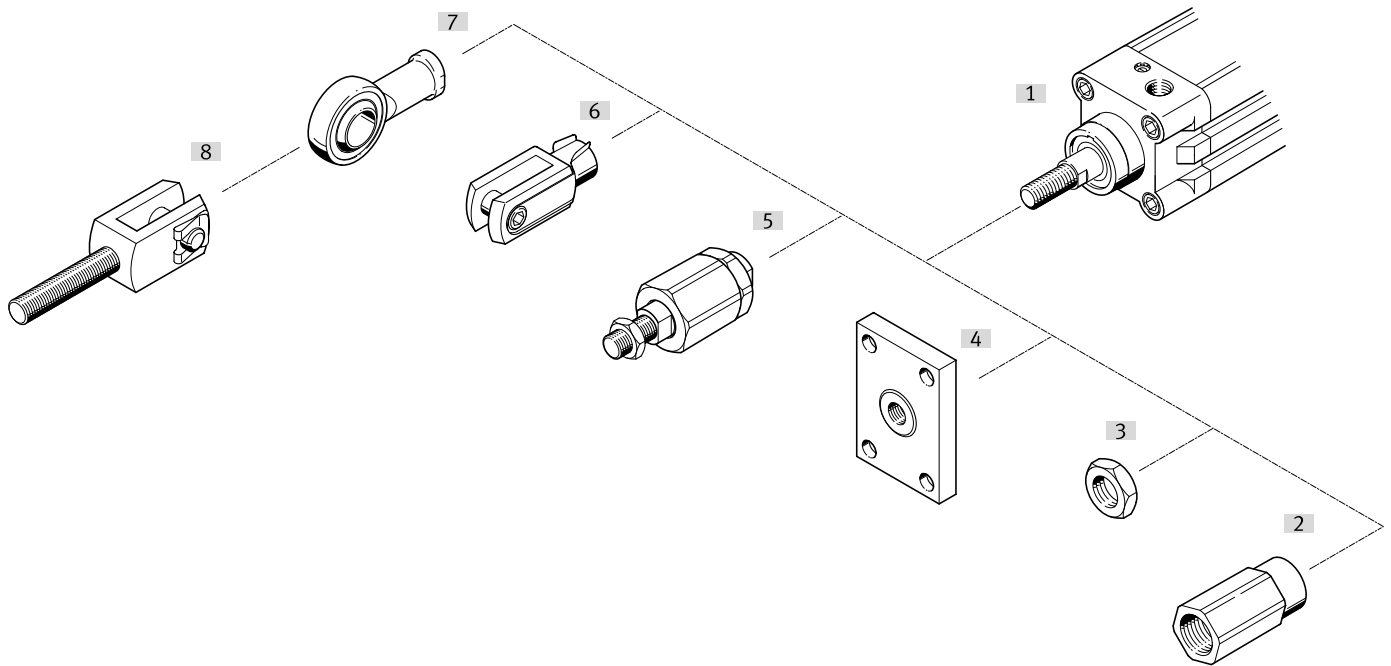


## Piston rod attachments

**FESTO**



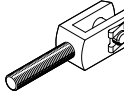
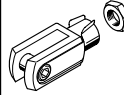
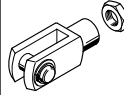


Peripherals overview

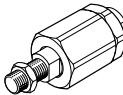
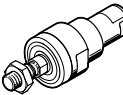






| Mounting attachments and accessories |                                   | Description   |
|--------------------------------------|-----------------------------------|---|
| [1]                                  | Cylinders with piston rod         | The piston rod attachments are mounted on the piston rod of the cylinder.   |
| [2]                                  | Adapter<br>AD                     | Specially for through, hollow piston rods, e.g. for connecting suction cups.  |
| [3]                                  | Hex nut<br>MSK                    | Based on and/or corresponds to ISO 8675.  |
| [4]                                  | Coupling piece<br>KSG             | The coupling pieces connect the piston rod end of all cylinder types to the machine parts to be moved. They compensate for radial misalignments up to $\pm 1$ mm.                       |
|                                      | Coupling piece<br>KSZ             | For cylinders with non-rotating piston rods. This coupling piece ensures the cylinder has a stable connection to the component being moved in order to compensate for radial deviation. |
| [5]                                  | Self-aligning rod coupler<br>FK   | The rod couplers connect the piston rod end of all cylinder types to the machine parts to be moved. This compensates for radial and angular deviations (misalignment).                  |
|                                      | Self-aligning rod coupler<br>CRFK | Corrosion and acid-resistant design.  |
| [6]                                  | Rod clevis<br>SG                  | This rod clevis is fitted to the threaded front end of the piston rod and permits a swivelling movement of the cylinder in one plane. Corresponds to ISO 8140 or DIN 71752.             |
|                                      | Rod clevis<br>CRSG                | Corrosion and acid-resistant design. Corresponds to ISO 8140 or DIN 71752.  |
| [7]                                  | Rod eye<br>SGS                    | The swivel bearing of the rod eyes are maintenance free. Correspond to ISO 12240-4 dimensional series K.  |
|                                      | Rod eye<br>CRSGS                  | Corrosion and acid-resistant design. Correspond to ISO 12240-4 dimensional series K.  |
| [8]                                  | Rod clevis<br>SGA                 | Rod clevises are used in combination with the rod eye SGS for spherical connection of cylinders.  |

Product range overview

| Piston rod attachments |        | Rod eye   |   | Rod clevis  |   |   |
|------------------------|--------|---|---|---|---|---|
| Piston rod thread      |        | SGS-...   | CRSGS-...   | SGA-... <sup>1)</sup>   | SG-...  | CRSG-...  |
| Outside                | Inside |  |  |  |  |  |
| M4                     |        | ■   | -   | -   | ■   | -   |
| M6                     |        | ■   | ■   | -   | ■   | ■   |
| M8                     |        | ■   | ■   | -   | ■   | ■   |
| M10                    |        | ■   | -   | -   | ■   | -   |
| M10x1.25               |        | ■   | ■   | ■   | ■   | ■   |
| M12                    |        | ■   | -   | ■   | ■   | -   |
| M12x1.25               |        | ■   | ■   | ■   | ■   | ■   |
| M16                    |        | ■   | -   | ■   | ■   | -   |
| M16x1.5                |        | ■   | ■   | ■   | ■   | ■   |
| M20x1.5                |        | ■   | ■   | ■   | ■   | ■   |
| M27x2                  |        | ■   | ■   | ■   | ■   | ■   |
| M36x2                  |        | ■   | -   | -   | ■   | -   |
| M42x2                  |        | ■   | -   | -   | ■   | -   |
| M48x2                  |        | ■   | -   | -   | ■   | -   |
| → Page/Internet        |        | 4   | 6   | 7   | 8   | 10  |

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

| Piston rod attachments |        | Self-aligning rod coupler   |   | Coupling piece  |  | Hex nut   | Adapter   |
|------------------------|--------|---|---|---|--|---|---|
| Piston rod thread      |        | FK-...  | CRFK-...  | KSG-...   | KSZ-...  | MSK-...   | AD-...  |
| Outside                | Inside |  |  |  |  |  |  |
| M4                     |        | ■   | -   | -   | -  | -   | -   |
| M6                     |        | ■   | -   | -   | ■  | -   | ■   |
| M8                     |        | ■   | -   | -   | ■  | -   | ■   |
| M10                    |        | ■   | -   | -   | -  | -   | -   |
| M10x1.25               |        | ■   | ■   | ■   | ■  | ■   | ■   |
| M12                    |        | ■   | -   | -   | -  | -   | -   |
| M12x1.25               |        | ■   | ■   | ■   | ■  | ■   | ■   |
| M16                    |        | ■   | -   | -   | -  | -   | -   |
| M16x1.5                |        | ■   | ■   | ■   | ■  | ■   | -   |
| M20x1.5                |        | ■   | ■   | ■   | ■  | -   | -   |
| M27x2                  |        | ■   | -   | ■   | -  | -   | -   |
| M36x2                  |        | ■   | -   | -   | -  | -   | -   |
| M42x2                  |        | -   | -   | -   | -  | -   | -   |
| M48x2                  |        | -   | -   | -   | -  | -   | -   |
|                        | M4     | ■   | -   | -   | -  | -   | -   |
|                        | M5     | ■   | -   | -   | -  | -   | -   |
|                        | M6     | ■   | -   | -   | -  | -   | -   |
|                        | M8     | ■   | -   | -   | -  | -   | -   |
|                        | M10    | ■   | -   | -   | -  | -   | -   |
|                        | M12    | ■   | -   | -   | -  | -   | -   |
|                        | M16    | ■   | -   | -   | -  | -   | -   |
| → Page/Internet        |        | 11  | 12  | 14  | 15   | 16  | 17  |

