

Profile cylinders, series PRA, PRB

Series PRA, 32–100 mm dia., double-acting,
proximity switching and cushioning



Rexroth
Bosch Group



Technical Data

Standard	ISO 6431, VDMA 24562, NFE 49-003-1
Working pressure, max.	1–10 bar (15 to 145 psi)
Ambient temperature range	-20 °C to +80 °C (-4 °F to +176 °F)
Medium	Compressed air, lubricated or non-lubricated

Materials	Piston rod	Stainless steel, smooth-rolled
	Cylinder body	Anodized aluminum
	End covers	Die-cast aluminum

Application area

Cylinder tube incl. fastening grooves
Flush-fitting assembly of cylinder switches (Micro radial)

Additional versions:

- heat resistant (+120 °C) (+248 °F)
- metal wipers
- increased corrosion protection
- double piston rod

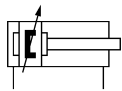


Technical information

Piston Ø		[mm]	32	40	50	63	80	100
Theoretical piston force at 6 bar (87 psi)	push stroke	[N]	422	665	1035	1647	2656	4145
		(lbf)	(95)	(149)	(233)	(370)	(597)	(932)
Cushioning length	pull stroke	[N]	364	560	871	1478	2397	3886
		(lbf)	(82)	(126)	(196)	(332)	(539)	(874)
Weight		[mm]	18	23	23	27	33	35
	0 mm stroke	[kg]	0,570	0,730	1,190	1,560	2,60	3,80
		(lbs)	(1.26)	(1.61)	(2.62)	(3.44)	(5.73)	(8.38)
	add. per 100 mm	[kg]	0,220	0,320	0,470	0,540	0,85	1,00
		(lbs)	(0.49)	(0.71)	(1.04)	(1.19)	(1.87)	(2.2)

Cushioning diagram, see Technical Information to the BRP Catalogue

Part no.







Piston Ø	32	40	50	63	80
Piston rod thread	M 10 x 1,25	M 12 x 1,25	M 16 x 1,5	M 16 x 1,5	M 20 x 1,5
Threaded port	G1/8	G 1/4	G 1/4	G 3/8	G 3/8
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
Max. stroke	2600	2600	2600	2600	2600
Piston Ø	100				
Piston rod thread	M 20 x 1,5				
Threaded port	G 1/2				
Stroke					
25	0822125001				
50	0822125002				
80	0822125003				
100	0822125004				
125	0822125005				
160	0822125006				
200	0822125007				
250	0822125008				
320	0822125009				
400	0822125010				
500	0822125011				
Max. stroke	2600				

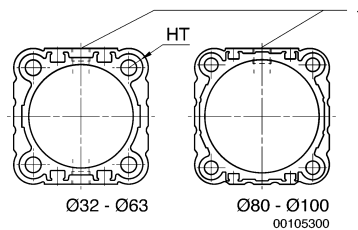
Order sample for intermediate strokes, e.g. dia. 32 mm, H = 650 mm: 08221200xx / H650

Profile cylinders, series PRA, PRB

Series PRA, 32–100 mm dia., double-acting,
proximity switching and cushioning

Rexroth
Bosch Group

▲ Accessories (to be ordered separately)							
Symbol	Type	32	40	50	63		
	Piston dia.	32	40	50	63		
	Front or rear flange	1827001277	1827001278	1827001279	1827001499		
	Angle brackets	1827001271	1827001272	1827001273	1827001498		
	Pivoted mounting (for top and bottom)	1827001609	1827001610	1827001611	1827002046		
	Clevis mounting, narrow (AB6)	1827001593	1827001594	1827001595	1827002024		
	Rear clevis	1825805223	1825805224	1825805225	1825805226		
	Clevis mounting (MP2)	1827001289	1827001290	1827001291	1827001500		
	Piston dia.	80	100				
	Front or rear flange	1827001281	1827001282				
	Angle brackets	1827001275	1827001276				
	Pivoted mounting	1827001613	1827001614				
	Clevis mounting, narrow (AB6)	1827001597	1827001598				
	Rear clevis	1825805227	1825805228				
	Clevis mounting (MP2)	1827001293	1827001294				
	Piston dia.	32 - 100					
	Sensor with 3 m cable, Reed	0830100629 (Micro)		0830100606 (Midi)			
	Sensor with M8, PNP	0830100489 (Micro)		0830100483 (Midi)			
	Sensor mounting	-		1827020084 (Midi)			
	Piston dia.	32	40	50	63		
	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		
	Piston dia.	80	100				
	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	

