

## Compact cylinders CDC, ISO 21287, Clean Design

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# Compact cylinders CDC, ISO 21287, Clean Design

Key features

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## Design

- With the CDC (Clean Design Compact) cylinder series, the ADN modular system has been expanded to include an easy to clean compact cylinder variant
- It is based on ISO 21287 for compact cylinders and, like the compact cylinder ADN, features short strokes and a compact design
- The compact cylinder CDC is designed as a double-acting pneumatic cylinder with piston, piston rod and profile barrel

## Easy to clean

- Clean Design means smooth surfaces without slots and edges, which means fewer places where dirt can collect
- For hygiene reasons, the threads on the cylinder caps should be sealed with suitable blanking screws
- Resistant to conventional cleaning agents
- Increased corrosion protection

## Easy to assemble

- Comprehensive range of mounting accessories for just about every type of installation
- Contactless position sensing via proximity sensors

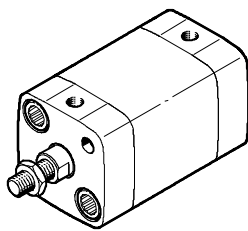
## Versatile

- The variants can be configured according to individual needs thanks to the modular product system
- Greater flexibility thanks to the wide range of variants

## Variants

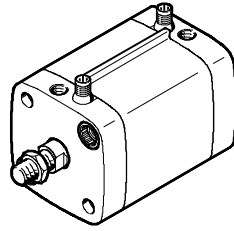
CDC-...

- Ø 20, 25 mm
- Without position sensing



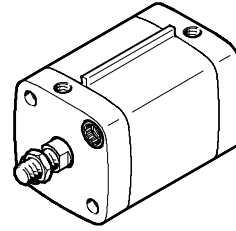
CDC-...A...-R

- Ø 32 ... 80 mm
- With position sensing integrated in the end positions



CDC-...A-R

- Ø 32 ... 80 mm
- With sensor mounting rail for external position sensing

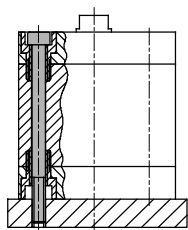


Note

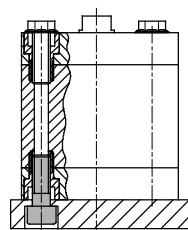
A combination of integrated and external position sensing is possible.

## Mounting options

With through screws

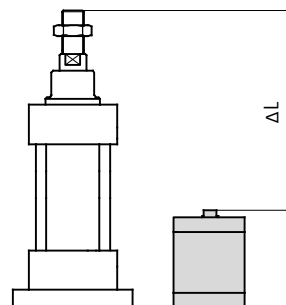


Direct mounting



## Size

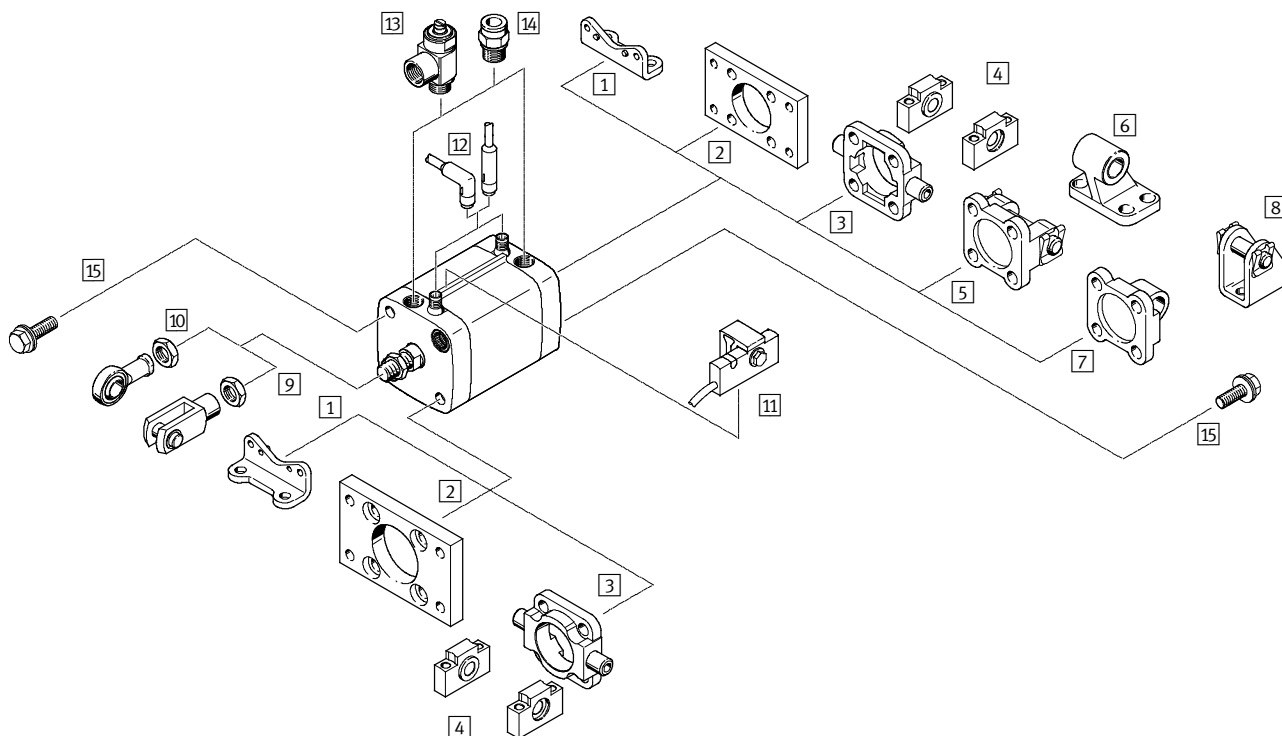
Space savings of up to 50% compared with cylinders to standard ISO 15552



# Compact cylinders CDC, ISO 21287, Clean Design

Peripherals overview

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| Mounting attachments and accessories |                                          |                                                                                        |
|--------------------------------------|------------------------------------------|----------------------------------------------------------------------------------------|
|                                      | Brief description                        | → Page/Internet                                                                        |
| 1                                    | Foot mounting<br>HNA-...-R3              | For bearing and end cap                                                                |
| 2                                    | Flange mounting<br>CRFNG                 | For bearing or end cap                                                                 |
| 3                                    | Trunnion flange<br>CRZNG                 | For bearing or end cap in combination with trunnion supports CRLNZG                    |
| 4                                    | Trunnion supports<br>CRLNZG              | For trunnion flange CRZNG                                                              |
| 5                                    | Swivel flange<br>SNCB- ... -R3           | For end cap                                                                            |
| 6                                    | Clevis foot mounting<br>CRLNG            | For swivel flange SNCB- ... -R3                                                        |
| 7                                    | Swivel flange<br>SNCL- ... -R3           | For end cap                                                                            |
| 8                                    | Clevis foot mounting<br>CRLBN            | For swivel flange SNCL- ... -R3                                                        |
| 9                                    | Rod clevis<br>CRSG                       | Permits a swivelling movement of the cylinder in one plane                             |
| 10                                   | Rod eye<br>CRSGS                         | With spherical bearing                                                                 |
| 11                                   | Proximity sensor<br>SMT-C1               | For attachment to the sensor mounting rail                                             |
| 12                                   | Cable with socket<br>SIM-K- ... -CDN     | – For electrical signal transmission and power supply<br>– With food industry approval |
| 13                                   | One-way flow control valve<br>CRGRLA     | For regulating speed                                                                   |
| 14                                   | Push-in fittings<br>QS-F/QL-F/CRQS/CRQSL | For connecting compressed air tubing with standard external diameters                  |
| 15                                   | Blanking screws<br>DAMD-P- ...           | For covering unused mounting threads                                                   |

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Type codes

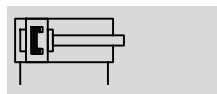
|                             |                                                             |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
|-----------------------------|-------------------------------------------------------------|-----|---|----|---|----|---|---|---|---|---|-----|---|-----|---|---|---|----|
|                             |                                                             | CDC | - | 32 | - | 50 | - | A | - | P | - | AIB | - | SME | - | R | - | K2 |
| <b>Type</b>                 |                                                             |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| Double-acting               |                                                             |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| CDC                         | Compact cylinder, Clean Design                              |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| <b>Piston Ø [mm]</b>        |                                                             |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| <b>Stroke [mm]</b>          |                                                             |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| <b>Piston rod thread</b>    |                                                             |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| A                           | Male thread                                                 |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| I                           | Female thread                                               |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| <b>Cushioning</b>           |                                                             |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| P                           | Flexible cushioning rings/pads at both ends                 |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| <b>Position sensing</b>     |                                                             |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| A                           | For proximity sensor                                        |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| AIB                         | At both ends, integrated                                    |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| AIV                         | Front, integrated                                           |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| AIH                         | Rear, integrated                                            |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| <b>Proximity sensor</b>     |                                                             |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| SME                         | Contacting (magnetic reed)                                  |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| SMT                         | Contactless (magneto-resistive)                             |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| <b>Sensor mounting rail</b> |                                                             |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| R                           | For external position sensing<br>(only with Ø 32 ... 80 mm) |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| <b>Variant</b>              |                                                             |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| S2                          | Through piston rod                                          |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| K2                          | Extended male piston rod thread                             |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| K5                          | Piston rod with special thread                              |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| K8                          | Extended piston rod                                         |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |
| S6                          | Heat-resistant seals for temperatures up to 120 °C          |     |   |    |   |    |   |   |   |   |   |     |   |     |   |   |   |    |