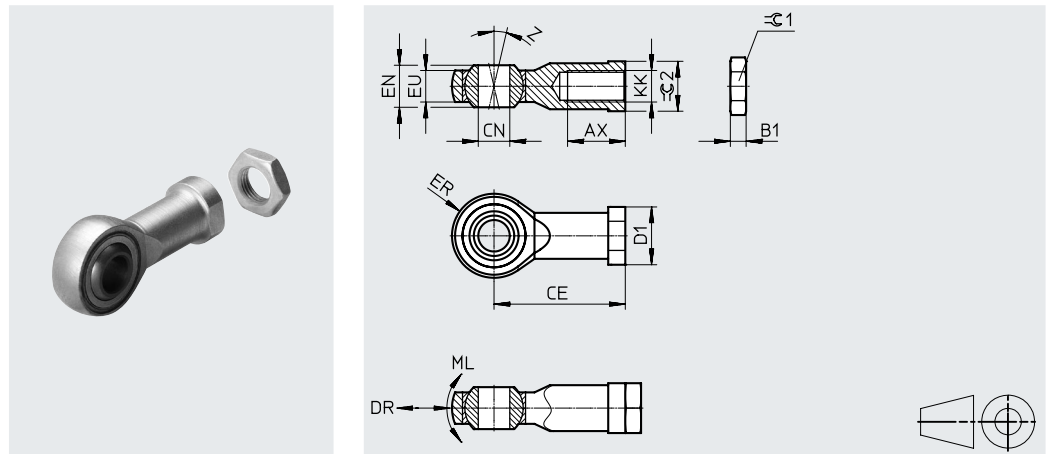
## Datasheet

### Rod eye SGS

Scope of delivery:  
1 rod eye, 1 hex nut to DIN 439

Material:  
Galvanised steel

RoHS-compliant  
LABS (PWIS) conformity:  
VDMA24364-B2-L



#### Dimensions and ordering data

| KK              | AX    | B1   | CE      | CN<br>∅<br>H7 | D1<br>∅ | DR <sup>1)</sup><br>max.<br>[μm] | ER<br>±0.5 | EN | EU   |
|-----------------|-------|------|---------|---------------|---------|----------------------------------|------------|----|------|
| <b>M4</b>       | 10 -2 | 2.2  | 27±1.2  | 5             | 12      | 34                               | 9          | 8  | 6    |
| <b>M6</b>       | 12 -2 | 3.2  | 30±1.2  | 6             | 14      | 34                               | 10         | 9  | 6.8  |
| <b>M8</b>       | 16 -2 | 4    | 36±1.2  | 8             | 17      | 40                               | 12         | 12 | 9    |
| <b>M10</b>      | 20 -2 | 5    | 43±1.2  | 10            | 20      | 40                               | 14         | 14 | 10.5 |
| <b>M10x1.25</b> |       |      |         |               |         |                                  |            |    |      |
| <b>M12</b>      | 22 -2 | 6    | 50±1.2  | 12            | 23      | 45                               | 16         | 16 | 12   |
| <b>M12x1.25</b> |       |      |         |               |         |                                  |            |    |      |
| <b>M16</b>      | 28 -2 | 8    | 64±1.2  | 16            | 29      | 45                               | 21         | 21 | 15   |
| <b>M16x1.5</b>  |       |      |         |               |         |                                  |            |    |      |
| <b>M20x1.5</b>  | 33 -2 | 10   | 77±1.7  | 20            | 37      | 55                               | 25         | 25 | 18   |
| <b>M27x2</b>    | 51 -2 | 13.5 | 110±1.7 | 30            | 52      | 55                               | 35         | 37 | 25   |
| <b>M36x2</b>    | 56 +2 | 18   | 125±2.1 | 35            | 60      | 60                               | 40         | 43 | 28   |
| <b>M42x2</b>    | 60 +2 | 21   | 142±2.1 | 40            | 69      | 60                               | 45         | 49 | 33   |
| <b>M48x2</b>    | 65 +2 | 24   | 160±2.1 | 50            | 78      | 60                               | 58         | 60 | 45   |

1) Max. play DR up to max. friction torque ML possible.

## Datasheet

| KK              | ML <sup>2)</sup><br>max.<br>[Nm] | Z<br>[°] | ⊕1 | ⊕2 | ISO 12240-4<br>Dimensional series K | CRC <sup>3)</sup> | Weight<br>[g] | Part no.     | Type                |
|-----------------|----------------------------------|----------|----|----|-------------------------------------|-------------------|---------------|--------------|---------------------|
| <b>M4</b>       | 0.1                              | 13       | 7  | 9  | –                                   | 1                 | 21            | <b>9253</b>  | <b>SGS-M4</b>       |
| <b>M6</b>       | 0.13                             | 13       | 10 | 11 | ■                                   | 1                 | 29            | <b>9254</b>  | <b>SGS-M6</b>       |
| <b>M8</b>       | 0.18                             | 13       | 13 | 14 | ■                                   | 1                 | 53            | <b>9255</b>  | <b>SGS-M8</b>       |
| <b>M10</b>      | 0.23                             | 13       | 17 | 17 | ■                                   | 1                 | 88            | <b>9256</b>  | <b>SGS-M10</b>      |
| <b>M10x1.25</b> |                                  |          |    |    | –                                   | 1                 | 87            | <b>9261</b>  | <b>SGS-M10x1.25</b> |
| <b>M12</b>      | 0.28                             | 13       | 19 | 19 | ■                                   | 1                 | 131           | <b>9257</b>  | <b>SGS-M12</b>      |
| <b>M12x1.25</b> |                                  |          |    |    | –                                   | 1                 | 129           | <b>9262</b>  | <b>SGS-M12x1.25</b> |
| <b>M16</b>      | 0.4                              | 15       | 24 | 22 | ■                                   | 1                 | 263           | <b>9258</b>  | <b>SGS-M16</b>      |
| <b>M16x1.5</b>  |                                  |          |    |    | –                                   | 1                 | 259           | <b>9263</b>  | <b>SGS-M16x1.5</b>  |
| <b>M20x1.5</b>  | 0.55                             | 15       | 30 | 30 | ■                                   | 1                 | 464           | <b>9264</b>  | <b>SGS-M20x1.5</b>  |
| <b>M27x2</b>    | 0.85                             | 15       | 41 | 41 | –                                   | 1                 | 1333          | <b>10774</b> | <b>SGS-M27x2</b>    |
| <b>M36x2</b>    | 1                                | 15       | 55 | 50 | ■                                   | 1                 | 2084          | <b>10775</b> | <b>SGS-M36x2</b>    |
| <b>M42x2</b>    | 1.2                              | 15       | 65 | 55 | ■                                   | 1                 | 3132          | <b>10776</b> | <b>SGS-M42x2</b>    |
| <b>M48x2</b>    | 1.5                              | 12       | 75 | 65 | ■                                   | 1                 | 5498          | <b>10777</b> | <b>SGS-M48x2</b>    |

2) Max. friction torque ML up to max. play DR possible.

3) In the area of the ball: CRC 0

More information [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

## Datasheet

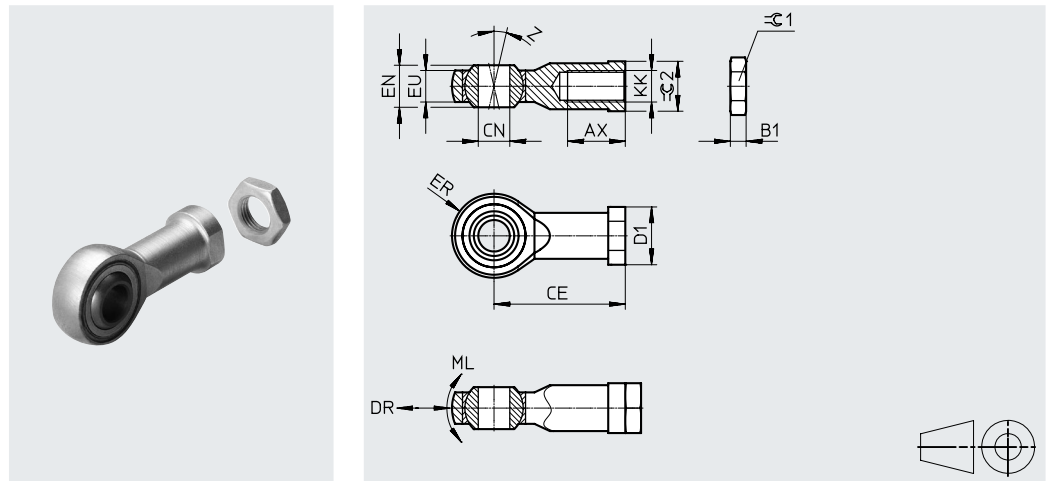
### Rod eye CRSGS

Scope of delivery:  
1 rod eye, 1 hex nut to DIN 439

Material:  
High-alloy steel

RoHS-compliant  
LABS (PWIS) conformity:  
VDMA24364-B2-L

Recommended for production systems  
for manufacturing lithium-ion batteries.



