R412020687

AVENTICS Series RPC Round cylinders

2024-04-05

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The AVENTICS Series RPC round profile cylinders offer a wide variety of connection options. They are easy to clean and suitable for packaging applications in the food industry due to food grade lubricants. The Series RPC can also be used in standard applications across machine automation needs





Technical data

Industry Industrial

Type Version: compact type

Piston \emptyset 32 mm Stroke 100 mm Ports G 1/8

Functional principle Double-acting
Cushioning Elastic cushioning
Magnetic piston Piston with magnet
Environmental requirements Industry standard

ATEX optional

Piston rod thread - type External thread
Piston rod thread M10x1,25
Piston rod single

Scraper Standard Industry Scraper

Pressure for determining piston forces 6,3 bar
Retracting piston force 435 N
Extracting piston force 505 N
Min. ambient temperature -20 °C
Max. ambient temperature 80 °C
Min. working pressure 1 bar



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Max. working pressure	10 bar
Impact energy	0.8 J 2024-04-05
Weight 0 mm stroke	0.33 kg
Weight +10 mm stroke	0.015 kg
Stroke max.	1200 mm
Medium	Compressed air
Min. medium temperature	-20 °C
Max. medium temperature	80 °C
Max. particle size	50 μm
Min. oil content of compressed air	0 mg/m³
Max. oil content of compressed air	5 mg/m³
Clamping piece for magnetic field sensor necessary	Clamping piece for magnetic field sensor necessary

Material

Piston rod Stainless Steel
Scraper material Polyurethane
Seal material Polyurethane
Material, front cover Aluminum
Cylinder tube Stainless Steel
End cover Aluminum

Nut for piston rodSteel, chrome-platedGuide bushingSteel, chrome-plated

Part No. R412020687

Technical information

Use our Internet configurator to order these variants with coarse-pitch thread M10x1.5 or M12x1.75. ATEX-certified cylinders with identification II 2G Ex h IIC T4 Gb / II 2D Ex h IIIC T135°C Db_X can be generated in the Internet configurator.

The operating temperature range for ATEX-certified cylinders is -20°C ... 60°C.

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.

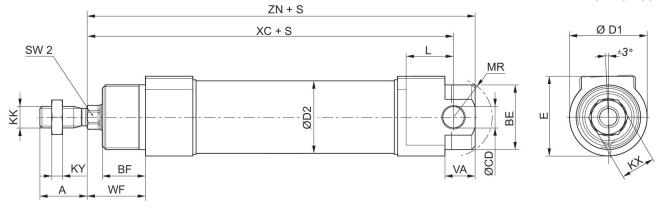
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).

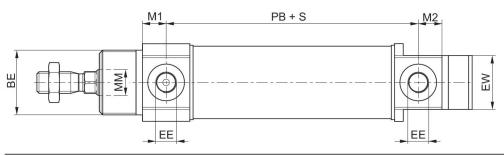
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Dimensions

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S=stroke

Piston Ø	А	BE	BF	Ø CD H8	Ø D1	Ø D2		EE	EW
32	22	M30x1,5	20	10	36	33.5	37	G 1/8	25
40	24	M38x1.5	23	12	45	41.5	45	G 1/4	30
50	32	M45x1,5	24	12	55	52.5	55	G 1/4	35
63	32	M45x1,5	26.5	16	69	65.4	69	G 3/8	35

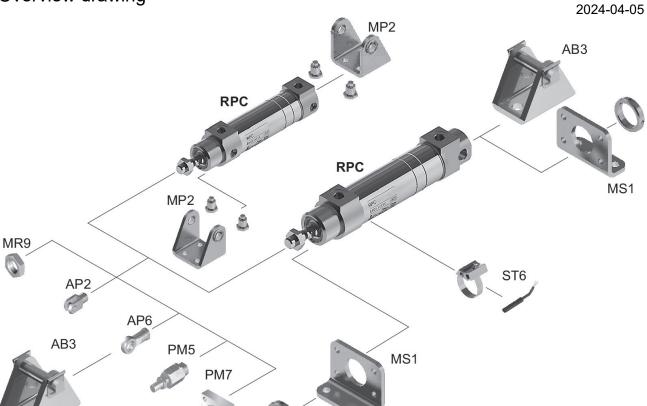
Piston Ø	KK	KX	KY	L min.	Ø MM f8	M1	M2	MR	РВ
32	M10x1,25*	16	5	22	12	11	11	18	67
40	M12x1,25*	19	6	23	16	11.5	11.5	22.5	78
50	M16x1,5	24	8	26	20	11.5	11.5	25.5	77.5
63	M16x1,5	24	8	29	20	13.5	13.5	36.5	81.5

Piston Ø	SW2	VA	WF	XC	ZN
32	10	14	27	120	130
40	13	15	32	136	147
50	17	18	33.5	141	152
63	17	20	36.5	151	165

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Overview drawing



NOTE: This overview drawing is only for orientation to indicate where the various accessory parts can be fastened to the cylinder. The illustration has been simplified for this purpose. It is thus not possible to derive the dimensions from this overview.