Accessories for electric positioning systems

FESTO

Key features

At a glance

Bellows couplings EAMC-B → Page 3

- One-piece coupling with threaded pin fixing, suitable for force-locked and backlash-free transmission of small and medium torques between electric motors and axes.
- System product for positioning technology
- Outer diameter 15 and 19 mm

Ring gear couplings EAMC → Page 3

- Three-piece coupling with clamping hub, suitable for force-locked and backlash-free transmission of medium and high torques between electric motors and axes.
- System product for positioning technology
- Outer diameter 15, 16, 20, 30, 40, 42, 56, 65, 67 mm

Ring gear couplings EAMD, with expanding mandrel → Page 9

- Three-piece coupling with expanding mandrel and clamping hub, suitable for force-locked and backlash-free transmission of medium and high torques between electric motors and axes with hollow shaft.
- System product for positioning technology
- Outer diameter 16, 19, 21, 25, 28, 30, 32, 33, 42, 56, 67, 75 mm

Connecting shafts KSK → Page 13

Electric axes are often combined to form multi-axis systems. When designing gantry systems with a medium centre distance between the axes and heavy loads, it is particularly important that the two basic axes are actuated synchronously. For these systems, two axes with toothed belt drive are generally coupled with a shared motor and synchronised using a connecting shaft.

Range of applications:

- For synchronisation of toothed belt axes DGE and EGC
- For torsion-resistant transmission of the necessary torque
- For slip-free transmission of an identical feed speed
- For compensating for tolerances and alignment errors between two axes

Data sheets for toothed belt axis:
DGE-ZR-KF → Page 14
EGC-TB-KF → Page 16
ELGA-TB-RF → Page 18
ELGA-TB-KF → Page 20

Type codes

001	Series	
EAMC	Coupling	

002	Coupling type	
B	Bellows coupling	
	Ring gear coupling	

003	Collar diameter [mm]	
15	15	
16	16	
19	19	
20	20	
30	30	
40	40	
42	42	
56	56	
65	65	
67	67	

004	Length	
20	20 mm	
22	22 mm	
24	24 mm	
30	30 mm	
32	32 mm	
35	35 mm	
50	50 mm	
58	58 mm	
62	62 mm	
66	66 mm	
90	90 mm	

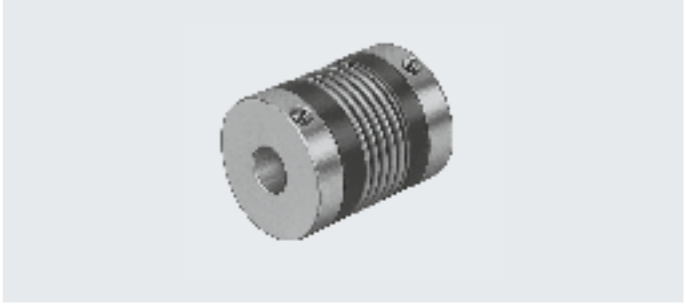
005	Inside diameter 1	
3	3 mm	
4	4 mm	
5	5 mm	
6	6 mm	
6.35	6.35 mm	
8	8 mm	
9	9 mm	
10	10 mm	
11	11 mm	
12	12 mm	
14	14 mm	
15	15 mm	
19	19 mm	
20	20 mm	
22	22 mm	
24	24 mm	
25	25 mm	
XX	Closed	

006	Inside diameter 2	
5	5 mm	
6	6 mm	
6.35	6.35 mm	
8	8 mm	
9	9 mm	
10	10 mm	
11	11 mm	
12	12 mm	
14	14 mm	
15	15 mm	
16	16 mm	
19	19 mm	
20	20 mm	
22	22 mm	
24	24 mm	
25	25 mm	
32	32 mm	
40	40 mm	

Data sheet

Bellows coupling EAMC-B

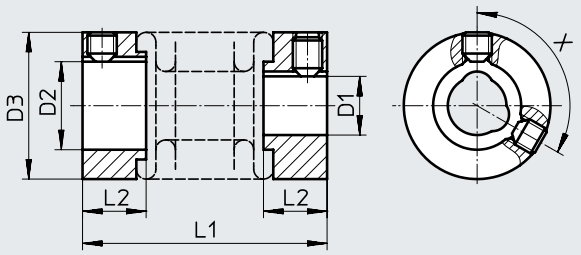
- Ø - Diameter
  15 and 19 mm



General technical data			
Type		EAMC-B-15-22	EAMC-B-19-24
Mass moment of inertia	[kg mm²]	0.13	0.47
Tightening torque for locking screw	[Nm]	1.5	1.5
Max. rotational speed	[rpm]	12000	8000
Corrosion resistance CRC[1)]		1	
Materials	Hubs	Aluminium	
	Bellows	Stainless steel	
Note on materials		RoHS-compliant	

1) Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. Dry internal 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).

Dimensions and ordering data Download CAD data ➔ www.festo.com

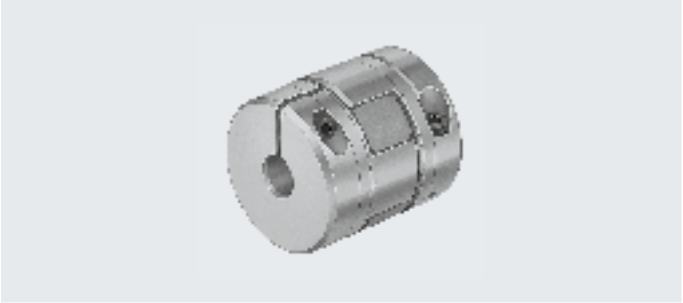


ø [mm]	D1 ø H7	D2 ø H7	D3 ø	L1	L2	X [°]	Transferable torque [Nm]	Weight [g]	Part no.	Type
15	4	5	15	22	6.5	–	1	6	**530084**	**EAMC-B-15-22-4-5**
	4	6	15	22	6.5	–	1	6	**540750**	**EAMC-B-15-22-4-6**
	4	9	15	22	6.5	–	1	6	**184262**	**EAMC-B-15-22-4-9**
	5	5	15	22	6.5	–	1	6	**530085**	**EAMC-B-15-22-5-5**
	5	6	15	22	6.5	–	1	6	**540751**	**EAMC-B-15-22-5-6**
	5	9	15	22	6.5	–	1	6	**529953**	**EAMC-B-15-22-5-9**
19	6	6	19	24	7.5	120	1.5	12	**184265**	**EAMC-B-19-24-6-6**
	6	6.35	19	24	7.5	120	1.5	12	**530086**	**EAMC-B-19-24-6-6.35**
	6	9	19	24	7.5	120	1.5	12	**184263**	**EAMC-B-19-24-6-9**
	6	10	19	24	7.5	120	1.5	12	**1450210**	**EAMC-B-19-24-6-10**

