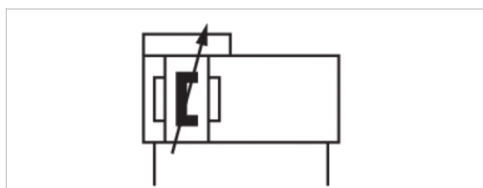


Rodless cylinder, Series RTC-CG

- Ports 10-32 UNF - 3/8 NPTF
- Ø 16-40 mm
- double-acting
- with magnetic piston
- ball rail guide
- Compact Guide
- Cushioning Pneumatically adjustable
- Easy2Combine capable with connection kit



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/m³
Pressure for determining piston forces	6.3 bar
An example configuration is illustrated. The delivered product may thus deviate from the illustration.	

Technical data

Piston Ø	16 mm	25 mm	32 mm	40 mm
Stroke 152.4	R480161097	R480676520	R480639375	R480676522
304.8	R480676516	R480635761	R480610198	R480676523
609.6	R480676517	R480656723	R480168891	R480174815
1016	R480676518	R480639928	R480676521	R480676524
1524	R480676519	R480625335	R480608061	R480606820

Technical data

Piston Ø	16 mm	25 mm	32 mm	40 mm
Piston force	127 N	309 N	507 N	792 N
Cushioning length	20 mm	20 mm	20 mm	20 mm
Cushioning energy	1,5 J	4 J	7 J	10 J
Speed max.	2 m/s	2 m/s	2 m/s	2 m/s
Weight 0 mm stroke	0,94 kg	1,64 kg	2,43 kg	3,92 kg
+10 mm stroke	0,026 kg	0,041 kg	0,056 kg	0,075 kg
Stroke max.	1800 mm	1800 mm	1800 mm	2000 mm

Technical information

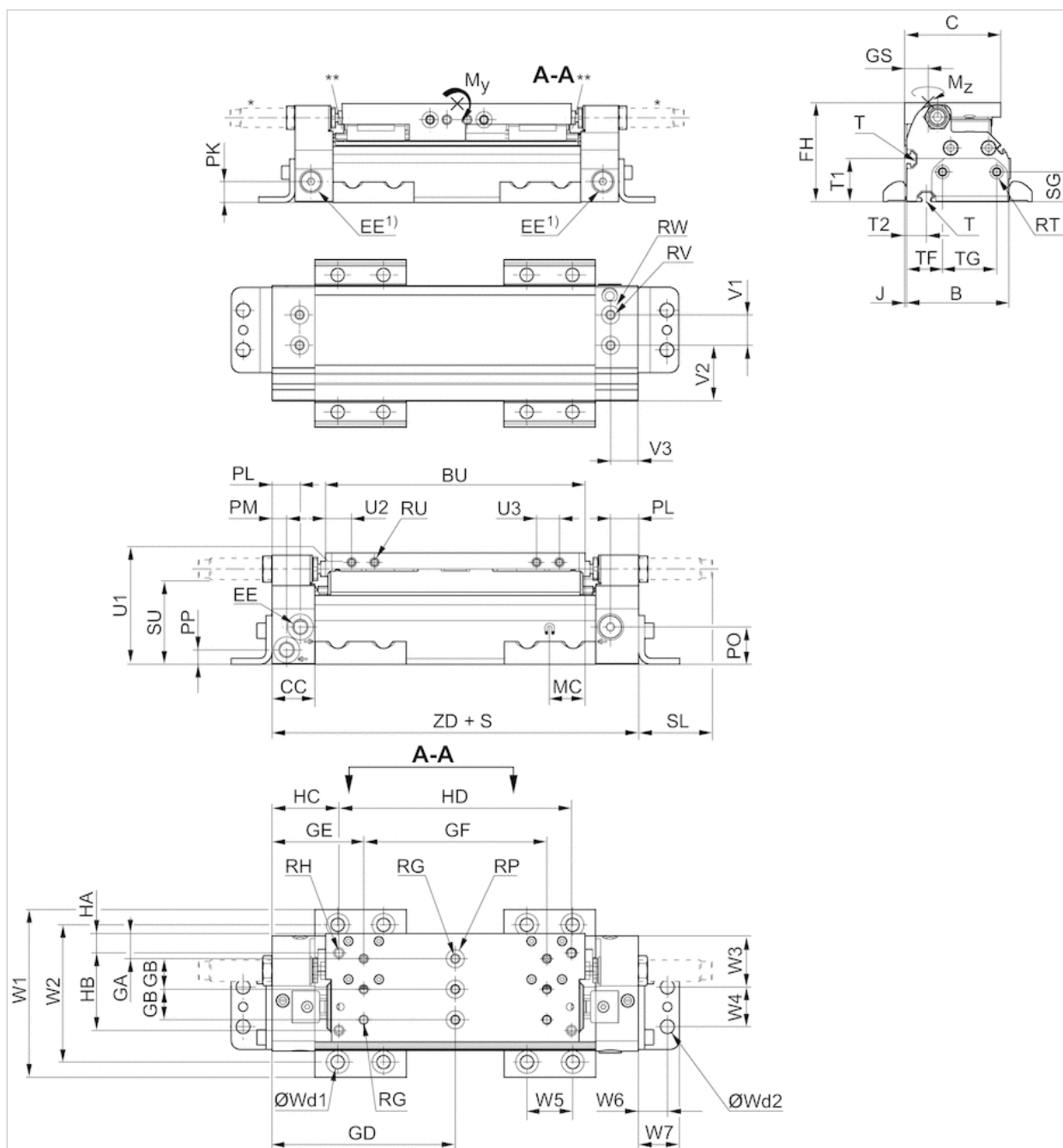
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .
The delivered product is lubricated for lifetime.
Use hydraulic shock absorbers for precise end position adjustment.
These pneumatic components with NPT or inch thread dimensions are only available from our US sales organization.

