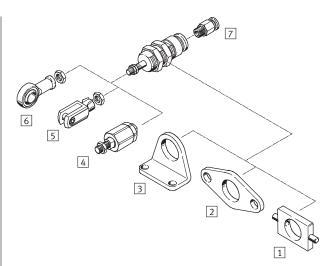
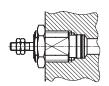


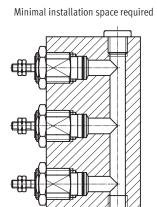
- Wide variety of applications for handling functions
- Minimal installation space required
- Stroke end positions can be varied according to the depth of engagement of the cylinder
- Additional mounting attachments

2.5

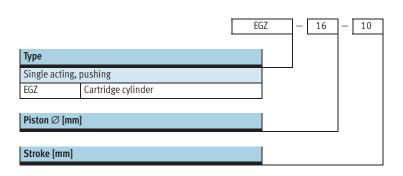


Installation without mounting attachments





| Mou | nting attachments and acces     | sories                                                                |          |         |          |           |
|-----|---------------------------------|-----------------------------------------------------------------------|----------|---------|----------|-----------|
|     |                                 | Brief description                                                     | Piston ∅ | PistonØ | Piston ∅ | → Page    |
|     |                                 |                                                                       | 6 mm     | 10 mm   | 16 mm    |           |
| 1   | Swivel mounting<br>WBN          | For cylinder housing between two hex nuts                             | -        | -       | -        | 1 / 2.5-6 |
| 2   | Flange mounting<br>FBN          | For cylinder housing between two hex nuts                             | -        | -       | -        | 1 / 2.5-5 |
| 3   | Foot mounting<br>HBN            | For cylinder housing between two hex nuts                             | -        | •       | -        | 1 / 2.5-5 |
| 4   | Self-aligning rod coupler<br>FK | For compensating radial and angular deviations                        | -        | -       | -        | 1 / 2.5-6 |
| 5   | Rod clevis<br>SG                | Permits a swivelling movement of the cylinder in one plane            | -        | -       | -        | 1 / 2.5-6 |
| 6   | Rod eye<br>SGS                  | With spherical bearing                                                | -        | •       | _        | 1 / 2.5-6 |
| 7   | Push-in fitting<br>QS           | For connecting compressed air tubing with standard external diameters | •        | •       | •        | Volume 3  |



## Cartridge cylinders EGZ Technical data

## Function



- **D** - Diameter

6 ... 16 mm

Stroke length 5 ... 15 mm

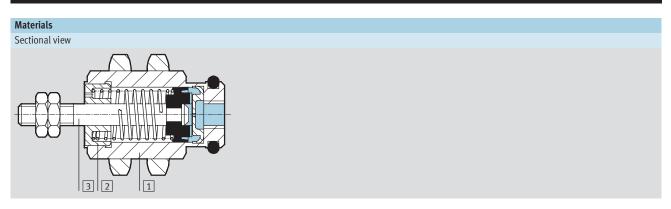


**FESTO** 

| General technical data        |                                          |             |    |  |  |  |  |  |
|-------------------------------|------------------------------------------|-------------|----|--|--|--|--|--|
| Piston $\varnothing$          | 6                                        | 10          | 16 |  |  |  |  |  |
| Pneumatic connection          | M3                                       | M5          | M5 |  |  |  |  |  |
| End of piston rod Male thread | M3                                       | M4          | M5 |  |  |  |  |  |
| Operating medium              | Filtered compressed air, lubricated or u | nlubricated |    |  |  |  |  |  |
| Constructional design         | Piston                                   |             |    |  |  |  |  |  |
|                               | Piston rod                               |             |    |  |  |  |  |  |
| Cushioning                    | None                                     |             |    |  |  |  |  |  |
| Position sensing              | None                                     |             |    |  |  |  |  |  |
| Type of mounting              | With lock nut                            |             |    |  |  |  |  |  |
|                               | With accessories                         |             |    |  |  |  |  |  |
| Mounting position             | Any                                      |             |    |  |  |  |  |  |

| Operating and environmen | Operating and environmental conditions |         |    |    |  |  |  |  |  |  |  |
|--------------------------|----------------------------------------|---------|----|----|--|--|--|--|--|--|--|
| Piston ∅                 |                                        | 6       | 10 | 16 |  |  |  |  |  |  |  |
| Operating pressure       | [bar]                                  | 1.5 8   |    |    |  |  |  |  |  |  |  |
| Ambient temperature      | [°C]                                   | -20 +80 |    |    |  |  |  |  |  |  |  |

