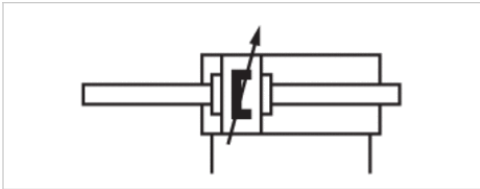


# Profile cylinder ISO 15552, Series PRA - inch

- Ø 32-125 mm
- Ports 1/8 NPT 1/4 NPT 3/8 NPT 1/2 NPT
- double-acting
- with magnetic piston
- Cushioning pneumatically, pneumatically adjustable
- Piston rod External thread
- Piston rod through
- ATEX optional



Compressed air connection	Internal thread
Working pressure min./max.	2 ... 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/m <sup>3</sup>
Pressure for determining piston forces	6.3 bar



## Technical data

Piston Ø Piston rod thread Ports Piston rod Ø	32 mm 7/16-20 UNF 1/8 NPT 12 mm	40 mm 1/2-20 UNF 1/4 NPT 16 mm	50 mm 3/4-16 UNF 1/4 NPT 20 mm	63 mm 3/4-16 UNF 3/8 NPT 20 mm	80 mm 3/4-16 UNF 3/8 NPT 25 mm	100 mm 3/4-16 UNF 1/2 NPT 25 mm
Stroke 25.4	R480176152	R480176240	R480176332	R480176414	R480176507	R480176597
50.8	R480176160	R480176248	R480176341	R480176423	R480176517	R480176604
76.2	R480176173	R480176255	R480176348	R480176435	R480176519	R480176612
101.6	R480176175	R480176267	R480176356	R480176440	R480176533	R480176615
127	R480176182	R480176276	R480176359	R480176448	R480176535	R480176625
152.4	R480176191	R480176283	R480176366	R480176454	R480176542	R480176630
177.8	R480176204	R480176289	R480176378	R480176463	R480176555	R480176645
203.2	R480176212	R480176300	R480176389	R480176477	R480176559	R480176651
228.6	R480176214	R480176308	R480176391	R480176481	R480176573	R480176659
254	R480176226	R480176313	R480176404	R480176489	R480176577	R480176667
304.8	R480176236	R480176319	R480176408	R480176496	R480176582	R480176674

Piston Ø Piston rod thread Ports Piston rod Ø	125 mm 1-14 UNF 1/2 NPT 32 mm
Stroke 25.4	R480176680
50.8	R480176693
76.2	R480176700
101.6	R480176706
127	R480176715
152.4	R480176724
177.8	R480176726
203.2	R480176740
228.6	R480176749
254	R480176750
304.8	R480176762

## Technical data

Piston Ø	32 mm	40 mm	50 mm	63 mm	80 mm	100 mm	125 mm
Retracting piston force	435 N	660 N	1035 N	1765 N	2855 N	4635 N	7220 N
Extracting piston force	435 N	660 N	1035 N	1765 N	2855 N	4635 N	7220 N
Cushioning length	16,5 mm	19 mm	17 mm	16,5 mm	19,5 mm	19,5 mm	22 mm
Cushioning energy	4,8 J	9 J	15 J	27 J	54 J	88 J	140 J
Weight 0 mm stroke	0,58 kg	0,8 kg	1,34 kg	1,72 kg	2,92 kg	4,08 kg	8,92 kg
Weight +10 mm stroke	0,031 kg	0,048 kg	0,072 kg	0,079 kg	0,124 kg	0,139 kg	0,22 kg
Stroke max.	1600 mm	1900 mm	2100 mm	2500 mm	2800 mm	2800 mm	2750 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.

