BoWex®

Curved-tooth gear coupling®

Types of hubs



Type 1.0 hub with feather keyway and setscrew

Positive-locking power transmission, permissible torque depending on the permissible surface pressure. Not suitable for backlash-free power transmission with heavily reversing operation.

Type 1.1 hub

without feather keyway, with setscrew

Non-positive torque transmission for crimp connections and adhesive bonds. (No ATEX approval)

Type 1.3 hub with spline bore (see page 107)



Type 2.0 clamping hub single slot without feather keyway

Frictionally engaged, backlash-free shaft-hub-connection. Transmittable torques depending on bore diameter.

Type 2.1 clamping hub

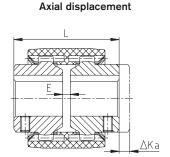
single slot with feather keyway
Positive-locking power transmission with additional friction fit. The friction fit avoids resp. reduces reverse backlash. Surface pressure of the keyway connection is reduced.

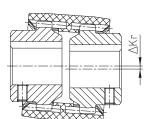
Type 2.3 clamping hub with spline bore (see page 107)

Other hub types on request.

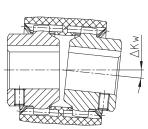
Displacements

BoWex® couplings are double-cardanic compensating for axial, radial and angular shaft displacements in addition to transmitting the power so that damage on the driving or driven machine is prevented.

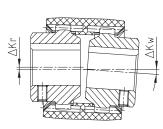




Radial displacement



Angular displacement



Radial and angular displacement

Displacements – type junior couplings												
BoWex® size	Т	ype junior plug-in couplin	ıg	Type junior M								
Dovvex™ size	14	19	24	14	19	24						
Max. axial displacement ΔK _a [mm]	± 1	± 1	± 1	± 1	± 1	± 1						
Max. radial displacement with $n=1500 \text{ rpm } \Delta K_r \text{ [mm]}$	± 0.1	± 0.1	± 0.1	± 0.3	± 0.3	± 0.4						
Max. radial displacement with n=3000 rpm ΔK_r [mm]	± 0.1	± 0.1	± 0.1	± 0.3	± 0.3	± 0.4						
Max. angular displacement with $n=1500 \text{ rpm } \Delta K_W \text{ [degree]}$	± 1.0	± 1.0	± 0.9	± 1.0	± 1.0	± 0.9						
Max. angular displacement with n=3000 rpm ΔK _W [degree]	± 0.7	± 0.7	± 0.6	± 0.7	± 0.7	± 0.6						

Displacements – type M, MC, I, AS, SpecI, SG and SSR													
BoWex [®] size	14	19	24	28	32	38	42	48	65	80	100	125	
Max. axial displacement ΔK _a [mm]	± 1	± 1	± 1	± 1	± 1	± 1	± 1	± 1	± 1	± 1	± 1	± 1	
Max. radial displacement with $n=1500 \text{ rpm } \Delta K_r \text{ [mm]}$	± 0.30	± 0.30	± 0.35	± 0.35	± 0.35	± 0.40	± 0.40	± 0.40	± 0.45	± 0.45	± 0.45	± 0.45	
Max. radial displacement with $n=3000 \text{ rpm } \Delta K_r \text{ [mm]}$	± 0.20	± 0.20	± 0.23	± 0.23	± 0.23	± 0.25	± 0.25	± 0.25	± 0.28	± 0.28	± 0.28	± 0.28	
Max. angular displacement with $n=1500 \text{ rpm } \Delta K_W \text{ [degree]}$	± 1.0	± 1.0	± 0.9	± 0.9	± 0.9	± 0.9	± 0.9	± 0.9	± 0.7	± 0.6	± 0.6	± 0.4	
Max. angular displacement with n=3000 rpm ΔK _W [degree]	± 0.7	± 0.7	± 0.6	± 0.6	± 0.6	± 0.6	± 0.6	± 0.6	± 0.5	± 0.4	± 0.4	± 0.3	

	Displacements – type GT				Displacements – type HEW Compact														
BoWex [®] size	28	38	48	65	42-130		65-180		80-225				100-30	5	125-365				
Elastomer hardness [Shore A]					T50	T65	T70	T50	T65	T70	T50	T65	T70	T50	T65	T70	T40	T52	T65
Max. axial displacement ΔKa [mm]	± 1	± 1	± 1	± 1	± 2			± 2			± 2			± 2			± 2		
Max. radial displacement with n=1500 rpm ΔK _r [mm]	± 1	± 1	± 1.4	± 1.4	± 1.1	± 1	± 0.5	± 1.6	± 1.5	± 0.7	± 1.8	± 1.7	± 2.2	± 2.2	± 2	± 1	± 2.5	± 2.3	± 1.1
Max. radial displacement with n=3000 rpm ΔK _r [mm]	± 0.6	± 0.6	± 1	± 1	± 0.55	± 0.5	± 0.25	± 0.8	± 0.75	± 0.35	± 0.9	± 0.85	± 0.9	± 1.1	± 1	± 0.5	± 1.25	± 1.15	± 0.55
Max. angular displacement with n=1500 rpm ΔK _W [degree]	± 1	± 1	± 0.9	± 0.9	± 1	± 0.75	± 0.5	± 1	± 0.75	± 0.5	± 1	± 0.75	± 0.4	± 1	± 0.75	± 0.5	± 1	± 0.75	± 0.5
Max. angular displacement with n=3000 rpm ΔK _W [degree]	± 0.7	± 0.7	± 0.6	± 0.6	± 0.5	± 0.4	± 0.25	± 0.5	± 0.4	± 0.25	± 0.5	± 0.4	± 0.5	± 0.5	± 0.25	± 0.25	± 0.5	± 0.4	± 0.25

The permissible displacement figures of the BoWex® couplings specified are general standard values taking into account the load of the coupling up to the rated torque TKN of the coupling.

With different operating conditions please order our data sheet for displacements of BoWex® KTR-N 20140.

The displacement figures may only be used one by one, if they appear simultaneously, they must be limited in proportion. Care should be taken to maintain the distance dimension E accurately in order to allow for axial clearance of the coupling while in operation. Detailed mounting instructions are shown on our homepage www.ktr.com.