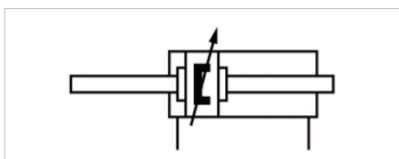


## Tie rod cylinder ISO 15552, Series TRB

- 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          | 32 mm      | 40 mm      | 50 mm      | 63 mm      | 80 mm      | 100 mm     | 125 mm     |
|-------------------|------------|------------|------------|------------|------------|------------|------------|
| Piston rod thread | M10x1,25   | M12x1,25   | M16x1,5    | M16x1,5    | M20x1,5    | M20x1,5    | M27x2      |
| Ports             | G 1/8      | G 1/4      | G 1/4      | G 3/8      | G 3/8      | G 1/2      | G 1/2      |
| Piston rod Ø      | 12 mm      | 16 mm      | 20 mm      | 20 mm      | 25 mm      | 25 mm      | 32 mm      |
| Stroke 25         | 0822340501 | 0822341501 | 0822342501 | 0822343501 | 0822344501 | 0822345501 | R480166022 |
| 50                | 0822340502 | 0822341502 | 0822342502 | 0822343502 | 0822344502 | 0822345502 | 7472410919 |
| 80                | 0822340503 | 0822341503 | 0822342503 | 0822343503 | 0822344503 | 0822345503 | 7472024294 |
| 100               | 0822340504 | 0822341504 | 0822342504 | 0822343504 | 0822344504 | 0822345504 | 7472412262 |
| 125               | 0822340505 | 0822341505 | 0822342505 | 0822343505 | 0822344505 | 0822345505 | 7472412263 |
| 160               | 0822340506 | 0822341506 | 0822342506 | 0822343506 | 0822344506 | 0822345506 | 7472412264 |
| 200               | 0822340507 | 0822341507 | 0822342507 | 0822343507 | 0822344507 | 0822345507 | 7472412265 |
| 250               | 0822340508 | 0822341508 | 0822342508 | 0822343508 | 0822344508 | 0822345508 | 7472412266 |
| 320               | 0822340509 | 0822341509 | 0822342509 | 0822343509 | 0822344509 | 0822345509 | 7472412267 |
| 400               | 0822340510 | 0822341510 | 0822342510 | 0822343510 | 0822344510 | 0822345510 | 7472412268 |
| 500               | 0822340511 | 0822341511 | 0822342511 | 0822343511 | 0822344511 | 0822345511 | 7472412269 |

## Technical data

| Piston Ø                | 32 mm           | 40 mm           | 50 mm             | 63 mm             | 80 mm             | 100 mm            |
|-------------------------|-----------------|-----------------|-------------------|-------------------|-------------------|-------------------|
| Retracting piston force | 435 N           | 660 N           | 1035 N            | 1765 N            | 2855 N            | 4635 N            |
| Extracting piston force | 435 N           | 660 N           | 1035 N            | 1765 N            | 2855 N            | 4635 N            |
| Cushioning length       | 16,5 mm         | 19 mm           | 17 mm             | 16,5 mm           | 19,5 mm           | 19,5 mm           |
| Cushioning energy       | 4,8 J           | 9 J             | 15 J              | 27 J              | 54 J              | 88 J              |
| Weight 0 mm stroke      | 0,52 kg         | 0,82 kg         | 1,42 kg           | 1,7 kg            | 2,67 kg           | 3,7 kg            |
| Weight +10 mm stroke    | 0,033           | 0,046           | 0,061             | 0,077             | 0,099             | 0,104             |
| Stroke max.             | 1500 mm         | 1500 mm         | 1500 mm           | 1500 mm           | 1500 mm           | 1500 mm           |
| Tie-rods                | Stainless steel | Stainless steel | Steel, galvanized | Steel, galvanized | Steel, galvanized | Steel, galvanized |

| Piston Ø                | 125 mm            |
|-------------------------|-------------------|
| Retracting piston force | 7220 N            |
| Extracting piston force | 7220 N            |
| Cushioning length       | 22 mm             |
| Cushioning energy       | 140 J             |
| Weight 0 mm stroke      | 9 kg              |
| Weight +10 mm stroke    | 0,26              |
| Stroke max.             | 1500 mm           |
| Tie-rods                | Steel, galvanized |

