

Reliable in every environment.



The GEARex® is ideally suited for use in harsh environments, such as those encountered in the iron or steel industry. This coupling is not only resistant to dust, dirt, water and vibrations – it also has no trouble handling high temperatures, alternating forces and shaft misalignments. Thanks to its excellent torque-size ratio, it can be deployed almost anywhere. Torques of up to 620,000 Nm can be transmitted as standard with the designs DA, DB and DAB. The transmissible torque can be increased even further through use of special materials.

Highlights

- Optimum torque-size ratio
- Torque transmission up to 1,050,000 Nm through use of special materials
- High operational reliability and long service life
- Large range of variants (also suitable for vertical installation)
- Coupling complies with the AGMA standard and is available in an ATEX version

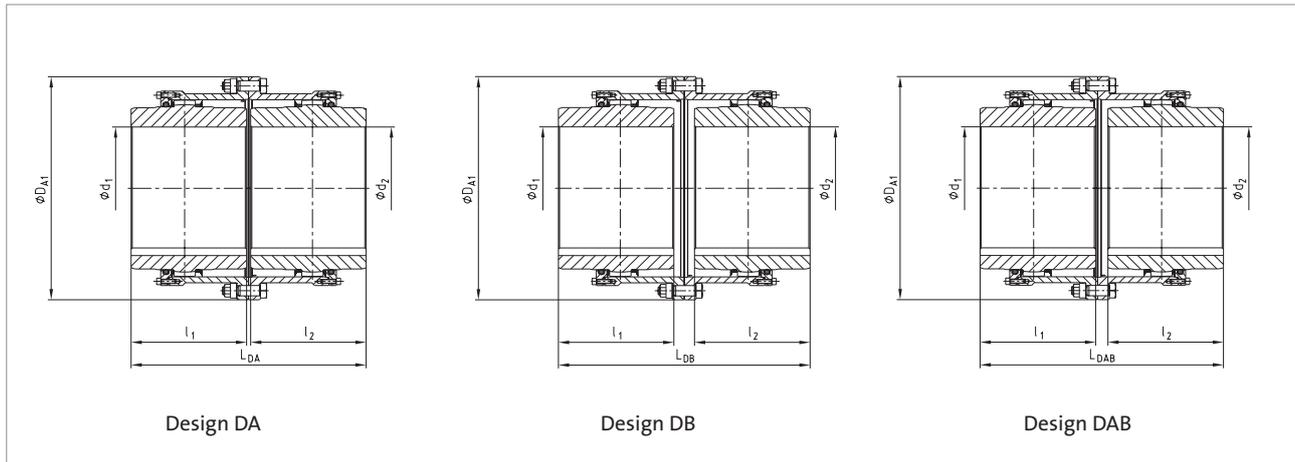
GEARex® – Design DA, DB, DAB

Torsionally rigid shaft coupling

Structure/function

GEARex® steel couplings with grease lubrication and toroidal sealing ring are flexible, double-cardanic shaft connections for positive-fit torque transmission that are well suited to shaft misalignment compensation. This coupling is particularly low-wear because it uses the crowned-gear principle.

Edge pressure in the tothing is avoided in the case of angular and radial misalignment. This allows a particularly long service life to be achieved. Two lubrication connections are provided opposite one another radially on each coupling casing for regular, controlled lubrication when fitted.



GEARex® DA, DB, DAB technical specifications and main dimensions

Size	Max. finished bore d_1/d_2 [mm]	Torque		Max. speed [rpm]	Dimensions				
		T_{KN} [Nm]	T_{KN} (42CrMo4) [Nm]		D_{A1} [mm]	L_{DA} [mm]	L_{DB} [mm]	L_{DAB} [mm]	l_1/l_2 [mm]
20	80	3,500	6,300	6,900	187	133	155	144	62
25	98	6,500	11,000	6,200	220	157	181	169	76
30	112	10,000	17,400	5,800	248	185	213	199	90
35	133	17,000	28,800	5,100	285	216	250	233	105
40	158	28,500	48,500	4,500	335	246	282	264	120
45	172	37,000	62,000	4,000	358	278	320	299	135
50	192	51,000	86,000	3,750	390	308	356	332	150
55	210	65,000	110,000	3,550	425.5	358	420	389	175
60	232	85,000	145,000	3,400	457	388	464	426	190
70	276	135,000	240,000	3,200	527	450	516	483	220
80	300	175,000	300,000	1,900	545	570	610	590	280
85	325	225,000	380,000	1,900	585	597	637	617	292
90	350	290,000	500,000	1,700	640	623	693	658	305
100	390	380,000	650,000	1,600	690	673	753	713	330
110	420	480,000	820,000	1,450	765	720	996	858	350
120	450	620,000	1,050,000	1,350	825	864	1261	1063	420

T_{KN} ... Rated torque

We are happy to help and advise you with your individual dimensioning requirements.