#### Dimensions and ordering data

| KK              | AV | B1   | CE      | CN<br>∅<br>H7 | D1<br>∅ | DR <sup>1)</sup><br>max.<br>[μm] | EF<br>±0.5 | EN | EU   |
|-----------------|----|------|---------|---------------|---------|----------------------------------|------------|----|------|
|                 | -2 |      |         |               |         |                                  |            |    |      |
| <b>M6</b>       | 12 | 3.2  | 30±1.2  | 6             | 13      | 34                               | 10         | 9  | 6.8  |
| <b>M8</b>       | 16 | 4    | 36±1.2  | 8             | 16      | 40                               | 12         | 12 | 9    |
| <b>M10x1.25</b> | 20 | 5    | 43±1.2  | 10            | 19      | 40                               | 14         | 14 | 10.5 |
| <b>M12x1.25</b> | 22 | 6    | 50±1.2  | 12            | 22      | 45                               | 16         | 16 | 12   |
| <b>M16x1.5</b>  | 28 | 8    | 64±1.2  | 16            | 27      | 45                               | 21         | 21 | 15   |
| <b>M20x1.5</b>  | 33 | 10   | 77±1.7  | 20            | 34      | 55                               | 25         | 25 | 18   |
| <b>M27x2</b>    | 51 | 13.5 | 110±1.7 | 30            | 50      | 55                               | 35         | 37 | 25   |

| KK              | ML <sup>2)</sup><br>max.<br>[Nm] | Z<br>[°] | ≈G1 | ≈G2 | ISO 12240-4<br>Dimensional<br>series K | CRC <sup>3)</sup> | Weight<br>[g] | Battery man-<br>ufacturing <sup>4)</sup> | Part no.      | Type                  |
|-----------------|----------------------------------|----------|-----|-----|--|-------------------|---------------|--|---------------|-----------------------|
| <b>M6</b>       | 0.18                             | 13       | 10  | 11  | ■                                      | 3                 | 29            | F5a                                      | <b>195580</b> | <b>CRSGS-M6</b>       |
| <b>M8</b>       | 0.23                             | 13       | 13  | 14  | ■                                      | 3                 | 53            | F5a                                      | <b>195581</b> | <b>CRSGS-M8</b>       |
| <b>M10x1.25</b> | 0.23                             | 13       | 17  | 17  | -                                      | 3                 | 87            | F5a                                      | <b>195582</b> | <b>CRSGS-M10x1.25</b> |
| <b>M12x1.25</b> | 0.28                             | 13       | 19  | 19  | -                                      | 3                 | 129           | F5a                                      | <b>195583</b> | <b>CRSGS-M12x1.25</b> |
| <b>M16x1.5</b>  | 0.4                              | 15       | 24  | 22  | -                                      | 3                 | 259           | F5a                                      | <b>195584</b> | <b>CRSGS-M16x1.5</b>  |
| <b>M20x1.5</b>  | 0.55                             | 15       | 30  | 30  | ■                                      | 3                 | 464           | F5a                                      | <b>195585</b> | <b>CRSGS-M20x1.5</b>  |
| <b>M27x2</b>    | 0.85                             | 15       | 41  | 41  | -                                      | 3                 | 1333          | F5a                                      | <b>195586</b> | <b>CRSGS-M27x2</b>    |

1) Max. play DR up to max. friction torque ML possible.

2) Max. friction torque ML up to max. play DR possible.

3) In the area of the ball: CRC 1

More information [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

4) F5a: Metals with more than 5% by mass of copper, zinc or nickel are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.

More information: [www.festo.com/x/topic/bat](http://www.festo.com/x/topic/bat)

## Datasheet

### Rod clevis SGA

**Scope of delivery:**

1 rod clevis, 1 pivot pin,  
1 retaining clip

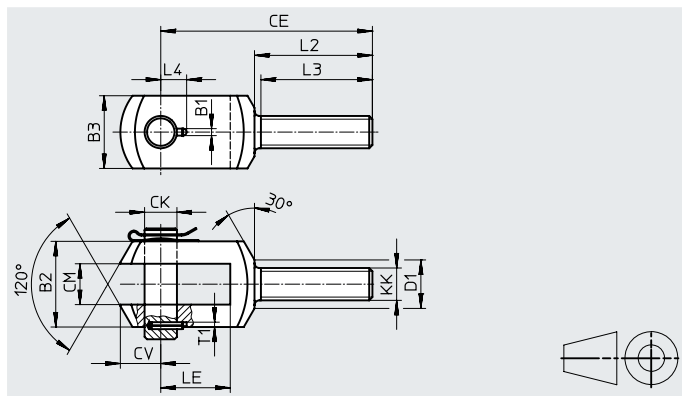
**Material:**

Galvanised steel

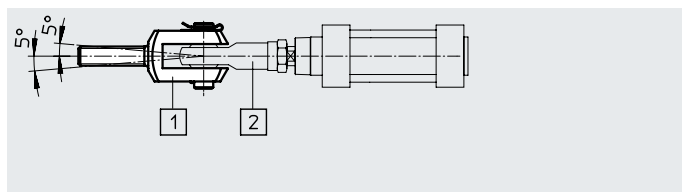
**RoHS-compliant**

LABS (PWIS) conformity:

VDMA24364-B2-L



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



**Dimensions and ordering data**

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

| KK              | L2  | L3  | L4   | LE | T1 | CRC <sup>1)</sup> | Weight<br>[g] | Part no.     | Type                |
|-----------------|-----|-----|------|----|----|-------------------|---------------|--------------|---------------------|
| <b>M10x1.25</b> | 53  | 50  | 11   | 20 | 3  | 1                 | 129           | <b>32954</b> | <b>SGA-M10x1.25</b> |
| <b>M12</b>      | 58  | 55  | 12   | 26 | 3  | 1                 | 222           | <b>6523</b>  | <b>SGA-M12</b>      |
| <b>M12x1.25</b> |     |     |      |    |    | 1                 | 222           | <b>10767</b> | <b>SGA-M12x1.25</b> |
| <b>M16</b>      | 65  | 62  | 14   | 31 | 3  | 1                 | 512           | <b>6524</b>  | <b>SGA-M16</b>      |
| <b>M16x1.5</b>  |     |     |      |    |    | 1                 | 512           | <b>10768</b> | <b>SGA-M16x1.5</b>  |
| <b>M20x1.5</b>  | 73  | 69  | 16   | 43 | 3  | 1                 | 954           | <b>10769</b> | <b>SGA-M20x1.5</b>  |
| <b>M27x2</b>    | 98  | 92  | 24   | 54 | 5  | 1                 | 2189          | <b>10770</b> | <b>SGA-M27x2</b>    |
| <b>M36x2</b>    | 121 | 115 | 26.5 | 72 | 5  | 1                 | 3938          | <b>10771</b> | <b>SGA-M36x2</b>    |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

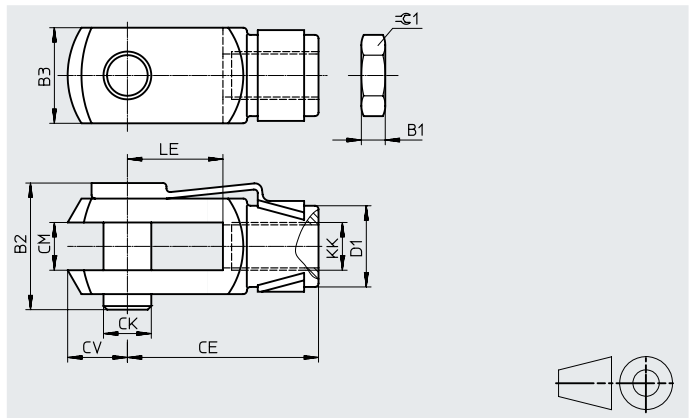
## Datasheet

### Rod clevis SG

Scope of delivery:  
1 rod clevis, 1 clevis pin, 1 hex nut  
(M4: DIN 934,  
M6 ... M16: DIN 439)

