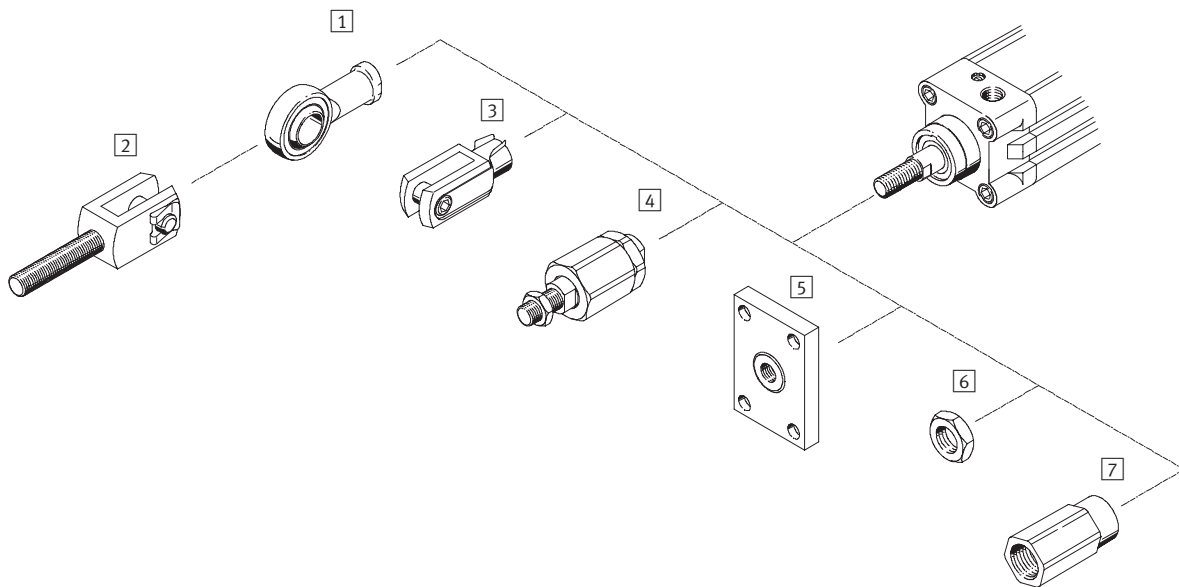




- Co-ordinated with Festo's cylinder range
- Versatile combinations
- Sturdy and functional
- Stainless steel variants

Piston rod attachments

Peripherals overview



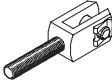




| Mounting attachments and accessories | | Brief description |
|--------------------------------------|---------------------------------|--|
| 1 | Rod eye SGS | Rod eyes are maintenance-free due to the combination of steel and PTFE-bronze material in the swivel bearing. Corresponds to DIN ISO 12 240-4 dimensional series K. |
| | Rod eye CRSGS | Corrosion and acid-resistant design. Corresponds to DIN ISO 12 240-4 dimensional series K. |
| 2 | Rod clevis SGA | Rod clevises are used in combination with the rod eye SGS for spherical connection of cylinders. |
| 3 | Rod clevis SG | This rod clevis is fitted to the threaded end of the piston rod and permits a swivelling movement of the cylinder in one plane. Corresponds to DIN ISO 8140 or DIN 71 752 |
| | Rod clevis CRSG | Corrosion and acid-resistant design. Corresponds to DIN ISO 8140 or DIN 71 752 |
| 4 | Self-aligning rod coupler FK | Rod couplers link the piston rod end of all cylinder types to the machine parts to be moved. This compensates for radial and angular deviations (misalignment). |
| 5 | Coupling piece KSG | Coupling pieces link the piston rod end of all cylinder types to the machine parts to be moved. They compensate radial misalignments up to ± 1 mm. |
| | Coupling piece KSZ | For cylinders with non-rotating piston rods. With this coupling piece, a cylinder can be connected with positional stability to the component being moved in order to compensate for radial deviation. |
| 6 | Hex nut MSK | Based on and/or corresponds to DIN EN ISO 8675. |
| 7 | Adapter AD | Specially for through, hollow piston rods, e.g. for connecting vacuum generators. |

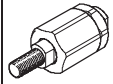




Piston rod attachments

Product range overview

FESTO

| Piston rod attachments | | | | | | |
|------------------------------|--------|---|---|---|---|---|
| Piston rod thread | | Rod eye | | Rod clevis | | |
| Male | Female | SGS-... | CRSGS-... | SGA-... ¹⁾ | SG-... | CRSG-... |
| | |  |  |  |  |  |
| M4 | | ■ | - | - | ■ | - |
| M6 | | ■ | ■ | - | ■ | ■ |
| M8 | | ■ | ■ | - | ■ | ■ |
| M10 | | ■ | - | - | ■ | - |
| M10x1.25 | | ■ | ■ | ■ | ■ | ■ |
| M12 | | ■ | - | ■ | ■ | - |
| M12x1.25 | | ■ | ■ | ■ | ■ | ■ |
| M16 | | ■ | - | ■ | ■ | - |
| M16x1.5 | | ■ | ■ | ■ | ■ | ■ |
| M20x1.5 | | ■ | ■ | ■ | ■ | ■ |
| M27x2 | | ■ | ■ | ■ | ■ | ■ |
| M36x2 | | ■ | - | - | ■ | - |
| M42x2 | | ■ | - | - | ■ | - |
| M48x2 | | ■ | - | - | ■ | - |
| Technical data → Page | | 1 / 10.3-4 | 1 / 10.3-5 | 1 / 10.3-6 | 1 / 10.3-7 | 1 / 10.3-8 |

