

# Profile cylinders, series PRA, PRB

Series PRB, 32–100 mm dia., double acting, proximity switching with cushioning



**Rexroth**  
Bosch Group



## Technical Data

Standard		ISO 15552 (ISO 6431, VDMA 24562) NF E 49-003-1, UNI
Working pressure		1–10 bar (15 to 145 psi)
Ambient temperature range		-10 °C to +80 °C (+14 °F to +176 °F)
Medium	Compressed air	ISO 8573-1:2001, class 6-4-3 or lower*
Materials	Piston rod Cylinder body End covers	Stainless steel, smooth-rolled Anodized aluminum Die-cast aluminum

## Application area

The grooves on the profile cylinder enable the cylinder switches to be fastened quickly.

\* Particle size ≤ 5 µm, dew point ≤ 3 °C, oil content ≤ 1 mg/m<sup>3</sup>

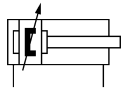


## Technical information

Piston Ø	[mm]	32	40	50	63	80	100
Theoretical piston force at 6 bar (87 psi)	push stroke	[N] 422 (94.9)	665 (149)	1035 (233)	1647 (370)	2656 (597)	4145 (932)
	pull stroke	[N] 364 (81.8)	560 (126)	871 (196)	1478 (332)	2397 (539)	3886 (874)
Cushioning length		[mm] 18	23	23	27	33	35
Weight	0 mm stroke	[kg] 0,570 (1.26)	0,730 (1.61)	1,190 (2.62)	1,560 (3.44)	2,60 (5.73)	3,80 (8.38)
	add. per 100 mm	[kg] 0,220 (0.485)	0,320 (0.705)	0,470 (1.04)	0,540 (1.19)	0,85 (1.87)	1,00 (2.2)
		[lbs]					

Cushioning diagram, see Technical Information to the BRP Catalogue

## Part no.



Piston Ø	32	40	50	63	80
Piston rod thread	M10x1,25	M12x1,25	M16x1,5	M16x1,5	M20x1,5
Threaded port	G1/8	G1/4	G1/4	G3/8	G3/8
Stroke <sup>3)</sup>					
25	0822350001	0822351001	0822352001	0822353001	0822354001
50	0822350002	0822351002	0822352002	0822353002	0822354002
80	0822350003	0822351003	0822352003	0822353003	0822354003
100	0822350004	0822351004	0822352004	0822353004	0822354004
125	0822350005	0822351005	0822352005	0822353005	0822354005
160	0822350006	0822351006	0822352006	0822353006	0822354006
200	0822350007	0822351007	0822352007	0822353007	0822354007
250	0822350008	0822351008	0822352008	0822353008	0822354008
320	0822350009	0822351009	0822352009	0822353009	0822354009
400	0822350010	0822351010	0822352010	0822353010	0822354010
500	0822350011	0822351011	0822352011	0822353011	0822354011
Max. stroke	2600	2600	2600	2600	2600
Piston Ø	100				
Piston rod thread	M20x1,5				
Threaded port	G1/2				
Stroke <sup>3)</sup>					
25	0822355001				
50	0822355002				
80	0822355003				
100	0822355004				
125	0822355005				
160	0822355006				
200	0822355007				
250	0822355008				
320	0822355009				
400	0822355010				
500	0822355011				
Max. stroke	2600				

<sup>3)</sup> Intermediate strokes may be delivered, e.g. D = 32 mm; H = 650 mm: 08223500xx/H650

