

**Standard cylinders CDN, ISO 15552, Clean Design**

**FESTO**



## Standard cylinders CDN, ISO 15552, Clean Design

Key features

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### Design



DIN



- Standards-based cylinders to ISO 15552 (corresponds to the withdrawn standards ISO 6431, DIN ISO 6431, VDMA 24 562, NF E 49 003.1 and UNI 10290)

### 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 mount

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

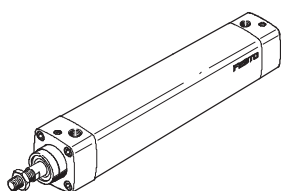
### Flexible

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

| Symbol | Key features                       | Description                                                                                                                                           |
|--------|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
|        | A3 Unlubricated operation          | Cleaning processes degrease the piston rod. A special piston rod seal permits a longer service life compared to the standard seal.                    |
|        | S2 Through piston rod              | For working at both ends with the same force in the forward and return stroke, for attaching external stops.                                          |
|        | K2 Extended male piston rod thread | –                                                                                                                                                     |
|        | K3 Female piston rod thread        | –                                                                                                                                                     |
|        | K8 Extended piston rod             | –                                                                                                                                                     |
|        | S6 Heat-resistant seals            | Temperature resistance up to max. 120 °C.<br>The seals used and the grease mean that this variant is not suitable for direct contact with foodstuffs. |

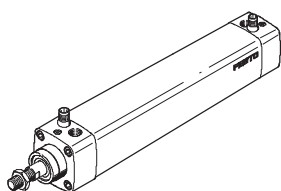
CDN-...

- Ø 32 ... 100 mm
- Without position sensing



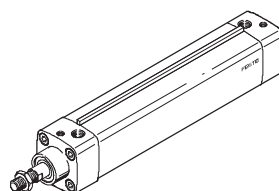
CDN-...A...-R

- Ø 32 ... 100 mm
- With position sensing integrated in the end positions



CDN-...A-R

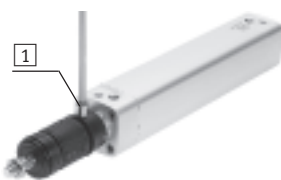
- Ø 32 ... 100 mm
- With sensor mounting rail for external position sensing



### Note

A combination of integrated and external position sensing is possible.

### Longer service life thanks to the bellows kit DADB



The bellows kit is a leak-free system. To prevent unwanted media being drawn in, the supply and exhaust air must be ducted via a venting hole in the connection part **1**.

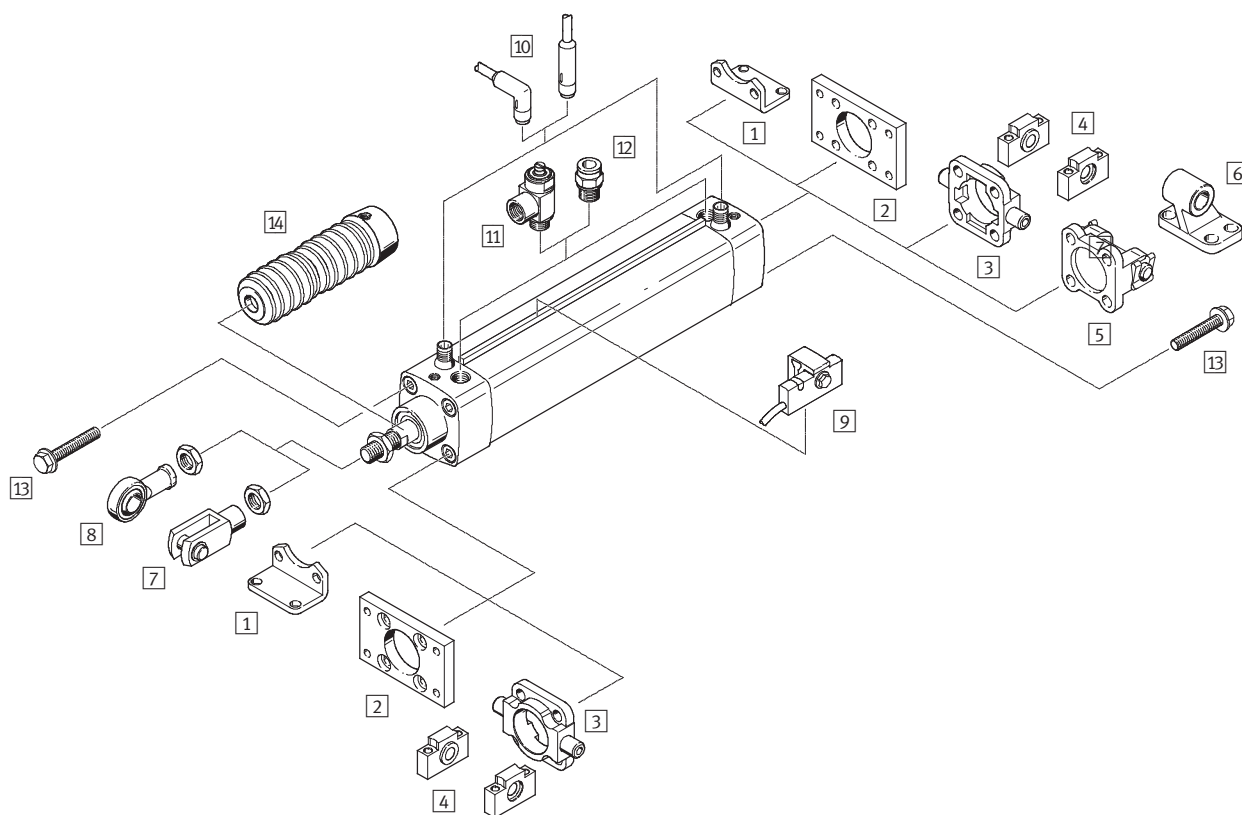
The kit protects the piston rod, seal and bearings from a wide range of media, for example:

- dust,
- chips,
- oil,
- grease,
- fuel.

## Standard cylinders CDN, ISO 15552, Clean Design

Peripherals overview

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| Mounting attachments and accessories |                                           |                                                                                                                                                                                                      |
|--------------------------------------|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                      | Brief description                         | → Page/Internet                                                                                                                                                                                      |
| 1                                    | Foot mounting<br>CRHNC                    | For bearing and end caps                                                                                                                                                                             |
| 2                                    | Flange mounting<br>CRFNG                  | – For bearing or end caps<br>– Cannot be used on the bearing cap in combination with bellows kit DADB                                                                                                |
| 3                                    | Trunnion flange<br>CRZNG                  | – For bearing or end caps in combination with trunnion supports CRLNZG<br>– Cannot be used on the bearing cap in combination with bellows kit DADB                                                   |
| 4                                    | Trunnion supports<br>CRLNZG               | For swivel mounting CRZNG                                                                                                                                                                            |
| 5                                    | Swivel flange<br>SNCB- ... -R3            | For end caps                                                                                                                                                                                         |
| 6                                    | Clevis foot<br>CRLNG                      | For swivel flange SNCB- ... -R3                                                                                                                                                                      |
| 7                                    | Rod clevis<br>CRSG                        | Permits a swivelling movement of the cylinder in one plane                                                                                                                                           |
| 8                                    | Rod eye<br>CRSGS                          | With spherical bearing                                                                                                                                                                               |
| 9                                    | Proximity sensor<br>SMT-C1                | For attachment to the sensor mounting rail                                                                                                                                                           |
| 10                                   | Plug socket with cable<br>SIM-K- ... -CDN | – For electrical signal transmission and power supply<br>– With food industry approval                                                                                                               |
| 11                                   | One-way flow control valve<br>CRGRLA      | For regulating speed                                                                                                                                                                                 |
| 12                                   | Push-in fittings<br>QS-F/QSL-F/CRQS/CRQSL | For connecting compressed air tubing with standard outside diameter                                                                                                                                  |
| 13                                   | Blanking screws<br>CR                     | For covering unused mounting threads                                                                                                                                                                 |
| 14                                   | Bellows kit<br>DADB                       | – Protects the cylinder (piston rod, seal and bearings) against a wide range of media and thus prevents premature wear<br>– The kit can only be used in combination with an extended piston rod (K8) |

# Standard cylinders CDN, ISO 15552, Clean Design

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Type codes

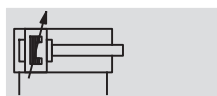
|                             |                                                    |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
|-----------------------------|----------------------------------------------------|-----|---|----|---|-----|---|-----|---|-----|---|-----|---|--|---|---|---|----|
|                             |                                                    | CDN | - | 50 | - | 200 | - | PPV | - | AIB | - | SME | - |  | - | R | - | K2 |
| <b>Type</b>                 |                                                    |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| Double-acting               |                                                    |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| CDN                         | Standard cylinder, Clean Design                    |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| <b>Piston Ø [mm]</b>        |                                                    |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| <b>Stroke [mm]</b>          |                                                    |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| <b>Cushioning</b>           |                                                    |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| PPV                         | Pneumatic cushioning, adjustable at both ends      |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| <b>Position sensing</b>     |                                                    |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| A                           | Via proximity sensor                               |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| AIB                         | At both ends, integrated                           |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| AIV                         | Front, integrated                                  |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| AIH                         | Rear, integrated                                   |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| <b>Proximity sensor</b>     |                                                    |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| SME                         | Contacting (magnetic reed)                         |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| SMT                         | Non-contacting (magneto-resistive)                 |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| <b>Wiper seal material</b>  |                                                    |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| A3                          | Suitable for unlubricated operation                |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| <b>Sensor mounting rail</b> |                                                    |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| R                           | For external position sensing                      |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| <b>Variant</b>              |                                                    |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| S2                          | Through piston rod                                 |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| K2                          | Extended male piston rod thread                    |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| K3                          | Female piston rod thread                           |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| K8                          | Extended piston rod                                |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |
| S6                          | Heat-resistant seals for temperatures up to 120 °C |     |   |    |   |     |   |     |   |     |   |     |   |  |   |   |   |    |