1) Only to be attached to the piston rod in conjunction with the rod eye SGS.

| Piston rod attachments | | | | | | |
|------------------------------|--------|---|---|---|---|---|
| Piston rod thread | | Self-aligning rod coupler | Coupling piece | | Hex nut | Adapter |
| Male | Female | FK-... | KSG-... | KSZ-... | MSK-... | AD-... |
| | |  |  |  |  |  |
| M4 | | ■ | - | - | - | - |
| M6 | | ■ | - | ■ | - | ■ |
| M8 | | ■ | - | ■ | - | ■ |
| M10 | | ■ | - | - | - | - |
| M10x1.25 | | ■ | ■ | ■ | ■ | ■ |
| M12 | | ■ | - | - | - | - |
| M12x1.25 | | ■ | ■ | ■ | ■ | ■ |
| M16 | | ■ | - | - | - | - |
| M16x1.5 | | ■ | ■ | ■ | ■ | - |
| M20x1.5 | | ■ | ■ | ■ | - | - |
| M27x2 | | ■ | ■ | - | - | - |
| M36x2 | | ■ | - | - | - | - |
| M42x2 | | - | - | - | - | - |
| M48x2 | | - | - | - | - | - |
| | M4 | ■ | - | - | - | - |
| | M5 | ■ | - | - | - | - |
| | M6 | ■ | - | - | - | - |
| | M8 | ■ | - | - | - | - |
| | M10 | ■ | - | - | - | - |
| | M12 | ■ | - | - | - | - |
| Technical data → Page | | 1 / 10.3-9 | 1 / 10.3-10 | 1 / 10.3-11 | 1 / 10.3-12 | 1 / 10.3-13 |

Drive accessories
Piston-rod attachments

10.3

Rod eyes SGS

Technical data



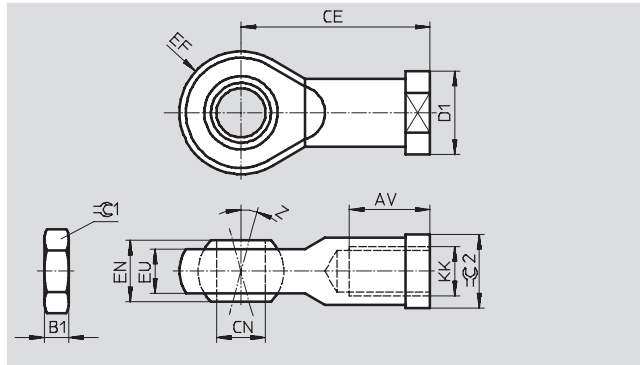
Rod eye SGS

Scope of delivery:

1 rod eye, 1 hex nut to DIN 439

Material:

Galvanised steel



| Dimensions and ordering data | | | | | | | | |
|------------------------------|-------|------|-----|---------------|---------|------------|----|------|
| KK | AV | B1 | CE | CN ∅ H7 | D1 ∅ | EF ±0.5 | EN | EU |
| M4 | 10 -2 | 2.2 | 27 | 5 | 11 | 9 | 8 | 6 |
| M6 | 12 -2 | 3.2 | 30 | 6 | 13 | 10 | 9 | 6.8 |
| M8 | 16 -2 | 4 | 36 | 8 | 16 | 12 | 12 | 9 |
| M10 | 20 -2 | 5 | 43 | 10 | 19 | 14 | 14 | 10.5 |
| M10x1.25 | | | | | | | | |
| M12 | 22 -2 | 6 | 50 | 12 | 22 | 16 | 16 | 12 |
| M12x1.25 | | | | | | | | |
| M16 | 28 -2 | 8 | 64 | 16 | 27 | 21 | 21 | 15 |
| M16x1.5 | | | | | | | | |
| M20x1.5 | 33 -2 | 10 | 77 | 20 | 34 | 25 | 25 | 18 |
| M27x2 | 51 -2 | 13.5 | 110 | 30 | 50 | 35 | 37 | 25 |
| M36x2 | 56 +2 | 18 | 125 | 35 | 58 | 40 | 43 | 28 |
| M42x2 | 60 +2 | 21 | 142 | 40 | 65 | 45 | 49 | 33 |
| M48x2 | 65 +2 | 24 | 160 | 50 | 75 | 58 | 60 | 45 |

| KK | Z [°] | ∠C1 | ∠C2 | DIN ISO 12 240-4 dimensional series K | CRC ¹⁾ | Weight [g] | Part No. | Type |
|----------|----------|-----|-----|---|-------------------|---------------|----------|--------------|
| M4 | 13 | 7 | 9 | – | 2 | 17 | 9 253 | SGS-M4 |
| M6 | 13 | 10 | 11 | ■ | 2 | 25 | 9 254 | SGS-M6 |
| M8 | 13 | 13 | 14 | ■ | 2 | 45 | 9 255 | SGS-M8 |
| M10 | 13 | 17 | 17 | ■ | 2 | 70 | 9 256 | SGS-M10 |
| M10x1.25 | | | | – | 2 | 70 | 9 261 | SGS-M10x1,25 |
| M12 | 13 | 19 | 19 | ■ | 2 | 105 | 9 257 | SGS-M12 |
| M12x1.25 | | | | – | 2 | 105 | 9 262 | SGS-M12x1,25 |
| M16 | 15 | 24 | 22 | ■ | 2 | 210 | 9 258 | SGS-M16 |
| M16x1.5 | | | | – | 2 | 210 | 9 263 | SGS-M16x1,5 |
| M20x1.5 | 15 | 30 | 30 | ■ | 2 | 380 | 9 264 | SGS-M20x1,5 |
| M27x2 | 15 | 41 | 41 | – | 2 | 1,300 | 10 774 | SGS-M27x2 |
| M36x2 | 15 | 55 | 50 | ■ | 2 | 1,825 | 10 775 | SGS-M36x2 |
| M42x2 | 15 | 65 | 55 | ■ | 2 | 2,780 | 10 776 | SGS-M42x2 |
| M48x2 | 12 | 75 | 65 | ■ | 2 | 5,215 | 10 777 | SGS-M48x2 |

