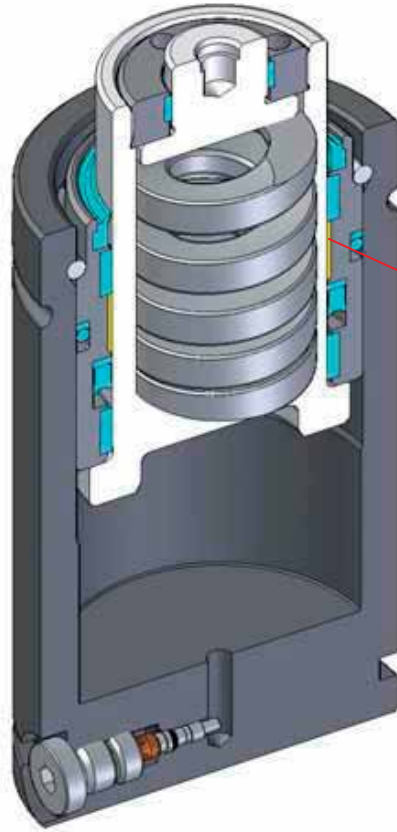


LS – INFO

Zerowa siła początkowa
Zero force on contact

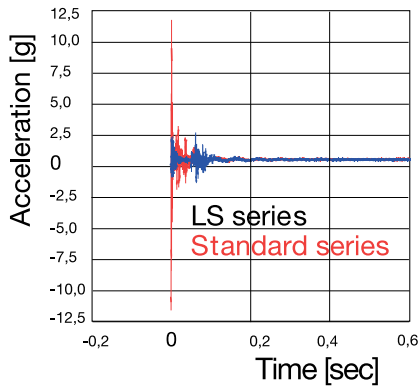


Permanent
Lubrication
on the
Rod

**-50%
vibrations**

**-55%
noise**

INITIAL IMPACT VIBRATIONS



FORCE CURVE

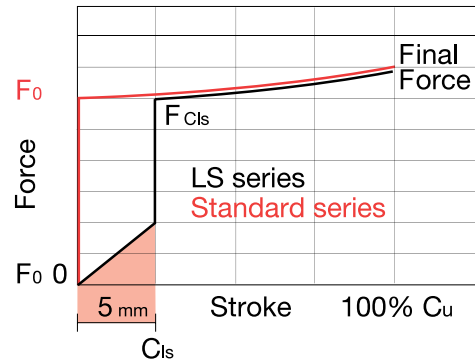
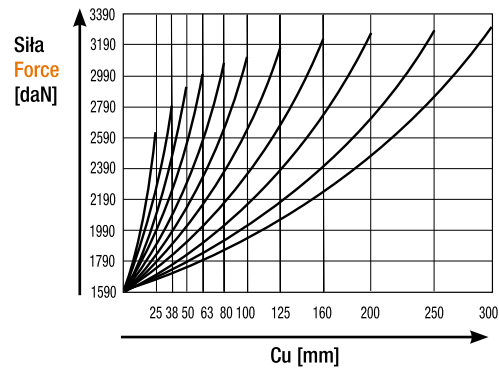
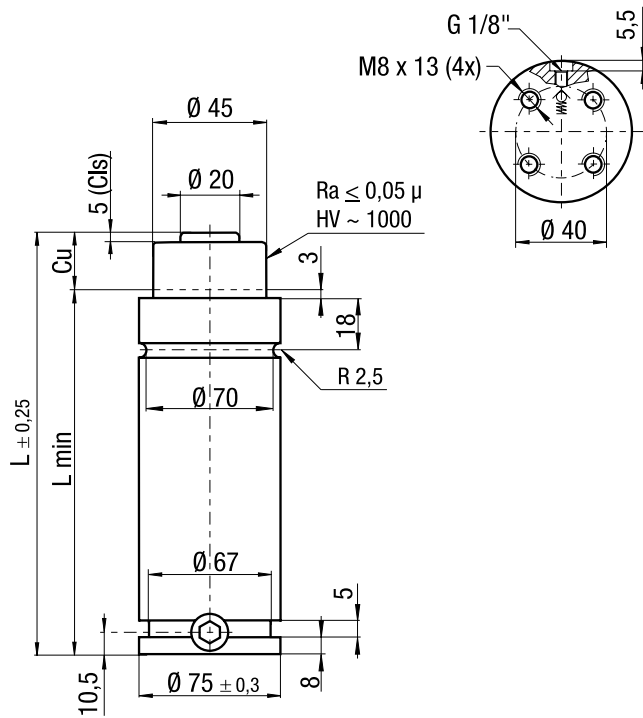


Tabela zakresów / Range chart

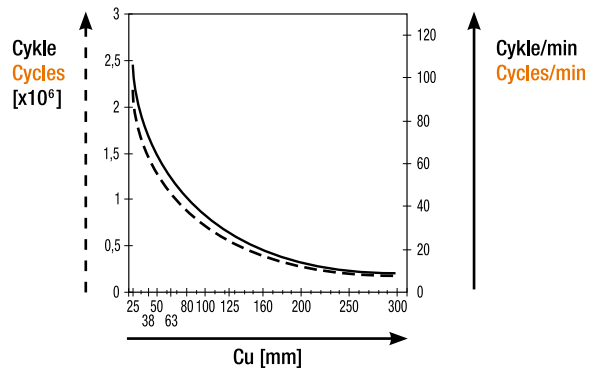
Model / Model	Korpus / Body Ø mm	Skok / Stroke Cu mm	Siła początkowa Initial Force F ₀ daN	lifepius concept		
				SKUDO	OSAS	OPAS
LS 1500	75	25 - 300	1590	-	-	-
LS 2400	75	25 - 300	2385	-	-	-
LS 3000	95	25 - 300	2830	-	-	-
LS 4200	95	25 - 300	4240	-	-	-
LS 5000	120	25 - 300	4418	-	-	-
LS 6600	120	25 - 300	6630	-	-	-
LS 7500	150	25 - 300	7630	-	-	-
LS 9500	150	25 - 300	9540	-	-	-

