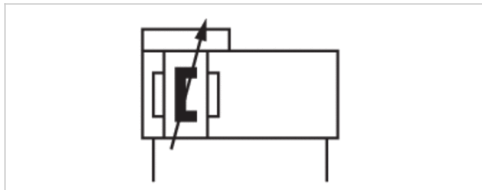


Rodless cylinder, Series RTC-SB

- Ø 25-40 mm
- Ports G 1/8 G 1/4
- double-acting
- with magnetic piston
- Slide bearing guide
- Cushioning Pneumatically adjustable



Working pressure min./max.	2 ... 8 bar
Ambient temperature min./max.	-10 ... 60 °C
Medium	Compressed air
Max. particle size	5 µm
Oil content of compressed air	0 ... 1 mg/m ³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø	25 mm	32 mm	40 mm
Stroke 100	R480470710	R480677234	R480470700
200	R480470711	R480470720	R480470701
300	R480470712	R480470721	R480470702
400	R480470713	R480470722	R480470703
500	R480470714	R480470723	R480470704
600	R480470715	R480470724	R480470705
700	R480470716	R480470725	R480470706
800	R480470717	R480470726	R480470707
900	R480470718	R480470727	R480470708
1000	R480470719	R480470728	R480470709

Technical data

Piston Ø	25 mm	32 mm	40 mm
Piston force	309 N	507 N	792 N
Cushioning length	20 mm	20 mm	20 mm
Cushioning energy	4 J	7 J	10 J
Speed max.	6,5 m/s	4 m/s	5 m/s

Piston Ø	25 mm	32 mm	40 mm
Weight 0 mm stroke	1,34 kg	2,1 kg	2,85 kg
+10 mm stroke	0,033 kg	0,04 kg	0,049 kg
Stroke max.	7000 mm	9900 mm	9900 mm

