



Tie rod cylinder ISO 15552, Series ITS

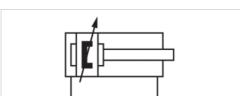
- ISO 15552
- Ø 160-320 mm
- Ports G 3/4 G 1
- double-acting
- with magnetic piston
- Cushioning pneumatically adjustable
- Piston rod External thread
- ATEX optional



Standards ISO 15552 Certificates ATEX optional Compressed air connection Internal thread Working pressure min./max. 2 ... 10 bar -20 ... 80 °C Ambient temperature min./max. -20 ... 80 °C Medium temperature min./max. Medium Compressed air Max. particle size 50 µm 0 ... 5 mg/m³ Oil content of compressed air

6.3 bar

Pressure for determining piston forces



Technical data

Piston Ø Piston rod thread Ports Piston rod Ø	160 mm M36x2 G 3/4 40 mm	200 mm M36x2 G 3/4 40 mm	250 mm M42x2 G 1 50 mm	320 mm M48x2 G 1 63 mm
Stroke 25	R480627295	R480627367	R480627451	R480627463
50	R480627296	R480627368	R480627452	R480630857
80	R480627297	R480627369	R480627453	R480627465
100	R480627298	R480627370	R480627454	R480627466
125	R480627299	R480627371	R480627455	R480627467
160	R480627300	R480627372	R480627456	R480627468
200	R480627301	R480627373	R480627457	R480627469
250	R480627302	R480627374	R480627458	R480627470
320	R480627303	R480627375	R480627459	R480627471
400	R480627304	R480627376	R480627460	R480627472
500	R480627305	R480627377	R480627461	R480627473



Technical data

Piston Ø	160 mm	200 mm	250 mm	320 mm
Retracting piston force	11875 N	19000 N	29688 N	48704 N
Extracting piston force	12667 N	19792 N	30925 N	50668 N
Cushioning length	46 mm	46 mm	56 mm	56 mm
Cushioning energy	160 J	170 J	180 J	190 J
Weight 0 mm stroke	12,5 kg	15,67 kg	25,87 kg	46,89 kg
Weight +10 mm stroke	0,21 kg	0,21 kg	0,38 kg	0,61 kg
Stroke max.	2700 mm	2700 mm	2500 mm	2500 mm

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).

Clamping piece for magnetic field sensor necessary

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.

Technical information

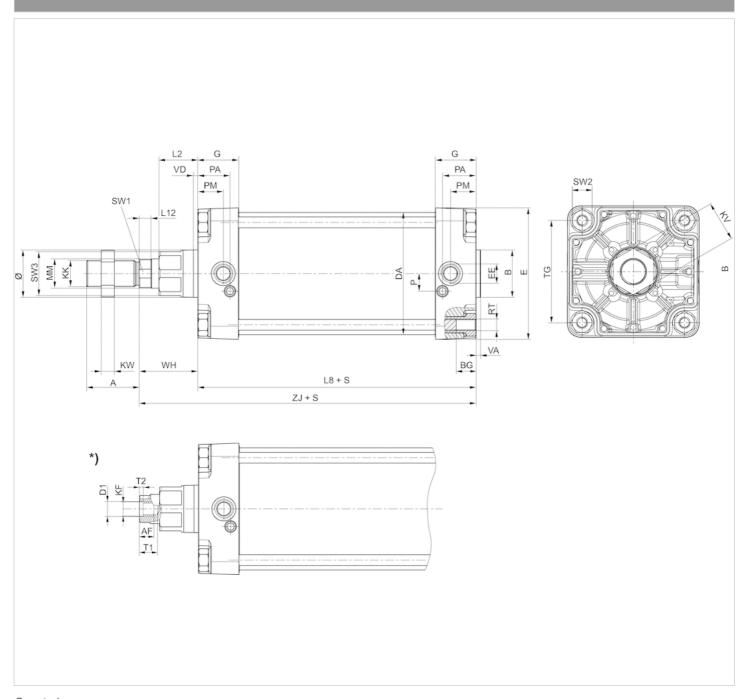
Material	
Cylinder tube	Aluminum, anodized
Piston rod	Stainless steel
Front cover	Die-cast aluminum
End cover	Die-cast aluminum
Seal	Acrylonitrile butadiene rubber
Nut for piston rod	Steel, galvanized
Scraper	Acrylonitrile butadiene rubber
Tie-rods	Stainless steel



AVENTICS

Dimensions

Dimensions



S = stroke

Dimensions

Piston Ø	А	AF	В	ØB	BG	D1	DA	Е	EE	G	KF	KK	KV	KW	L2	L8	L12	MM	Р	РА
160 mm	72	36	65	65	24	25	167	180	G 3/4	56	M24	M36x2	55	18	53	180	16	40	24	45
200 mm	72	36	75	75	24	25	210	220	G 3/4	54	M24	M36x2	55	18	56	180	16	40	22.5	42
250 mm	84	50	90	90	25	31	262	280	G 1	59.5	M30	M42x2	65	21	67	200	20	50	29	46
320 mm	96	55	110	110	28	37	336	350	G 1	61.5	M36	M48x2	75	24	76	220	23.25	63	30	48

