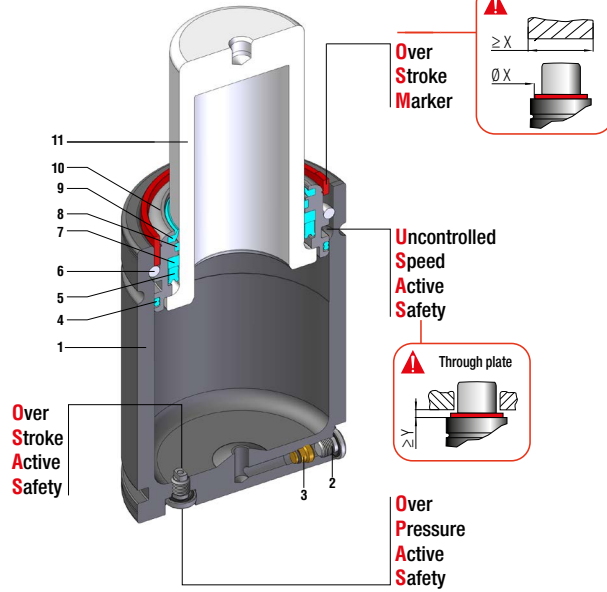


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RV 170 - RV 320



RV 350 ÷ RV 20000



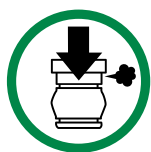
Sealing	Design
ROD SEAL	BUSH - BODY DESIGN

1	Body	7	Back-up ring
2	Plug	8	Guide ring
3	Valve	9	Rod wiper
4	Dual ring seal	10	Bush
5	Rod seal	11	Rod (nitrited superfinished)
6	Retaining ring		

Minima altezza, massima forza
Minimum height, maximum force

Codice Code	Corpo Body Ø		Corsa Stroke Cu		Forza iniziale Initial force FO		OSAS	USAS	OPAS
	mm	inch	mm	inch	daN	lb			
RV 170	19	0.75	7 - 125	0.28 - 4.92	170	382	●	●	●
RV 320	25	0.98	7 - 125	0.28 - 4.92	320	719	●	●	●
RV 350	32	1.26	10 - 125	0.39 - 4.92	360	809	●	●	●
RV 500	38	1.50	10 - 125	0.39 - 4.92	470	1057	●	●	●
RV 750	45	1.77	10 - 125	0.39 - 4.92	740	1664	●	●	●
RV 1000	50	1.97	10 - 125	0.39 - 4.92	920	2068	●	●	●
RV 1200	50	1.97	10 - 125	0.39 - 4.92	1060	2383	●	●	●
RV 1500	63	2.48	10 - 125	0.39 - 4.92	1530	3440	●	●	●
RV 2400	75	2.95	10 - 125	0.39 - 4.92	2385	5362	●	●	●
RV 4200	95	3.74	16 - 125	0.63 - 4.92	4240	9532	●	●	●
RV 6600	120	4.72	16 - 125	0.63 - 4.92	6630	14905	●	●	●
RV 9500	150	5.91	19 - 125	0.75 - 4.92	9540	21447	●	●	●
RV 12000	150	5.91	19 - 125	0.75 - 4.92	11780	26470	●	●	●
RV 20000	195	7.68	19 - 125	0.75 - 4.92	19910	44738	●	●	●

● Integrato di serie - Built-in as standard



VDI 3003



OSAS

Sicurezza Attiva Oltre Corsa
Over Stroke Active Safety



VDI 3003



USAS

Sicurezza Attiva Ritorno Incontrollato
Uncontrolled Speed Active Safety



VDI 3003



OPAS

Sicurezza Attiva Oltre Pressione
Over Pressure Active Safety

RV 170

ACTIVE SAFETY



OSAS



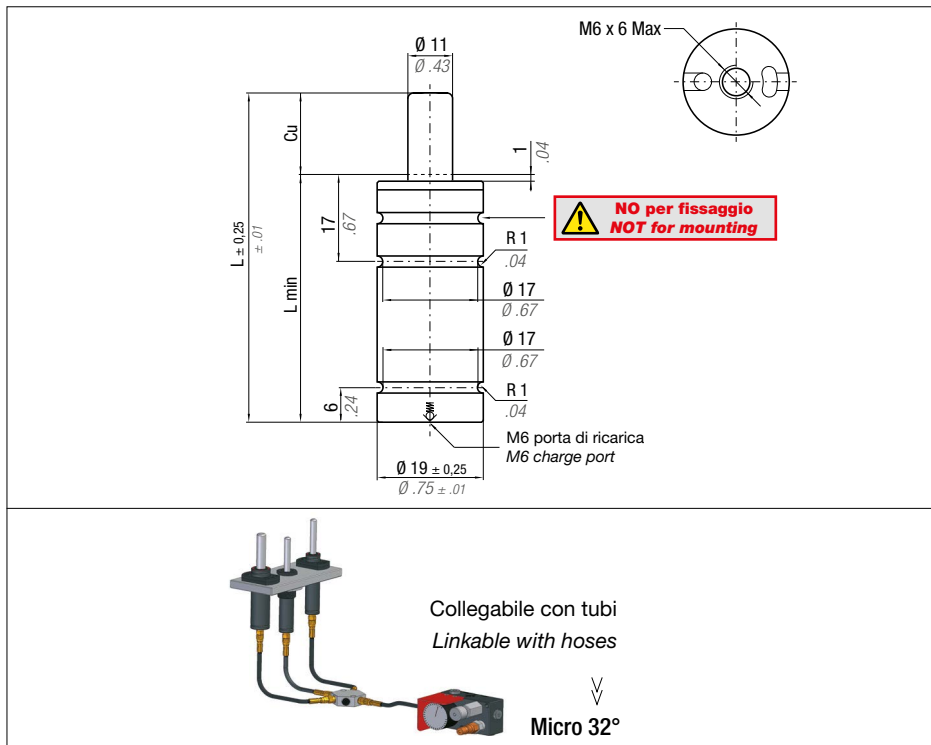
USAS



OPAS

***F_{1i}** =
Forza finale isoteramica
con 100% Cu
Isothermal end force at 100% Cu

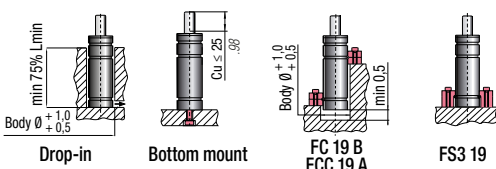
****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytropic end force at 100% Cu



	0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 180 bar 2610 psi	P min 20 bar 290 psi	S 0,95 cm ² 0.147 in ²	SPM ~ 40 - 100 (at 20°C)	Velocità massima <i>Max Speed</i> 1,8 m/s 70.8 in/s	Kit manutenzione Monouso <i>Maintenance kit</i> Disposable
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Codice Code	Cu		L		L min		FO		*F _{1i}		**F _{1p}		VO		PED 2014/68/EU	
	mm	inch	mm	inch	mm	inch	Forza iniziale Initial force	Forza finale End force	Forza iniziale Initial force	Forza finale End force	Forza iniziale Initial force	Forza finale End force	cm ³	in ³		~Kg
RV 170 - 007	7	0.28	44	1.73	37	1.46	170 382 ± 5%	274	616	320	719	2,1	0.13	0,06	0.13	●
RV 170 - 010	10	0.39	50	1.97	40	1.57		285	641	337	758	2,9	0.18	0,06	0.13	●
RV 170 - 013	13	0.51	56	2.20	43	1.69		292	656	348	782	3,6	0.22	0,07	0.15	●
RV 170 - 015	15	0.59	60	2.36	45	1.77		296	665	353	794	4,1	0.25	0,07	0.15	●
RV 170 - 019	19	0.75	68	2.68	49	1.93		301	677	361	812	5,0	0.31	0,07	0.16	●
RV 170 - 025	25	0.98	80	3.15	55	2.17		306	688	369	830	6,4	0.39	0,08	0.17	●
RV 170 - 032	32	1.26	94	3.7	62	2.44		310	697	374	841	8,1	0.49	0,09	0.19	●
RV 170 - 038	38	1.5	106	4.17	68	2.68		312	701	378	850	9,5	0.58	0,09	0.20	●
RV 170 - 050	50	1.97	130	5.12	80	3.15		315	708	382	859	12,4	0.76	0,11	0.23	●
RV 170 - 063	63	2.48	156	6.14	93	3.66		317	713	385	866	15,5	0.95	0,12	0.26	●
RV 170 - 075	75	2.95	185	7.28	110	4.33		318	715	387	870	18,3	1.12	0,14	0.30	●
RV 170 - 080	80	3.15	195	7.68	115	4.53		319	717	388	872	19,5	1.19	0,14	0.31	●
RV 170 - 100	100	3.94	235	9.25	135	5.31		320	719	390	877	24,3	1.48	0,16	0.36	●
RV 170 - 125	125	4.92	285	11.22	160	6.3		321	722	391	879	30,2	1.84	0,19	0.42	●

Esempio di ordinazione/Order example = RV 170-007 (codice/code)



Fissaggi Flange mounts

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RV 320

ACTIVE SAFETY



OSAS



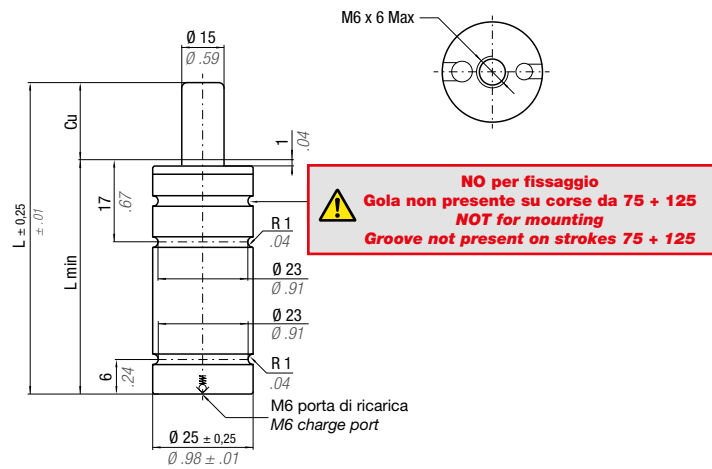
USAS



OPAS

***F₁** =
Forza finale isoterma
con 100% Cu
Isothermal end force at 100% Cu

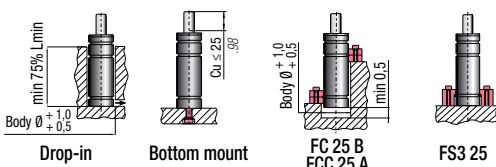
****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytropic end force at 100% Cu



	0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 180 bar 2610 psi	P min 20 bar 290 psi	S 1,77 cm ² 0.27 in ²	SPM ~ 40 - 100 (at 20°C)	Velocità massima <i>Max Speed</i> 1,8 m/s 70.8 in/s	Kit manutenzione Monouso Maintenance kit Disposable
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Codice Code	Cu	L		L min		FO Forza iniziale Initial force	*F ₁ Forza finale End force	**F _{1p} Forza finale End force	VO	~Kg	~lb	PED 2014/68/EU				
		mm	inch	mm	inch								daN	lb	daN	lb
RV 320 - 007	7	0.28	44	1.73	37	1.46	320 719 ± 5%	471	1059	540	1214	4,6	0.28	0,10	0.22	●
RV 320 - 010	10	0.39	50	1.97	40	1.57		495	1112	574	1291	6,0	0.37	0,10	0.23	●
RV 320 - 013	13	0.51	56	2.20	43	1.69		511	1148	598	1344	7,3	0.45	0,11	0.24	●
RV 320 - 015	15	0.59	60	2.36	45	1.77		519	1167	610	1371	8,2	0.50	0,11	0.24	●
RV 320 - 019	19	0.75	68	2.68	49	1.93		531	1195	628	1412	10,1	0.62	0,12	0.26	●
RV 320 - 025	25	0.98	80	3.15	55	2.17		544	1223	647	1454	12,8	0.78	0,13	0.28	●
RV 320 - 032	32	1.26	94	3.70	62	2.44		553	1244	661	1486	15,9	0.97	0,14	0.31	●
RV 320 - 038	38	1.50	106	4.17	68	2.68		559	1257	669	1505	18,6	1.14	0,15	0.33	●
RV 320 - 050	50	1.97	130	5.12	80	3.15		567	1274	681	1531	24,1	1.47	0,17	0.37	●
RV 320 - 063	63	2.48	156	6.14	93	3.66		572	1286	689	1549	29,9	1.82	0,19	0.42	●
RV 320 - 075	75	2.95	185	7.28	110	4.33		570	1282	686	1543	35,8	2.18	0,22	0.48	●
RV 320 - 080	80	3.15	195	7.68	115	4.53		572	1285	688	1548	38,1	2.33	0,23	0.50	●
RV 320 - 100	100	3.94	235	9.25	135	5.31		576	1295	695	1562	47,1	2.87	0,26	0.57	●
RV 320 - 125	125	4.92	285	11.22	160	6.30		580	1303	700	1574	58,4	3.56	0,30	0.66	●

Esempio di ordinazione/Order example = RV 320-007 (codice/code)



Fissaggi Flange mounts

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RV 350

OSAS + OSM = OVER STROKE ACTIVE SAFETY = OVER STROKE MARKER

ACTIVE SAFETY



OSAS



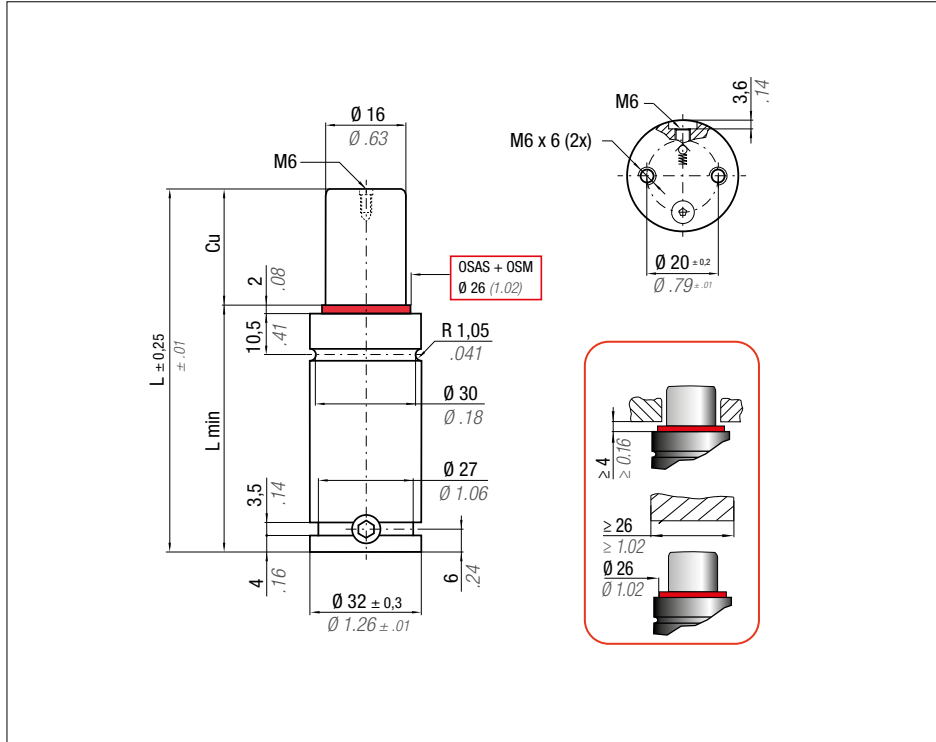
USAS



OPAS

***F₁** =
Forza finale isoterma
con 100% Cu
Isothermal end force at 100% Cu

****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytropic end force at 100% Cu

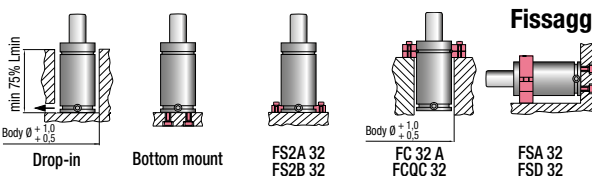


	0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 180 bar 2610 psi	P min 20 bar 290 psi	S 2,01 cm ² 0,312 in ²	SPM ~ 20 - 100 (at 20°C)	Velocità massima <i>Max Speed</i> 1,8 m/s 70.8 in/s	Kit manutenzione 39BMRV00350C Maintenance kit 39BMRV00350C
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Codice Code	Cu		L		L min		FO Forza iniziale Initial force		*F ₁ Forza finale End force		**F _{1p} Forza finale End force		VO		PED 2014/68/EU	
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	daN	lb	cm ³	in ³		~Kg
• RV 350 - 010	10	0.39	50	1.97	40	1.57	360 809 ± 5 % 180 bar 2610psi + 20 °C +68 °F	531	1194	607	1366	7,7	0.47	0,17	0.36	●
RV 350 - 013	13	0.51	56	2.20	43	1.69		544	1224	627	1409	9,5	0.58	0,18	0.39	●
RV 350 - 016	16	0.63	62	2.44	46	1.81		554	1245	641	1440	11,2	0.68	0,19	0.41	●
RV 350 - 019	19	0.75	68	2.68	49	1.93		561	1261	651	1463	13,0	0.79	0,19	0.43	●
RV 350 - 025	25	0.98	80	3.15	55	2.17		571	1283	665	1496	16,6	1.01	0,21	0.47	●
RV 350 - 032	32	1.26	94	3.70	62	2.44		578	1300	676	1520	20,7	1.26	0,24	0.52	●
RV 350 - 038	38	1.50	106	4.17	68	2.68		583	1310	683	1535	24,3	1.48	0,26	0.56	●
RV 350 - 050	50	1.97	130	5.12	80	3.15		589	1323	691	1554	31,4	1.92	0,30	0.65	●
RV 350 - 063	63	2.48	156	6.14	93	3.66		593	1333	697	1568	39,1	2.39	0,34	0.74	●
RV 350 - 075	75	2.95	180	7.09	105	4.13		595	1338	701	1576	46,3	2.83	0,38	0.83	●
RV 350 - 080	80	3.15	190	7.48	110	4.33		596	1340	702	1579	49,2	3.00	0,39	0.86	●
RV 350 - 100	100	3.94	230	9.06	130	5.12		599	1346	706	1588	61,1	3.73	0,46	1.01	●
RV 350 - 125	125	4.92	280	11.02	155	6.10	606	1363	717	1613	74,9	4.57	0,54	1.18	●	

Esempio di ordinazione/Order example = RV 350-010 (codice/code)

