

Torsionally Rigid All-Steel Couplings ARPEX Series

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FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX Series

General information

Overview



ARPEX couplings have proved themselves for over 30 years in all areas of technology where reliable, maintenance-free torque transmission is required. ARPEX couplings link machine shafts and compensate for shaft misalignments, while generating only low restorative forces. Thanks to the use of spring steel plates and backlash-free screw connections, ARPEX couplings are torsionally rigid and backlash-free. All ARPEX coupling components are manufactured from high-quality steel. Robust, compact construction guaranteeing a high level of operational reliability and a long service life is therefore possible. High-precision production ensures that at speed in the assembled condition only low forces act on the machine parts connected to them. ARPEX couplings can be used for both directions of rotation and are thus also suitable for reverse operation.

ARPEX couplings are not subject to wear and, if correctly designed, assembled and installed, can be expected to have an unlimited service life. With most types the intermediate spacer can be fitted radially without having to move the driving and driven machines.

Thanks to a large number of standard components ARPEX couplings can be combined to make many different types. In this way, standard types can be used with many drives.

ARPEX couplings can withstand temperatures between -40 °C and $+280\text{ °C}$ in operation. On request, they can also be specially equipped for use in other temperature ranges.



ARPEX coupling optionally suitable for potentially explosive environments.

Complies with Directive 94/9/EC for:

CE Ex II 2G T2/T3/T4/T5/T6
 $-40\text{ °C} \leq T_a \leq +230\text{ °C}/+150\text{ °C}/+85\text{ °C}/+50\text{ °C}/35\text{ °C}$

CE Ex II 2D T 120 °C $-40\text{ °C} \leq T_a \leq +70\text{ °C}$

CE Ex I M2



To meet the high quality demands made of ARPEX couplings, the development and manufacture of ARPEX couplings is integrated into a certified quality management system in accordance with the requirements of DIN EN ISO 9001.

Type approval for use of ARPEX couplings in shipbuilding has been issued by the following classification societies: American Bureau of Shipping (ABS), Det Norske Veritas (DNV), Germanischer Lloyd (GL) and Lloyd's Register of Shipping. Product certification to GOST-R for the Russian market has already been obtained.

Design

ARPEX couplings are manufactured completely from steel. Torque is transmitted by means of torsionally rigid, flexible plates. The plates are held together by a sleeve and ring to form a compact plate pack. This ensures easy, operationally safe installation. Two plate packs fastened alternately to the flanges permit compensation of shaft misalignments in an angular, radial and axial direction. On coupling types with a single plate pack only angular and axial misalignments are possible.

Materials

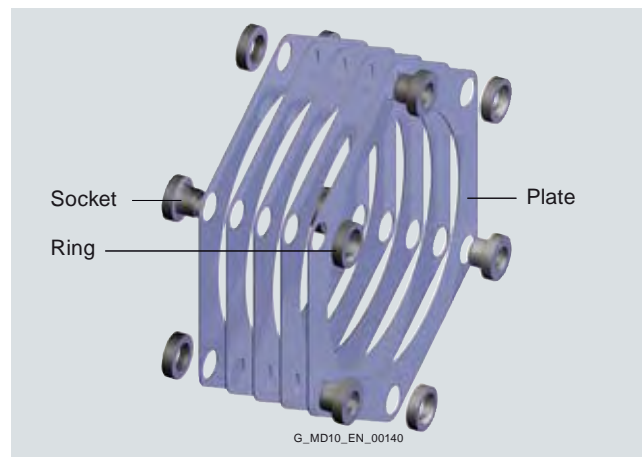
All coupling parts like hubs, spacers and flanges are manufactured from high-grade steel; the plates are made from stainless, hard-rolled CrNi spring steel. Bolts and nuts are of quality 10.9 or 10.

Application

ARPEX couplings are available as a catalog standard from 92 Nm to 1450000 Nm and are divided into various series. Because of this series diversity, ARPEX couplings meet most torque and speed requirements as a universal coupling solution in general mechanical engineering. The individual series and their corresponding possible applications are described in full in the following sections.

Plate pack

The flexible elements in an ARPEX coupling take the form of plate packs. The individual, thin plates are held together by a socket and ring to form a compact plate pack. The picture below shows the structure of a ring plate pack.

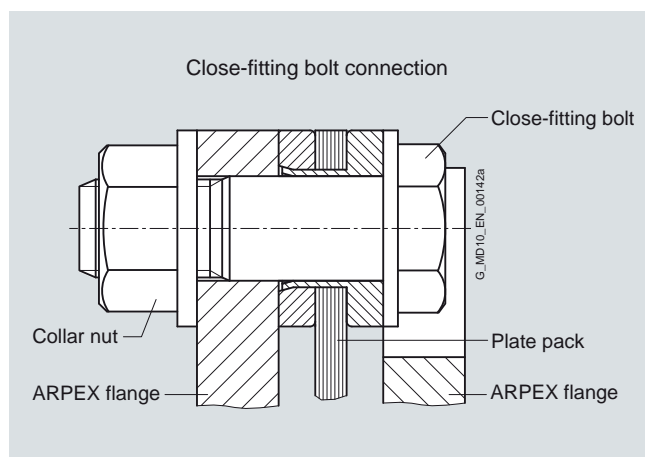
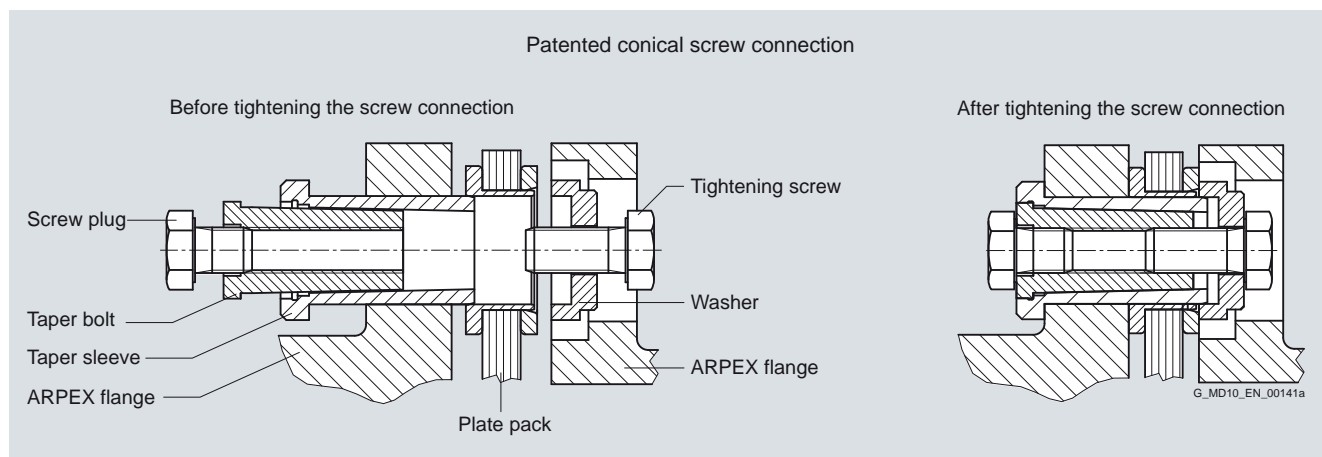


FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX Series

General information

Plate pack screw connection



Features of plate pack screw connection

Up to bolt size M22, the plate pack screw connection on ARPEX couplings is in the form of a close-fitting bolt connection. After that the patented conical screw connection is used. The decisive advantage of this screw connection is considerably simplified fitting. The use of an hydraulic fitting tool is no longer necessary. All sizes can be fitted with a torque wrench.

A further feature of the conical screw connection is the genuine positive connection resulting in high centering accuracy and, thus, a high balancing quality. Material: High-grade quenched and tempered steel.

The conical screw connection is used for the following coupling sizes:

- ARS-6 series: size 305-6 to 602-6
- ARC-8/-10 series: all sizes
- ARP-6 series: type NAN, size 325-6;
type MCECM, size 310 and 345-6
- ARW-4/-6 series: size 324-4 to 880-6

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

General information

Overview



Coupling can be designed for potentially explosive environments.

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Benefits

ARPEX couplings of the ARS-6 series are outstanding for their versatility. Most standard components are available from stock, resulting in short delivery times. Their use in potentially explosive environments in accordance with Directive 94/9/EC is possible.

Application

ARPEX couplings of the ARS-6 series are a versatile coupling solution which thanks to standard modular components can be used for most drive requirements at a low to medium speed. Torques of between 170 and 106000 Nm can be transmitted at a permitted angular misalignment of 0.7°. The open flange form is regarded as very easy to fit and has easily accessible screw connection points. On most types, the intermediate spacer can be radially fitted without moving the connected units.

Main areas of application for the ARS-6 series:

- Paper-making machines
- Printing machines
- Compressors
- Pumps
- Fans and blowers
- Film and foil machines
- Generators
- Presses
- Metalworking machines
- Conveyors
- Crane systems
- Textile machines
- Plastics processing machines
- Centrifuges

FLENDER Standard Couplings

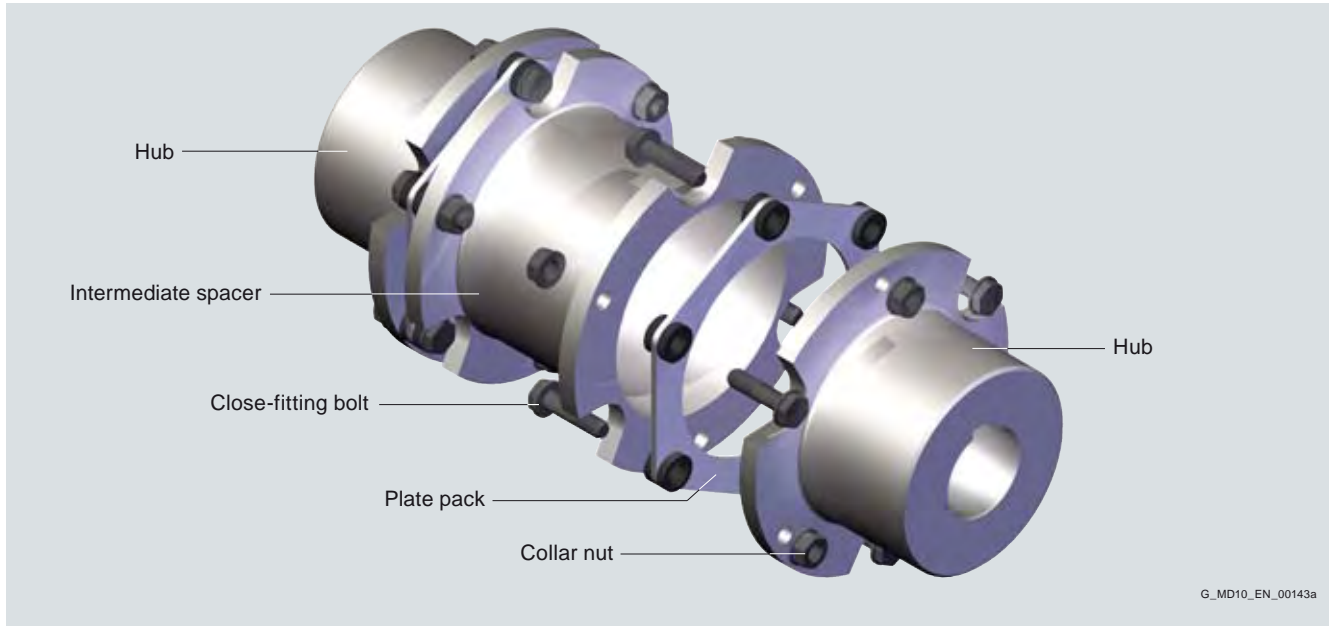
Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

General information

Design

The classic design of an ARPEX couplings of the ARS-6 series is shown in the following illustration. The plate packs are bolted alternately between the flanges of the coupling hubs and the intermediate spacer. Up to size 280-6 close-fitting bolts and from size

305-6 conical screw connections are used for fastening. A large number of intermediate spacer and shafts, hubs and flanges can be combined and thus cover a large number of possible drive requirements.



Design of an ARPEX coupling, ARS-6 series, type NEN

Variants of the ARPEX coupling, ARS-6 series

Types	
NEN, BEN, BEB	Variant with standard intermediate spacer, many sizes available from stock
NON, BON	Variant with shortest intermediate spacer
NUN, BUN, BUB	Variant with split intermediate spacer
NHN	Variant with intermediate spacer for customer-specific shaft distance
NZN	Variant with reinforced intermediate spacer
NWN	Variant with intermediate shaft

All coupling types can be very easily combined with further standard components in the ARPEX modular system. Jumbo hubs are used to permit larger maximum bores.

Clamping hubs transmit torque by friction without the use of parallel keys.

F, D and C flanges offer many different possibilities for flange connection.

The coupling parts of the ARPEX ARS-6 series are machined on all sides. Exceptions are H and Z spacers and intermediate shafts. The spacers are delivered with unmachined, primed spacer tube.

Higher torques and maximum speeds with similar coupling outer diameters DA can be achieved with the ARPEX ARC-8/-10 series.

Further application-specific coupling types are available in selection module **X.CAT NG** at www.siemens.com/couplings. Dimension sheets and further information are available on request.

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

General information

Technical data

Power ratings

Size DA	Rated torque T_{KN}	Maxi- mum torque T_{Kmax}	Over- load torque T_{KOL}	Fatigue torque T_{KW}	Maxi- mum speed n_{Kmax}	Maximum permitted shaft misalignment			Torsional stiffness							
						$\pm\Delta K_a$	$\pm\Delta K_w$	$\pm\Delta K_r$	C_{Tdyn}							
									NHN NZN NWN	NEN/ BEN/ BUN/ BUB	NON BON	NEN BEN/ BEB	NUN BUN/ BUB	NON BON	NHN	NZN
Nm	Nm	Nm	Nm	rpm	mm	mm	mm	MNm/rad	MNm/rad	MNm/rad	MNm/rad	MNm/rad	MNm/rad	MNm/rad		
78-6	170	320	510	85	13400	1.10	0.7°	12.1	0.57	0.53	0.05	0.04	0.05	0.012	0.032	0.05
105-6	270	510	810	135	10000	1.80		12.1	0.88	0.53	0.09	0.09	0.09	0.024	0.070	0.09
125-6	490	930	1470	245	8400	2.02		12.1	1.04	0.68	0.17	0.17	0.18	0.043	0.141	0.19
140-6	700	1330	2100	350	7500	2.40		12.1	1.28	0.72	0.22	0.22	0.24	0.066	0.203	0.25
165-6	1250	2370	3750	625	6350	2.74		12.0	1.49	0.84	0.33	0.34	0.36	0.114	0.317	0.39
175-6	2000	3800	6000	1000	6000	2.86		12.0	1.55	0.98	0.48	0.50	0.52	0.196	0.443	0.57
195-6	3000	5700	9000	1500	5350	3.06		12.0	1.55	0.98	0.67	0.69	0.73	0.302	0.614	0.79
210-6	4400	8300	13200	2200	5000	3.14		12.0	1.77	1.10	0.77	0.78	0.82	0.352	0.669	0.88
240-6	5700	10800	17100	2850	4350	3.70		12.0	1.93	1.20	1.24	1.26	1.32	0.568	1.04	1.40
255-6	7600	14400	22800	3800	4100	3.84		11.9	2.09	1.50	1.39	1.42	1.46	0.697	1.22	1.57
280-6	10000	19000	30000	4600	3750	4.18		11.9	2.53	1.53	1.55	1.57	1.65	0.881	1.42	1.73
305-6	12000	21000	36000	5000	3400	4.46		11.9	2.72	1.80	2.83	2.87	3.05	1.51	2.71	3.32
335-6	18000	32000	54000	7500	3100	4.84		11.9	2.88	1.89	3.85	3.92	4.14	2.11	3.62	4.49
372-6	24000	43000	72000	10000	2800	4.98		11.8	3.03	2.16	5.72	5.84	6.12	3.14	–	6.75
407-6	34000	61000	102000	14000	2550	5.50		11.8	3.31	2.26	7.25	7.42	7.79	5.06	–	8.51
442-6	43000	77000	129000	18000	2350	6.02		11.8	3.59	2.48	10.0	10.2	10.8	7.42	–	11.9
487-6	55000	99000	165000	23000	2150	6.80		11.7	4.09	2.64	11.7	11.9	12.7	9.25	–	13.6
522-6	69000	124000	207000	29000	2000	7.34		11.7	4.35	2.86	14.0	14.3	15.1	11.4	–	16.2
572-6	92000	166000	276000	38000	1800	7.86		11.6	4.87	3.02	17.9	18.3	19.4	15.2	–	20.7
602-6	106000	191000	318000	44000	1700	8.24		11.6	5.13	3.24	21.1	21.7	22.9	18.2	–	24.5

The permitted shaft misalignments ΔK_a , ΔK_r and ΔK_w are maximum values and must not occur at the same time (see following table).

The permitted shaft misalignment ΔK_r for types NHN, NZN and NWN applies to a coupling with shaft distance $S = 1000$ mm.

For other shaft distances, the permitted radial misalignment can be determined with the following formula:

$$\Delta K_r = (S - S1) \cdot \tan(\Delta K_w)$$

The shaft distance S is shown in the table for the type.

T_{Kmax} permitted only five times per hour.

The values for torsional stiffness apply to the complete coupling. In the case of types NHN and NZN to a coupling with shaft distance $S = 1000$ mm. In the case of type NWN, the torsional stiffness applies to a coupling without intermediate or torsion shaft. The torsional stiffness of the plate packs applies to the rated coupling torque T_{KN} . To determine the torsional stiffness for a specific operating point, e.g. for calculating torsional vibration, the manufacturer must be consulted.

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

General information

Permitted shaft misalignments

Size	Permitted angular misalignment $\pm\Delta K_w$								
	0.0°	0.1°	0.2°	0.3°	0.4°	0.5°	0.6°	0.7°	
DA	Permitted axial misalignment $\pm\Delta K_a$ in mm								
78-6	1.10	0.94	0.79	0.63	0.47	0.31	0.16	0.00	
105-6	1.80	1.54	1.29	1.03	0.77	0.51	0.26	0.00	
125-6	2.02	1.73	1.44	1.15	0.87	0.58	0.29	0.00	
140-6	2.40	2.06	1.71	1.37	1.03	0.69	0.34	0.00	
165-6	2.74	2.35	1.96	1.57	1.17	0.78	0.39	0.00	
175-6	2.86	2.45	2.04	1.63	1.23	0.82	0.41	0.00	
195-6	3.06	2.62	2.19	1.75	1.31	0.87	0.44	0.00	
210-6	3.14	2.69	2.24	1.79	1.35	0.90	0.45	0.00	
240-6	3.70	3.17	2.64	2.11	1.59	1.06	0.53	0.00	
255-6	3.84	3.29	2.74	2.19	1.65	1.10	0.55	0.00	
280-6	4.18	3.58	2.99	2.39	1.79	1.19	0.60	0.00	
305-6	4.46	3.82	3.19	2.55	1.91	1.27	0.64	0.00	
335-6	4.84	4.15	3.46	2.77	2.07	1.38	0.69	0.00	
372-6	4.98	4.27	3.56	2.85	2.13	1.42	0.71	0.00	
407-6	5.50	4.71	3.93	3.14	2.36	1.57	0.79	0.00	
442-6	6.02	5.16	4.30	3.44	2.58	1.72	0.86	0.00	
487-6	6.80	5.83	4.86	3.89	2.91	1.94	0.97	0.00	
522-6	7.34	6.29	5.24	4.19	3.15	2.10	1.05	0.00	
572-6	7.86	6.74	5.61	4.49	3.37	2.25	1.12	0.00	
602-6	8.24	7.06	5.89	4.71	3.53	2.35	1.18	0.00	

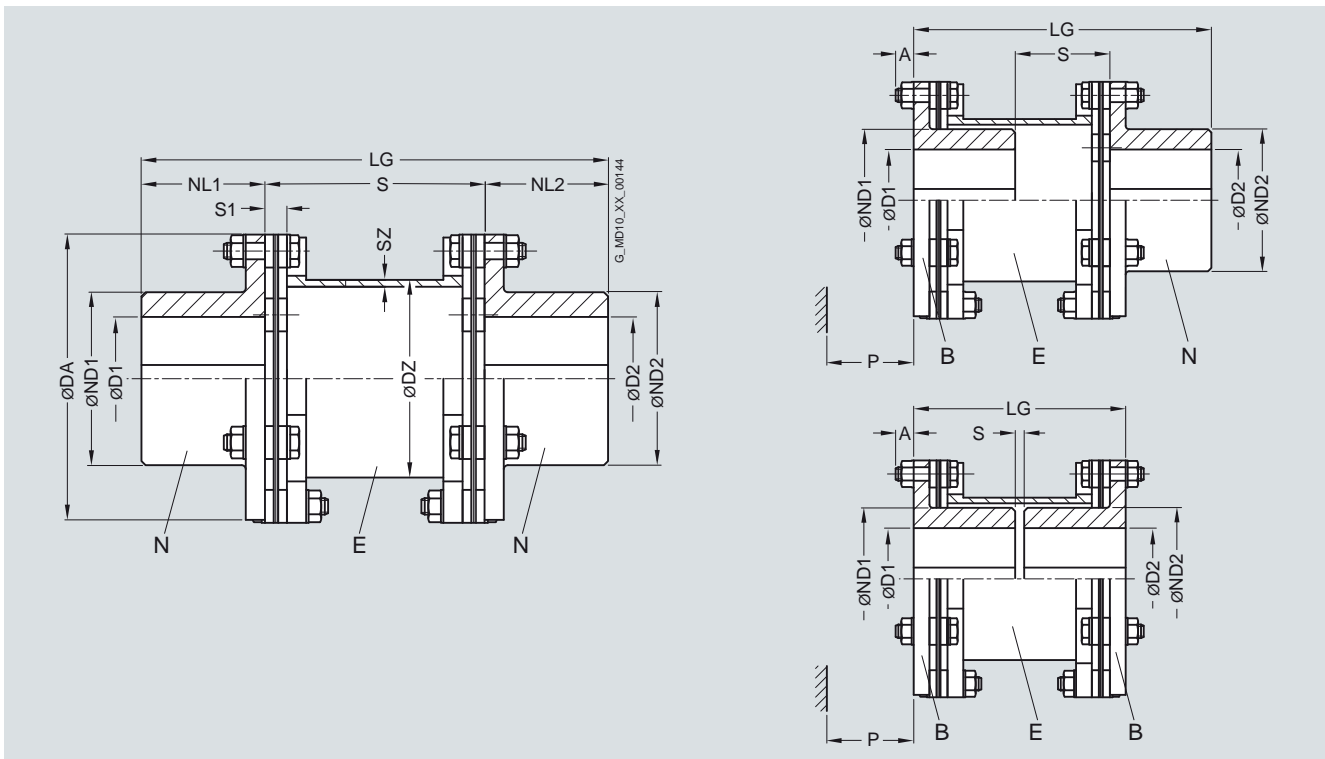
FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Type NEN

Selection and ordering data

Torsionally rigid coupling type NEN with radially freely dismountable intermediate spacer. Types BEN and BEB cannot be dismounted radially without moving the units. On type BEB, the smallest possible shaft distance can be achieved.



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Size	Rated torque	Maximum speed	Type	Dimensions in mm								Shaft distance	Mass moment of inertia			Product code	Weight	
DA	T_{KN}	n_{Kmax}		D1	D2	ND1	ND2	DZ	SZ	NL1/ NL2	S1	S	A	P	LG	J	Order codes for bore diameters and tolerances are specified in catalog section 3	m
mm	Nm	rpm		max.	max.											kgm ²		kg
78-6	170	13400	NEN	28	28	39	39	45	2.5	30	8	55	–	–	115	0.001	2LC0470-0NS99-0AA0	1.2
			BEN										32	8	29	92	2LC0470-0AK99-0AA0	
			BEB										9			69	2LC0470-0AC99-0AA0	
105-6	270	10000	NEN	45	45	63	63	72	2.5	45	8	80	–	–	170	0.003	2LC0470-1NS99-0AA0	2.5
			BEN										42	8	29	132	2LC0470-1AK99-0AA0	
			BEB										4			94	2LC0470-1AC99-0AA0	
125-6	490	8400	NEN	55	55	76	76	84	2.5	55	11	96	–	–	206	0.009	2LC0470-2NS99-0AA0	4.5
			BEN										50	10	37	160	2LC0470-2AK99-0AA0	
			BEB										4			114	2LC0470-2AC99-0AA0	
140-6	700	7500	NEN	65	65	91	91	99	2.5	65	11	116	–	–	246	0.015	2LC0470-3NS99-0AA0	6.4
			BEN										60	10	37	190	2LC0470-3AK99-0AA0	
			BEB										4			134	2LC0470-3AC99-0AA0	
165-6	1250	6350	NEN	75	75	105	105	114	2.5	75	14	136	–	–	286	0.032	2LC0470-4NS99-0AA0	9.7
			BEN										70	12	45	220	2LC0470-4AK99-0AA0	
			BEB										4			154	2LC0470-4AC99-0AA0	
175-6	2000	6000	NEN	80	80	110	110	120	3.0	80	15	142	–	–	302	0.048	2LC0470-5NS99-0AA0	12.5
			BEN										74	15	52	234	2LC0470-5AK99-0AA0	
			BEB										6			166	2LC0470-5AC99-0AA0	
195-6	3000	5350	NEN	90	90	120	120	131	3.0	80	15	142	–	–	302	0.073	2LC0470-6NS99-0AA0	14.9
			BEN										74	14	52	234	2LC0470-6AK99-0AA0	
			BEB										6			166	2LC0470-6AC99-0AA0	

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Type NEN

Size	Rated torque	Maximum speed	Type	Dimensions in mm										Mass moment of inertia	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight		
				D1, D2 Keyway DIN 6885 max. max.	ND1	ND2	DZ	SZ	NL1/ NL2	S1	Shaft distance	A	P				LG	J
mm	Nm	rpm													kgm ²		kg	
210-6	4400	5000	NEN	95	95	126	126	139	4.0	90	15	160	–	–	340	0.109	2LC0470-7NS99-0AA0	19.5
			BEN									83	20	61	263		2LC0470-7AK99-0AA0	
			BEB									6			186		2LC0470-7AC99-0AA0	
240-6	5700	4350	NEN	110	110	145	145	162	5.0	100	18	176	–	–	376	0.210	2LC0470-8NS99-0AA0	28.4
			BEN									91	18	66	291		2LC0470-8AK99-0AA0	
			BEB									6			206		2LC0470-8AC99-0AA0	
255-6	7600	4100	NEN	115	115	154	154	170	5.0	110	23	194	–	–	414	0.315	2LC0471-0NS99-0AA0	37.5
			BEN									102	24	81	322		2LC0471-0AK99-0AA0	
			BEB									10			230		2LC0471-0AC99-0AA0	
280-6	10000	3750	NEN	135	135	184	184	186	6.0	130	25	232	–	–	492	0.542	2LC0471-1NS99-0AA0	54.5
			BEN	120	135	161	184					121	22	83	381	0.514	2LC0471-1AK99-0AA0	52.1
			BEB	120	120	161	161					10			270	0.486	2LC0471-1AC99-0AA0	49.7
305-6	12000	3400	NEN	145	145	198	198	200	6.5	140	27	250	–	–	530	0.762	2LC0471-2NS99-0AA0	66.4
			BEN	130	145	175	198					130	13	61	410	0.724	2LC0471-2AK99-0AA0	63.6
			BEB	130	130	175	175					10			290	0.685	2LC0471-2AC99-0AA0	60.9
335-6	18000	3100	NEN	160	160	214	214	218	7.5	150	30	266	–	–	566	1.18	2LC0471-3NS99-0AA0	84.2
			BEN	140	160	190	214					138	15	69	438	1.13	2LC0471-3AK99-0AA0	82.1
			BEB	140	140	190	190					10			310	1.08	2LC0471-3AC99-0AA0	80.0
372-6	24000	2800	NEN	165	165	225	225	228	9.5	160	32	280	–	–	600	1.93	2LC0471-4NS99-0AA0	116
			BEN	145	165	200	225					145	16	76	465	1.87	2LC0471-4AK99-0AA0	113
			BEB	145	145	200	200					10			330	1.80	2LC0471-4AC99-0AA0	110
407-6	34000	2550	NEN	185	185	250	250	245	11.0	175	35	306	–	–	656	3.06	2LC0471-5NS99-0AA0	152
			BEN	145	185	205	250					158	19	83	508	2.91	2LC0471-5AK99-0AA0	148
			BEB	145	145	205	205					10			360	2.76	2LC0471-5AC99-0AA0	144
442-6	43000	2350	NEN	200	200	270	270	273	11.0	190	38	332	–	–	712	4.58	2LC0471-6NS99-0AA0	192
			BEN	170	200	230	270					172	20	92	552	4.38	2LC0471-6AK99-0AA0	185
			BEB	170	170	230	230					12			392	4.18	2LC0471-6AC99-0AA0	178
487-6	55000	2150	NEN	225	225	305	305	298	13.0	215	41	376	–	–	806	7.73	2LC0471-7NS99-0AA0	268
			BEN	180	225	250	305					194	23	100	624	7.32	2LC0471-7AK99-0AA0	258
			BEB	180	180	250	250					12			442	6.91	2LC0471-7AC99-0AA0	248
522-6	69000	2000	NEN	240	240	325	325	324	13.0	230	44	400	–	–	860	10.7	2LC0471-8NS99-0AA0	323
			BEN	200	240	275	325					206	23	107	666	10.2	2LC0471-8AK99-0AA0	312
			BEB	200	200	275	275					12			472	9.72	2LC0471-8AC99-0AA0	301
572-6	92000	1800	NEN	265	265	360	360	356	15.0	255	47	446	–	–	956	17.1	2LC0472-0NS99-0AA0	431
			BEN	220	265	300	360					229	24	114	739	16.2	2LC0472-0AK99-0AA0	413
			BEB	220	220	300	300					12			522	15.2	2LC0472-0AC99-0AA0	394
602-6	106000	1700	NEN	280	280	380	380	368	16.0	270	50	470	–	–	1010	22.6	2LC0472-1NS99-0AA0	514
			BEN	225	280	310	380					241	26	123	781	21.3	2LC0472-1AK99-0AA0	492
			BEB	225	225	310	310					12			552	20.0	2LC0472-1AC99-0AA0	470

Torsionally rigid ARPEX couplings up to size 240-6 available from stock.

