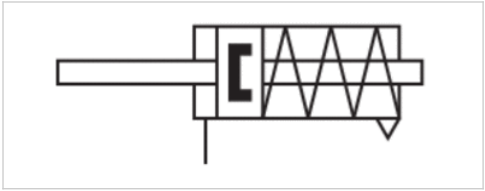
# Compact cylinder ISO 21287, Series CCI

- ISO 21287
- Ø 16-100 mm
- Ports M5 G 1/8
- Single-acting, retracted without pressure
- with magnetic piston
- Cushioning elastic
- Piston rod Internal thread
- Piston rod through



| | |
|---|---|
| Standards | ISO 21287 |
| Compressed air connection | Internal thread |
| Working pressure min./max. | 1,5 ... 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 | 16 mm<br>M4<br>M5<br>8 mm | 20 mm<br>M6<br>M5<br>10 mm | 25 mm<br>M6<br>M5<br>10 mm | 32 mm<br>M8<br>G 1/8<br>12 mm | 40 mm<br>M8<br>G 1/8<br>12 mm | 50 mm<br>M10<br>G 1/8<br>16 mm |
|---|---|---|---|---|---|---|
| Stroke 5 | R422001592 | R422001593 | R422001594 | R422001595 | R422001596 | R422001597 |
| 10 | R422001602 | R422001603 | R422001604 | R422001605 | R422001606 | R422001607 |
| 15 | R422001612 | R422001613 | R422001614 | R422001615 | R422001616 | R422001617 |
| 20 | R422001622 | R422001623 | R422001624 | R422001625 | R422001626 | R422001627 |
| 25 | R422001632 | R422001633 | R422001634 | R422001635 | R422001636 | R422001637 |

| Piston Ø<br>Piston rod thread<br>Ports<br>Piston rod Ø | 63 mm<br>M10<br>G 1/8<br>16 mm | 80 mm<br>M12<br>G 1/8<br>20 mm | 100 mm<br>M12<br>G 1/8<br>25 mm |
|---|---|---|---|
| Stroke 5 | R422001598 | R422001599 | R422001600 |
| 10 | R422001608 | R422001609 | R422001610 |
| 15 | R422001618 | R422001619 | R422001620 |

| Piston Ø<br>Piston rod thread<br>Ports<br>Piston rod Ø | 63 mm<br>M10<br>G 1/8<br>16 mm | 80 mm<br>M12<br>G 1/8<br>20 mm | 100 mm<br>M12<br>G 1/8<br>25 mm |
|---|---|---|---|
| 20 | R422001628 | R422001629 | R422001630 |
| 25 | R422001638 | R422001639 | R422001640 |

## Technical data

| Piston Ø | 16 mm | 20 mm | 25 mm | 32 mm | 40 mm | 50 mm | 63 mm |
|---|---|---|---|---|---|---|---|
| Retracting piston force | 12 N | 13 N | 25 N | 35 N | 43 N | 82 N | 82 N |
| Extracting piston force | 83 N | 135 N | 235 N | 400 N | 677 N | 1028 N | 1745 N |
| Impact energy | 0,11 J | 0,15 J | 0,2 J | 0,4 J | 0,52 J | 0,64 J | 0,75 J |
| Weight 0 mm stroke | 0,066 kg | 0,109 kg | 0,131 kg | 0,25 kg | 0,325 kg | 0,486 kg | 0,732 kg |
| Weight +10 mm stroke | 0,02 kg | 0,029 kg | 0,032 kg | 0,052 kg | 0,06 kg | 0,087 kg | 0,103 kg |
| Stroke max. | 25 mm | 25 mm | 25 mm | 25 mm | 25 mm | 25 mm | 25 mm |

| Piston Ø | 80 mm | 100 mm |
|---|---|---|
| Retracting piston force | 105 N | 215 N |
| Extracting piston force | 2864 N | 4424 N |
| Impact energy | 0,75 J | 1 J |
| Weight 0 mm stroke | 1,21 kg | 2,32 kg |
| Weight +10 mm stroke | 0,14 kg | 0,206 kg |
| Stroke max. | 25 mm | 25 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).

