

## ISO 15552, series PRA



AVENTICS™ ISO 15552, series PRA

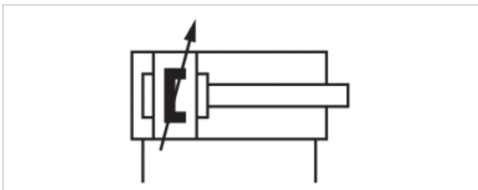


# Profile cylinder ISO 15552, PRA series

- Ø 32-125 mm
- Ports G 1/8 G 1/4 G 3/8 G 1/2
- 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.	1.5 ... 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 M10x1,25 G 1/8 12 mm	40 mm M12x1,25 G 1/4 16 mm	50 mm M16x1,5 G 1/4 20 mm	63 mm M16x1,5 G 3/8 20 mm	80 mm M20x1,5 G 3/8 25 mm	100 mm M20x1,5 G 1/2 25 mm
Stroke 25	0822120001	0822121001	0822122001	0822123001	0822124001	0822125001
50	0822120002	0822121002	0822122002	0822123002	0822124002	0822125002
80	0822120003	0822121003	0822122003	0822123003	0822124003	0822125003
100	0822120004	0822121004	0822122004	0822123004	0822124004	0822125004
125	0822120005	0822121005	0822122005	0822123005	0822124005	0822125005
160	0822120006	0822121006	0822122006	0822123006	0822124006	0822125006
200	0822120007	0822121007	0822122007	0822123007	0822124007	0822125007
250	0822120008	0822121008	0822122008	0822123008	0822124008	0822125008
320	0822120009	0822121009	0822122009	0822123009	0822124009	0822125009
400	0822120010	0822121010	0822122010	0822123010	0822124010	0822125010
500	0822120011	0822121011	0822122011	0822123011	0822124011	0822125011

Piston Ø Piston rod thread Ports Piston rod Ø	125 mm M27x2 G 1/2 32 mm
Stroke 25	R480140491
50	R480140455
80	R480141371
100	R480079499
125	R480140083
160	R480079809
200	R480140833
250	R480141106
320	R480140759
400	R480141373
500	R480141666

## 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	505 N	790 N	1235 N	1960 N	3165 N	4945 N	7725 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	0.5 kg	0.65 kg	1.06 kg	1.42 kg	2.37 kg	3.51 kg	6.72 kg
Weight +10 mm stroke	0.022 kg	0.032 kg	0.047 kg	0.054 kg	0.085 kg	0.1 kg	0.15 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).

ATEX-certified cylinders with identification II 2G Ex h IIB T4 Gb / II 2D Ex h IIIB T135°C Db\_X can be generated in the Internet configurator.

