

# Electrical cylinder DNCE, with piston rod

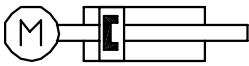
Size 32, 40 mm, stroke 100 to 600 mm, ball screw pitch 3, 5, 10, 12.5 mm

**Cleanroom class ISO 4 (FS209E class 10)**

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.

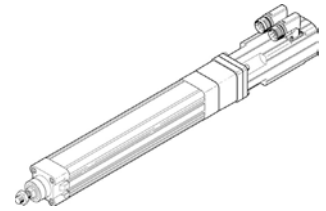
The mechanical interfaces are largely compatible with the standard pneumatic cylinder DNC.

**DNCE-...-BS-Q-RR-SA**



- Electromechanical linear axis with piston rod in accordance with ISO 15552
- Linear drive with ball screw
- Axial or parallel (U-shaped) motor interface
- Comprehensive range of accessories from the standard pneumatic cylinder DNC modular system
- Axial kit for Festo motor is available separately

**Order example:**  
 Part no: 15129285  
 Type: DNCE-32-400-BS-”10”P-Q-RR-SA  
 Double acting linear drive, size 32, 400 mm stroke, with ball screw spindle, pitch 10 mm and square piston rod to protect against rotation.



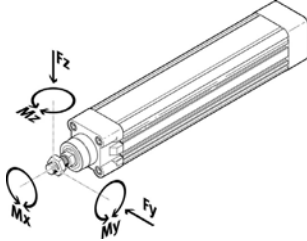
| Ordering data                  | Part No. | Size | Fixed stroke [mm] | Ball screw pitch [mm] | Max. feed force [N] | Max. speed [m/s] |
|--------------------------------|----------|------|-------------------|-----------------------|---------------------|------------------|
| DNCE-32-100-BS-”3”P-Q-RR-SA    | 15129278 | 32   | 100               | 3                     | 300                 | 0.15             |
| DNCE-32-200-BS-”3”P-Q-RR-SA    | 15129279 | 32   | 200               | 3                     | 300                 | 0.15             |
| DNCE-32-300-BS-”3”P-Q-RR-SA    | 15129280 | 32   | 300               | 3                     | 300                 | 0.15             |
| DNCE-32-400-BS-”3”P-Q-RR-SA    | 15129281 | 32   | 400               | 3                     | 300                 | 0.15             |
| DNCE-32-100-BS-”10”P-Q-RR-SA   | 15129282 | 32   | 100               | 10                    | 350                 | 0.50             |
| DNCE-32-200-BS-”10”P-Q-RR-SA   | 15129283 | 32   | 200               | 10                    | 350                 | 0.50             |
| DNCE-32-300-BS-”10”P-Q-RR-SA   | 15129284 | 32   | 300               | 10                    | 350                 | 0.50             |
| DNCE-32-400-BS-”10”P-Q-RR-SA   | 15129285 | 32   | 400               | 10                    | 350                 | 0.50             |
| DNCE-40-100-BS-”5”P-Q-RR-SA    | 15129286 | 40   | 100               | 5                     | 525                 | 0.25             |
| DNCE-40-200-BS-”5”P-Q-RR-SA    | 15129287 | 40   | 200               | 5                     | 525                 | 0.25             |
| DNCE-40-300-BS-”5”P-Q-RR-SA    | 15129288 | 40   | 300               | 5                     | 525                 | 0.25             |
| DNCE-40-400-BS-”5”P-Q-RR-SA    | 15129289 | 40   | 400               | 5                     | 525                 | 0.25             |
| DNCE-40-600-BS-”5”P-Q-RR-SA    | 15129290 | 40   | 600               | 5                     | 525                 | 0.25             |
| DNCE-40-100-BS-”12.7”P-Q-RR-SA | 15129291 | 40   | 100               | 12.7                  | 800                 | 0.64             |
| DNCE-40-200-BS-”12.7”P-Q-RR-SA | 15129292 | 40   | 200               | 12.7                  | 800                 | 0.64             |
| DNCE-40-300-BS-”12.7”P-Q-RR-SA | 15129293 | 40   | 300               | 12.7                  | 800                 | 0.64             |
| DNCE-40-400-BS-”12.7”P-Q-RR-SA | 15129294 | 40   | 400               | 12.7                  | 800                 | 0.64             |
| DNCE-40-600-BS-”12.7”P-Q-RR-SA | 15129295 | 40   | 600               | 12.7                  | 800                 | 0.64             |

These values represent maximum values and are dependent on the motor variant used.

