

Piston rod attachments

FESTO



Festo core product range
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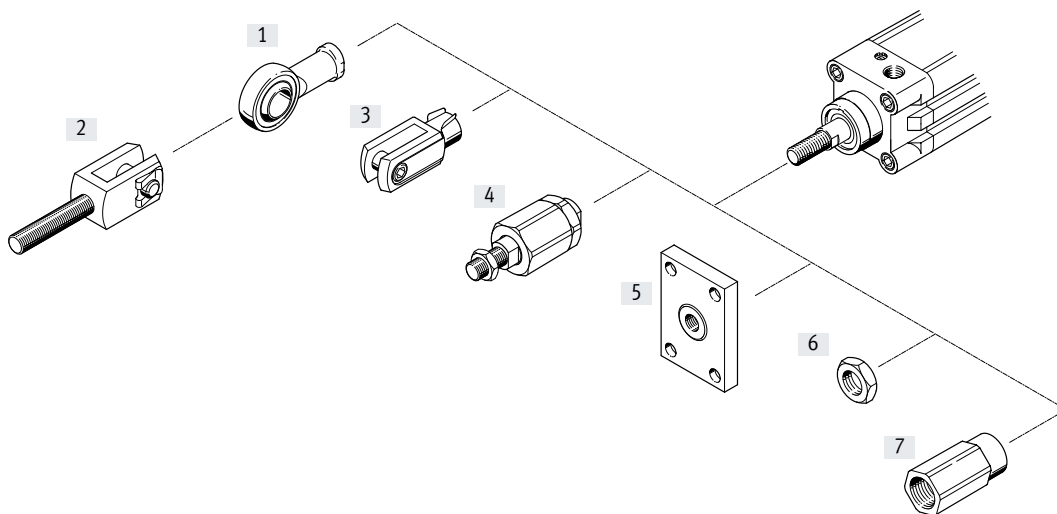
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More than 2200 products

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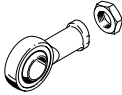

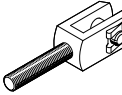
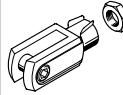
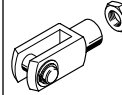
Just look
for the
star!

Peripherals overview

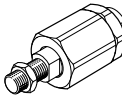
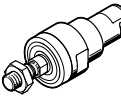
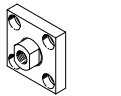
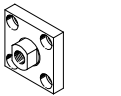
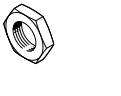
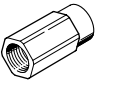


Mounting components and accessories		Description
[1]	Rod eye SGS	Rod eyes are maintenance-free due to the combination of steel and PTFE-bronze in the swivel bearing. Correspond to ISO 12240-4 dimensional series K.
	Rod eye CRSGS	Corrosion and acid-resistant design. Correspond to ISO 12240-4 dimensional series K.
[2]	Rod clevis SGA	Rod clevises are used in combination with the rod eye SGS for spherical connection of cylinders.
[3]	Rod clevis 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 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).
	Self-aligning rod coupler CRFK	Corrosion and acid-resistant design.
[5]	Coupling piece KSG	Coupling pieces link the piston rod end of all cylinder types to the machine parts to be moved. They compensate for radial misalignments up to ± 1 mm.
	Coupling piece 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.
[6]	Hex nut MSK	Based on and/or corresponds to ISO 8675.
[7]	Adapter AD	Specially for through, hollow piston rods, e.g. for connecting suction cups.

Product range overview

Piston rod attachments		Rod eye		Rod clevis		
Piston rod thread		SGS-...	CRSGS-...	SGA-... ¹⁾	SG-...	CRSG-...
Male	Female					
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