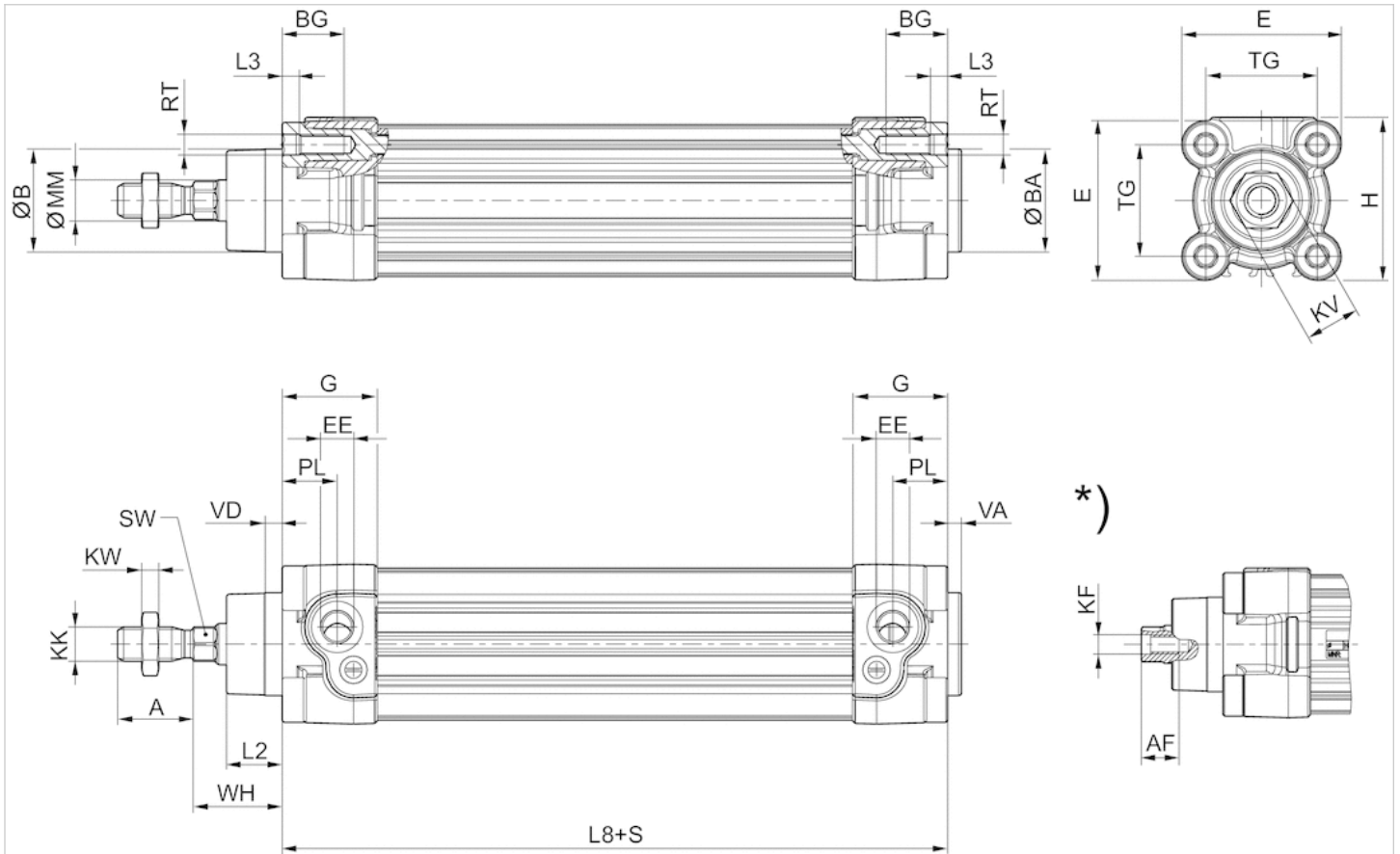
The operating temperature range for ATEX-certified cylinders is -20 °C ... 50 °C.

## 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

\*) For cylinders with optional piston rod with internal thread

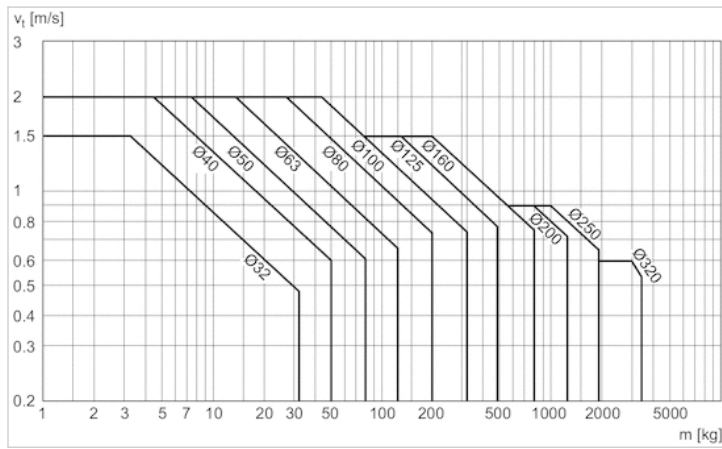
## Dimensions

Piston Ø	A -2	AF+1	ØB d11	ØBA d11	BG min.	E	EE	G	H	KF	KK	KV	KW
32 mm	22	12	30	30	16	46.5	G 1/8	27.75	47.5	M6	M10x1,25	16	5
40 mm	24	13.5	35	35	16	53	G 1/4	33.25	53	M8	M12x1,25	18	6
50 mm	32	17	40	40	16	65	G 1/4	31	65	M10	M16x1,5	24	8
63 mm	32	17	45	45	16	75	G 3/8	38.25	75	M10	M16x1,5	24	8
80 mm	40	21	45	45	17	95	G 3/8	38.25	95	M12	M20x1,5	30	10
100 mm	40	21	55	55	17	115	G 1/2	42.25	115	M12	M20x1,5	30	10
125 mm	54	28	60	60	20	140	G 1/2	53.85	140	M16	M27x2	41	13.5

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

# Diagrams

## Cushioning diagram



$v$  = Piston velocity [m/s]

$m$  = Cushionable mass [kg]

# Accessories overview