Material:  
Galvanised steel

RoHS-compliant  
LABS (PWIS) conformity:  
VDMA24364-B2-L



#### Dimensions and ordering data

| KK              | B1  | B2   | B3 | CE     | CK<br>∅ | CM           | CV | D1<br>∅ |
|-----------------|-----|------|----|--------|---------|--------------|----|---------|
| <b>M4</b>       | 3.2 | 11.1 | 8  | 16±0.3 | 4h11    | 4B13         | 5  | 8       |
| <b>M6</b>       | 3.2 | 16.2 | 12 | 24±0.3 | 6h11    | 6B13         | 7  | 10      |
| <b>M8</b>       | 4   | 21.6 | 16 | 32±0.4 | 8h11    | 8B13         | 10 | 14      |
| <b>M10</b>      | 5   | 26   | 20 | 40±0.4 | 10h11   | 10B13        | 12 | 18      |
| <b>M10x1.25</b> |     |      |    |        |         |              |    |         |
| <b>M12</b>      | 6   | 31.1 | 24 | 48±0.4 | 12h11   | 12+0.7/+0.15 | 14 | 20      |
| <b>M12x1.25</b> |     |      |    |        |         |              |    |         |
| <b>M16</b>      | 8   | 39.5 | 32 | 64±0.4 | 16h11   | 16+0.7/+0.15 | 19 | 26      |
| <b>M16x1.5</b>  |     |      |    |        |         |              |    |         |

| KK              | LE<br>±0.5 | ≈G1 | ISO 8140 | DIN 71752 | CRC <sup>1)</sup> | Weight<br>[g] | Part no.    | Type               |
|-----------------|------------|-----|----------|-----------|-------------------|---------------|-------------|--------------------|
| <b>M4</b>       | 8          | 7   | —        | ■         | 1                 | 10            | <b>6532</b> | <b>SG-M4</b>       |
| <b>M6</b>       | 12         | 10  | ■        | ■         | 1                 | 22            | <b>3110</b> | <b>SG-M6</b>       |
| <b>M8</b>       | 16         | 13  | ■        | ■         | 1                 | 53            | <b>3111</b> | <b>SG-M8</b>       |
| <b>M10</b>      | 20         | 17  | —        | ■         | 1                 | 104           | <b>2674</b> | <b>SG-M10</b>      |
| <b>M10x1.25</b> |            | 17  | ■        | ■         | 1                 | 103           | <b>6144</b> | <b>SG-M10x1.25</b> |
| <b>M12</b>      | 24         | 19  | —        | ■         | 1                 | 168           | <b>2675</b> | <b>SG-M12</b>      |
| <b>M12x1.25</b> |            | 19  | ■        | ■         | 1                 | 166           | <b>6145</b> | <b>SG-M12x1.25</b> |
| <b>M16</b>      | 32         | 24  | —        | ■         | 1                 | 376           | <b>2676</b> | <b>SG-M16</b>      |
| <b>M16x1.5</b>  |            |     | ■        | ■         | 1                 | 375           | <b>6146</b> | <b>SG-M16x1.5</b>  |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

## Datasheet

### Rod clevis SG

#### Scope of delivery:

1 rod clevis, 1 bolt,  
1 retaining ring, 1 hex nut (DIN 439)

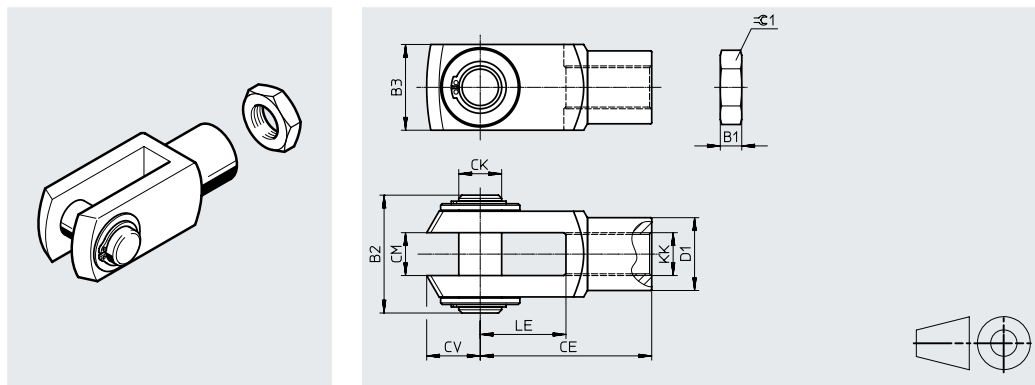
#### Material:

Galvanised steel

#### RoHS-compliant

LABS (PWIS) conformity:

VDMA24364-B2-L



#### Dimensions and ordering data

| KK             | B1   | B2    | B3 | CE      | CK<br>∅ | CM           | CV | D1<br>∅ |
|----------------|------|-------|----|---------|---------|--------------|----|---------|
| <b>M20x1.5</b> | 10   | 55    | 40 | 80±0.4  | 20e8    | 20+0.7/+0.15 | 25 | 34      |
| <b>M27x2</b>   | 13.5 | 73    | 55 | 110±0.4 | 30e8    | 30+0.7/+0.15 | 38 | 48      |
| <b>M36x2</b>   | 18   | 93    | 70 | 144±0.4 | 35e8    | 35+0.7/+0.15 | 44 | 60      |
| <b>M42x2</b>   | 21   | 111   | 85 | 168±0.4 | 40e8    | 40+0.7/+0.15 | 64 | 70      |
| <b>M48x2</b>   | 24   | 121.5 | 90 | 192±0.4 | 50e8    | 50+0.7/+0.15 | 73 | 80      |

| KK             | LE<br>±0.5 | ≈C1 | ISO 8140 | CRC <sup>1)</sup> | Weight<br>[g] | Part no.     | Type              |
|----------------|------------|-----|----------|-------------------|---------------|--------------|-------------------|
| <b>M20x1.5</b> | 40         | 30  | ■        | 1                 | 793           | <b>6147</b>  | <b>SG-M20x1.5</b> |
| <b>M27x2</b>   | 54         | 41  | ■        | 1                 | 2135          | <b>14987</b> | <b>SG-M27x2-B</b> |
| <b>M36x2</b>   | 72         | 55  | ■        | 1                 | 4320          | <b>9581</b>  | <b>SG-M36x2</b>   |
| <b>M42x2</b>   | 84         | 65  | ■        | 1                 | 7520          | <b>9582</b>  | <b>SG-M42x2</b>   |
| <b>M48x2</b>   | 96         | 75  | ■        | 1                 | 10029         | <b>9583</b>  | <b>SG-M48x2</b>   |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

## Datasheet

### Rod clevis CRSG

**Scope of delivery:**

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

**Material:**

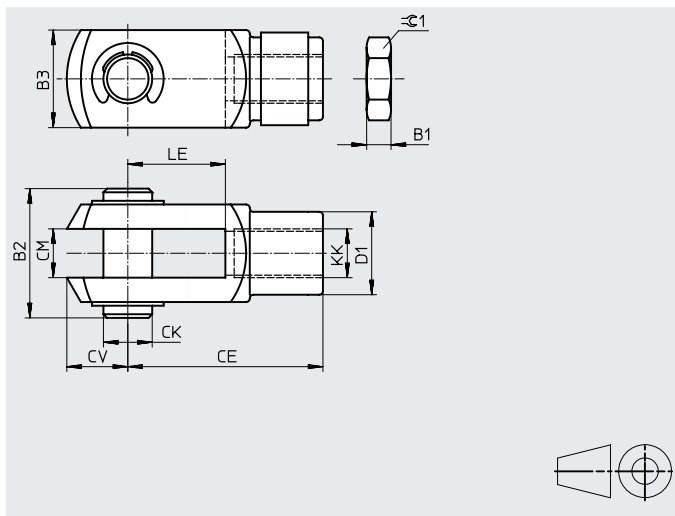
High-alloy steel

**RoHS-compliant**

LABS (PWIS) conformity:

VDMA24364-B2-L

Recommended for production systems for manufacturing lithium-ion batteries.



**Dimensions and ordering data**

| KK              | B1   | B2   | B3 | CE      | CK<br>∅ | CM     | CV | D1<br>∅ |
|-----------------|------|------|----|---------|---------|--------|----|---------|
| <b>M4</b>       | 2.2  | 11.5 | 8  | 16±0.3  | 4 h11   | 4 B13  | 5  | 8       |
| <b>M6</b>       | 3.2  | 19   | 12 | 24±0.3  | 6 e8    | 6 B13  | 7  | 10      |
| <b>M8</b>       | 4    | 24   | 16 | 32±0.4  | 8 e8    | 8 B13  | 10 | 14      |
| <b>M10x1.25</b> | 5    | 27   | 20 | 40±0.4  | 10 e8   | 10 B13 | 12 | 18      |
| <b>M12x1.25</b> | 6    | 33   | 24 | 48±0.4  | 12 e8   | 12     | 14 | 20      |
| <b>M16x1.5</b>  | 8    | 43   | 32 | 64±0.4  | 16 e8   | 16     | 19 | 26      |
| <b>M20x1.5</b>  | 10   | 53   | 40 | 80±0.4  | 20 e8   | 20     | 25 | 34      |
| <b>M27x2</b>    | 13.5 | 70   | 55 | 110±0.4 | 30 e8   | 30     | 38 | 48      |