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Technical data

## Function



- Ø - Diameter  
20 ... 80 mm

- | - Stroke length  
1 ... 500 mm

- T - [www.festo.com](http://www.festo.com)

## Variants



S2



K2



K5



K8



S6



CDC-...-A-P



CDC-...-A-P-R

| General technical data |                                             |                        |          |          |          |          |         |
|------------------------|---------------------------------------------|------------------------|----------|----------|----------|----------|---------|
| Piston Ø               | 20                                          | 25                     | 32       | 40       | 50       | 63       | 80      |
| Pneumatic connection   | M5                                          | M5                     | G1/8     | G1/8     | G1/8     | G1/8     | G1/8    |
| Piston rod thread      | M8                                          | M8                     | M10x1.25 | M10x1.25 | M12x1.25 | M12x1.25 | M16x1.5 |
| Design                 | Piston                                      |                        |          |          |          |          |         |
|                        | Piston rod                                  |                        |          |          |          |          |         |
|                        | Cylinder barrel                             |                        |          |          |          |          |         |
| Cushioning             | Flexible cushioning rings/pads at both ends |                        |          |          |          |          |         |
| Position sensing       | A                                           | For proximity sensor   |          |          |          |          |         |
|                        | AIB                                         | At both ends, built-in |          |          |          |          |         |
|                        | AIV                                         | Front, built-in        |          |          |          |          |         |
|                        | AIH                                         | Rear, built-in         |          |          |          |          |         |
| Type of mounting       | Via through-hole                            |                        |          |          |          |          |         |
|                        | With female thread                          |                        |          |          |          |          |         |
|                        | Via accessories                             |                        |          |          |          |          |         |
| Mounting position      | Any                                         |                        |          |          |          |          |         |

| Operating and environmental conditions       |    |                                                                                                        |             |            |            |    |    |            |
|----------------------------------------------|----|--------------------------------------------------------------------------------------------------------|-------------|------------|------------|----|----|------------|
| Piston Ø                                     |    | 20                                                                                                     | 25          | 32         | 40         | 50 | 63 | 80         |
| Operating medium                             |    | Compressed air in accordance with ISO 8573-1:2010 [7:4:4]                                              |             |            |            |    |    |            |
| Note on operating/pilot medium               |    | Operation with lubricated medium possible (in which case lubricated operation will always be required) |             |            |            |    |    |            |
| Operating pressure                           |    | [bar]                                                                                                  | 0.8 ... 10  |            | 0.6 ... 10 |    |    |            |
|                                              | S2 | [bar]                                                                                                  | 1.2 ... 10  |            | 1 ... 10   |    |    | 0.8 ... 10 |
|                                              | S6 | [bar]                                                                                                  | 1 ... 10    | 0.6 ... 10 |            |    |    |            |
| Ambient temperature <sup>1)</sup>            |    | [°C]                                                                                                   | -20 ... +80 |            |            |    |    |            |
|                                              | S6 | [°C]                                                                                                   | 0 ... +120  |            |            |    |    |            |
| Suitability for use in the food industry     |    | As per manufacturer's declaration (➔ Support / Downloads)                                              |             |            |            |    |    |            |
| Corrosion resistance class CRC <sup>2)</sup> |    | 3                                                                                                      |             |            |            |    |    |            |

1) Note operating range of proximity sensors

2) Corrosion resistance class 3 to Festo standard 940 070

Components requiring higher corrosion resistance. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface

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| Forces [N] and impact energy [J]        |    |     |      |     |      |       |       |       |
|-----------------------------------------|----|-----|------|-----|------|-------|-------|-------|
| Piston Ø                                |    | 20  | 25   | 32  | 40   | 50    | 63    | 80    |
| Theoretical force at 6 bar, advancing   |    | 188 | 295  | 483 | 754  | 1,178 | 1,870 | 3,016 |
|                                         | S2 | 141 | 247  | 415 | 686  | 1,057 | 1,750 | 2,827 |
| Theoretical force at 6 bar, retracting  |    | 141 | 247  | 415 | 686  | 1,057 | 1,750 | 2,827 |
| Max. impact energy at the end positions |    | 0.2 | 0.3  | 0.4 | 0.7  | 1     | 1.3   | 1.8   |
|                                         | S6 | 0.1 | 0.15 | 0.2 | 0.35 | 0.5   | 0.65  | 0.9   |

Permissible impact velocity:

$$v_{perm.} = \sqrt{\frac{2 \times E_{perm.}}{m_{dead} + m_{load}}}$$

$v_{perm.}$  Permissible impact velocity  
 $E_{perm.}$  Max. impact energy  
 $m_{dead}$  Moving load (drive)  
 $m_{load}$  Moving work load

Maximum permissible load:

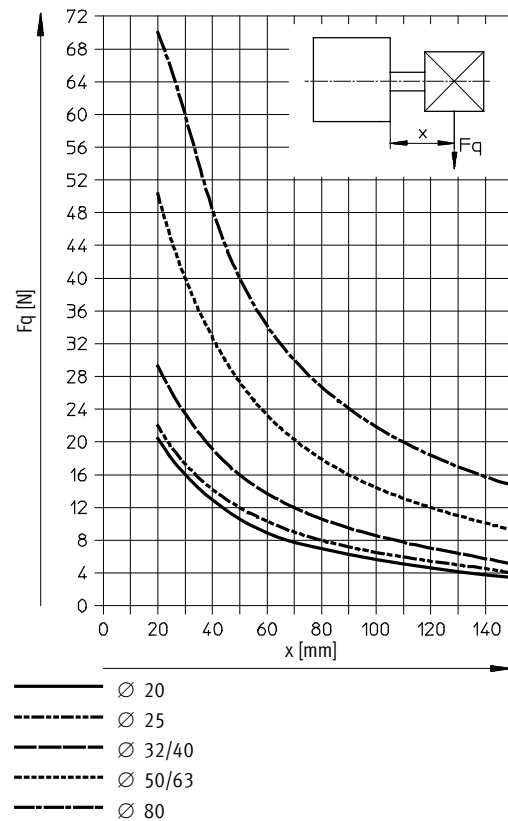
$$m_{load} = \frac{2 \times E_{perm.}}{v^2} - m_{dead}$$



Note

These specifications represent the maximum values which can be reached. Note the maximum permitted impact energy.

## Max. lateral force $F_q$ as a function of projection $x$



# Compact cylinders CDC, ISO 21287, Clean Design

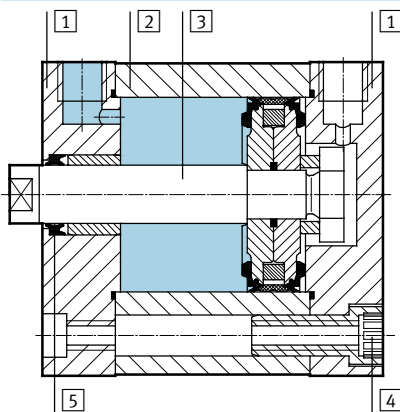
Technical data

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| Weights [g]                        |     |     |     |     |     |     |       |
|------------------------------------|-----|-----|-----|-----|-----|-----|-------|
| Piston Ø                           | 20  | 25  | 32  | 40  | 50  | 63  | 80    |
| Basic version                      |     |     |     |     |     |     |       |
| Product weight with 0 mm stroke    | 133 | 170 | 277 | 377 | 567 | 790 | 1,475 |
| Additional weight per 10 mm stroke | 20  | 23  | 31  | 35  | 52  | 59  | 84    |
|                                    |     |     |     |     |     |     |       |
| Moving load with 0 mm stroke       | 24  | 33  | 53  | 82  | 128 | 177 | 367   |
| Additional load per 10 mm stroke   | 6   | 6   | 9   | 9   | 16  | 16  | 25    |
|                                    |     |     |     |     |     |     |       |
| S2 – Through piston rod            |     |     |     |     |     |     |       |
| Product weight with 0 mm stroke    | 150 | 183 | 296 | 386 | 600 | 827 | 1,507 |
| Additional weight per 10 mm stroke | 26  | 29  | 40  | 44  | 67  | 74  | 109   |
|                                    |     |     |     |     |     |     |       |
| Moving load with 0 mm stroke       | 34  | 40  | 64  | 81  | 144 | 195 | 367   |
| Additional load per 10 mm stroke   | 12  | 12  | 18  | 18  | 32  | 32  | 49    |

## Materials

Sectional view



| Compact cylinder    | Basic version                | S6                                                  |
|---------------------|------------------------------|-----------------------------------------------------|
| 1 End cap           | Anodised aluminium           |                                                     |
| 2 Cylinder barrel   | Anodised aluminium           |                                                     |
| 3 Piston rod        | High-alloy steel             |                                                     |
| 4 Flange screws     | Corrosion-resistant steel    |                                                     |
| – Seals             | Polyurethane, nitrile rubber | Fluorocarbon rubber                                 |
| – Note on materials | Free of copper and PTFE      |                                                     |
|                     |                              | Contains PWIS (paint-wetting impairment substances) |