For simplified fitting on B hubs, plate packs from size 280-6 available with closing element.

Weights and mass moments of inertia apply to the entire coupling with maximum bores D1/D2.

Ordering example:

ARPEX ARS-6 NEN coupling, size 105-6,
bore ØD1 40H7 mm, with keyway to DIN 6885 and set screw,
bore ØD2 45K7 mm, with keyway to DIN 6885 and set screw.

Product code:

2LC0470-1NS99-0AA0-Z
LOW+M1A+M13

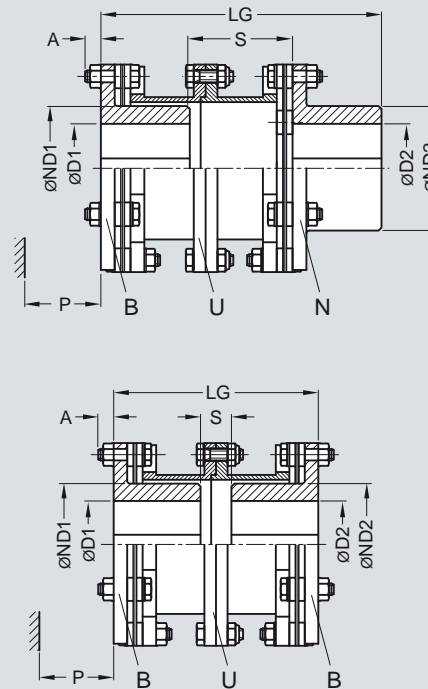
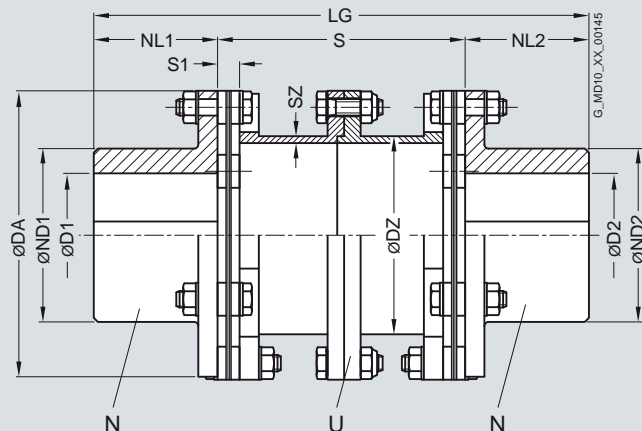
FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Type NUN

Selection and ordering data

Torsionally rigid coupling type NUN with radially freely dismountable intermediate spacer. Types BUN and BUB cannot be radially dismounted without moving the units. On type BUB, the smallest possible shaft distance can be achieved.



6

Size	Rated torque	Maximum speed	Type	Dimensions in mm										Mass moment of inertia	Product code	Weight			
DA	T_{KN}	n_{Kmax}		D1, D2	ND1	ND2	DZ	SZ	NL1/ NL2	S1	S	A	P	LG	J	Order codes for bore diameters and tolerances are specified in catalog section 3	m		
mm	Nm	rpm		max. max.											kgm ²		kg		
78-6	170	13400	NUN	28	28	39	39	45	2.5	30	8	84	–	–	144	0.001	2LC0470-0NW99-0AA0	1.5	
			BUN										61	8	29		121		2LC0470-0BD99-0AA0
			BUB										38				98		2LC0470-0AT99-0AA0
105-6	270	10000	NUN	45	45	63	63	72	2.5	45	8	90	–	–	180	0.004	2LC0470-1NW99-0AA0	2.9	
			BUN										52	8	29		142		2LC0470-1BD99-0AA0
			BUB										14				104		2LC0470-1AT99-0AA0
125-6	490	8400	NUN	55	55	76	76	84	2.5	55	11	116	–	–	226	0.011	2LC0470-2NW99-0AA0	5.3	
			BUN										70	10	37		180		2LC0470-2BD99-0AA0
			BUB										24				134		2LC0470-2AT99-0AA0
140-6	700	7500	NUN	65	65	91	91	99	2.5	65	11	116	–	–	246	0.019	2LC0470-3NW99-0AA0	7.2	
			BUN										60	10	37		190		2LC0470-3BD99-0AA0
			BUB										4				134		2LC0470-3AT99-0AA0
165-6	1250	6350	NUN	75	75	105	105	114	2.5	75	14	136	–	–	286	0.038	2LC0470-4NW99-0AA0	10.9	
			BUN										70	12	45		220		2LC0470-4BD99-0AA0
			BUB										4				154		2LC0470-4AT99-0AA0
175-6	2000	6000	NUN	80	80	110	110	120	3.0	80	15	142	–	–	302	0.057	2LC0470-5NW99-0AA0	14.1	
			BUN										74	15	52		234		2LC0470-5BD99-0AA0
			BUB										6				166		2LC0470-5AT99-0AA0
195-6	3000	5350	NUN	90	90	120	120	131	3.0	80	15	142	–	–	302	0.085	2LC0470-6NW99-0AA0	16.8	
			BUN										74	14	52		234		2LC0470-6BD99-0AA0
			BUB										6				166		2LC0470-6AT99-0AA0

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Type NUN

Size	Rated torque	Maximum speed	Type	Dimensions in mm										Mass moment of inertia	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight		
				D1, D2 Keyway DIN 6885 max. max.	ND1	ND2	DZ	SZ	NL1/ NL2	S1	S	A	P				LG	J
mm	Nm	rpm												kgm ²		kg		
210-6	4400	5000	NUN	95	95	126	126	139	4.0	90	15	160	–	–	340	0.128	2LC0470-7NW99-0AA0	21.9
			BUN									83	20	61	263		2LC0470-7BD99-0AA0	
			BUB									6			186		2LC0470-7AT99-0AA0	
240-6	5700	4350	NUN	110	110	145	145	162	5.0	100	18	176	–	–	376	0.242	2LC0470-8NW99-0AA0	31.5
			BUN									91	18	66	291		2LC0470-8BD99-0AA0	
			BUB									6			206		2LC0470-8AT99-0AA0	
255-6	7600	4100	NUN	115	115	154	154	170	5.0	110	23	194	–	–	414	0.363	2LC0471-0NW99-0AA0	41.6
			BUN									102	24	81	322		2LC0471-0BD99-0AA0	
			BUB									10			230		2LC0471-0AT99-0AA0	
280-6	10000	3750	NUN	135	135	184	184	186	6.0	130	25	232	–	–	492	0.611	2LC0471-1NW99-0AA0	59.4
			BUN	120	135	161	184					121	22	83	381	0.583	2LC0471-1BD99-0AA0	57.0
			BUB	120	120	161	161					10			270	0.555	2LC0471-1AT99-0AA0	54.6
305-6	12000	3400	NUN	145	145	198	198	200	6.5	140	27	250	–	–	530	0.861	2LC0471-2NW99-0AA0	72.4
			BUN	130	145	175	198					130	13	61	410	0.823	2LC0471-2BD99-0AA0	69.6
			BUB	130	130	175	175					10			290	0.784	2LC0471-2AT99-0AA0	66.8
335-6	18000	3100	NUN	160	160	214	214	218	7.5	150	30	266	–	–	566	1.35	2LC0471-3NW99-0AA0	93.1
			BUN	140	160	190	214					138	15	69	438	1.31	2LC0471-3BD99-0AA0	91.0
			BUB	140	140	190	190					10			310	1.26	2LC0471-3AT99-0AA0	88.9
372-6	24000	2800	NUN	165	165	225	225	228	9.5	160	32	280	–	–	600	2.21	2LC0471-4NW99-0AA0	127
			BUN	145	165	200	225					145	16	76	465	2.15	2LC0471-4BD99-0AA0	125
			BUB	145	145	200	200					10			330	2.09	2LC0471-4AT99-0AA0	122
407-6	34000	2550	NUN	185	185	250	250	245	11.0	175	35	306	–	–	656	3.55	2LC0471-5NW99-0AA0	170
			BUN	145	185	205	250					158	19	83	508	3.40	2LC0471-5BD99-0AA0	166
			BUB	145	145	205	205					10			360	3.25	2LC0471-5AT99-0AA0	161
442-6	43000	2350	NUN	200	200	270	270	273	11.0	190	38	332	–	–	712	5.29	2LC0471-6NW99-0AA0	213
			BUN	170	200	230	270					172	20	92	552	5.09	2LC0471-6BD99-0AA0	206
			BUB	170	170	230	230					12			392	4.89	2LC0471-6AT99-0AA0	200
487-6	55000	2150	NUN	225	225	305	305	298	13.0	215	41	376	–	–	806	8.79	2LC0471-7NW99-0AA0	294
			BUN	180	225	250	305					194	23	100	624	8.38	2LC0471-7BD99-0AA0	284
			BUB	180	180	250	250					12			442	7.96	2LC0471-7AT99-0AA0	274
522-6	69000	2000	NUN	240	240	325	325	324	13.0	230	44	400	–	–	860	12.5	2LC0471-8NW99-0AA0	361
			BUN	200	240	275	325					206	23	107	666	12.0	2LC0471-8BD99-0AA0	350
			BUB	200	200	275	275					12			472	11.5	2LC0471-8AT99-0AA0	339
572-6	92000	1800	NUN	265	265	360	360	356	15.0	255	47	446	–	–	956	19.7	2LC0472-0NW99-0AA0	477
			BUN	220	265	300	360					229	24	114	739	18.7	2LC0472-0BD99-0AA0	458
			BUB	220	220	300	300					12			522	17.8	2LC0472-0AT99-0AA0	439
602-6	106000	1700	NUN	280	280	380	380	368	16.0	270	50	470	–	–	1010	26.9	2LC0472-1NW99-0AA0	584
			BUN	225	280	310	380					241	26	123	781	25.6	2LC0472-1BD99-0AA0	562
			BUB	225	225	310	310					12			552	24.3	2LC0472-1AT99-0AA0	540

Up to size 240-6 available from stock.

Because of the split variant, the coupling is optionally available with prefitted plate packs.

For simplified fitting on B hubs, plate packs from size 280-6 available with closing element.

Weights and mass moments of inertia apply to the entire coupling with maximum bores D1/D2.

Ordering example:

ARPEX ARS-6 NUN coupling, size 140-6,
Bore ØD1 60H7 mm, with keyway to DIN 6885 and set screw,
Bore ØD2 65K7 mm, with keyway to DIN 6885 and set screw.

Product code:

**2LC0470-3NW99-0AA0-Z
L1E+M1F+M13**

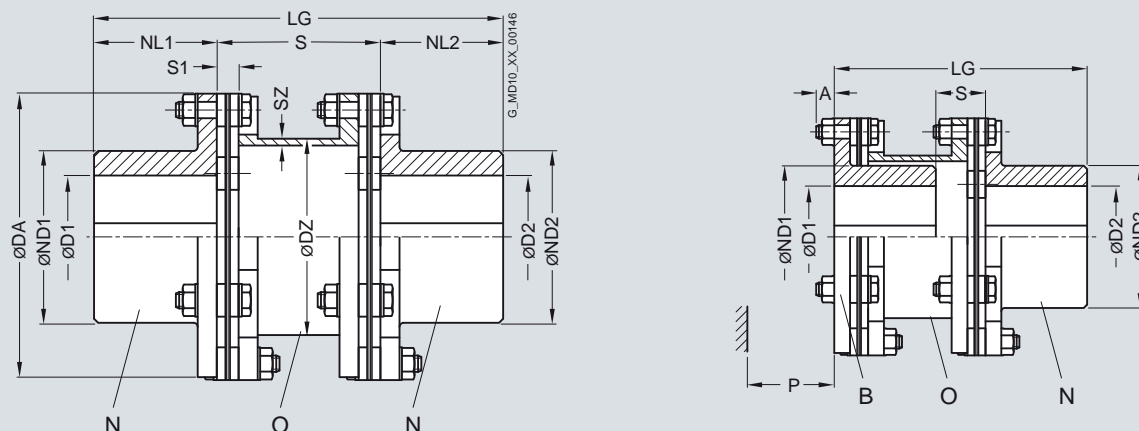
FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Type NON

Selection and ordering data

Torsionally rigid coupling with shortest possible shaft distance enabling problem-free fitting with commercially available tools. Type NON with radially freely dismountable intermediate spacer. Type BON cannot be radially dismounted without moving the units.



Size	Rated torque	Maximum speed	Type	Dimensions in mm										Mass moment of inertia	Product code	Weight		
DA	T_{KN}	n_{Kmax}		D1, D2	ND1	ND2	DZ	SZ	NL1/ NL2	S1	Shaft distance	A	P	LG	J	Order codes for bore diameters and tolerances are specified in catalog section 3	m	
mm	Nm	rpm		max. max.							S				kgm ²		kg	
78-6	170	13400	NON	28	28	39	39	45	2.5	30	8	51	–	–	111	0.001	2LC0470-0NV99-0AA0	1.1
			BON									28	8	29	88		2LC0470-0AS99-0AA0	
105-6	270	10000	NON	45	45	63	63	72	2.5	45	8	51	–	–	141	0.003	2LC0470-1NV99-0AA0	2.4
			BON									13	8	29	103		2LC0470-1AS99-0AA0	
125-6	490	8400	NON	55	55	76	76	84	2.5	55	11	67	–	–	177	0.008	2LC0470-2NV99-0AA0	4.3
			BON									21	10	37	131		2LC0470-2AS99-0AA0	
140-6	700	7500	NON	65	65	91	91	99	2.5	65	11	70	–	–	200	0.015	2LC0470-3NV99-0AA0	6.1
			BON									14	10	37	144		2LC0470-3AS99-0AA0	
165-6	1250	6350	NON	75	75	105	105	114	2.5	75	14	83	–	–	233	0.031	2LC0470-4NV99-0AA0	9.4
			BON									17	12	45	167		2LC0470-4AS99-0AA0	
175-6	2000	6000	NON	80	80	110	110	120	3.0	80	15	95	–	–	255	0.047	2LC0470-5NV99-0AA0	12.1
			BON									27	15	52	187		2LC0470-5AS99-0AA0	
195-6	3000	5350	NON	90	90	120	120	131	3.0	80	15	95	–	–	255	0.071	2LC0470-6NV99-0AA0	14.5
			BON									27	14	52	187		2LC0470-6AS99-0AA0	
210-6	4400	5000	NON	95	95	126	126	139	4.0	90	15	105	–	–	285	0.105	2LC0470-7NV99-0AA0	18.7
			BON									28	20	61	208		2LC0470-7AS99-0AA0	
240-6	5700	4350	NON	110	110	145	145	162	5.0	100	18	116	–	–	316	0.203	2LC0470-8NV99-0AA0	27.3
			BON									31	18	66	231		2LC0470-8AS99-0AA0	
255-6	7600	4100	NON	115	115	154	154	170	5.0	110	23	146	–	–	366	0.309	2LC0471-0NV99-0AA0	36.5
			BON									54	24	81	274		2LC0471-0AS99-0AA0	
280-6	10000	3750	NON	135	135	184	184	186	6.0	130	25	150	–	–	410	0.524	2LC0471-1NV99-0AA0	52.3
			BON	120	135	161	184					39	22	83	299	0.496	2LC0471-1AS99-0AA0	49.9

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Type NON

Size	Rated torque	Maximum speed	Type	Dimensions in mm										Mass moment of inertia	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight		
				D1, D2	ND1	ND2	DZ	SZ	NL1/ NL2	S1	S	A	P				LG	J
mm	Nm	rpm		max.	max.										kgm ²		kg	
305-6	12000	3400	NON	145	145	198	198	200	6.5	140	27	174	–	–	454	0.740	2LC0471-2NV99-0AA0	64.1
			BON	130	145	175	198						54	13	61	334	0.702	2LC0471-2AS99-0AA0
335-6	18000	3100	NON	160	160	214	214	218	7.5	150	30	185	–	–	485	1.14	2LC0471-3NV99-0AA0	81.0
			BON	140	160	190	214						57	15	69	357	1.09	2LC0471-3AS99-0AA0
372-6	24000	2800	NON	165	165	225	225	228	9.5	160	32	209	–	–	529	1.89	2LC0471-4NV99-0AA0	112
			BON	145	165	200	225						74	16	76	394	1.82	2LC0471-4AS99-0AA0
407-6	34000	2550	NON	185	185	250	250	245	11.0	175	35	220	–	–	570	2.98	2LC0471-5NV99-0AA0	147
			BON	145	185	205	250						72	19	83	422	2.84	2LC0471-5AS99-0AA0
442-6	43000	2350	NON	200	200	270	270	273	11.0	190	38	241	–	–	621	4.46	2LC0471-6NV99-0AA0	185
			BON	170	200	230	270						81	20	92	461	4.27	2LC0471-6AS99-0AA0
487-6	55000	2150	NON	225	225	305	305	298	13.0	215	41	257	–	–	687	7.51	2LC0471-7NV99-0AA0	257
			BON	180	225	250	305						75	23	100	505	7.10	2LC0471-7AS99-0AA0
522-6	69000	2000	NON	240	240	325	325	324	13.0	230	44	278	–	–	738	10.4	2LC0471-8NV99-0AA0	311
			BON	200	240	275	325						84	23	107	544	9.93	2LC0471-8AS99-0AA0
572-6	92000	1800	NON	265	265	360	360	356	15.0	255	47	294	–	–	804	16.5	2LC0472-0NV99-0AA0	413
			BON	220	265	300	360						77	24	114	587	15.6	2LC0472-0AS99-0AA0
602-6	106000	1700	NON	280	280	380	380	368	16.0	270	50	315	–	–	855	21.9	2LC0472-1NV99-0AA0	492
			BON	225	280	310	380						86	26	123	626	20.6	2LC0472-1AS99-0AA0

Up to size 240-6 available from stock.

For simplified fitting on B hubs, plate packs from size 280-6 available with closing element.

Weights and mass moments of inertia apply to the entire coupling with maximum bores D1/D2.

Ordering example:

ARPEX ARS-6 NON coupling, size 105-6,
Bore ØD1 40H7 mm, with keyway to DIN 6885 and set screw,
Bore ØD2 45K7 mm, with keyway to DIN 6885 and set screw.

Product code:

2LC0470-1NV99-0AA0-Z
LOW+M1A+M13

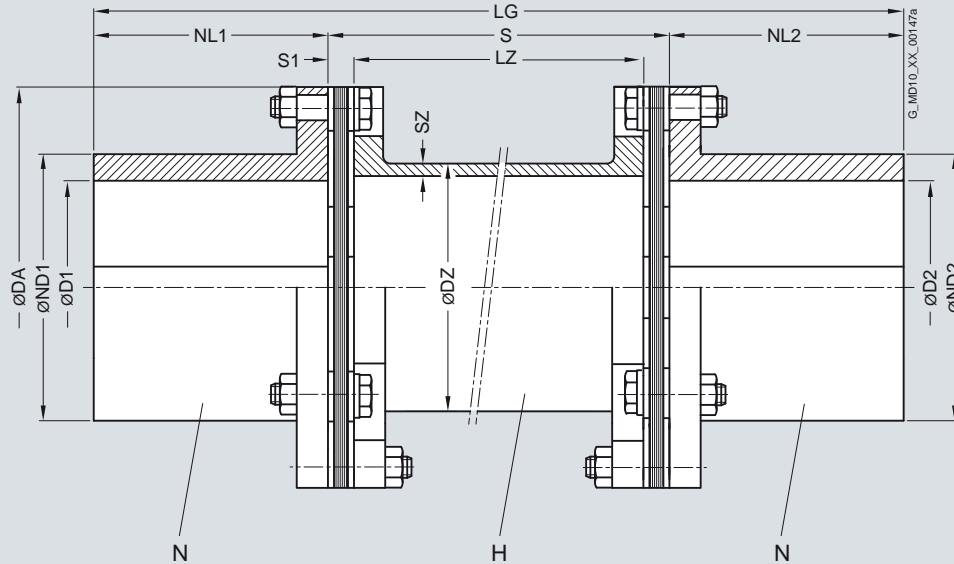
FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Type NHN

Selection and ordering data

Torsionally rigid coupling type NHN with variable shaft distance S. Type NHN with radially freely dismountable intermediate spacer.



Size	Rated torque	Maximum speed	Dimensions in mm							Shaft distance S	Mass moment of inertia J	Product code	Weight m
			D1/D2	ND1/ND2	DZ	SZ	NL1/NL2	S1	LZ				
mm	Nm	rpm	Keyway DIN 6885 max.							min.	kgm ²	Order codes for bore diameters and tolerances are specified in catalog section 3	kg
78-6	170	13400	28	39	44.5	3.2	30	8	69	85	0.002	2LC0470-0NT99-0AZ0	4.3
105-6	270	10000	45	63	57.0	3.2	45	8	64	80	0.006	2LC0470-1NT99-0AZ0	6.6
125-6	490	8400	55	76	63.5	4.0	55	11	73	95	0.014	2LC0470-2NT99-0AZ0	10.2
140-6	700	7500	65	91	76.1	3.6	65	11	73	95	0.023	2LC0470-3NT99-0AZ0	12.6
165-6	1250	6350	75	105	88.9	4.0	75	14	72	100	0.046	2LC0470-4NT99-0AZ0	17.7
175-6	2000	6000	80	110	101.6	5.0	80	15	70	100	0.074	2LC0470-5NT99-0AZ0	23.7
195-6	3000	5350	90	120	108.0	7.1	80	15	70	100	0.115	2LC0470-6NT99-0AZ0	31.8
210-6	4400	5000	95	126	114.3	7.1	90	15	100	130	0.157	2LC0470-7NT99-0AZ0	36.9
240-6	5700	4350	110	145	133.0	7.1	100	18	104	140	0.287	2LC0470-8NT99-0AZ0	48.6
255-6	7600	4100	115	154	139.7	8.0	110	23	134	180	0.415	2LC0471-0NT99-0AZ0	61.4
280-6	10000	3750	135	184	152.4	8.8	130	25	130	180	0.675	2LC0471-1NT99-0AZ0	81.9
305-6	12000	3400	145	198	168.3	10.0	140	27	146	200	0.962	2LC0471-2NT99-0AZ0	100
335-6	18000	3100	160	214	177.8	12.5	150	30	170	230	1.46	2LC0471-3NT99-0AZ0	128
372-6	24000	2800	165	225	193.7	14.2	160	32	186	250	2.32	2LC0471-4NT99-0AZ0	168
407-6	34000	2550	185	250	244.5	14.2	175	35	180	250	3.85	2LC0471-5NT99-0AZ0	212
442-6	43000	2350	200	270	273.0	16.0	190	38	184	260	5.82	2LC0471-6NT99-0AZ0	267
487-6	55000	2150	225	305	298.5	17.5	215	41	188	270	9.39	2LC0471-7NT99-0AZ0	352
522-6	69000	2000	240	325	323.9	17.5	230	44	202	290	12.8	2LC0471-8NT99-0AZ0	413
572-6	92000	1800	265	360	355.6	20.0	255	47	216	310	20.1	2LC0472-0NT99-0AZ0	538
602-6	106000	1700	280	380	368.0	22.2	270	50	230	330	26.1	2LC0472-1NT99-0AZ0	633

The permitted length of the intermediate spacer depends on the maximum operating speed of the coupling (see following table).

In the case of individual order of the intermediate spacer, the length (LZ) must be specified.

For greater shaft distances, see type NZN.

Weights and mass moments of inertia apply to the entire coupling with maximum bores D1/D2 and S = 1000 mm.

