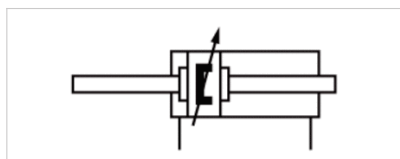


## Profile cylinder ISO 15552, PRA series

- Ø 32-125 mm
- Ports G 1/8, G 1/4, G 3/8, G 1/2
- double-acting
- with magnetic piston
- Cushioning pneumatically, adjustable
- Piston rod External thread
- Piston rod through



|                                        |                 |
|----------------------------------------|-----------------|
| Standards                              | ISO 15552       |
| Compressed air connection              | Internal thread |
| Working pressure min./max.             | 1,5 ... 10 bar  |
| Ambient temperature min./max.          | -20 ... 80 °C   |
| Medium temperature min./max.           | -20 ... 80 °C   |
| Medium                                 | Compressed air  |
| Max. particle size                     | 50 µm           |
| Oil content of compressed air          | 0 ... 5 mg/m³   |
| Pressure for determining piston forces | 6.3 bar         |

### Technical data

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

## Technical data

| Piston Ø                | 32 mm    | 40 mm    | 50 mm    | 63 mm    | 80 mm    | 100 mm   | 125 mm  |
|-------------------------|----------|----------|----------|----------|----------|----------|---------|
| Retracting piston force | 435 N    | 660 N    | 1035 N   | 1765 N   | 2855 N   | 4635 N   | 7220 N  |
| Extracting piston force | 435 N    | 660 N    | 1035 N   | 1765 N   | 2855 N   | 4635 N   | 7220 N  |
| Cushioning length       | 16,5 mm  | 19 mm    | 17 mm    | 16,5 mm  | 19,5 mm  | 19,5 mm  | 22 mm   |
| Cushioning energy       | 4,8 J    | 9 J      | 15 J     | 27 J     | 54 J     | 88 J     | 140 J   |
| Weight 0 mm stroke      | 0,58 kg  | 0,8 kg   | 1,34 kg  | 1,72 kg  | 2,92 kg  | 4,08 kg  | 8,92 kg |
| Weight +10 mm stroke    | 0,031 kg | 0,048 kg | 0,072 kg | 0,079 kg | 0,124 kg | 0,139 kg | 0,22 kg |
| Stroke max.             | 1500 mm  | 1500 mm  | 1500 mm  | 1500 mm  | 1500 mm  | 1500 mm  | 1500 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 oil content of compressed air must remain constant during the life cycle.

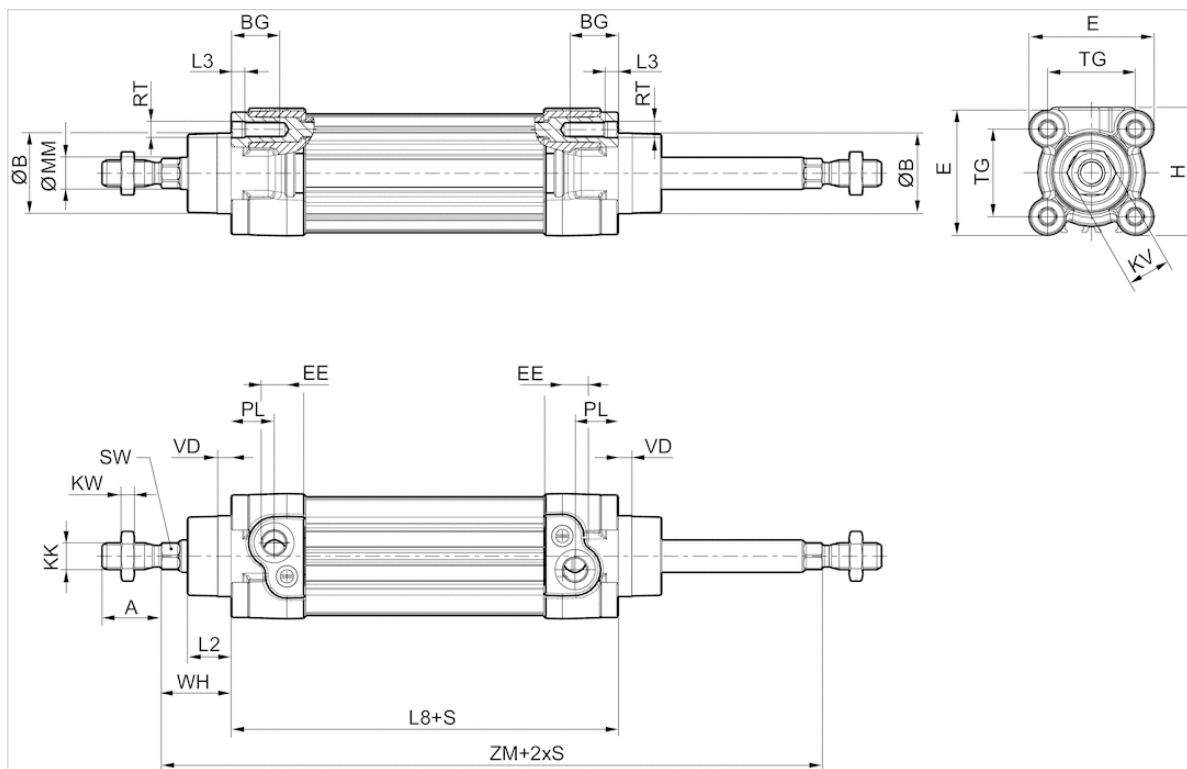
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

