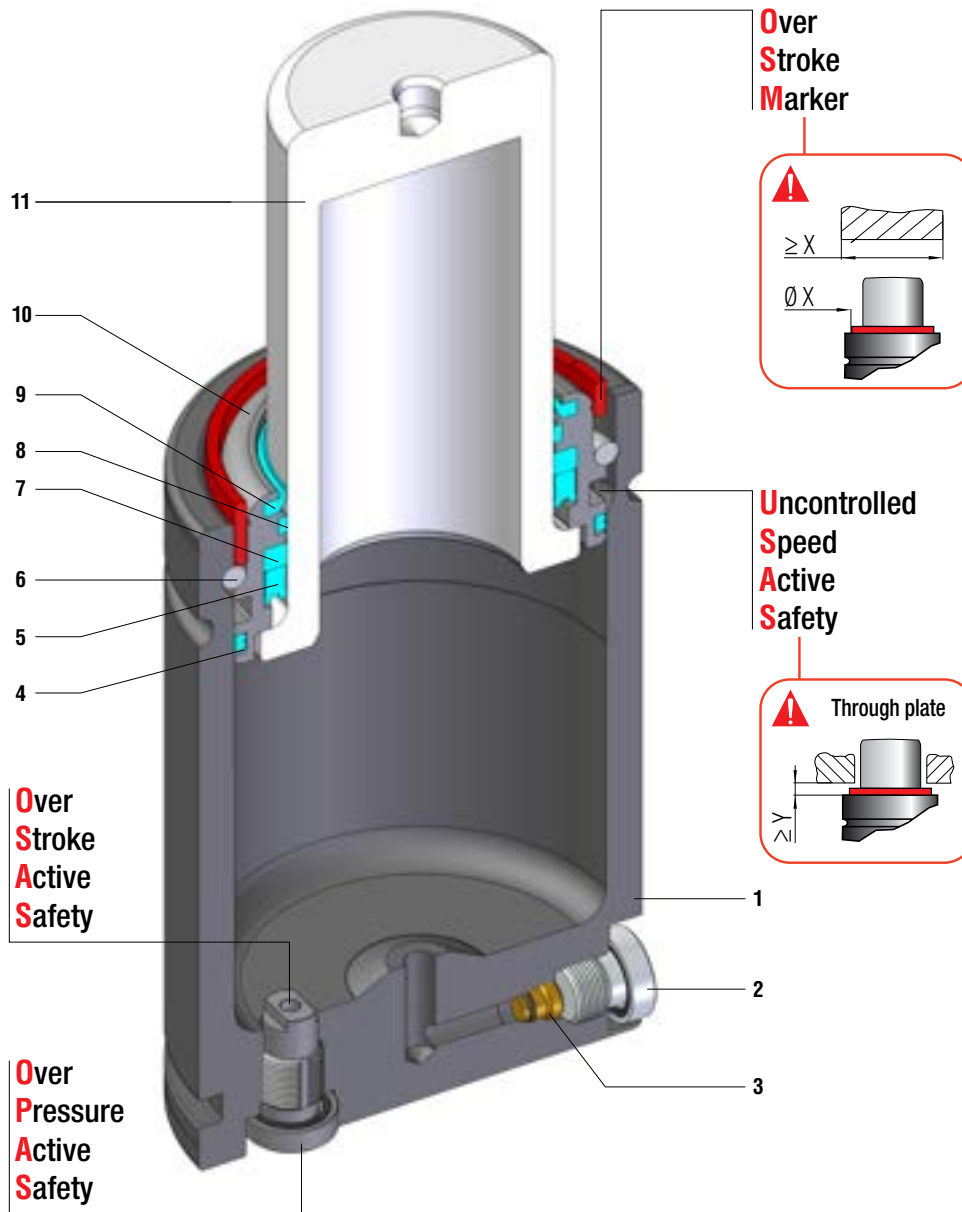


FCA		



Minima altezza, massima forza, collegabili G1/8 - Minimum height, maximum force, hose cylinders with G1/8 charging port  
 Minimale Höhe, maximale Kraft, Gdf. mit G1/8 Öffnung verbindbar - Hauteur minimale, force maximale, cylindres raccordés avec trou G1/8 gaz  
 Mínima altura, máxima fuerza, cilindros conectados con agujero G1/8 gas - Altura mínima, força máxima, cilindros conectados com furo G1/8 gás

