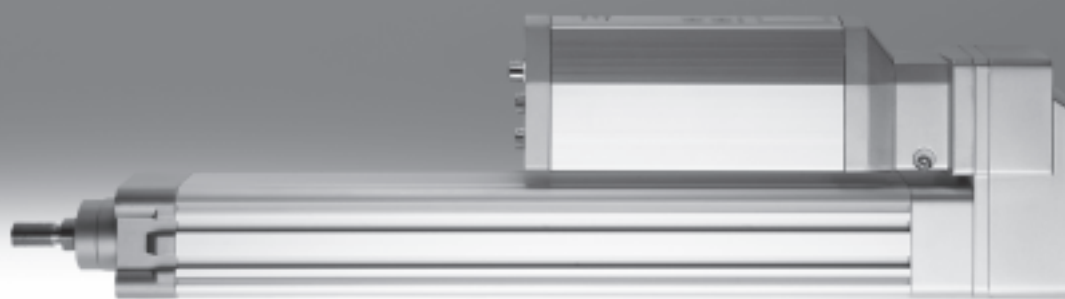


## Electric cylinders DNCE, with piston rod

**FESTO**



## Electric cylinders DNCE, with piston rod

Key features

### Key features at a glance

#### General information

The electric cylinder DNCE is a mechanical linear axis with piston rod. The drive component consists of an electrically driven spindle, which converts the rotation of the motor into the linear motion of the piston rod.

The mechanical interfaces are largely compatible with the standard cylinder DNC.

#### Features

- Choice of spindle type:
  - with lead screw (LS)
  - with ball screw (BS)
- Electric piston rod cylinder with lead screw is self-retarding
- Compact dimensions

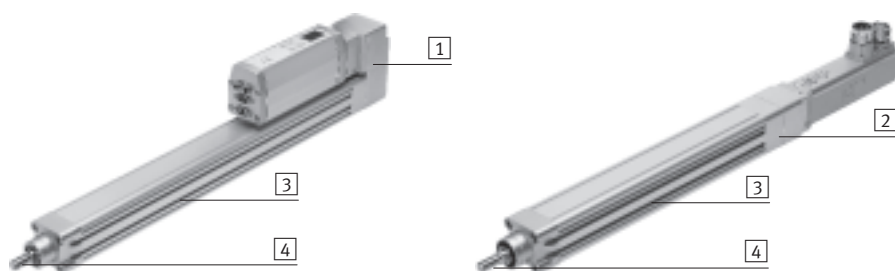
#### Range of applications

- Electric cylinder with lead screw
  - For applications with slow feed speeds
- Electric cylinder with ball screw
  - For applications with high feed speeds and high running performance

### Entire system consists of electric cylinder, motor and motor mounting kit

#### Electric piston rod cylinder

→ 6



- 1 Parallel kit
- 2 Axial kit
- 3 Slot for proximity sensor
- 4 Options:
  - linear drive with lead screw (LS)
  - linear drive with ball screw (BS)

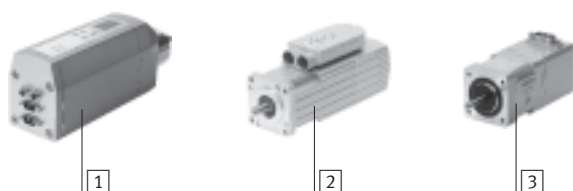
#### Note

The linear drive with lead screw is self-retarding, which means that slow movements cannot be excluded in the event of vibration.

The entire system with intelligent motor unit MTR-DCI is self-locking.

#### Motor/motor unit

→ 17



- 1 Intelligent motor unit MTR-DCI
- 2 Servo motor EMMS-AS, MTR-AC
- 3 Stepper motor EMMS-ST, MTR-ST

#### Note

A range of specially adapted complete solutions is available for the electric piston rod cylinder DNCE and the motors/motor units.

#### Motor mounting kit

→ 17

##### Axial kit

##### Parallel kit



There are complete kits for both parallel and axial motor attachment.

## Electric cylinders DNCE, with piston rod

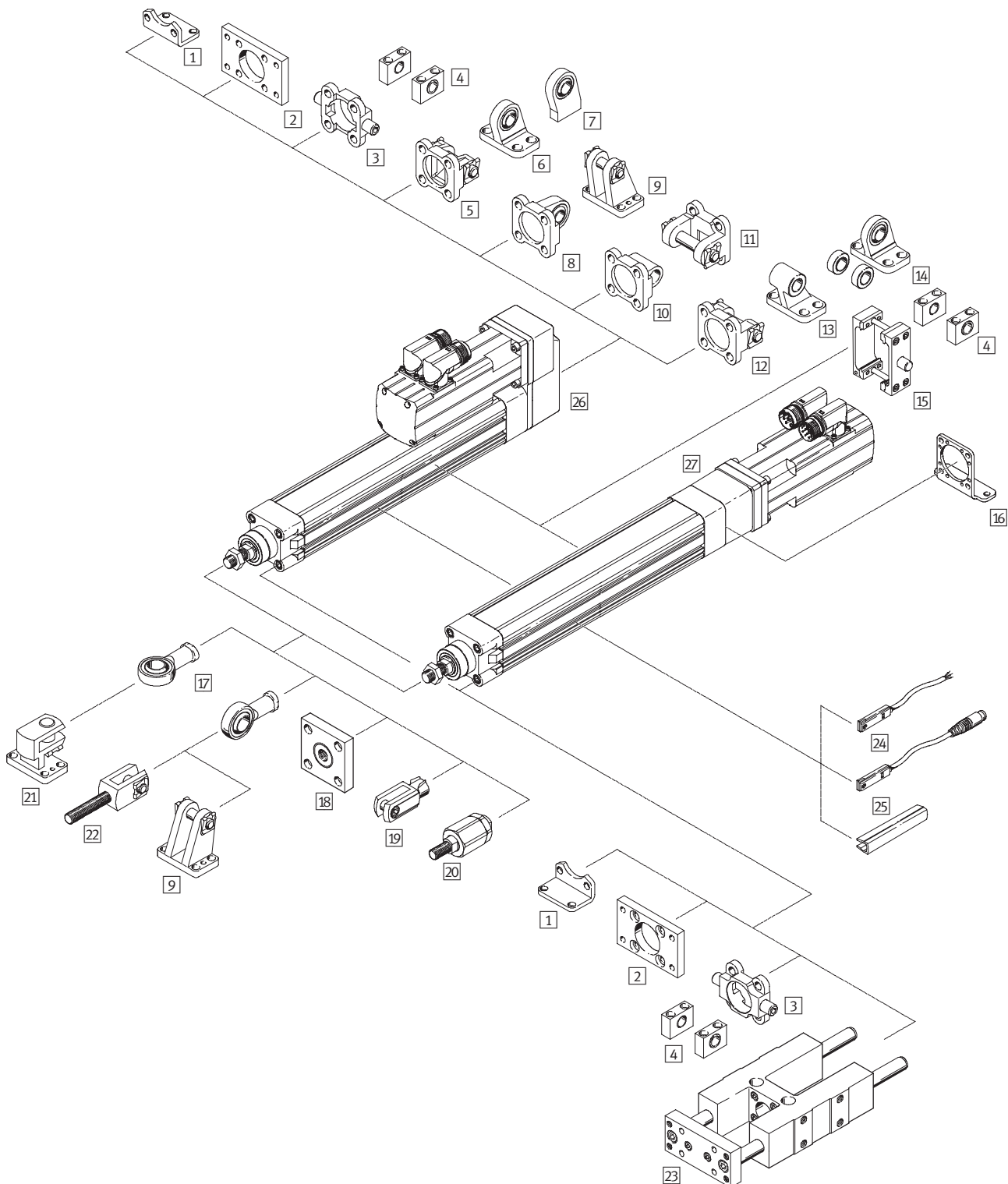
Type codes

|                                    |                              |      |   |    |   |     |   |    |   |        |   |   |
|------------------------------------|------------------------------|------|---|----|---|-----|---|----|---|--------|---|---|
|                                    |                              | DNCE | – | 32 | – | 100 | – | LS | – | "1,5"P | – | Q |
| <b>Type</b>                        |                              |      |   |    |   |     |   |    |   |        |   |   |
| DNCE                               | Electric piston rod cylinder |      |   |    |   |     |   |    |   |        |   |   |
| <b>Size</b>                        |                              |      |   |    |   |     |   |    |   |        |   |   |
| <b>Stroke [mm]</b>                 |                              |      |   |    |   |     |   |    |   |        |   |   |
| <b>Drive function</b>              |                              |      |   |    |   |     |   |    |   |        |   |   |
| LS                                 | Linear drive with lead screw |      |   |    |   |     |   |    |   |        |   |   |
| BS                                 | Linear drive with ball screw |      |   |    |   |     |   |    |   |        |   |   |
| <b>Spindle pitch [mm]</b>          |                              |      |   |    |   |     |   |    |   |        |   |   |
| <b>Protection against rotation</b> |                              |      |   |    |   |     |   |    |   |        |   |   |
| Q                                  | Non-rotating piston rod      |      |   |    |   |     |   |    |   |        |   |   |

## Electric cylinders DNCE, with piston rod

Peripherals overview

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# Electric cylinders DNCE, with piston rod

Peripherals overview

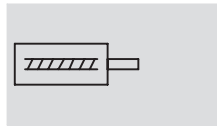
| Mounting attachments and accessories |                                                                                                                                        |                 |
|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-----------------|
|                                      | Brief description                                                                                                                      | → Page/Internet |
| 1 Foot mounting<br>HNC/CRHNC         | – With parallel motor attachment for bearing and gear unit end caps<br>– With axial motor attachment for bearing end caps              | 24              |
| 2 Flange mounting<br>FNC/CRFNG       | – With parallel motor attachment for bearing and gear unit end caps<br>– With axial motor attachment for bearing end caps              | 25              |
| 3 Trunnion flange<br>ZNC/CRZNG       | – With parallel motor attachment for bearing and gear unit end caps<br>– With axial motor attachment for bearing end caps              | 26              |
| 4 Trunnion support<br>LNZG/CRLNZG    | For cylinders with trunnion mounting                                                                                                   | 27              |
| 5 Swivel flange<br>SNC               | With parallel motor attachment                                                                                                         | 28              |
| 6 Clevis foot<br>LSNG                | With parallel motor attachment, with spherical bearing                                                                                 | 31              |
| 7 Clevis foot<br>LSNSG               | With parallel motor attachment, weld-on, with spherical bearing                                                                        | 31              |
| 8 Swivel flange<br>SNCS              | With parallel motor attachment, with spherical bearing                                                                                 | 28              |
| 9 Clevis foot<br>LBG                 | With parallel motor attachment, with spherical bearing                                                                                 | 31              |
| 10 Swivel flange<br>SNCL             | With parallel motor attachment                                                                                                         | 29              |
| 11 Swivel flange<br>SNCB/SNCB-...-R3 | With parallel motor attachment, with spherical bearing                                                                                 | 30              |
| 12 Swivel flange<br>SNCB/SNCB-...-R3 | With parallel motor attachment                                                                                                         | 30              |
| 13 Clevis foot<br>LNG/CRLNG          | With parallel motor attachment                                                                                                         | 31              |
| 14 Clevis foot<br>LSN                | With parallel motor attachment, with spherical bearing                                                                                 | 31              |
| 15 Trunnion mounting kit<br>ZNCM     | For mounting anywhere along the cylinder profile barrel. Cannot be mounted in the vicinity of the motor with parallel motor attachment | 31              |
| 16 Foot mounting<br>HNCE             | With axial motor attachment                                                                                                            | 23              |
| 17 Rod eye<br>SGS/CRSGS              | With spherical bearing                                                                                                                 | 32              |
| 18 Coupling piece<br>KSZ             | To compensate for radial deviations                                                                                                    | 32              |
| 19 Rod clevis<br>SG/CRSG             | Permits a swivelling movement of the cylinder in one plane                                                                             | 32              |
| 20 Self-aligning rod coupler<br>FK   | To compensate for radial and angular deviations                                                                                        | 32              |
| 21 Clevis foot<br>LQG                | For rod eye SGS                                                                                                                        | 32              |
| 22 Rod clevis<br>SGA                 | For swivel attachment of cylinders                                                                                                     | 32              |
| 23 Guide unit<br>FENG                | For protecting standard cylinders against rotation at high torque loads                                                                | 32              |
| 24 Proximity sensor<br>SME/SMT-8     | For position sensing. Can be integrated in sensor slot, thus no projecting parts                                                       | 33              |
| 25 Slot cover<br>ABP-5-S             | For protecting against the ingress of dirt                                                                                             | 33              |
| 26 Parallel kit<br>EAMM-U            | For parallel motor attachment                                                                                                          | 17              |
| 27 Axial kit<br>EAMM-A               | For axial motor attachment                                                                                                             | 17              |

## Electric cylinders DNCE, with piston rod

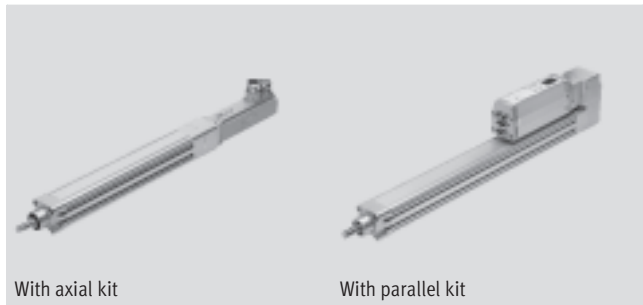
Technical data

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Function



-  Size  
32 ... 63
-  Stroke length  
1 ... 800 mm
-  [www.festo.com](http://www.festo.com)



With axial kit

With parallel kit

| General technical data                       |                                      |                                      |                                      |  |
|----------------------------------------------|--------------------------------------|--------------------------------------|--------------------------------------|--|
| Size                                         | 32                                   | 40                                   | 63                                   |  |
| Constructional design                        | LS                                   | With lead screw                      |                                      |  |
|                                              | BS                                   | With ball screw                      |                                      |  |
| Piston rod thread                            | M10x1.25                             | M12x1.25                             | M16x1.5                              |  |
| Working stroke                               | 1 ... 400                            | 1 ... 600                            | 1 ... 800                            |  |
| Variant                                      | Non-rotating piston rod              |                                      |                                      |  |
| Protection against torsion/guide             | Plain bearing guide                  |                                      |                                      |  |
| Stroke reserve [mm]                          | 0                                    |                                      |                                      |  |
| Max. angle of rotation at the piston rod [°] | ±0.30                                | ±0.25                                | ±0.20                                |  |
| Impact energy (E) at the end positions [J]   | 0.0001 $E = 0.5 \times m \times v^2$ | 0.0002 $E = 0.5 \times m \times v^2$ | 0.0004 $E = 0.5 \times m \times v^2$ |  |
| Duty cycle <sup>1)</sup> [%]                 | 100                                  |                                      |                                      |  |
| Position sensing                             | Via proximity sensor                 |                                      |                                      |  |
| Type of mounting                             | Via female threads                   |                                      |                                      |  |
|                                              | Via accessories                      |                                      |                                      |  |
| Mounting position                            | Any                                  |                                      |                                      |  |