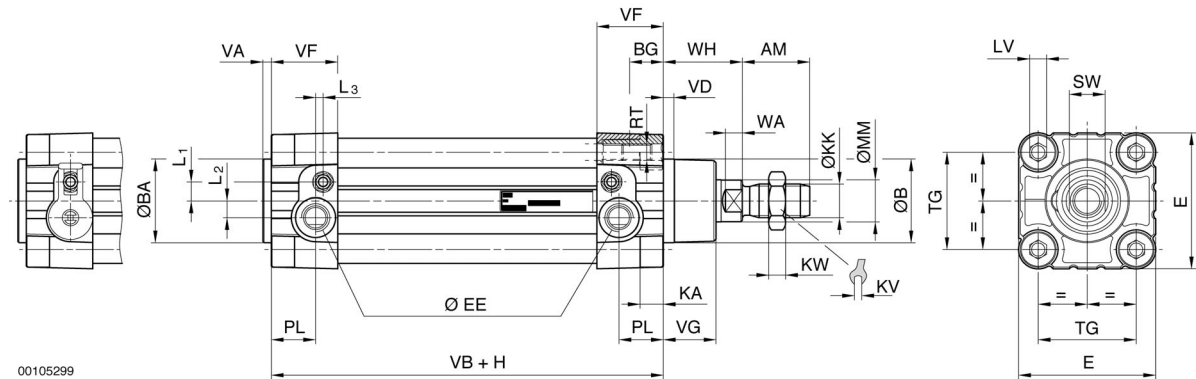


* Air connection

Profile cylinders, series PRA, PRB

Series PRA, 32–100 mm dia., double-acting, proximity switching and cushioning

Rexroth
Bosch Group



H = Stroke

Piston dia.	AM -0,1	B e11	E		EE	KK	VD	WH	BA e11	BG	KV	KW	MM f8	PL -0,3	RT	SW	TG		VA -0,2
32	22	30	47	+0,4	G 1/8	M10x1,25	5	26	30	16	17	5	12	14	M6	10	32,5	±0,35	4
40	24	35	53	+0,4	G 1/4	M12x1,25	5	30	35	16	19	6	16	16	M6	10	38	±0,35	4
50	32	40	65	+0,5	G 1/4	M16x1,5	5	37	40	16	24	8	20	21	M8	16	46,5	±0,45	4
63	32	45	75	+0,5	G 3/8	M16x1,5	5	37	45	16	24	8	20	22	M8	16	56,5	±0,55	4
80	40	45	95	±0,35	G 3/8	M20x1,5	5	46	45	16	30	10	25	27	M10	22	72	±0,6	4
100	40	55	115	±0,35	G 1/2	M20x1,5	5	51	55	16	30	10	25	26	M10	22	89	±0,6	4

Piston Ø	VB		VF -0,2	VG		WA -0,2	KA	HT	LV		L1	L2	L3
32	94	±0,4	27,5	16	±0,1	6	6,3	4,75	6	E11	5	5,5	18
40	105	±0,7	31	20	±0,1	6	6,3	4,75	6	E11	5,5	8	7
50	106	±0,7	31,5	25	±0,1	8	10,6	6,7	8	E11	8	9	0
63	121	±0,8	35	25	±0,1	8	10,6	7,7	8	E11	10	11	0
80	128	±0,8	39,5	33	±0,15	10	14,6	8,3	15	-0,05/-0,2	8	14	0
100	138	±1	40,5	38	±0,15	10	14,6	8,3	15	-0,05/-0,2	14	10	0