1) 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

Rod eyes CRSGS, stainless steel

Technical data



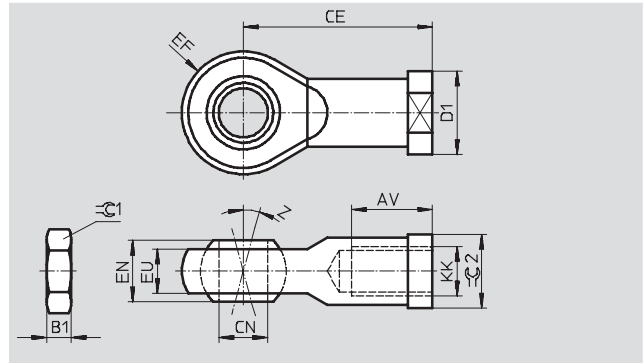
Rod eye CRSGS

Scope of delivery:

1 rod eye, 1 hex nut to DIN 439

Material:

High-alloy steel



| Dimensions and ordering data | | | | | | | | |
|------------------------------|----|------|-----|---------|----|------|----|------|
| KK | AV | B1 | CE | CN | D1 | EF | EN | EU |
| | -2 | | | ∅ H7 | ∅ | ±0.5 | | |
| M6 | 12 | 3.2 | 30 | 6 | 13 | 10 | 9 | 6.8 |
| M8 | 16 | 4 | 36 | 8 | 16 | 12 | 12 | 9 |
| M10x1.25 | 20 | 5 | 43 | 10 | 19 | 14 | 14 | 10.5 |
| M12x1.25 | 22 | 6 | 50 | 12 | 22 | 16 | 16 | 12 |
| M16x1.5 | 28 | 8 | 64 | 16 | 27 | 21 | 21 | 15 |
| M20x1.5 | 33 | 10 | 77 | 20 | 34 | 25 | 25 | 18 |
| M27x2 | 51 | 13.5 | 110 | 30 | 50 | 35 | 37 | 25 |

| KK | Z | ≈C1 | ≈C2 | DIN ISO 12 240-4 dimensional series K | CRC ¹⁾ | Weight [g] | Part No. | Type |
|----------|-----|-----|-----|---|-------------------|---------------|----------|----------------|
| | [°] | | | | | | | |
| M6 | 13 | 10 | 11 | ■ | 4 | 25 | 195 580 | CRSGS-M6 |
| M8 | 13 | 13 | 14 | ■ | 4 | 45 | 195 581 | CRSGS-M8 |
| M10x1.25 | 13 | 17 | 17 | - | 4 | 70 | 195 582 | CRSGS-M10x1,25 |
| M12x1.25 | 13 | 19 | 19 | - | 4 | 105 | 195 583 | CRSGS-M12x1,25 |
| M16x1.5 | 15 | 24 | 22 | - | 4 | 210 | 195 584 | CRSGS-M16x1,5 |
| M20x1.5 | 15 | 30 | 30 | ■ | 4 | 380 | 195 585 | CRSGS-M20x1,5 |
| M27x2 | 15 | 41 | 41 | - | 4 | 1,300 | 195 586 | CRSGS-M27x2 |

1) Corrosion resistance class 4 according 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

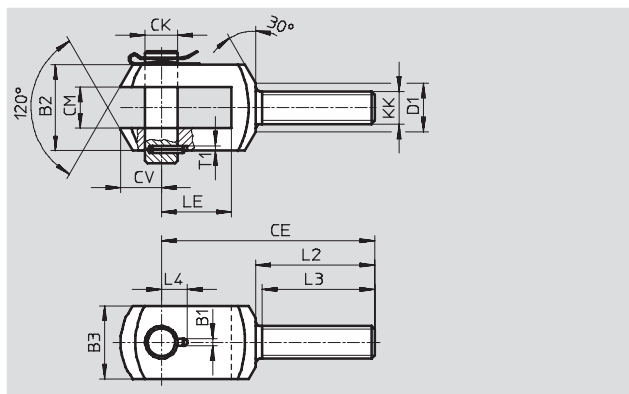
Rod clevises SGA

Technical data

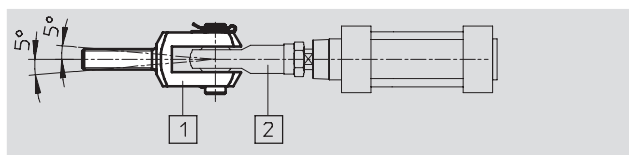
Rod clevis SGA

Scope of delivery:
1 rod clevis, 1 pivot pin
and 1 retaining clip

Material:
Galvanised steel
Free of copper, PTFE and silicone



The rod clevis SGA [1] is used in combination with the rod eye SGS [2] (→ 1 / 10.3-4) for spherical mounting of cylinders.