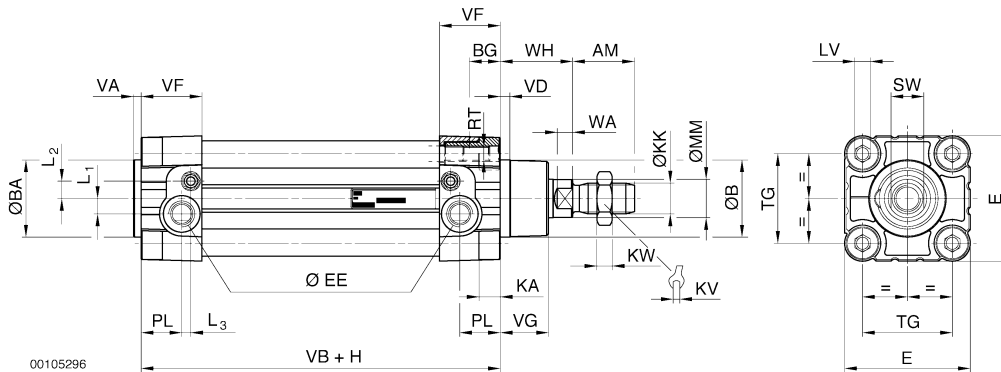
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▲ Accessories (to be ordered separately)					
Symbol	Type	32	40	50	63
	<b>Piston dia.</b>	<b>32</b>	<b>40</b>	<b>50</b>	<b>63</b>
	Front or rear flange	1827001277	1827001278	1827001279	1827001280
	Angle brackets	1827001271	1827001272	1827001273	1827001274
	Clevis mounting, narrow (AB6)	1827001593	1827001594	1827001595	1827001596
	Rear clevis	1825805223	1825805224	1825805225	1825805226
	Clevis mounting (MP2)	1827001289	1827001290	1827001291	1827001292
	<b>Piston dia.</b>	<b>80</b>	<b>100</b>		
	Front or rear flange	1827001281	1827001282		
	Angle brackets	1827001275	1827001276		
	Pivoted mounting MT4	1827003995	1827003996		
	Clevis mounting, narrow (AB6)	1827001597	1827001598		
	Rear clevis	1825805227	1825805228		
	Clevis mounting (MP2)	1827001293	1827001294		
		<b>Piston dia.</b>	<b>32 - 100</b>		
Sensor with 3 m cable, Reed		0830100629 (Micro)		0830100606 (Midi)	
Sensor with M8, PNP		0830100489 (Micro)		0830100483 (Midi)	
Sensor mounting		1827020287 (Micro)		1827020084 (Midi)	
	<b>Piston dia.</b>	<b>32</b>	<b>40</b>	<b>50</b>	<b>63</b>
	Rod clevis with female threads	1822122024	1822122025	1822122005	1822122005
	Rod clevis with male threads	1822122032	1822122033	1822122034	1822122034
	Mounting plate	1827001629	1827001630	1827001631	1827001631
	Ball eye rod end	1822124003	1822124004	1822124005	1822124005
	Flexible coupling	1826409002	1826409003	1826409004	1826409004
	<b>Piston dia.</b>	<b>80</b>	<b>100</b>		
	Rod clevis with female threads	1822122004	1822122004		
	Rod clevis with male threads	1822122035	1822122035		
	Mounting plate	1827001632	1827001632		
	Ball eye rod end	1822124006	1822124006		
	Flexible coupling	1826409005	1826409005		

▲ Seal kit						
Piston Ø	32	40	50	63	80	100
	1827009557	1827009564	1827009569	1827009576	1827009899	1827009907



H = Stroke

Piston Ø	AM -2	B e11	E	EE	KK 6g	VD	WH ±0,8	BA e11	BG	KV	KW	MM f8	PL -0,3	RT
32	22	30	47	+0,4	G1/8	M10x1,25	5	26	30	16	17	6	12	M6
40	24	35	53	+0,4	G1/4	M12x1,25	5	30	35	16	19	7	16	M6
50	32	40	65	+0,5	G1/4	M16x1,5	5	37	40	16	24	8	20	M8
63	32	45	75	+0,5	G3/8	M16x1,5	5	37	45	16	24	8	20	M8
80	40	45	95	±0,35	G3/8	M20x1,5	5	46	45	16	30	10	25	M10
100	40	55	115	±0,35	G1/2	M20x1,5	5	51	55	16	30	10	25	M10

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Piston ∅	SW	TG		VA -0,2	VB		VF -0,2	VG		WA -0,3	KA	L1	L2	L3	LV	
32	10	32,5	±0,35	4	94	±0,4	27,5	16	±0,1	6	6,3	5	5,5	6,3	6	E11
40	13	38	±0,35	4	105	±0,7	31	20	±0,1	6	6,3	5,5	8	7,5	6	E11
50	16	46,5	±0,45	4	106	±0,7	31,5	25	±0,1	8	10,6	8	9	0	8	E11
63	16	56,5	±0,55	4	121	±0,8	35	25	±0,1	8	10,6	10	11	0	8	E11
80	22	72	±0,6	4	128	±0,8	39,5	33	±0,15	10	14,6	8	14	0	15	-0,05/-0,2
100	22	89	±0,6	4	138	±1	40,5	38	±0,15	10	14,6	14	10	0	15	-0,05/-0,2