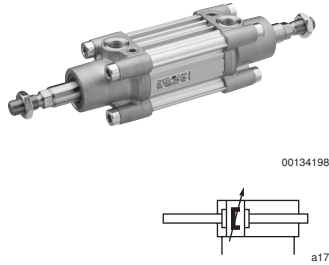


## Piston rod cylinders → Standard cylinders

**Profile cylinder, ISO 15552, Series PRA**

► Ø 32 - 125 mm ► Ports: G 1/8 - G 1/2 ► double-acting ► with magnetic piston ► cushioning: pneumatic, adjustable, elastic ► piston rod: through, external thread



|                                        |                   |
|----------------------------------------|-------------------|
| Standards                              | ISO 15552         |
| Compressed air connection              | internal thread   |
| Working pressure min./max.             | 1.5 bar / 10 bar  |
| Ambient temperature min./max.          | -20 °C / +80 °C   |
| Medium temperature min./max.           | -20 °C / +80 °C   |
| Medium                                 | Compressed air    |
| Max. particle size                     | 50 µm             |
| Oil content of compressed air          | 0 mg/m³ - 5 mg/m³ |
| Pressure for determining piston forces | 6,3 bar           |

|                    |                    |
|--------------------|--------------------|
| Materials:         |                    |
| Cylinder tube      | Aluminum, anodized |
| Piston rod         | Stainless steel    |
| Front cover        | Die-cast aluminum  |
| End cover          | Die-cast aluminum  |
| Seal               | Polyurethane       |
| Nut for piston rod | Steel, galvanized  |
| Scraper            | Polyurethane       |

**Technical Remarks**

- The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C.
- The oil content of air pressure must remain constant during the life cycle.
- Use only the approved oils from Bosch Rexroth, see chapter „Technical information“.

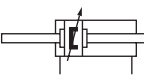
| Piston Ø                | [mm]          | 32    | 40    | 50    | 63    | 80    |
|-------------------------|---------------|-------|-------|-------|-------|-------|
| Retracting piston force | [N]           | 435   | 660   | 1035  | 1765  | 2855  |
| Extending piston force  | [N]           | 435   | 660   | 1035  | 1765  | 2855  |
| Cushioning length       | [mm]          | 11.5  | 15    | 17    | 16.5  | 19.5  |
| Cushioning energy       | [J]           | 4.8   | 9     | 15    | 27    | 54    |
| Weight                  | 0 mm stroke   | 0.58  | 0.8   | 1.34  | 1.72  | 2.92  |
|                         | +10 mm stroke | 0.031 | 0.048 | 0.072 | 0.079 | 0.124 |
| Stroke max.             | [mm]          | 1600  | 1900  | 2100  | 2500  | 2800  |

| Piston Ø                | [mm]          | 100   | 125  |  |  |  |
|-------------------------|---------------|-------|------|--|--|--|
| Retracting piston force | [N]           | 4635  | 7220 |  |  |  |
| Extending piston force  | [N]           | 4635  | 7220 |  |  |  |
| Cushioning length       | [mm]          | 19.5  | 22   |  |  |  |
| Cushioning energy       | [J]           | 88    | 140  |  |  |  |
| Weight                  | 0 mm stroke   | 4.08  | 8.92 |  |  |  |
|                         | +10 mm stroke | 0.139 | 0.22 |  |  |  |
| Stroke max.             | [mm]          | 2800  | 2750 |  |  |  |

## Piston rod cylinders → Standard cylinders

**Profile cylinder, ISO 15552, Series PRA**

► Ø 32 - 125 mm ► Ports: G 1/8 - G 1/2 ► double-acting ► with magnetic piston ► cushioning: pneumatic, adjustable, elastic ► piston rod: through, external thread

