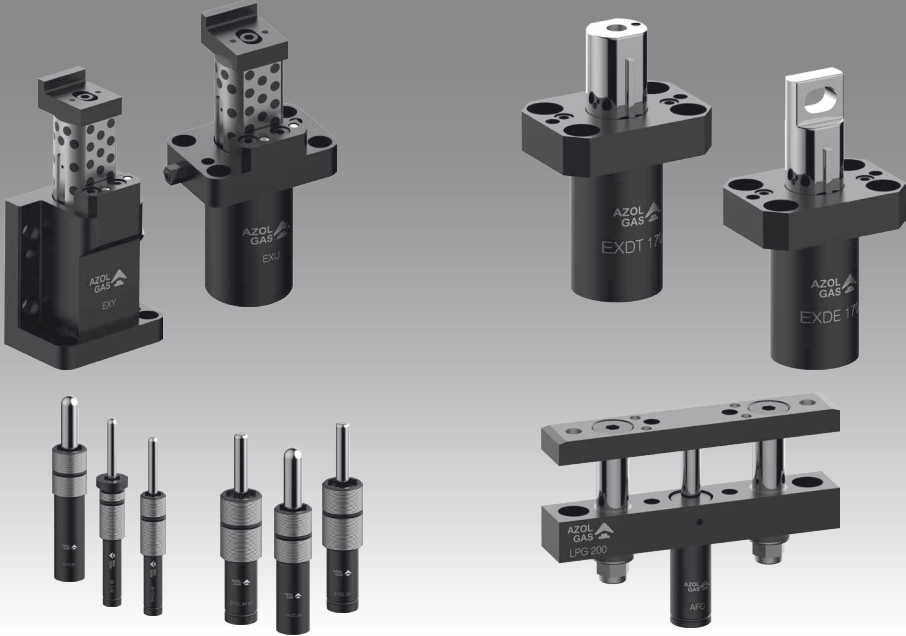




LIFTERS & STRIPPERS



SERIES MB/MP - EF - EX - EXD/LPG

Looking for lifting or stripping parts solutions in forming applications?

AZOLGAS provides you stock lifing/flange stripping/part ejection solutions:

- Long service life
- Safety featured
- Cost effective
- Easy installation

EF_

Nitrogen Gas Strippers are intended to be used for part ejection replacing conventional coil springs.

AZOLGAS EF Gas Strippers are designed to meet longer service life, safety and easy installation.



GAS STRIPPERS

M_

Spring Plungers are applied when requested small force part ejection.

Find the right solution to your needs by AZOLGAS wide range of Spring Plungers MB-MP.



SPRING PLUNGERS

EX_

Flange Strippers are widely used for stripping parts on flanging dies operations.

Release the part from the tool in a smooth way.

Make sure the right choice to meet automotive standards by using AZOLGAS EX Flange Strippers.



FLANGE STRIPPERS

EXD_

AZOLGAS EXD nitrogen Stock Lifters are Ideal to be used in progressive dies.

AZOLGAS LPG nitrogen Guided Stock Lifters are recommended to progressive dies for lifting and work holding applications.

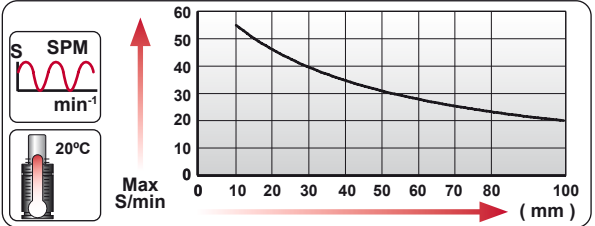
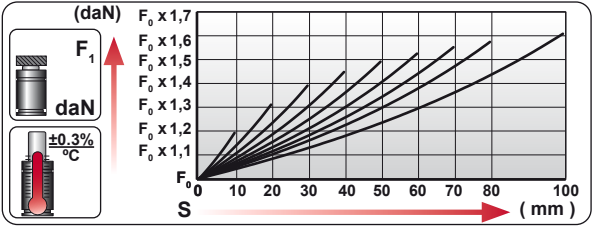
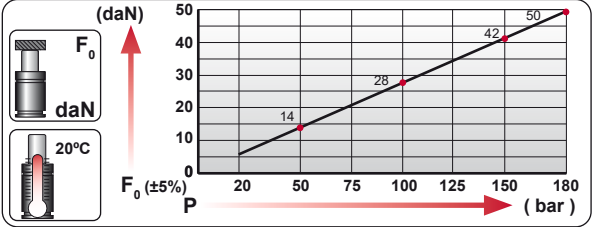
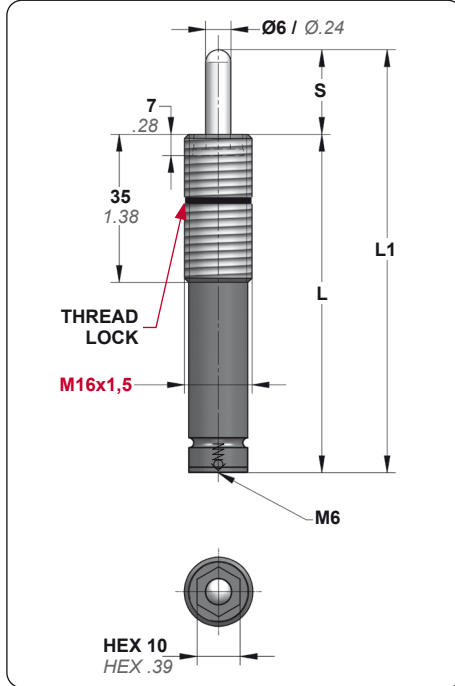


STOCK LIFTERS

EFG 16

Gas Strippers

BMW B2 4036	FORD W-DX35-6030
MB B8 0820 100 000 002	GM 90.25
VW 39D 549	



VDI SAFETY

STANDARS

ORDER	S		L1 ±0.25		L			
	mm	inch	mm	inch	mm	inch	Kg.	lb
EFG 16 ... 010	10	0.39	80	3.15	70	2.76	0.06	0.13
EFG 16 ... 020	20	0.79	100	3.94	80	3.15	0.07	0.15
EFG 16 ... 030	30	1.18	120	4.72	90	3.54	0.08	0.18
EFG 16 ... 040	40	1.57	140	5.51	100	3.94	0.08	0.18
EFG 16 ... 050	50	1.97	160	6.30	110	4.33	0.09	0.20
EFG 16 ... 060	60	2.36	180	7.09	120	4.72	0.09	0.20
EFG 16 ... 070	70	2.76	200	7.87	130	5.12	0.10	0.22
EFG 16 ... 080	80	3.15	220	8.66	140	5.51	0.11	0.24
EFG 16 ... 100	100	3.94	260	10.24	160	6.30	0.12	0.26

ORDER	COLOR	P	
		bar	psi
EFG 16 6 050	Green	20	290
EFG 16 11 050	Blue	40	580
EFG 16 21 050	Red	75	1090
EFG 16 42 050	Yellow	150	2175
EFG 16 XX 050	Black	20-180	290-2610

ORDER	F ₀ Initial Force ±5% 20°C 68°F		F ₁ (ISOTHERMAL) End Force	
	daN	lb	daN	lb
	EFG 16 6 050	6	13	9
EFG 16 11 050	11	25	16	36
EFG 16 21 050	21	47	31	70
EFG 16 42 050	42	94	62	139
EFG 16 XX 050	6-50	13-112	8-105	18-236

MOUNTING OPTIONS

Top Mount **E23-016** 607

HOW TO ORDER

ASSEMBLY TOOL OPTION

LPT 10

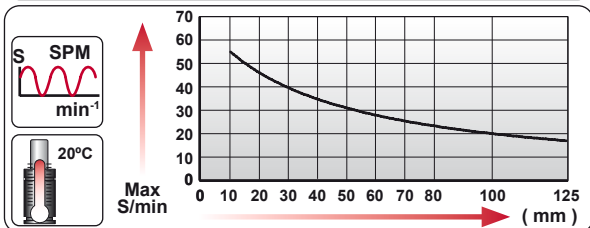
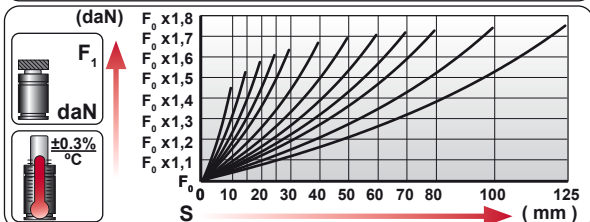
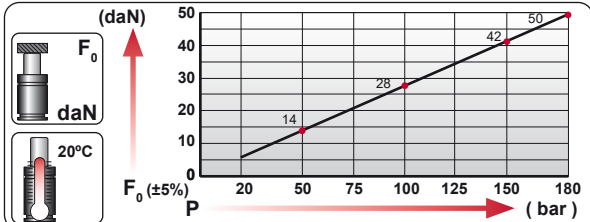
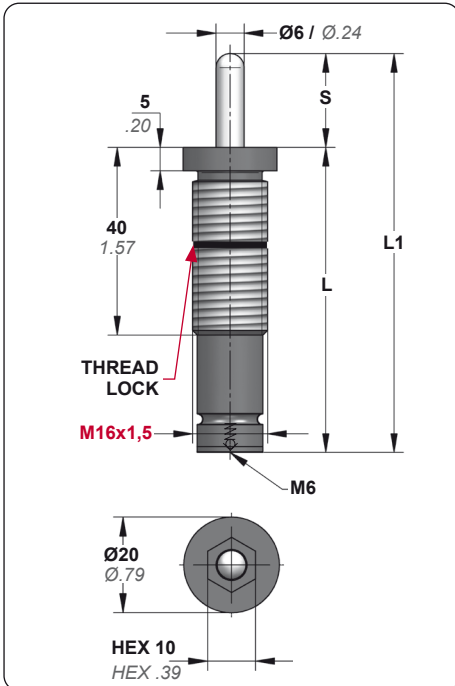
HOW TO ORDER

TECHNICAL DATA					
Fluid	N ₂	Pmin Pmax 20°C / 68°F	20 bar 180 bar 290 psi 2610 psi	Charging Adapter	06 CG 2-Q
Smax	< 90%	Tmin Tmax	0 °C 80 °C 32 °F 176 °F	Connection	X
Vmax	1,6 m/s	Force variation by temperature	±0,3% / °C	Cartridge Kit	X



	GM	90.80
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EFT 16
Gas Strippers



VDI SAFETY

STANDARS



ORDER	S		L1 ±0.25		L		Kg. lb	
	mm	inch	mm	inch	mm	inch		
EFT 16 ... 010	10	0.39	65	2.56	55	2.17	0.06	0.13
EFT 16 ... 015	15	0.59	75	2.95	60	2.36	0.07	0.15
EFT 16 ... 020	20	0.79	85	3.35	65	2.56	0.07	0.15
EFT 16 ... 025	25	0.98	95	3.74	70	2.76	0.07	0.15
EFT 16 ... 030	30	1.18	105	4.13	75	2.95	0.08	0.18
EFT 16 ... 040	40	1.57	125	4.92	85	3.35	0.08	0.18
EFT 16 ... 050	50	1.97	145	5.71	95	3.74	0.09	0.20
EFT 16 ... 060	60	2.36	165	6.50	105	4.13	0.10	0.22
EFT 16 ... 070	70	2.76	185	7.28	115	4.53	0.10	0.22
EFT 16 ... 080	80	3.15	205	8.07	125	4.92	0.11	0.24
EFT 16 ... 100	100	3.94	245	9.65	145	5.71	0.12	0.26
EFT 16 ... 125	125	4.92	295	11.61	170	6.69	0.14	0.31

ORDER	COLOR	P	
		bar	psi
EFT 16 6 050	Green	20	290
EFT 16 11 050	Blue	40	580
EFT 16 21 050	Red	75	1090
EFT 16 42 050	Yellow	150	2175
EFT 16 XX 050	Black	20-180	290-2610

ORDER	F ₀ Initial Force ±5% 20°C 68°F		F ₁ (ISOTHERMAL) End Force	
	daN	lb	daN	lb
	EFT 16 6 050	6	13	10
EFT 16 11 050	11	25	20	45
EFT 16 21 050	21	47	35	79
EFT 16 42 050	42	94	70	157
EFT 16 XX 050	6-50	13-112	10-85	22-191

ASSEMBLY TOOL OPTION
HOW TO ORDER **LPT 10**

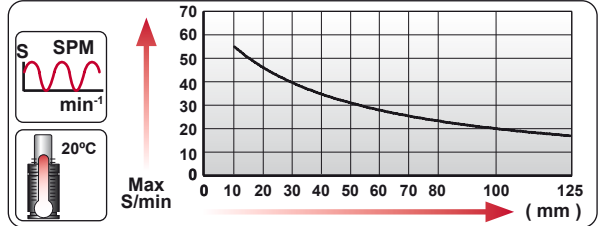
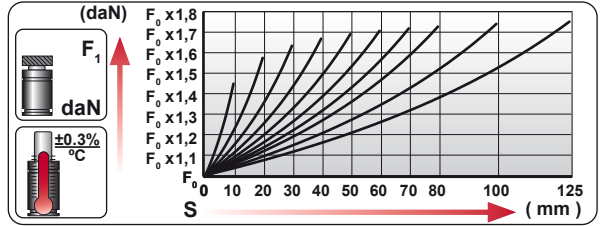
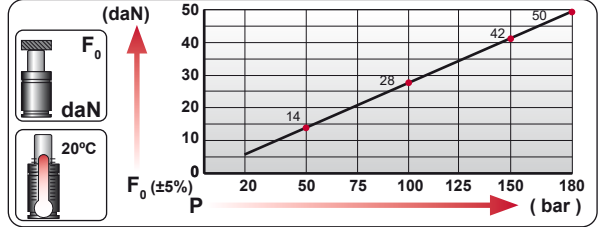
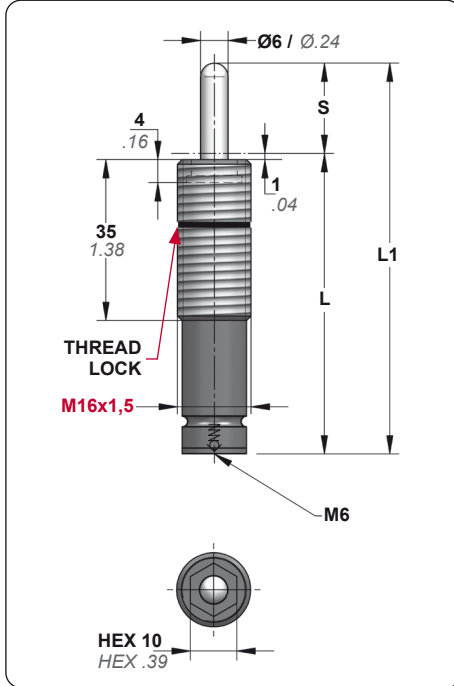
TECHNICAL DATA

Fluid	N ₂	Pmin Pmax 20°C / 68°F	20 bar 180 bar 290 psi 2610 psi	Tmin Tmax	0 °C 80 °C 32 °F 176 °F	Charging Adapter	06 CG 2-Q
Smax	< 90%	Force variation by temperature	±0,3% / °C	Connection	X	Cartridge Kit	X
Vmax	1,6 m/s						

EFGC 16

Gas Strippers

		RENAULT EM24.54.300
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VDI SAFETY

STANDARS PED APPROVED VDI 3003

ORDER	S		L1 ±0.25		L		Kg. lb	
	mm	inch	mm	inch	mm	inch		
EFGC 16 ... 010	10	0.39	65	2.56	55	2.17	0.06	0.13
EFGC 16 ... 020	20	0.79	85	3.35	65	2.56	0.06	0.13
EFGC 16 ... 030	30	1.18	105	4.13	75	2.95	0.07	0.15
EFGC 16 ... 040	40	1.57	125	4.92	85	3.35	0.08	0.18
EFGC 16 ... 050	50	1.97	145	5.71	95	3.74	0.08	0.18
EFGC 16 ... 060	60	2.36	165	6.50	105	4.13	0.09	0.20
EFGC 16 ... 070	70	2.76	185	7.28	115	4.53	0.09	0.20
EFGC 16 ... 080	80	3.15	205	8.07	125	4.92	0.10	0.22
EFGC 16 ... 100	100	3.94	245	9.65	145	5.71	0.11	0.24
EFGC 16 ... 125	125	4.92	295	11.61	170	6.69	0.13	0.29

ORDER	COLOR	P	
		bar	psi
EFGC 16 6 050	Green	20	290
EFGC 16 11 050	Blue	40	580
EFGC 16 21 050	Red	75	1090
EFGC 16 42 050	Yellow	150	2175
EFGC 16 XX 050	Black	20-180	290-2610

ORDER	Initial Force ±5% 20°C 68°F		F1 (ISOTHERMAL) End Force	
	daN	lb	daN	lb
EFGC 16 6 050	6	13	10	22
EFGC 16 11 050	11	25	20	45
EFGC 16 21 050	21	47	35	79
EFGC 16 42 050	42	94	70	157
EFGC 16 XX 050	6-50	13-112	10-85	22-191

MOUNTING OPTIONS

Top Mount **E23-016** 607

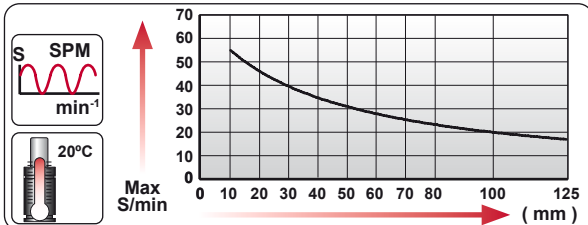
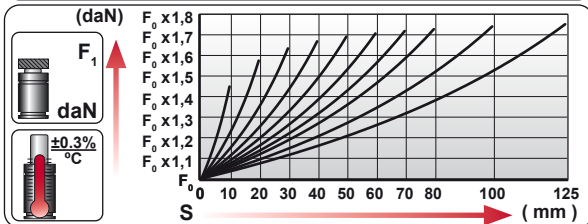
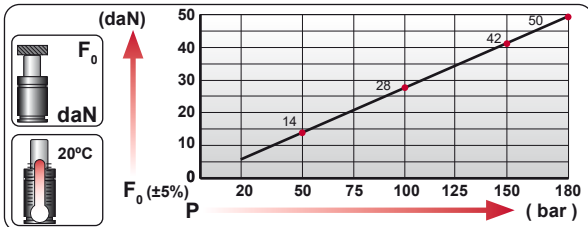
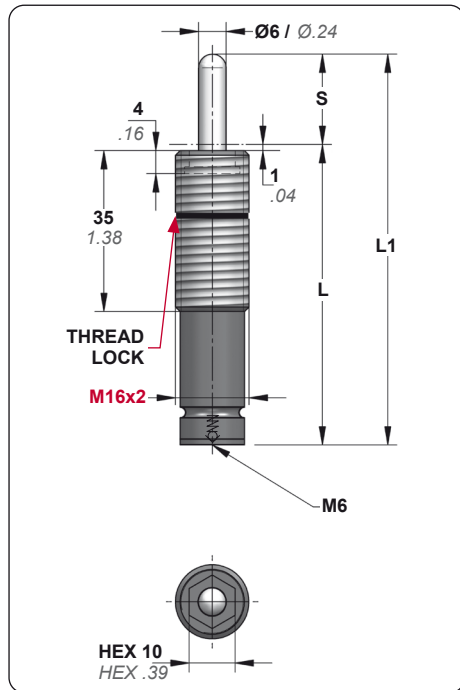
HOW TO ORDER

ASSEMBLY TOOL OPTION

LPT 10

HOW TO ORDER

TECHNICAL DATA					
Fluid	N ₂	Pmin Pmax	20 bar 180 bar 290 psi 2610 psi	Charging Adapter	06 CG 2-Q
Smax	< 90%	Tmin Tmax	0 °C 80 °C 32 °F 176 °F	Connection	X
Vmax	1,6 m/s	Force variation by temperature	±0,3% / °C	Cartridge Kit	X



