R412020759

AVENTICS Series RPC Round cylinders

2024-04-05

### **AVENTICS Series RPC Round cylinders**

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: standard type

Piston  $\emptyset$  50 mm Stroke 400 mm Ports G 1/4

Functional principle Double-acting

Cushioning Pneumatic adjustable cushioning

Magnetic piston Piston with magnet
Environmental requirements Industry standard
ATEX optional

Piston rod thread - type External thread

Piston rod thread M16x1,5
Piston rod single

Scraper Standard Industry Scraper

Pressure for determining piston forces 6,3 bar Retracting piston force 1035 N Extracting piston force 1235 N -20 °C Min. ambient temperature 80°C Max. ambient temperature Min. working pressure 1 bar Max. working pressure 10 bar Cushioning length 17 mm Cushioning energy 15 J Weight 0 mm stroke 0.96 kg

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| Weight +10 mm stroke                               | 0.04 kg  |
|--|--|
| Stroke max.  | 1200 mm 2024-04-05                                 |
| 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 rod Steel, chrome-plated

Part No. R412020759

#### 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.

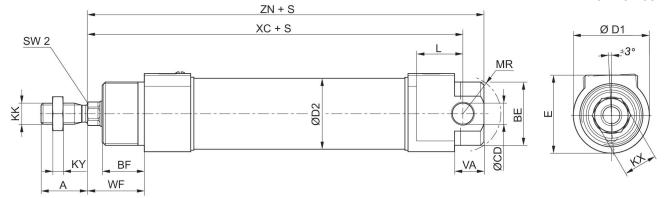
Use only the approved oils from AVENTICS. Further information can be found in the "Technical information" document (available in https://www.emerson.com/en-us/support).

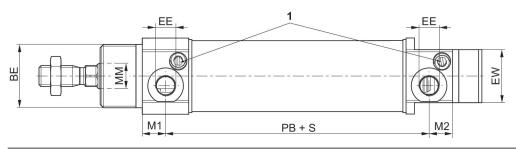
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### **Dimensions**

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S=stroke
1) Slot in throttle screw 1 mm

| 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   | PB   |
|----------|-----------|----|----|--------|---------|------|------|------|------|
| 32       | M10x1,25* | 16 | 5  | 22     | 12      | 11   | 11   | 18   | 75   |
| 40       | M12x1,25* | 19 | 6  | 23     | 16      | 11.5 | 11.5 | 22.5 | 87   |
| 50       | M16x1,5   | 24 | 8  | 26     | 20      | 11.5 | 11.5 | 25.5 | 87.5 |
| 63       | M16x1,5   | 24 | 8  | 29     | 20      | 13   | 13.5 | 36.5 | 92   |

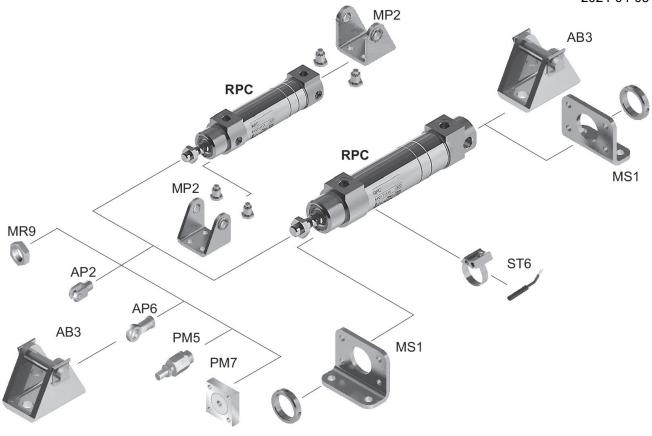
| Piston Ø | SW2 | VA | WF   | XC  | ZN  |
|----------|-----|----|------|-----|-----|
| 32       | 10  | 14 | 27   | 128 | 138 |
| 40       | 13  | 15 | 32   | 146 | 157 |
| 50       | 17  | 18 | 33.5 | 151 | 162 |
| 63       | 17  | 20 | 36.5 | 161 | 175 |

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### Overview drawing

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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.