

# Piston rod attachments

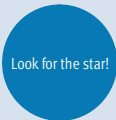


★/☆ Festo core product range  
Covers 80% of your automation tasks

Worldwide: Always in stock  
Superb: Festo quality at an attractive price  
Easy: Reduces procurement and storing complexity

★ Ready for dispatch from the Festo factory in 24 hours  
Held in stock in 13 service centres worldwide  
More than 2200 products

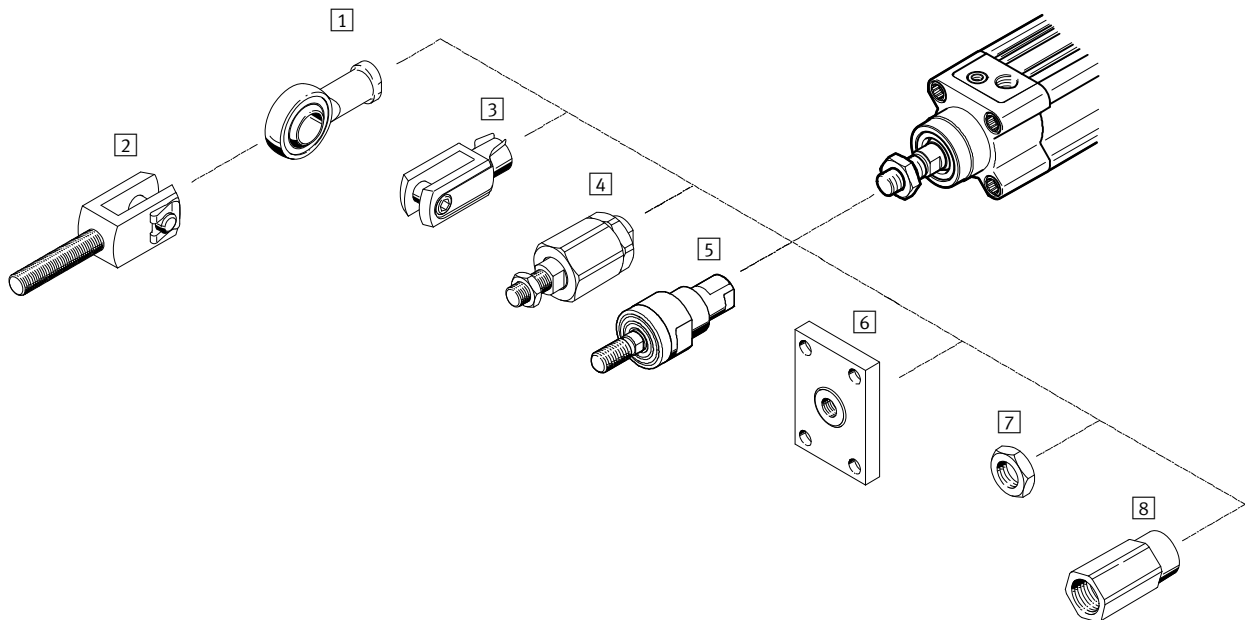
☆ Ready for dispatch in 5 days maximum from stock  
Assembled for you in 4 service centres worldwide  
Up to 6 x 10<sup>12</sup> variants per product series



# Piston rod attachments

Peripherals overview



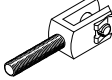


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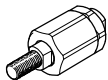
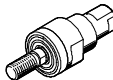




Mounting attachments and accessories		Description
1	Rod eye SGS	Rod eyes are maintenance-free due to the combination of steel and PTFE-bronze material in the swivel bearing. Corresponds to ISO 12240-4 dimensional series K.
	Rod eye CRSGS	Corrosion and acid-resistant design. Corresponds to ISO 12240-4 dimensional series K.
2	Rod clevis SGA	Rod clevises are used in combination with the rod eye SGS for spherical connection of cylinders.
	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 ISO 8140 or DIN 71752.
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 ISO 8140 or DIN 71752.
	Rod clevis CRSG	Corrosion and acid-resistant design. Corresponds to ISO 8140 or DIN 71752.
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	Self-aligning rod coupler CRFK	Corrosion and acid-resistant design.
6	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 $\pm 1$ 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.
7	Hex nut MSK	Based on and/or corresponds to ISO 8675.
8	Adapter AD	Specially for through, hollow piston rods, e.g. for connecting vacuum generators.

# Piston rod attachments

Product range overview

Piston rod attachments						
Piston rod thread		Rod eye		Rod clevis		
Male	Female	SGS-...	CRSGS-...	SGA-... <sup>1)</sup>	SG-...	CRSG-...
						