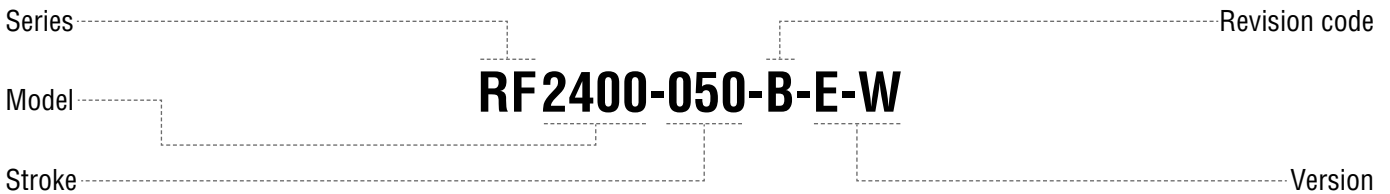
<b>SEALING</b>	ROD SEAL
<b>DESIGN</b>	BUSH - BODY DESIGN

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

## RANGE CHART

Model	Body Ø		Stroke Cu		Initial force F0								
	mm	inch	mm	inch	daN	lb	OSAS	USAS	OPAS	SKUDO	SW		
RF 750	45	1.77	10 - 125	0.39 - 4.92	740	1664	✓	✓	✓	-	✓		
RF 1000	50	1.97	13 - 125	0.51 - 4.92	920	2068	✓	✓	✓	-	✓		
RF 1200	50	1.97	13 - 125	0.51 - 4.92	1060	2383	✓	✓	✓	-	✓		
RF 1500	63	2.48	13 - 125	0.51 - 4.92	1530	3440	✓	✓	✓	-	✓		
RF 2400	75	2.95	16 - 125	0.63 - 4.92	2385	5362	✓	✓	✓	-	✓		
	95	3.74	<b>RV series</b>									✓ Built-in as standard	✓ Optional upon request
	120	4.72											
	150	5.91											
	150	5.91											
	195	7.68											

## HOW TO ORDER



### Available versions

<b>RF 2400-050-B</b> Standard code	<b>RF 2400-050-B-W</b> Add "-W" to standard code	<b>RF 2400-050-B-N</b> Add "-N" to standard code	<b>RF 2400-050-B-N-W</b> Add "-N-W" to standard code	<b>RF 2400-050-B-E</b> Add "-E" to standard code	<b>RF 2400-050-B-E-W</b> Add "-E-W" to standard code
Self contained	Self contained +  Secondary wiper	Linkable	Linkable +  Secondary wiper	Easy Manifold	Easy Manifold +  Secondary wiper



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

## ACTIVE SAFETY



OSAS



USAS



OPAS

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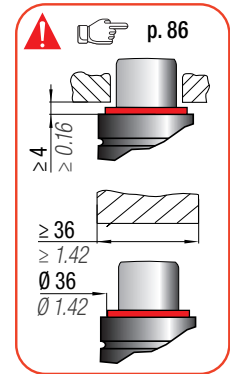
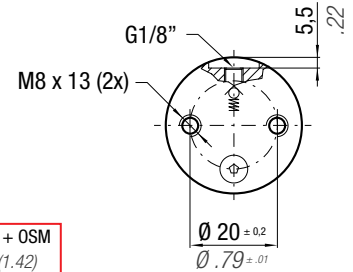
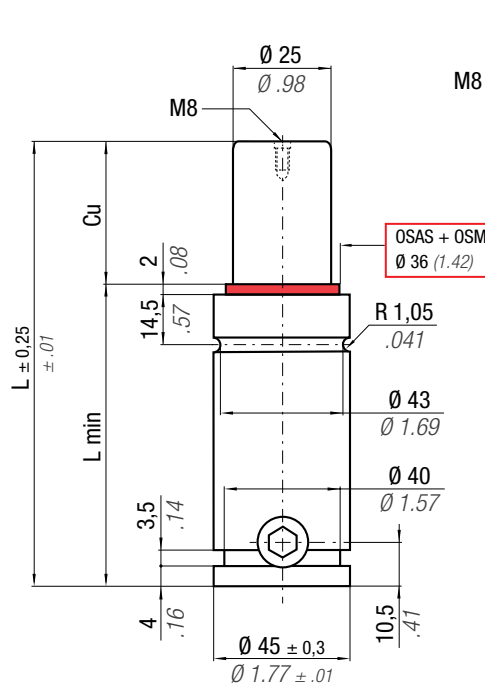
El nuevo código será suministrado sólo cuando se agoten las existencias del antiguo

O novo código irá ser fornecido apenas quando o antigo esgotar stock

**easu** MANIPOL p. 247

\*  $F_{1i}$  = Isothermal end force at 100% Cu p. 16

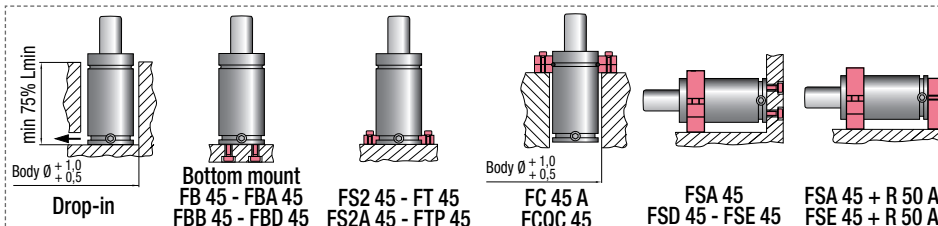
\*\*  $F_{1p}$  = Polytrophic end force at 100% Cu