| Material           |                    |
|--------------------|--------------------|
| 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       |

## Dimensions

### Dimensions



S = stroke

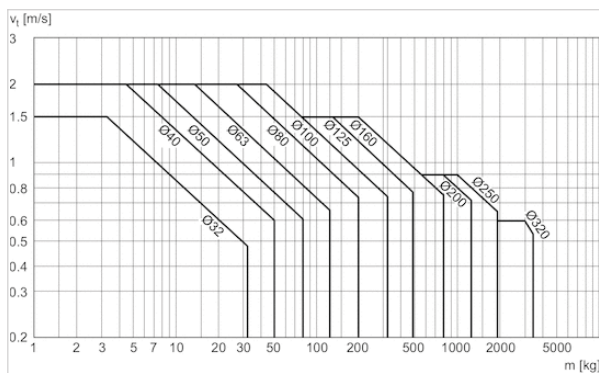
## Dimensions

| Piston Ø | A -2 | ØB d11 | BG min. | E    | EE    | G     | H    | KK       | KV | KW   | ØMM f8 | PL   | L2    | L3 ±0,5 | L8      | RT  | SW |
|----------|------|--------|---------|------|-------|-------|------|----------|----|------|--------|------|-------|---------|---------|-----|----|
| 32 mm    | 22   | 30     | 16      | 46.5 | G 1/8 | 27.75 | 47.5 | M10x1,25 | 16 | 5    | 12     | 16   | 16.25 | 4.5     | 94±0,4  | M6  | 10 |
| 40 mm    | 24   | 35     | 16      | 53   | G 1/4 | 33.25 | 53   | M12x1,25 | 18 | 6    | 16     | 20   | 18.25 | 4.5     | 105±0,7 | M6  | 13 |
| 50 mm    | 32   | 40     | 16      | 65   | G 1/4 | 31    | 65   | M16x1,5  | 24 | 8    | 20     | 19   | 25    | 4.5     | 106±0,7 | M8  | 17 |
| 63 mm    | 32   | 45     | 16      | 75   | G 3/8 | 38.25 | 75   | M16x1,5  | 24 | 8    | 20     | 24   | 25    | 4.5     | 121±0,8 | M8  | 17 |
| 80 mm    | 40   | 45     | 17      | 95   | G 3/8 | 38.25 | 95   | M20x1,5  | 30 | 10   | 25     | 23.5 | 33    | 0       | 128±0,8 | M10 | 22 |
| 100 mm   | 40   | 55     | 17      | 115  | G 1/2 | 42.25 | 115  | M20x1,5  | 30 | 10   | 25     | 25   | 36    | 0       | 138±1   | M10 | 22 |
| 125 mm   | 54   | 60     | 20      | 140  | G 1/2 | 53.85 | 140  | M27x2    | 41 | 13.5 | 32     | 33   | 45    | 0       | 160±1   | M12 | 27 |

| TG       | VD | WH     | ZM         |
|----------|----|--------|------------|
| 32,5±0,5 | 5  | 26±1,4 | 146+3/-1,5 |
| 38±0,5   | 5  | 30±1,4 | 165+3/-1,5 |
| 46,5±0,6 | 5  | 37±1,4 | 180+3/-1,5 |
| 56,5±0,7 | 5  | 37±1,8 | 195+3/-1,5 |
| 72±0,7   | 5  | 46±1,8 | 220+3/-1,5 |
| 89±0,7   | 5  | 51±1,8 | 240+3,5/-2 |
| 110±1,1  | 7  | 65±2,2 | 290+3,5/-2 |

## Diagrams

### Cushioning diagram



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

## Accessories overview