M4		■	-	-	■	-
M6		■	■	-	■	■
M8		■	■	-	■	■
M10		■	-	-	■	-
M10x1.25		■	■	■	■	■
M12		■	-	■	■	-
M12x1.25		■	■	■	■	■
M16		■	-	■	■	-
M16x1.5		■	■	■	■	■
M20x1.5		■	■	■	■	■
M27x2		■	■	■	■	■
M36x2		■	-	-	■	-
M42x2		■	-	-	■	-
M48x2		■	-	-	■	-
<b>Technical data → Page/Internet</b>		10	LEERER MERKER	LEERER MERKER	LEERER MERKER	LEERER MERKER

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-...	CRFK-...	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	■	-	-	-	-	-
<b>Technical data → Page/Internet</b>		LEERER MERKER	LEERER MERKER	LEERER MERKER	13	LEERER MERKER	LEERER MERKER

# Rod eyes SGS

Technical data

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## Rod eye SGS

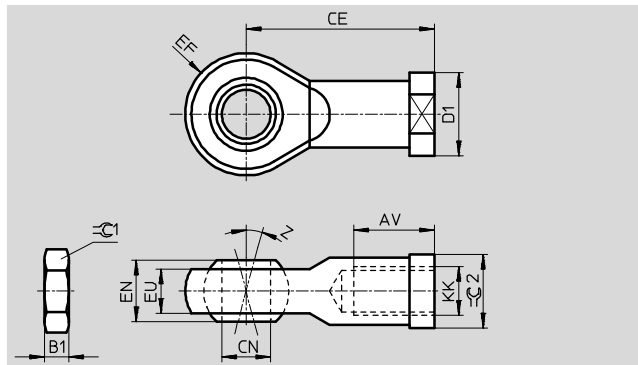
Scope of delivery:

1 rod eye, 1 hex nut to DIN 439

Material:

Galvanised steel

RoHS-compliant



### Dimensions and ordering data

KK	AV	B1	CE	CN Ø H7	D1 Ø	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	ISO 12240-4 dimensional series K	CRC <sup>1)</sup>	Weight [g]	Part No.	Type
M4	13	7	9	–	2	21	9253	SGS-M4
M6	13	10	11	■	2	29	★ 9254	SGS-M6
M8	13	13	14	■	2	53	★ 9255	SGS-M8
M10	13	17	17	■	2	88	9256	SGS-M10
M10x1.25				–	2	87	★ 9261	SGS-M10x1,25
M12	13	19	19	■	2	131	9257	SGS-M12
M12x1.25				–	2	129	★ 9262	SGS-M12x1,25
M16	15	24	22	■	2	263	9258	SGS-M16
M16x1.5				–	2	259	★ 9263	SGS-M16x1,5
M20x1.5	15	30	30	■	2	464	★ 9264	SGS-M20x1,5
M27x2	15	41	41	–	2	1333	10774	SGS-M27x2
M36x2	15	55	50	■	2	2084	10775	SGS-M36x2
M42x2	15	65	55	■	2	3132	10776	SGS-M42x2
M48x2	12	75	65	■	2	5498	10777	SGS-M48x2

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

Festo core product range

★ Ready for dispatch from the Festo factory in 24 hours

☆ Ready for dispatch in 5 days maximum from stock

# Rod eyes CRSGS, stainless steel

Technical data

## Rod eye CRSGS

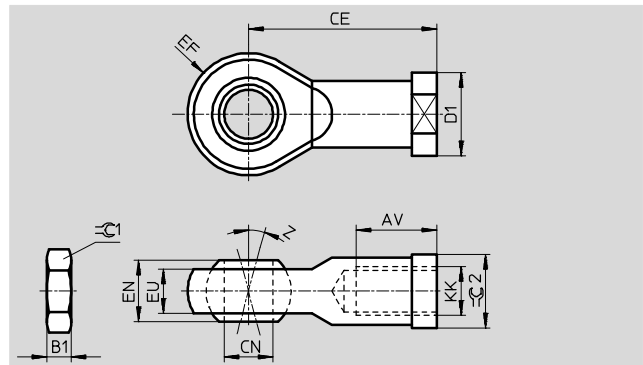
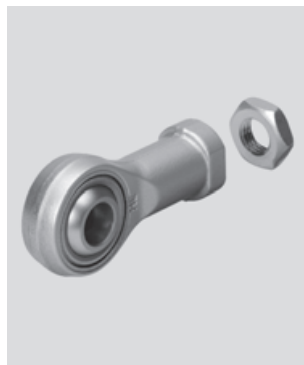
Scope of delivery:

1 rod eye, 1 hex nut to DIN 439

Material:

High-alloy steel

RoHS-compliant



Dimensions and ordering data								
KK	AV	B1	CE	CN Ø H7	D1 Ø	EF ±0.5	EN	EU
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	ISO 12240-4 dimensional series K	CRC <sup>1)</sup>	Weight [g]	Part No.	Type
M6	13	10	11	■	4	29	195580	CRSGS-M6
M8	13	13	14	■	4	53	195581	CRSGS-M8
M10x1.25	13	17	17	-	4	87	195582	CRSGS-M10x1,25
M12x1.25	13	19	19	-	4	129	195583	CRSGS-M12x1,25
M16x1.5	15	24	22	-	4	259	195584	CRSGS-M16x1,5
M20x1.5	15	30	30	■	4	464	195585	CRSGS-M20x1,5
M27x2	15	41	41	-	4	1333	195586	CRSGS-M27x2

1) Corrosion resistance class CRC 4 to Festo standard FN 940070  
 Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, for instance in the chemical or food industries. These applications may need to be supported by special tests (➔ also FN 940082) using appropriate media.

# Rod clevises SGA

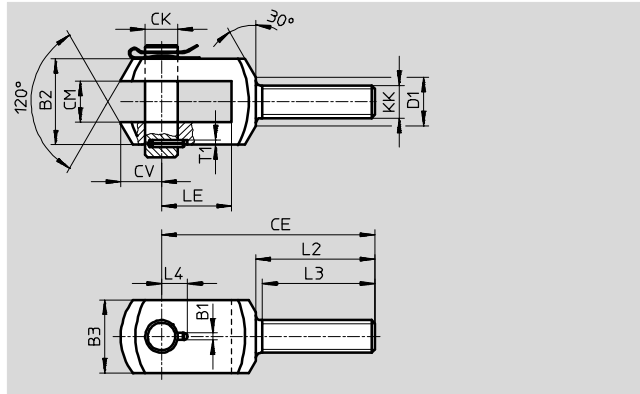
Technical data



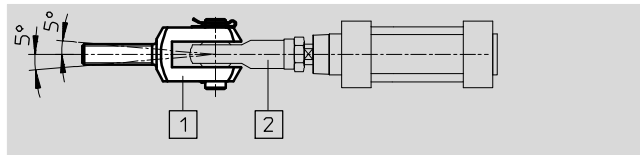
## Rod clevis SGA

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

Material:  
Galvanised steel  
Free of copper and PTFE  
RoHS-compliant



The rod clevis SGA [1] is used in combination with the rod eye SGS [2] (→ page 10) 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 <sup>1)</sup>	Weight	Part No.	Type
							[g]		
M10x1.25	53	50	11	20	3	1	129	<b>32954</b>	<b>SGA-M10x1,25</b>
M12	58	55	12	26	3	1	222	<b>6523</b>	<b>SGA-M12</b>
M12x1.25							222	<b>10767</b>	<b>SGA-M12x1,25</b>
M16	65	62	14	31	3	1	512	<b>6524</b>	<b>SGA-M16</b>
M16x1.5							512	<b>10768</b>	<b>SGA-M16x1,5</b>
M20x1.5	73	69	16	43	3	1	954	<b>10769</b>	<b>SGA-M20x1,5</b>
M27x2	98	92	24	54	5	1	2189	<b>10770</b>	<b>SGA-M27x2</b>
M36x2	121	115	26.5	72	5	1	3938	<b>10771</b>	<b>SGA-M36x2</b>

1) Corrosion resistance class CRC 1 to Festo standard FN 940070  
Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

# Rod clevises SG

Technical data

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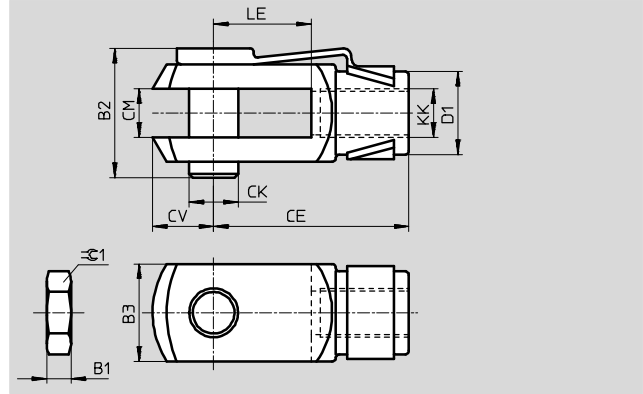
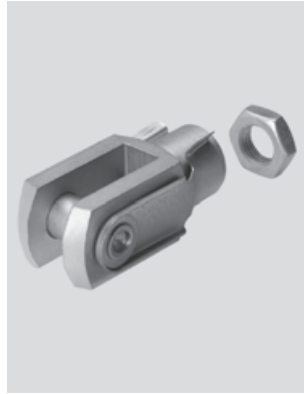
## Rod clevis SG