		$\Delta P$	<b>P max</b>	<b>P min</b>	<b>S</b>	<b>SPM</b>	<b>Max Speed</b>	<b>Maintenance kit</b>
N <sub>2</sub>	0 - 80 °C 32 - 176 °F	± 0,33 %/°C	150 bar 2175 psi	20 bar 290 psi	4,91 cm <sup>2</sup> 0,761 in <sup>2</sup>	~ 20 - 100 (at 20°C)	1,8 m/s 70,8 in/s	39BMRV00750C

CODE	PHASING OUT from 04/2021	NEW	Cu		L		L min		F <sub>0</sub>		F <sub>1i</sub> *		F <sub>1p</sub> **		V <sub>0</sub>		~Kg	~lb	PED 2014/68/EU
			mm	inch	mm	inch	mm	inch	daN	lb	daN	lb	daN	lb	cm <sup>3</sup>	in <sup>3</sup>			
RF 750 - 010 - A	♦ RF 750 - 010 - B		10	0.39	62	2.44	52	2.05	740 ± 5%	1664	1118	2514	1343	3018	16,6	1.01	0,47	1.04	✓
RF 750 - 013 - A	RF 750 - 013 - B		13	0.51	68	2.68	55	2.17			1152	2590	1396	3139	20,4	1.24	0,48	1.06	✓
RF 750 - 016 - A	RF 750 - 016 - B		16	0.63	74	2.91	58	2.28			1176	2644	1435	3227	24,1	1.47	0,50	1.10	✓
RF 750 - 019 - A	RF 750 - 019 - B		19	0.75	80	3.15	61	2.40			1194	2685	1465	3293	27,9	1.70	0,52	1.15	✓
RF 750 - 025 - A	RF 750 - 025 - B		25	0.98	92	3.62	67	2.64			1220	2743	1507	3388	35,5	2.17	0,56	1.23	✓
RF 750 - 032 - A	RF 750 - 032 - B		32	1.26	106	4.17	74	2.91			1240	2787	1539	3460	44,3	2.70	0,61	1.34	✓
RF 750 - 038 - A	RF 750 - 038 - B		38	1.50	118	4.65	80	3.15			1251	2813	1558	3503	51,9	3.17	0,65	1.43	✓
RF 750 - 050 - A	RF 750 - 050 - B		50	1.97	142	5.59	92	3.62			1267	2848	1584	3562	67,0	4.09	0,72	1.59	✓
RF 750 - 063 - A	RF 750 - 063 - B		63	2.48	168	6.61	105	4.13			1278	2873	1602	3602	83,4	5.09	0,81	1.79	✓
RF 750 - 075 - A	RF 750 - 075 - B		75	2.95	192	7.56	117	4.61			1285	2888	1614	3628	98,5	6.01	0,88	1.94	✓
RF 750 - 080 - A	RF 750 - 080 - B		80	3.15	202	7.95	122	4.80	1287	2893	1618	3637	104,8	6.40	0,92	2.03	✓		
RF 750 - 100 - A	RF 750 - 100 - B		100	3.94	242	9.53	142	5.59	1294	2909	1629	3663	130,1	7.94	1,04	2.29	✓		
RF 750 - 125 - A	RF 750 - 125 - B		125	4.92	292	11.50	167	6.57	1300	2922	1639	3685	161,6	9.86	1,21	2.67	✓		