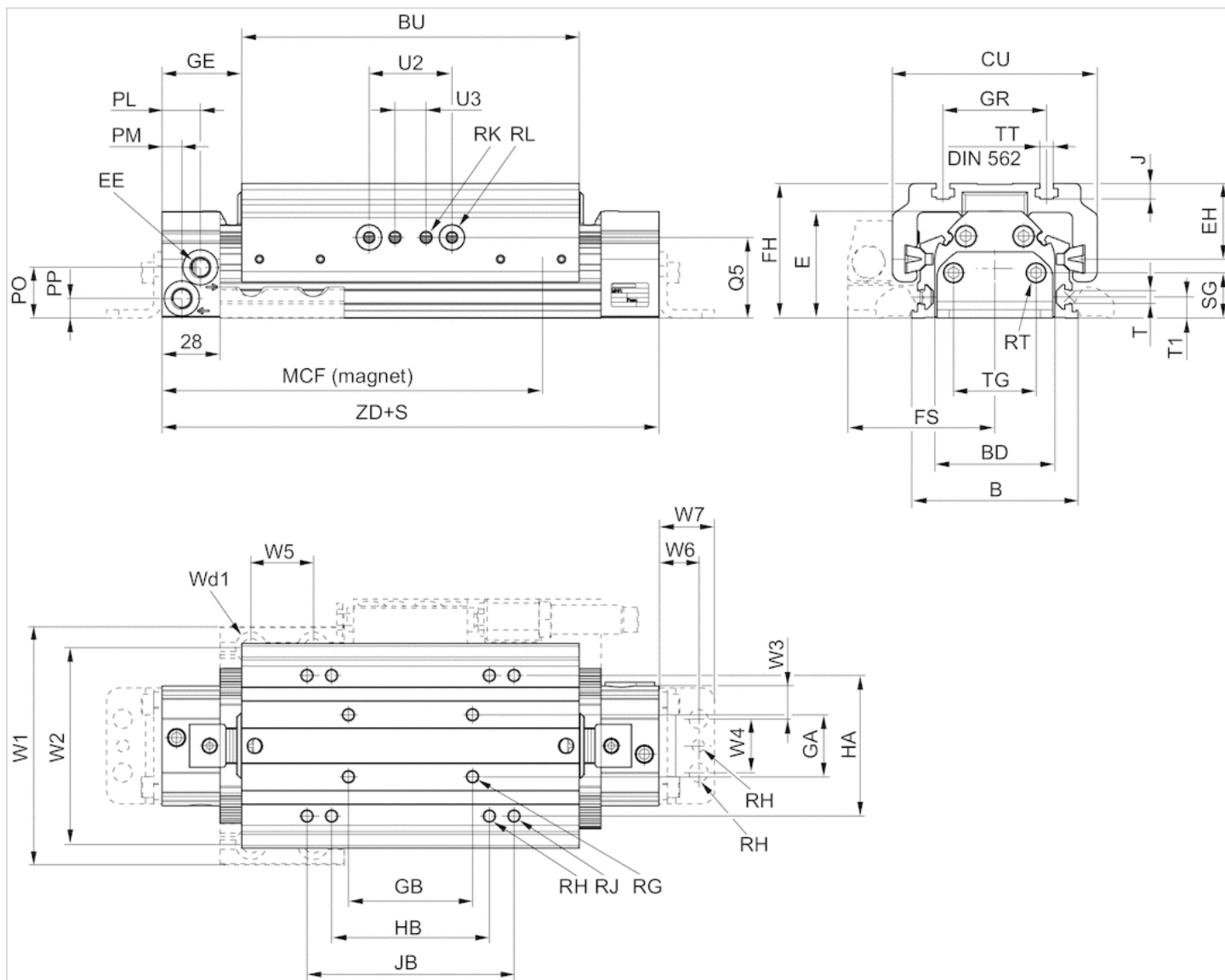
Technical information

The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The delivered product is lubricated for lifetime.

Technical information

Material	
Cylinder tube	Aluminum, anodized
Cap	Aluminum, anodized
Seal	Polyurethane
Sealing strips	Polyurethane Stainless steel
Ball rail table	Aluminum, anodized

Dimensions



Dimensions

Piston Ø	B	BU	BD	CU	EE	EH	FH	FS	GA	GB	GE	GR	HA	HB	J	JB	MCF	PL	PM
25 mm	67,3	147	44	81	G 1/8	28	55.1	62	18	60	34	40	54.4	63.5	5.9	80	165	20	8
32 mm	80,3	163	58	99	G 1/8	36,6	65.1	71	30	60	38.5	50	68	76.2	7.5	100	182	18.5	9.5
40 mm	89,3	182	70	108	G 1/4	41	71	75.5	30	60	40.5	50	80	101.6	7.5	120	205	18	10

Piston Ø	PO	PP	Q5	RG	RH	RJ	RK	RL	RT 1)	SG	T	TT	T1	TG	U2	U3	W1
25 mm	21.5	9.3	38.8	M4	1/4-28 UNF	M6	M6	Ø12.01 H7	M5	17.3	N6	M4	10.1	19	40	15	96
32 mm	24.5	9.5	39	M6	1/4-28 UNF	M6	M6	Ø12.01 H7	M6	22	N6	M6	10.1	40	40	15	115
40 mm	31.5	11	44.6	M6	1/4-28 UNF	M6	M6	Ø12.01 H7	M6	22	N6	M6	11.2	40	40	15	124

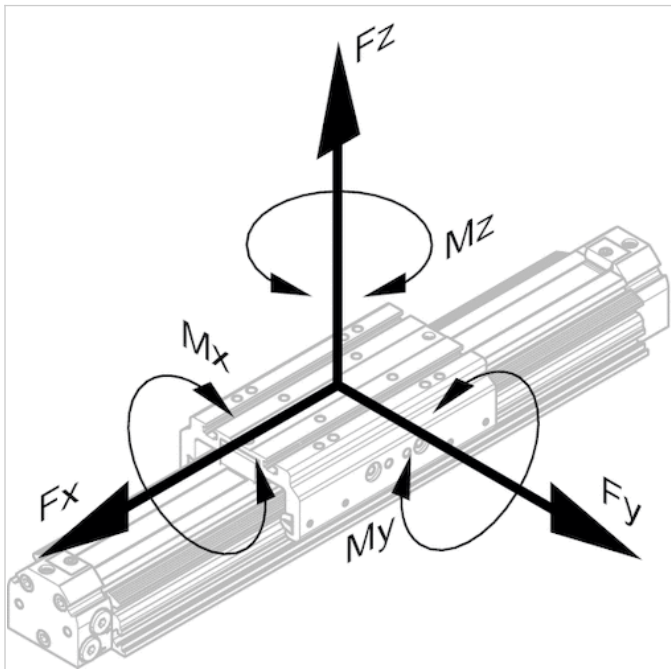
Piston Ø	W2	W3	W4	W5	W6	W7	Wd1	Wd2	Wd3	ZD
25 mm	79	7	18	30	13.5	19.8	Ø6.8	Ø6.8	Ø4G8	215
32 mm	95	15	26	30	19	26.8	Ø8.8	Ø9.2	Ø6G8	240
40 mm	104	15	26	30	19	26.8	Ø8.8	Ø9.2	Ø6G8	263