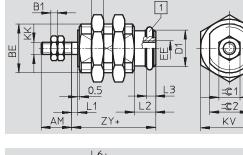
| Forces and permitted applied load [N]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |     |     |      |     |    |      |     |     |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----|-----|------|-----|----|------|-----|-----|--|
| Piston $\varnothing$                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 6    | 10  |     | 10   | 10  |    |      | 16  |     |  |
| Stroke                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 5    | 10  | 15  | 5    | 10  | 15 | 5    | 10  | 15  |  |
| Theoretical force at 6 bar, advancing                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 14   |     |     | 42   |     |    | 109  |     |     |  |
| Spring return force                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 1.5  | 2.1 | 1.6 | 4    | 3.5 | 3  | 10   | 8.8 | 7.5 |  |
| Maximum applied load at the piston                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 0.10 |     |     | 0.15 |     |    | 0.20 |     |     |  |
| The second secon |      |     |     |      |     |    |      |     |     |  |



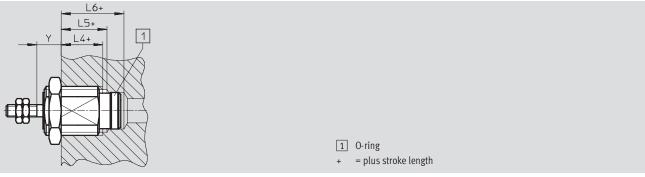
| Cylinder     |                      |
|--------------|----------------------|
| 1 Housing    | Brass, nickel-plated |
| 2 Cover      | Polyacetal           |
| 3 Piston rod | High-alloy steel     |

Dimensions

2.5



Download CAD data → www.festo.com/en/engineering



| Ø<br>[mm]       | AM | B1  | BE      | D1<br>∅<br>H7/f8 | EE | KK | KV<br>h13 | KW  | L1  | L2 | L3  |
|-----------------|----|-----|---------|------------------|----|----|-----------|-----|-----|----|-----|
| 6 <sup>1)</sup> | 7  | 1.8 | M10x1   | 7.6              | M3 | M3 | 13        | 3.5 | 1.5 | 6  | 2.4 |
| 10              | 10 | 2.2 | M16x1.5 | 12               | M5 | M4 | 19        | 4   | 2   | 7  | 3   |
| 16              | 12 | 2.7 | M22x1.5 | 18.5             | M5 | M5 | 27        | 5   | 2   | 9  | 3.5 |

| Ø               | L4  | L5  | L6   | ١    | Υ        |      | =©1 | =©2 |
|-----------------|-----|-----|------|------|----------|------|-----|-----|
|                 | – Y | – Y | – Y  | min. | max.     |      |     |     |
| [mm]            | +1  | -1  | +1   |      | + stroke |      | h13 | h13 |
| 6 <sup>1)</sup> | 9   | 11  | 15.5 | 6    | 5        | 15   | 5.5 | 8   |
| 6 <sup>2)</sup> | 11  | 13  | 17.5 | 6    | 7        | 17   |     |     |
| 10              | 11  | 13  | 18.5 | 7    | 6        | 17.5 | 7   | 13  |
| 16              | 13  | 16  | 21   | 8    | 6        | 20.5 | 8   | 19  |

- 5 mm stroke
   10 and 15 mm stroke

| Ordering data <sup>1)</sup> |          |           |                |          |           |
|-----------------------------|----------|-----------|----------------|----------|-----------|
| Stroke                      | Part No. | Туре      | Stroke         | Part No. | Туре      |
| [mm]                        |          |           | [mm]           |          |           |
| Piston ∅ 6 mm               |          |           | Piston ∅ 10 mm |          |           |
| 5                           | 15 033   | EGZ-6-5   | 5              | 15 036   | EGZ-10-5  |
| 10                          | 15 034   | EGZ-6-10  | 10             | 15 037   | EGZ-10-10 |
| 15                          | 15 035   | EGZ-6-15  | 15             | 15 038   | EGZ-10-15 |
|                             |          |           |                |          |           |
| Piston Ø 16 mm              |          |           |                |          |           |
| 5                           | 15 039   | EGZ-16-5  |                |          |           |
| 10                          | 15 040   | EGZ-16-10 |                |          |           |
| 15                          | 15 041   | EGZ-16-15 |                |          |           |

<sup>1)</sup> Two hex nuts each for the male cylinder thread and for the piston thread are included in the scope of delivery.