♦ Disposable



**HOW TO ORDER** p. 87

**INSTALLATION GUIDELINE** p. 205


**ACTIVE SAFETY**


OSAS



USAS



OPAS

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

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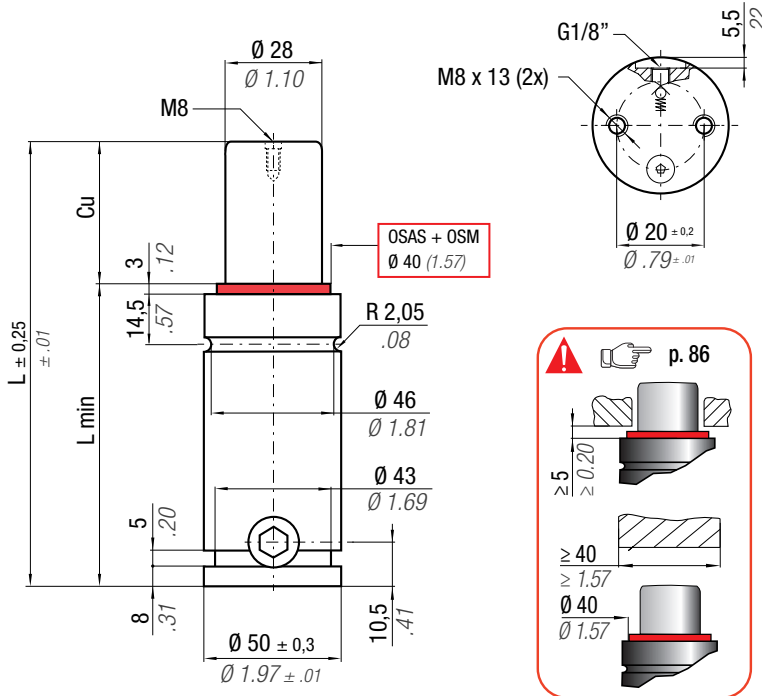
O novo código irá ser fornecido apenas quando o antigo esgotar stock

 \*  $F_{1i}$  =

Isothermal end force at 100% Cu

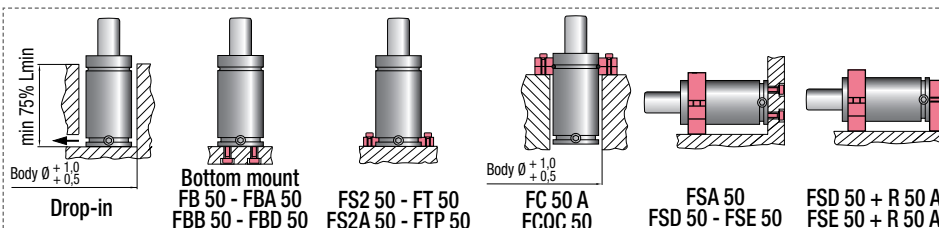
 \*\*  $F_{1p}$  =

Polyphoric end force at 100% Cu



N <sub>2</sub>		0 - 80 °C 32 - 176 °F	$\Delta P$ ± 0,33 %/°C	P max 150 bar 2175 psi	P min 20 bar 290 psi	S 6,15 cm <sup>2</sup> 0.953 in <sup>2</sup>	SPM ~ 20 - 100 (at 20°C)	Max Speed 1,8 m/s 70.8 in/s	Maintenance kit 39BMRV01000C
CODE	NEW	Cu	L	L min	F <sub>0</sub>	F <sub>1i</sub> *	F <sub>1p</sub> **	V <sub>0</sub>	PED
PHASING OUT from 04/2021		mm inch	mm inch	mm inch	Initial force daN lb	End force * daN lb	End force ** daN lb	cm <sup>3</sup> in <sup>3</sup>	~Kg ~lb 2014/68/EU
RF 1000 - 013 - A	◆ RF 1000 - 013 - B	13 0.51	74 2.91	61 2.40	920 2068 ± 5% 150 bar 2175 psi + 20 °C +68 °F	1370 3079	1631 3667	28,4 1.73	0,65 1,43 ✓
RF 1000 - 016 - A	RF 1000 - 016 - B	16 0.63	80 3.15	64 2.52		1407 3163	1690 3800	33,1 2.02	0,68 1,50 ✓
RF 1000 - 019 - A	RF 1000 - 019 - B	19 0.75	86 3.39	67 2.64		1436 3229	1737 3906	37,7 2.30	0,70 1,54 ✓
RF 1000 - 025 - A	RF 1000 - 025 - B	25 0.98	98 3.86	73 2.87		1479 3326	1807 4062	47,1 2.87	0,75 1,65 ✓
RF 1000 - 032 - A	RF 1000 - 032 - B	32 1.26	112 4.41	80 3.15		1514 3403	1863 4187	58,0 3.54	0,81 1,79 ✓
RF 1000 - 038 - A	RF 1000 - 038 - B	38 1.50	124 4.88	86 3.39		1535 3451	1897 4266	67,4 4.11	0,85 1,87 ✓
RF 1000 - 050 - A	RF 1000 - 050 - B	50 1.97	148 5.83	98 3.86		1564 3517	1946 4375	86,1 5.25	0,95 2,09 ✓
RF 1000 - 063 - A	RF 1000 - 063 - B	63 2.48	174 6.85	111 4.37		1585 3564	1981 4453	106,3 6.49	1,05 2,31 ✓
RF 1000 - 075 - A	RF 1000 - 075 - B	75 2.95	198 7.80	123 4.84		1599 3594	2003 4503	125,0 7.63	1,15 2,54 ✓
RF 1000 - 080 - A	RF 1000 - 080 - B	80 3.15	208 8.19	128 5.04		1603 3605	2011 4520	132,8 8.10	1,19 2,62 ✓
RF 1000 - 100 - A	RF 1000 - 100 - B	100 3.94	248 9.76	148 5.83		1618 3636	2034 4573	164,0 10.01	1,35 2,98 ✓
RF 1000 - 125 - A	RF 1000 - 125 - B	125 4.92	298 11.73	173 6.81		1629 3663	2054 4617	202,9 12.38	1,55 3,42 ✓