# Compact cylinders CDC, ISO 21287, Clean Design

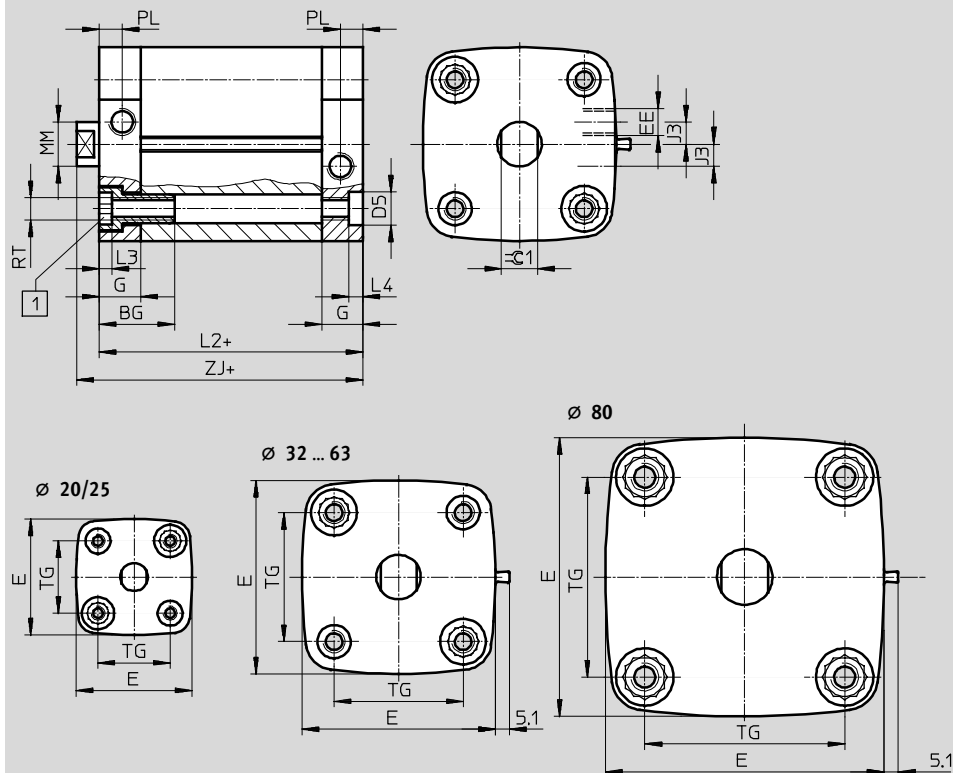
Technical data

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## Dimensions

Download CAD data → [www.festo.com](http://www.festo.com)

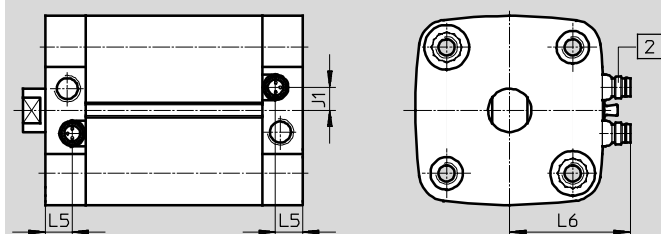
### Basic version



1 Socket head screw with female thread for mounting attachments

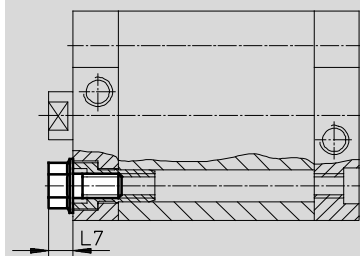
+ = plus stroke length

### With position sensing integrated in the end positions



1 Miniature plug connector, 3-pin, with integrated proximity sensor (order code SME or SMT) suitable for cable with socket SIM-K...-CDN

### Projection of blanking screw



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| Ø    | BG   | D5 | E    | EE   | G     | J1   | J3   | L2 | L3  | L4 |
|------|------|----|------|------|-------|------|------|----|-----|----|
| [mm] |      | F9 |      |      |       | ±0.1 | ±0.1 |    |     |    |
| 20   | 19.5 | 9  | 36.8 | M5   | 12    | –    | –    | 37 | 4.4 | 5  |
| 25   |      |    | 41.8 |      |       |      | 39   |    |     |    |
| 32   | 26   |    | 49.8 | G1/8 | 15    | 5.8  | 7    | 44 |     |    |
| 40   |      |    | 57.8 |      |       | 8    | 8    | 45 |     |    |
| 50   | 27   | 12 | 69.7 |      |       | 8.5  |      | 49 |     |    |
| 63   |      |    | 81.3 |      |       | 12   |      |    |     |    |
| 80   |      |    | –    |      | 100.4 |      | 16.5 | 15 |     | 54 |

| Ø    | L5   | L6 | L7   | MM<br>Ø<br>h8 | PL   | RT | TG   | ZJ   | ⊖G1 |
|------|------|----|------|---------------|------|----|------|------|-----|
| [mm] |      | ±2 |      |               | ±0.1 |    |      | +1   | h13 |
| 20   | –    | –  | 7    | 10            | 6    | M5 | 22   | 42.7 | 9   |
| 25   |      |    |      |               |      |    | 26   | 44.7 |     |
| 32   | 10   | 35 | 8.7  | 12            | 8.2  | M6 | 32.5 | 50.2 | 10  |
| 40   |      | 39 |      |               |      |    | 38   | 51.2 |     |
| 50   |      | 45 | 10.3 | 16            |      | M8 | 46.5 | 53.2 | 13  |
| 63   |      | 50 |      |               |      |    | 56.5 | 57.2 |     |
| 80   | 11.5 | 60 | 11.9 | 20            |      |    | M10  | 72   | 63  |



Note

The following maximum stroke lengths apply in combination with a swivel mounting on the end cap:

| Ø<br>[mm]          | 20 | 25 | 32  | 40 | 50 | 63 | 80  |
|--------------------|----|----|-----|----|----|----|-----|
| Max. stroke length | 50 |    | 100 |    |    |    | 150 |

# Compact cylinders CDC, ISO 21287, Clean Design

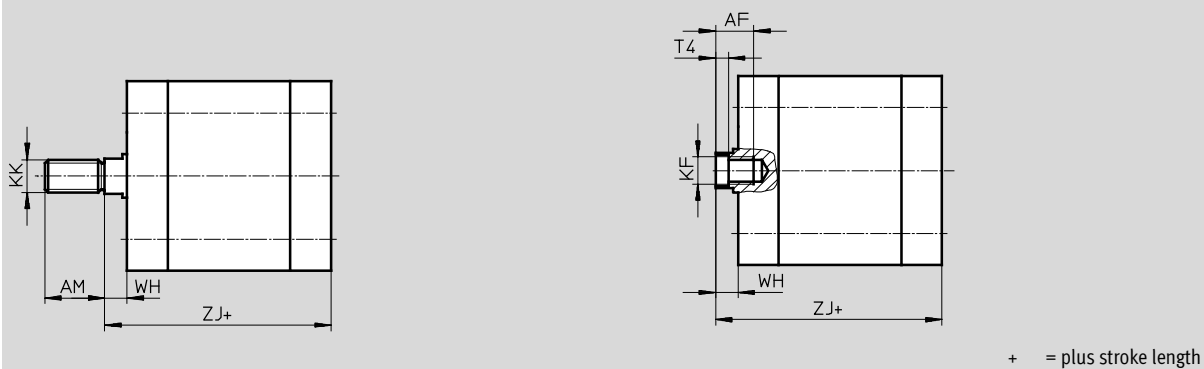
Technical data

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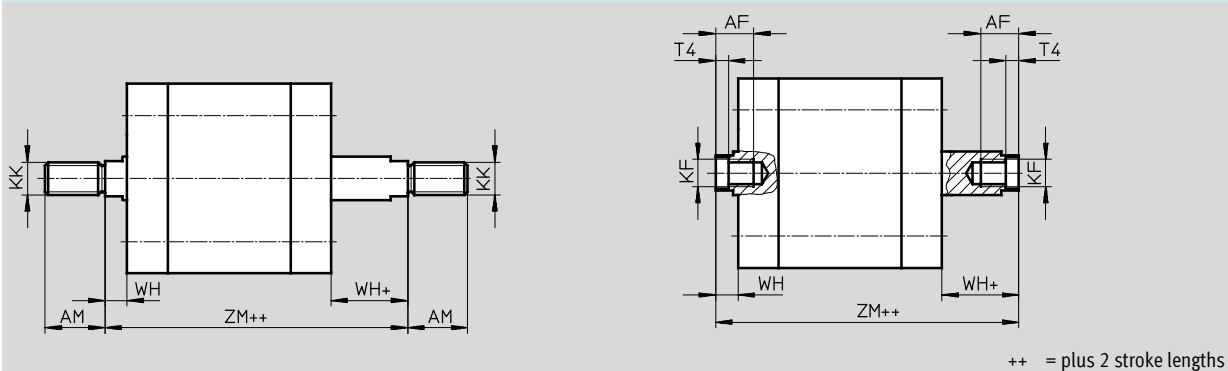
## Dimensions – Variants

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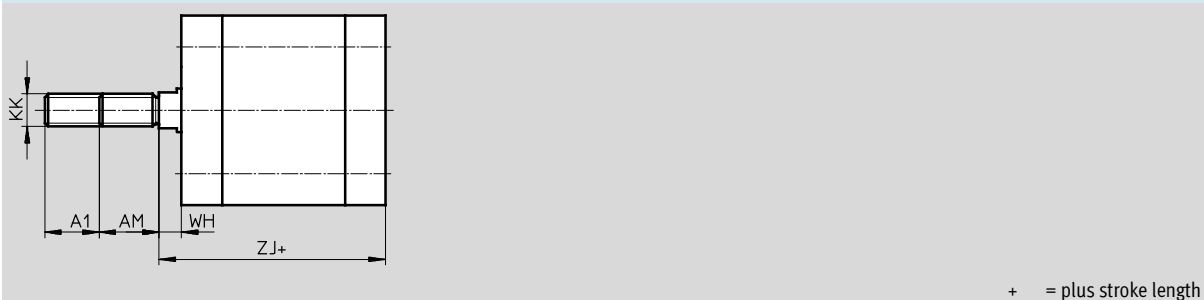
### Basic version