# Electrical cylinder DNCE, with piston rod

Size 32, 40 mm, stroke 100 to 600 mm, ball screw pitch 3, 5, 10, 12.5 mm

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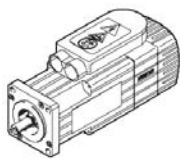
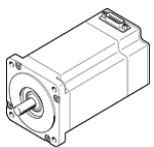


| Technical data                             | Size                | 32          | 40          |
|--|---------------------|-------------|-------------|
| Spindle pitch                              | [mm/rev]            | BS-"3"      | BS-"10"     |
| Working stroke                             | [mm]                | 100 ... 400 | 100 ... 600 |
| Guide value for effective load, horizontal | [kg]                | 30          | 36          |
| Guide value for effective load, vertical   | [kg]                | 15          | 18          |
| Spindle diameter                           | [mm]                | 10          | 10          |
| Max. feed force $F_x^{1)}$                 | [N]                 | 300         | 350         |
| Max. speed <sup>1)</sup>                   | [m/s]               | 0.15        | 0.5         |
| Max. rotational speed <sup>1)</sup>        | [rpm]               | 3000        | 3000        |
| Max. acceleration <sup>1)</sup>            | [m/s <sup>2</sup> ] | 6           | 6           |
| Repetition accuracy                        | [mm]                | ±0.02       | ±0.02       |
| Max. permissible force $F_y^{2)}$          | [N]                 | 105         | 250         |
| Max. permissible force $F_z^{2)}$          | [N]                 | 105         | 250         |
| Max. permissible torque $M_x$              | [Nm]                | 1           | 4           |
| Max. permissible torque $M_y$              | [Nm]                | 8           | 20          |
| Max. permissible torque $M_z$              | [Nm]                | 8           | 20          |
| Max. driving torque <sup>3)</sup>          | [Nm]                | 0.4         | 0.8         |

1) These values represent maximum values and are dependent on the motor variant used.

2) These forces are dependent on the position of the piston rod.

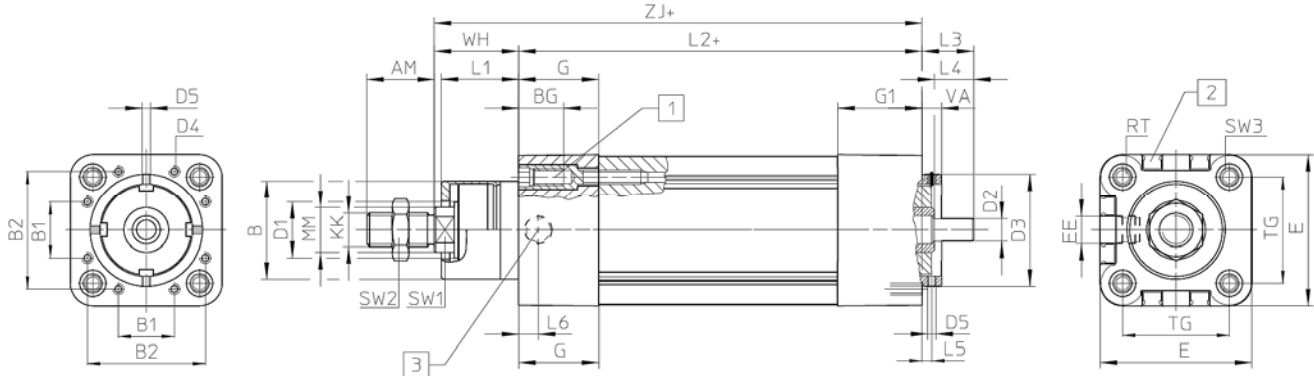
3) For the variant with lead screw (LS), the values are dependent on the speed.