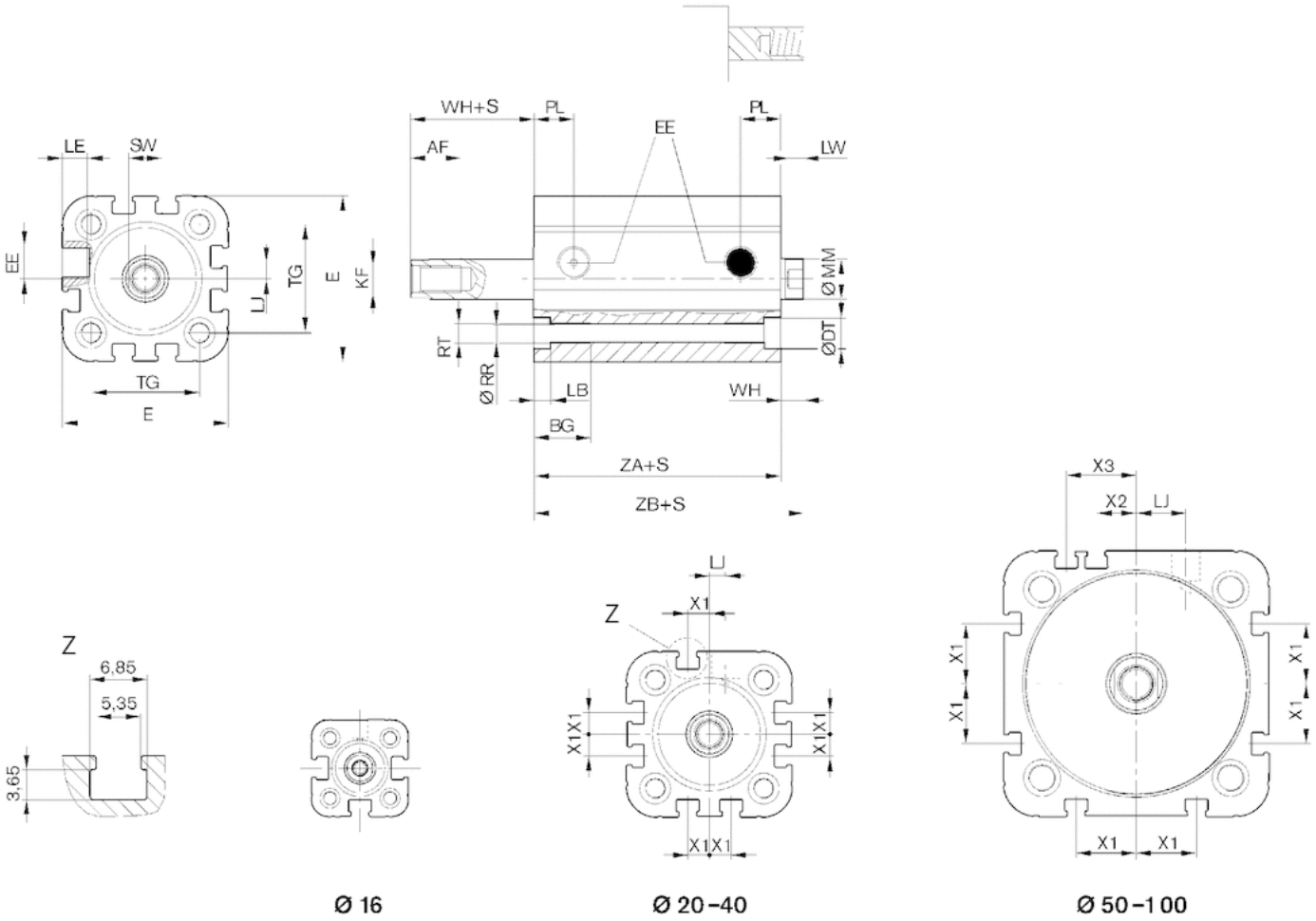
With cylinders with a piston rod extension, dimensions "WH" and "ZB" are increased by the value of the piston rod extension.
Piston Ø 50/63, stroke 5 mm: AF= 11 mm
Piston Ø 80/100, stroke 5 mm: AF= 15 mm