Zerowa siła początkowa
Zero force on contact

LS 1500

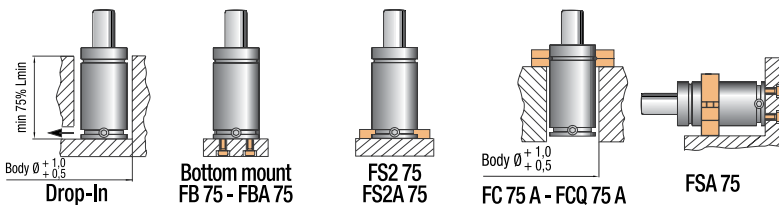


Polytropic end forces



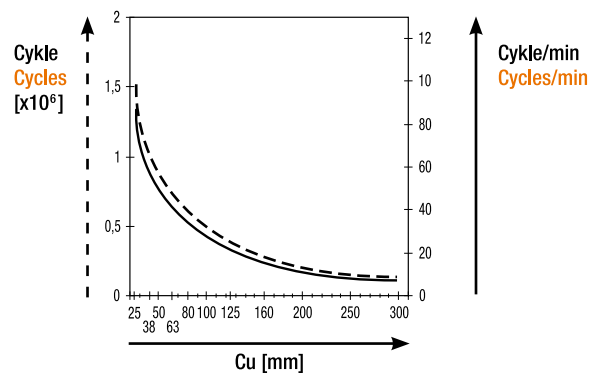
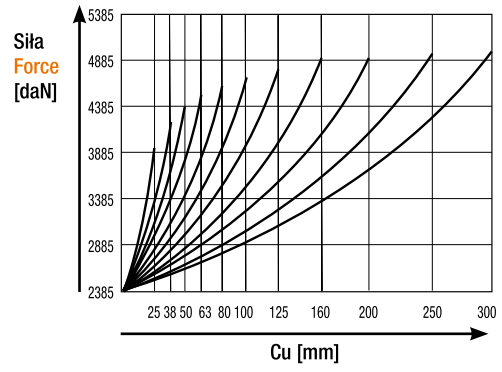
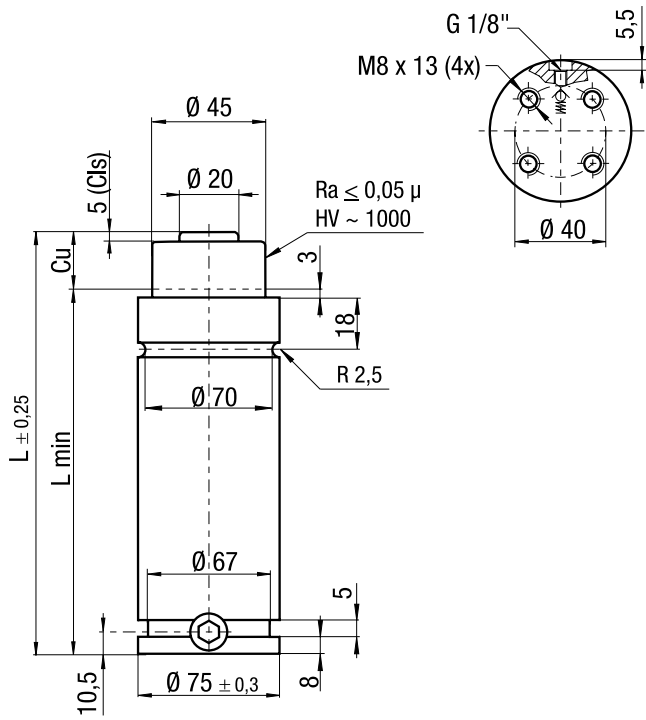
Max Speed 1,8 m/s	°C 0÷80	N₂	P_{max} 100 bar	P_{min} 20 bar	S 15,9 cm ²		Maintenance kit 39BMLS01500A	
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Nr kat. / Item no.	C _u mm	L mm	L _{min} mm	F ₀ daN	F _{Clis} daN	V ₀ cm ³	kg	Nr kat. / Item no.
LS 1500 - 025 - A	25	160	135	0 (+20°C, 100 bar)	1590 (+20°C, 100 bar)	126,0	3,71	LS 1500 - 025 - A - N
LS 1500 - 038 - A	38	186	148			174,0	3,79	LS 1500 - 038 - A - N
LS 1500 - 050 - A	50	210	160			218,0	3,89	LS 1500 - 050 - A - N
LS 1500 - 063 - A	63,5	237	173,5			268,0	4,48	LS 1500 - 063 - A - N
LS 1500 - 080 - A	80	270	190			329,0	4,73	LS 1500 - 080 - A - N
LS 1500 - 100 - A	100	310	210			403,0	4,89	LS 1500 - 100 - A - N
LS 1500 - 125 - A	125	360	235			495,0	5,57	LS 1500 - 125 - A - N
LS 1500 - 160 - A	160	430	270			624,0	6,33	LS 1500 - 160 - A - N
LS 1500 - 200 - A	200	510	310			771,0	7,19	LS 1500 - 200 - A - N
LS 1500 - 250 - A	250	610	360			955,0	9,19	LS 1500 - 250 - A - N
LS 1500 - 300 - A	300	710	410			1139,0	11,04	LS 1500 - 300 - A - N