Dimensions

Permissible forces F_x F_y F_z and torques M_x M_y M_z

$$\frac{M_x}{M_{x_{max.}}} + \frac{M_y}{M_{y_{max.}}} + \frac{M_z}{M_{z_{max.}}} \leq 1$$

With simultaneously moments on the cylinder this equation must be used in addition to the maximum moments check. In the cushioning phase of the movement additional forces occur and must be considered. Please use our calculation tool for rodless cylinders on the <http://www.aventics.com>.



dynamic

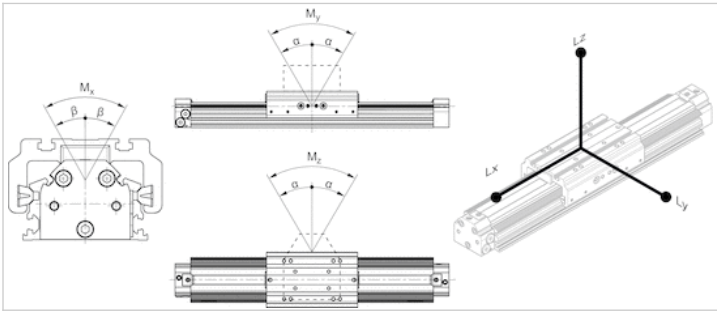
Piston Ø	M_x [Nm]	M_y [Nm]	M_z [Nm]
25 mm	1.4	30	30
32 mm	6	45	45
40 mm	8	50	50

static

Piston Ø	F_x [N]	F_y [N]	F_z [N]	M_x [Nm]	M_y [Nm]	M_z [Nm]
25 mm	1800	700	2300	32	50	50
32 mm	2200	1000	2600	73	91	91
40 mm	2700	1000	2600	83	111	111

Dimensions

Max. play and recommended max. lever arm length



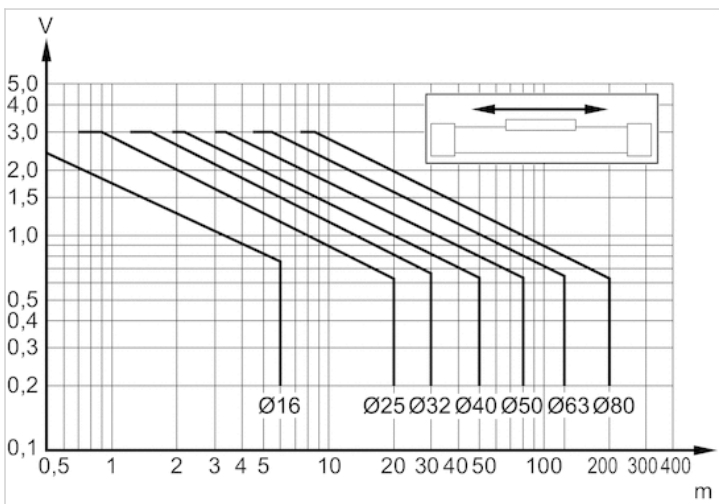
L = lever arm
M = Torques

Dimensions

Piston Ø	α	β	Lx	Ly	Lz
25 mm	$\leq 0,2^\circ$	$\leq 0,3^\circ$	201	110	201
32 mm	$\leq 0,2^\circ$	$\leq 0,3^\circ$	242	120	242
40 mm	$\leq 0,2^\circ$	$\leq 0,3^\circ$	242	120	242

Diagrams

Limit diagram for pneumatic cushioning with horizontal mounting



v = Piston velocity [m/s] m = Cushionable mass [kg]

The values for the cushionable mass m and piston velocity v must be on or below the graph for the selected piston diameter.

Limit diagram for pneumatic cushioning with vertical mounting

