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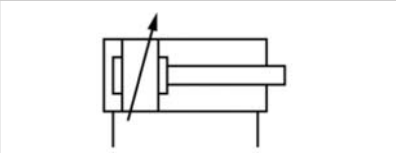
Tie rod cylinder ISO 15552, Series TRB

- Ø 32-125 mm
- double-acting
- Cushioning pneumatically, adjustable
- Piston rod External thread
- Low friction



Standards	ISO 15552
Compressed air connection	Internal thread
Working pressure min./max.	1 ... 10 bar
Ambient temperature min./max.	-20 ... 80 °C
Medium temperature min./max.	-20 ... 80 °C
Medium	Compressed air
Max. particle size	50 µm
Oil content of compressed air	0 ... 5 mg/m³
Pressure for determining piston forces	6.3 bar

Technical data

Piston Ø	32 mm	40 mm	50 mm	63 mm	80 mm
Retracting piston force	435 N	660 N	1035 N	1765 N	2855 N
Extracting piston force	505 N	790 N	1235 N	1960 N	3165 N
Extracting breakaway pressure	0,05 bar	0,04 bar	0,04 bar	0,03 bar	0,03 bar
Cushioning length	11,5 mm	15 mm	17 mm	16,5 mm	19,5 mm
Cushioning energy	4,8 J	9 J	15 J	27 J	54 J
Weight 0 mm stroke	0,46 kg	0,67 kg	1,14 kg	1,4 kg	2,12 kg
Weight +10 mm stroke	0,024 kg	0,03 kg	0,036 kg	0,052 kg	0,06 kg
Stroke max.	1600 mm	1900 mm	2100 mm	2500 mm	2800 mm
Tie-rods	Stainless steel	Stainless steel	Steel, galvanized	Steel, galvanized	Steel, galvanized

Piston Ø	100 mm	125 mm
Retracting piston force	4635 N	7220 N
Extracting piston force	4945 N	7725 N
Extracting breakaway pressure	0,02 bar	0,02 bar
Cushioning length	19,5 mm	22 mm
Cushioning energy	88 J	140 J
Weight 0 mm stroke	3,16 kg	6,92 kg
Weight +10 mm stroke	0,065 kg	0,21 kg
Stroke max.	2800 mm	2750 mm
Tie-rods	Steel, galvanized	Steel, galvanized

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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).

The extracting breakaway pressure is determined with the piston in center position.

Technical information

Material	
Cylinder tube	Steel, painted
Piston rod	Stainless steel
Front cover	Die-cast aluminum
End cover	Die-cast aluminum
Seal	Nitrile butadiene rubber
Nut for piston rod	Steel, galvanized
Scraper	Nitrile butadiene rubber
Tie-rods	Stainless steel, Steel, galvanized
	See table for additional data on materials.

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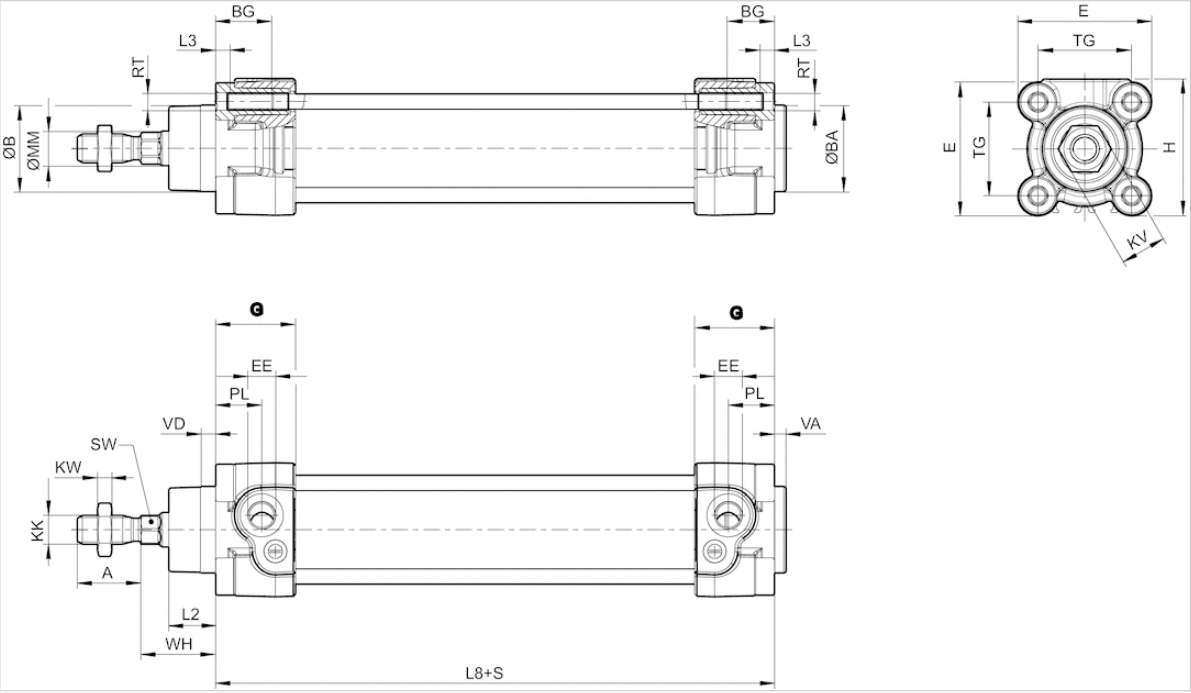
Dimensions

