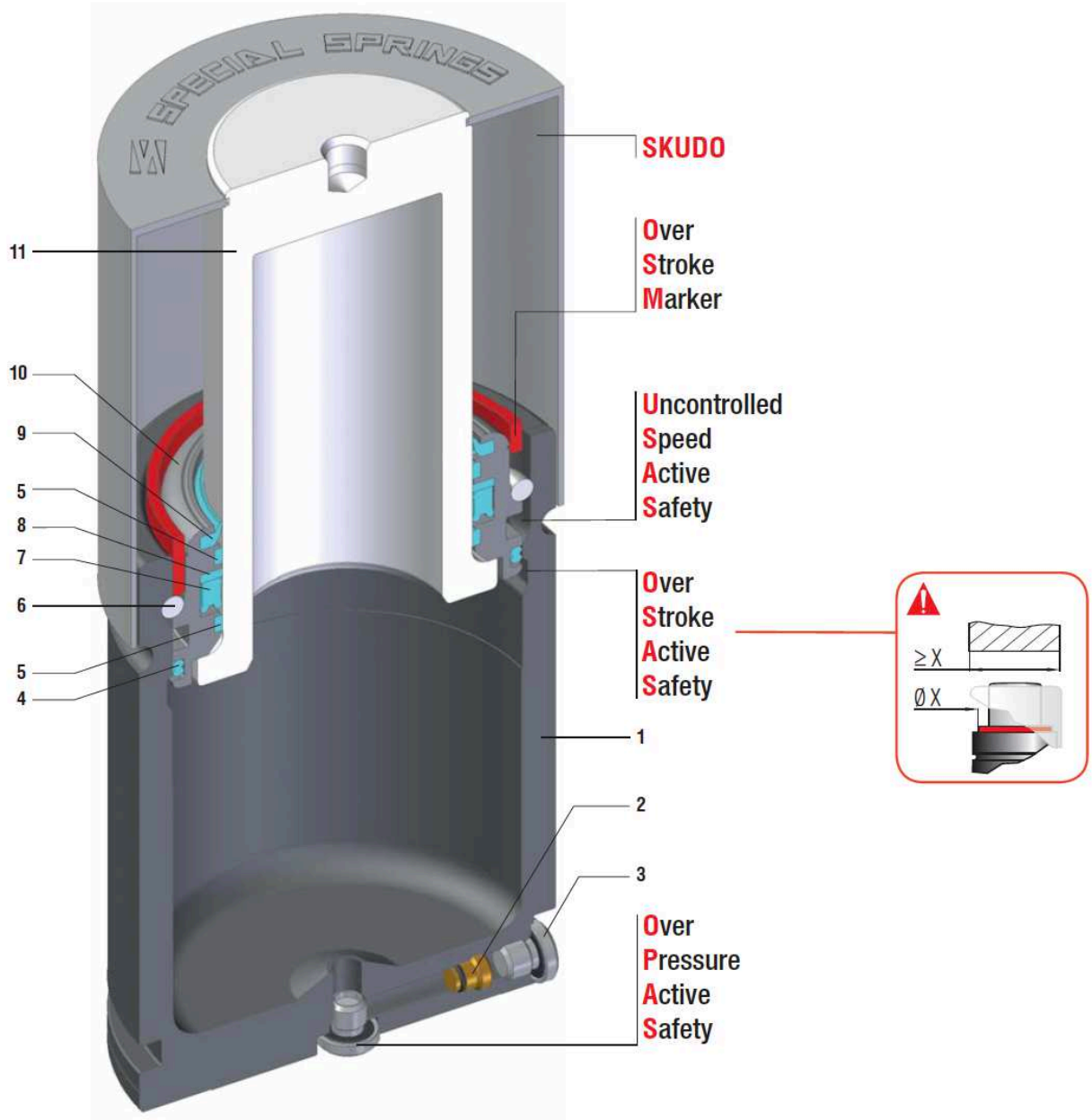


Minima altezza, massima forza + SKUDO - Minimum height, maximum force + SKUDO - Minimale Höhe, maximale Kraft + SKUDO
Hauteur minimale, force maximale + SKUDO - Mínima altura, máxima fuerza + SKUDO - Altura mínima, força máxima + SKUDO

SEALING	ROD SEAL
DESIGN	BUSH - BODY DESIGN

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

RANGE CHART

Model	Body Ø		Stroke Cu		Initial force F0		OSAS	USAS	OPAS	SKUDO
	mm	inch	mm	inch	daN	lb				
RS 170	19	0.75	7 - 122	0.28 - 4.80	170	382	-	-	✓	✓
RS 320	25	0.98	7 - 122	0.28 - 4.80	320	719	-	-	✓	✓
RS 350	32	1.26	7 - 122	0.28 - 4.80	360	809	✓	✓	✓	✓
RS 500	38	1.50	7 - 122	0.28 - 4.80	470	1057	✓	✓	✓	✓
RS 750	45	1.77	7 - 122	0.28 - 4.80	740	1664	✓	✓	✓	✓
RS 1000	50	1.97	10 - 122	0.39 - 4.80	920	2068	✓	✓	✓	✓
RS 1200	50	1.97	10 - 122	0.39 - 4.80	1060	2383	✓	✓	✓	✓
RS 1500	63	2.48	10 - 122	0.39 - 4.80	1530	3440	✓	✓	✓	✓
RS 2400	75	2.95	13 - 122	0.51 - 4.80	2385	5362	✓	✓	✓	✓
RS 4200	95	3.74	13 - 122	0.51 - 4.80	4240	9532	✓	✓	✓	✓
RS 6600	120	4.72	13 - 122	0.51 - 4.80	6630	14905	✓	✓	✓	✓
RS 9500	150	5.91	16 - 122	0.63 - 4.80	9540	21447	✓	✓	✓	✓

HOW TO ORDER

Series
Model
Stroke
Revision code

RS 2400-050-A - N
- E

- IT Codice cilindro autonomo
- EN Self-contained cylinder code
- DE Kode des eingeständigen Gdf.
- FR Code du cylindre autonome
- ES Codigo del cilindro autónomo
- PT Codigo do cilindro autónomo

- IT Collegabile con tubi, cilindro fornito scarico e senza valvola unidirezionale
- EN Linkable with hoses, cylinder supplied without pressure and oneway valve
- DE Anschlussfähig mit Leitungen, Gdf. geliefert ohne Druck und RückschlagVentil
- FR Connectable avec tubes, ressort fourni sans pression ni valve unidirectionelle
- ES Connectable con tubos, cilindro suministrado sin presión y sin válvula unidireccional
- PT Acompláveis com tubos, cilindro fornecidos sem pressão e sem válvula unidireccional

- IT Collegabile EASY MANIFOLD, fornito scarico + guarnizione di collegamento
- EN Linkable EASY MANIFOLD, supplied without pressure + connecting seal
- DE Anschlussfähig EASY MANIFOLD, geliefert ohne Druck + Verbindungsdichtung
- FR Connectable EASY MANIFOLD, fourni sans pression + joint de connexion
- ES Connectable EASY MANIFOLD, suministrado sin presión + junta de connexión
- PT Acompláveis EASY MANIFOLD, fornecidos sem pressão + vedantes de conexão

SPECIAL SPRINGS

ACTIVE SAFETY

Il nuovo codice sarà fornito solo ad esaurimento del vecchio

The new code will be supplied only when the old will be out of stock

Der neue Kode wird geliefert nur wenn der alte nicht mehr im Lager ist

Le nouveau code sera fourni uniquement lorsque le vieux stock sera ecoulé

El nuevo código será suministrado sólo cuando el viejo está fuera de stock

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

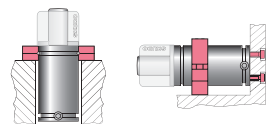
*** $F1_i$ =** Isothermal end force at 100% Cu p. 16

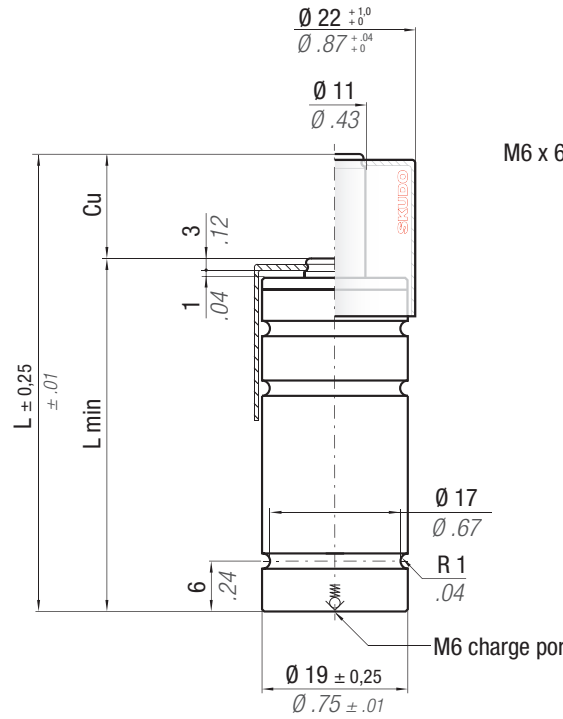
**** $F1_p$ =** Polytrophic end force at 100% Cu

