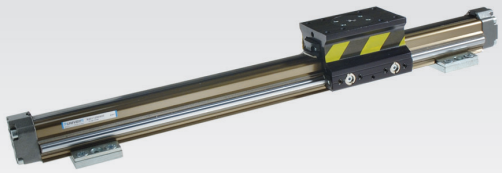
S5

Rodless cylinders with integrated slide - Ø 25÷50 mm
Technopolymer sliding guide

- Extruded aluminium profile Ø 25÷50 mm
- Stroke length up to 6m
- Flexible guiding system
- Sliding of carriage by means of plastic slides on steel rods
- Translation speed 0,2÷1,5 m/sec
- Version with locking unit available upon request



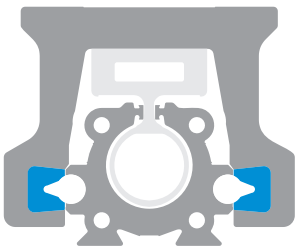
TECNICHAL CHARACTERISTICS

Ambient temperature	-20÷80 °C
Fluid	filtered air, with or without lubrication
Working pressure	3÷10 bar
Bores	Ø 25 - 32 - 40 - 50 mm
Cushionings	adjustable on both sides

CONSTRUCTIVE CHARACTERISTICS

End-cap	die-cast aluminium
Barrel	anodized aluminium
Piston	aluminium
Guide slide	acetalic resin
Piston seal	double lip nitrile rubber (NBR)
Shock absorber seals	nitrile rubber (NBR) on both sides

Technopolymer sliding guide



S5 with L6 locking unit

CODIFICATION KEY

S	5	0	1	1	2	5	0	8	5	0
1		2	3	4	5		6			

1 Series

S5 = Ø 25÷50 mm - Rodless cylinders with integrated guides Technopolymer sliding guide

2 Carriage type

0 = Standard carriage (except Ø 40 - 50 mm)
2 = Medium carriage
3 = Long carriage

3 Left end-cap supply port

0 = No supply port (both chambers are supplied from the right end-cap)
1 = Side supply port
2 = Bottom supply port
3 = Rear supply port

4 Right end-cap supply port

1 = Side supply port
2 = Bottom supply port
3 = Rear supply port
4 = Rear supply ports for both chambers on the right end-cap

5 Bore (mm)

25 = Ø25
32 = Ø32
40 = Ø40
50 = Ø50

6 Stroke (mm)

Up to **6000**

Stroke tolerances

Ø	mm
25	+2,5 - 0
32	+3,2 - 0
40	+3,2 - 0
50	+3,2 - 0

Cylinder mass Standard carriage

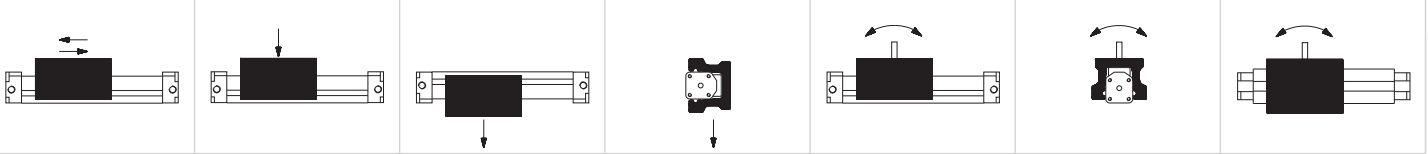
Cylinder mass Medium carriage

Cylinder mass Long carriage

Ø	Cylinder - stroke 0	Increase for 100 mm stroke	Cylinder - stroke 0	Cylinder - stroke 0
	g	g	g	g
25	1625	365	1930	264
32	2775	495	3265	465
40	-	920	6095	860
50	-	1280	10030	14040