1) In the case of the variant with lead screw (LS), the duty cycle depends on the speed

| Mechanical data                                             |           |         |          |           |         |            |         |          |          |
|-------------------------------------------------------------|-----------|---------|----------|-----------|---------|------------|---------|----------|----------|
| Size                                                        | 32        |         |          | 40        |         |            | 63      |          |          |
| Spindle design                                              | LS-"1,5"P | BS-"3"P | BS-"10"P | LS-"2,5"P | BS-"5"P | BS-"12,7"P | LS-"4"P | BS-"10"P | BS-"20"P |
| Spindle pitch [mm/rev.]                                     | 1.5       | 3       | 10       | 2.5       | 5       | 12.7       | 4       | 10       | 20       |
| Spindle diameter [mm]                                       | 9         | 10      | 10       | 12.5      | 12      | 12.7       | 20      | 20       | 20       |
| Max. static axial force [N]                                 | 600       | 600     | 600      | 1,400     | 1,400   | 1,400      | 3,700   | 3,700    | 3,700    |
| Max. feed force $F_x$ <sup>1)</sup> [N]                     | 300       | 300     | 350      | 600       | 525     | 800        | 1,000   | 2,500    | 1,625    |
| Continuous feed force <sup>1)</sup> [N]                     | 300       | 240     | 280      | 600       | 420     | 640        | 1,000   | 2,000    | 1,300    |
| Max. driving torque <sup>2)</sup> [Nm]                      | 0.4       | 0.4     | 0.8      | 1.15      | 0.9     | 1.9        | 3       | 4.9      | 5.9      |
| No-load driving torque with axial kit <sup>3)</sup> [Nm]    | 0.08      | 0.08    | 0.08     | 0.12      | 0.12    | 0.12       | 0.3     | 0.2      | 0.2      |
| No-load driving torque with parallel kit <sup>3)</sup> [Nm] | 0.13      | 0.13    | 0.13     | 0.22      | 0.22    | 0.22       | 0.6     | 0.5      | 0.5      |
| Continuous driving torque [Nm]                              | 0.4       | 0.3     | 0.6      | 1.15      | 0.8     | 1.6        | 3       | 4.1      | 4.8      |
| Max. radial force <sup>4)</sup> [N]                         | 120       | 120     | 120      | 260       | 260     | 260        | 300     | 300      | 300      |
| Max. speed [m/s]                                            | 0.06      | 0.15    | 0.5      | 0.07      | 0.25    | 0.64       | 0.07    | 0.5      | 1.0      |
| Max. rotational speed                                       | 2,400     | 3,000   | 3,000    | 1,650     | 3,000   | 3,000      | 1,050   | 3,000    | 3,000    |
| Max. acceleration [m/s <sup>2</sup> ]                       | 1         | 6       | 6        | 1         | 6       | 6          | 1       | 6        | 6        |
| Reversing backlash <sup>5)</sup> [mm]                       | 0.2       | 0.05    | 0.05     | 0.2       | 0.05    | 0.05       | 0.2     | 0.05     | 0.05     |
| Repetition accuracy [mm]                                    | ±0.07     | ±0.02   | ±0.02    | ±0.07     | ±0.02   | ±0.02      | ±0.07   | ±0.02    | ±0.02    |

- 1) The feed force in the case of the variant with lead screw (LS) depends on the speed → 9  
The feed force in the case of the variant with ball screw (BS) → 7
- 2) The driving torque in the case of the variant with lead screw (LS) depends on the rotational speed → 10
- 3) Measured at a speed of 200 rpm
- 4) On drive shaft
- 5) In new condition

# Electric cylinders DNCE, with piston rod

Technical data

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| Operating and environmental conditions |      |             |
|----------------------------------------|------|-------------|
| Ambient temperature <sup>1)2)</sup>    | [°C] | 0 ... 50    |
| Storage temperature                    | [°C] | -25 ... +60 |
| Protection class <sup>2)</sup>         |      | IP40        |
| Relative air humidity                  | [%]  | 0 ... 95    |

- 1) Note operating range of proximity sensors and motors  
2) Higher protection class and other ambient conditions on request

| Weight [g]                         |           |         |          |           |         |            |         |          |          |
|------------------------------------|-----------|---------|----------|-----------|---------|------------|---------|----------|----------|
| Size                               | 32        |         |          | 40        |         |            | 63      |          |          |
| Spindle design                     | LS-"1,5"P | BS-"3"P | BS-"10"P | LS-"2,5"P | BS-"5"P | BS-"12,7"P | LS-"4"P | BS-"10"P | BS-"20"P |
| Basic weight with 0 mm stroke      | 720       | 750     | 770      | 1,210     | 1,270   | 1,350      | 2,790   | 3,010    | 3,010    |
| Additional weight per 10 mm stroke | 32.4      | 33      | 33.6     | 46.1      | 45.5    | 46.7       | 79.8    | 81.2     | 81.2     |
| Moving load with 0 mm stroke       | 150       | 170     | 200      | 250       | 310     | 380        | 600     | 810      | 810      |
| Moving load per 10 mm stroke       | 6.9       | 6.9     | 6.9      | 8.9       | 8.9     | 8.9        | 12.8    | 12.8     | 12.8     |

| Mass moment of inertia             |                          |         |          |           |         |            |         |          |          |
|------------------------------------|--------------------------|---------|----------|-----------|---------|------------|---------|----------|----------|
| Size                               | 32                       |         |          | 40        |         |            | 63      |          |          |
| Spindle design                     | LS-"1,5"P                | BS-"3"P | BS-"10"P | LS-"2,5"P | BS-"5"P | BS-"12,7"P | LS-"4"P | BS-"10"P | BS-"20"P |
| J <sub>0</sub> with 0 mm stroke    | [kg cm <sup>2</sup> ]    | 0.0433  | 0.0439   | 0.0446    | 0.1316  | 0.1304     | 0.1337  | 0.7565   | 0.7626   |
| j <sub>H</sub> per metre stroke    | [kg cm <sup>2</sup> /m]  | 0.0361  | 0.0476   | 0.0595    | 0.1341  | 0.1163     | 0.1572  | 0.8176   | 0.9090   |
| j <sub>L</sub> per kg working load | [kg cm <sup>2</sup> /kg] | 0.0006  | 0.0023   | 0.0253    | 0.0016  | 0.0063     | 0.0409  | 0.0041   | 0.0253   |

The mass moment of inertia J<sub>A</sub> of the electric cylinder is calculated as follows:

$$J_A = J_0 + j_H \times \text{working stroke [m]} + j_L \times m_{\text{working load [kg]}}$$

## Calculation of the feed force F<sub>xm</sub> for the electric cylinder DNCE with ball screw (BS)

The peak feed force value must not exceed the maximum feed force within a movement cycle. In the case of vertical operation, the peak value is generally

achieved during the acceleration phase of the upwards stroke. If the maximum feed force is exceeded, this can increase wear and thus shorten

the service life of the ball screw. The maximum speed must likewise not be exceeded.

$$F_x \leq F_{x\max.}$$

and

$$v_x \leq v_{x\max.}$$

### Mean feed force (to DIN 69 051-4)

During operation, the continuous feed force may be briefly exceeded up to

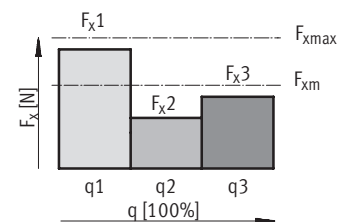
the maximum feed force. The continuous feed force must, however,

be adhered to when averaged over a movement cycle.

$$F_{xm} \leq F_{xdauer}$$

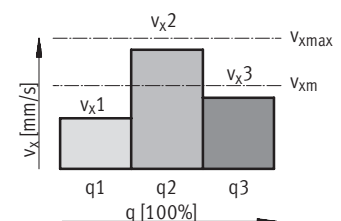
$$F_{xm} = \sqrt[3]{\sum F_x^3 \times \frac{v_x}{v_{xm}} \times \frac{q}{100}} =$$

$$F_{xm} = \sqrt[3]{F_{x1}^3 \times \frac{v_{x1}}{v_{xm}} \times \frac{q_1}{100} + F_{x2}^3 \times \frac{v_{x2}}{v_{xm}} \times \frac{q_2}{100} + F_{x3}^3 \times \frac{v_{x3}}{v_{xm}} \times \frac{q_3}{100} + \dots}$$



### Mean feed speed (to DIN 69 051-4)

$$v_{xm} = \sum v_x \times \frac{q}{100} = v_{x1} \times \frac{q_1}{100} + v_{x2} \times \frac{q_2}{100} + v_{x3} \times \frac{q_3}{100} + \dots$$



|                    |                       |                    |                 |
|--------------------|-----------------------|--------------------|-----------------|
| F <sub>x</sub>     | Feed force            | v <sub>x</sub>     | Feed speed      |
| F <sub>xm</sub>    | Mean feed force       | v <sub>xm</sub>    | Mean feed speed |
| F <sub>xmax.</sub> | Max. feed force       | v <sub>xmax.</sub> | Max. feed speed |
| F <sub>xcont</sub> | Continuous feed force |                    |                 |
| q                  | Time                  |                    |                 |

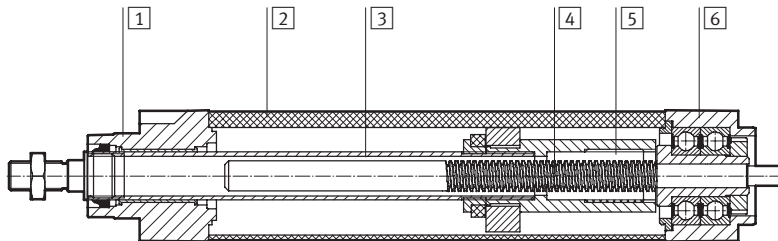
## Electric cylinders DNCE, with piston rod

Technical data

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### Materials

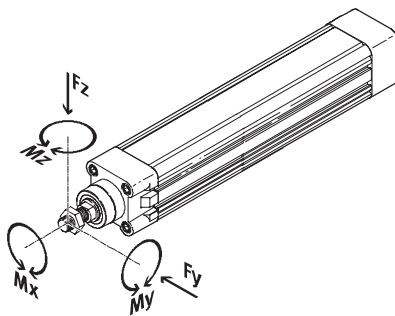
Sectional view



### Electric cylinder

|   |                    |                                          |
|---|--------------------|------------------------------------------|
| 1 | Bearing cap        | Die-cast aluminium, painted              |
| 2 | Cylinder barrel    | Wrought aluminium alloy, smooth anodised |
| 3 | Piston rod         | High-alloy stainless steel               |
| 4 | Spindle            | Steel                                    |
| 5 | Spindle nut for LS | Polyacetate                              |
|   | Spindle nut for BS | Steel                                    |
| 6 | Drive cover        | Die-cast aluminium, painted              |

### Maximum permissible loads on the piston rod



If there are two or more forces and torques simultaneously acting upon the piston rod, the following equations must be satisfied:

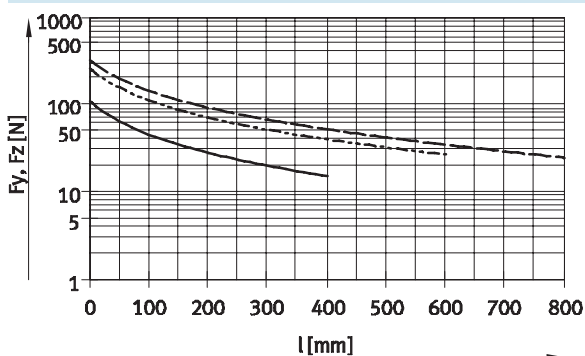
$$\frac{|F_y|}{F_{y\max}} + \frac{|F_z|}{F_{z\max}} + \frac{|M_y|}{M_{y\max}} + \frac{|M_z|}{M_{z\max}} \leq 1$$

$$|F_x| \leq F_{x\max}$$

$$|M_x| \leq M_{x\max}$$

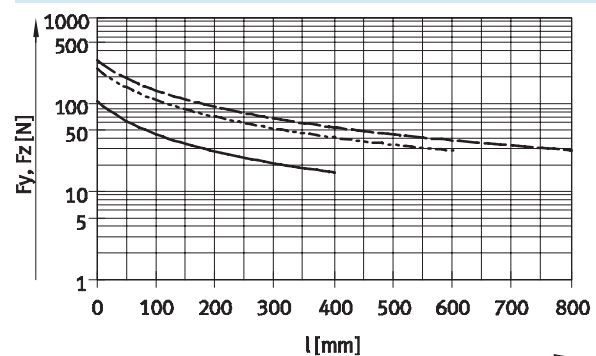
Maximum permissible lateral forces  $F_{y\max}$  and  $F_{z\max}$  on the piston rod

Horizontal mounting position



— DNCE-32-LS/BS  
- - - DNCE-40-LS/BS  
- · - DNCE-63-LS/BS

Vertical mounting position



— DNCE-32-LS/BS  
- - - DNCE-40-LS/BS  
- · - DNCE-63-LS/BS

Note

Sizing software  
PositioningDrives  
→ [www.festo.com](http://www.festo.com)

| Size                                   | 32  | 40    | 63    |
|----------------------------------------|-----|-------|-------|
| Maximum permissible forces and torques |     |       |       |
| $F_{x\max}$ (static) [N]               | 600 | 1,400 | 3,700 |
| $M_{x\max}$ [Nm]                       | 1   | 1     | 1.5   |
| $M_{y\max}, M_{z\max}$ [Nm]            | 8   | 20    | 27    |

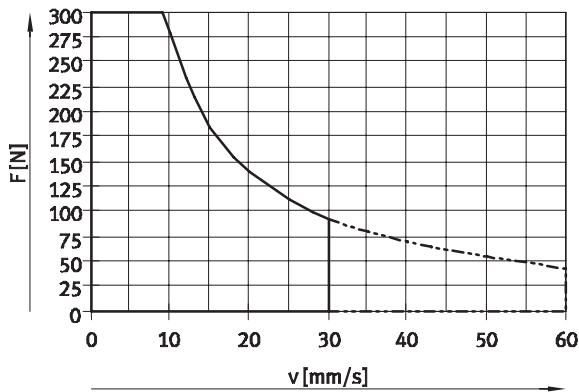
## Electric cylinders DNCE, with piston rod

Technical data

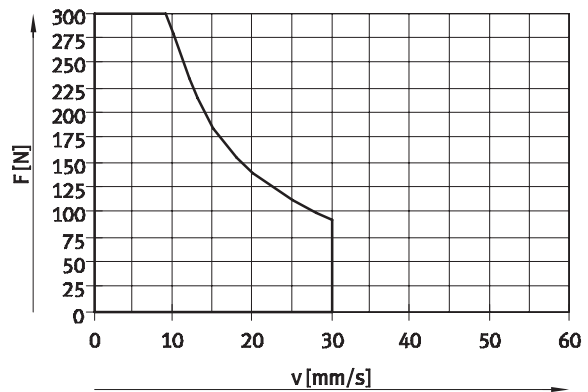
**FESTO**

### Feed force $F$ as a function of speed $v$

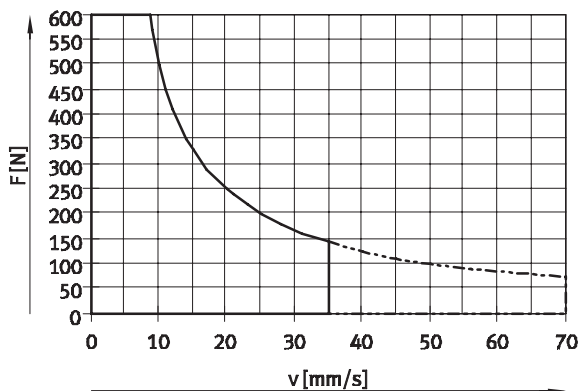
DNCE-32-1...299-LS-...



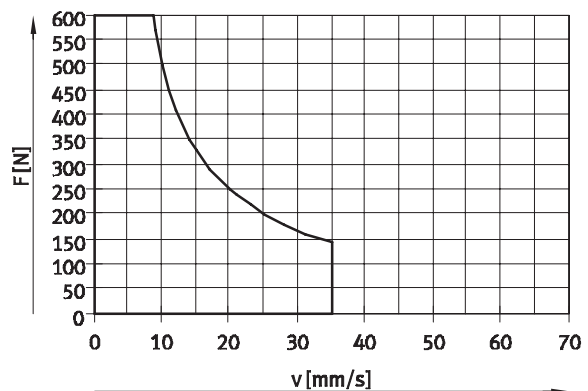
DNCE-32-300...400-LS-...