| KK              | LE<br>±0.5 | ≈G1 | ISO 8140 | DIN 71752 | CRC <sup>1)</sup> | Weight<br>[g] | Battery production <sup>2)</sup> | Part no.       | Type                 |
|-----------------|------------|-----|----------|-----------|-------------------|---------------|----------------------------------|----------------|----------------------|
| <b>M4</b>       | 8          | 7   | ■        | ■         | 1                 | 8             | F5a                              | <b>8165295</b> | <b>CRSG-M4</b>       |
| <b>M6</b>       | 12         | 10  | ■        | ■         | 2                 | 25            | F5a                              | <b>13567</b>   | <b>CRSG-M6</b>       |
| <b>M8</b>       | 16         | 13  | ■        | ■         | 2                 | 55            | F5a                              | <b>13568</b>   | <b>CRSG-M8</b>       |
| <b>M10x1.25</b> | 20         | 17  | ■        | ■         | 2                 | 110           | F5a                              | <b>13569</b>   | <b>CRSG-M10x1.25</b> |
| <b>M12x1.25</b> | 24         | 19  | ■        | ■         | 2                 | 180           | F5a                              | <b>13570</b>   | <b>CRSG-M12x1.25</b> |
| <b>M16x1.5</b>  | 32         | 24  | ■        | ■         | 2                 | 395           | F5a                              | <b>13571</b>   | <b>CRSG-M16x1.5</b>  |
| <b>M20x1.5</b>  | 40         | 30  | ■        | —         | 2                 | 800           | F5a                              | <b>13572</b>   | <b>CRSG-M20x1.5</b>  |
| <b>M27x2</b>    | 54         | 41  | ■        | —         | 2                 | 1900          | F5a                              | <b>185361</b>  | <b>CRSG-M27x2</b>    |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

2) F5a: Metals with more than 5% by mass of copper, zinc or nickel are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.

More information: [www.festo.com/x/topic/bat](http://www.festo.com/x/topic/bat)

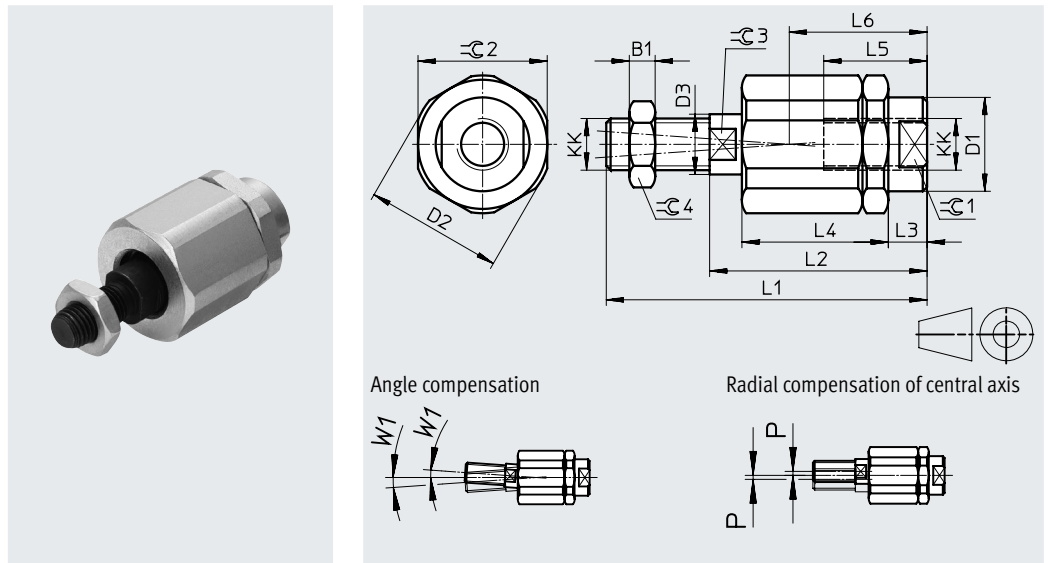
# Datasheet

## Self-aligning rod coupler FK

Scope of delivery:  
1 self-aligning rod coupler, 1 hex nut to  
DIN 439

Material:  
Housing, bushing: Steel  
Nut: Galvanised  
Spherical washer, ball pin:  
Case-hardened steel

RoHS-compliant  
LABS (PWIS) conformity:  
VDMA24364-B2-L



| Dimensions and ordering data |      |         |         |         |      |      |      |      |      |      |     |     |     |
|------------------------------|------|---------|---------|---------|------|------|------|------|------|------|-----|-----|-----|
| KK                           | B1   | D1<br>∅ | D2<br>∅ | D3<br>∅ | L1   | L2   | L3   | L4   | L5   | L6   | W1  | ∠C1 | ∠C2 |
|                              |      |         |         |         |      |      |      |      |      |      | [°] |     |     |
| <b>M4</b>                    | 2.2  | –       | –       | 3.8     | 33   | 24   | 4.5  | 16.5 | 12.5 | 16   | 4   | 11  | 11  |
| <b>M5</b>                    | 2.7  | 8.5     | 14.5    | 5.8     | 38.5 | 25   | 4.4  | 17.5 | 11.5 | 15.7 | 4   | 7   | 13  |
| <b>M6</b>                    | 3.2  | 8.5     | 14.5    | 5.8     | 37   | 25   | 4.4  | 17.5 | 11.5 | 15.7 | 4   | 7   | 13  |
| <b>M8</b>                    | 4    | 12.5    | 19      | 7.8     | 49   | 34   | 6    | 23.5 | 14   | 20.5 | 4   | 10  | 17  |
| <b>M10</b>                   | 5    | 21.4    | 32.5    | 13.8    | 67.5 | 49.5 | 9    | 34   | 23   | 31   | 4   | 19  | 30  |
| <b>M10x1.25</b>              |      |         |         |         | 69.5 |      |      |      |      |      | 4   |     |     |
| <b>M12</b>                   | 6    | 21.4    | 32.5    | 13.8    | 70.5 | 49.5 | 9    | 34   | 23   | 31   | 4   | 19  | 30  |
| <b>M12x1.25</b>              |      |         |         |         | 74.5 |      |      |      |      |      | 10  |     |     |
| <b>M16</b>                   | 8    | 33.8    | 45      | 22      | 97   | 71   | 10   | 53   | 32   | 44.5 | 4   | 30  | 41  |
| <b>M16x1.5</b>               |      |         |         |         | 103  |      |      |      |      |      | 4   |     |     |
| <b>M20x1.5</b>               | 10   | 33.8    | 45      | 22      | 120  | 80   | 19   | 53   | 41   | 53.5 | 4   | 30  | 41  |
| <b>M27x2</b>                 | 13.5 | 62      | 62      | 28      | 157  | 103  | 12.2 | 79   | 42   | 62.5 | 4   | 55  | 55  |
| <b>M36x2</b>                 | 18   | 80      | 80      | 38      | 251  | 179  | 22   | 136  | 78   | 110  | 4   | 75  | 75  |

| KK              | ∠C3 | ∠C4 | Max. permissible ten-<br>sile and compressive<br>load<br>[N] | Axial play<br>[mm] | Radial compensa-<br>tion P<br>[mm] | CRC <sup>1)</sup> | Weight<br>[g] | Part no.     | Type               |
|-----------------|-----|-----|--|--------------------|------------------------------------|-------------------|---------------|--------------|--------------------|
| <b>M4</b>       | 3.2 | 7   | 750  | 0.04 ... 0.2       | ±0.5                               | 2                 | 17            | <b>6528</b>  | <b>FK-M4</b>       |
| <b>M5</b>       | 5   | 8   | 1200   | 0.04 ... 0.2       | ±0.5                               | 2                 | 23            | <b>30984</b> | <b>FK-M5</b>       |
| <b>M6</b>       | 5   | 10  | 1200   | 0.04 ... 0.2       | ±0.5                               | 2                 | 24            | <b>2061</b>  | <b>FK-M6</b>       |
| <b>M8</b>       | 7   | 13  | 2500   | 0.04 ... 0.2       | ±0.5                               | 2                 | 56            | <b>2062</b>  | <b>FK-M8</b>       |
| <b>M10</b>      | 12  | 17  | 5000   | 0.05 ... 0.25      | ±0.7                               | 2                 | 236           | <b>2063</b>  | <b>FK-M10</b>      |
| <b>M10x1.25</b> |     |     | 5000   | 0.05 ... 0.25      | ±0.7                               | 2                 | 236           | <b>6140</b>  | <b>FK-M10x1.25</b> |
| <b>M12</b>      | 12  | 19  | 5000   | 0.05 ... 0.25      | ±0.7                               | 2                 | 242           | <b>2064</b>  | <b>FK-M12</b>      |
| <b>M12x1.25</b> |     |     | 5000   | 0.05 ... 0.25      | ±0.7                               | 2                 | 245           | <b>6141</b>  | <b>FK-M12x1.25</b> |
| <b>M16</b>      | 19  | 24  | 10000  | 0.05 ... 0.25      | ±1                                 | 2                 | 706           | <b>2065</b>  | <b>FK-M16</b>      |
| <b>M16x1.5</b>  |     |     | 10000  | 0.05 ... 0.25      | ±1                                 | 2                 | 709           | <b>6142</b>  | <b>FK-M16x1.5</b>  |
| <b>M20x1.5</b>  | 19  | 30  | 10000  | 0.05 ... 0.25      | ±1                                 | 2                 | 792           | <b>6143</b>  | <b>FK-M20x1.5</b>  |
| <b>M27x2</b>    | 24  | 41  | 30000  | 0.05 ... 0.25      | ±1                                 | 2                 | 2129          | <b>10485</b> | <b>FK-M27x2</b>    |
| <b>M36x2</b>    | 32  | 55  | 40000  | 0.05 ... 0.25      | ±1                                 | 2                 | 6076          | <b>10746</b> | <b>FK-M36x2</b>    |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