| Dimensions and ordering data | | | | | | | | |
|------------------------------|-----|-----|----|-----|------------|-----|----|----|
| KK | B1 | B2 | B3 | CE | CK | CM | CV | D1 |
| | | d12 | | | ∅ F7/h9 | B12 | | ∅ |
| M10x1.25 | 3.3 | 28 | 20 | 78 | 10 | 14 | 12 | 18 |
| M12 | 4.3 | 30 | 25 | 92 | 12 | 16 | 16 | 19 |
| M12x1.25 | | | | | | | | |
| M16 | 4.3 | 40 | 35 | 108 | 16 | 21 | 21 | 24 |
| M16x1.5 | | | | | | | | |
| M20x1.5 | 4.3 | 50 | 40 | 131 | 20 | 25 | 25 | 30 |
| M27x2 | 6.3 | 67 | 60 | 168 | 30 | 37 | 32 | 38 |
| M36x2 | 6.3 | 78 | 70 | 211 | 35 | 43 | 39 | 48 |

| KK | L2 | L3 | L4 | LE | T1 | CRC ¹⁾ | Weight | Part No. | Type |
|----------|-----|-----|------|----|----|-------------------|--------|----------|--------------|
| | | | | | | | [g] | | |
| M10x1.25 | 53 | 50 | 11 | 20 | 3 | 2 | 135 | 32 954 | SGA-M10x1,25 |
| M12 | 58 | 55 | 12 | 26 | 3 | 2 | 210 | 6 523 | SGA-M12 |
| M12x1.25 | | | | | | | 210 | 10 767 | SGA-M12x1,25 |
| M16 | 65 | 62 | 14 | 31 | 3 | 2 | 500 | 6 524 | SGA-M16 |
| M16x1.5 | | | | | | | 500 | 10 768 | SGA-M16x1,5 |
| M20x1.5 | 73 | 69 | 16 | 43 | 3 | 2 | 1,090 | 10 769 | SGA-M20x1,5 |
| M27x2 | 98 | 92 | 24 | 54 | 5 | 2 | 2,120 | 10 770 | SGA-M27x2 |
| M36x2 | 121 | 115 | 26.5 | 72 | 5 | 2 | 3,825 | 10 771 | SGA-M36x2 |

1) 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

Rod clevises SG

Technical data



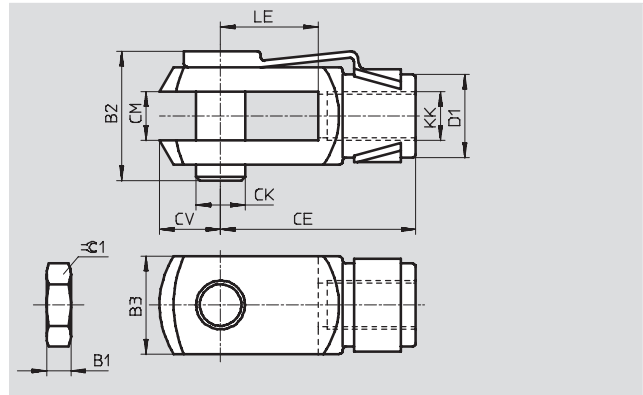
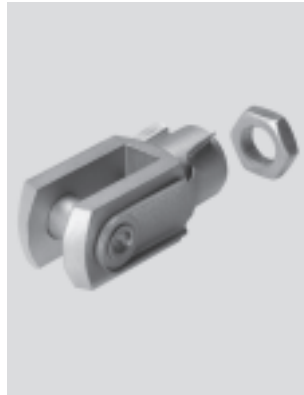
Rod clevis SG

Scope of delivery:

1 rod clevis, 1 hinged spring pin,
DIN 71752, DIN ISO 8140
1 hex nut (M4: DIN 934, M6 ... M48:
DIN 439)

Material:

Galvanised steel
M4 ... M27: Free of copper, PTFE and
silicone



| Dimensions and ordering data | | | | | | | | |
|------------------------------|------|------|----|---------|---------------|--------------|----|---------|
| KK | B1 | B2 | B3 | CE | CK ∅ H9 | CM | CV | D1 ∅ |
| M4 | 3.2 | 11 | 8 | 16±0.3 | 4 | 4B13 | 5 | 8 |
| M6 | 3.2 | 16 | 12 | 24±0.3 | 6 | 6B13 | 7 | 10 |
| M8 | 4 | 21.5 | 16 | 32±0.4 | 8 | 8B13 | 10 | 14 |
| M10 | 5 | 26 | 20 | 40±0.4 | 10 | 10B13 | 12 | 18 |
| M10x1.25 | | | | | | | | |
| M12 | 6 | 31 | 24 | 48±0.4 | 12 | 12+0.7/+0.15 | 14 | 20 |
| M12x1.25 | | | | | | | | |
| M16 | 8 | 39 | 32 | 64±0.4 | 16 | 16+0.7/+0.15 | 19 | 26 |
| M16x1.5 | | | | | | | | |
| M20x1.5 | 10 | 54 | 40 | 80±0.4 | 20 | 20+0.7/+0.15 | 25 | 34 |
| M27x2 | 13.5 | 74 | 55 | 110±0.4 | 30 | 30+0.7/+0.15 | 38 | 48 |
| M36x2 | 18 | 92 | 70 | 144±0.4 | 35 | 35+0.7/+0.15 | 44 | 60 |
| M42x2 | 21 | 111 | 85 | 168±0.4 | 40 | 40+0.7/+0.15 | 64 | 70 |
| M48x2 | 24 | 123 | 90 | 192±0.4 | 50 | 50+0.7/+0.15 | 73 | 80 |