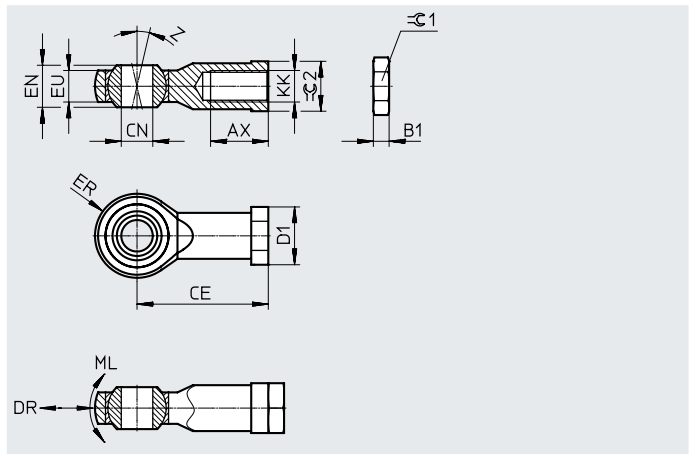
Piston rod attachments		Self-aligning rod coupler		Coupling piece		Hex nut	Adapter
Piston rod thread		FK-...	CRFK-...	KSG-...	KSZ-...	MSK-...	AD-...
Male	Female						
M4		■	-	-	-	-	-
M6		■	-	-	■	-	■
M8		■	-	-	■	-	■
M10		■	-	-	-	-	-
M10x1.25		■	■	■	■	■	■
M12		■	-	-	-	-	-
M12x1.25		■	■	■	■	■	■
M16		■	-	-	-	-	-
M16x1.5		■	■	■	■	■	-
M20x1.5		■	■	■	■	-	-
M27x2		■	-	■	-	-	-
M36x2		■	-	-	-	-	-
M42x2		-	-	-	-	-	-
M48x2		-	-	-	-	-	-
	M4	■	-	-	-	-	-
	M5	■	-	-	-	-	-
	M6	■	-	-	-	-	-
	M8	■	-	-	-	-	-
	M10	■	-	-	-	-	-
	M12	■	-	-	-	-	-
	M16	■	-	-	-	-	-
→ Page/Internet		11	12	13	14	15	16

Data sheet

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

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

Data sheet

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

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

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

Low corrosion stress. Dry indoor application 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).

4) In the area of the ball:

Corrosion resistance class CRC 0 to Festo standard FN 940070

No corrosion stress. Applies to small, visually unimportant standards-based parts such as threaded pins, circlips and clamping sleeves which are usually only available on the market in a phosphated or burnished version (and possibly oiled) as well as to ball bearings (for components < CRC 3) and plain bearings.

Festo core product range



Generally ready for shipping ex works in 24 hours

Generally ready for shipping ex works in 5 days

Data sheet

Rod eye CRSGS

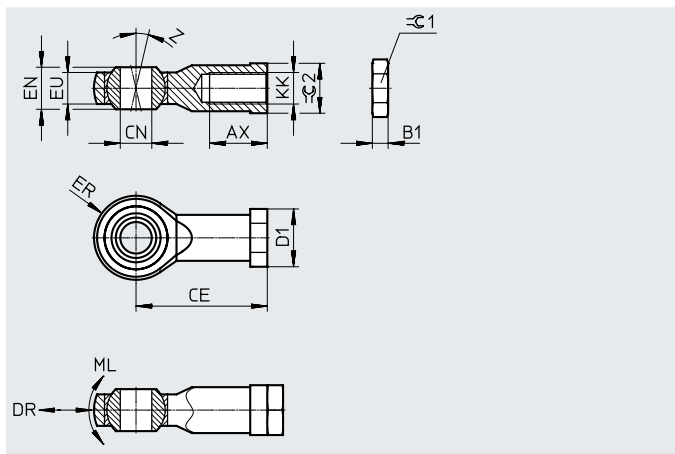
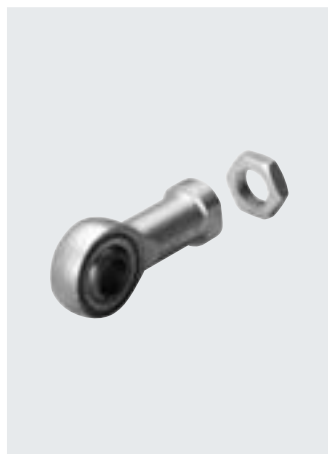
Scope of delivery:

1 rod eye, 1 hex nut to DIN 439

Material:

High-alloy steel

RoHS-compliant



Dimensions and ordering data

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

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

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

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

3) Corrosion resistance class CRC 3 to Festo standard FN 940070

High corrosion stress. Outdoor exposure under moderate corrosive conditions. Externally visible parts with primarily functional surface requirements which are in direct contact with a normal industrial environment.

4) In the area of the ball:

Corrosion resistance class CRC 1 to Festo standard FN 940070

Low corrosion stress. Dry indoor application 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).