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Type NHN

Permitted shaft distance S of type NHN relative to speed

Size	Speed n_N												
	rpm												
DA	500	600	700	800	900	1000	1200	1400	1500	2000	2500	3000	4000
mm	Permitted shaft distance S												
	mm												
78-6	2809	2565	2376	2223	2096	1989	1816	1682	1625	1409	1261	1152	998
105-6	3203	2925	2709	2534	2390	2268	2071	1918	1853	1606	1437	1313	1138
125-6	3372	3079	2852	2668	2516	2388	2181	2020	1952	1692	1514	1383	1199
140-6	3719	3396	3145	2943	2775	2633	2405	2227	2152	1865	1669	1525	1322
165-6	4027	3677	3405	3186	3005	2852	2604	2412	2331	2020	1809	1652	1433
175-6	4296	3923	3633	3399	3206	3042	2778	2573	2487	2155	1929	1763	1529
195-6	4393	4011	3715	3476	3278	3110	2841	2631	2542	2204	1973	1802	1563
210-6	4527	4134	3828	3582	3378	3205	2927	2711	2620	2271	2033	1857	1610
240-6	4906	4480	4149	3882	3661	3474	3173	2939	2840	2462	2204	2013	1746
255-6	5023	4587	4249	3976	3750	3558	3250	3011	2910	2523	2259	2064	1791
280-6	5246	4791	4437	4152	3916	3717	3395	3145	3039	2635	2360	2156	
305-6	5509	5031	4660	4361	4113	3903	3566	3303	3192	2768	2479	2265	
335-6	5634	5146	4766	4461	4207	3993	3647	3379	3266	2832	2536	2318	
372-6	5873	5364	4968	4650	4385	4162	3802	3523	3404	2952	2644		
407-6	6647	6071	5623	5262	4963	4710	4303	3986	3852	3341	2992		
442-6	7023	6414	5941	5560	5244	4977	4547	4212	4071	3530			
487-6	7345	6708	6214	5815	5485	5205	4755	4406	4258	3693			
522-6	7669	7005	6489	6072	5728	5436	4966	4601	4446	3857			
572-6	8000	7333	6792	6356	5996	5690	5199	4817	4655				
602-6	8000	7447	6898	6456	6089	5779	5280	4892	4728				

Outside the permitted speed range

Ordering example:

ARPEX ARS-6 NHN coupling, size 105-6, with shaft distance S = 1000 mm,

Bore ØD1 40H7 mm, with keyway to DIN 6885 and set screw,

Bore ØD2 45K7 mm, with keyway to DIN 6885 and set screw.

Product code:

2LC0470-1NT99-0AZ0-Z**L0W+M1A+Q0Y+M13**plain text to Q0Y: **S = 1000 mm**

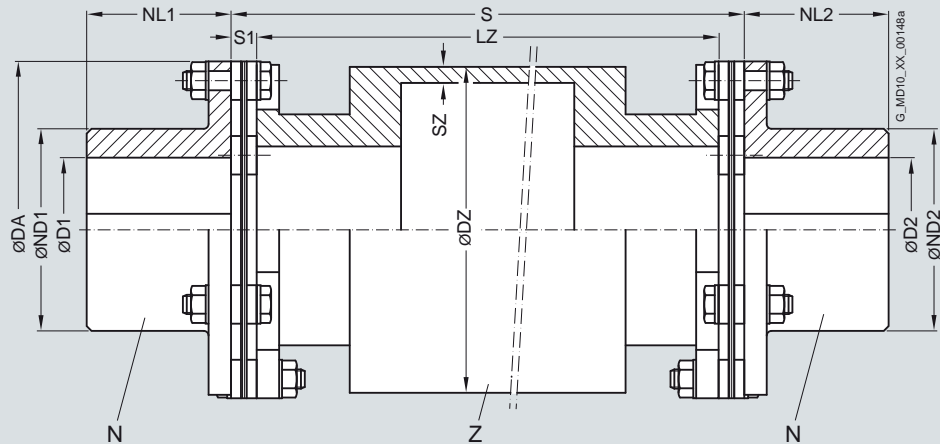
FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Type NZN

Selection and ordering data

Torsionally rigid coupling type NZN with variable shaft distance S and reinforced intermediate spacer.
Type NZN with radially freely dismountable intermediate spacer.



Size	Rated torque	Maximum speed	Dimensions in mm							Shaft distance	Mass moment of inertia	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight
			D1/D2	ND1/ND2	DZ	SZ	NL1/NL2	S1	LZ				
mm	Nm	rpm	Keyway DIN 6885 max.										kg
78-6	170	13400	28	39	76.1	3.6	30	8	124	140	0.009	2LC0470-0PC99-0AZ0	7.8
105-6	270	10000	45	63	101.6	5.0	45	8	124	140	0.031	2LC0470-1PC99-0AZ0	15.3
125-6	490	8400	55	76	114.3	7.1	55	11	163	185	0.061	2LC0470-2PC99-0AZ0	23.9
140-6	700	7500	65	91	139.7	8.0	65	11	163	185	0.125	2LC0470-3PC99-0AZ0	33.1
165-6	1250	6350	75	105	168.3	7.1	75	14	212	240	0.219	2LC0470-4PC99-0AZ0	41.5
175-6	2000	6000	80	110	177.8	7.1	80	15	225	255	0.266	2LC0470-5PC99-0AZ0	45.6
195-6	3000	5350	90	120	193.7	7.1	80	15	225	255	0.361	2LC0470-6PC99-0AZ0	51.7
210-6	4400	5000	95	126	193.7	7.1	90	15	250	280	0.392	2LC0470-7PC99-0AZ0	55.0
240-6	5700	4350	110	145	219.1	7.1	100	18	264	300	0.622	2LC0470-8PC99-0AZ0	68.3
255-6	7600	4100	115	154	244.5	7.1	110	23	314	360	0.902	2LC0471-0PC99-0AZ0	85.9
280-6	10000	3750	135	184	273.0	7.1	130	25	330	380	1.39	2LC0471-1PC99-0AZ0	112
305-6	12000	3400	145	198	298.5	11.0	140	27	391	445	2.28	2LC0471-2PC99-0AZ0	155
335-6	18000	3100	160	214	323.9	11.0	150	30	400	460	3.13	2LC0471-3PC99-0AZ0	180

The permitted length of the intermediate spacer depends on the maximum operating speed of the coupling (see following table).

In the case of individual order of the intermediate spacer, the length (LZ) must be specified.

Weights and mass moments of inertia apply to the entire coupling with maximum bores D1/D2 and $S = 1000$ mm.

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Type NZN

Permitted shaft distance S of type NZN relative to speed

Size	Speed n_N												
	rpm												
DA	500	600	700	800	900	1000	1200	1400	1500	2000	2500	3000	4000
mm	Permitted shaft distance S												
	mm												
78-6	3716	3393	3142	2940	2772	2630	2402	2224	2149	1862	1666	1522	1319
105-6	4289	3916	3626	3392	3199	3035	2771	2566	2480	2148	1922	1756	1522
125-6	4523	4130	3824	3578	3374	3201	2923	2707	2616	2267	2029	1853	1606
140-6	5011	4575	4237	3964	3738	3546	3238	2999	2898	2511	2247	2052	1779
165-6	5543	5061	4687	4385	4135	3924	3583	3318	3206	2779	2487	2271	1969
175-6	5704	5209	4823	4513	4256	4038	3687	3415	3300	2860	2559	2338	2026
195-6	5963	5445	5042	4717	4448	4221	3854	3570	3449	2989	2675	2443	2118
210-6	5963	5445	5042	4717	4448	4221	3854	3570	3449	2989	2675	2443	2118
240-6	6357	5805	5376	5030	4743	4501	4110	3807	3678	3188	2853	2606	2259
255-6	6731	6147	5692	5326	5023	4766	4353	4032	3896	3377	3023	2762	2395
280-6	7124	6505	6025	5637	5316	5045	4607	4267	4124	3574	3200	2923	–
305-6	7410	6767	6267	5864	5530	5248	4793	4439	4290	3719	3329	3041	–
335-6	7732	7061	6539	6119	5771	5476	5002	4633	4477	3881	3474	3174	–

Ordering example:

ARPEX ARS-6 NZN coupling, size 105-6, with shaft distance
 S = 1000 mm,
 Bore ØD1 40H7 mm, with keyway to DIN 6885 and set screw,
 Bore ØD2 45K7 mm, with keyway to DIN 6885 and set screw.

Product code:

2LC0470-1PC99-0AZ0-Z**L0W+M1A+Q0Y+M13**plain text to Q0Y: **S = 1000 mm**

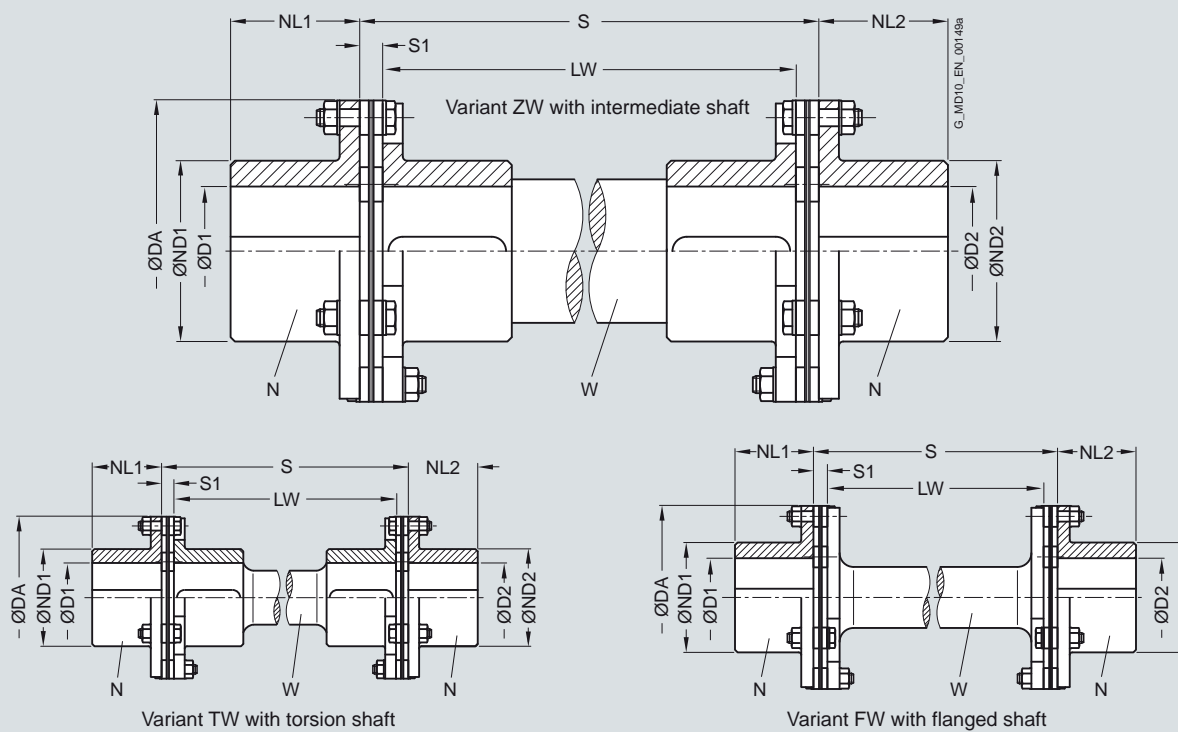
FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Type NWN

Selection and ordering data

Torsionally rigid coupling type NWN with radially freely dismountable intermediate, torsion or flange shaft and variable shaft distance S.



6

Size	Rated torque	Maximum speed	Type	Dimensions in mm						Shaft distance	Mass moment of inertia	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight
				D1/D2 Keyway DIN 6885 max.	ND1	NL1/NL2	S1	LW min.	S min.				
78-6	170	13400	ZW	28	39	30	8	74	90	0.001	2LC0470-0NX99-0AZ0	1.7	
			TW					74	90				
			FW					35	51				2LC0470-0PB99-0AZ0
105-6	270	10000	ZW	45	63	45	8	104	120	0.004	2LC0470-1NX99-0AZ0	4.6	
			TW					104	120				
			FW					35	51				2LC0470-1PA99-0AZ0
125-6	490	8400	ZW	55	76	55	11	123	145	0.011	2LC0470-2NX99-0AZ0	8.3	
			TW					123	145				
			FW					45	67				2LC0470-2PB99-0AZ0
140-6	700	7500	ZW	65	91	65	11	143	165	0.021	2LC0470-3NX99-0AZ0	12.8	
			TW					143	165				
			FW					48	70				2LC0470-3PA99-0AZ0
165-6	1250	6350	ZW	75	105	75	14	162	190	0.045	2LC0470-4NX99-0AZ0	19.6	
			TW					162	190				
			FW					55	83				2LC0470-4PA99-0AZ0
175-6	2000	6000	ZW	80	110	80	15	170	200	0.064	2LC0470-5NX99-0AZ0	24.0	
			TW					170	200				
			FW					65	95				2LC0470-5PA99-0AZ0
195-6	3000	5350	ZW	90	120	80	15	170	200	0.096	2LC0470-6NX99-0AZ0	28.7	
			TW					170	200				
			FW					65	95				2LC0470-6PB99-0AZ0
210-6	4400	5000	ZW	95	126	90	15	190	220	0.138	2LC0470-7NX99-0AZ0	36.1	
			TW					190	220				
			FW					75	105				2LC0470-7PA99-0AZ0

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Type NWN

Size	Rated torque	Maximum speed	Type	Dimensions in mm						Shaft distance S	Mass moment of inertia J	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight
				D1/D2 Keyway DIN 6885 max.	ND1	NL1/NL2	S1	LW min.	S min.				
DA	T_{KN}	n_{Kmax}										m	
mm	Nm	rpm								kgm ²		kg	
240-6	5700	4350	ZW	110	145	100	18	214	250	0.267	2LC0470-8NX99-0AZ0	53.1	
			TW					214	250				2LC0470-8PB99-0AZ0
			FW					80	116				2LC0470-8PA99-0AZ0
255-6	7600	4100	ZW	115	154	110	23	234	280	0.398	2LC0471-0NX99-0AZ0	68.3	
			TW					234	280				2LC0471-0PB99-0AZ0
			FW					100	146				2LC0471-0PA99-0AZ0
280-6	10000	3750	ZW	135	184	130	25	270	320	0.734	2LC0471-1NX99-0AZ0	105	
			TW					270	320				2LC0471-1PB99-0AZ0
			FW					100	150				2LC0471-1PA99-0AZ0
305-6	12000	3400	ZW	145	198	140	27	296	350	1.04	2LC0471-2NX99-0AZ0	129	
			TW					296	350				2LC0471-2PB99-0AZ0
			FW					120	174				2LC0471-2PA99-0AZ0
335-6	18000	3100	ZW	160	214	150	30	310	370	1.58	2LC0471-3NX99-0AZ0	162	
			TW					310	370				2LC0471-3PB99-0AZ0
			FW					125	185				2LC0471-3PA99-0AZ0
372-6	24000	2800	ZW	165	225	160	32	336	400	2.44	2LC0471-4NX99-0AZ0	206	
			TW					336	400				2LC0471-4PB99-0AZ0
			FW					145	209				2LC0471-4PA99-0AZ0
407-6	34000	2550	ZW	185	250	175	35	360	430	3.89	2LC0471-5NX99-0AZ0	272	
			TW					360	430				2LC0471-5PB99-0AZ0
			FW					150	220				2LC0471-5PA99-0AZ0
442-6	43000	2350	ZW	200	270	190	38	394	470	5.83	2LC0471-6NX99-0AZ0	347	
			TW					394	470				2LC0471-6PB99-0AZ0
			FW					165	241				2LC0471-6PA99-0AZ0
487-6	55000	2150	ZW	225	305	215	41	448	530	10.0	2LC0471-7NX99-0AZ0	489	
			TW					448	530				2LC0471-7PB99-0AZ0
			FW					175	257				2LC0471-7PA99-0AZ0
522-6	69000	2000	ZW	240	325	230	44	472	560	13.9	2LC0471-8NX99-0AZ0	593	
			TW					472	560				2LC0471-8PB99-0AZ0
			FW					190	278				2LC0471-8PA99-0AZ0
572-6	92000	1800	ZW	265	360	255	47	526	620	22.4	2LC0472-0NX99-0AZ0	797	
			TW					526	620				2LC0472-0PB99-0AZ0
			FW					200	294				2LC0472-0PA99-0AZ0
602-6	106000	1700	ZW	280	380	270	50	550	650	29.5	2LC0472-1NX99-0AZ0	941	
			TW					550	650				2LC0472-1PB99-0AZ0
			FW					215	315				2LC0472-1PA99-0AZ0

The permitted length of the intermediate spacer depends on the maximum operating speed of the coupling.

Weights and mass moments of inertia apply to four hubs with maximum bore D1/D2 and two plate packs.

Ordering example:

ARPEX ARS-6 NWN coupling, size 105-6, with intermediate shaft and shaft distance S = 1000 mm,
Bore ØD1 40H7 mm, with keyway to DIN 6885 and set screw,
Bore ØD2 45K7 mm, with keyway to DIN 6885 and set screw.

Product code:

2LC0470-1NX99-0AZ0-Z

L0W+M1A+Q0Y+M13

plain text to Q0Y: **S = 1000 mm**

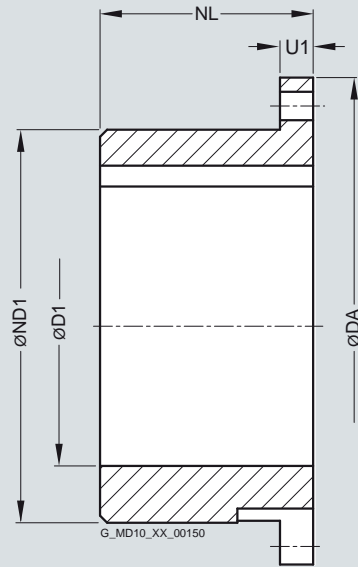
FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Further hubs and flanges
J hub

Selection and ordering data

J hubs or jumbo hubs are used where the shaft diameter is greater than the maximum bore diameter of the N hub. Because of the larger hub core diameter " $\varnothing ND1$ ", the J hub cannot be used as a B hub, i.e. the hub core diameter is greater than the inside diameter of the spacer tube and cannot project into the spacer. The J hub can be combined with any spacer.



FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Further hubs and flanges
J hub

Size	Dimensions in mm				Mass moment of inertia <i>J</i>	Product code	Weight <i>m</i>
	D1 Keyway DIN 6885 max.	ND1	NL	U1			
mm					kgm ²	Order codes for bore diameters and tolerances are specified in catalog section 3	kg
78-6	40	53	30	7	0.0002	2LC0470-0JU90-0AA0	0.3
105-6	60	80	45	7	0.0013	2LC0470-1JU90-0AA0	0.9
125-6	70	92	55	9	0.0029	2LC0470-2JU90-0AA0	1.5
140-6	80	107	65	9	0.0058	2LC0470-3JU90-0AA0	2.4
165-6	92	124	75	9	0.0121	2LC0470-4JU90-0AA0	3.7
175-6	96	130	80	12	0.0168	2LC0470-5JU90-0AA0	4.5
195-6	106	142	80	12	0.0244	2LC0470-6JU90-0AA0	5.4
210-6	110	149	90	13	0.0347	2LC0470-7JU90-0AA0	6.9
240-6	130	173	100	15	0.0675	2LC0470-8JU90-0AA0	9.9
255-6	135	182	110	18	0.0961	2LC0471-0JU90-0AA0	12.6

Weights and mass moments of inertia apply to a J hub with a maximum bore D1.

Ordering example:

ARPEX ARS-6 J hub, size 105-6,
hub with bore 60H7 mm and parallel keyway to DIN 6885/1 and set screw.

Product code:

2LC0470-1JU90-0AA0
L1E

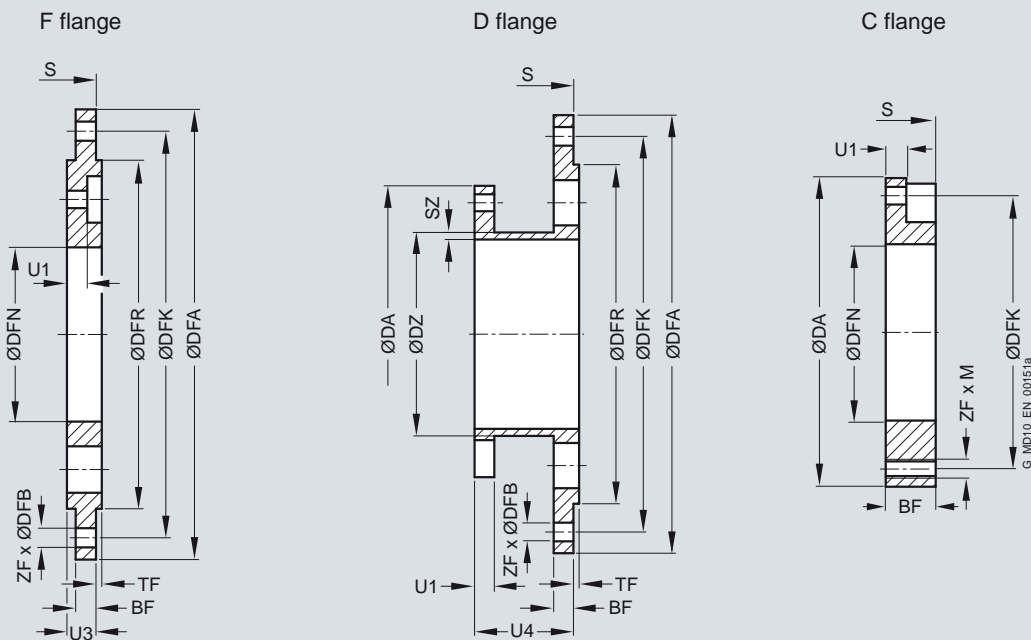
FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Further hubs and flanges
F flange, D flange, C flange

Selection and ordering data

F, D and C flanges are used where torque is to be transmitted by flange connections.
F, D and C flanges can be combined with any spacer.



Size	Type	Dimensions in mm													Mass moment of inertia <i>J</i> kgm ²	Product code	Weight <i>m</i> kg	
		DA	DFR	DFA	DFN	DZ	SZ	DFK	DFB	M	ZF	BF	U1	U3				U4
78-6	F	90 ₆	125	40	-	-	110	6.6	-	6	7	7	10	-	2	0.0014	2LC0470-0GP00-0AA0	0.7
	D	-	-	-	45	2.5	-	-	-	-	-	-	-	35	-	0.0014	2LC0470-0EC00-0AA0	0.8
	C	-	-	40H7	-	-	66	-	6	6	12	-	-	-	-	0.0002	2LC0470-0BE00-0AA0	0.2
105-6	F	120 ₆	155	60	-	-	140	6.6	-	6	7	7	10	-	2	0.0036	2LC0470-1GP00-0AA0	1.1
	D	-	-	-	72	2.5	-	-	-	-	-	-	-	35	-	0.0036	2LC0470-1EC00-0AA0	1.2
	C	-	-	60H7	-	-	93	-	6	6	12	-	-	-	-	0.0007	2LC0470-1BE00-0AA0	0.4
125-6	F	140 ₆	178	75	-	-	160	9.0	-	6	9	9	13	-	2	0.0077	2LC0470-2GP00-0AA0	1.8
	D	-	-	-	84	2.5	-	-	-	-	-	-	-	45	-	0.0079	2LC0470-2EC00-0AA0	1.9
	C	-	-	75H7	-	-	109	-	8	6	15	-	-	-	-	0.0016	2LC0470-2BE00-0AA0	0.7
140-6	F	155 ₆	194	90	-	-	175	9.0	-	6	9	9	13	-	2	0.0109	2LC0470-3GP00-0AA0	2.0
	D	-	-	-	99	2.5	-	-	-	-	-	-	-	45	-	0.0113	2LC0470-3EC00-0AA0	2.2
	C	-	-	90H7	-	-	124	-	8	6	15	-	-	-	-	0.0026	2LC0470-3BE00-0AA0	0.8
165-6	F	180 ₆	232	95	-	-	210	11.0	-	6	9	9	15	-	2	0.0233	2LC0470-4GP00-0AA0	3.3
	D	-	-	-	114	2.5	-	-	-	-	-	-	-	55	-	0.0226	2LC0470-4EC00-0AA0	3.2
	C	-	-	95H7	-	-	145	-	10	6	17	-	-	-	-	0.0060	2LC0470-4BE00-0AA0	1.4
175-6	F	190 ₆	245	105	-	-	220	14.0	-	6	12	12	19	-	2	0.0365	2LC0470-5GP00-0AA0	4.5
	D	-	-	-	120	3.0	-	-	-	-	-	-	-	65	-	0.0368	2LC0470-5EC00-0AA0	4.7
	C	-	-	105H7	-	-	153	-	12	6	21	-	-	-	-	0.0091	2LC0470-5BE00-0AA0	1.8
195-6	F	215 ₆	270	115	-	-	245	14.0	-	8	12	12	20	-	2	0.0559	2LC0470-6GP00-0AA0	5.6
	D	-	-	-	131	3.0	-	-	-	-	-	-	-	65	-	0.0542	2LC0470-6EC00-0AA0	5.6
	C	-	-	115H7	-	-	169	-	14	6	22	-	-	-	-	0.0146	2LC0470-6BE00-0AA0	2.4
210-6	F	230 ₆	300	120	-	-	270	18.0	-	6	13	13	22	-	2	0.0907	2LC0470-7GP00-0AA0	7.6
	D	-	-	-	139	4.0	-	-	-	-	-	-	-	75	-	0.0889	2LC0470-7EC00-0AA0	7.7
	C	-	-	120H7	-	-	180	-	16	6	24	-	-	-	-	0.0210	2LC0470-7BE00-0AA0	3.1
240-6	F	260 ₆	330	140	-	-	300	18.0	-	8	15	15	26	-	2	0.1549	2LC0470-8GP00-0AA0	10.6
	D	-	-	-	162	5.0	-	-	-	-	-	-	-	80	-	0.1514	2LC0470-8EC00-0AA0	10.7
	C	-	-	140H7	-	-	207	-	18	6	28	-	-	-	-	0.0416	2LC0470-8BE00-0AA0	4.6

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Further hubs and flanges
F flange, D flange, C flange