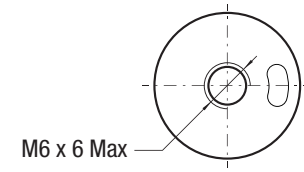
OPAS

SKUDO

NOT FOR





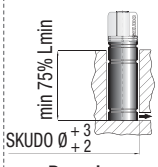


N_2	°F 32 - 176 / °C 0 - 80	ΔP	P max	P min	S	SPM	Max Speed	Maintenance kit
		± 0,33 %/°C	180 bar *2610 psi*	20 bar *290 psi*	0,95 cm² *0.147 in²*	~ 40 - 100 (at 20°C)	1,8 m/s	Disposable

CODE PHASING OUT from 09/2013	NEW	Cu		L		L min		F0 Initial force		$F1_i$ * End force		$F1_p$ ** End force		V0				PED 2014/68/EU
		mm	*inch*	mm	*inch*	mm	*inch*	daN	*lb*	daN	*lb*	daN	*lb*	cm³	*in³*	~Kg	~lb	
RS 170 - 007 - A	RS 170 - 007 - B	7	*0.28*	50	*1.97*	43	*1.69*			231	*520*	259	*582*	3,0	*0.18*	0,06	*0.13*	✓
RS 170 - 010 - A	RS 170 - 010 - B	10	*0.39*	56	*2.20*	46	*1.81*			245	*551*	279	*627*	4,0	*0.24*	0,07	*0.14*	✓
RS 170 - 012 - A	RS 170 - 012 - B	12	*0.47*	60	*2.36*	48	*1.89*			252	*567*	289	*650*	4,0	*0.24*	0,07	*0.15*	✓
RS 170 - 016 - A	RS 170 - 016 - B	16	*0.63*	68	*2.68*	52	*2.05*	170	*382*	263	*592*	305	*686*	5,0	*0.31*	0,07	*0.16*	✓
RS 170 - 022 - A	RS 170 - 022 - B	22	*0.87*	80	*3.15*	58	*2.28*	± 5%		275	*618*	322	*724*	7,0	*0.43*	0,08	*0.17*	✓
RS 170 - 029 - A	RS 170 - 029 - B	29	*1.14*	94	*3.70*	65	*2.56*			284	*639*	336	*755*	8,0	*0.49*	0,09	*0.19*	✓
RS 170 - 035 - A	RS 170 - 035 - B	35	*1.38*	106	*4.17*	71	*2.80*	180 bar		290	*652*	344	*773*	10,0	*0.61*	0,09	*0.21*	✓
RS 170 - 047 - A	RS 170 - 047 - B	47	*1.85*	130	*5.12*	83	*3.27*	*2610psi*		298	*669*	356	*800*	13,0	*0.79*	0,11	*0.24*	✓
RS 170 - 060 - A	RS 170 - 060 - B	60	*2.36*	156	*6.14*	96	*3.78*			303	*682*	364	*818*	16,0	*0.98*	0,12	*0.27*	✓
RS 170 - 072 - A	RS 170 - 072 - B	72	*2.83*	185	*7.28*	113	*4.45*	+ 20 °C	*+68 °F*	296	*665*	353	*794*	19,0	*1.16*	0,14	*0.31*	✓
RS 170 - 077 - A	RS 170 - 077 - B	77	*3.03*	195	*7.68*	118	*4.65*			297	*669*	355	*798*	21,0	*1.28*	0,15	*0.32*	✓
RS 170 - 097 - A	RS 170 - 097 - B	97	*3.82*	235	*9.25*	138	*5.43*			303	*680*	363	*816*	25,0	*1.53*	0,17	*0.37*	✓
RS 170 - 122 - A	RS 170 - 122 - B	122	*4.80*	285	*11.22*	163	*6.42*			307	*691*	370	*832*	31,0	*1.89*	0,19	*0.43*	✓

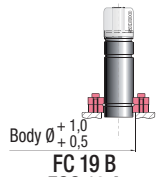
WARNING
REMOVE SKUDO

Upside down mounting



Drop-in

Bottom mount

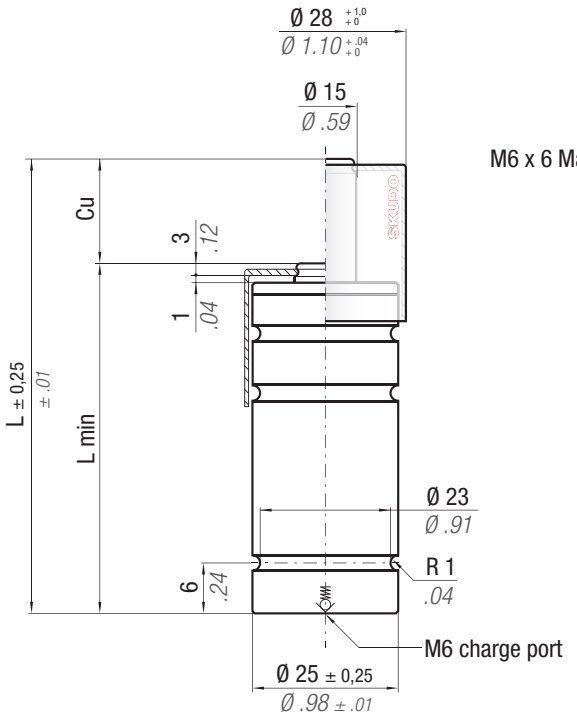


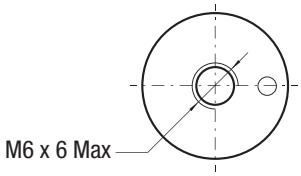
FC 19 B
FCC 19 A

FS3 19

HOW TO ORDER

(10 pcs) RS 170-047-B





Il nuovo codice sarà fornito solo ad esaurimento del vecchio

The new code will be supplied only when the old will be out of stock

Der neue Kode wird geliefert nur wenn der alte nicht mehr im Lager ist

Le nouveau code sera fourni uniquement lorsque le vieux stock sera ecoulé

El nuevo código será suministrado sólo cuando el viejo está fuera de stock

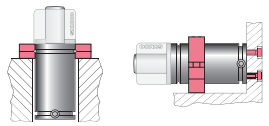
O novo código irá ser fornecido apenas quando o antigo esgotar stock

ACTIVE SAFETY

*** $F1_i$ =** Isothermal end force at 100% Cu p. 16

**** $F1_p$ =** Polytrophic end force at 100% Cu

NOT FOR



OPAS

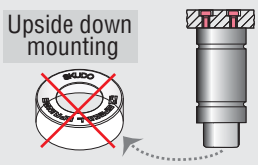
SKUDO

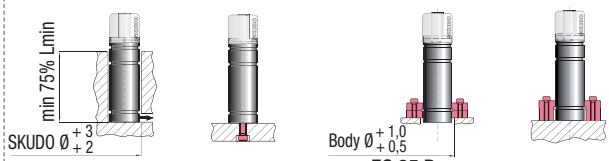
RS

N_2	°F 32 - 176 / °C 0 - 80	ΔP	P max	P min	S	SPM	Max Speed	Maintenance kit
		± 0,33 %/°C	180 bar *2610 psi*	20 bar *290 psi*	1,77 cm² *0.27 in²*	~ 40 - 100 (at 20°C)	1,8 m/s	Disposable

CODE PHASING OUT from 09/2013	NEW	Cu mm	Cu *inch*	L mm	L *inch*	L min mm	L min *inch*	F0 Initial force daN	F0 *lb*	$F1_i$ * End force daN	$F1_i$ * *lb*	$F1_p$ ** End force daN	$F1_p$ ** *lb*	V0 cm³	V0 *in³*	~Kg	~lb	PED 2014/68/EU
RS 320 - 007 - A	RS 320 - 007 - B	7	*0.28*	50	*1.97*	43	*1.69*			423	*950*	472	*1061*	6,0	*0.37*	0,10	*0.23*	✓
RS 320 - 010 - A	RS 320 - 010 - B	10	*0.39*	56	*2.20*	46	*1.81*			447	*1004*	506	*1138*	8,0	*0.49*	0,11	*0.24*	✓
RS 320 - 012 - A	RS 320 - 012 - B	12	*0.47*	60	*2.36*	48	*1.89*			459	*1032*	523	*1176*	8,0	*0.49*	0,11	*0.25*	✓
RS 320 - 016 - A	RS 320 - 016 - B	16	*0.63*	68	*2.68*	52	*2.05*			479	*1077*	552	*1241*	10,0	*0.61*	0,12	*0.26*	✓
RS 320 - 022 - A	RS 320 - 022 - B	22	*0.87*	80	*3.15*	58	*2.28*	320 *719* ± 5%		499	*1123*	581	*1306*	13,0	*0.79*	0,13	*0.29*	✓
RS 320 - 029 - A	RS 320 - 029 - B	29	*1.14*	94	*3.70*	65	*2.56*			516	*1159*	605	*1360*	16,0	*0.98*	0,14	*0.31*	✓
RS 320 - 035 - A	RS 320 - 035 - B	35	*1.38*	106	*4.17*	71	*2.80*			526	*1182*	620	*1394*	19,0	*1.16*	0,15	*0.33*	✓
RS 320 - 047 - A	RS 320 - 047 - B	47	*1.85*	130	*5.12*	83	*3.27*	180 bar *2610psi*		540	*1213*	641	*1441*	24,0	*1.46*	0,17	*0.38*	✓
RS 320 - 060 - A	RS 320 - 060 - B	60	*2.36*	156	*6.14*	96	*3.78*			549	*1235*	655	*1472*	30,0	*1.83*	0,19	*0.43*	✓
RS 320 - 072 - A	RS 320 - 072 - B	72	*2.83*	185	*7.28*	113	*4.45*	+ 20 °C *+68 °F*		537	*1207*	636	*1430*	38,0	*2.32*	0,22	*0.48*	✓
RS 320 - 077 - A	RS 320 - 077 - B	77	*3.03*	195	*7.68*	118	*4.65*			540	*1213*	641	*1441*	40,0	*2.44*	0,23	*0.50*	✓
RS 320 - 097 - A	RS 320 - 097 - B	97	*3.82*	235	*9.25*	138	*5.43*			549	*1234*	654	*1470*	49,0	*2.99*	0,26	*0.57*	✓
RS 320 - 122 - A	RS 320 - 122 - B	122	*4.80*	285	*11.22*	163	*6.42*			557	*1252*	666	*1497*	60,0	*4.09*	0,30	*0.66*	✓

