

Metal Bellows Coupling I Series KPS

- 4-corrugation bellows / simple installation with lateral EASY-clamping hub
- expanding cone hub for direct mounting

technical data:

KPS	T_N	moment of inertia	torsional stiffness	max. shaft misalignment (mm)		axial spring rate	lateral spring rate	tightening torque of screws	nmax.
size	[Nm]	[10^{-3}kgm^2]	[Nm/arcmin]	axial±	lateral	[N/mm]	[N/mm]	[Nm] (*)	[upm]
2	2	0,01	0,4	0,25	0,1	32	100	2/2	38000
8	8	0,026	1,9	0,5	0,15	20	90	8/8	24000
20	20	0,13	7	0,5	0,2	70	480	14/14	17000
60	60	0,25	13	0,6	0,2	70	650	35(30)*/35	16000
170	170	0,71	27	0,8	0,2	100	1000	65(50)*/65	12000
400	400	1,9	64	0,7	0,2	135	1500	115(90)*/115	10000
600	600	4,1	107	0,7	0,2	145	3000	180(140)*/180	8000

(*) note: reduced tightening torque for bigger hub bore diameter - see also $\phi D1$ max!

material:

bellows: stainless steel

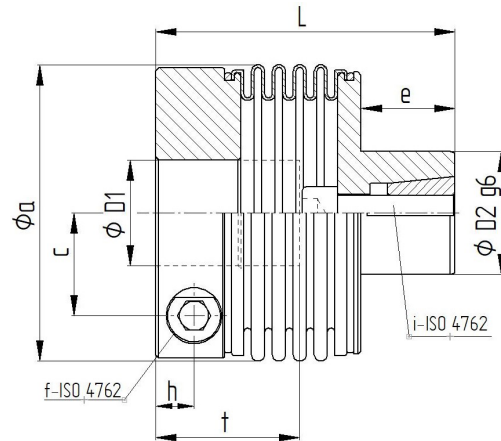
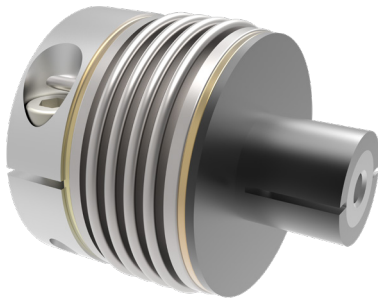
hubs: high-tensile aluminum

expanding cone: heat-treated steel

screws: ISO 4762 / 12.9

temperature range:

-40°C up to +200°C



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

KPS	ϕa	c	e	f/i	h	L	tmin	tmax	mass ~ [kg]	$\phi D1$		$\phi D2$	
										min	max	min	max
2	24,5 [27,5]	7,5	10	M 3	4,4	38	10,5	18	0,03	3	10 [14]	8	12
8	39,5 [44,5]	13	20	M 5	6	61	14	31,5	0,16	6	19 [24]	13	20
20	56	19	23	M 6	8	71,5	17	34	0,38	8	32	15	24
60	66	22	26	M 8	9	78	19	36	0,5	13	28 (35)	20	28
170	82	28,5	30	M 10	11,5	92	23	43	0,9	18	32 (43)	24	35
400	101	35	32	M 12	13	102	28	50	1,5	28	42 (55)	32	42
600	122	42	42	M 14	16	120,5	30	55	2,5	32	55 (68)	35	48

note: The corresponding shaft bores for the expansion cone pin $\phi D2$ g6 with manufacturing tolerance H7. Size KPS2 / KPS 8 without EASY version available with larger hub bores [see square brackets]

mounting instructions: To avoid damage to the metal bellows during installation avoid, the axial assembly force should not act on the clamping hub, but on the conical screw are exercised.

application example: compact and integrated attachment of a KPS

order example: KPS 20 - D1 = 15 H7 - D2 = 20 g6