Technical information

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

Dimensions

Dimensions in inches



S = stroke

T = Type of t-groove nut

1) Auxiliary air feeding

An example configuration is illustrated. The delivered product may thus deviate from the illustration.

* Shock absorber optional in end cover for diameters 16-40

** RTC-CG 16 & 25: 2x Lube ports on each runner block, RTC-CG 32 & 40: Lube nipple of funnel type with thread connection M3

Dimensions in inches

Piston Ø	B	C	BU	CC	EE	FH	GA	GB	GD	GE	GF	GS	HA	HB	HC	HD	J	MC
16 mm	1.97	2.01	4.8	1.1	*10-32/M7	2.13	0.28	0.79	3.68	1.52	4.33	0.45	0.3	1.5	2.68	2	0.08	0.47
25 mm	2.46	2.29	5.79	1.1	1/8 NPTF	2.56	0.24	0.79	4.23	2.11	4.25	0.59	0.2	1.8	1.53	5.4	0.06	0.59
32 mm	2.97	2.8	6.69	1.1	1/8 NPTF	2.87	0.65	0.79	4.72	2.36	4.72	0.69	0.5	2	1.72	6	0.06	0.79
40 mm	3.37	2.91	7.32	1.1	1/8 NPTF	3.72	0.65	0.79	5.18	2.82	4.72	0.73	0.5	2	2.18	6	0.06	0.67

Piston Ø	PK	PL	PM	PN	PO	PP	RG 1)	RH 2)	RP	RT 3)	RU 4)	SG	SL	SU	T
16 mm	0.47	0.71	0.28	0.28	0.52	0.29	M5	4xUNC 1/4-20	Ø 9	M5	M5	0.68	1.31	1.52	N4
25 mm	0.4	0.79	0.31	0.35	0.85	0.37	M5	4xUNC 1/4-20	Ø 9	M5	M6	0.68	1.94	1.85	N6
32 mm	0.59	0.73	0.37	0.47	0.96	0.37	M6	4xUNC 1/4-20	Ø 12	M6	M6	0.87	1.9	2.19	N6
40 mm	0.71	0.71	0.39	0.43	1.24	0.41	M6	4xUNC 1/4-20	Ø 12	M6	M6	0.87	1.78	2.89	N6

Piston Ø	W1	W2	W3	W4	W5	W6	W7	Wd1	Wd2	T1	T2	TF	TG	U1	U2	U3	ZD
16 mm	3.09	2.42	0.94	0.71	1.18	0.53	0.78	M6	M6	0.73	0.41	1	0.75	1.89	0.51	0.59	7.36
25 mm	3.58	2.91	0.14	0.71	1.18	0.53	0.78	M6	M6	1.05	0.53	1.22	0.75	2.32	0.51	1.06	8.46
32 mm	4.33	3.54	1.32	1.02	1.18	0.75	1.06	M8	M8	1.24	0.57	1.04	1.57	2.64	0.67	1.34	9.45
40 mm	4.72	3.93	1.48	1.02	1.18	0.75	1.06	M8	M8	1.63	0.51	1.2	1.57	3.13	0.98	1.34	10.36

Piston Ø	M [lb 5)
16 mm	0.485
25 mm	0.882
32 mm	1.036
40 mm	2.138

1) Thread depth: 0.47 inch for piston Ø 5/8, 1 and 1 1/2. 0.41 inch for piston Ø 1 1/4

2) Thread depth: 0.50 inch for piston Ø 5/8 - 1 1/2

3) Thread depth: 0.35 inch for piston Ø 5/8 - 1 1/2

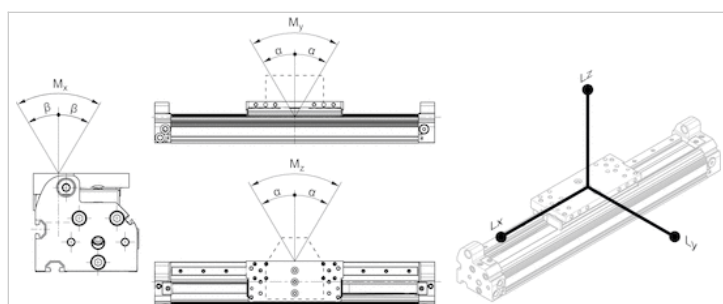
4) Thread depth: 0.40 inch for piston Ø 5/8 - 1 1/2

