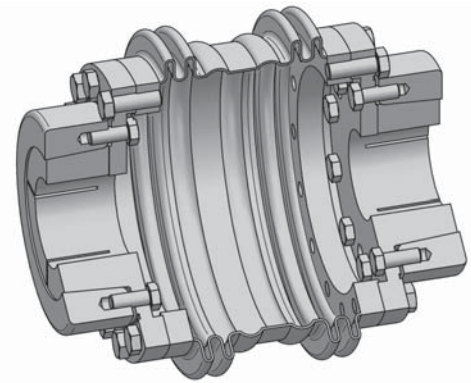


Metal bellows coupling I Series KXL

- /// for high torques up to 38.000 Nm // backlash free, exact torque transfer
- /// high torsional stiffness // low moments of inertia // high tolerance of shaft displacements
- /// three- parted construction // easy to fit // variable in use

The metal bellows couplings of the series KXL are constructed for medium- size to big drives of up to max. 38000 Nm. Although this type of coupling has proven itself reliable for years, the series was completely reworked in order to make it even more attractive regarding technical parameters as well as the aspect of costs. It is very special because of the three- parted construction with a flexible intermediate piece (bellow). This intermediate piece can be disassembled. It consists of an optimal torsionally stiff stainless steel bellow with 2 bellow shafts on each side and an intermediate pipe which is variable in length. The connection with the two hubs is frictionally engaged (screws acc. to DIN 933). Therefore, assembly is much easier as, e.g. in case of inspection or service, the heavy drive unit or the output unit need not be disassembled. The designer can chose between several hub variations (see selection table).The very good moment of inertia and the rotation symmetrical design ensure good dynamic operation characteristics. KXL-couplings are most suitable for precise drives, such as for printing machines, cross cutters, main spindle drives, transfer axis or gearbox attachment.



Material: bellows: stainless steel
 flange: heat-treated steel - black finish
 hubs: heat-treated steel - black finish, resp. GGG 60

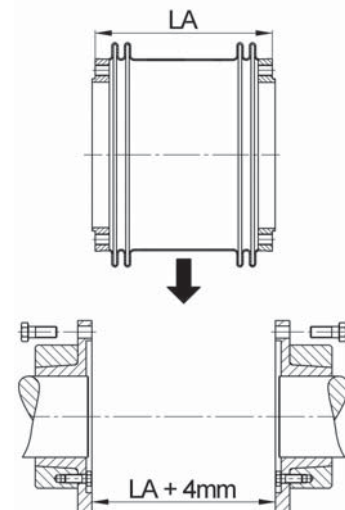
Technical data:

KXL size	torques		torsional stiffness CT [Nm/arcmin]	spring rate		max. shaft displacement		
	nominal torque TN [Nm]	max. torque Tmax [Nm]		axial Ca[N/mm]	angular Cw[N/°]	axial ± da[mm]	angular dw[°]	radial dr[mm]
3,5	3.500	5.000	550	350	25	3,2	1,3	0,8
6	6.000	8.000	960	405	40	3,5	1,3	0,9
8,5	8.500	11.000	1.360	460	55	3,8	1,3	1,2
13,5	13.500	17.000	2.200	410	70	4,4	1,3	1,3
19	19.500	24.000	3.200	415	105	4,6	1,2	1,5
30	30.000	38.000	5.300	390	150	4,8	1,2	1,6

Temperature range: -40°C up to +300°C

KXL size	mass			moments of inertia		
	per hub A/B	per hub F/G	bellows	per hub A/B	per hub F/G	bellows
	mA/mB [kg]	mF/mG [kg]	mBP [kg]	JA/JB [kgm ²]	JF/JG [kgm ²]	JBP [kgm ²]
3,5	9,7	3,3	1,7	0,06	0,02	0,02
6	13	5,7	2,6	0,11	0,04	0,03
8,5	18	7	3,5	0,16	0,06	0,05
13,5	20	8	5,1	0,22	0,08	0,11
19	32	11,5	6,6	0,47	0,18	0,19
30	58	20	9,3	1,27	0,53	0,41

Note: The specific parameters for the total weight resp. the total moment of inertia must be rounded off in dependence of length „L 16“.