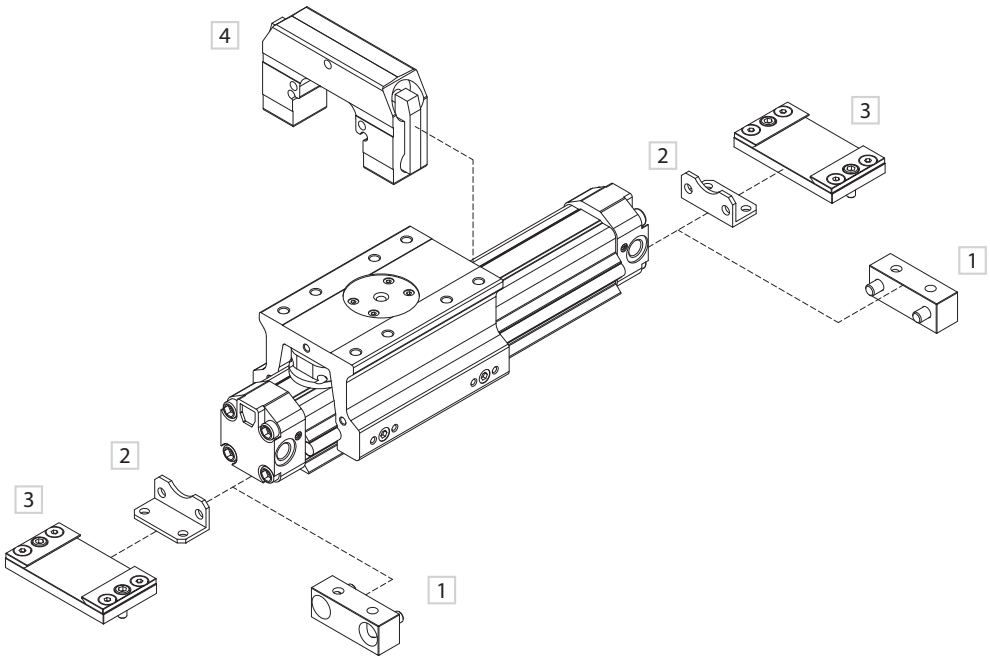
Theoretical forces **(N)** at different working pressure **(bar)** Static load value **(N)** and torque **(Nm)**

Please note that in dynamic conditions, the load must be reduced due to effects associated with the speed.
A moment is the product of the load (Newton) and the arm (meters), i.e the distance between the centre of gravity of the load and the longitudinal axis of the piston.

Force	Load			Bending moment	Torque	Bending moment
6 bar	P1	P2	P3	M1	M2	M3
						

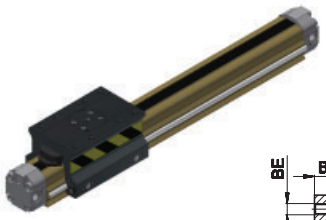
Ø	Force	Load			Standard carriage			Medium carriage			Long carriage		
	F (N)	P1 (N)	P2 (N)	P3 (N)	M1 (Nm)	M2 (Nm)	M3 (Nm)	M1 (Nm)	M2 (Nm)	M3 (Nm)	M1 (Nm)	M2 (Nm)	M3 (Nm)
25	250	400			13	8	16	20	10	25	40	15	50
32	420	400			20	9	27	30	12	40	55	18	75
40	640	600			-	-	-	60	30	80	110	45	150
50	1050	800			-	-	-	85	50	110	150	75	210