Scope of delivery:

1 rod clevis, 1 hinged spring pin,  
1 hex nut (M4: DIN 934, M6 ... M16:  
DIN 439)

Material:

Galvanised steel  
Free of copper and PTFE  
RoHS-compliant



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

KK	LE ±0.5	≡C1	ISO 8140	DIN 71752	CRC <sup>1)</sup>	Weight [g]	Part No.	Type
M4	8	7	–	■	1	10	6532	SG-M4
M6	12	10	■	■	1	25	★ 3110	SG-M6
M8	16	13	■	■	1	55	★ 3111	SG-M8
M10	20	17	–	■	1	105	2674	SG-M10
M10x1.25			■	■	1	105	★ 6144	SG-M10x1,25
M12	24	19	–	■	1	165	2675	SG-M12
M12x1.25			■	■	1	165	★ 6145	SG-M12x1,25
M16	32	24	–	■	1	385	2676	SG-M16
M16x1.5			■	■	1	385	★ 6146	SG-M16x1,5

1) Corrosion resistance class CRC 1 to Festo standard FN 940070

Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock

# Rod clevises SG

Technical data

FESTO

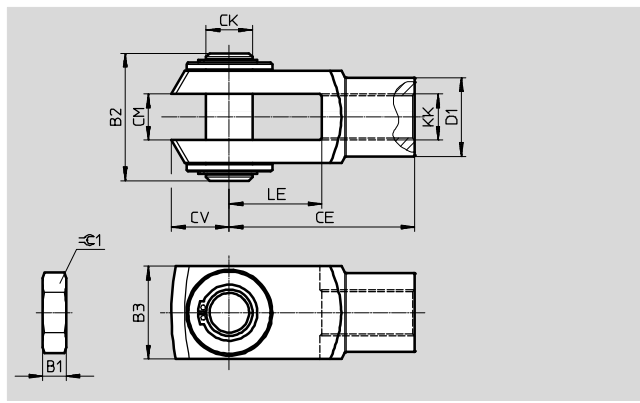
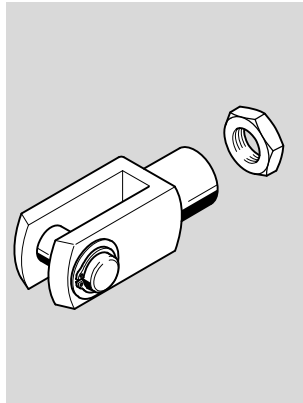
## Rod clevis SG

Scope of delivery:

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

Material:

Galvanised steel  
Free of copper and PTFE  
RoHS-compliant



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

KK	LE ±0.5	≈C1	ISO 8140	CRC <sup>1)</sup>	Weight [g]	Part No.	Type
M20x1.5	40	30	■	1	785	★ 6147	SG-M20x1,5
M27x2	54	41	■	1	2145	14987	SG-M27x2-B
M36x2	72	55	■	1	4220	9581	SG-M36x2
M42x2	84	65	■	1	7520	9582	SG-M42x2
M48x2	96	75	■	1	10030	9583	SG-M48x2

1) Corrosion resistance class CRC 1 to Festo standard FN 940070

Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ☆ Ready for dispatch in 5 days maximum from stock

# Rod clevises CRSG, stainless steel

Technical data

## Rod clevis CRSG

Scope of delivery:

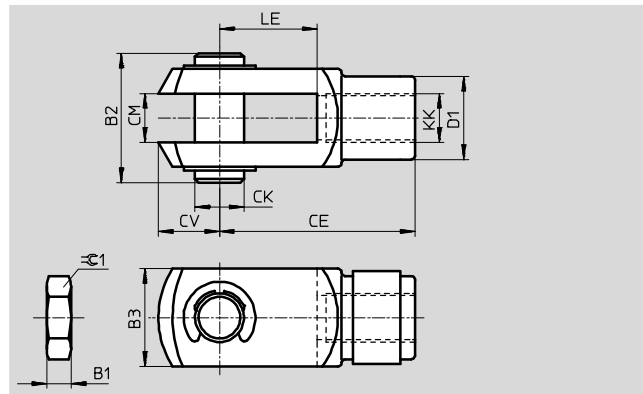
1 rod clevis, 1 pivot pin,  
1 hex nut to DIN 439