Dimensions



S = stroke

Dimensions

Ø	A -2	ØBd11	ØBAd11	BG min.	E	EE	G	H	KK	KV	KW	ØMMf8	PL	L2	L3 ±0,5	L8	RT	SW
32	22	30	30	16	46.5	G1/8	27.75	47.5	M10x1,25	16	5	12	16	16.25	4.5	94±0,4	M6	10
40	24	35	35	16	53	G1/4	33.25	53	M12x1,25	18	6	16	20	18.25	4.5	105±0,7	M6	13
50	32	40	40	16	65	G1/4	31	65	M16x1,5	24	8	20	19	25	4.5	106±0,7	M8	17
63	32	45	45	16	75	G3/8	38.25	75	M16x1,5	24	8	20	24	25	4.5	121±0,8	M8	17
80	40	45	45	17	95	G3/8	38.25	95	M20x1,5	30	10	25	23.5	33	0	128±0,8	M10	22
100	40	55	55	17	115	G1/2	42.25	115	M20x1,5	30	10	25	25	36	0	138±1	M10	22
125	54	60	60	20	140	G1/2	53.85	140	M27x2	41	13.5	32	33	45	0	160±1	M12	27

TG	VA -1	VD	WH
32,5±0,5	4	5	26±1,4
38±0,5	4	5	30±1,4
46,5±0,6	4	5	37±1,4
56,5±0,7	4	5	37±1,8
72±0,7	4	5	46±1,8
89±0,7	4	5	51±1,8
110±1,1	6	7	65±2,2

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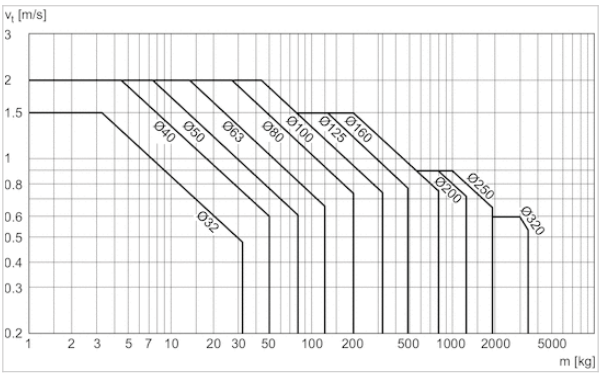
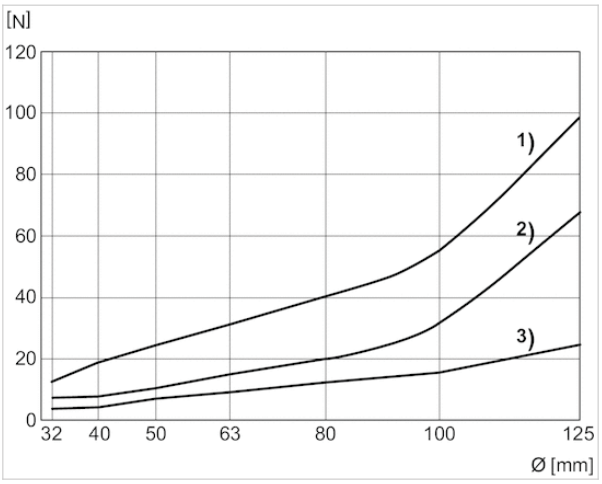
Diagrams