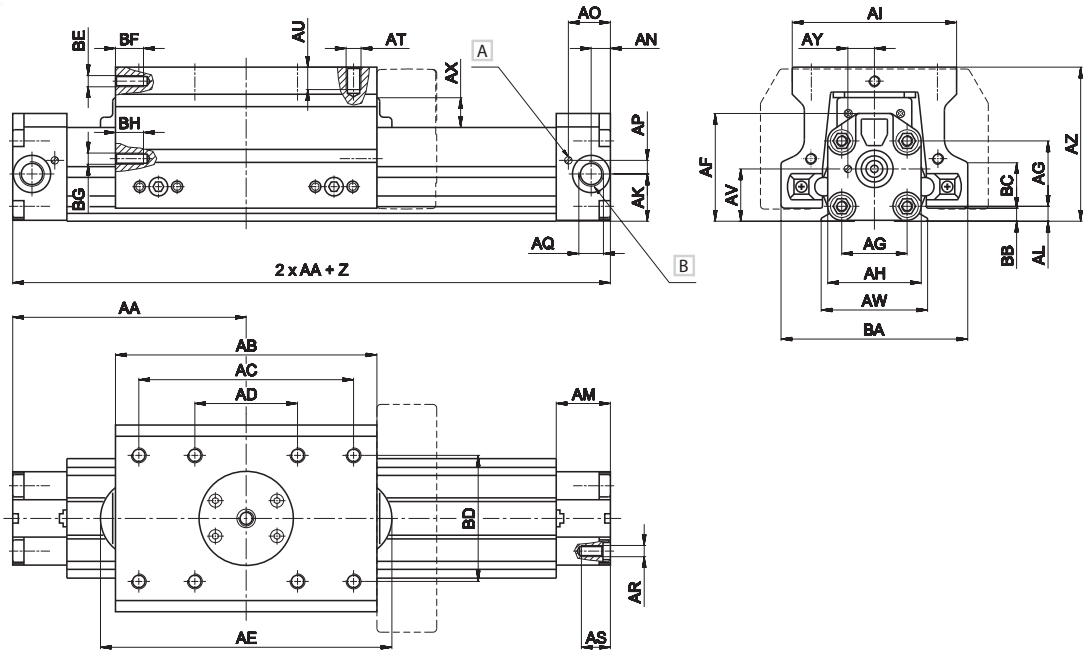
Fixing elements and accessories



	DESCRIPTION	NOTE	PART NO.
1	Bracket Ø40-50	Anodized aluminium	**SF-13**_ _ _
2	Angle bracket Ø25-32	Zinc-plated steel	**SF-13** _ _ _
3	Fixing plate	Zinc-plated steel	**SF-12** _ _ _
4	L6 locking unit	-	**L6-S5** _ _ _

Rodless cylinders with integrated guides and standard carriage - 8 fixing holes





Z = Stroke

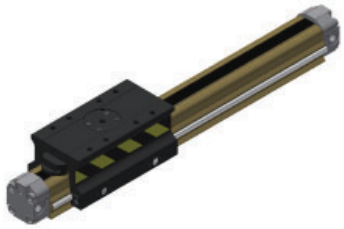
Ø	AA	AB	AC	AD	AE	AF	AG	AH	AI	AK	AL	AM	AN	AO	AP	AQ	AR
25	100	106	90	50	130	48,3	28	40,5	70	20,2	7	24	7,4	18,2	5,7	G1/8	M5
32	125	140	115	55	156	57	35	50	88	25,3	8	29	10,3	22,5	7,3	G1/4	M6
40	-	-	-	-	-	-	44	64	90	33,8	11,8	33	12,5	26,5	8,7	G3/8	M8
50	-	-	-	-	-	-	55	80	100	41,4	14,7	33	14,2	25,7	11,8	G3/8	M10

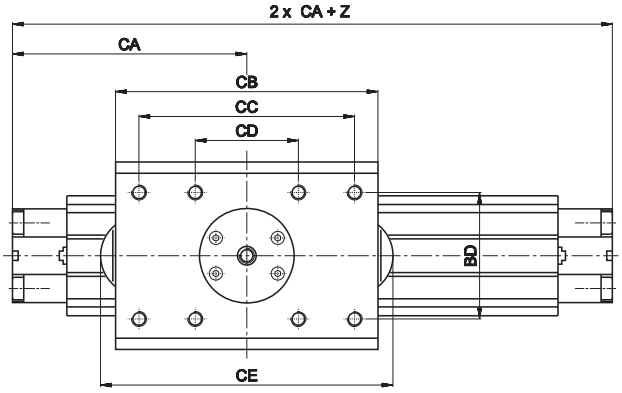
Ø	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH
25	12	M6	10	22,8	42,8	16	12,2	71,8	85	5,7	24	50	15	M6	M6	15
32	15,5	M6	12	28	57	16	14,2	82,5	100	7	24,5	67,5	15	M6	M6	15
40	20	M8	14	37	67	19,5	16,5	106,6	135	7	39	65	15	M6	M6	15
50	20	M8	16	47,7	86	20,5	19,1	123,7	149	7,2	41	76,5	16	M8	M6	15

Dimensions of the L6 locking unit are indicated by dotted lines; for the fi xing holes of the locking unit, see dedicated chapter.
For Ø 40 - 50 the standard carriage is not available

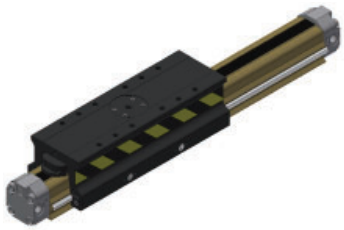
A Pneumatic cushioning adjusting screw
B Side supply port