# Standard cylinders CDN, ISO 15552, Clean Design

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Technical data

Function

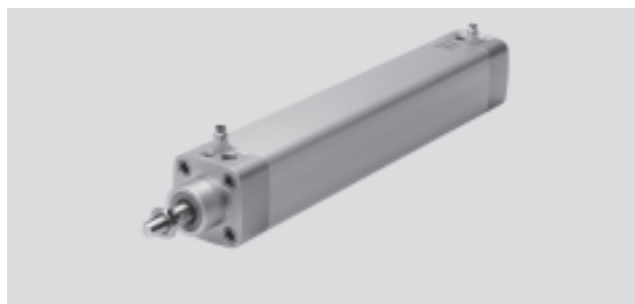


- N- Diameter  
32 ... 100 mm
- T- Stroke length  
10 ... 2,000 mm

- Standards-based cylinders to ISO 15552 (corresponds to the withdrawn standards ISO 6431, DIN ISO 6431, VDMA 24 562, NF E 49 003.1 and UNI 10290)



DIN



[www.festo.com/en/Spare\\_parts\\_service](http://www.festo.com/en/Spare_parts_service)

Wearing parts kits  
→ 9

| General technical data |      |                                               |                 |                 |                 |                 |                 |
|------------------------|------|-----------------------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Piston Ø               |      | 32                                            | 40              | 50              | 63              | 80              | 100             |
| Pneumatic connection   |      | G $\frac{1}{8}$                               | G $\frac{1}{4}$ | G $\frac{1}{4}$ | G $\frac{3}{8}$ | G $\frac{3}{8}$ | G $\frac{1}{2}$ |
| Piston rod thread      |      | M10x1.25                                      | M12x1.25        | M16x1.5         | M16x1.5         | M20x1.5         | M20x1.5         |
| Constructional design  |      | Piston                                        |                 |                 |                 |                 |                 |
|                        |      | Piston rod                                    |                 |                 |                 |                 |                 |
|                        |      | Cylinder barrel                               |                 |                 |                 |                 |                 |
| Cushioning             |      | Pneumatic cushioning, adjustable at both ends |                 |                 |                 |                 |                 |
| Cushioning length      | [mm] | 20                                            | 20              | 22              | 22              | 32              | 32              |
| Position sensing       | A    | Via proximity sensor                          |                 |                 |                 |                 |                 |
|                        | AIB  | At both ends, integrated                      |                 |                 |                 |                 |                 |
|                        | AIV  | Front, integrated                             |                 |                 |                 |                 |                 |
|                        | AIH  | Rear, integrated                              |                 |                 |                 |                 |                 |
| Type of mounting       |      | Via female thread                             |                 |                 |                 |                 |                 |
|                        |      | Via accessories                               |                 |                 |                 |                 |                 |
| Mounting position      |      | Any                                           |                 |                 |                 |                 |                 |

| Operating and environmental conditions       |                                                     |
|----------------------------------------------|-----------------------------------------------------|
| Operating medium                             | Filtered compressed air, lubricated or unlubricated |
| Operating pressure [bar]                     | 0.6 ... 12                                          |
| Ambient temperature <sup>1)</sup> [°C]       | -20 ... +80                                         |
| S6 [°C]                                      | 0 ... +120                                          |
| CE mark (see declaration of conformity)      | To EU EMC Directive <sup>2)</sup>                   |
| Corrosion resistance class CRC <sup>3)</sup> | 3                                                   |

1) Note operating range of proximity sensors.

2) For information about the applicability of the component see the manufacturer's EC declaration of conformity at: [www.festo.com](http://www.festo.com) → Support → User documentation.

If the component is subject to restrictions on usage in residential, office or commercial environments or small businesses, further measures to reduce the emitted interference may be necessary.

3) Corrosion resistance class 3 as per 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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Technical data

| Forces [N] and impact energy [J]        |     |      |       |       |       |       |
|-----------------------------------------|-----|------|-------|-------|-------|-------|
| Piston Ø                                | 32  | 40   | 50    | 63    | 80    | 100   |
| Theoretical force at 6 bar, advancing   | 483 | 754  | 1,178 | 1,870 | 3,016 | 4,712 |
| Theoretical force at 6 bar, retracting  | 415 | 633  | 990   | 1,682 | 2,721 | 4,418 |
| Max. impact energy at the end positions | 0.4 | 0.7  | 1.0   | 1.3   | 1.6   | 1.6   |
| S6                                      | 0.2 | 0.35 | 0.5   | 0.65  | 0.8   | 0.8   |

Permissible impact velocity:

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

Maximum permissible load:

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

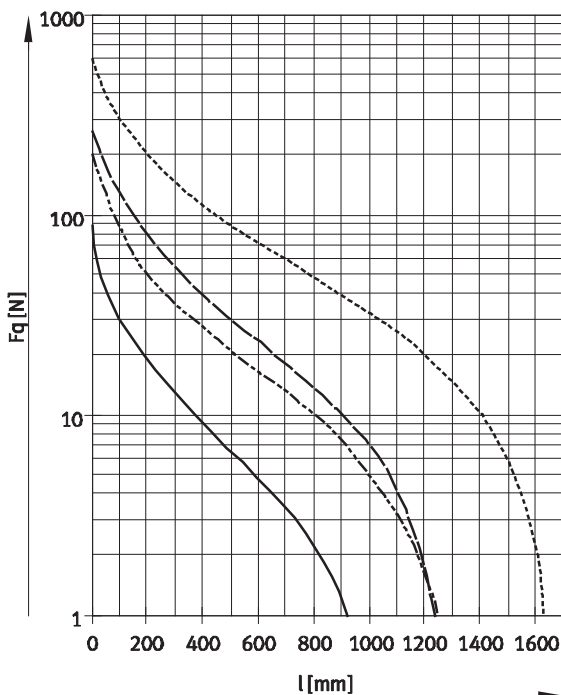
$v_{perm.}$  Permissible impact velocity  
 $E_{perm.}$  Max. impact energy  
 $m_{intrinsic}$  Moving load (drive)  
 $m_{load}$  Moving effective load

## Note

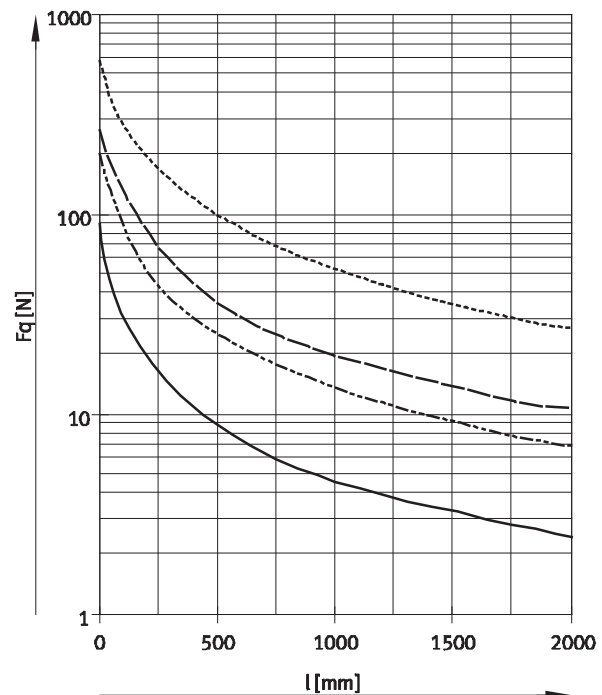
This data represents the maximum values that can be achieved. The maximum permissible impact energy must be observed.

## Max. lateral force $F_q$ as a function of stroke length $l$

Horizontal mounting



Vertical mounting



— Ø 32  
 - - - Ø 40  
 - · - Ø 50, 63  
 - - - - Ø 80, 100

# Standard cylinders CDN, ISO 15552, Clean Design

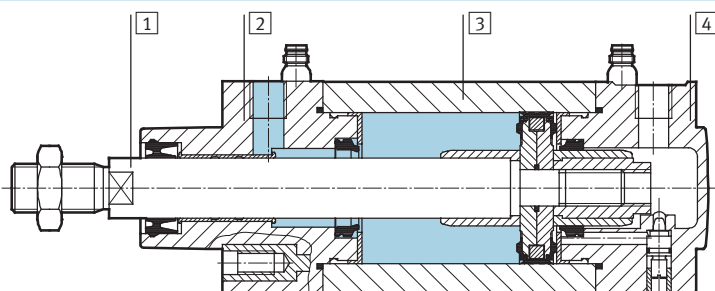
FESTO

Technical data

| Weight [g]                         |     |       |       |       |       |       |
|------------------------------------|-----|-------|-------|-------|-------|-------|
| Piston Ø                           | 32  | 40    | 50    | 63    | 80    | 100   |
| Basic version                      |     |       |       |       |       |       |
| Product weight with 0 mm stroke    | 600 | 920   | 1,530 | 2,140 | 3,151 | 4,820 |
| Additional weight per 10 mm stroke | 33  | 42    | 65    | 70    | 137   | 158   |
|                                    |     |       |       |       |       |       |
| Moving load with 0 mm stroke       | 130 | 250   | 450   | 510   | 1,131 | 1,544 |
| Additional load per 10 mm stroke   | 9   | 16    | 25    | 25    | 137   | 158   |
|                                    |     |       |       |       |       |       |
| S2 – Through piston rod            |     |       |       |       |       |       |
| Product weight with 0 mm stroke    | 715 | 1,130 | 1,920 | 2,570 | 3,613 | 5,389 |
| Additional weight per 10 mm stroke | 42  | 58    | 90    | 95    | 175   | 196   |
|                                    |     |       |       |       |       |       |
| Moving load with 0 mm stroke       | 210 | 420   | 780   | 860   | 1,392 | 1,872 |
| Additional load per 10 mm stroke   | 18  | 32    | 50    | 50    | 76    | 76    |

## Materials

Sectional view



| Standard cylinder   | Basic version                | S6            | A3           |
|---------------------|------------------------------|---------------|--------------|
| 1 Piston rod        | High-alloy steel             |               |              |
| 2 Bearing cap       | Anodised aluminium           |               |              |
| 3 Cylinder barrel   | Anodised aluminium           |               |              |
| 4 End cap           | Die-cast aluminium           |               |              |
| – Seals             | Polyurethane, nitrile rubber | Fluoro rubber | Polyethylene |
| – Note on materials | Free of copper and PTFE      |               |              |

