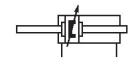
**R480631095** 2024-04-05

# **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
 200 mm

 Ports
 G 1

Functional principle Double-acting

Cushioning Pneumatic adjustable cushioning

Magnetic piston Piston with magnet
Environmental requirements Industry standard
ATEX optional

Piston rod thread - type External thread

Piston rod thread M48x2
Piston rod through

Scraper Standard Industry 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

### series ITS

## Tie rod cylinder ISO 15552, Series ITS

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Weight +10 mm stroke 1.22 kg Stroke max. 1000 mm

Medium Compressed air

Min. medium temperature  $-20~^{\circ}\text{C}$ Max. medium temperature  $80~^{\circ}\text{C}$ Max. particle size  $50~\mu\text{m}$ Min. oil content of compressed air  $0~\text{mg/m}^{3}$ Max. oil content of compressed air  $5~\text{mg/m}^{3}$ 

Clamping piece for magnetic field sensor Clamping piece for magnetic field sensor

necessary necessary

#### Material

Piston rod Stainless Steel

Scraper material Acrylonitrile butadiene rubber

Material tie-rod Stainless Steel

Seal material Acrylonitrile butadiene rubber

Material, front cover Die-cast aluminum

Cylinder tube Aluminum

End cover Die-cast aluminum

Nut for piston rod Steel, chrome-plated

Part No. R480631095

#### 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.

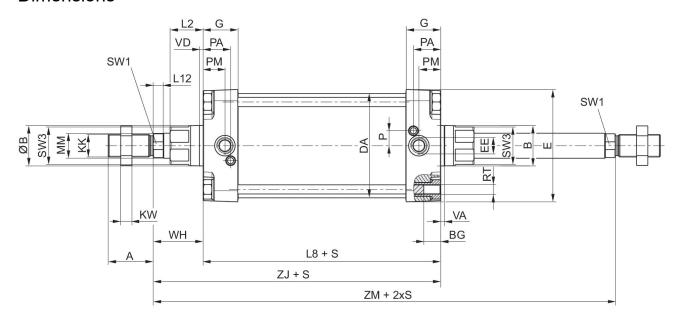
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

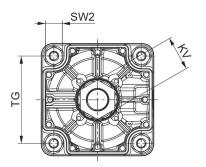
The oil content of compressed air must remain constant during the life cycle.

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).

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### **Dimensions**





S = stroke

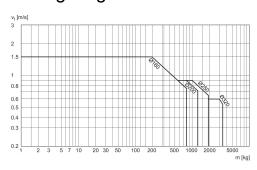
Piston Ø	А		ØB	BG	DA		EE	G	KK
160	72	65	65	24	167	180	G 3/4	56	M36x2
200	72	75	75	24	210	220	G 3/4	54	M36x2
250	84	90	90	25	262	280	G 1	59.5	M42x2
320	96	110	110	28	336	350	G 1	61.5	M48x2

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

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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

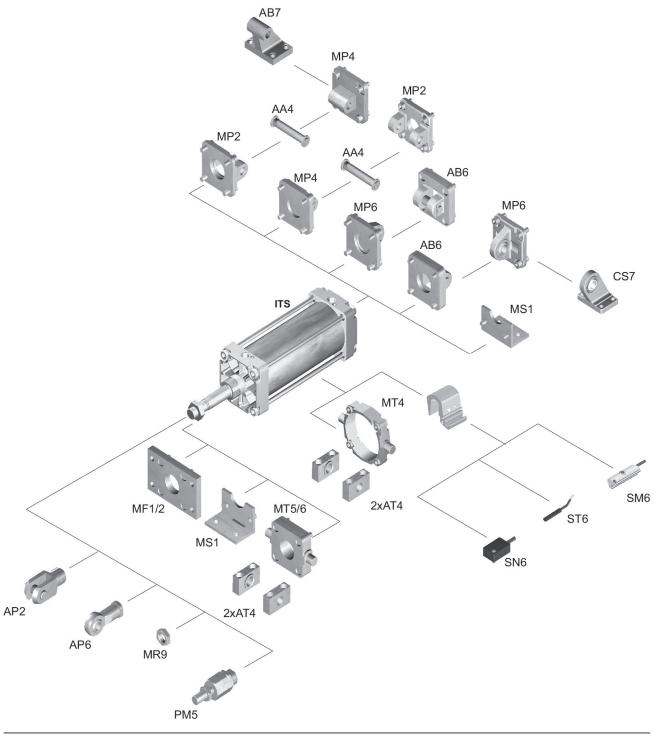
### Cushioning diagram



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

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### Overview drawing



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.