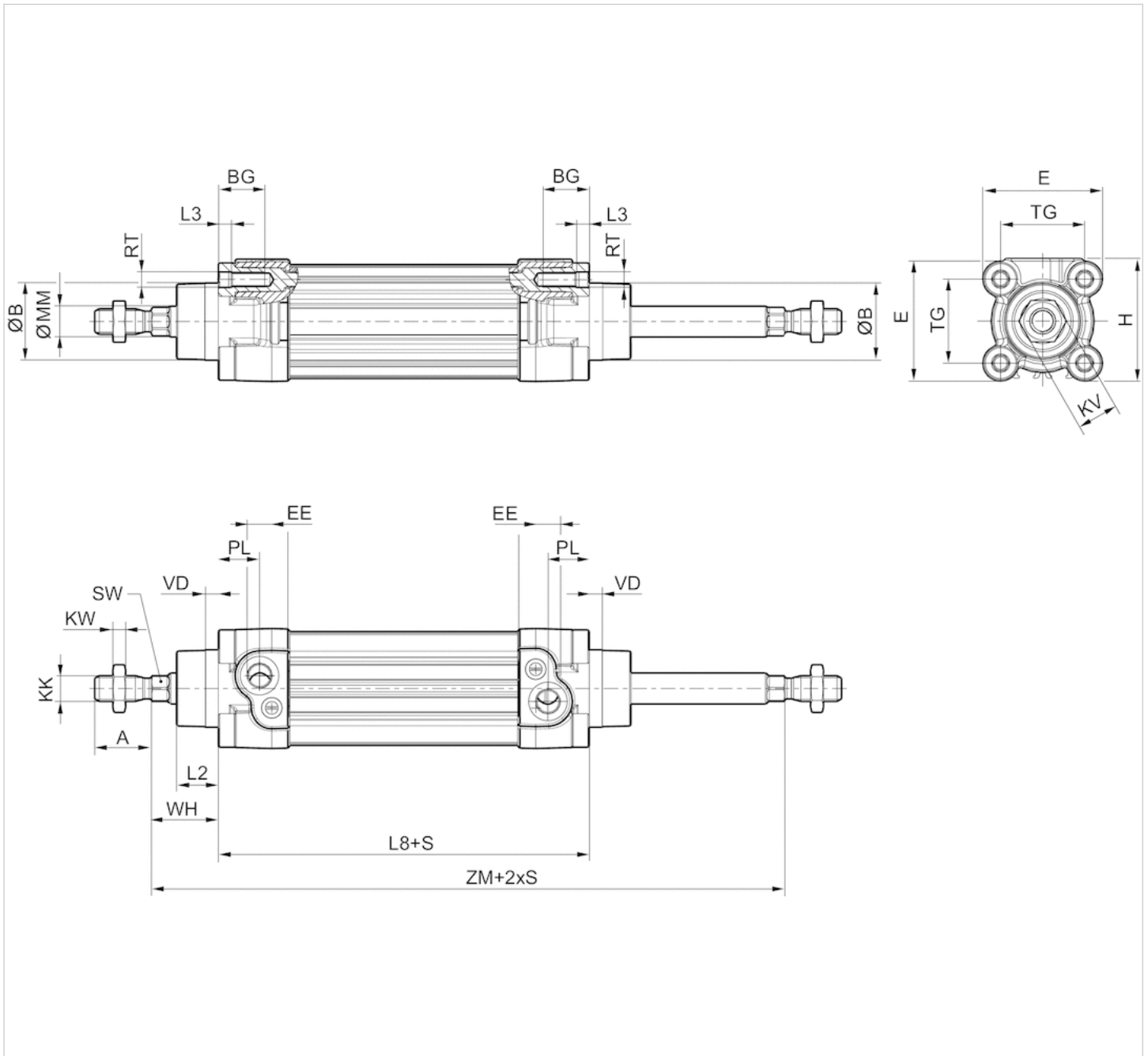
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in the MediaCentre).

