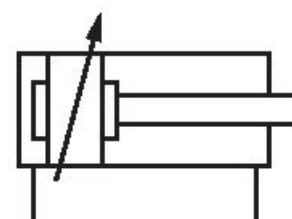


Profile cylinder ISO 15552, PRA series

R480146313

General series information
AVENTICS Series PRA Profile cylinders (ISO 15552)

- The AVENTICS Series PRA (ISO 15552) cylinders have a compact design profile with integrated sensor slots. The Series PRA (ISO 15552) cylinders can be used for all industries. This includes general automation technology, machine and systems construction, as well as specific industry applications.



Technical data

Industry	Industrial
Standards	ISO 15552
Piston Ø	80 mm
Stroke	320 mm
Ports	G 3/8
Functional principle	Double-acting
Cushioning	Pneumatic adjustable cushioning
Magnetic piston	Piston without magnet
Environmental requirements	Industry standard Heat resistant
Piston rod	single
Scraper	Heat-Resistant Scraper
Pressure for determining piston forces	6,3 bar
Retracting piston force	2855 N

Extracting piston force	3165 N
Min. ambient temperature	-10 °C
Max. ambient temperature	150 °C
Working pressure min.	2 bar
Working pressure max	10 bar
Piston rod thread	M20x1,5
Cushioning length	19.5 mm
Cushioning energy	54 J
Weight 0 mm stroke	2.37 kg
Weight +10 mm stroke	0.085 kg
Stroke max.	2800 mm
Medium	Compressed air
Min. medium temperature	-10 °C
Max. medium temperature	150 °C
Max. particle size	50 µm
Oil content of compressed air min.	0 mg/m ³
Oil content of compressed air max.	5 mg/m ³

Material

Piston rod	Stainless Steel
Scraper material	Fluorocaoutchouc
Seal material	Fluorocaoutchouc
Material, front cover	Die-cast aluminum
Cylinder tube	Aluminum
End cover	Die-cast aluminum
Nut for piston rod	Steel, chrome-plated
Part No.	R480146313