### S2 – Through piston rod



### K2 – Extended male piston rod thread



| Ø    | A1       | AF   | AM   | KF  | KK       | T4  | WH  | ZJ   | ZM   |
|------|----------|------|------|-----|----------|-----|-----|------|------|
| [mm] |          | min. | −0.5 |     |          |     | +1  | +1   |      |
| 20   | 1 ... 20 | 14   | 16   | M6  | M8       | 2.6 | 5.7 | 42.7 | 49.8 |
| 25   |          |      |      |     |          |     |     | 44.7 | 51.8 |
| 32   |          | 16   | 19   | M8  | M10x1.25 | 3.3 | 6.2 | 50.2 | 57.8 |
| 40   |          |      |      |     |          |     |     | 51.2 | 58.9 |
| 50   |          | 20   | 22   | M10 | M12x1.25 | 4.7 | 8.2 | 53.2 | 63.1 |
| 63   |          |      |      |     |          |     |     | 57.2 | 66.9 |
| 80   | 1 ... 30 |      |      |     |          |     |     | 28   | M12  |

# Compact cylinders CDC, ISO 21287, Clean Design

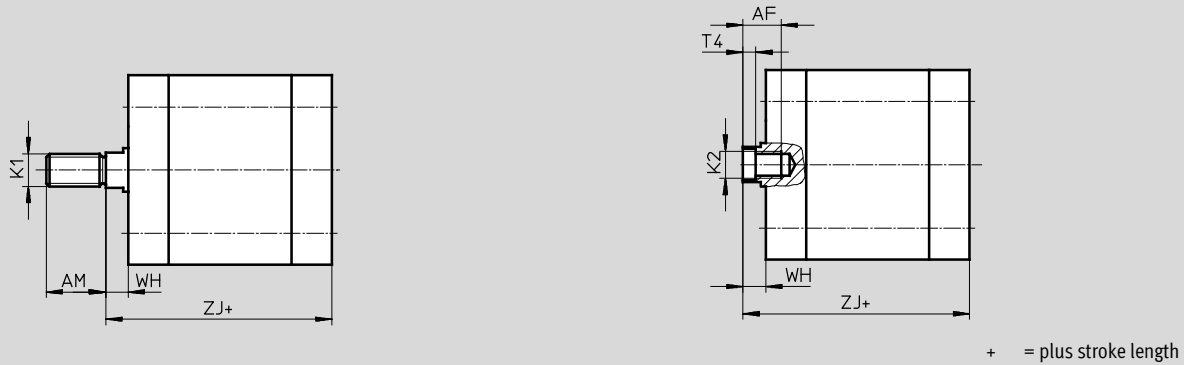
Technical data

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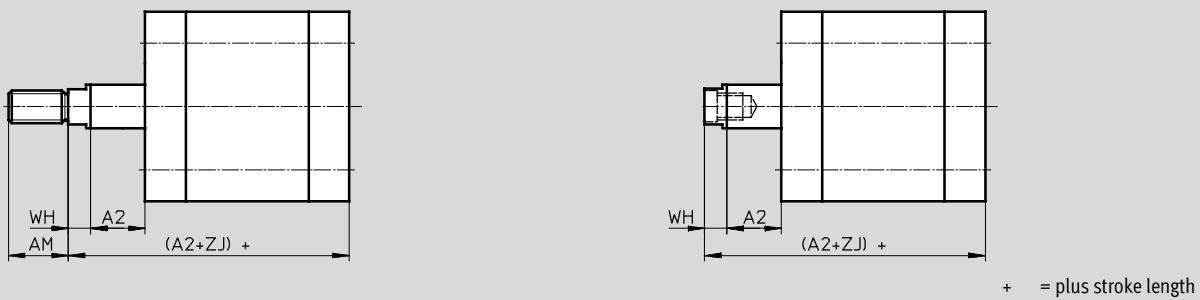
## Dimensions – Variants

Download CAD data → [www.festo.com](http://www.festo.com)

### K5 – Special thread on piston rod



### K8 – Extended piston rod



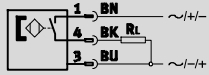
| Ø    | AF   | A2        | AM   | K1            | K2 | T4  | WH  | ZJ   |
|------|------|-----------|------|---------------|----|-----|-----|------|
| [mm] | min. |           | -0.5 |               |    |     | +1  | +1   |
| 20   | 14   | 1 ... 300 | 16   | M10, M10x1.25 | M5 | 2.6 | 5.7 | 42.7 |
| 25   |      |           |      |               |    |     |     | 44.7 |
| 32   | 16   | 1 ... 400 | 19   | M10, M12      | M6 | 3.3 | 6.2 | 50.2 |
| 40   |      |           |      |               |    |     |     | 51.2 |
| 50   | 20   | 1 ... 500 | 22   | M12, M12      | M8 | 4.7 | 8.2 | 53.2 |
| 63   |      |           |      |               |    |     |     | 57.2 |
| 80   |      |           |      |               |    |     |     | 63   |

# Compact cylinders CDC, ISO 21287, Clean Design

Technical data

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Proximity sensor,  
magnetic reed  
(order code SME)



Note

The proximity sensor can only be ordered in conjunction with the order code AIB, AIV and AIH (integrated position sensing) in the modular product system.



| Technical data                           |                             |                                         |
|------------------------------------------|-----------------------------|-----------------------------------------|
| General information                      |                             |                                         |
| Design                                   | Integrated                  |                                         |
| Based on standard                        | EN 60947-5-2                |                                         |
| CE mark (see declaration of conformity)  | To EU EMC Directive         |                                         |
| Note on materials                        | Free of copper and PTFE     |                                         |
|                                          |                             |                                         |
| Input signal/measuring element           |                             |                                         |
| Measuring principle                      | Magnetic reed               |                                         |
| Ambient temperature                      | [°C]                        | −20 ... +60                             |
|                                          |                             |                                         |
| Switching output                         |                             |                                         |
| Switching output                         | Contacting, bipolar         |                                         |
| Switching element function               | N/O contact                 |                                         |
| Reproducibility of switching point       | [mm]                        | ±0.1                                    |
| Hysteresis                               | [mm]                        | 1 ... 4, depending on the cylinder used |
| Switch-on time                           | [ms]                        | 0.5                                     |
| Switch-off time                          | [ms]                        | 0.5                                     |
| Max. output current                      | [mA]                        | 500                                     |
| Max. switching capacity AC               | [W]                         | 10 VA                                   |
| Max. switching capacity DC               | [W]                         | 10 W                                    |
| Inductive protective circuit             | Adapted to MZ coil with LED |                                         |
| Residual current                         | [mA]                        | 0                                       |
|                                          |                             |                                         |
| Output, further data                     |                             |                                         |
| Protection against short circuit         | No                          |                                         |
| Protection against overloading           | No                          |                                         |
|                                          |                             |                                         |
| Electronic components                    |                             |                                         |
| Operating voltage range                  | [V AC]                      | 12 ... 30                               |
|                                          | [V DC]                      | 12 ... 30                               |
| Protection against polarity reversal     | No                          |                                         |
|                                          |                             |                                         |
| Electromechanical components             |                             |                                         |
| Electrical connection                    | Plug, M8x1, 3-pin           |                                         |
| Connection direction                     | Lateral                     |                                         |
| Information on crimp connector materials | Gold-plated brass           |                                         |

## Compact cylinders CDC, ISO 21287, Clean Design

FESTO

Technical data

| Technical data                               |      |                                                               |
|----------------------------------------------|------|---------------------------------------------------------------|
| Mechanical components                        |      |                                                               |
| Tightening torque                            | [Nm] | 0.3                                                           |
| Mounting position                            |      | Any                                                           |
| Product weight                               | [g]  | 2.7                                                           |
| Information on housing materials             |      | Polyamide, epoxy resin, nickel-plated brass                   |
| Display/operation                            |      |                                                               |
| Switching status display                     |      | Yellow LED                                                    |
| Immissions/emissions                         |      |                                                               |
| Degree of protection                         |      | IP65, IP67 to EN 60529                                        |
|                                              |      | IP69K, to DIN 40050 Part 9                                    |
|                                              |      | Only in conjunction with plug socket with cable SIM-K-...-CDN |
| Corrosion resistance class CRC <sup>1)</sup> |      | 3                                                             |

1) Corrosion resistance class 3 according to Festo standard 940 070

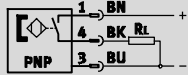
Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface.