Data sheet

Ring gear coupling EAMC

- Ø - Diameter
15 ... 67 mm



General technical data

Type		EAMC-15-20	EAMC-16-20	EAMC-20-30	EAMC-30-32	EAMC-30-35
Mass moment of inertia	[kg mm²]	0.23	0.28	1.06	5.87	6.1
Tightening torque for locking screw	[Nm]	1.3	0.5	0.76	4	2.9
Max. rotational speed	[rpm]	10000	10000	9000	8000	8000
Corrosion resistance CRC[1)]		1				
Materials	Hubs	Aluminium				
	Ring gear	Polyurethane				
Note on materials		RoHS-compliant				

Type		EAMC-40-66	EAMC-42-50	EAMC-42-66	EAMC-56-58	EAMC-65-90	EAMC-67-62
Mass moment of inertia	[kg mm²]	42.3	34.8	45.5	128	417	280
Tightening torque for locking screw	[Nm]	10.5	8	8	15	25	35
Max. rotational speed	[rpm]	6500	6000	6000	5500	4500	4500
Corrosion resistance CRC[1)]		1					
Materials	Hubs	Aluminium					
	Ring gear	Polyurethane					
Note on materials		RoHS-compliant					

1) Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. Dry internal 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

Dimensions and ordering data

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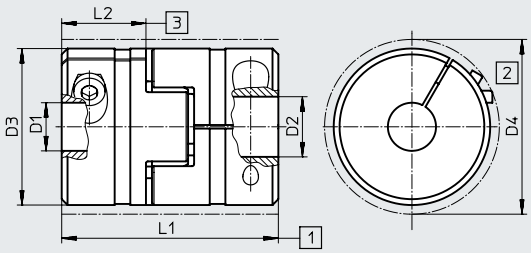

[1] Nominal length with axial offset compensation
[2] Min. installation diameter (interference profile of locking screw)
[3] Insertion depth

ø [mm]	D1 ø H7	D2 ø H7	D3 ø	D4 ø	L1	L2	Transferable torque [Nm]	Weight [g]	Part no.	Type
15	5	6	15	–	20±1	6.5	1.5	8	**533707**	**EAMC-15-20-5-6**
16	3	5	16	17	20±1	6	0.2	8	**562672**	**EAMC-16-20-3-5**
	3	6	16	17	20±1	6	0.2	8	**562671**	**EAMC-16-20-3-6**
	3	8	16	17	20±1	6	0.2	8	**2310368**	**EAMC-16-20-3-8**
	4	5	16	17	20±1	6	0.7	8	**562674**	**EAMC-16-20-4-5**
	4	6	16	17	20±1	6	0.7	8	**562673**	**EAMC-16-20-4-6**
	4	8	16	17	20±1	6	0.7	8	**562675**	**EAMC-16-20-4-8**
	5	5	16	17	20±1	6	1.1	8	**562676**	**EAMC-16-20-5-5**
	5	6	16	17	20±1	6	1.1	8	**543419**	**EAMC-16-20-5-6**
	5	8	16	17	20±1	6	1.1	8	**562677**	**EAMC-16-20-5-8**
	6	6	16	17	20±1	6	1.6	8	**543420**	**EAMC-16-20-6-6**
	6	8	16	17	20±1	6	1.6	8	**1232854**	**EAMC-16-20-6-8**
20	5	6	20	24	30	10	2.2	20	**558902**	**EAMC-20-30-5-6**
	6	6	20	24	30	10	2.3	20	**558901**	**EAMC-20-30-6-6**
	6	10	20	24	30	10	2.3	20	**1451964**	**EAMC-20-30-6-10**
30	5	6	30	–	32±1	10.3	3.5	48	**561333**	**EAMC-30-32-5-6**
	5	8	30	–	32±1	10.3	3.5	48	**562678**	**EAMC-30-32-5-8**
	6	6	30	–	32±1	10.3	6.5	48	**558312**	**EAMC-30-32-6-6**
	6	6.35	30	–	32±1	10.3	6.5	48	**551002**	**EAMC-30-32-6-6.35**
	6	8	30	–	32±1	10.3	6.5	48	**533708**	**EAMC-30-32-6-8**
	6	9	30	–	32±1	10.3	6.5	48	**551003**	**EAMC-30-32-6-9**
	6	10	30	–	32±1	10.3	6.5	48	**562681**	**EAMC-30-32-6-10**
	6	11	30	–	32±1	10.3	6.5	48	**3187577**	**EAMC-30-32-6-11**
	6	14	30	–	32±1	10.3	6.5	48	**1233256**	**EAMC-30-32-6-14**
	6.35	8	30	–	32±1	10.3	6.5	48	**543421**	**EAMC-30-32-6.35-8**
	6.35	10	30	–	32±1	10.3	6.5	48	**562679**	**EAMC-30-32-6.35-10**
	8	8	30	–	32±1	10.3	12.5	48	**543422**	**EAMC-30-32-8-8**
	8	9	30	–	32±1	10.3	12.5	48	**543423**	**EAMC-30-32-8-9**
	8	10	30	–	32±1	10.3	12.5	48	**558029**	**EAMC-30-32-8-10**
	8	11	30	–	32±1	10.3	12.5	48	**551004**	**EAMC-30-32-8-11**
	8	14	30	–	32±1	10.3	12.5	48	**562682**	**EAMC-30-32-8-14**
	9	10	30	–	32±1	10.3	12.5	48	**562680**	**EAMC-30-32-9-10**
	10	10	30	–	32±1	10.3	12.5	48	**2310372**	**EAMC-30-32-10-10**
	10	11	30	–	32±1	10.3	12.5	48	**565008**	**EAMC-30-32-10-11**
	10	14	30	–	32±1	10.3	12.5	48	**562683**	**EAMC-30-32-10-14**

Data sheet

Dimensions and ordering data

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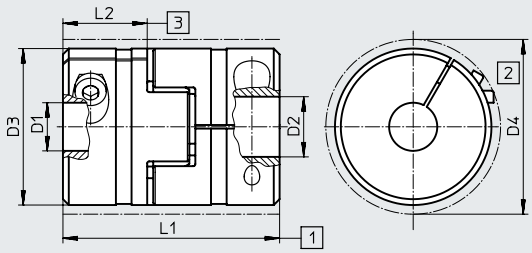


[1] Nominal length with axial offset compensation
[2] Min. installation diameter (interference profile of locking screw)
[3] Insertion depth