• Monouso / Disposable



Fissaggi Flange mounts

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RV 500

OSAS + OSM = OVER STROKE ACTIVE SAFETY = OVER STROKE MARKER

ACTIVE SAFETY



OSAS



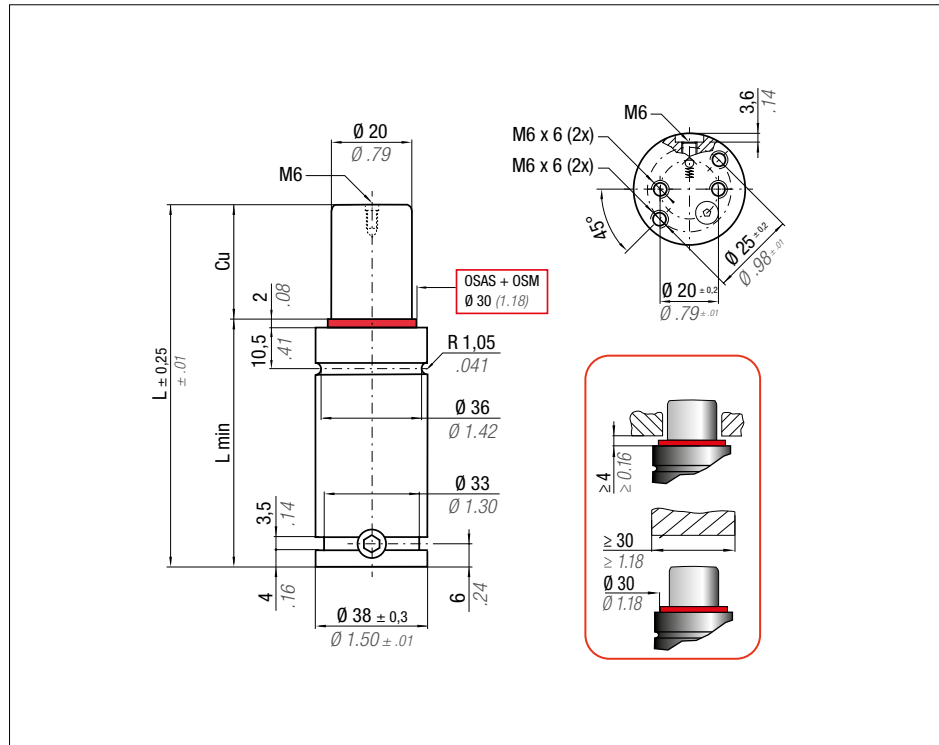
USAS



OPAS

***F_{1i}** =
Forza finale isoterma
con 100% Cu
Isothermal end force at 100% Cu

****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytrophic end force at 100% Cu

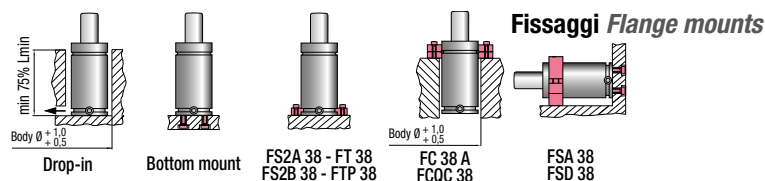


	N₂	0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 150 bar 2175 psi	P min 20 bar 290 psi	S 3,14 cm ² 0.487 in ²	SPM ~ 20 - 100 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione 39BMRV00500C Maintenance kit 39BMRV00500C
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Codice Code	Cu	L		L min		FO Forza iniziale Initial force	*F _{1i} Forza finale End force	**F _{1p} Forza finale End force	VO	~Kg	~lb	PED 2014/68/EU				
		mm	inch	mm	inch								daN	lb	daN	lb
• RV 500 - 010	10	0.39	50	1.97	40	1.57	470 1057 ± 5% 150 bar 2175psi + 20 °C +68 °F	696	1565	828	1862	11,2	0.68	0,27	0.60	●
RV 500 - 013	13	0.51	56	2.20	43	1.69		716	1609	859	1931	13,8	0.84	0,25	0.55	●
RV 500 - 016	16	0.63	62	2.44	46	1.81		730	1641	882	1982	16,3	0.99	0,26	0.57	●
RV 500 - 019	19	0.75	68	2.68	49	1.93		740	1664	899	2020	18,9	1.15	0,28	0.62	●
RV 500 - 025	25	0.98	80	3.15	55	2.17		755	1698	922	2074	24,0	1.46	0,31	0.68	●
RV 500 - 032	32	1.26	94	3.70	62	2.44		766	1723	941	2115	30,0	1.83	0,34	0.75	●
RV 500 - 038	38	1.50	106	4.17	68	2.68		773	1738	952	2140	35,1	2.14	0,37	0.82	●
RV 500 - 050	50	1.97	130	5.12	80	3.15		782	1759	967	2173	45,3	2.76	0,43	0.95	●
RV 500 - 063	63	2.48	156	6.14	93	3.66		789	1773	977	2196	56,4	3.44	0,49	1.08	●
RV 500 - 075	75	2.95	180	7.09	105	4.13		792	1782	984	2211	66,6	4.06	0,54	1.19	●
RV 500 - 080	80	3.15	190	7.48	110	4.33		794	1785	986	2216	70,8	4.32	0,57	1.26	●
RV 500 - 100	100	3.94	230	9.06	130	5.12		798	1794	992	2231	87,9	5.36	0,66	1.46	●
RV 500 - 125	125	4.92	280	11.02	155	6.10		801	1801	998	2243	109,2	6.66	0,78	1.72	●

Esempio di ordinazione/Order example = RV 500-010 (codice/code)

• Monouso / Disposable



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RV 750

OSAS + OSM = OVER STROKE ACTIVE SAFETY = OVER STROKE MARKER

ACTIVE SAFETY



OSAS



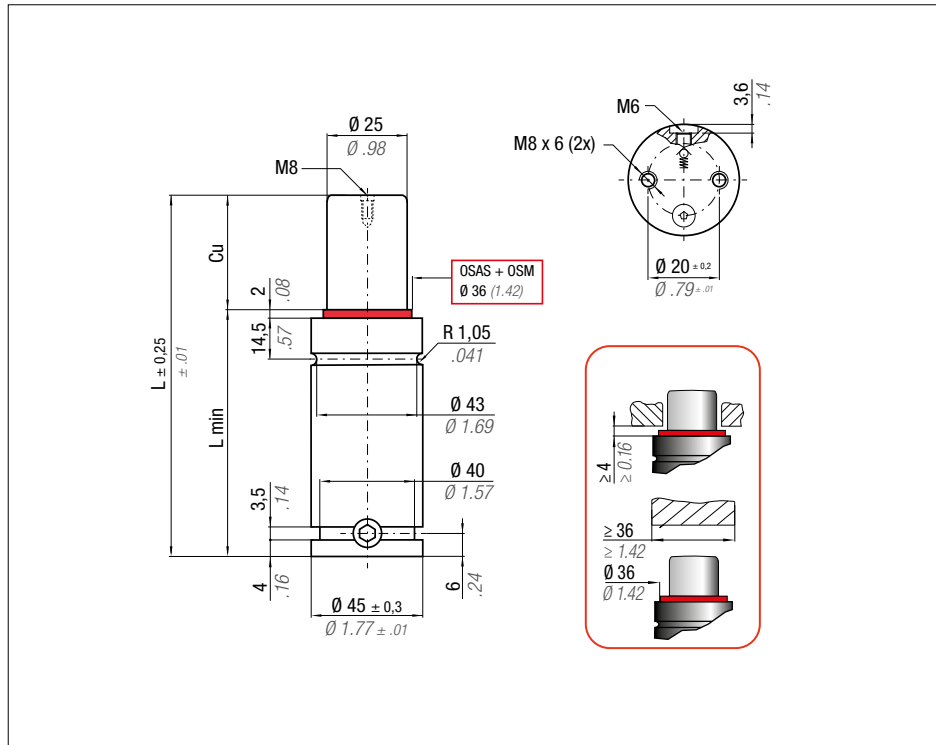
USAS



OPAS

***F_{1i}** =
Forza finale isoteramica
con 100% Cu
Isothermal end force at 100% Cu

****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytrophic end force at 100% Cu

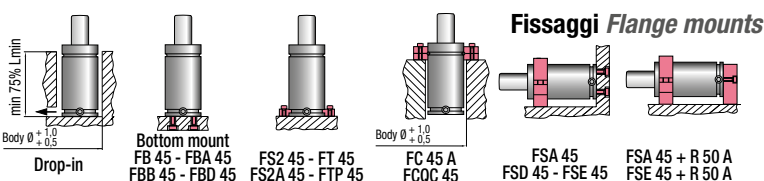


	N₂	 0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 150 bar 2175 psi	P min 20 bar 290 psi	S 4,91 cm ² 0.761 in ²	SPM ~ 20 - 100 (at 20°C)	Velocità massima <i>Max Speed</i> 1,8 m/s 70.8 in/s	Kit manutenzione 39BMRV00750C Maintenance kit 39BMRV00750C
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Codice Code	Cu	L	L min	FO Forza iniziale Initial force	*F _{1i} Forza finale End force	**F _{1p} Forza finale End force	VO	PED 2014/68/EU							
									mm	inch	mm	inch	mm	inch	daN
• RV 750 - 010	10	0.39	52	2.05	42	1.65	1118 2514	1343 3018	16,6 1.01	0,36 0.79	●				
RV 750 - 013	13	0.51	58	2.28	45	1.77	1152 2590	1396 3139	20,4 1.24	0,38 0.84	●				
RV 750 - 016	16	0.63	64	2.52	48	1.89	1176 2644	1435 3227	24,1 1.47	0,40 0.88	●				
RV 750 - 019	19	0.75	70	2.76	51	2.01	1194 2685	1465 3293	27,9 1.70	0,42 0.93	●				
RV 750 - 025	25	0.98	82	3.23	57	2.24	1220 2743	1507 3388	35,5 2.17	0,45 0.99	●				
RV 750 - 032	32	1.26	96	3.78	64	2.52	1240 2787	1539 3460	44,3 2.70	0,50 1.10	●				
RV 750 - 038	38	1.50	108	4.25	70	2.76	1251 2813	1558 3503	51,9 3.17	0,54 1.19	●				
RV 750 - 050	50	1.97	132	5.20	82	3.23	1267 2848	1584 3562	67,0 4.09	0,61 1.34	●				
RV 750 - 063	63	2.48	158	6.22	95	3.74	1278 2873	1602 3602	83,4 5.09	0,70 1.54	●				
RV 750 - 075	75	2.95	182	7.17	107	4.21	1285 2888	1614 3628	98,5 6.01	0,78 1.72	●				
RV 750 - 080	80	3.15	192	7.56	112	4.41	1287 2893	1618 3637	104,8 6.40	0,81 1.79	●				
RV 750 - 100	100	3.94	232	9.13	132	5.20	1294 2909	1629 3663	130,1 7.94	0,94 2.07	●				
RV 750 - 125	125	4.92	282	11.10	157	6.18	1300 2922	1639 3685	161,6 9.86	1,10 2.43	●				

Esempio di ordinazione/Order example = RV 750-010 (codice/code)

• Monouso / Disposable



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RV 1000

OSAS + OSM = OVER STROKE ACTIVE SAFETY = OVER STROKE MARKER

ACTIVE SAFETY



OSAS



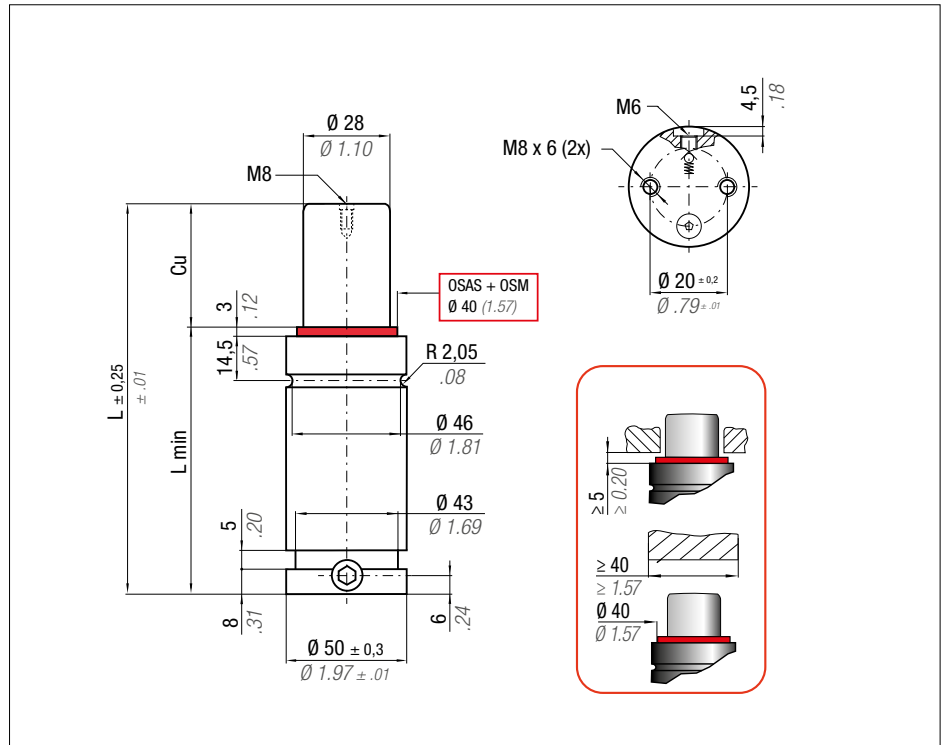
USAS



OPAS

***F_{1i}** =
Forza finale isoterma
con 100% Cu
Isothermal end force at 100% Cu

****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytropic end force at 100% Cu

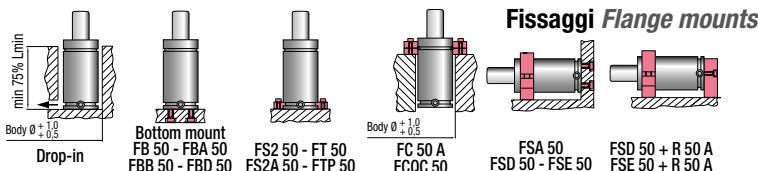


	0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 150 bar 2175 psi	P min 20 bar 290 psi	S 6,15 cm ² 0.953 in ²	SPM ~ 20 - 100 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione 39BMRV01000C Maintenance kit 39BMRV01000C
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Codice Code	Cu		L		L min		FO Forza iniziale Initial force	*F _{1i} Forza finale End force	**F _{1p} Forza finale End force	VO	~Kg ~lb					
	mm	inch	mm	inch	mm	inch					daN	lb		cm ³	in ³	~Kg
• RV 1000 - 010	10	0.39	58	2.28	48	1.89	920 2068 ± 5% 150 bar 2175 psi + 20 °C +68 °F	1321	2969	1554	3494	23,7	1.45	0,49	1.08	●
• RV 1000 - 013	13	0.51	64	2.52	51	2.01		1370	3079	1631	3667	28,4	1.73	0,51	1.12	●
RV 1000 - 016	16	0.63	70	2.76	54	2.13		1407	3163	1690	3800	33,1	2.02	0,54	1.19	●
RV 1000 - 019	19	0.75	76	2.99	57	2.24		1436	3229	1737	3906	37,7	2.30	0,56	1.23	●
RV 1000 - 025	25	0.98	88	3.46	63	2.48		1479	3326	1807	4062	47,1	2.87	0,61	1.34	●
RV 1000 - 032	32	1.26	102	4.02	70	2.76		1514	3403	1863	4187	58,0	3.54	0,67	1.48	●
RV 1000 - 038	38	1.50	114	4.49	76	2.99		1535	3451	1897	4266	67,4	4.11	0,72	1.59	●
RV 1000 - 050	50	1.97	138	5.43	88	3.46		1564	3517	1946	4375	86,1	5.25	0,81	1.79	●
RV 1000 - 063	63	2.48	164	6.46	101	3.98		1585	3564	1981	4453	106,3	6.49	0,92	2.03	●
RV 1000 - 075	75	2.95	188	7.40	113	4.45		1599	3594	2003	4503	125,0	7.63	1,01	2.23	●
RV 1000 - 080	80	3.15	198	7.80	118	4.65		1603	3605	2011	4520	132,8	8.10	1,05	2.31	●
RV 1000 - 100	100	3.94	238	9.37	138	5.43		1618	3636	2034	4573	164,0	10.01	1,21	2.67	●
RV 1000 - 125	125	4.92	288	11.34	163	6.42	1629	3663	2054	4617	202,9	12.38	1,41	3.11	●	

Esempio di ordinazione/Order example = RV 1000-010 (codice/code)

• Monouso / Disposable



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RV 1200

OSAS + OSM = OVER STROKE ACTIVE SAFETY = OVER STROKE MARKER

ACTIVE SAFETY



OSAS



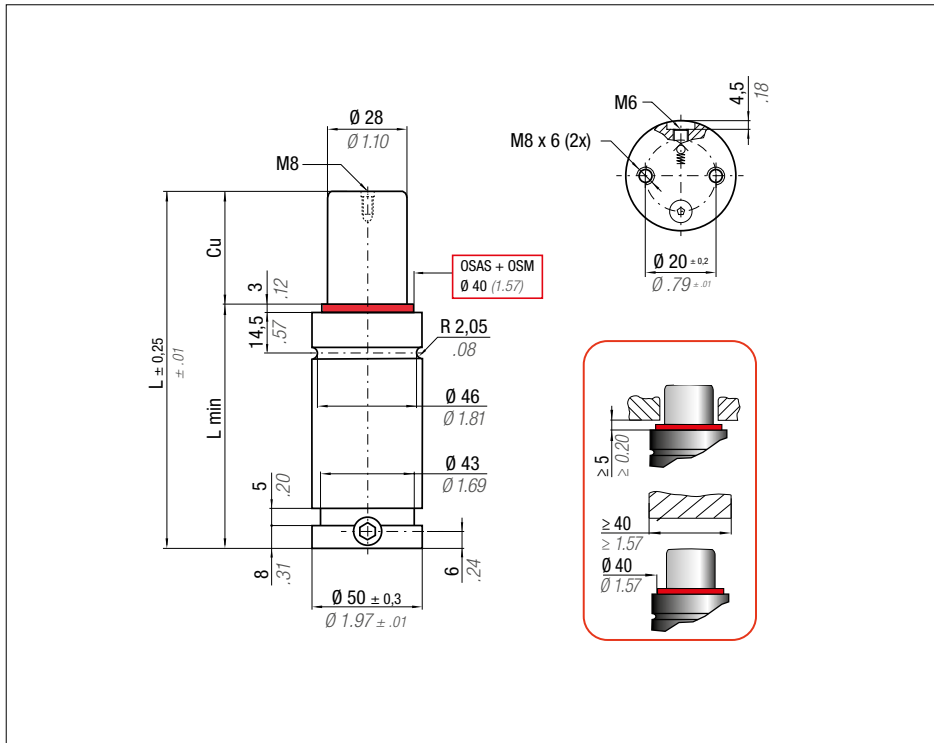
USAS



OPAS

***F_i** =
Forza finale isoteramica
con 100% Cu
Isothermal end force at 100% Cu

****F_p** =
Forza finale politropica
con 100% Cu
Polytrophic end force at 100% Cu

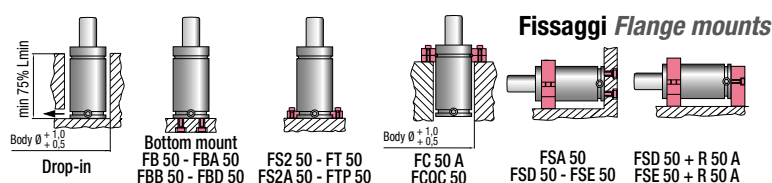


	N₂	 0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 170 bar 2465 psi	P min 20 bar 290 psi	S 6,15 cm ² 0.953 in ²	SPM ~ 20 - 100 (at 20°C)	Velocità massima <i>Max Speed</i> 1,8 m/s 70.8 in/s	Kit manutenzione 39BMRV01000C Maintenance kit 39BMRV01000C
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Codice Code	Cu		L		L min		FO Forza iniziale Initial force	*F _i Forza finale End force	**F _p Forza finale End force	VO		PED 2014/68/EU
	mm	inch	mm	inch	mm	inch				cm ³	in ³	
• RV 1200 - 010	10	0.39	58	2.28	48	1.89	1046 2352 ± 5% 170 bar 2465 psi + 20 °C +68 °F	1519 3414	1752 3939	23,7 1.45	0,49 1.08	●
• RV 1200 - 013	13	0.51	64	2.52	51	2.01		1577 3546	1839 4135	28,4 1.73	0,51 1.12	●
RV 1200 - 016	16	0.63	70	2.76	54	2.13		1622 3646	1906 4284	33,1 2.02	0,54 1.19	●
RV 1200 - 019	19	0.75	76	2.99	57	2.24		1657 3725	1959 4403	37,7 2.30	0,56 1.23	●
RV 1200 - 025	25	0.98	88	3.46	63	2.48		1709 3841	2037 4579	47,1 2.87	0,61 1.34	●
RV 1200 - 032	32	1.26	102	4.02	70	2.76		1750 3934	2100 4721	58,0 3.54	0,67 1.48	●
RV 1200 - 038	38	1.50	114	4.49	76	2.99		1776 3992	2139 4809	67,4 4.11	0,72 1.59	●
RV 1200 - 050	50	1.97	138	5.43	88	3.46		1811 4072	2194 4932	86,1 5.25	0,81 1.79	●
RV 1200 - 063	63	2.48	164	6.46	101	3.98		1836 4128	2233 5020	106,3 6.49	0,92 2.03	●
RV 1200 - 075	75	2.95	188	7.40	113	4.45		1853 4165	2258 5077	125,0 7.63	1,01 2.23	●
RV 1200 - 080	80	3.15	198	7.80	118	4.65		1858 4177	2267 5096	132,8 8.10	1,05 2.31	●
RV 1200 - 100	100	3.94	238	9.37	138	5.43		1875 4215	2293 5156	164,0 10.01	1,21 2.67	●
RV 1200 - 125	125	4.92	288	11.34	163	6.42		1889 4247	2315 5205	202,9 12.38	1,41 3.11	●

Esempio di ordinazione/Order example = RV 1200-010 (codice/code)