# Compact cylinders CDC, ISO 21287, Clean Design

Technical data

FESTO

Proximity sensor,  
magneto-resistive  
(order code SMT)



Note

The proximity sensor can only be ordered in conjunction with the order code AIB, AIV and AIH (integrated position sensing) in the modular product system.



| Technical data                           |                             |                                         |
|------------------------------------------|-----------------------------|-----------------------------------------|
| General information                      |                             |                                         |
| Design                                   | Integrated                  |                                         |
| Based on standard                        | EN 60947-5-2                |                                         |
| CE mark (see declaration of conformity)  | To EU EMC Directive         |                                         |
| Note on materials                        | Free of copper and PTFE     |                                         |
|                                          |                             |                                         |
| Input signal/measuring element           |                             |                                         |
| Measuring principle                      | Magneto-resistive           |                                         |
| Ambient temperature                      | [°C]                        | −20 ... +60                             |
|                                          |                             |                                         |
| Switching output                         |                             |                                         |
| Switching output                         | PNP                         |                                         |
| Switching element function               | N/O contact                 |                                         |
| Reproducibility of switching point       | [mm]                        | ±0.1                                    |
| Hysteresis                               | [mm]                        | 1 ... 4, depending on the cylinder used |
| Switch-on time                           | [ms]                        | 0.5                                     |
| Switch-off time                          | [ms]                        | 0.5                                     |
| Max. output current                      | [mA]                        | 100                                     |
| Max. switching capacity DC               | [W]                         | 3                                       |
| Voltage drop                             | [V]                         | < 2                                     |
| Inductive protective circuit             | Adapted to MZ, MY, ME coils |                                         |
| Residual current                         | [µA]                        | < 10                                    |
|                                          |                             |                                         |
| Output, further data                     |                             |                                         |
| Protection against short circuit         | Yes                         |                                         |
| Protection against overloading           | Yes                         |                                         |
|                                          |                             |                                         |
| Electronic components                    |                             |                                         |
| Operating voltage range                  | [V DC]                      | 5 ... 30                                |
| Residual ripple                          | [%]                         | 10                                      |
| Protection against polarity reversal     | Yes                         |                                         |
|                                          |                             |                                         |
| Electromechanical components             |                             |                                         |
| Electrical connection                    | Plug, M8x1, 3-pin           |                                         |
| Connection direction                     | Lateral                     |                                         |
| Information on crimp connector materials | Gold-plated brass           |                                         |

## Compact cylinders CDC, ISO 21287, Clean Design

FESTO

Technical data

| Technical data                               |      |                                                               |
|----------------------------------------------|------|---------------------------------------------------------------|
| Mechanical components                        |      |                                                               |
| Tightening torque                            | [Nm] | 0.3                                                           |
| Mounting position                            |      | Any                                                           |
| Product weight                               | [g]  | 2.7                                                           |
| Information on housing materials             |      | Polyamide, epoxy resin, nickel-plated brass                   |
| Display/operation                            |      |                                                               |
| Switching status display                     |      | Yellow LED                                                    |
| Immissions/emissions                         |      |                                                               |
| Degree of protection                         |      | IP65, IP67 to EN 60529                                        |
|                                              |      | IP69K, to DIN 40050 Part 9                                    |
|                                              |      | Only in conjunction with plug socket with cable SIM-K-...-CDN |
| Corrosion resistance class CRC <sup>1)</sup> |      | 3                                                             |

1) Corrosion resistance class 3 according to Festo standard 940 070

Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface.

# Compact cylinders CDC, ISO 21287, Clean Design

Ordering data – Modular products

FESTO

| Mandatory data |          |      |                   |     |                  |     | → |
|----------------|----------|------|-------------------|-----|------------------|-----|---|
| Module No.     | Function |      | Stroke            |     | Cushioning       |     |   |
|                | Piston Ø |      | Piston rod thread |     | Position sensing |     |   |
| 543 305        | CDC      | 20   | 1 ... 500         | A   | P                | –   |   |
| 543 306        |          | 25   |                   | I   |                  | A   |   |
| 543 307        |          | 32   |                   |     |                  | AIB |   |
| 543 308        |          | 40   |                   |     |                  | AIV |   |
| 543 309        |          | 50   |                   |     |                  | AIH |   |
| 543 310        |          | 63   |                   |     |                  |     |   |
| 543 311        |          | 80   |                   |     |                  |     |   |
| Order example  |          |      |                   |     |                  |     |   |
| 543 306        | CDC      | – 25 | – 225             | – A | – P              | –   |   |

| Ordering table |                   |                                                                     |                   |                          |         |         |         |                 |      |               |
|----------------|-------------------|---------------------------------------------------------------------|-------------------|--------------------------|---------|---------|---------|-----------------|------|---------------|
| Size           | 20                | 25                                                                  | 32                | 40                       | 50      | 63      | 80      | Condi-<br>tions | Code | Enter<br>code |
| M              | Module No.        | 543 305                                                             | 543 306           | 543 307                  | 543 308 | 543 309 | 543 310 | 543 311         |      |               |
|                | Function          | Standard cylinder, double-acting, based on ISO 21287 (Clean Design) |                   |                          |         |         |         |                 |      | CDC           |
|                | Piston Ø [mm]     | 20                                                                  | 25                | 32                       | 40      | 50      | 63      | 80              | -... |               |
|                | Stroke [mm]       | 1 ... 300                                                           |                   | 1 ... 400                |         |         |         | 1 ... 500       | -... |               |
|                | Piston rod thread | Male thread                                                         |                   |                          |         |         |         |                 |      | -A            |
|                |                   | Female thread                                                       |                   |                          |         |         |         |                 | 1    | -I            |
|                | Cushioning        | Flexible cushioning rings/pads at both ends                         |                   |                          |         |         |         |                 |      | -P            |
|                | Position sensing  | Without position sensing                                            |                   | -                        | -       | -       | -       | -               |      |               |
|                |                   | -                                                                   | -                 | For proximity sensor     |         |         |         |                 |      | -A            |
|                |                   | -                                                                   | -                 | At both ends, integrated |         |         |         |                 | 2    | -AIB          |
| -              |                   | -                                                                   | Front, integrated |                          |         |         |         | 2               | -AIV |               |
| -              |                   | -                                                                   | Rear, integrated  |                          |         |         |         | 2               | -AIH |               |

1 I Not with extended male thread K2

2 AIB, AIV, AIH Only with proximity sensor SME, SMT

Transfer order code

|  |     |   |  |   |  |   |  |   |   |
|--|-----|---|--|---|--|---|--|---|---|
|  | CDC | – |  | – |  | – |  | – | P |
|--|-----|---|--|---|--|---|--|---|---|

### Ordering data – Modular products

| Ordering table |                                   |                                                      |                 |                                                    |            |            |    |    |                 |          |               |
|----------------|-----------------------------------|------------------------------------------------------|-----------------|----------------------------------------------------|------------|------------|----|----|-----------------|----------|---------------|
| Size           |                                   | 20                                                   | 25              | 32                                                 | 40         | 50         | 63 | 80 | Condi-<br>tions | Code     | Enter<br>code |
| 0              | Proximity sensor                  | —                                                    | —               | SME (contacting)                                   |            |            |    |    | 3               | -SME     |               |
|                |                                   | —                                                    | —               | SMT (contactless)                                  |            |            |    |    | 4               | -SMT     |               |
|                | Sensor mounting rail              | —                                                    | —               | Sensor mounting rail for external position sensing |            |            |    |    | 5               | -R       |               |
|                | Type of piston rod                | Through piston rod                                   |                 |                                                    |            |            |    |    |                 | -S2      |               |
|                | Male thread extended<br>[mm]      | Extended male piston rod thread<br>1 ... 20 1 ... 30 |                 |                                                    |            |            |    |    |                 | -...K2   |               |
|                | Piston rod with<br>special thread | Male thread                                          | M10x1.25<br>M10 | M10<br>M12                                         | M12<br>M16 | M16<br>M20 |    |    |                 | -“...”K5 |               |
|                |                                   | Female thread                                        | M5              | M6                                                 | M8         | M10        |    |    |                 |          |               |
|                | Piston rod extended<br>[mm]       | Extended piston rod<br>1 ... 300 1 ... 400 1 ... 500 |                 |                                                    |            |            |    |    | 6               | -...K8   |               |
|                | Temperature resistance            | Heat-resistant seals for temperatures up to 120 °C   |                 |                                                    |            |            |    |    | 7               | -S6      |               |

- Transfer order code

[illegible]

# Compact cylinders CDC, ISO 21287, Clean Design

FESTO

Accessories

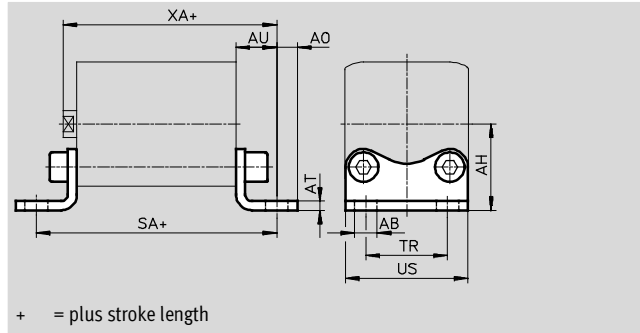
## Foot mounting HNA-...-R3

Material:

Steel with protective coating

Free of copper and PTFE

RoHS-compliant



| Dimensions and ordering data |         |      |      |      |      |     |      |      |    |                   |        |          |           |
|------------------------------|---------|------|------|------|------|-----|------|------|----|-------------------|--------|----------|-----------|
| For Ø                        | AB<br>Ø | AH   | AO   | AT   | AU   | SA  | TR   | US   | XA | CRC <sup>1)</sup> | Weight | Part No. | Type      |
| [mm]                         | H14     | JS14 |      | ±0.5 | ±0.2 |     | ±0.2 | −0.5 |    |                   | [g]    |          |           |
| 20                           | 7       | 27   | 6.25 | 4    | 16   | 69  | 22   | 34.5 | 59 | 3                 | 50     | 537 254  | HNA-20-R3 |
| 25                           |         | 29   |      |      |      | 71  | 26   | 38.5 | 61 | 3                 | 55     | 537 255  | HNA-25-R3 |
| 32                           |         | 33.5 |      |      |      | 76  | 32   | 46   | 66 | 3                 | 70     | 537 256  | HNA-32-R3 |
| 40                           | 10      | 38   | 9    | 5    | 21   | 81  | 36   | 54   | 69 | 3                 | 90     | 537 257  | HNA-40-R3 |
| 50                           |         | 45   | 8    |      |      | 87  | 45   | 64   | 74 | 3                 | 160    | 537 258  | HNA-50-R3 |
| 63                           |         | 50   |      |      |      | 91  | 50   | 75   | 78 | 3                 | 180    | 537 259  | HNA-63-R3 |
| 80                           | 12      | 63   | 10.5 | 6    | 26   | 106 | 63   | 63   | 89 | 3                 | 380    | 537 260  | HNA-80-R3 |