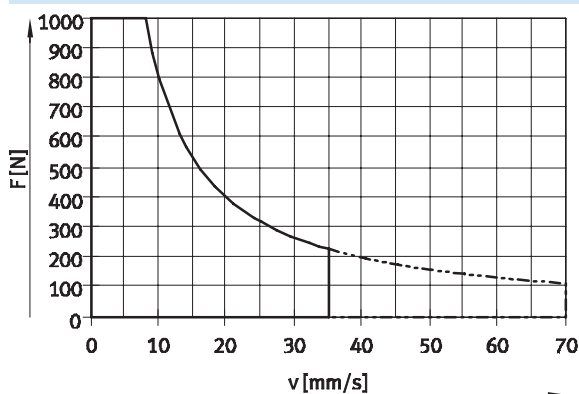
DNCE-40-1...299-LS-...



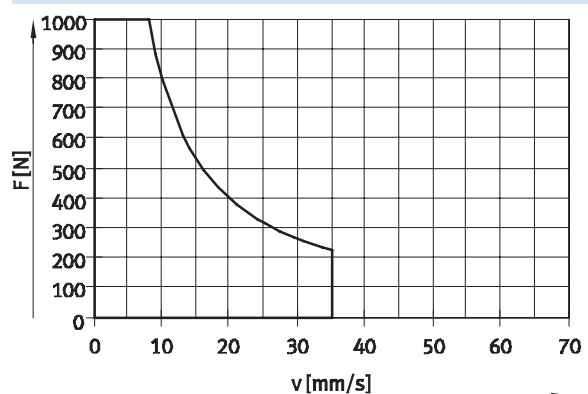
DNCE-40-300...600-LS-...



DNCE-63-1...419-LS-...



DNCE-63-420...800-LS-...



- Recommended operating range
- - - Permissible operating range  
(duty cycle < 50% recommended)

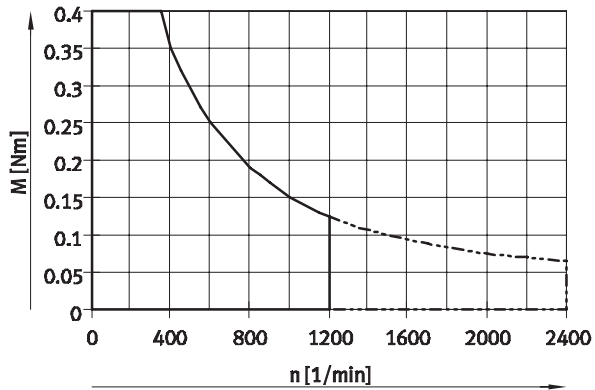
## Electric cylinders DNCE, with piston rod

Technical data

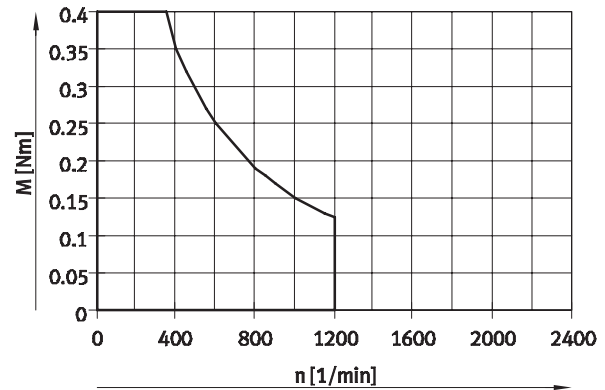
**FESTO**

### Driving torque M as a function of rotational speed n

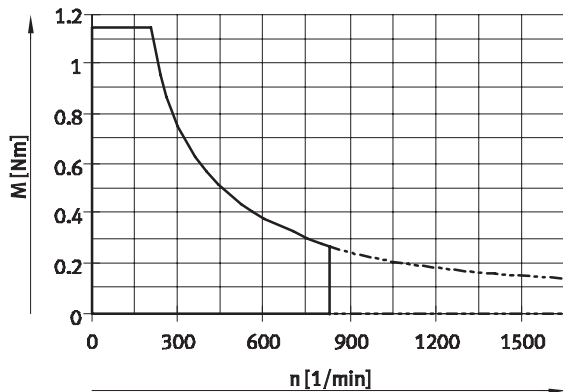
DNCE-32-1...299-LS-...



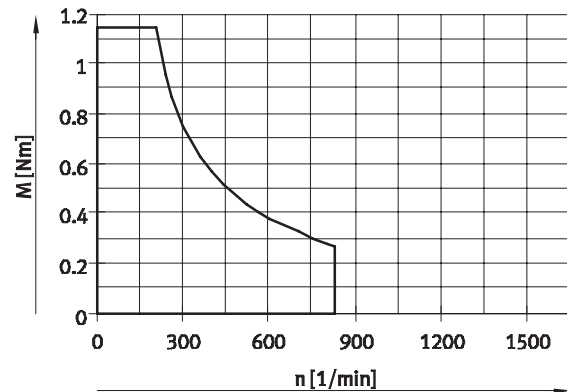
DNCE-32-300...400-LS-...



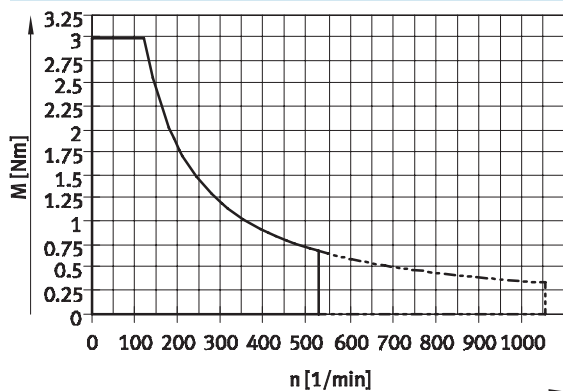
DNCE-40-1...299-LS-...



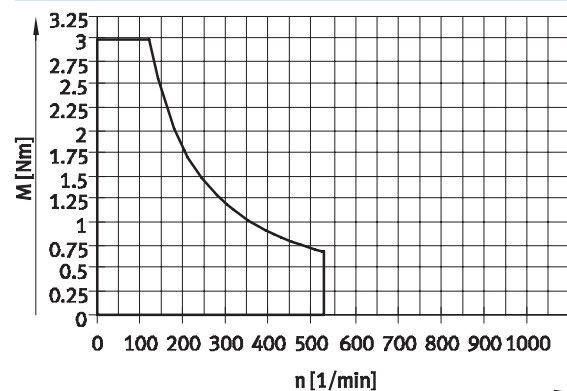
DNCE-40-300...600-LS-...



DNCE-63-1...419-LS-...



DNCE-63-420...800-LS-...



— Recommended operating range  
- - - Permissible operating range  
(duty cycle < 50% recommended)

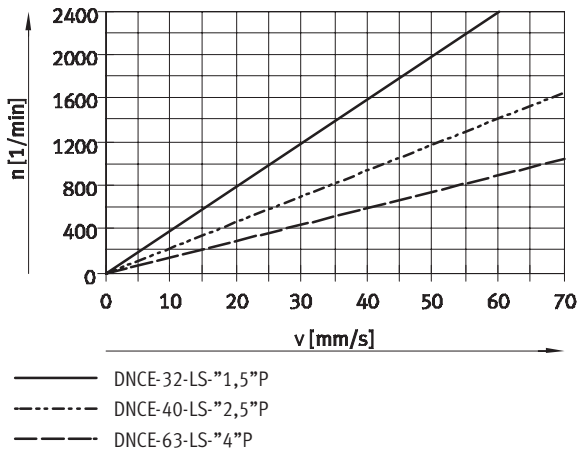
## Electric cylinders DNCE, with piston rod

Technical data

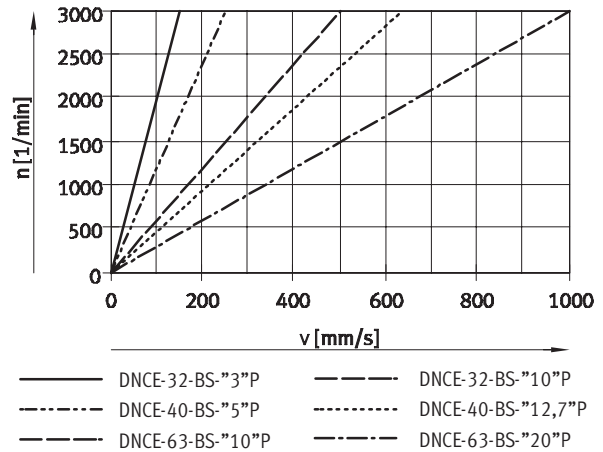
**FESTO**

### Rotational speed $n$ as a function of speed $v$

DNCE-...-LS-...



DNCE-...-BS-...



### Driving torque $M$ as a function of feed force $F$



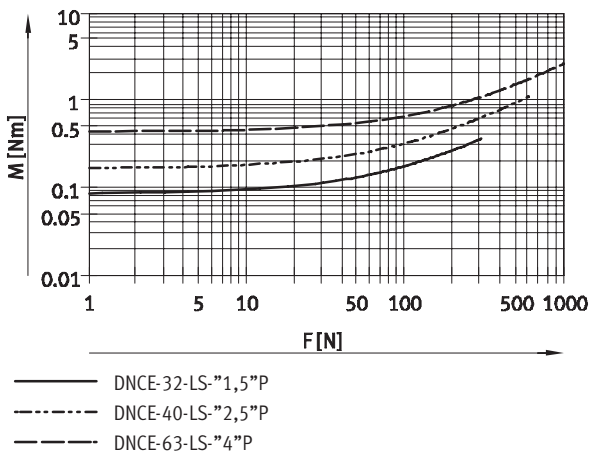
Note

In the diagrams the moments of friction at room temperature are taken into account.

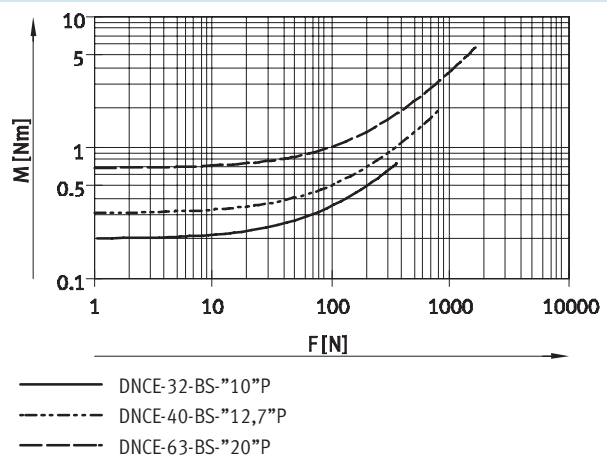
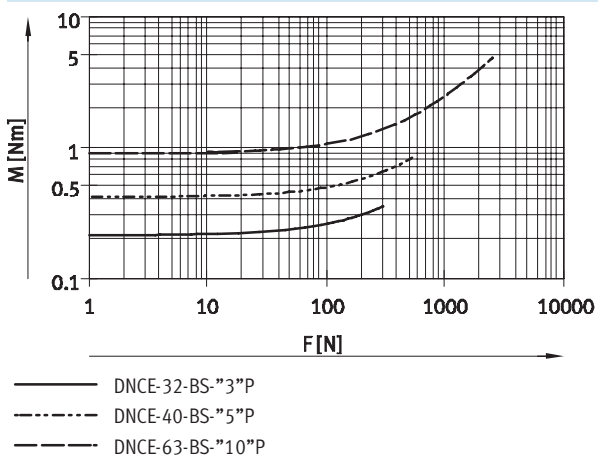
At lower temperatures the moments of friction of the DNCE-...-LS (slide thread) will increase.

Sizing software  
PositioningDrives  
→ [www.festo.com](http://www.festo.com)

DNCE-...-LS-...



DNCE-...-BS-...

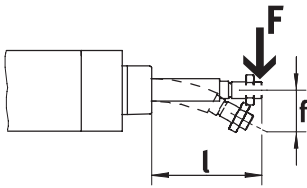


## Electric cylinders DNCE, with piston rod

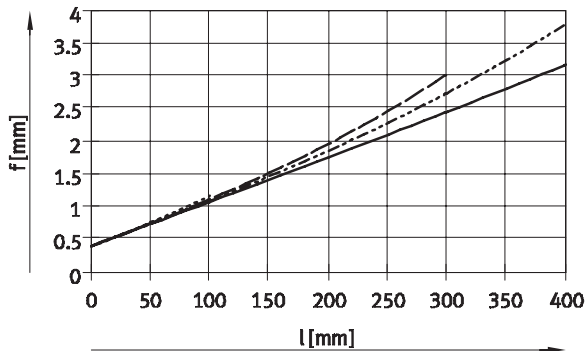
Technical data

**FESTO**

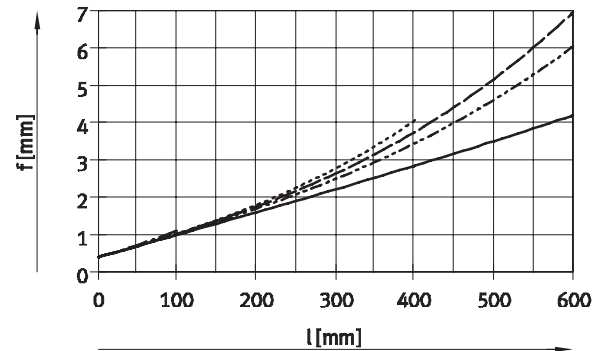
Piston rod displacement  $f$  as a function of stroke length  $l$



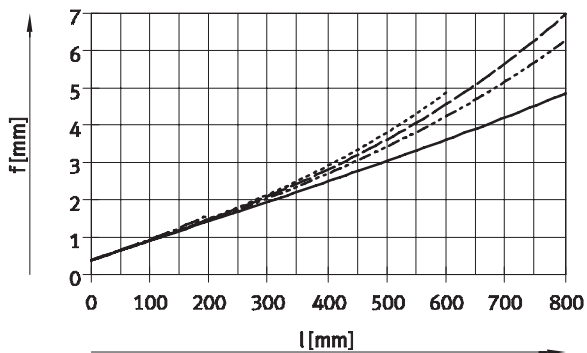
DNCE-32-...



DNCE-40-...



DNCE-63-...

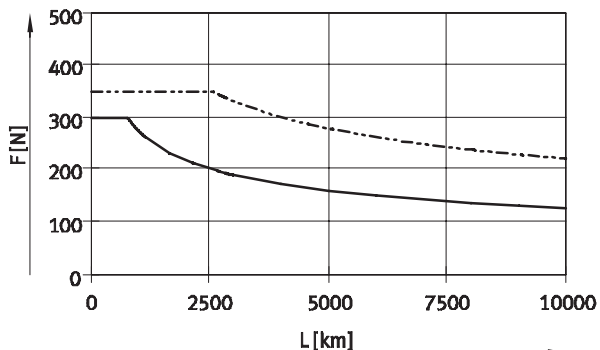


## Electric cylinders DNCE, with piston rod

Technical data

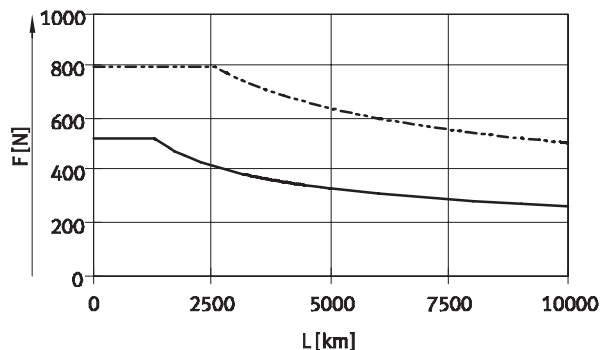
### Running performance L as a function of mean feed force F (to DIN 69 051-4)

DNCE-32-...-BS-...