• Monouso / Disposable



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RV 1500

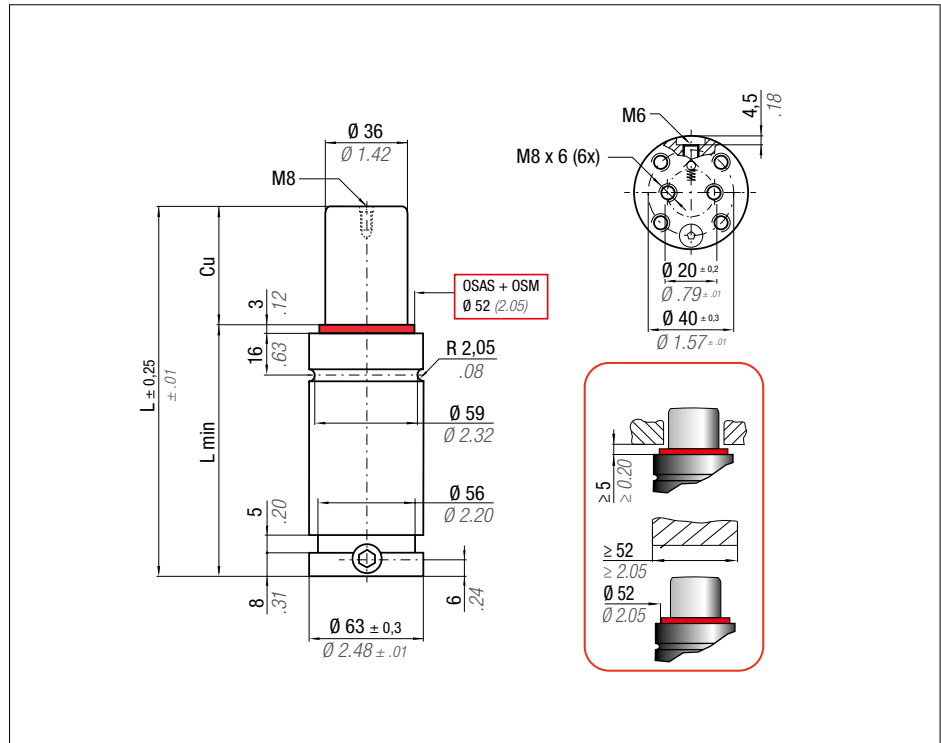
OSAS + OSM = OVER STROKE ACTIVE SAFETY = OVER STROKE MARKER

ACTIVE SAFETY



***F_{1i}** =
Forza finale isotermaica
con 100% Cu
Isothermal end force at 100% Cu

****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytropic end force at 100% Cu



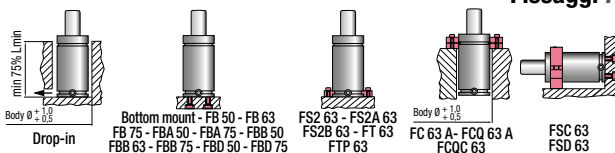
	 0 - 80 °C 32 - 176 °F	ΔP $\pm 0,33 \% / ^\circ C$	P max 150 bar 2175 psi	P min 20 bar 290 psi	S 10,18 cm ² 1.578 in ²	SPM ~ 20 - 100 (at 20°C)	Velocità massima <i>Max Speed</i> 1,8 m/s 70.8 in/s	Kit manutenzione 39BMRV01500C Maintenance kit 39BMRV01500C
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Codice Code	Cu	L		L min		FO		*F _{1i}		**F _{1p}		VO	~Kg	~lb	PED 2014/68/EU	
		mm	inch	mm	inch	mm	inch	daN	lb	daN	lb					daN
• RV 1500 - 010	10	0.39	64	2.52	54	2.13	1530 3440 $\pm 5\%$ 150 bar 2175 psi + 20 °C +68 °F	2089	4697	2424	5448	44	2.69	0,88	1.94	●
• RV 1500 - 013	13	0.51	70	2.76	57	2.24		2168	4874	2546	5723	52	3.17	0,91	2.01	●
RV 1500 - 016	16	0.63	76	2.99	60	2.36		2230	5012	2642	5939	60	3.66	0,96	2.12	●
RV 1500 - 019	19	0.75	82	3.23	63	2.48		2279	5123	2720	6114	68	4.15	0,99	2.18	●
RV 1500 - 025	25	0.98	94	3.70	69	2.72		2353	5290	2838	6380	84	5.13	1,06	2.34	●
RV 1500 - 032	32	1.26	108	4.25	76	2.99		2414	5426	2935	6599	102	6.22	1,14	2.51	●
RV 1500 - 038	38	1.50	120	4.72	82	3.23		2452	5512	2997	6738	118	7.20	1,21	2.67	●
RV 1500 - 050	50	1.97	144	5.67	94	3.70		2506	5633	3085	6935	149	9.09	1,36	3.00	●
RV 1500 - 063	63	2.48	170	6.69	107	4.21		2544	5720	3148	7078	184	11.23	1,52	3.35	●
RV 1500 - 075	75	2.95	194	7.64	119	4.69		2570	5777	3190	7172	215	13.12	1,66	3.66	●
RV 1500 - 080	80	3.15	204	8.03	124	4.88		2578	5797	3204	7204	229	13.97	1,72	3.79	●
RV 1500 - 100	100	3.94	244	9.61	144	5.67		2605	5857	3249	7303	281	17.15	1,95	4.30	●
RV 1500 - 125	125	4.92	294	11.57	169	6.65		2628	5907	3286	7387	347	21.18	2,24	4.94	●

Esempio di ordinazione/Order example = RV 1500-010 (codice/code)

• Monouso / Disposable

Fissaggi Flange mounts



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RV 4200

OSAS + OSM = OVER STROKE ACTIVE SAFETY = OVER STROKE MARKER

ACTIVE SAFETY



OSAS



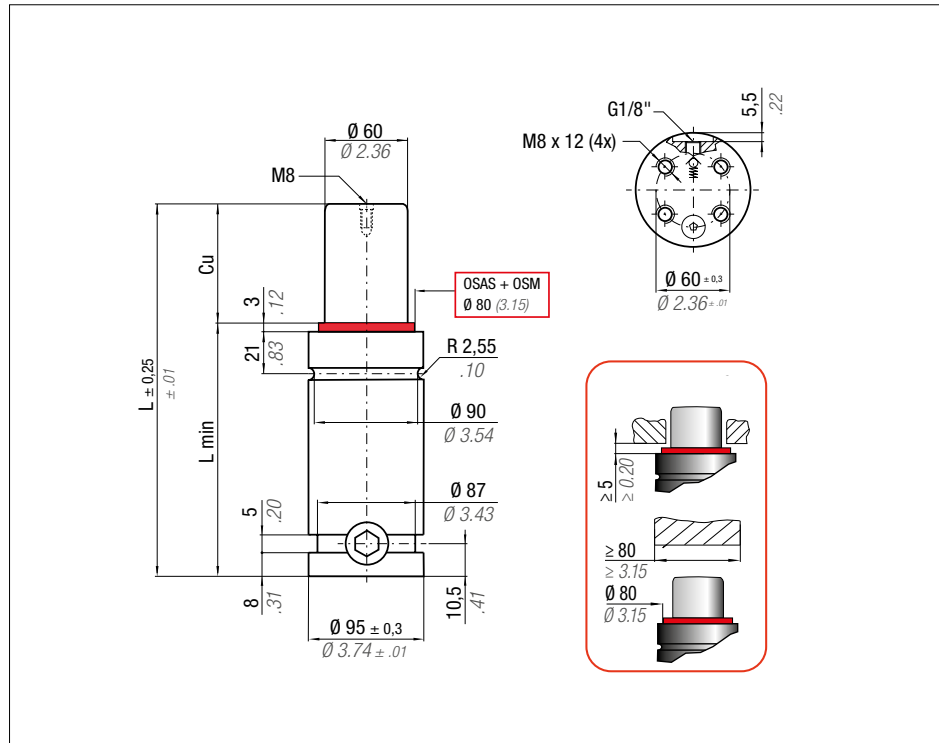
USAS



OPAS

***F_{1i}** =
Forza finale isotermaica
con 100% Cu
Isothermal end force at 100% Cu

****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytropic end force at 100% Cu



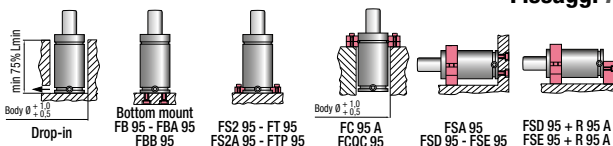
	0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 150 bar 2175 psi	P min 20 bar 290 psi	S 28,27 cm ² 4.382 in ²	SPM ~ 20 - 100 (at 20°C)	Velocità massima <i>Max Speed</i> 1,8 m/s 70.8 in/s	Kit manutenzione 39BMRV04200C Maintenance kit 39BMRV04200C
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Codice Code	Cu	L		L min		FO Forza iniziale Initial force	*F _{1i} Forza finale End force		**F _{1p} Forza finale End force		VO	~Kg ~lb	PED 2014/68/EU		
		mm	inch	mm	inch		daN	lb	daN	lb				daN	lb
• RV 4200 - 016	16	0.63	90	3.54	74	2.91	6103	13720	7197	16179	172	10.50	2,76	6.08	●
• RV 4200 - 019	19	0.75	96	3.78	77	3.03	6269	14093	7458	16767	192	11.72	2,84	6.26	●
RV 4200 - 025	25	0.98	108	4.25	83	3.27	6531	14682	7874	17702	232	14.16	2,99	6.59	●
RV 4200 - 032	32	1.26	122	4.80	90	3.54	6755	15186	8236	18515	279	17.03	3,16	6.97	●
RV 4200 - 038	38	1.50	134	5.28	96	3.78	6902	15517	8475	19052	320	19.53	3,31	7.30	●
RV 4200 - 050	50	1.97	158	6.22	108	4.25	7117	16001	8827	19844	401	24.47	3,61	7.96	●
RV 4200 - 063	63	2.48	184	7.24	121	4.76	7278	16361	9092	20440	488	29.78	3,94	8.69	●
RV 4200 - 075	75	2.95	208	8.19	133	5.24	7386	16604	9272	20843	569	34.72	4,24	9.35	●
RV 4200 - 080	80	3.15	218	8.58	138	5.43	7423	16687	9333	20982	603	36.80	4,36	9.61	●
RV 4200 - 100	100	3.94	258	10.16	158	6.22	7539	16949	9529	21421	738	45.04	4,86	10.71	●
RV 4200 - 125	125	4.92	308	12.13	183	7.20	7639	17173	9696	21798	906	55.29	5,48	12.08	●

Esempio di ordinazione/Order example = RV 4200-016 (codice/code)

• Monouso / Disposable

Fissaggi Flange mounts



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RV 6600

OSAS + OSM = OVER STROKE ACTIVE SAFETY = OVER STROKE MARKER

ACTIVE SAFETY

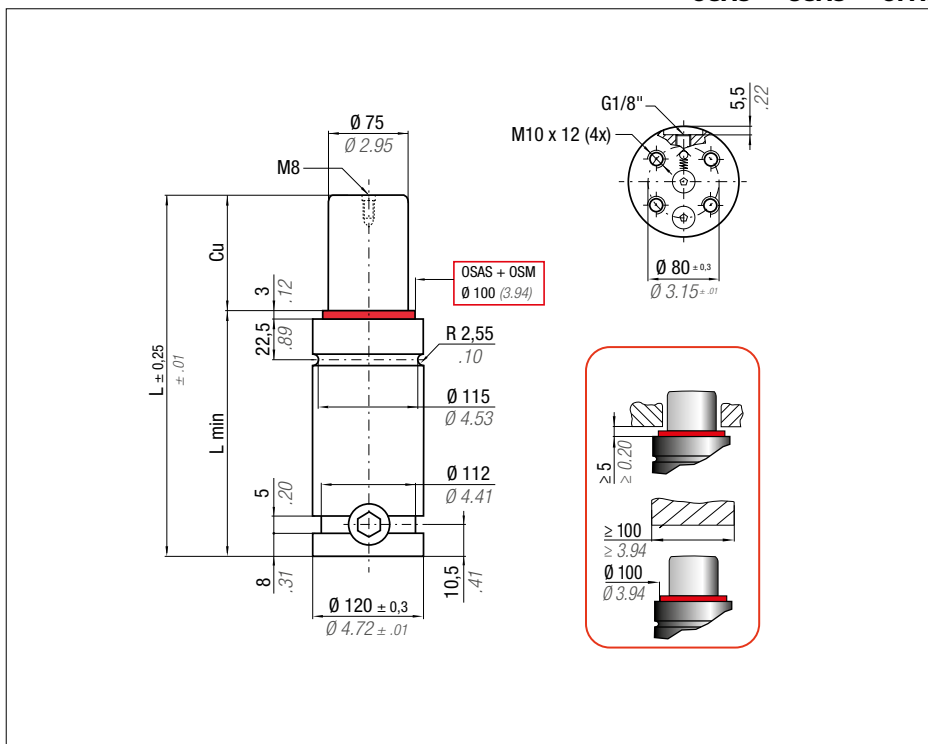
OSAS

USAS

OPAS

***F_i** =
Forza finale isoteramica
con 100% Cu
Isothermal end force at 100% Cu

****F_p** =
Forza finale politropica
con 100% Cu
Polytropic end force at 100% Cu



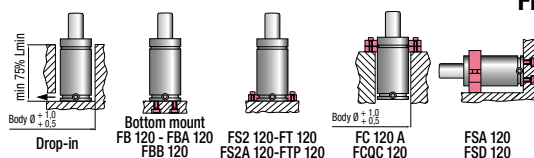
	N₂	 0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 150 bar 2175 psi	P min 20 bar 290 psi	S 44,18 cm ² 6.848 in ²	SPM ~ 20 - 100 (at 20°C)	Velocità massima <i>Max Speed</i> 1,8 m/s 70.8 in/s	Kit manutenzione 39BMRV06600C Maintenance kit 39BMRV06600C
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Codice Code	Cu		L		L min		FO Forza iniziale Initial force	*F _i Forza finale End force	**F _p Forza finale End force	VO		PED 2014/68/EU				
	mm	inch	mm	inch	mm	inch				cm ³	in ³		~Kg	~lb		
• RV 6600 - 016	16	0.63	100	3.94	84	3.31	6630 14904 ± 5% 150 bar 2175 psi + 20 °C +68 °F	9141	20550	10631	23900	298	18.19	5,12	11.29	●
• RV 6600 - 019	19	0.75	106	4.17	87	3.43		9393	21115	11022	24777	330	20.14	5,23	11.53	●
RV 6600 - 025	25	0.98	118	4.65	93	3.66		9799	22028	11658	26209	394	24.04	5,47	12.06	●
RV 6600 - 032	32	1.26	132	5.20	100	3.94		10157	22834	12228	27490	469	28.62	5,75	12.68	●
RV 6600 - 038	38	1.50	144	5.67	106	4.17		10397	23374	12614	28357	533	32.53	5,99	13.21	●
RV 6600 - 050	50	1.97	168	6.61	118	4.65		10757	24183	13196	29666	661	40.34	6,47	14.26	●
RV 6600 - 063	63	2.48	194	7.64	131	5.16		11031	24799	13645	30675	799	48.76	6,99	15.41	●
RV 6600 - 075	75	2.95	218	8.58	143	5.63		11219	25221	13954	31369	927	56.57	7,47	16.47	●
RV 6600 - 080	80	3.15	228	8.98	148	5.83		11284	25367	14061	31611	980	59.80	7,67	16.91	●
RV 6600 - 100	100	3.94	268	10.55	168	6.61		11490	25832	14404	32381	1193	72.80	8,46	18.65	●
RV 6600 - 125	125	4.92	318	12.52	193	7.60		11669	26234	14703	33053	1459	89.03	9,46	20.86	●

Esempio di ordinazione/Order example = RV 6600-016 (codice/code)

• Monouso / Disposable

Fissaggi Flange mounts



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RV 9500

OSAS + OSM = OVER STROKE ACTIVE SAFETY = OVER STROKE MARKER

ACTIVE SAFETY



OSAS



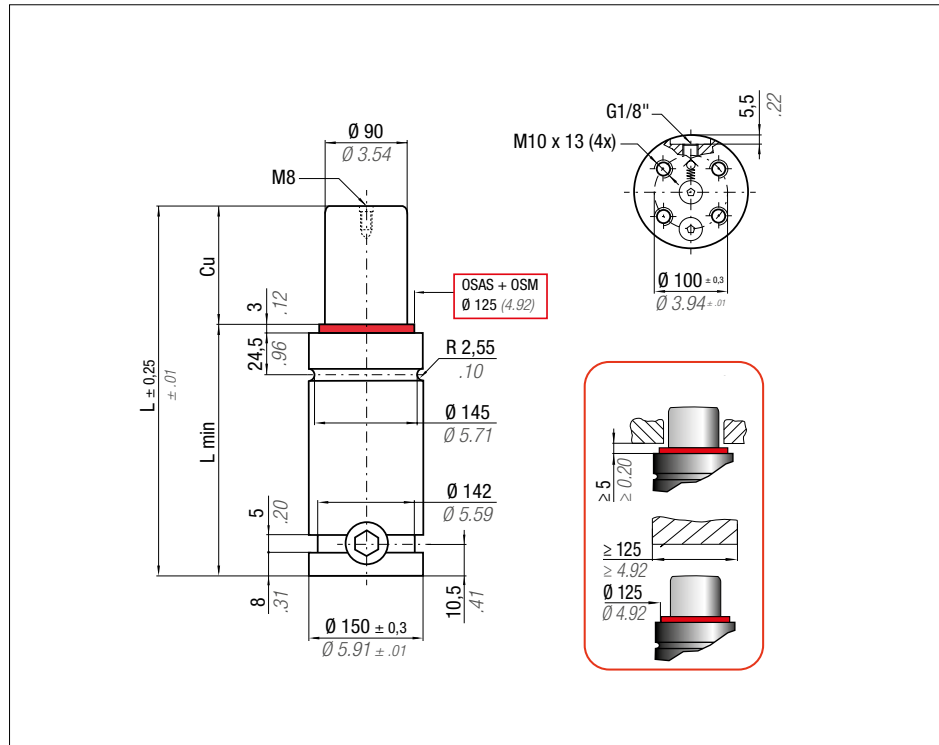
USAS



OPAS

***F_{1i}** =
Forza finale isotermaica
con 100% Cu
Isothermal end force at 100% Cu

****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytropic end force at 100% Cu

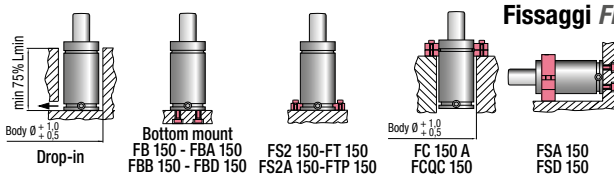


	 0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 150 bar 2175 psi	P min 20 bar 290 psi	S 63,62 cm ² 9.864 in ²	SPM ~ 20 - 80 (at 20°C)	Velocità massima <i>Max Speed</i> 1,8 m/s 70.8 in/s	Kit manutenzione 39BMRV09500C Maintenance kit 39BMRV09500C
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Codice Code	Cu	L		L min	FO Forza iniziale Initial force	*F _{1i} Forza finale End force	**F _{1p} Forza finale End force	VO		~Kg	~lb	 2014/68/EU				
		mm	inch					mm	inch				cm ³	in ³		
• RV 9500 - 019	19	0.75	116	4.57	97	3.82	9540 21446 ± 5% 150 bar 2175 psi + 20 °C +68 °F	13135	29528	15265	34318	513	31.31	9,56	21.08	●
RV 9500 - 025	25	0.98	128	5.04	103	4.06		13676	30744	16105	36206	609	37.16	9,93	21.89	●
RV 9500 - 032	32	1.26	142	5.59	110	4.33		14156	31825	16862	37906	722	44.06	10,37	22.86	●
RV 9500 - 038	38	1.50	154	6.06	116	4.57		14480	32553	17376	39062	818	49.92	10,74	23.68	●
RV 9500 - 050	50	1.97	178	7.01	128	5.04		14967	33648	18156	40815	1010	61.63	11,49	25.33	●
RV 9500 - 063	63	2.48	204	8.03	141	5.55		15341	34487	18759	42173	1218	74.33	12,30	27.12	●
RV 9500 - 075	75	2.95	228	8.98	153	6.02		15597	35063	19177	43111	1411	86.10	13,05	28.77	●
RV 9500 - 080	80	3.15	238	9.37	158	6.22		15686	35264	19322	43439	1491	90.99	13,37	29.48	●
RV 9500 - 100	100	3.94	278	10.94	178	7.01		15970	35901	19788	44485	1811	110.51	14,61	32.21	●
RV 9500 - 125	125	4.92	328	12.91	203	7.99		16216	36455	20194	45398	2212	134.98	16,18	35.67	●