1) Corrosion resistance class 3 according to Festo standard 940 070

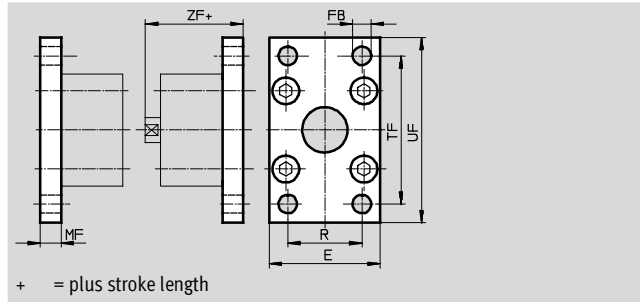
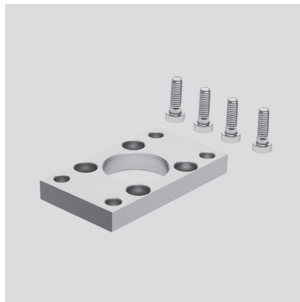
Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface.

## Flange mounting CRFNG

Material:

High-alloy steel

Free of copper and PTFE



| Dimensions and ordering data |    |          |    |    |     |     |    |                   |        |                  |
|------------------------------|----|----------|----|----|-----|-----|----|-------------------|--------|------------------|
| For Ø                        | E  | FB       | MF | R  | TF  | UF  | ZF | CRC <sup>1)</sup> | Weight | Part No. Type    |
| [mm]                         |    | Ø<br>H13 |    |    |     |     |    |                   | [g]    |                  |
| 32                           | 45 | 7        | 10 | 32 | 64  | 80  | 54 | 4                 | 225    | 161 846 CRFNG-32 |
| 40                           | 54 | 9        | 10 | 36 | 72  | 90  | 55 | 4                 | 300    | 161 847 CRFNG-40 |
| 50                           | 65 | 9        | 12 | 45 | 90  | 110 | 57 | 4                 | 540    | 161 848 CRFNG-50 |
| 63                           | 75 | 9        | 12 | 50 | 100 | 120 | 61 | 4                 | 680    | 161 849 CRFNG-63 |
| 80                           | 93 | 12       | 16 | 63 | 126 | 150 | 70 | 4                 | 1,500  | 161 850 CRFNG-80 |

1) Corrosion resistance class 4 according to Festo standard 940 070

Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

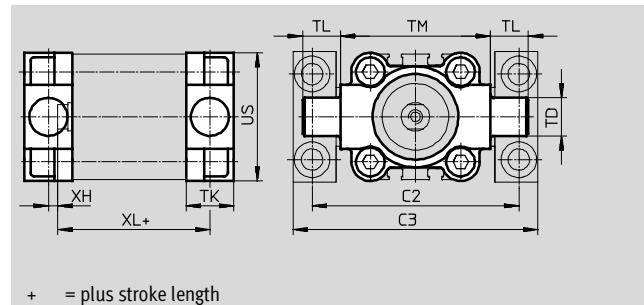
# Compact cylinders CDC, ISO 21287, Clean Design

Accessories

**FESTO**

## Trunnion flange CRZNG

Material:  
CRZNG: Electrolytically polished  
special steel casting  
Free of copper and PTFE  
RoHS-compliant

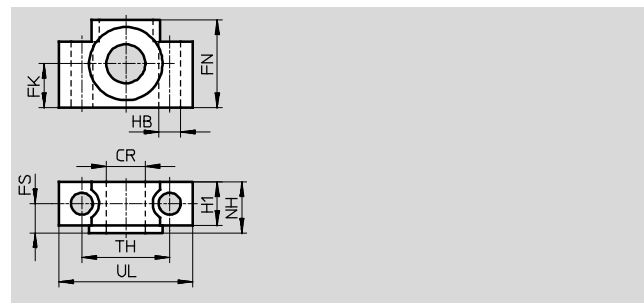
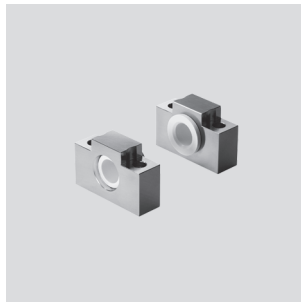


| Dimensions and ordering data |     |     |               |    |    |     |    |    |    |                   |        |                |                 |
|------------------------------|-----|-----|---------------|----|----|-----|----|----|----|-------------------|--------|----------------|-----------------|
| For Ø                        | C2  | C3  | TD<br>Ø<br>e9 | TK | TL | TM  | US | XH | XL | CRC <sup>1)</sup> | Weight | Part No.       | Type            |
| [mm]                         |     |     |               |    |    |     |    |    |    |                   |        |                |                 |
| 32                           | 71  | 86  | 12            | 16 | 12 | 50  | 45 | 2  | 52 | 4                 | 150    | <b>161 852</b> | <b>CRZNG-32</b> |
| 40                           | 87  | 105 | 16            | 20 | 16 | 63  | 54 | 4  | 55 | 4                 | 285    | <b>161 853</b> | <b>CRZNG-40</b> |
| 50                           | 99  | 117 | 16            | 24 | 16 | 75  | 64 | 4  | 57 | 4                 | 473    | <b>161 854</b> | <b>CRZNG-50</b> |
| 63                           | 116 | 136 | 20            | 24 | 20 | 90  | 75 | 4  | 61 | 4                 | 687    | <b>161 855</b> | <b>CRZNG-63</b> |
| 80                           | 136 | 156 | 20            | 28 | 20 | 110 | 93 | 5  | 81 | 4                 | 1,296  | <b>161 856</b> | <b>CRZNG-80</b> |

1) Corrosion resistance class 4 according to Festo standard 940 070  
Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

## Trunnion supports CRLNZG

Material:  
High-alloy steel  
Free of copper and PTFE  
RoHS-compliant



| Dimensions and ordering data |                |                 |    |      |    |                |    |            |    |                   |               |                |                     |
|------------------------------|----------------|-----------------|----|------|----|----------------|----|------------|----|-------------------|---------------|----------------|---------------------|
| For Ø                        | CR<br>Ø<br>D11 | FK<br>Ø<br>±0.1 | FN | FS   | H1 | HB<br>Ø<br>H13 | NH | TH<br>±0.2 | UL | CRC <sup>1)</sup> | Weight<br>[g] | Part No.       | Type                |
| [mm]                         |                |                 |    |      |    |                |    |            |    |                   |               |                |                     |
| 32                           | 12             | 15              | 30 | 10.5 | 15 | 6.6            | 18 | 32         | 46 | 4                 | 205           | <b>161 874</b> | <b>CRLNZG-32</b>    |
| 40, 50                       | 16             | 18              | 36 | 12   | 18 | 9              | 21 | 36         | 55 | 4                 | 323           | <b>161 875</b> | <b>CRLNZG-40/50</b> |
| 63, 80                       | 20             | 20              | 40 | 13   | 20 | 11             | 23 | 42         | 65 | 4                 | 435           | <b>161 876</b> | <b>CRLNZG-63/80</b> |

1) Corrosion resistance class 4 according to Festo standard 940 070  
Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

# Compact cylinders CDC, ISO 21287, Clean Design

FESTO

Accessories

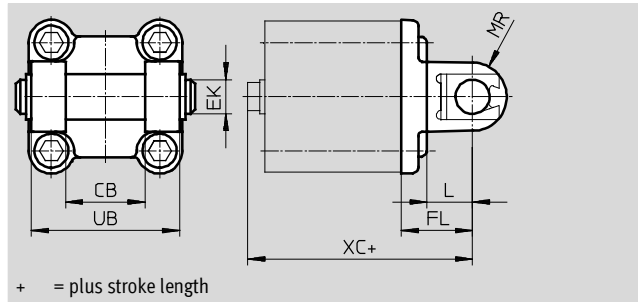
## Swivel flange SNCB-...-R3

Material:

Die-cast aluminium with protective coating, high corrosion protection

Free of copper and PTFE

RoHS-compliant



| Dimensions and ordering data |     |         |      |    |     |     |    |                   |        |          |            |
|------------------------------|-----|---------|------|----|-----|-----|----|-------------------|--------|----------|------------|
| For Ø                        | CB  | EK<br>Ø | FL   | L  | MR  | UB  | XC | CRC <sup>1)</sup> | Weight | Part No. | Type       |
| [mm]                         | H14 | e8      | ±0.2 |    |     | h14 |    |                   | [g]    |          |            |
| 32                           | 26  | 10      | 22   | 13 | 8.5 | 45  | 72 | 3                 | 100    | 176 944  | SNCB-32-R3 |
| 40                           | 28  | 12      | 25   | 16 | 12  | 52  | 76 | 3                 | 151    | 176 945  | SNCB-40-R3 |
| 50                           | 32  | 12      | 27   | 16 | 12  | 60  | 80 | 3                 | 228    | 176 946  | SNCB-50-R3 |
| 63                           | 40  | 16      | 32   | 21 | 16  | 70  | 89 | 3                 | 371    | 176 947  | SNCB-63-R3 |
| 80                           | 50  | 16      | 36   | 22 | 16  | 90  | 99 | 3                 | 632    | 176 948  | SNCB-80-R3 |

1) Corrosion resistance class 3 according to Festo standard 940 070

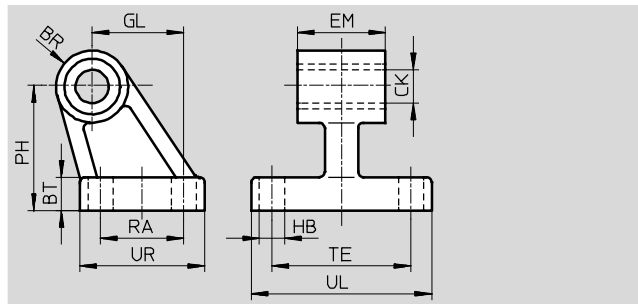
Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface.