VDI SAFETY

STANDARS



ORDER	S		L1 ±0.25		L		Kg. lb	
	mm	inch	mm	inch	mm	inch		
EFGD 16 ... 010	10	0.39	65	2.56	55	2.17	0.06	0.13
EFGD 16 ... 020	20	0.79	85	3.35	65	2.56	0.07	0.15
EFGD 16 ... 030	30	1.18	105	4.13	75	2.95	0.07	0.15
EFGD 16 ... 040	40	1.57	125	4.92	85	3.35	0.08	0.18
EFGD 16 ... 050	50	1.97	145	5.71	95	3.74	0.09	0.20
EFGD 16 ... 060	60	2.36	165	6.50	105	4.13	0.09	0.20
EFGD 16 ... 070	70	2.76	185	7.28	115	4.53	0.10	0.22
EFGD 16 ... 080	80	3.15	205	8.07	125	4.92	0.10	0.22
EFGD 16 ... 100	100	3.94	245	9.65	145	5.71	0.12	0.26
EFGD 16 ... 125	125	4.92	295	11.61	170	6.69	0.13	0.29

ORDER	COLOR	P	
		bar	psi
EFGD 16 6 050	Green	20	290
EFGD 16 11 050	Blue	40	580
EFGD 16 21 050	Red	75	1090
EFGD 16 42 050	Yellow	150	2175
EFGD 16 XX 050	Black	20-180	290-2610

ORDER	F ₀ Initial Force ±5%		F ₁ (ISOTHERMAL) End Force	
	daN	lb	daN	lb
EFGD 16 6 050	6	13	10	22
EFGD 16 11 050	11	25	20	45
EFGD 16 21 050	21	47	35	79
EFGD 16 42 050	42	94	70	157
EFGD 16 XX 050	6-50	13-112	10-85	22-191

MOUNTING OPTIONS



E63-016 607

ASSEMBLY TOOL OPTION



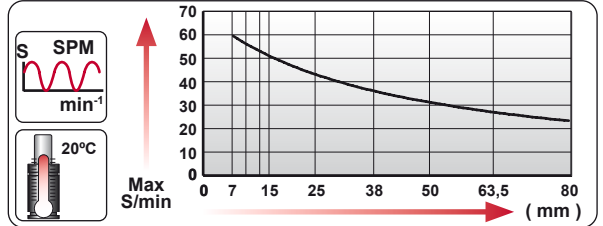
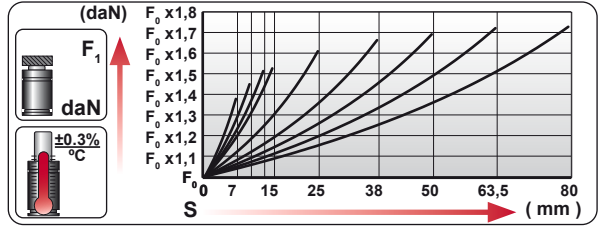
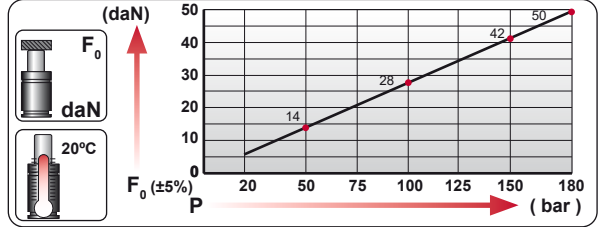
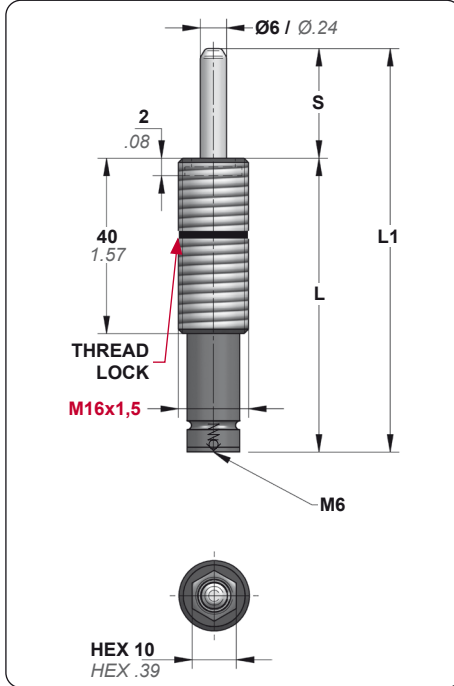
LPT 10

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax 20°C / 68°F	20 bar 180 bar 290 psi 2610 psi	Charging Adapter	06 CG 2-Q
Smix	< 90%	Tmin Tmax 0°C 80°C 32°F 176°F		Connection	X
Vmax	1,6 m/s	Force variation by temperature	±0,3% / °C	Cartridge Kit	X

EFGL 16

Gas Strippers



VDI SAFETY

STANDARS



ORDER	S		L1 ±0.25		L		Kg.	
	mm	inch	mm	inch	mm	inch	Kg.	lb
EFGL 16 ... 007	7	0.28	56	2.20	49	1.93	0.06	0.13
EFGL 16 ... 010	10	0.39	62	2.44	52	2.05	0.06	0.13
EFGL 16 ... 012	12.7	0.50	67.4	2.65	54.7	2.15	0.06	0.13
EFGL 16 ... 015	15	0.59	72	2.83	57	2.24	0.06	0.13
EFGL 16 ... 025	25	0.98	92	3.62	67	2.64	0.07	0.15
EFGL 16 ... 038	38	1.50	118	4.65	80	3.15	0.08	0.18
EFGL 16 ... 050	50	1.97	142	5.59	92	3.62	0.09	0.20
EFGL 16 ... 063	63.5	2.50	172	6.77	108.5	4.27	0.09	0.20
EFGL 16 ... 080	80	3.15	205	8.07	125	4.92	0.10	0.22

ORDER	COLOR	P	
		bar	psi
EFGL 16 13 050	Green	45	650
EFGL 16 25 050	Blue	90	1305
EFGL 16 38 050	Red	135	1960
EFGL 16 50 050	Yellow	180	2610
EFGL 16 XX 050	Black	20-180	290-2610

ORDER	F ₀ Initial Force ±5% 20°C 68°F		F ₁ (ISOTHERMAL) End Force	
	daN	lb	daN	lb
	EFGL 16 13 050	13	29	22
EFGL 16 25 050	25	56	42	94
EFGL 16 38 050	38	85	64	144
EFGL 16 50 050	50	112	85	191
EFGL 16 XX 050	6-50	13-112	10-85	22-191

MOUNTING OPTIONS



E23-016 607

ASSEMBLY TOOL OPTION



LPT 10

TECHNICAL DATA

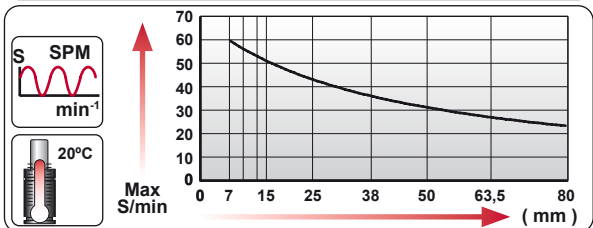
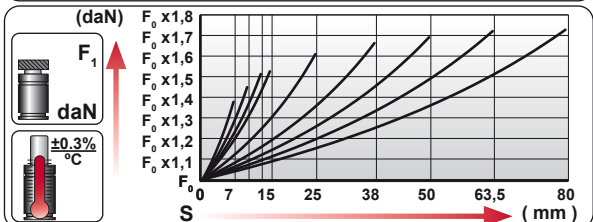
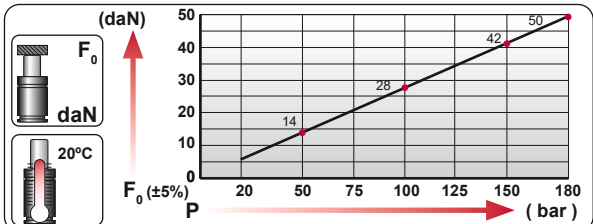
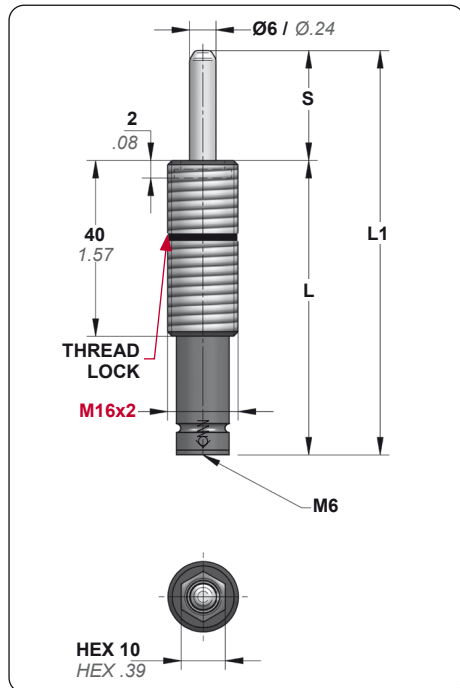
Fluid	N ₂	Pmin Pmax 20°C / 68°F	20 bar / 290 psi	180 bar / 2610 psi	Charging Adapter	06 CG 2-Q
Smax	< 90%	Tmin Tmax	0 °C / 32 °F	80 °C / 176 °F	Connection	X
Vmax	1,6 m/s	Force variation by temperature	±0,3% / °C		Cartridge Kit	X



	FORD W-DX35-8031	

EFGQ 16

Gas Strippers



VDI SAFETY

STANDARS



ORDER	S		L1 ±0.25		L		Kg. lb	
	mm	inch	mm	inch	mm	inch		
EFGQ 16 ... 007	7	0.28	56	2.20	49	1.93	0.06	0.13
EFGQ 16 ... 010	10	0.39	62	2.44	52	2.05	0.06	0.13
EFGQ 16 ... 012	12.7	0.50	67.4	2.65	54.7	2.15	0.06	0.13
EFGQ 16 ... 015	15	0.59	72	2.83	57	2.24	0.06	0.13
EFGQ 16 ... 025	25	0.98	92	3.62	67	2.64	0.07	0.15
EFGQ 16 ... 038	38	1.50	118	4.65	80	3.15	0.08	0.18
EFGQ 16 ... 050	50	1.97	142	5.59	92	3.62	0.08	0.18
EFGQ 16 ... 063	63.5	2.50	172	6.77	108.5	4.27	0.09	0.20
EFGQ 16 ... 080	80	3.15	205	8.07	125	4.92	0.10	0.22

ORDER	COLOR	P	
		bar	psi
EFGQ 16 13 050	Green	45	650
EFGQ 16 25 050	Blue	90	1305
EFGQ 16 38 050	Red	135	1960
EFGQ 16 50 050	Yellow	180	2610
EFGQ 16 XX 050	Black	20-180	290-2610

ORDER	F ₀ Initial Force ±5% 20°C 68°F		F ₁ (ISOTHERMAL) End Force	
	daN	lb	daN	lb
	EFGQ 16 13 050	13	29	22
EFGQ 16 25 050	25	56	42	94
EFGQ 16 38 050	38	85	64	144
EFGQ 16 50 050	50	112	85	191
EFGQ 16 XX 050	6-50	13-112	10-85	22-191

MOUNTING OPTIONS



E63-016

607

ASSEMBLY TOOL OPTION



LPT 10

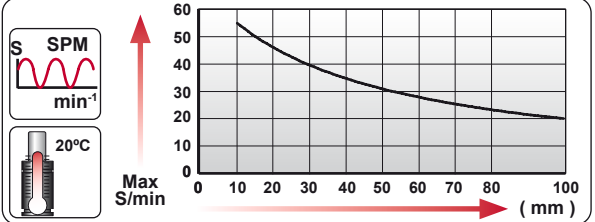
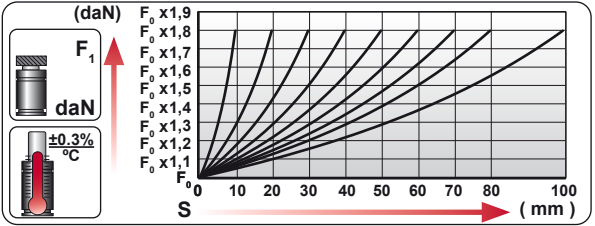
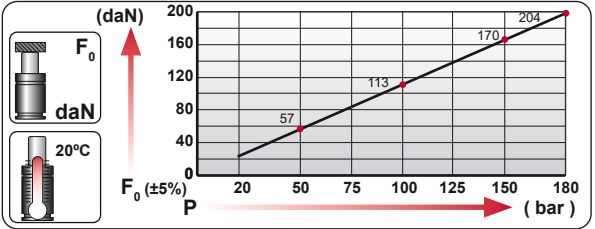
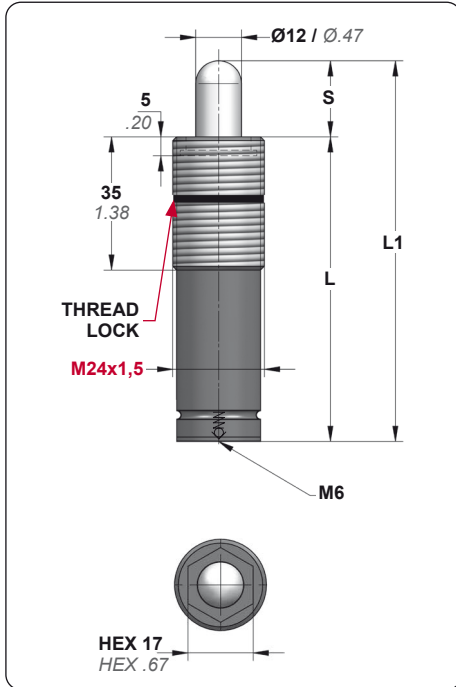
TECHNICAL DATA

Fluid	N ₂	Pmin Pmax 20°C / 68°F	20 bar 180 bar 290 psi 2610 psi	Charging Adapter	06 CG 2-Q
Smix	< 90%	Tmin Tmax	0 °C 80 °C 32 °F 176 °F	Connection	X
Vmax	1,6 m/s	Force variation by temperature	±0,3% / °C	Cartridge Kit	X

EFG 24

Gas Strippers

	FORD	W-DX35-6030	
MB	B8 0820 100 000 002	GM	90.25
VW	39D 549		



VDI SAFETY

STANDARS

ORDER	S		L1 ±0.25		L			
	mm	inch	mm	inch	mm	inch	Kg.	lb
EFG 24 ... 010	10	0.39	80	3.15	70	2.76	0.19	0.42
EFG 24 ... 020	20	0.79	100	3.94	80	3.15	0.20	0.44
EFG 24 ... 030	30	1.18	120	4.72	90	3.54	0.22	0.49
EFG 24 ... 040	40	1.57	140	5.51	100	3.94	0.24	0.53
EFG 24 ... 050	50	1.97	160	6.30	110	4.33	0.26	0.57
EFG 24 ... 060	60	2.36	180	7.09	120	4.72	0.27	0.60
EFG 24 ... 070	70	2.76	200	7.87	130	5.12	0.29	0.64
EFG 24 ... 080	80	3.15	220	8.66	140	5.51	0.31	0.68
EFG 24 ... 100	100	3.94	260	10.24	160	6.30	0.34	0.75

ORDER	COLOR	P	
		bar	psi
EFG 24 23 050	Green	20	290
EFG 24 45 050	Blue	40	580
EFG 24 85 050	Red	75	1090
EFG 24 170 050	Yellow	150	2175
EFG 24 XXX 050	Black	20-180	290-2610

ORDER	F ₀ Initial Force ±5% 20°C 68°F		F ₁ (ISOTHERMAL) End Force	
	daN	lb	daN	lb
	EFG 24 23 050	23	52	40
EFG 24 45 050	45	101	80	180
EFG 24 85 050	85	191	155	348
EFG 24 170 050	170	382	305	686
EFG 24 XXX 050	23-200	52-450	40-355	90-798

MOUNTING OPTIONS

Top Mount E23-024 607

HOW TO ORDER

ASSEMBLY TOOL OPTION

LPT 17

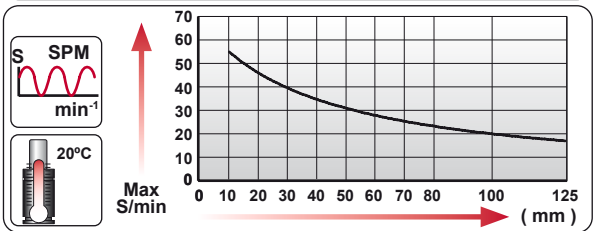
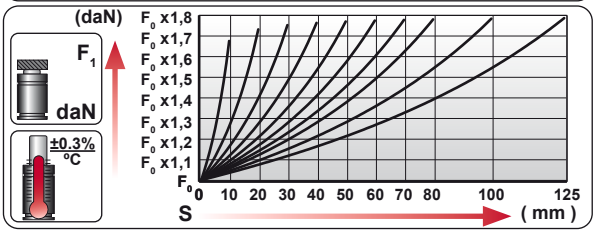
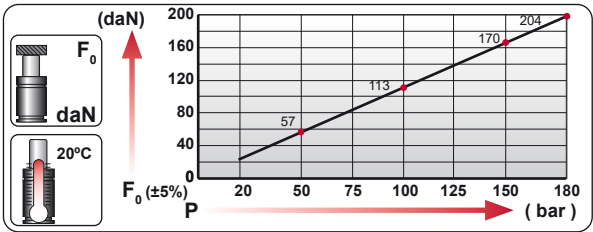
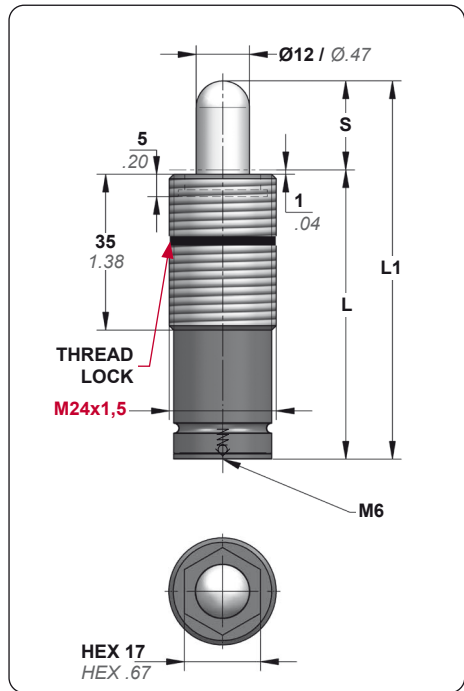
HOW TO ORDER

TECHNICAL DATA					
Fluid	N ₂	Pmin Pmax 20°C / 68°F	20 bar 180 bar 290 psi 2610 psi	Charging Adapter	06 CG 2-Q
Smax	< 90%	Tmin Tmax	0 °C 80 °C 32 °F 176 °F	Connection	X
Vmax	1,6 m/s	Force variation by temperature	±0,3% / °C	Cartridge Kit	X



EFGC 24

Gas Strippers



VDI SAFETY

STANDARS

ORDER	S		L1 ±0.25		L		Kg. lb	
	mm	inch	mm	inch	mm	inch		
EFGC 24 ... 010	10	0.39	65	2.56	55	2.17	0.14	0.31
EFGC 24 ... 020	20	0.79	85	3.35	65	2.56	0.16	0.35
EFGC 24 ... 030	30	1.18	105	4.13	75	2.95	0.18	0.40
EFGC 24 ... 040	40	1.57	125	4.92	85	3.35	0.19	0.42
EFGC 24 ... 050	50	1.97	145	5.71	95	3.74	0.21	0.46
EFGC 24 ... 060	60	2.36	165	6.50	105	4.13	0.23	0.51
EFGC 24 ... 070	70	2.76	185	7.28	115	4.53	0.25	0.55
EFGC 24 ... 080	80	3.15	205	8.07	125	4.92	0.26	0.57
EFGC 24 ... 100	100	3.94	245	9.65	145	5.71	0.30	0.66
EFGC 24 ... 125	125	4.92	295	11.61	170	6.69	0.34	0.75