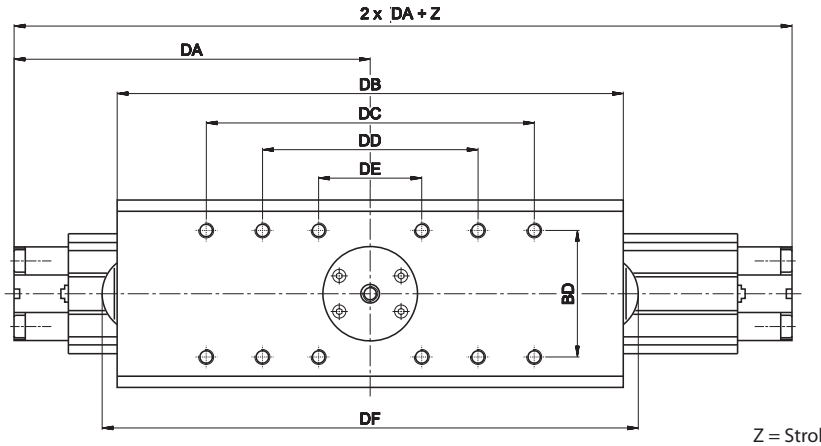
Rodless cylinder with integrated guides and medium carriage - 8 fixing holes





Rodless cylinder with integrated guides and long carriage - 12 fixing holes

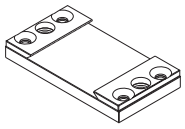


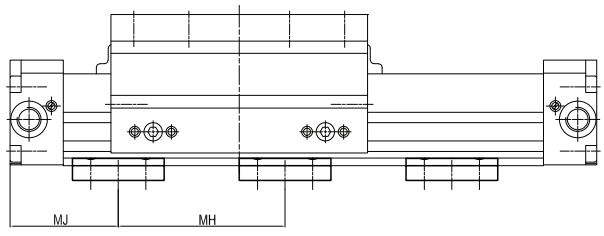


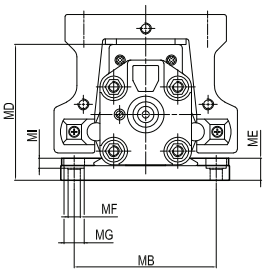
Z = Stroke

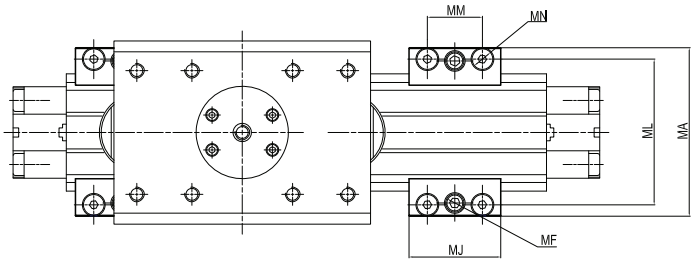
Ø	BD	CA	CB	CC	CD	CE	DA	DB	DC	DD	DE	DF
25	50	114,5	136	90	50	160	147,5	201	130	90	50	225
32	67,5	142,5	175	115	55	191	190	270	175	115	55	286
40	65	169	205	180	75	215	225	317	280	185	75	327
50	76,5	205	258	190	80	271	277	398	320	200	80	411

