

Metall Bellows Coupling I Series KPS

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

technical data:

KPS size	T_N [Nm]	moment of inertia [10^{-3}kgm^2]	torsional stiffness [Nm/arcmin]	max. shaft misalignment (mm)		axial spring rate [N/mm]	lateral spring rate [N/mm]	tightening torque of screws [Nm]		nmax. [rpm]
				axial±	lateral			f	i	
2	2	0,01	0,4	0,25	0,1	32	100	2	2	41000
8	8	0,026	1,9	0,5	0,15	20	90	8	8	25500
20	20	0,13	7	0,5	0,2	70	480	14	14	20000
60	60	0,25	13	0,6	0,2	70	650	30	35	17000
170	170	0,71	27	0,8	0,2	100	1000	50	65	14000
400	400	1,9	64	0,7	0,2	135	1500	90	115	11000
600	600	4,1	107	0,7	0,2	145	3000	140	180	9000

material:

bellows: stainless steel

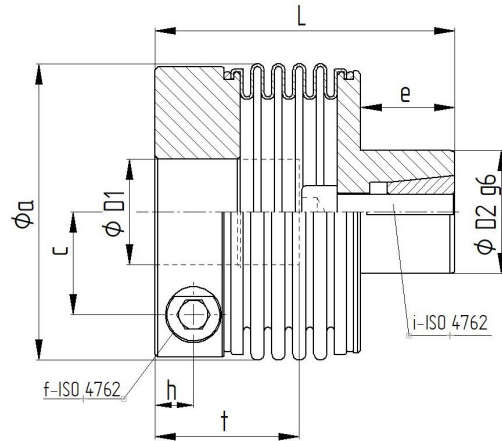
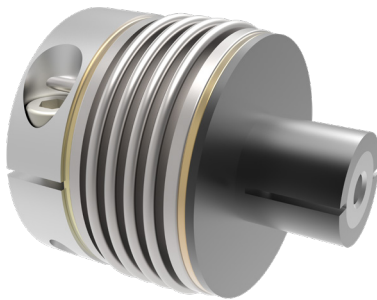
hubs: high-tensile aluminum

expanding cone: heat-treated steel

screws: ISO 4762 / 12.9

temperature range:

-40°C up to +200°C

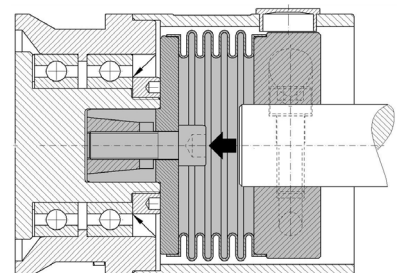


Dimensions [mm]: length dimensions according to DIN ISO 2768 cH

KPS	Ø a	c	e	f/i	h	L	tmin	tmax	mass ~ [kg]	Ø D1		Ø 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	25	M 8	9	78	19	36	0,5	13	35	20	28
170	82	28,5	30	M 10	11,5	92	23	43	0,9	18	43	24	35
400	101	35	32	M 12	13	102	28	50	1,5	30	55	32	42
600	122	42	42	M 14	16	120,5	30	55	2,5	32	68	35	48

note: The corresponding shaft bores for the expansion cone pin Ø 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