## Technical information

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

## Dimensions

### Dimensions



S = stroke

## Dimensions

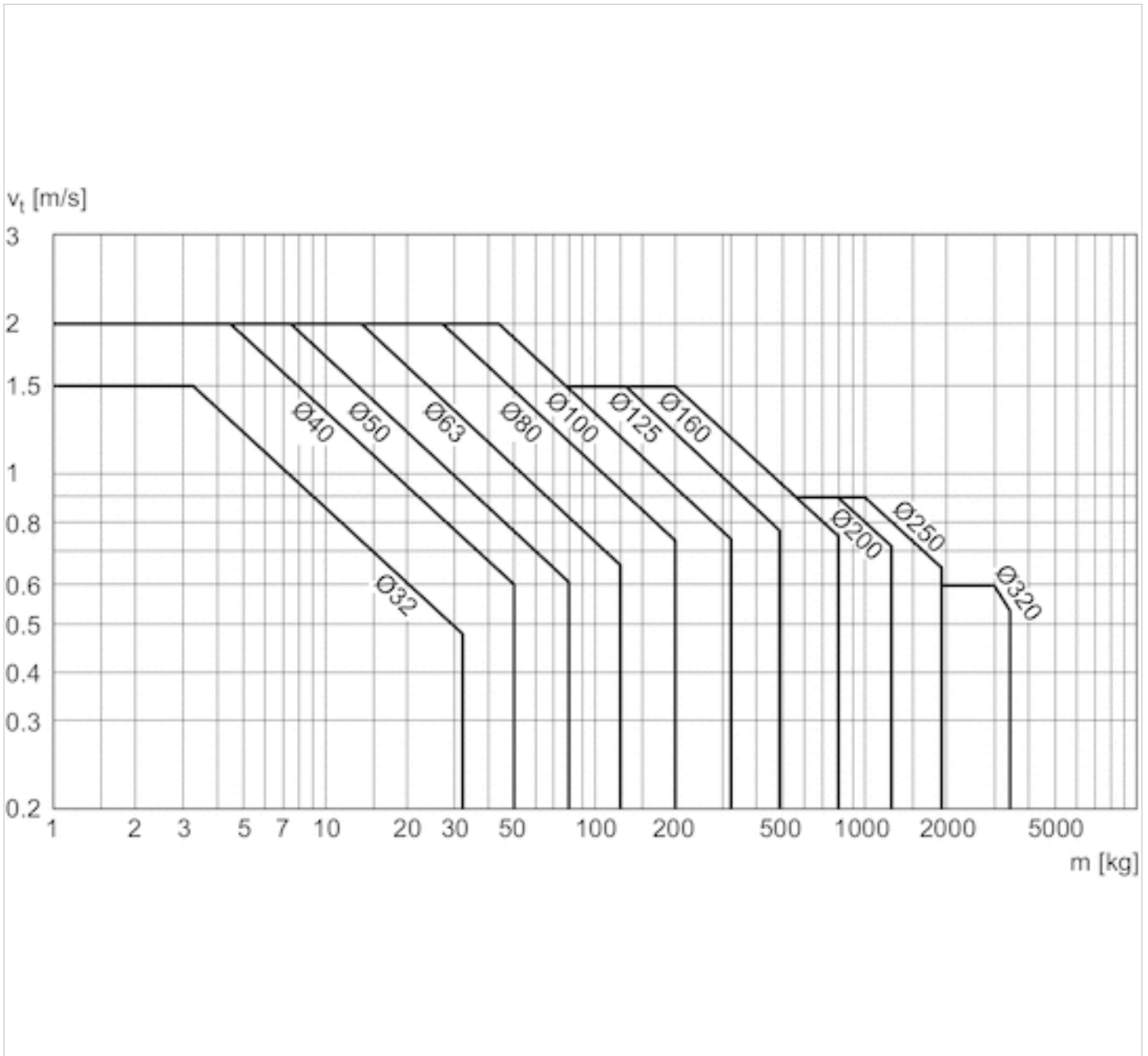
Piston Ø	A -2	ØB d11	BG min.	E	EE inch	EE	H	KK inch	KK	KV	KW
32 mm	22	30	16	46.5	1/8 NPT	G 1/8	47.5	7/16 - 20 UNF	M10x1,25	16	5
40 mm	24	35	16	53	1/4 NPT	G 1/4	53	1/2 -20 UNF	M12x1,25	18	6
50 mm	32	40	16	65	1/4 NPT	G 1/4	65	3/4 - 16 UNF	M16x1,5	24	8
63 mm	32	45	16	75	3/8 NPT	G 3/8	75	3/4 - 16 UNF	M16x1,5	24	8
80 mm	40	45	17	95	3/8 NPT	G 3/8	95	3/4 - 16 UNF	M20x1,5	30	10
100 mm	40	55	17	115	1/2 NPT	G 1/2	115	3/4 - 16 UNF	M20x1,5	30	10

Piston Ø	A -2	ØB d11	BG min.	E	EE inch	EE	H	KK inch	KK	KV	KW
125 mm	54	60	20	140	1/2 NPT	G 1/2	140	1 - 14 UNF	M27x2	41	13.5

Piston Ø	ØMM f8	PL	L2	L3 ±0,5	L8	RT	SW	TG	VD	WH	ZM
32 mm	12	16	16.25	4.5	94±0,4	M6	10	32,5±0,5	5	26±1,4	146+3/-1,5
40 mm	16	20	18.25	4.5	105±0,7	M6	13	38±0,5	5	30±1,4	165+3/-1,5
50 mm	20	19	25	4.5	106±0,7	M8	17	46,5±0,6	5	37±1,4	180+3/-1,5
63 mm	20	24	25	4.5	121±0,8	M8	17	56,5±0,7	5	37±1,8	195+3/-1,5
80 mm	25	23.5	33	0	128±0,8	M10	22	72±0,7	5	46±1,8	220+3/-1,5
100 mm	25	25	36	0	138±1	M10	22	89±0,7	5	51±1,8	240+3,5/-2
125 mm	32	33	45	0	160±1	M12	27	110±1,1	7	65±2,2	290+3,5/-2