Esempio di ordinazione/Order example = RV 9500-019 (codice/code)

• Monouso / Disposable



Fissaggi Flange mounts

pag./page 4.63 ÷ 4.74

RV 12000

OSAS + OSM = OVER STROKE ACTIVE SAFETY = OVER STROKE MARKER

ACTIVE SAFETY



OSAS



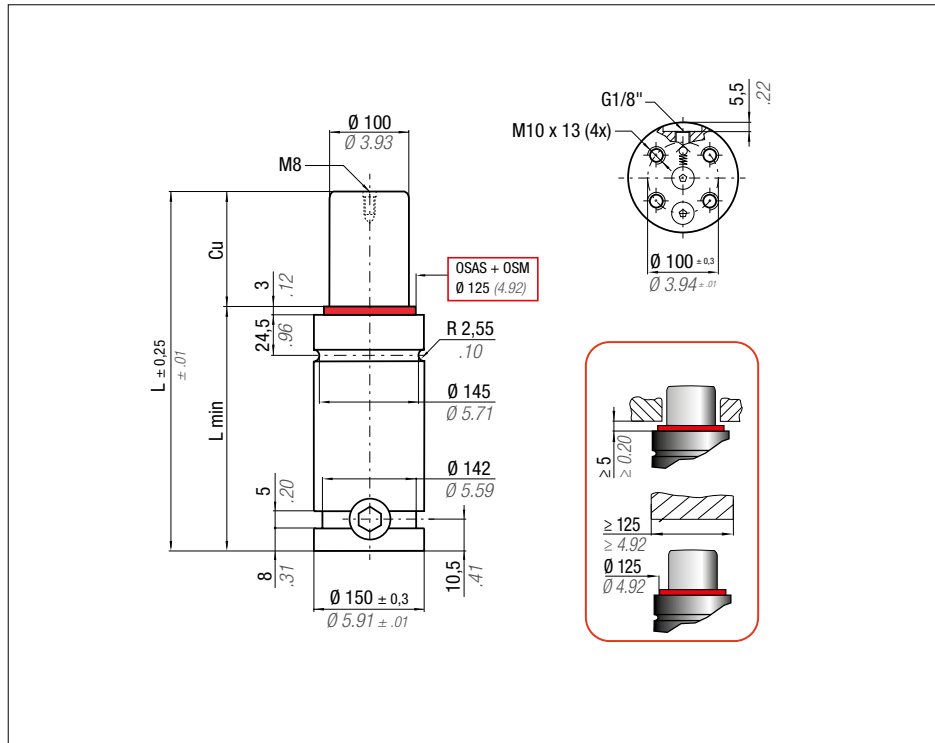
USAS



OPAS

***F_i** =
Forza finale isoteramica
con 100% Cu
Isothermal end force at 100% Cu

****F_p** =
Forza finale politropica
con 100% Cu
Polytropic end force at 100% Cu



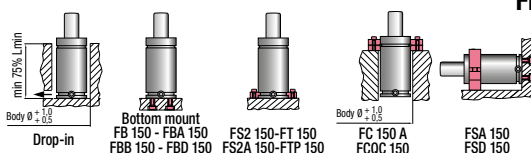
	N₂	0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 150 bar 2175 psi	P min 20 bar 290 psi	S 78,54 cm ² 12.173 in ²	SPM ~ 20 - 80 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione 39BMRV12000A Maintenance kit 39BMRV12000A
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Codice Code	Cu	L	L min	FO Forza iniziale Initial force	*F _i Forza finale End force	**F _p Forza finale End force	VO	PED							
								mm	inch	mm	inch	mm	inch	daN	lb
• RV 12000 - 019	19	0.75	116	4.57	97	3.82	16936	38075	19966	44886	568	34.66	9,34	20.59	●
RV 12000 - 025	25	0.98	128	5.04	103	4.06	17789	39991	21311	47910	671	40.95	9,73	21.45	●
RV 12000 - 032	32	1.26	142	5.59	110	4.33	18565	41737	22555	50706	791	48.27	10,18	22.44	●
RV 12000 - 038	38	1.50	154	6.06	116	4.57	19098	42935	23419	52648	894	54.56	10,57	23.30	●
RV 12000 - 050	50	1.97	178	7.01	128	5.04	19916	44772	24759	55659	1101	67.19	11,35	25.02	●
RV 12000 - 063	63	2.48	204	8.03	141	5.55	20555	46210	25820	58045	1324	80.80	12,20	26.90	●
RV 12000 - 075	75	2.95	228	8.98	153	6.02	21001	47212	26566	59723	1531	93.43	12,97	28.59	●
RV 12000 - 080	80	3.15	238	9.37	158	6.22	21157	47563	26829	60314	1617	98.68	13,30	29.32	●
RV 12000 - 100	100	3.94	278	10.94	178	7.01	21659	48692	27677	62221	1961	119.67	14,60	32.19	●
RV 12000 - 125	125	4.92	328	12.91	203	7.99	22101	49685	28430	63912	2391	145.91	16,22	35.76	●

Esempio di ordinazione/Order example = RV 12000-019 (codice/code)

• Monouso / Disposable

Fissaggi Flange mounts



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RV 20000

OSAS + OSM = OVER STROKE ACTIVE SAFETY = OVER STROKE MARKER

ACTIVE SAFETY

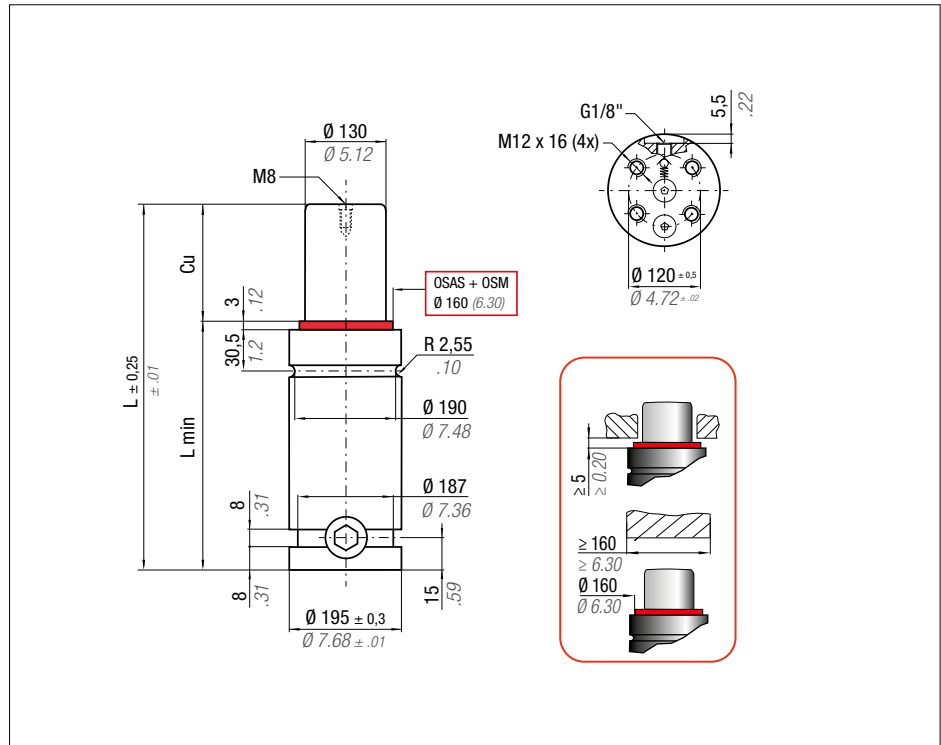
OSAS

USAS

OPAS

***F_{1i}** =
Forza finale isoterma
con 100% Cu
Isothermal end force at 100% Cu

****F_{1p}** =
Forza finale politropica
con 100% Cu
Polytrophic end force at 100% Cu



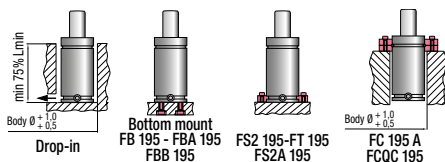
	0 - 80 °C 32 - 176 °F	ΔP ± 0,33 %/°C	P max 150 bar 2175 psi	P min 20 bar 290 psi	S 132,73 cm ² 20.573 in ²	SPM ~ 20 - 80 (at 20°C)	Velocità massima Max Speed 1,8 m/s 70.8 in/s	Kit manutenzione 39BMRV20000A Maintenance kit 39BMRV20000A
--	---------------------------------	--------------------------	-------------------------------------	-----------------------------------	--	--------------------------------------	---	---

Codice Code	Cu	L	L min	FO Forza iniziale Initial force	*F _{1i} Forza finale End force	**F _{1p} Forza finale End force	VO	~Kg	~lb	PED 2014/68/EU																																																																														
											mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	cm ³	in ³																																																																		
• RV 20000 - 019	19	0.75	148	5.83	129	5.08	19910 44738 ± 5% 150 bar 2175 psi + 20 °C +68 °F	27636	62128	32207	72404	1047	63.89	21,58	47.58	●																																																																								
• RV 20000 - 025	25	0.98	160	6.30	135	5.32											29099	65417	34490	77537	1215	74.14	22,29	49.14	●																																																															
RV 20000 - 032	32	1.26	174	6.85	142	5.59																				30485	68532	36688	82478	1411	86.10	23,12	50.97	●																																																						
RV 20000 - 038	38	1.50	186	7.32	148	5.83																													31467	70740	38266	86025	1580	96.42	23,84	52.56	●																																													
RV 20000 - 050	50	1.97	210	8.27	160	6.30																																						33024	74242	40801	91724	1916	116.92	25,26	55.69	●																																				
RV 20000 - 063	63	2.48	236	9.29	173	6.81																																															34290	77086	42889	96418	2280	139.13	26,80	59.08	●																											
RV 20000 - 075	75	2.95	260	10.24	185	7.28																																																								35196	79124	44401	99818	2617	159.70	28,22	62.21	●																		
RV 20000 - 080	80	3.15	270	10.63	190	7.48																																																																	35519	79850	44943	101035	2757	168.24	28,81	63.52	●									
RV 20000 - 100	100	3.94	310	12.21	210	8.27																																																																										36574	82222	46724	105039	3317	202.42	31,19	68.76	●
RV 20000 - 125	125	4.92	360	14.17	235	9.25																																																																																		

Esempio di ordinazione/Order example = RV 20000-019 (codice/code)

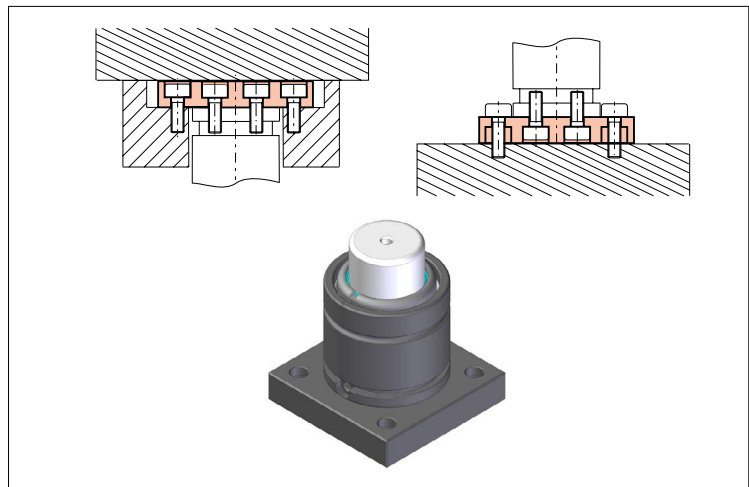
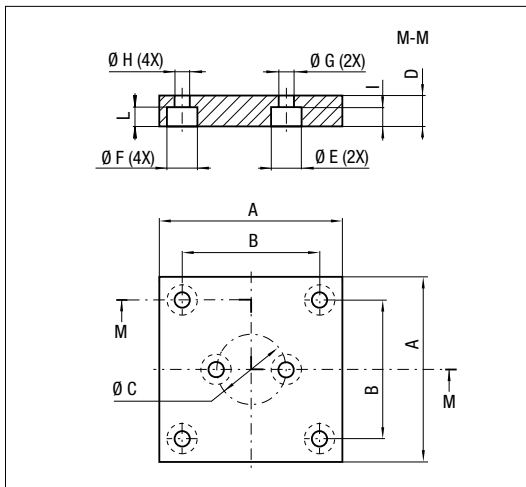
• Monouso / Disposable

Fissaggi Flange mounts



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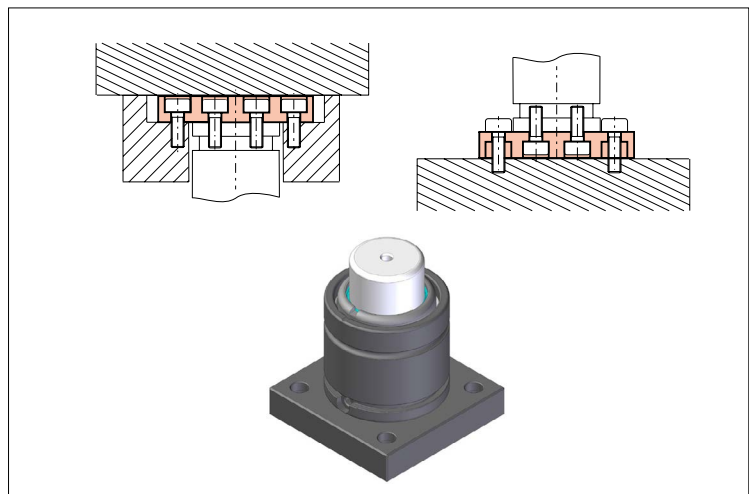
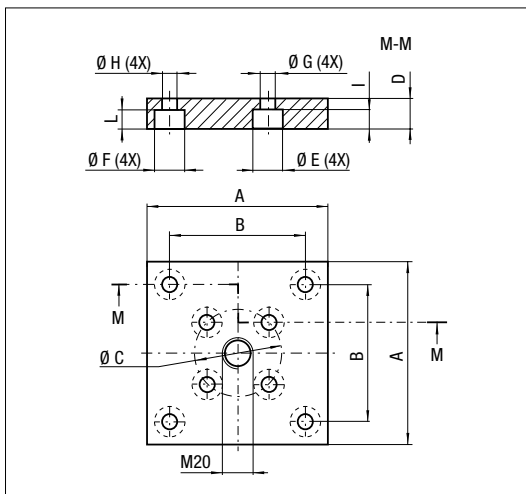
FB



Codice Code	A	B	Ø C	D	Ø E	Ø F	Ø G	Ø H	I	L
	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch
FB 45	70 2.76	50 1.97	20 0.79	20 0.79	15 0.59	15 0.59	9 0.35	9 0.35	14 0.55	12 0.47
FB 50	75 2.95	56,5 2.22	20 0.79	20 0.79	15 0.59	15 0.59	9 0.35	9 0.35	14 0.55	12 0.47
FB 63	100 3.94	73,5 2.89	20 0.79	20 0.79	15 0.59	18 0.71	9 0.35	11 0.43	12 0.47	12 0.47

Esempio di ordinazione/Order example = FB 45 (codice/code)

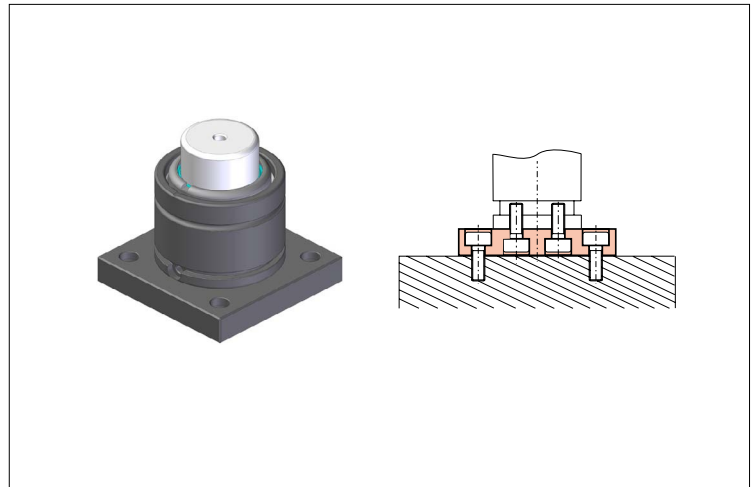
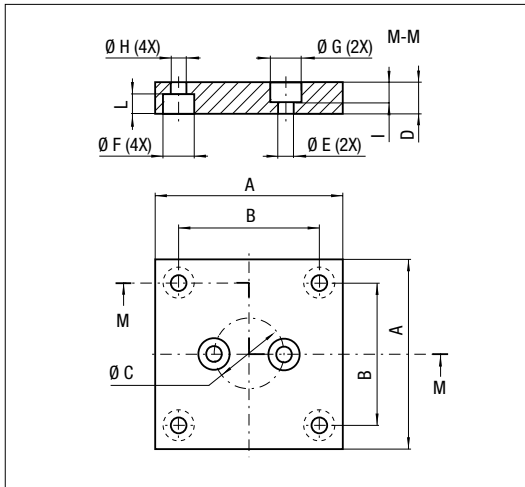
FB



Codice Code	A	B	Ø C	D	Ø E	Ø F	Ø G	Ø H	I	L
	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch
FB 75	100 3.94	73,5 2.89	40 1.57	20 0.79	15 0.59	18 0.71	9 0.35	11 0.43	14 0.55	12 0.47
FB 95	120 4.72	92 3.62	60 2.36	20 0.79	15 0.59	20 0.79	9 0.35	13,5 0.53	14 0.55	13 0.51
FB 120	140 5.51	109,5 4.31	80 3.15	20 0.79	18 0.71	20 0.79	11 0.43	13,5 0.53	15 0.59	13 0.51
FB 150	190 7.48	138 5.43	100 3.94	25 0.98	18 0.71	26 1.02	11 0.43	17,5 0.69	15 0.59	17 0.67
FB 195	210 8.27	170 6.69	120 4.72	25 0.98	20 0.79	26 1.02	13,5 0.53	17,5 0.69	13 0.51	17 0.67

Esempio di ordinazione/Order example = FB 75 (codice/code)

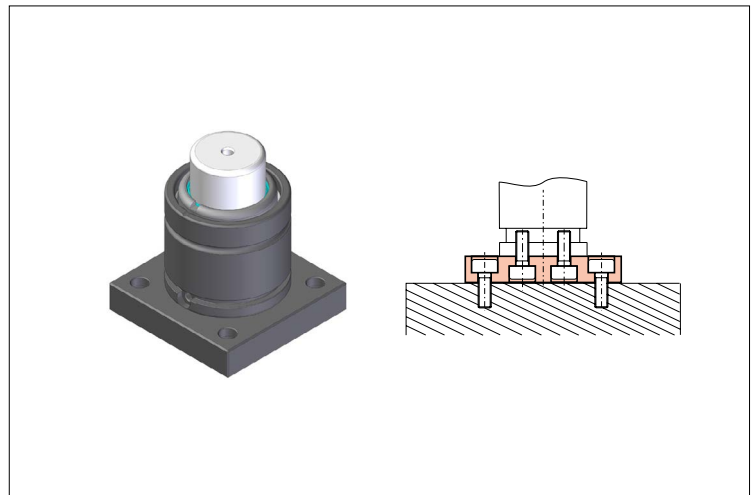
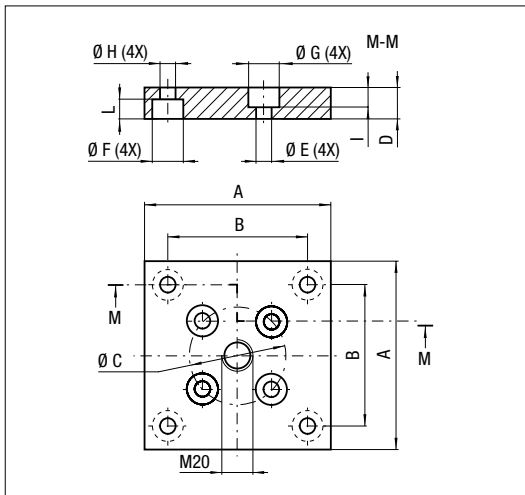
FBA