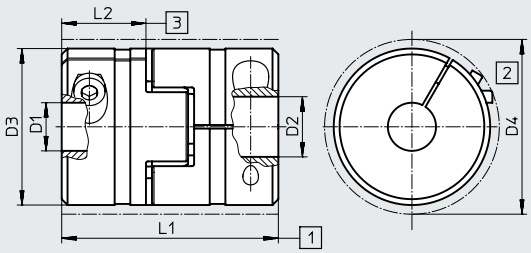
ø [mm]	D1 ø H7	D2 ø H7	D3 ø	D4 ø	L1	L2	Transferable torque [Nm]	Weight [g]	Part no.	Type
30	6	6	30	31.4	35±0.7	11	7.5	45	**123040**	**EAMC-30-35-6-6**
	6	6.35	30	31.4	35±0.7	11	7.5	45	**530087**	**EAMC-30-35-6-6.35**
	6	8	30	31.4	35±0.7	11	7.5	45	**123041**	**EAMC-30-35-6-8**
	6	9	30	31.4	35±0.7	11	7.5	45	**530941**	**EAMC-30-35-6-9**
	6	10	30	31.4	35±0.7	11	7.5	45	**1453062**	**EAMC-30-35-6-10**
	6	11	30	31.4	35±0.7	11	7.5	45	**123843**	**EAMC-30-35-6-11**
	6	12	30	31.4	35±0.7	11	7.5	45	**123855**	**EAMC-30-35-6-12**
	6.35	8	30	31.4	35±0.7	11	7.5	45	**530088**	**EAMC-30-35-6.35-8**
	6.35	12	30	31.4	35±0.7	11	7.5	45	**550995**	**EAMC-30-35-6.35-12**
	8	8	30	31.4	35±0.7	11	8	45	**123044**	**EAMC-30-35-8-8**
	8	9	30	31.4	35±0.7	11	8	45	**557390**	**EAMC-30-35-8-9**
	8	10	30	31.4	35±0.7	11	8	45	**123050**	**EAMC-30-35-8-10**
	8	11	30	31.4	35±0.7	11	8	45	**123042**	**EAMC-30-35-8-11**
	8	12	30	31.4	35±0.7	11	8	45	**123043**	**EAMC-30-35-8-12**
	8	14	30	31.4	35±0.7	11	8	45	**1453063**	**EAMC-30-35-8-14**
	9	12	30	31.4	35±0.7	11	8.3	45	**550996**	**EAMC-30-35-9-12**
	10	12	30	31.4	35±0.7	11	8.6	45	**552640**	**EAMC-30-35-10-12**
	11	12	30	31.4	35±0.7	11	8.9	45	**123051**	**EAMC-30-35-11-12**
	12	12	30	31.4	35±0.7	11	9.4	45	**123052**	**EAMC-30-35-12-12**
40	9	12	40	45.8	66±0.85	25	21	139	**1731999**	**EAMC-40-66-9-12**
	10	12	40	45.8	66±0.85	25	21	139	**1452794**	**EAMC-40-66-10-12**
	11	11	40	45.8	66±0.85	25	21	139	**530090**	**EAMC-40-66-11-11**
	11	12	40	45.8	66±0.85	25	21	139	**525864**	**EAMC-40-66-11-12**
	11	14	40	45.8	66±0.85	25	21	139	**1452798**	**EAMC-40-66-11-14**
	11	15	40	45.8	66±0.85	25	21	139	**550998**	**EAMC-40-66-11-15**
	11	20	40	45.8	66±0.85	25	21	139	**550999**	**EAMC-40-66-11-20**
	12	14	40	45.8	66±0.85	25	21	139	**1452803**	**EAMC-40-66-12-14**
	12	15	40	45.8	66±0.85	25	21	139	**123850**	**EAMC-40-66-12-15**
	12	19	40	45.8	66±0.85	25	21	139	**529952**	**EAMC-40-66-12-19**
	12	20	40	45.8	66±0.85	25	21	139	**123851**	**EAMC-40-66-12-20**
	14	20	40	45.8	66±0.85	25	21	139	**1452809**	**EAMC-40-66-14-20**
	15	16	40	45.8	66±0.85	25	21	139	**123846**	**EAMC-40-66-15-16**
	15	19	40	45.8	66±0.85	25	21	139	**123844**	**EAMC-40-66-15-19**
	15	20	40	45.8	66±0.85	25	21	139	**123845**	**EAMC-40-66-15-20**
	15	22	40	45.8	66±0.85	25	21	139	**3307627**	**EAMC-40-66-15-22**
	15	24	40	45.8	66±0.85	25	21	139	**176033**	**EAMC-40-66-15-24**
	19	20	40	45.8	66±0.85	25	21	139	**123847**	**EAMC-40-66-19-20**
	20	20	40	45.8	66±0.85	25	21	139	**123849**	**EAMC-40-66-20-20**
	20	24	40	45.8	66±0.85	25	21	139	**176034**	**EAMC-40-66-20-24**
	XX[1)]	15	40	45.8	66±0.85	25	–	139	**176036**	**EAMC-40-66-XX-15**
	XX[1)]	20	40	45.8	66±0.85	25	–	139	**176037**	**EAMC-40-66-XX-20**

1) Hub predrilled to a diameter of 5 mm. Drilled hole max. 20 mm

Data sheet

Dimensions and ordering data

Download CAD data ➔ www.festo.com



[1] Nominal length with axial offset compensation
[2] Min. installation diameter (interference profile of locking screw)
[3] Insertion depth

ø [mm]	D1 ø H7	D2 ø H7	D3 ø	D4 ø	L1	L2	Transferable torque [Nm]	Weight [g]	Part no.	Type
42	8	19	42	44.5	50±2	17	17	140	**2310376**	**EAMC-42-50-8-19**
	9	12	42	44.5	50±2	17	17	146	**1732001**	**EAMC-42-50-9-12**
	10	12	42	44.5	50±2	17	17	145	**1455666**	**EAMC-42-50-10-12**
	11	12	42	44.5	50±2	17	17	138	**543424**	**EAMC-42-50-11-12**
	12	12	42	44.5	50±2	17	17	138	**533709**	**EAMC-42-50-12-12**
	12	14	42	44.5	50±2	17	17	142	**1455671**	**EAMC-42-50-12-14**
	12	16	42	44.5	50±2	17	17	140	**1232880**	**EAMC-42-50-12-16**
	12	19	42	44.5	50±2	17	17	138	**551005**	**EAMC-42-50-12-19**
	12	20	42	44.5	50±2	17	17	135	**2138701**	**EAMC-42-50-12-20**
	12	24	42	44.5	50±2	17	17	130	**558314**	**EAMC-42-50-12-24**
	11	12	42	44.5	66±2	25	17	166	**558313**	**EAMC-42-66-11-12**
56	19	19	56	57	58±2	19.9	60	285	**1485673**	**EAMC-56-58-19-19**
	19	20	56	57	58±2	19.9	60	284	**3181801**	**EAMC-56-58-19-20**
	19	24	56	57	58±2	19.9	60	277	**1485674**	**EAMC-56-58-19-24**
	19	25	56	57	58±2	19.9	60	275	**558315**	**EAMC-56-58-19-25**
	24	25	56	57	58±2	19.9	60	265	**558316**	**EAMC-56-58-24-25**
65	15	24	65	72.6	90±1.1	35	80	535	**530940**	**EAMC-65-90-15-24**
	19	25	65	72.6	90±1.1	35	85	535	**551000**	**EAMC-65-90-19-25**
	20	25	65	72.6	90±1.1	35	85	535	**176035**	**EAMC-65-90-20-25**
	24	25	65	72.6	90±1.1	35	92	535	**123852**	**EAMC-65-90-24-25**
	25	25	65	72.6	90±1.1	35	92	535	**123853**	**EAMC-65-90-25-25**
	25	32	65	72.6	90±1.1	35	92	535	**1745817**	**EAMC-65-90-25-32**
	25	40	65	72.6	90±1.1	35	62	535	**551001**	**EAMC-65-90-25-40**
	XX[2)]	25	65	72.6	90±1.1	35	–	535	**176038**	**EAMC-65-90-XX-25**
67	24	24	66.5	68	62±2	21	143	436	**1451407**	**EAMC-67-62-24-24**
	24	25	66.5	68	62±2	21	143	435	**3187895**	**EAMC-67-62-24-25**
	24	32	66.5	68	62±2	21	143	428	**1485796**	**EAMC-67-62-24-32**