# Standard cylinders CDN, ISO 15552, Clean Design

Technical data

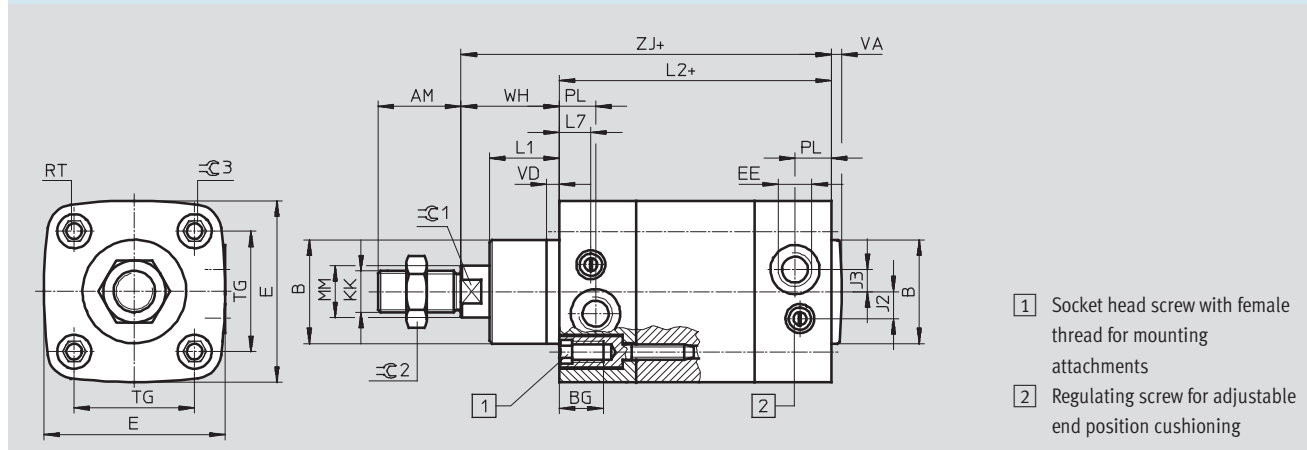
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## Dimensions

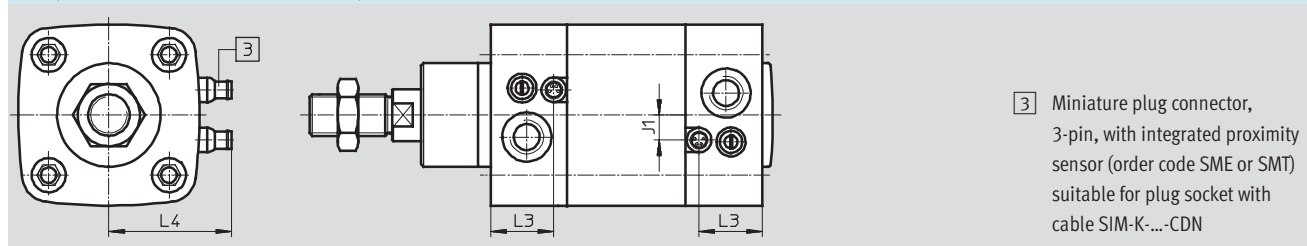
Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)

Basic version

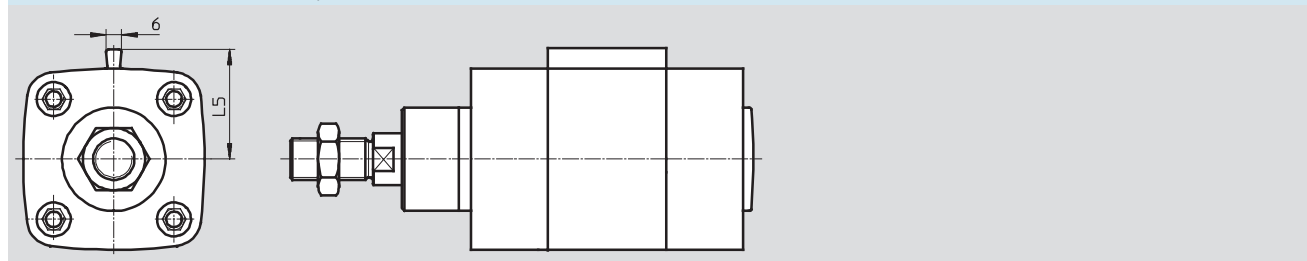
and A3 – unlubricated operation



## With position sensing integrated in the end positions



## With sensor mounting rail for external position sensing



| Ø    | AM | B     | BG   | E   | EE              | J1   | J2   | J3   | KK       | L1   | L2       | L3   | L4 |
|------|----|-------|------|-----|-----------------|------|------|------|----------|------|----------|------|----|
| [mm] |    | Ø d11 | min. |     |                 |      |      |      |          |      |          |      | ±2 |
| 32   | 22 | 30    | 16   | 50  | G $\frac{3}{8}$ | 6    | 6    | 5.5  | M10x1.25 | 18   | 94 ±0.4  | 23.2 | 35 |
| 40   | 24 | 35    | 16   | 58  | G $\frac{1}{4}$ | 8.5  | 8.4  | 6.5  | M12x1.25 | 21   | 105 ±0.4 | 28.2 | 39 |
| 50   | 32 | 40    | 17   | 70  | G $\frac{3}{4}$ | 9    | 9    | 8.5  | M16x1.5  | 28   | 106 ±0.4 | 28.2 | 45 |
| 63   | 32 | 45    | 17   | 81  | G $\frac{3}{8}$ | 14   | 14   | 11   | M16x1.5  | 28.5 | 121 ±0.4 | 35.7 | 50 |
| 80   | 40 | 45    | 17   | 100 | G $\frac{3}{8}$ | 21.5 | 14.5 | 8    | M20x1.5  | 34.5 | 128 ±0.8 | 30.6 | 60 |
| 100  | 40 | 55    | 17   | 120 | G $\frac{1}{2}$ | 22   | 16   | 17.5 | M20x1.5  | 38   | 138 ±1   | 33.5 | 70 |

| Ø    | L5   | L7   | MM | PL   | RT  | TG   | VA | VD | WH   | ZJ  | ⌀1 | ⌀2 | ⌀3 |
|------|------|------|----|------|-----|------|----|----|------|-----|----|----|----|
| [mm] |      |      | Ø  |      |     |      |    |    | ±1.4 |     |    |    |    |
| 32   | 30   | 10.5 | 12 | 17   | M6  | 32.5 | 4  | 5  | 26   | 120 | 10 | 17 | 6  |
| 40   | 34   | 16   | 16 | 22   | M6  | 38   | 4  | 5  | 30   | 135 | 13 | 19 | 6  |
| 50   | 40   | 12   | 20 | 20   | M8  | 46.5 | 4  | 5  | 37   | 143 | 17 | 24 | 8  |
| 63   | 45.5 | 17.5 | 20 | 26   | M8  | 56.5 | 4  | 5  | 37   | 158 | 17 | 24 | 8  |
| 80   | 55   | 15.4 | 25 | 16.4 | M10 | 72   | 4  | 5  | 46   | 174 | 22 | 30 | 6  |
| 100  | 65   | 15.8 | 25 | 19   | M10 | 89   | 4  | 5  | 51   | 189 | 22 | 30 | 6  |

# Standard cylinders CDN, ISO 15552, Clean Design

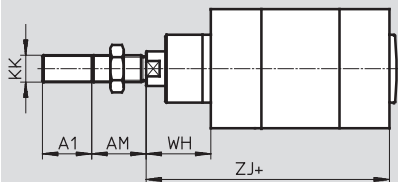
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Technical data

## Dimensions – Variants

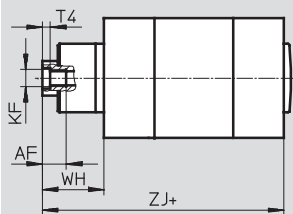
Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)

### K2 – Extended male piston rod thread



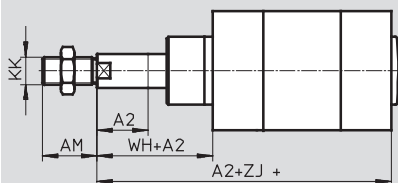
+ = plus stroke length

### K3 – Female piston rod thread



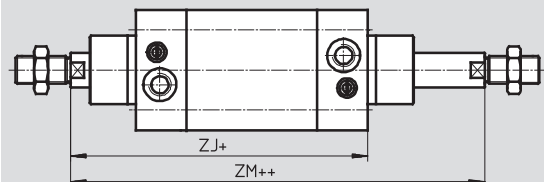
+ = plus stroke length

### K8 – Extended piston rod



+ = plus stroke length

### S2 – Through piston rod



+ = plus stroke length  
++ = plus 2x stroke length

| Ø    | AF | AM | A1   | A2   | KF  | KK       | T4  | WH   | ZJ  | ZM    |
|------|----|----|------|------|-----|----------|-----|------|-----|-------|
| [mm] |    |    | max. | max. |     |          |     | ±1.4 |     |       |
| 32   | 12 | 22 | 35   | 500  | M6  | M10x1.25 | 2.6 | 26   | 120 | 146.6 |
| 40   | 12 | 24 | 35   |      | M8  | M12x1.25 | 3.3 | 30   | 135 | 165.3 |
| 50   | 16 | 32 | 70   |      | M10 | M16x1.5  | 4.7 | 37   | 143 | 180.3 |
| 63   | 16 | 32 | 70   |      | M10 | M16x1.5  | 4.7 | 37   | 158 | 195.9 |
| 80   | 20 | 40 | 70   |      | M12 | M20x1.5  | 6.1 | 46   | 174 | 222   |
| 100  | 20 | 40 | 70   |      | M12 | M20x1.5  | 6.1 | 51   | 189 | 240   |

## Ordering data – Wearing parts kits

| Piston Ø | Part No. | Type                           | Piston Ø | Part No. | Type                            |
|----------|----------|--------------------------------|----------|----------|---------------------------------|
| [mm]     |          |                                | [mm]     |          |                                 |
| 32       | 397 440  | CDN-32-...-PPV-A <sup>1)</sup> | 63       | 397 443  | CDN-63-...-PPV-A <sup>1)</sup>  |
| 40       | 397 441  | CDN-40-...-PPV-A <sup>1)</sup> | 80       | 397 444  | CDN-80-...-PPV-A <sup>1)</sup>  |
| 50       | 397 442  | CDN-50-...-PPV-A <sup>1)</sup> | 100      | 397 445  | CDN-100-...-PPV-A <sup>1)</sup> |

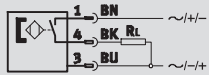
1) Assembly grease included in scope of delivery

# Standard cylinders CDN, ISO 15552, 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                        | DIN 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           |                                         |

# Standard cylinders CDN, ISO 15552, Clean Design



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 IEC 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                                                             |

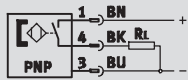
- 1) Corrosion resistance class 3 according to Festo standard 940 070  
Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface.