5) M = moving mass

* Can be selected in the configurator (M7 for high-speed applications)

Dimensions

Max. play and recommended max. lever arm length



L = lever arm

M = Torques

Dimensions

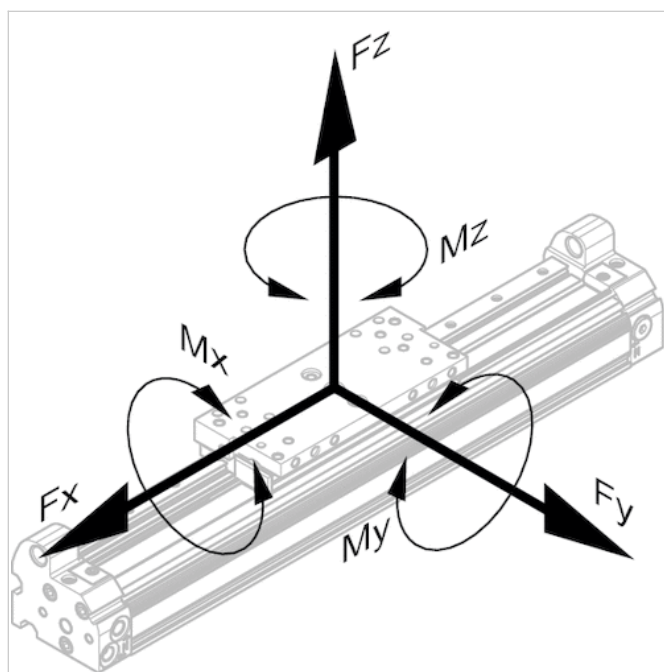
Piston Ø	Ø [inch]	α	β	Lx	Ly	Lz
16 mm	5/8	0,1°	0,2°	328	328	328
25 mm	1	0,1°	0,2°	424	424	424
32 mm	1 1/4	0,1°	0,2°	480	480	480
40 mm	1 1/2	0,1°	0,2°	532	532	532

Dimensions

Permissible forces Fx Fy Fz and torques Mx My Mz

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

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

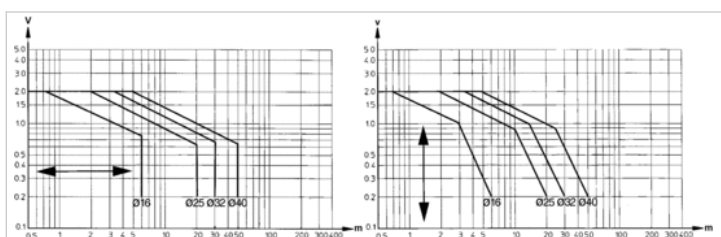
Piston Ø	Ø [inch]	Mx [Nm]	My [Nm]	Mz [Nm]
16 mm	5/8	4	30	30
25 mm	1	10	78	78
32 mm	1 1/4	22	158	110
40 mm	1 1/2	36	284	109

static

Piston Ø	Ø [inch]	F _x [N]	F _y [N]	F _z [N]	M _x [Nm]	M _y [Nm]	M _z [Nm]
16 mm	5/8	744	744	744	4	30	30
25 mm	1	1456	1456	1456	10	78	78
32 mm	1 1/4	1840	1840	2646	22	158	110
40 mm	1 1/2	1640	1640	4284	36	284	109

Diagrams

Limit diagram for pneumatic cushioning for horizontal or vertical mounting

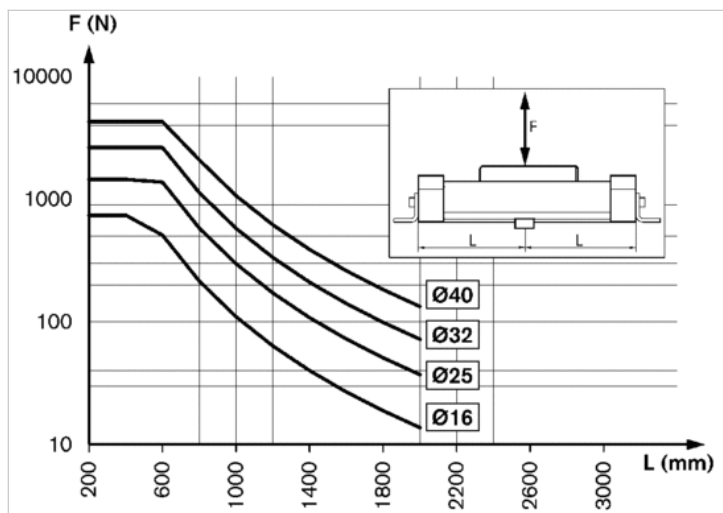


v = Piston velocity [m/s]

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.

Support span



Max. support span L [mm] as a function of F [N] at a deflection of 0.5 mm