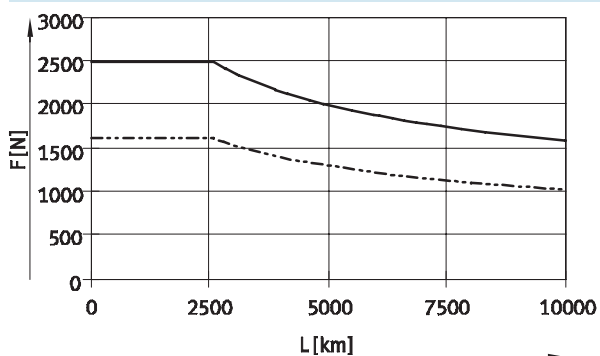
— DNCE-32-BS-10"P  
- - - DNCE-32-BS-12,5"P

DNCE-40-...-BS-...



— DNCE-40-BS-5"P  
- - - DNCE-40-BS-12,5"P

DNCE-63-...-BS-...



— DNCE-63-BS-10"P  
- - - DNCE-63-BS-20"P

### Note

- The data on running performance is based on empirically determined and theoretically calculated data. The running performance attainable in practice may deviate from the indicated curves if the parameters are different.
- Characteristic for DNCE-63-BS-10"P applies to a mean speed of 1,500 rpm.
- Characteristic for all other DNCE-...-BS applies to a maximum speed of 3,000 rpm.

## Electric cylinders DNCE, with piston rod

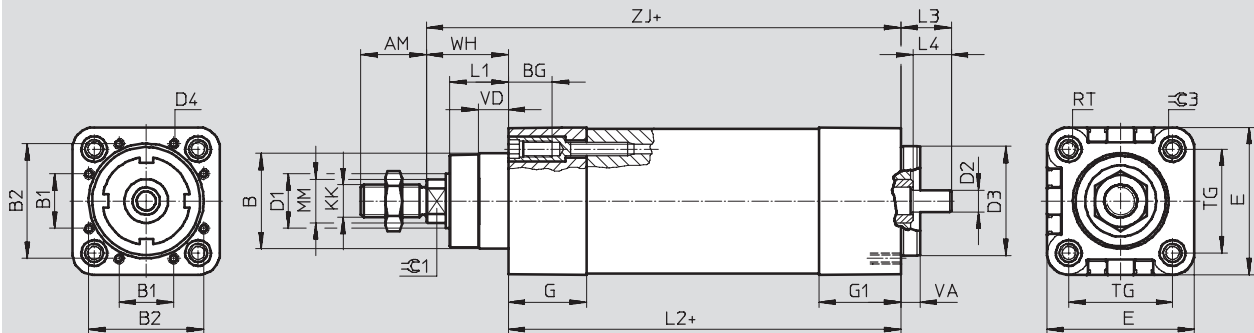
Technical data

**FESTO**

### Dimensions

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

Electric cylinder DNCE



+ = plus stroke length

| Size<br>[mm] | AM | B<br>Ø<br>d11 | B1 | B2 | BG | D1<br>Ø<br>h9 | D2<br>Ø<br>h6 | D3<br>Ø<br>f7 | D4 | E    | G    | G1 | KK       |
|--------------|----|---------------|----|----|----|---------------|---------------|---------------|----|------|------|----|----------|
| 32           | 22 | 30            | 19 | 32 | 16 | 16            | 6             | 32            | M3 | 45.5 | 24   | 26 | M10x1.25 |
| 40           | 24 | 35            | 20 | 42 | 16 | 20            | 8             | 40            | M4 | 54   | 28.5 | 30 | M12x1.25 |
| 63           | 32 | 45            | 31 | 62 | 17 | 28            | 12            | 60            | M5 | 75.5 | 34   | 36 | M16x1.5  |

| Size<br>[mm] | L1   | L2    | L3   | L4 | MM | RT | TG   | VA | VD   | WH | ZJ<br>±1 | ≈C1 | ≈C3 |
|--------------|------|-------|------|----|----|----|------|----|------|----|----------|-----|-----|
| 32           | 18   | 122   | 15.9 | 8  | 12 | M6 | 32.5 | 7  | 10   | 26 | 148      | 10  | 6   |
| 40           | 21.5 | 146.5 | 18.4 | 14 | 16 | M6 | 38   | 7  | 10.5 | 30 | 176.5    | 13  | 6   |
| 63           | 28.5 | 177   | 23.5 | 17 | 20 | M8 | 56.5 | 9  | 15   | 37 | 214      | 17  | 8   |

## Electric cylinders DNCE, with piston rod

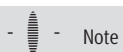
Technical data

**FESTO**

| Ordering data – DNCE-32                   |          |                        |  |                                            |          |                         |  |
|-------------------------------------------|----------|------------------------|--|--------------------------------------------|----------|-------------------------|--|
| Stroke<br>[mm]                            | Part No. | Type                   |  | Stroke<br>[mm]                             | Part No. | Type                    |  |
| Ball screw drive with spindle pitch 3 mm  |          |                        |  | Lead screw drive with spindle pitch 1.5 mm |          |                         |  |
| 100                                       | 543 115  | DNCE-32-100-BS-"3"P-Q  |  | 100                                        | 543 111  | DNCE-32-100-LS-"1,5"P-Q |  |
| 200                                       | 543 116  | DNCE-32-200-BS-"3"P-Q  |  | 200                                        | 543 112  | DNCE-32-200-LS-"1,5"P-Q |  |
| 300                                       | 543 117  | DNCE-32-300-BS-"3"P-Q  |  | 300                                        | 543 113  | DNCE-32-300-LS-"1,5"P-Q |  |
| 400                                       | 543 118  | DNCE-32-400-BS-"3"P-Q  |  | 400                                        | 543 114  | DNCE-32-400-LS-"1,5"P-Q |  |
| Ball screw drive with spindle pitch 10 mm |          |                        |  |                                            |          |                         |  |
| 100                                       | 543 119  | DNCE-32-100-BS-"10"P-Q |  |                                            |          |                         |  |
| 200                                       | 543 120  | DNCE-32-200-BS-"10"P-Q |  |                                            |          |                         |  |
| 300                                       | 543 121  | DNCE-32-300-BS-"10"P-Q |  |                                            |          |                         |  |
| 400                                       | 543 122  | DNCE-32-400-BS-"10"P-Q |  |                                            |          |                         |  |

| Ordering data – DNCE-40                     |          |                          |  |                                            |          |                         |  |
|---------------------------------------------|----------|--------------------------|--|--------------------------------------------|----------|-------------------------|--|
| Stroke<br>[mm]                              | Part No. | Type                     |  | Stroke<br>[mm]                             | Part No. | Type                    |  |
| Ball screw drive with spindle pitch 5 mm    |          |                          |  | Lead screw drive with spindle pitch 2.5 mm |          |                         |  |
| 100                                         | 543 127  | DNCE-40-100-BS-"5"P-Q    |  | 100                                        | 543 123  | DNCE-40-100-LS-"2,5"P-Q |  |
| 200                                         | 543 128  | DNCE-40-200-BS-"5"P-Q    |  | 200                                        | 543 124  | DNCE-40-200-LS-"2,5"P-Q |  |
| 300                                         | 555 466  | DNCE-40-300-BS-"5"P-Q    |  | 300                                        | 555 465  | DNCE-40-300-LS-"2,5"P-Q |  |
| 400                                         | 543 129  | DNCE-40-400-BS-"5"P-Q    |  | 400                                        | 543 125  | DNCE-40-400-LS-"2,5"P-Q |  |
| 600                                         | 543 130  | DNCE-40-600-BS-"5"P-Q    |  | 600                                        | 543 126  | DNCE-40-600-LS-"2,5"P-Q |  |
| Ball screw drive with spindle pitch 12.7 mm |          |                          |  |                                            |          |                         |  |
| 100                                         | 543 131  | DNCE-40-100-BS-"12,7"P-Q |  |                                            |          |                         |  |
| 200                                         | 543 132  | DNCE-40-200-BS-"12,7"P-Q |  |                                            |          |                         |  |
| 300                                         | 555 467  | DNCE-40-300-BS-"12,7"P-Q |  |                                            |          |                         |  |
| 400                                         | 543 133  | DNCE-40-400-BS-"12,7"P-Q |  |                                            |          |                         |  |
| 600                                         | 543 134  | DNCE-40-600-BS-"12,7"P-Q |  |                                            |          |                         |  |

| Ordering data – DNCE-63                   |          |                        |  |                                          |          |                       |  |
|-------------------------------------------|----------|------------------------|--|------------------------------------------|----------|-----------------------|--|
| Stroke<br>[mm]                            | Part No. | Type                   |  | Stroke<br>[mm]                           | Part No. | Type                  |  |
| Ball screw drive with spindle pitch 10 mm |          |                        |  | Lead screw drive with spindle pitch 4 mm |          |                       |  |
| 100                                       | 555 470  | DNCE-63-100-BS-"10"P-Q |  | 100                                      | 555 468  | DNCE-63-100-LS-"4"P-Q |  |
| 200                                       | 543 139  | DNCE-63-200-BS-"10"P-Q |  | 200                                      | 543 135  | DNCE-63-200-LS-"4"P-Q |  |
| 300                                       | 555 471  | DNCE-63-300-BS-"10"P-Q |  | 300                                      | 555 469  | DNCE-63-300-LS-"4"P-Q |  |
| 400                                       | 543 140  | DNCE-63-400-BS-"10"P-Q |  | 400                                      | 543 136  | DNCE-63-400-LS-"4"P-Q |  |
| 600                                       | 543 141  | DNCE-63-600-BS-"10"P-Q |  | 600                                      | 543 137  | DNCE-63-600-LS-"4"P-Q |  |
| 800                                       | 543 142  | DNCE-63-800-BS-"10"P-Q |  | 800                                      | 543 138  | DNCE-63-800-LS-"4"P-Q |  |
| Ball screw drive with spindle pitch 20 mm |          |                        |  |                                          |          |                       |  |
| 100                                       | 555 472  | DNCE-63-100-BS-"20"P-Q |  |                                          |          |                       |  |
| 200                                       | 543 143  | DNCE-63-200-BS-"20"P-Q |  |                                          |          |                       |  |
| 300                                       | 555 473  | DNCE-63-300-BS-"20"P-Q |  |                                          |          |                       |  |
| 400                                       | 543 144  | DNCE-63-400-BS-"20"P-Q |  |                                          |          |                       |  |
| 600                                       | 543 145  | DNCE-63-600-BS-"20"P-Q |  |                                          |          |                       |  |
| 800                                       | 543 146  | DNCE-63-800-BS-"20"P-Q |  |                                          |          |                       |  |



Note

Variable strokes can be ordered via the modular product system

→ 16

## Electric cylinders DNCE, with piston rod

Ordering data – Modular products

**FESTO**

| M Mandatory data              |             |                |              |             |                  |                             |
|-------------------------------|-------------|----------------|--------------|-------------|------------------|-----------------------------|
| Module No.                    | Function    | Size           | Stroke       | Drive type  | Spindle pitch    | Protection against rotation |
| 555 488<br>555 489<br>555 490 | DNCE        | 32<br>40<br>63 | 1 ... 800    | LS<br>BS    | "... "P          | Q                           |
| <b>Order example</b>          |             |                |              |             |                  |                             |
| <b>555 489</b>                | <b>DNCE</b> | <b>- 40</b>    | <b>- 550</b> | <b>- LS</b> | <b>- "2,5" P</b> | <b>- Q</b>                  |

| Ordering table              |                              |           |           |                 |         |               |
|-----------------------------|------------------------------|-----------|-----------|-----------------|---------|---------------|
| Size                        | 32                           | 40        | 63        | Condi-<br>tions | Code    | Enter<br>code |
| M Module No.                | 555 488                      | 555 489   | 555 490   |                 |         |               |
| Function                    | Electric piston rod cylinder |           |           |                 | DNCE    | DNCE          |
| Size                        | 32                           | 40        | 63        |                 | "...    |               |
| Stroke [mm]                 | 100                          |           |           |                 | "...    |               |
|                             | 200                          |           |           |                 |         |               |
|                             | 300                          |           |           |                 |         |               |
|                             | 400                          |           |           |                 |         |               |
|                             | –                            | 600       |           |                 |         |               |
|                             | –                            | –         | 800       |                 |         |               |
|                             | 1 ... 400                    | 1 ... 600 | 1 ... 800 | [1]             |         |               |
| Drive type                  | Lead screw spindle           |           |           |                 | -LS     |               |
|                             | Ball screw spindle           |           |           |                 | -BS     |               |
| Spindle pitch [mm]          | 1.5                          | –         | –         | [2]             | "... "P |               |
|                             | –                            | 2.5       | –         | [2]             |         |               |
|                             | 3                            | –         | –         | [3]             |         |               |
|                             | –                            | –         | 4         | [2]             |         |               |
|                             | –                            | 5         | –         | [3]             |         |               |
|                             | 10                           | –         | 10        | [3]             |         |               |
|                             | –                            | 12.7      | –         | [3]             |         |               |
|                             | –                            | –         | 20        | [3]             |         |               |
| Protection against rotation | Non-rotating piston rod      |           |           |                 | -Q      | -Q            |

[1] ... Additional stroke lengths upon request

[2] "1,5" P, "2,5" P, "4" P

Only with drive type LS

[3] "3" P, "5" P, "10" P, "12,7" P, "20" P

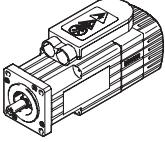
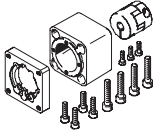
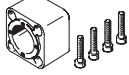
Only with drive type BS

Transfer order code

|  |      |   |  |   |  |   |  |   |  |   |   |
|--|------|---|--|---|--|---|--|---|--|---|---|
|  | DNCE | - |  | - |  | - |  | - |  | - | Q |
|--|------|---|--|---|--|---|--|---|--|---|---|