| Ordering data   | For DNCE-32        | Axial kit            | For DNCE-40        | Axial kit            |
|---|--------------------|----------------------|--------------------|----------------------|
|  | EMMS-AS-40-...     | 15129296             | EMMS-AS-55-...     | 15129301             |
|   | MTR-AC-40-3S-A-... | EAMM-A-D32-40A-RR-SA | MTR-AC-55-3S-A-... | EAMM-A-D40-55A-RR-SA |
|   | EMMS-AS-55-...     | 15129297             | EMMS-AS-70-...     | 15129302             |
|   | MTR-AC-55-3S-A-... | EAMM-A-D32-55A-RR-SA | MTR-AC-70-3S-A-... | EAMM-A-D40-70A-RR-SA |
|  | EMMS-ST-42-...     | 15129298             | EMMS-ST-57-...     | 15129303             |
|   |                    | EAMM-A-D32-42A-RR-SA |                    | EAMM-A-D40-57A-RR-SA |
|   | EMMS-ST-57-...     | 15129299             | EMMS-ST-87-...     | 15129304             |
|   |                    | EAMM-A-D32-57A-RR-SA |                    | EAMM-A-D40-87A-RR-SA |

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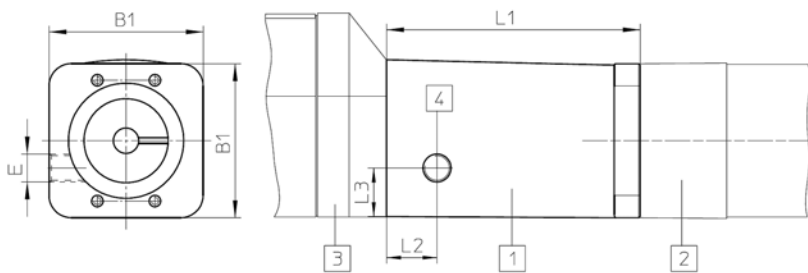


+ = Plus stroke length

- 1 Socket head screw with female thread for mounting attachment
- 2 Cylinder switch
- 3 Vacuum suction port

| Size | AM | B<br>Ø d11 | B1 | B2 | BG | D1<br>Ø h9 | D2<br>Ø h6 | D3<br>Ø f7 | D4 | D5 | E    | EE  | G    | G1 | KK       |
|------|----|------------|----|----|----|------------|------------|------------|----|----|------|-----|------|----|----------|
| 32   | 22 | 30         | 19 | 32 | 16 | 16         | 6          | 32         | M3 | M3 | 45.5 | 1/8 | 24   | 26 | M10x1.25 |
| 40   | 24 | 35         | 20 | 42 | 16 | 20         | 8          | 40         | M4 | M3 | 54   | 1/8 | 28.5 | 30 | M12x1.25 |

| Size | L1   | L2    | L3   | L4 | L5  | L6  | MM | RT | TG   | VA | WH | ZJ    | SW1 | SW2 | SW3 |
|------|------|-------|------|----|-----|-----|----|----|------|----|----|-------|-----|-----|-----|
| 32   | 18.0 | 122.0 | 15.9 | 8  | 3.5 | 7.5 | 12 | M6 | 32.5 | 7  | 26 | 148.0 | 10  | 16  | 6   |
| 40   | 21.5 | 146.5 | 18.4 | 14 | 3.5 | 7.0 | 16 | M6 | 38.0 | 7  | 30 | 176.5 | 13  | 18  | 6   |



- 1 Axial Kit
- 2 Electric piston rod cylinder
- 3 Motor
- 4 Vacuum suction port

| Type                 | Part No. | B1   | L1   | L2   | L3   | E   | Weight<br>[g] |
|----------------------|----------|------|------|------|------|-----|---------------|
| EAMM-A-D32-40A-RR-SA | 15129296 | 45.0 | 39.8 | 17.5 | 17.0 | 1/8 | 130           |
| EAMM-A-D32-42A-RR-SA | 15129298 | 45.0 | 48.0 |      |      |     | 140           |
| EAMM-A-D32-55A-RR-SA | 15129297 | 55.0 | 49.2 |      |      |     | 260           |
| EAMM-A-D32-57A-RR-SA | 15129299 | 56.4 | 50.5 |      |      |     | 270           |
| EAMM-A-D40-55A-RR-SA | 15129301 | 53.5 | 49.2 | 28.0 | 19.5 | 350 |               |
| EAMM-A-D40-57A-RR-SA | 15129303 | 53.5 | 50.5 |      |      | 350 |               |
| EAMM-A-D40-70A-RR-SA | 15129302 | 70.0 | 52.0 |      |      | 410 |               |
| EAMM-A-D40-87A-RR-SA | 15129304 | 85.8 | 54.0 |      |      | 530 |               |