ORDER	COLOR	P	
		bar	psi
EFGC 24 23 050	Green	20	290
EFGC 24 45 050	Blue	40	580
EFGC 24 85 050	Red	75	1090
EFGC 24 170 050	Yellow	150	2175
EFGC 24 XXX 050	Black	20-180	290-2610

ORDER	F_0 Initial Force ±5% 20°C 68°F		F_1 (ISOTHERMAL) End Force	
	daN	lb	daN	lb
	EFGC 24 23 050	23	52	40
EFGC 24 45 050	45	101	80	180
EFGC 24 85 050	85	191	150	337
EFGC 24 170 050	170	382	300	674
EFGC 24 XXX 050	23-200	52-450	40-355	90-798

MOUNTING OPTIONS

Top Mount **E23-024** 607

HOW TO ORDER

ASSEMBLY TOOL OPTION

LPT 17

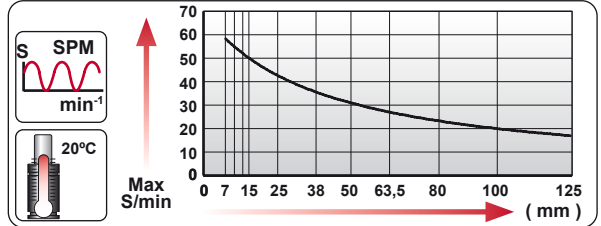
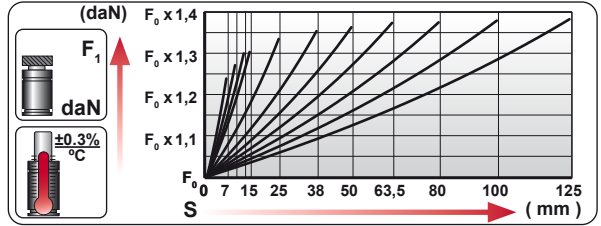
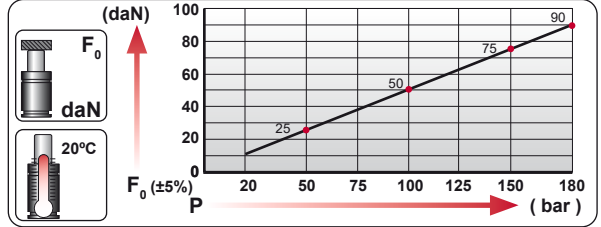
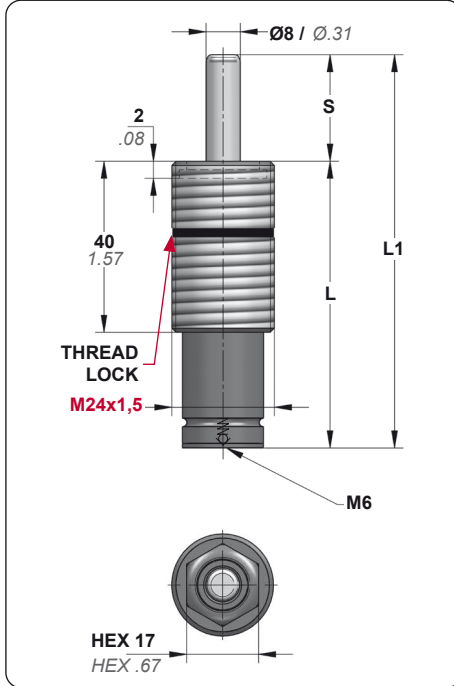
HOW TO ORDER

TECHNICAL DATA		Fluid		Pmin Pmax		20 bar 180 bar		Charging Adapter	
		N ₂		20°C / 68°F		290 psi 2610 psi		06 CG 2-Q	
	Smax	< 90%		Tmin Tmax		0 °C 80 °C 32 °F 176 °F			
	Vmax	1,6 m/s		Force variation by temperature		±0,3% / °C			

EFGL 24

Gas Strippers

	FORD W-DX35-8018	



VDI SAFETY

STANDARS



ORDER	S		L1 ±0.25		L		Kg. lb	
	mm	inch	mm	inch	mm	inch		
EFGL 24 ... 007	7	0.28	56	2.20	49	1.93	0.12	0.26
EFGL 24 ... 010	10	0.39	62	2.44	52	2.05	0.13	0.29
EFGL 24 ... 012	12.7	0.50	67.4	2.65	54.7	2.15	0.13	0.29
EFGL 24 ... 015	15	0.59	72	2.83	57	2.24	0.13	0.29
EFGL 24 ... 025	25	0.98	92	3.62	67	2.64	0.15	0.33
EFGL 24 ... 038	38	1.50	118	4.65	80	3.15	0.16	0.35
EFGL 24 ... 050	50	1.97	142	5.59	92	3.62	0.18	0.40
EFGL 24 ... 063	63.5	2.50	172	6.77	109	4.29	0.19	0.42
EFGL 24 ... 080	80	3.15	205	8.07	125	4.92	0.21	0.46
EFGL 24 ... 100	100	3.94	245	9.65	145	5.71	0.24	0.53
EFGL 24 ... 125	125	4.92	295	11.61	170	6.69	0.27	0.60

ORDER	COLOR	P	
		bar	psi
EFGL 24 30 050	Green	60	870
EFGL 24 50 050	Blue	100	1450
EFGL 24 70 050	Red	140	2030
EFGL 24 90 050	Yellow	180	2610
EFGL 24 XX 050	Black	20-180	290-2610

ORDER	F ₀ Initial Force ±5% 20°C 68°F		F ₁ (ISOTHERMAL) End Force	
	daN	lb	daN	lb
	EFGL 24 30 050	30	67	40
EFGL 24 50 050	50	112	70	157
EFGL 24 70 050	70	157	95	214
EFGL 24 90 050	90	202	120	270
EFGL 24 XX 050	10-90	22-202	13-120	29-270

MOUNTING OPTIONS



E23-024



ASSEMBLY TOOL OPTION



LPT 17

TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar 180 bar	Charging Adapter	06 CG 2-Q
		20°C / 68°F	290 psi 2610 psi	Connection	X
Smax	< 90%	Tmin Tmax	0 °C 80 °C	Cartridge Kit	X
			32 °F 176 °F		
Vmax	1,6 m/s	Force variation by temperature	±0,3% / °C		



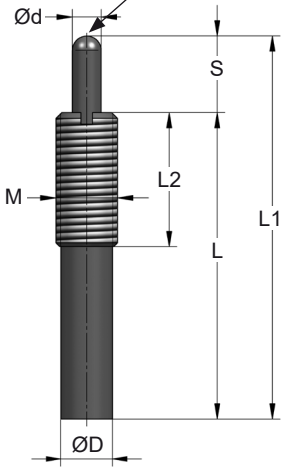
MBR

Spring Plungers



MBR

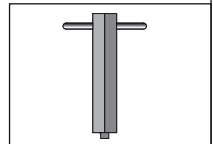
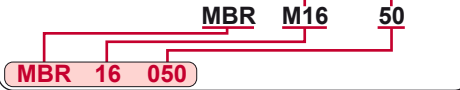
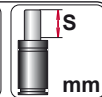
S45C
(STEEL)



ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	ØD (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MBR 16 020	M16x2	20	100	80	35	13.4	7.5	35	174	LP 16
MBR 16 030	M16x2	30	150	120	35	13.4	7.5	20	80	LP 16
MBR 16 040	M16x2	40	190	150	35	13.4	7.5	55	158	LP 16
MBR 16 050	M16x2	50	250	200	35	13.4	7.5	35	105	LP 16



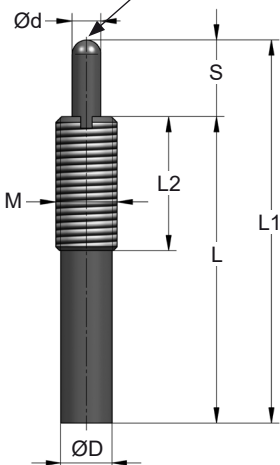
ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO



LP 16

MBN

S45C
(STEEL)



ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	ØD (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MBN 16 010	M16	11	91	80	35	13.4	7.3	17	75	LPS 16
MBN 16 020	M16	21	141	120	35	13.4	7.3	21	80	LPS 16
MBN 16 030	M16	31	181	150	35	13.4	7.3	21	90	LPS 16
MBN 16 040	M16	41	241	200	35	13.4	7.3	16	80	LPS 16
MBN 22 020	M22	21	151	130	50	19	9	80	215	LPS 22
MBN 22 030	M22	31	199	168	50	19	9	70	210	LPS 22
MBN 22 040	M22	41	267	226	50	19	9	75	210	LPS 22



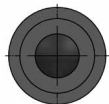
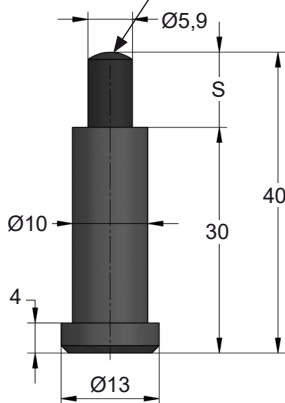
ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO



LPS _ _

MBP

S45C
(STEEL)



ORDER	S (mm)	F ₀ (N)	F ₁ (N)
MBP 010	10	42	110



ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO

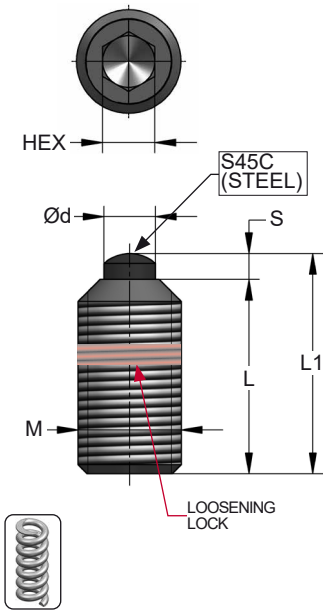


MBSD / MBSL

Spring Plungers



MBSD



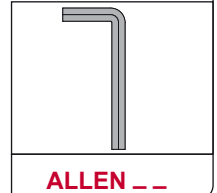
ORDER	M	S (mm)	L1 (mm)	L (mm)	Ød (mm)	HEX (mm)	F ₀ (N)	F ₁ (N)	Allen Key
MBSD 5 001	M5	1.5	13.5	12	2.5	2.5	5	15	2.5
MBSD 6 001	M6	1.5	14.5	13	3	3	6	20	3
MBSD 8 002	M8	2	17	15	4	4	6	20	4
MBSD 10 002	M10	2.5	18.5	16	5	5	10	30	5
MBSD 12 003	M12	3.5	23.5	20	6	6	10	30	6
MBSD 16 004	M16	4.5	26.5	22	8	8	20	60	8

ENG ORDER
 DEU BESTELL
 FRA COMMANDE
 ITA ORDINE
 ESP PEDIDO
 POR PEDIDO

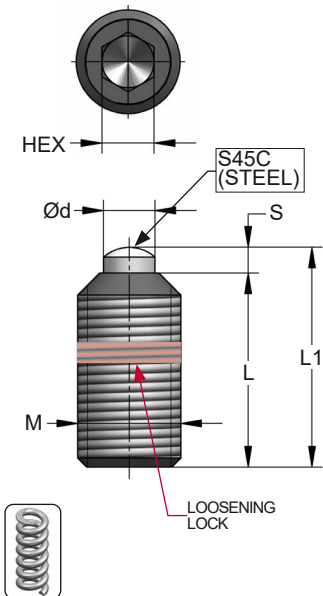
M
 S mm

MBSD M16 4

MBSD 16 004



MBSL



ORDER	M	S (mm)	L1 (mm)	L (mm)	Ød (mm)	HEX (mm)	F ₀ (N)	F ₁ (N)	Allen Key
MBSL 5 001	M5	1.5	13.5	12	2.5	2.5	2	8	2.5
MBSL 6 001	M6	1.5	14.5	13	3	3	3	10	3
MBSL 8 002	M8	2	17	15	4	4	3	10	4
MBSL 10 002	M10	2.5	18.5	16	5	5	5	15	5
MBSL 12 003	M12	3.5	23.5	20	6	6	5	15	6
MBSL 16 004	M16	4.5	26.5	22	8	8	10	30	8

ENG ORDER
 DEU BESTELL
 FRA COMMANDE
 ITA ORDINE
 ESP PEDIDO
 POR PEDIDO

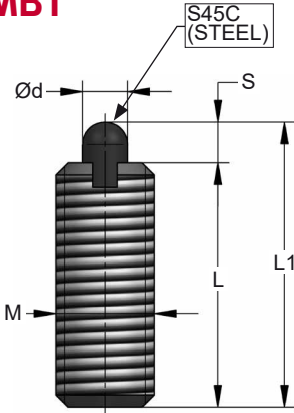
M
 S mm

MBSL M16 4

MBSL 16 004



MBT

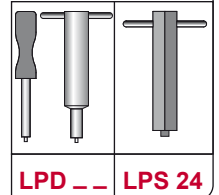


ORDER	M	S (mm)	L1 (mm)	L (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MBT 3 001	M3	1	13	12	1	2	4	LPD 3
MBT 4 001	M4	1.5	16.5	15	1.5	4.5	16	LPD 4
MBT 5 002	M5	2.3	20.3	18	2.4	6	19	LPD 5
MBT 6 002	M6	2.5	22.5	20	2.7	6	19	LPD 6
MBT 8 003	M8	3	25	22	3.5	10	39	LPD 8
MBT 10 003	M10	3	25	22	4	10	39	LPD 10
MBT 12 004	M12	4	32	28	6	12	53	LPD 12
MBT 16 005	M16	5	37	32	7.5	45	100	LPD 16
MBT 20 007	M20	7	47	40	10	52	125	LPD 20
MBT 24 010	M24	10	62	52	12	70	170	LPS 24

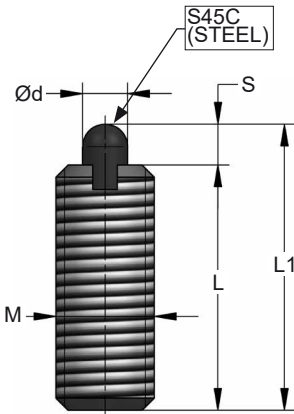
ENG ORDER
 DEU BESTELL
 FRA COMMANDE
 ITA ORDINE
 ESP PEDIDO
 POR PEDIDO

MBT M24 10

MBT 24 010



MBTH

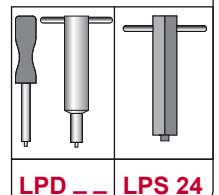


ORDER	M	S (mm)	L1 (mm)	L (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MBTH 5 002	M5	2.3	20.3	18	2.4	11	40	LPD 5
MBTH 6 002	M6	2.5	22.5	20	2.7	15	43	LPD 6
MBTH 8 003	M8	3	25	22	3.5	20	75	LPD 8
MBTH 10 003	M10	3	25	22	4	20	75	LPD 10
MBTH 12 004	M12	4	32	28	6	45	120	LPD 12
MBTH 16 005	M16	5	37	32	7.5	64	160	LPD 16
MBTH 20 007	M20	7	47	40	10	75	195	LPD 20
MBTH 24 010	M24	10	62	52	12	75	245	LPS 24

ENG ORDER
 DEU BESTELL
 FRA COMMANDE
 ITA ORDINE
 ESP PEDIDO
 POR PEDIDO

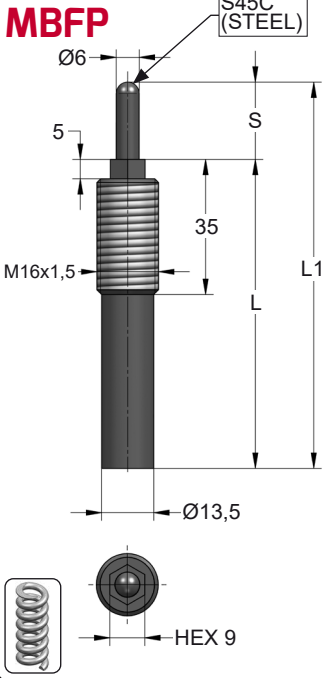
MBTH M24 10

MBTH 24 010



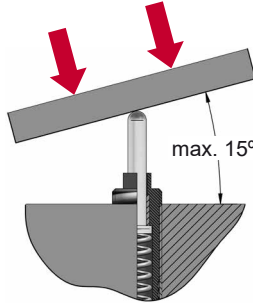
MBFP

Spring Plungers



S45C
(STEEL)

ORDER	S (mm)	L1 (mm)	L (mm)	F ₀ (N)	F ₁ (N)	Key
MBFP 16 020	20	100	80	35	89	LPV 8-9
MBFP 16 030	30	120	90	2	27	LPV 8-9
MBFP 16 050	50	200	150	9	34	LPV 8-9



ENG ORDER
 DEU BESTELL
 FRA COMMANDE
 ITA ORDINE
 ESP PEDIDO
 POR PEDIDO

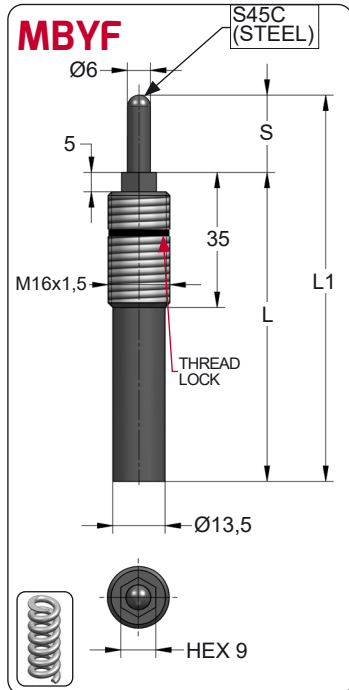
M

S
 mm

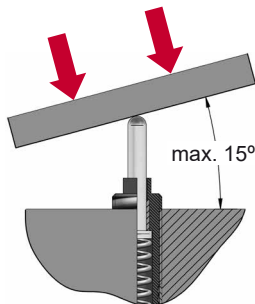
MBFP M16 50

MBFP 16 050

LPV 8-9



ORDER	S (mm)	L1 (mm)	L (mm)	F ₀ (N)	F ₁ (N)	Key
MBYF 16 020	20	100	80	35	89	LPV 8-9
MBYF 16 030	30	150	120	16	73	LPV 8-9
MBYF 16 050	50	250	200	21	76	LPV 8-9

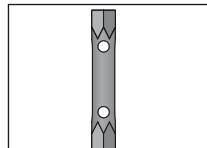


ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO

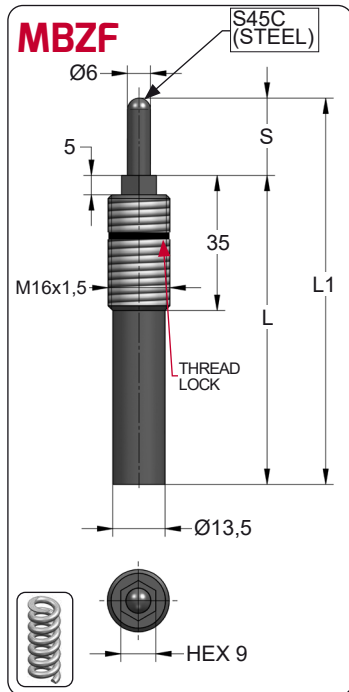


MBYF M16 50

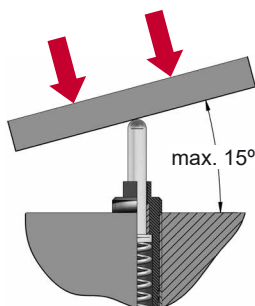
MBYF 16 050



LPV 8-9



ORDER	S (mm)	L1 (mm)	L (mm)	F ₀ (N)	F ₁ (N)	Key
MBZF 16 020	20	100	80	4	36	LPV 8-9
MBZF 16 030	30	110	80	3.5	43	LPV 8-9
MBZF 16 050	50	200	150	11	40	LPV 8-9

