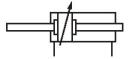
#### **AVENTICS Series ITS Tie rod cylinders** (ISO 15552)

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 Industrial Standards ISO 15552 Piston Ø 320 mm Stroke 320 mm Ports G 1 Functional principle Double-acting Cushioning Magnetic piston **Environmental requirements** Industry standard ATEX optional Piston rod thread - type External thread Piston rod thread M48x2 Piston rod through Scraper Pressure for determining piston forces 6,3 bar Retracting piston force 48704 N Extracting piston force 48704 N -20 °C Min. ambient temperature 80 °C Max. ambient temperature Min. working pressure 2 bar Max. working pressure 10 bar **Cushioning length** 56 mm Cushioning energy 190 J Weight 0 mm stroke 51.23 kg

Pneumatic adjustable cushioning Piston without magnet Standard Industry Scraper



### Tie rod cylinder ISO 15552, Series ITS

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| series ITS |  |
|------------|--|
| 2024-04-05 |  |

| Weight +10 mm stroke               | 1.22 kg        |
|------------------------------------|----------------|
| Stroke max.                        | 1000 mm        |
| Medium                             | Compressed air |
| Min. medium temperature            | -20 °C         |
| Max. medium temperature            | 80 °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 Scraper material Material tie-rod Seal material Material, front cover Cylinder tube End cover Nut for piston rod Part No. Stainless Steel Acrylonitrile butadiene rubber Stainless Steel Acrylonitrile butadiene rubber Die-cast aluminum Aluminum Die-cast aluminum Steel, chrome-plated R480627759

#### **Technical information**

ATEX-certified cylinders with identification II 2G Ex h IIC T4 Gb / II 2D Ex h IIIC T135°C Db\_X can be generated in the Internet configurator.

The operating temperature range for ATEX-certified cylinders is -20°C ... 60°C.

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.

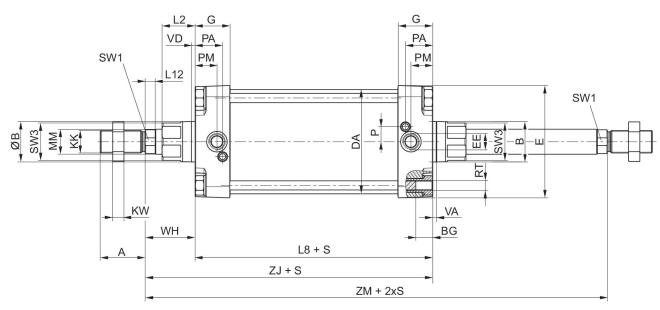
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).

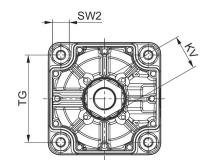


## Tie rod cylinder ISO 15552, Series ITS

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### Dimensions





S = stroke

| Piston Ø | A  | В   | ØВ  | 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 |
|          |    |     |     |     | ·     |     |       |      |       |
| Piston Ø | KV | KW  | L2  | L8  | L12   | MM  |       | 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    |

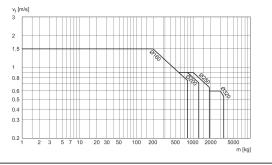


# Tie rod cylinder ISO 15552, Series ITS

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| Piston Ø | RT  | SW1 | SW2 | SW3 | TG  | VD | WH  | ZJ    | ZM  |
|----------|-----|-----|-----|-----|-----|----|-----|-------|-----|
| 160      | M16 | 36  | 27  | 60  | 140 | 6  | 80  | 260   | 340 |
| 200      | M16 | 36  | 27  | 60  | 175 | 6  | 95  | 275   | 370 |
| 250      | M20 | 46  | 41  | 80  | 220 | 31 | 105 | 305.3 | 411 |
| 320      | M24 | 55  | 50  | 95  | 270 | 34 | 120 | 340.5 | 462 |

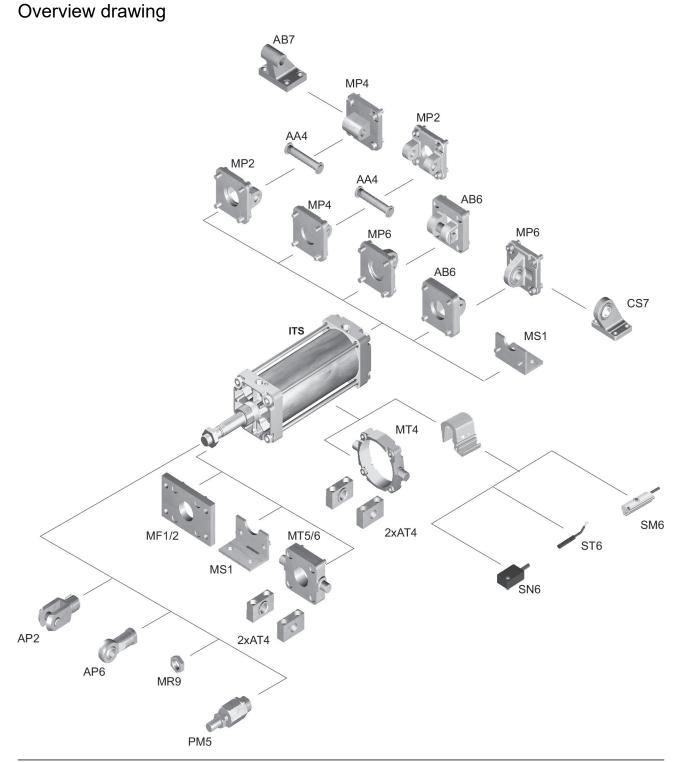
### Cushioning diagram



v<sub>t</sub> = Piston velocity [m/s] m = Cushionable mass [kg]



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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.