## Clevis foot CRLNG

Material:

High-alloy steel

Free of copper and PTFE



| Dimensions and ordering data |    |    |         |      |    |         |    |    |    |    |    |                   |        |
|------------------------------|----|----|---------|------|----|---------|----|----|----|----|----|-------------------|--------|
| For Ø                        | BR | BT | CK<br>Ø | EM   | GL | HB<br>Ø | PH | RA | TE | UL | UR | CRC <sup>1)</sup> | Weight |
| [mm]                         |    |    | D11     | -0.4 |    | H13     |    |    |    |    |    |                   | [g]    |
| 32                           | 10 | 8  | 10      | 25.8 | 21 | 6.6     | 32 | 18 | 38 | 51 | 31 | 4                 | 120    |
| 40                           | 11 | 10 | 12      | 27.8 | 24 | 6.6     | 36 | 22 | 41 | 54 | 35 | 4                 | 160    |
| 50                           | 12 | 12 | 12      | 31.8 | 33 | 9       | 45 | 30 | 50 | 65 | 45 | 4                 | 280    |
| 63                           | 15 | 12 | 16      | 39.8 | 37 | 9       | 50 | 35 | 52 | 67 | 50 | 4                 | 375    |
| 80                           | 15 | 14 | 16      | 49.8 | 47 | 11      | 63 | 40 | 66 | 86 | 60 | 4                 | 580    |

1) Corrosion resistance class 4 according to Festo standard 940 070

Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

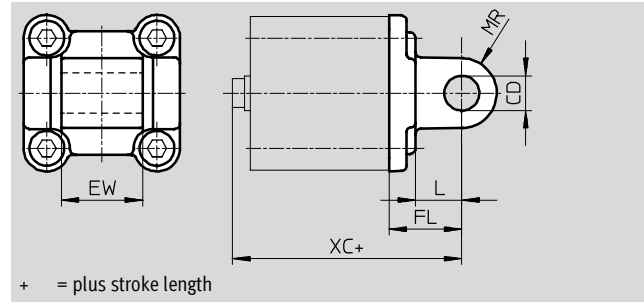
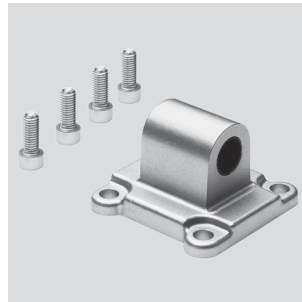
# Compact cylinders CDC, ISO 21287, Clean Design

FESTO

Accessories

## Swivel flange SNCL-...-R3

Material:  
SNCL-...-R3: Die-cast aluminium with  
protective coating  
Free of copper and PTFE  
RoHS-compliant

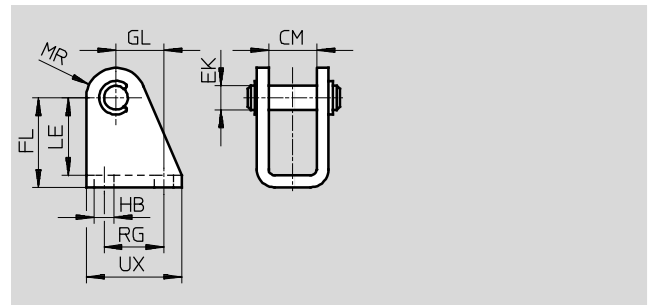


| Dimensions and ordering data |    |     |      |    |    |    |                   |        |          |            |  |
|------------------------------|----|-----|------|----|----|----|-------------------|--------|----------|------------|--|
| For Ø                        | CD | EW  | FL   | L  | MR | XC | CRC <sup>1)</sup> | Weight | Part No. | Type       |  |
| [mm]                         | Ø  | h12 | ±0.2 |    |    |    |                   | [g]    |          |            |  |
| 20                           | 8  | 16  | 20   | 14 | 8  | 63 | 3                 | 40     | 537 796  | SNCL-20-R3 |  |
| 25                           |    |     |      |    |    | 65 | 3                 | 45     | 537 797  | SNCL-25-R3 |  |

- 1) Corrosion resistance class 3 according to Festo standard 940 070  
Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface.

## Clevis foot CRLBN, stainless steel

Material:  
High-alloy steel  
Free of copper and PTFE



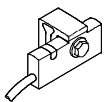
| Dimensions and ordering data |      |    |              |    |     |    |    |    |    |                   |        |                     |
|------------------------------|------|----|--------------|----|-----|----|----|----|----|-------------------|--------|---------------------|
| For Ø                        | CM   | EK | FL           | GL | HB  | LE | MR | RG | UX | CRC <sup>1)</sup> | Weight | Part No. Type       |
| [mm]                         |      | Ø  |              |    |     |    |    |    |    |                   | [g]    |                     |
| 20/25                        | 16.1 | 8  | 30 +0.4/-0.2 | 16 | 6.6 | 26 | 10 | 20 | 32 | 4                 | 62     | 161 863 CRLBN-20/25 |

- 1) Corrosion resistance class 4 according to Festo standard 940 070  
Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

## Compact cylinders CDC, ISO 21287, Clean Design

Accessories

**FESTO**

| Ordering data – Proximity sensors for T-slot, magneto-resistive                   |                                 |                  |                       |                  | Technical data → Internet: smt |                         |
|-----------------------------------------------------------------------------------|---------------------------------|------------------|-----------------------|------------------|--------------------------------|-------------------------|
|                                                                                   | Type of mounting                | Switching output | Electrical connection | Cable length [m] | Part No.                       | Type                    |
| N/O contact                                                                       |                                 |                  |                       |                  |                                |                         |
|  | Is mounted on the mounting rail | PNP              | Cable, 3-wire         | 5.0              | 571 339                        | SMT-C1-PS-24V-K-5,0-OE  |
|                                                                                   |                                 |                  | Plug M8x1, 3-pin      | 0.3              | 571 342                        | SMT-C1-PS-24V-K-0,3-M8D |
|                                                                                   |                                 |                  | Plug M12x1, 3-pin     | 0.3              | 571 341                        | SMT-C1-PS-24V-K-0,3-M12 |

| Ordering data – Connecting cables for SMT-C1-...                                  |                               |                              |                  | Technical data → Internet: nebu |                      |
|-----------------------------------------------------------------------------------|-------------------------------|------------------------------|------------------|---------------------------------|----------------------|
|                                                                                   | Electrical connection, left   | Electrical connection, right | Cable length [m] | Part No.                        | Type                 |
|  | Straight socket, M8x1, 3-pin  | Cable, open end, 3-wire      | 2.5              | 541 333                         | NEBU-M8G3-K-2.5-LE3  |
|                                                                                   |                               |                              | 5                | 541 334                         | NEBU-M8G3-K-5-LE3    |
|                                                                                   | Straight socket, M12x1, 5-pin | Cable, open end, 3-wire      | 2.5              | 541 363                         | NEBU-M12G5-K-2.5-LE3 |
|                                                                                   |                               |                              | 5                | 541 364                         | NEBU-M12G5-K-5-LE3   |
|  | Angled socket, M8x1, 3-pin    | Cable, open end, 3-wire      | 2.5              | 541 338                         | NEBU-M8W3-K-2.5-LE3  |
|                                                                                   |                               |                              | 5                | 541 341                         | NEBU-M8W3-K-5-LE3    |
|                                                                                   | Angled socket, M12x1, 5-pin   | Cable, open end, 3-wire      | 2.5              | 541 367                         | NEBU-M12W5-K-2.5-LE3 |
|                                                                                   |                               |                              | 5                | 541 370                         | NEBU-M12W5-K-5-LE3   |

| Ordering data – Connecting cables for integrated proximity sensor                   |                              |                              |                  | Technical data → Internet: sim |                  |
|-------------------------------------------------------------------------------------|------------------------------|------------------------------|------------------|--------------------------------|------------------|
|                                                                                     | Electrical connection, left  | Electrical connection, right | Cable length [m] | Part No.                       | Type             |
|  | Straight socket, M8x1, 3-pin | Cable, open end, 3-wire      | 2.5              | 525 259                        | SIM-K-GD-2,5-CDN |
|                                                                                     |                              |                              | 5                | 525 260                        | SIM-K-GD-5-CDN   |
|  | Angled socket, M8x1, 3-pin   | Cable, open end, 3-wire      | 2.5              | 525 261                        | SIM-K-WD-2,5-CDN |
|                                                                                     |                              |                              | 5                | 525 262                        | SIM-K-WD-5-CDN   |

-  - Note

The connecting cables SIM... are suitable for foodstuffs, resistant to cleaning and disinfecting agents to DIN 11483.