Data sheet

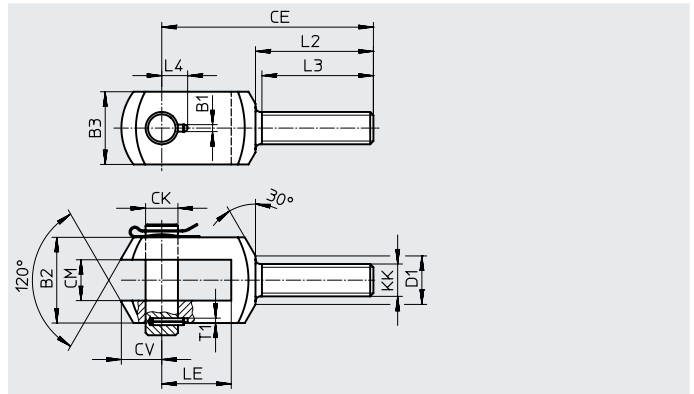
Rod clevis SGA

Scope of delivery:

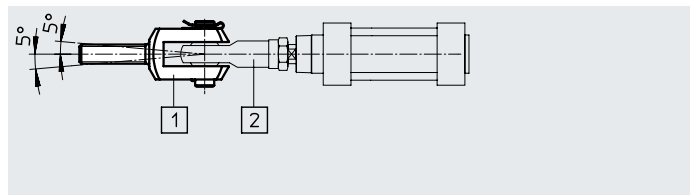
1 rod clevis, 1 pivot pin,
1 retaining clip

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 4) for spherical mounting of cylinders.



Dimensions and ordering data

KK	B1	B2	B3	CE	CK ∅ F7/h9	CM B12	CV	D1 ∅
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 [g]	Part no.	Type
M10x1.25	53	50	11	20	3	1	129	32954	SGA-M10x1.25
M12	58	55	12	26	3	1	222	6523	SGA-M12
M12x1.25						1	222	10767	SGA-M12x1.25
M16	65	62	14	31	3	1	512	6524	SGA-M16
M16x1.5						1	512	10768	SGA-M16x1.5
M20x1.5	73	69	16	43	3	1	954	10769	SGA-M20x1.5
M27x2	98	92	24	54	5	1	2189	10770	SGA-M27x2
M36x2	121	115	26.5	72	5	1	3938	10771	SGA-M36x2

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

Low corrosion stress. Dry indoor application 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).

Data sheet

Rod clevis SG

Scope of delivery:

1 rod clevis, 1 clevis pin, 1 hex nut

(M4: DIN 934,

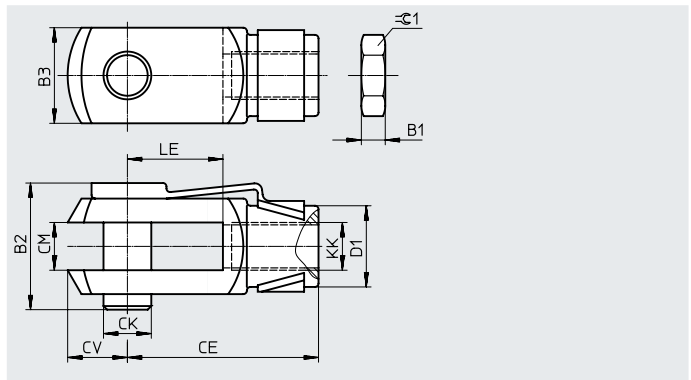
M6 ... M16: DIN 439)

Material:

Galvanised steel

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 ¹⁾	Weight [g]	Part no.	Type
M4	8	7	–	■	1	10	6532	SG-M4
M6	12	10	■	■	1	22	★ 3110	SG-M6
M8	16	13	■	■	1	53	★ 3111	SG-M8
M10	20	17	–	■	1	104	2674	SG-M10
M10x1.25		17	■	■	1	103	★ 6144	SG-M10x1.25
M12	24	19	–	■	1	168	2675	SG-M12
M12x1.25		19	■	■	1	166	★ 6145	SG-M12x1.25
M16	32	24	–	■	1	376	2676	SG-M16
M16x1.5			■	■	1	375	★ 6146	SG-M16x1.5

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

Low corrosion stress. Dry indoor application 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).