# Standard cylinders CDN, ISO 15552, 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                        | DIN 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           |                                         |

## Standard cylinders CDN, ISO 15552, 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 IEC 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.

# Standard cylinders CDN, ISO 15552, Clean Design

FESTO

Ordering data – Modular products

| M Mandatory data |     |          |       |                 | O Options |                        |            |                      |   |                      |       |                     |       |                        |
|------------------|-----|----------|-------|-----------------|-----------|------------------------|------------|----------------------|---|----------------------|-------|---------------------|-------|------------------------|
| Module No.       |     | Function |       | Stroke          |           | Position sensing       |            | Wiper seal material  |   | Type of piston rod   |       | Female thread       |       | Temperature resistance |
|                  |     | Piston Ø |       | Cushioning      |           | Proximity sensor       |            | Sensor mounting rail |   | Extended male thread |       | Extended piston rod |       |                        |
|                  |     | CDN      | 32    | 10 ...<br>2 000 | PPV       | A<br>AIB<br>AIV<br>AIH | SME<br>SMT | A3                   | R | S2                   | ...K2 | K3                  | ...K8 |                        |
|                  |     |          | 40    |                 |           |                        |            |                      |   |                      |       |                     |       |                        |
|                  |     |          | 50    |                 |           |                        |            |                      |   |                      |       |                     |       |                        |
|                  |     |          | 63    |                 |           |                        |            |                      |   |                      |       |                     |       |                        |
|                  |     |          | 80    |                 |           |                        |            |                      |   |                      |       |                     |       |                        |
|                  |     |          | 100   |                 |           |                        |            |                      |   |                      |       |                     |       |                        |
| Order example    |     |          |       |                 |           |                        |            |                      |   |                      |       |                     |       |                        |
| 193 663          | CDN | - 63     | - 900 | - PPV           | - AIV     | - SME                  | -          | -                    | - | - 30K2               | -     | -                   | -     |                        |

| Ordering table         |                                                    |                                                                     |         |         |         |          |         |            |        |            |  |  |      |  |  |
|------------------------|----------------------------------------------------|---------------------------------------------------------------------|---------|---------|---------|----------|---------|------------|--------|------------|--|--|------|--|--|
| Size                   |                                                    | 32                                                                  | 40      | 50      | 63      | 80       | 100     | Conditions | Code   | Enter code |  |  |      |  |  |
| M                      | Module No.                                         | 193 660                                                             | 193 661 | 193 662 | 193 663 | 193 664  | 193 665 |            |        |            |  |  |      |  |  |
|                        | Function                                           | Standard cylinder, double-acting, based on ISO 15552 (Clean Design) |         |         |         |          |         |            | CDN    |            |  |  | CDN  |  |  |
|                        | Piston Ø [mm]                                      | 32                                                                  | 40      | 50      | 63      | 80       | 100     |            | -...   |            |  |  |      |  |  |
|                        | Stroke [mm]                                        | 10 ... 2 000                                                        |         |         |         |          |         |            | -...   |            |  |  |      |  |  |
|                        | Cushioning                                         | Pneumatic cushioning, adjustable at both ends                       |         |         |         |          |         |            | -PPV   |            |  |  | -PPV |  |  |
| O                      | Position sensing                                   | Via proximity sensor                                                |         |         |         |          |         | 1          | -A     |            |  |  |      |  |  |
|                        |                                                    | At both ends, integrated                                            |         |         |         |          |         | 2          | -AIB   |            |  |  |      |  |  |
|                        |                                                    | Front, integrated                                                   |         |         |         |          |         | 2          | -AIV   |            |  |  |      |  |  |
|                        |                                                    | Rear, integrated                                                    |         |         |         |          |         | 2          | -AIH   |            |  |  |      |  |  |
|                        | Proximity sensor                                   | SME (contacting)                                                    |         |         |         |          |         | 3          | -SME   |            |  |  |      |  |  |
|                        |                                                    | SMT (non-contacting)                                                |         |         |         |          |         | 3          | -SMT   |            |  |  |      |  |  |
|                        | Wiper seal material                                | Suitable for unlubricated operation                                 |         |         |         |          |         | 4          | -A3    |            |  |  |      |  |  |
|                        | Sensor mounting rail                               | Sensor mounting rail for external position sensing                  |         |         |         |          |         | 5          | -R     |            |  |  |      |  |  |
|                        | Type of piston rod                                 | Through piston rod                                                  |         |         |         |          |         |            | -S2    |            |  |  |      |  |  |
|                        | Extended male thread [mm]                          | Piston rod with extended male thread                                |         |         |         | 1 ... 70 |         |            | -...K2 |            |  |  |      |  |  |
|                        |                                                    | Piston rod with female thread                                       |         |         |         |          |         |            |        |            |  |  |      |  |  |
|                        | Female thread                                      | (M6)                                                                | (M8)    | (M10)   | (M12)   | 6        | -K3     |            |        |            |  |  |      |  |  |
|                        | Extended piston rod [mm]                           | Extended piston rod at front                                        |         |         |         |          |         |            | -...K8 |            |  |  |      |  |  |
|                        |                                                    | 1 ... 500                                                           |         |         |         |          |         |            |        |            |  |  |      |  |  |
| Temperature resistance | Heat-resistant seals for temperatures up to 120 °C |                                                                     |         |         |         |          | 7       | -S6        |        |            |  |  |      |  |  |

- |                 |                                            |      |                                               |
|-----------------|--------------------------------------------|------|-----------------------------------------------|
| 1 A             | Only with sensor rail R                    | 5 R  | Only with position sensing A, AIB, AIV or AIH |
| 2 AIB, AIV, AIH | Only with proximity sensor SME or SMT      | 6 K3 | Not with extended male thread K2              |
| 3 SME, SMT      | Only with position sensing AIB, AIV or AIH | 7 S6 | Not with position sensing A, AIB, AIV or AIH  |
| 4 A3            | Not with temperature resistance S6         |      |                                               |
|                 | Not with position sensing AIB, AIV or AIH  |      |                                               |

## Transfer order code

- **CDN** -  -  - **PPV** -  -  -  -  -  -  -  -  -

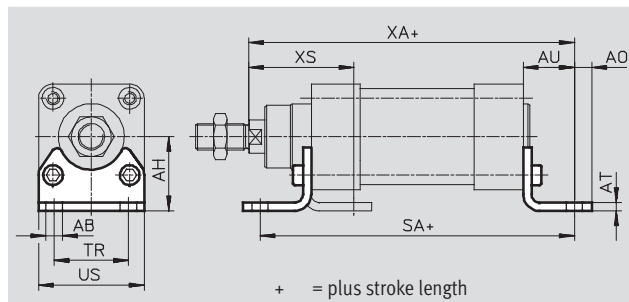
# Standard cylinders CDN, ISO 15552, Clean Design

**FESTO**

Accessories

## Foot mounting CRHNC

Material:  
High-alloy steel  
Free of copper, PTFE and silicone



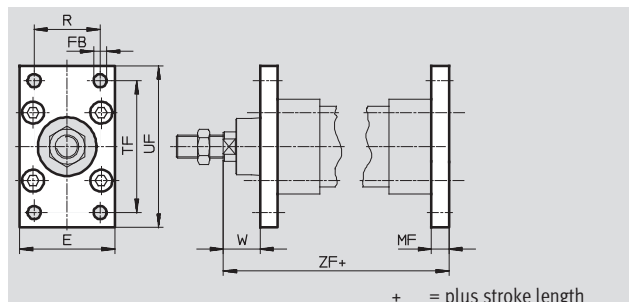
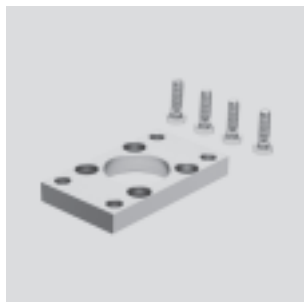
| Dimensions and ordering data |         |    |      |    |    |       |    |     |       |      |                   |               |                          |
|------------------------------|---------|----|------|----|----|-------|----|-----|-------|------|-------------------|---------------|--------------------------|
| For Ø                        | AB<br>Ø | AH | AO   | AT | AU | SA    | TR | US  | XA    | XS   | CRC <sup>1)</sup> | Weight<br>[g] | Part No. Type            |
| [mm]                         |         |    |      |    |    |       |    |     |       |      |                   |               |                          |
| 32                           | 7       | 32 | 6.5  | 4  | 24 | 142   | 32 | 45  | 144.7 | 45.7 | 4                 | 135           | <b>176 937 CRHNC-32</b>  |
| 40                           | 10      | 36 | 9    | 4  | 28 | 160.8 | 36 | 54  | 163.6 | 53.8 | 4                 | 180           | <b>176 938 CRHNC-40</b>  |
| 50                           | 10      | 45 | 9.5  | 5  | 31 | 167.9 | 45 | 64  | 175   | 63.1 | 4                 | 325           | <b>176 939 CRHNC-50</b>  |
| 63                           | 10      | 50 | 12.5 | 5  | 32 | 184.9 | 50 | 75  | 191.5 | 64.6 | 4                 | 405           | <b>176 940 CRHNC-63</b>  |
| 80                           | 12      | 63 | 15   | 6  | 41 | 209.9 | 63 | 93  | 215.5 | 81.6 | 4                 | 820           | <b>176 941 CRHNC-80</b>  |
| 100                          | 14.5    | 71 | 17.5 | 6  | 41 | 220.1 | 75 | 110 | 229.6 | 85.5 | 4                 | 1,000         | <b>176 942 CRHNC-100</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.