WARNING REMOVE SKUDO





HOW TO ORDER

(10 pcs) RS 320-047-B

SPECIAL SPRINGS

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

ACTIVE SAFETY

OSAS

USAS

OPAS

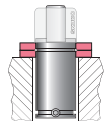
SKUDO

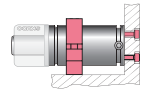
easy MANIFOLD p. 211

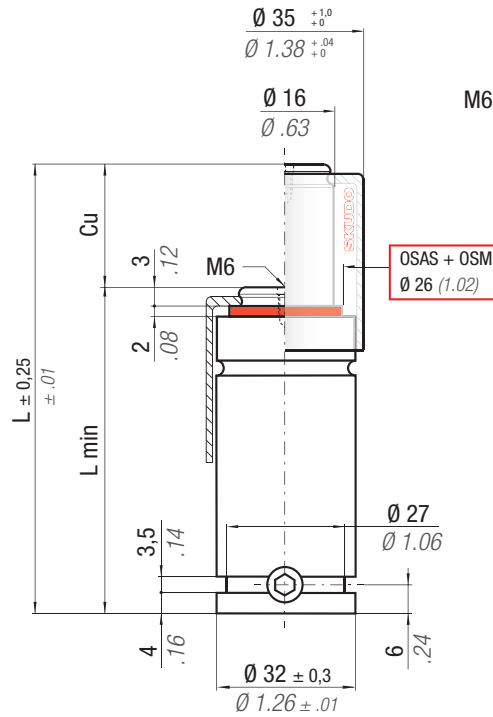
* $F1_i$ = Isothermal end force at 100% Cu p. 16

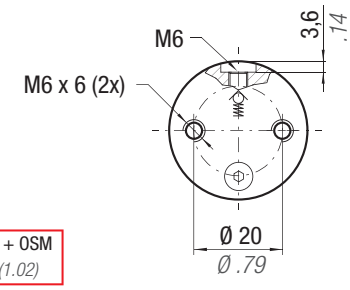
** $F1_p$ = Polytrophic end force at 100% Cu

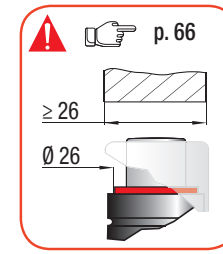
NOT FOR









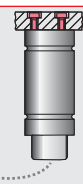


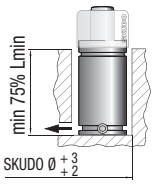
N_2	°F 32 - 176 / °C 0 - 80	ΔP	P max	P min	S	SPM	Max Speed	Maintenance kit
		± 0,33 %/°C	180 bar *2610 psi*	20 bar *290 psi*	2,01 cm^2 *0.312 in^2*	~ 20 - 100 (at 20°C)	1,8 m/s	39BMRV00350C

CODE	Cu		L		L min		Fo Initial force		$F1_i$ * End force		$F1_p$ ** End force		Vo				PED 2014/68/EU
	mm	*inch*	mm	*inch*	mm	*inch*	daN	*lb*	daN	*lb*	daN	*lb*	cm^3	*in^3*	~Kg	~lb	
RS 350 - 007 - A	7	*0.28*	50	*1.97*	43	*1.69*			458	*1030*	505	*1136*	8,0	*0.49*	0,16	*0.36*	✓
RS 350 - 010 - A	10	*0.39*	56	*2.20*	46	*1.81*			478	*1075*	533	*1199*	10,0	*0.61*	0,17	*0.38*	✓
RS 350 - 013 - A	13	*0.51*	62	*2.44*	49	*1.93*			493	*1109*	554	*1245*	12,0	*0.73*	0,18	*0.40*	✓
RS 350 - 016 - A	16	*0.63*	68	*2.68*	52	*2.05*	360 *809* ± 5%		505	*1134*	570	*1282*	14,0	*0.85*	0,19	*0.42*	✓
RS 350 - 022 - A	22	*0.87*	80	*3.15*	58	*2.28*			521	*1171*	593	*1333*	18,0	*1.10*	0,21	*0.46*	✓
RS 350 - 029 - A	29	*1.14*	94	*3.70*	65	*2.56*			533	*1199*	611	*1374*	22,0	*1.34*	0,23	*0.51*	✓
RS 350 - 035 - A	35	*1.38*	106	*4.17*	71	*2.80*	180 bar *2610 psi*		541	*1216*	622	*1399*	26,0	*1.59*	0,25	*0.55*	✓
RS 350 - 047 - A	47	*1.85*	130	*5.12*	83	*3.27*			552	*1240*	637	*1432*	33,0	*2.01*	0,29	*0.63*	✓
RS 350 - 060 - A	60	*2.36*	156	*6.14*	96	*3.78*			559	*1256*	648	*1456*	41,0	*2.50*	0,33	*0.72*	✓
RS 350 - 072 - A	72	*2.83*	180	*7.09*	108	*4.25*	+ 20 °C *+68 °F*		563	*1266*	654	*1471*	49,0	*2.99*	0,36	*0.80*	✓
RS 350 - 077 - A	77	*3.03*	190	*7.48*	113	*4.45*			565	*1270*	657	*1476*	52,0	*3.17*	0,38	*0.83*	✓
RS 350 - 097 - A	97	*3.82*	230	*9.06*	133	*5.24*			570	*1281*	663	*1492*	65,0	*3.97*	0,44	*0.96*	✓
RS 350 - 122 - A	122	*4.80*	280	*11.02*	158	*6.22*			574	*1289*	669	*1504*	80,0	*4.88*	0,51	*1.13*	✓

WARNING
REMOVE SKUDO

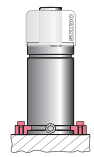
Upside down mounting





Drop-in

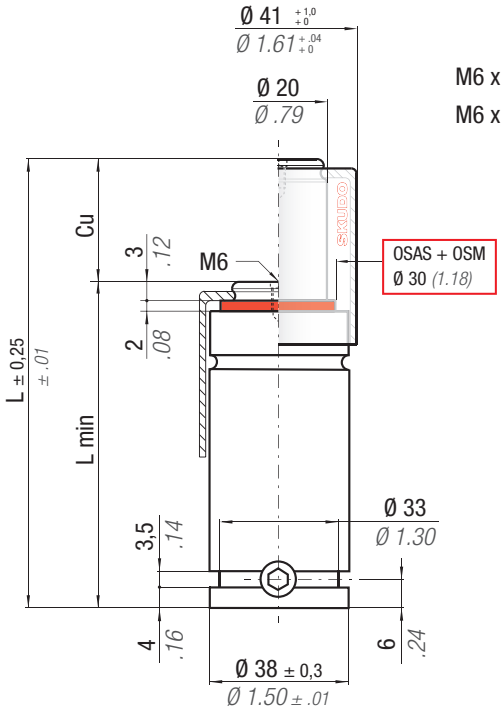
Bottom mount

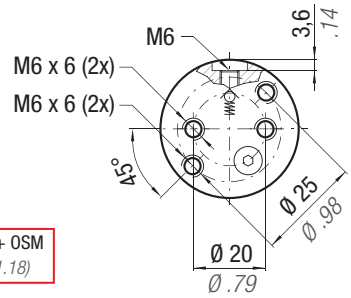


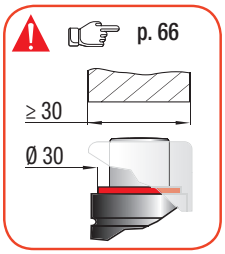
FS2A 32
FS2B 32

HOW TO ORDER

(10 pcs) RS 350-047-A
(10 pcs) RS 350-047-A-N







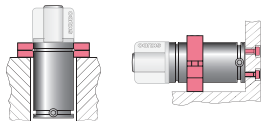
OSAS + OSM = OVER STROKE ACTIVE SAFETY + OVER STROKE MARKER

easy MANIFOLD p. 211

* $F1_i$ = Isothermal end force at 100% Cu p. 16

** $F1_p$ = Polytrophic end force at 100% Cu

NOT FOR



ACTIVE SAFETY

OSAS

USAS

OPAS

SKUDO

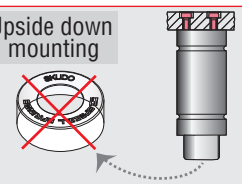
RS

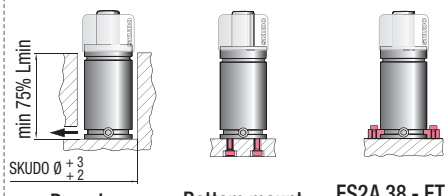
N_2	°F 32 - 176	°C 0 - 80	ΔP	P max	P min	S	SPM	Max Speed	Maintenance kit
			± 0,33 %/°C	150 bar *2175 psi*	20 bar *290 psi*	3,14 cm² *0.487 in²*	~ 20 - 100 (at 20°C)	1,8 m/s	39BMRV00500C

