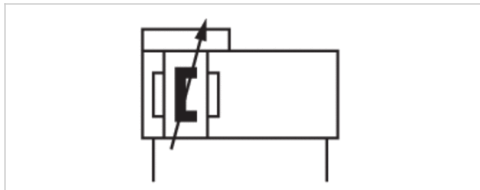


Rodless cylinder, Series RTC-LB

- Ø 25-40 mm
- Ports G 1/8 G 1/4
- double-acting
- with magnetic piston
- Slide bearing guide with long slide
- 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 | R480470739 | R480677235 | R480470729 |
| 200 | R480470740 | R480470749 | R480470730 |
| 300 | R480470741 | R480470750 | R480470731 |
| 400 | R480470742 | R480470751 | R480470732 |
| 500 | R480470743 | R480470752 | R480470733 |
| 600 | R480470744 | R480470753 | R480470734 |
| 700 | R480470745 | R480470754 | R480470735 |
| 800 | R480470746 | R480470755 | R480470736 |
| 900 | R480470747 | R480470756 | R480470737 |
| 1000 | R480470748 | R480470757 | R480470738 |

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 | 2,38 kg | 3,7 kg | 5,04 kg |
| +10 mm stroke | 0,033 kg | 0,04 kg | 0,049 kg |
| Stroke max. | 7000 mm | 9900 mm | 9900 mm |

