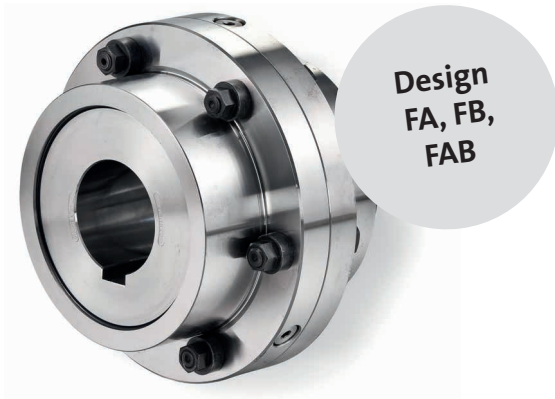


# Reliable in every environment.



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 135,000 Nm can be transmitted as standard with the designs FA, FB and FAB. The transmissible torque can be increased even further through use of special materials.

## Highlights

- Optimum torque-size ratio
- Torque transmission up to 240,000 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

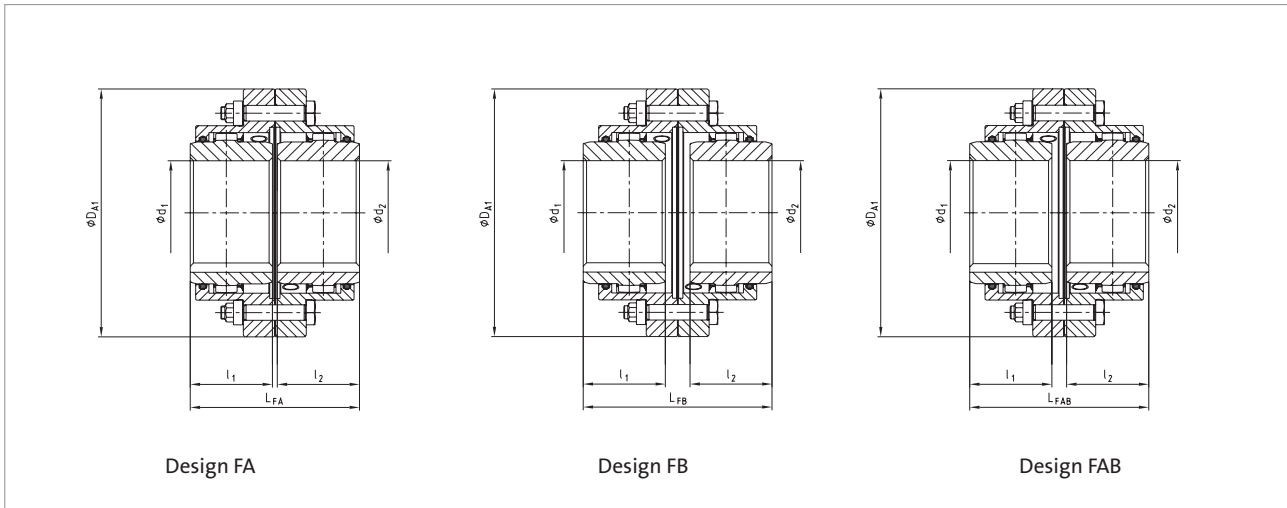
# GEARex® – Design FA, FB, FAB

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 toothing 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. Torques of up to 1,050,000 Nm can be implemented using design DA, DB and DAB.



## GEARex® FA, FB, FAB 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]	$L_{FA}$ [mm]	$L_{FB}$ [mm]	$L_{FAB}$ [mm]	$l_1/l_2$ [mm]
10	50	930	1,580	8,500	111	89	107	98	43
15	64	2,000	3,300	7,700	152	103	115	109	50
20	80	3,500	6,300	6,900	178	127	155	141	62
25	98	6,500	11,000	6,200	213	157	181	169	76
30	112	10,000	17,400	5,800	240	185	213	199	90
35	133	17,000	28,800	5,100	280	216	250	233	105
40	158	28,500	48,500	4,500	318	246	282	264	120
45	172	37,000	62,000	4,000	347	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

$T_{KN}$  ... Rated torque

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