^{*)} For cylinders with optional piston road with internal thread

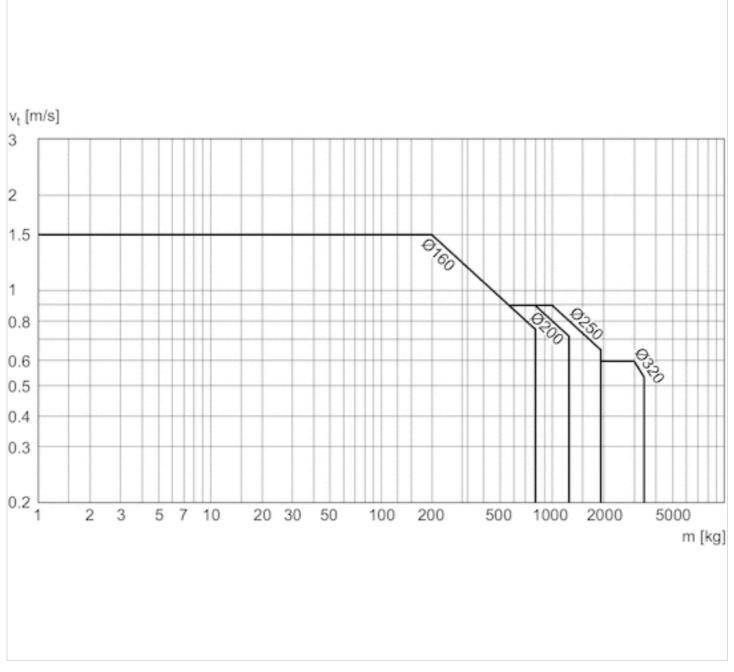




Piston Ø	PM	RT	SW1	SW2	SW3	T1	T2	TG	VA	VD	WH	ZJ
160 mm	35	M16	36	27	60	40	10	140	6	6	80	260
200 mm	30	M16	36	27	60	40	10	175	6	6	95	275
250 mm	32.8	M20	46	41	80	60	10	220	10	31	105	305.3
320 mm	37	M24	55	50	95	65	13	270	10	34	120	340.5

Diagrams

Cushioning diagram



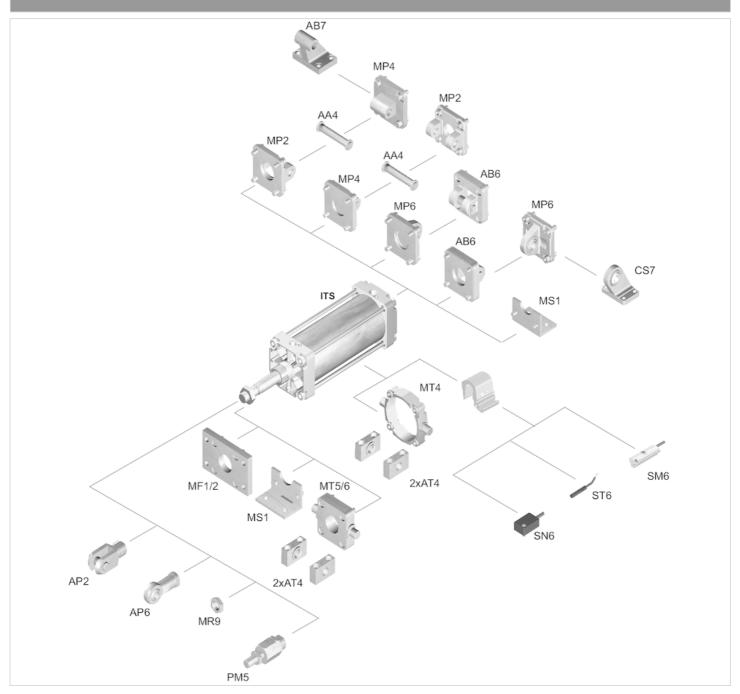
v = Piston velocity [m/s]

m = Cushionable mass [kg]



Accessories overview

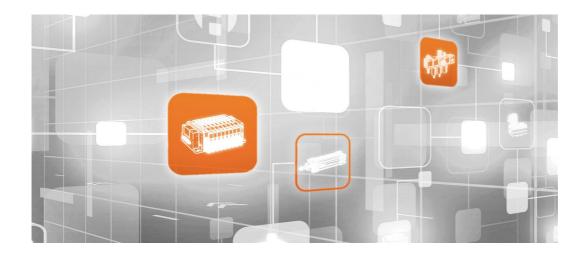
Overview drawing



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.

Efficient pneumatic solutions, our program: cylinders and drives, valves and valve systems, air supply management



Visit us: Emerson.com/Aventics

Your local contact: Emerson.com/contactus



Emerson.com



Facebook.com/EmersonAutomationSolutions



LinkedIn.com/company/Emerson-Automation-Solutions



Twitter.com/EMR_Automation

An example configuration is depicted on the title page. The delivered product may thus vary from that in the illustration. Subject to change. This Document, as well as the data, specifications and other information set forth in it, are the exclusive property of AVENTICS GmbH. It may not be reproduced or given to third parties without its consent. Only use the AVENTICS products shown in industrial applications. Read the product documentation completely and carefully before using the product. Observe the applicable regulations and laws of the respective country. When integrating the product into applications, note the system manufacturer's specifications for safe use of the product. The data specified only serve to describe the product. No statements concerning a certain condition or suitability for a certain application can be derived from our information. The information given does not release the user from the obligation of own judgement and verification. It must be remembered that the products are subject to a natural process of wear and again.

The Emerson logo is a trademark and service mark of Emerson Electric Co. Brand logotype are registered trademarks of one of the Emerson family of companies. All other marks are the property of their respective owners.

2020 Emerson Electric Co. All rights reserved.