Material:

High-alloy steel

Free of copper and PTFE

RoHS-compliant



Dimensions and ordering data								
KK	B1	B2	B3	CE	CK	CM	CV	D1
			h11		∅ H9/e8			∅ ±0.3
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	∓C1	ISO 8140	DIN 71752	CRC <sup>1)</sup>	Weight	Part No.	Type
	±0.5					[g]		
M6	12	10	■	■	4	25	13567	CRSG-M6
M8	16	13	■	■	4	55	13568	CRSG-M8
M10x1.25	20	17	■	■	4	110	13569	CRSG-M10x1,25
M12x1.25	24	19	■	■	4	180	13570	CRSG-M12x1,25
M16x1.5	32	24	■	■	4	395	13571	CRSG-M16x1,5
M20x1.5	40	30	■	–	4	800	13572	CRSG-M20x1,5
M27x2	54	41	■	–	4	1900	185361	CRSG-M27x2

1) Corrosion resistance class CRC 4 to Festo standard FN 940070  
Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, for instance in the chemical or food industries. These applications may need to be supported by special tests (→ also FN 940082) using appropriate media.

# Self-aligning rod couplers FK

Technical data

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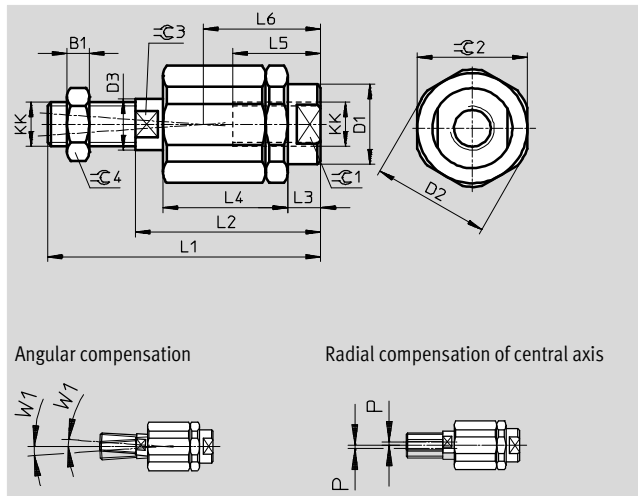
## Self-aligning rod coupler FK

Scope of delivery:

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

Material:

- Galvanised steel
- Free of copper and PTFE
- RoHS-compliant



Dimensions and ordering data													
KK	B1	D1 ∅	D2 ∅	D3 ∅	L1	L2	L3	L4	L5	L6	W1 [°]	≈C1	≈C2
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	8.5	14.5	5.8	37	25	4.4	17.5	11.5	15.7	4	7	13
M8	4	12.5	19	7.8	49	34	6	23.5	14	20.5	4	10	17
M10	5	21.4	32.5	13.8	67.5	49.5	9	34	23	31	4	19	30
M10x1.25					69.5						4		
M12	6	21.4	32.5	13.8	70.5	49.5	9	34	23	31	4	19	30
M12x1.25					74.5						50.5		
M16	8	33.8	45	22	97	71	10	53	32	44.5	4	30	41
M16x1.5					103						4		
M20x1.5	10	33.8	45	22	120	80	19	53	41	53.5	4	30	41
M27x2	13.5	62	62	28	157	103	12.2	79	42	62.5	4	55	55
M36x2	18	80	80	38	251	179	22	136	78	110	4	75	75

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

1) Corrosion resistance class CRC 2 to Festo standard FN 940070

Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.

Festo core product range

- ★ Ready for dispatch from the Festo factory in 24 hours
- ★ Ready for dispatch in 5 days maximum from stock

# Self-aligning rod couplers CRFK, stainless steel

Technical data

## Self-aligning rod coupler CRFK

Scope of delivery:

1 self-aligning rod coupler

Material:

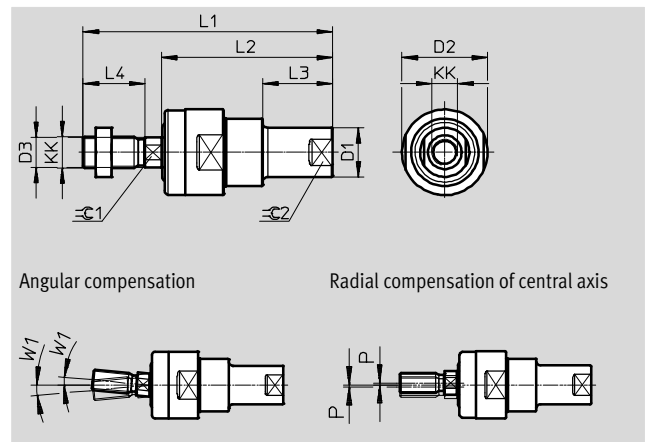
Housing, nut, threaded pin:

High-alloy stainless steel

Cap: Elastomer

Free of copper and PTFE

RoHS-compliant



Dimensions and ordering data										
KK	D1 Ø	D2 Ø	D3 Ø	L1	L2	L3	L4	W1 [°]	≈C1	≈C2
M10x1.25	19	33	11.5	94	66	27	22	5	10	16
M12x1.25	19	33	11.5	96	66	27	24	5	10	16
M16x1.5	27	47	16	129	89	32	32	5	14	22
M20x1.5	35	57	21	165	114	40	40	5	18	30

KK	Tensile and compressive load max. [N]	Axial play [mm]	Radial deviation P [mm]	Ambient temperature [°C]
M10x1.25	2100	0.01 ... 0.03	±1	-20 ... +100
M12x1.25	2100	0.01 ... 0.03	±1	-20 ... +100
M16x1.5	5600	0.01 ... 0.03	±1	-20 ... +100
M20x1.5	13800	0.01 ... 0.03	±1	-20 ... +100

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

1) Corrosion resistance class CRC 4 to Festo standard FN 940070

Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, for instance in the chemical or food industries. These applications may need to be supported by special tests (→ also FN 940082) using appropriate media.

# 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:

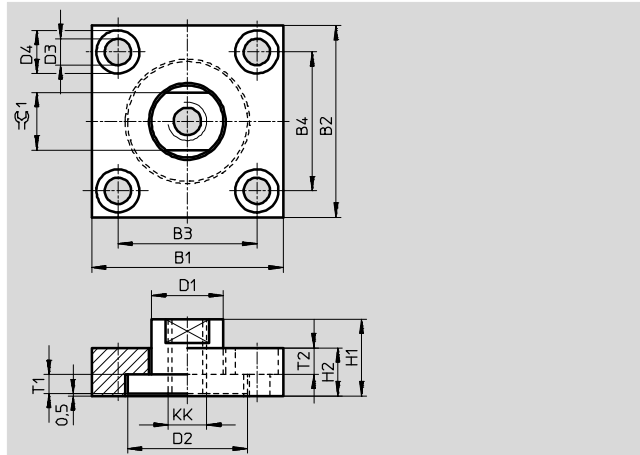
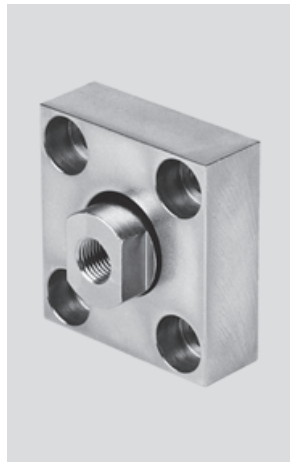
1 flange plate, 1 threaded coupling

Material:

Galvanised steel

Free of copper and PTFE

RoHS-compliant



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 <sup>1)</sup> [Nm]	CRC <sup>2)</sup>	Weight [g]	Part No.	Type
M10x1.25	15	0.5	6.8	17	9.9	1	230	<b>32963</b>	<b>KSG-M10x1,25</b>
M12x1.25	20		9	19	24	1	450	<b>32964</b>	<b>KSG-M12x1,25</b>
M16x1.5	20		11	24	47	1	885	<b>32965</b>	<b>KSG-M16x1,5</b>
M20x1.5	20		13	36	82	1	1140	<b>32966</b>	<b>KSG-M20x1,5</b>
M27x2	20		13	36	82	1	1080	<b>32967</b>	<b>KSG-M27x2</b>