Size	Type	Dimensions in mm														Mass moment of inertia <i>J</i> kgm ²	Product code	Weight <i>m</i> kg
		DA mm	DFR	DFA	DFN	DZ	SZ	DFK	DFB	M	ZF	BF	U1	U3	U4			
255-6	F	275 _{m6}	345	150	–	–	315	18.0	–	8	18	18	30	–	2	0.2167	2LC0471-0GP00-0AA0	13.2
	D	–	–	–	170	5.0	–	–	–	–	–	–	100	–	–	0.2168	2LC0471-0EC00-0AA0	13.9
	C	–	–	150H7	–	–	219	–	20	6	32	–	–	–	–	0.0586	2LC0471-0BE00-0AA0	5.7
280-6	F	305 _{m6}	375	160	–	–	345	18.0	–	10	19	19	31	–	3	0.3278	2LC0471-1GP00-0AA0	17.1
	D	–	–	–	186	6.0	–	–	–	–	–	–	100	–	–	0.3266	2LC0471-1EC00-0AA0	17.9
	C	–	–	160H7	–	–	240	–	22	6	34	–	–	–	–	0.0927	2LC0471-1BE00-0AA0	7.6
305-6	F	330 _{m6}	400	180	–	–	370	18.0	–	12	20	20	37	–	3	0.4709	2LC0471-2GP00-0AA0	21.3
	D	–	–	–	200	6.5	–	–	–	–	–	–	120	–	–	0.4519	2LC0471-2EC00-0AA0	21.9
	C	–	–	180H7	–	–	260	–	24	6	40	–	–	–	–	0.1442	2LC0471-2BE00-0AA0	9.8
335-6	F	365 _{m6}	447	190	–	–	410	22.0	–	10	22	22	41	–	3	0.8051	2LC0471-3GP00-0AA0	29.9
	D	–	–	–	218	7.5	–	–	–	–	–	–	125	–	–	0.7586	2LC0471-3EC00-0AA0	29.7
	C	–	–	190H7	–	–	285	–	27	6	44	–	–	–	–	0.2334	2LC0471-3BE00-0AA0	13.5
372-6	F	410 _{m6}	505	200	–	–	460	22.0	–	12	25	25	46	–	3	1.4635	2LC0471-4GP00-0AA0	42.9
	D	–	–	–	228	9.5	–	–	–	–	–	–	145	–	–	1.3843	2LC0471-4EC00-0AA0	44.0
	C	–	–	200H7	–	–	310	–	30	6	49	–	–	–	–	0.3947	2LC0471-4BE00-0AA0	19.0
407-6	F	445 _{m6}	535	210	–	–	490	22.0	–	16	27	27	48	–	3	1.9809	2LC0471-5GP00-0AA0	51.9
	D	–	–	–	245	11.0	–	–	–	–	–	–	150	–	–	1.9083	2LC0471-5EC00-0AA0	54.4
	C	–	–	210H7	–	–	340	–	33	6	51	–	–	–	–	0.6095	2LC0471-5BE00-0AA0	25.2
442-6	F	490 _{m6}	585	230	–	–	540	22.0	–	18	30	30	55	–	3	3.2065	2LC0471-6GP00-0AA0	70.0
	D	–	–	–	273	11.0	–	–	–	–	–	–	165	–	–	2.9664	2LC0471-6EC00-0AA0	69.0
	C	–	–	230H7	–	–	370	–	36	6	58	–	–	–	–	0.9466	2LC0471-6BE00-0AA0	33.0
487-6	F	535 _{m6}	645	260	–	–	590	26.0	–	16	33	33	60	–	3	5.1248	2LC0471-7GP00-0AA0	91.6
	D	–	–	–	298	13.0	–	–	–	–	–	–	175	–	–	4.8658	2LC0471-7EC00-0AA0	94.3
	C	–	–	260H7	–	–	410	–	39	6	63	–	–	–	–	1.5350	2LC0471-7BE00-0AA0	43.4
522-6	F	580 _{m6}	695	280	–	–	640	26.0	–	18	36	36	63	–	4	7.4857	2LC0471-8GP00-0AA0	114
	D	–	–	–	324	13.0	–	–	–	–	–	–	190	–	–	7.0887	2LC0471-8EC00-0AA0	117
	C	–	–	280H7	–	–	440	–	42	6	67	–	–	–	–	2.0955	2LC0471-8BE00-0AA0	51.4
572-6	F	625 _{m6}	770	310	–	–	700	33.0	–	16	38	38	67	–	4	11.6519	2LC0472-0GP00-0AA0	147
	D	–	–	–	356	15.0	–	–	–	–	–	–	200	–	–	11.2872	2LC0472-0EC00-0AA0	153
	C	–	–	310H7	–	–	480	–	45	6	71	–	–	–	–	3.2918	2LC0472-0BE00-0AA0	66.6
602-6	F	655 _{m6}	800	320	–	–	730	33.0	–	16	41	41	72	–	4	14.7118	2LC0472-1GP00-0AA0	172
	D	–	–	–	368	16.0	–	–	–	–	–	–	215	–	–	14.3454	2LC0472-1EC00-0AA0	181
	C	–	–	320H7	–	–	505	–	48	6	76	–	–	–	–	4.3874	2LC0472-1BE00-0AA0	81.1

F, D and C flanges are readily available in many sizes.

Ordering example:

ARPEX ARS-6 F flange, size 105-6.

Product code:

2LC0470-1GP00-0AA0

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Further hubs and flanges Clamping hub

Selection and ordering data

Standard clamping hub types 124 and 125 can be combined with any spacer. It should be noted that the clamping hub can be used only as an N hub (hub core outside). Clamping hub as "B hub" (hub core in spacer tube) on request. Transmissible torque and maximum bore diameter are smaller on a B hub variant than stated below.

Function

ARPEX clamping hubs transmit torque with the aid of a flexible press fit. By pulling the clamping ring on by means of the tightening screws the necessary surface pressure is applied in the "shaft/hub" contact area. After the tightening operation the clamping ring lies up against the clamping hub. The gap dimension between the clamping hub and the clamping ring is then zero. This has the effect that even with repeated fitting and dismounting the balancing condition is maintained (no wobble effect). Clamping hubs can be clamped as often as required. It must be ensured that the taper surfaces are adequately lubricated.

Transmissible torque

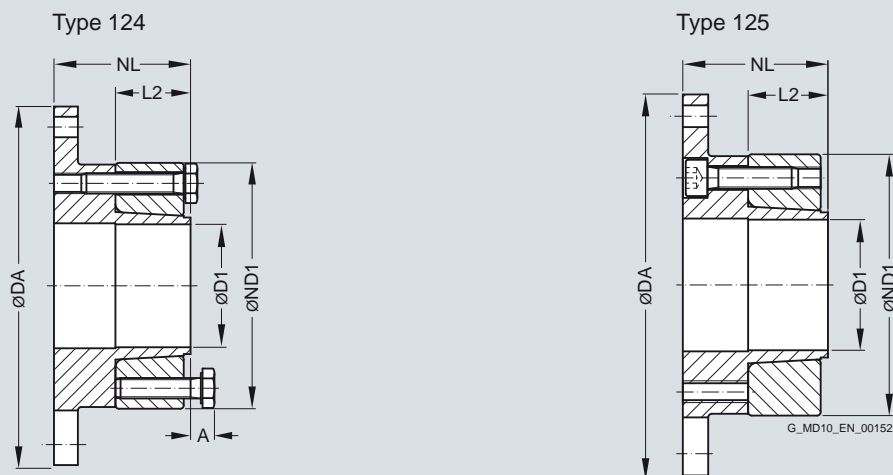
The clamping connections are designed to enable the specified maximum torques to be transmitted. These maximum torques may not be exceeded. The mathematical coefficient of friction between the shaft and the clamping hub is $\mu = 0.16$.

Fitting clearance and surface roughness

The transmissible torques take into account the maximum fitting clearance and maximum surface roughness. For other shaft tolerances reduced torques or other bore tolerances must be used. The surface roughness of the shaft should be $\leq R_a = 1.6 \mu\text{m}$.

The shaft tolerance must be specified in the order. To specify, -Z must be added to the product code and the order code Y26 with plain text specification of the shaft tolerance for D1 must be added as well. The fit pairing G6/h6 should be used wherever possible.

6



Size DA	Clamping hub Type	Dimensions in mm						Mass moment of inertia J	Product code Order codes for bore diameters and toler- ances are specified in catalog section 3	Weight m
		D1 min.	D1 max.	ND1	NL	L2	A			
78-6	124	15	25	48	35	19	6	0.0002	2LC0470-0LM90-0AA0	0.5
	125								2LC0470-0LN90-0AA0	
105-6	124	25	45	74	40	22	8	0.0012	2LC0470-1LM90-0AA0	1.0
	125								2LC0470-1LN90-0AA0	
125-6	124	30	50	86	45	28	8	0.0026	2LC0470-2LM90-0AA0	1.6
	125								2LC0470-2LN90-0AA0	
140-6	124	30	60	103	50	33	9	0.0051	2LC0470-3LM90-0AA0	2.4
	125								2LC0470-3LN90-0AA0	
165-6	124	38	70	118	55	33	9	0.0096	2LC0470-4LM90-0AA0	3.4
	125								2LC0470-4LN90-0AA0	
175-6	124	42	75	122	65	43	10	0.0141	2LC0470-5LM90-0AA0	4.3
	125								2LC0470-5LN90-0AA0	
195-6	124	48	75	135	70	44	9	0.0231	2LC0470-6LM90-0AA0	6.2
	125								2LC0470-6LN90-0AA0	
210-6	124	55	85	141	75	49	9	0.0309	2LC0470-7LM90-0AA0	7.2
	125								2LC0470-7LN90-0AA0	
240-6	124	65	95	164	90	59	10	0.0648	2LC0470-8LM90-0AA0	11.4
	125								2LC0470-8LN90-0AA0	

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Further hubs and flanges
Clamping hub

Size DA	Clamping hub Type	Dimensions in mm						Mass moment of inertia J	Product code Order codes for bore diameters and toler- ances are specified in catalog section 3	Weight m
		D1	D1	ND1	NL	L2	A			
mm		min.	max.					kgm ²		kg
255-6	124	70	95	171	95	64	10	0.0886	2LC0471-0LM90-0AA0	14.1
	125								2LC0471-0LN90-0AA0	
280-6	124	75	110	189	115	79	–	0.1489	2LC0471-1LM90-0AA0	19.6
	125								2LC0471-1LN90-0AA0	
305-6	124	80	120	203	125	90	–	0.2163	2LC0471-2LM90-0AA0	24.3
	125								2LC0471-2LN90-0AA0	
335-6	124	85	130	221	140	100	–	0.3441	2LC0471-3LM90-0AA0	32.6
	125								2LC0471-3LN90-0AA0	
372-6	124	95	140	230	150	110	–	0.4955	2LC0471-4LM90-0AA0	38.8
	125								2LC0471-4LN90-0AA0	

Additional coupling sizes are available on request.

Smaller bore diameters D1 min. are available on request.

Forcing-off threads of clamping hubs of type 124 from size 280 fitted from flange side (like type 125).

Weights and mass moments of inertia apply to a clamping hub with a maximum bore D1.

Dimensions and torques

Finished bore/shaft in standard fit	Size														
		78-6	105-6	125-6	140-6	165-6	175-6	195-6	210-6	240-6	255-6	280-6	305-6	335-6	372-6
D1 ^{G6} / _{h6} mm	Rated coupling torque T_{KN} Nm	170	270	490	700	1250	2000	3000	4400	5700	7600	10000	12000	18000	24000
	Maximum transmissible torque of the clamping hub Nm	200	–	–	–	–	–	–	–	–	–	–	–	–	–
16	200	–	–	–	–	–	–	–	–	–	–	–	–	–	–
19	220	–	–	–	–	–	–	–	–	–	–	–	–	–	–
20	250	–	–	–	–	–	–	–	–	–	–	–	–	–	–
22	245	–	–	–	–	–	–	–	–	–	–	–	–	–	–
24	195	–	–	–	–	–	–	–	–	–	–	–	–	–	–
25	225	270	–	–	–	–	–	–	–	–	–	–	–	–	–
28	–	400	–	–	–	–	–	–	–	–	–	–	–	–	–
30	–	380	670	900	–	–	–	–	–	–	–	–	–	–	–
32	–	430	710	940	–	–	–	–	–	–	–	–	–	–	–
35	–	390	740	1060	–	–	–	–	–	–	–	–	–	–	–
38	–	520	950	1340	1720	–	–	–	–	–	–	–	–	–	–
40	–	400	810	1140	1970	–	–	–	–	–	–	–	–	–	–
42	–	480	950	1320	1790	2590	–	–	–	–	–	–	–	–	–
45	–	505	850	1190	2150	3120	–	–	–	–	–	–	–	–	–
48	–	–	850	1400	2430	3200	3280	–	–	–	–	–	–	–	–
50	–	–	970	1090	2500	3550	3650	–	–	–	–	–	–	–	–
55	–	–	–	1390	2300	3870	3750	4120	–	–	–	–	–	–	–
60	–	–	–	1180	2020	3490	4490	5220	–	–	–	–	–	–	–
65	–	–	–	–	2500	4000	4840	6630	7600	–	–	–	–	–	–
70	–	–	–	–	2360	3610	5110	7430	9200	9800	–	–	–	–	–
75	–	–	–	–	–	3070	5040	7430	9600	11700	14600	–	–	–	–
80	–	–	–	–	–	–	–	7330	8800	12600	17200	19300	–	–	–
85	–	–	–	–	–	–	–	6260	10000	12400	18300	21400	25100	–	–
90	–	–	–	–	–	–	–	–	9700	14200	20000	23600	29000	–	–
95	–	–	–	–	–	–	–	–	10000	14700	19700	24000	30400	36300	–
100	–	–	–	–	–	–	–	–	–	–	19700	24000	34400	41100	–
110	–	–	–	–	–	–	–	–	–	–	19100	24000	33600	44200	–
120	–	–	–	–	–	–	–	–	–	–	–	24000	33400	48000	–
130	–	–	–	–	–	–	–	–	–	–	–	–	33500	46700	–
140	–	–	–	–	–	–	–	–	–	–	–	–	–	44900	–

The maximum transmissible torque of the clamping hub must not be exceeded!

Further coupling sizes and higher torques are available on request.

Ordering example:
ARPEX ARS-6 clamping hub, size 105-6, type 124,
for shaft diameter 40h6 mm.

Product code:
2LC0470-1LM90-0AA0-Z
LOW+Y26
clear text to Y26: **h6**

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARS-6 Series

Spare and wear parts
Plate pack ARS-6

Selection and ordering data

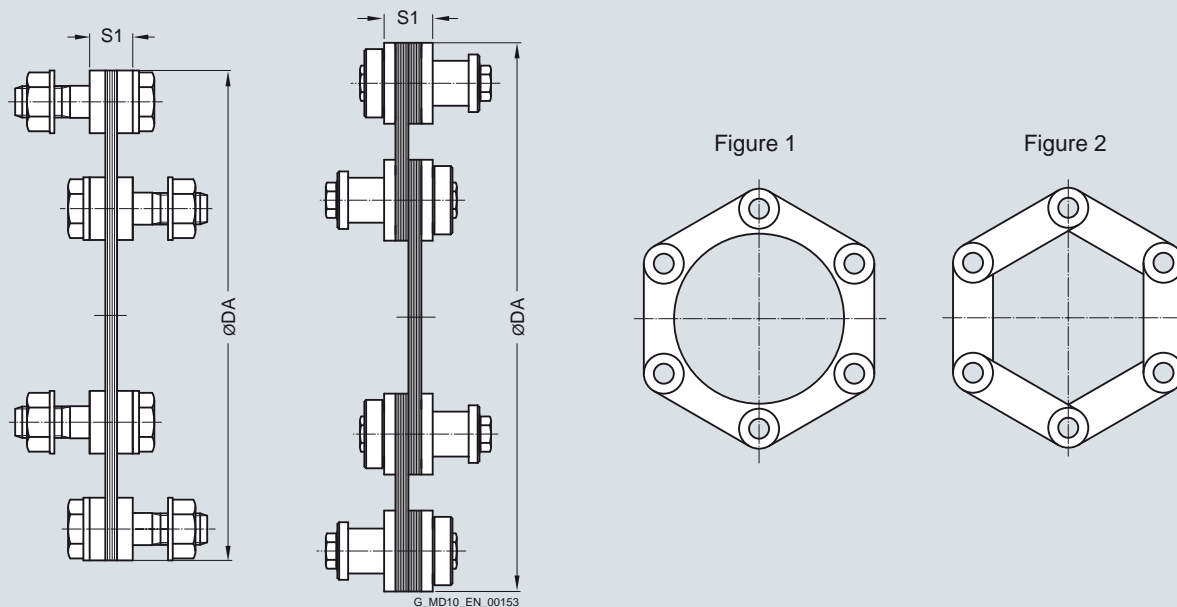


Plate packs up to size 255-6 comprise ring plates (Fig. 1) and from size 280-6 side-bar plates (Fig. 2).

Dimensions in mm		Mass moment of inertia	Product code	Weight
Size	S1	J		m
DA		kgm ²		kg
78-6	8	0.0001	2LC0470-0NQ00-0AA0	0.1
105-6	8	0.0003	2LC0470-1NQ00-0AA0	0.1
125-6	11	0.0009	2LC0470-2NQ00-0AA0	0.3
140-6	11	0.0012	2LC0470-3NQ00-0AA0	0.3
165-6	14	0.0033	2LC0470-4NQ00-0AA0	0.7
175-6	15	0.0050	2LC0470-5NQ00-0AA0	0.9
195-6	15	0.0084	2LC0470-6NQ00-0AA0	1.2
210-6	15	0.0137	2LC0470-7NQ00-0AA0	1.8
240-6	18	0.0253	2LC0470-8NQ00-0AA0	2.5
255-6	23	0.0410	2LC0471-0NQ00-0AA0	3.5
280-6	25	0.0613	2LC0471-1NQ00-0AA0	4.4
305-6	27	0.0734	2LC0471-2NQ00-0AA0	4.6
335-6	30	0.1180	2LC0471-3NQ00-0AA0	6.1
372-6	32	0.2127	2LC0471-4NQ00-0AA0	9.3
407-6	35	0.3387	2LC0471-5NQ00-0AA0	12.3
442-6	38	0.4950	2LC0471-6NQ00-0AA0	15.2
487-6	41	0.7965	2LC0471-7NQ00-0AA0	20.0
522-6	44	1.0849	2LC0471-8NQ00-0AA0	23.6
572-6	47	1.6931	2LC0472-0NQ00-0AA0	31.0
602-6	50	2.2420	2LC0472-1NQ00-0AA0	37.1

The plate pack of the ARS-6 series is readily available as a spare part.

The plate pack is delivered with screw connection.

Up to size 280-6 close-fitting bolts with collar nuts are used.

From size 305-6 patented conical screw connections are used.

Ordering example:

ARPEX ARS-6 plate pack, size 105-6,
complete with screw connections.

Product code:

2LC0470-1NQ00-0AA0

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARC-8/-10 Series

General information

Overview



Coupling can be designed for potentially explosive environments in accordance with 94/9/EC.

Benefits

ARPEX couplings of the ARC-8/-10 series are outstanding for their robust construction. They have been optimized for high torques combined with high speeds. The patented conical screw connection ensures reliable torque transmission by a true

positive fit and is designed to be extremely easy to fit. Couplings can be designed for potentially explosive environments in accordance with 94/9/EC.

Application

ARPEX couplings of the ARC-8 and ARC-10 series are output- and speed-optimized coupling solutions. Power transmission is by means of patented conical screw connections and plate packs of the octagonal and decagonal types. Torques of between 8.5 and 1450 kNm can be transmitted at a permitted angular misalignment of 0.2° to 0.4°. The closed flange shape and a compact construction permit high peripheral speeds and high speeds. On most types, the intermediate spacer can be radially fitted without moving the connected units.

Main areas of application for the ARC-8/-10 series:

- Paper-making machines
- Printing machines
- Compressors
- Fans and blowers
- Generators
- Presses
- Conveyors
- Crane systems
- Pumps
- Mills
- Rotary furnaces
- Stirrers

6

FLENDER Standard Couplings

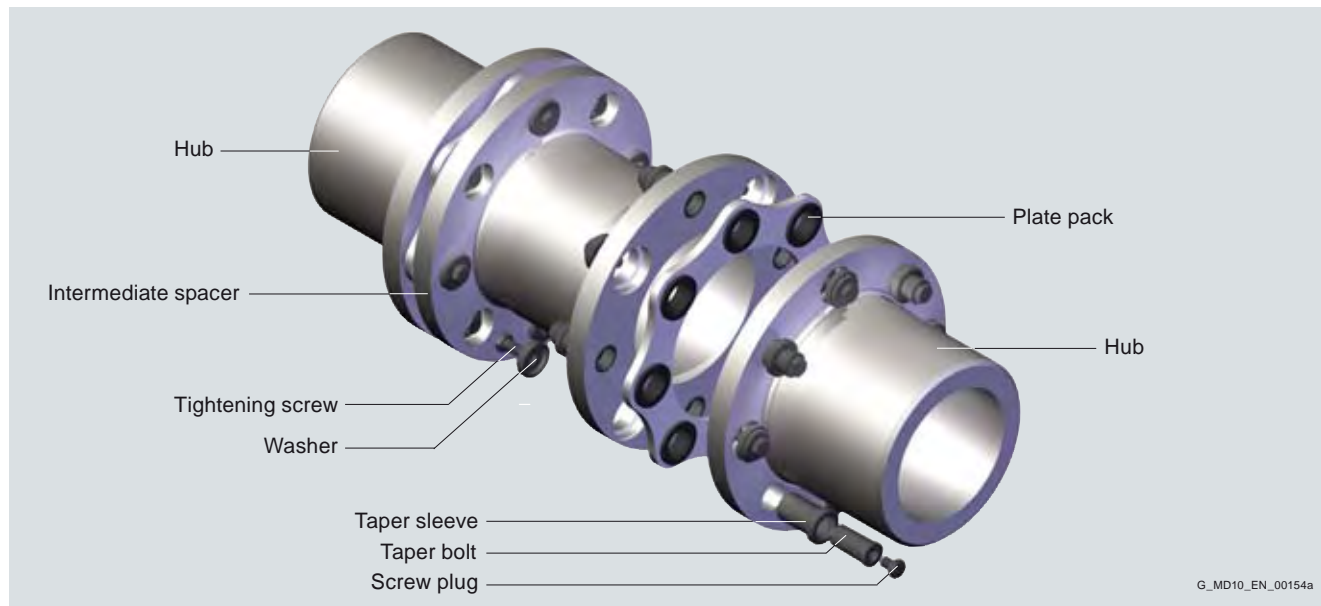
Torsionally Rigid All-Steel Couplings – ARPEX ARC-8/-10 Series

General information

Design

The classic design of an ARPEX coupling of the ARC-8/-10 series type NEN is shown in the following illustration. The plate packs are bolted alternately between the flanges of the coupling hubs and the intermediate spacer.

Conical screw connections are used for fastening. The intermediate spacer lengths are variably designed according to customer specifications.



G_MD10_EN_00154a

Design of an ARPEX coupling, ARC-8/-10 series, type NEN

Variants of the ARPEX coupling, ARC-8/-10 series

Types	
NEN	Variant with intermediate spacer machined on all sides, length variable
NHN	Variant with unmachined intermediate spacer, length variable
BUB	Compact variant with split intermediate spacer for short shaft distances
MFEFM	Variant with preassembled intermediate unit and machined intermediate spacer, length variable
MFHFM	Variant with preassembled intermediate unit and unmachined intermediate spacer, length variable

The coupling parts of the ARPEX ARC-8/-10 series with the exception of the H spacers have been machined on all sides. These are delivered with unmachined and primed spacer tube.

Further application-specific coupling types are available in selection module **X.CAT NG** at www.siemens.com/couplings. Dimension sheets and further information are available on request.

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARC-8/-10 Series

General information

Technical data

Power ratings

Size	Rated torque T_{KN} kNm	Maximum torque T_{Kmax} kNm	Overload torque T_{KOL} kNm	Fatigue torque T_{KW} kNm	Maximum speed n_{Kmax} rpm	Maximum permitted shaft misalignment			Torsional stiffness							
						$\pm\Delta K_a$ mm	$\pm\Delta K_w$ mm	$\pm\Delta K_r$ mm	C_T							
									NEN NHN	BUB	MFEFM MFHFM	NEN for	NHN	BUB	MFEFM for	MFHFM
									S = 1000 mm	S = 1000 mm	S = 1000 mm	S = 1000 mm	S = 1000 mm	S = 1000 mm		
									mm	mm	mm	MNm/rad	MNm/rad	MNm/rad	MNm/rad	MNm/rad
225-8	8.5	17	25.5	4.25	8500	1.94	0.4°	6.87	0.96	6.53	3.1	0.9368	3.0	3.1	0.9748	
255-8	12.7	25.4	38.1	6.35	7500	2.32		6.86	1.10	6.51	3.8	1.2778	3.7	3.8	1.3295	
270-8	16.5	33	49.5	8.25	7000	2.40		6.88	1.10	6.52	5.4	1.7339	5.1	5.4	1.8072	
295-8	23	46	69	11.5	6500	2.62		6.86	1.17	6.44	7.1	2.6134	6.7	7.1	2.7358	
325-8	33	66	99	16.5	6000	2.60		6.84	1.38	6.34	9.6	3.9537	9.4	9.6	4.1715	
355-8	45	90	135	22.5	5500	2.88		6.83	1.42	6.28	12.8	5.6093	12.5	12.8	5.9339	
385-8	56	112	168	28	5000	3.12		6.81	1.63	6.22	17.8	7.8517	17.0	17.8	8.3555	
420-8	70	140	210	35	4500	3.46		6.79	1.78	6.14	22.9	10.8175	21.9	22.9	11.5763	
455-8	88	176	264	44	4200	4.02		6.78	1.89	6.11	30.0	14.2794	28.2	30.0	15.2998	
505-8	120	240	360	60	3800	4.28		6.77	2.41	6.04	40.2	20.9046	36.4	40.2	22.4421	
545-8	165	330	495	82.5	3500	4.48		6.75	2.67	5.98	50.4	28.7428	45.0	50.4	30.7848	
595-8	210	420	630	105	3200	4.86		6.73	2.88	5.89	67.8	39.5343	59.5	67.8	42.5997	
630-8	260	520	780	130	3000	4.98	0.3°	4.93	2.10	4.14	61.8	42.6162	61.2	61.8	46.3697	
700-8	340	680	1020	170	2700	5.78		4.91	2.38	4.06	84.9	60.2135	83.1	84.9	65.8083	
								S = 1500 mm	S = 1500 mm	S = 1500 mm	S = 1500 mm	S = 1500 mm	S = 1500 mm	S = 1500 mm	S = 1500 mm	
630-10	340	680	1020	170	3000	3.04	0.2°	5.03	1.40	4.50	94.6	46.9832	94.4	94.6	50.5520	
700-10	430	860	1290	215	2700	3.60		5.02	1.58	4.45	135	72.3106	132	135	77.9729	
760-10	550	1100	1650	275	2500	3.70		4.98	1.60	4.30	173	91.7589	180	173	101.228	
860-10	770	1540	2310	385	2200	4.82		4.95	1.86	4.21	244	145.230	245	244	160.422	
950-10	1050	2100	3150	525	2000	5.40		4.91	1.92	4.09	325	204.443	338	325	227.957	
1035-10	1450	2900	4350	725	1850	5.78		4.88	1.95	3.97	426	292.140	455	426	326.930	

The permitted shaft misalignments ΔK_a , ΔK_r and ΔK_w are maximum values and must not occur at the same time (see following table).

The specified, permitted shaft misalignment ΔK_r for types NEN/NHN and MFEFM/MFHFM applies to a shaft distance of $S = 1000$ mm (ARC-8) or $S = 1500$ mm (ARC-10).

