AVENTICS Series ITS Tie rod cylinders (ISO 15552)

The AVENTICS Series ITS (ISO 15552) cylinders are often chosen when extremely large loads need to be moved efficiently and under control with the familiar ease of operation. The Series ITS (ISO 15552) cylinders are easily configurable to your application needs.





- Technical data Industry Standards Piston Ø Stroke Ports Functional principle Cushioning Magnetic piston **Environmental requirements** Piston rod thread - type Piston rod thread Piston rod Scraper Pressure for determining piston forces Retracting piston force Extracting piston force Min. ambient temperature Max. ambient temperature
- Industrial ISO 15552 250 mm 125 mm G 1 Double-acting Pneumatic adjustable cushioning Piston without magnet Industry standard Heat resistant External thread M42x2 single Heat-Resistant Scraper 6,3 bar 29688 N 30925 N -10 °C 150 °C 2 bar



Min. working pressure

Tie rod cylinder ISO 15552, Series ITS

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| Max. working pressure | 10 bar |
|------------------------------------|----------------|
| Cushioning length | 56 mm |
| Cushioning energy | 180 J |
| Weight 0 mm stroke | 25.87 kg |
| Weight +10 mm stroke | 0.38 kg |
| Stroke max. | 2500 mm |
| Medium | Compressed air |
| Min. medium temperature | -10 °C |
| Max. medium temperature | 150 °C |
| Max. particle size | 50 µm |
| Min. oil content of compressed air | 0 mg/m³ |
| Max. oil content of compressed air | 5 mg/m³ |

Material

| Piston rod | Stainless Steel |
|-----------------------|----------------------|
| Scraper material | Fluorocaoutchouc |
| Material tie-rod | Stainless Steel |
| Seal material | Fluorocaoutchouc |
| Material, front cover | Die-cast aluminum |
| Cylinder tube | Aluminum |
| End cover | Die-cast aluminum |
| Nut for piston rod | Steel, chrome-plated |
| Part No. | R480627479 |

Technical information

The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

The oil content of compressed air must remain constant during the life cycle.

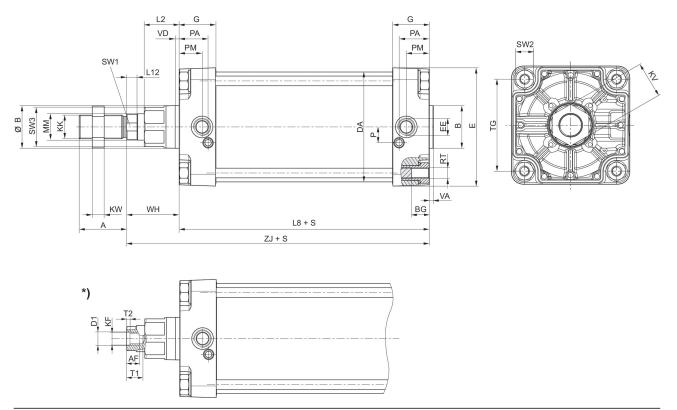
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).



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Dimensions



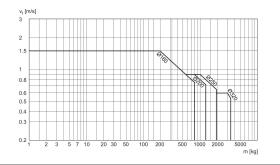
S = stroke *) For cylinders with optional piston road with internal thread

| Piston Ø | A | В | ØB | BG | DA | E | EE | G | KK |
|----------|-----|-----|-----|-----|-------|-----|-------|------|-------|
| 160 | 72 | 65 | 65 | 24 | 167 | 180 | G 3/4 | 56 | M36x2 |
| 200 | 72 | 75 | 75 | 24 | 210 | 220 | G 3/4 | 54 | M36x2 |
| 250 | 84 | 90 | 90 | 25 | 262 | 280 | G 1 | 59.5 | M42x2 |
| 320 | 96 | 110 | 110 | 28 | 336 | 350 | G 1 | 61.5 | M48x2 |
| | | · | | I | | | I | | |
| Piston Ø | KV | KW | L2 | L8 | L12 | MM | Р | PA | PM |
| 160 | 55 | 18 | 53 | 180 | 16 | 40 | 24 | 45 | 35 |
| 200 | 55 | 18 | 56 | 180 | 16 | 40 | 22.5 | 42 | 30 |
| 250 | 65 | 21 | 67 | 200 | 20 | 50 | 29 | 46 | 32.8 |
| 320 | 75 | 24 | 76 | 220 | 23.25 | 63 | 30 | 48 | 37 |
| | | | | | | | | | |
| Piston Ø | RT | SW1 | SW2 | SW3 | TG | VA | VD | WH | ZJ |
| 160 | M16 | 36 | 27 | 60 | 140 | 6 | 6 | 80 | 260 |
| 200 | M16 | 36 | 27 | 60 | 175 | 6 | 6 | 95 | 275 |
| 250 | M20 | 46 | 41 | 80 | 220 | 10 | 31 | 105 | 305.3 |
| 320 | M24 | 55 | 50 | 95 | 270 | 10 | 34 | 120 | 340.5 |



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Cushioning diagram



 v_t = Piston velocity [m/s] m = Cushionable mass [kg]



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Overview drawing AB7 MP4 MP2 AA4 MP2 AA4 AB6 MP4 MP6 MP6 AB6 CS7 ITS MS1 MT4 SM6 2xAT4 MF1/2 MT5/6 ST6 MS1 SN6 AP2 2xAT4 0 AP6 MR9 PM5

NOTE: This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.