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

2) Corrosion resistance class CRC 1 to Festo standard FN 940070

Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

# 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:

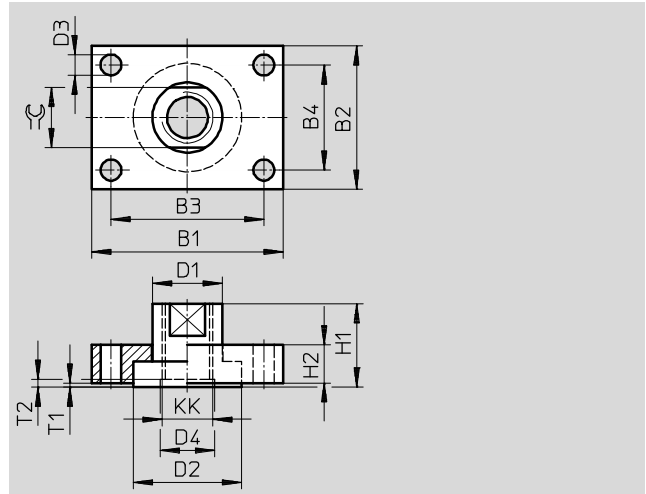
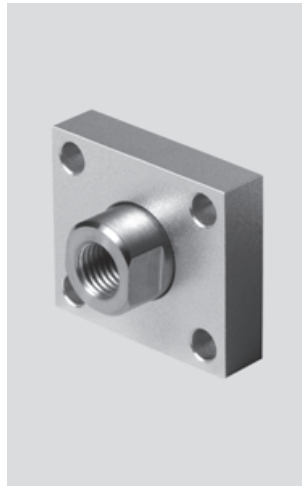
1 flange plate, 1 threaded coupling

Material:

Galvanised steel

Free of copper and PTFE

RoHS-compliant



Dimensions and ordering data												
KK	B1	B2	B3	B4	D1	D2	D3	D4	H1	H2	T1	T2
					∅	∅	∅ H13	∅			min.	
M6	30	25	20	15	12-01	18	5.5	8	16	8	0.1	2
M8	35	30	25	20	14-01	20	5.5	-	22	8	0.1	-
M10x1.25	40	35	30	25	17-02	26	5.5	-	20	10	0.1	-
M12x1.25	50	40	40	30	17-02	26	5.5	-	22	12	0.1	-
M16x1.5	60	45	48	33	22-02	34	6.6	-	25	12	0.1	-
M20x1.5	72	50	57	35	30-02	44	9	-	32	15	0.1	-

KK	⌀	Max. tightening torque <sup>1)</sup>	Max. tightening torque <sup>2)</sup>	Max. tightening torque <sup>3)</sup>	CRC <sup>4)</sup>	Weight	Part No.	Type
		[Nm]	[Nm]	[Nm]		[g]		
M6	10	5.9	6.9	2.1	1	45	36123	KSZ-M6
M8	13	5.9	16	5	1	70	36124	KSZ-M8
M10x1.25	15	5.9	34	12	1	110	36125	KSZ-M10x1,25
M12x1.25	15	5.9	61	22	1	180	36126	KSZ-M12x1,25
M16x1.5	19	9.9	148	57	1	250	36127	KSZ-M16x1,5
M20x1.5	27	24	296	120	1	420	36128	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  $\mu$  0,1 and 10x safety margin at max. permissible tightening torque

4) Corrosion resistance class CRC 1 to Festo standard FN 940070

Low corrosion stress. For dry indoor applications or transport and storage protection. Also applies to parts behind covers, in the non-visible interior area, and parts which are covered in the application (e.g. drive trunnions).

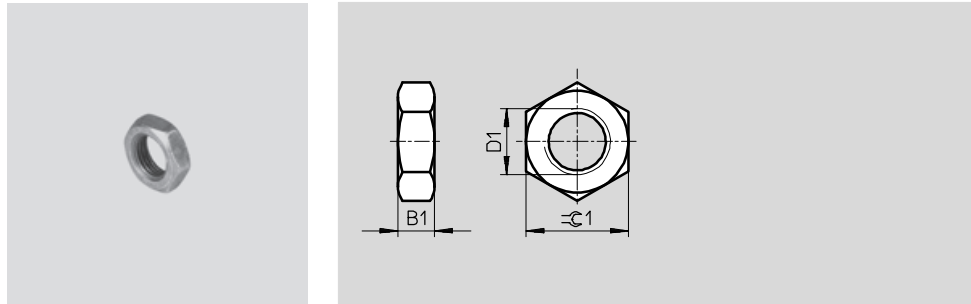
 Note      The torque on the coupling piece must not exceed the permissible torque on the cylinder. The mounting screws should be tightened evenly.