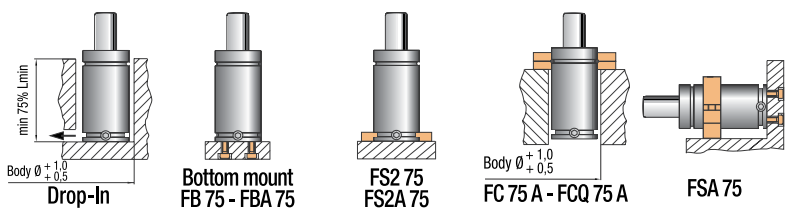
LS 2400

Zerowa siła początkowa
Zero force on contact



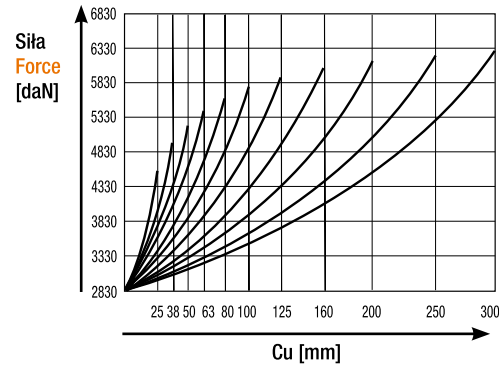
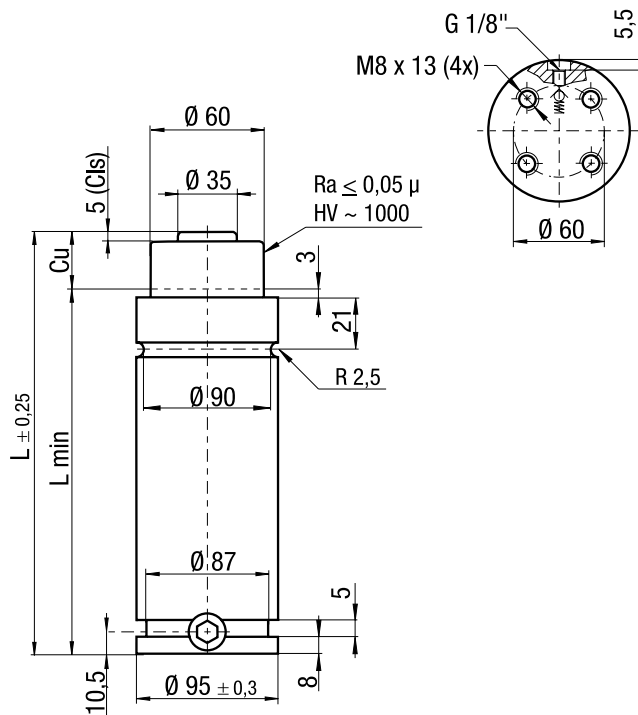
Max Speed 1,8 m/s	°C 0÷80	N₂	P max 150 bar	P min 20 bar	S 15,9 cm ²	Maintenance kit 39BMLS01500A	lifeplus concept
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Nr kat. / Item no.	C _u mm	L mm	L _{min} mm	F ₀ daN	F _{Clis} daN	V ₀ cm ³	kg	Nr kat. / Item no.
LS 2400 - 025 - A	25	160	135	0 (+20°C, 150 bar)	2385 (+20°C, 150 bar)	126,0	3,71	LS 2400 - 025 - A - N
LS 2400 - 038 - A	38	186	148			174,0	3,79	LS 2400 - 038 - A - N
LS 2400 - 050 - A	50	210	160			218,0	3,89	LS 2400 - 050 - A - N
LS 2400 - 063 - A	63,5	237	173,5			268,0	4,48	LS 2400 - 063 - A - N
LS 2400 - 080 - A	80	270	190			329,0	4,73	LS 2400 - 080 - A - N
LS 2400 - 100 - A	100	310	210			403,0	4,89	LS 2400 - 100 - A - N
LS 2400 - 125 - A	125	360	235			495,0	5,57	LS 2400 - 125 - A - N
LS 2400 - 160 - A	160	430	270			624,0	6,33	LS 2400 - 160 - A - N
LS 2400 - 200 - A	200	510	310			771,0	7,19	LS 2400 - 200 - A - N
LS 2400 - 250 - A	250	610	360			955,0	9,19	LS 2400 - 250 - A - N
LS 2400 - 300 - A	300	710	410			1139,0	11,04	LS 2400 - 300 - A - N