The permitted shaft misalignment ΔK_r for types NEN and NHN is calculated as follows: $\Delta K_r = (S - S1) \cdot \tan(\Delta K_w)$.

The permitted shaft misalignment ΔK_r for types MFEFM and MFHFM is calculated as follows:

$$\Delta K_r = (S - S1 - 2 \cdot BF) \cdot \tan(\Delta K_w).$$

The values for torsional stiffness apply to the complete coupling. In the case of types NHN and MFHFM to a coupling with shaft distance $S = 1000$ mm (ARC-8) or $S = 1500$ mm (ARC-10). The torsional stiffness of the plate packs applies to the rated coupling torque T_{KN} . To determine the torsional stiffness for a specific operating point, e.g. for calculating torsional vibration, the manufacturer must be consulted.

T_{Kmax} permitted only five times per hour.

Permitted shaft misalignments

Size	Permitted angular misalignment $\pm\Delta K_w$				
	0.0°	0.1°	0.2°	0.3°	0.4°
	Permitted axial misalignment $\pm\Delta K_a$ in mm				
225-8	1.94	1.46	0.97	0.48	0.00
255-8	2.32	1.74	1.16	0.58	0.00
270-8	2.40	1.80	1.20	0.60	0.00
295-8	2.62	1.96	1.31	0.66	0.00
325-8	2.60	1.95	1.30	0.65	0.00
355-8	2.88	2.16	1.44	0.72	0.00
385-8	3.12	2.34	1.56	0.78	0.00
420-8	3.46	2.59	1.73	0.86	0.00
455-8	4.02	3.01	2.01	1.00	0.00
505-8	4.28	3.21	2.14	1.07	0.00
545-8	4.48	3.36	2.24	1.12	0.00
595-8	4.86	3.65	2.43	1.22	0.00
630-8	4.98	3.32	1.66	0.00	
700-8	5.78	3.85	1.93	0.00	
630-10	3.04	1.52	0.00		
700-10	3.60	1.80	0.00		
760-10	3.70	1.85	0.00		
860-10	4.82	2.41	0.00		
950-10	5.40	2.70	0.00		
1035-10	5.78	2.89	0.00		

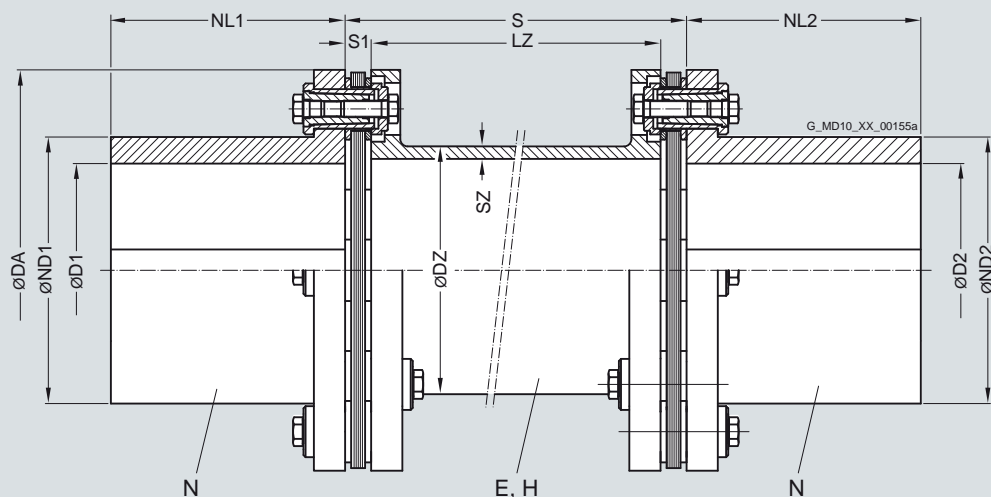
FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARC-8/-10 Series

Types NEN/NHN

Selection and ordering data

Torsionally rigid coupling types NEN and NHN with radially freely dismountable intermediate spacer and variable spacer length. Power transmission via patented conical screw connection.



Size	Rated torque	Maximum speed	Type	Dimensions in mm								Mass moment of inertia	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight
				D1/D2 Keyway DIN 6885 max.	ND1/ ND2	DZ	SZ	NL1/ NL2	S1	LZ	S			
mm	kNm	rpm								min.	min.	kgm ²		kg
225-8	8.5	8500	NEN	120	147	135.0	6.0	140	16	91	123	0.19	2LC0400-0BE99-0AZ0	29
			NHN			139.7	8.0			240	272	0.21	2LC0400-0BF99-0AZ0	33
255-8	12.7	7500	NEN	140	172	147.0	7.0	160	17	94	128	0.35	2LC0400-1BE99-0AZ0	42
			NHN			152.4	8.8			250	284	0.38	2LC0400-1BF99-0AZ0	47
270-8	16.5	7000	NEN	150	182	172.0	7.0	170	14	96	124	0.45	2LC0400-2BE99-0AZ0	46
			NHN			177.8	7.1			300	328	0.49	2LC0400-2BF99-0AZ0	52
295-8	23	6500	NEN	160	199	188.0	8.0	185	17	121	155	0.75	2LC0400-3BE99-0AZ0	66
			NHN			193.7	8.8			310	344	0.82	2LC0400-3BF99-0AZ0	74
325-8	33	6000	NEN	170	214	197.0	10.5	195	20	134	174	1.27	2LC0400-4BE99-0AZ0	93
			NHN			203.0	12.5			380	420	1.42	2LC0400-4BF99-0AZ0	108
355-8	45	5500	NEN	185	235	222.0	11.0	215	22	145	189	2.01	2LC0400-5BE99-0AZ0	123
			NHN			229.0	12.5			390	434	2.21	2LC0400-5BF99-0AZ0	140
385-8	56	5000	NEN	205	256	238.0	12.0	240	25	151	201	3.02	2LC0400-6BE99-0AZ0	156
			NHN			244.5	14.2			450	500	3.35	2LC0400-6BF99-0AZ0	181
420-8	70	4500	NEN	230	282	266.0	12.0	275	27	177	231	4.74	2LC0400-7BE99-0AZ0	202
			NHN			273.0	14.2			470	524	5.23	2LC0400-7BF99-0AZ0	230
455-8	88	4200	NEN	255	308	291.0	13.0	300	29	180	238	6.81	2LC0400-8BE99-0AZ0	244
			NHN			298.5	14.2			470	528	7.43	2LC0400-8BF99-0AZ0	274
505-8	120	3800	NEN	285	344	315.0	15.0	340	31	188	250	11.5	2LC0401-0BE99-0AZ0	335
			NHN			323.9	17.5			590	652	12.8	2LC0401-0BF99-0AZ0	390
545-8	165	3500	NEN	300	371	346.0	17.0	350	33	202	268	16.8	2LC0401-1BE99-0AZ0	427
			NHN			355.6	20.0			600	666	18.7	2LC0401-1BF99-0AZ0	497
595-8	210	3200	NEN	330	405	384.0	18.0	390	36	212	284	25.9	2LC0401-2BE99-0AZ0	552
			NHN			394.0	20.0			610	682	28.6	2LC0401-2BF99-0AZ0	626

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARC-8/-10 Series

Types NEN/NHN

Size	Rated torque	Maximum speed	Type	Dimensions in mm								Shaft distance S	Mass moment of inertia J	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight m
DA	T_{KN}	n_{Kmax}		D1/D2 Keyway DIN 6885 max.	ND1/ ND2	DZ	SZ	NL1/ NL2	S1	LZ min.	S min.	J		m	
mm	kNm	rpm										kgm ²		kg	
630-8	260	3000	NEN	340	425	409.0	19.0	400	58	281	397	40.6	2LC0401-3BE99-0AZ0	763	
			NHN								630	746	43.4	2LC0401-3BF99-0AZ0	830
700-8	340	2700	NEN	395	479	459.0	19.0	470	62	300	424	66.5	2LC0401-4BE99-0AZ0	992	
			NHN								700	824	71.0	2LC0401-4BF99-0AZ0	1078
630-10	340	3000	NEN	310	425	396.0	29.0	400	58	281	397	45.0	2LC0410-0BE99-0AZ0	895	
			NHN								630	746	48.5	2LC0410-0BF99-0AZ0	991
700-10	430	2700	NEN	350	479	459.0	26.0	470	62	300	424	75.7	2LC0410-1BE99-0AZ0	1215	
			NHN								700	824	82.4	2LC0410-1BF99-0AZ0	1352
760-10	550	2500	NEN	375	507	483.0	30.0	480	74	359	507	116	2LC0410-2BE99-0AZ0	1557	
			NHN								760	908	123	2LC0410-2BF99-0AZ0	1688
860-10	770	2200	NEN	425	574	546.0	33.0	510	82	393	557	208	2LC0410-3BE99-0AZ0	2159	
			NHN								860	1024	223	2LC0410-3BF99-0AZ0	2380
950-10	1050	2000	NEN	470	639	596.0	38.0	550	92	437	621	347	2LC0410-4BE99-0AZ0	2948	
			NHN								950	1134	371	2LC0410-4BF99-0AZ0	3234
1035-10	1450	1850	NEN	490	693	645.0	46.0	580	102	481	685	545	2LC0410-5BE99-0AZ0	3974	
			NHN								1035	1239	586	2LC0410-5BF99-0AZ0	4401

The permitted length of the intermediate spacer depends on the maximum operating speed of the coupling (see following table).

Weights and mass moments of inertia apply to the entire coupling with maximum bores D1/D2 and S = S min.

In the case of individual order of the intermediate spacer, the length (LZ) must be specified.

Permitted shaft distance S of type NHN relative to speed

Size	Speed n_N rpm													
	500	600	700	800	900	1000	1200	1400	1500	2000	2500	3000	4000	
	Permitted shaft distance S mm													
225-8	4962	4531	4196	3926	3703	3514	3209	2972	2872	2489	2228	2035	1765	
255-8	5170	4721	4372	4091	3858	3661	3343	3097	2992	2594	2322	2121	1839	
270-8	5608	5120	4741	4436	4183	3969	3625	3357	3243	2811	2516	2298	1992	
295-8	5860	5351	4955	4636	4372	4148	3788	3509	3390	2938	2630	2402	2083	
325-8	5969	5451	5048	4723	4454	4227	3860	3575	3455	2994	2680	2449	2123	
355-8	6349	5798	5369	5024	4738	4496	4106	3803	3675	3185	2851	2605	2259	
385-8	6573	6003	5559	5202	4906	4655	4252	3938	3806	3299	2953	2698	2340	
420-8	6968	6363	5893	5514	5200	4935	4507	4175	4034	3497	3131	2861	2481	
455-8	7290	6658	6166	5770	5441	5164	4716	4368	4221	3660	3276	2993	2596	
505-8	7575	6918	6407	5995	5654	5365	4900	4539	4386	3803	3405	3111		
545-8	7933	7245	6710	6279	5922	5619	5133	4754	4594	3983	3566	3258		
595-8	8368	7642	7078	6623	6246	5928	5414	5015	4847	4202	3762	3438		
630-8	8659	7910	7327	6858	6469	6140	5610	5198	5024	4358	3904	3569		
700-8	9197	8401	7782	7283	6870	6521	5958	5521	5336	4629	4147			
630-10	8410	7682	7116	6660	6283	5963	5449	5049	4880	4234	3793	3468		
700-10	9128	8338	7724	7229	6819	6472	5914	5480	5296	4595	4116			
760-10	9348	8540	7912	7406	6987	6632	6061	5616	5429	4711	4222			
860-10	9951	9091	8423	7884	7438	7060	6452	5980	5780	5016	Outside the permitted speed range			
950-10	10386	9489	8792	8230	7765	7371	6737	6244	6035	5239				
1035-10	10771	9841	9119	8536	8054	7646	6989	6478	6262					

Ordering example:

ARPEX ARC-8 NHN coupling, size 270-8, with shaft distance S = 1000 mm,
Bore ØD1 120H7 mm, with keyway to DIN 6885 and set screw,
Bore ØD2 130K7 mm, with keyway to DIN 6885 and set screw.

Product code:

2LC0400-2BF99-0AZ0-Z

L1S+M1U+Q0Y+M13

clear text to Q0Y **S = 1000 mm**

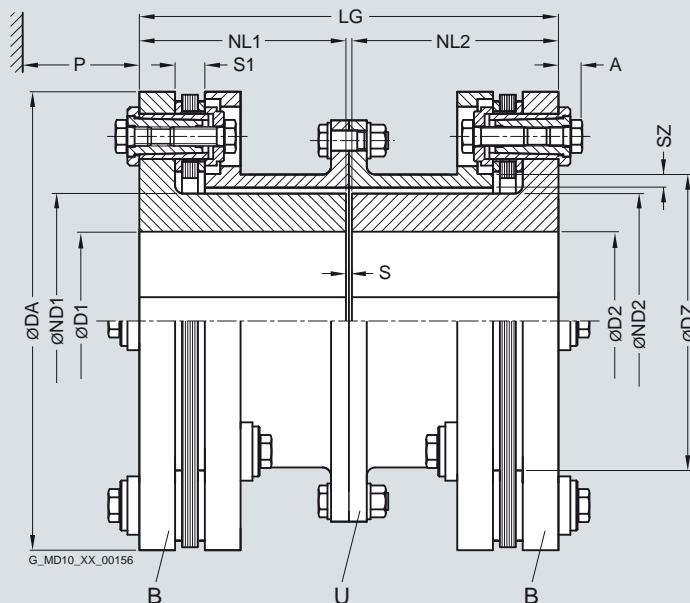
FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARC-8/-10 Series

Type BUB

Selection and ordering data

Torsionally rigid coupling type BUB with split intermediate spacer. Type BUB permits shortest shaft distances.



6

Size	Rated torque	Maximum speed	Dimensions in mm										Mass moment of inertia	Product code	Weight	
			DA	T_{KN}	n_{Kmax}	D1/D2 Keyway DIN 6885 max.	ND1/ ND2	DZ	SZ	NL1/ NL2	S1	Shaft distance				J
mm	kNm	rpm								S	A	P	LG	kgm ²		kg
225-8	8.5	8500	105	136	150	4.5	90	16	5	12	47	185	0.19	2LC0400-0AF99-0AA0	27	
255-8	12.7	7500	125	160	175	5.0	100	17	8	13	49	208	0.34	2LC0400-1AF99-0AA0	38	
270-8	16.5	7000	130	169	185	5.5	100	14	8	13	46	208	0.43	2LC0400-2AF99-0AA0	43	
295-8	23	6500	135	185	202	6.0	110	17	7	15	55	227	0.70	2LC0400-3AF99-0AA0	61	
325-8	33	6000	140	195	217	8.5	130	20	10	16	65	270	1.23	2LC0400-4AF99-0AA0	90	
355-8	45	5500	150	215	238	9.0	135	22	12	19	71	282	1.89	2LC0400-5AF99-0AA0	116	
385-8	56	5000	180	235	259	9.5	155	25	8	20	79	318	2.87	2LC0400-6AF99-0AA0	143	
420-8	70	4500	200	260	285	10.0	170	27	10	23	87	350	4.51	2LC0400-7AF99-0AA0	187	
455-8	88	4200	220	285	311	10.5	180	29	10	23	90	370	6.42	2LC0400-8AF99-0AA0	226	
505-8	120	3800	245	316	347	12.0	220	31	12	24	97	452	11.1	2LC0401-0AF99-0AA0	322	
545-8	165	3500	260	334	374	14.5	240	33	16	26	103	496	15.9	2LC0401-1AF99-0AA0	400	
595-8	210	3200	285	364	408	15.0	260	36	16	27	112	536	24.0	2LC0401-2AF99-0AA0	507	
630-8	260	3000	300	381	428	17.0	280	58	16	28	150	576	37.4	2LC0401-3AF99-0AA0	688	
700-8	340	2700	332	431	482	17.5	310	62	20	29	160	640	62.3	2LC0401-4AF99-0AA0	936	
630-10	340	3000	260	377	428	23.0	280	58	16	28	150	576	41.0	2LC0410-0AF99-0AA0	794	
700-10	430	2700	310	430	482	24.0	310	62	20	29	160	640	66.4	2LC0410-1AF99-0AA0	1023	
760-10	550	2500	320	452	512	26.0	330	74	20	34	191	680	104	2LC0410-2AF99-0AA0	1354	
860-10	770	2200	350	515	579	28.0	380	82	20	38	209	780	191	2LC0410-3AF99-0AA0	1993	
950-10	1050	2000	400	574	644	31.0	400	92	25	40	233	825	311	2LC0410-4AF99-0AA0	2592	
1035-10	1450	1850	430	615	698	38.0	420	102	25	42	257	865	477	2LC0410-5AF99-0AA0	3332	

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARC-8/-10 Series

Type BUB

Split intermediate spacer permits preassembly of the coupling halves at the factory and easy final assembly by the customer (optional).

Power transmission via patented conical screw connection.

The hubs are standard-manufactured from high-grade steel. In the case of smaller bore diameters higher-grade material is used, depending on the application (additional price).

Weights and mass moments of inertia apply to the entire coupling with maximum bores D1/D2.

Ordering example:

ARPEX ARC-8 BUB coupling, size 270-8,

Bore ØD1 120H7 mm, with keyway to DIN 6885 and set screw,

Bore ØD2 130K7 mm, with keyway to DIN 6885 and set screw.

Product code:

2LC0400-2AF99-0AA0-Z

L1S+M1U+M13

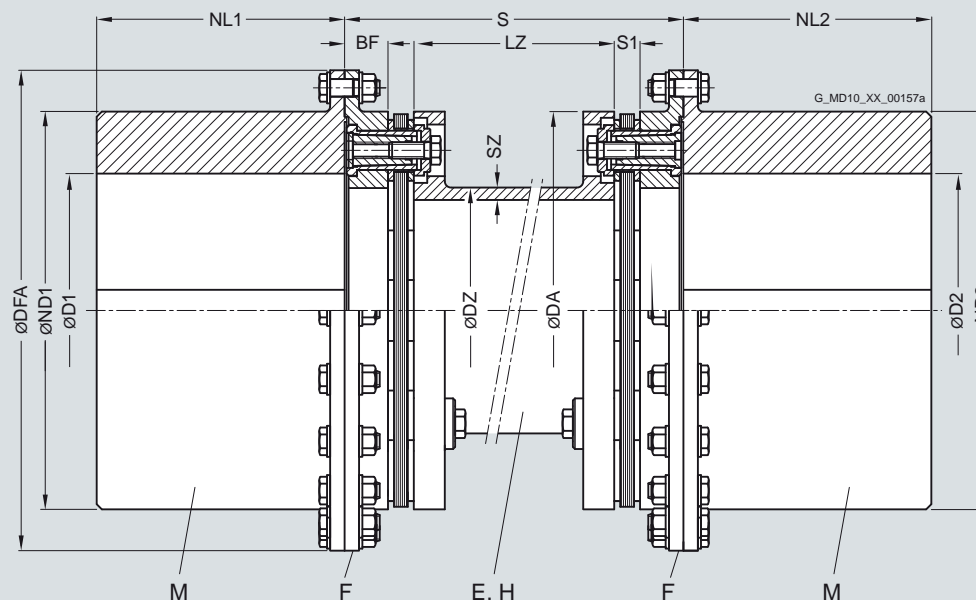
FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARC-8/-10 Series

Types MFEFM/MFHFM

Selection and ordering data

Torsionally rigid coupling types MFEFM and MFHFM with radially freely dismountable FEF or FHF transmission unit and variable spacer length. Power transmission via patented conical screw connection.



Size	Rated torque	Maximum speed	Type	Dimensions in mm										Mass moment of inertia	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight
				DA	D1/D2 Keyway DIN 6885	ND1/ ND2	DFA	DZ	SZ	NL1/ NL2	S1	LZ	S			
mm	kNm	rpm		max.								min.	min.		kgm ²	kg
225-8	8.5	8500	MFEFM	160	225	283	135.0	6.0	170	16	91	171	24	0.81	2LC0400-0AV99-0AZ0	81
			MFHFM				139.7	8.0			240	320		0.83	2LC0400-0AX99-0AZ0	85
255-8	12.7	7500	MFEFM	180	255	313	147.0	7.0	180	17	94	178	25	1.37	2LC0400-1AV99-0AZ0	109
			MFHFM				152.4	8.8			250	334		1.39	2LC0400-1AX99-0AZ0	114
270-8	16.5	7000	MFEFM	195	270	328	172.0	7.0	185	14	96	176	26	1.70	2LC0400-2AV99-0AZ0	119
			MFHFM				177.8	7.1			300	380		1.74	2LC0400-2AX99-0AZ0	125
295-8	23	6500	MFEFM	210	295	353	188.0	8.0	190	17	121	215	30	2.55	2LC0400-3AV99-0AZ0	153
			MFHFM				193.7	8.8			310	404		2.62	2LC0400-3AX99-0AZ0	161
325-8	33	6000	MFEFM	230	325	389	197.0	10.5	210	20	134	246	36	4.30	2LC0400-4AV99-0AZ0	215
			MFHFM				203.0	12.5			380	492		4.45	2LC0400-4AX99-0AZ0	231
355-8	45	5500	MFEFM	255	355	419	222.0	11.0	230	22	145	267	39	6.45	2LC0400-5AV99-0AZ0	270
			MFHFM				229.0	12.5			390	512		6.65	2LC0400-5AX99-0AZ0	288
385-8	56	5000	MFEFM	275	385	465	238.0	12.0	250	25	151	285	42	10.0	2LC0400-6AV99-0AZ0	354
			MFHFM				244.5	14.2			450	584		10.4	2LC0400-6AX99-0AZ0	379
420-8	70	4500	MFEFM	300	420	507	266.0	12.0	270	27	177	325	47	15.3	2LC0400-7AV99-0AZ0	454
			MFHFM				273.0	14.2			470	618		15.8	2LC0400-7AX99-0AZ0	483
455-8	88	4200	MFEFM	325	455	542	291.0	13.0	295	29	180	334	48	22.2	2LC0400-8AV99-0AZ0	563
			MFHFM				298.5	14.2			470	624		22.8	2LC0400-8AX99-0AZ0	593
505-8	120	3800	MFEFM	361	505	601	315.0	15.0	325	31	188	354	52	37.9	2LC0401-0AV99-0AZ0	773
			MFHFM				323.9	17.5			590	756		39.2	2LC0401-0AX99-0AZ0	829
545-8	165	3500	MFEFM	389	545	641	346.0	17.0	350	33	202	378	55	54.3	2LC0401-1AV99-0AZ0	959
			MFHFM				355.6	20.0			600	776		56.2	2LC0401-1AX99-0AZ0	1029
595-8	210	3200	MFEFM	425	595	691	384.0	18.0	385	36	212	404	60	82.8	2LC0401-2AV99-0AZ0	1236
			MFHFM				394.0	20.0			610	802		85.5	2LC0401-2AX99-0AZ0	1310

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARC-8/-10 Series

Types MFEFM/MFHFM

Size	Rated torque T_{KN}	Maximum speed n_{kmax}	Type	Dimensions in mm										Mass moment of inertia J	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight m
				DA	D1/D2 Keyway DIN 6885 max.	ND1/ ND2	DFA	DZ	SZ	NL1/ NL2	S1	LZ min.	S min.			
mm	kNm	rpm												kgm ²		kg
630-8	260	3000	MFEFM	450	630	736	409.0	19.0	405	58	281	549	76	116	2LC0401-3AV99-0AZ0	1567
			MFHFM				419.0	20.0			630	898		119	2LC0401-3AX99-0AZ0	1634
700-8	340	2700	MFEFM	500	700	816	459.0	19.0	450	62	300	586	81	194	2LC0401-4AV99-0AZ0	2106
			MFHFM				470.0	20.0			700	986		198	2LC0401-4AX99-0AZ0	2192
630-10	340	3000	MFEFM	450	630	746	396.0	29.0	405	58	281	549	76	121	2LC0410-0AV99-0AZ0	1631
			MFHFM				406.4	30.0			630	898		125	2LC0410-0AX99-0AZ0	1727
700-10	430	2700	MFEFM	500	700	816	459.0	26.0	450	62	300	586	81	197	2LC0410-1AV99-0AZ0	2136
			MFHFM				470.0	30.0			700	986		203	2LC0410-1AX99-0AZ0	2273
760-10	550	2500	MFEFM	545	760	878	483.0	30.0	490	74	359	701	97	301	2LC0410-2AV99-0AZ0	2810
			MFHFM				495.0	30.0			760	1102		308	2LC0410-2AX99-0AZ0	2940
860-10	770	2200	MFEFM	615	860	991	546.0	33.0	555	82	393	769	106	547	2LC0410-3AV99-0AZ0	3993
			MFHFM				559.0	36.0			860	1236		563	2LC0410-3AX99-0AZ0	4213
950-10	1050	2000	MFEFM	680	950	1083	596.0	38.0	615	92	437	857	118	892	2LC0410-4AV99-0AZ0	5368
			MFHFM				610.0	40.0			950	1370		916	2LC0410-4AX99-0AZ0	5654
1035-10	1450	1850	MFEFM	740	1035	1168	645.0	46.0	670	102	481	947	131	1371	2LC0410-5AV99-0AZ0	7005
			MFHFM				660.4	50.0			1035	1501		1412	2LC0410-5AX99-0AZ0	7432

FEF or FHF transmission unit preassembled at the factory enables easy final assembly by the customer.

The permitted length of the intermediate spacer depends on the maximum operating speed of the coupling (see following table).

Permitted shaft distance S of type MFHFM relative to speed

Size	Speed n_N rpm													
	500	600	700	800	900	1000	1200	1400	1500	2000	2500	3000	4000	
Permitted shaft distance S mm														
225-8	5010	4579	4244	3974	3751	3562	3257	3020	2920	2537	2276	2083	1813	
255-8	5220	4771	4422	4141	3908	3711	3393	3147	3042	2644	2372	2171	1889	
270-8	5660	5172	4793	4488	4235	4021	3677	3409	3295	2863	2568	2350	2044	
295-8	5920	5411	5015	4696	4432	4208	3848	3569	3450	2998	2690	2462	2143	
325-8	6041	5523	5120	4795	4526	4299	3932	3647	3527	3066	2752	2521	2195	
355-8	6427	5876	5447	5102	4816	4574	4184	3881	3753	3263	2929	2683	2337	
385-8	6657	6087	5643	5286	4990	4739	4336	4022	3890	3383	3037	2782	2424	
420-8	7062	6457	5987	5608	5294	5029	4601	4269	4128	3591	3225	2955	2575	
455-8	7386	6754	6262	5866	5537	5260	4812	4464	4317	3756	3372	3089	2692	
505-8	7679	7022	6511	6099	5758	5469	5004	4643	4490	3907	3509	3215		
545-8	8043	7355	6820	6389	6032	5729	5243	4864	4704	4093	3676	3368		
595-8	8488	7762	7198	6743	6366	6048	5534	5135	4967	4322	3882	3558		
630-8	8811	8062	7479	7010	6621	6292	5762	5350	5176	4510	4056	3721		
700-8	9359	8563	7944	7445	7032	6683	6120	5683	5498	4791	4309			
630-10	8562	7834	7268	6812	6435	6115	5601	5201	5032	4386	3945	3620		
700-10	9290	8500	7886	7391	6981	6634	6076	5642	5458	4757	4278			
760-10	9542	8734	8106	7600	7181	6826	6255	5810	5623	4905	4416			
860-10	10163	9303	8635	8096	7650	7272	6664	6192	5992	5228	Outside the permitted speed range			
950-10	10622	9725	9028	8466	8001	7607	6973	6480	6271	5475				
1035-10	11033	10103	9381	8798	8316	7908	7251	6740	6524					

Ordering example:

ARPEX ARC-8 MFHFM coupling, size 270-8, with shaft distance S = 1000 mm,
Bore ØD1 150H7 mm, with keyway to DIN 6885 and set screw,
Bore ØD2 160K7 mm, with keyway to DIN 6885 and set screw.

