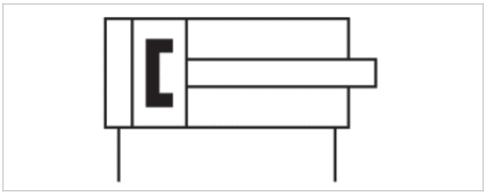
# Round cylinder, Series RPC

- Version: mini type
- Ø 32-63 mm
- Ports G 1/8 G 1/4 G 3/8
- double-acting
- with magnetic piston
- Cushioning elastic non-adjustable
- with trunnion mounting
- Piston rod External thread
- ATEX optional



| | |
|---|---|
| Compressed air connection | Internal thread |
| Working pressure min./max. | 1 ... 10 bar |
| Ambient temperature min./max. | -20 ... 80 °C |
| Medium temperature min./max. | -20 ... 80 °C |
| Medium | Compressed air |
| Max. particle size | 50 µm |
| Oil content of compressed air | 0 ... 5 mg/m³ |
| Pressure for determining piston forces | 6.3 bar |

## Technical data

| Piston Ø<br>Piston rod thread<br>Ports<br>Piston rod Ø | 32 mm<br>M10x1,25<br>G 1/8<br>12 mm | 40 mm<br>M12x1,25<br>G 1/4<br>16 mm | 50 mm<br>M16x1,5<br>G 1/4<br>20 mm | 63 mm<br>M16x1,5<br>G 3/8<br>20 mm |
|---|---|---|---|---|
| Stroke 25 | R412020640 | R412020651 | R412020662 | R412020673 |
| 50 | R412020641 | R412020652 | R412020663 | R412020674 |
| 80 | R412020642 | R412020653 | R412020664 | R412020675 |
| 100 | R412020643 | R412020654 | R412020665 | R412020676 |
| 125 | R412020644 | R412020655 | R412020666 | R412020677 |
| 160 | R412020645 | R412020656 | R412020667 | R412020678 |
| 200 | R412020646 | R412020657 | R412020668 | R412020679 |
| 250 | R412020647 | R412020658 | R412020669 | R412020680 |
| 320 | R412020648 | R412020659 | R412020670 | R412020681 |
| 400 | R412020649 | R412020660 | R412020671 | R412020682 |
| 500 | R412020650 | R412020661 | R412020672 | R412020683 |

## Technical data

| Piston Ø | 32 mm | 40 mm | 50 mm | 63 mm |
|---|---|---|---|---|
| Retracting piston force | 435 N | 660 N | 1035 N | 1765 N |
| Extracting piston force | 505 N | 790 N | 1235 N | 1960 N |
| Impact energy | 0,8 J | 1,04 J | 1,28 J | 1,5 J |
| Weight 0 mm stroke | 0,3 kg | 0,56 kg | 0,88 kg | 1,63 kg |
| Weight +10 mm stroke | 0,015 kg | 0,024 kg | 0,04 kg | 0,044 kg |
| Stroke max. | 1200 mm | 1200 mm | 1200 mm | 1200 mm |

## Technical information

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. Further information can be found in the “Technical information” document (available in the MediaCentre).

