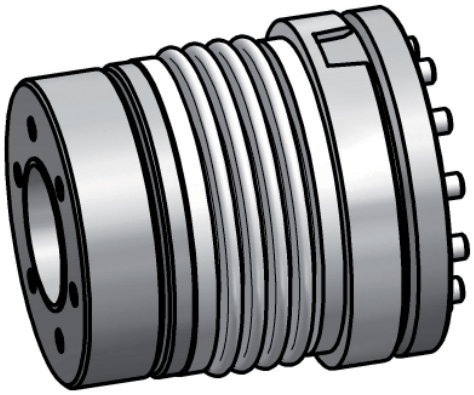
Metal bellows coupling I Series KPP-F

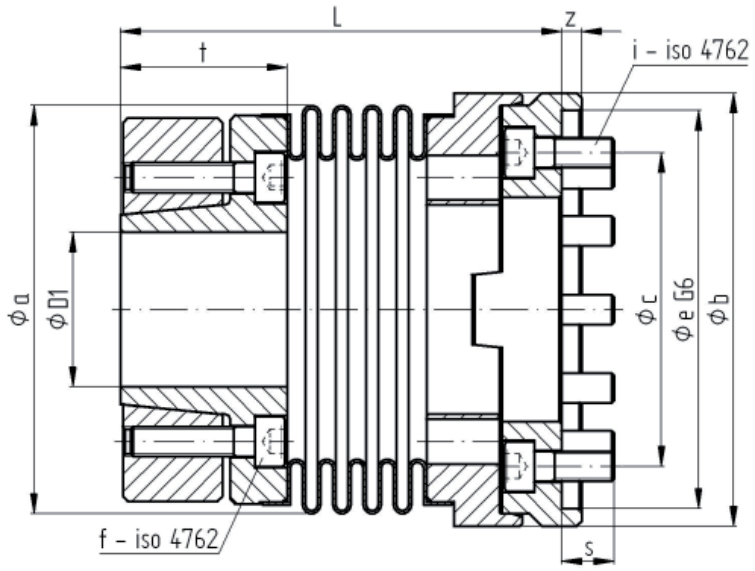
- for standardized interface connection DIN - EN - ISO 9409 - 1
- plug in design
- blind mounting possible
- conical clamping hub on output side
- sturdy whole metal version
- temperatures up to 300°C

Technical data:

KPP-F Size	nominal torque [Nm]*	ISO-9409 interface	moment of inertia [10^{-3}kgm^2]	torsional stiffness [Nm/arcmin]	max. shaft displacement (mm) axial±	lateral	axial spring rate [N/mm]	lateral spring rate [N/mm]	mass approx. [kg]	tightening torque of screws [Nm] f	i
40	40	A-31,5	0,13	4	0,5	0,15	36	180	0,4	4	8
140	140	A-50	0,77	12	0,6	0,2	120	1200	1,1	8	14
200	200	A-63	1,6	19	0,8	0,2	100	1000	1,6	14	14
400	400	A-80	4,5	45	0,7	0,2	135	1500	2,8	35	35
700	700	A-100	12	67	1	0,2	145	2800	5,5	35	65
1600	1600	A-125	29	260	1	0,3	250	1900	9,0	65	65

* allowed Maximum torque = 2x nominal torque • maximum speed up to 20.000 min^{-1}





Material: bellows: stainless steel
conical clamping hub and flange ring: heat treated, carbonized steel
keyway ring: highly tensile high-strength Aluminium or heat treated steel
screws: ISO 4762 – nickel plated

Dimensions [mm]: length dimensions according to DIN ISO 2768 cH

KPP-F	Øa	Øb	Øc	Øe	f	i	L*	s	t	z	ØD1 min	ØD1 max
40	50	48	31,5	40	6xM4	8xM5	70	7	23	3	10	20
140	71	75	50	63	6xM5	8xM6	79	9	29	4	18	32
200	82	87	63	80	6xM6	12xM6	89	10,5	33,5	4	24	35
400	101	106	80	100	6xM8	12XM8	104	13	40,5	4	25	48
700	122	137	100	130	6xM8	12xM10	120	15	48,5	4	30	60
1600	157	166	125	160	6xM10	12xM10	122	19	51	4	42	70