2) Hub predrilled to a diameter of 9.5 mm. Drilled hole max. 38 mm

Type codes

001	Series	
EAMD	Ring gear coupling with expanding mandrel	

002	Collar diameter [mm]	
16	16	
19	19	
21	21	
25	25	
28	28	
30	30	
32	32	
33	33	
42	42	
56	56	
67	67	
75	75	

003	Collar length [mm]	
15	15	
22	22	
32	32	
40	40	
46	46	
51	51	
54	54	
62	62	
82	82	

004	Inside diameter 1	
5	5 mm	
6	6 mm	
6.35	6.35 mm	
8	8 mm	
9	9 mm	
10	10 mm	
11	11 mm	
12	12 mm	
14	14 mm	
16	16 mm	
18	18 mm	
19	19 mm	
20	20 mm	
22	22 mm	
24	24 mm	
25	25 mm	
32	32 mm	
40	40 mm	

005	Expanding mandrel diameter [mm]	
8	8	
10	10	
16	16	
23	23	
32	32	

006	Expanding mandrel length [mm]	
X10	10	
X12	12	
X20	20	
X32	32	
X25	25	
X27	27	

007	Ring gear hardness	
	Standard	
U	64 Sh D	

Data sheet

Ring gear coupling EAMD,
with expanding mandrel

- Ø - Diameter
16 ... 75 mm

General technical data

Type		EAMD-16-15	EAMD-19-15	EAMD-21-15	EAMD-25-22	EAMD-28-22
Mass moment of inertia	[kg mm²]	0.355	0.445	0.45	3.2	3.5
Tightening torque for locking screw D1	[Nm]	0.5	0.5	0.5	2	2
Tightening torque for locking screw D2	[Nm]	2	2	2	4	4
Max. rotational speed	[rpm]	10000	10000	10000	8000	8000
Corrosion resistance CRC[1)]		1				
Materials	Hubs	Aluminium				
	Ring gear	Polyurethane				
Note on materials		RoHS-compliant				

Type		EAMD-30-22	EAMD-32-32	EAMD-33-22	EAMD-42-40	EAMD-56-46
Mass moment of inertia	[kg mm²]	4.0	14.5	4.6	39	151
Tightening torque for locking screw D1	[Nm]	2	4	2	8	15
Tightening torque for locking screw D2	[Nm]	4	9	4	9.5	32
Max. rotational speed	[rpm]	8000	8000	8000	6000	5500
Corrosion resistance CRC[1)]		1				
Materials	Hubs	Aluminium				
	Ring gear	Polyurethane				
Note on materials		RoHS-compliant				

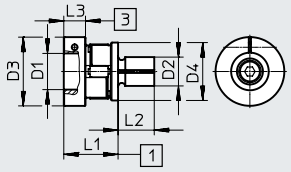
Type		EAMD-56-54	EAMD-56-62	EAMD-67-51	EAMD-67-82	EAMD-75-51
Mass moment of inertia	[kg mm²]	172	192	374	831	425
Tightening torque for locking screw D1	[Nm]	15	15	35	35	35
Tightening torque for locking screw D2	[Nm]	32	32	60	60	60
Max. rotational speed	[rpm]	5500	5500	4500	4500	4500
Corrosion resistance CRC[1)]		1				
Materials	Hubs	Aluminium				
	Ring gear	Polyurethane				
Note on materials		RoHS-compliant				

1) Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. Dry internal 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).

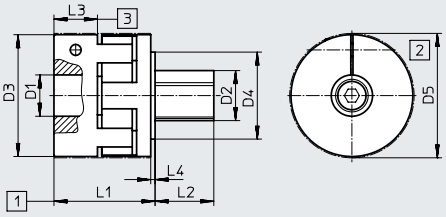
Data sheet

Dimensions and ordering data Download CAD data ➔ www.festo.com

EAMD-16/EAMD-19



EAMD-...



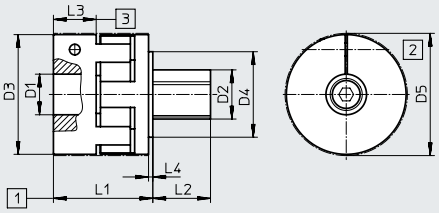
[1] Nominal length with axial offset compensation
[2] Min. installation diameter (interference profile of locking screw)
[3] Insertion depth

ø [mm]	D1 ø H7	D2 ø H7	D3 ø	D4 ø	D5 ø	L1	L2	L3	L4	Transferable torque [Nm]	Weight [g]	Part no.	Type
16	5	8	16	–	–	15±1	10	6	–	1.2	13	**4819892**	**EAMD-16-15-5-8X10**
	6	8	16	–	–	15±1	10	6	–	1.5	12.8	**4819883**	**EAMD-16-15-6-8X10**
	6.35	8	16	–	–	15±1	10	6	–	1.6	12.8	**561292**	**EAMD-16-15-6.35-8X10**
	8	8	16	–	–	15±1	10	6	–	2	12	**1184697**	**EAMD-16-15-8-8X10**
19	9	8	19	–	–	15±1	10	6	–	2	13.5	**557999**	**EAMD-19-15-9-8X10**
	10	8	19	–	–	15±1	10	6	–	2	13	**557998**	**EAMD-19-15-10-8X10**
21	11	8	21	–	–	15±1	10	6	–	2	13.7	**4820350**	**EAMD-21-15-11-8X10**
	12	8	21	–	–	15±1	10	6	–	2	13.5	**4820335**	**EAMD-21-15-12-8X10**
25	6.35	10	25	22	–	22+1	12	8.1	1	3.6	43.7	**561293**	**EAMD-25-22-6.35-10X12**
	8	10	25	22	–	22+1	12	8.1	1	8	43.4	**5010861**	**EAMD-25-22-8-10X12**
	9	10	25	22	–	22+1	12	8.1	1	9	43.2	**3717923**	**EAMD-25-22-9-10X12**
	10	10	25	22	–	22+1	12	8.1	1	9	43.7	**1453860**	**EAMD-25-22-10-10X12**
	11	10	25	22	–	22+1	12	8.1	1	9	43.5	**558000**	**EAMD-25-22-11-10X12**
	12	10	25	22	–	22+1	12	8.1	1	9	42.1	**5029897**	**EAMD-25-22-12-10X12**
28	14	10	28	22	–	22±1	12	8.1	1	9	43	**1453861**	**EAMD-28-22-14-10X12**
30	16	10	30	22	–	22±1	12	8.1	1	9	44.8	**5030235**	**EAMD-30-22-16-10X12**
32	9	16	32	25	–	32±1	20	10.1	1.5	12.5	127	**5038002**	**EAMD-32-32-9-16X20**
	10	16	32	25	–	32±1	20	10.1	1.5	16	126	**5273329**	**EAMD-32-32-10-16X20-U**
	11	16	32	25	–	32±1	20	10.1	1.5	12.5	126	**558001**	**EAMD-32-32-11-16X20**
	14	16	32	25	–	32±1	20	10.1	1.5	12.5	124	**1377840**	**EAMD-32-32-14-16X20**
	16	16	32	25	–	32±1	20	10.1	1.5	12.5	123	**1184858**	**EAMD-32-32-16-16X20**
33	19	10	33	22	–	22±1	12	8.1	1	9	46.1	**5030024**	**EAMD-33-22-19-10X12**

Data sheet

Dimensions and ordering data Download CAD data ➔ www.festo.com

EAMD-...