◆ Disposable


**HOW TO ORDER**

p. 87

**INSTALLATION GUIDELINE**

p. 205



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

## ACTIVE SAFETY



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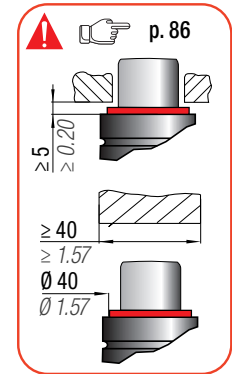
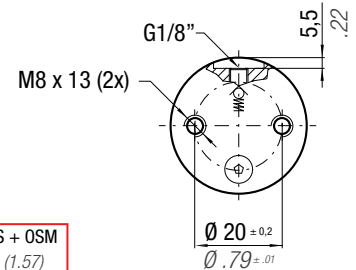
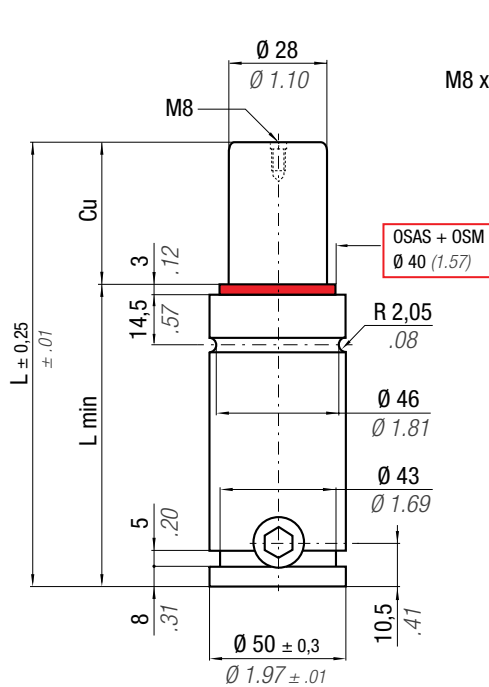