| KK | LE ±0.5 | ≈C1 | DIN ISO 8140 | DIN 71 752 | CRC ¹⁾ | Weight [g] | Part No. | Type |
|----------|------------|-----|--------------|------------|-------------------|---------------|----------|-------------|
| M4 | 8 | 7 | - | ■ | 2 | 10 | 6 532 | SG-M4 |
| M6 | 12 | 10 | ■ | ■ | 2 | 25 | 3 110 | SG-M6 |
| M8 | 16 | 13 | ■ | ■ | 2 | 55 | 3 111 | SG-M8 |
| M10 | 20 | 16 | - | ■ | 2 | 105 | 2 674 | SG-M10 |
| M10x1.25 | | 17 | ■ | ■ | 2 | 105 | 6 144 | SG-M10x1,25 |
| M12 | 24 | 18 | - | ■ | 2 | 165 | 2 675 | SG-M12 |
| M12x1.25 | | 19 | ■ | ■ | 2 | 165 | 6 145 | SG-M12x1,25 |
| M16 | 32 | 24 | - | ■ | 2 | 385 | 2 676 | SG-M16 |
| M16x1.5 | | | ■ | ■ | 2 | 385 | 6 146 | SG-M16x1,5 |
| M20x1.5 | 40 | 30 | ■ | - | 2 | 785 | 6 147 | SG-M20x1,5 |
| M27x2 | 54 | 41 | ■ | - | 2 | 2,145 | 14 987 | SG-M27x2-B |
| M36x2 | 72 | 55 | ■ | - | 2 | 4,220 | 9 581 | SG-M36x2 |
| M42x2 | 84 | 65 | ■ | - | 2 | 7,520 | 9 582 | SG-M42x2 |
| M48x2 | 96 | 75 | ■ | - | 2 | 10,030 | 9 583 | SG-M48x2 |

1) 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

Rod clevises CRSG, stainless steel

Technical data



Rod clevis CRSG

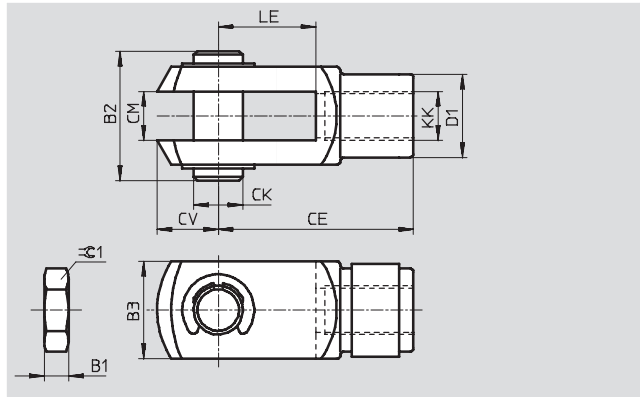
Scope of delivery:

1 rod clevis, 1 pivot pin, 1 hex nut to DIN 439

Material:

High-alloy steel

Free of copper, PTFE and silicone



| Dimensions and ordering data | | | | | | | | |
|------------------------------|------|----|----|---------|---------------|--------------|----|---------|
| KK | B1 | B2 | B3 | CE | CK ∅ H9 | CM | CV | D1 ∅ |
| M6 | 3.2 | 19 | 12 | 24±0.3 | 6 | 6B13 | 7 | 10 |
| M8 | 4 | 24 | 16 | 32±0.4 | 8 | 8B13 | 10 | 14 |
| M10x1.25 | 5 | 27 | 20 | 40±0.4 | 10 | 10B13 | 12 | 18 |
| M12x1.25 | 6 | 33 | 24 | 48±0.4 | 12 | 12+0.7/+0.15 | 14 | 20 |
| M16x1.5 | 8 | 43 | 32 | 64±0.4 | 16 | 16+0.7/+0.15 | 19 | 26 |
| M20x1.5 | 10 | 53 | 40 | 80±0.4 | 20 | 20+0.7/+0.15 | 25 | 34 |
| M27x2 | 13.5 | 70 | 55 | 110±0.4 | 30 | 30+0.7/+0.15 | 38 | 48 |

| KK | LE ±0.5 | ∅C1 | DIN ISO 8140 | DIN 71 752 | CRC ¹⁾ | Weight [g] | Part No. | Type |
|----------|------------|-----|--------------|------------|-------------------|---------------|----------|---------------|
| M6 | 12 | 10 | ■ | ■ | 4 | 25 | 13 567 | CRSG-M6 |
| M8 | 16 | 13 | ■ | ■ | 4 | 55 | 13 568 | CRSG-M8 |
| M10x1.25 | 20 | 16 | ■ | ■ | 4 | 110 | 13 569 | CRSG-M10x1,25 |
| M12x1.25 | 24 | 18 | ■ | ■ | 4 | 180 | 13 570 | CRSG-M12x1,25 |
| M16x1.5 | 32 | 24 | ■ | ■ | 4 | 395 | 13 571 | CRSG-M16x1,5 |
| M20x1.5 | 36 | 30 | ■ | - | 4 | 800 | 13 572 | CRSG-M20x1,5 |
| M27x2 | 54 | 41 | ■ | - | 4 | 1,900 | 185 361 | CRSG-M27x2 |

1) Corrosion resistance class 4 according 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