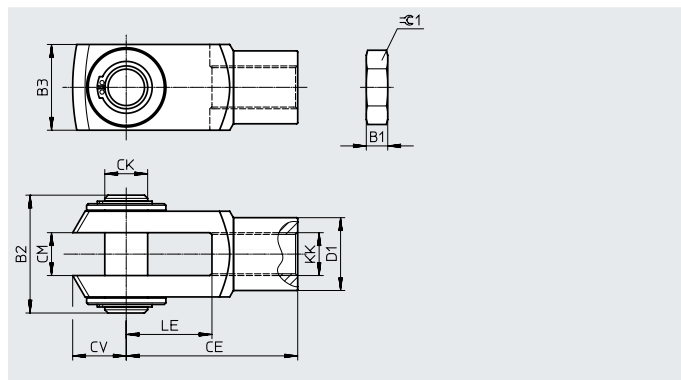
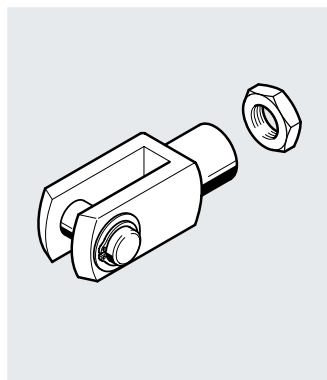
Data sheet

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 ø	CM	CV	D1 ø
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 ¹⁾	Weight [g]	Part no.	Type
M20x1.5	40	30	■	1	793	★ 6147	SG-M20x1.5
M27x2	54	41	■	1	2135	14987	SG-M27x2-B
M36x2	72	55	■	1	4320	9581	SG-M36x2
M42x2	84	65	■	1	7520	9582	SG-M42x2
M48x2	96	75	■	1	10029	9583	SG-M48x2

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

Low corrosion stress. Dry indoor application 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



Generally ready for shipping ex works in 24 hours

Generally ready for shipping ex works in 5 days

Data sheet

Rod clevis CRSG

Scope of delivery:

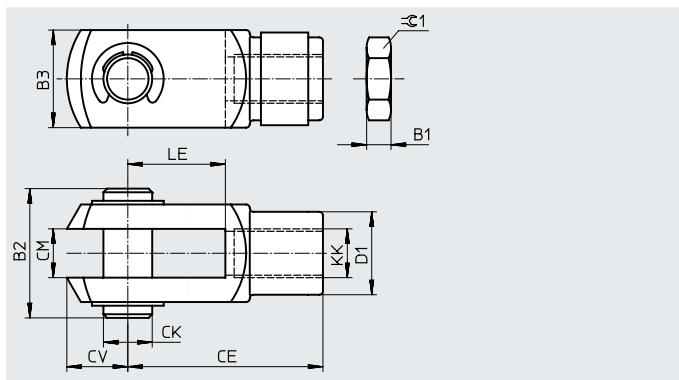
1 rod clevis, 1 pivot pin, 1 hex nut to
DIN 439

Material:

High-alloy steel

Free of copper and PTFE

RoHS-compliant



Dimensions and ordering data

KK	B1	B2	B3	CE	CK ∅ H9/e8	CM	CV	D1 ∅ ±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 ±0.5	≅1	ISO 8140	DIN 71752	CRC ¹⁾	Weight [g]	Part no.	Type
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

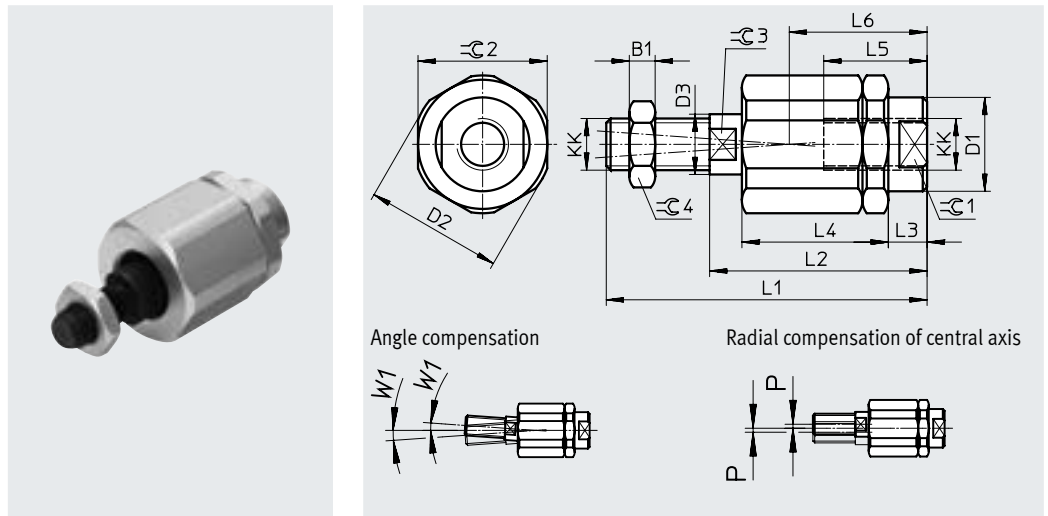
Particularly high corrosion stress. Outdoor exposure under extreme corrosive conditions. Parts exposed to aggressive media, e.g. in the chemical or food industries. Such applications may need to be safeguarded by special tests (→ also FN 940082), using appropriate media.