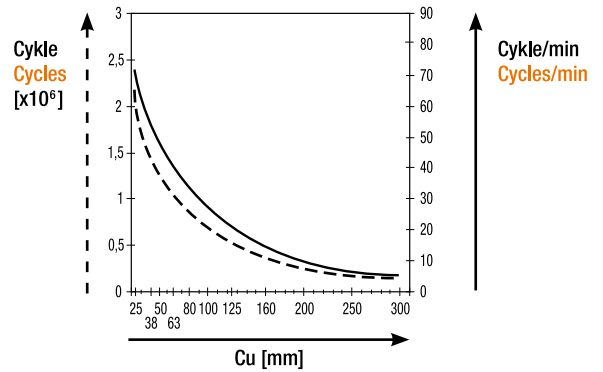


Zerowa siła początkowa
Zero force on contact

LS 3000

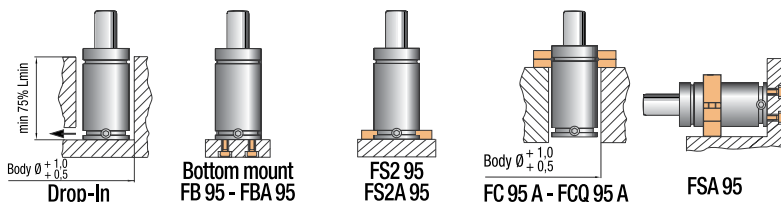


Politropowa siła końcowa
Polytropic end forces



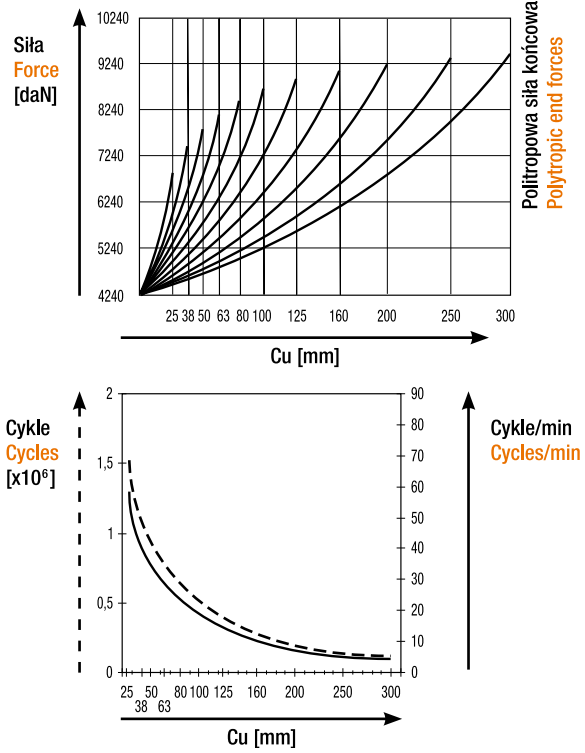
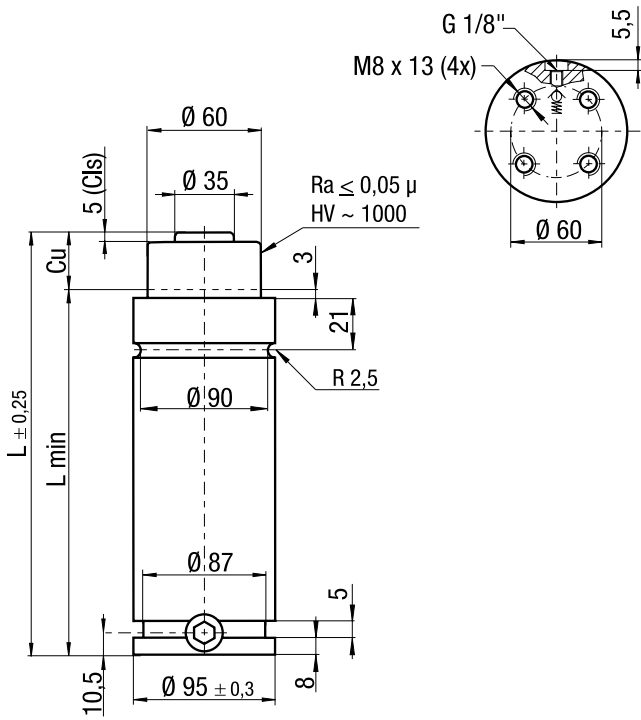
Max Speed 1,8 m/s	°C 0÷80	N₂	P_{max} 100 bar	P_{min} 20 bar	S 28,27 cm ²		Maintenance kit 39BMLS03000A	
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Nr kat. / Item no.	C _u mm	L mm	L _{min} mm	F ₀ daN	F _{Cis} daN	V ₀ cm ³	kg	Nr kat. / Item no.
LS 3000 - 025 - A	25	170	145	0 (+20°C, 100 bar)	2830 (+20°C, 100 bar)	195,0	5,69	LS 3000 - 025 - A - N
LS 3000 - 038 - A	38	196	158			274,0	6,48	LS 3000 - 038 - A - N
LS 3000 - 050 - A	50	220	170			347,0	6,77	LS 3000 - 050 - A - N
LS 3000 - 063 - A	63,5	247	183,5			429,0	6,84	LS 3000 - 063 - A - N
LS 3000 - 080 - A	80	280	200			529,0	7,23	LS 3000 - 080 - A - N
LS 3000 - 100 - A	100	320	220			650,0	7,95	LS 3000 - 100 - A - N
LS 3000 - 125 - A	125	370	245			801,0	9,58	LS 3000 - 125 - A - N
LS 3000 - 160 - A	160	440	280			1013,0	10,89	LS 3000 - 160 - A - N
LS 3000 - 200 - A	200	520	320			1256,0	11,03	LS 3000 - 200 - A - N
LS 3000 - 250 - A	250	620	370			1559,0	12,06	LS 3000 - 250 - A - N
LS 3000 - 300 - A	300	720	420	1859,0	13,02	LS 3000 - 300 - A - N		