\*  $F_{1i} =$

Isothermal end force at 100% Cu p. 16

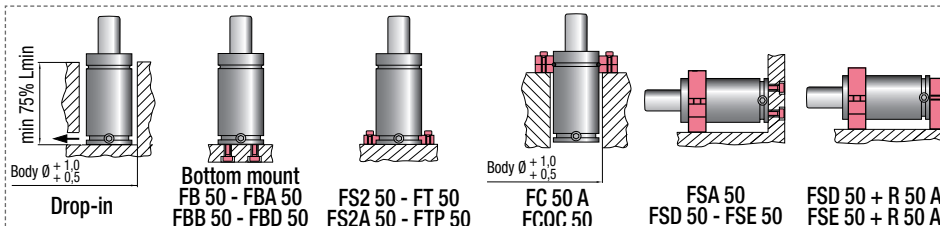
\*\*  $F_{1p} =$

Polytropic end force at 100% Cu



	0 - 80 °C 32 - 176 °F	$\Delta P$ ± 0,33 %/°C	P max 170 bar 2465 psi	P min 20 bar 290 psi	S 6,15 cm <sup>2</sup> 0,953 in <sup>2</sup>	SPM ~ 20 - 100 (at 20°C)	Max Speed 1,8 m/s 70,8 in/s	Maintenance kit 39BMRV01000C		
CODE PHASING OUT from 04/2021	NEW	Cu	L	L min	F <sub>0</sub>	F <sub>1i</sub> *	F <sub>1p</sub> **	V <sub>0</sub>		
		mm / inch	mm / inch	mm / inch	daN / lb	daN / lb	daN / lb	cm <sup>3</sup> / in <sup>3</sup>	~Kg / ~lb	
RF 1200 - 013 - A	♦ RF 1200 - 013 - B	13 / 0.51	74 / 2.91	61 / 2.40	1046 / 2352 ± 5% 170 bar 2465 psi + 20 °C +68 °F	1577 / 3546	1839 / 4135	28,4 / 1.73	0,65 / 1.43	✓
RF 1200 - 016 - A	RF 1200 - 016 - B	16 / 0.63	80 / 3.15	64 / 2.52		1622 / 3646	1906 / 4284	33,1 / 2.02	0,68 / 1.50	✓
RF 1200 - 019 - A	RF 1200 - 019 - B	19 / 0.75	86 / 3.39	67 / 2.64		1657 / 3725	1959 / 4403	37,7 / 2.30	0,70 / 1.54	✓
RF 1200 - 025 - A	RF 1200 - 025 - B	25 / 0.98	98 / 3.86	73 / 2.87		1709 / 3841	2037 / 4579	47,1 / 2.87	0,75 / 1.65	✓
RF 1200 - 032 - A	RF 1200 - 032 - B	32 / 1.26	112 / 4.41	80 / 3.15		1750 / 3934	2100 / 4721	58,0 / 3.54	0,81 / 1.79	✓
RF 1200 - 038 - A	RF 1200 - 038 - B	38 / 1.50	124 / 4.88	86 / 3.39		1776 / 3992	2139 / 4809	67,4 / 4.11	0,85 / 1.87	✓
RF 1200 - 050 - A	RF 1200 - 050 - B	50 / 1.97	148 / 5.83	98 / 3.86		1811 / 4072	2194 / 4932	86,1 / 5.25	0,95 / 2.09	✓
RF 1200 - 063 - A	RF 1200 - 063 - B	63 / 2.48	174 / 6.85	111 / 4.37		1836 / 4128	2233 / 5020	106,3 / 6.49	1,05 / 2.31	✓
RF 1200 - 075 - A	RF 1200 - 075 - B	75 / 2.95	198 / 7.80	123 / 4.84		1853 / 4165	2258 / 5077	125,0 / 7.63	1,15 / 2.54	✓
RF 1200 - 080 - A	RF 1200 - 080 - B	80 / 3.15	208 / 8.19	128 / 5.04		1858 / 4177	2267 / 5096	132,8 / 8.10	1,19 / 2.62	✓
RF 1200 - 100 - A	RF 1200 - 100 - B	100 / 3.94	248 / 9.76	148 / 5.83		1875 / 4215	2293 / 5156	164,0 / 10.01	1,35 / 2.98	✓
RF 1200 - 125 - A	RF 1200 - 125 - B	125 / 4.92	298 / 11.73	173 / 6.81		1889 / 4247	2315 / 5205	202,9 / 12.38	1,55 / 3.42	✓