Clamping piece for magnetic field sensor necessary

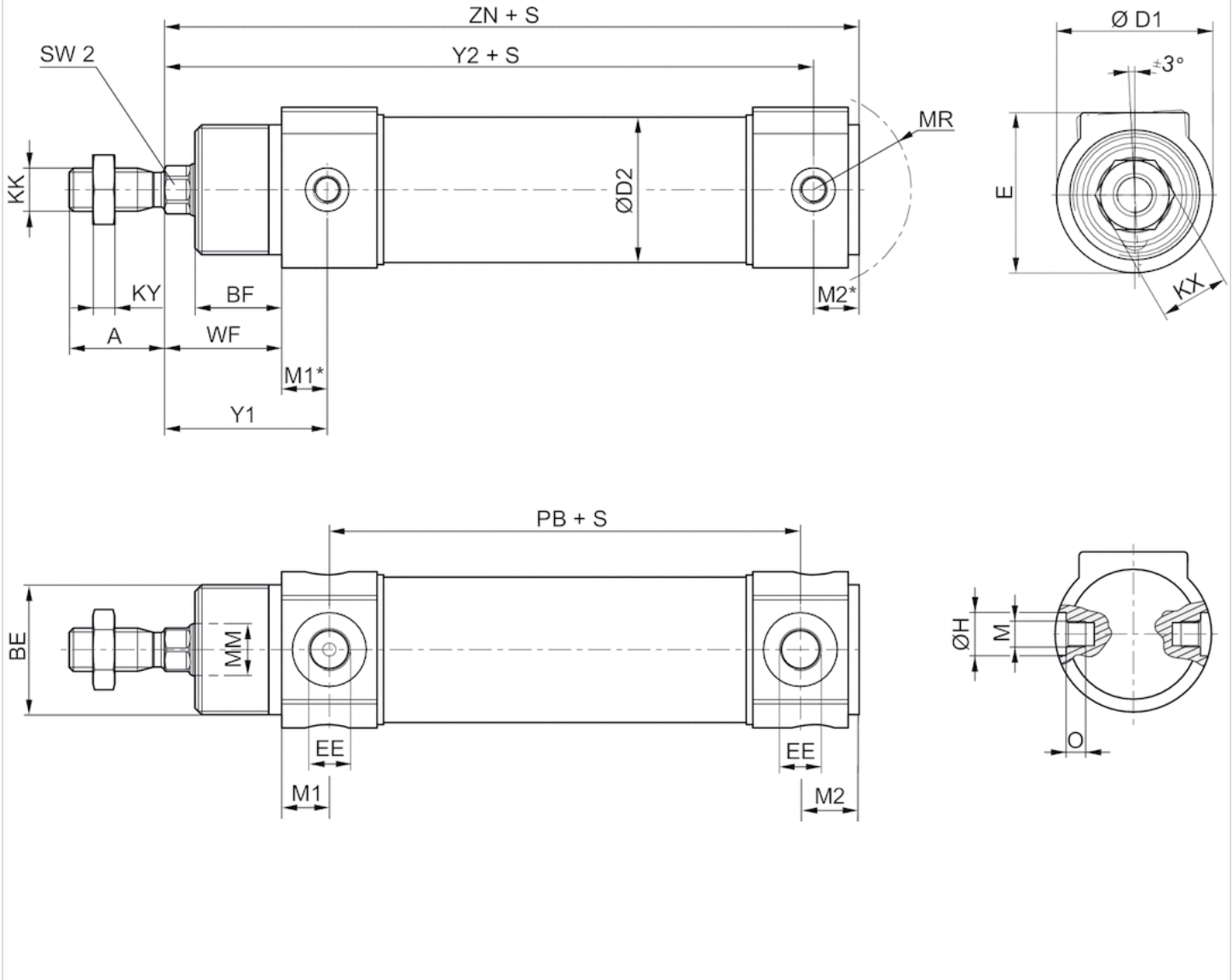
Use our Internet configurator to order these variants with coarse-pitch thread M10x1.5 or M12x1.75.
ATEX-certified cylinders with identification II 2G Ex h IIC T4 Gb / II 2D Ex h IIIC T135°C Db_X can be generated in the Internet configurator.
The operating temperature range for ATEX-certified cylinders is -20°C ... 60°C.

## Technical information

| Material | |
|---|---|
| Cylinder tube | Stainless steel |
| Piston rod | Stainless steel |
| Front cover | Aluminum, anodized |
| End cover | Aluminum, anodized |
| Seal | Polyurethane |
| Nut for piston rod | Steel, galvanized |
| Scraper | Polyurethane |
| Guide bushing | Steel |
| Grease | AGF (NSF-H1) |