Codice Code	A		B		Ø C		D	Ø E		Ø F		Ø G		Ø H		I	L			
	mm	inch	mm	inch	mm	inch		mm	inch	mm	inch	mm	inch	mm	inch					
FBA 45	70	2.76	50	1.97	20	0.79	20	0.79	9	0.35	18	0.71	15	0.59	11	0.43	14	0.55	12	0.47
FBA 50	75	2.95	56,5	2.22	20	0.79	20	0.79	9	0.35	18	0.71	15	0.59	11	0.43	14	0.55	12	0.47

Esempio di ordinazione/Order example = FBA 45 (codice/code)

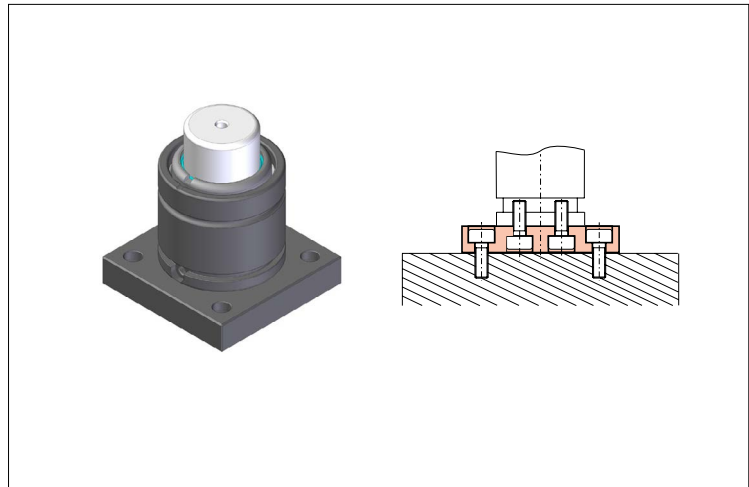
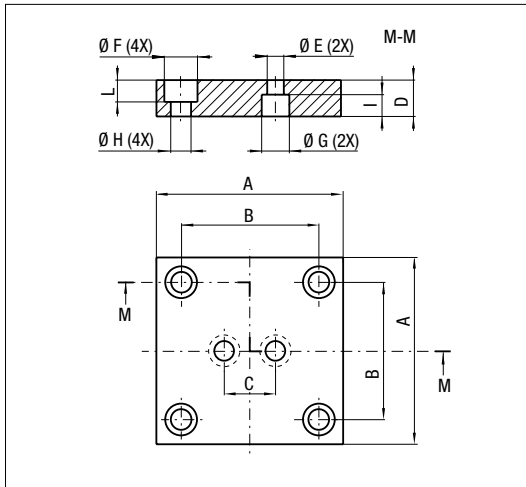
FBA



Codice Code	A		B		Ø C		D	Ø E		Ø F		Ø G		Ø H		I	L			
	mm	inch	mm	inch	mm	inch		mm	inch	mm	inch	mm	inch	mm	inch					
FBA 75	100	3.94	73,5	2.89	40	1.57	20	0.79	9	0.35	18	0.71	15	0.59	11	0.43	14	0.55	12	0.47
FBA 95	120	4.72	92	3.62	60	1.57	20	0.79	9	0.35	20	0.79	15	0.59	13,5	0.53	14	0.55	13	0.51
FBA 120	140	5.51	109,5	4.31	80	3.15	20	0.79	11	0.43	20	0.79	18	0.71	13,5	0.53	15	0.59	13	0.51
FBA 150	190	7.48	138	5.43	100	3.94	25	0.98	11	0.43	26	1.02	18	0.71	17,5	0.69	15	0.59	17	0.67
FBA 195	210	8.27	170	6.69	120	4.72	25	0.98	13,5	0.53	26	1.02	20	0.79	17,5	0.69	15	0.59	17	0.67

Esempio di ordinazione/Order example = FBA 75 (codice/code)

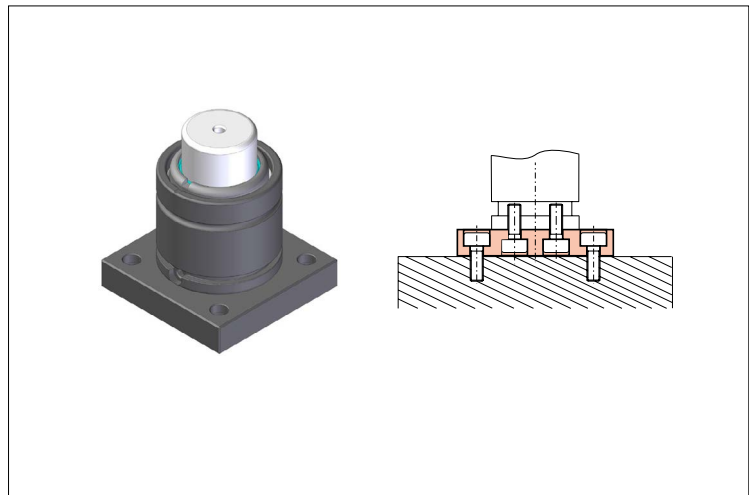
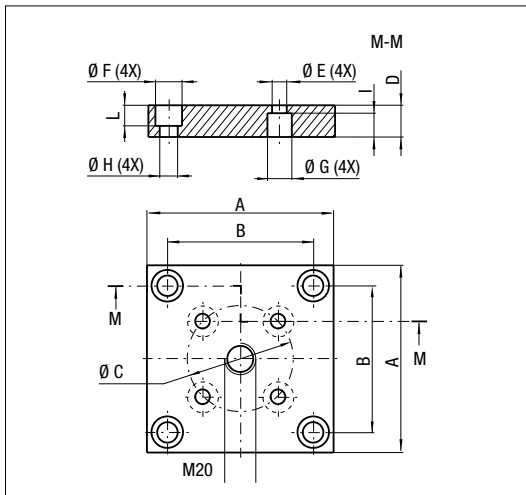
FBB



Codice Code	A		B		C		D		Ø E		Ø F		Ø G		Ø H		I	L		
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
FBB 45	70	2.76	50	1.97	20	0.79	20	0.79	9	0.35	15	0.59	15	0.59	9	0.35	12	0.47	12	0.47
FBB 50	75	2.95	56,5	2.22	20	0.79	20	0.79	9	0.35	15	0.59	15	0.59	9	0.35	12	0.47	12	0.47
FBB 63	100	3.94	73,5	2.89	20	0.79	20	0.79	9	0.35	18	0.71	15	0.59	11	0.43	12	0.47	12	0.47

Esempio di ordinazione/Order example = FBB 45 (codice/code)

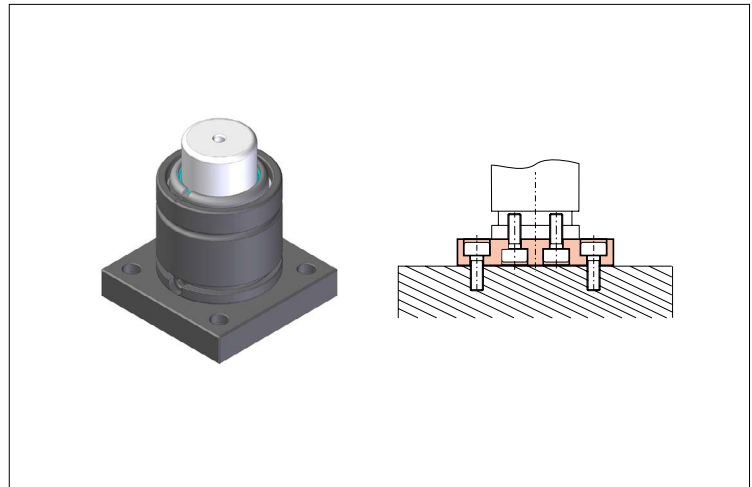
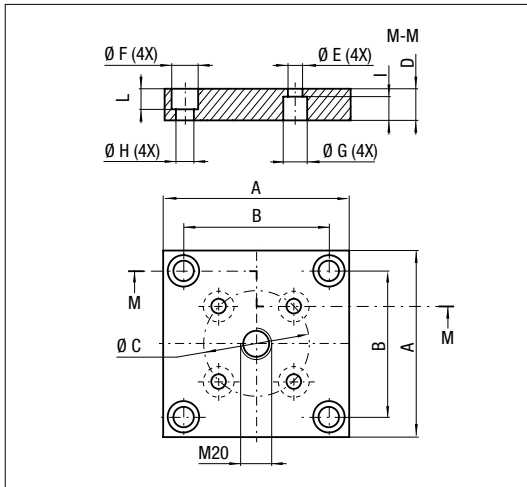
FBB



Codice Code	A		B		Ø C	D		Ø E		Ø F		Ø G		Ø H		I	L			
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
FBB 75	100	3.94	73,5	2.89	40	1.57	20	0.79	9	0.35	18	0.71	15	0.59	11	0.43	12	0.47	14	0.55
FBB 95	120	4.72	92	3.62	60	2.36	20	0.79	9	0.35	20	0.79	15	0.59	13,5	0.53	14	0.55	13	0.51
FBB 120	140	5.51	109,5	4.31	80	3.15	20	0.79	11	0.43	20	0.79	18	0.71	13,5	0.53	15	0.59	13	0.51
FBB 150A	190	7.48	138	5.43	100	3.94	20	0.79	11	0.43	20	0.79	18	0.71	13,5	0.53	15	0.59	13	0.51
FBB 195	210	8.27	170	6.69	120	4.72	25	0.98	13,5	0.53	26	1.02	20	0.79	17,5	0.69	15	0.59	17	0.67

Esempio di ordinazione/Order example = FBB 75 (codice/code)

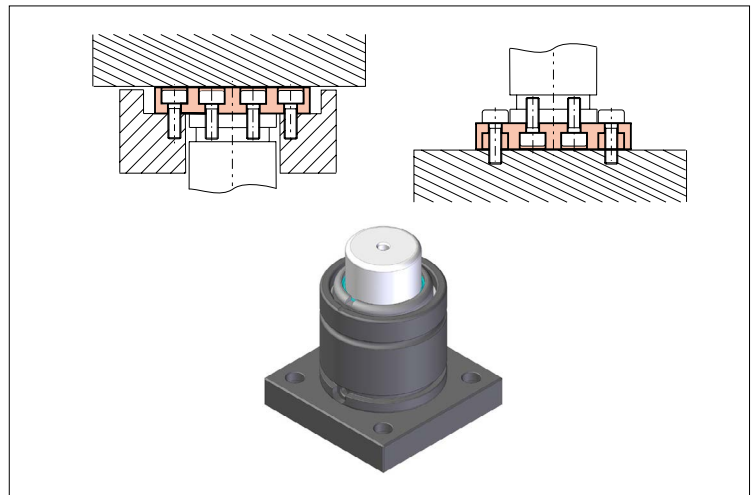
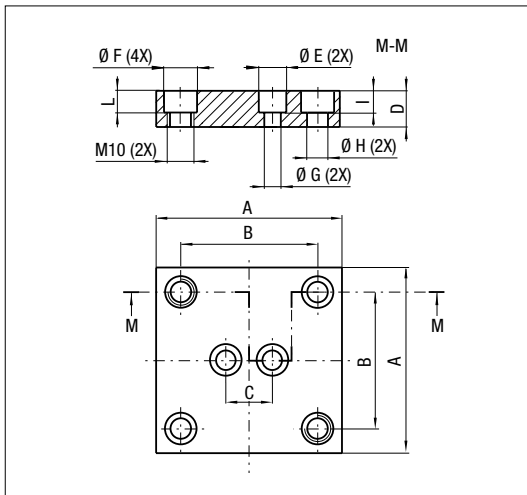
FBC



Codice Code	A		B		Ø C		D	Ø E		Ø F		Ø G		Ø H		I	L			
	mm	inch	mm	inch	mm	inch		mm	inch	mm	inch	mm	inch	mm	inch					
FBC 75	100	3.94	73,5	2.89	40	1.57	20	0.79	9	0.35	18	0.71	15	0.59	11	0.43	12	0.47	15	0.55

Esempio di ordinazione/Order example = FBC 75 (codice/code)

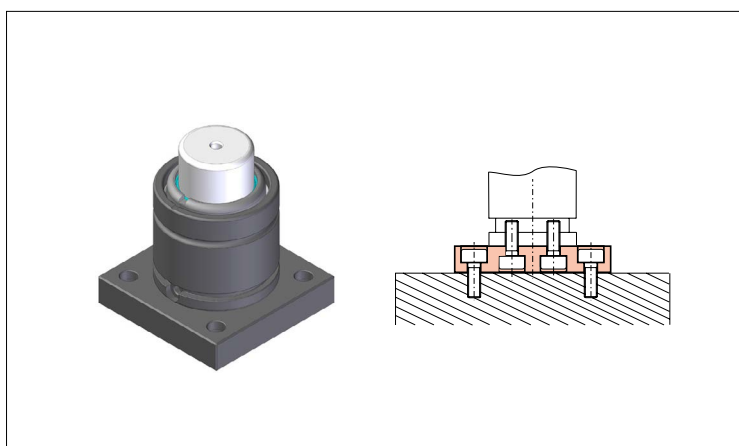
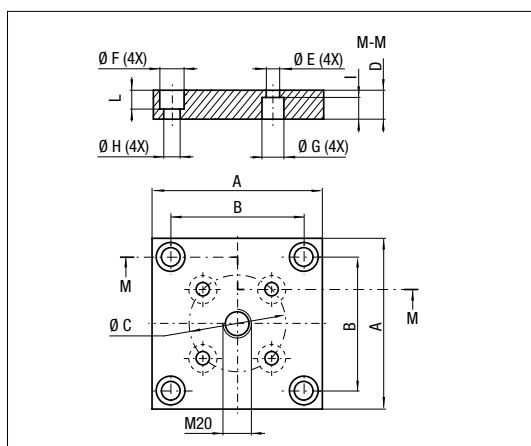
FBD



Codice Code	A		B		C	D	Ø E		Ø F		Ø G		Ø H		I	L				
	mm	inch	mm	inch			mm	inch	mm	inch	mm	inch	mm	inch						
FBD 45	70	2.76	50	1.97	20	0.79	20	0.79	15	0.59	15	0.59	9	0.35	9	0.35	12	0.47	12	0.47
FBD 50	75	2.95	56,5	2.22	20	0.79	20	0.79	15	0.59	15	0.59	9	0.35	9	0.35	12	0.47	12	0.47

Esempio di ordinazione/Order example = FBD 45 (codice/code)

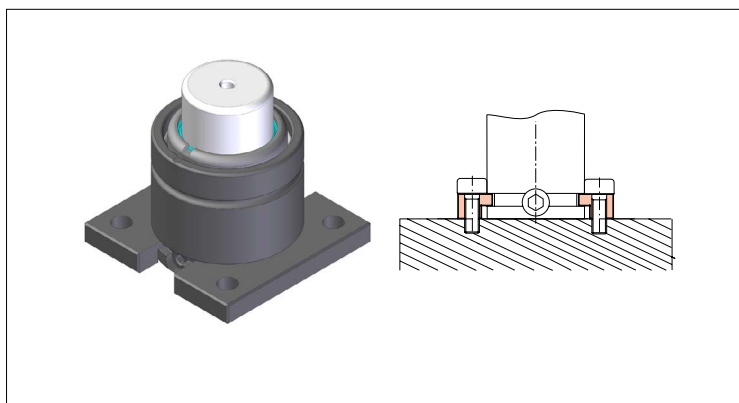
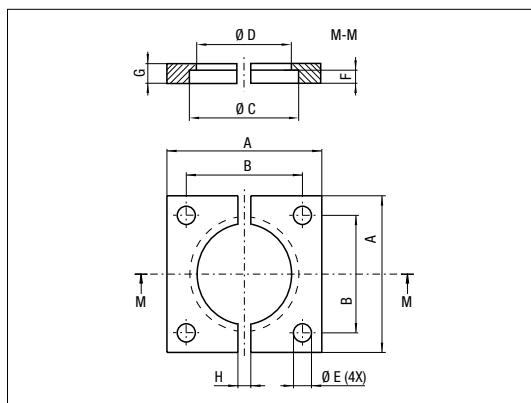
FBD



Codice Code	A		B		Ø C		D	Ø E		Ø F		Ø G		Ø H		I	L			
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch		
FBD 75	100	3.94	73,5	2.89	40	1.57	20	0.79	15	0.59	18	0.71	9	0.35	11	0.43	12	0.47	15	0.59
FBD 150	190	7.48	138	5.43	100	3.94	20	0.79	18	0.71	26	1.02	11	0.43	17,5	0.69	15	0.59	17	0.67

Esempio di ordinazione/Order example = FBD 75 (codice/code)

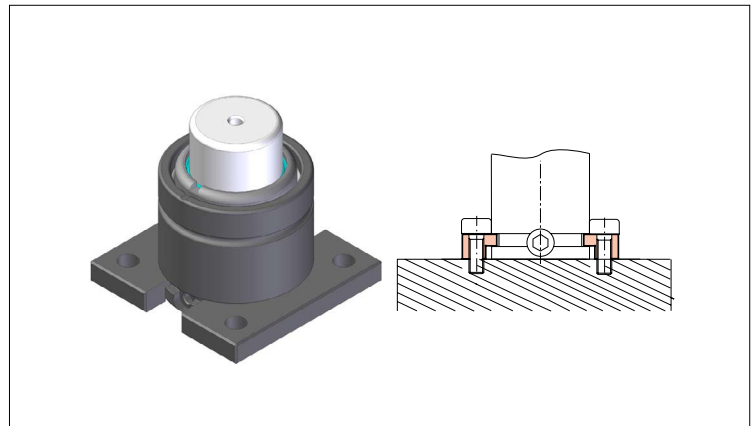
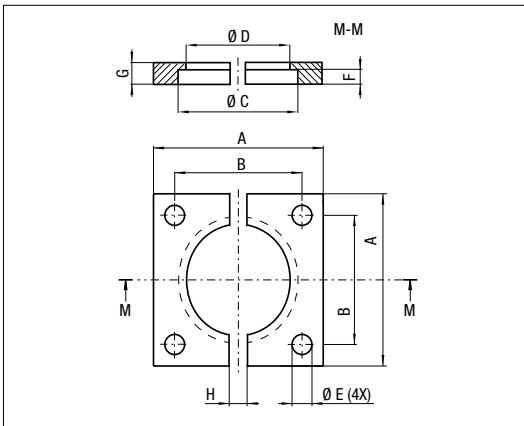
FS2



Codice Code	A		B		Ø C		Ø D		Ø E		F		G		H	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FS2 32	50	1.97	35	1.38	32,5	1.28	28,5	1.12	6,6	0.26	4	0.16	7	0.28	5	0.20
FS2 38	55	2.17	40	1.57	38,5	1.52	34,5	1.36	7	0.28	4	0.16	7	0.28	5	0.20
FS2 45	70	2.76	50	1.97	45,5	1.79	41,5	1.63	9	0.35	4	0.16	7	0.28	20	0.79
FS2 50	75	2.95	56,5	2.22	50,5	1.99	44,5	1.75	9	0.35	8	0.31	12	0.47	24	0.95
FS2 63	85	3.35	63,5	2.50	63,5	2.50	57,5	2.26	11	0.43	8	0.31	12	0.47	24	0.95
FS2 75	100	3.94	73,5	2.89	75,5	2.97	68,5	2.70	11	0.43	8	0.31	12	0.47	24	0.95
FS2 95	120	4.72	92	3.62	95,5	3.76	88,5	3.48	13,5	0.53	8	0.31	12	0.47	24	0.95
FS2 120	140	5.51	109,5	4.31	120,5	4.74	113,5	4.47	13,5	0.53	8	0.31	12	0.47	24	0.95
FS2 150	190	7.48	138	5.43	150,5	5.93	143,5	5.65	17,5	0.69	8	0.31	12	0.47	24	0.95
FS2 195	210	8.27	170	6.69	195,5	7.70	188	7.40	17,5	0.69	8	0.31	13	0.51	24	0.95

Esempio di ordinazione/Order example = FS2 32 (codice/code)