## Flange mounting CRFNG

Material:  
High-alloy steel  
Free of copper, PTFE and silicone

Cannot be used on the bearing cap in conjunction with bellows kit DADB.



| Dimensions and ordering data |     |         |    |    |     |     |    |     |                   |        |          |           |
|------------------------------|-----|---------|----|----|-----|-----|----|-----|-------------------|--------|----------|-----------|
| For Ø                        | E   | FB<br>Ø | MF | R  | TF  | UF  | W  | ZF  | CRC <sup>1)</sup> | Weight | Part No. | Type      |
| [mm]                         |     |         |    |    |     |     |    |     |                   | [g]    |          |           |
| 32                           | 45  | 7       | 10 | 32 | 64  | 80  | 16 | 130 | 4                 | 240    | 161 846  | CRFNG-32  |
| 40                           | 54  | 9       | 10 | 36 | 72  | 90  | 20 | 145 | 4                 | 300    | 161 847  | CRFNG-40  |
| 50                           | 65  | 9       | 12 | 45 | 90  | 110 | 25 | 155 | 4                 | 550    | 161 848  | CRFNG-50  |
| 63                           | 75  | 9       | 12 | 50 | 100 | 120 | 25 | 170 | 4                 | 710    | 161 849  | CRFNG-63  |
| 80                           | 93  | 12      | 16 | 63 | 126 | 150 | 30 | 190 | 4                 | 1,680  | 161 850  | CRFNG-80  |
| 100                          | 110 | 14      | 16 | 75 | 150 | 175 | 35 | 205 | 4                 | 2,450  | 161 851  | CRFNG-100 |

- 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.

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## Accessories

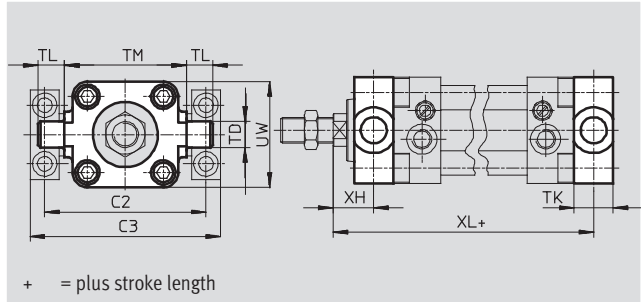
### Trunnion flange CRZNG

Material:

High-alloy steel

Free of copper, PTFE and silicone

Cannot be used on the bearing cap in conjunction with bellows kit DADB.



| Dimensions and ordering data |     |     |               |    |    |     |     |    |     |                   |        |          |           |
|------------------------------|-----|-----|---------------|----|----|-----|-----|----|-----|-------------------|--------|----------|-----------|
| For Ø                        | C2  | C3  | TD<br>Ø<br>e9 | TK | TL | TM  | UW  | XH | XL  | CRC <sup>1)</sup> | Weight | Part No. | Type      |
| [mm]                         |     |     |               |    |    |     |     |    |     |                   | [g]    |          |           |
| 32                           | 71  | 86  | 12            | 16 | 12 | 50  | 50  | 18 | 128 | 4                 | 150    | 161 852  | CRZNG-32  |
| 40                           | 87  | 105 | 16            | 20 | 16 | 63  | 55  | 20 | 145 | 4                 | 260    | 161 853  | CRZNG-40  |
| 50                           | 99  | 117 | 16            | 24 | 16 | 75  | 65  | 25 | 155 | 4                 | 430    | 161 854  | CRZNG-50  |
| 63                           | 116 | 136 | 20            | 24 | 20 | 90  | 75  | 25 | 170 | 4                 | 640    | 161 855  | CRZNG-63  |
| 80                           | 136 | 156 | 20            | 28 | 20 | 110 | 100 | 32 | 188 | 4                 | 1,300  | 161 856  | CRZNG-80  |
| 100                          | 164 | 189 | 25            | 38 | 25 | 132 | 120 | 32 | 208 | 4                 | 2,400  | 161 857  | CRZNG-100 |

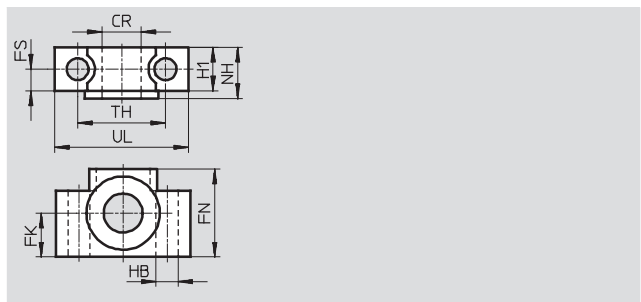
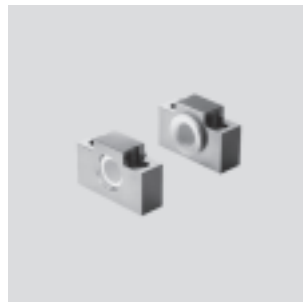
- 1) Corrosion resistance class 4 according to Festo standard 940 070  
Components subject to particularly high corrosion stress. Parts used with aggressive media, e.g. in the food or chemical industry. These applications should be supported with special tests with the media if required.

## Trunnion supports CRLNZG

Material:

High-alloy steel

Free of copper, PTFE and silicone



| Dimensions and ordering data |         |         |    |      |      |         |      |      |    |                   |        |          |                |
|------------------------------|---------|---------|----|------|------|---------|------|------|----|-------------------|--------|----------|----------------|
| For Ø                        | CR<br>Ø | FK<br>Ø | FN | FS   | H1   | HB<br>Ø | NH   | TH   | UL | CRC <sup>1)</sup> | Weight | Part No. | Type           |
| [mm]                         | D11     | ±0.1    |    |      |      | H13     |      | ±0.2 |    |                   | [g]    |          |                |
| 32                           | 12      | 15      | 30 | 10.5 | 15   | 6.6     | 18   | 32   | 46 | 4                 | 200    | 161 874  | CRLNZG-32      |
| 40, 50                       | 16      | 18      | 36 | 12   | 18   | 9       | 21   | 36   | 55 | 4                 | 330    | 161 875  | CRLNZG-40/50   |
| 63, 80                       | 20      | 20      | 40 | 13   | 20   | 11      | 23   | 42   | 65 | 4                 | 440    | 161 876  | CRLNZG-63/80   |
| 100                          | 25      | 25      | 50 | 16   | 24.5 | 14      | 28.5 | 50   | 75 | 4                 | 740    | 161 877  | CRLNZG-100/125 |

- 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.

# Standard cylinders CDN, ISO 15552, Clean Design

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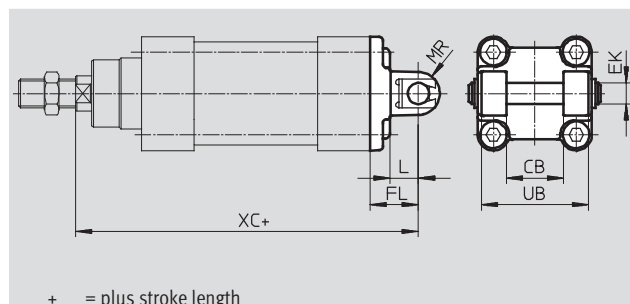
Accessories

## Swivel flange SNCB- ... R3

Material:

Die-cast aluminium with protective coating

Free of copper, PTFE and silicone



| Dimensions and ordering data |     |         |      |    |     |     |       |                   |        |                |                    |
|------------------------------|-----|---------|------|----|-----|-----|-------|-------------------|--------|----------------|--------------------|
| For Ø                        | CB  | EK      | FL   | L  | MR  | UB  | XC    | CRC <sup>1)</sup> | Weight | Part No.       | Type               |
| [mm]                         | H14 | Ø<br>e8 | ±0.2 |    |     | h14 |       |                   | [g]    |                |                    |
| 32                           | 26  | 10      | 22   | 13 | 8.5 | 45  | 142.7 | 3                 | 100    | <b>176 944</b> | <b>SNCB-32-R3</b>  |
| 40                           | 28  | 12      | 25   | 16 | 12  | 52  | 160.6 | 3                 | 150    | <b>176 945</b> | <b>SNCB-40-R3</b>  |
| 50                           | 32  | 12      | 27   | 16 | 12  | 60  | 171   | 3                 | 225    | <b>176 946</b> | <b>SNCB-50-R3</b>  |
| 63                           | 40  | 16      | 32   | 21 | 16  | 70  | 191.5 | 3                 | 365    | <b>176 947</b> | <b>SNCB-63-R3</b>  |
| 80                           | 50  | 16      | 36   | 22 | 16  | 90  | 210.5 | 3                 | 610    | <b>176 948</b> | <b>SNCB-80-R3</b>  |
| 100                          | 60  | 20      | 41   | 27 | 20  | 110 | 229.6 | 3                 | 925    | <b>176 949</b> | <b>SNCB-100-R3</b> |

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

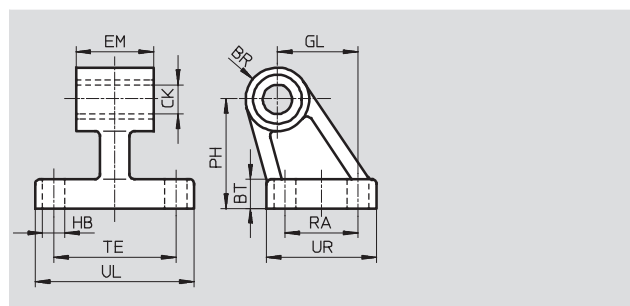
Components subject to high corrosion stress. External visible parts in direct contact with industrial atmospheres or media such as solvents and cleaning agents, with a predominantly functional requirement for the surface.