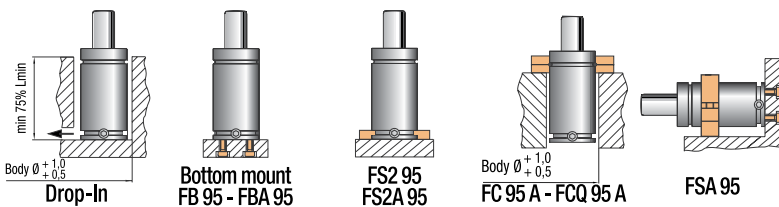
LS 4200

Zerowa siła początkowa
Zero force on contact



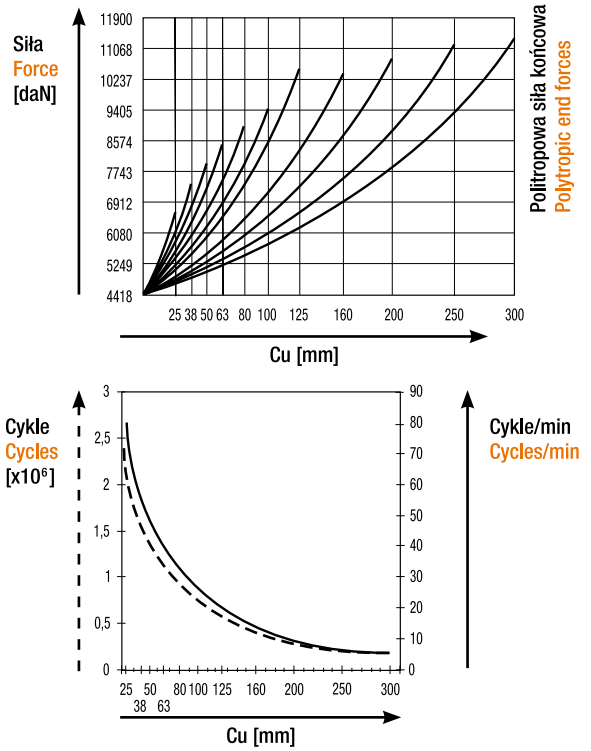
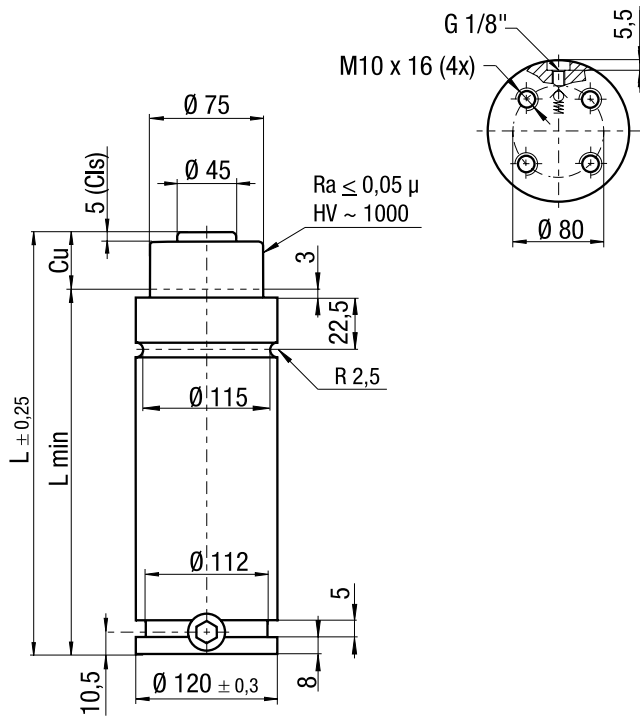
Max Speed 1,8 m/s	°C 0÷80	N₂	P max 150 bar	P min 20 bar	S 28,27 cm ²	Maintenance kit 39BMLS03000A	lifeplus concept
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Nr kat. / Item no.	C_u mm	L mm	L_{min} mm	F_0 daN	$F_{Cl.s}$ daN	V_0 cm ³	kg	Nr kat. / Item no.
LS 4200 - 025 - A	25	170	145	0 (+20°C, 150 bar)	4240 (+20°C, 150 bar)	195,0	5,69	LS 4200 - 025 - A - N
LS 4200 - 038 - A	38	196	158			274,0	6,48	LS 4200 - 038 - A - N
LS 4200 - 050 - A	50	220	170			347,0	6,77	LS 4200 - 050 - A - N
LS 4200 - 063 - A	63,5	247	183,5			429,0	6,84	LS 4200 - 063 - A - N
LS 4200 - 080 - A	80	280	200			529,0	7,23	LS 4200 - 080 - A - N
LS 4200 - 100 - A	100	320	220			650,0	7,95	LS 4200 - 100 - A - N
LS 4200 - 125 - A	125	370	245			801,0	9,58	LS 4200 - 125 - A - N
LS 4200 - 160 - A	160	440	280			1013,0	10,89	LS 4200 - 160 - A - N
LS 4200 - 200 - A	200	520	320			1256,0	11,03	LS 4200 - 200 - A - N
LS 4200 - 250 - A	250	620	370			1559,0	12,06	LS 4200 - 250 - A - N
LS 4200 - 300 - A	300	720	420	1859,0	13,02	LS 4200 - 300 - A - N		



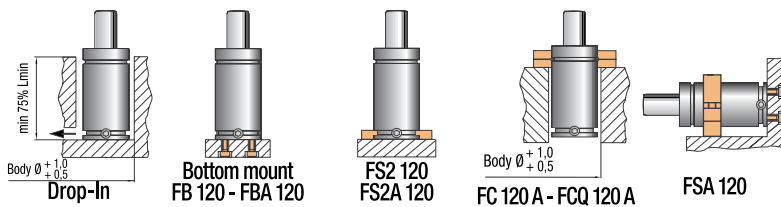
Zerowa siła początkowa
Zero force on contact