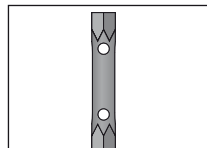


ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO



MBZF M16 50

MBZF 16 050



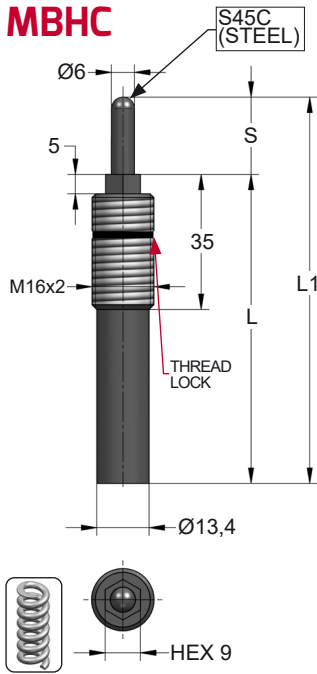
LPV 8-9

MBHC / MBHF

Spring Plungers



MBHC



ORDER	S (mm)	L1 (mm)	L (mm)	F ₀ (N)	F ₁ (N)	Key
MBHC 16 010	10	70	60	4	13.3	LPV 8-9
MBHC 16 015	15	75	60	10	40	LPV 8-9
MBHC 16 020	20	100	80	7	34.5	LPV 8-9
MBHC 16 030	30	110	80	6.5	45.5	LPV 8-9
MBHC 16 030/1	30	150	120	18	40	LPV 8-9
MBHC 16 040	40	190	150	13.2	37.2	LPV 8-9
MBHC 16 050	50	200	150	13.2	43.2	LPV 8-9
MBHC 16 060	60	210	150	13.2	49.2	LPV 8-9
MBHC 16 070	70	270	200	9.7	40.5	LPV 8-9
MBHC 16 080	80	280	200	9.7	44.8	LPV 8-9

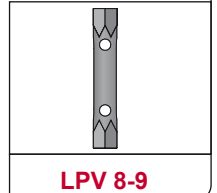
ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO

M

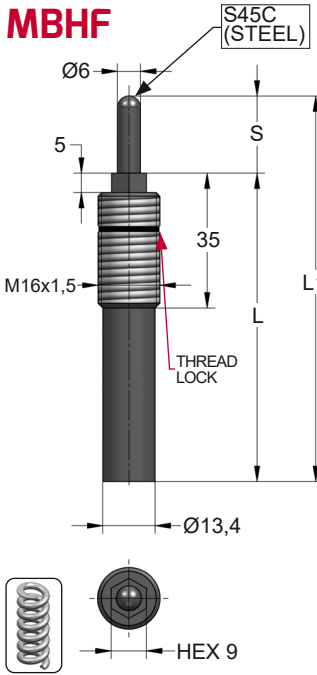
S
mm

MBHC M16 80

MBHC 16 080



MBHF



ORDER	S (mm)	L1 (mm)	L (mm)	F ₀ (N)	F ₁ (N)	Key
MBHF 16 010	10	70	60	4	13.3	LPV 8-9
MBHF 16 015	15	75	60	10	40	LPV 8-9
MBHF 16 020	20	100	80	7	34.5	LPV 8-9
MBHF 16 030	30	110	80	6.5	45.5	LPV 8-9
MBHF 16 030/1	30	150	120	18	40	LPV 8-9
MBHF 16 040	40	190	150	13.2	37.2	LPV 8-9
MBHF 16 050	50	200	150	13.2	43.2	LPV 8-9
MBHF 16 060	60	210	150	13.2	49.2	LPV 8-9
MBHF 16 070	70	270	200	9.7	40.5	LPV 8-9
MBHF 16 080	80	280	200	9.7	44.8	LPV 8-9

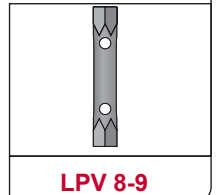
ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO

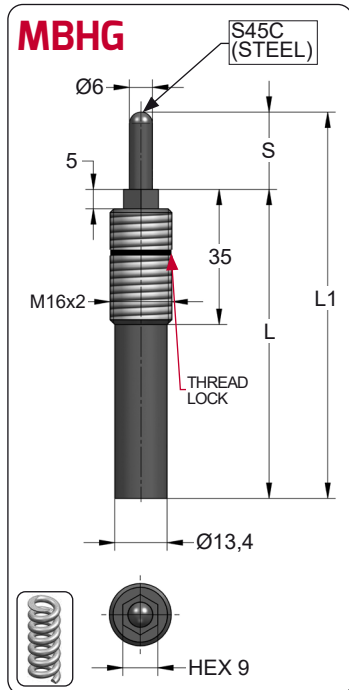
M

S
mm

MBHF M16 80

MBHF 16 080



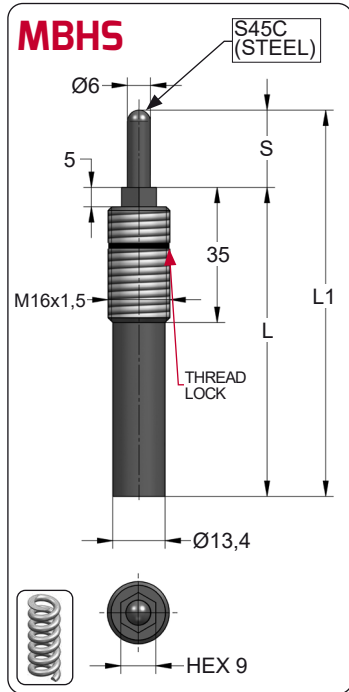
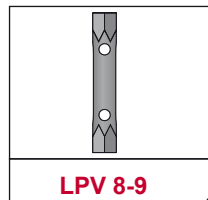


ORDER	S (mm)	L1 (mm)	L (mm)	F ₀ (N)	F ₁ (N)	Key
MBHG 16 010	10	70	60	13	45.5	LPV 8-9
MBHG 16 015	15	75	60	15	56	LPV 8-9
MBHG 16 020	20	100	80	34.5	172.5	LPV 8-9
MBHG 16 030	30	150	120	20	80	LPV 8-9
MBHG 16 030/1	30	180	150	56.1	132.2	LPV 8-9
MBHG 16 040	40	190	150	56.1	158.1	LPV 8-9
MBHG 16 050	50	250	200	19.3	100	LPV 8-9
MBHG 16 060	60	260	200	19.3	116	LPV 8-9
MBHG 16 070	70	270	200	19.3	132	LPV 8-9
MBHG 16 080	80	280	200	25	100	LPV 8-9

ENG ORDER
 DEU BESTELL
 FRA COMMANDE
 ITA ORDINE
 ESP PEDIDO
 POR PEDIDO

MBHG M16 80

MBHG 16 080

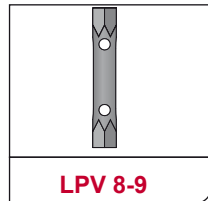


ORDER	S (mm)	L1 (mm)	L (mm)	F ₀ (N)	F ₁ (N)	Key
MBHS 16 010	10	70	60	13	45.5	LPV 8-9
MBHS 16 015	15	75	60	15	56	LPV 8-9
MBHS 16 020	20	100	80	34.5	172.5	LPV 8-9
MBHS 16 030	30	150	120	20	80	LPV 8-9
MBHS 16 030/1	30	180	150	56.1	132.2	LPV 8-9
MBHS 16 040	40	190	150	56.1	158.1	LPV 8-9
MBHS 16 050	50	250	200	19.3	100	LPV 8-9
MBHS 16 060	60	260	200	19.3	116	LPV 8-9
MBHS 16 070	70	270	200	19.3	132	LPV 8-9
MBHS 16 080	80	280	200	25	100	LPV 8-9

ENG ORDER
 DEU BESTELL
 FRA COMMANDE
 ITA ORDINE
 ESP PEDIDO
 POR PEDIDO

MBHS M16 80

MBHS 16 080

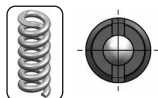
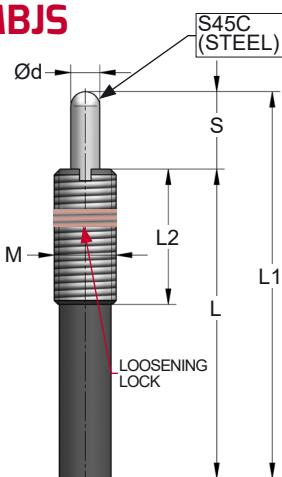


MBJS / MBJX

Spring Plungers



MBJS



ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MBJS 3 001	M3	1.5	11.5	10	10	1.1	0.05	0.32	---
MBJS 3 003	M3	3	18	15	15	1.1	0.09	0.32	---
MBJS 4 002	M4	2	17	15	15	1.6	0.23	0.65	---
MBJS 4 004	M4	4	28	24	24	1.6	0.24	0.65	---
MBJS 5 003	M5	3	23	20	20	2	0.74	2.95	LPJ 1
MBJS 5 005	M5	5	32	27	27	2	0.72	2.95	LPJ 1
MBJS 6 003	M6	3	28	25	25	2.5	0.85	3.2	LPJ 1
MBJS 6 005	M6	5	35	30	30	2.5	0.85	3.2	LPJ 1
MBJS 8 003	M8	3	28	25	25	3.1	0.9	3.3	LPJ 2
MBJS 8 005	M8	5	32	27	27	3.1	0.9	3.3	LPJ 2
MBJS 10 005	M10	5	35	30	30	3.8	1.9	4.7	LPJ 2
MBJS 10 010	M10	10	53	43	30	3.8	1.7	4.7	LPJ 2
MBJS 12 005	M12	5	35	30	30	5.5	1.5	4.7	LPJ 3
MBJS 12 010	M12	10	53	43	35	5.5	1.3	5.9	LPJ 3
MBJS 12 015	M12	15	66	51	35	5.5	1.6	5.9	LPJ 3
MBJS 16 010	M16	10	70	60	35	8	1.7	12.8	LPJ 4
MBJS 16 015	M16	15	75	60	35	8	1.7	12.8	LPJ 4
MBJS 16 020	M16	20	105	85	35	8	1.7	12.8	LPJ 4

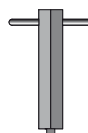


ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO



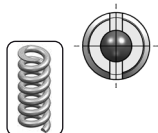
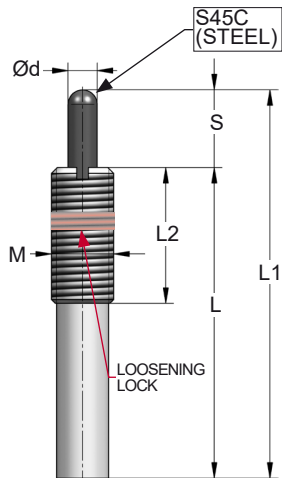
MBJS M16 20

MBJS 16 020



LPJ __

MBJX



ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MBJX 3 001	M3	1.5	16.5	15	15	1.1	2	5	---
MBJX 3 003	M3	3	23	20	20	1.1	2	5	---
MBJX 4 002	M4	2	26	24	24	1.6	5	13	---
MBJX 4 004	M4	4	28	24	24	1.6	5	13	---
MBJX 5 003	M5	3	30	27	27	2	9	25	LPJ 1
MBJX 5 005	M5	5	44	39	39	2	9	25	LPJ 1
MBJX 6 003	M6	3	33	30	30	2.5	14	39	LPJ 1
MBJX 6 005	M6	5	41	36	36	2.5	14	39	LPJ 1
MBJX 8 003	M8	3	30	27	27	3.1	15	41	LPJ 2
MBJX 8 005	M8	5	40	35	30	3.1	15	41	LPJ 2
MBJX 10 005	M10	5	40	35	30	3.8	16	63	LPJ 2
MBJX 10 010	M10	10	63	53	30	3.8	13	63	LPJ 2
MBJX 12 005	M12	5	48	43	35	5.5	37	98	LPJ 3
MBJX 12 010	M12	10	68	58	35	5.5	15	98	LPJ 3
MBJX 12 015	M12	15	93	78	35	5.5	15	98	LPJ 3
MBJX 16 010	M16	10	70	60	35	8	24	147	LPJ 4
MBJX 16 015	M16	15	85	70	35	8	22	147	LPJ 4
MBJX 16 020	M16	20	110	90	35	8	13	147	LPJ 4
MBJX 20 015	M20	15	95	80	45	10	13	250	LPJ 5
MBJX 24 015	M24	15	99	84	45	10	25	314	LPJ 5

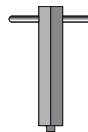


ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO



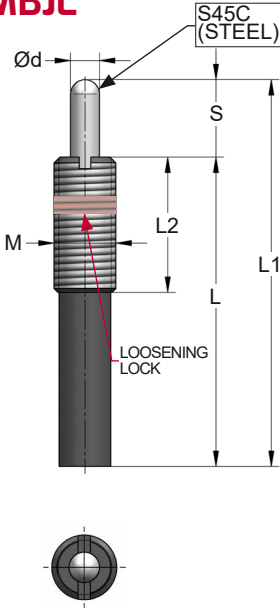
MBJX M24 15

MBJX 24 015

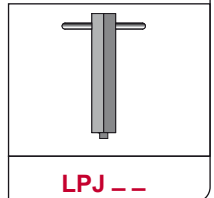
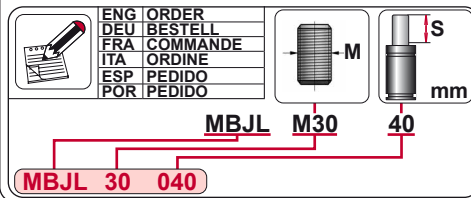


LPJ __

MBJL



ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MBJL 3 001	M3	1.5	11.5	10	10	1.1	0.5	1	---
MBJL 3 003	M3	3	18	15	15	1.1	0.3	1	---
MBJL 4 002	M4	2	17	15	15	1.6	1	2	---
MBJL 4 004	M4	4	28	24	24	1.6	0.6	2	---
MBJL 5 003	M5	3	23	20	20	2	2	10	LPJ 1
MBJL 5 005	M5	5	32	27	27	2	2	10	LPJ 1
MBJL 6 003	M6	3	28	25	25	2.5	6	10	LPJ 1
MBJL 6 005	M6	5	35	30	30	2.5	2	10	LPJ 1
MBJL 6 010	M6	10	49	39	30	2.5	1.4	10	LPJ 1
MBJL 8 003	M8	3	28	25	25	3.1	6	10	LPJ 2
MBJL 8 005	M8	5	32	27	27	3.1	3	10	LPJ 2
MBJL 8 010	M8	10	53	43	30	3.1	3	10	LPJ 2
MBJL 10 005	M10	5	35	30	30	3.8	6	15	LPJ 2
MBJL 10 010	M10	10	53	43	30	3.8	3	15	LPJ 2
MBJL 10 015	M10	15	73	58	30	3.8	3	15	LPJ 2
MBJL 12 005	M12	5	35	30	30	5.5	6	15	LPJ 3
MBJL 12 010	M12	10	53	43	35	5.5	3	20	LPJ 3
MBJL 12 015	M12	15	66	51	35	5.5	3	20	LPJ 3
MBJL 12 020	M12	20	98	78	35	5.5	3.5	20	LPJ 3
MBJL 16 010	M16	10	70	60	35	8	6	40	LPJ 4
MBJL 16 015	M16	15	75	60	35	8	4	40	LPJ 4
MBJL 16 020	M16	20	105	85	35	8	5	40	LPJ 4
MBJL 16 030	M16	30	155	125	35	8	3	40	LPJ 4
MBJL 16 040	M16	40	165	125	35	8	5	40	LPJ 4
MBJL 16 050	M16	50	205	155	35	8	20	50	LPJ 4
MBJL 16 060	M16	60	219	159	35	8	3	50	LPJ 4
MBJL 16 070	M16	70	255	185	35	8	3.5	50	LPJ 4
MBJL 16 080	M16	80	265	185	35	8	20	50	LPJ 4
MBJL 20 015	M20	15	75	60	45	10	13	80	LPJ 5
MBJL 20 020	M20	20	92	72	45	10	12	80	LPJ 5
MBJL 20 030	M20	30	126	96	45	10	12	80	LPJ 5
MBJL 20 040	M20	40	160	120	45	10	12	80	LPJ 5
MBJL 24 007	M24	7	67	60	45	10	20	98	LPJ 5
MBJL 24 015	M24	15	75	60	45	10	20	98	LPJ 5
MBJL 24 020	M24	20	95	75	45	10	18	98	LPJ 5
MBJL 24 030	M24	30	130	100	45	10	18	98	LPJ 5
MBJL 24 040	M24	40	164	124	45	10	18	98	LPJ 5
MBJL 30 015	M30	15	81	66	45	14	28	118	LPJ 6
MBJL 30 020	M30	20	98	78	45	14	28	118	LPJ 6
MBJL 30 030	M30	30	130	100	45	14	28	118	LPJ 6
MBJL 30 040	M30	40	163	123	45	14	28	118	LPJ 6

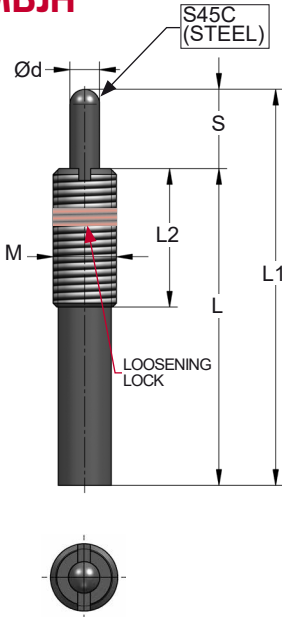


MBJH



Spring Plungers

MBJH

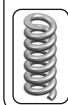
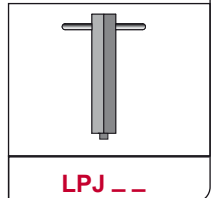


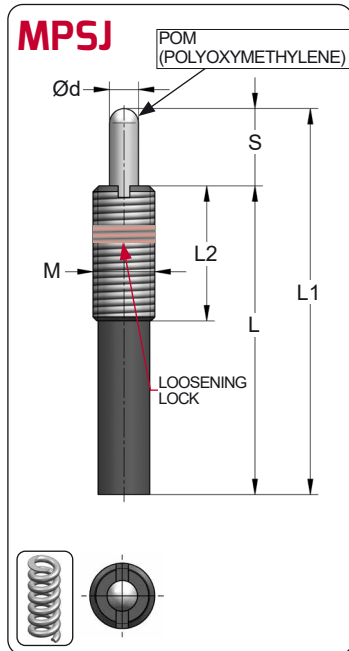
ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MBJH 3 001	M3	1.5	11.5	10	10	1.1	0.8	3	---
MBJH 3 003	M3	3	18	15	15	1.1	0.8	3	---
MBJH 4 002	M4	2	17	15	15	1.6	3	9	---
MBJH 4 004	M4	4	28	24	24	1.6	2	9	---
MBJH 5 003	M5	3	23	20	20	2	5	20	LPJ 1
MBJH 5 005	M5	5	32	27	27	2	3	20	LPJ 1
MBJH 6 003	M6	3	28	25	25	2.5	8	30	LPJ 1
MBJH 6 005	M6	5	35	30	30	2.5	5	30	LPJ 1
MBJH 6 010	M6	10	49	39	30	2.5	5	28	LPJ 1
MBJH 8 003	M8	3	28	25	25	3.1	15	30	LPJ 2
MBJH 8 005	M8	5	32	27	27	3.1	8	30	LPJ 2
MBJH 8 010	M8	10	53	43	30	3.1	7	30	LPJ 2
MBJH 10 005	M10	5	35	30	30	3.8	9	50	LPJ 2
MBJH 10 010	M10	10	53	43	30	3.8	8	50	LPJ 2
MBJH 10 015	M10	15	73	58	30	3.8	6	50	LPJ 2
MBJH 12 005	M12	5	35	30	30	5.5	19	50	LPJ 3
MBJH 12 010	M12	10	53	43	35	5.5	8	50	LPJ 3
MBJH 12 015	M12	15	66	51	35	5.5	5	50	LPJ 3
MBJH 12 020	M12	20	98	78	35	5.5	7	50	LPJ 3
MBJH 16 010	M16	10	70	60	35	8	13	80	LPJ 4
MBJH 16 015	M16	15	75	60	35	8	13	80	LPJ 4
MBJH 16 020	M16	20	105	85	35	8	10	80	LPJ 4
MBJH 16 030	M16	30	155	125	35	8	7	80	LPJ 4
MBJH 16 040	M16	40	165	125	35	8	7	80	LPJ 4
MBJH 16 050	M16	50	205	155	35	8	30	80	LPJ 4
MBJH 16 060	M16	60	219	159	35	8	4	80	LPJ 4
MBJH 16 070	M16	70	255	185	35	8	5,6	80	LPJ 4
MBJH 16 080	M16	80	265	185	35	8	30	95	LPJ 4
MBJH 20 015	M20	15	75	60	45	10	25	150	LPJ 5
MBJH 20 020	M20	20	92	72	45	10	23	150	LPJ 5
MBJH 20 030	M20	30	126	96	45	10	23	150	LPJ 5
MBJH 20 040	M20	40	160	120	45	10	23	150	LPJ 5
MBJH 24 007	M24	7	67	60	45	10	44	196	LPJ 5
MBJH 24 015	M24	15	75	60	45	10	47	216	LPJ 5
MBJH 24 020	M24	20	95	75	45	10	44	216	LPJ 5
MBJH 24 030	M24	30	130	100	45	10	44	216	LPJ 5
MBJH 24 040	M24	40	164	124	45	10	44	216	LPJ 5
MBJH 30 015	M30	15	81	66	45	14	44	275	LPJ 6
MBJH 30 020	M30	20	98	78	45	14	53	275	LPJ 6
MBJH 30 030	M30	30	130	100	45	14	45	275	LPJ 6
MBJH 30 040	M30	40	163	123	45	14	47	275	LPJ 6

ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO

MBJH M30 40

MBJH 30 040





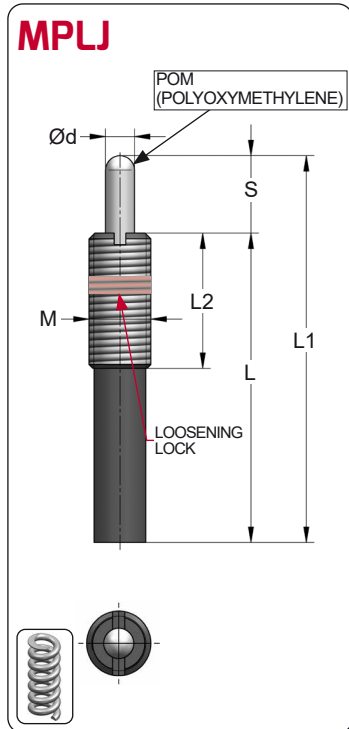
ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MPSJ 3 001	M3	1.5	11.5	10	10	1.1	0.05	0.32	---
MPSJ 3 003	M3	3	18	15	15	1.1	0.09	0.32	---
MPSJ 4 002	M4	2	17	15	15	1.6	0.23	0.65	---
MPSJ 4 004	M4	4	28	24	24	1.6	0.24	0.65	---
MPSJ 5 003	M5	3	23	20	20	2	0.74	2.95	LPJ 1
MPSJ 5 005	M5	5	32	27	27	2	0.72	2.95	LPJ 1
MPSJ 6 003	M6	3	28	25	25	2.5	0.85	3.2	LPJ 1
MPSJ 6 005	M6	5	35	30	30	2.5	0.85	3.2	LPJ 1
MPSJ 8 003	M8	3	28	25	25	3.1	0.9	3.3	LPJ 2
MPSJ 8 005	M8	5	32	27	27	3.1	0.9	3.3	LPJ 2
MPSJ 10 005	M10	5	35	30	30	3.8	1.9	4.7	LPJ 2
MPSJ 10 010	M10	10	53	43	30	3.8	1.7	4.7	LPJ 2
MPSJ 12 005	M12	5	35	30	30	5.5	1.5	4.7	LPJ 3
MPSJ 12 010	M12	10	53	43	35	5.5	1.3	5.9	LPJ 3
MPSJ 12 015	M12	15	66	51	35	5.5	1.6	5.9	LPJ 3
MPSJ 16 010	M16	10	70	60	35	8	1.7	12.8	LPJ 4
MPSJ 16 015	M16	15	75	60	35	8	1.7	12.8	LPJ 4
MPSJ 16 020	M16	20	105	85	35	8	1.7	12.8	LPJ 4

ENG ORDER
 DEU BESTELL
 FRA COMMANDE
 ITA ORDINE
 ESP PEDIDO
 POR PEDIDO

MPSJ M16 20

MPSJ 16 020

LPJ --



ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MPLJ 3 001	M3	1.5	11.5	10	10	1.1	0.5	1	---
MPLJ 3 003	M3	3	18	15	15	1.1	0.3	1	---
MPLJ 4 002	M4	2	17	15	15	1.6	1	2	---
MPLJ 4 004	M4	4	28	24	24	1.6	0.6	2	---
MPLJ 5 003	M5	3	23	20	20	2	2	10	LPJ 1
MPLJ 5 005	M5	5	32	27	27	2	2	10	LPJ 1
MPLJ 6 003	M6	3	28	25	25	2.5	6	10	LPJ 1
MPLJ 6 005	M6	5	35	30	30	2.5	2	10	LPJ 1
MPLJ 8 003	M8	3	28	25	25	3.1	6	10	LPJ 2
MPLJ 8 005	M8	5	32	27	27	3.1	3	10	LPJ 2
MPLJ 10 005	M10	5	35	30	30	3.8	6	15	LPJ 2
MPLJ 10 010	M10	10	53	43	30	3.8	3	15	LPJ 2
MPLJ 12 005	M12	5	35	30	30	5.5	6	15	LPJ 3
MPLJ 12 010	M12	10	53	43	35	5.5	3	20	LPJ 3
MPLJ 12 015	M12	15	66	51	35	5.5	3	20	LPJ 3
MPLJ 16 010	M16	10	70	60	35	8	6	40	LPJ 4
MPLJ 16 015	M16	15	75	60	35	8	4	40	LPJ 4
MPLJ 16 020	M16	20	105	85	35	8	5	40	LPJ 4
MPLJ 16 030	M16	30	155	125	35	8	3	40	LPJ 4
MPLJ 20 015	M20	15	75	60	45	10	13	80	LPJ 5
MPLJ 24 015	M24	15	75	60	45	10	20	98	LPJ 5

ENG ORDER
 DEU BESTELL
 FRA COMMANDE
 ITA ORDINE
 ESP PEDIDO
 POR PEDIDO

MPLJ M24 15

MPLJ 24 015

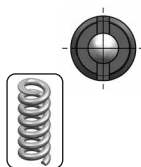
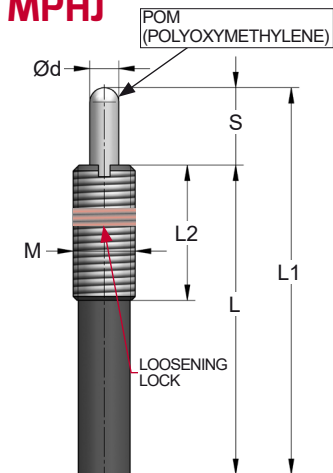
LPJ --

MPHJ / MPXJ

Spring Plungers



MPHJ

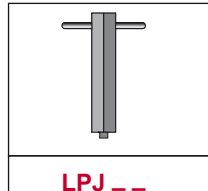


ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MPHJ 3 001	M3	1.5	11.5	10	10	1.1	0.8	3	---
MPHJ 3 003	M3	3	18	15	15	1.1	0.8	3	---
MPHJ 4 002	M4	2	17	15	15	1.6	3	9	---
MPHJ 4 004	M4	4	28	24	24	1.6	2	9	---
MPHJ 5 003	M5	3	23	20	20	2	5	20	LPJ 1
MPHJ 5 005	M5	5	32	27	27	2	3	20	LPJ 1
MPHJ 6 003	M6	3	28	25	25	2.5	8	30	LPJ 1
MPHJ 6 005	M6	5	35	30	30	2.5	5	30	LPJ 1
MPHJ 8 003	M8	3	28	25	25	3.1	15	30	LPJ 2
MPHJ 8 005	M8	5	32	27	27	3.1	8	30	LPJ 2
MPHJ 10 005	M10	5	35	30	30	3.8	9	50	LPJ 2
MPHJ 10 010	M10	10	53	43	30	3.8	8	50	LPJ 2
MPHJ 12 005	M12	5	35	30	30	5.5	19	50	LPJ 3
MPHJ 12 010	M12	10	53	43	35	5.5	8	50	LPJ 3
MPHJ 12 015	M12	15	66	51	35	5.5	5	50	LPJ 3
MPHJ 16 010	M16	10	70	60	35	8	13	80	LPJ 4
MPHJ 16 015	M16	15	75	60	35	8	13	80	LPJ 4
MPHJ 16 020	M16	20	105	85	35	8	10	80	LPJ 4
MPHJ 16 030	M16	30	155	125	35	8	7	80	LPJ 4
MPHJ 20 015	M20	15	75	60	45	10	25	150	LPJ 5
MPHJ 24 015	M24	15	75	60	45	10	47	216	LPJ 5

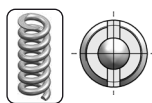
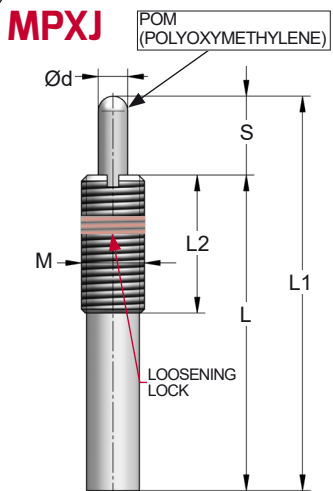
ENG ORDER DEU BESTELL FRA COMMANDE
 ITA ORDINE ESP PEDIDO POR PEDIDO

MPHJ M24 15

MPHJ 24 015



MPXJ

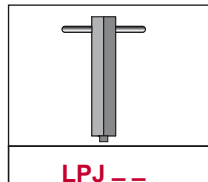


ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MPXJ 3 001	M3	1.5	16.5	15	15	1.1	2	5	---
MPXJ 3 003	M3	3	23	20	20	1.1	2	5	---
MPXJ 4 002	M4	2	26	24	24	1.6	5	13	---
MPXJ 4 004	M4	4	28	24	24	1.6	5	13	---
MPXJ 5 003	M5	3	30	27	27	2	9	25	LPJ 1
MPXJ 5 005	M5	5	44	39	39	2	9	25	LPJ 1
MPXJ 6 003	M6	3	33	30	30	2.5	14	39	LPJ 1
MPXJ 6 005	M6	5	41	36	36	2.5	14	39	LPJ 1
MPXJ 8 003	M8	3	30	27	27	3.1	15	41	LPJ 2
MPXJ 8 005	M8	5	40	35	30	3.1	15	41	LPJ 2
MPXJ 10 005	M10	5	40	35	30	3.8	16	63	LPJ 2
MPXJ 10 010	M10	10	63	53	30	3.8	13	63	LPJ 2
MPXJ 12 005	M12	5	48	43	35	5.5	37	98	LPJ 3
MPXJ 12 010	M12	10	68	58	35	5.5	15	98	LPJ 3
MPXJ 12 015	M12	15	93	78	35	5.5	15	98	LPJ 3
MPXJ 16 010	M16	10	70	60	35	8	24	147	LPJ 4
MPXJ 16 015	M16	15	85	70	35	8	22	147	LPJ 4
MPXJ 16 020	M16	20	110	90	35	8	13	147	LPJ 4

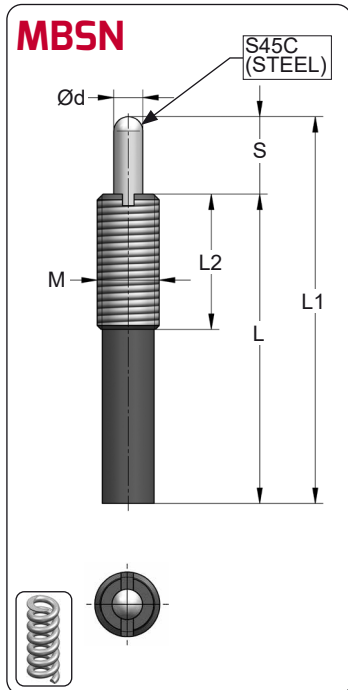
ENG ORDER DEU BESTELL FRA COMMANDE
 ITA ORDINE ESP PEDIDO POR PEDIDO

MPXJ M16 20

MPXJ 16 020



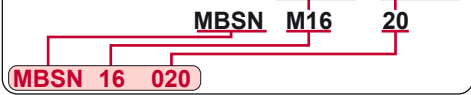
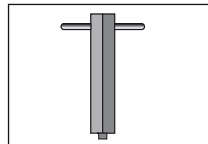
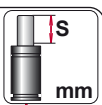
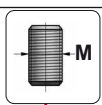
MBSN



ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MBSN 5 003	M5	3	23	20	20	2	0.74	2.95	LPJ 1
MBSN 5 005	M5	5	32	27	27	2	0.72	2.95	LPJ 1
MBSN 6 003	M6	3	28	25	25	2.5	0.85	3.2	LPJ 1
MBSN 6 005	M6	5	35	30	30	2.5	0.85	3.2	LPJ 1
MBSN 8 003	M8	3	28	25	25	3.1	0.9	3.3	LPJ 2
MBSN 8 005	M8	5	32	27	27	3.1	0.9	3.3	LPJ 2
MBSN 10 005	M10	5	35	30	30	3.8	1.9	4.7	LPJ 2
MBSN 10 010	M10	10	53	43	30	3.8	1.7	4.7	LPJ 2
MBSN 12 005	M12	5	35	30	30	5.5	1.5	4.7	LPJ 3
MBSN 12 010	M12	10	53	43	35	5.5	1.3	5.9	LPJ 3
MBSN 12 015	M12	15	66	51	35	5.5	1.6	5.9	LPJ 3
MBSN 16 010	M16	10	70	60	35	8	1.7	12.8	LPJ 4
MBSN 16 015	M16	15	75	60	35	8	1.7	12.8	LPJ 4
MBSN 16 020	M16	20	105	85	35	8	1.7	12.8	LPJ 4

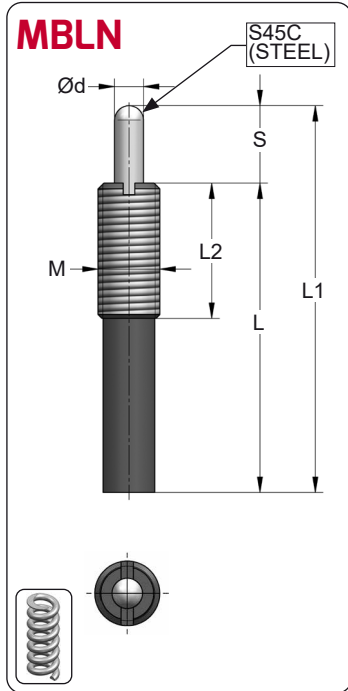


ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO



LPJ _ _

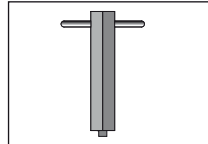
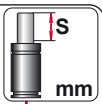
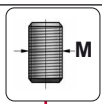
MBLN



ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MBLN 5 003	M5	3	23	20	20	2	2	10	LPJ 1
MBLN 5 005	M5	5	32	27	27	2	2	10	LPJ 1
MBLN 6 003	M6	3	28	25	25	2.5	6	10	LPJ 1
MBLN 6 005	M6	5	35	30	30	2.5	2	10	LPJ 1
MBLN 8 003	M8	3	28	25	25	3.1	6	10	LPJ 2
MBLN 8 005	M8	5	32	27	27	3.1	3	10	LPJ 2
MBLN 10 005	M10	5	35	30	30	3.8	6	15	LPJ 2
MBLN 10 010	M10	10	53	43	30	3.8	3	15	LPJ 2
MBLN 12 005	M12	5	35	30	30	5.5	6	15	LPJ 3
MBLN 12 010	M12	10	53	43	35	5.5	3	20	LPJ 3
MBLN 12 015	M12	15	66	51	35	5.5	3	20	LPJ 3
MBLN 16 010	M16	10	70	60	35	8	6	40	LPJ 4
MBLN 16 015	M16	15	75	60	35	8	4	40	LPJ 4
MBLN 16 020	M16	20	105	85	35	8	5	40	LPJ 4



ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO



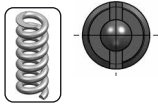
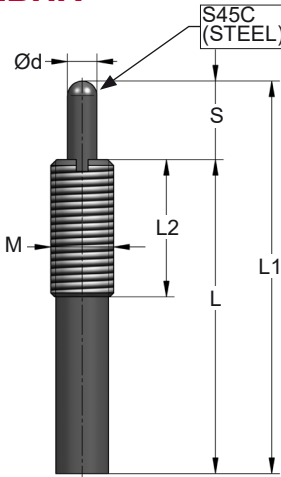
LPJ _ _

MBHN / MBXN

Spring Plungers



MBHN



ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MBHN 5 003	M5	3	23	20	20	2	5	20	LPJ 1
MBHN 5 005	M5	5	32	27	27	2	3	20	LPJ 1
MBHN 6 003	M6	3	28	25	25	2.5	8	30	LPJ 1
MBHN 6 005	M6	5	35	30	30	2.5	5	30	LPJ 1
MBHN 8 003	M8	3	28	25	25	3.1	15	30	LPJ 2
MBHN 8 005	M8	5	32	27	27	3.1	8	30	LPJ 2
MBHN 10 005	M10	5	35	30	30	3.8	9	50	LPJ 2
MBHN 10 010	M10	10	53	43	30	3.8	8	50	LPJ 2
MBHN 12 005	M12	5	35	30	30	5.5	19	50	LPJ 3
MBHN 12 010	M12	10	53	43	35	5.5	8	50	LPJ 3
MBHN 12 015	M12	15	66	51	35	5.5	5	50	LPJ 3
MBHN 16 010	M16	10	70	60	35	8	13	80	LPJ 4
MBHN 16 015	M16	15	75	60	35	8	13	80	LPJ 4
MBHN 16 020	M16	20	105	85	35	8	10	80	LPJ 4

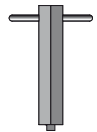


ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO



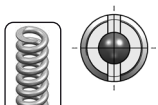
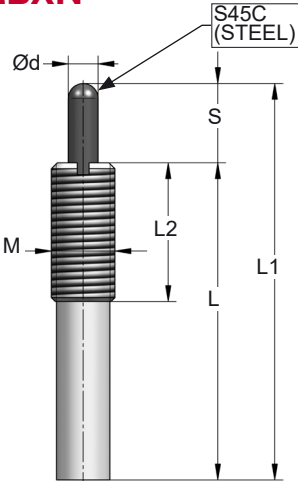
MBHN M16 20

MBHN 16 020



LPJ _ _

MBXN



ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MBXN 5 003	M5	3	30	27	27	2	9	25	LPJ 1
MBXN 5 005	M5	5	44	39	39	2	9	25	LPJ 1
MBXN 6 003	M6	3	33	30	30	2.5	14	39	LPJ 1
MBXN 6 005	M6	5	41	36	36	2.5	14	39	LPJ 1
MBXN 8 003	M8	3	30	27	27	3.1	15	41	LPJ 2
MBXN 8 005	M8	5	40	35	30	3.1	15	41	LPJ 2
MBXN 10 005	M10	5	40	35	30	3.8	16	63	LPJ 2
MBXN 10 010	M10	10	63	53	30	3.8	13	63	LPJ 2
MBXN 12 005	M12	5	48	43	35	5.5	37	98	LPJ 3
MBXN 12 010	M12	10	68	58	35	5.5	15	98	LPJ 3
MBXN 12 015	M12	15	93	78	35	5.5	15	98	LPJ 3
MBXN 16 010	M16	10	70	60	35	8	24	147	LPJ 4
MBXN 16 015	M16	15	85	70	35	8	22	147	LPJ 4
MBXN 16 020	M16	20	110	90	35	8	13	147	LPJ 4