## Technical information

| Material | |
|---|---|
| Cylinder tube | Aluminum, anodized |
| Piston rod | Stainless steel |
| Front cover | Aluminum |
| End cover | Aluminum |
| Seal | Polyurethane |
| Scraper | Polyurethane |

## Dimensions

### Ø 16 mm ... 100 mm




Ø 16 Ø 20–40 Ø 50–100

S = stroke

## Dimensions

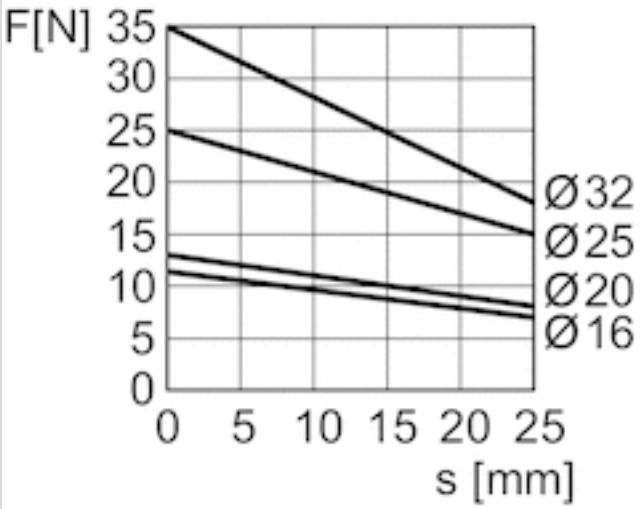
| Piston Ø | AF | BG | DT | E | EE | KF | LB | LE | LJ | LW | MM f8 | PL | RR | RT 6H | SW | TG | WH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 16 mm | 10 | 15 | 6 | 29.3 | M5 | M4 | 3.5 | 4.5 | – | 4 | 8 | 8 | 3.3 | M4 | 7 | 18 | 4,8 ±0,9 |
| 20 mm | 12 | 15.5 | 7.5 | 36.3 | M5 | M6 | 4.5 | 4.5 | 4.5 | 4 | 10 | 10 | 4.2 | M5 | 8 | 22 | 5,6 ±0,9 |
| 25 mm | 12 | 15.5 | 8 | 40.3 | M5 | M6 | 4.5 | 4.5 | 4 | 4 | 10 | 10 | 4.2 | M5 | 8 | 26 | 5,6 ±0,9 |
| 32 mm | 12 | 17 | 8.6 | 50 | G 1/8 | M8 | 5 | 7.5 | 4.85 | 4.5 | 12 | 12 | 5.1 | M6 | 10 | 32.5 | 7,4 ±0,9 |
| 40 mm | 12 | 17 | 9.2 | 58 | G 1/8 | M8 | 5 | 7.5 | 9.85 | 4.5 | 12 | 12 | 5.1 | M6 | 10 | 38 | 7,4 ±0,9 |
| 50 mm | 16 | 17 | 11 | 68.3 | G 1/8 | M10 | 5 | 7.5 | 12 | 6 | 16 | 12 | 6.7 | M8 | 13 | 46.5 | 8,4 ±0,9 |