LS 5000



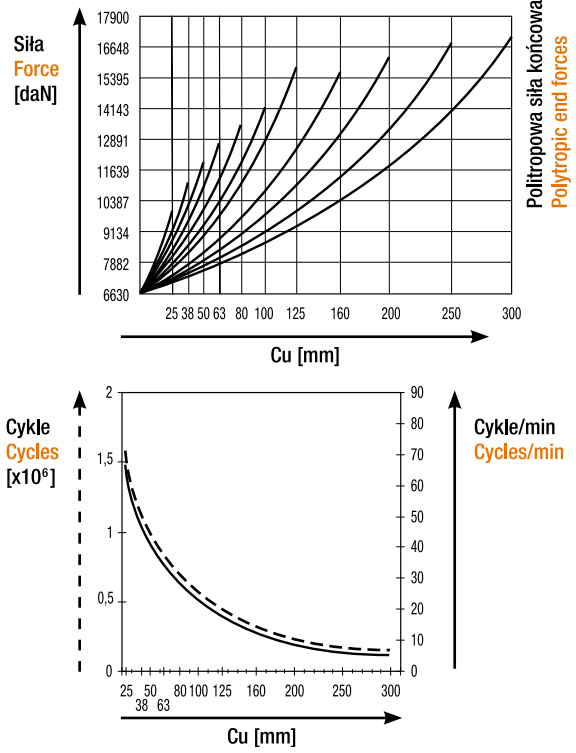
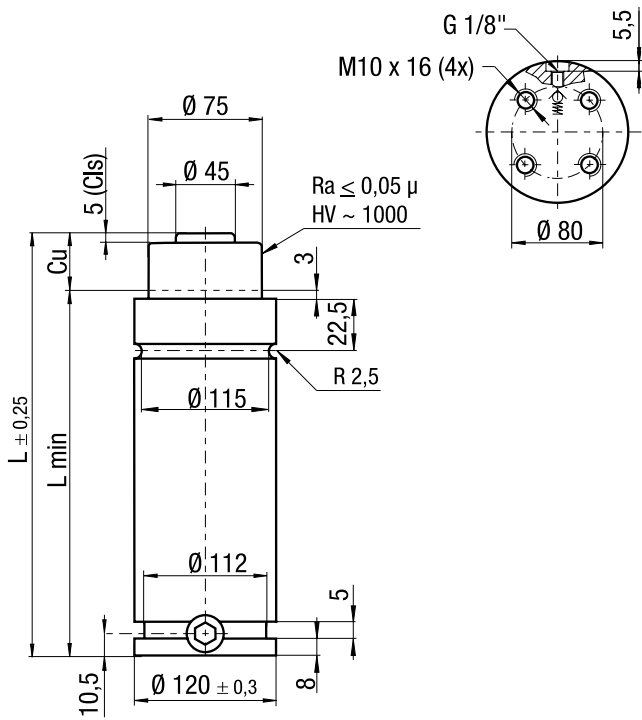
Max Speed 1,8 m/s	°C 0÷80	N₂	P max 100 bar	P min 20 bar	S 44,18 cm ²		Maintenance kit 39BMLS05000A	
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Nr kat. / Item no.	C _u mm	L mm	L _{min} mm	F ₀ daN	F _{Clis} daN	V ₀ cm ³	kg	Nr kat. / Item no.
LS 5000 - 025 - A	25	190	165	0 (+20°C, 100 bar)	4418 (+20°C, 100 bar)	353,0	10,60	LS 5000 - 025 - A - N
LS 5000 - 038 - A	38	216	178			471,0	12,00	LS 5000 - 038 - A - N
LS 5000 - 050 - A	50	240	190			580,0	13,20	LS 5000 - 050 - A - N
LS 5000 - 063 - A	63,5	267	203,5			697,0	13,60	LS 5000 - 063 - A - N
LS 5000 - 080 - A	80	300	220			851,0	14,10	LS 5000 - 080 - A - N
LS 5000 - 100 - A	100	340	240			1032,0	15,40	LS 5000 - 100 - A - N
LS 5000 - 125 - A	125	390	265			1259,0	16,90	LS 5000 - 125 - A - N
LS 5000 - 160 - A	160	460	300			1575,0	18,70	LS 5000 - 160 - A - N
LS 5000 - 200 - A	200	540	340			1937,0	21,70	LS 5000 - 200 - A - N
LS 5000 - 250 - A	250	640	390			2390,0	24,80	LS 5000 - 250 - A - N
LS 5000 - 300 - A	300	740	440			2843,0	28,00	LS 5000 - 300 - A - N