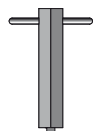


ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO



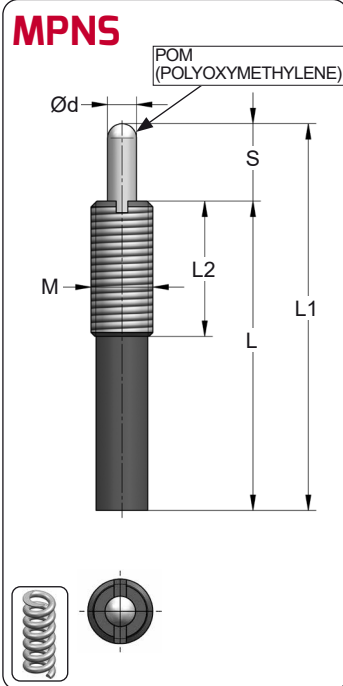
MBXN M16 20

MBXN 16 020



LPJ _ _

MPNS

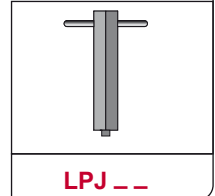


ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MPNS 5 003	M5	3	23	20	20	2	0.74	2.95	LPJ 1
MPNS 5 005	M5	5	32	27	27	2	0.72	2.95	LPJ 1
MPNS 6 003	M6	3	28	25	25	2.5	0.85	3.2	LPJ 1
MPNS 6 005	M6	5	35	30	30	2.5	0.85	3.2	LPJ 1
MPNS 8 003	M8	3	28	25	25	3.1	0.9	3.3	LPJ 2
MPNS 8 005	M8	5	32	27	27	3.1	0.9	3.3	LPJ 2
MPNS 10 005	M10	5	35	30	30	3.8	1.9	4.7	LPJ 2
MPNS 10 010	M10	10	53	43	30	3.8	1.7	4.7	LPJ 2
MPNS 12 005	M12	5	35	30	30	5.5	1.5	4.7	LPJ 3
MPNS 12 010	M12	10	53	43	35	5.5	1.3	5.9	LPJ 3
MPNS 12 015	M12	15	66	51	35	5.5	1.6	5.9	LPJ 3
MPNS 16 010	M16	10	70	60	35	8	1.7	12.8	LPJ 4
MPNS 16 015	M16	15	75	60	35	8	1.7	12.8	LPJ 4
MPNS 16 020	M16	20	105	85	35	8	1.7	12.8	LPJ 4

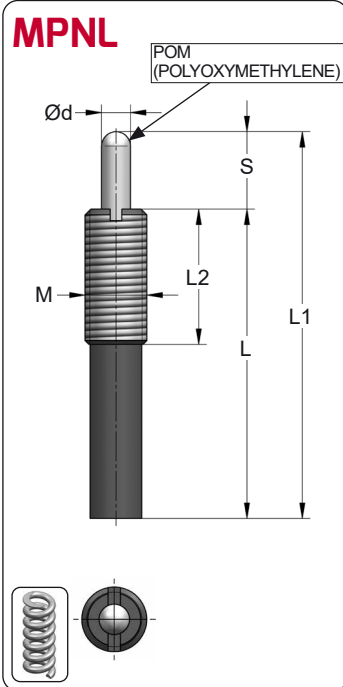
ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO

MPNS M16 20

MPNS 16 020



MPNL

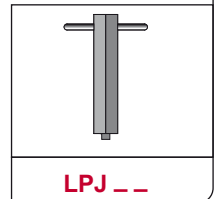


ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MPNL 5 003	M5	3	23	20	20	2	2	10	LPJ 1
MPNL 5 005	M5	5	32	27	27	2	2	10	LPJ 1
MPNL 6 003	M6	3	28	25	25	2.5	6	10	LPJ 1
MPNL 6 005	M6	5	35	30	30	2.5	2	10	LPJ 1
MPNL 8 003	M8	3	28	25	25	3.1	6	10	LPJ 2
MPNL 8 005	M8	5	32	27	27	3.1	3	10	LPJ 2
MPNL 10 005	M10	5	35	30	30	3.8	6	15	LPJ 2
MPNL 10 010	M10	10	53	43	30	3.8	3	15	LPJ 2
MPNL 12 005	M12	5	35	30	30	5.5	6	15	LPJ 3
MPNL 12 010	M12	10	53	43	35	5.5	3	20	LPJ 3
MPNL 12 015	M12	15	66	51	35	5.5	3	20	LPJ 3
MPNL 16 010	M16	10	70	60	35	8	6	40	LPJ 4
MPNL 16 015	M16	15	75	60	35	8	4	40	LPJ 4
MPNL 16 020	M16	20	105	85	35	8	5	40	LPJ 4

ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO

MPNL M16 20

MPNL 16 020

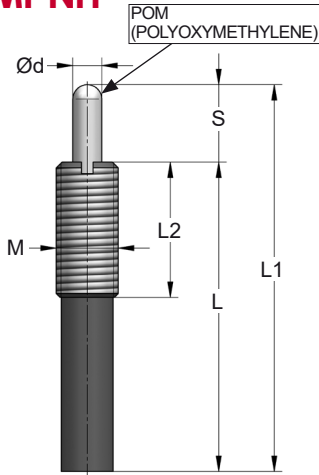


MPNH

Spring Plungers



MPNH



ORDER	M	S (mm)	L1 (mm)	L (mm)	L2 (mm)	Ød (mm)	F ₀ (N)	F ₁ (N)	Key
MPNH 5 003	M5	3	23	20	20	2	5	20	LPJ 1
MPNH 5 005	M5	5	32	27	27	2	3	20	LPJ 1
MPNH 6 003	M6	3	28	25	25	2.5	8	30	LPJ 1
MPNH 6 005	M6	5	35	30	30	2.5	5	30	LPJ 1
MPNH 8 003	M8	3	28	25	25	3.1	15	30	LPJ 2
MPNH 8 005	M8	5	32	27	27	3.1	8	30	LPJ 2
MPNH 10 005	M10	5	35	30	30	3.8	9	50	LPJ 2
MPNH 10 010	M10	10	53	43	30	3.8	8	50	LPJ 2
MPNH 12 005	M12	5	35	30	30	5.5	19	50	LPJ 3
MPNH 12 010	M12	10	53	43	35	5.5	8	50	LPJ 3
MPNH 12 015	M12	15	66	51	35	5.5	5	50	LPJ 3
MPNH 16 010	M16	10	70	60	35	8	13	80	LPJ 4
MPNH 16 015	M16	15	75	60	35	8	13	80	LPJ 4
MPNH 16 020	M16	20	105	85	35	8	10	80	LPJ 4

ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO

MPNH M16 20

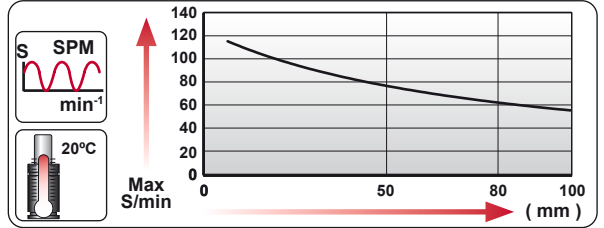
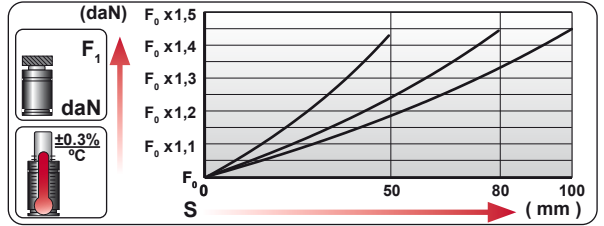
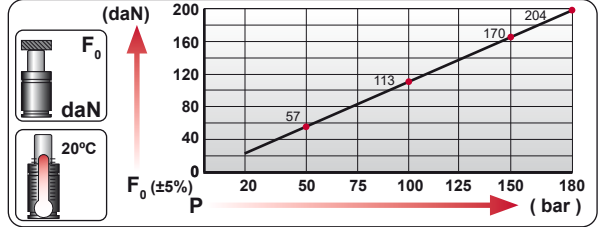
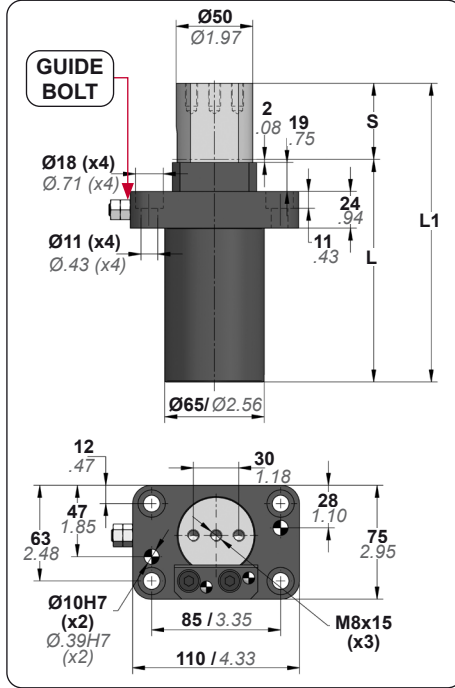
MPNH 16 020

LPJ __

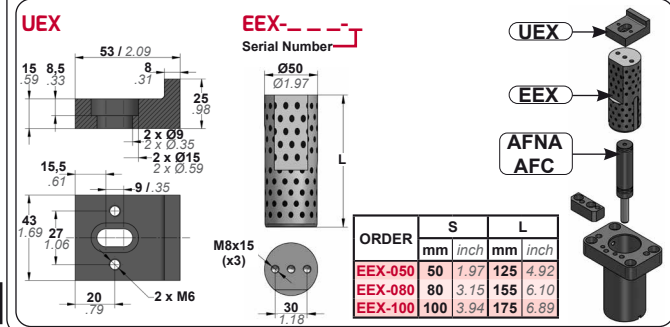


EXU

Flange Strippers



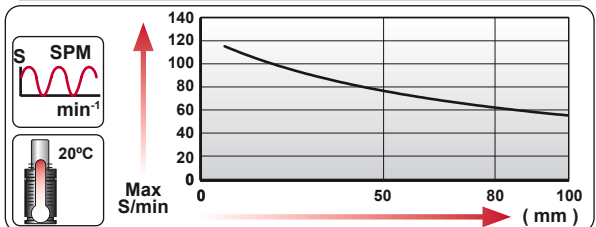
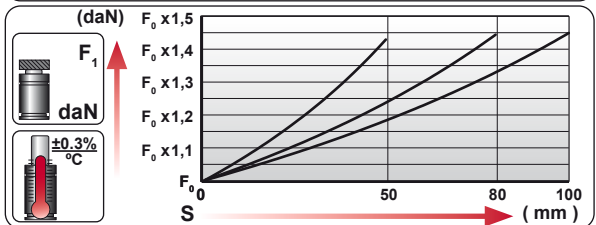
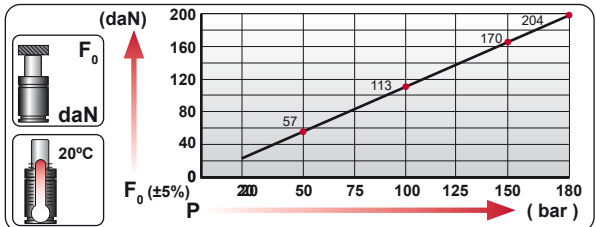
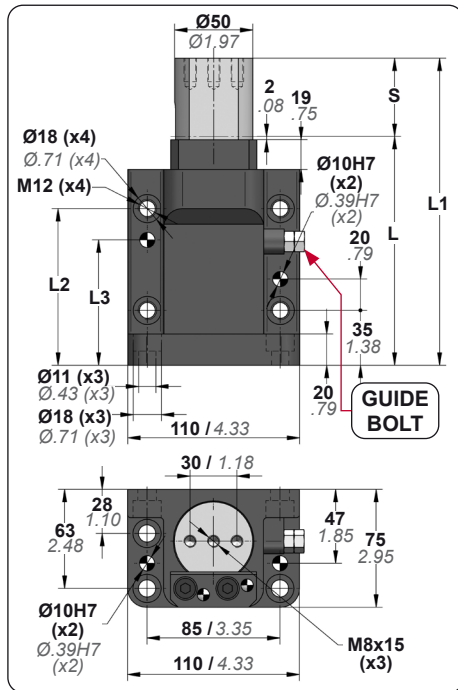
ORDER	S		L1 ±0.25		L		GAS SPRING		Kg. / lb	
	mm	inch	mm	inch	mm	inch				
EXU --- 050	50	1.97	196	7.72	146	5.75	AFNA --- 050	4.15	9.15	
EXU --- 080	80	3.15	256	10.08	176	6.93	AFC --- 080 V1	5.01	11.05	
EXU --- 100	100	3.94	296	11.65	196	7.72	AFC --- 100 V1	5.41	11.93	



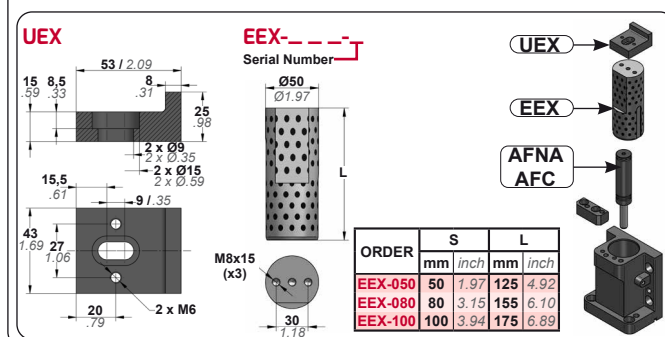
ORDER	COLOR	P	
		bar	psi
EXU 50 050	Green	45	650
EXU 100 050	Blue	90	1305
EXU 150 050	Red	135	1960
EXU 200 050	Yellow	180	2610

ORDER	F ₀ Initial Force ±5% 20°C 68°F		F ₁ (ISOTHERMAL) End Force	
	daN	lb	daN	lb
EXU 50 050	50	112	70	157
EXU 100 050	100	225	145	326
EXU 150 050	150	337	215	483
EXU 200 050	200	450	285	641

TECHNICAL DATA										
	Fluid	N ₂		Pmin Pmax 20°C / 68°F	20 bar 180 bar 290 psi 2610 psi		Tmin Tmax 0 °C 80 °C 32 °F 176 °F		Gas Spring	AFNA --- 050 AFC --- 050 V1
	Sm _{max}	< 90%		Tmin Tmax					Cap	UEX
	V _{max}	1,6 m/s		Force variation by temperature	±0,3% / °C				Rod	EEX---



ORDER	S		L1 ± 0.25		L		L2		L3		GAS SPRING		Kg. / lb	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch				
EXY --- 050	50	1.97	196	7.72	146	5.75	100	3.94	80	3.15	AFNA --- 050	5.47	12.06	
EXY --- 080	80	3.15	256	10.08	176	6.93	130	5.12	110	4.33	AFC --- 080 V1	6.83	15.06	
EXY --- 100	100	3.94	296	11.65	196	7.72	150	5.91	130	5.12	AFC --- 100 V1	7.56	16.67	



ORDER	COLOR	P	
		bar	psi
EXY 50 050	Green	45	650
EXY 100 050	Blue	90	1305
EXY 150 050	Red	135	1960
EXY 200 050	Yellow	180	2610

ORDER	F_0 Initial Force $\pm 5\%$ 20°C 68°F		F_1 (ISOTHERMAL) End Force	
	daN	lb	daN	lb
EXY 50 050	50	112	70	157
EXY 100 050	100	225	145	326
EXY 150 050	150	337	215	483
EXY 200 050	200	450	285	641

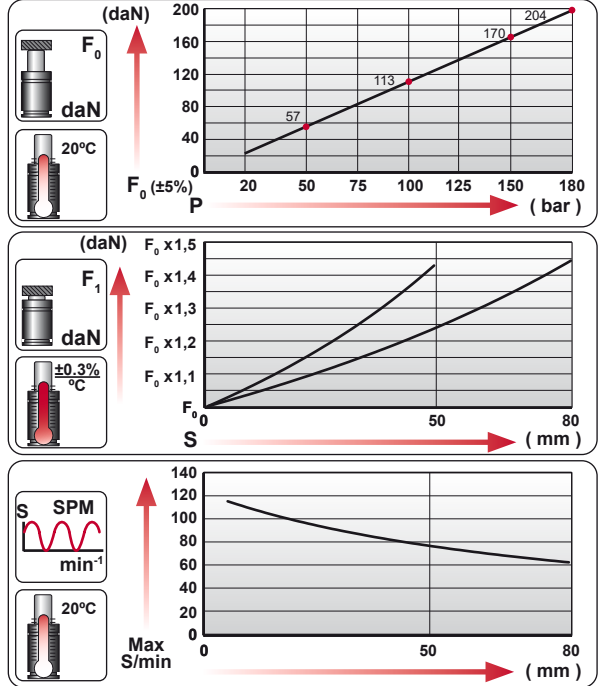
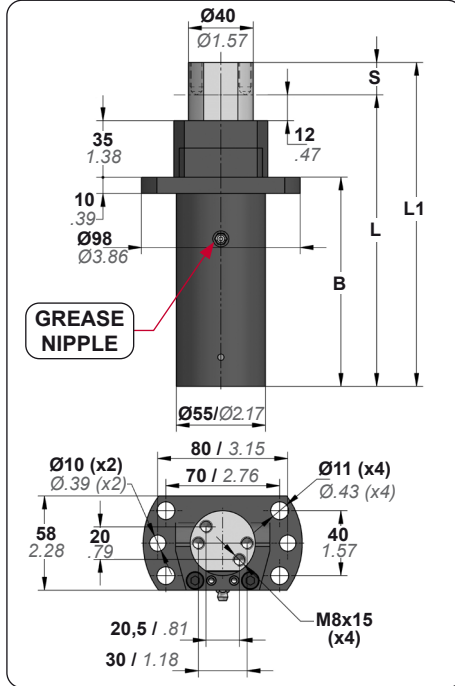
TECHNICAL DATA		Fluid		Pmin Pmax 20°C / 68°F		20 bar 180 bar 290 psi 2610 psi		Gas Spring	
	N ₂		Tmin Tmax		20°C / 68°F		20°C / 68°F		AFNA --- 050
	Smax < 90%		Tmin Tmax		20°C / 68°F		20°C / 68°F		AFC --- V1
	Vmax 1,6 m/s		Tmin Tmax		20°C / 68°F		20°C / 68°F		UEX
			Tmin Tmax		20°C / 68°F		20°C / 68°F		EEX---
			Tmin Tmax		20°C / 68°F		20°C / 68°F		
			Tmin Tmax		20°C / 68°F		20°C / 68°F		
			Tmin Tmax		20°C / 68°F		20°C / 68°F		
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EXG V1

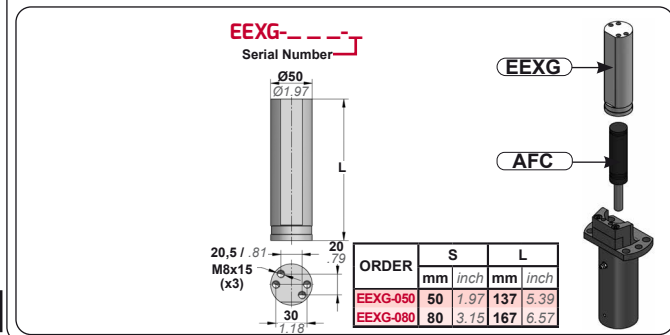
Flange Strippers

AZOLGAS	PSA
EXG 150 050 V1	MABEC (2015)
EXG 150 080 V1	N 000 473 321
	N 000 473 322

	PSA	E24.57.420.G (2015)