CODE	Cu mm	Cu *inch*	L mm	L *inch*	L min mm	L min *inch*	F0 Initial force daN	F0 *lb*	$F1_i$ * End force daN	$F1_i$ * *lb*	$F1_p$ ** End force daN	$F1_p$ ** *lb*	V0 cm³	V0 *in³*	~Kg	~lb	PED 2014/68/EU
RS 500 - 007 - A	7	*0.28*	50	*1.97*	43	*1.69*			609	*1370*	694	*1560*	11,0	*0.67*	0,24	*0.53*	✓
RS 500 - 010 - A	10	*0.39*	56	*2.20*	46	*1.81*			639	*1437*	739	*1661*	14,0	*0.85*	0,25	*0.55*	✓
RS 500 - 013 - A	13	*0.51*	62	*2.44*	49	*1.93*			661	*1486*	773	*1738*	17,0	*1.04*	0,26	*0.57*	✓
RS 500 - 016 - A	16	*0.63*	68	*2.68*	52	*2.05*			678	*1524*	800	*1798*	19,0	*1.16*	0,28	*0.62*	✓
RS 500 - 022 - A	22	*0.87*	80	*3.15*	58	*2.28*			703	*1579*	838	*1884*	24,0	*1.46*	0,31	*0.68*	✓
RS 500 - 029 - A	29	*1.14*	94	*3.70*	65	*2.56*	470 ± 5%	*1057*	722	*1622*	868	*1951*	30,0	*1.83*	0,34	*0.75*	✓
RS 500 - 035 - A	35	*1.38*	106	*4.17*	71	*2.80*			733	*1648*	887	*1994*	35,0	*2.14*	0,37	*0.82*	✓
RS 500 - 047 - A	47	*1.85*	130	*5.12*	83	*3.27*	150 bar	*2175psi*	749	*1684*	913	*2053*	46,0	*2.81*	0,42	*0.93*	✓
RS 500 - 060 - A	60	*2.36*	156	*6.14*	96	*3.78*			760	*1709*	931	*2093*	57,0	*3.48*	0,48	*1.06*	✓
RS 500 - 072 - A	72	*2.83*	180	*7.09*	108	*4.25*			767	*1725*	942	*2118*	67,0	*4.09*	0,54	*1.19*	✓
RS 500 - 077 - A	77	*3.03*	190	*7.48*	113	*4.45*	+ 20 °C	*+68 °F*	770	*1730*	946	*2127*	72,0	*4.39*	0,56	*1.23*	✓
RS 500 - 097 - A	97	*3.82*	230	*9.06*	133	*5.24*			777	*1747*	958	*2154*	89,0	*5.43*	0,66	*1.46*	✓
RS 500 - 122 - A	122	*4.80*	280	*11.02*	158	*6.22*			783	*1760*	968	*2176*	110,0	*6.71*	0,77	*1.70*	✓

WARNING
REMOVE SKUDO

Upside down mounting





Drop-in

Bottom mount

FS2A 38 - FT 38
FS2B 38 - FTP 38

HOW TO ORDER

(10 pcs) RS 500-047-A
(10 pcs) RS 500-047-A-N

SPECIAL SPRINGS

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

ACTIVE SAFETY

easy MANIFOLD p. 211

OSAS

USAS

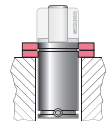
OPAS

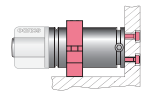
SKUDO

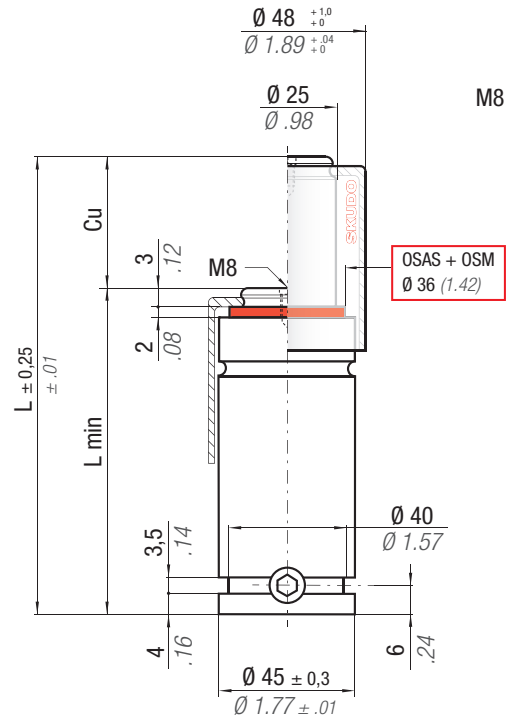
* $F1_i$ = Isothermal end force at 100% Cu p. 16

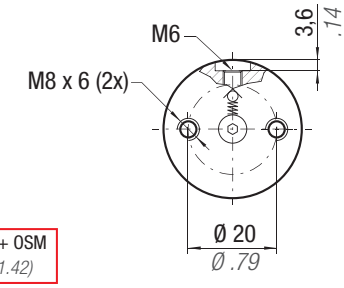
** $F1_p$ = Polytrophic end force at 100% Cu

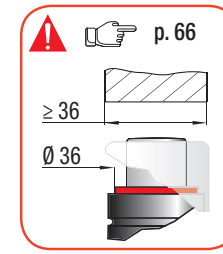
NOT FOR









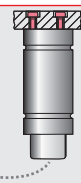


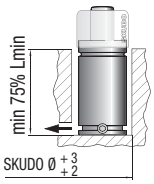
N_2	°F 32 - 176 / °C 0 - 80	ΔP	P max	P min	S	SPM	Max Speed	Maintenance kit
		± 0,33 %/°C	150 bar *2175 psi*	20 bar *290 psi*	4,91 cm² *0.761 in²*	~ 20 - 100 (at 20°C)	1,8 m/s	39BMRV00750C

CODE	Cu mm	Cu inch	L mm	L inch	L min mm	L min inch	F0 Initial force daN	F0 lb	$F1_i$ * End force daN	$F1_i$ * lb	$F1_p$ ** End force daN	$F1_p$ ** lb	V0 cm³	V0 in³	~Kg	~lb	PED 2014/68/EU
RS 750 - 007 - A	7	0.28	52	2.05	45	1.77			956	2148	1090	2450	18,0	1.10	0,36	0.79	✓
RS 750 - 010 - A	10	0.39	58	2.28	48	1.89			1006	2262	1166	2621	21,0	1.28	0,38	0.84	✓
RS 750 - 013 - A	13	0.51	64	2.52	51	2.01			1044	2347	1225	2754	25,0	1.53	0,39	0.86	✓
RS 750 - 016 - A	16	0.63	70	2.76	54	2.13	740 ± 5%	1664	1074	2414	1272	2860	29,0	1.77	0,41	0.90	✓
RS 750 - 022 - A	22	0.87	82	3.23	60	2.36			1117	2511	1340	3012	37,0	2.26	0,45	0.99	✓
RS 750 - 029 - A	29	1.14	96	3.78	67	2.64			1151	2588	1395	3136	46,0	2.81	0,50	1.10	✓
RS 750 - 035 - A	35	1.38	108	4.25	73	2.87	150 bar	*2175psi*	1173	2636	1429	3213	53,0	3.23	0,54	1.19	✓
RS 750 - 047 - A	47	1.85	132	5.20	85	3.35			1202	2702	1477	3320	68,0	4.15	0,61	1.34	✓
RS 750 - 060 - A	60	2.36	158	6.22	98	3.86			1223	2748	1511	3397	85,0	5.19	0,70	1.54	✓
RS 750 - 072 - A	72	2.83	182	7.17	110	4.33	+ 20 °C	*+68 °F*	1236	2778	1533	3446	100,0	6.10	0,77	1.70	✓
RS 750 - 077 - A	77	3.03	192	7.56	115	4.53			1240	2788	1540	3462	107,0	6.53	0,81	1.79	✓
RS 750 - 097 - A	97	3.82	232	9.13	135	5.31			1254	2819	1563	3514	132,0	8.05	0,93	2.05	✓
RS 750 - 122 - A	122	4.80	282	11.10	160	6.30			1266	2845	1582	3556	164,0	10.00	1,10	2.43	✓

WARNING
REMOVE SKUDO

Upside down mounting





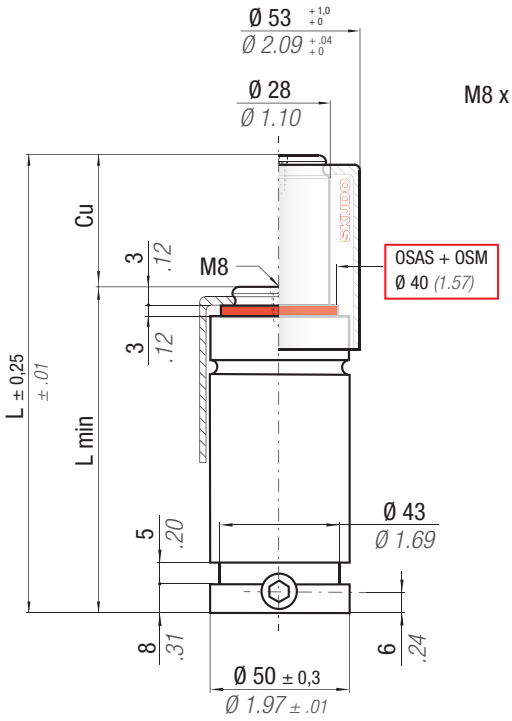
Drop-in

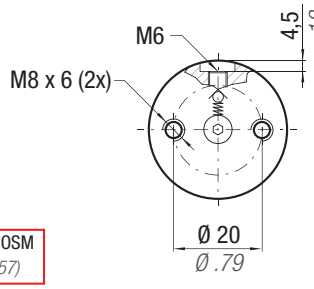
Bottom mount
FB 45 - FBA 45
FBB 45 - FBD 45

