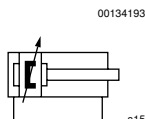


Piston rod cylinders ▶ Standard cylinders

Profile cylinder ISO 15552, Series PRA

▶ Ports: G 1/8 - G 1/2 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: pneumatically, adjustable ▶ Piston rod: external thread ▶ ATEX optional



Standards	ISO 15552
Compressed air connection	Internal thread
Working pressure min./max.	2 bar / 10 bar
Ambient temperature min./max.	-20 °C / +80 °C
Medium temperature min./max.	-20 °C / +80 °C
Medium	Compressed air
Max. particle size	50 μm
Oil content of compressed air	0 mg/m ³ - 5 mg/m ³
Pressure for determining piston forces	6,3 bar

Materials:	
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

Technical Remarks

- 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, see chapter „Technical information“.
- ATEX-certified cylinders can be generated in the Internet configurator.
- ATEX ID: II 2G c IIB T4 II 2D c IP65 T125 °C X
- The operating temperature range for ATEX-certified cylinders is -20 °C ... 50 °C.

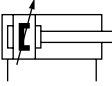
Piston Ø	[mm]	32	40	50	63	80
Retracting piston force	[N]	435	660	1035	1765	2855
Extracting piston force	[N]	505	790	1235	1960	3165
Cushioning length	[mm]	16.5	19	17	16.5	19.5
Cushioning energy	[J]	4.8	9	15	27	54
Weight	0 mm stroke	0.5	0.65	1.06	1.42	2.37
	+10 mm stroke	0.022	0.032	0.047	0.054	0.085
Stroke max.	[mm]	1600	1900	2100	2500	2800
Working pressure min./max.	[bar]	1.5 - 10	1.5 - 10	1.5 - 10	1.5 - 10	1.5 - 10

Piston Ø	[mm]	100	125			
Retracting piston force	[N]	4635	7220			
Extracting piston force	[N]	4945	7725			
Cushioning length	[mm]	19.5	22			
Cushioning energy	[J]	88	140			
Weight	0 mm stroke	3.51	6.72			
	+10 mm stroke	0.1	0.15			
Stroke max.	[mm]	2800	2750			
Working pressure min./max.	[bar]	1.5 - 10	1.5 - 10			

Piston rod cylinders ▶ Standard cylinders

Profile cylinder ISO 15552, Series PRA

▶ Ports: G 1/8 - G 1/2 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: pneumatically, adjustable ▶ Piston rod: external thread ▶ ATEX optional

	Piston Ø Piston rod thread Ports Piston rod Ø	32	40	50	63	80	
		M10x1,25 G 1/8 12	M12x1,25 G 1/4 16	M16x1,5 G 1/4 20	M16x1,5 G 3/8 20	M20x1,5 G 3/8 25	
	Stroke 25	0822120001	0822121001	0822122001	0822123001	0822124001	
	50	0822120002	0822121002	0822122002	0822123002	0822124002	
	80	0822120003	0822121003	0822122003	0822123003	0822124003	
	100	0822120004	0822121004	0822122004	0822123004	0822124004	
	125	0822120005	0822121005	0822122005	0822123005	0822124005	
	160	0822120006	0822121006	0822122006	0822123006	0822124006	
	200	0822120007	0822121007	0822122007	0822123007	0822124007	
	250	0822120008	0822121008	0822122008	0822123008	0822124008	
	320	0822120009	0822121009	0822122009	0822123009	0822124009	
	400	0822120010	0822121010	0822122010	0822123010	0822124010	
	500	0822120011	0822121011	0822122011	0822123011	0822124011	
		Piston Ø Piston rod thread Ports Piston rod Ø	100 M20x1,5 G 1/2 25	125 M27x2 G 1/2 32			
	Stroke 25	0822125001	R480140491				
	50	0822125002	R480140455				
	80	0822125003	R480141371				
	100	0822125004	R480079499				
	125	0822125005	R480140083				
	160	0822125006	R480079809				
	200	0822125007	R480140833				
	250	0822125008	R480141106				
320	0822125009	R480140759					
400	0822125010	R480141373					
500	0822125011	R480141666					

Configurable product



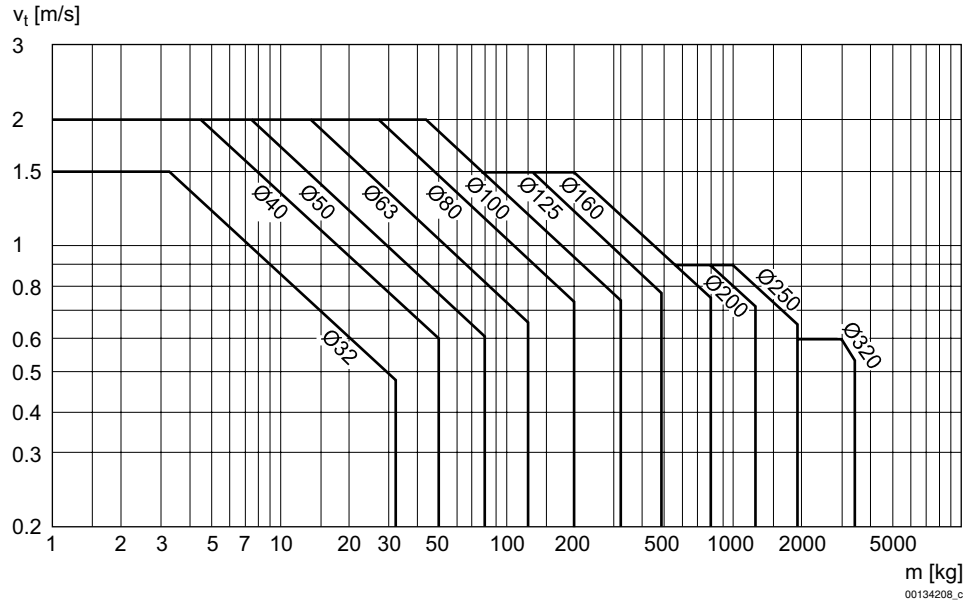
This product is configurable. Please use our Internet configurator at <http://www.aventics.com> or contact the nearest AVENTICS sales office.