♦ Disposable



## HOW TO ORDER

p. 87

## INSTALLATION GUIDELINE

p. 205


**ACTIVE SAFETY**

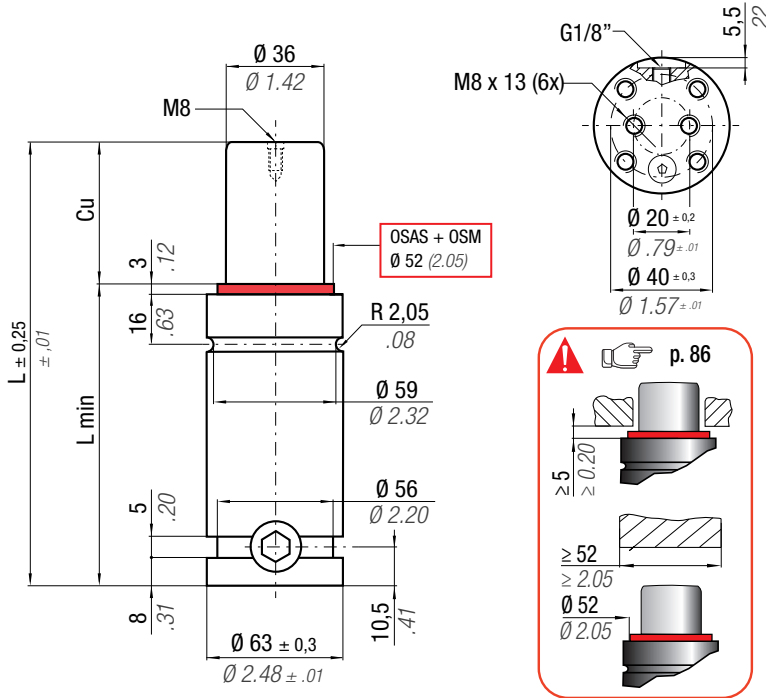

OSAS



USAS



OPAS


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 \*  $F_{1i}$  =

Isothermal end force at 100% Cu

 \*\*  $F_{1p}$  =

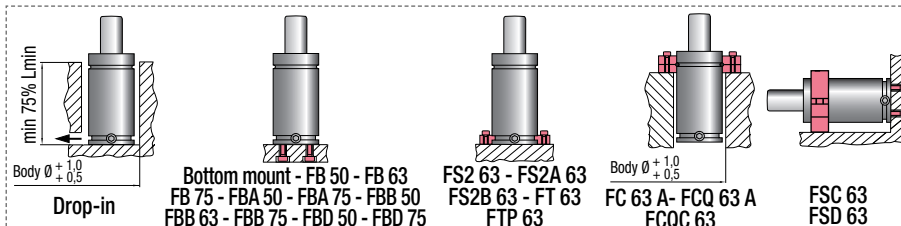
Polyphoric end force at 100% Cu

p. 16

p. 16

N <sub>2</sub>		0 - 80 °C 32 - 176 °F	$\Delta P$ ± 0,33 %/°C	P max 150 bar 2175 psi	P min 20 bar 290 psi	S 10,18 cm <sup>2</sup> 1.578 in <sup>2</sup>	SPM ~ 20 - 100 (at 20°C)	Max Speed 1,8 m/s 70.8 in/s	Maintenance kit 39BMRV01500C	
CODE	NEW	Cu	L	L min	F <sub>0</sub>	F <sub>1i</sub> *	F <sub>1p</sub> **	V <sub>0</sub>	PED	
PHASING OUT from 04/2021		mm inch	mm inch	mm inch	Initial force daN lb	End force * daN lb	End force ** daN lb	cm <sup>3</sup> in <sup>3</sup>	~Kg ~lb 2014/68/EU	
RF 1500 - 013 - B	◆ RF 1500 - 013 - C	13 0.51	80 3.15	67 2.64	1530 3440 ± 5% 150 bar 2175 psi	2168 4874	2546 5723	52 3.17	1,15 2.54 ✓	
RF 1500 - 016 - B	RF 1500 - 016 - C	16 0.63	86 3.39	70 2.76		2230 5012	2642 5939	60 3.66	1,18 2.60 ✓	
RF 1500 - 019 - B	RF 1500 - 019 - C	19 0.75	92 3.62	73 2.87		2279 5123	2720 6114	68 4.15	1,22 2.69 ✓	
RF 1500 - 025 - B	RF 1500 - 025 - C	25 0.98	104 4.09	79 3.11		2353 5290	2838 6380	84 5.13	1,29 2.84 ✓	
RF 1500 - 032 - B	RF 1500 - 032 - C	32 1.26	118 4.65	86 3.39		2414 5426	2935 6599	102 6.22	1,37 3.02 ✓	
RF 1500 - 038 - B	RF 1500 - 038 - C	38 1.50	130 5.12	92 3.62		2452 5512	2997 6738	118 7.20	1,44 3.17 ✓	
RF 1500 - 050 - B	RF 1500 - 050 - C	50 1.97	154 6.06	104 4.09		2506 5633	3085 6935	149 9.09	1,58 3.48 ✓	
RF 1500 - 063 - B	RF 1500 - 063 - C	63 2.48	180 7.09	117 4.61		2544 5720	3148 7078	184 11.23	1,74 3.84 ✓	
RF 1500 - 075 - B	RF 1500 - 075 - C	75 2.95	204 8.03	129 5.08		+ 20 °C +68 °F	2570 5777	3190 7172	215 13.12	1,88 4.14 ✓
RF 1500 - 080 - B	RF 1500 - 080 - C	80 3.15	214 8.43	134 5.28			2578 5797	3204 7204	229 13.97	1,94 4.28 ✓
RF 1500 - 100 - B	RF 1500 - 100 - C	100 3.94	254 10.00	154 6.06		2605 5857	3249 7303	281 17.15	2,18 4.81 ✓	
RF 1500 - 125 - B	RF 1500 - 125 - C	125 4.92	304 11.97	179 7.05		2628 5907	3286 7387	347 21.18	2,47 5.45 ✓	

◆ Disposable


**HOW TO ORDER**

p. 87

**INSTALLATION GUIDELINE**

p. 205



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

## ACTIVE SAFETY



OSAS



USAS

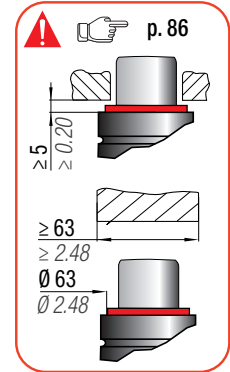
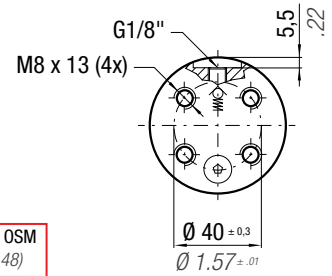
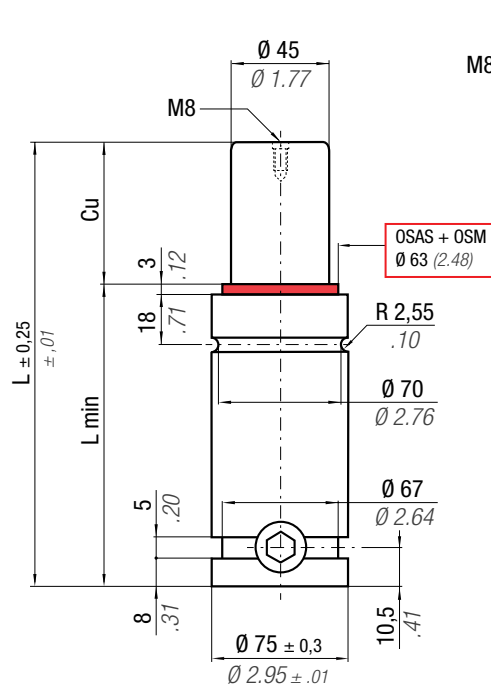