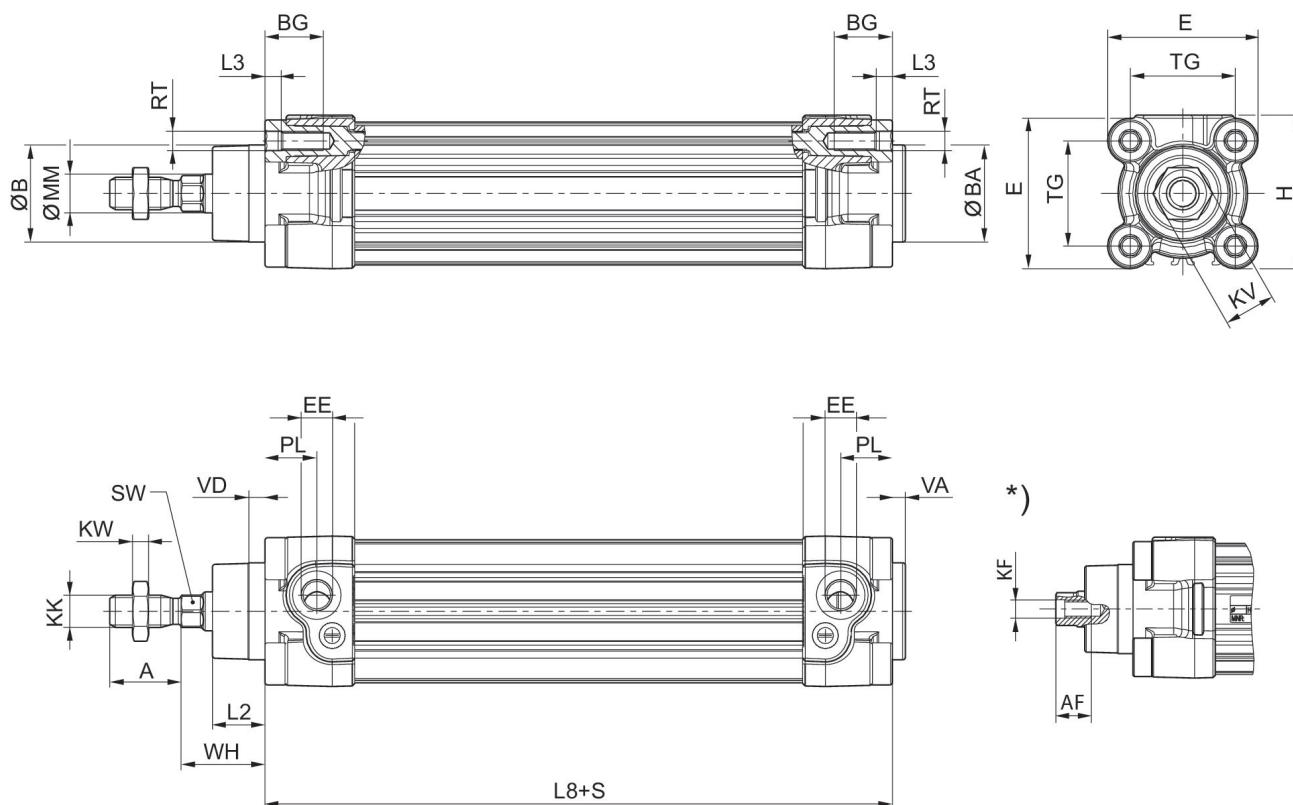
Technical information

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>).

Dimensions



S = stroke
* Internal thread

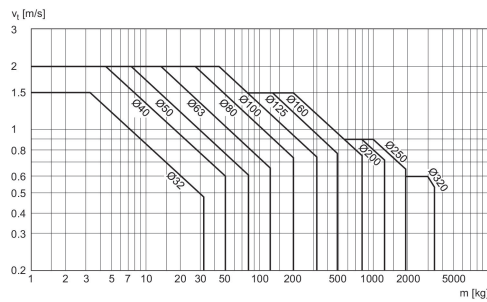
Piston \varnothing	A -2	AF+1	$\varnothing B$ d11	$\varnothing BA$ d11	BG min.	E	EE	G	H
32	22	12	30	30	16	46.5	G 1/8	27.75	47.5
40	24	13.5	35	35	16	53	G 1/4	33.25	53
50	32	17	40	40	16	65	G 1/4	31	65
63	32	17	45	45	16	75	G 3/8	38.25	75
80	40	21	45	45	17	95	G 3/8	38.25	95
100	40	21	55	55	17	115	G 1/2	42.25	115
125	54	28	60	60	20	140	G 1/2	53.85	140

Piston \varnothing	KF	KK	KV	KW	$\varnothing MM$ f8	PL	L2	L3 $\pm 0,5$	L8
32	M6	M10x1,25	16	5	12	16	16.25	4.5	94 $\pm 0,4$
40	M8	M12x1,25	18	6	16	20	18.25	4.5	105 $\pm 0,7$
50	M10	M16x1,5	24	8	20	19	25	4.5	106 $\pm 0,7$
63	M10	M16x1,5	24	8	20	24	25	4.5	121 $\pm 0,8$
80	M12	M20x1,5	30	10	25	23.5	33	0	128 $\pm 0,8$
100	M12	M20x1,5	30	10	25	25	36	0	138 ± 1
125	M16	M27x2	41	13.5	32	33	45	0	160 ± 1

Piston \varnothing	RT	SW	TG	VA -1	VD	WH
32	M6	10	32,5 $\pm 0,5$	4	5	26 $\pm 1,4$

Piston Ø	RT	SW	TG	VA -1	VD	WH
40	M6	13	38±0,5	4	5	30±1,4
50	M8	17	46,5±0,6	4	5	37±1,4
63	M8	17	56,5±0,7	4	5	37±1,8
80	M10	22	72±0,7	4	5	46±1,8
100	M10	22	89±0,7	4	5	51±1,8
125	M12	27	110±1,1	6	7	65±2,2

Cushioning diagram



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