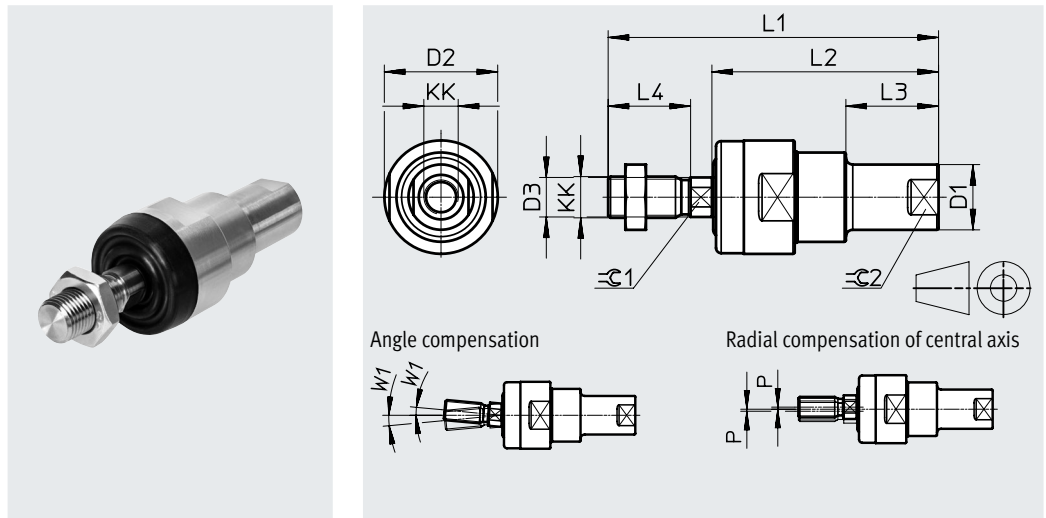
## Datasheet

### Self-aligning rod coupler CRFK

Scope of delivery:  
1 self-aligning rod coupler

Material:  
Housing, threaded bolt, nut: High-alloy stainless steel  
Cap: EPDM

RoHS-compliant  
LABS (PWIS) conformity:  
VDMA24364-B2-L



#### Dimensions and ordering data

| KK              | D1<br>∅ | D2<br>∅ | D3<br>∅ | L1  | L2  | L3 | L4 | W1<br>[°] | ⊖C1 | ⊖C2 |
|-----------------|---------|---------|---------|-----|-----|----|----|-----------|-----|-----|
| <b>M10x1.25</b> | 19      | 33      | 11.5    | 94  | 66  | 27 | 22 | 5         | 10  | 16  |
| <b>M12x1.25</b> | 19      | 33      | 11.5    | 96  | 66  | 27 | 24 | 5         | 10  | 16  |
| <b>M16x1.5</b>  | 27      | 47      | 16      | 129 | 89  | 32 | 32 | 5         | 14  | 22  |
| <b>M20x1.5</b>  | 35      | 57      | 21      | 165 | 114 | 40 | 40 | 5         | 18  | 30  |

| KK              | Max. permissible tensile and compressive load<br>[N] | Axial play<br>[mm] | Radial compensation<br>P<br>[mm] | Ambient temperature<br>[°C] |
|-----------------|--|--------------------|----------------------------------|-----------------------------|
| <b>M10x1.25</b> | 2100   | 0.01 ... 0.03      | ±1                               | -20 ... +100                |
| <b>M12x1.25</b> | 2100   | 0.01 ... 0.03      | ±1                               | -20 ... +100                |
| <b>M16x1.5</b>  | 5600   | 0.01 ... 0.03      | ±1                               | -20 ... +100                |
| <b>M20x1.5</b>  | 13800  | 0.01 ... 0.03      | ±1                               | -20 ... +100                |

| KK              | CRC <sup>1)</sup> | Weight<br>[g] | Part no.       | Type                 |
|-----------------|-------------------|---------------|----------------|----------------------|
| <b>M10x1.25</b> | 4                 | 230           | <b>2305778</b> | <b>CRFK-M10x1.25</b> |
| <b>M12x1.25</b> | 4                 | 230           | <b>2305779</b> | <b>CRFK-M12x1.25</b> |
| <b>M16x1.5</b>  | 4                 | 670           | <b>2490673</b> | <b>CRFK-M16x1.5</b>  |
| <b>M20x1.5</b>  | 4                 | 1280          | <b>2545677</b> | <b>CRFK-M20x1.5</b>  |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

# Datasheet

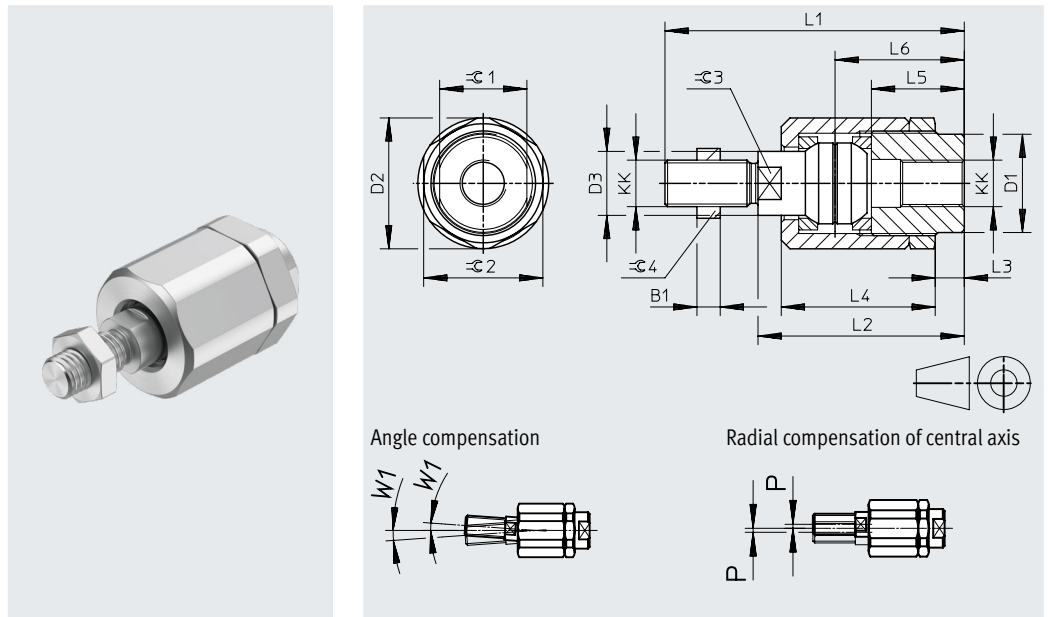
## Self-aligning rod coupler DARP

Scope of delivery:  
1 self-aligning rod coupler, 1 hex nut to  
DIN 439

Material:  
Housing, bushing, nut: High-alloy  
stainless steel  
Spherical washer, ball stud: Case-hard-  
ened steel

RoHS-compliant  
LABS (PWIS) conformity:  
VDMA24364-B2-L

Recommended for production systems  
for manufacturing lithium-ion batter-  
ies.