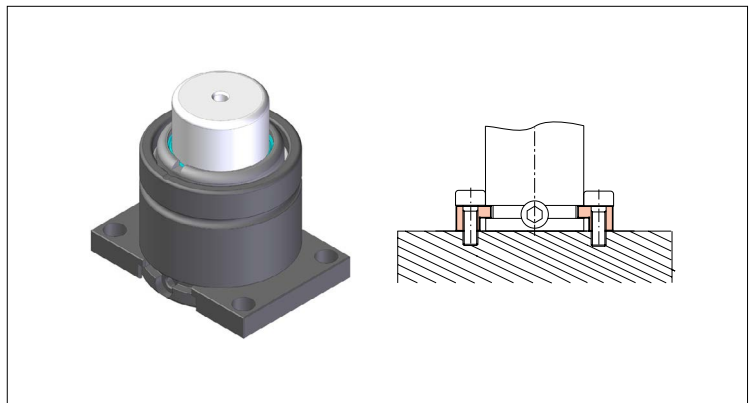
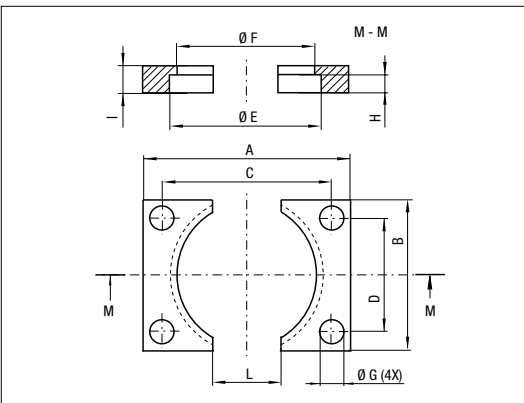
FS2B



Codice Code	A		B		Ø C		Ø D		Ø E		F		G		H	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FS2B 32	50	1.97	35	1.38	32,5	1.28	28,5	1.12	6,6	0.26	4	0.16	7	0.28	12	0.47
FS2B 38	55	2.17	40	1.57	38,5	1.52	34,5	1.36	6,6	0.26	4	0.16	7	0.28	12	0.47
FS2B 63	100	3.94	73,5	2.89	64	2.52	57,5	2.60	11	0.43	8	0.32	12	0.47	24	0.95

Esempio di ordinazione/Order example = FS2B 32 (codice/code)

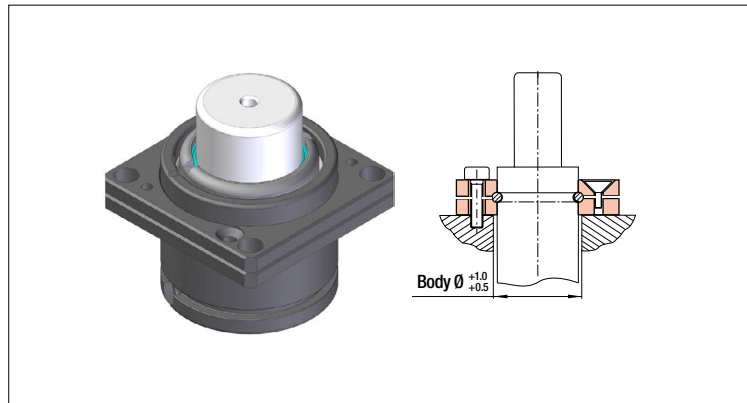
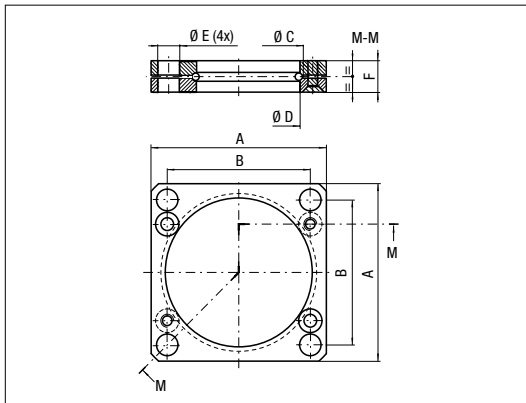
FS2A



Codice Code	A		B		C		D		Ø E		Ø F		Ø G		H		I		L	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FS2A 32	50	1.97	27	1.06	40	1.57	18	0.71	32,5	1.28	28,5	1.12	6,6	0.26	4	0.16	7	0.28	20	0.79
FS2A 38	55	2.17	33	1.30	44	1.73	20	0.79	38,5	1.52	34,5	1.36	6,6	0.26	4	0.16	7	0.28	20	0.79
FS2A 45	70	2.76	40	1.57	57	2.24	27	1.06	45,5	1.79	41,5	1.63	9	0.35	4	0.16	7	0.28	25	0.98
FS2A 50	75	2.95	45	1.77	62	2.44	32	1.26	50,5	1.99	44,5	1.75	9	0.35	8	0.31	12	0.47	25	0.98
FS2A 63	85	3.35	58	2.28	69	2.72	42	1.65	63,5	2.5	57,5	2.26	11	0.43	8	0.31	12	0.47	30	1.18
FS2A 75	100	3.94	70	2.76	84	3.31	54	2.13	75,5	2.97	68,5	2.7	11	0.43	8	0.31	12	0.47	30	1.18
FS2A 95	120	4.72	90	3.54	100	3.94	70	2.76	95,5	3.76	88,5	3.48	13,5	0.53	8	0.31	12	0.47	40	1.57
FS2A 120	140	5.51	115	4.53	120	4.72	95	3.74	120,5	4.74	113,5	4.47	13,5	0.53	8	0.31	12	0.47	50	1.97
FS2A 150	190	7.48	145	5.71	165	6.5	120	4.72	150,5	5.93	143,5	5.65	17,5	0.69	8	0.31	12	0.47	60	2.36
FS2A 195	210	8.27	190	7.48	185	7.28	165	6.50	195,5	7.70	188	7.40	17,5	0.69	8	0.31	13	0.51	80	3.15

Esempio di ordinazione/Order example = FS2A 32 (codice/code)

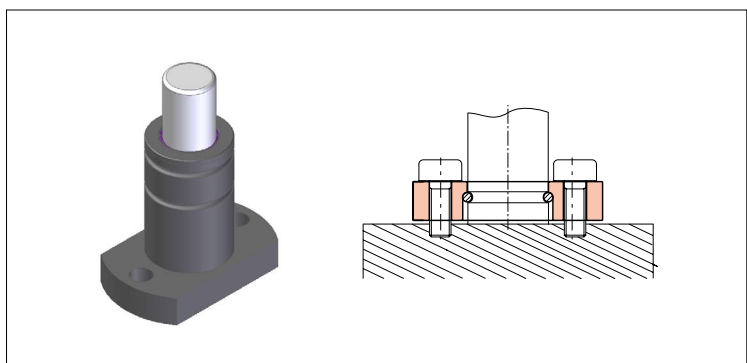
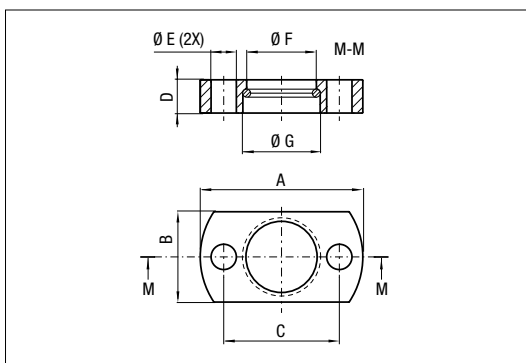
FCQ - FCQC



Codice Code	A		B		Ø C		Ø D		Ø E		F	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FCQC 32	45	1.77	35	1.38	34	1.34	32,5	1.28	7	0.28	9	0.26
FCQC 38	52	2.05	40	1.57	40	1.57	38,5	1.52	7	0.28	9	0.35
FCQC 45	64	2.52	50	1.97	47	1.85	45,5	1.79	9	0.35	13	0.51
FCQC 50	70	2.76	56,5	2.22	54	2.13	50,5	1.99	9	0.35	13	0.51
FCQ 63 A	90	3.54	73,5	2.89	67	2.64	63,45	2.50	11	0.43	16	0.63
FCQ 63	80	3.15	64	2.52	67	2.64	63,45	2.50	11	0.43	16	0.63
FCQC 75	90	3.54	73,5	2.89	80	3.15	75,5	2.97	11	0.43	16	0.63
FCQC 95	110	4.33	92	3.62	100	3.94	95,5	3.76	13,5	0.53	18	0.71
FCQC 120	130	5.12	109,5	4.31	125	4.92	120,5	4.74	13,5	0.53	21	0.83
FCQC 150	162	6.38	138	5.43	155	6.10	150,5	5.93	17,5	0.69	27	1.06
FCQC 195	210	8.27	170	6.69	200	7.87	195,5	7.70	17,5	0.69	27	1.06

Esempio di ordinazione/Order example = FCQC 32 (codice/code)

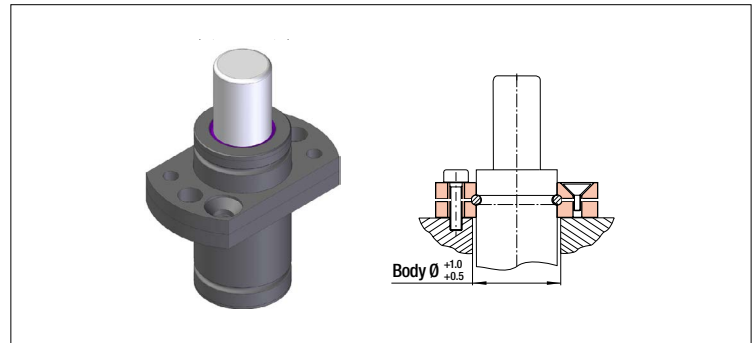
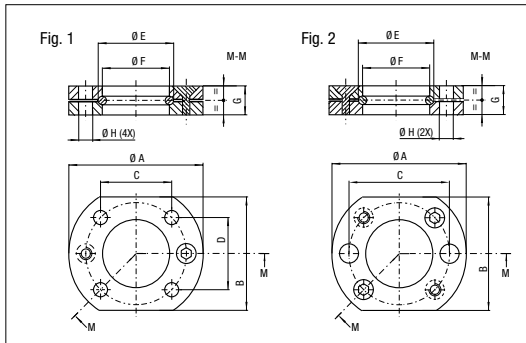
FS3



Codice Code	A		B		C		D		Ø E		Ø F		Ø G	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FS3 19	45	1.77	25	0.98	32	1.26	9,2	0.36	7	0.28	19,3	0.76	21,4	0.84
FS3 25	50	1.97	30	1.18	38	1.50	9,2	0.36	7	0.28	25,3	1.00	27,4	1.08

Esempio di ordinazione/Order example = FS3 19 (codice/code)

FC - FCC

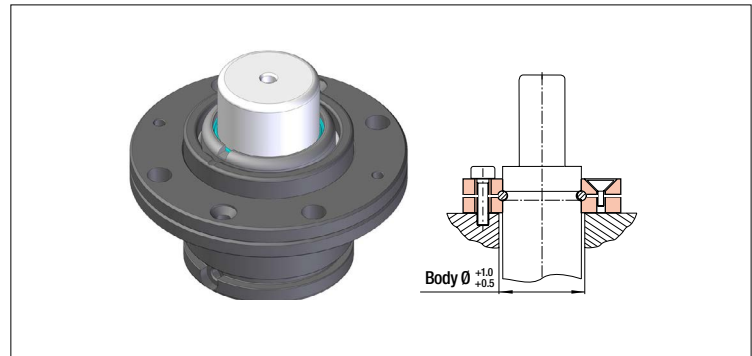
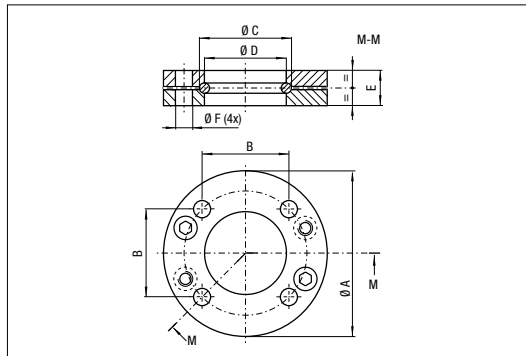


Codice Code	Ø A		B		C		D		Ø E		Ø F		G		Ø H		Rif. fig.
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
FC 12 A	34	1.34	21	0.83	24	0.94	-	-	13,7	0.54	12,5	0.49	9	0.35	6,6	0.26	Fig. 2
FC 15 A	37	1.36	24	0.94	27	1.06	-	-	16,7	0.66	15,5	0.61	9	0.35	6,6	0.26	
FC 19 B	44	1.73	25	0.98	30	1.18	12	0.47	21,9	0.86	19,5	0.77	9	0.35	6,6	0.26	Fig. 1
FC 25 B	50	1.97	30	1.18	34	1.34	18	0.71	27,9	1.10	25,5	1.00	9	0.35	6,6	0.26	
FCC 19 A	44	1.73	25	0.98	32	1.26	-	-	21	0.83	19,5	0.77	9	0.35	6,6	0.26	Fig. 2
FCC 25 A	50	1.97	30	1.18	38	1.50	-	-	27	1.06	25,5	1.00	9	0.35	6,6	0.26	

Esempio di ordinazione/Order example = FC 12 A (codice/code)

MOLLE
Springs

FC - FCC

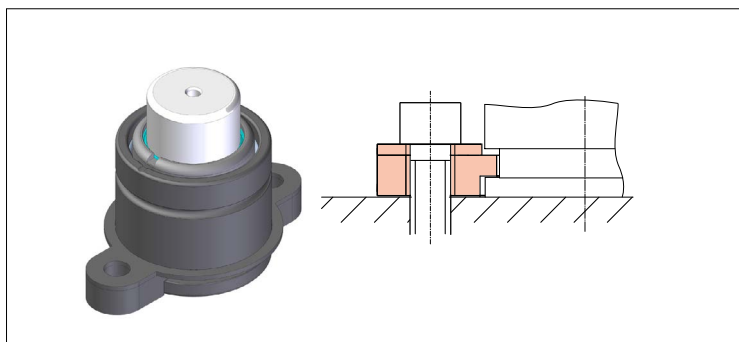
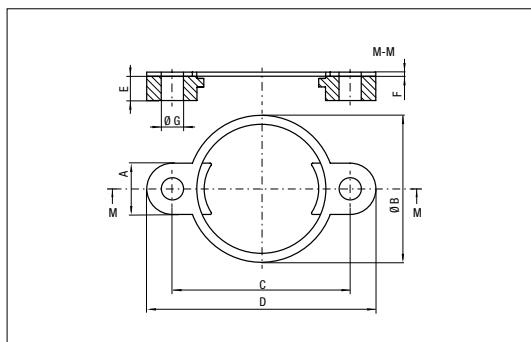


Codice Code	A		B		Ø C		Ø D		E		Ø F	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FC 32 A	60	2.36	35	1.38	34	1.34	32,5	1.28	9	0.35	7	0.28
FC 38 A	68	2.68	40	1.57	40	1.57	38,5	1.52	9	0.35	7	0.28
FC 45 A	86	3.39	50	1.97	47	1.85	45,5	1.79	13	0.51	9	0.35
FC 50 A	95	3.74	56,5	2.22	54	2.13	50,5	1.99	13	0.51	9	0.35
FC 63 A	122	4.80	73,5	2.89	67	2.64	63,5	2.50	16	0.63	11	0.43
FC 75 A	122	4.80	73,5	2.89	80	3.15	75,5	2.97	16	0.63	11	0.43
FC 95 A	150	5.91	92	3.62	100	3.94	95,5	3.76	18	0.71	13,5	0.53
FC 120 A	175	6.89	109,5	4.31	125	4.92	120,5	4.74	21	0.83	13,5	0.53
FC 150 A	220	8.66	138	5.43	155	6.10	150,5	5.93	27	1.06	17,5	0.69
FC 195 A	290	11.42	170	6.69	200	7.87	195,5	7.70	27	1.06	17,5	0.69

Esempio di ordinazione/Order example = FC 32 A (codice/code)

INDEX

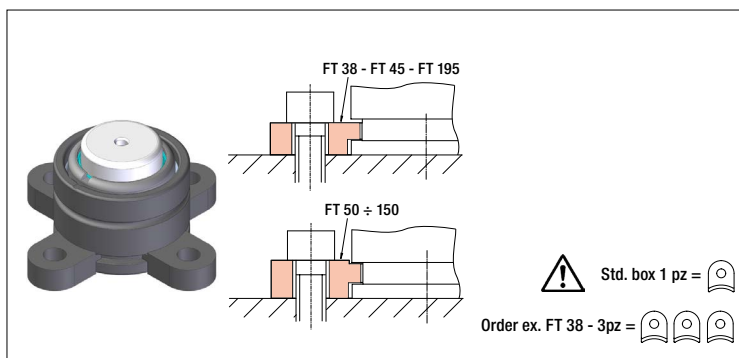
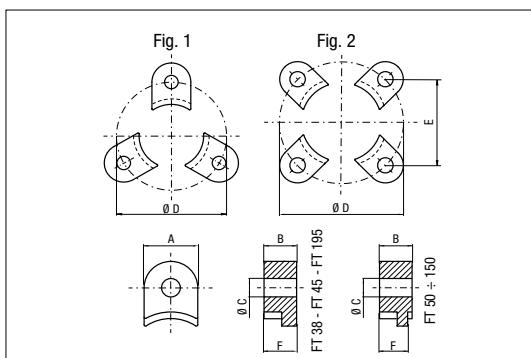
FTP



Codice Code	A		Ø B		C		D		E		F		Ø G	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch
FTP 38	20	0.79	48	1.89	56.6	2.23	76.6	3.02	7	0.28	2,5	0.10	7	0.28
FTP 45	25	0.98	56	2.20	70.7	2.78	95.7	3.77	7	0.28	2,5	0.10	9	0.35
FTP 50	30	1.18	61	2.40	80	3.15	110	4.33	14,2	0.56	2,5	0.10	13	0.51
FTP 63	30	1.18	73	2.87	92	3.62	122	4.80	14,2	0.56	2,5	0.10	13	0.51
FTP 75	30	1.18	86	3.39	104	4.09	134	5.28	14,2	0.56	2,5	0.10	13	0.51
FTP 95	40	1.57	106	4.17	130	5.12	170	6.69	14,2	0.56	2,5	0.10	17	0.67
FTP 120	50	1.97	131	5.16	155	6.10	205	8.07	14,2	0.56	2,5	0.10	17	0.67
FTP 150	50	1.97	170	6.69	195	7.68	245	9.65	14,2	0.56	2,5	0.10	21	0.83

Esempio di ordinazione/Order example = FTP 38 (codice/code)

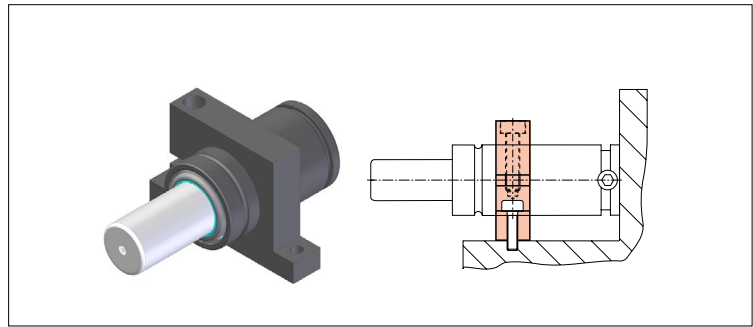
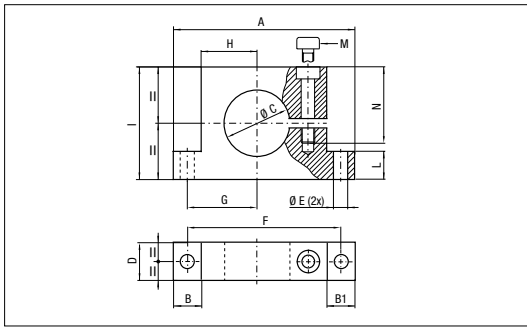
FT



Codice Code	A		B		C		Ø D		E		F		Rif. fig.
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	
FT 38	20	0.79	7	0.28	7	0.28	56,6	2.23	-	-	7	0.28	Fig. 1
FT 45	25	0.98	7	0.28	9	0.35	70,7	2.78	-	-	7	0.28	
FT 50	30	1.18	14,2	0.56	13	0.51	80	3.15	-	-	13	0.51	
FT 63	30	1.18	14,2	0.56	13	0.51	92	3.62	65	2.56	13	0.51	Fig. 2
FT 75	30	1.18	14,2	0.56	13	0.51	104	4.09	73,5	2.89	13	0.51	
FT 95	40	1.57	14,2	0.56	17	0.67	130	5.12	92	3.62	13	0.51	
FT 120	50	1.97	14,2	0.56	17	0.67	155	6.1	109,5	4.31	13	0.51	
FT 150	50	1.97	14,2	0.56	21	0.83	195	7.68	138	5.43	13	0.51	
FT 195	58	2.28	16	0.63	21	0.83	240	9.45	169	6.65	16	0.63	