OPAS

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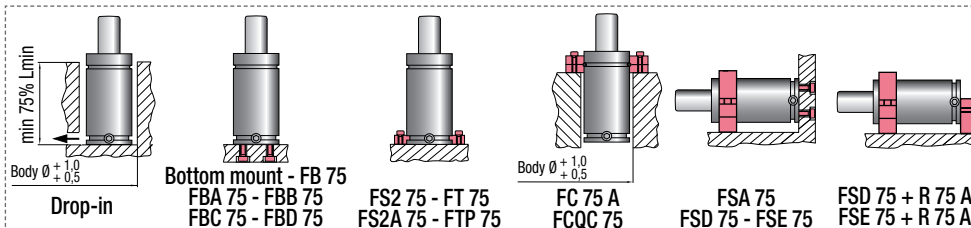
**easu** MANIPOL p. 247

\*  $F_{1i}$  = Isothermal end force at 100% Cu p. 16  
 \*\*  $F_{1p}$  = Polytrophic end force at 100% Cu



N <sub>2</sub>		0 - 80 °C 32 - 176 °F	$\Delta P$ ± 0,33 %/°C	P max 150 bar 2175 psi	P min 20 bar 290 psi	S 15,90 cm <sup>2</sup> 2,465 in <sup>2</sup>	SPM ~ 20 - 100 (at 20°C)	Max Speed 1,8 m/s 70,8 in/s	Maintenance kit 39BMRV02400D	
CODE	NEW	Cu	L	L min	F <sub>0</sub>	F <sub>1i</sub> *	F <sub>1p</sub> **	V <sub>0</sub>		
PHASING OUT from 04/2021		mm inch	mm inch	mm inch	Initial force daN lb	End force * daN lb	End force ** daN lb	cm <sup>3</sup> in <sup>3</sup>	~Kg ~lb	2014/68/EU
RF 2400 - 016 - A	♦ RF 2400 - 016 - B	16 0.63	87 3.43	71 2.80	2385 5362 ± 5% 150 bar 2175 psi + 20 °C +68 °F	3510 7891	4170 9374	92 5.61	1,68 3.70	✓
RF 2400 - 019 - A	♦ RF 2400 - 019 - B	19 0.75	93 3.66	74 2.91		3592 8075	4299 9665	104 6.35	1,73 3.81	✓
RF 2400 - 025 - A	RF 2400 - 025 - B	25 0.98	105 4.13	80 3.15		3716 8354	4498 10111	128 7.81	1,82 4.01	✓
RF 2400 - 032 - A	RF 2400 - 032 - B	32 1.26	119 4.69	87 3.43		3818 8583	4662 10481	156 9.52	1,93 4.25	✓
RF 2400 - 038 - A	RF 2400 - 038 - B	38 1.50	131 5.16	93 3.66		3883 8728	4767 10717	180 10.98	2,03 4.48	✓
RF 2400 - 050 - A	RF 2400 - 050 - B	50 1.97	155 6.10	105 4.13		3974 8935	4917 11054	228 13.91	2,21 4.87	✓
RF 2400 - 063 - A	RF 2400 - 063 - B	63 2.48	181 7.13	118 4.65		4041 9083	5026 11299	280 17.09	2,42 5.34	✓
RF 2400 - 075 - A	RF 2400 - 075 - B	75 2.95	205 8.07	130 5.12		4084 9181	5098 11461	328 20.02	2,61 5.75	✓
RF 2400 - 080 - A	RF 2400 - 080 - B	80 3.15	215 8.46	135 5.31		4099 9215	5123 11517	348 21.24	2,69 5.93	✓
RF 2400 - 100 - A	RF 2400 - 100 - B	100 3.94	255 10.04	155 6.10		4145 9318	5199 11688	428 26.12	3,00 6.61	✓
RF 2400 - 125 - A	RF 2400 - 125 - B	125 4.92	305 12.01	180 7.09	4183 9405	5264 11833	528 32.22	3,40 7.50	✓	

♦ Disposable



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