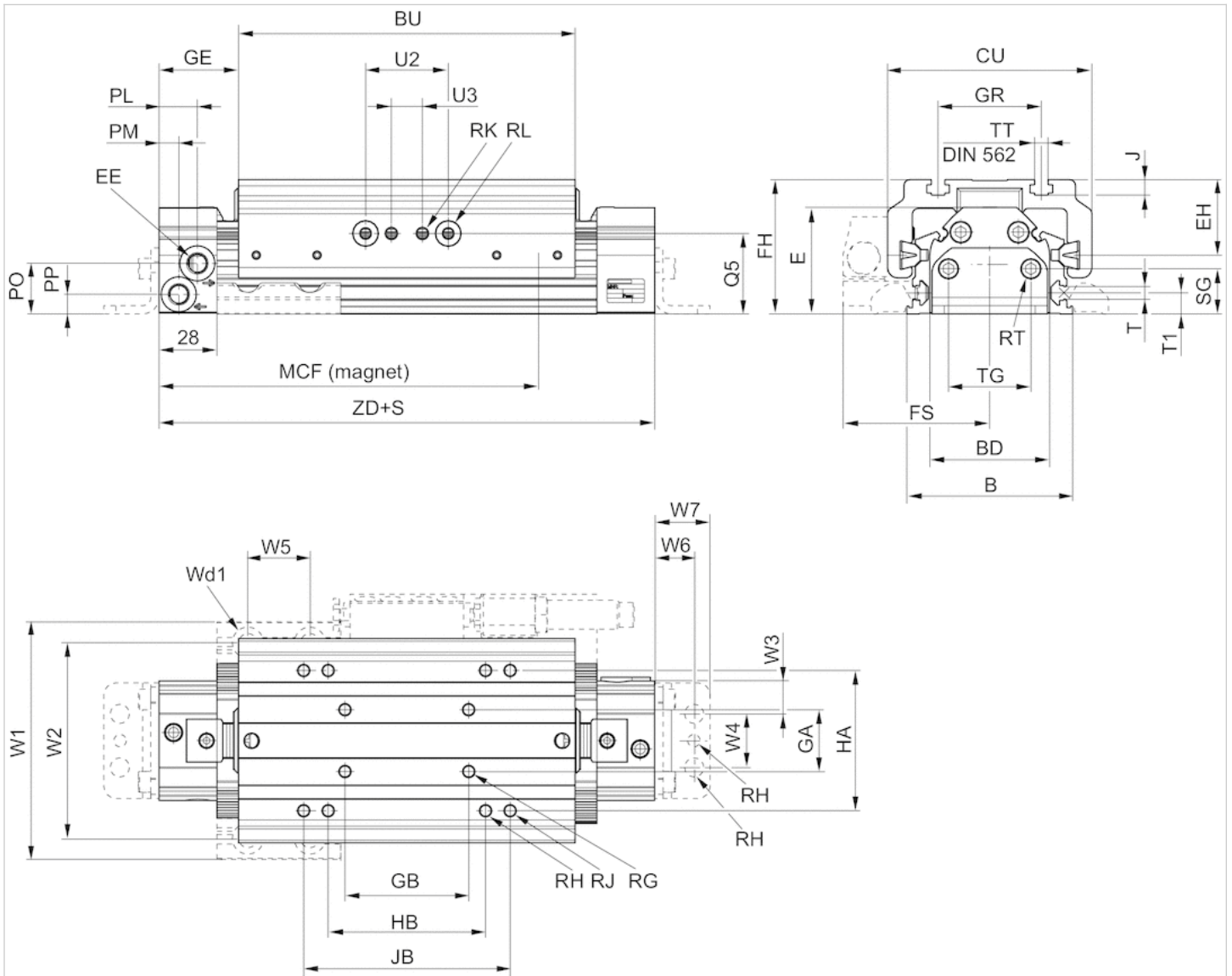
Technical information

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 | 294 | 44 | 81 | G 1/8 | 28 | 55.1 | 62 | 18 | 60 | 34 | 40 | 54.4 | 101.6 | 5.9 | 160 | 312 | 20 | 8 |
| 32 mm | 80,3 | 326 | 58 | 99 | G 1/8 | 36,6 | 65.1 | 71 | 30 | 60 | 38.5 | 50 | 68 | 101.6 | 7.5 | 200 | 345 | 18.5 | 9.5 |
| 40 mm | 89,3 | 364 | 70 | 108 | G 1/4 | 41 | 71 | 75.5 | 30 | 60 | 40.5 | 50 | 80 | 127 | 7.5 | 240 | 388 | 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 | N6 | 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 | N6 | 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 | N6 | 11.2 | 40 | 40 | 15 | 124 |

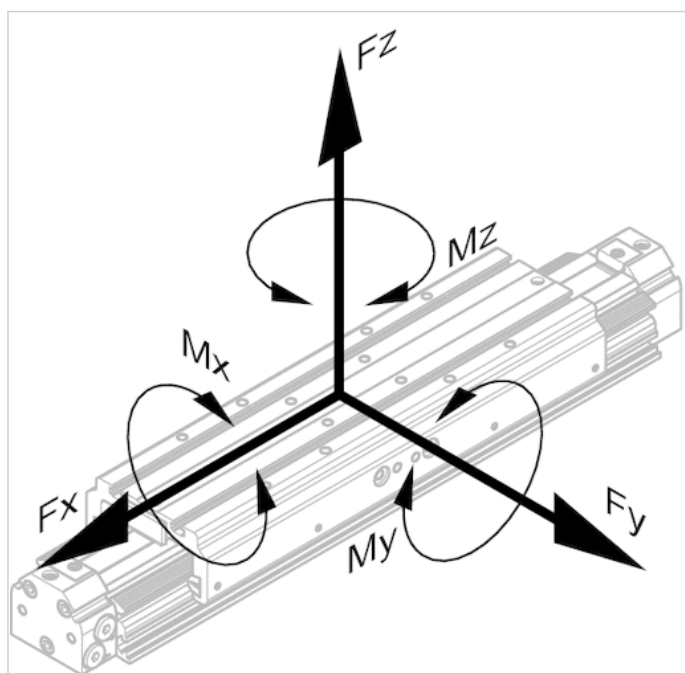
| Piston Ø | W2 | W3 | W4 | W5 | W6 | W7 | Wd1 | Wd2 | Wd3 | ZD |
|----------|-----|----|----|----|------|------|------|------|------|-----|
| 25 mm | 79 | 7 | 18 | 30 | 13.5 | 19.8 | Ø6.8 | Ø6.8 | Ø4G8 | 362 |
| 32 mm | 95 | 15 | 26 | 30 | 19 | 26.8 | Ø8.8 | Ø9.2 | Ø6G8 | 403 |
| 40 mm | 104 | 15 | 26 | 30 | 19 | 26.8 | Ø8.8 | Ø9.2 | Ø6G8 | 445 |