|                                                                                  | Piston Ø<br>Piston rod thread<br>Ports<br>Piston rod Ø           | 32<br>M10x1,25<br>G 1/8<br>12           | 40<br>M12x1,25<br>G 1/4<br>16         | 50<br>M16x1,5<br>G 1/4<br>20 | 63<br>M16x1,5<br>G 3/8<br>20 | 80<br>M20x1,5<br>G 3/8<br>25 |
|----------------------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------|---------------------------------------|------------------------------|------------------------------|------------------------------|
|  | Stroke 25                                                        | R480041413                              | R480041432                            | R480041443                   | R480041453                   | R480041484                   |
|                                                                                  | 50                                                               | R480041419                              | R480041433                            | R480041444                   | R480041454                   | R480041485                   |
|                                                                                  | 80                                                               | R480041420                              | R480041434                            | R480041445                   | R480041455                   | R480041487                   |
|                                                                                  | 100                                                              | R480041421                              | R480041435                            | R480041446                   | R480041456                   | R480041488                   |
|                                                                                  | 125                                                              | R480041422                              | R480041436                            | R480041074                   | R480041457                   | R480041490                   |
|                                                                                  | 160                                                              | R480041423                              | R480041437                            | R480041447                   | R480041458                   | R480041491                   |
|                                                                                  | 200                                                              | R480041425                              | R480041438                            | R480041448                   | R480041459                   | R480041492                   |
|                                                                                  | 250                                                              | R480041426                              | R480041439                            | R480041449                   | R480041460                   | R480041493                   |
|                                                                                  | 320                                                              | R480041427                              | R480041440                            | R480041450                   | R480041461                   | R480041494                   |
|                                                                                  | 400                                                              | R480041428                              | R480041441                            | R480041451                   | R480041481                   | R480041496                   |
|                                                                                  | 500                                                              | R480041429                              | R480041442                            | R480041452                   | R480041482                   | R480041497                   |
|                                                                                  | <b>Piston Ø<br/>Piston rod thread<br/>Ports<br/>Piston rod Ø</b> | <b>100<br/>M20x1,5<br/>G 1/2<br/>25</b> | <b>125<br/>M27x2<br/>G 1/2<br/>32</b> |                              |                              |                              |
|                                                                                  | Stroke 25                                                        | R480148059                              | R480148066                            |                              |                              |                              |
|                                                                                  | 50                                                               | R480069994                              | R480148067                            |                              |                              |                              |
|                                                                                  | 80                                                               | R480148061                              | R480148068                            |                              |                              |                              |
|                                                                                  | 100                                                              | R480059815                              | R480142910                            |                              |                              |                              |
|                                                                                  | 125                                                              | R480146278                              | R480148069                            |                              |                              |                              |
|                                                                                  | 160                                                              | R480148062                              | R480148070                            |                              |                              |                              |
|                                                                                  | 200                                                              | R480148063                              | R480148071                            |                              |                              |                              |
|                                                                                  | 250                                                              | R480077546                              | R480148072                            |                              |                              |                              |
|                                                                                  | 320                                                              | R480148064                              | R480148073                            |                              |                              |                              |
|                                                                                  | 400                                                              | R480148065                              | R480148074                            |                              |                              |                              |
|                                                                                  | 500                                                              | R480148060                              | R480148075                            |                              |                              |                              |