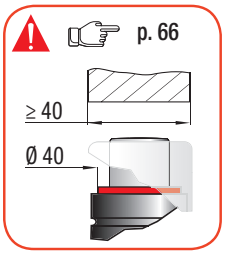
FS2 45 - FT 45
FS2A 45 - FTP 45

HOW TO ORDER

(10 pcs) RS 750-047-A
(10 pcs) RS 750-047-A-N







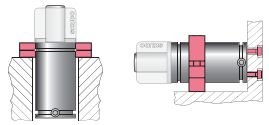
OSAS + OSM = OVER STROKE ACTIVE SAFETY + OVER STROKE MARKER

easy MANIFOLD p. 211

*** $F1_i$ =** Isothermal end force at 100% Cu p. 16

**** $F1_p$ =** Polytrophic end force at 100% Cu

NOT FOR



ACTIVE SAFETY

OSAS

USAS

OPAS

SKUDO

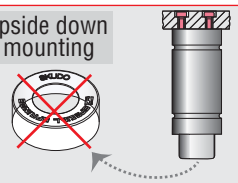
RS

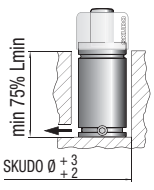
N_2	°F 32 - 176	°C 0 - 80	ΔP	P max	P min	S	SPM	Max Speed	Maintenance kit
			± 0,33 %/°C	150 bar *2175 psi*	20 bar *290 psi*	6,15 cm^2 *0.953 in^2*	~ 20 - 100 (at 20°C)	1,8 m/s	39BMRV01000C

CODE	Cu mm	Cu inch	L mm	L inch	L min mm	L min inch	F0 Initial force daN	F0 lb	$F1_i$ * End force daN	$F1_i$ * lb	$F1_p$ ** End force daN	$F1_p$ ** lb	V0 cm^3	V0 in^3	~Kg	~lb	PED 2014/68/EU
RS 1000 - 010 - A	10	0.39	64	2.52	54	2.13	920 ± 5%	2068	1222	2748	1402	3152	29,0	1.77	0,51	1.12	✓
RS 1000 - 013 - A	13	0.51	70	2.76	57	2.24			1270	2856	1476	3318	34,0	2.07	0,54	1.19	✓
RS 1000 - 016 - A	16	0.63	76	2.99	60	2.36			1309	2943	1536	3453	39,0	2.38	0,56	1.23	✓
RS 1000 - 022 - A	22	0.87	88	3.46	66	2.60			1368	3075	1628	3660	48,0	2.93	0,61	1.34	✓
RS 1000 - 029 - A	29	1.14	102	4.02	73	2.87			1416	3183	1705	3833	59,0	3.60	0,67	1.48	✓
RS 1000 - 035 - A	35	1.38	114	4.49	79	3.11			1446	3252	1754	3943	69,0	4.21	0,71	1.57	✓
RS 1000 - 047 - A	47	1.85	138	5.43	91	3.58	150 bar *2175 psi*		1490	3349	1824	4101	88,0	5.37	0,81	1.79	✓
RS 1000 - 060 - A	60	2.36	164	6.46	104	4.09			1521	3419	1875	4215	108,0	6.59	0,91	2.01	✓
RS 1000 - 072 - A	72	2.83	188	7.40	116	4.57	+ 20 °C *+68 °F*		1542	3466	1908	4289	127,0	7.75	1,05	2.31	✓
RS 1000 - 077 - A	77	3.03	198	7.80	121	4.76			1549	3481	1920	4316	135,0	8.24	1,09	2.40	✓
RS 1000 - 097 - A	97	3.82	238	9.37	141	5.55			1570	3530	1956	4397	166,0	10.13	1,21	2.67	✓
RS 1000 - 122 - A	122	4.80	288	11.34	166	6.54			1588	3571	1986	4465	205,0	12.51	1,41	3.11	✓

WARNING
REMOVE SKUDO

Upside down mounting





Drop-in

Bottom mount
FB 50 - FBA 50
FBB 50 - FBD 50

FS2 50 - FT 50
FS2A 50 - FTP 50

HOW TO ORDER

(10 pcs) RS 1000-047-A
(10 pcs) RS 1000-047-A-N

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

ACTIVE SAFETY

easy MANIFOLD p. 211

OSAS

USAS

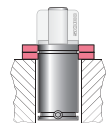
OPAS

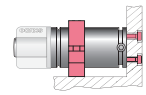
SKUDO

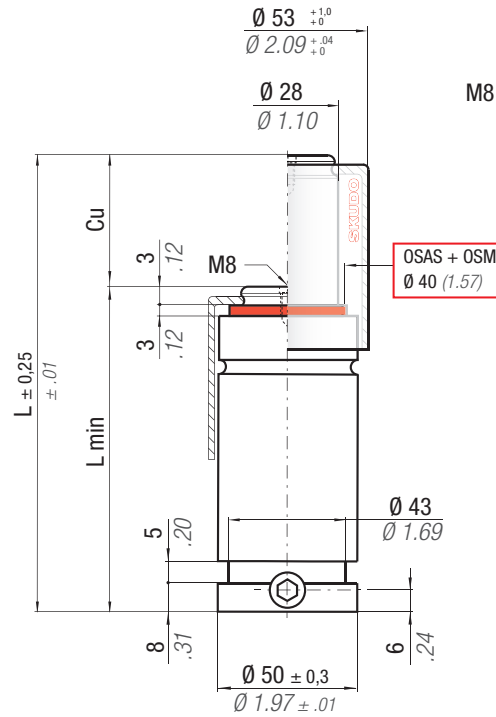
* $F1_i$ = Isothermal end force at 100% Cu p. 16

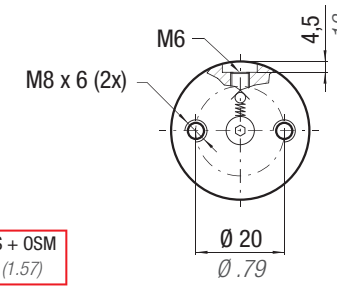
** $F1_p$ = Polytrophic end force at 100% Cu

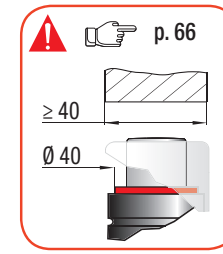
NOT FOR









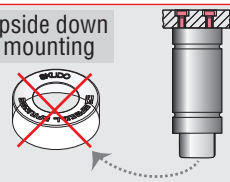


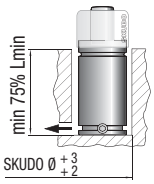
N_2	°F 32 - 176 / °C 0 - 80	ΔP	P max	P min	S	SPM	Max Speed	Maintenance kit
		± 0,33 %/°C	170 bar *2465 psi*	20 bar *290 psi*	6,15 cm² *0.953 in²*	~ 20 - 100 (at 20°C)	1,8 m/s	39BMRV01000C

CODE	Cu		L		L min		F0 Initial force		$F1_i$ * End force		$F1_p$ ** End force		V0				PED 2014/68/EU
	mm	*inch*	mm	*inch*	mm	*inch*	daN	*lb*	daN	*lb*	daN	*lb*	cm³	*in³*	~Kg	*~lb*	
RS 1200 - 010 - A	10	*0.39*	64	*2.52*	54	*2.13*	1060 *2383* ± 5% 170 bar *2465 psi* + 20 °C *+68 °F*		1401	*3150*	1581	*3554*	30,0	*1.83*	0,51	*1.12*	✓
RS 1200 - 013 - A	13	*0.51*	70	*2.76*	57	*2.24*			1458	*3278*	1664	*3741*	34,0	*2.07*	0,54	*1.19*	✓
RS 1200 - 016 - A	16	*0.63*	76	*2.99*	60	*2.36*			1505	*3383*	1732	*3893*	39,0	*2.38*	0,56	*1.23*	✓
RS 1200 - 022 - A	22	*0.87*	88	*3.46*	66	*2.60*			1575	*3540*	1836	*4127*	48,0	*2.93*	0,61	*1.34*	✓
RS 1200 - 029 - A	29	*1.14*	102	*4.02*	73	*2.87*			1633	*3670*	1922	*4321*	59,0	*3.60*	0,67	*1.48*	✓
RS 1200 - 035 - A	35	*1.38*	114	*4.49*	79	*3.11*			1669	*3753*	1977	*4445*	69,0	*4.21*	0,71	*1.57*	✓
RS 1200 - 047 - A	47	*1.85*	138	*5.43*	91	*3.58*			1721	*3870*	2056	*4622*	88,0	*5.37*	0,81	*1.79*	✓
RS 1200 - 060 - A	60	*2.36*	164	*6.46*	104	*4.09*			1759	*3954*	2114	*4752*	108,0	*6.59*	0,91	*2.01*	✓
RS 1200 - 072 - A	72	*2.83*	188	*7.40*	116	*4.57*			1784	*4010*	2152	*4837*	127,0	*7.75*	1,05	*2.31*	✓
RS 1200 - 077 - A	77	*3.03*	198	*7.80*	121	*4.76*			1792	*4029*	2165	*4866*	135,0	*8.24*	1,09	*2.40*	✓
RS 1200 - 097 - A	97	*3.82*	238	*9.37*	141	*5.55*			1818	*4087*	2205	*4957*	166,0	*10.13*	1,21	*2.67*	✓
RS 1200 - 122 - A	122	*4.80*	288	*11.34*	166	*6.54*			1840	*4136*	2239	*5033*	205,0	*12.51*	1,41	*3.11*	✓