# Hex nuts MSK

Technical data

## Hex nut MSK

Material:  
Galvanised steel



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

- 1) Corrosion resistance class CRC 2 to Festo standard FN 940070  
Moderate corrosion stress. Indoor applications in which condensation may occur. External visible parts with primarily decorative requirements for the surface and which are in direct contact with the ambient atmosphere typical for industrial applications.
- 2) Packaging unit quantity

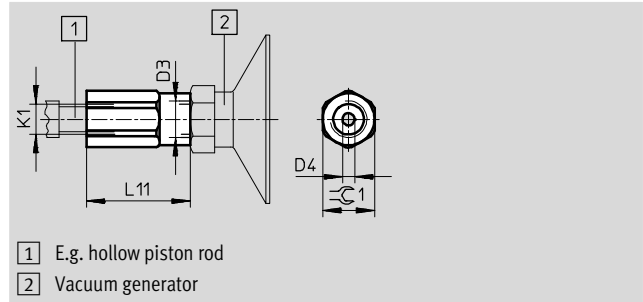
# Adapter AD

Technical data

## Adapter AD

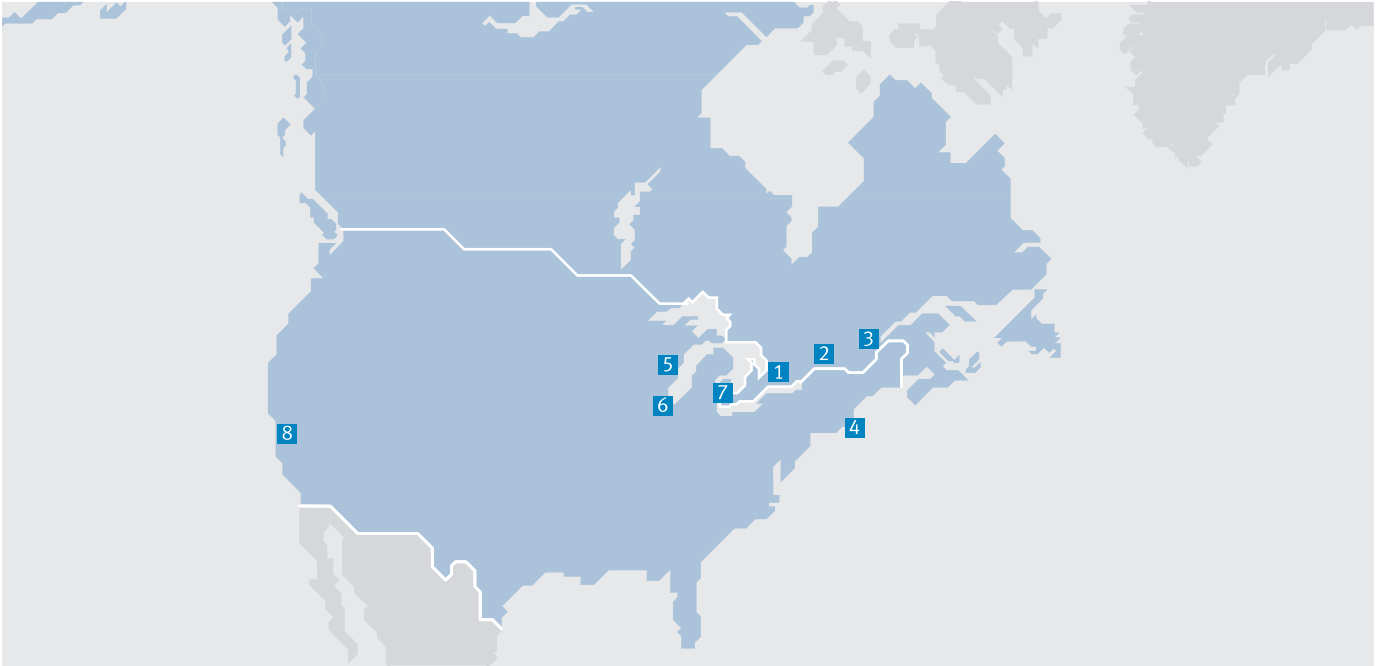
Material:

Anodised aluminium



Dimensions and ordering data							
K1	D3	D4 Ø	L11	r1	Weight [g]	Part No.	Type
M6	M5	2.3	27	10	6	157328	AD-M6-M5
M6	G1/8	2.3	27	13	9	157329	AD-M6-1/8
M6	G1/4	2.3	30	17	17	157330	AD-M6-1/4
M8	G1/8	3.2	29	13	8	157331	AD-M8-1/8
M8	G1/4	3.2	32	17	16	157332	AD-M8-1/4
M10x1.25	G1/8	4	31	13	10	157333	AD-M10x1,25-1/8
M10x1.25	G1/4	4	34	17	16	157334	AD-M10x1,25-1/4
M12x1.25	G1/4	6	34	17	28	160256	AD-M12x1,25-1/4
M12x1.25	G3/8	6	37	22	14	160257	AD-M12x1,25-3/8

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