## Technical information

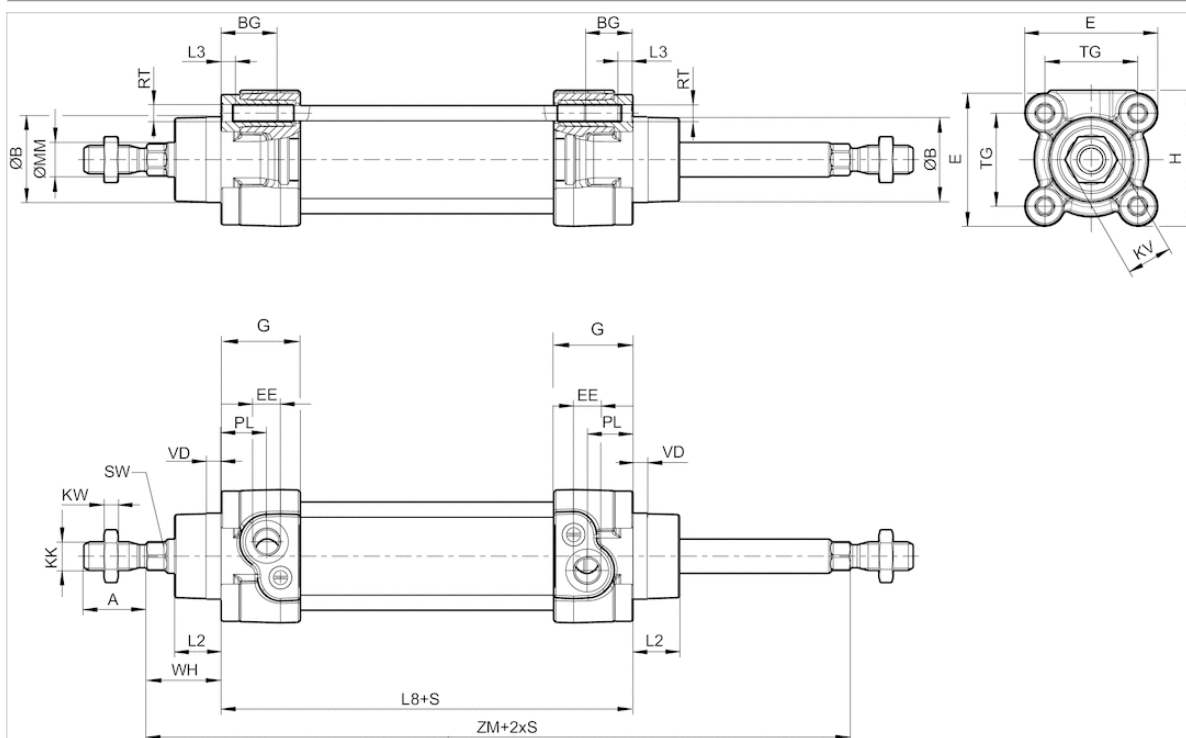
The pressure dew point must be at least 15 °C under ambient and medium temperature and may not exceed 3 °C .  
The oil content of compressed air must remain constant during the life cycle.  
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (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                       |
| Tie-rods                                    | Stainless steel, Steel, galvanized |
| See table for additional data on materials. |                                    |

## Dimensions

### Dimensions in inches



S = stroke

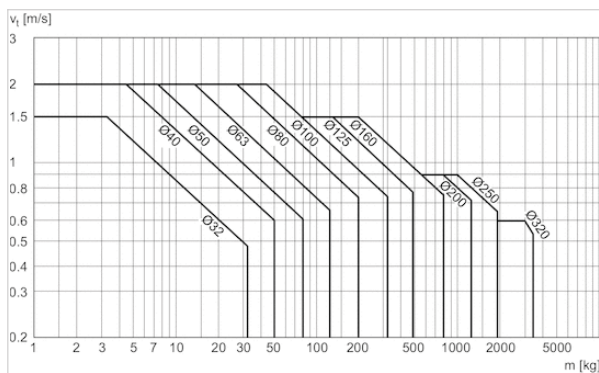
## Dimensions

| 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 | G1/8 | 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   | G1/4 | 33.25 | 53   | M12x1,25 | 18 | 6    | 16     | 20   | 18.25 | 4.5     | 105±0,7 | M6  | 13 |
| 50 mm    | 32   | 40     | 16      | 65   | G1/4 | 31    | 65   | M16x1,5  | 24 | 8    | 20     | 19   | 25    | 4.5     | 106±0,7 | M8  | 17 |
| 63 mm    | 32   | 45     | 16      | 75   | G3/8 | 38.25 | 75   | M16x1,5  | 24 | 8    | 20     | 24   | 25    | 4.5     | 121±0,8 | M8  | 17 |
| 80 mm    | 40   | 45     | 17      | 95   | G3/8 | 38.25 | 95   | M20x1,5  | 30 | 10   | 25     | 23.5 | 33    | 0       | 128±0,8 | M10 | 22 |
| 100 mm   | 40   | 55     | 17      | 115  | G1/2 | 42.25 | 115  | M20x1,5  | 30 | 10   | 25     | 25   | 36    | 0       | 138±1   | M10 | 22 |
| 125 mm   | 54   | 60     | 20      | 140  | G1/2 | 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