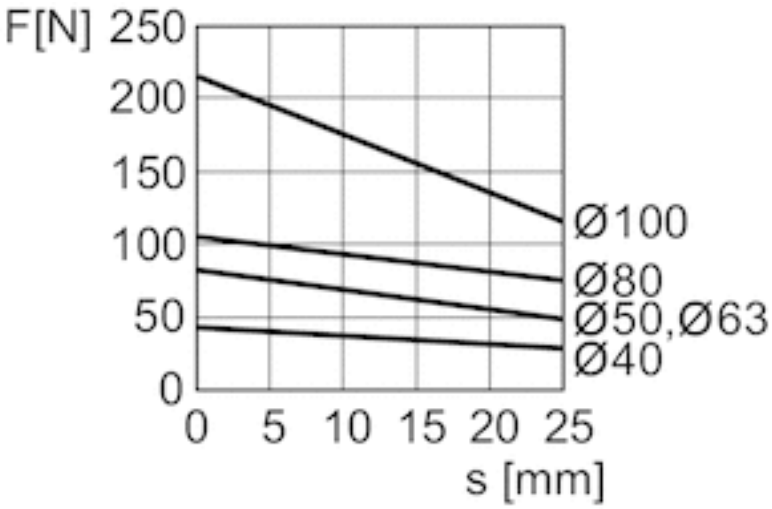
| Piston Ø | AF | BG | DT | E | EE | KF | LB | LE | LJ | LW | MM f8 | PL | RR | RT 6H | SW | TG | WH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 63 mm | 16 | 17 | 11 | 80 | G 1/8 | M10 | 5 | 7.5 | 14.8 | 6 | 16 | 12 | 6.7 | M8 | 13 | 56.5 | 8,5 ±0,9 |
| 80 mm | 20 | 20 | 15 | 96 | G 1/8 | M12 | 5 | 7.5 | 22 | 7 | 20 | 14 | 8.5 | M10 | 16 | 72 | 9,8 ±1 |
| 100 mm | 20 | 20 | 15 | 116 | G 1/8 | M12 | 5 | 7.5 | 27 | 7 | 25 | 16.5 | 8.5 | M10 | 21 | 89 | 9,8 ±1 |

| Piston Ø | X1 | X2 | X3 | ZA | ZB |
|---|---|---|---|---|---|
| 16 mm | – | – | – | 34,9 ±0,1 | 39,7 ±0,8 |
| 20 mm | 4.2 | – | – | 37,3 ±0,1 | 43,6 ±0,8 |
| 25 mm | 4.5 | – | – | 39 ±0,1 | 44,5 ±0,9 |
| 32 mm | 6.5 | – | – | 44 ±0,1 | 51,4 ±1 |
| 40 mm | 11 | – | – | 45 ±0,1 | 52,4 ±1 |
| 50 mm | 13 | 4 | 13 | 45,5 ±0,1 | 53,6 ±1 |
| 63 mm | 18 | 12 | 21 | 49 ±0,1 | 57,4 ±1 |
| 80 mm | 18 | 16.5 | 25.5 | 54,7 ±0,1 | 64,4 ±1 |
| 100 mm | 20 | 20 | 29 | 67 ±0,1 | 76,7 ±1 |