Self-aligning rod couplers FK

Technical data



Self-aligning rod coupler FK

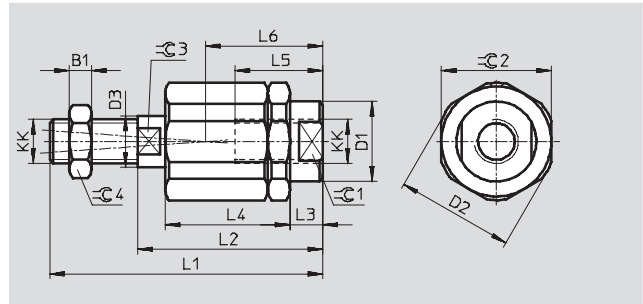
Scope of delivery:

1 self-aligning rod coupler, 1 hex nut to DIN 439

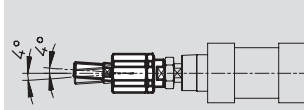
Material:

Galvanised steel

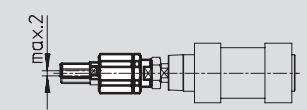
Free of copper, PTFE and silicone



Angular compensation



Radial compensation of central axis



| Dimensions and ordering data | | | | | | | | | | |
|------------------------------|------|---------|---------|---------|------|------|------|------|------|------|
| KK | B1 | D1 ∅ | D2 ∅ | D3 ∅ | L1 | L2 | L3 | L4 | L5 | L6 |
| M4 | 2.2 | – | – | 3.8 | 33 | 24 | 4.5 | 16.5 | 12.5 | 16 |
| M5 | 2.7 | 8.5 | 14.5 | 5.8 | 38.5 | 25 | 4.4 | 17.5 | 11.5 | 15.7 |
| M6 | 3.2 | 8.5 | 14.5 | 5.8 | 37 | 25 | 4.4 | 17.5 | 11.5 | 15.7 |
| M8 | 4 | 12.5 | 19 | 7.8 | 49 | 34 | 6 | 23.5 | 14 | 20.5 |
| M10 | 5 | 21.4 | 32 | 13.8 | 67.5 | 49.5 | 9 | 34 | 23 | 31 |
| M10x1.25 | | | | | 69.5 | | | | | |
| M12 | 6 | 21.4 | 32 | 13.8 | 70.5 | 49.5 | 9 | 34 | 23 | 31 |
| M12x1.25 | | | | | 74.5 | | | | | |
| M16 | 8 | 33.8 | 45 | 22 | 97 | 71 | 10 | 53 | 32 | 44.5 |
| M16x1.5 | | | | | 103 | | | | | |
| M20x1.5 | 10 | 33.8 | 45 | 22 | 120 | 80 | 19 | 53 | 41 | 53.5 |
| M27x2 | 13.5 | 62 | 62 | 28 | 157 | 103 | 12.2 | 79 | 42 | 62.5 |
| M36x2 | 18 | 80 | 80 | 38 | 251 | 179 | 22 | 136 | 78 | 110 |

| KK | ≙C1 | ≙C2 | ≙C3 | ≙C4 | Radial deviation [mm] | CRC ¹⁾ | Weight [g] | Part No. | Type |
|----------|-----|-----|-----|-----|--------------------------|-------------------|---------------|----------|-------------|
| M4 | 11 | 11 | 3.2 | 7 | ±0.5 | 2 | 15 | 6 528 | FK-M4 |
| M5 | 7 | 13 | 5 | 8 | ±0.5 | 2 | 20 | 30 984 | FK-M5 |
| M6 | 7 | 13 | 5 | 10 | ±0.5 | 2 | 23 | 2 061 | FK-M6 |
| M8 | 10 | 17 | 7 | 13 | ±0.5 | 2 | 50 | 2 062 | FK-M8 |
| M10 | 19 | 30 | 12 | 17 | ±0.7 | 2 | 210 | 2 063 | FK-M10 |
| M10x1.25 | | | | | ±0.7 | 2 | 210 | 6 140 | FK-M10x1,25 |
| M12 | 19 | 30 | 12 | 19 | ±0.7 | 2 | 210 | 2 064 | FK-M12 |
| M12x1.25 | | | | | ±0.7 | 2 | 215 | 6 141 | FK-M12x1,25 |
| M16 | 30 | 41 | 19 | 24 | ±1 | 2 | 670 | 2 065 | FK-M16 |
| M16x1.5 | | | | | ±1 | 2 | 650 | 6 142 | FK-M16x1,5 |
| M20x1.5 | 30 | 41 | 19 | 30 | ±1 | 2 | 720 | 6 143 | FK-M20x1,5 |
| M27x2 | 55 | 55 | 24 | 41 | ±1 | 2 | 2,100 | 10 485 | FK-M27x2 |
| M36x2 | 75 | 75 | 32 | 55 | ±1 | 2 | 5,800 | 10 746 | FK-M36x2 |

1) 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

Coupling pieces KSG

Technical data

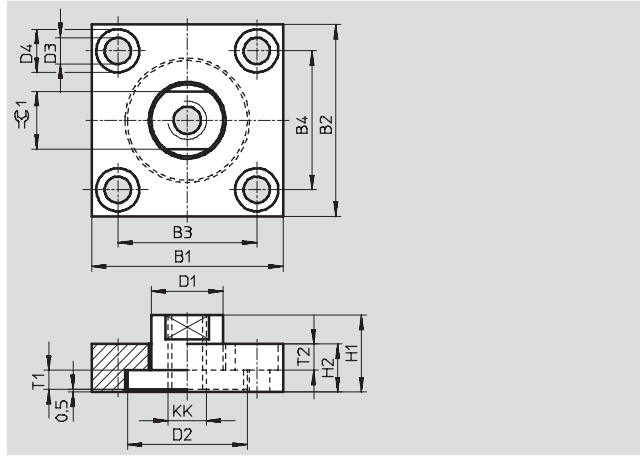


Coupling piece KSG

These coupling pieces connect the piston-rod thread of all types of cylinders to machine components which need to be driven. The pieces can compensate for radial alignment deviations of up to 1 mm.