[1] Nominal length with axial offset compensation
[2] Min. installation diameter (interference profile of locking screw)
[3] Insertion depth

ø [mm]	D1 ø H7	D2 ø H7	D3 ø	D4 ø	D5 ø	L1	L2	L3	L4	Transferable torque [Nm]	Weight [g]	Part no.	Type
42	10	16	42	25	44.5	40±2	25	17	1.5	17	199	**5200227**	**EAMD-42-40-10-16X25**
	11	16	42	25	44.5	40±2	25	17	1.5	17	198	**5200234**	**EAMD-42-40-11-16X25**
	12	16	42	25	44.5	40±2	25	17	1.5	17	198	**5200241**	**EAMD-42-40-12-16X25**
	14	16	42	25	44.5	40±2	25	17	1.5	21	196	**3420022**	**EAMD-42-40-14-16X25-U**
	18	16	42	25	44.5	40±2	25	17	1.5	17	192	**5056644**	**EAMD-42-40-18-16X25**
	19	16	42	25	44.5	40±2	25	17	1.5	17	190	**558002**	**EAMD-42-40-19-16X25**
	20	16	42	25	44.5	40±2	25	17	1.5	17	189	**1188350**	**EAMD-42-40-20-16X25**
	20	16	42	25	44.5	40±2	25	17	1.5	21	189	**1781043**	**EAMD-42-40-20-16X25-U**
	22	16	42	25	44.5	40±2	25	17	1.5	17	186	**5046328**	**EAMD-42-40-22-16X25**
56	14	23	56	40	57	46.5±2	27	20	2	38	424	**5062229**	**EAMD-56-46-14-23X27**
	18	23	56	40	57	46.5±2	27	20	2	57	419	**5063729**	**EAMD-56-46-18-23X27**
	19	23	56	40	57	46.5±2	27	20	2	60	418	**558003**	**EAMD-56-46-19-23X27**
	20	23	56	40	57	46.5±2	27	20	2	60	416	**558004**	**EAMD-56-46-20-23X27**
	24	23	56	40	57	46.5±2	27	20	2	60	409	**558005**	**EAMD-56-46-24-23X27**
	25	23	56	40	57	46.5±2	27	20	2	60	407	**1188801**	**EAMD-56-46-25-23X27**
	25	23	56	40	57	46.5±2	27	20	2	75	407	**1781045**	**EAMD-56-46-25-23X27-U**
	32	23	56	40	57	46.5±2	27	20	2	60	390	**5063745**	**EAMD-56-46-32-23X27**
	18	23	56	40	57	54.5±2	27	20	2	60	466	**5225774**	**EAMD-56-54-18-23X27**
	19	23	56	40	57	54.5±2	27	20	2	60	464	**5215476**	**EAMD-56-54-19-23X27**
	22	23	56	40	57	54.5±2	27	20	2	60	457	**5226828**	**EAMD-56-54-22-23X27**
	20	23	56	40	57	62.5±2	27	20	2	60	507	**5228153**	**EAMD-56-62-20-23X27**
67	16	32	66.5	–	68	51±2	32	21	–	93	750	**5071095**	**EAMD-67-51-16-32x32-U**
	19	32	66.5	–	68	51±2	32	21	–	113	745	**3398671**	**EAMD-67-51-19-32X32-U**
	20	32	66.5	–	68	51±2	32	21	–	120	744	**3717812**	**EAMD-67-51-20-32X32-U**
	22	32	66.5	–	68	51±2	32	21	–	133	740	**5070937**	**EAMD-67-51-22-32X32-U**
	24	32	66.5	–	68	51±2	32	21	–	143	736	**558008**	**EAMD-67-51-24-32X32-U**
	25	32	66.5	–	68	51±2	32	21	–	150	734	**558006**	**EAMD-67-51-25-32X32-U**
	32	32	66.5	–	68	51±2	32	21	–	192	717	**1379269**	**EAMD-67-51-32-32X32-U**
	24	32	66.5	–	68	82±2	32	21	–	143	1559	**558009**	**EAMD-67-82-24-32X32-U**
	25	32	66.5	–	68	82±2	32	21	–	150	1557	**558007**	**EAMD-67-82-25-32X32-U**
	32	32	66.5	–	68	82±2	32	21	–	192	1540	**1379270**	**EAMD-67-82-32-32X32-U**
75	40	32	75	–	75	51±2	32	21	–	200	741	**5078084**	**EAMD-75-51-40-32x32-U**

Type codes

001	Series	
KSK	Connecting shaft	

002	Generation	
	Standard	
A	2nd generation	

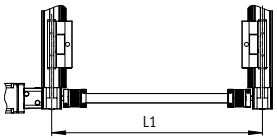
003	Size	
25	25	
40	40	
50	50	
63	63	
70	70	
80	80	
120	120	
185	185	

004	Length	
...	200 ... 2000 mm	

Data sheet

Connecting shafts KSK
for toothed belt axis DGE-ZR-KF

- Ø - Size
25, 40, 63



Nominal length L1 = Centre-to-centre distance between the axes

The total mass is calculated as follows:
$m_{total} = m_0 + m_L \times L1$

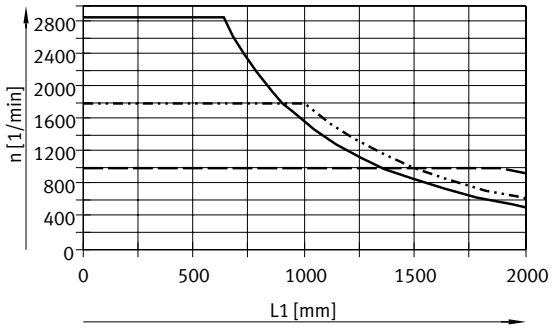
The moment of inertia is calculated as follows:
$J_{total} = J_0 + J_L \times L1$

