

Metal Bellows Coupling I Series KXL

- /// for high torques up to 70.000 Nm // backlash-free, exact torque transfer
- /// high torsional stiffness // low moments of inertia // high tolerance of shaft misalignments
- /// three-part 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 70.000 Nm. Although this type of coupling has proven itself reliable for years, the series was completely redesigned 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-part construction with a flexible intermediate piece (bellows). This intermediate piece can be disassembled. It consists of an optimal torsionally stiff stainless steel bellows with 2 bellows 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 ISO 4017/10.9). Therefore, assembly is much easier, as in case of inspection or service, the heavy drive unit or the output unit need not be disassembled. The designer can choose 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 those used in printing machines, cross cutters, main spindle drives, transfer axes or used in combination with gearboxes. Medium transport or a parallel drive chain through the coupling interior is possible.



material:
bellows: stainless steel
flange: heat-treated steel - oxidized
hubs: heat-treated steel - oxidized

technical data:

KXL size	nominal torque [Nm]	maximum torque [10 ⁻³ kgm ²]	torsional stiffness CT [Nm/arcmin]	spring rate		max. shaft misalignment [mm]			nmax. [upm]
				axial C _a [N/mm]	angular C _w [N/°]	axial± d _a [mm]	angular d _w [°]	lateral d _r [mm]	
9	9000	15000	1800	550	60	2,5	1,4	1,1	4500
12	12000	17000	2200	490	85	3,5	1,4	1,5	4000
18	18000	26000	3900	530	130	4	1,5	1,6	3500
32	32000	45000	7200	900	180	4	1,4	1,6	2500
50	50000	70000	13500	950	230	4	1,5	1,6	2000

maximum temperature range: -40°C up to +300°C

KXL size	mass			moments of inertia		
	per hub A/B mA/mB [kg]	per hub F/G mF/mG [kg]	bellows mBP [kg]	per hub A/B JA/JB [kgm ²]	per hub F/G JF/FG [kgm ²]	bellows JBP [kgm ²]
9	16	6,5	10,5	0,12	0,07	0,14
12	21	8	14	0,17	0,08	0,24
18	31	11	20	0,37	0,18	0,47
32	52	20	30	0,94	0,53	1,12
50	95	30	45	2,5	1,4	2,65

note: The technical data corresponds to bellows with standard length 'L16' or 'LA'. Different lengths are available on request