Cushioning diagram



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

Stick-slip effect in unpressurized state



1) Standard PRA
2) Low-friction PRA (with magnet)
3) Low-friction TRB (without magnet)

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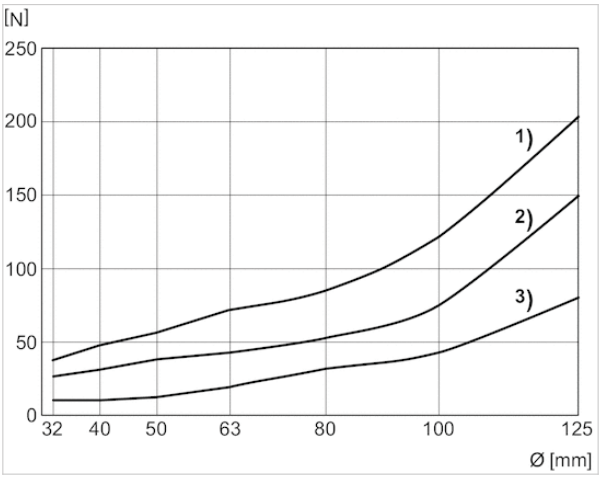
Stick-slip effect internal cylinder pressure on both sides 6.3 bar



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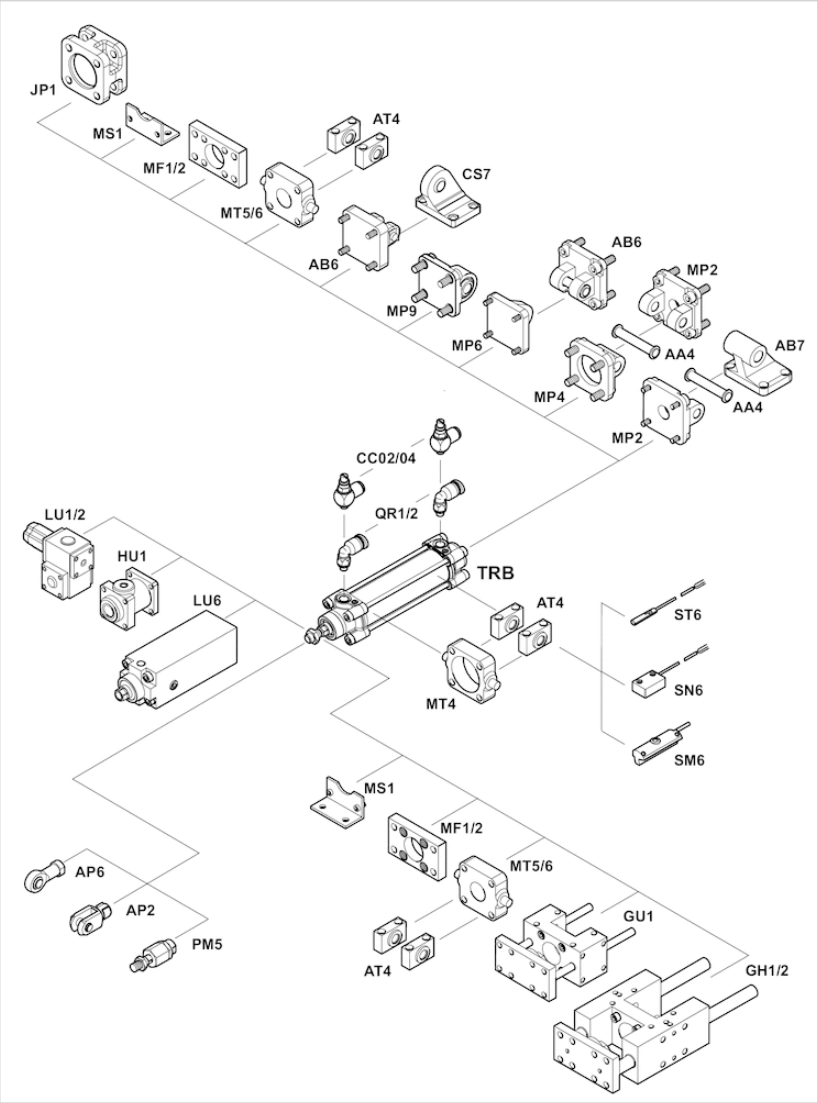
Accessories overview



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