Fixing plate







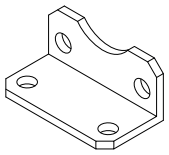


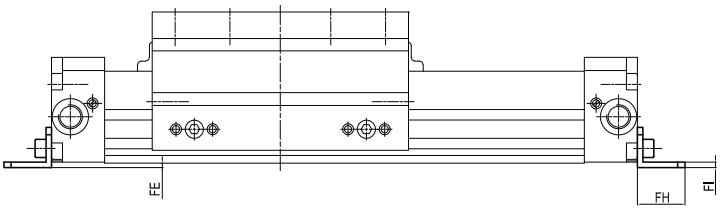
Material: Zinc-plated steel

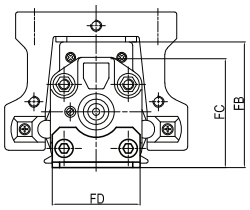
Cylinder	MA	MB	MC	MD	ME	MF	MG	MH	MI	MJ	ML[b]	MM	MN	Mass	Part no.
Ø														g	
25	78,5	63,5	50	79,8	12	M8	11	500 [a]	6,5	55	65,5	30	M6	310	**SF-12025**
32	92	77,5	50	90,5	12	M8	11	600 [a]	8,5	60	79,5	30	M6	340	**SF-12032**
40	117	96	60	116,6	15	M10	14	700 [a]	8	70	96	37,5	M8	660	**SF-12040**
50	136	115	60	133,7	15	M10	14	800 [a]	8	70	115	37,5	M8	700	**SF-12050**

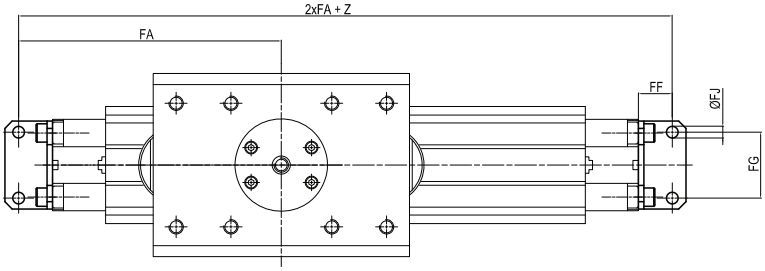
(a) = Max allowable dimension to limit the bending of cylinder according to the stroke and to provide a correct fixing
(b) = For Ø 40 - 50 mm, MB and ML dimensions are the same

Angle bracket





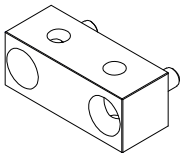


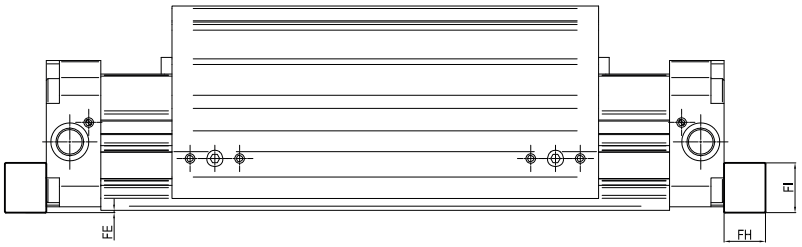


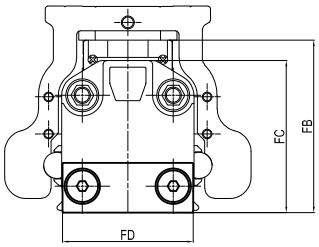
Material: Zinc-plated steel

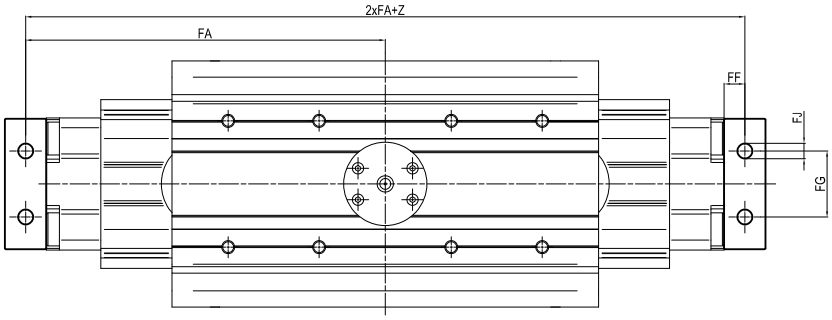
Cylinder Ø	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ Ø	Mass g	Part no.
25	116	58,1	48,8	40	0,5	16	27	22	2,5	5,5	34	**SF-13025**
32	143,5	68,7	59,2	48	2,5	18,5	36	26	3	6,5	53	**SF-13032**

Bracket









Material: Anodized aluminium

Cylinder Ø	FA	FB	FC	FD	FE	FF	FG	FH	FI	FJ Ø	Mass g	Part no.
40	162,5	86,5	74,9	63	0,7	12,5	30	25	25	9	116	**SF-13040**
50	187,5	104,3	92,4	79	1,3	12,5	40	25	30	9,3	170	**SF-13050**