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

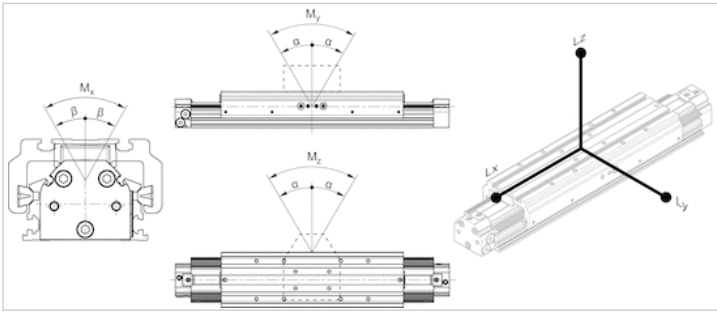
| Piston Ø | M_x [Nm] | M_y [Nm] | M_z [Nm] |
|----------|------------|------------|------------|
| 25 mm | 1.4 | 60 | 60 |
| 32 mm | 6 | 90 | 90 |
| 40 mm | 8 | 100 | 100 |

static

| Piston Ø | F_x [N] | F_y [N] | F_z [N] | M_x [Nm] | M_y [Nm] | M_z [Nm] |
|----------|-----------|-----------|-----------|------------|------------|------------|
| 25 mm | 1800 | 1200 | 3200 | 42 | 160 | 160 |
| 32 mm | 2200 | 1400 | 3800 | 96 | 310 | 310 |
| 40 mm | 2700 | 1400 | 3800 | 109 | 362 | 362 |

Dimensions

Max. play and recommended max. lever arm length



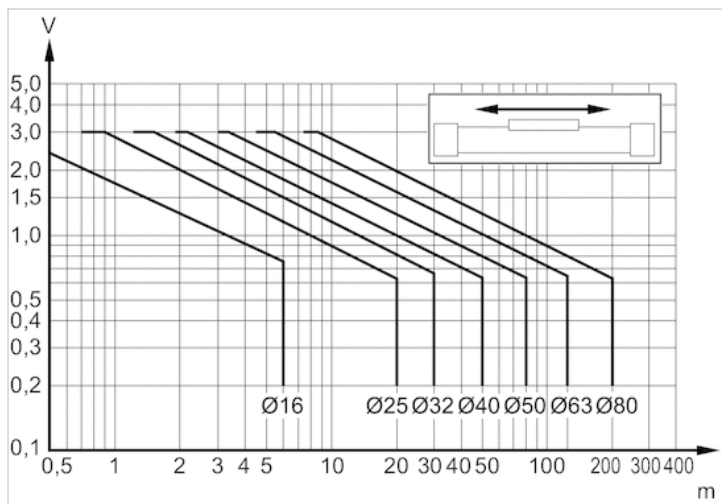
L = lever arm
M = Torques

Dimensions

| Piston Ø | α | β | Lx | Ly | Lz |
|----------|------------------|------------------|-----|-----|-----|
| 25 mm | $\leq 0,2^\circ$ | $\leq 0,3^\circ$ | 551 | 280 | 551 |
| 32 mm | $\leq 0,1^\circ$ | $\leq 0,3^\circ$ | 612 | 320 | 612 |
| 40 mm | $\leq 0,1^\circ$ | $\leq 0,3^\circ$ | 612 | 320 | 612 |

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