ORDER	S		L1 ± 0.25		L		B		GAS SPRING	Kg. / lb	
	mm	inch	mm	inch	mm	inch	mm	inch			
EXG ... 050 V1	50	1.97	200	7.87	150	5.91	103	4.06	AFC ... 050 V1	2.53	5.58
EXG ... 080 V1	80	3.15	260	10.24	180	7.09	133	5.24	AFC ... 080 V1	3.09	6.81



ORDER	COLOR	P	
		bar	psi
EXG 50 050 V1	Green	45	650
EXG 100 050 V1	Blue	90	1305
EXG 150 050 V1	Red	135	1960
EXG 200 050 V1	Yellow	180	2610

ORDER	F_0 Initial Force $\pm 5\%$ 20°C / 68°F		F_1 (ISOTHERMAL) End Force	
	daN	lb	daN	lb
EXG 50 050 V1	50	112	75	169
EXG 100 050 V1	100	225	155	348
EXG 150 050 V1	150	337	230	517
EXG 200 050 V1	200	450	305	686

TECHNICAL DATA													
	Fluid	N_2		P_{min} P_{max}	20 bar	180 bar		T_{min} T_{max}	290 psi	2610 psi		Gas Spring	AFC-----V1
	S_{max}	< 90%		T_{min} T_{max}	0 °C	80 °C		T_{min} T_{max}	32 °F	176 °F		Cap	X
	V_{max}	1,6 m/s		Force variation by temperature	$\pm 0,3\% / ^\circ\text{C}$			Rod	EEXG----				

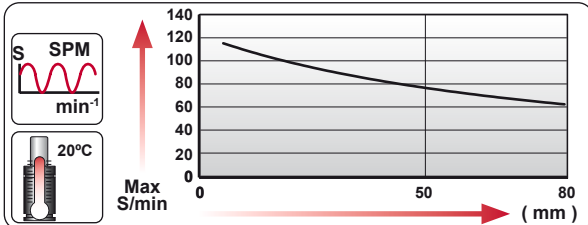
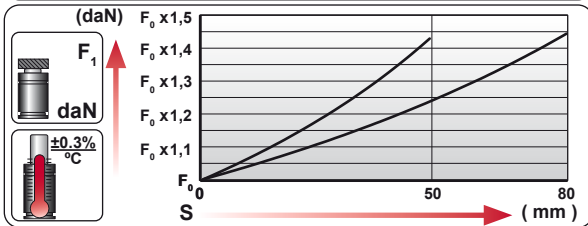
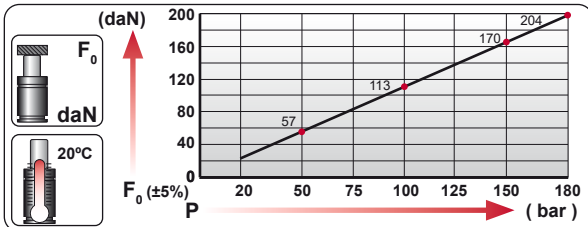
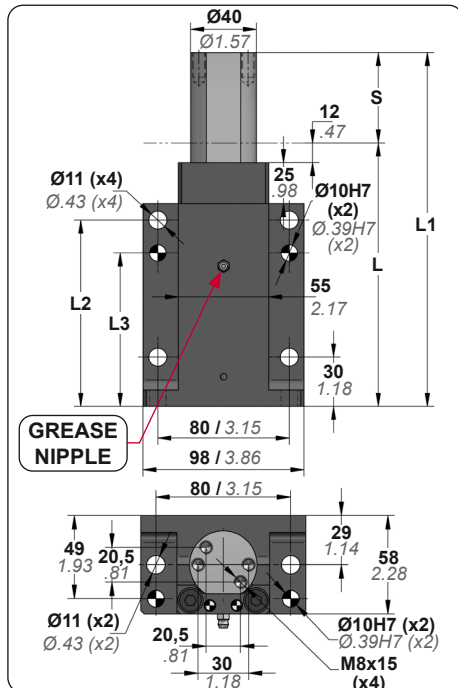


		PSA	E24.57.420.G

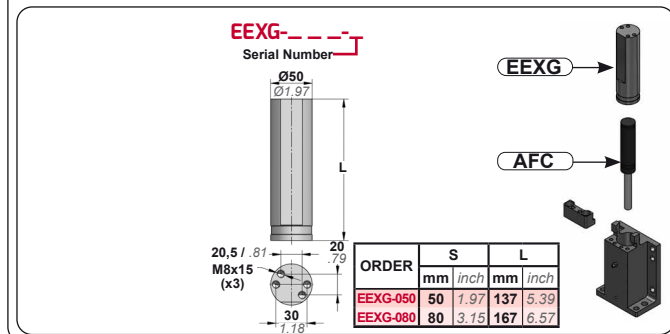
AZOLGAS	PSA MABEC
EXF 150 050	N 000 442 336
EXF 150 080	N 000 444 548



Flange Strippers



ORDER	S		L1 ±0.25		L		L2		L3		GAS SPRING		Kg. lb	
	mm	inch	mm	inch	mm	inch	mm	inch	mm	inch	AFC ... 050 V1	AFC ... 080 V1		
EXF --- 050	50	1.97	200	7.87	150	5.91	103	4.06	83	3.27	AFC ... 050 V1	AFC ... 080 V1	4.38	9.66
EXF --- 080	80	3.15	260	10.24	180	7.09	133	5.24	113	4.45	AFC ... 050 V1	AFC ... 080 V1	5.50	12.13



ORDER	COLOR	P	
		bar	psi
EXF 50 050	Green	45	650
EXF 100 050	Blue	90	1305
EXF 150 050	Red	135	1960
EXF 200 050	Yellow	180	2610

ORDER	F ₀ Initial Force ±5% 20°C 68°F		F ₁ (ISOTHERMAL) End Force	
	daN	lb	daN	lb
EXF 50 050	50	112	75	169
EXF 100 050	100	225	155	348
EXF 150 050	150	337	230	517
EXF 200 050	200	450	305	686

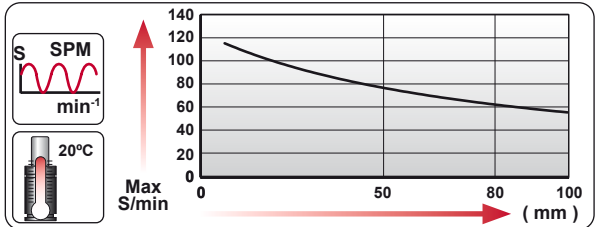
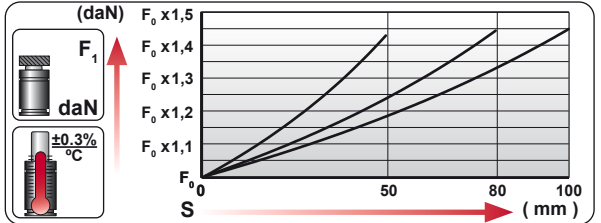
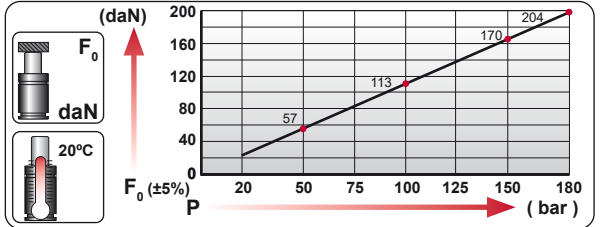
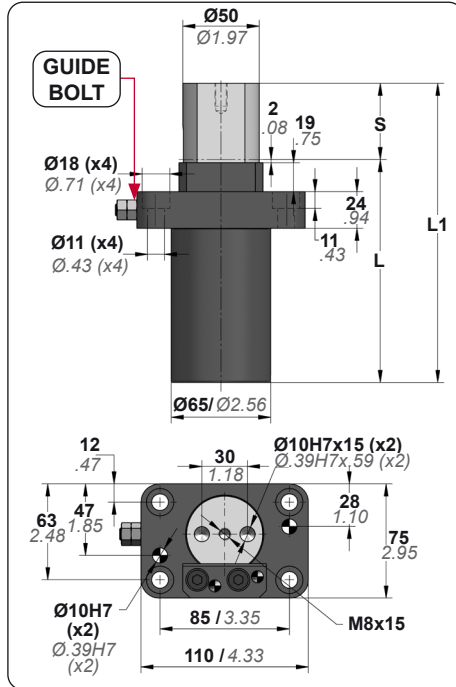
TECHNICAL DATA					
	Fluid	N ₂		Pmin Pmax 20°C / 68°F	20 bar 180 bar 290 psi 2610 psi
	Smax	< 90%		Tmin Tmax	0 °C 80 °C 32 °F 176 °F
	Vmax	1,6 m/s		Force variation by temperature	±0,3% / °C
	Gas Spring	AFC --- V1		Cap	X
	Rod	EEXG---		Cap	X

EXB

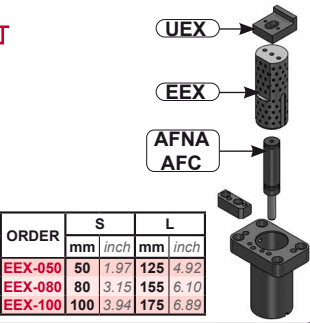
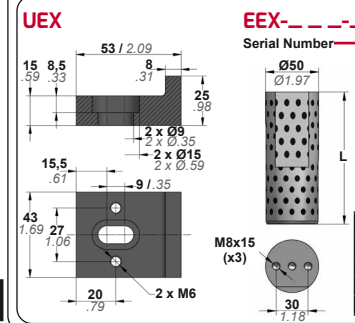
Flange Strippers

AZOLGAS	BMW
EXB 100 050	2 174 771
EXB 100 080	2 174 772
EXB 100 100	2 175 937

BMW B2 4003		
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ORDER	S		L1 ± 0.25		L		GAS SPRING	Kg. / lb	
	mm	inch	mm	inch	mm	inch			
EXB --- 050	50	1.97	196	7.72	146	5.75	AFNA --- 050	4.15	9.15
EXB --- 080	80	3.15	256	10.08	176	6.93	AFC --- 080 V1	5.01	11.05
EXB --- 100	100	3.94	296	11.65	196	7.72	AFC --- 100 V1	5.41	11.93



ORDER	COLOR	P	
		bar	psi
EXB 50 050	Green	45	650
EXB 100 050	Blue	90	1305
EXB 150 050	Red	135	1960
EXB 200 050	Yellow	180	2610

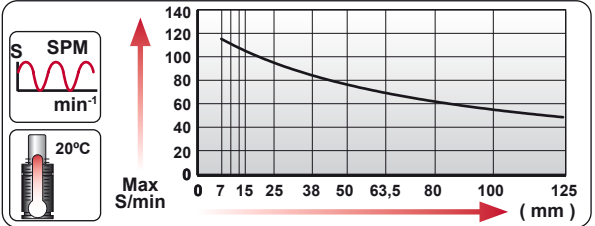
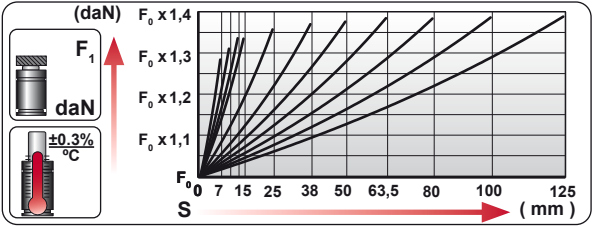
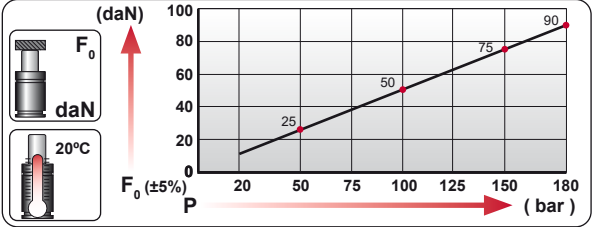
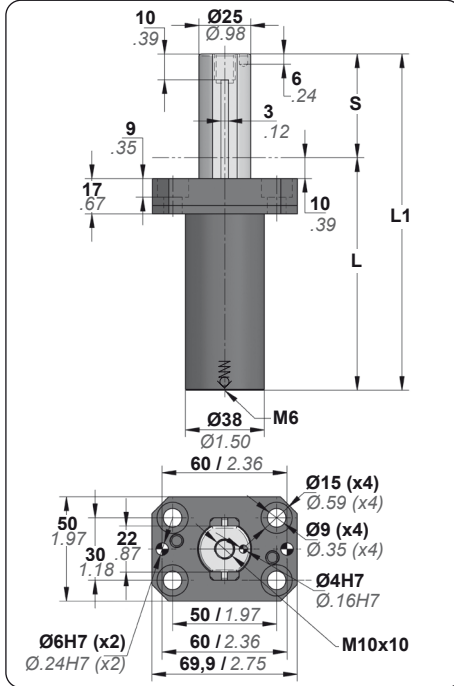
ORDER	F_0 Initial Force $\pm 5\%$ $20^\circ\text{C} / 68^\circ\text{F}$		F_1 (ISOTHERMAL) End Force	
	daN	lb	daN	lb
EXB 50 050	50	112	70	157
EXB 100 050	100	225	145	326
EXB 150 050	150	337	215	483
EXB 200 050	200	450	285	641

TECHNICAL DATA									
	Fluid	N_2		Pmin Pmax $20^\circ\text{C} / 68^\circ\text{F}$	20 bar 290 psi	180 bar 2610 psi		Gas Spring	AFNA --- 050 AFC --- 050 V1
	Sm	< 90%		Tmin Tmax	0 °C 32 °F	80 °C 176 °F		Cap	UEX
	Vmax	1,6 m/s		Force variation by temperature	$\pm 0,3\% / ^\circ\text{C}$			Rod	EEX---

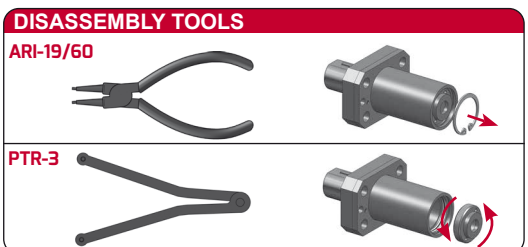
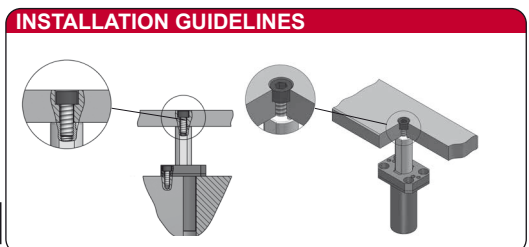


EXDB 90 V3

Stock Lifters



ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		GAS SPRING		Kg. lb	
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb				
EXDB 90 025 V3	25	0.98	112	4.41	87	3.43	90	202	127	286	AFJ 90 025 V2	0.63	1.39	
EXDB 90 038 V3	38	1.50	138	5.43	100	3.94	±5% 180 bar 2610 psi at 20°C 68°F		128	288	AFJ 90 038 V2	0.69	1.52	
EXDB 90 050 V3	50	1.97	162	6.38	112	4.41			128	288	AFJ 90 050 V2	0.75	1.65	
EXDB 90 063 V3	63.5	2.50	192	7.56	128.5	5.06			129	289	AFJ 90 063 V2	0.82	1.81	
EXDB 90 080 V3	80	3.15	225	8.86	145	5.71			129	289	AFJ 90 080 V2	0.92	2.03	
EXDB 90 100 V3	100	3.94	265	10.43	165	6.50			129	290	AFJ 90 100 V2	1.02	2.25	
EXDB 90 125 V3	125	4.92	315	12.40	190	7.48			129	290	AFJ 90 125 V2	1.15	2.54	



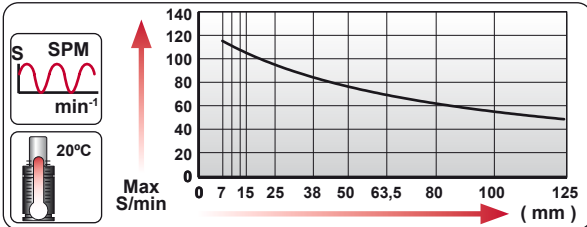
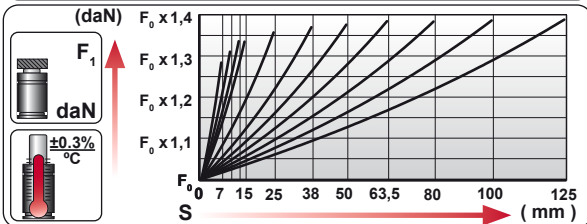
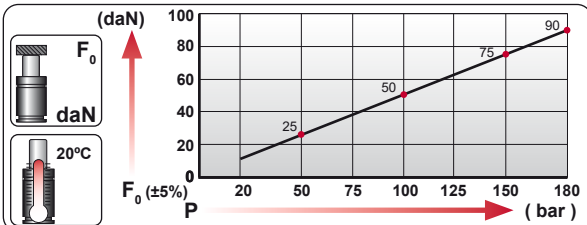
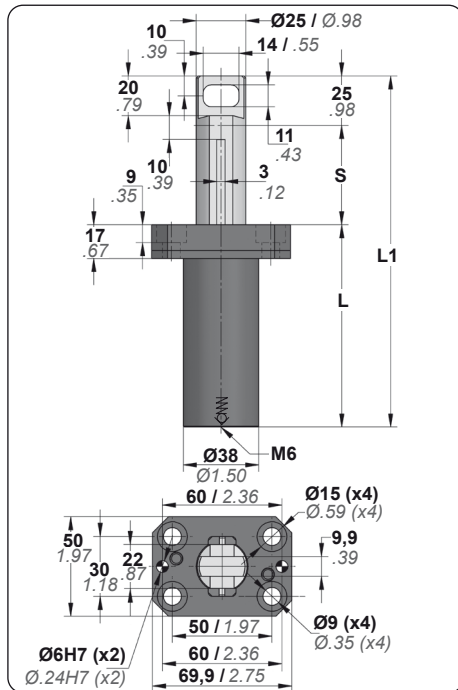
TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar 180 bar 20°C / 68°F 2610 psi	Tmin Tmax	0 °C 80 °C 32 °F 176 °F	Gas Spring	AFJ 90 ___ V2
Smax	< 90%	Force variation by temperature	±0,3% / °C	Connection	X	Cartridge Kit	X
Vmax	0,8 m/s						

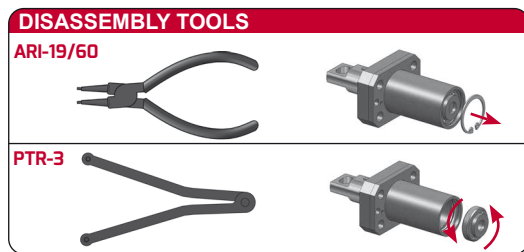
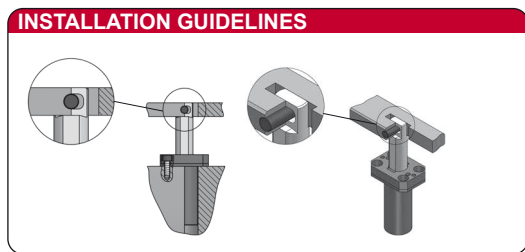


EXDN 90 V3

Stock Lifters



ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		GAS SPRING		
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb		Kg.	lb
EXDN 90 025 V3	25	0.98	127	5.00	77	3.03	90	202	127	286	AFJ 90 025 V2	0.64	1.41
EXDN 90 038 V3	38	1.50	153	6.02	90	3.54	±5% 180 bar 2610 psi at 20°C 68°F		128	288	AFJ 90 038 V2	0.70	1.54
EXDN 90 050 V3	50	1.97	177	6.97	102	4.02			128	288	AFJ 90 050 V2	0.76	1.68
EXDN 90 063 V3	63.5	2.50	207	8.15	118.5	4.67			129	289	AFJ 90 063 V2	0.84	1.85
EXDN 90 080 V3	80	3.15	240	9.45	135	5.31			129	289	AFJ 90 080 V2	0.93	2.05
EXDN 90 100 V3	100	3.94	280	11.02	155	6.10			129	290	AFJ 90 100 V2	1.03	2.27
EXDN 90 125 V3	125	4.92	330	12.99	180	7.09			129	290	AFJ 90 125 V2	1.16	2.56