## Clevis foot CRLNG

Material:

High-alloy steel

Free of copper, PTFE and silicone



| 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 | Part No. | Type      |
| [mm]                         |    |    | D11     | −0.4 |    | H13     |    |    |    |    |    |                   | [g]    |          |           |
| 32                           | 10 | 8  | 10      | 25.8 | 21 | 6.6     | 32 | 18 | 38 | 51 | 31 | 4                 | 120    | 161 840  | CRLNG-32  |
| 40                           | 11 | 10 | 12      | 27.8 | 24 | 6.6     | 36 | 22 | 41 | 54 | 35 | 4                 | 160    | 161 841  | CRLNG-40  |
| 50                           | 12 | 12 | 12      | 31.8 | 33 | 9       | 45 | 30 | 50 | 65 | 45 | 4                 | 280    | 161 842  | CRLNG-50  |
| 63                           | 15 | 12 | 16      | 39.8 | 37 | 9       | 50 | 35 | 52 | 67 | 50 | 4                 | 375    | 161 843  | CRLNG-63  |
| 80                           | 15 | 14 | 16      | 49.8 | 47 | 11      | 63 | 40 | 66 | 86 | 60 | 4                 | 580    | 161 844  | CRLNG-80  |
| 100                          | 19 | 15 | 20      | 59.8 | 55 | 11      | 71 | 50 | 76 | 96 | 70 | 4                 | 935    | 161 845  | CRLNG-100 |

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.

## Standard cylinders CDN, ISO 15552, Clean Design

Accessories

**FESTO**

### Bellows kit DADB



| General technical data                       |      |                                                                      |            |            |            |            |            |
|----------------------------------------------|------|----------------------------------------------------------------------|------------|------------|------------|------------|------------|
| Type DADB-V6-                                |      | 32                                                                   | 40         | 50         | 63         | 80         | 100        |
| Max. stroke range of cylinder <sup>1)</sup>  | [mm] | 10 ... 500                                                           | 10 ... 500 | 10 ... 500 | 10 ... 500 | 10 ... 500 | 10 ... 500 |
| Type of mounting                             |      | Via threaded pin                                                     |            |            |            |            |            |
| Mounting position                            |      | Any                                                                  |            |            |            |            |            |
| Resistance to media                          |      | Dust, chippings, oil, grease, fuel (➔ Internet: Resistance to media) |            |            |            |            |            |
| Ambient temperature <sup>2)</sup>            | [°C] | -10 ... +80                                                          |            |            |            |            |            |
| Degree of protection                         |      | IP54                                                                 |            |            |            |            |            |
| Corrosion resistance class CRC <sup>3)</sup> |      | 3                                                                    |            |            |            |            |            |

1) In conjunction with the bellows kit DADB

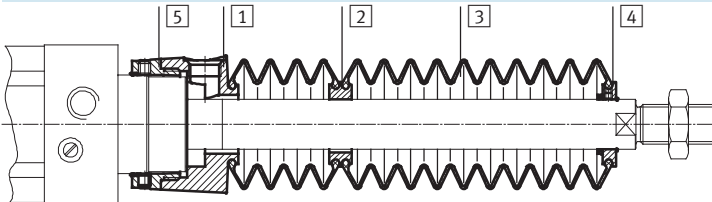
2) Note operating range of proximity sensors and cylinder

3) 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.

### Materials

#### Sectional view



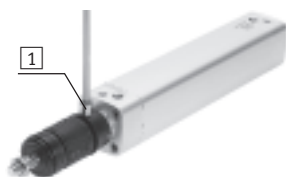
| Bellows           |            |                         |
|-------------------|------------|-------------------------|
| 1                 | Connection | Polyamide               |
| 2                 | Adapter    | Polyamide               |
| 3                 | Bellows    | Nitrile rubber          |
| 4                 | End piece  | Polyamide               |
| 5                 | Connector  | Polyamide               |
| -                 | O-ring     | Nitrile rubber          |
| Note on materials |            | Free of copper and PTFE |
|                   |            | RoHS-compliant          |

| Weight [g]    |     |     |     |     |     |     |
|---------------|-----|-----|-----|-----|-----|-----|
| Type DADB-V6- | 32  | 40  | 50  | 63  | 80  | 100 |
| Stroke [mm]   |     |     |     |     |     |     |
| 10 ... 50     | 29  | 42  | 71  | 69  | 99  | 124 |
| 51 ... 125    | 41  | 56  | 91  | 89  | 127 | 152 |
| 126 ... 175   | 52  | 68  | 105 | 103 | 140 | 165 |
| 176 ... 250   | 66  | 85  | 129 | 127 | 193 | 218 |
| 251 ... 300   | 79  | 100 | 147 | 145 | 231 | 255 |
| 301 ... 350   | 92  | 115 | 166 | 164 | 268 | 293 |
| 351 ... 375   | 92  | 115 | 167 | 165 | 259 | 284 |
| 376 ... 425   | 104 | 129 | 185 | 183 | 296 | 321 |
| 426 ... 475   | 117 | 144 | 204 | 202 | 334 | 359 |
| 476 ... 500   | 117 | 144 | 205 | 203 | 324 | 349 |

## Standard cylinders CDN, ISO 15552, Clean Design

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### Speed of travel $v$ as a function of tubing length $l$



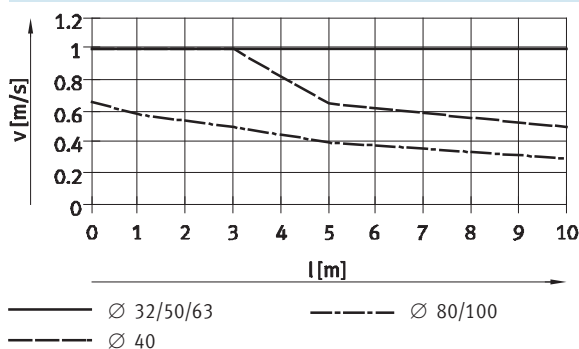
The bellows kit is a leak-free system. To prevent unwanted media from being drawn in, the supply and exhaust air must be ducted via a venting hole in the connection part

**1.**

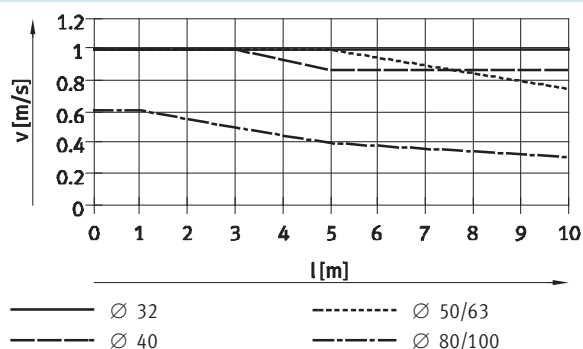
The pressure generated in the bellows kit by the positioning motion is primarily defined by the speed of

travel and the tubing length. The recommended tubing length based on the travel speed of the drive can be read from the graph.

#### Advancing



#### Retracting



#### Note

The push-in fittings opposite must be used for the venting hole. Silencers can be used as an alternative. This reduces the travel speed slightly.

#### Tubing length and push-in fitting for venting hole

| $\varnothing$<br>[mm] | Tubing O.D.<br>[mm] | Push-in fitting |                           |
|-----------------------|---------------------|-----------------|---------------------------|
|                       |                     | Part No.        | Type                      |
| 32, 40                | 8                   | 186 109         | QS-G $\frac{1}{8}$ -8-I   |
|                       |                     | 533 929         | QS-F-G $\frac{1}{8}$ -8-I |
|                       |                     | 533 880         | QS-F-G $\frac{1}{8}$ -8H  |
| 50, 63, 80, 100       | 12                  | 186 350         | QS-G $\frac{1}{4}$ -12    |
|                       |                     | 533 848         | QS-F-G $\frac{1}{4}$ -12  |
|                       |                     | 533 884         | QS-F-G $\frac{1}{4}$ -12H |

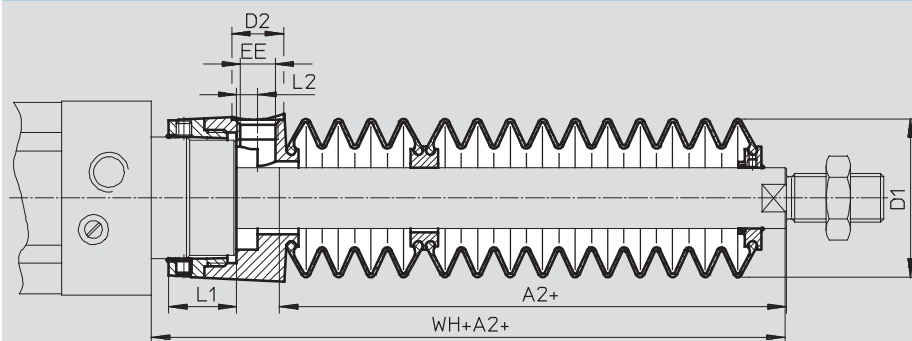
## Standard cylinders CDN, ISO 15552, Clean Design

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### Dimensions

Download CAD Data → [www.festo.com/us/cad](http://www.festo.com/us/cad)