# Dimensions

## Dimensions




S=stroke

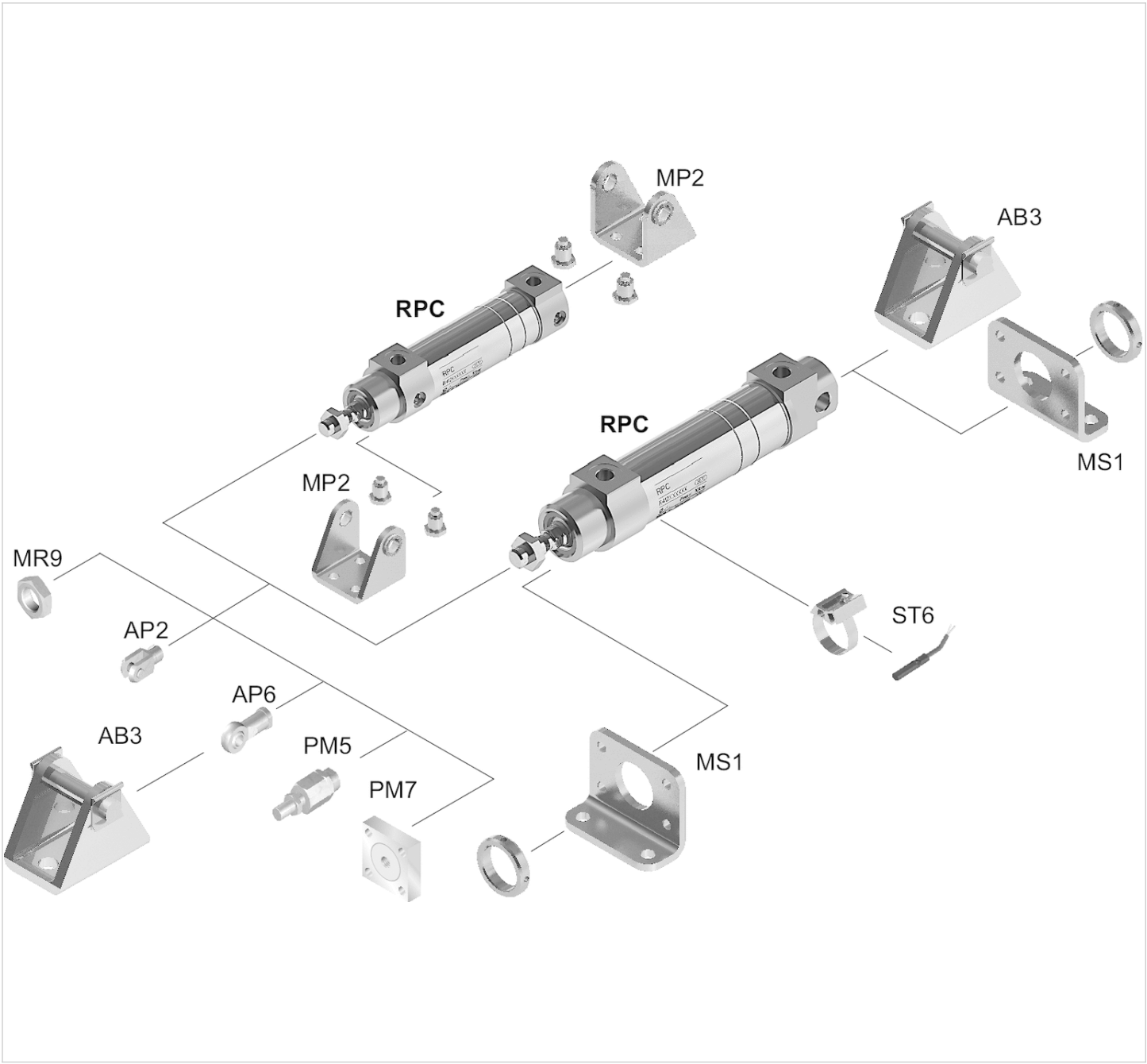
# Dimensions

| Piston Ø | A | BE | BF | Ø D1 | Ø D2 | E | EE | Ø H | KK | KX | KY | M | Ø MM f8 | M1 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 mm | 22 | M30x1,5 | 20 | 36 | 33.5 | 37 | G 1/8 | 10 | M10x1,25* | 16 | 5 | M6x0,5 | 12 | 11 |
| 40 mm | 24 | M38x1.5 | 23 | 45 | 41.5 | 45 | G 1/4 | 12 | M12x1,25* | 19 | 6 | M6x0,5 | 16 | 11.5 |
| 50 mm | 32 | M45x1,5 | 24 | 55 | 52.5 | 55 | G 1/4 | 14 | M16x1,5 | 24 | 8 | M8x0,75 | 20 | 11.5 |
| 63 mm | 32 | M45x1,5 | 26.5 | 69 | 65.4 | 69 | G 3/8 | 16 | M16x1,5 | 24 | 8 | M8x0,75 | 20 | 13.5 |

| Piston Ø | M1* | M2 | M2* | MR | O | PB | SW2 | WF | Y1 | Y2 | ZN |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 32 mm | 10.5 | 13.5 | 10.5 | 22.5 | 4.5 | 58.5 | 10 | 27 | 37.5 | 99.5 | 110 |
| 40 mm | 12 | 14 | 12.5 | 25.5 | 4.5 | 76 | 13 | 32 | 43 | 120 | 132.5 |
| 50 mm | 10 | 14 | 12.5 | 31 | 7.5 | 75.5 | 17 | 33.5 | 43.5 | 122 | 134.5 |
| 63 mm | 16 | 16 | 11.5 | 37.5 | 7.5 | 79 | 17 | 36.5 | 52.5 | 134 | 145.5 |

## Accessories overview

### 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.

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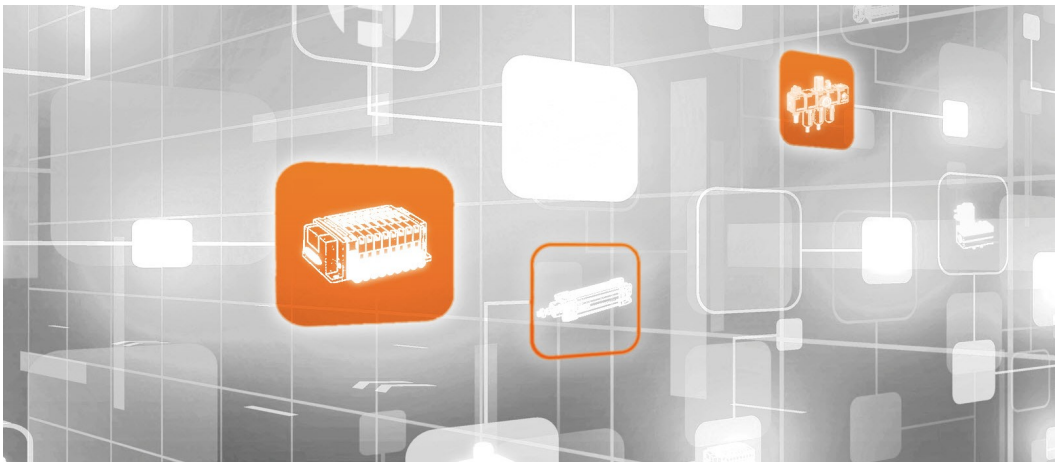

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