## Electric cylinders DNCE, with piston rod

Accessories

| Permissible axis/motor combinations with axial kit                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Motor/motor unit                                                                  | Axial kit                                                                         | Axial kit consisting of:                                                          |                                                                                     |                                                                                     |
|                                                                                   |                                                                                   | Motor flange                                                                      | Coupling                                                                            | Coupling housing                                                                    |
|  |  |  |  |  |
| Type                                                                              | Part No.<br>Type                                                                  | Part No.<br>Type                                                                  | Part No.<br>Type                                                                    | Part No.<br>Type                                                                    |
| <b>DNCE-32</b>                                                                    |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| With servo motor                                                                  |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| EMMS-AS-40-...                                                                    | 543 147                                                                           | 552 163                                                                           | 543 420                                                                             | 552 155                                                                             |
| MTR-AC-40-3S-A-...                                                                | EAMM-A-D32-40A                                                                    | EAMF-A-28B-40A                                                                    | KSE-16-20-D06-D06                                                                   | EAMK-A-D32-28B                                                                      |
| EMMS-AS-55-...                                                                    | 550 979                                                                           | 529 942                                                                           | 551 003                                                                             | 551 006                                                                             |
| MTR-AC-55-3S-A-...                                                                | EAMM-A-D32-55A                                                                    | MTR-FL44-AC55                                                                     | KSE-30-32-D06-D09                                                                   | EAMK-A-D32-44                                                                       |
| With stepper motor                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| EMMS-ST-42-...                                                                    | 543 148<br>EAMM-A-D32-42A                                                         | 552 164<br>EAMF-A-28B-42A                                                         | 543 419<br>KSE-16-20-D05-D06                                                        | 552 155<br>EAMK-A-D32-28B                                                           |
| EMMS-ST-57-...                                                                    | 550 980<br>EAMM-A-D32-57A                                                         | 530 081<br>MTR-FL44-ST57                                                          | 551 002<br>KSE-30-32-D06-D06.35                                                     | 551 006<br>EAMK-A-D32-44                                                            |
| With intelligent motor unit                                                       |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| MTR-DCI-32S-... <sup>1)</sup>                                                     | 543 149<br>EAMM-A-D32-32B                                                         | –                                                                                 | 543 420<br>KSE-16-20-D06-D06                                                        | 552 156<br>EAMK-A-D32-32B                                                           |
| <b>DNCE-40</b>                                                                    |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| With servo motor                                                                  |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| EMMS-AS-55-...                                                                    | 543 153                                                                           | 529 942                                                                           | 543 423                                                                             | 552 157                                                                             |
| MTR-AC-55-3S-A-...                                                                | EAMM-A-D40-55A                                                                    | MTR-FL44-AC55                                                                     | KSE-30-32-D08-D09                                                                   | EAMK-A-D40-44                                                                       |
| EMMS-AS-70-...                                                                    | 550 981                                                                           | 529 943                                                                           | 551 004                                                                             | 552 157                                                                             |
| MTR-AC-70-3S-A-...                                                                | EAMM-A-D40-70A                                                                    | MTR-FL44-AC70                                                                     | KSE-30-32-D08-D11                                                                   | EAMK-A-D40-44                                                                       |
| With stepper motor                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| EMMS-ST-57-...                                                                    | 543 154<br>EAMM-A-D40-57A                                                         | 530 081<br>MTR-FL44-ST57                                                          | 543 421<br>KSE-30-32-D06.35-D08                                                     | 552 157<br>EAMK-A-D40-44                                                            |
| EMMS-ST-87-...                                                                    | 550 982<br>EAMM-A-D40-87A                                                         | 530 082<br>MTR-FL44-ST87                                                          | 551 004<br>KSE-30-32-D08-D11                                                        | 552 157<br>EAMK-A-D40-44                                                            |
| With intelligent motor unit                                                       |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| MTR-DCI-42S-...-G7 <sup>1)</sup>                                                  | 543 155<br>EAMM-A-D40-42B                                                         | –                                                                                 | 543 422<br>KSE-30-32-D08-D08                                                        | 522 158<br>EAMK-A-D40-42B                                                           |
| MTR-DCI-42S-...-G14 <sup>1)</sup>                                                 | 543 156<br>EAMM-A-D40-42C                                                         | –                                                                                 | 543 422<br>KSE-30-32-D08-D08                                                        | 522 159<br>EAMK-A-D40-42C                                                           |

 Note

1) Motor unit MTR-DCI may only be used in conjunction with electric cylinder DNCE-...-LS (slide thread).

Depending on the combination of motor/motor unit and electric cylinder the maximum feed force of the cylinder cannot be reached.

The following tool is available for selecting and sizing the unit:

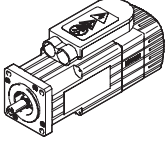
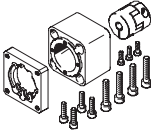
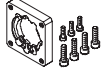
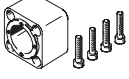
 Note

Sizing software  
PositioningDrives  
→ [www.festo.com](http://www.festo.com)

## Electric cylinders DNCE, with piston rod

Accessories

**FESTO**

| Permissible axis/motor combinations with axial kit                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Motor/motor unit                                                                  | Axial kit                                                                         | Axial kit consisting of:                                                          |                                                                                     |                                                                                     |
|                                                                                   |                                                                                   | Motor flange                                                                      | Coupling                                                                            | Coupling housing                                                                    |
|  |  |  |  |  |
| Type                                                                              | Part No.<br>Type                                                                  | Part No.<br>Type                                                                  | Part No.<br>Type                                                                    | Part No.<br>Type                                                                    |
| <b>DNCE-63</b>                                                                    |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| With servo motor                                                                  |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| EMMS-AS-70-...                                                                    | 543 161                                                                           | 529 945                                                                           | 543 424                                                                             | 552 160                                                                             |
| MTR-AC-70-3S-A-...                                                                | EAMM-A-D60-70A                                                                    | MTR-FL64-AC70                                                                     | KSE-42-50-D11-D12                                                                   | EAMK-A-D60-64-L51                                                                   |
| EMMS-AS-100-...                                                                   | 550 983                                                                           | 529 947                                                                           | 551 005                                                                             | 551 007                                                                             |
| MTR-AC-100-...-A...                                                               | EAMM-A-D60-100A                                                                   | MTR-FL64-AC100                                                                    | KSE-42-50-D12-D19                                                                   | EAMK-A-D60-64-L61                                                                   |
| With stepper motor                                                                |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| EMMS-ST-87-...                                                                    | 543 162                                                                           | 530 082                                                                           | 543 424                                                                             | 552 160                                                                             |
|                                                                                   | EAMM-A-D60-87A                                                                    | MTR-FL64-ST87                                                                     | KSE-42-50-D11-D12                                                                   | EAMK-A-D60-64-L51                                                                   |
| With intelligent motor unit                                                       |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
| MTR-DCI-52S-...-G7 <sup>1)</sup>                                                  | 543 163                                                                           | —                                                                                 | 533 709                                                                             | 552 161                                                                             |
|                                                                                   | EAMM-A-D60-52B                                                                    |                                                                                   | KSE-42-50-D12-D12                                                                   | EAMK-A-D60-52B                                                                      |
| MTR-DCI-52S-...-G14 <sup>1)</sup>                                                 | 543 164                                                                           | —                                                                                 | 533 709                                                                             | 552 162                                                                             |
|                                                                                   | EAMM-A-D60-52C                                                                    |                                                                                   | KSE-42-50-D12-D12                                                                   | EAMK-A-D60-52C                                                                      |

 Note

1) Motor unit MTR-DCI may only be used in conjunction with electric cylinder DNCE-...-LS (slide thread).

Depending on the combination of motor/motor unit and electric cylinder the maximum feed force of the cylinder cannot be reached.

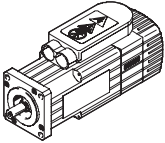
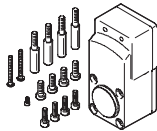
The following tool is available for selecting and sizing the unit:

 Note

Sizing software  
PositioningDrives  
→ [www.festo.com](http://www.festo.com)

## Electric cylinders DNCE, with piston rod

Accessories

| Permissible axis/motor combinations with parallel kit                             |                                                                                    |                |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------------|
| Motor/motor unit                                                                  | Parallel kit                                                                       |                |
|  |  |                |
| Type                                                                              | Part No.                                                                           | Type           |
| <b>DNCE-32</b>                                                                    |                                                                                    |                |
| With servo motor                                                                  |                                                                                    |                |
| EMMS-AS-40-...                                                                    | 543 150                                                                            | EAMM-U-D32-40A |
| MTR-AC-40-3S-A-...                                                                |                                                                                    |                |
| With intelligent motor unit                                                       |                                                                                    |                |
| MTR-DCI-32S-... <sup>1)</sup>                                                     | 543 152                                                                            | EAMM-U-D32-32B |
| <b>DNCE-40</b>                                                                    |                                                                                    |                |
| With servo motor                                                                  |                                                                                    |                |
| EMMS-AS-55-...                                                                    | 543 157                                                                            | EAMM-U-D40-55A |
| MTR-AC-55-3S-A-...                                                                |                                                                                    |                |
| With intelligent motor unit                                                       |                                                                                    |                |
| MTR-DCI-42S-G07 <sup>1)</sup>                                                     | 543 159                                                                            | EAMM-U-D40-42B |
| MTR-DCI-42S-G14 <sup>1)</sup>                                                     | 543 160                                                                            | EAMM-U-D40-42C |
| <b>DNCE-63</b>                                                                    |                                                                                    |                |
| With servo motor                                                                  |                                                                                    |                |
| EMMS-AS-70-...                                                                    | 543 165                                                                            | EAMM-U-D60-70A |
| MTR-AC-70-3S-A-...                                                                |                                                                                    |                |
| With intelligent motor unit                                                       |                                                                                    |                |
| MTR-DCI-52S-G07 <sup>1)</sup>                                                     | 543 167                                                                            | EAMM-U-D60-52B |
| MTR-DCI-52S-G14 <sup>1)</sup>                                                     | 543 168                                                                            | EAMM-U-D60-52C |

 Note

1) Motor unit MTR-DCI may only be used in conjunction with electric cylinder DNCE-...-LS (slide thread).

Depending on the combination of motor/motor unit and electric cylinder the maximum feed force of the cylinder cannot be reached. If parallel kits are used, the relevant no-load driving torque of the kit must be taken into account.

The following tool is available for selecting and sizing the unit:

 Note

Sizing software  
PositioningDrives  
→ [www.festo.com](http://www.festo.com)

## Electric cylinders DNCE, with piston rod

Accessories

**FESTO**

### Axial kit EAMM-A-...

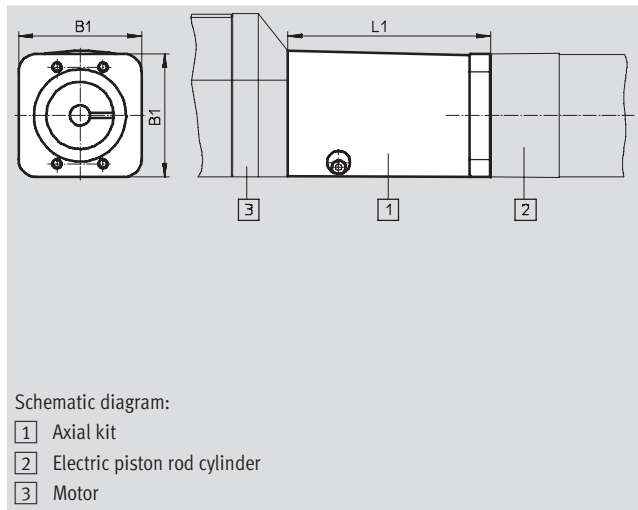
Material:

Coupling housing: Die-cast aluminium

Coupling hubs: Wrought aluminium alloy

Clamping component: High-alloy steel

Screws: Galvanised steel



| General technical data |                       |        |     |     |       |      |       |      |      |      |      |      |
|------------------------|-----------------------|--------|-----|-----|-------|------|-------|------|------|------|------|------|
| EAMM-A-...             |                       | D32-   |     |     |       |      | D40-  |      |      |      |      |      |
|                        |                       | 32B    | 40A | 42A | 55A   | 57A  | 42B   | 42C  | 55A  | 57A  | 70A  | 87A  |
| Transferable torque    | [Nm]                  | 1.1    | 1.1 | 0.8 | 4     | 4    | 8     | 8    | 8    | 6    | 8    | 8    |
| Mass moment of inertia | [kg mm <sup>2</sup> ] | 0.3    | 0.3 | 0.3 | 5.87  | 5.87 | 5.87  | 5.87 | 5.87 | 5.87 | 5.87 | 5.87 |
| Max. speed             | [r.p.m.]              | 10,000 |     |     | 8,000 |      | 8,000 |      |      |      |      |      |
| Mounting position      |                       | Any    |     |     |       |      |       |      |      |      |      |      |

| EAMM-A-...             |                       | D60-  |      |      |      |      |
|------------------------|-----------------------|-------|------|------|------|------|
|                        |                       | 52B   | 52C  | 70A  | 87A  | 100A |
| Transferable torque    | [Nm]                  | 14    | 14   | 12   | 12   | 14   |
| Mass moment of inertia | [kg mm <sup>2</sup> ] | 35.5  | 35.5 | 35.5 | 35.5 | 35.5 |
| Max. speed             | [r.p.m.]              | 6,000 |      |      |      |      |
| Mounting position      |                       | Any   |      |      |      |      |

| Operating and environmental conditions |                  |
|----------------------------------------|------------------|
| Ambient temperature                    | [°C] 0 ... 50    |
| Storage temperature                    | [°C] -25 ... +60 |
| Protection class <sup>1)</sup>         | IP40             |
| Relative air humidity                  | [%] 0 ... 95     |

1) Only with combined attachment of motor and axis

## Electric cylinders DNCE, with piston rod

Accessories

| Dimensions and ordering data |      |      |               |                |                        |
|------------------------------|------|------|---------------|----------------|------------------------|
| Type                         | B1   | L1   | Weight<br>[g] | Part No.       | Type                   |
| EAMM-A-D32-32B               | 45   | 43   | 150           | <b>543 149</b> | <b>EAMM-A-D32-32B</b>  |
| EAMM-A-D32-40A               |      | 39.8 | 130           | <b>543 147</b> | <b>EAMM-A-D32-40A</b>  |
| EAMM-A-D32-42A               |      | 48   | 140           | <b>543 148</b> | <b>EAMM-A-D32-42A</b>  |
| EAMM-A-D32-55A               | 55   | 49.2 | 260           | <b>550 979</b> | <b>EAMM-A-D32-55A</b>  |
| EAMM-A-D32-57A               | 56.4 | 50.5 | 270           | <b>550 980</b> | <b>EAMM-A-D32-57A</b>  |
| EAMM-A-D40-42B               | 53.5 | 88   | 340           | <b>543 155</b> | <b>EAMM-A-D40-42B</b>  |
| EAMM-A-D40-42C               |      | 101  | 370           | <b>543 156</b> | <b>EAMM-A-D40-42C</b>  |
| EAMM-A-D40-55A               |      | 49.2 | 350           | <b>543 153</b> | <b>EAMM-A-D40-55A</b>  |
| EAMM-A-D40-57A               |      | 50.5 | 350           | <b>543 154</b> | <b>EAMM-A-D40-57A</b>  |
| EAMM-A-D40-70A               | 70   | 52   | 410           | <b>550 981</b> | <b>EAMM-A-D40-70A</b>  |
| EAMM-A-D40-87A               | 85.8 | 54   | 530           | <b>550 982</b> | <b>EAMM-A-D40-87A</b>  |
| EAMM-A-D60-52B               | 74   | 112  | 930           | <b>543 163</b> | <b>EAMM-A-D60-52B</b>  |
| EAMM-A-D60-52C               |      | 126  | 1,020         | <b>543 164</b> | <b>EAMM-A-D60-52C</b>  |
| EAMM-A-D60-70A               |      | 63.2 | 750           | <b>543 161</b> | <b>EAMM-A-D60-70A</b>  |
| EAMM-A-D60-87A               |      | 64.7 | 890           | <b>543 162</b> | <b>EAMM-A-D60-87A</b>  |
| EAMM-A-D60-100A              | 100  | 78.2 | 1,170         | <b>550 983</b> | <b>EAMM-A-D60-100A</b> |

 **Note**

Permissible axis/motor combinations

→ 17

## Electric cylinders DNCE, with piston rod

Accessories

**FESTO**

### Parallel kit EAMM-U-...

Material:

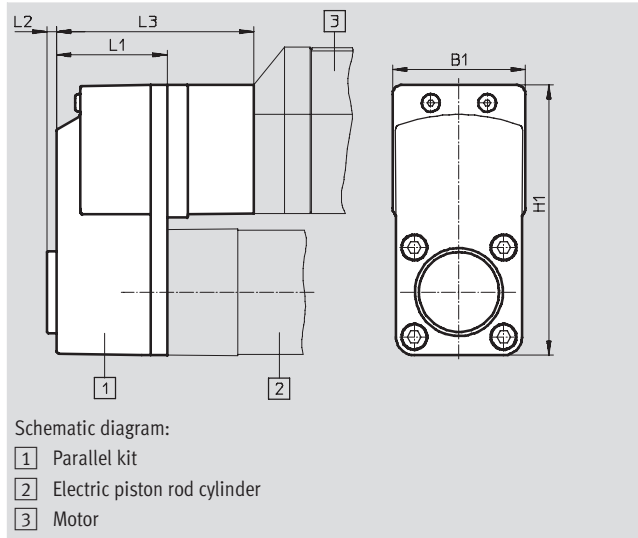
Coupling housing: Die-cast aluminium

Clamping component, clamping sleeve, toothed belt gearwheel:

High-alloy steel

Toothed belt: Polychloroprene

Screws: Galvanised steel



| General technical data |                      |       |       |        |        |        |      |      |      |
|------------------------|----------------------|-------|-------|--------|--------|--------|------|------|------|
| EAMM-U-...             |                      | D32-  |       | D40-   |        |        | D60- |      |      |
|                        |                      | 32B   | 40A   | 42B    | 42C    | 55A    | 52B  | 52C  | 70A  |
| Transferable torque    | [Nm]                 | 1     | 1     | 3      | 3      | 3      | 5.5  | 5.5  | 5.5  |
| No-load drive torque   | [Nm]                 | 0.05  | 0.05  | 0.1    | 0.1    | 0.1    | 0.3  | 0.3  | 0.3  |
| Mass moment of inertia | [kgmm <sup>2</sup> ] | 2.931 | 2.931 | 10.016 | 10.016 | 10.016 | 70.5 | 70.5 | 70.5 |
| Max. speed             | [r.p.m.]             | 3,000 |       |        |        |        |      |      |      |
| Mounting position      |                      | Any   |       |        |        |        |      |      |      |

| Operating and environmental conditions |      |             |
|----------------------------------------|------|-------------|
| Ambient temperature                    | [°C] | 0 ... 50    |
| Storage temperature                    | [°C] | -25 ... +60 |
| Protection class <sup>1)</sup>         |      | IP40        |
| Relative air humidity                  | [%]  | 0 ... 95    |

1) Only with combined attachment of motor and axis

| Dimensions and ordering data |      |       |    |    |     |            |          |                |
|------------------------------|------|-------|----|----|-----|------------|----------|----------------|
| Type                         | B1   | H1    | L1 | L2 | L3  | Weight [g] | Part No. | Type           |
| EAMM-U-D32-32B               | 45.1 | 93.1  | 40 | 4  | –   | 300        | 543 152  | EAMM-U-D32-32B |
| EAMM-U-D32-40A               |      |       |    |    | –   | 300        | 543 150  | EAMM-U-D32-40A |
| EAMM-U-D40-42B               |      |       |    |    | 84  | 660        | 543 159  | EAMM-U-D40-42B |
| EAMM-U-D40-42C               | 56.5 | 115   | 47 | 4  | 97  | 690        | 543 160  | EAMM-U-D40-42C |
| EAMM-U-D40-55A               |      |       |    |    | –   | 530        | 543 157  | EAMM-U-D40-55A |
| EAMM-U-D60-52B               |      |       |    |    | 106 | 1,530      | 543 167  | EAMM-U-D60-52B |
| EAMM-U-D60-52C               | 86   | 162.6 | 58 | 4  | 120 | 1,630      | 543 168  | EAMM-U-D60-52C |
| EAMM-U-D60-70A               |      |       |    |    | –   | 1,170      | 543 165  | EAMM-U-D60-70A |

 Note

Permissible axis/motor combinations  
→ 19

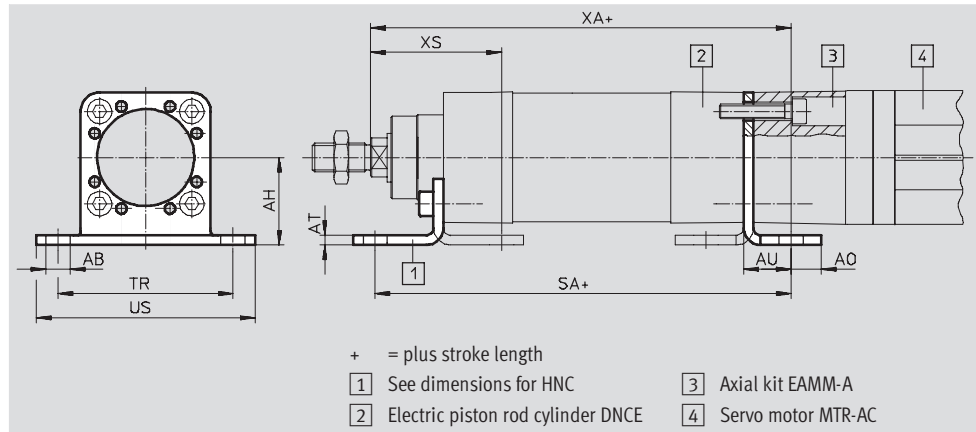
## Electric cylinders DNCE, with piston rod

Accessories

**Foot mounting HNCE,  
for axial motor attachment**

Material:  
Galvanised steel

Copper, PTFE and silicone-free



| Dimensions and ordering data |         |    |      |    |      |       |    |     |       |    |
|------------------------------|---------|----|------|----|------|-------|----|-----|-------|----|
| For size                     | AB<br>Ø | AH | AO   | AT | AU   | SA    | TR | US  | XA    | XS |
| [mm]                         |         |    |      |    |      |       |    |     |       |    |
| 32                           | 7       | 32 | 10.5 | 4  | 17.5 | 163.5 | 58 | 71  | 165.5 | 46 |
| 40                           | 10      | 36 | 12.5 | 4  | 19.5 | 194.5 | 72 | 90  | 196   | 54 |
| 63                           | 10      | 50 | 15   | 5  | 23   | 232   | 92 | 110 | 237   | 64 |

| For size | CRC <sup>1)</sup> | Weight | Part No. | Type       |
|----------|-------------------|--------|----------|------------|
| [mm]     |                   | [g]    |          |            |
| 32       | 1                 | 160    | 547 949  | HNCE-32-AX |
| 40       | 1                 | 220    | 547 950  | HNCE-40-AX |
| 63       | 1                 | 470    | 547 951  | HNCE-63-AX |

1) Corrosion resistance class 1 to Festo standard 940 070  
Components requiring low corrosion resistance. Transport and storage protection. Parts that do not have primarily decorative surface requirements, e.g. in internal areas that are not visible or behind covers

## Electric cylinders DNCE, with piston rod

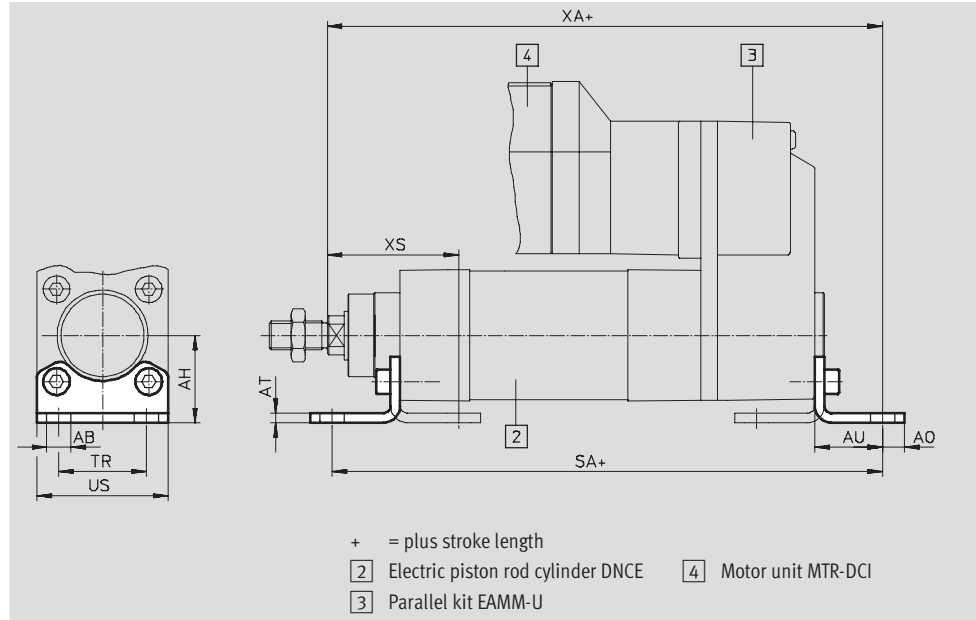
Accessories

**FESTO**

Foot mounting HNC/CRHNC,  
for parallel motor attachment

Material:  
HNC: Galvanised steel

CRHNC: High-alloy steel  
Copper, PTFE and silicone-free



### Dimensions and ordering data

| For size | AB | AH | AO   | AT | AU | SA    | TR | US | XA    | XS |
|----------|----|----|------|----|----|-------|----|----|-------|----|
| [mm]     | Ø  |    |      |    |    |       |    |    |       |    |
| 32       | 7  | 32 | 6.5  | 4  | 24 | 210   | 32 | 45 | 212   | 46 |
| 40       | 10 | 36 | 9    | 4  | 28 | 249.5 | 36 | 54 | 251.5 | 54 |
| 63       | 10 | 50 | 12.5 | 5  | 32 | 299   | 50 | 75 | 304   | 64 |

| For size | Basic version     |            |          |        | High corrosion protection |            |          |          |
|----------|-------------------|------------|----------|--------|---------------------------|------------|----------|----------|
|          | CRC <sup>1)</sup> | Weight [g] | Part No. | Type   | CRC <sup>1)</sup>         | Weight [g] | Part No. | Type     |
| [mm]     |                   |            |          |        |                           |            |          |          |
| 32       | 2                 | 135        | 174 369  | HNC-32 | 4                         | 135        | 176 937  | CRHNC-32 |
| 40       | 2                 | 180        | 174 370  | HNC-40 | 4                         | 180        | 176 938  | CRHNC-40 |
| 63       | 2                 | 405        | 174 372  | HNC-63 | 4                         | 405        | 176 940  | CRHNC-63 |

1) Corrosion resistance class 2 to Festo standard 940 070

Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Corrosion resistance class 4 to Festo standard 940 070

Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required

## Electric cylinders DNCE, with piston rod

Accessories

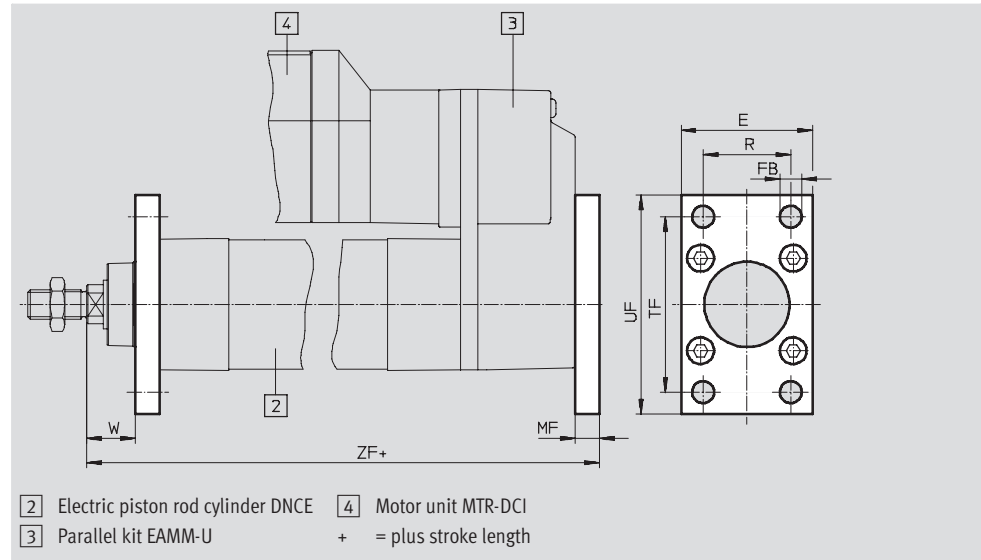
### Flange mounting FNC/CRFNG

Material:

FNC: Galvanised steel

CRFNG: High-alloy steel

Copper, PTFE and silicone-free



| Dimensions and ordering data |    |                |    |    |     |     |    |       |
|------------------------------|----|----------------|----|----|-----|-----|----|-------|
| For size                     | E  | FB<br>Ø<br>H13 | MF | R  | TF  | UF  | W  | ZF    |
| [mm]                         |    |                |    |    |     |     |    |       |
| 32                           | 45 | 7              | 10 | 32 | 64  | 80  | 16 | 198   |
| 40                           | 54 | 9              | 10 | 36 | 72  | 90  | 20 | 233.5 |
| 63                           | 75 | 9              | 12 | 50 | 100 | 120 | 25 | 284   |

| For size | Basic version     |               |          |        | High corrosion protection |               |          |          |
|----------|-------------------|---------------|----------|--------|---------------------------|---------------|----------|----------|
|          | CRC <sup>1)</sup> | Weight<br>[g] | Part No. | Type   | CRC <sup>1)</sup>         | Weight<br>[g] | Part No. | Type     |
| [mm]     |                   |               |          |        |                           |               |          |          |
| 32       | 2                 | 240           | 174 376  | FNC-32 | 4                         | 240           | 161 846  | CRFNG-32 |
| 40       | 2                 | 280           | 174 377  | FNC-40 | 4                         | 300           | 161 847  | CRFNG-40 |
| 63       | 2                 | 690           | 174 379  | FNC-63 | 4                         | 710           | 161 849  | CRFNG-63 |

1) Corrosion resistance class 2 to Festo standard 940 070

Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Corrosion resistance class 4 to Festo standard 940 070

Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required

## Electric cylinders DNCE, with piston rod

Accessories

**FESTO**

### Trunnion flange ZNCF/CRZNG

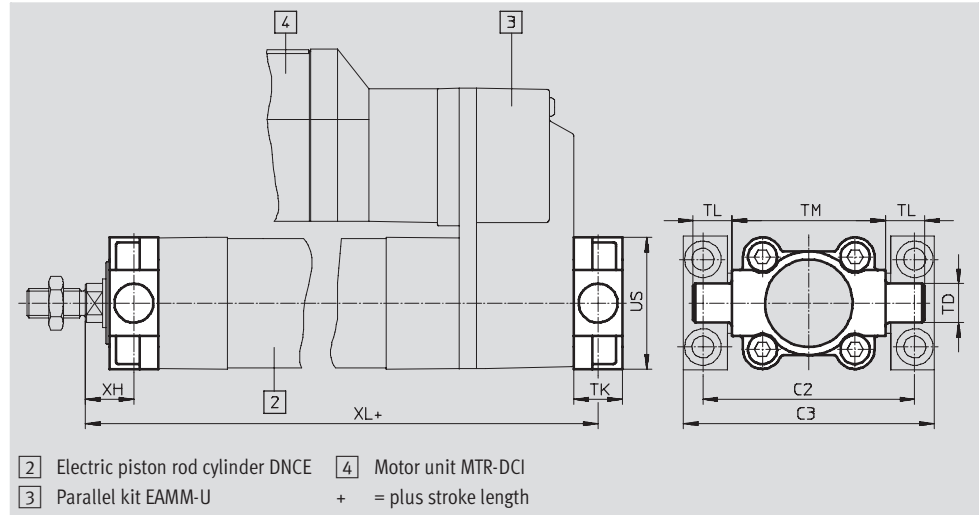
Material:

ZNCF: Special steel casting

CRZNG: Electrolytically polished

special steel casting

Copper, PTFE and silicone-free



#### Dimensions and ordering data

| For size | C2  | C3  | TD<br>Ø<br>e9 | TK | TL | TM | US | XH | XL    |
|----------|-----|-----|---------------|----|----|----|----|----|-------|
| [mm]     |     |     |               |    |    |    |    |    |       |
| 32       | 71  | 86  | 12            | 16 | 12 | 50 | 45 | 18 | 196   |
| 40       | 87  | 105 | 16            | 20 | 16 | 63 | 54 | 20 | 233.5 |
| 63       | 116 | 136 | 20            | 24 | 20 | 90 | 75 | 25 | 284   |

| For size | Basic version     |               |          |         | High corrosion protection |               |          |          |
|----------|-------------------|---------------|----------|---------|---------------------------|---------------|----------|----------|
|          | CRC <sup>1)</sup> | Weight<br>[g] | Part No. | Type    | CRC <sup>1)</sup>         | Weight<br>[g] | Part No. | Type     |
| [mm]     |                   |               |          |         |                           |               |          |          |
| 32       | 2                 | 130           | 174 411  | ZNCF-32 | 4                         | 150           | 161 852  | CRZNG-32 |
| 40       | 2                 | 240           | 174 412  | ZNCF-40 | 4                         | 260           | 161 853  | CRZNG-40 |
| 63       | 2                 | 600           | 174 414  | ZNCF-63 | 4                         | 640           | 161 855  | CRZNG-63 |

1) Corrosion resistance class 2 to Festo standard 940 070

Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Corrosion resistance class 4 to Festo standard 940 070

Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required

## Electric cylinders DNCE, with piston rod

Accessories

### Trunnion support LNZG

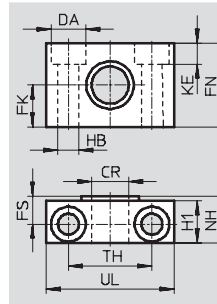
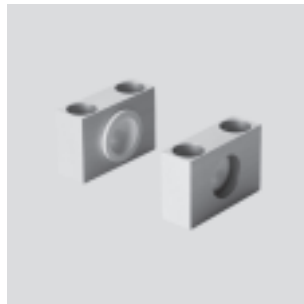
Material:

Trunnion support:

Anodised aluminium

Plain bearing: Polymer

Copper, PTFE and silicone-free



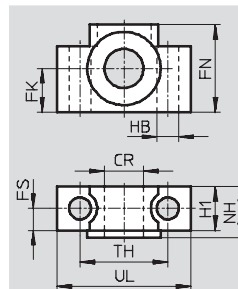
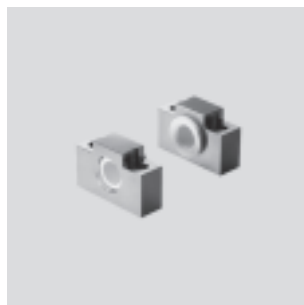
| Dimensions and ordering data |     |     |      |    |      |    |     |     |    |      |    |                   |        |          |            |
|------------------------------|-----|-----|------|----|------|----|-----|-----|----|------|----|-------------------|--------|----------|------------|
| For size                     | CR  | DA  | FK   | FN | FS   | H1 | HB  | KE  | NH | TH   | UL | CRC <sup>1)</sup> | Weight | Part No. | Type       |
|                              | Ø   | Ø   | Ø    |    |      |    | Ø   |     |    |      |    |                   |        |          |            |
| [mm]                         | D11 | H13 | ±0.1 |    |      |    | H13 |     |    | ±0.2 |    |                   | [g]    |          |            |
| 32                           | 12  | 11  | 15   | 30 | 10.5 | 15 | 6.6 | 6.8 | 18 | 32   | 46 | 2                 | 125    | 32 959   | LNZG-32    |
| 40                           | 16  | 15  | 18   | 36 | 12   | 18 | 9   | 9   | 21 | 36   | 55 | 2                 | 400    | 32 960   | LNZG-40/50 |
| 63                           | 20  | 18  | 20   | 40 | 13   | 20 | 11  | 11  | 23 | 42   | 65 | 2                 | 480    | 32 961   | LNZG-63/80 |

### Trunnion support CRLNZG

Material:

High-alloy steel

Copper, PTFE and silicone-free



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

1) Corrosion resistance class 2 to Festo standard 940 070

Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents.

Corrosion resistance class 4 to Festo standard 940 070

Components requiring higher corrosion resistance. Parts used with aggressive media, e.g. food or chemical industry. These applications should be supported with special tests with the media if required

## Electric cylinders DNCE, with piston rod

Accessories

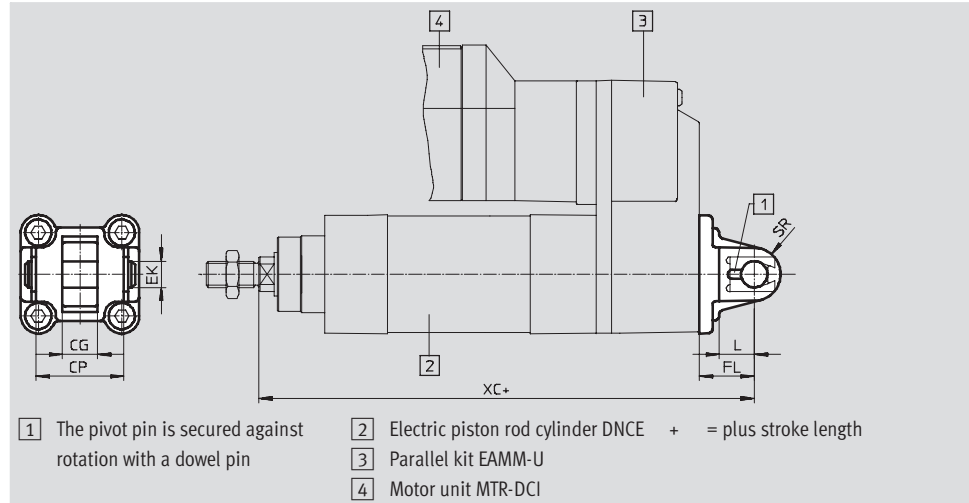
**FESTO**

### Swivel flange SNC

Material:

Die-cast aluminium

Copper, PTFE and silicone-free



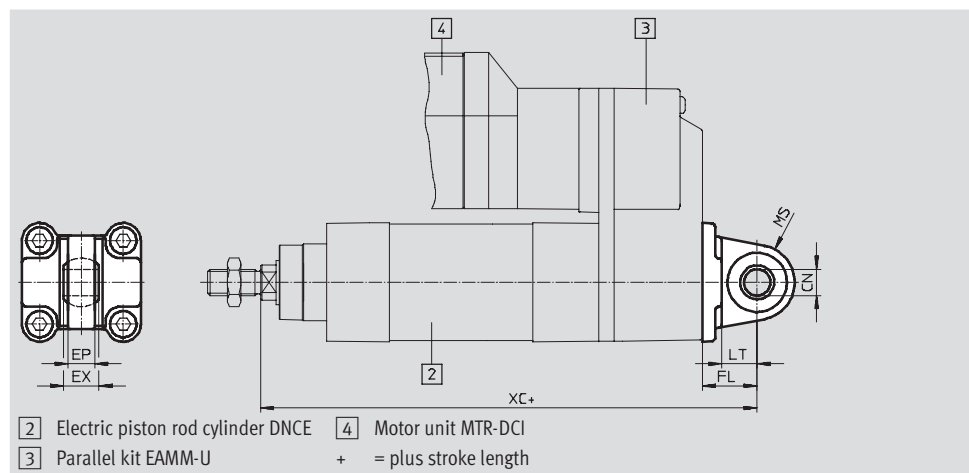
| Dimensions and ordering data |     |     |         |      |    |    |       |                   |        |          |        |
|------------------------------|-----|-----|---------|------|----|----|-------|-------------------|--------|----------|--------|
| For size                     | CG  | CP  | EK<br>Ø | FL   | L  | SR | XC    | CRC <sup>1)</sup> | Weight | Part No. | Type   |
| [mm]                         | H14 | h14 |         | ±0.2 |    |    |       |                   | [g]    |          |        |
| 32                           | 14  | 34  | 10      | 22   | 13 | 10 | 210   | 2                 | 90     | 174 383  | SNC-32 |
| 40                           | 16  | 40  | 12      | 25   | 16 | 12 | 248.5 | 2                 | 120    | 174 384  | SNC-40 |
| 63                           | 21  | 51  | 16      | 32   | 21 | 16 | 304   | 2                 | 320    | 174 386  | SNC-63 |

### Swivel flange SNCS

Material:

Die-cast aluminium

Copper, PTFE and silicone-free



| Dimensions and ordering data |         |      |    |      |    |    |       |                   |        |          |         |
|------------------------------|---------|------|----|------|----|----|-------|-------------------|--------|----------|---------|
| For size                     | CN<br>Ø | EP   | EX | FL   | LT | MS | XC    | CRC <sup>1)</sup> | Weight | Part No. | Type    |
| [mm]                         | H7      | +0.2 |    | ±0.2 |    |    |       |                   | [g]    |          |         |
| 32                           | 10      | 10.5 | 14 | 22   | 13 | 15 | 210   | 2                 | 85     | 174 397  | SNCS-32 |
| 40                           | 12      | 12   | 16 | 25   | 16 | 17 | 248.5 | 2                 | 125    | 174 398  | SNCS-40 |
| 63                           | 16      | 15   | 21 | 32   | 21 | 22 | 304   | 2                 | 280    | 174 400  | SNCS-63 |

1) Corrosion resistance class 2 to Festo standard 940 070

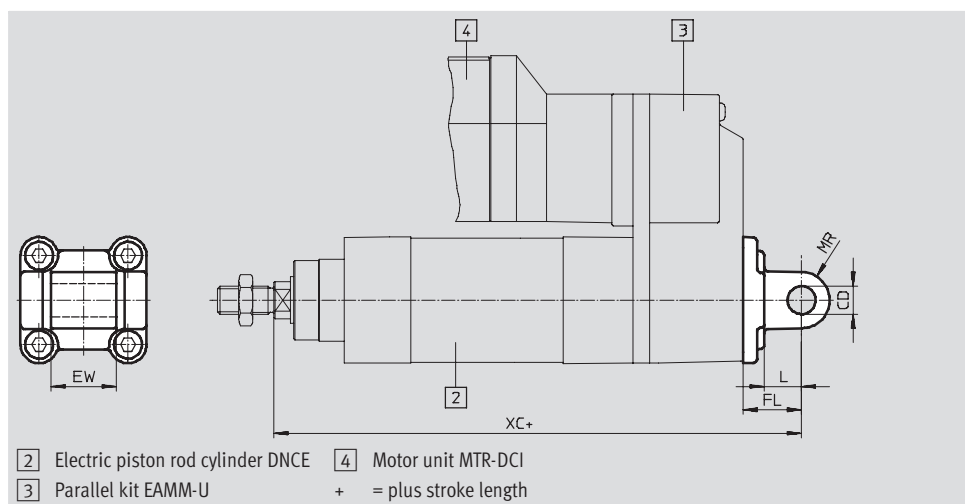
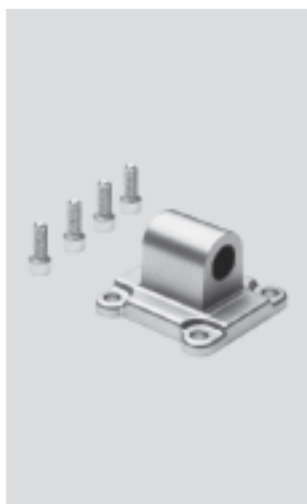
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents

## Electric cylinders DNCE, with piston rod

Accessories

### Swivel flange SNCL

Material:  
Die-cast aluminium  
Copper, PTFE and silicone-free



| Dimensions and ordering data |         |     |      |    |    |       |                   |        |          |         |
|------------------------------|---------|-----|------|----|----|-------|-------------------|--------|----------|---------|
| For size                     | CD      | EW  | FL   | L  | MR | XC    | CRC <sup>1)</sup> | Weight | Part No. | Type    |
| [mm]                         | Ø<br>H9 | h12 | ±0.2 |    |    |       |                   | [g]    |          |         |
| 32                           | 10      | 26  | 22   | 13 | 10 | 210   | 2                 | 75     | 174 404  | SNCL-32 |
| 40                           | 12      | 28  | 25   | 16 | 12 | 248.5 | 2                 | 100    | 174 405  | SNCL-40 |
| 63                           | 16      | 40  | 32   | 21 | 16 | 304   | 2                 | 250    | 174 407  | SNCL-63 |

- 1) Corrosion resistance class 2 to Festo standard 940 070  
Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents

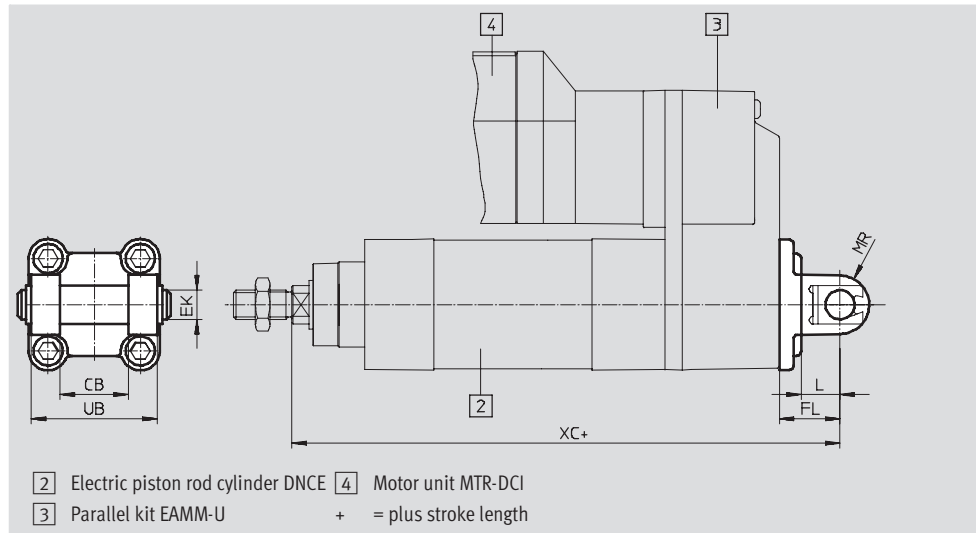
## Electric cylinders DNCE, with piston rod

Accessories

**FESTO**

**Swivel flange**  
**SNCB/SNCB-...-R3**

**Material:**  
SNCB: Die-cast aluminium  
SNCB-...-R3: Die-cast aluminium with  
protective coating, high corrosion  
protection  
Copper, PTFE and silicone-free



| Dimensions and ordering data |     |         |      |    |    |     |       |
|------------------------------|-----|---------|------|----|----|-----|-------|
| For size                     | CB  | EK      | FL   | L  | MR | UB  | XC    |
| [mm]                         | H14 | Ø<br>e8 | ±0.2 |    |    | h14 |       |
| 32                           | 26  | 10      | 22   | 13 | 10 | 45  | 210   |
| 40                           | 28  | 12      | 25   | 16 | 12 | 52  | 248.5 |
| 63                           | 40  | 16      | 32   | 21 | 16 | 70  | 304   |

| For size | Basic version     |               |          |         | Variant R3 – High corrosion protection |               |          |            |
|----------|-------------------|---------------|----------|---------|----------------------------------------|---------------|----------|------------|
|          | CRC <sup>1)</sup> | Weight<br>[g] | Part No. | Type    | CRC <sup>1)</sup>                      | Weight<br>[g] | Part No. | Type       |
| [mm]     |                   |               |          |         |                                        |               |          |            |
| 32       | 2                 | 100           | 174 390  | SNCB-32 | 3                                      | 100           | 176 944  | SNCB-32-R3 |
| 40       | 2                 | 150           | 174 391  | SNCB-40 | 3                                      | 150           | 176 945  | SNCB-40-R3 |
| 63       | 2                 | 365           | 174 393  | SNCB-63 | 3                                      | 365           | 176 947  | SNCB-63-R3 |

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

## Electric cylinders DNCE, with piston rod

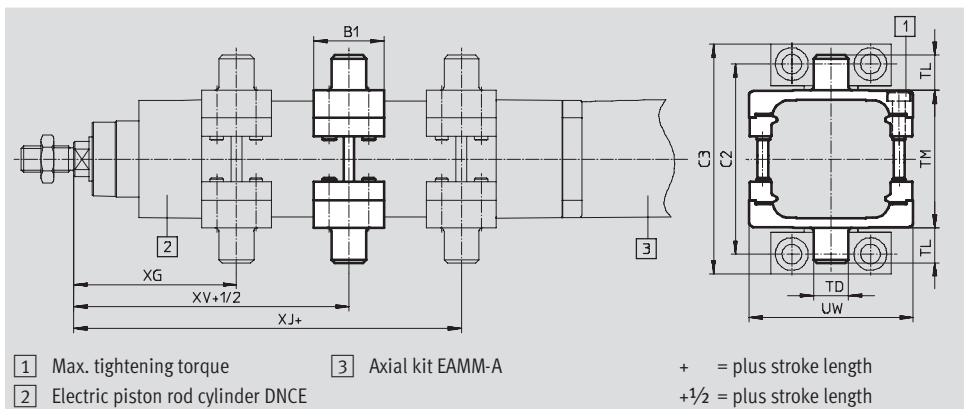
Accessories

### Trunnion mounting kit ZNCM

Material:  
Tempered steel

The mounting kit can be attached at any position on the cylinder profile barrel.