Product code:

2LC0400-2AX99-0AZ0-Z

L1W+M1X+Q0Y+M13

clear text to Q0Y: **S = 1000 mm**

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARC-8/-10 Series

Spare and wear parts
Plate pack ARC-8/-10

Selection and ordering data

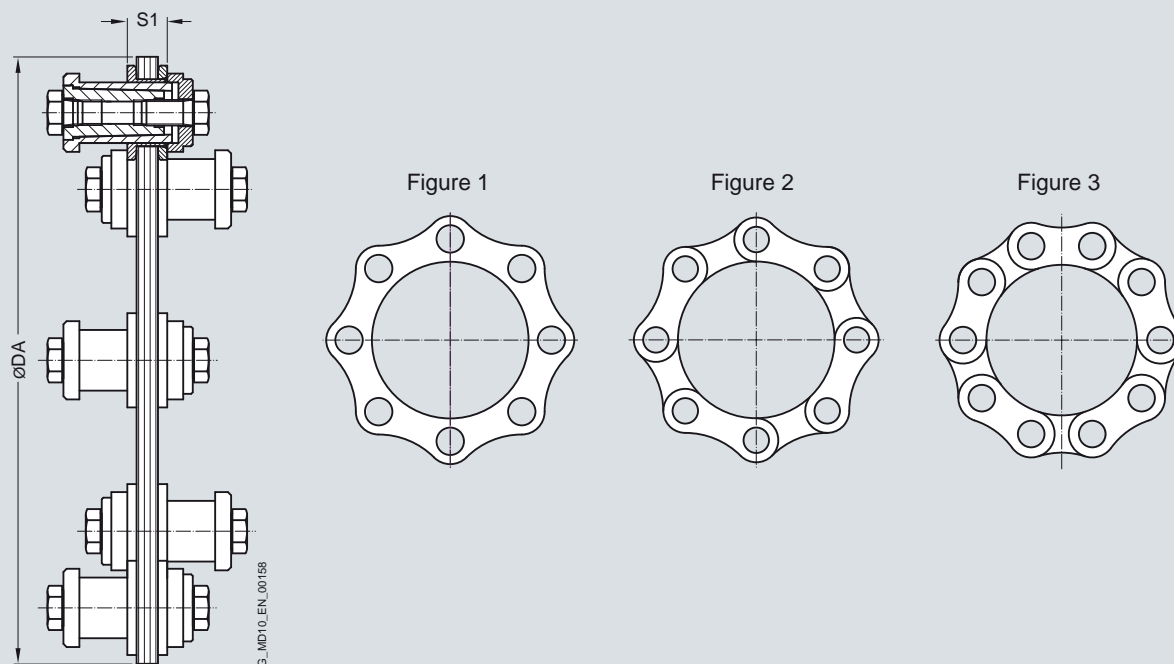


Plate packs of the ARC-8 series up to size 595-8 comprise ring plates (Fig. 1) and from size 630-8 side-bar plates (Fig. 2).

Plate packs of the ARC-10 series in all sizes comprise side-bar plates (Fig. 3).

Dimensions in mm		Plate pack Series	Mass moment of inertia J kgm ²	Product code	Weight m kg
Size	S1				
225-8	16	ARC-8	0.02	2LC0400-0AT00-0AA0	2.4
255-8	17	ARC-8	0.03	2LC0400-1AT00-0AA0	3.1
270-8	14	ARC-8	0.04	2LC0400-2AT00-0AA0	3.4
295-8	17	ARC-8	0.07	2LC0400-3AT00-0AA0	4.8
325-8	20	ARC-8	0.12	2LC0400-4AT00-0AA0	7.2
355-8	22	ARC-8	0.20	2LC0400-5AT00-0AA0	9.8
385-8	25	ARC-8	0.30	2LC0400-6AT00-0AA0	12.7
420-8	27	ARC-8	0.46	2LC0400-7AT00-0AA0	16.2
455-8	29	ARC-8	0.64	2LC0400-8AT00-0AA0	19.2
505-8	31	ARC-8	1.01	2LC0401-0AT00-0AA0	24.5
545-8	33	ARC-8	1.47	2LC0401-1AT00-0AA0	30.8
595-8	36	ARC-8	2.26	2LC0401-2AT00-0AA0	39.8
630-8	58	ARC-8	4.03	2LC0401-3AT00-0AA0	67.2
700-8	62	ARC-8	6.33	2LC0401-4AT00-0AA0	84.5
630-10	58	ARC-10	5.00	2LC0410-0AT00-0AA0	78.0
700-10	62	ARC-10	7.85	2LC0410-1AT00-0AA0	98.0
760-10	74	ARC-10	13.73	2LC0410-2AT00-0AA0	147
860-10	82	ARC-10	24.49	2LC0410-3AT00-0AA0	203
950-10	92	ARC-10	41.26	2LC0410-4AT00-0AA0	277
1035-10	102	ARC-10	65.64	2LC0410-5AT00-0AA0	374

The plate pack of the ARC-8/-10 series is readily available as a spare part.

The plate pack is delivered with conical screw connection.

Ordering example:
ARPEX ARC-8 plate pack, size 225-8,
complete with screw connection

Product code:
2LC0400-0AT00-0AA0

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARP-6 Series

General information

Overview



Coupling can be used for potentially explosive environments in accordance with 94/9/EC.

Benefits

ARPEX couplings of the ARP-6 series are outstanding for their application-optimized construction. The two types NAN and MCECM have been specially designed for drives with uniform to medium loads and at the same time meet the requirements of API 610. The type MCECM with preassembled CEC intermedi-

ate unit can also be optionally designed to API 671. A special catcher device serves to secure the intermediate spacer in the event of plate breakage. Their use in potentially explosive environments in accordance with Directive 94/9/EC is possible.

Application

ARPEX series ARP-6 couplings have been specially developed for pump drives and specifically for centrifugal pump drives. Special care was taken to meet the requirements of API 610 and API 671 (API = American Petroleum Institute). Power is transmitted via close-fitting bolts and nuts from size 310-6 with conical screw connection and plate packs in hexagonal design. Torques of between 100 and 17000 Nm can be transmitted at a permitted angular misalignment of 0.7°. The closed flange shape and a compact construction permit high peripheral speeds and high speeds. The intermediate spacer can be fitted radially without moving the connected units.

Main areas of application for the ARP-6 series:

- Centrifugal pumps
- Boiler feed pumps
- Propeller pumps
- Wing pumps
- Pipeline pumps
- Turbo compressors
- Screw compressors
- Turbo blowers
- Axial, radial blowers
- Rotary-piston blowers
- Fans

FLENDER Standard Couplings

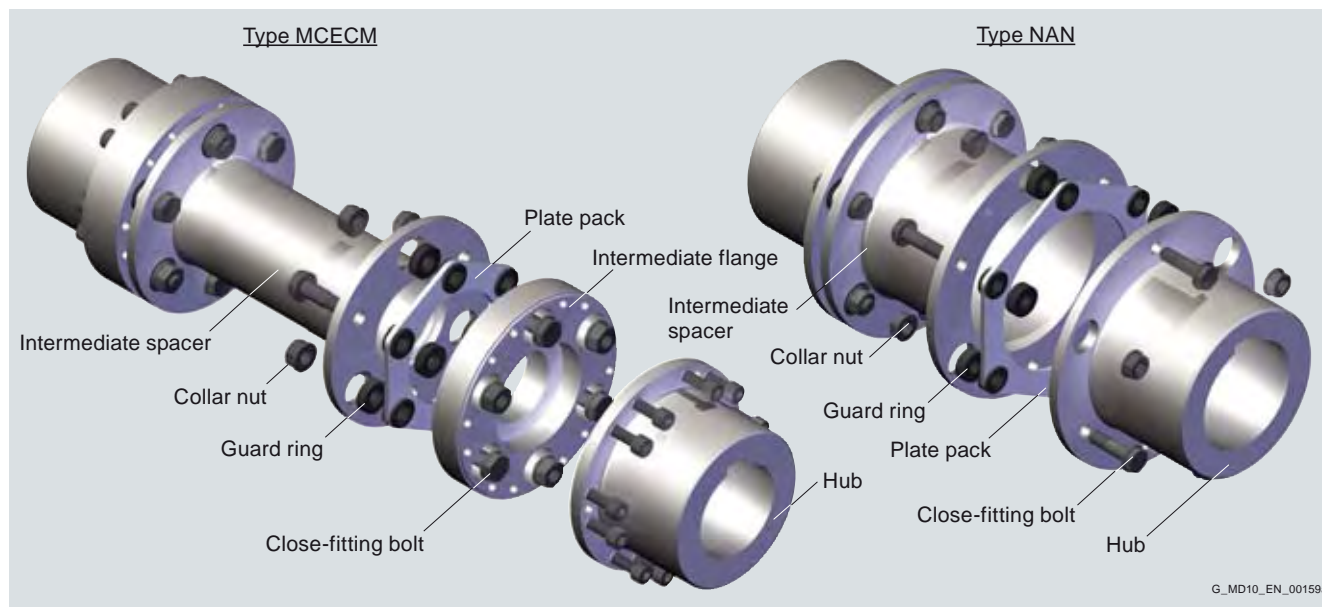
Torsionally Rigid All-Steel Couplings – ARPEX ARP-6 Series

General information

Design

NAN: The design of an ARPEX NAN coupling of the ARP-6 series is shown in the following illustration. The plate packs are bolted alternately between the flanges of the coupling hubs and the intermediate spacer. Up to size 298-6 close-fitting bolts and from size 325-6 conical screw connections are used for fastening. The intermediate spacer is available from stock in various fixed lengths. Hubs are designed with threaded pull-off holes.

MCECM: The design of an ARPEX MCECM coupling of the ARP-6 series is shown in the following illustration. Bolted between two hubs is the CEC transmission unit, the preassembled plate packs of which are bolted alternately between flanges and intermediate spacer. Up to size 275-6 close-fitting bolts and from size 310-6 conical screw connections are used for fastening. The intermediate spacer is available from stock in various fixed lengths. Jumbo hubs for large bore diameters can be optionally used.



G_MD10_EN_00159a

Design of the ARPEX coupling, ARP-6 series

Variants of the ARPEX coupling, ARP-6 series

Types	
NAN	Variant with intermediate spacer, various fixed lengths available from stock
MCECM	Variant with preassembled intermediate unit and spacer machined on all sides, various fixed lengths available from stock

Further application-specific coupling types are available in selection module **X.CAT NG** at www.siemens.com/couplings. Dimension sheets and further information are available on request.

Technical data

Power ratings, type NAN

Size	Rated torque T_{KN} Nm	Maximum torque T_{Kmax} Nm	Overload torque T_{KOL} Nm	Fatigue torque T_{KW} Nm	Maximum speed n_{Kmax} rpm	Maximum permitted shaft misalignment					Torsional stiffness							
						$\pm\Delta K_a$ mm	$\pm\Delta K_w$ mm	$\pm\Delta K_r$ mm	S = 100 mm	S = 140 mm	S = 180 mm	S = 200 mm	S = 250 mm	C_T				
														S = 100 mm	S = 140 mm	S = 180 mm	S = 200 mm	S = 250 mm
88-6	190	270	450	70	21700	1.10	0.7°	1.15	1.64	–	–	–	0.04	0.04	–	–	–	
115-6	270	410	680	110	16600	1.81		1.15	1.64	2.13	–	–	0.09	0.09	0.08	–	–	
135-6	580	870	1450	230	12700	2.02		1.14	1.62	2.11	–	–	0.21	0.19	0.17	–	–	
150-6	660	1000	1650	270	11400	2.41		1.14	1.62	2.11	2.36	2.97	0.27	0.25	0.24	0.23	0.21	
176-6	1220	1900	3100	490	9750	2.75		1.11	1.6	2.09	2.33	2.94	0.44	0.40	0.38	0.36	0.34	
185-6	1875	2900	4700	750	9300	2.85		1.09	1.58	2.06	2.31	2.92	0.56	0.52	0.49	0.47	0.44	
212-6	2850	4230	7200	1200	8100	3.06		1.10	1.59	2.08	2.32	2.93	0.81	0.75	0.70	0.67	0.62	
225-6	4200	6300	10500	1700	7650	3.14		–	1.59	2.08	2.32	2.93	–	0.85	0.81	0.79	0.74	
256-6	5750	8700	15000	2300	6700	3.69		–	1.56	2.05	2.3	2.91	–	1.37	1.31	1.29	1.22	
272-6	8050	12000	20000	3200	6300	3.85		–	1.51	2	2.25	2.86	–	1.44	1.39	1.36	1.3	
298-6	10000	15000	25000	4000	5150	4.19		–	1.47	1.95	2.2	2.81	–	1.47	1.43	1.41	1.37	
325-6	12000	18000	30000	4800	4700	4.45		–	–	1.93	2.17	2.79	–	–	2.48	2.44	2.34	

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARP-6 Series

General information

Power ratings, type MCECM

Size	Rated torque T_{KN} Nm	Maximum torque T_{Kmax} Nm	Overload torque T_{KOL} Nm	Fatigue torque T_{KW} Nm	Maximum speed n_{Kmax} rpm	Maximum permitted shaft misalignment					Torsional stiffness							
						$\pm\Delta K_a$ mm	$\pm\Delta K_w$ mm	$\pm\Delta K_r$ mm	S = 100 mm	S = 140 mm	S = 180 mm	S = 200 mm	S = 250 mm	C_T				
														S = 100 mm	S = 140 mm	S = 180 mm	S = 200 mm	S = 250 mm
64-4	100	150	250	40	22500	0.80	0.7°	0.78	1.27	–	–	–	0.009	0.008	–	–	–	
96-6	210	310	530	85	19900	1.15		0.78	1.27	–	–	–	0.06	0.05	–	–	–	
120-6	490	740	1250	200	15900	1.47		0.65	1.14	1.62	–	–	0.17	0.15	0.13	–	–	
142-6	925	1400	2300	370	13400	1.73		–	1.04	1.53	–	–	–	0.28	0.25	–	–	
162-6	1600	2400	4000	640	11800	2.07		–	0.92	1.40	1.65	2.26	–	0.43	0.39	0.38	0.34	
190-6	2500	3800	6300	1000	10000	2.36		–	0.93	1.42	1.66	2.27	–	0.71	0.65	0.63	0.57	
214-6	3900	5900	9800	1600	8900	2.67		–	0.78	1.27	1.51	2.13	–	1.01	0.94	0.92	0.85	
230-6	5200	7800	13000	2100	8300	2.88		–	–	1.25	1.49	2.10	–	–	1.36	1.32	1.22	
245-6	7000	10500	18000	2800	7800	2.99		–	–	1.00	1.25	1.86	–	–	1.49	1.45	1.37	
275-6	9800	15000	25000	4000	6250	3.38		–	–	–	1.22	1.83	–	–	–	1.65	1.58	
310-6	12900	20000	33000	5200	5550	3.85		–	–	–	–	1.64	–	–	–	–	2.96	
345-6	17000	26000	43000	6800	5000	4.24		–	–	–	–	1.61	–	–	–	–	4.12	

The permitted shaft misalignments ΔK_a , ΔK_r and ΔK_w are maximum values and must not occur at the same time (see following table). The permitted shaft misalignment ΔK_r applies to the shaft distance S specified in each case.

T_{Kmax} permitted only five times per hour.

The values for torsional stiffness apply to the complete coupling. The torsional stiffness of the plate packs applies to the rated coupling torque T_{KN} . To determine the torsional stiffness for a specific operating point, e.g. for calculating torsional vibration, the manufacturer must be consulted.

Permitted shaft misalignments, type NAN

Size	Permitted angular misalignment $\pm\Delta K_w$								
	0.0°	0.1°	0.2°	0.3°	0.4°	0.5°	0.6°	0.7°	
	Permitted axial misalignment $\pm\Delta K_a$ in mm								
88-6	1.10	0.94	0.79	0.63	0.47	0.31	0.16	0.00	
115-6	1.81	1.55	1.29	1.03	0.77	0.52	0.26	0.00	
135-6	2.02	1.73	1.44	1.15	0.86	0.58	0.29	0.00	
150-6	2.41	2.06	1.72	1.38	1.03	0.69	0.34	0.00	
176-6	2.75	2.36	1.96	1.57	1.18	0.79	0.39	0.00	
185-6	2.85	2.45	2.04	1.63	1.22	0.82	0.41	0.00	
212-6	3.06	2.63	2.19	1.75	1.31	0.88	0.44	0.00	
225-6	3.14	2.69	2.24	1.80	1.35	0.90	0.45	0.00	
256-6	3.69	3.16	2.64	2.11	1.58	1.05	0.53	0.00	
272-6	3.85	3.30	2.75	2.20	1.65	1.10	0.55	0.00	
298-6	4.19	3.59	2.99	2.39	1.80	1.20	0.60	0.00	
325-6	4.45	3.82	3.18	2.54	1.91	1.27	0.64	0.00	

Permitted shaft misalignments, type MCECM

Size	Permitted angular misalignment $\pm\Delta K_w$								
	0.0°	0.1°	0.2°	0.3°	0.4°	0.5°	0.6°	0.7°	
	Permitted axial misalignment $\pm\Delta K_a$ in mm								
64-4	0.80	0.68	0.57	0.46	0.34	0.23	0.11	0.00	
96-6	1.15	0.99	0.82	0.66	0.49	0.33	0.16	0.00	
120-6	1.47	1.26	1.05	0.84	0.63	0.42	0.21	0.00	
142-6	1.73	1.48	1.23	0.99	0.74	0.49	0.25	0.00	
162-6	2.07	1.77	1.48	1.18	0.89	0.59	0.30	0.00	
190-6	2.36	2.02	1.68	1.35	1.01	0.67	0.34	0.00	
214-6	2.67	2.29	1.91	1.53	1.14	0.76	0.38	0.00	
230-6	2.88	2.47	2.06	1.65	1.23	0.82	0.41	0.00	
245-6	2.99	2.56	2.13	1.71	1.28	0.85	0.43	0.00	
275-6	3.38	2.90	2.41	1.93	1.45	0.97	0.48	0.00	
310-6	3.85	3.30	2.75	2.20	1.65	1.10	0.55	0.00	
345-6	4.24	3.64	3.03	2.42	1.82	1.21	0.61	0.00	

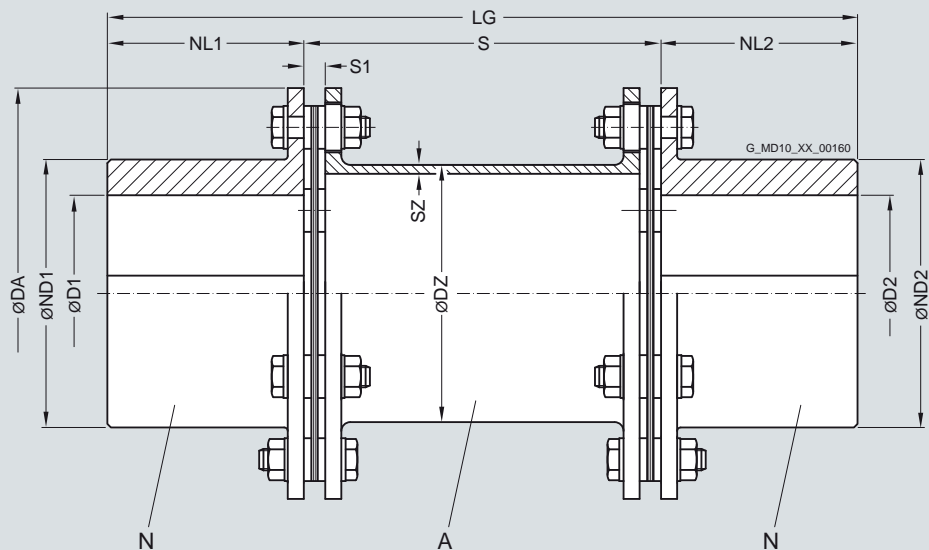
FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARP-6 Series

Type NAN

Selection and ordering data

Torsionally rigid type NAN coupling with radially freely dismountable intermediate spacer and catcher device for securing the intermediate spacer in the event of plate breakage. Standard coupling type in accordance with **API 610**.



Size	Rated torque	Maximum speed	Dimensions in mm							Shaft distance	Mass moment of inertia	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight
			DA	ND1/ND2	DZ	SZ	NL1/NL2	S1	S				
mm	Nm	rpm	D1/D2 Keyway DIN 6885 max.								kgm ²		kg
88-6	190	21 700	35	48	45	2.5	40	6	100	180	0.001	2LC0450-0AD99-0AA0	1.6
									140	220	0.001	2LC0450-0AD99-0AB0	1.7
115-6	270	16 600	55	75	72	2.5	55	6	100	210	0.005	2LC0450-1AD99-0AA0	3.2
									140	250	0.005	2LC0450-1AD99-0AB0	3.4
									180	290	0.005	2LC0450-1AD99-0AC0	3.6
135-6	580	12 700	65	86	84	2.5	65	7	100	230	0.011	2LC0450-2AD99-0AA0	5.2
									140	270	0.012	2LC0450-2AD99-0AB0	5.4
									180	310	0.012	2LC0450-2AD99-0AC0	5.6
150-6	660	11 400	75	101	99	2.5	75	7	100	250	0.019	2LC0450-3AD99-0AA0	7.2
									140	290	0.020	2LC0450-3AD99-0AB0	7.5
									180	330	0.021	2LC0450-3AD99-0AC0	7.7
									200	350	0.021	2LC0450-3AD99-0AD0	7.8
									250	400	0.022	2LC0450-3AD99-0AE0	8.1
176-6	1 220	9 750	85	117	114	2.5	85	9	100	270	0.041	2LC0450-4AD99-0AA0	11.4
									140	310	0.042	2LC0450-4AD99-0AB0	11.7
									180	350	0.043	2LC0450-4AD99-0AC0	12.0
									200	370	0.044	2LC0450-4AD99-0AD0	12.1
									250	420	0.045	2LC0450-4AD99-0AE0	12.4
185-6	1 875	9 300	90	122	120	3.0	90	11	100	280	0.056	2LC0450-5AD99-0AA0	13.5
									140	320	0.057	2LC0450-5AD99-0AB0	13.9
									180	360	0.058	2LC0450-5AD99-0AC0	14.2
									200	380	0.058	2LC0450-5AD99-0AD0	14.4
									250	430	0.060	2LC0450-5AD99-0AE0	14.8

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARP-6 Series

Type NAN

Size	Rated torque	Maximum speed	Dimensions in mm						Shaft distance	Mass moment of inertia	Product code	Weight	
			D1/D2 Keyway DIN 6885 max.	ND1/ND2	DZ	SZ	NL1/ NL2	S1					S
mm	Nm	rpm								kgm ²		kg	
212-6	2 850	8 100	100	134	131	3.0	100	10	100	300	0.095	2LC0450-6AD99-0AA0	18.3
									140	340	0.097	2LC0450-6AD99-0AB0	18.6
									180	380	0.098	2LC0450-6AD99-0AC0	19.0
									200	400	0.099	2LC0450-6AD99-0AD0	19.2
									250	450	0.101	2LC0450-6AD99-0AE0	19.7
225-6	4 200	7 650	105	141	139	4.0	105	10	140	350	0.134	2LC0450-7AD99-0AB0	22.8
									180	390	0.136	2LC0450-7AD99-0AC0	23.3
									200	410	0.137	2LC0450-7AD99-0AD0	23.6
									250	460	0.140	2LC0450-7AD99-0AE0	24.2
									256-6	5 750	6 700	120	163
180	420	0.267	2LC0450-8AD99-0AC0	35.1									
200	440	0.270	2LC0450-8AD99-0AD0	35.5									
250	490	0.276	2LC0450-8AD99-0AE0	36.5									
272-6	8 050	6 300	125	171	170	5.0	130	16					
									180	440	0.378	2LC0451-0AD99-0AC0	43.7
									200	460	0.381	2LC0451-0AD99-0AD0	44.1
									250	510	0.388	2LC0451-0AD99-0AE0	45.1
									298-6	10 000	5 150	140	189
180	460	0.567	2LC0451-1AD99-0AC0	54.7									
200	480	0.572	2LC0451-1AD99-0AD0	55.2									
250	530	0.582	2LC0451-1AD99-0AE0	56.5									
325-6	12 000	4 700	150	203	200	6.5	150	22					
									200	500	0.857	2LC0451-2AD99-0AD0	70.0
									250	550	0.872	2LC0451-2AD99-0AE0	71.6

Hubs are designed with threaded pull-off holes.
Type NAN with spacer machined on all sides, available in various standard lengths.
A spacers are also available in the following inch dimensions:
S = 3.5"/5"/7"/8"/10".
Other spacer lengths are available on request.

Weights and mass moments of inertia apply to the entire coupling with maximum bores D1/D2.

Ordering example:
ARPEX ARP-6 NAN coupling, size 135-6, with shaft distance S = 140 mm,
Bore ØD1 50H7 mm, with keyway to DIN 6885 and set screw,
Bore ØD2 60K7 mm, with keyway to DIN 6885 and set screw.