WARNING
REMOVE SKUDO

Upside down mounting





Drop-in

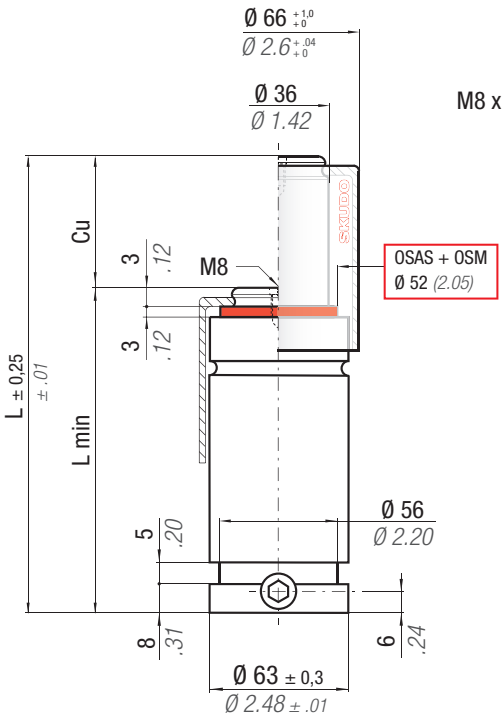
Bottom mount
FB 50 - FBA 50
FBB 50 - FBD 50

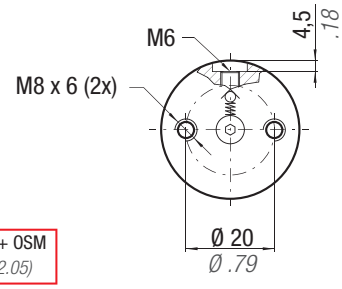
FS2 50 - FT 50
FS2A 50 - FTP 50

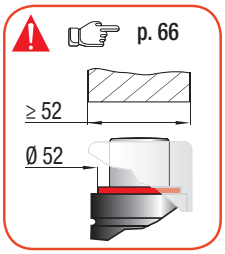
HOW TO ORDER

(10 pcs) RS 1200-047-A

(10 pcs) RS 1200-047-A-N







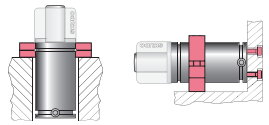
OSAS + OSM = OVER STROKE ACTIVE SAFETY + OVER STROKE MARKER

easy MANIFOLD p. 211

* $F1_i$ = Isothermal end force at 100% Cu p. 16

** $F1_p$ = Polytrophic end force at 100% Cu

NOT FOR



ACTIVE SAFETY

OSAS

USAS

OPAS

SKUDO

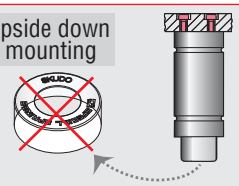
RS

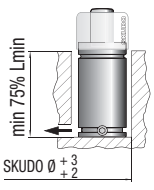
N_2	°F 32 - 176	°C 0 - 80	ΔP	P max	P min	S	SPM	Max Speed	Maintenance kit
			± 0,33 %/°C	150 bar *2175 psi*	20 bar *290 psi*	10,18 cm² *1.578 in²*	~ 20 - 100 (at 20°C)	1,8 m/s	39BMRV01500C

CODE	Cu mm	Cu *inch*	L mm	L *inch*	L min mm	L min *inch*	Fo Initial force daN	Fo *lb*	$F1_i$ * End force daN	$F1_i$ * *lb*	$F1_p$ ** End force daN	$F1_p$ ** *lb*	Vo cm³	Vo *in³*	~Kg	~lb	PED 2014/68/EU
RS 1500 - 010 - A	10	*0.39*	70	*2.76*	60	*2.36*	1530 ± 5% 150 bar + 20 °C	*3440* *2175 psi* *+68 °F*	1970	*4428*	2241	*5038*	53,0	*3.23*	0,92	*2.03*	✓
RS 1500 - 013 - A	13	*0.51*	76	*2.99*	63	*2.48*			2045	*4597*	2355	*5294*	61,0	*3.72*	0,96	*2.12*	✓
RS 1500 - 016 - A	16	*0.63*	82	*3.23*	66	*2.60*			2106	*4735*	2450	*5508*	69,0	*4.21*	0,99	*2.18*	✓
RS 1500 - 022 - A	22	*0.87*	94	*3.70*	72	*2.83*			2201	*4947*	2596	*5836*	85,0	*5.19*	1,06	*2.34*	✓
RS 1500 - 029 - A	29	*1.14*	108	*4.25*	79	*3.11*			2279	*5124*	2720	*6115*	103,0	*6.28*	1,14	*2.51*	✓
RS 1500 - 035 - A	35	*1.38*	120	*4.72*	85	*3.35*			2330	*5238*	2801	*6297*	119,0	*7.26*	1,21	*2.67*	✓
RS 1500 - 047 - A	47	*1.85*	144	*5.67*	97	*3.82*			2402	*5401*	2917	*6558*	151,0	*9.21*	1,35	*2.98*	✓
RS 1500 - 060 - A	60	*2.36*	170	*6.69*	110	*4.33*			2455	*5520*	3003	*6751*	186,0	*11.35*	1,51	*3.33*	✓
RS 1500 - 072 - A	72	*2.83*	194	*7.64*	122	*4.80*			2490	*5599*	3060	*6879*	217,0	*13.24*	1,65	*3.64*	✓
RS 1500 - 077 - A	77	*3.03*	204	*8.03*	127	*5.00*			2502	*5625*	3079	*6922*	231,0	*14.09*	1,71	*3.77*	✓
RS 1500 - 097 - A	97	*3.82*	244	*9.61*	147	*5.79*			2540	*5709*	3141	*7061*	284,0	*17.32*	1,94	*4.28*	✓
RS 1500 - 122 - A	122	*4.80*	294	*11.57*	172	*6.77*			2571	*5780*	3193	*7178*	350,0	*21.35*	2,23	*4.92*	✓

WARNING REMOVE SKUDO

Upside down mounting





Drop-in

Bottom mount - FB 50 FBA 50 - FBD 50 FB 63 - FBB 63

FS2 63 - FS2A 63 FS2B 63 - FT 63 FTP 63

HOW TO ORDER

(10 pcs) RS 1500-047-A

(10 pcs) RS 1500-047-A-N

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

ACTIVE SAFETY

easy MANIFOLD p. 211

OSAS

USAS

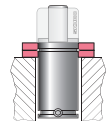
OPAS

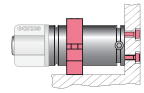
SKUDO

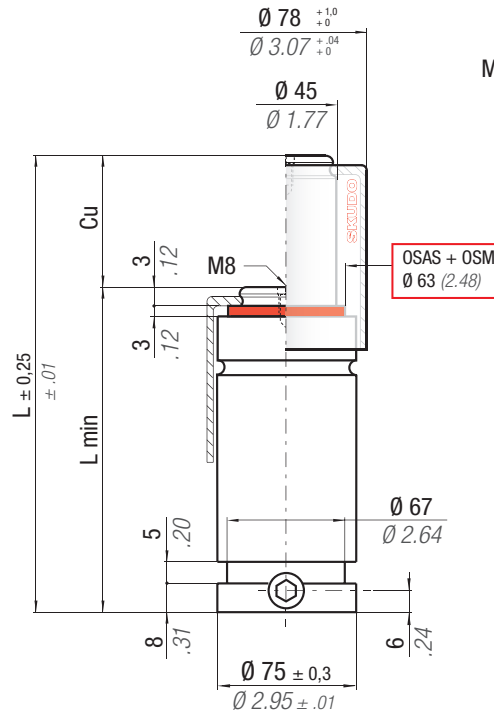
* $F1_i$ = Isothermal end force at 100% Cu p. 16

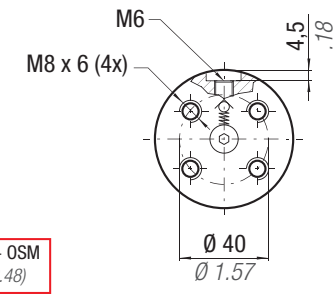
** $F1_p$ = Polytrophic end force at 100% Cu

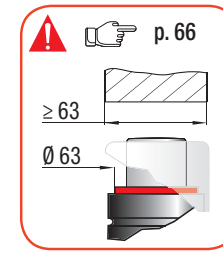
NOT FOR









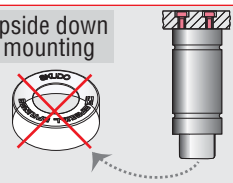


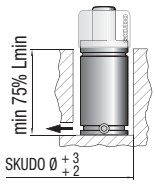
N_2	°F 32 - 176 / °C 0 - 80	ΔP	P max	P min	S	SPM	Max Speed	Maintenance kit
		± 0,33 %/°C	150 bar *2175 psi*	20 bar *290 psi*	15,90 cm² *2.465 in²*	~ 20 - 100 (at 20°C)	1,8 m/s	39BMRV02400C