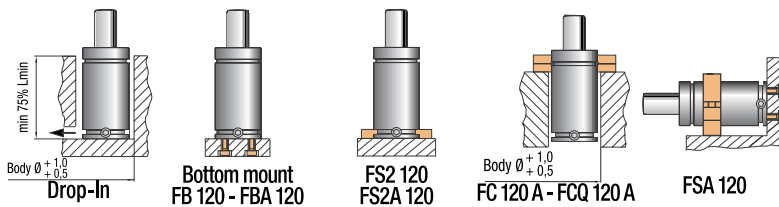
LS 6600

Zerowa siła początkowa
Zero force on contact



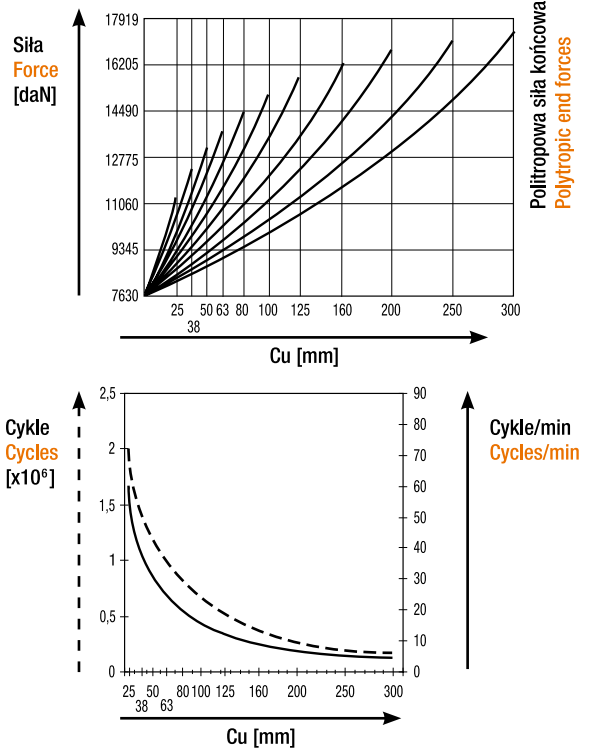
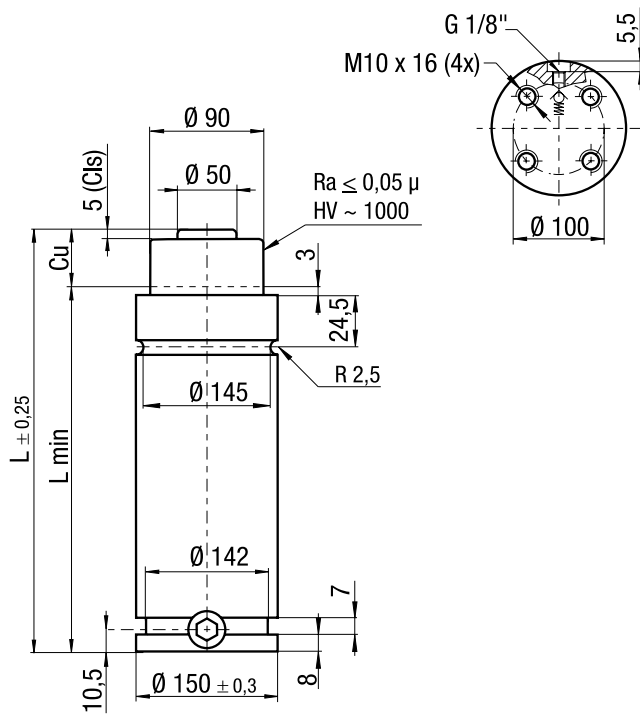
Max Speed 1,8 m/s	°C 0÷80	N₂	P max 150 bar	P min 20 bar	S 44,18 cm ²	Maintenance kit 39BMLS05000A	lifeplus concept
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Nr kat. / Item no.	Cu mm	L mm	L _{min} mm	F ₀ daN	F _{Cl_s} daN	V ₀ cm ³	kg	Nr kat. / Item no.
LS 6600 - 025 - A	25	190	165	0 (+20°C, 150 bar)	6630 (+20°C, 150 bar)	353,0	10,60	LS 6600 - 025 - A - N
LS 6600 - 038 - A	38	216	178			471,0	12,00	LS 6600 - 038 - A - N
LS 6600 - 050 - A	50	240	190			580,0	13,20	LS 6600 - 050 - A - N
LS 6600 - 063 - A	63,5	267	203,5			697,0	13,60	LS 6600 - 063 - A - N
LS 6600 - 080 - A	80	300	220			851,0	14,10	LS 6600 - 080 - A - N
LS 6600 - 100 - A	100	340	240			1032,0	15,40	LS 6600 - 100 - A - N
LS 6600 - 125 - A	125	390	265			1259,0	16,90	LS 6600 - 125 - A - N
LS 6600 - 160 - A	160	460	300			1575,0	18,70	LS 6600 - 160 - A - N
LS 6600 - 200 - A	200	540	340			1937,0	21,70	LS 6600 - 200 - A - N
LS 6600 - 250 - A	250	640	390			2390,0	24,80	LS 6600 - 250 - A - N
LS 6600 - 300 - A	300	740	440			2843,0	28,00	LS 6600 - 300 - A - N



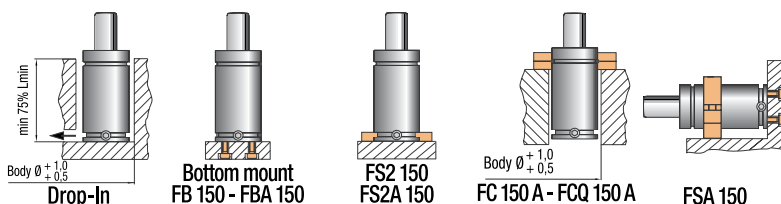
Zerowa siła początkowa
Zero force on contact