Piston rod cylinders ▶ Standard cylinders

Profile cylinder ISO 15552, Series PRA

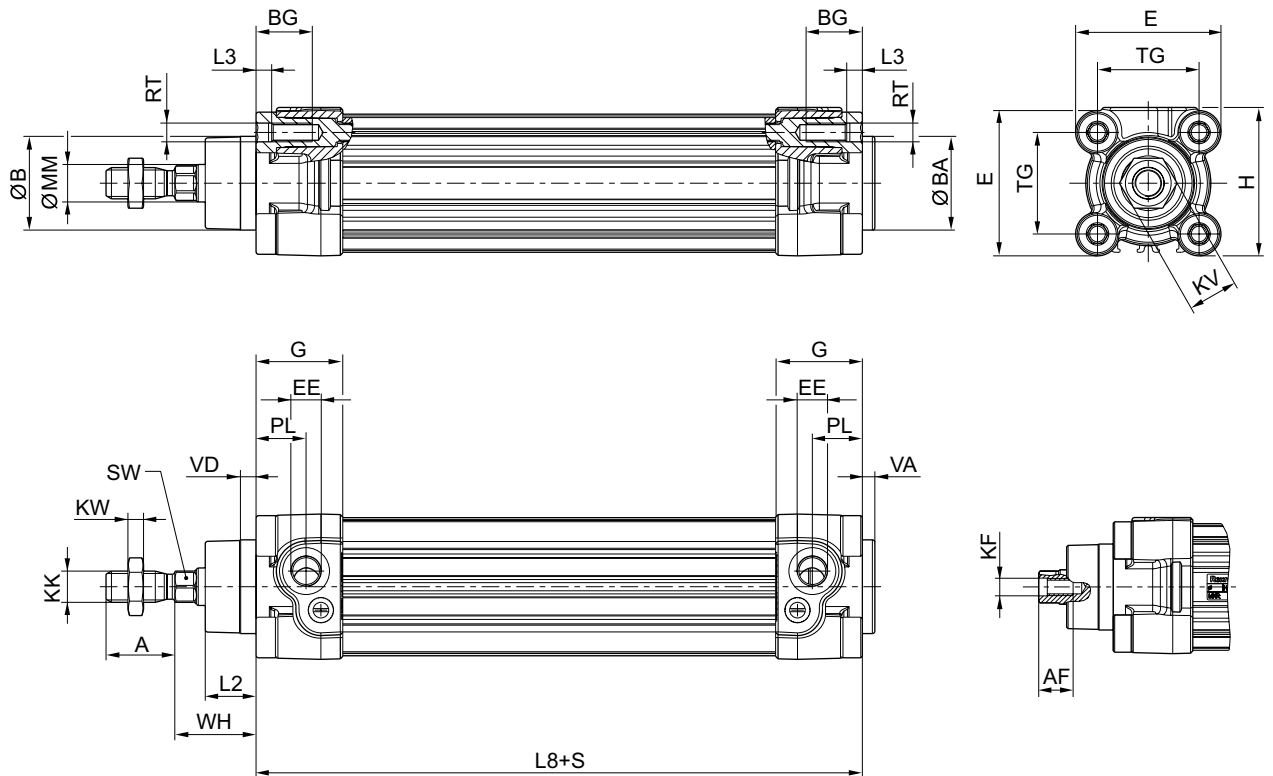
▶ Ports: G 1/8 - G 1/2 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: pneumatically, adjustable ▶ Piston rod: external thread ▶ ATEX optional

Cushioning diagram



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

Dimensions



S = stroke

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Piston rod cylinders ▶ Standard cylinders
Profile cylinder ISO 15552, Series PRA

▶ Ports: G 1/8 - G 1/2 ▶ double-acting ▶ with magnetic piston ▶ Cushioning: pneumatically, adjustable ▶ Piston rod: external thread ▶ ATEX optional

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

Piston Ø	KV	KW	ØMM f8	PL	L2	L3 ±0,5	L8	RT	SW	TG	VA -1	VD
32	16	5	12	16	16.25	4.5	94±0,4	M6	10	32,5±0,5	4	5
40	18	6	16	20	18.25	4.5	105±0,7	M6	13	38±0,5	4	5
50	24	8	20	19	25	4.5	106±0,7	M8	17	46,5±0,6	4	5
63	24	8	20	24	25	4.5	121±0,8	M8	17	56,5±0,7	4	5
80	30	10	25	23.5	33	0	128±0,8	M10	22	72±0,7	4	5
100	30	10	25	25	36	0	138±1	M10	22	89±0,7	4	5
125	41	13.5	32	33	45	0	160±1	M12	27	110±1,1	6	7

Piston Ø	WH											
32	26±1,4											
40	30±1,4											
50	37±1,4											
63	37±1,8											
80	46±1,8											
100	51±1,8											
125	65±2,2											