ArcOflex®

Torsionally rigid shaft coupling

Robust, maintenance-free and made entirely of steel.

The ArcOflex® is an extremely robust all-steel shaft coupling. The diaphragm packs are made of stainless steel and boast a high capacity to compensate for shaft misalignment with low restoring forces. They have been optimised using the finite element method (FEM). The comprehensive modular system allows a large number of variation options – even in the high temperature range.

Highlights

- Single or double-cardanic design options
- Standard torque transmission up to 23,000 Nm
- Can be used at high temperatures
- Maintenance-free
- Long service life
- Large range of variants

Lenze SELECTION

ArcOflex®

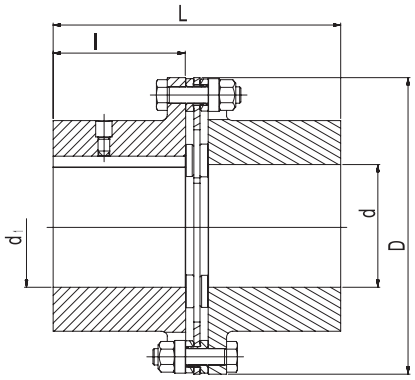
Torsionally rigid shaft coupling

Structure/function

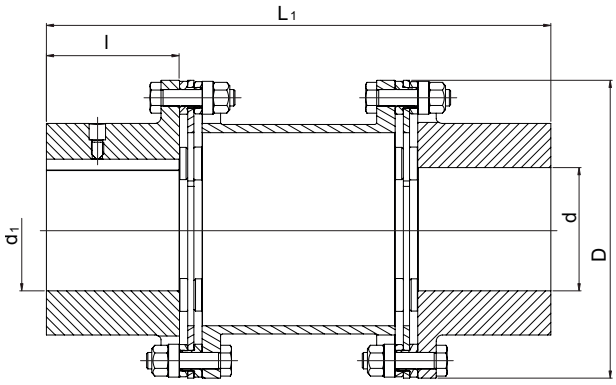
The ArcOflex® offers torsionally rigid and backlash-free torque transmission. When it is dimensioned correctly and installed professionally, users can expect a virtually unlimited service life. The simple cardanic design (Design 1) reliably compensates for axial and angular shaft misalignments. The double-cardanic design (Design 2) also reliably compensates for radial shaft misalignments. Thanks to the flexible modular system, a large number of variations are possible.

The various installation methods for the hubs with design 2 and the use of individual intermediate pieces facilitate variable installation lengths.

The diaphragm packs, made of stainless steel and optimised using FEM, are connected to the hub flanges using fitting bolts.



Design 1



Design 2

ArcOflex® technical specifications and main dimensions

Size	Min/max. finished bore	Torque		Max. speed	Dimensions			
	d/d_1 with NnD 6885/1 [mm]	T_{KN} [Nm]	T_{KW} [Nm]	[rpm]	D [mm]	L [mm]	L_1 [mm]	l [mm]
55	25 ... 65	800	250	6,700	128	121	206	55
65	30 ... 75	1,200	300	5,900	145	141	246	65
75	35 ... 85	1,800	550	5,100	168	164	286	75
80	35 ... 90	2,800	850	4,750	180	175	300	80
85	40 ... 100	4,500	1,600	4,300	200	175	300	80
90	45 ... 110	6,000	1,900	4,000	215	200	340	90
98	50 ... 120	9,000	3,500	3,400	250	223	370	100
120	80 ... 150	23,000	4,100	2,800	310	264	452	120

T_{KN} ... Rated torque with angular misalignment of 0.5° per diaphragm pack

T_{KW} ... Alternating torque with alternating load and max. angular misalignment

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