General technical data				
Size		25	40	63
Design		Connecting tube with a coupling at each end		
Mounting position		Horizontal (vertical on request)		
Nominal length L1	[mm]	200 ... 2000	250 ... 2000	350 ... 2000
Basic moment of inertia J_0 with L1 = 0 mm	[kg mm²]	31	147	1310
Additional moment of inertia J_L per 1 m nominal length	[kg mm²/m]	34	80	333
Max. permissible axial offset	[mm]	±2		
Basic weight m_0 with L1 = 0 mm	[kg]	0.22	0.36	1.8
Additional weight m_L per 1 m nominal length	[kg/m]	0.32	0.48	0.8

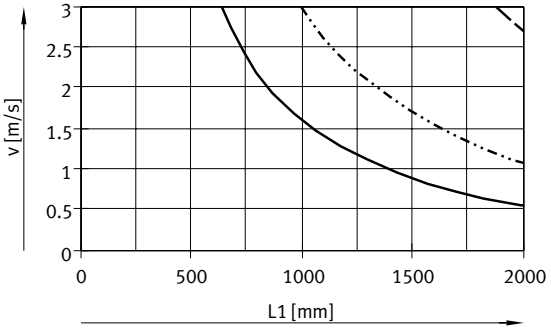
Operating and environmental conditions		
Ambient temperature	[°C]	–10 ... +60
Corrosion resistance CRC[1)]		2
Materials		
Coupling, hub		Wrought aluminium alloy
Coupling, bellows		High-alloy steel
Connecting tube		High-alloy steel
Note on materials		RoHS-compliant
		Contains paint-wetting impairment substances

1) Corrosion resistance class CRC 1 to Festo standard FN 940070
Low corrosion stress. Dry internal 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).

Max. rotational speed n as a function of nominal length L1



Max. velocity v as a function of nominal length L1



KSK-25
KSK-40
KSK-63

Data sheet

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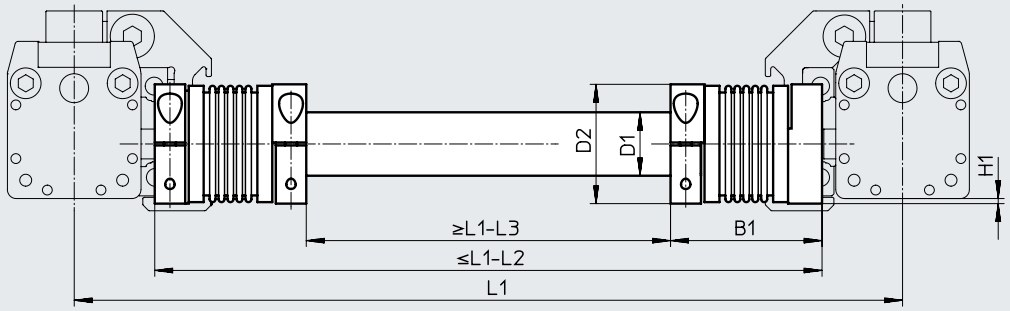


Size [mm]	B1	D1 ø	D2 ø	H1	L1	L2	L3	Part no.	Type
25	50	21.27	40	1.6	1)	51.4	156.4	**196587**	**KSK-25-...**
40	59	26.52	49	–		71.4	194.6	**196588**	**KSK-40-...**
63	94	41.6	81	–		114.6	308.6	**196589**	**KSK-63-...**

1) Centre-to-centre distance between the axes

Note

The nominal length L1 must be specified in the type code when ordering. The nominal length L1 indicates the centre-to-centre distance between the axes in this case.

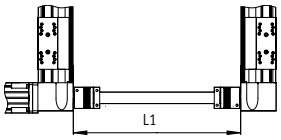
Order example:
Two toothed belt axes DGE-40-...-ZR-KF are to be linked using a connecting shaft with a nominal length L1 = 1000 mm.

The following connecting shaft is required:
Type: KSK-40-1000
Part no. 196588

Data sheet

Connecting shafts KSK
for toothed belt axis EGC-TB-KF

- Ø - Size
50, 70, 80, 120 and 185



Nominal length L1 = Inside width between the drive covers

The total mass is calculated as follows:
$m_{total} = m_0 + m_L \times L1$

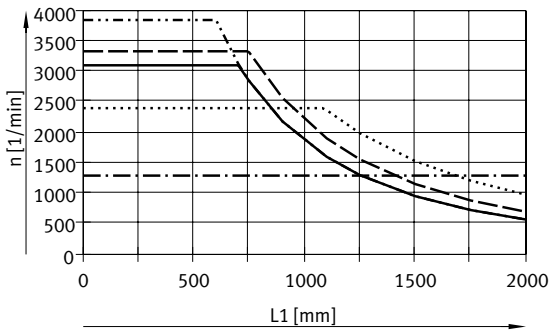
The moment of inertia is calculated as follows:
$J_{total} = J_0 + J_L \times L1$

General technical data						
Size		50	70	80	120	185
Design		Connecting tube with a coupling at each end as well as two drive shafts for adapting the hollow shaft				
Mounting position		Horizontal (vertical on request)				
Nominal length L1	[mm]	200 ... 2000			250 ... 2000	350 ... 2000
Basic moment of inertia J_0 with L1 = 0 mm	[kg mm²]	34	35	159	1390	7261
Additional moment of inertia J_L per 1 m nominal length	[kg mm²/m]	34	34	80	333	1946
Max. permissible axial offset	[mm]	±2				±5
Basic weight m_0 with L1 = 0 mm	[kg]	0.28	0.29	0.53	2.28	5.29
Additional weight m_L per 1 m nominal length	[kg/m]	0.32	0.32	0.48	0.8	1.89

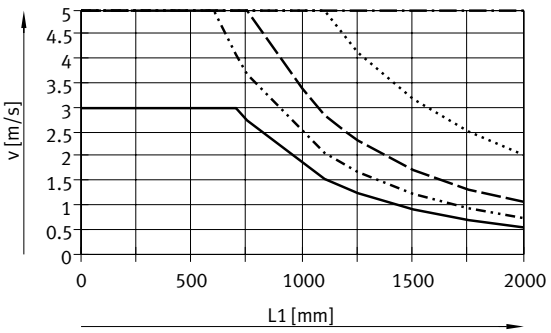
Operating and environmental conditions		
Ambient temperature	[°C]	–10 ... +60
Corrosion resistance CRC[1)]		2
Materials		
Coupling, hub		Wrought aluminium alloy
Coupling, bellows		High-alloy steel
Connecting tube, drive shafts		High-alloy steel
Note on materials		RoHS-compliant
		Contains paint-wetting impairment substances

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 which are in direct contact with a normal industrial environment.