CODE	Cu mm	Cu inch	L mm	L inch	L min mm	L min inch	F0 Initial force daN	F0 lb	$F1_i$ * End force daN	$F1_i$ * lb	$F1_p$ ** End force daN	$F1_p$ ** lb	V0 cm³	V0 in³	~Kg	~lb	PED 2014/68/EU
RS 2400 - 013 - A	13	0.51	77	3.03	64	2.52			3220	7238	3718	8358	93,0	5.67	1,36	3,00	✓
RS 2400 - 016 - A	16	0.63	83	3.27	67	2.64			3320	7465	3873	8707	105,0	6.41	1,40	3,09	✓
RS 2400 - 022 - A	22	0.87	95	3.74	73	2.87			3476	7814	4115	9251	129,0	7.87	1,50	3,31	✓
RS 2400 - 029 - A	29	1.14	109	4.29	80	3.15	2385 ± 5%	5362	3606	8107	4322	9716	157,0	9.58	1,61	3,55	✓
RS 2400 - 035 - A	35	1.38	121	4.76	86	3.39			3690	8296	4456	10017	181,0	11.04	1,70	3,75	✓
RS 2400 - 047 - A	47	1.85	145	5.71	98	3.86	150 bar	2175 psi	3811	8568	4651	10456	230,0	14.03	1,89	4,17	✓
RS 2400 - 060 - A	60	2.36	171	6.73	111	4.37			3900	8768	4796	10782	282,0	17.20	2,09	4,61	✓
RS 2400 - 072 - A	72	2.83	195	7.68	123	4.84			3959	8900	4892	10998	330,0	20.13	2,28	5,03	✓
RS 2400 - 077 - A	77	3.03	205	8.07	128	5.04	+ 20 °C	+68 °F	3979	8946	4925	11072	350,0	21.35	2,36	5,20	✓
RS 2400 - 097 - A	97	3.82	245	9.65	148	5.83			4042	9087	5029	11306	431,0	26.29	2,67	5,89	✓
RS 2400 - 122 - A	122	4.80	295	11.61	173	6.81			4096	9207	5117	11503	532,0	32.45	3,07	6,77	✓

WARNING
REMOVE SKUDO

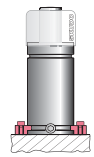
Upside down mounting





Drop-in

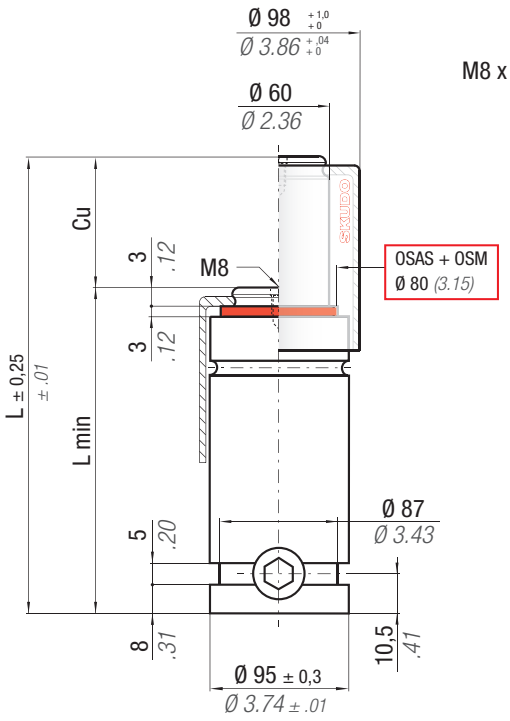
Bottom mount - FB 75
FBA 75 - FBB 75
FBC 75 - FBD 75

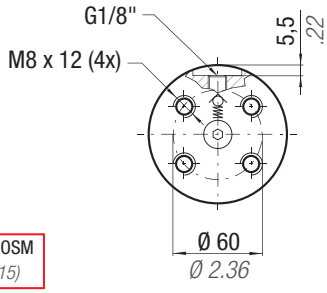


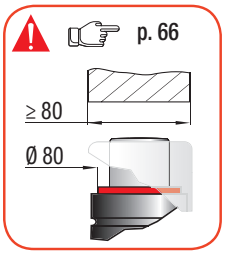
FS2 75 - FT 75
FS2A 75 - FTP 75

HOW TO ORDER

(10 pcs) RS 2400-047-A
(10 pcs) RS 2400-047-A-N







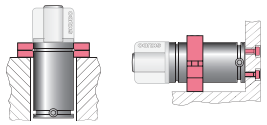
OSAS + OSM = OVER STROKE ACTIVE SAFETY + OVER STROKE MARKER

easy MANIFOLD p. 211

* $F1_i$ = Isothermal end force at 100% Cu p. 16

** $F1_p$ = Polytrophic end force at 100% Cu

NOT FOR



ACTIVE SAFETY

OSAS

USAS

OPAS

SKUDO

RS

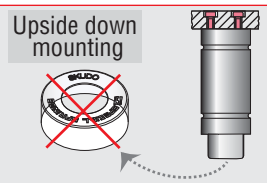
N_2	°F 32 - 176	°C 0 - 80	ΔP	P max	P min	S	SPM	Max Speed	Maintenance kit
			± 0,33 %/°C	150 bar *2175 psi*	20 bar *290 psi*	28,27 cm² *4.382 in²*	~ 20 - 100 (at 20°C)	1,8 m/s	39BMRV04200C

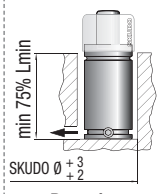
CODE	Cu mm	Cu *inch*	L mm	L *inch*	L min mm	L min *inch*	F0 Initial force daN	F0 *lb*	$F1_i$ * End force daN	$F1_i$ * *lb*	$F1_p$ ** End force daN	$F1_p$ ** *lb*	V0 cm³	V0 *in³*	~Kg	~lb	PED 2014/68/EU
RS 4200 - 013 - A	13	*0.51*	90	*3.54*	77	*3.03*	4240 ± 5%	*9532*	5633	*12664*	6471	*14547*	173,0	*10.55*	2,76	*6.08*	✓
RS 4200 - 016 - A	16	*0.63*	96	*3.78*	80	*3.15*			5823	*13090*	6761	*15199*	194,0	*11.83*	2,83	*6.24*	✓
RS 4200 - 022 - A	22	*0.87*	108	*4.25*	86	*3.39*			6125	*13771*	7232	*16258*	234,0	*14.27*	2,98	*6.57*	✓
RS 4200 - 029 - A	29	*1.14*	122	*4.80*	93	*3.66*			6390	*14365*	7650	*17198*	281,0	*17.14*	3,16	*6.97*	✓
RS 4200 - 035 - A	35	*1.38*	134	*5.28*	99	*3.90*			6566	*14761*	7931	*17830*	322,0	*19.64*	3,30	*7.28*	✓
RS 4200 - 047 - A	47	*1.85*	158	*6.22*	111	*4.37*			6827	*15347*	8351	*18774*	403,0	*24.58*	3,60	*7.94*	✓
RS 4200 - 060 - A	60	*2.36*	184	*7.24*	124	*4.88*			7024	*15790*	8673	*19498*	491,0	*29.95*	3,93	*8.66*	✓
RS 4200 - 072 - A	72	*2.83*	208	*8.19*	136	*5.35*			7158	*16091*	8893	*19992*	572,0	*34.89*	4,20	*9.26*	✓
RS 4200 - 077 - A	77	*3.03*	218	*8.58*	141	*5.55*			7204	*16195*	8970	*20165*	606,0	*36.97*	4,35	*9.59*	✓
RS 4200 - 097 - A	97	*3.82*	258	*10.16*	161	*6.34*			7350	*16524*	9212	*20709*	741,0	*45.20*	4,85	*10.69*	✓
RS 4200 - 122 - A	122	*4.80*	308	*12.13*	186	*7.32*			7476	*16807*	9423	*21184*	910,0	*55.51*	5,47	*12.06*	✓

150 bar *2175 psi*

+ 20 °C *+68 °F*

WARNING
REMOVE SKUDO





Drop-in

Bottom mount
FB 95 - FBA 95
FBB 95

FS2 95 - FT 95
FS2A 95 - FTP 95

HOW TO ORDER

(10 pcs) RS 4200-047-A

(10 pcs) RS 4200-047-A-N

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

ACTIVE SAFETY

easy MANIFOLD p. 211

OSAS

USAS

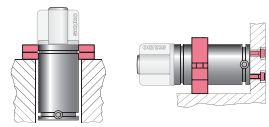
OPAS

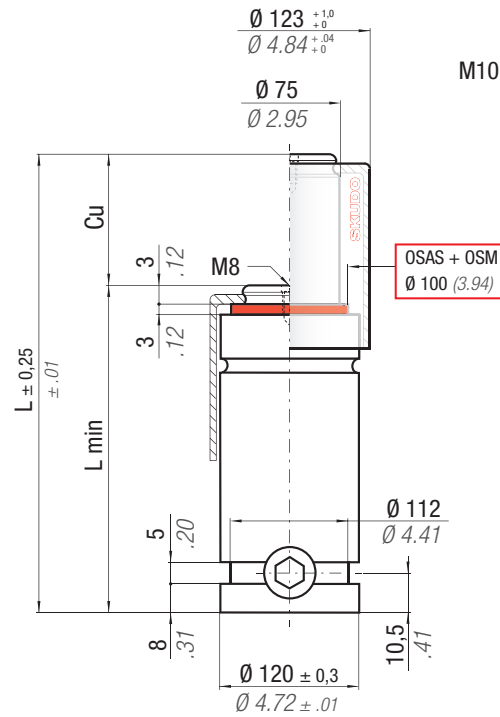
SKUDO

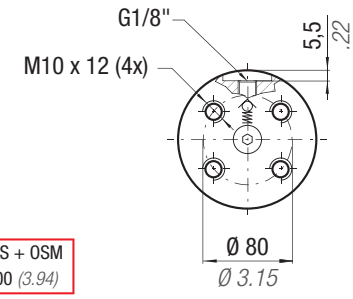
* $F1_i$ = Isothermal end force at 100% Cu p. 16