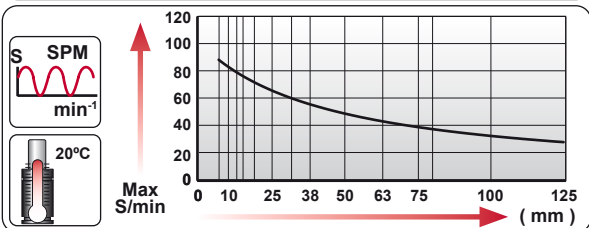
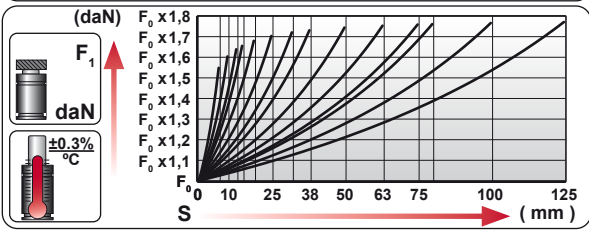
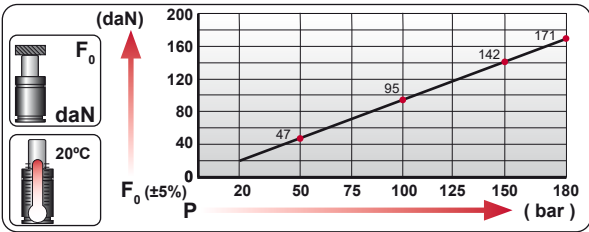
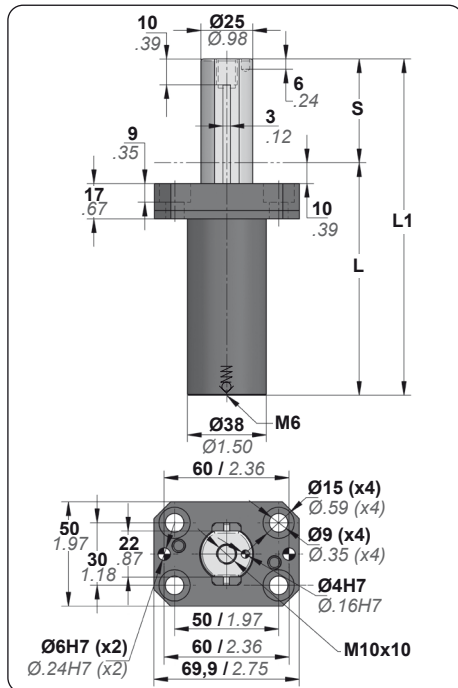


TECHNICAL DATA

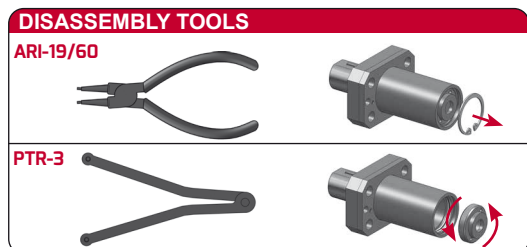
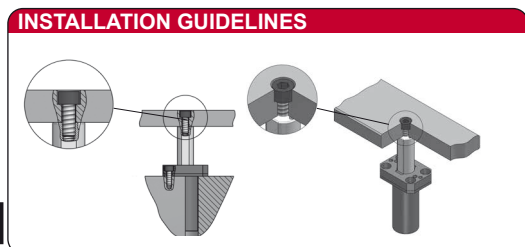
Fluid	N ₂	Pmin Pmax 20°C / 68°F	20 bar 290 psi	180 bar 2610 psi	Tmin Tmax 0°C / 32°F	80°C 176°F	Gas Spring	AFJ 90 ___ V2
Smax	< 90%	Force variation by temperature	±0,3% / °C		Connection			X
Vmax	0,8 m/s				Cartridge Kit			X

EXDT 170 V3

Stock Lifters



ORDER	S		L1 ±0.25		L		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		GAS SPRING		Kg. lb	
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb				
EXDT 170 025 V3	25	0.98	112	4.41	87	3.43	±5% 180 bar 2610 psi at 20°C 68°F	382	293	658	CW 170 025 V1	0.61	1.34	
EXDT 170 038 V3	38	1.50	138	5.43	100	3.94			301	676	CW 170 038 V1	0.68	1.50	
EXDT 170 050 V3	50	1.97	162	6.38	112	4.41			304	685	CW 170 050 V1	0.75	1.65	
EXDT 170 063 V3	63	2.48	188	7.40	125	4.92			307	691	CW 170 063 V1	0.83	1.83	
EXDT 170 080 V3	80	3.15	225	8.86	145	5.71			307	689	CW 170 080 V1	0.94	2.07	
EXDT 170 100 V3	100	3.94	265	10.43	165	6.50			309	695	CW 170 100 V1	1.05	2.31	
EXDT 170 125 V3	125	4.92	315	12.40	190	7.48			311	699	CW 170 125 V1	1.19	2.62	

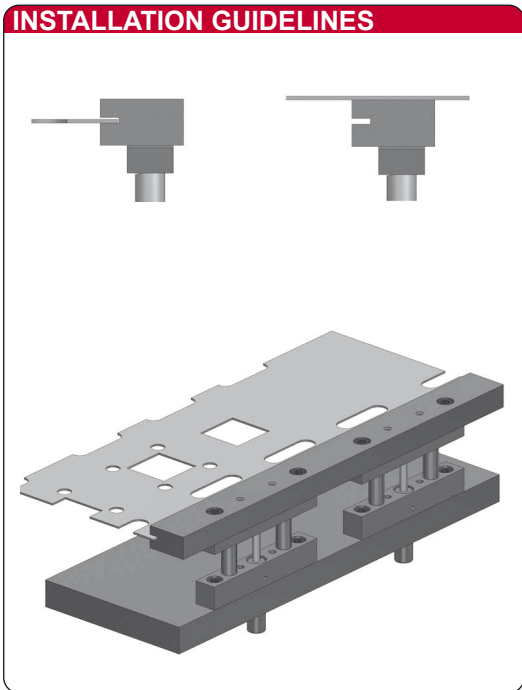
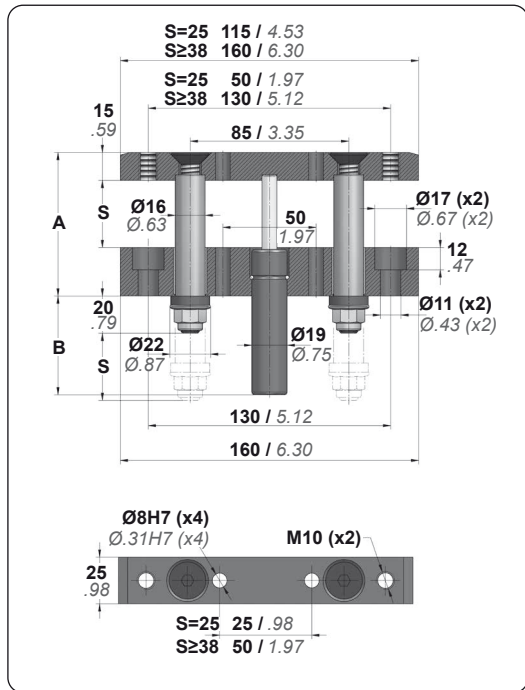


TECHNICAL DATA

Fluid	N ₂	Pmin Pmax	20 bar 180 bar 290 psi 2610 psi	Tmin Tmax	0 °C 80 °C 32 °F 176 °F	Gas Spring	CW 170 --- V1
Smax	< 90%	Force variation by temperature	±0,3% / °C	Connection		Cartridge Kit	X
Vmax	0,8 m/s						X

LPG 90

Guided Lifters



ORDER	S		A		B		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		GAS SPRING	Kg. lb	
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb		Kg.	lb
LPG 90 025	23	0.91	64	2.52	40	1.57	90	202	127	286	AFJ 90 025 V2	1.36	3.00
LPG 90 038	36	1.42	77	3.03	53	2.09			128	288	AFJ 90 038 V2	1.42	3.13
LPG 90 050	48	1.89	89	3.50	65	2.56			128	288	AFJ 90 050 V2	1.47	3.24
LPG 90 063	61.5	2.42	102.5	4.04	81.5	3.21			129	289	AFJ 90 063 V2	1.53	3.37
LPG 90 080	78	3.07	119	4.69	98	3.86			129	289	AFJ 90 080 V2	1.60	3.53
LPG 90 100	98	3.86	139	5.47	118	4.65			129	290	AFJ 90 100 V2	1.69	3.73
LPG 90 125	123	4.84	164	6.46	143	5.63			129	290	AFJ 90 125 V2	1.80	3.97
LPG 90 150	148	5.83	189	7.44	168	6.61			129	290	AFJ 90 150 V2	1.91	4.21

Ram Velocity		Attachment Mass	
mm/s	m/s	Kg.	lb
300	12	20	44
400	16	11	24
500	20	7.3	16
600	24	5.0	11
700	28	3.7	8
800	31	2.8	6

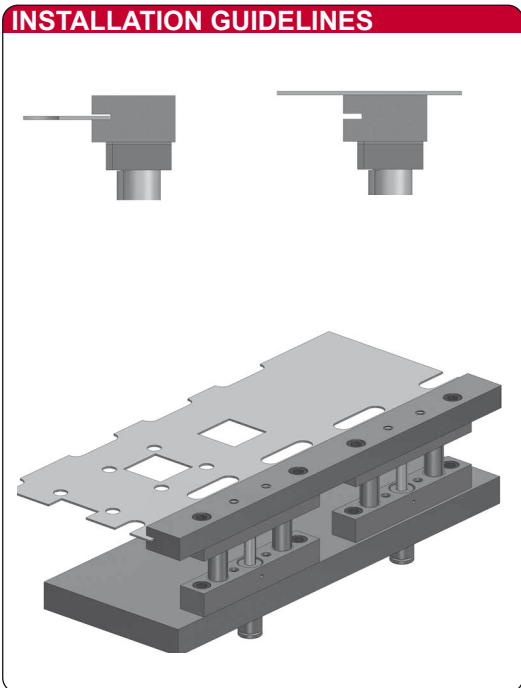
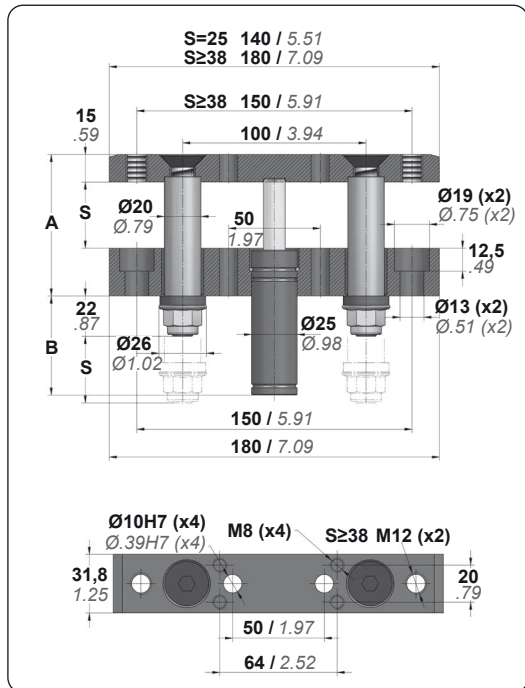
Determine the slider speed of the press from its technical specification and application conditions, and follow the instructions according to chart.

Make sure that the load doesn't exceed the recommended maximal value for the given speed.

TECHNICAL DATA												
	Fluid	N ₂		Pmin Pmax 20°C / 68°F	20 bar 290 psi	180 bar 2610 psi		Tmin Tmax 0°C 32°F	80°C 176°F		Charging Adapter	06 CG 2-Q
	Sm _{ax}	< 90%		Tmin Tmax	0°C 32°F	80°C 176°F		Force variation by temperature	±0,3% / °C		Connection	X
	V _{max}	1,6 m/s		Force variation by temperature	±0,3% / °C		Cartridge Kit	X				



LPG 200
Guided Lifters



ORDER	S		A		B		F ₀ Initial Force		F ₁ (ISOTHERMAL) End Force		GAS SPRING		Kg. lb	
	mm	inch	mm	inch	mm	inch	daN	lb	daN	lb				
LPG 200 025	23	0.91	64	2.52	41	1.61	200	450	289	650	AFC 200 025 V1	2.01	4.43	
LPG 200 038	36	1.42	77	3.03	54	2.13			291	654	AFC 200 038 V1	2.08	4.59	
LPG 200 050	48	1.89	89	3.50	66	2.60			292	656	AFC 200 050 V1	2.16	4.76	
LPG 200 063	61.5	2.42	102.5	4.04	82.5	3.25			292	657	AFC 200 063 V1	2.25	4.96	
LPG 200 080	78	3.07	119	4.69	99	3.90			293	658	AFC 200 080 V1	2.34	5.16	
LPG 200 100	98	3.86	139	5.47	119	4.69			293	659	AFC 200 100 V1	2.46	5.42	
LPG 200 125	123	4.84	164	6.46	144	5.67			293	659	AFC 200 125 V1	2.61	5.75	
LPG 200 150	148	5.83	189	7.44	177	6.97			295	663	AFC-M 200 150	2.90	6.39	
LPG 200 175	173	6.81	214	8.43	202	7.95			295	663	AFC-M 200 175	3.07	6.77	
LPG 200 200	198	7.80	239	9.41	227	8.94			296	665	AFC-M 200 200	3.24	7.14	

±5%
180 bar
2610 psi
at
20°C
68°F

Ram Velocity		Attachment Mass	
mm/s	m/s	Kg.	lb
300	12	31	68
400	16	17	37
500	20	11	24
600	24	7.7	17
700	28	5.6	12
800	31	4.3	9

Determine the slider speed of the press from its technical specification and application conditions, and follow the instructions according to chart.

Make sure that the load doesn't exceed the recommended maximal value for the given speed.

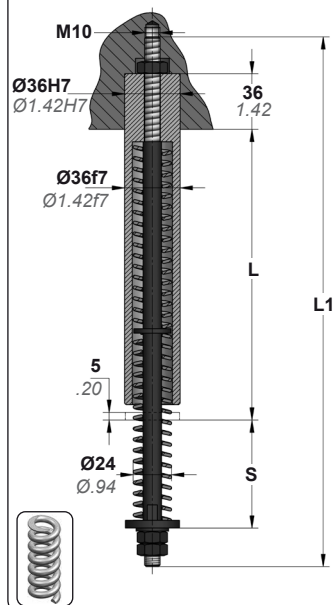
TECHNICAL DATA															
	Fluid	N ₂		Pmin Pmax 20°C / 68°F	20 bar 290 psi	180 bar 2610 psi		Tmin Tmax 0°C / 32°F	80°C / 176°F		Charging Adapter	06 CG 2-Q			
	Smax	< 90%		Tmin Tmax							Connection	X			
	Vmax	1,6 m/s		Force variation by temperature		±0,3% / °C					Cartridge Kit	X			

PME / PGE

Bolt



PME



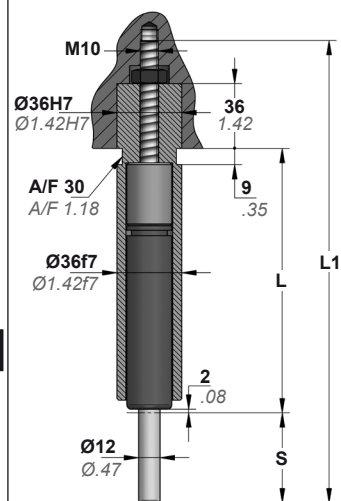
ORDER	S (mm) (inch)	L1 (mm) (inch)	L (mm) (inch)	F ₀ (daN) (lb)	F ₁ (daN) (lb)
PME - 1	50 1.97	290 11.42	155 6.10	117.2 263	650 1461
PME - 2	50 1.97	290 11.42	155 6.10	185 416	1030 2316
PME - 3	65 2.56	343.5 13.52	193.5 7.62	94 211	650 1461
PME - 4	65 2.56	343.5 13.52	193.5 7.62	149 335	1030 2316
PME - 5	80 3.15	392.5 15.45	227.5 8.96	84.7 190	650 1461
PME - 6	80 3.15	392.5 15.45	227.5 8.96	134 301	1030 2316



	ENG ORDER	
	DEU BESTELL	
	FRA COMMANDE	
	ITA ORDINE	
	ESP PEDIDO	
	POR PEDIDO	

PME 1

PGE



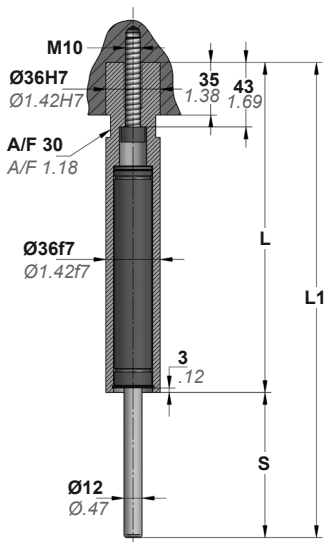
ORDER	S (mm) (inch)	L1 (mm) (inch)	L (mm) (inch)	F ₀ (daN) (lb)	F ₁ (daN) (lb)	Gas Spring
PGE - 1	50 1.97	257 10.12	147 5.79	50 112	65 146	AF 50 050
PGE - 2	50 1.97	257 10.12	147 5.79	100 225	125 281	AF 100 050
PGE - 3	65 2.56	310.5 12.22	185.5 7.30	50 112	65 146	AF 50 065
PGE - 4	65 2.56	310.5 12.22	185.5 7.30	100 225	125 281	AF 100 065
PGE - 5	80 3.15	359.5 14.15	218.5 8.60	50 112	65 146	AF 50 080
PGE - 6	80 3.15	359.5 14.15	218.5 8.60	100 225	125 281	AF 100 080



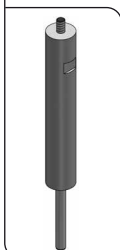
	ENG ORDER	
	DEU BESTELL	
	FRA COMMANDE	
	ITA ORDINE	
	ESP PEDIDO	
	POR PEDIDO	

PGE 1

PGN



ORDER	S (mm) (inch)	L1 (mm) (inch)	L (mm) (inch)	F ₀ (daN) (lb)	F ₁ (daN) (lb)	Gas Spring
PGN - 1	58 2.28	240 9.45	182 7.17	100 225	155 348	AFC 100 063 V1
PGN - 2	74 2.91	274 10.79	200 7.87	100 225	155 348	AFC 100 080 V1
PGN - 3	94 3.70	314 12.36	220 8.66	100 225	155 348	AFC 100 100 V1

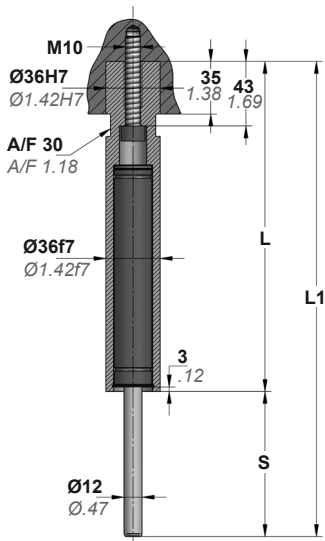


ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO

PGN

PGN 1

PGH



ORDER	S (mm) (inch)	L1 (mm) (inch)	L (mm) (inch)	F ₀ (daN) (lb)	F ₁ (daN) (lb)	Gas Spring
PGH - 1	58 2.28	240 9.45	182 7.17	100 225	155 348	AFC 100 063 V1
PGH - 2	74 2.91	274 10.79	200 7.87	100 225	155 348	AFC 100 080 V1
PGH - 3	94 3.70	314 12.36	220 8.66	100 225	155 348	AFC 100 100 V1



ENG ORDER
DEU BESTELL
FRA COMMANDE
ITA ORDINE
ESP PEDIDO
POR PEDIDO

PGH

PGH 1