Max. rotational speed n as a function of nominal length L1



Max. velocity v as a function of nominal length L1

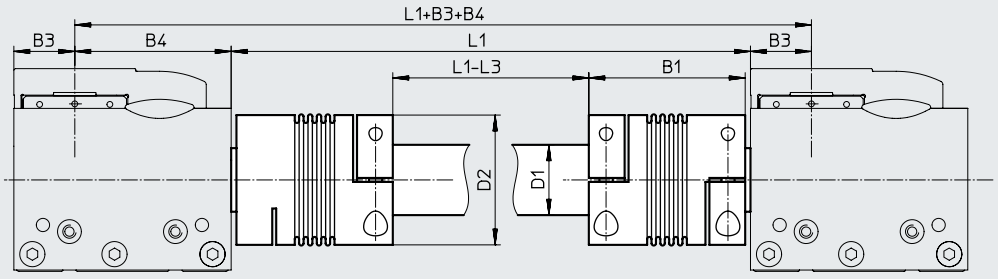


KSK-50
KSK-70
KSK-80
KSK-120
KSK-185

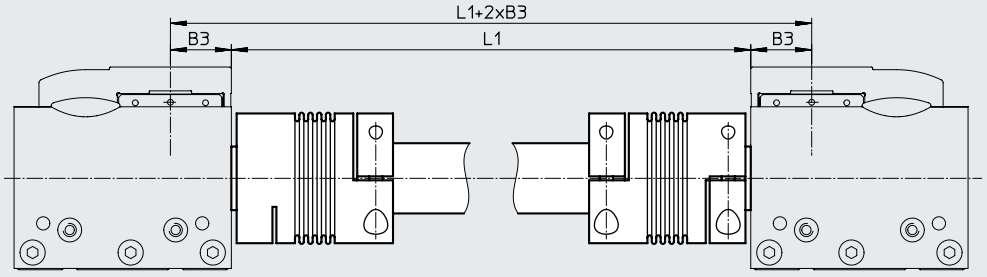
Data sheet

Dimensions and ordering data Download CAD data ➔ www.festo.com

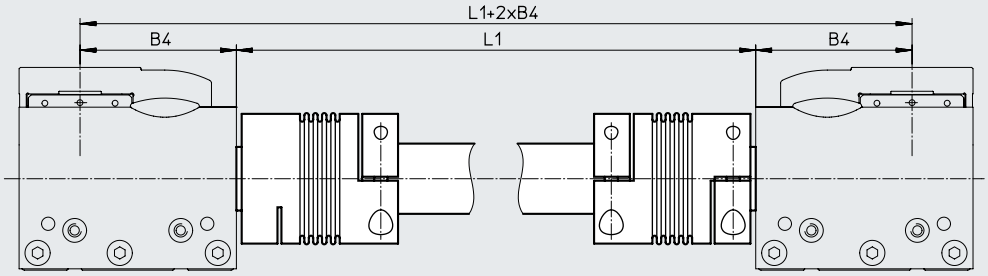
Internal/external guide



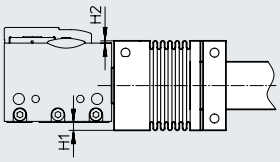
Internal guide



External guide



Projection of coupling



Size [mm]	B1	B3	B4	D1 ø	D2 ø	H1	H2	L1	L3	Part no.	Type
50	50	12.5	35.5	21.27	40	4	1	1)	102.2	**563710**	**KSK-50-...**
70	50	17.5	51.5	21.27	40	–	–		103.7	**562520**	**KSK-70-...**
80	59	23	59	26.52	49	–	–		122	**562521**	**KSK-80-...**
120	94	35	85	41.6	81	–	1		192	**562522**	**KSK-120-...**
185	111	55	131	65.4	110	–	–		228	**562523**	**KSK-185-...**

1) Inside width between the drive covers

Note

The nominal length L1 must be specified in the type code when ordering. The nominal length L1 indicates the inside width between the drive covers in this case.

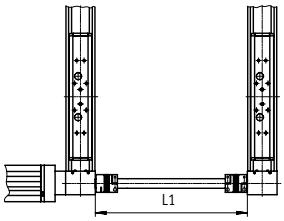
Order example:
Two toothed belt axes EGC-70-...-TB-KF are to be linked using a connecting shaft with a nominal length L1 = 1000 mm.

The following connecting shaft is required:
Type: KSK-70-1000
Part no. 562520

Data sheet

Connecting shafts KSK
for toothed belt axis ELGA-TB-RF

- Ø - Size
A-70, 80, 120



Nominal length L1 = Inside width between the drive covers

The total mass is calculated as follows:
$m_{total} = m_0 + m_L \times L1$

The moment of inertia is calculated as follows:
$J_{total} = J_0 + J_L \times L1$

General technical data

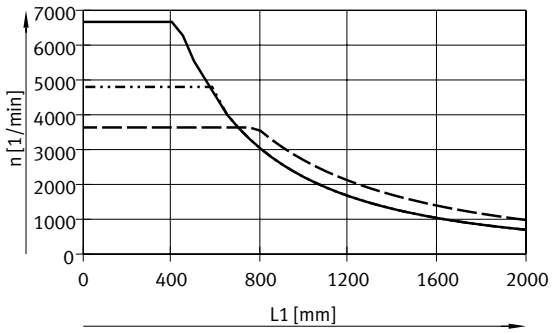
Size		A-70	80	120
Design		Connecting tube with a coupling at each end as well as 2 drive shafts for adapting the hollow shaft. With the KSK185, 2 plugs are additionally supplied for inserting into the tube ends		
Mounting position		Horizontal (vertical on request)		
Nominal length L1	[mm]	200 ... 2000		250 ... 2000
Basic moment of inertia J_0 with L1 = 0 mm	[kg mm²]	161	159	1390
Additional moment of inertia J_L per 1 m nominal length	[kg mm²/m]	80	80	333
Max. permissible axial offset	[mm]	±2		
Basic weight m_0 with L1 = 0 mm	[kg]	0.54	0.53	2.28
Additional weight m_L per 1 m nominal length	[kg/m]	0.48	0.48	0.8

Operating and environmental conditions

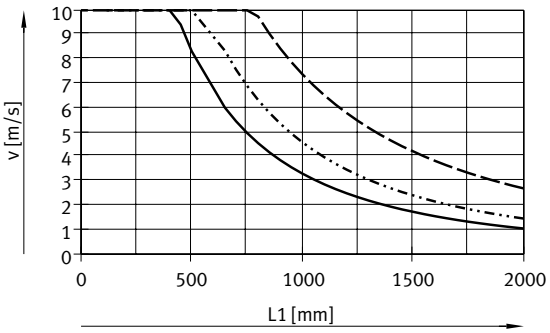
Ambient temperature	[°C]	–10 ... +60
Corrosion resistance CRC[1)]		2
Materials		
Coupling, hub		Wrought aluminium alloy
Coupling, bellows		High-alloy steel
Connecting tube, drive shafts		High-alloy steel
Note on materials		RoHS-compliant
		Contains paint-wetting impairment substances

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 which are in direct contact with a normal industrial environment.