+ = plus stroke length

| Ø<br>Stroke<br>[mm] | 32               |            |    |                               |      |     |       | 40               |            |    |                               |      |     |       |
|---------------------|------------------|------------|----|-------------------------------|------|-----|-------|------------------|------------|----|-------------------------------|------|-----|-------|
|                     | A2 <sup>1)</sup> | D1<br>max. | D2 | EE                            | L1   | L2  | WH+A2 | A2 <sup>1)</sup> | D1<br>max. | D2 | EE                            | L1   | L2  | WH+A2 |
| 10 ... 50           | 29               | 38         | 14 | G <sup>1</sup> / <sub>8</sub> | 12.9 | 5.4 | 55    | 28               | 46         | 14 | G <sup>1</sup> / <sub>8</sub> | 16.3 | 5.4 | 58    |
| 51 ... 125          | 47               |            |    |                               |      |     | 73    | 43               |            |    |                               |      |     | 73    |
| 126 ... 175         | 61               |            |    |                               |      |     | 87    | 56               |            |    |                               |      |     | 86    |
| 176 ... 250         | 80               |            |    |                               |      |     | 106   | 72               |            |    |                               |      |     | 102   |
| 251 ... 300         | 96               |            |    |                               |      |     | 122   | 86               |            |    |                               |      |     | 116   |
| 301 ... 350         | 112              |            |    |                               |      |     | 138   | 100              |            |    |                               |      |     | 130   |
| 351 ... 375         | 114              |            |    |                               |      |     | 140   | 101              |            |    |                               |      |     | 131   |
| 376 ... 425         | 130              |            |    |                               |      |     | 156   | 115              |            |    |                               |      |     | 145   |
| 426 ... 475         | 145              |            |    |                               |      |     | 171   | 130              |            |    |                               |      |     | 160   |
| 476 ... 500         | 147              |            |    |                               |      |     | 173   | 131              |            |    |                               |      |     | 161   |

| Ø<br>Stroke<br>[mm] | 50               |            |    |                               |       |    |       | 63               |            |    |                               |      |    |       |
|---------------------|------------------|------------|----|-------------------------------|-------|----|-------|------------------|------------|----|-------------------------------|------|----|-------|
|                     | A2 <sup>1)</sup> | D1<br>max. | D2 | EE                            | L1    | L2 | WH+A2 | A2 <sup>1)</sup> | D1<br>max. | D2 | EE                            | L1   | L2 | WH+A2 |
| 10 ... 50           | 28               | 57         | 17 | G <sup>1</sup> / <sub>4</sub> | 22.35 | 7  | 65    | 28               | 57         | 17 | G <sup>1</sup> / <sub>4</sub> | 22.4 | 7  | 65    |
| 51 ... 125          | 46               |            |    |                               |       |    | 83    | 46               |            |    |                               |      |    | 83    |
| 126 ... 175         | 56               |            |    |                               |       |    | 93    | 56               |            |    |                               |      |    | 93    |
| 176 ... 250         | 73               |            |    |                               |       |    | 110   | 73               |            |    |                               |      |    | 110   |
| 251 ... 300         | 86               |            |    |                               |       |    | 123   | 86               |            |    |                               |      |    | 123   |
| 301 ... 350         | 97               |            |    |                               |       |    | 134   | 97               |            |    |                               |      |    | 134   |
| 351 ... 375         | 105              |            |    |                               |       |    | 142   | 105              |            |    |                               |      |    | 142   |
| 376 ... 425         | 116              |            |    |                               |       |    | 153   | 116              |            |    |                               |      |    | 153   |
| 426 ... 475         | 126              |            |    |                               |       |    | 163   | 126              |            |    |                               |      |    | 163   |
| 476 ... 500         | 134              |            |    |                               |       |    | 171   | 134              |            |    |                               |      |    | 171   |

| Ø<br>Stroke<br>[mm] | 80               |            |    |                               |    |    |       | 100              |            |    |                               |    |    |       |
|---------------------|------------------|------------|----|-------------------------------|----|----|-------|------------------|------------|----|-------------------------------|----|----|-------|
|                     | A2 <sup>1)</sup> | D1<br>max. | D2 | EE                            | L1 | L2 | WH+A2 | A2 <sup>1)</sup> | D1<br>max. | D2 | EE                            | L1 | L2 | WH+A2 |
| 10 ... 50           | 25               | 93         | 17 | G <sup>1</sup> / <sub>4</sub> | 28 | 4  | 71    | 25               | 93         | 17 | G <sup>1</sup> / <sub>4</sub> | 28 | 4  | 71    |
| 51 ... 125          | 37               |            |    |                               |    |    | 83    | 37               |            |    |                               |    |    | 83    |
| 126 ... 175         | 49               |            |    |                               |    |    | 95    | 49               |            |    |                               |    |    | 95    |
| 176 ... 250         | 62               |            |    |                               |    |    | 108   | 62               |            |    |                               |    |    | 108   |
| 251 ... 300         | 74               |            |    |                               |    |    | 120   | 74               |            |    |                               |    |    | 120   |
| 301 ... 350         | 86               |            |    |                               |    |    | 132   | 86               |            |    |                               |    |    | 132   |
| 351 ... 375         | 87               |            |    |                               |    |    | 133   | 87               |            |    |                               |    |    | 133   |
| 376 ... 425         | 98               |            |    |                               |    |    | 144   | 98               |            |    |                               |    |    | 144   |
| 426 ... 475         | 110              |            |    |                               |    |    | 156   | 110              |            |    |                               |    |    | 156   |
| 476 ... 500         | 111              |            |    |                               |    |    | 157   | 111              |            |    |                               |    |    | 157   |

1) The dimension corresponds to the K8 value (extended piston rod) of the drive

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## Ordering data – Bellows kit

An extended piston rod (order code K8) → 14 is absolutely necessary for using a bellows kit.

The necessary dimension for K8 as a function of piston diameter and cylinder stroke as well as the corresponding bellows kit is indicated in the table below:

### Order example:

Selected standard cylinder:

CDN-32-320-PPV-AIB-SME-...

The dimension for the corresponding K8 value (see table):  
112 mm

Complete type code for standard cylinder:

CDN-32-320-PPV-AIB-SME-...-112K8

The corresponding bellows kit:

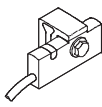
DADB-V6-32-S301-350

| Cylinder data |             |                  | Bellows kit |                      |
|---------------|-------------|------------------|-------------|----------------------|
| Ø             | Stroke      | Dimension for K8 | Part No.    | Type                 |
| [mm]          | [mm]        | [mm]             |             |                      |
| 32            | 10 ... 50   | 29               | 553 271     | DADB-V6-32-S10-50    |
|               | 51 ... 125  | 47               | 553 273     | DADB-V6-32-S51-125   |
|               | 126 ... 175 | 61               | 553 275     | DADB-V6-32-S126-175  |
|               | 176 ... 250 | 80               | 553 277     | DADB-V6-32-S176-250  |
|               | 251 ... 300 | 96               | 553 279     | DADB-V6-32-S251-300  |
|               | 301 ... 350 | 112              | 553 281     | DADB-V6-32-S301-350  |
|               | 351 ... 375 | 114              | 553 283     | DADB-V6-32-S351-375  |
|               | 376 ... 425 | 130              | 553 285     | DADB-V6-32-S376-425  |
|               | 426 ... 475 | 145              | 553 287     | DADB-V6-32-S426-475  |
|               | 476 ... 500 | 147              | 553 289     | DADB-V6-32-S476-500  |
| 50            | 10 ... 50   | 28               | 553 311     | DADB-V6-50-S10-50    |
|               | 51 ... 125  | 46               | 553 313     | DADB-V6-50-S51-125   |
|               | 126 ... 175 | 56               | 553 315     | DADB-V6-50-S126-175  |
|               | 176 ... 250 | 73               | 553 317     | DADB-V6-50-S176-250  |
|               | 251 ... 300 | 86               | 553 319     | DADB-V6-50-S251-300  |
|               | 301 ... 350 | 97               | 553 321     | DADB-V6-50-S301-350  |
|               | 351 ... 375 | 105              | 553 323     | DADB-V6-50-S351-375  |
|               | 376 ... 425 | 116              | 553 325     | DADB-V6-50-S376-425  |
|               | 426 ... 475 | 126              | 553 327     | DADB-V6-50-S426-475  |
|               | 476 ... 500 | 134              | 553 329     | DADB-V6-50-S476-500  |
| 63            | 10 ... 50   | 28               | 553 331     | DADB-V6-63-S10-50    |
|               | 51 ... 125  | 46               | 553 333     | DADB-V6-63-S51-125   |
|               | 126 ... 175 | 56               | 553 335     | DADB-V6-63-S126-175  |
|               | 176 ... 250 | 73               | 553 337     | DADB-V6-63-S176-250  |
|               | 251 ... 300 | 86               | 553 339     | DADB-V6-63-S251-300  |
|               | 301 ... 350 | 97               | 553 341     | DADB-V6-63-S301-350  |
|               | 351 ... 375 | 105              | 553 343     | DADB-V6-63-S351-375  |
|               | 376 ... 425 | 116              | 553 345     | DADB-V6-63-S376-425  |
|               | 426 ... 475 | 126              | 553 347     | DADB-V6-63-S426-475  |
|               | 476 ... 500 | 134              | 553 349     | DADB-V6-63-S476-500  |
| 80            | 10 ... 50   | 25               | 553 351     | DADB-V6-80-S10-50    |
|               | 51 ... 125  | 37               | 553 353     | DADB-V6-80-S51-125   |
|               | 126 ... 175 | 49               | 553 355     | DADB-V6-80-S126-175  |
|               | 176 ... 250 | 62               | 553 357     | DADB-V6-80-S176-250  |
|               | 251 ... 300 | 74               | 553 359     | DADB-V6-80-S251-300  |
|               | 301 ... 350 | 86               | 553 361     | DADB-V6-80-S301-350  |
|               | 351 ... 375 | 87               | 553 363     | DADB-V6-80-S351-375  |
|               | 376 ... 425 | 98               | 553 365     | DADB-V6-80-S376-425  |
|               | 426 ... 475 | 110              | 553 367     | DADB-V6-80-S426-475  |
|               | 476 ... 500 | 111              | 553 369     | DADB-V6-80-S476-500  |
| 100           | 10 ... 50   | 25               | 553 371     | DADB-V6-100-S10-50   |
|               | 51 ... 125  | 37               | 553 373     | DADB-V6-100-S51-125  |
|               | 126 ... 175 | 49               | 553 375     | DADB-V6-100-S126-175 |
|               | 176 ... 250 | 62               | 553 377     | DADB-V6-100-S176-250 |
|               | 251 ... 300 | 74               | 553 379     | DADB-V6-100-S251-300 |
|               | 301 ... 350 | 86               | 553 381     | DADB-V6-100-S301-350 |
|               | 351 ... 375 | 87               | 553 383     | DADB-V6-100-S351-375 |
|               | 376 ... 425 | 98               | 553 385     | DADB-V6-100-S376-425 |
|               | 426 ... 475 | 110              | 553 387     | DADB-V6-100-S426-475 |
|               | 476 ... 500 | 111              | 553 389     | DADB-V6-100-S476-500 |