Metal bellows coupling I Series KXL

Dimensions: (mm)

length dimensions according to DIN ISO 2768 cH

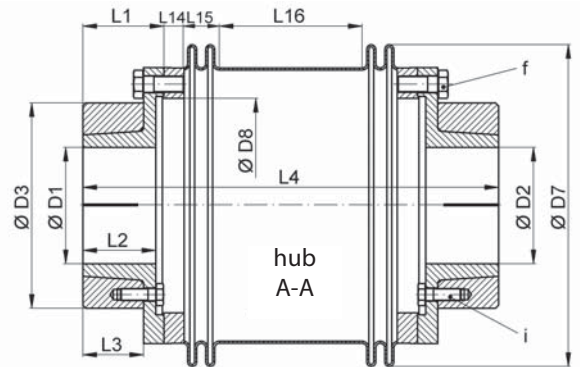
size	3,5	6	8,5	13,5	19	30
D1 min	70	75	80	90	110	130
D2 max	90	100	110	130	150	170
D3	157	175	192	205	247	296
D5	167	198	218	272	322	406
D6	65	80	80	100	130	200
D7	203	236	259	319	372	460
D8	142	176	193	208	250	325
L1	62	70	77	85	91	105
L2	53,5	60,5	66	74	79	93
L3	46	50	54	62	66	78
L4**	277	313	351	374	417	468
L5	-	20	23	23	25	27
L6	-	7,5	8,5	10	11,5	12,5
L7	-	42,5	49	55	67	68
L8	-	38	44	44	55	55
L9	-	68	75	83	89	103
L10**	-	209	239	246	281	308
L11	90	100	110	123	143	157
L14	25	28	32	22	25,5	28
L15	30	31,5	34,5	38	40	44
L16*	41	50	60	80	100	110
LA ±2	150	169	193	200	231	254
L18	17	21	21	21	25	25
L20**	142	163	179	206	241	258
L21	21	25	25	25	30	30
f	12 x M10	12 x M12	12 x M14	14 x M16	12 x M18	12 x M20
i	10x M10	9x M12	8x M14	9x M14	8x M16	10x M16
TA-f [Nm]	67	115	185	250	350	500
TA-i [Nm]	67	115	185	185	250	250

* Standard length - intermediate part: Different dimensions for L 16 possible, please advice along with the order.

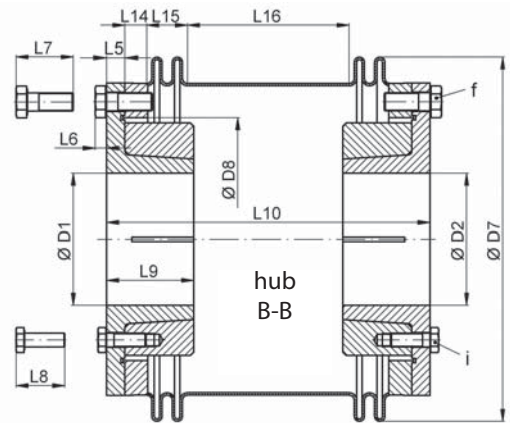
** Overall length for standard length L16

Notice:

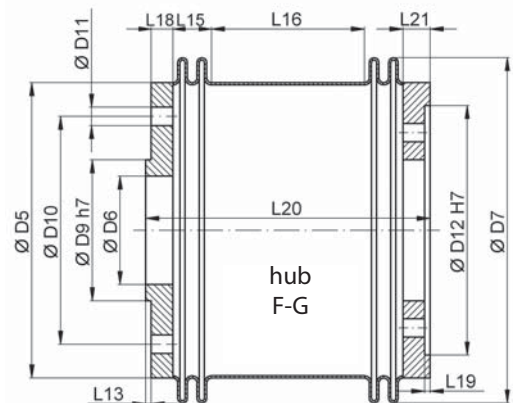
- ⚡ Tightening torques for flange hub „f“ and clamping ring hub „i“ can be taken from corresponding installation instruction
- ⚡ Dimensions of flange hub types F and G of L13, L19 and ØD6, ØD9, ØD10, ØD11, ØD12 customized.
- ⚡ Combination of different hub types are possible (see ordering example).



Hub type A:
frictional, backlash free conical
clamping ring connection, external
free radial disassembly of the bellow part



Hub type B:
frictional, backlash free conical
clamping ring connection, internal
free radial disassembly of the bellow part is not possible



Hub type F/G:
attached flange, center outside, acc. to ISO 9409
resp. customer's requirements
radial disassembly possible

Ordering example: KXL 13,5 – BG / L16 = 200 / D1 = Ø120^{G6} / D2 = kundenspezifisch