Data sheet

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	Max. permissible tensile and compressive load [N]	Axial play [mm]	Radial compensation P [mm]	CRC ¹⁾	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 can occur. External visible parts with primarily decorative surface requirements in direct contact with a normal industrial environment.

Festo core product range

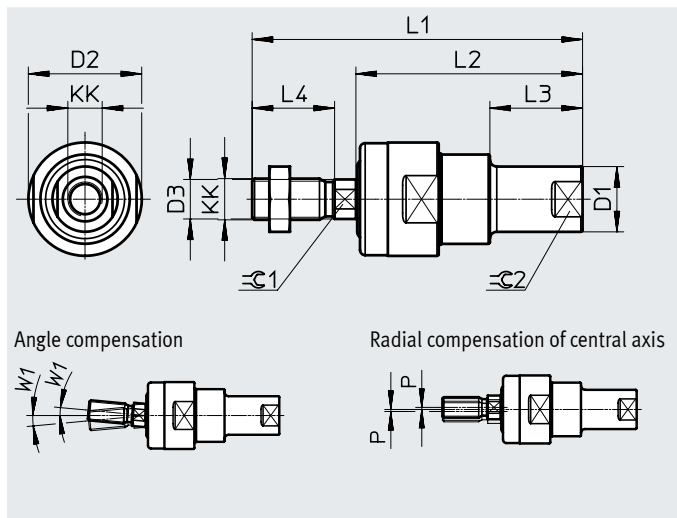
- ★ Generally ready for shipping ex works in 24 hours
- ★ Generally ready for shipping ex works in 5 days

Data sheet

Self-aligning rod coupler CRFK

Scope of delivery:
1 self-aligning rod coupler

Material:
Housing, nut, threaded bolt: High-alloy stainless steel
Cap: Elastomer
Free of copper and PTFE
RoHS-compliant



Dimensions and ordering data

KK	D1 ∅	D2 ∅	D3 ∅	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	Max. permissible tensile and compressive load [N]	Axial play [mm]	Radial compensation 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 ¹⁾	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, e.g. in the chemical or food industries. Such applications may need to be safeguarded by special tests (→ also FN 940082), using appropriate media.

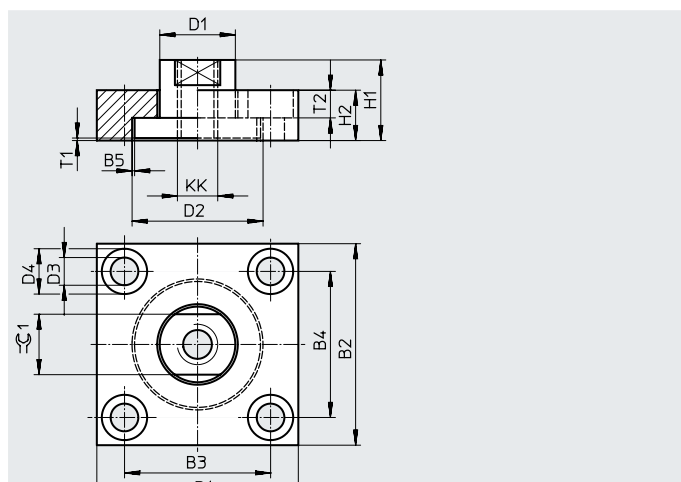
Data sheet

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
Free of copper and PTFE
RoHS-compliant



Dimensions and ordering data										
KK	B1	B2	B3	B4	B5 Max. radial play	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 play	T2	≈C1	Max. tightening torque ¹⁾ [Nm]	CRC ²⁾	Weight [g]	Part no.	Type
M10x1.25	15	0.5	6.8	17	9.9	1	230	32963	KSG-M10x1.25
M12x1.25	20		9	19	24	1	450	32964	KSG-M12x1.25
M16x1.5	20		11	24	47	1	885	32965	KSG-M16x1.5
M20x1.5	20		13	36	82	1	1140	32966	KSG-M20x1.5
M27x2	20		13	36	82	1	1080	32967	KSG-M27x2

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

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

Low corrosion stress. Dry indoor application 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).