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| 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.

| 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                                                                   |            |             |                                        |            |                                       |                            |                  |
|  | G1/8       | 4           | Brass, nickel-plated and chrome-plated | 8          | 193 408                               | QS-F-G1/8-4 <sup>1)</sup>  | 10               |
|                                                                                     |            | 6           |                                        | 12         | 193 409                               | QS-F-G1/8-6 <sup>1)</sup>  |                  |
|                                                                                     |            | 8           |                                        | 14         | 193 410                               | QS-F-G1/8-8 <sup>1)</sup>  |                  |
|                                                                                     | G1/4       | 6           |                                        | 16         | 193 411                               | QS-F-G1/4-6 <sup>1)</sup>  |                  |
|                                                                                     |            | 8           |                                        | 16         | 193 412                               | QS-F-G1/4-8 <sup>1)</sup>  |                  |
|                                                                                     |            | 10          |                                        | 22         | 193 413                               | QS-F-G1/4-10 <sup>1)</sup> |                  |
|                                                                                     | G3/8       | 8           |                                        | 20         | 193 414                               | QS-F-G3/8-8 <sup>1)</sup>  |                  |
|                                                                                     |            | 10          |                                        | 30         | 193 415                               | QS-F-G3/8-10 <sup>1)</sup> |                  |
|                                                                                     |            | 12          |                                        | 38         | 193 487                               | QS-F-G3/8-12 <sup>1)</sup> |                  |
|                                                                                     | G1/2       | 10          |                                        | 42         | 193 416                               | QS-F-G1/2-10 <sup>1)</sup> |                  |
|                                                                                     |            | 12          |                                        | 46         | 193 417                               | QS-F-G1/2-12 <sup>1)</sup> |                  |

1) With sealing ring

3) Packaging unit quantity

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| 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                                                                 |            |             |                                        |            |                                       |                              |                  |
|  | R1/8       | 6           | Stainless steel                        | 9.9        | 162 862                               | CRQS-1/8-6 <sup>2)</sup>     | 1                |
|                                                                                   |            | 8           |                                        | 13         | 162 863                               | CRQS-1/8-8 <sup>2)</sup>     |                  |
|                                                                                   | R1/4       | 8           |                                        | 18         | 162 864                               | CRQS-1/4-8 <sup>2)</sup>     |                  |
|                                                                                   |            | 10          |                                        | 22         | 162 865                               | CRQS-1/4-10 <sup>2)</sup>    |                  |
|                                                                                   | R3/8       | 10          |                                        | 29         | 162 866                               | CRQS-3/8-10 <sup>2)</sup>    |                  |
|                                                                                   |            | 12          |                                        | 38         | 162 867                               | CRQS-3/8-12 <sup>2)</sup>    |                  |
|                                                                                   | R1/2       | 12          |                                        | 55         | 162 868                               | CRQS-1/2-12 <sup>2)</sup>    |                  |
|                                                                                   |            | 16          |                                        | 59         | 162 869                               | CRQS-1/2-16 <sup>2)</sup>    |                  |
| With internal hex                                                                 |            |             |                                        |            |                                       |                              |                  |
|  | G1/8       | 4           | Brass, nickel-plated and chrome-plated | 8.6        | 533 927                               | QS-F-G1/8-4-I <sup>1)</sup>  | 10               |
|                                                                                   |            | 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>  |                  |
|                                                                                   | G1/4       | 8           |                                        | 14.6       | 533 930                               | QS-F-G1/4-8-I <sup>1)</sup>  |                  |
|                                                                                   |            | 10          |                                        | 21         | 533 931                               | QS-F-G1/4-10-I <sup>1)</sup> |                  |
|                                                                                   | G3/8       | 12          |                                        | 34.3       | 533 932                               | QS-F-G3/8-12-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: crqsl |          |                             |                  |
|-------------------------------------------------------------------------------------|------------|-------------|----------------------------------------|----------------------------------|----------|-----------------------------|------------------|
|                                                                                     | Connection |             | Material                               | Weight [g]                       | Part No. | Type                        | PU <sup>3)</sup> |
|                                                                                     | Thread     | Tubing O.D. |                                        |                                  |          |                             |                  |
| With external hex                                                                   |            |             |                                        |                                  |          |                             |                  |
|  | G1/8       | 4           | Brass, nickel-plated and chrome-plated | 17.6                             | 193 418  | QSL-F-G1/8-4 <sup>1)</sup>  | 10               |
|                                                                                     |            | 6           |                                        | 16                               | 193 419  | QSL-F-G1/8-6 <sup>1)</sup>  |                  |
|                                                                                     |            | 8           |                                        | 20                               | 193 420  | QSL-F-G1/8-8 <sup>1)</sup>  |                  |
|                                                                                     | G1/4       | 6           |                                        | 24.5                             | 193 421  | QSL-F-G1/4-6 <sup>1)</sup>  |                  |
|                                                                                     |            | 8           |                                        | 24                               | 193 422  | QSL-F-G1/4-8 <sup>1)</sup>  |                  |
|                                                                                     |            | 10          |                                        | 34.6                             | 193 423  | QSL-F-G1/4-10 <sup>1)</sup> |                  |
|                                                                                     |            | 12          |                                        | 49                               | 533 853  | QSL-F-G1/4-12 <sup>1)</sup> |                  |
|                                                                                     | G3/8       | 8           |                                        | 34.2                             | 193 424  | QSL-F-G3/8-8 <sup>1)</sup>  |                  |
|                                                                                     |            | 10          |                                        | 36.6                             | 193 425  | QSL-F-G3/8-10 <sup>1)</sup> |                  |
|                                                                                     |            | 12          |                                        | 51.1                             | 197 486  | QSL-F-G3/8-12 <sup>1)</sup> |                  |
|                                                                                     | G1/2       | 10          |                                        | 66                               | 193 426  | QSL-F-G1/2-10 <sup>1)</sup> |                  |
|                                                                                     |            | 12          |                                        | 70                               | 193 427  | QSL-F-G1/2-12 <sup>1)</sup> |                  |
|  | R1/8       | 6           | Stainless steel                        | 20                               | 162 872  | CRQSL-1/8-6 <sup>2)</sup>   | 1                |
|                                                                                     |            | 8           |                                        | 27                               | 162 873  | CRQSL-1/8-8 <sup>2)</sup>   |                  |
|                                                                                     | R1/4       | 8           |                                        | 31                               | 162 874  | CRQSL-1/4-8 <sup>2)</sup>   |                  |
|                                                                                     |            | 10          |                                        | 46                               | 162 875  | CRQSL-1/4-10 <sup>2)</sup>  |                  |
|                                                                                     | R3/8       | 10          |                                        | 52                               | 162 876  | CRQSL-3/8-10 <sup>2)</sup>  |                  |
|                                                                                     |            | 12          |                                        | 69                               | 162 877  | CRQSL-3/8-12 <sup>2)</sup>  |                  |
|                                                                                     | R1/2       | 12          |                                        | 89                               | 162 878  | CRQSL-1/2-12 <sup>2)</sup>  |                  |
|                                                                                     |            | 16          |                                        | 105                              | 162 879  | CRQSL-1/2-16 <sup>2)</sup>  |                  |

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

## Standard cylinders CDN, ISO 15552, 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 |                                                 |            |                                                  |              |
|  | G1/8       | CRQS/CRQSL/CRQST,   | Electrolytically polished special steel casting | 44         | 161 404                                          | CRGRLA-1/8-B |
|                                                                                   | G1/4       | Quick Star          |                                                 | 83         | 161 405                                          | CRGRLA-1/4-B |
|                                                                                   | G3/8       |                     |                                                 | 150        | 161 406                                          | CRGRLA-3/8-B |
|                                                                                   | G1/2       |                     |                                                 | 315        | 161 407                                          | CRGRLA-1/2-B |

| Ordering data – Blanking screws, corrosion-resistant                              |         |                  |                   |            |          |                     |
|-----------------------------------------------------------------------------------|---------|------------------|-------------------|------------|----------|---------------------|
|                                                                                   | For Ø   | Material         | CRC <sup>1)</sup> | Weight [g] | Part No. | Type                |
|  | 32, 40  | High-alloy steel | 3                 | 3          | 650 120  | CR-M6x12-A2-70:6KT  |
|                                                                                   | 50, 63  |                  | 3                 | 6          | 650 121  | DAMD-PS-M8-16-R1    |
|                                                                                   | 80, 100 |                  | 3                 | 13         | 650 122  | CR-M10x16-A2-70:6KT |

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.

| Ordering data – Corrosion and acid-resistant piston rod attachments                 |         |          |                | Technical data ➔ Internet: crsg                                                     |         |          |               |
|-------------------------------------------------------------------------------------|---------|----------|----------------|-------------------------------------------------------------------------------------|---------|----------|---------------|
|                                                                                     | For Ø   | Part No. | Type           |                                                                                     | For Ø   | Part No. | Type          |
| Rod eye CRSGS                                                                       |         |          |                | Rod clevis CRSG                                                                     |         |          |               |
|  | 32      | 195 582  | CRSGS-M10x1,25 |  | 32      | 13 569   | CRSG-M10x1,25 |
|                                                                                     | 40      | 195 583  | CRSGS-M12x1,25 |                                                                                     | 40      | 13 570   | CRSG-M12x1,25 |
|                                                                                     | 50, 63  | 195 584  | CRSGS-M16x1,5  |                                                                                     | 50, 63  | 13 571   | CRSG-M16x1,5  |
|                                                                                     | 80, 100 | 195 585  | CRSGS-M20x1,5  |                                                                                     | 80, 100 | 13 572   | CRSG-M20x1,5  |

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