In combination with the parallel kit EAMM-U, the trunnion mounting kit cannot be mounted in the vicinity of the motor.

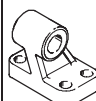
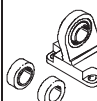
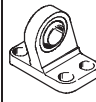
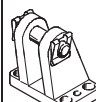
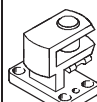


| Dimensions and ordering data |    |     |     |               |    |    |     |      |
|------------------------------|----|-----|-----|---------------|----|----|-----|------|
| For size                     | B1 | C2  | C3  | TD<br>Ø<br>e9 | TL | TM | UW  | XG   |
| [mm]                         |    |     |     |               |    |    |     |      |
| 32                           | 30 | 71  | 86  | 12            | 12 | 50 | 65  | 65   |
| 40                           | 32 | 87  | 105 | 16            | 16 | 63 | 75  | 74.5 |
| 63                           | 41 | 116 | 136 | 20            | 20 | 90 | 105 | 91.5 |

| For size | XJ    | XV    | Max.<br>tightening torque<br>[Nm] | CRC <sup>1)</sup> | Weight<br>[g] | Part No. | Type    |
|----------|-------|-------|-----------------------------------|-------------------|---------------|----------|---------|
| [mm]     |       |       |                                   |                   |               |          |         |
| 32       | 107   | 86    | 4+1                               | 2                 | 210           | 163 525  | ZNCM-32 |
| 40       | 130.5 | 102.5 | 8+1                               | 2                 | 385           | 163 526  | ZNCM-40 |
| 63       | 157.5 | 124.5 | 18+2                              | 2                 | 890           | 163 528  | ZNCM-63 |

1) Corrosion resistance class 2 to Festo standard 940 070

Components subject to moderate corrosion stress. Externally visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment or media such as coolants or lubricating agents

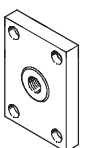
| Ordering data – Mounting attachments                                                |          |          |         | Technical data → Internet: clevis foot                                              |          |          |          |
|-------------------------------------------------------------------------------------|----------|----------|---------|-------------------------------------------------------------------------------------|----------|----------|----------|
| Designation                                                                         | For size | Part No. | Type    | Designation                                                                         | For size | Part No. | Type     |
| <b>Clevis foot LNG</b>                                                              |          |          |         | <b>Clevis foot LSN</b>                                                              |          |          |          |
|  | 32       | 33 890   | LNG-32  |  | 32       | 5 561    | LSN-32   |
|                                                                                     | 40       | 33 891   | LNG-40  |                                                                                     | 40       | 5 562    | LSN-40   |
|                                                                                     | 63       | 33 893   | LNG-63  |                                                                                     | 63       | 5 564    | LSN-63   |
| <b>Clevis foot LSNG</b>                                                             |          |          |         | <b>Clevis foot LSNSG</b>                                                            |          |          |          |
|  | 32       | 31 740   | LSNG-32 |  | 32       | 31 747   | LSNSG-32 |
|                                                                                     | 40       | 31 741   | LSNG-40 |                                                                                     | 40       | 31 748   | LSNSG-40 |
|                                                                                     | 63       | 31 743   | LSNG-63 |                                                                                     | 63       | 31 750   | LSNSG-63 |
| <b>Clevis foot LBG</b>                                                              |          |          |         | <b>Right-angle clevis foot LQG</b>                                                  |          |          |          |
|  | 32       | 31 761   | LBG-32  |  | 32       | 31 768   | LQG-32   |
|                                                                                     | 40       | 31 762   | LBG-40  |                                                                                     | 40       | 31 769   | LQG-40   |
|                                                                                     | 63       | 31 764   | LBG-63  |                                                                                     | 63       | 31 771   | LQG-63   |

## Electric cylinders DNCE, with piston rod

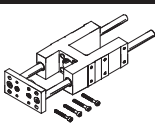
Accessories

**FESTO**

| Ordering data – Mounting attachments, corrosion resistant                         |          |          | Technical data → Internet: clevis foot |  |
|-----------------------------------------------------------------------------------|----------|----------|----------------------------------------|--|
| Designation                                                                       | For size | Part No. | Type                                   |  |
| Clevis foot CRLNG                                                                 |          |          |                                        |  |
|  | 32       | 161 840  | CRLNG-32                               |  |
|                                                                                   | 40       | 161 841  | CRLNG-40                               |  |
|                                                                                   | 63       | 161 843  | CRLNG-63                               |  |

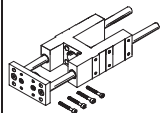
| Ordering data – Piston-rod attachments                                             |          |          |              | Technical data → Internet: piston-rod attachment                                  |          |          |              |
|------------------------------------------------------------------------------------|----------|----------|--------------|-----------------------------------------------------------------------------------|----------|----------|--------------|
| Designation                                                                        | For size | Part No. | Type         | Designation                                                                       | For size | Part No. | Type         |
| Rod eye SGS                                                                        |          |          |              | Rod clevis SGA                                                                    |          |          |              |
|   | 32       | 9 261    | SGS-M10x1,25 |  | 32       | 32 954   | SGA-M10x1,25 |
|                                                                                    | 40       | 9 262    | SGS-M12x1,25 |                                                                                   | 40       | 10 767   | SGA-M12x1,25 |
|                                                                                    | 63       | 9 263    | SGS-M16x1,5  |                                                                                   | 63       | 10 768   | SGA-M16x1,5  |
| Rod clevis SG                                                                      |          |          |              | Self-aligning rod coupler FK                                                      |          |          |              |
|   | 32       | 6 144    | SG-M10x1,25  |  | 32       | 6 140    | FK-M10x1,25  |
|                                                                                    | 40       | 6 145    | SG-M12x1,25  |                                                                                   | 40       | 6 141    | FK-M12x1,25  |
|                                                                                    | 63       | 6 146    | SG-M16x1,5   |                                                                                   | 63       | 6 142    | FK-M16x1,5   |
| Coupling piece KSZ                                                                 |          |          |              |                                                                                   |          |          |              |
|  | 32       | 36 125   | KSZ-M10x1,25 |                                                                                   |          |          |              |
|                                                                                    | 40       | 36 126   | KSZ-M12x1,25 |                                                                                   |          |          |              |
|                                                                                    | 63       | 36 127   | KSZ-M16x1,5  |                                                                                   |          |          |              |

| Ordering data – Piston rod attachments, corrosion resistant                         |          |          |                | Technical data → Internet: piston-rod attachment                                    |          |          |               |
|-------------------------------------------------------------------------------------|----------|----------|----------------|-------------------------------------------------------------------------------------|----------|----------|---------------|
| Designation                                                                         | For size | Part No. | Type           | Designation                                                                         | For size | Part No. | Type          |
| Rod eye CRS GS                                                                      |          |          |                | Rod clevis CRS G                                                                    |          |          |               |
|  | 32       | 195 582  | CRSGS-M10x1,25 |  | 32       | 13 569   | CRSG-M10x1,25 |
|                                                                                     | 40       | 195 583  | CRSGS-M12x1,25 |                                                                                     | 40       | 13 570   | CRSG-M12x1,25 |
|                                                                                     | 63       | 195 584  | CRSGS-M16x1,5  |                                                                                     | 63       | 13 571   | CRSG-M16x1,5  |

| Ordering data – Guide units for fixed strokes (recirculating ball bearing guide only) |             |          |                | Technical data → Internet: feng |             |          |      |
|---------------------------------------------------------------------------------------|-------------|----------|----------------|---------------------------------|-------------|----------|------|
|                                                                                       | Stroke [mm] | Part No. | Type           |                                 | Stroke [mm] | Part No. | Type |
|    | For size 32 |          |                | For size 40                     |             |          |      |
|                                                                                       | 10 ... 100  | 34 494   | FENG-32-100-KF | 10 ... 100                      |             |          |      |
|                                                                                       | 10 ... 200  | 34 496   | FENG-32-200-KF | 10 ... 200                      |             |          |      |
|                                                                                       | 10 ... 320  | 34 497   | FENG-32-320-KF | 10 ... 320                      |             |          |      |
|                                                                                       | 10 ... 400  | 150 290  | FENG-32-400-KF | 10 ... 400                      |             |          |      |
|                                                                                       | 10 ... 500  | 34 498   | FENG-32-500-KF | 10 ... 500                      |             |          |      |
|                                                                                       | For size 63 |          |                |                                 |             |          |      |
|                                                                                       | 10 ... 100  | 34 514   | FENG-63-100-KF |                                 |             |          |      |
|                                                                                       | 10 ... 200  | 34 516   | FENG-63-200-KF |                                 |             |          |      |
|                                                                                       | 10 ... 320  | 34 518   | FENG-63-320-KF |                                 |             |          |      |
|                                                                                       | 10 ... 400  | 34 519   | FENG-63-400-KF |                                 |             |          |      |
|                                                                                       | 10 ... 500  | 34 520   | FENG-63-500-KF |                                 |             |          |      |

## Electric cylinders DNCE, with piston rod

Accessories

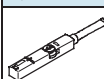
| Ordering data – Guide units for variable strokes                                  |               |             |                                       |                       | Technical data → Internet: feng |                    |
|-----------------------------------------------------------------------------------|---------------|-------------|---------------------------------------|-----------------------|---------------------------------|--------------------|
|  | For size [mm] | Stroke [mm] | With recirculating ball bearing guide |                       | With plain-bearing guide        |                    |
|                                                                                   |               |             | Part No.                              | Type                  | Part No.                        | Type               |
|                                                                                   | 32            | 10 ... 500  | <b>34 487</b>                         | <b>FENG-32-...-KF</b> | <b>34 481</b>                   | <b>FENG-32-...</b> |
|                                                                                   | 40            | 10 ... 500  | <b>34 488</b>                         | <b>FENG-40-...-KF</b> | <b>34 482</b>                   | <b>FENG-40-...</b> |
|                                                                                   | 63            | 10 ... 500  | <b>34 490</b>                         | <b>FENG-63-...-KF</b> | <b>34 484</b>                   | <b>FENG-63-...</b> |

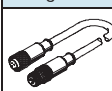
### Permissible proximity sensors in combination with motor units MTR-DCI

| Ordering data – Proximity sensor for T-slot, magneto-resistive                    |                                                                    |               |                       |                  | Technical data → Internet: smt |                            |
|-----------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------|-----------------------|------------------|--------------------------------|----------------------------|
|                                                                                   | Type of mounting                                                   | Switch output | Electrical connection | Cable length [m] | Part No.                       | Type                       |
| N/O contact                                                                       |                                                                    |               |                       |                  |                                |                            |
|  | Insertable in the slot lengthwise, flush with the cylinder profile | PNP           | Plug M8x1, 3-pin      | 0.3              | <b>175 484</b>                 | <b>SMT-8-PS-S-LED-24-B</b> |

### Permissible proximity sensors in combination with servo motors MTR-AC, stepper motors MTR-ST or guide units FENG

| Ordering data – Proximity sensor for T-slot, magneto-resistive                      |                                                                    |               |                       |                  | Technical data → Internet: smt |                            |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------|-----------------------|------------------|--------------------------------|----------------------------|
|                                                                                     | Type of mounting                                                   | Switch output | Electrical connection | Cable length [m] | Part No.                       | Type                       |
| N/O contact                                                                         |                                                                    |               |                       |                  |                                |                            |
|  | Insertable in the slot lengthwise, flush with the cylinder profile | PNP           | Cable, 3-wire         | 2.5              | <b>175 436</b>                 | <b>SMT-8-PS-K-LED-24-B</b> |

| Ordering data – Proximity sensors for T-slot, magnetic reed                         |                                                                    |               |                       |                  | Technical data → Internet: sme |                               |
|-------------------------------------------------------------------------------------|--------------------------------------------------------------------|---------------|-----------------------|------------------|--------------------------------|-------------------------------|
|                                                                                     | Type of mounting                                                   | Switch output | Electrical connection | Cable length [m] | Part No.                       | Type                          |
| N/O contact                                                                         |                                                                    |               |                       |                  |                                |                               |
|  | Insertable in the slot from above, flush with cylinder profile     | Contacting    | Cable, 3-wire         | 2.5              | <b>543 862</b>                 | <b>SME-8M-DS-24V-K-2,5-OE</b> |
|                                                                                     |                                                                    |               |                       | 5.0              | <b>543 863</b>                 | <b>SME-8M-DS-24V-K-5,0-OE</b> |
|  | Insertable in the slot lengthwise, flush with the cylinder profile | Contacting    | Cable, 3-wire         | 2.5              | <b>150 855</b>                 | <b>SME-8-K-LED-24</b>         |

| Ordering data – Connecting cables                                                   |                         |            |                  | Technical data → Internet: km8 |                        |
|-------------------------------------------------------------------------------------|-------------------------|------------|------------------|--------------------------------|------------------------|
|                                                                                     | Mounting                | Connection | Cable length [m] | Part No.                       | Type                   |
| Straight socket                                                                     |                         |            |                  |                                |                        |
|  | Union nut M8, both ends | 3-pin      | 0.5              | <b>175 488</b>                 | <b>KM8-M8-GSGD-0,5</b> |
|                                                                                     |                         |            | 1                | <b>175 489</b>                 | <b>KM8-M8-GSGD-1</b>   |
|                                                                                     |                         |            | 2.5              | <b>165 610</b>                 | <b>KM8-M8-GSGD-2,5</b> |
|                                                                                     |                         |            | 5                | <b>165 611</b>                 | <b>KM8-M8-GSGD-5</b>   |

| Ordering data – Slot cover for T-slot                                               |                       |          |                |                |  |
|-------------------------------------------------------------------------------------|-----------------------|----------|----------------|----------------|--|
|                                                                                     | Mounting              | Length   | Part No.       | Type           |  |
|  | Insertable from above | 2x 0.5 m | <b>151 680</b> | <b>ABP-5-S</b> |  |