Max. rotational speed n as a function of nominal length L1



Max. velocity v as a function of nominal length L1

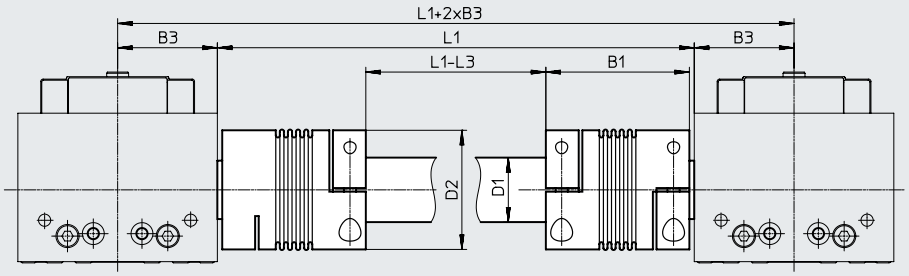


KSK-A-70
KSK-80
KSK-120

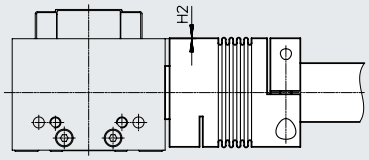
Data sheet

Dimensions and ordering data Download CAD data ➔ www.festo.com

Internal/external guide



Projection of coupling



Size [mm]	B1	B3	D1 ø H7	D2 ø	H2	L1	L3	Part no.	Type
70	59	34.5	26.52	49	0.2	1)	122	**2261462**	**KSK-A-70-...**
80	59	41	26.52	49	–		122	**562521**	**KSK-80-...**
120	94	60	41.6	81	–		192	**562522**	**KSK-120-...**

1) Inside width between the drive covers

Note

The nominal length L1 must be specified in the type code when ordering. The nominal length L1 indicates the inside width between the drive covers in this case.

Order example:
Two toothed belt axes ELGA-TB-RF-80-... are to be linked using a connecting shaft with a nominal length L1 = 1000 mm.

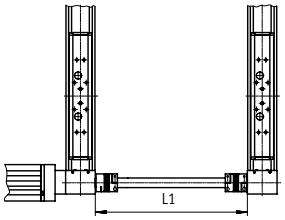
The following connecting shaft is required:
Type: KSK-80-1000
Part no. 562521

Data sheet

Connecting shafts KSK
for toothed belt axis ELGA-TB-KF

- Ø - Size
A-70, 80, 120, 185

The connecting shaft KSK-185 is used in combination with the toothed belt axis ELGA-TB-KF-150.



Nominal length L1 = Inside width between the drive covers

The total mass is calculated as follows:
$m_{total} = m_0 + m_L \times L1$

The moment of inertia is calculated as follows:
$J_{total} = J_0 + J_L \times L1$

General technical data

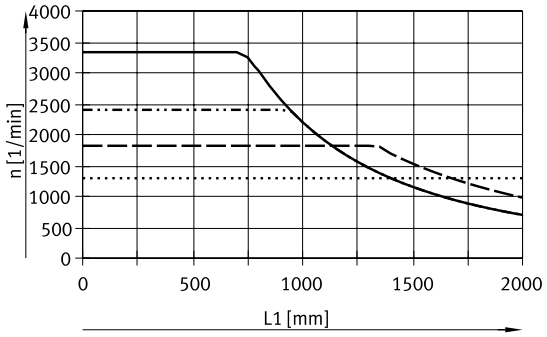
Size		A-70	80	120	185
Design		Connecting tube with a coupling at each end as well as two drive shafts for adapting the hollow shaft. With the KSK185, 2 plugs are additionally supplied for inserting into the tube ends			
Mounting position		Horizontal (vertical on request)			
Nominal length L1	[mm]	200 ... 2000		250 ... 2000	350 ... 2000
Basic moment of inertia J_0 with L1 = 0 mm	[kg mm²]	161	159	1390	7261
Additional moment of inertia J_L per 1 m nominal length	[kg mm²/m]	80	80	333	1946
Max. permissible axial offset	[mm]	±2			±5
Basic weight m_0 with L1 = 0 mm	[kg]	0.54	0.53	2.28	5.29
Additional weight m_L per 1 m nominal length	[kg/m]	0.48	0.48	0.8	1.89

Operating and environmental conditions

Ambient temperature	[°C]	–10 ... +60
Corrosion resistance CRC[1)]		2
Materials		
Coupling, hub		Wrought aluminium alloy
Coupling, bellows		High-alloy steel
Connecting tube, drive shafts		High-alloy steel
Note on materials		RoHS-compliant
		Contains paint-wetting impairment substances

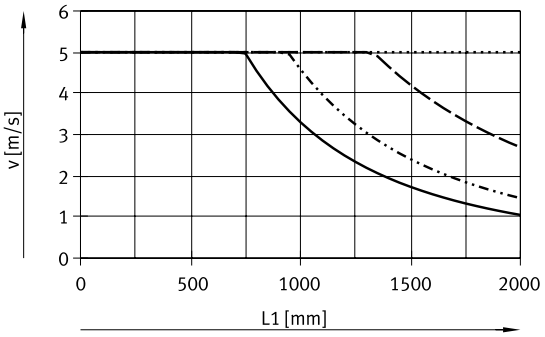
1) Corrosion resistance class CRC 2 to Festo standard FN 940070
Moderate corrosion stress. Indoor applications in which condensation can occur. External visible parts with primarily decorative surface requirements which are in direct contact with a normal industrial environment.

Max. rotational speed n as a function of nominal length L1



KSK-A-70
KSK-80
KSK-120
KSK-185

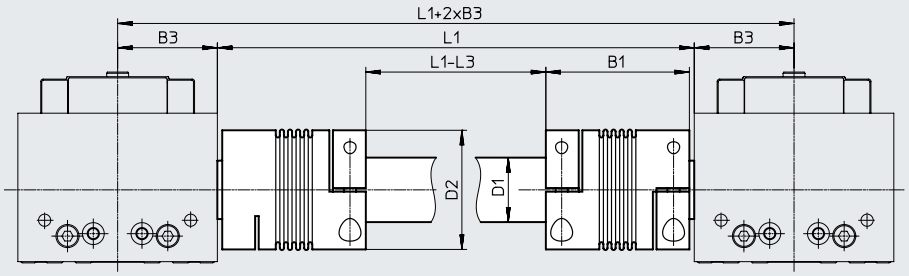
Max. velocity v as a function of nominal length L1



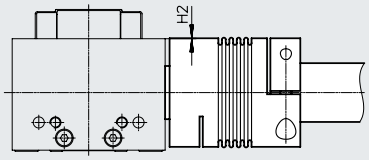
Data sheet

Dimensions and ordering data Download CAD data ➔ www.festo.com

Internal/external guide



Projection of coupling



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80	59	41	26.52	49	–		122	**562521**	**KSK-80-...**
120	94	60	41.6	81	–		192	**562522**	**KSK-120-...**
185[2)]	111	77	65.4	110	–		228	**562523**	**KSK-185-...**

1) Inside width between the drive covers

2) For ELGA-TB-KF-150

Note

The nominal length L1 must be specified in the type code when ordering. The nominal length L1 indicates the inside width between the drive covers in this case.

Order example:
Two toothed belt axes ELGA-TB-KF-80-... are to be linked using a connecting shaft with a nominal length L1 = 1000 mm.

The following connecting shaft is required:
Type: KSK-80-1000
Part no. 562521