## Cartridge cylinders EGZ Accessories

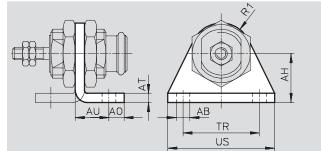
Foot mounting HBN for piston  $\varnothing$  10, 16 mm

Material:

Steel

Free of copper, PTFE and silicone





**FESTO** 

| Dimension | imensions and ordering data  |         |    |    |    |    |    |    |    |                   |            |          |             |
|-----------|------------------------------|---------|----|----|----|----|----|----|----|-------------------|------------|----------|-------------|
| For Ø     | Minimum<br>stroke<br>lengths | AB<br>∅ | АН | AO | AT | AU | R1 | TR | US | CRC <sup>1)</sup> | Weight [g] | Part No. | Type        |
| 10        | 5                            | 5.5     | 20 | 6  | 4  | 14 | 13 | 32 | 42 | 2                 | 40         | 5 125    | HBN-12/16X1 |
| 16        | 7                            | 6.6     | 25 | 8  | 5  | 17 | 20 | 40 | 54 | 2                 | 90         | 5 127    | HBN-20/25X1 |

<sup>1)</sup> Corrosion resistance class 2 according to Festo standard 940 070 Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents.

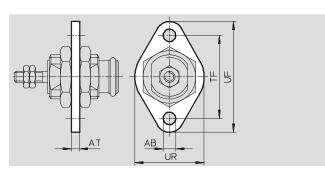
## Flange mounting FBN for piston $\varnothing$ 10, 16 mm

Material:

Steel

Free of copper, PTFE and silicone





| Dimensio | Dimensions and ordering data |     |    |    |    |    |                   |        |          |           |
|----------|------------------------------|-----|----|----|----|----|-------------------|--------|----------|-----------|
| For Ø    | Minimum                      | AB  | AT | TF | UF | UR | CRC <sup>1)</sup> | Weight | Part No. | Туре      |
|          | stroke                       | Ø   |    |    |    |    |                   |        |          |           |
|          | lengths                      |     |    |    |    |    |                   |        |          |           |
|          |                              |     |    |    |    |    |                   | [g]    |          |           |
| 10       | 5                            | 5.5 | 4  | 40 | 53 | 30 | 2                 | 25     | 5 130    | FBN-12/16 |
| 16       | 7                            | 6.6 | 5  | 50 | 68 | 40 | 2                 | 45     | 5 131    | FBN-20/25 |

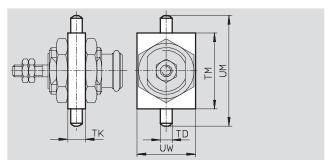
<sup>1)</sup> Corrosion resistance class 2 according to Festo standard 940 070 Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as

2.5

Swivel mounting WBN for piston  $\varnothing$  10, 16 mm

Material: Tempered steel





| Dimension | imensions and ordering data |    |    |    |    |    |        |               |         |  |
|-----------|-----------------------------|----|----|----|----|----|--------|---------------|---------|--|
| For Ø     | Minimum                     | TD | TK | TM | UM | UW | Weight | Part No. Type |         |  |
|           | stroke                      | Ø  |    |    |    |    |        |               |         |  |
|           | lengths                     |    |    |    |    |    |        |               |         |  |
|           |                             | m6 |    |    |    |    | [g]    |               |         |  |
| 10        | 9                           | 6  | 8  | 38 | 58 | 25 | 50     | 8 609 WBN     | l-12/16 |  |
| 16        | 10                          | 6  | 8  | 46 | 66 | 30 | 70     | 8 610 WBN     | l-20/25 |  |

| Ordering data    | – Piston rod attach | ments    |        |
|------------------|---------------------|----------|--------|
| Designation      | For ∅               | Part No. | Туре   |
| Rod eye SGS      |                     |          |        |
| ~ <b>(6)</b>     | 10                  | 9 253    | SGS-M4 |
|                  |                     |          |        |
|                  |                     |          |        |
| Self-aligning ro | d coupler FK        |          |        |
|                  | 10                  | 6 528    | FK-M4  |
|                  | 16                  | 30 984   | FK-M5  |
|                  |                     |          |        |

|               |       |          | Technical data → 1 / 10.3-2 |
|---------------|-------|----------|-----------------------------|
| Designation   | For Ø | Part No. | Туре                        |
| Rod clevis SG |       |          |                             |
|               | 10    | 6 532    | SG-M4                       |
|               |       |          |                             |
|               |       |          |                             |
|               |       |          |                             |
|               |       |          |                             |
|               |       |          |                             |
| I             |       |          |                             |