LS 7500



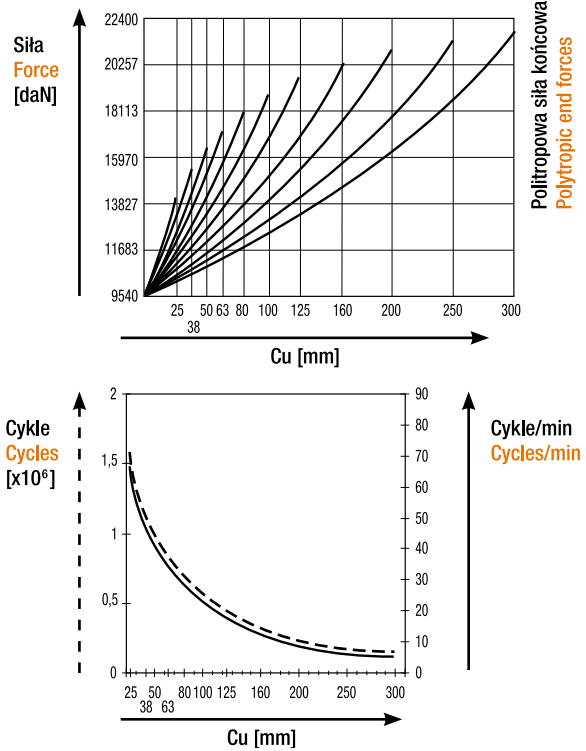
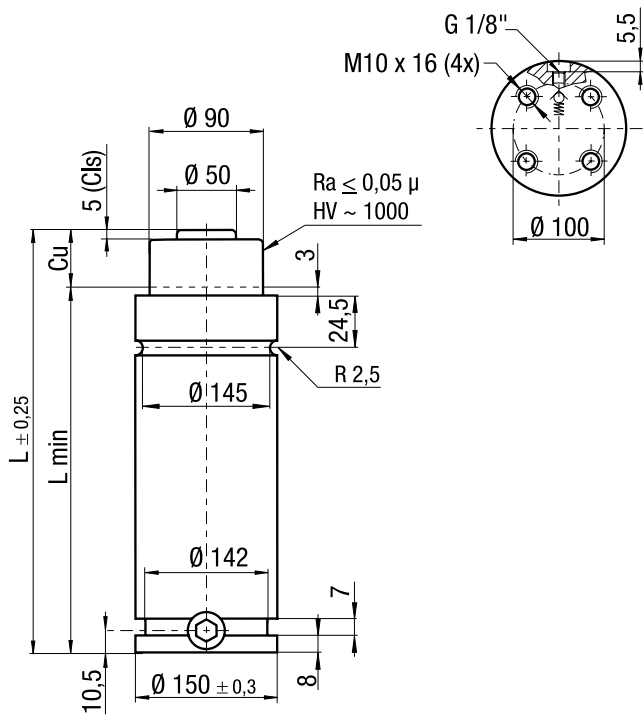
Max Speed 1,8 m/s	°C 0÷80	N₂	P max 120 bar	P min 20 bar	S 63,61 cm ²		Maintenance kit 39BMLS07500A	
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Nr kat. / Item no.	C _u mm	L mm	L _{min} mm	F ₀ daN	F _{Cis} daN	V ₀ cm ³	kg	Nr kat. / Item no.
LS 7500 - 025 - A	25	205	180	0 (+20°C, 120 bar)	7630 (+20°C, 120 bar)	654,0	19,95	LS 7500 - 025 - A - N
LS 7500 - 038 - A	38	231	193			839,0	21,15	LS 7500 - 038 - A - N
LS 7500 - 050 - A	50	255	205			1010,0	21,95	LS 7500 - 050 - A - N
LS 7500 - 063 - A	63,5	282	218,5			1195,0	22,75	LS 7500 - 063 - A - N
LS 7500 - 080 - A	80	315	235			1437,0	24,55	LS 7500 - 080 - A - N
LS 7500 - 100 - A	100	355	255			1723,0	26,25	LS 7500 - 100 - A - N
LS 7500 - 125 - A	125	405	280			2079,0	28,15	LS 7500 - 125 - A - N
LS 7500 - 160 - A	160	475	315			2587,0	31,55	LS 7500 - 160 - A - N
LS 7500 - 200 - A	200	555	355			3148,0	35,15	LS 7500 - 200 - A - N
LS 7500 - 250 - A	250	655	405			3861,0	38,65	LS 7500 - 250 - A - N
LS 7500 - 300 - A	300	755	455			4573,0	42,55	LS 7500 - 300 - A - N



LS 9500

Zerowa siła początkowa
Zero force on contact



Max Speed 1,8 m/s	°C 0÷80	N₂	P max 150 bar	P min 20 bar	S 63,61 cm ²		Maintenance kit 39BMLS07500A	
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Nr kat. / Item no.	Cu mm	L mm	L _{min} mm	F ₀ daN	F _{cts} daN	V ₀ cm ³	kg	Nr kat. / Item no.
LS 9500 - 025 - A	25	205	180	0 (+20°C, 150 bar)	9540 (+20°C, 150 bar)	654,0	19,95	LS 9500 - 025 - A - N
LS 9500 - 038 - A	38	231	193			839,0	21,15	LS 9500 - 038 - A - N
LS 9500 - 050 - A	50	255	205			1010,0	21,95	LS 9500 - 050 - A - N
LS 9500 - 063 - A	63,5	282	218,5			1195,0	22,75	LS 9500 - 063 - A - N
LS 9500 - 080 - A	80	315	235			1437,0	24,55	LS 9500 - 080 - A - N
LS 9500 - 100 - A	100	355	255			1723,0	26,25	LS 9500 - 100 - A - N
LS 9500 - 125 - A	125	405	280			2079,0	28,15	LS 9500 - 125 - A - N
LS 9500 - 160 - A	160	475	315			2587,0	31,55	LS 9500 - 160 - A - N
LS 9500 - 200 - A	200	555	355			3148,0	35,15	LS 9500 - 200 - A - N
LS 9500 - 250 - A	250	655	405			3861,0	38,65	LS 9500 - 250 - A - N
LS 9500 - 300 - A	300	755	455			4573,0	42,55	LS 9500 - 300 - A - N