Data sheet

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:

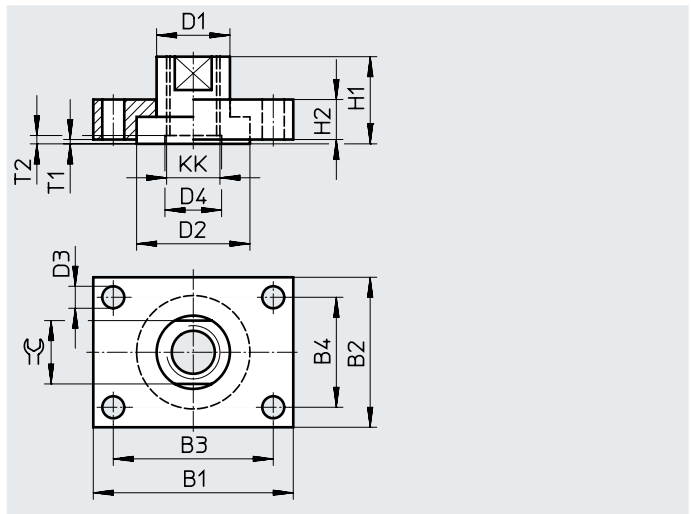
1 flange plate, 1 threaded coupling

Material:

Galvanised steel

Free of copper and PTFE

RoHS-compliant



Dimensions and ordering data

KK	B1	B2	B3	B4	D1 ∅	D2 ∅	D3 ∅ H13	D4 ∅	H1	H2	T1	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]	CRC ⁴⁾	Weight [g]	Part no.	Type
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

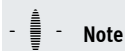
1) For retaining screws with regular thread/strength class 8.8.

2) For lock nut on the piston rod

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

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

Low corrosion stress. Dry indoor application 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).



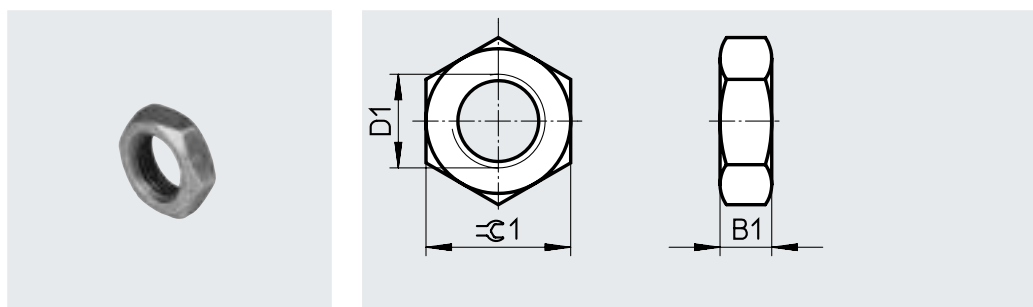
Note

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

Data sheet

Hex nut MSK

Material:
Galvanised steel



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

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

Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements in direct contact with a normal industrial environment.

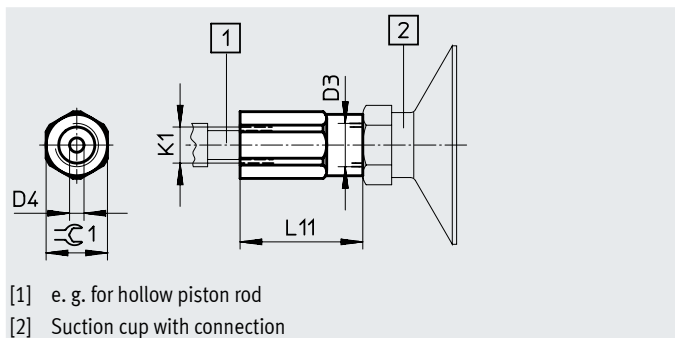
2) Packaging unit

Adapter AD

Data sheet

Adapter AD

Material:
Anodised aluminium



- [1] e. g. for hollow piston rod
- [2] Suction cup with connection

Dimensions and ordering data							
K1	D3	D4 ∅	L11	$\approx G1$	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