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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

Piston rod thread - type

 Industry
 Industrial

 Standards
 ISO 15552

 Piston Ø
 160 mm

 Stroke
 200 mm

 Ports
 G 3/4

Functional principle Double-acting

Cushioning Pneumatic adjustable cushioning

Magnetic piston Piston without magnet

Environmental requirements Industry standard ATEX optional

External thread

Piston rod thread M36x2
Piston rod single

Cylinder special features with trunnion mounting
Scraper Standard Industry Scraper

Pressure for determining piston forces 6,3 bar
Retracting piston force 11875 N
Extracting piston force 12667 N
Min. ambient temperature -20 °C
Max. ambient temperature 80 °C

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2 bar Min. working pressure Max. working pressure 10 bar Cushioning length 46 mm Cushioning energy 160 J Weight 0 mm stroke 15.67 kg Weight +10 mm stroke $0.21 \, kg$ 2700 mm Stroke max.

Tie rod cylinder ISO 15552, Series ITS

Medium Compressed air

-20 °C Min. medium temperature 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 Stainless Steel

Acrylonitrile butadiene rubber Scraper material

Material tie-rod Stainless Steel

Seal material Acrylonitrile butadiene rubber

Die-cast aluminum Material, front cover

Cylinder tube **Aluminum**

End cover Die-cast aluminum Nut for piston rod Steel, chrome-plated Trunnion mounting Nodular graphite iron

Part No. R480627337

Technical information

The trunnion mounting is positioned in the center at the factory and can be adjusted later.

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.

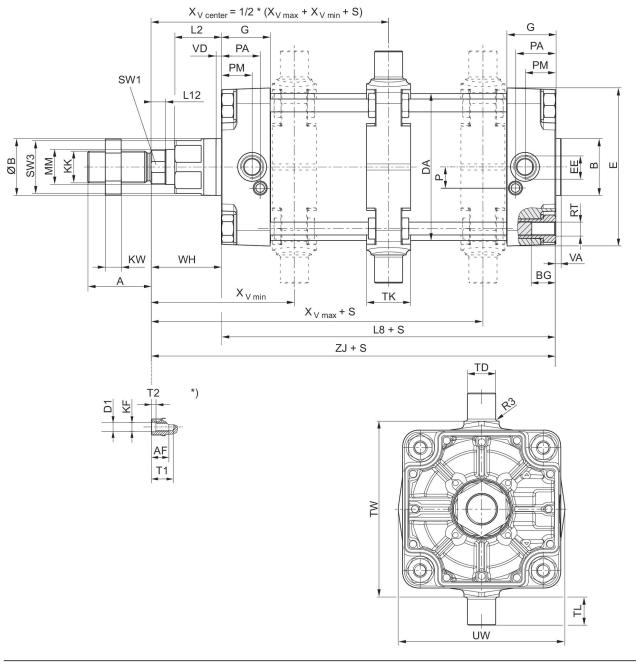
The pressure dew point must be at least 15 °C less than ambient and medium temperature and may not exceed 3 °C.

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	Е	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

 $[\]ensuremath{^{\star}}\xspace)$ For cylinders with optional piston road with internal thread

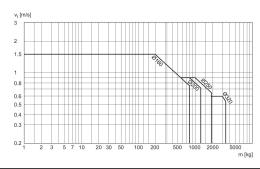
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Piston Ø	KV	KW	L2	L8	L12	MM	Р	PA	PM
160	55	18	53	180	16	40	24	45	35
200	55	18	56	180	16	40	22.5	42	30
250	65	21	67	200	20	50	29	46	32.8
320	75	24	76	220	23.25	63	30	48	37

Piston Ø	R3	RT	SW1	SW2	SW3	TD e9	TG	TK	TL h14
160	2.5	M16	36	27	60	32	140	50	32
200	2.5	M16	36	27	60	32	175	50	32
250	3	M20	46	41	80	40	220	60	40
320	3.2	M24	55	50	95	50	270	70	50

Piston Ø	TW h14	UW	VD	WH	XV min	XV max	ZJ
160	200	190	6	80	163	177	260
200	250	240	6	95	177	193	275
250	320	310	31	105	195	215	305.3
320	400	400	34	120	228	233	340.5

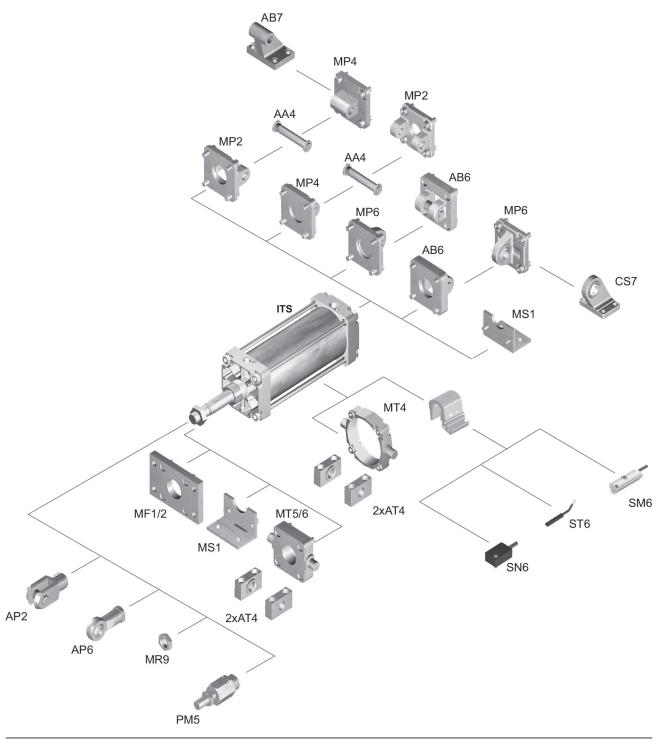
Cushioning diagram



 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.