Scope of delivery:
1 flange plate, 1 threaded coupling

Material:
Galvanised steel
Free of copper, PTFE and silicone



| Dimensions and ordering data | | | | | | | | | | |
|------------------------------|----|----|----|----|-------------------------------|----------------|-----------------|----------------|----------------|----|
| KK | B1 | B2 | B3 | B4 | B5 Max. radial backlash | D1 ∅ H11 | D2 ∅ -0,2 | D3 ∅ H13 | D4 ∅ H13 | H1 |
| M10x1,25 | 60 | 37 | 36 | 23 | 1 | 20 | 32 | 6,6 | 11 | 24 |
| M12x1,25 | 60 | 56 | 42 | 38 | | 25 | 42 | 9 | 15 | 30 |
| M16x1,5 | 80 | 80 | 58 | 58 | | 30 | 52 | 11 | 18 | 32 |
| M20x1,5 | 90 | 90 | 65 | 65 | | 40 | 62 | 14 | 20 | 35 |
| M27x2 | 90 | 90 | 65 | 65 | | 40 | 62 | 14 | 20 | 35 |

| KK | H2 | T1 Min. axial backlash | T2 | ≈C1 | Max. tightening torque ¹⁾ [Nm] | KBK ²⁾ | Weight [g] | Part No. | Type |
|----------|----|------------------------------|-----|-----|---|-------------------|---------------|----------|--------------|
| M10x1,25 | 15 | 0,5 | 6,8 | 17 | 9,9 | 2 | 230 | 32 963 | KSG-M10x1,25 |
| M12x1,25 | 20 | | 9 | 19 | 24 | 2 | 450 | 32 964 | KSG-M12x1,25 |
| M16x1,5 | 20 | | 11 | 24 | 47 | 2 | 900 | 32 965 | KSG-M16x1,5 |
| M20x1,5 | 20 | | 13 | 36 | 82 | 2 | 1 050 | 32 966 | KSG-M20x1,5 |
| M27x2 | 20 | | 13 | 36 | 82 | 2 | 1 110 | 32 967 | KSG-M27x2 |

1) For mounting screws with standard threads and strength class 8.8

2) 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

Coupling pieces KSZ

Technical data



Coupling piece KSZ

for non-rotating piston rods with male threads

These coupling pieces can be used to connect a cylinder with a non-rotating piston rod to another component with a defined orientation without rotating either the cylinder or other component.

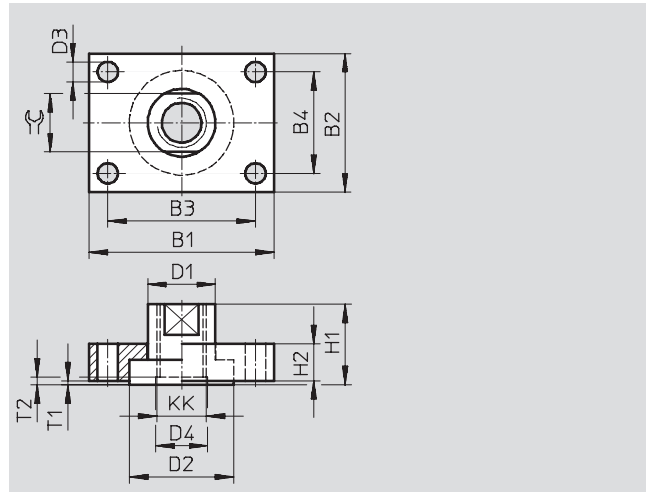
Scope of delivery:

1 flange plate, 1 threaded coupling

Material:

Galvanised steel

Free of copper, PTFE and silicone



| Dimensions and ordering data | | | | | | | | | | | | |
|------------------------------|----|----|----|----|---------|---------|----------------|---------|----|----|------------|----|
| KK | B1 | B2 | B3 | B4 | D1 ∅ | D2 ∅ | D3 ∅ H13 | D4 ∅ | H1 | H2 | T1 min. | T2 |
| M6 | 30 | 25 | 20 | 15 | 12-0,1 | 18 | 5,5 | 8 | 16 | 8 | 0,1 | 2 |
| M8 | 35 | 30 | 25 | 20 | 14-0,1 | 20 | 5,5 | - | 22 | 8 | 0,1 | - |
| M10x1,25 | 40 | 35 | 30 | 25 | 17-0,2 | 26 | 5,5 | - | 20 | 10 | 0,1 | - |
| M12x1,25 | 50 | 40 | 40 | 30 | 17-0,2 | 26 | 5,5 | - | 22 | 12 | 0,1 | - |
| M16x1,5 | 60 | 45 | 48 | 33 | 22-0,2 | 34 | 6,6 | - | 25 | 12 | 0,1 | - |
| M20x1,5 | 72 | 50 | 57 | 35 | 30-0,2 | 44 | 9 | - | 32 | 15 | 0,1 | - |