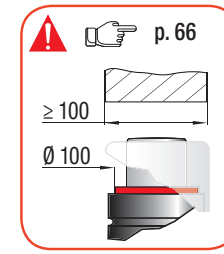
** $F1_p$ = Polytrophic end force at 100% Cu

NOT FOR







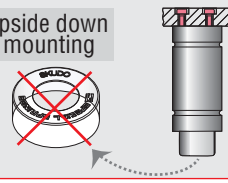


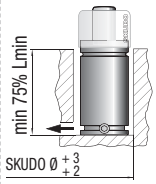
N_2	°F 32 - 176 / °C 0 - 80	ΔP	P max	P min	S	SPM	Max Speed	Maintenance kit
		± 0,33 %/°C	150 bar *2175 psi*	20 bar *290 psi*	44,18 cm² *6.848 in²*	~ 20 - 100 (at 20°C)	1,8 m/s	39BMRV06600C

CODE	Cu mm	Cu inch	L mm	L inch	L min mm	L min inch	F0 Initial force daN	F0 lb	$F1_i$ * End force daN	$F1_i$ * lb	$F1_p$ ** End force daN	$F1_p$ ** lb	V0 cm³	V0 in³	~Kg	~lb	PED 2014/68/EU
RS 6600 - 013 - A	13	0.51	100	3.94	87	3.43	6630 ± 5%	14904	8535	19187	9705	21818	300,0	18.30	5,06	11.16	✓
RS 6600 - 016 - A	16	0.63	106	4.17	90	3.54			8812	19811	10127	22766	332,0	20.25	5,17	11.40	✓
RS 6600 - 022 - A	22	0.87	118	4.65	96	3.78			9265	20829	10824	24333	396,0	24.16	5,42	11.95	✓
RS 6600 - 029 - A	29	1.14	132	5.20	103	4.06			9671	21742	11458	25759	471,0	28.73	5,69	12.54	✓
RS 6600 - 035 - A	35	1.38	144	5.67	109	4.29			9946	22360	11892	26734	535,0	32.64	5,93	13.07	✓
RS 6600 - 047 - A	47	1.85	168	6.61	121	4.76	150 bar	2175 psi	10362	23296	12557	28229	663,0	40.44	6,40	14.11	✓
RS 6600 - 060 - A	60	2.36	194	7.64	134	5.28			10684	24018	13077	29398	802,0	48.92	6,90	15.21	✓
RS 6600 - 072 - A	72	2.83	218	8.58	146	5.75			10905	24515	13438	30210	930,0	56.73	7,40	16.31	✓
RS 6600 - 077 - A	77	3.03	228	8.98	151	5.94	+ 20 °C	+68 °F	10982	24689	13564	30493	983,0	59.96	7,60	16.76	✓
RS 6600 - 097 - A	97	3.82	268	10.55	171	6.73			11229	25243	13970	31406	1197,0	73.02	8,40	18.52	✓
RS 6600 - 122 - A	122	4.80	318	12.52	196	7.72			11443	25726	14326	32206	1464,0	89.30	9,40	20.72	✓

WARNING
REMOVE SKUDO

Upside down mounting





Drop-in

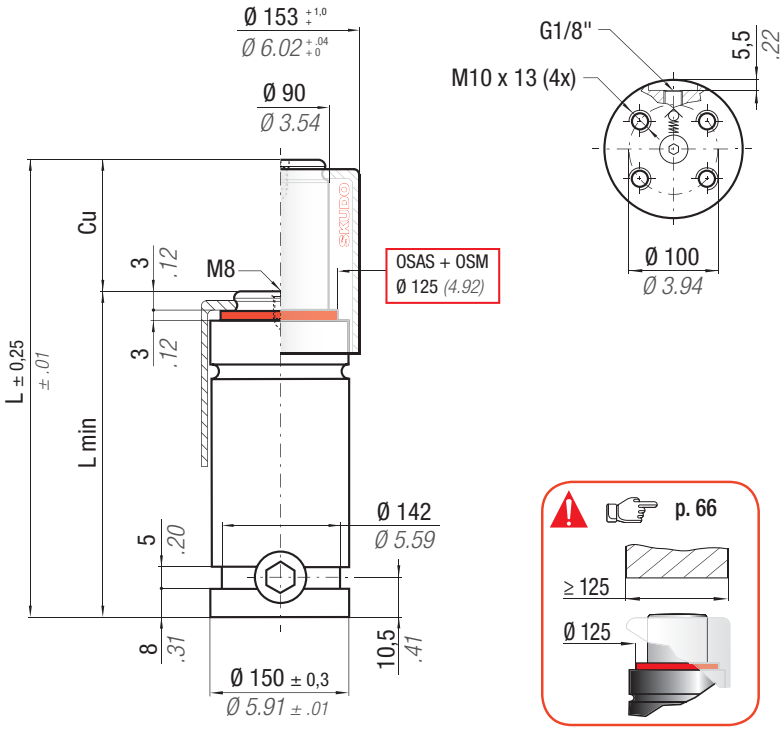
Bottom mount
FB 120 - FBA 120
FBB 120

FS2 120-FT 120
FS2A 120-FTP 120

HOW TO ORDER

(10 pcs) RS 6600-047-A

(10 pcs) RS 6600-047-A-N



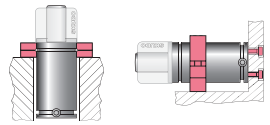
OSAS + OSM = OVER STROKE ACTIVE SAFETY + OVER STROKE MARKER

easy MANIFOLD p. 211

* $F1_i$ = Isothermal end force at 100% Cu p. 16

** $F1_p$ = Polytrophic end force at 100% Cu

NOT FOR



ACTIVE SAFETY

OSAS

USAS

OPAS

SKUDO

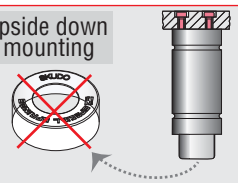
RS

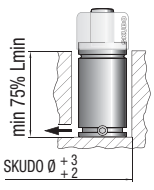
N_2	°F 32 - 176	°C 0 - 80	ΔP	P max	P min	S	SPM	Max Speed	Maintenance kit
			± 0,33 %/°C	150 bar *2175 psi*	20 bar *290 psi*	63,62 cm² *9.861 in²*	~ 20 - 100 (at 20°C)	1,8 m/s	39BMRV09500C

CODE	Cu mm	Cu *inch*	L mm	L *inch*	L min mm	L min *inch*	F0 Initial force daN	F0 *lb*	$F1_i$ * End force daN	$F1_i$ * *lb*	$F1_p$ ** End force daN	$F1_p$ ** *lb*	V0 cm³	V0 *in³*	~Kg	~lb	PED 2014/68/EU
RS 9500 - 016 - A	16	*0.63*	116	*4.57*	100	*3.94*			12388	*27849*	14124	*31752*	517,0	*31.54*	9,51	*20.97*	✓
RS 9500 - 022 - A	22	*0.87*	128	*5.04*	106	*4.17*			12985	*29192*	15035	*33800*	614,0	*37.45*	9,90	*21.83*	✓
RS 9500 - 029 - A	29	*1.14*	142	*5.59*	113	*4.45*	9540	*21446*	13523	*30401*	15867	*35670*	727,0	*44.35*	10,30	*22.71*	✓
RS 9500 - 035 - A	35	*1.38*	154	*6.06*	119	*4.69*	± 5%		13888	*31222*	16439	*36956*	823,0	*50.20*	10,70	*23.59*	✓
RS 9500 - 047 - A	47	*1.85*	178	*7.01*	131	*5.16*			14443	*32470*	17317	*38930*	1017,0	*62.04*	11,40	*25.13*	✓
RS 9500 - 060 - A	60	*2.36*	204	*8.03*	144	*5.67*	150 bar		14873	*33436*	18004	*40475*	1226,0	*74.79*	12,20	*26.90*	✓
RS 9500 - 072 - A	72	*2.83*	228	*8.98*	156	*6.14*	*2175 psi*		15170	*34104*	18483	*41551*	1420,0	*86.62*	13,00	*28.66*	✓
RS 9500 - 077 - A	77	*3.03*	238	*9.37*	161	*6.34*	+ 20 °C *+68 °F*		15274	*34337*	18651	*41929*	1500,3	*91.52*	13,30	*29.32*	✓
RS 9500 - 097 - A	97	*3.82*	278	*10.94*	181	*7.13*			15606	*35083*	19191	*43143*	1823,0	*111.20*	14,60	*32.19*	✓
RS 9500 - 122 - A	122	*4.80*	328	*12.91*	206	*8.11*			15896	*35735*	19666	*44211*	2226,0	*135.79*	16,10	*35.49*	✓

WARNING
REMOVE SKUDO

Upside down mounting





Drop-in

Bottom mount
FB 150 - FBA 150
FBB 150 - FBD 150

FS2 150-FT 150
FS2A 150-FTP 150

HOW TO ORDER

(10 pcs) RS 9500-047-A
(10 pcs) RS 9500-047-A-N