# Compact cylinders CDC, ISO 21287, Clean Design

Accessories

**FESTO**

| Ordering data – Push-in fittings                                                  |            |                   |                                        | Technical data → Internet: quick star |          |                             |                  |  |  |  |
|-----------------------------------------------------------------------------------|------------|-------------------|----------------------------------------|---------------------------------------|----------|-----------------------------|------------------|--|--|--|
|                                                                                   | Connection |                   | Material                               | Weight [g]                            | Part No. | Type                        | PU <sup>3)</sup> |  |  |  |
|                                                                                   | Thread     | Tubing O.D.       |                                        |                                       |          |                             |                  |  |  |  |
| With external hex                                                                 |            |                   |                                        |                                       |          |                             |                  |  |  |  |
|  | M5         | 4                 | Brass, nickel-plated and chrome-plated | 6.1                                   | 533 844  | QS-F-M5-4 <sup>1)</sup>     | 10               |  |  |  |
|                                                                                   |            | 6                 |                                        | 9.3                                   | 533 845  | QS-F-M5-6 <sup>1)</sup>     |                  |  |  |  |
|                                                                                   | G1/8       | 4                 |                                        | 8                                     | 193 408  | QS-F-G1/8-4 <sup>1)</sup>   |                  |  |  |  |
|                                                                                   |            | 6                 |                                        | 12                                    | 193 409  | QS-F-G1/8-6 <sup>1)</sup>   |                  |  |  |  |
|                                                                                   |            | 8                 |                                        | 14                                    | 193 410  | QS-F-G1/8-8 <sup>1)</sup>   |                  |  |  |  |
|                                                                                   |            |                   |                                        |                                       |          |                             |                  |  |  |  |
|  | M5         | 4                 | Stainless steel                        | 6                                     | 162 860  | CRQS-M5-4 <sup>1)</sup>     | 1                |  |  |  |
|                                                                                   |            | 6                 |                                        | 8.4                                   | 162 861  | CRQS-M5-6 <sup>1)</sup>     |                  |  |  |  |
|                                                                                   | R1/8       | 6                 |                                        | 9.9                                   | 162 862  | CRQS-1/8-6 <sup>2)</sup>    |                  |  |  |  |
|                                                                                   |            | 8                 |                                        | 13                                    | 162 863  | CRQS-1/8-8 <sup>2)</sup>    |                  |  |  |  |
|                                                                                   |            |                   |                                        |                                       |          |                             |                  |  |  |  |
|                                                                                   |            | With internal hex |                                        |                                       |          |                             |                  |  |  |  |
|  | M5         | 4                 | Brass, nickel-plated and chrome-plated | 6                                     | 533 924  | QS-F-M5-4-I <sup>1)</sup>   | 10               |  |  |  |
|                                                                                   |            | 6                 |                                        | 9                                     | 537 014  | QS-F-M5-6-I <sup>1)</sup>   |                  |  |  |  |
|                                                                                   | G1/8       | 4                 |                                        | 8.6                                   | 533 927  | QS-F-G1/8-4-I <sup>1)</sup> |                  |  |  |  |
|                                                                                   |            | 6                 |                                        | 13.4                                  | 533 928  | QS-F-G1/8-6-I <sup>1)</sup> |                  |  |  |  |
|                                                                                   |            | 8                 |                                        | 13.1                                  | 533 929  | QS-F-G1/8-8-I <sup>1)</sup> |                  |  |  |  |
|                                                                                   |            |                   |                                        |                                       |          |                             |                  |  |  |  |

- 1) With sealing ring  
 2) With PTFE coating  
 3) Packaging unit quantity

| Ordering data – Push-in L-fittings                                                  |            |             |                                        |            | Technical data → Internet: quick star |                          |                  |  |
|-------------------------------------------------------------------------------------|------------|-------------|----------------------------------------|------------|---------------------------------------|--------------------------|------------------|--|
|                                                                                     | Connection |             | Material                               | Weight [g] | Part No.                              | Type                     | PU <sup>3)</sup> |  |
|                                                                                     | Thread     | Tubing O.D. |                                        |            |                                       |                          |                  |  |
| With external hex                                                                   |            |             |                                        |            |                                       |                          |                  |  |
|  | M5         | 4           | Brass, nickel-plated and chrome-plated | 10.1       | 533 849                               | QSL-F-M5-4 <sup>1)</sup> | 10               |  |
|                                                                                     |            | 6           |                                        | 14.7       | 533 850                               | QSL-F-M5-6 <sup>1)</sup> |                  |  |
|                                                                                     | G½         | 4           |                                        | 17.6       | 193 418                               | QSL-F-G½-4 <sup>1)</sup> |                  |  |
|                                                                                     |            | 6           |                                        | 16         | 193 419                               | QSL-F-G½-6 <sup>1)</sup> |                  |  |
|                                                                                     |            | 8           |                                        | 20         | 193 420                               | QSL-F-G½-8 <sup>1)</sup> |                  |  |
|                                                                                     |            |             |                                        |            |                                       |                          |                  |  |
|  | M5         | 4           | Stainless steel                        | 13         | 162 870                               | CRQSL-M5-4 <sup>1)</sup> | 1                |  |
|                                                                                     |            | 6           |                                        | 19         | 162 871                               | CRQSL-M5-6 <sup>1)</sup> |                  |  |
|                                                                                     | R½         | 6           |                                        | 20         | 162 872                               | CRQSL-½-6 <sup>2)</sup>  |                  |  |
|                                                                                     |            | 8           |                                        | 27         | 162 873                               | CRQSL-½-8 <sup>2)</sup>  |                  |  |

- 1) With sealing ring  
 2) With PTFE coating  
 3) Packaging unit quantity

# Compact cylinders CDC, ISO 21287, Clean Design

Accessories

**FESTO**

| Ordering data – Plastic tubing, standard O.D.                                     |                                                                     |       | Technical data → Internet: tubing |
|-----------------------------------------------------------------------------------|---------------------------------------------------------------------|-------|-----------------------------------|
|                                                                                   |                                                                     | Type  |                                   |
|  | Good resistance to chemicals and hydrolysis                         | PLN   |                                   |
|                                                                                   | Pneumatic tubing with resistance to high temperatures and chemicals | PFAN  |                                   |
|                                                                                   | Approved for use in the food industry and hydrolysis-resistant      | PUN-H |                                   |

| Ordering data – One-way flow control valves                                       |            |                     |                                                 |            | Technical data → Internet: <a href="#">crgla</a> |              |
|-----------------------------------------------------------------------------------|------------|---------------------|-------------------------------------------------|------------|--------------------------------------------------|--------------|
|                                                                                   | Connection |                     | Material                                        | Weight [g] | Part No.                                         | Type         |
|                                                                                   | Thread     | For push-in fitting |                                                 |            |                                                  |              |
|  | M5         | CRQS/CRQSL/CRQST,   | Electrolytically polished special steel casting | 14         | 161 403                                          | CRGRLA-M5-B  |
|                                                                                   | G1/8       | Quick Star          |                                                 | 44         | 161 404                                          | CRGRLA-1/8-B |

| Ordering data – Blanking screws, corrosion-resistant                              |        |                  |                   |            |                                        |                  |
|-----------------------------------------------------------------------------------|--------|------------------|-------------------|------------|----------------------------------------|------------------|
|                                                                                   | For Ø  | Material         | CRC <sup>1)</sup> | Weight [g] | Part No. Type                          | PU <sup>3)</sup> |
|  | 20, 25 | High-alloy steel | 3                 | 5.5        | 543 714 DAMD-P-M5-10-R1 <sup>2)</sup>  | 4                |
|                                                                                   | 32, 40 |                  |                   | 9          | 543 715 DAMD-P-M6-12-R1 <sup>2)</sup>  |                  |
|                                                                                   | 50, 63 |                  |                   | 17.5       | 543 716 DAMD-P-M8-16-R1 <sup>2)</sup>  |                  |
|                                                                                   | 80     |                  |                   | 30         | 543 717 DAMD-P-M10-16-R1 <sup>2)</sup> |                  |

1) Corrosion resistance class 3 according to Festo standard 940 070

Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface.

2) With sealing ring

3) Packaging unit quantity

| Ordering data – Corrosion and acid-resistant piston rod attachments                 |        |          |                | Technical data → Internet: crsg                                                     |        |          |               |
|-------------------------------------------------------------------------------------|--------|----------|----------------|-------------------------------------------------------------------------------------|--------|----------|---------------|
| Designation                                                                         | For Ø  | Part No. | Type           | Designation                                                                         | For Ø  | Part No. | Type          |
| Rod eye CRSGS                                                                       |        |          |                | Rod clevis CRSG                                                                     |        |          |               |
|  | 20, 25 | 195 581  | CRSGS-M8       |  | 20, 25 | 13 568   | CRSG-M8       |
|                                                                                     | 32, 40 | 195 582  | CRSGS-M10x1,25 |                                                                                     | 32, 40 | 13 569   | CRSG-M10x1,25 |
|                                                                                     | 50, 63 | 195 583  | CRSGS-M12x1,25 |                                                                                     | 50, 63 | 13 570   | CRSG-M12x1,25 |
|                                                                                     | 80     | 195 584  | CRSGS-M16x1,5  |                                                                                     | 80     | 13 571   | CRSG-M16x1,5  |