| Dimensions and ordering data |     |         |         |         |      |      |     |      |      |      |           |    |    |
|------------------------------|-----|---------|---------|---------|------|------|-----|------|------|------|-----------|----|----|
| KK                           | B1  | D1<br>∅ | D2<br>∅ | D3<br>∅ | L1   | L2   | L3  | L4   | L5   | L6   | W1<br>[°] | ∅1 | ∅2 |
| M4                           | 2.2 | —       | —       | 3.8     | 33   | 24   | 4.5 | 16.5 | 12.5 | 16   | 4         | 11 | 11 |
| M5                           | 2.7 | 8.5     | 14.5    | 5.8     | 38.5 | 25   | 4.4 | 17.5 | 11.5 | 15.7 | 4         | 7  | 13 |
| M6                           | 3.2 |         |         |         | 37   |      |     |      |      |      | 4         |    |    |
| M8                           | 4   | 12.5    | 19      | 7.8     | 49   | 33.5 | 6   | 23.5 | 14   | 20.5 | 4         | 10 | 17 |
| M10x1.25                     | 5   | 21.4    | 32.5    | 13.8    | 69.5 | 49.5 | 7   | 36   | 23   | 31   | 4         | 19 | 30 |
| M12x1.25                     | 6   |         |         |         | 74.5 |      |     |      |      |      | 50.5      |    |    |
| M16x1.25                     | 8   | 33.8    | 45      | 22      | 103  | 71   | 10  | 53   | 32   | 44.5 | 4         | 30 | 41 |
| M20x1.25                     | 10  |         |         |         | 120  |      |     |      |      |      | 80        |    |    |

| KK       | ∅3  | ∅4 | Max. permissible<br>tensile and compres-<br>sive load<br>[N] | Axial play<br>[mm] | Radial compensa-<br>tion P<br>[mm] | CRC <sup>1)</sup> | Weight<br>[g] | Battery man-<br>ufacturing <sup>2)</sup> | Part no. | Type        |
|----------|-----|----|--|--------------------|------------------------------------|-------------------|---------------|--|----------|-------------|
| M4       | 3.2 | 7  | 750  | 0.04 ... 0.2       | ±0.5                               | 2                 | 17            | F5a                                      | 8170110  | DARP-M4-F   |
| M5       | 5   | 8  | 1000   | 0.04 ... 0.2       | ±0.5                               | 2                 | 24            | F5a                                      | 8170112  | DARP-M5-F   |
| M6       |     | 10 | 1000   | 0.04 ... 0.2       | ±0.5                               | 2                 | 25            | F5a                                      | 8170115  | DARP-M6-F   |
| M8       | 7   | 13 | 2500   | 0.04 ... 0.2       | ±0.5                               | 2                 | 58            | F5a                                      | 8170116  | DARP-M8-F   |
| M10x1.25 | 12  | 17 | 5000   | 0.05 ... 0.25      | ±0.7                               | 2                 | 236           | F5a                                      | 8170119  | DARP-M10P-F |
| M12x1.25 |     | 19 | 5000   | 0.05 ... 0.25      | ±0.7                               | 2                 | 244           | F5a                                      | 8170120  | DARP-M12P-F |
| M16x1.25 | 19  | 24 | 10000  | 0.05 ... 0.25      | ±1                                 | 2                 | 712           | F5a                                      | 8170121  | DARP-M16P-F |
| M20x1.25 |     | 30 | 10000  | 0.05 ... 0.25      | ±1                                 | 2                 | 796           | F5a                                      | 8170124  | DARP-M20P-F |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)  
 2) F5a: Metals with more than 5% by mass of copper, zinc or nickel are excluded from use. Exceptions are nickel in steel, chemically nickel-plated surfaces, printed circuit boards, cables, electrical plug connectors and coils.  
 More information: [www.festo.com/x/topic/bat](http://www.festo.com/x/topic/bat)

## Datasheet

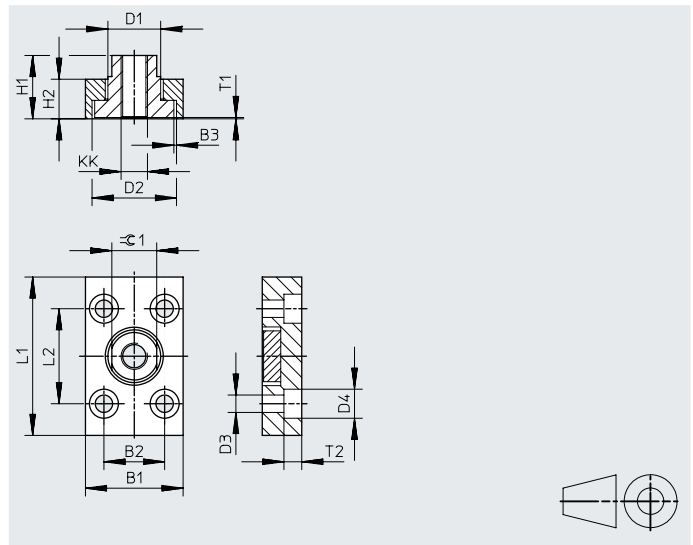
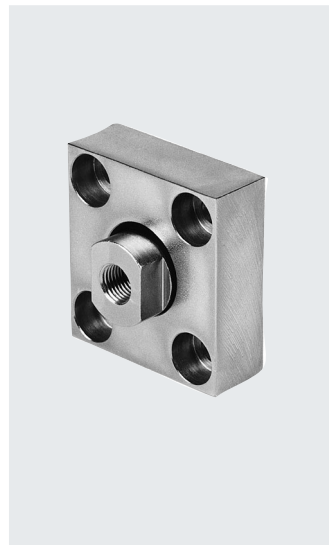
### Coupling piece KSG

The coupling piece connects the piston rod thread of all cylinder types to the machine parts to be moved. It compensates for radial deflections of up to 1 mm.

Scope of delivery:  
1 flange plate, 1 threaded coupling

Material:  
Galvanised steel

RoHS-compliant  
LABS (PWIS) conformity:  
VDMA24364-B2-L



#### Dimensions and ordering data

| KK              | B1 | B2 | B3<br>Max. radial<br>play | D1<br>$\varnothing$ | D2<br>$\varnothing$ | D3<br>$\varnothing$<br>H13 | D4<br>$\varnothing$<br>H13 | H1 | H2 | L1 | L2 |
|-----------------|----|----|---------------------------|---------------------|---------------------|----------------------------|----------------------------|----|----|----|----|
| <b>M10x1.25</b> | 37 | 23 | 1                         | 20                  | 32                  | 6.6                        | 11                         | 24 | 15 | 60 | 36 |
| <b>M12x1.25</b> | 56 | 38 | 1                         | 25                  | 42                  | 9                          | 15                         | 30 | 20 | 60 | 42 |
| <b>M16x1.5</b>  | 80 | 58 | 1                         | 30                  | 52                  | 11                         | 18                         | 32 | 20 | 80 | 58 |
| <b>M20x1.5</b>  | 90 | 65 | 1                         | 40                  | 62                  | 14                         | 20                         | 35 | 20 | 90 | 65 |
| <b>M27x2</b>    | 90 | 65 | 1                         | 40                  | 62                  | 14                         | 20                         | 35 | 20 | 90 | 65 |

| KK              | T1<br>Min. axial play | T2<br>+0.4 -0 | $\varnothing 1$<br>h13 | Max. tightening<br>torque <sup>1)</sup><br>[Nm] | CRC <sup>2)</sup> | Weight<br>[g] | Part no.     | Type                |
|-----------------|-----------------------|---------------|------------------------|---|-------------------|---------------|--------------|---------------------|
| <b>M10x1.25</b> | 0.5                   | 6.8           | 17                     | 9.9   | 1                 | 229           | <b>32963</b> | <b>KSG-M10x1.25</b> |
| <b>M12x1.25</b> | 0.5                   | 9             | 19                     | 24  | 1                 | 447           | <b>32964</b> | <b>KSG-M12x1.25</b> |
| <b>M16x1.5</b>  | 0.5                   | 11            | 24                     | 47  | 1                 | 882           | <b>32965</b> | <b>KSG-M16x1.5</b>  |
| <b>M20x1.5</b>  | 0.5                   | 13            | 36                     | 82  | 1                 | 1083          | <b>32966</b> | <b>KSG-M20x1.5</b>  |
| <b>M27x2</b>    | 0.5                   | 13            | 36                     | 82  | 1                 | 1143          | <b>32967</b> | <b>KSG-M27x2</b>    |

1) For retaining screws with regular thread/strength class 8.8.

2) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

## Datasheet

### Coupling piece KSZ

for non-rotating piston rods with male thread

This coupling piece provides a non-rotating cylinder with stability when connecting it with a component, without needing to turn the cylinder or the component.