## Configurable product

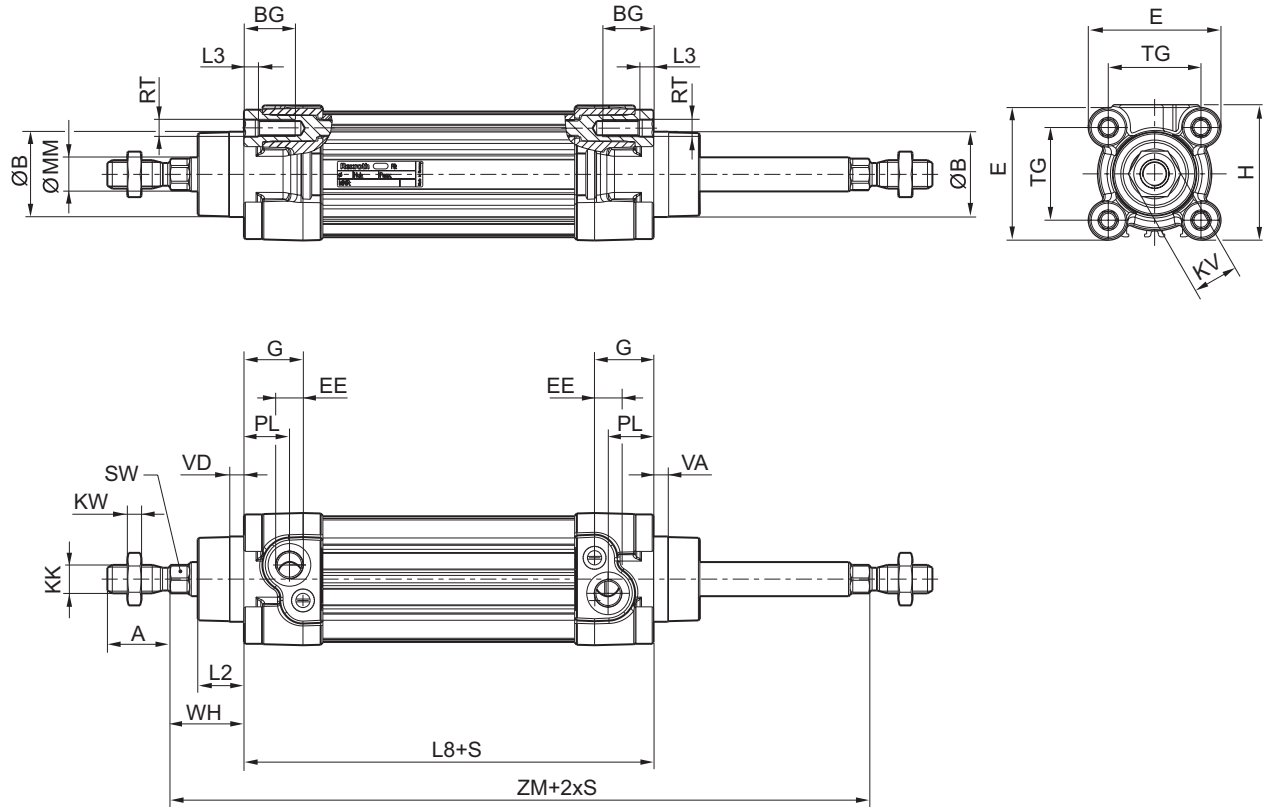


This product is configurable. Please use our Internet configurator at [www.boschrexroth.com/pneumatics](http://www.boschrexroth.com/pneumatics) or contact the nearest Bosch Rexroth sales office.

## Piston rod cylinders → Standard cylinders

**Profile cylinder, ISO 15552, Series PRA**

► Ø 32 - 125 mm ► Ports: G 1/8 - G 1/2 ► double-acting ► with magnetic piston ► cushioning: pneumatic, adjustable, elastic ► piston rod: through, external thread

**Dimensions**

00134209

S = stroke

| Piston Ø | A -2 | ØB d11 | BG min. | E    | EE    | G     | H    | KK       | KV | KW   | ØMM f8 |
|----------|------|--------|---------|------|-------|-------|------|----------|----|------|--------|
| 32       | 22   | 30     | 16      | 46.5 | G 1/8 | 27.75 | 47.5 | M10x1,25 | 16 | 5    | 12     |
| 40       | 24   | 35     | 16      | 53   | G 1/4 | 33.25 | 53   | M12x1,25 | 18 | 6    | 16     |
| 50       | 32   | 40     | 16      | 65   | G 1/4 | 31    | 65   | M16x1,5  | 24 | 8    | 20     |
| 63       | 32   | 45     | 16      | 75   | G 3/8 | 31    | 75   | M16x1,5  | 24 | 8    | 20     |
| 80       | 40   | 45     | 17      | 95   | G 3/8 | 38.25 | 95   | M20x1,5  | 30 | 10   | 25     |
| 100      | 40   | 55     | 17      | 115  | G 1/2 | 38.25 | 115  | M20x1,5  | 30 | 10   | 25     |
| 125      | 54   | 60     | 20      | 140  | G 1/2 | 42.25 | 140  | M27x2    | 41 | 13.5 | 32     |

| Piston Ø | PL   | L2    | L3 ±0,5 | L8      | RT  | SW | TG       | VD | WH     | ZM         |
|----------|------|-------|---------|---------|-----|----|----------|----|--------|------------|
| 32       | 16   | 16.25 | 4.5     | 94±0,4  | M6  | 10 | 32,5±0,5 | 5  | 26±1,4 | 146+3/-1,5 |
| 40       | 20   | 18.25 | 4.5     | 105±0,7 | M6  | 13 | 38±0,5   | 5  | 30±1,4 | 165+3/-1,5 |
| 50       | 19   | 25    | 4.5     | 106±0,7 | M8  | 17 | 46,5±0,6 | 5  | 37±1,4 | 180+3/-1,5 |
| 63       | 24   | 25    | 4.5     | 121±0,8 | M8  | 17 | 56,5±0,7 | 5  | 37±1,8 | 195+3/-1,5 |
| 80       | 23.5 | 33    | 0       | 128±0,8 | M10 | 22 | 72±0,7   | 5  | 46±1,8 | 220+3/-1,5 |
| 100      | 25   | 36    | 0       | 138±1   | M10 | 22 | 89±0,7   | 5  | 51±1,8 | 240+3,5/-2 |
| 125      | 33   | 45    | 0       | 160±1   | M12 | 27 | 110±1,1  | 7  | 65±2,2 | 290+3,5/-2 |