| KK | ≡C | Max. tightening torque ¹⁾ [Nm] | Max. tightening torque ²⁾ [Nm] | Max. tightening torque ³⁾ [Nm] | KBK ⁴⁾ | Weight [g] | Part No. | Type |
|----------|----|--|--|--|-------------------|---------------|----------|--------------|
| M6 | 10 | 5,9 | 6,9 | 2,1 | 2 | 45 | 36 123 | KSZ-M6 |
| M8 | 13 | 5,9 | 16 | 5 | 2 | 70 | 36 124 | KSZ-M8 |
| M10x1,25 | 15 | 5,9 | 34 | 12 | 2 | 110 | 36 125 | KSZ-M10x1,25 |
| M12x1,25 | 15 | 5,9 | 61 | 22 | 2 | 180 | 36 126 | KSZ-M12x1,25 |
| M16x1,5 | 19 | 9,9 | 148 | 57 | 2 | 250 | 36 127 | KSZ-M16x1,5 |
| M20x1,5 | 27 | 24 | 296 | 120 | 2 | 420 | 36 128 | KSZ-M20x1,5 |

1) For mounting screws with standard threads and strength class 8.8

2) For use with lock nut on piston rod

3) Torque which coupling can transmit with coefficient of friction μ 0,1 and 10x safety margin at max. permissible tightening torque

4) 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 on direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating agents

- Note The torque on the coupling piece must not exceed the permissible torque on the cylinder. The mounting screws should be tightened evenly.

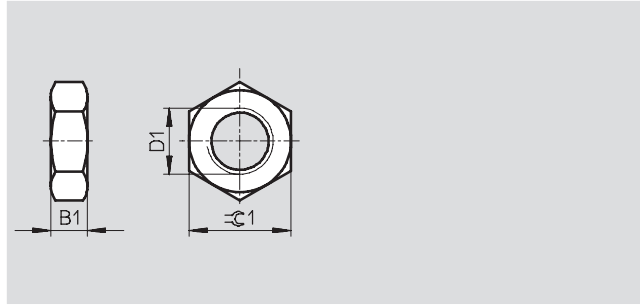
Hex nuts MSK

Technical data



Hex nut MSK

Material:
Galvanised steel



| Dimensions and ordering data | | | | | | | | | |
|------------------------------|----|--------------|--------------------------------|-----------------------------|-------------------|---------------|----------|--------------|------------------|
| D1 | B1 | $\approx C1$ | Conforms to DIN EN ISO 8675 | Based on DIN EN ISO 8675 | CRC ¹⁾ | Weight [g] | Part No. | Type | PU ²⁾ |
| M10x1.25 | 5 | 17 | - | ■ | 2 | 7 | 189 005 | MSK-M10x1,25 | 10 |
| M12x1.25 | 6 | 19 | - | ■ | 2 | 9 | 189 006 | MSK-M12x1,25 | 10 |
| M16x1.5 | 8 | 24 | ■ | - | 2 | 18 | 189 007 | MSK-M16x1,5 | 10 |

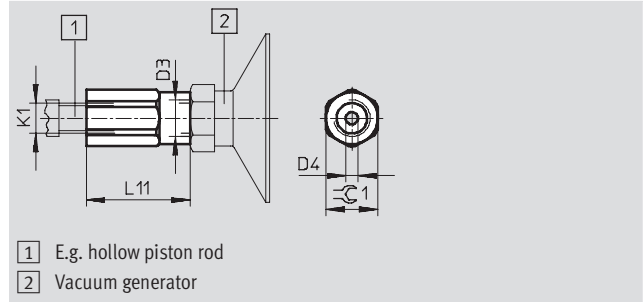
- 1) Corrosion resistance class 2 according to Festo standard 940 070
Components requiring moderate corrosion resistance. Externally visible parts with primarily decorative surface requirements which are in direct contact with a surrounding industrial atmosphere or media such as cooling or lubricating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

Adapter AD

Technical data

Adapter AD

Material:
Anodised aluminium



| Dimensions and ordering data | | | | | | |
|------------------------------|-----------------|---------|-----|-----|---------------|------------------------------------|
| K1 | D3 | D4 Ø | L11 | ⊖C1 | Weight [g] | Part No. Type |
| M6 | M5 | 2.3 | 27 | 10 | 6 | 157 328 AD-M6-M5 |
| M6 | G $\frac{1}{8}$ | 2.3 | 27 | 13 | 9 | 157 329 AD-M6- $\frac{1}{8}$ |
| M6 | G $\frac{1}{4}$ | 2.3 | 30 | 17 | 17 | 157 330 AD-M6- $\frac{1}{4}$ |
| M8 | G $\frac{1}{8}$ | 3.2 | 29 | 13 | 8 | 157 331 AD-M8- $\frac{1}{8}$ |
| M8 | G $\frac{1}{4}$ | 3.2 | 32 | 17 | 16 | 157 332 AD-M8- $\frac{1}{4}$ |
| M10x1.25 | G $\frac{1}{8}$ | 4 | 31 | 13 | 10 | 157 333 AD-M10x1,25- $\frac{1}{8}$ |
| M10x1.25 | G $\frac{1}{4}$ | 4 | 34 | 17 | 16 | 157 334 AD-M10x1,25- $\frac{1}{4}$ |
| M12x1.25 | G $\frac{1}{4}$ | 6 | 34 | 17 | 28 | 160 256 AD-M12x1,25- $\frac{1}{4}$ |
| M12x1.25 | G $\frac{3}{8}$ | 6 | 37 | 22 | 14 | 160 257 AD-M12x1,25- $\frac{3}{8}$ |