# Diagrams

## Extracting piston force

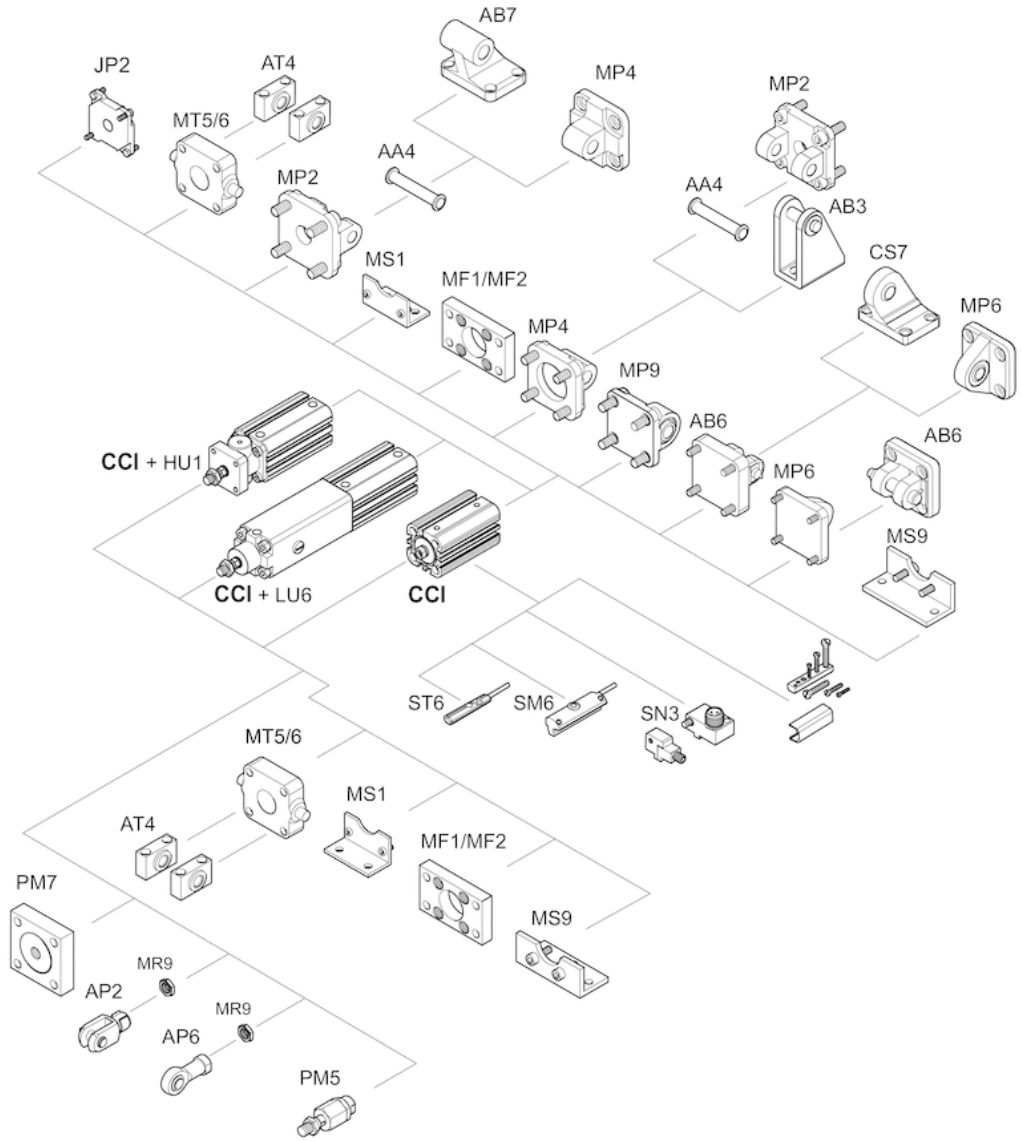



F = spring return force, s = return stroke

# 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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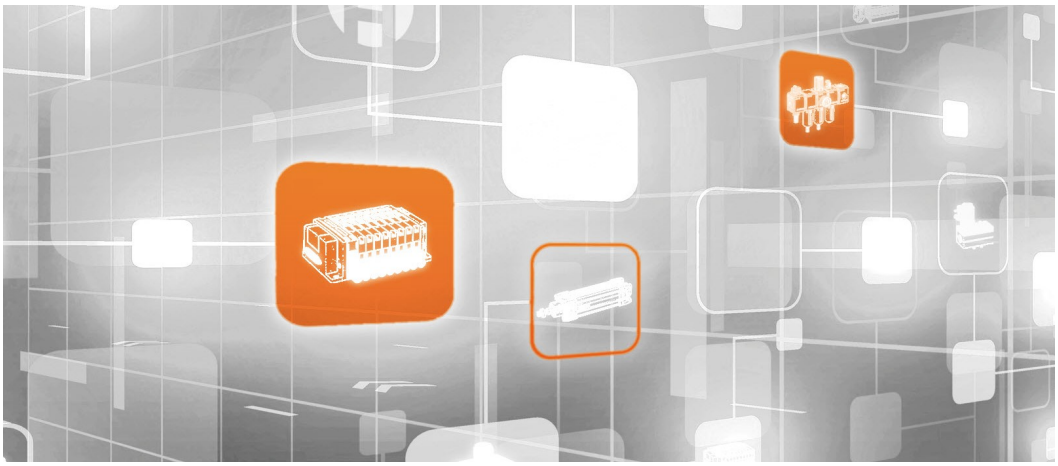

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