* length of delivery (±1mm) without axial preload - preload length at mounting = approx. 1,5 mm

Ordering example: KPP - F 140 D1 = 32 G7 / for ISO 9409 - interface A-50

Metal bellows coupling I technics Series KPE / KPP-F

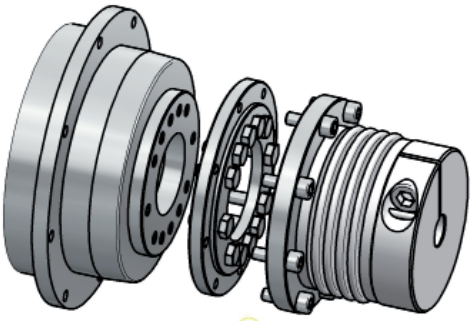
for standard flange connection DIN EN ISO 9409 - 1

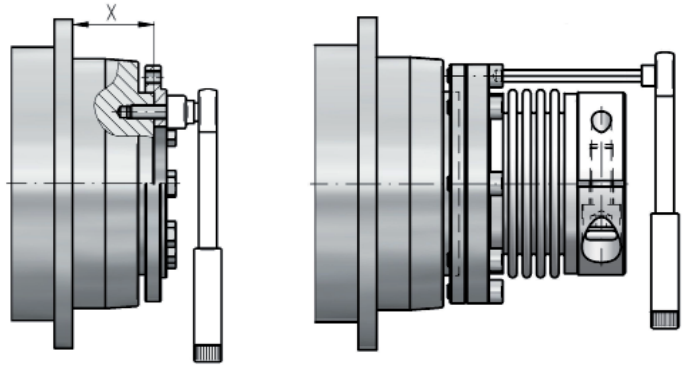
General:

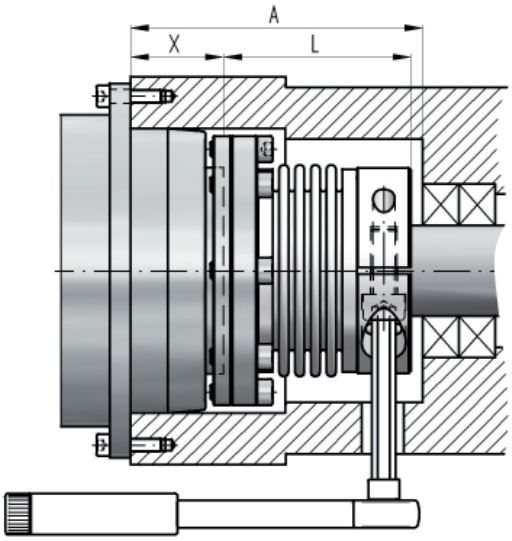
For connection of gear boxes and engines to the standard interface DIN EN 9409-1 two new series of metal bellows couplings (KPE and KPP-F) were conceived. Both types offer the specific features of metal bellows servo couplings, such as zero backlash, high torsional stiffness, compensation of misalignment or high revs and operating temperature. While the KPE series with separate flange offers compact length and easy mounting, the KPP-F series designed as a plug-in component, allows mounting in hardly accessible conditions via blind mounting and very easy dismounting.

Mounting of the KPE series:

For the connection of the KPE series to the ISO-9409 interface an intermediate flange is required. For the fastening of the coupling flange, the scews are situated above the outer diameter of the bellows. For the mounting of the output side EASY-clamping hub drive shaft connection, a radial bore is required. Installation space depth for coupling mounting must be at least A = X + L.







Mounting of the KPP-F series:

The plug-in connection of the KPP-F series were designed for applications, in which radial bore for a clamping screw is impossible or blind mounting is required in general. More detailed information can be found on the data sheet of the standard KPP series. The clamping screws of the output side cone clamping ring hub are tightened by the inside of the bellows. During plug-in mounting an axial pretension of approx. 1,5 mm of the bellows has to be maintened. Therefore, installation space depth (front face to stopring) must be A = X + L - 1,5 mm.