Product code:
2LC0450-2AD99-0AB0-Z
L1C+M1E+M13

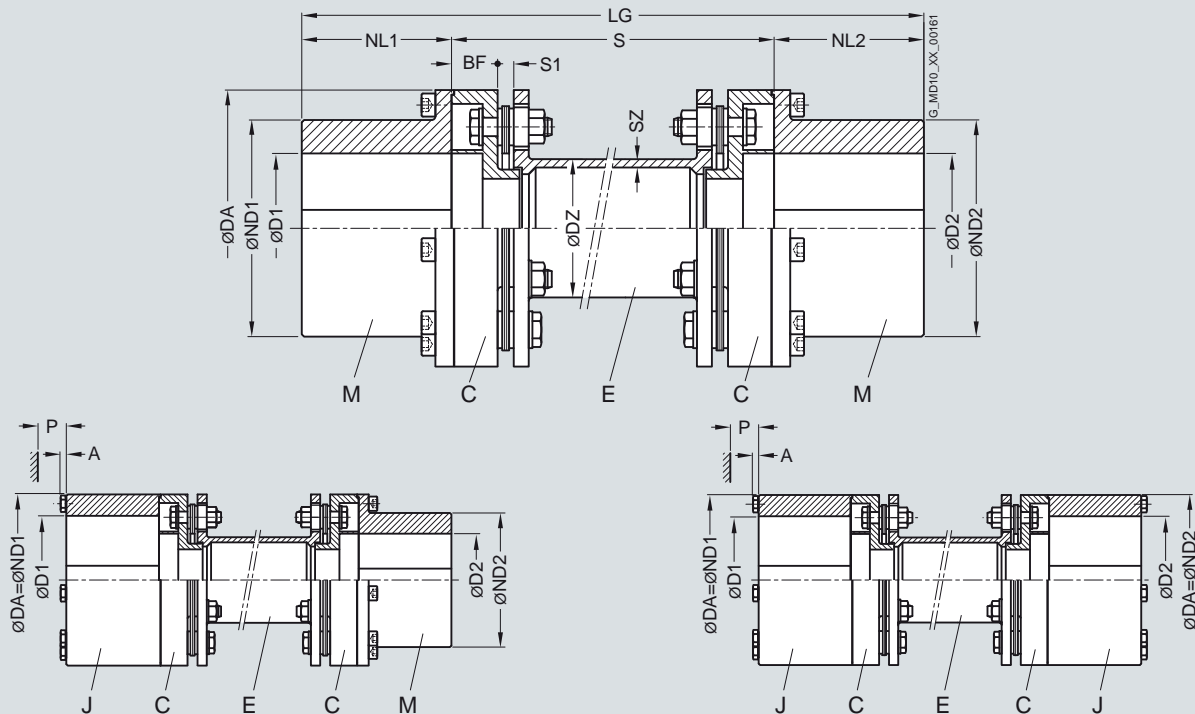
FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARP-6 Series

Type MCECM

Selection and ordering data

Torsionally rigid type MCECM coupling with radially freely dismountable intermediate unit and catcher device for securing the intermediate spacer in the event of plate breakage. Standard coupling type in accordance with **API 610**. Coupling type in accordance with **API 671** possible.



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Size	Rated torque	Maximum speed	Type	Dimensions in mm													Mass moment of inertia	Product code	Weight				
DA	T_{KN}	n_{Kmax}		D1/D2	ND1	ND2	DZ	SZ	NL1/ NL2	S1	BF	A	P	S	LG	J	Order codes for bore diameters and tolerances are specified in catalog section 3	m					
mm	Nm	rpm		Keyway DIN 6885 max. max.												kgm ²		kg					
64-4	100	22500	JCECJ	46	46	64	64	28	3.0	25	6	14.5	5	42	100	150	0.001	2LC0460-0AG99-0AA0	1.6				
																	140	190	0.001	2LC0460-0AG99-0AB0	1.7		
96-6	210	19900	MCECM	50	50	70	70	45	2.5	50	6	15	-	-	100	200	0.004	2LC0460-1AP99-0AA0	3.8				
																140	240	0.005	2LC0460-1AP99-0AB0	3.9			
			JCECM	65	50	96	70							6	68	100	200	0.006	2LC0460-1AH99-0AA0	4.4			
																140	240	0.006	2LC0460-1AH99-0AB0	4.5			
			JCECJ	65	65	96	96									100	200	0.008	2LC0460-1AG99-0AA0	5.0			
																140	240	0.008	2LC0460-1AG99-0AB0	5.1			
120-6	490	15900	MCECM	65	65	94	94	60	3.6	65	7	20	-	-	100	230	0.016	2LC0460-2AP99-0AA0	8.1				
																140	270	0.016	2LC0460-2AP99-0AB0	8.3			
			JCECM	80	65	120	94							6	88	100	310	0.016	2LC0460-2AP99-0AC0	8.5			
																140	230	0.020	2LC0460-2AH99-0AA0	9.1			
			JCECJ	80	80	120	120									140	270	0.020	2LC0460-2AH99-0AB0	9.3			
																180	310	0.020	2LC0460-2AH99-0AC0	9.5			
			142-6	925	13400	MCECM	75	75	109	109	72	4.8	75	9	23	-	-	100	290	0.035	2LC0460-3AP99-0AB0	13.2	
																			180	330	0.035	2LC0460-3AP99-0AC0	13.6
						JCECM	95	75	142	109							8	100	140	290	0.045	2LC0460-3AH99-0AB0	15.0
																			180	330	0.046	2LC0460-3AH99-0AC0	15.3
JCECJ	95	95				142	142									140	290	0.055	2LC0460-3AG99-0AB0	16.8			
																180	330	0.056	2LC0460-3AG99-0AC0	17.1			

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARP-6 Series

Type MCECM

Size	Rated torque	Maximum speed	Type	Dimensions in mm												Shaft distance	Mass moment of inertia	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight																									
				D1/D2 Keyway DIN 6885 max. max.	ND1	ND2	DZ	SZ	NL1/ NL2	S1	BF	A	P	S	LG					J																								
mm	Nm	rpm															kgm ²		m																									
162-6	1600	11800	MCECM	85	85	122	122	84.5	5.5	85	11	27	-	-	140	310	0.066	2LC0460-4AP99-0AB0	19.2																									
															180	350	0.067	2LC0460-4AP99-0AC0	19.7																									
															200	370	0.067	2LC0460-4AP99-0AD0	19.9																									
			JCECM	108	85	162	122	10	113	140	310	0.087	2LC0460-4AH99-0AB0	22.0																														
										180	350	0.088	2LC0460-4AH99-0AC0	22.4																														
										200	370	0.088	2LC0460-4AH99-0AD0	22.6																														
										250	420	0.089	2LC0460-4AH99-0AE0	23.2																														
										140	310	0.108	2LC0460-4AG99-0AB0	24.8																														
										180	350	0.109	2LC0460-4AG99-0AC0	25.3																														
			JCECJ	108	108	162	162	140	310	0.108	2LC0460-4AG99-0AB0	24.8																																
													180	350	0.109	2LC0460-4AG99-0AC0	25.3																											
																		200	370	0.109	2LC0460-4AG99-0AD0	25.5																						
																							250	420	0.110	2LC0460-4AG99-0AE0	26.0																	
																												MCECM	105	105	145	145	97.6	7.0	105	10	27	-	-	140	350	0.136	2LC0460-5AP99-0AB0	28.4
																																								180	390	0.138	2LC0460-5AP99-0AC0	29.0
200	410	0.138	2LC0460-5AP99-0AD0	29.4																																								
JCECM	125	105	190	145	12	135	140	350	0.186	2LC0460-5AH99-0AB0	33.8																																	
							180	390	0.187	2LC0460-5AH99-0AC0	34.4																																	
							200	410	0.188	2LC0460-5AH99-0AD0	34.7																																	
							250	460	0.190	2LC0460-5AH99-0AE0	35.5																																	
							140	350	0.236	2LC0460-5AG99-0AB0	39.2																																	
							180	390	0.238	2LC0460-5AG99-0AC0	39.8																																	
JCECJ	125	125	190	190	140	350	0.236	2LC0460-5AG99-0AB0	39.2																																			
										180	390	0.238	2LC0460-5AG99-0AC0	40.1																														
															200	410	0.238	2LC0460-5AG99-0AD0	40.9																									
																				250	460	0.240	2LC0460-5AG99-0AE0	40.9																				
																									MCECM	115	115	164	164	110	9.1	115	10	33	-	-	140	370	0.251	2LC0460-6AP99-0AB0	41.7			
																																					180	410	0.253	2LC0460-6AP99-0AC0	42.6			
200	430	0.254	2LC0460-6AP99-0AD0	43.1																																								
JCECM	140	115	214	164	12	145	140	370	0.339	2LC0460-6AH99-0AB0	48.9																																	
							180	410	0.342	2LC0460-6AH99-0AC0	49.8																																	
							200	430	0.343	2LC0460-6AH99-0AD0	50.3																																	
							250	480	0.346	2LC0460-6AH99-0AE0	51.4																																	
							140	370	0.428	2LC0460-6AG99-0AB0	56.2																																	
							180	410	0.430	2LC0460-6AG99-0AC0	57.1																																	
JCECJ	140	140	214	214	140	370	0.428	2LC0460-6AG99-0AB0	56.2																																			
										180	410	0.430	2LC0460-6AG99-0AC0	57.1																														
															200	430	0.431	2LC0460-6AG99-0AD0	57.6																									
																				250	480	0.434	2LC0460-6AG99-0AE0	58.7																				
																									MCECM	125	125	174	174	123	8.8	125	12	33	-	-	180	430	0.359	2LC0460-7AP99-0AC0	51.5			
																																					200	450	0.361	2LC0460-7AP99-0AD0	52.0			
250	500	0.365	2LC0460-7AP99-0AE0	53.2																																								
JCECM	155	125	230	174	14	158	180	430	0.484	2LC0460-7AH99-0AC0	60.0																																	
							200	450	0.485	2LC0460-7AH99-0AD0	60.5																																	
							250	500	0.489	2LC0460-7AH99-0AE0	61.7																																	
							180	430	0.610	2LC0460-7AG99-0AC0	68.7																																	
							200	450	0.611	2LC0460-7AG99-0AD0	69.2																																	
							250	500	0.615	2LC0460-7AG99-0AE0	70.5																																	
JCECJ	155	155	230	230	180	430	0.610	2LC0460-7AG99-0AC0	68.7																																			
										200	450	0.611	2LC0460-7AG99-0AD0	69.2																														
															250	500	0.615	2LC0460-7AG99-0AE0	70.5																									
																				MCECM	130	130	185	185	128	12.2	130	16	41	-	-	180	440	0.532	2LC0460-8AP99-0AC0	67.0								
																																200	460	0.534	2LC0460-8AP99-0AD0	67.7								
																																250	510	0.540	2LC0460-8AP99-0AE0	69.5								
JCECM	165	130	245	185	16	170	180	440	0.693											2LC0460-8AH99-0AC0	76.2																							
							200	460	0.695	2LC0460-8AH99-0AD0	76.9																																	
							250	510	0.701	2LC0460-8AH99-0AE0	78.6																																	
							180	440	0.855	2LC0460-8AG99-0AC0	85.5																																	
							200	460	0.857	2LC0460-8AG99-0AD0	86.2																																	
							250	510	0.863	2LC0460-8AG99-0AE0	88.0																																	

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARP-6 Series

Type MCECM

Size	Rated torque	Maximum speed	Type	Dimensions in mm												Shaft distance	Mass moment of inertia	Product code Order codes for bore diameters and tolerances are specified in catalog section 3	Weight	
				D1/D2	ND1	ND2	DZ	SZ	NL1/ NL2	S1	BF	A	P	S	LG					J
mm	Nm	rpm		max.	max.											kgm ²		kg		
275-6	9800	6250	MCECM	150	150	213	213	148	12.6	150	20	40	-	-	200	500	0.917	2LC0461-0AP99-0AD0	91.1	
															250	550	0.927	2LC0461-0AP99-0AE0	93.3	
			JCECM	185	150	275	213							16	200	200	500	1.207	2LC0461-0AH99-0AD0	104.4
																250	550	1.217	2LC0461-0AH99-0AE0	106.5
			JCECJ	185	185	275	275									200	500	1.499	2LC0461-0AG99-0AD0	118.0
																250	550	1.509	2LC0461-0AG99-0AE0	120.1
310-6	12900	5550	MCECM	170	170	240	240	160	13.5	170	22	47	-	-	250	590	1.670	2LC0461-1AP99-0AE0	131.7	
			JCECM	205	170	310	240							16	220	2.228	2LC0461-1AH99-0AE0	153.2		
			JCECJ	205	205	310	310									2.788	2LC0461-1AG99-0AE0	175.0		
345-6	17000	5000	MCECM	190	190	267	267	172	18.5	190	24	47	-	-	250	630	2.742	2LC0461-2AP99-0AE0	176.1	
			JCECM	230	190	345	267							20	245	3.684	2LC0461-2AH99-0AE0	205.1		
			JCECJ	230	230	345	345									4.629	2LC0461-2AG99-0AE0	234.3		

Hubs are designed with threaded pull-off holes.
E spacers are also available in the following inch dimensions on request: S = 3.5"/5"/7"/8"/10".
Other spacer lengths are available on request.
Plate packs in the CEC intermediate unit assembled at the factory.

Jumbo hub for large shaft diameters.

Weights and mass moments of inertia apply to the entire coupling with maximum bores D1/D2.

Ordering example:
ARPEX ARP-6 MCECM coupling, size 120-6, with shaft distance S = 140 mm,
Bore ØD1 50H7 mm, with keyway to DIN 6885 and set screw,
Bore ØD2 60K7 mm, with keyway to DIN 6885 and set screw.

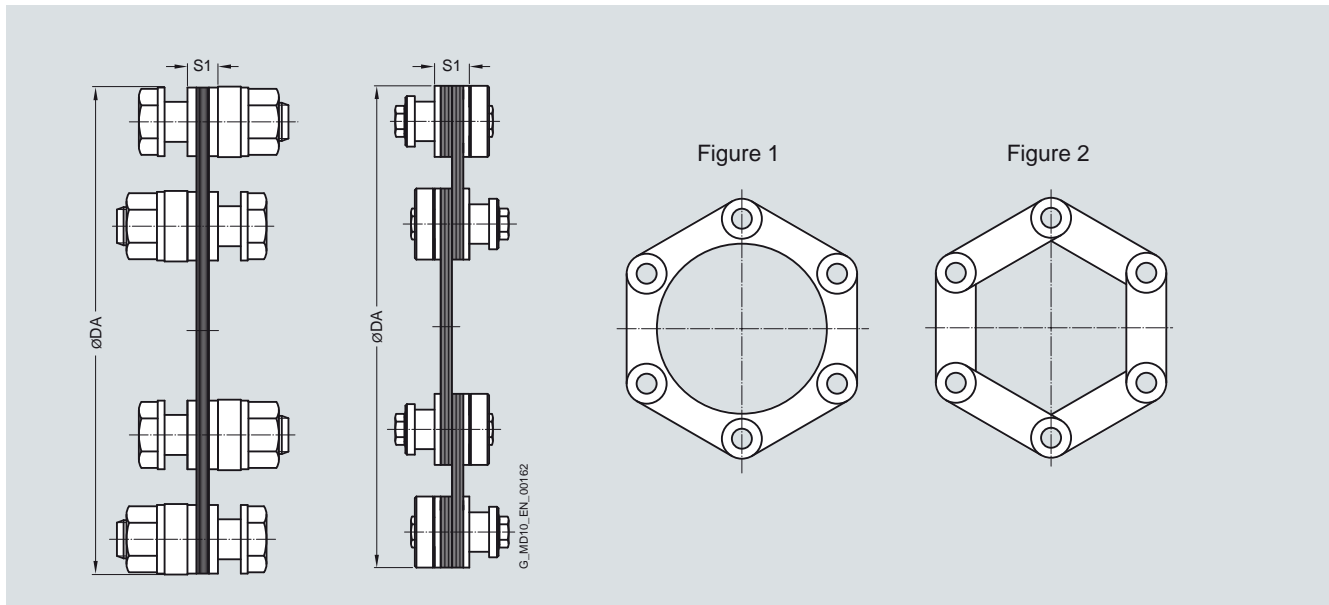
Product code:
2LC0460-2AP99-0AB0-Z
L1C+M1E+M13

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARP-6 Series

Spare and wear parts
Plate pack ARP-6

Selection and ordering data



Mainly ring plates (Fig. 1) are used for the plate packs. Sizes 298-6 and 325-6 comprise side-bar plates (Fig. 2).

The plate pack of the ARP-6 series is delivered with screw connection and is readily available as a spare part.

- With outside diameters up to $DA = 300$ mm, close-fitting bolts with collar nuts are used
- From outside diameter $DA = 300$ mm, patented conical screw connections are used

Plate pack

Dimensions in mm		Mass moment of inertia	Product code	Weight
Size	S1	J		m
DA		kgm ²		kg
Plate pack NAN				
88-6	6	0.0001	2LC0450-0AF00-0AA0	0.1
115-6	6	0.0003	2LC0450-1AF00-0AA0	0.1
135-6	7	0.0010	2LC0450-2AF00-0AA0	0.3
150-6	7	0.0013	2LC0450-3AF00-0AA0	0.4
176-6	9	0.0035	2LC0450-4AF00-0AA0	0.7
185-6	11	0.0053	2LC0450-5AF00-0AA0	0.9
212-6	10	0.0088	2LC0450-6AF00-0AA0	1.3
225-6	10	0.0145	2LC0450-7AF00-0AA0	1.8
256-6	12	0.0269	2LC0450-8AF00-0AA0	2.6
272-6	16	0.0425	2LC0451-0AF00-0AA0	3.7
298-6	20	0.0653	2LC0451-1AF00-0AA0	4.7
325-6	22	0.1081	2LC0451-2AF00-0AA0	6.6
Plate pack MCECM				
64-4	6	0.0001	2LC0460-0AS00-0AA0	0.1
96-6	6	0.0002	2LC0460-1AS00-0AA0	0.1
120-6	7	0.0006	2LC0460-2AS00-0AA0	0.3
142-6	9	0.0018	2LC0460-3AS00-0AA0	0.6
162-6	11	0.0033	2LC0460-4AS00-0AA0	0.9
190-6	10	0.0060	2LC0460-5AS00-0AA0	1.2
214-6	10	0.0116	2LC0460-6AS00-0AA0	1.8
230-6	12	0.0189	2LC0460-7AS00-0AA0	2.5
245-6	16	0.0299	2LC0460-8AS00-0AA0	3.5
275-6	20	0.0487	2LC0461-0AS00-0AA0	4.6
310-6	22	0.0891	2LC0461-1AS00-0AA0	6.5
345-6	24	0.1461	2LC0461-2AS00-0AA0	8.7

Ordering example for plate pack NAN:

ARPEX ARP-6 plate pack, size 115-6, complete with screw connection.

Product code:

2LC0450-1AF00-0AA0

Ordering example for plate pack MCECM:

ARPEX ARP-6 plate pack, size 120-6, complete with screw connection.

Product code:

LC0460-2AS00-0AA0

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARW-4/-6 Series

General information

Overview



Coupling can be designed for potentially explosive environments in accordance with 94/9/EC.

6

Benefits

ARPEX couplings of the ARW-4/-6 series are outstanding for their large angular misalignment capacity of 3°. They were specially designed for drives where high misalignments which have

to be compensated for by the coupling are to be expected. The intermediate spacer lengths are variable and are manufactured to customer specifications.

Application

ARPEX couplings of the ARW-4/-6 series are used where large misalignment capacities are required. In the paper-making machine industry, the ARW coupling has already proved itself as a maintenance-free alternative to the cardan shaft. Torques of between 92 and 80000 Nm can be transmitted at a permitted angular misalignment of 3.0°. The intermediate spacer can be fitted radially without moving the connected units.

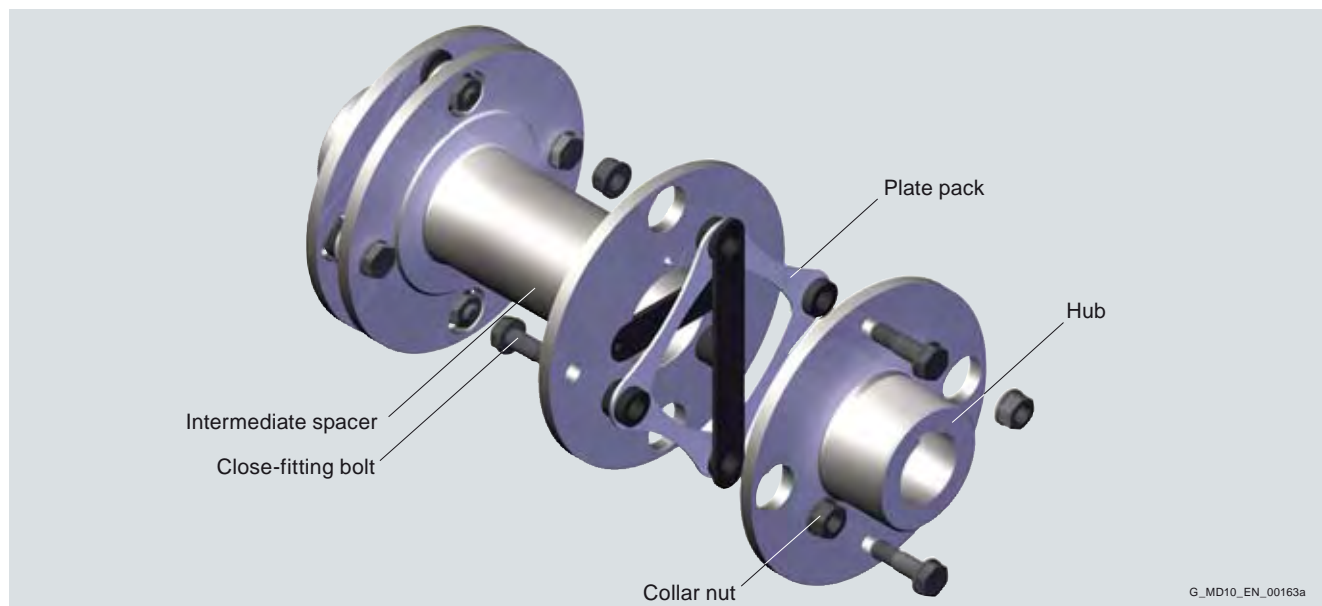
Main areas of application for the ARW-4/-6 series:

- Paper-making machines
- Wind power systems
- Traction drives

Design

The design of an ARPEX NHN coupling of the ARW-4/-6 series is shown in the following illustration. The plate packs are bolted alternately between the flanges of the coupling hubs and the intermediate spacer. Up to size 292-4 close-fitting bolts and from size 324-4 conical screw connections are used for fastening. Up to

size 647-4 plate packs in rectangular design, from size 695-6 in hexagonal design are used. The intermediate spacers are variable in length and are manufactured specifically to customer specifications.



Variants of the ARPEX coupling, ARW-4/-6 series

G_MD10_EN_00163a

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARW-4/-6 Series

General information

Variants of the ARPEX coupling, ARW-4/-6 series

Types

NHN	Variant with unmachined intermediate spacer, with variable spacer length
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Further application-specific coupling types are available in selection module **X.CAT NG** at www.siemens.com/couplings. Dimension sheets and further information are available on request.

The coupling parts of the ARPEX ARW-4/-6 series with the exception of H spacers are machined on all sides. These are delivered with unmachined, primed spacer tube.

Technical data

Power ratings, type NHN

Size	Rated torque	Maximum torque	Overload torque	Fatigue torque	Maximum speed	Maximum permitted shaft misalignment			Torsional stiffness	
	T_{KN}	T_{Kmax}	T_{KOL}	T_{KW}	n_{Kmax}	+ ΔK_a Tension	- ΔK_a Compression	$\pm \Delta K_w$	$\pm \Delta K_r$ for S = 1000 mm mm	C_{Tdyn} for S = 1000 mm MNm/rad
	Nm	Nm	Nm	Nm	rpm	mm	mm			
101-4	92	140	230	37	10400	2.4	2.0	3.0°	51.8	0.006
133-4	225	340	560	90	7850	3.3	2.2		51.7	0.012
167-4	450	680	1130	180	6250	4.2	2.2		51.6	0.028
196-4	800	1200	2000	320	5350	5.1	2.2		51.6	0.068
230-4	1250	1880	3200	500	4550	5.7	2.2		51.6	0.108
260-4	2000	3000	5000	800	4000	6.6	2.2		51.5	0.174
292-4	2700	4100	6800	1080	3550	7.5	2.8		51.4	0.275
324-4	3850	5800	9700	1540	3200	8.4	2.8		51.4	0.451
355-4	5250	7900	13200	2100	2950	9.0	2.8		51.4	0.622
389-4	6650	10000	16700	2660	2700	10.0	2.8		51.4	0.657
439-4	9850	15000	25000	3940	2350	11.1	3.0		51.3	1.08
499-4	13300	20000	34000	5320	2100	12.4	4.8		50.8	1.32
547-4	19000	29000	48000	7600	1900	13.4	4.8		50.7	2.03
600-4	25150	38000	63000	10060	1750	14.6	4.8		50.6	2.73
647-4	32500	49000	82000	13000	1600	16.0	4.8		50.6	3.93
695-6	41000	62000	103000	16400	1500	17.0	4.8		50.7	10.1
756-6	52000	78000	130000	20800	1350	18.0	4.8		50.6	14.0
817-6	65000	98000	163000	26000	1250	20.0	4.8		50.5	16.9
880-6	80000	120000	200000	32000	1150	22.0	4.8		50.5	21.2

The radial misalignment ΔK_r applies to a type NHN coupling with a shaft distance S = 1000 mm. The radial misalignment ΔK_r for other shaft distances S is calculated as follows:

$$\Delta K_r = (S - S1) \cdot \tan(\Delta K_w)$$

The permitted shaft misalignments ΔK_a , ΔK_r and ΔK_w are maximum values and must not occur at the same time (see following table).

Permitted shaft misalignments

Size	Permitted angular misalignment ΔK_w (tension +)			Permitted angular misalignment ΔK_w (compression -)		
	3.0°	1.5°	0.0°	3.0°	1.5°	0.0°
	Permitted axial misalignment ΔK_a in mm			Permitted axial misalignment ΔK_a in mm		
101-4	0.8	1.6	2.4	0.8	1.6	2
133-4	1.1	2.2	3.3	1.1	2.2	2.2
167-4	1.4	2.8	4.2	1.4	2.2	2.2
196-4	1.7	3.4	5.1	1.7	2.2	2.2
230-4	1.9	3.8	5.7	1.9	2.2	2.2
260-4	2.2	4.4	6.6	2.2	2.2	2.2
292-4	2.5	5.0	7.5	2.5	2.8	2.8
324-4	2.8	5.6	8.4	2.8	2.8	2.8
355-4	3.0	6.0	9.0	2.8	2.8	2.8
389-4	3.3	6.7	10.0	2.8	2.8	2.8
439-4	3.7	7.4	11.1	3.0	3.0	3.0
499-4	4.1	8.3	12.4	4.1	4.8	4.8
547-4	4.5	8.9	13.4	4.4	4.8	4.8
600-4	4.9	9.7	14.6	4.8	4.8	4.8
647-4	5.3	10.7	16.0	4.8	4.8	4.8
695-6	5.6	11.4	17.0	4.8	4.8	4.8
756-6	6	12.1	18.0	4.8	4.8	4.8
817-6	6.7	13.4	20.0	4.8	4.8	4.8
880-6	7.3	14.8	22.0	4.8	4.8	4.8

Because of design specifications, the maximum possible axial shaft misalignment with plate packs pulled apart (**tension +**) is greater than with plate packs pressed together (**compression -**).

The torsional stiffness values apply to the entire coupling with shaft distance S = 1000 mm. The torsional stiffness of the plate packs applies to the rated coupling torque T_{KN} . To determine the torsional stiffness for a specific operating point, e.g. for calculating torsional vibration, the manufacturer must be consulted.