Scope of delivery:

1 flange plate, 1 threaded coupling

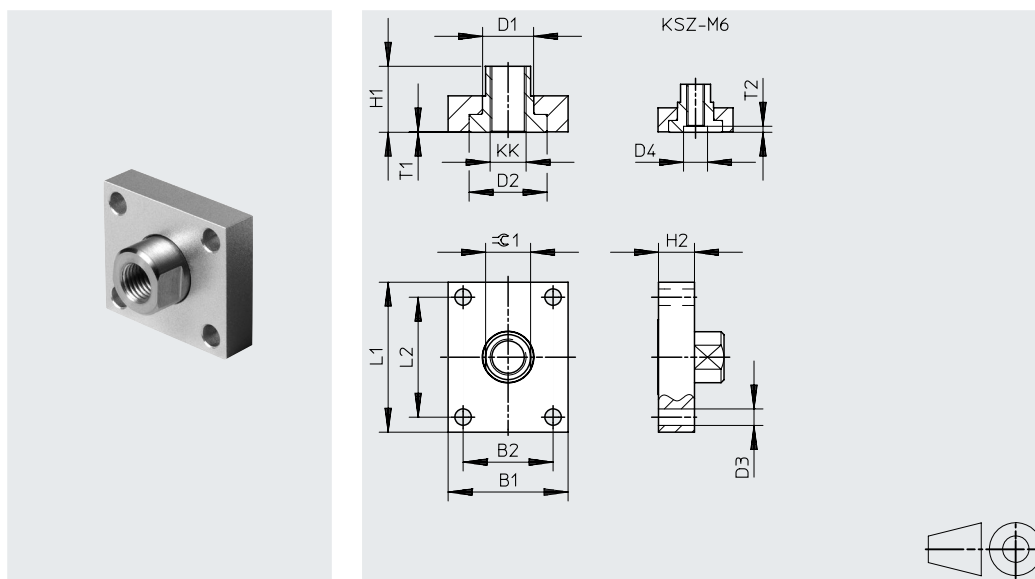
Material:

Galvanised steel

RoHS-compliant

LABS (PWIS) conformity:

VDMA24364-B2-L



| Dimensions and ordering data |    |    |         |         |                |         |    |    |    |    |     |    |
|------------------------------|----|----|---------|---------|----------------|---------|----|----|----|----|-----|----|
| KK                           | B1 | B2 | D1<br>∅ | D2<br>∅ | D3<br>∅<br>H13 | D4<br>∅ | H1 | H2 | L1 | L2 | T1  | T2 |
| <b>M6</b>                    | 25 | 15 | 12      | 18      | 5.5            | 8       | 16 | 8  | 30 | 20 | 0.1 | 2  |
| <b>M8</b>                    | 30 | 20 | 14      | 20      | 5.5            | –       | 22 | 8  | 35 | 25 | 0.1 | –  |
| <b>M10x1.25</b>              | 35 | 25 | 17      | 26      | 5.5            | –       | 20 | 10 | 40 | 30 | 0.1 | –  |
| <b>M12x1.25</b>              | 40 | 30 | 17      | 26      | 5.5            | –       | 22 | 12 | 50 | 40 | 0.1 | –  |
| <b>M16x1.5</b>               | 45 | 33 | 22      | 34      | 6.6            | –       | 25 | 12 | 60 | 48 | 0.1 | –  |
| <b>M20x1.5</b>               | 50 | 35 | 30      | 44      | 9              | –       | 32 | 15 | 72 | 57 | 0.1 | –  |

| KK              | ≈C1<br>h13 | Max. tightening torque <sup>1)</sup><br>[Nm] | Max. tightening torque <sup>2)</sup><br>[Nm] | Max. tightening torque <sup>3)</sup><br>[Nm] | CRC <sup>4)</sup> | Weight<br>[g] | Part no.     | Type                |
|-----------------|------------|--|--|--|-------------------|---------------|--------------|---------------------|
| <b>M6</b>       | 10         | 5.9  | 6.9  | 2.1  | 1                 | 45            | <b>36123</b> | <b>KSZ-M6</b>       |
| <b>M8</b>       | 13         | 5.9  | 16   | 5  | 1                 | 70            | <b>36124</b> | <b>KSZ-M8</b>       |
| <b>M10x1.25</b> | 15         | 5.9  | 34   | 12   | 1                 | 110           | <b>36125</b> | <b>KSZ-M10x1.25</b> |
| <b>M12x1.25</b> | 15         | 5.9  | 61   | 22   | 1                 | 180           | <b>36126</b> | <b>KSZ-M12x1.25</b> |
| <b>M16x1.5</b>  | 19         | 9.9  | 148  | 57   | 1                 | 246           | <b>36127</b> | <b>KSZ-M16x1.5</b>  |
| <b>M20x1.5</b>  | 27         | 24   | 296  | 120  | 1                 | 418           | <b>36128</b> | <b>KSZ-M20x1.5</b>  |

1) For retaining screws with regular thread/strength class 8.8.

2) For lock nut on the piston rod

3) Transferable torque of coupling with friction coefficient =  $\mu$  0.1 and 10x safety with max. permissible tightening torque

4) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

### Note

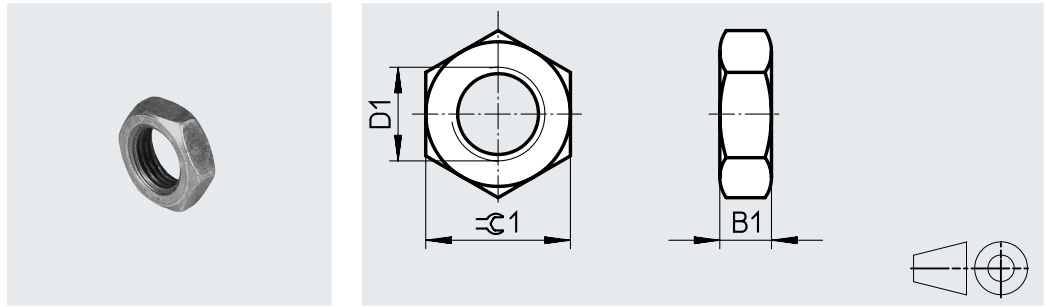
The torque on the coupling piece must not exceed the permissible torque on the cylinder. The retaining screws must be evenly tightened.

## Datasheet

## Hex nut MSK

Material:  
Galvanised steel

RoHS-compliant  
LABS (PWIS) conformity:  
VDMA24364-B2-L



## Dimensions and ordering data

| D1              | B1 | ≈C1 | Conforms to<br>ISO 8675 | Based on ISO 8675 | CRC <sup>1)</sup> | Weight<br>[g] | Part no.      | Type                | PU <sup>2)</sup> |
|-----------------|----|-----|-------------------------|-------------------|-------------------|---------------|---------------|---------------------|------------------|
| <b>M10x1.25</b> | 5  | 17  | –                       | ■                 | 2                 | 7             | <b>189005</b> | <b>MSK-M10x1.25</b> | 10               |
| <b>M12x1.25</b> | 6  | 19  | –                       | ■                 | 2                 | 9             | <b>189006</b> | <b>MSK-M12x1.25</b> | 10               |
| <b>M16x1.5</b>  | 8  | 24  | ■                       | –                 | 2                 | 18            | <b>189007</b> | <b>MSK-M16x1,5</b>  | 10               |

1) More information: [www.festo.com/x/topic/crc](http://www.festo.com/x/topic/crc)

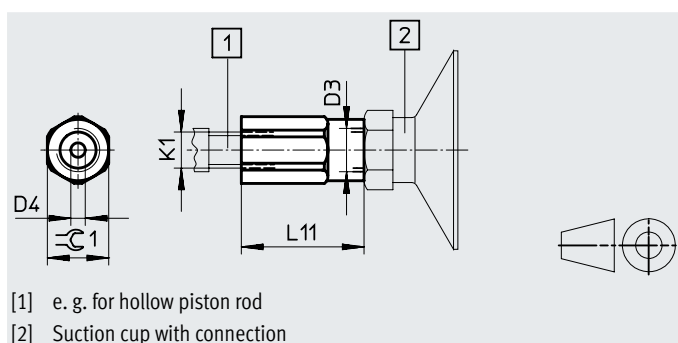
2) Packaging unit.

## Datasheet

### Adapter AD

Material:  
Anodised aluminium

RoHS-compliant  
LABS (PWIS) conformity:  
VDMA24364-B2-L



#### Dimensions and ordering data

| K1              | D3   | D4<br>∅ | L11 | $\varnothing 1$ | Weight<br>[g] | Part no. | Type            |
|-----------------|------|---------|-----|-----------------|---------------|----------|-----------------|
| <b>M6</b>       | M5   | 2.3     | 27  | 10              | 6             | 157328   | AD-M6-M5        |
| <b>M6</b>       | G1/8 | 2.3     | 27  | 13              | 9             | 157329   | AD-M6-1/8       |
| <b>M6</b>       | G1/4 | 2.3     | 30  | 17              | 17            | 157330   | AD-M6-1/4       |
| <b>M8</b>       | G1/8 | 3.2     | 29  | 13              | 8             | 157331   | AD-M8-1/8       |
| <b>M8</b>       | G1/4 | 3.2     | 32  | 17              | 16            | 157332   | AD-M8-1/4       |
| <b>M10x1.25</b> | G1/8 | 4       | 31  | 13              | 10            | 157333   | AD-M10x1.25-1/8 |
| <b>M10x1.25</b> | G1/4 | 4       | 34  | 17              | 16            | 157334   | AD-M10x1.25-1/4 |
| <b>M12x1.25</b> | G1/4 | 6       | 34  | 17              | 28            | 160256   | AD-M12x1.25-1/4 |
| <b>M12x1.25</b> | G3/8 | 6       | 37  | 22              | 14            | 160257   | AD-M12x1.25-3/8 |