# Diagrams

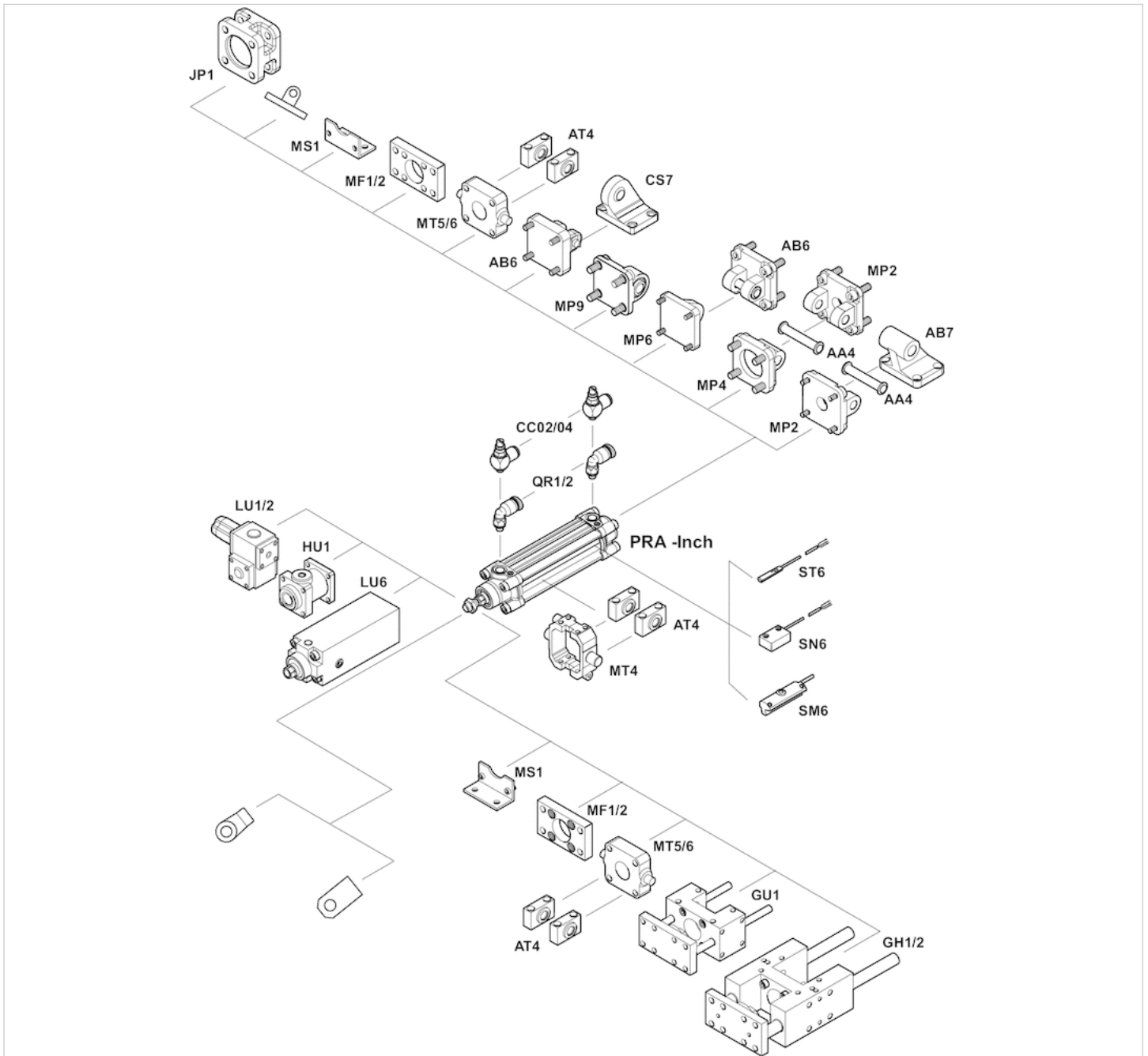
## Cushioning diagram



$v$  = 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.

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