Esempio di ordinazione/Order example = FT 38 (codice/code)

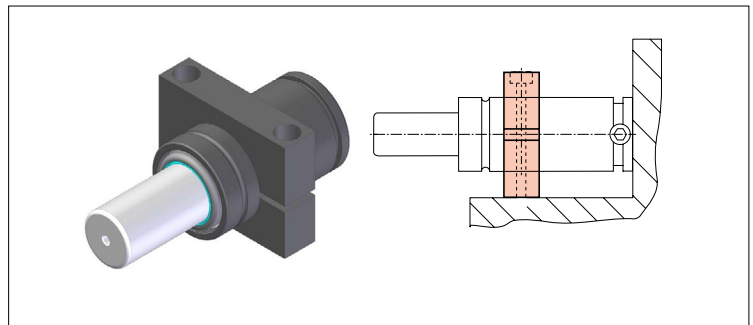
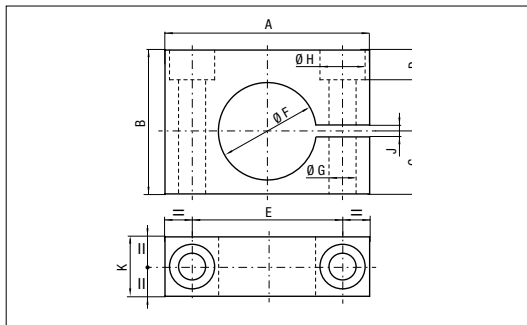
FSA - FSF



Codice Code	A	B	B1	ØC	D	ØE	F	G	H	I	L	M	N
	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch		mm inch
FSA 32	90 3.54	18 0.71	18 0.71	32 1.26	20 0.79	9 0.35	72 2.83	31 1.22	22 0.87	45 1.77	15 0.59	M8	39 1.54
FSF 32	90 3.54	18 0.71	18 0.71	32 1.26	30 1.18	8,5 0.33	72 2.83	31 1.22	22 0.87	45 1.77	15 0.59	M8	40 1,57
FSA 38	95 3.74	18 0.71	18 0.71	38 1.50	20 0.79	9 0.35	77 3.03	34 1.34	25 0.98	55 2.17	15 0.59	M8	45 1,77
FSF 38	95 3.74	17 0.67	19 0.75	38 1.50	30 1.18	8,5 0.33	77 3.03	34 1.34	25 0.98	55 2.17	15 0.59	M8	46 1,81
FSA 45	100 3.94	18 0.71	18 0.71	45 1.77	20 0.79	9 0.35	82 3.23	37 1.46	28 1.10	60 2.36	15 0.59	M8	45 1,77
FSF 45	100 3.94	18 0.71	18 0.71	45 1.77	30 1.18	8,5 0.33	82 3.23	37 1.46	28 1.10	60 2.36	15 0.59	M8	52 2,05
FSA 50	130 5.12	20 0.79	20 0.79	50 1.97	30 1.18	9 0.35	110 4.33	50 1.97	40 1.57	80 3.15	20 0.79	M8	55 2,17
FSA 75	160 6.30	22,5 0.89	22,5 0.89	75 2.95	30 1.18	11 0.43	137 5.39	63,5 2.50	52,5 2.07	105 4.13	20 0.79	M10	80 3,15
FSA 95	195 7.68	25 0.98	25 0.98	95 3.74	30 1.18	13,5 0.53	170 6.69	80 3.15	67,5 2.66	125 4.92	20 0.79	M12	99,5 3,92
FSA 120	220 8.66	27,5 1.08	27,5 1.08	120 4.72	30 1.18	13,5 0.53	195 7.68	92,5 3.64	77,5 3.05	148 5.83	20 0.79	M12	106 4,17
FSA 150	260 10.24	30 1.18	30 1.18	150 5.91	30 1.18	13,5 0.53	230 9.06	110 4.33	95 3.74	200 7.87	20 0.79	M12	138 5,43

Esempio di ordinazione/Order example = FSA 32 (codice/code)

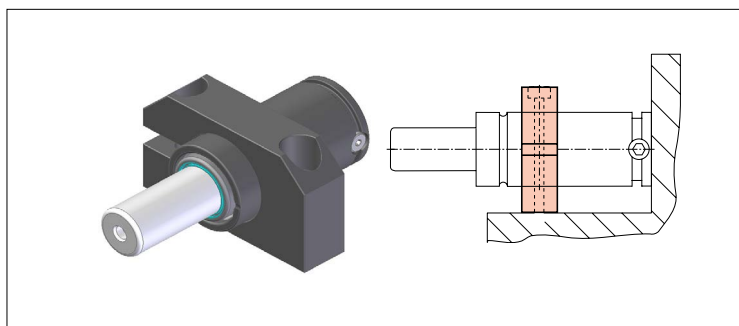
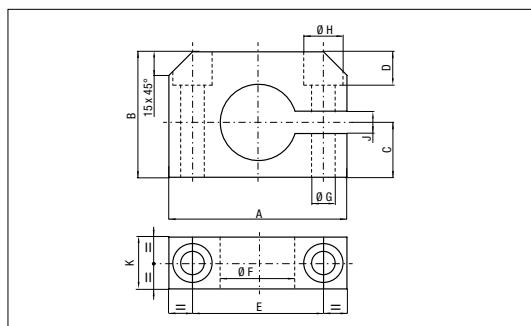
FSB - FSC - FSD



Codice Code	A	B	C	D	E	ØF	ØG	ØH	J	K
	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch
FSB 32	80 3.15	63 2.48	38,5 1.52	18 0.71	56 2.20	32 1.26	10,5 0.41	17 0.67	6 0.24	25 0.98
FSD 32	68 2.68	48 1.89	20,9 0.82	10 0.39	50 1.97	32,5 1.28	9 0.35	15 0.59	4 0.16	20 0.79
FSD 38	74 2.91	54 2.13	23,9 0.94	16 0.63	54 2.13	38,5 1.52	9 0.35	15 0.59	4 0.16	20 0.79
FSD 45	80 3.15	60 2.36	27,5 1.08	22 0.87	60 2.36	45,5 1.79	9 0.35	15 0.59	4 0.16	20 0.79
FSD 50	90 3.54	70 2.76	30 1.18	25 0.98	68 2.68	50,5 1.99	11 0.43	18 0.71	5 0.20	30 1.18
FSC 63	105 4.13	80 3.15	40 1.57	11 0.43	80 3.15	63 2.48	10,5 0.41	17 0.67	10 0.39	30 1.18
FSD 63	108 4.25	82 3.23	36,5 1.44	27 1.06	84 3.31	63,5 2.50	11 0.43	18 0.71	5 0.20	30 1.18
FSD 75	125 4.92	94 3.70	42 1.65	32 1.26	100 3.94	75,5 2.97	13,5 0.53	20 0.79	5 0.20	30 1.18
FSD 95	140 5.51	115 4.53	52,5 2.07	33 1.30	115 4.53	95,5 3.76	13,5 0.53	20 0.79	5 0.20	30 1.18
FSD 120	170 6.69	140 5.51	65 2.56	58 2.28	145 5.71	120,5 4.74	13,5 0.53	20 0.79	7 0.28	30 1.18
FSD 150	200 7.87	170 6.69	80 3.15	68 2.68	175 6.89	150,5 5.93	13,5 0.53	20 0.79	7 0.28	30 1.18

Esempio di ordinazione/Order example = FSB 32 (codice/code)

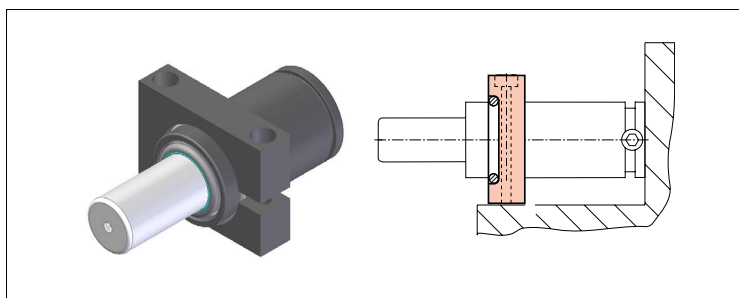
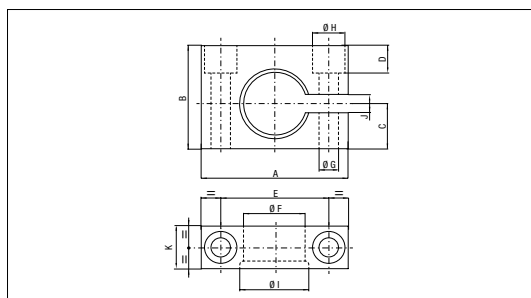
FSE



Codice Code	A	B	C	D	E	Ø F	Ø G	Ø H	J	K
	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch
FSE 45	100 3.94	60 2.36	30 1.18	20 0.79	70 2.76	45,3 1.78	11 0.43	18 0.71	10 0.39	25 0.98

Esempio di ordinazione/Order example = FSE 45 (codice/code)

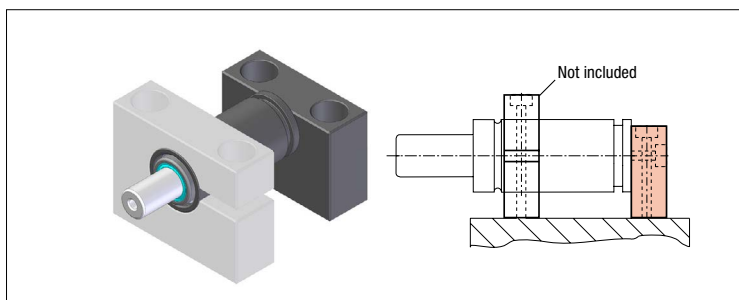
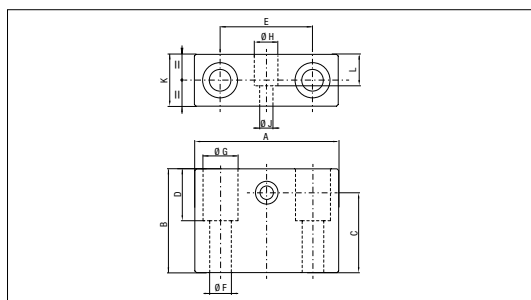
FSE



Codice Code	A	B	C	D	E	Ø F	Ø G	Ø H	Ø I	J	K
	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch
FSE 50	90 3.54	70 2.76	30 1.18	25 0.98	68 2.68	50,3 1.98	11 0.43	18 0.71	54,1 2.13	10 0.39	30 1.18
FSE 75	125 4.92	94 3.70	42 1.65	19 0.75	100 3.94	75,3 2.96	13 0.51	20 0.79	80,1 3.15	10 0.39	30 1.18
FSE 95	140 5.51	115 4.53	52,5 2.07	40 1.57	115 4.53	95,3 3.75	13 0.51	20 0.79	100,1 3.94	10 0.39	30 1.18

Esempio di ordinazione/Order example = FSE 50 (codice/code)

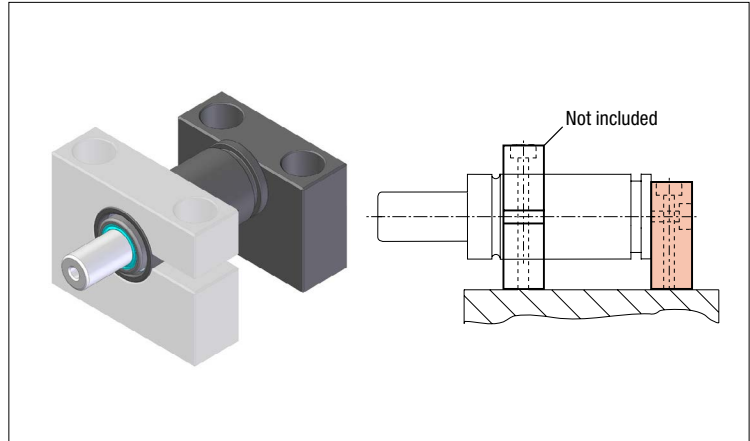
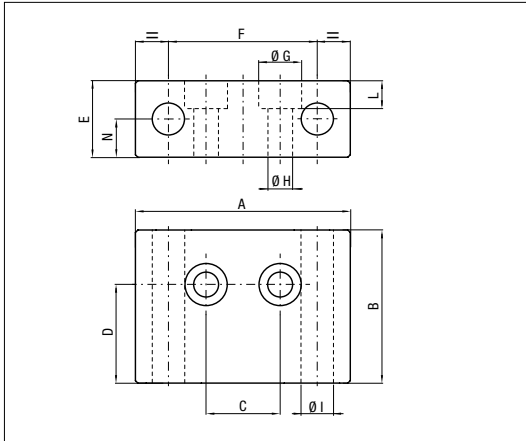
R



Codice Code	A	B	C	D	E	Ø F	Ø G	Ø H	Ø J	L	K
	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch
R 32 A	70 2.76	50 1.97	38,5 1.52	25 0.98	45 1.77	10,5 0.41	17 0.67	11 0.43	6,5 0.26	15 0.59	25 0.98

Esempio di ordinazione/Order example = R 32 A (codice/code)

R

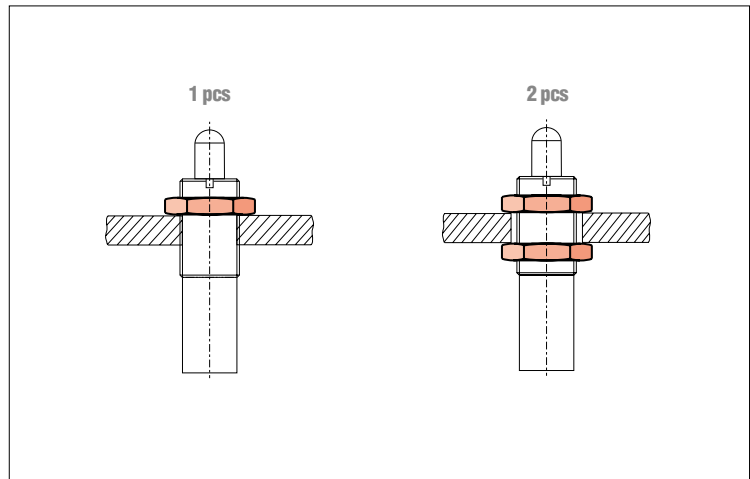
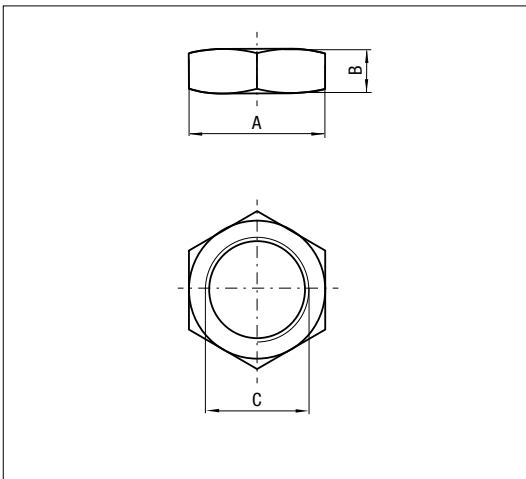


Codice Code	A	B	C	D	E	F	ØG	ØH	L	ØI	N
	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch	mm inch
R 38 A	60 2.36	38 1.50	18 0.71	23,9 0.94	28 1.10	40 1.57	14 0.55	9 0.35	10 0.39	9 0.35	12 0,47
R 50 A	65 2.56	45 1.77	20 0.79	30 1.18	28 1.10	44 1.73	14 0.55	9 0.35	10 0.39	11 0.43	13 0,51
R 75 A	80 3.15	45 1.77	28,3 1.11	27,8 1.09	28 1.10	57 2.24	14 0.55	9 0.35	10 0.39	14 0.55	12 0,47
R 95 A	95 3.74	45 1.77	42,4 1.67	31,2 1.23	28 1.10	70 2.76	14 0.55	9 0.35	10 0.39	14 0.55	15 0,59

Esempio di ordinazione/Order example = R 38 A (codice/code)

MOLLE
Springs

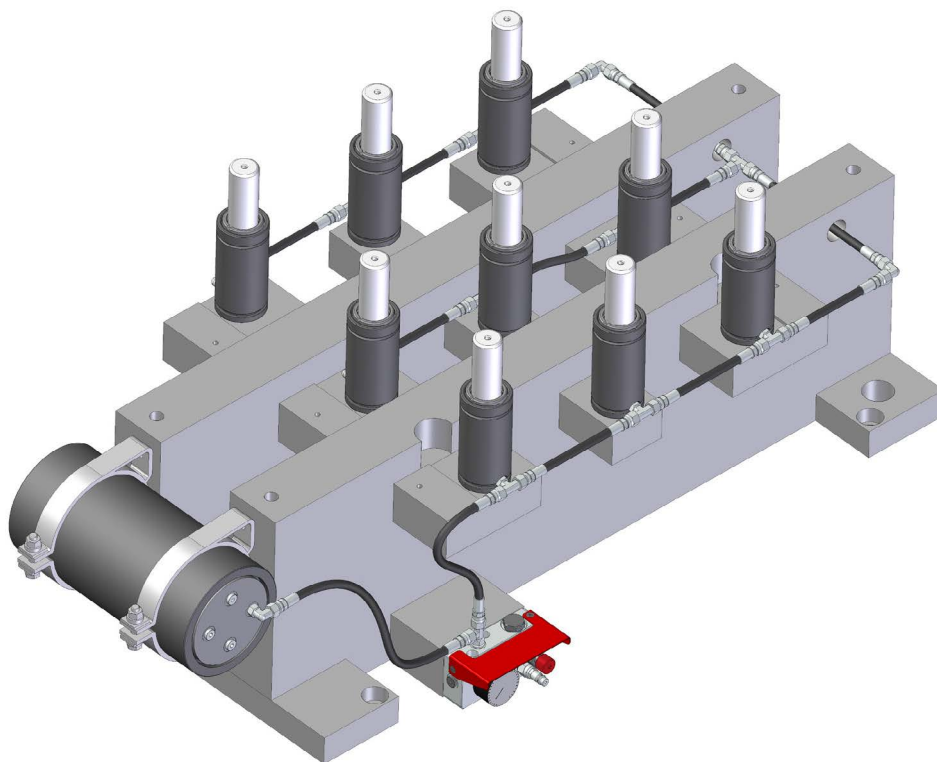
DM - DI



Codice Code	Reference to standards	A	B	C
			mm inch	
DM 16	0-28	S24	8 0.31	M 16 x 1,5
39DM16X2A	0	S24	8 0.31	M 16 x 2
39DI5/8-11A	0	S26	9 0.36	5/8" - 11 UNC
DM 24	0-28	S36	10 0.39	M 24 x 1,5
DI 1" - 8	0	S38	14 0.55	1" - 8

Esempio di ordinazione/Order example = DM 16 (codice/code)

INDEX



VANTAGGI

- Pressione uguale in tutti i cilindri
- Controllo della pressione = controllo della forza
- Aumento/riduzione della pressione = aumento/riduzione della forza attraverso il pannello di controllo (regolazione possibile anche con il sistema in lavoro, senza intervento diretto sui cilindri).
- Utilizzo di polmoni di compensazione per un ridotto incremento della pressione a fine compressione.
- Gestione di impianti e forze diverse nello stesso stampo (uso multipannello MCPC+AUMCP).
- Stop di sicurezza con uso pressostato.
- Utilizzo tappo di sicurezza con disco di rottura CE.
- Flessibilità di collegamento con tubi e raccordi EO -24°, JIC 37°, FlexFlow, Micro 32°, ORFS

I cilindri collegabili a sistema (codice modello + N/NA) sono forniti privi di valvola unidirezionale e con corpo/fondello speciale dove previsto.

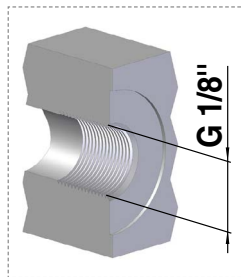
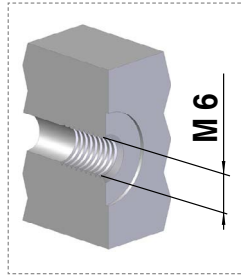
Per le serie S/SC/H/KE/RV/RS/RF/RG/RT/LS/ML/HT è possibile trasformare i cilindri autonomi in cilindri collegabili a sistema semplicemente rimuovendo i dispositivi di tenuta dal foro di caricamento. Scaricare completamente la pressione prima di questa operazione. Qualora si rendesse necessario rimuovere uno qualsiasi dei componenti installati, scaricare completamente la pressione attraverso il pannello.

BENEFITS

- Same pressure in all gas springs
- Pressure control = force control
- Pressure increase/decrease = force increase/decrease through the control panel (the adjustment is also possible with the system running, without direct intervention on the cylinders).
- Lower pressure increase by using compensation tank.
- Possibility to manage different systems and forces in the same tool by using the multipanel MCPC+AUMCP
- Safe stop function through pressure switch.
- Use of the safety plug with rupture disc CE.
- Flexible linking by using hose and connection EO - 24°, JIC 37°, FlexFlow, Micro 32°, ORFS and couplings and many useful accessories

The hoses system gas springs (model code + N/NA) are supplied without charging valve and with special body/end plate when specified. However S/SC/H/KE/RV/RS/RF/RG/RT/LS/ML/HT series can be converted from self-contained to hoses system by simply removing the charging valve. Be sure that all pressure is exhausted before starting this operation. In case it's necessary to remove any of the installed components, pressure must be fully exhausted through the control panel.

**Richiedi
il catalogo generale**



FLEXFLOW - CONNECTIONS
S12,65x1,5

TMA
Low gas flow

MICRO - CONNECTIONS
M8x1

Twin seal

TSM
Low gas flow

JIC 37° - CONNECTIONS
7/16"-20 UNF

TNC
High gas flow

ORFS - CONNECTIONS
9/16"-18 UNF

HY 400
High gas flow

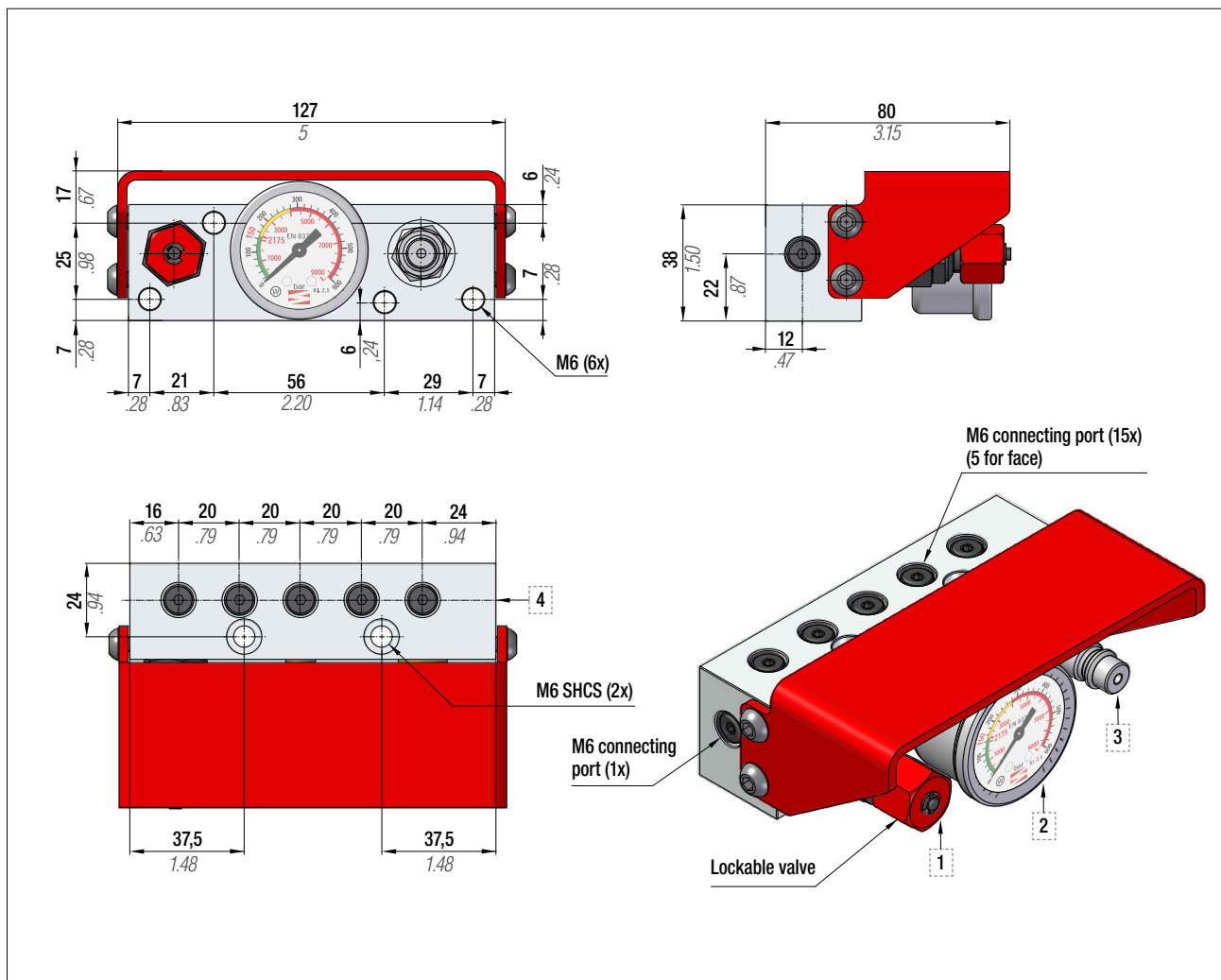
EO - 24° - CONNECTIONS
M12x1,5

Twin seal

HY 500
High gas flow

MOLLE
Springs

INDEX



Micro pannello di controllo composto da base in alluminio, manometro, valvola per caricamento e scaricamento, tappo di rottura sovrappressione e protezione in acciaio. Idoneo per le gestioni di impianti collegati realizzati con micro hose e micro connections. 16 uscite M6.

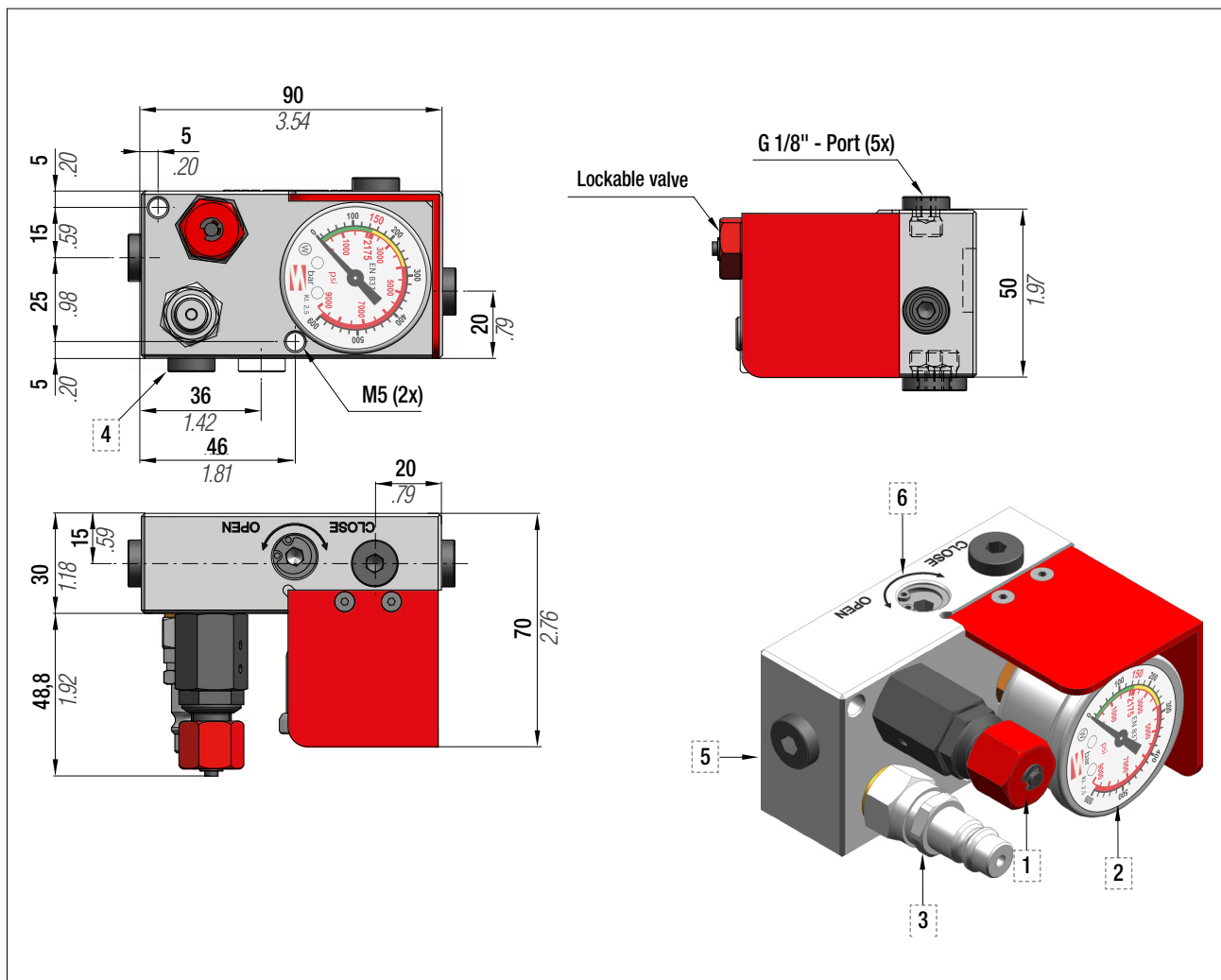
Micro control panel with aluminium base, gauge, charging and discharging valve, overpressure rupture plug and steel protection. Suitable for hose systems equipped with micro hose and micro connections. 16 M6 ports.

1	2	3	4
Valvola di scarico <i>Discharging valve</i>	Manometro 0÷ 620 bar <i>Pressure gauge 0÷620 bar</i>	Innesto rapido di caricamento Cejn <i>Quick coupling for charging Cejn</i>	Tappo di rottura sovrappressione <i>Over pressure rupture plug</i>

Codice <i>Code</i>	Manometro <i>Pressure gauge</i>	Tappo di rottura <i>Rupture Plug</i>	Easy Manifold <i>Easy Manifold</i>	Angolo posizione manometro <i>Gauge Angle position</i>	
				0°*	180°
39CP01A-...	bar/psi	●	●	—	180

Esempio di ordinazione/Order example =
39CP01A-180 (codice/code + Angolo posizione manometro/Gauge angle position)

*Visibile nel disegno. *Visible in the drawing.*



Il mini pannello di controllo Special Springs, grazie a un design miniaturizzato e unico, offre una grande flessibilità d'uso che aumenta con le unità aggiuntive AUMCP. Consiste in un blocchetto di alluminio provvisto di manometro, valvola di caricamento e scaricamento, 4 uscite, valvola d'intercettazione e tappo di rottura sovrappressione.

The Special Springs mini control panel, thanks to its unique miniaturized design, offers wide flexibility of use, increased when combined with additional AUMCP units. It consists of an aluminium block with pressure gauge, charging and discharging valve, 4 outlets, on-off valve and overpressure rupture plug.

1	2	3	4	5	6
Valvola di scarico Discharging valve	Manometro 0÷ 620 bar Pressure gauge 0÷620 bar	Innesto rapido di caricamento Cejn Quick coupling for charging Cejn	Tappo di rottura sovrappressione Over pressure rupture plug	Fori di collegamento 1/8"G (5x) 1/8"G connecting ports (5x)	Valvola di intercettazione Shut off valve

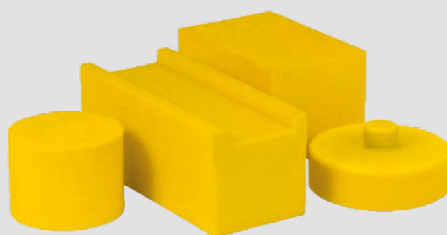
Codice Code	Manometro Pressure gauge	Tappo di rottura Rupture Plug	Valvola di intercettazione Shut off valve	Easy Manifold Easy Manifold	Angolo posizione manometro Gauge Angle position		
					0°*	180°	270°
39MCPC-...	bar/psi	●	●	●	—	180	270
39CP19A-...	bar/psi	●	—	●	—	180	270

Esempio di ordinazione/Order example =
39MCPC-270 (codice/code + Angolo posizione manometro/Gauge angle position)

*Visibile nel disegno. Visible in the drawing.

Blocchi elastici per stoccaggio stampi

Spring relief blocks for tools



Sicurezza per operatori e macchinari

Campo di applicazione

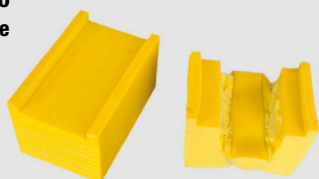
I gruppi di molle degli stampi devono essere alleggeriti durante lo stoccaggio. Questo si può ottenere con vari tipi di „distanziatori”, in legno, metallo, o materiali plastici vari. Se questi distanziatori non vengono rimossi dallo stampo prima della messa in funzione della pressa, le sollecitazioni che ne derivano possono farli piegare, rompere, o farli esplodere. Questo rappresenta un potenziale pericolo per gli operatori addetti al funzionamento delle presse.

I vantaggi in sintesi

- Nessuna rottura - nessun rischio di schegge!
- In caso di collisione: nessun danno allo stampo .
- Nessuna rottura anche se il distanziale di sicurezza è posizionato in un incavo dello stampo.
- Colore ben identificabile: giallo.
- Nessuna lavorazione o pretrattamento necessario.
- Deformazione completa della superficie senza rottura.
- Non soggetto a ispezioni annuali TÜV.
- Pressione superficiale fino a 12 N/mm² senza deformazione.
- Installazione semplice.
- Diverse dimensioni disponibili a magazzino, anche pezzi finiti secondo gli standard industriali.
- Diverse lunghezze disponibili, anche tagliate a misura.

Blocchi elastici PRIMA e DOPO una sollecitazione accidentale della pressa

Spring relief block BEFORE and AFTER unintentional strain in a press



Blocchi elastici per stoccaggio stampi

alpharim yellow è stato sviluppato appositamente per questo tipo di applicazione e – oltre a svolgere la funzionalità richiesta – offre in aggiunta proprietà completamente nuove in termini di sicurezza, testate ormai da molti anni.

Varianti disponibili

1. Come da standard industriali.
2. Prodotti semilavorati (in blocchi, o in barre tonde).
3. A disegno del cliente.
4. A misura (grezzo o fresato).

Per il dimensionamento vale generalmente quanto segue

- La pressione superficiale non deve superare i 12N/mm².
- L'altezza delle barre tonde non deve superare 2 volte il diametro.

Safety for workers and machinery

Range of application

Spring assemblies in tools must be relieved during storage. This is achieved by various „spacers“ made of wood, metal and various plastic materials. If such spacer blocks are not removed from the tool before a press is put into operation, they can be strained so much during the first stroke that they bend, break or burst explosively. They thus represent a latent danger for employees in press operation.

The Advantages at a glance

- No brittle break – no risk of splintering!
- In case of collision: no damage to the tool.
- No tool breakage even if the spring relief block is placed above a tool recess.
- Signal colour: yellow.
- No conditioning or pre-treatment necessary.
- Full surface deformation without breakage.
- Not subject to annual TÜV inspections.
- Surface pressure up to 12 N/mm² without deforming.
- Simple installation.
- Several dimensions available ex stock, also finished parts according to industry standard.
- Several lengths available, also cut to size.

Spring relief for pressing tools

alpharim yellow was developed especially for this application and – in addition to the required functionality – for the first time offers completely new safety aspects that have already been tested over many years.

Design variants

1. According to factory standards.
2. Semi-finished products (sheets, round bars).
3. According to customer drawings.
4. Cut-to-size (raw or milled).

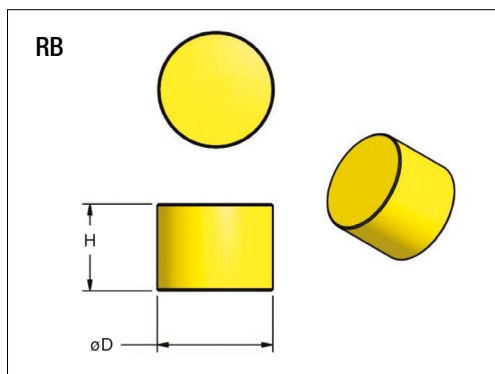
The following generally applies to dimensioning

- Surface pressure must not exceed 12N/mm².
- The height of round bars should not exceed 2 times the diameter.



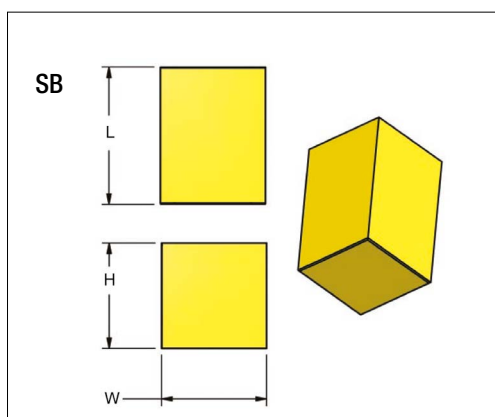
Blocchi elastici per stoccaggio stampi

Spring relief blocks for tools



BARRE TONDE / ROUND BARS					
Codice Code	ØD mm	H _{max} mm	Codice Code	ØD mm	H _{max} mm
CFARB	30	1000	CFARB	110	1000
CFARB	40	1000	CFARB	120	1000
CFARB	50	1000	CFARB	130	1000
CFARB	65	1000	CFARB	150	850
CFARB	79	1000	CFARB	130	600
CFARB	100	1000			

Esempio di ordinazione/Order example = CFARB-65x1000 (codice/code + D + H)



BARRE QUADRE / SQUARE BARS							
Codice Code	H mm	W _{max} mm	L _{max} mm	Codice Code	H mm	W _{max} mm	L _{max} mm
CFASB	10	300	900	CFASB	100	300	800
CFASB	30	300	900	CFASB	110	300	800
CFASB	50	300	800	CFASB	120	300	800
CFASB	60	300	800	CFASB	130	300	800
CFASB	80	300	800	CFASB	150	300	680

Esempio di ordinazione/Order example = CFASB-50x300x800 (codice/code + H+W+L)

Blocchi tondi dimensioni standard

Round blocks standard dimensions

Codice Code	Dimensione Dimension	Codice Code	Dimensione Dimension	Codice Code	Dimensione Dimension
B805610331945	D 65x36	B805610376656	D 80x156	B805610534807	D 110x106
B805610331946	D 65x86	B805610376657	D 80x176	B805610534808	D 110x126
B805610331947	D 65x146	B805610376658	D 80x196	B805611003161	D 150x73
B805610331948	D 80x36	B805610376661	D 110x73	B805611003164	D 150x86
B805610331949	D 80x86	B805610376669	D 110x86	B805611003169	D 150x116
B805610331950	D 80x146	B805610376673	D 110x116	B805611003172	D 150x136
B805610331951	D 80x186	B805610376675	D 110x136	B805611003174	D 150x156
B805610331952	D 110x36	B805610376676	D 110x156	B805611003175	D 150x176
B805610331953	D 110x86	B805610376678	D 110x176	B805611003178	D 150x196
B805610331955	D 110x186	B805610376679	D 110x196	B805611003179	D 180x73
B805610333445	D 65x23	B805610534800	D 65x66	B805611003180	D 180x86
B805610333446	D 80x23	B805610534801	D 65x106	B805611003181	D 180x116
B805610333447	D 110x23	B805610534802	D 65x126	B805611003182	D 180x136
B805610376649	D 80x73	B805610534803	D 80x66	B805611003183	D 180x156
B805610376651	D 80x86	B805610534804	D 80x106	B805611003184	D 180x176
B805610376653	D 80x116	B805610534805	D 80x126	B805611003185	D 180x196
B805610376655	D 80x136	B805610534806	D 110x66		

Esempio di ordinazione/Order example = B805610331945 (codice/code)