T_{Kmax} permitted only five times per hour.

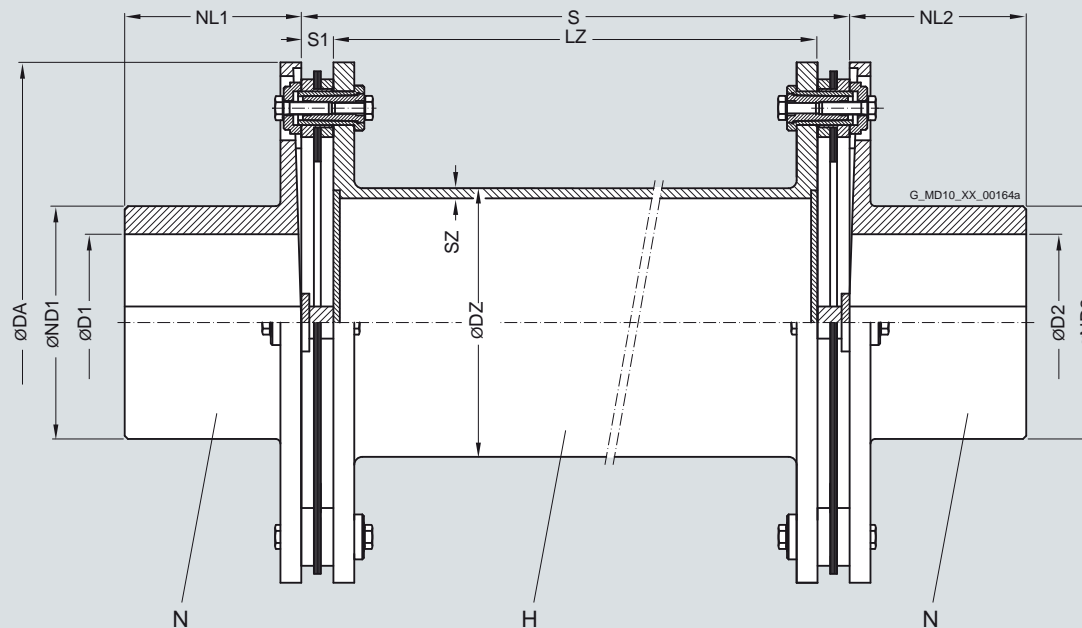
FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARW-4/-6 Series

Type NHN

Selection and ordering data

Torsionally rigid type NHN coupling with high angular misalignment capacity up to 3° and radially freely dismountable intermediate spacer and variable shaft distance S.



Size	Rated torque	Maximum speed	Dimensions in mm							Shaft distance	Mass moment of inertia	Product code	Weight
DA	T_{KN}	n_{Kmax}	D1/D2 Keyway DIN 6885	ND1/ ND2	DZ	SZ	NL1/ NL2	S1	LZ min.	S min.	J	Order codes for bore diameters and tolerances are specified in catalog section 3	m
mm	Nm	rpm	max.								kgm ²		kg
101-4	92	10400	32	45	45	2.9	32	11	43	65	0.002	2LC0530-0AD99-0AZ0	1.5
133-4	225	7850	45	60	48	2.9	45	13	59	85	0.008	2LC0530-1AD99-0AZ0	3.9
167-4	450	6250	50	70	64	4.0	50	15	70	100	0.022	2LC0530-2AD99-0AZ0	7.1
196-4	800	5350	60	80	89	4.0	60	16	83	115	0.056	2LC0530-3AD99-0AZ0	12.1
230-4	1250	4550	75	100	102	5.0	75	16	83	115	0.109	2LC0530-4AD99-0AZ0	17.9
260-4	2000	4000	90	120	133	5.0	90	17	96	130	0.189	2LC0530-5AD99-0AZ0	24.6
292-4	2700	3550	100	130	152	5.0	100	19	92	130	0.359	2LC0530-6AD99-0AZ0	35.1
324-4	3850	3200	110	145	168	6.3	110	20	120	160	0.520	2LC0530-7AD99-0AZ0	43.7
355-4	5250	2950	120	160	178	7.1	120	20	125	165	0.856	2LC0530-8AD99-0AZ0	59.8
389-4	6650	2700	130	175	194	7.1	130	20	130	170	1.09	2LC0530-9AD99-0AZ0	68.9
439-4	9850	2350	150	200	219	7.1	150	22	166	210	2.23	2LC0531-1AD99-0AZ0	106
499-4	13300	2100	165	220	245	7.1	165	30	170	230	3.81	2LC0531-2AD99-0AZ0	142
547-4	19000	1900	190	250	299	8.8	190	32	176	240	6.24	2LC0531-3AD99-0AZ0	191
600-4	25150	1750	205	275	324	8.8	205	34	182	250	10.2	2LC0531-4AD99-0AZ0	257
647-4	32500	1600	225	300	343	10.0	225	35	220	290	16.5	2LC0531-5AD99-0AZ0	348
695-6	41000	1500	240	325	368	10.0	240	33	224	290	23.7	2LC0540-0AD99-0AZ0	441
756-6	52000	1350	255	340	394	12.5	255	34	232	300	33.2	2LC0540-1AD99-0AZ0	525
817-6	65000	1250	270	360	406	12.5	270	36	238	310	49.1	2LC0540-2AD99-0AZ0	659
880-6	80000	1150	300	400	419	12.5	300	37	256	330	72.8	2LC0540-3AD99-0AZ0	849

The permitted length of the intermediate spacer depends on the maximum operating speed of the coupling (see following table).

In the case of individual order of the intermediate spacer, the length (LZ) must be specified.

Mass moments of inertia and weights apply to the entire NHN coupling with maximum bores D1/D2 and a shaft distance $S = S_{min}$.

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARW-4/-6 Series

Type NHN

Permitted shaft distance S of type NHN relative to speed

Size	Speed n_N rpm												
	500	600	700	800	900	1000	1200	1400	1500	2000	2500	3000	4000
	Permitted shaft distance S mm												
101-4	2822	2577	2387	2233	2106	1999	1825	1691	1634	1416	1268	1159	1005
133-4	2949	2693	2494	2334	2201	2089	1908	1767	1708	1481	1326	1212	1051
167-4	3376	3083	2856	2672	2520	2392	2185	2024	1956	1696	1518	1387	1203
196-4	4029	3679	3407	3188	3007	2854	2606	2414	2333	2022	1811	1654	1435
230-4	4297	3924	3634	3400	3207	3043	2779	2574	2488	2156	1930	1764	1530
260-4	4943	4514	4181	3912	3689	3500	3197	2961	2861	2480	2220	2028	1759
292-4	5305	4844	4487	4198	3959	3757	3431	3178	3071	2662	2383	2177	
324-4	5562	5079	4704	4401	4151	3939	3597	3332	3220	2791	2499	2283	
355-4	5709	5214	4828	4518	4261	4043	3692	3420	3305	2865	2564		
389-4	5968	5450	5047	4722	4453	4226	3859	3575	3454	2994	2680		
439-4	6361	5809	5380	5034	4747	4505	4114	3811	3682	3192			
499-4	6738	6154	5699	5333	5030	4773	4360	4039	3903	3384			
547-4	7442	6797	6295	5890	5555	5272	4815	4460	4310				
600-4	7762	7089	6565	6144	5794	5499	5022	4652	4496				
647-4	7980	7287	6750	6316	5957	5653	5163	4783	4622	Outside the permitted speed range			
695-6	8000	7553	6995	6545	6173	5858	5350	4956	4789				
756-6	8000	7797	7221	6757	6372	6047	5523						
817-6	8000	7920	7335	6864	6473	6143	5611						
880-6	8000	8000	7456	6977	6580	6244							

Ordering example:

ARPEX ARW-4 NHN coupling, size 133-4, with shaft distance
S = 1000 mm,Bore ØD1 40H7 mm, with keyway to DIN 6885 and set screw,
Bore ØD2 45K7 mm, with keyway to DIN 6885 and set screw.

Product code:

2LC0530-1AD99-0AZ0-Z**L0W+M1A+Q0Y+M13**plain text to Q0Y: **S = 1000 mm**

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARW-4/-6 Series

Spare and wear parts
Plate pack ARW-4/-6

Selection and ordering data

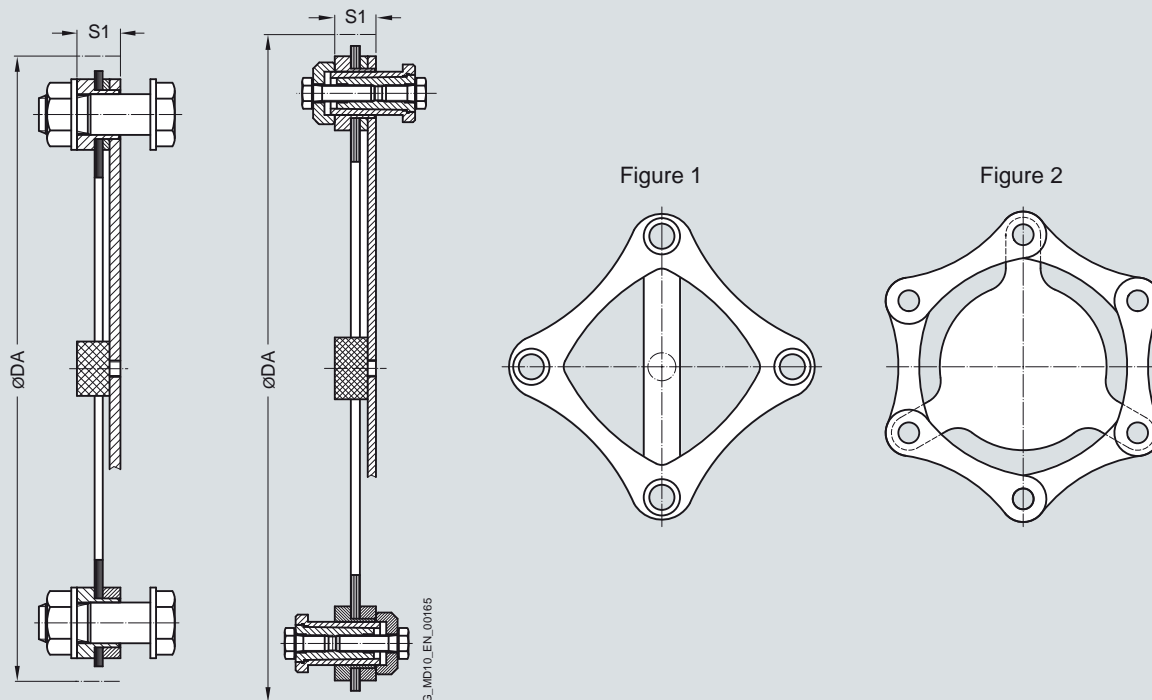


Plate packs of the ARW-4 series comprise ring plates (Fig. 1), those of the ARW-6 series side-bar plates (Fig. 2).

Dimensions in mm		Mass moment of inertia	Product code	Weight
Size	S1	J		m
DA		kgm ²		kg
101-4	11	0.0001	2LC0530-0AB00-0AA0	0.1
133-4	13	0.0005	2LC0530-1AB00-0AA0	0.2
167-4	15	0.0017	2LC0530-2AB00-0AA0	0.5
196-4	16	0.0037	2LC0530-3AB00-0AA0	0.7
230-4	16	0.0068	2LC0530-4AB00-0AA0	1.0
260-4	17	0.0136	2LC0530-5AB00-0AA0	1.5
292-4	19	0.0227	2LC0530-6AB00-0AA0	1.9
324-4	20	0.0288	2LC0530-7AB00-0AA0	2.1
355-4	20	0.0452	2LC0530-8AB00-0AA0	2.7
389-4	20	0.0645	2LC0531-0AB00-0AA0	3.2
439-4	22	0.1147	2LC0531-1AB00-0AA0	4.5
499-4	30	0.2235	2LC0531-2AB00-0AA0	6.9
547-4	32	0.3658	2LC0531-3AB00-0AA0	9.5
600-4	34	0.5355	2LC0531-4AB00-0AA0	11.4
647-4	35	0.7939	2LC0531-5AB00-0AA0	14.6
695-6	33	1.4624	2LC0540-0AB00-0AA0	24.6
756-6	34	1.2250	2LC0540-1AB00-0AA0	20.2
817-6	36	1.7497	2LC0540-2AB00-0AA0	23.9
880-6	37	2.5460	2LC0540-3AB00-0AA0	28.9

The plate pack of the ARW-4/-6 series is readily available as a spare part.

The plate pack is delivered with screw connection.

Up to size 292-4 close-fitting bolts with collar nuts, from size 324-4 patented conical screw connections are used.

Ordering example:
ARPEX ARW-4 plate pack, size 133-4,
complete with screw connection.

Product code:
2LC0530-1AB00-0AA0

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARF-6 Series

General information

Overview



Coupling can be designed for potentially explosive environments in accordance with 94/9/EC.

Benefits

ARPEX couplings of the ARF-6 series are extremely short and so suitable for drives with short shaft distances. They also serve as self-aligning couplings for axial, angular and radial misalignment. The hubs are available both as pure clamping hubs for smooth shafts and with parallel keyway for shafts with parallel

key. The variant with slit clamping hubs enables the delivery of fully preassembled couplings. This means that the entire coupling can be dismantled and fitted without moving the connected units.

Application

ARPEX couplings of the ARF-6 series are designed for minimum fitting spaces without having to sacrifice the advantages of the two-joint coupling. It is thus possible to compensate for both axial and angular as well as radial misalignment. By using half-shell clamping hubs, the coupling can be radially freely dismantled. Power is transmitted via hexagon socket head cap screws and close-fitting bolts with nuts and ring plate packs in

hexagonal design. Torques of between 120 and 6100 Nm can be transmitted at a permitted angular misalignment of 0.7°.

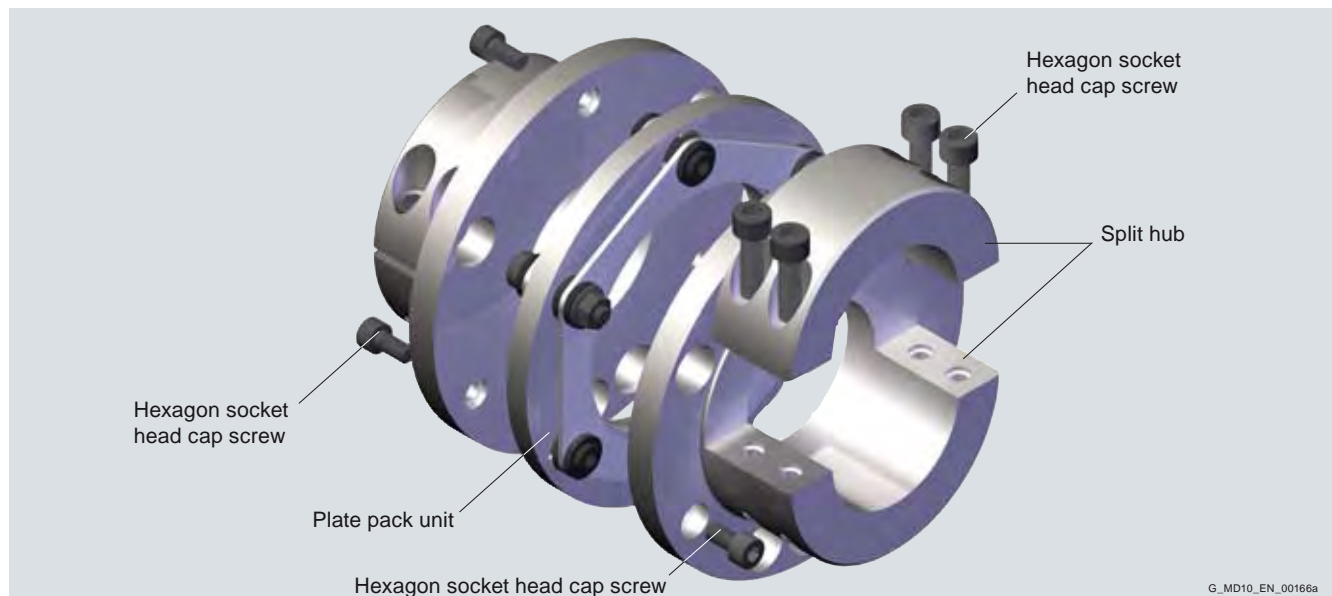
Main areas of application for the ARF-6 series:

- Film stretching machines
- Machines in the cellulose industry
- Machines in confined fitting situations

Design

The two plate packs form a unit with the adapter disk and are screwed together with close-fitting bolts and nuts at three points. The alternate connection of this intermediate unit with the flanges of the split coupling hubs is achieved by means of short

hexagon socket head cap screws at further three points. The hubs are designed as axially slit clamping hubs with a half-shell. For larger bores these can be manufactured as jumbo hubs. Optionally, the hubs are also available without parallel keyway.



Design of the ARPEX coupling, ARF series

G_MD10_EN_00166a

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARF-6 Series

General information

Design of the ARF coupling

Types	
GG	Variant with 2 standard clamping hubs
GJ	Variant with 1 jumbo clamping hub for large bore diameters

Further application-specific coupling types are available in selection module **X.CAT NG** at www.siemens.com/couplings. Dimension sheets and further information are available on request.

Technical data

Power ratings, types GG and GJ

Size	Rated torque	Maximum torque	Overload torque	Fatigue torque	Maximum speed	Maximum permitted shaft misalignment			Torsional stiffness
	T_{KN} Nm	T_{Kmax} Nm	T_{KOL} Nm	T_{KW} Nm	n_{Kmax} rpm	$\pm\Delta K_a$ mm	$\pm\Delta K_w$	$\pm\Delta K_r$ mm	C_{Tdyn} MNm/rad
84-6	120	220	330	55	12500	1.10	0.7°	0.16	0.07
111-6	190	350	520	90	9450	1.80		0.16	0.13
132-6	350	650	950	160	7950	2.02		0.20	0.20
147-6	500	900	1350	230	7100	2.40		0.20	0.28
171-6	900	1700	2450	400	6100	2.74		0.24	0.57
182-6	1450	2600	4000	650	5750	2.86		0.29	0.66
202-6	2150	3900	5800	980	5200	3.06		0.29	0.77
218-6	3200	5800	8700	1450	4800	3.14		0.37	1.25
252-6	4500	8100	12000	2000	4150	3.70		0.45	1.55
267-6	6100	11000	16500	2800	3900	3.84		0.46	1.80

The permitted shaft misalignments ΔK_a , ΔK_r and ΔK_w are maximum values and must not occur at the same time (see following table).

T_{Kmax} permitted only five times per hour.

The values for torsional stiffness apply to the complete coupling. The torsional stiffness of the plate packs applies to the rated coupling torque T_{KN} . To determine the torsional stiffness for a specific operating point, e.g. for calculating torsional vibration, the manufacturer must be consulted.

Permitted shaft misalignments

Size	Permitted angular misalignment $\pm\Delta K_w$								
	0.0°	0.1°	0.2°	0.3°	0.4°	0.5°	0.6°	0.7°	
	Permitted axial misalignment $\pm\Delta K_a$ in mm								
84-6	1.10	0.94	0.79	0.63	0.47	0.31	0.16	0.00	
111-6	1.80	1.54	1.29	1.03	0.77	0.51	0.26	0.00	
132-6	2.02	1.73	1.44	1.15	0.87	0.58	0.29	0.00	
147-6	2.40	2.06	1.71	1.37	1.03	0.69	0.34	0.00	
171-6	2.74	2.35	1.96	1.57	1.17	0.78	0.39	0.00	
182-6	2.86	2.45	2.04	1.63	1.23	0.82	0.41	0.00	
202-6	3.06	2.62	2.19	1.75	1.31	0.87	0.44	0.00	
218-6	3.14	2.69	2.24	1.79	1.35	0.90	0.45	0.00	
252-6	3.70	3.17	2.64	2.11	1.59	1.06	0.53	0.00	
267-6	3.84	3.29	2.74	2.19	1.65	1.10	0.55	0.00	

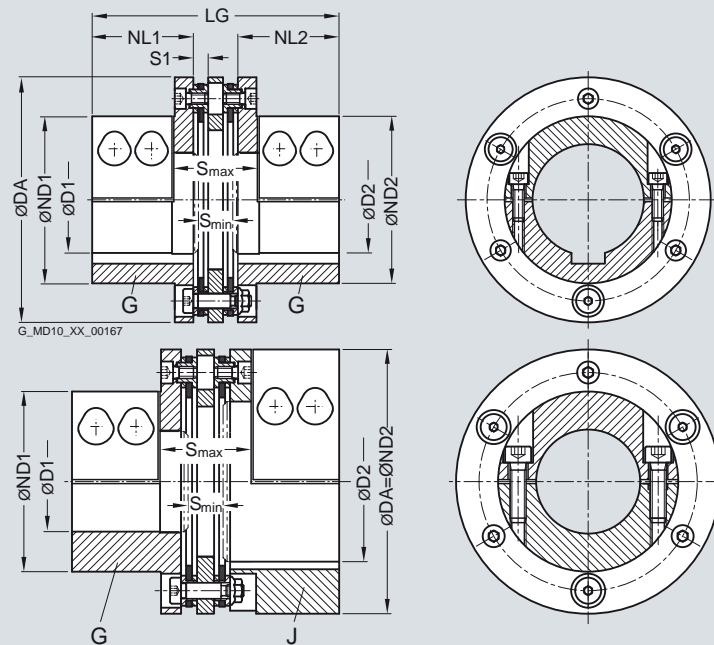
FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARF-6 Series

Types GG and GJ

Selection and ordering data

Radially freely dismountable, torsionally rigid coupling, available as types GG and GJ.
Complete dismounting without moving the units with extremely short shaft distances.



The shaft tolerance must be specified in the order. To specify, -Z must be added to the product code and the order codes Y26 and Y27 with plain text specification of the shaft tolerance for D1 and D2 must be added as well.

Size	Rated torque	Maximum speed	Type	Dimensions in mm										Mass moment of inertia	Product code	Weight
				D1	D2	ND1	ND2	NL1/ NL2	S1	S	LG	J	Order codes for bore diameters and tolerances are specified in catalog section 3			
DA	T_{KN}	n_{Kmax}		Keyway DIN 6885												
mm	Nm	rpm		max.	max.									kgm ²		g
				Parallel key/ clamping seat	Parallel key	Clamping seat										
84-6	120	12500	GG	25	25	25	50	50	40	6	16	39	99	0.0013	2LC0420-0AB99-0AA0	1.7
			GJ		40	48		84							0.0021	2LC0420-0AC99-0AA0
111-6	190	9450	GG	48	48	48	76	76	40	6	16	39	99	0.0043	2LC0420-1AB99-0AA0	2.9
			GJ		65	65		111							0.0067	2LC0420-1AC99-0AA0
132-6	350	7950	GG	52	52	52	90	90	55	8	18.5	45	134	0.0110	2LC0420-2AB99-0AA0	5.7
			GJ		75	80		132							0.0177	2LC0420-2AC99-0AA0
147-6	500	7100	GG	60	60	60	105	105	65	8	18.5	45	154	0.0199	2LC0420-3AB99-0AA0	8.3
			GJ		85	85		147							0.0324	2LC0420-3AC99-0AA0
171-6	900	6100	GG	70	70	70	122	122	75	9	22.5	56	179	0.0439	2LC0420-4AB99-0AA0	13.3
			GJ		100	100		171							0.0695	2LC0420-4AC99-0AA0
182-6	1450	5750	GG	70	70	70	126	126	85	11	29	71	205	0.0649	2LC0420-5AB99-0AA0	17.5
			GJ		100	110		182							0.1005	2LC0420-5AC99-0AA0
202-6	2150	5200	GG	75	75	75	138	138	85	11	29	71	205	0.0986	2LC0420-6AB99-0AA0	21.9
			GJ		115	125		202							0.1519	2LC0420-6AC99-0AA0
218-6	3200	4800	GG	90	90	90	149	149	95	14	35	86	234	0.1499	2LC0420-7AB99-0AA0	27.2
			GJ		130	130		218							0.2345	2LC0420-7AC99-0AA0
252-6	4500	4150	GG	100	100	100	166	166	105	17	40.5	101	264	0.2924	2LC0420-8AB99-0AA0	39.9
			GJ		140	150		252							0.4651	2LC0420-8AC99-0AA0
267-6	6100	3900	GG	110	110	100	177	177	110	17	40.5	102	275	0.3827	2LC0421-0AB99-0AA0	45.9
			GJ		150	160		267							0.6129	2LC0421-0AC99-0AA0

Jumbo hubs for larger shaft diameters.
G and J hubs in split clamping hub variant.
The hub variant with keyway rates as standard. Optionally, the shaft/hub connection can be implemented without keyway as a pure clamping seat.
For specification of plate pack, see under spare parts.
Weights and mass moments of inertia apply to the entire coupling with maximum bores D1/D2.

Ordering example:
ARPEX ARF-6 GG coupling, size 132-6, for shaft diameter ØD1 45h6 mm, without keyway, for shaft diameter ØD2 50k6 mm, with keyway to DIN 6885-1, keyway width P9.

Product code: **2LC0420-2AB99-0AA0-Z**
L1A+M1C+L45+Y26+Y27
plain text to Y26: **h6**
plain text to Y27: **k6**

FLENDER Standard Couplings

Torsionally Rigid All-Steel Couplings – ARPEX ARF-6 Series

Spare and wear parts
Plate pack ARF-6

Selection and ordering data

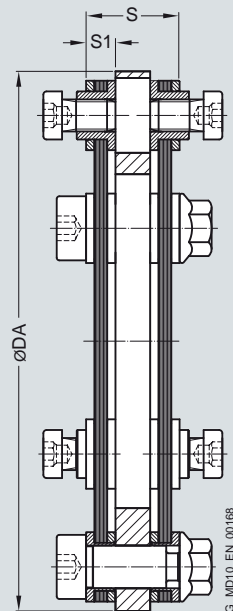
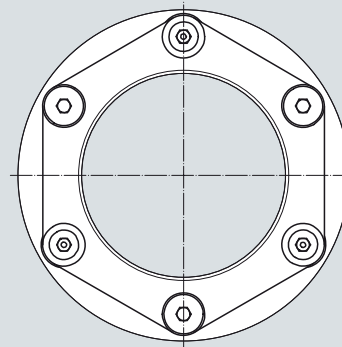


Figure 1



Ring plates (Fig. 1) are used for the plate packs.

Dimensions in mm				Mass moment of inertia	Product code	Weight
Size	Type	S	S1	J		m
DA				kgm ²		kg
84-6	GG	19	6	0.0003	2LC0420-0AE00-0AA0	0.30
	GJ				2LC0420-0AH00-0AA0	
111-6	GG	19	6	0.0009	2LC0420-1AE00-0AA0	0.46
	GJ				2LC0420-1AH00-0AA0	
132-6	GG	24	8	0.0026	2LC0420-2AE00-0AA0	0.90
	GJ				2LC0420-2AH00-0AA0	
147-6	GG	24	8	0.0038	2LC0420-3AE00-0AA0	1.07
	GJ				2LC0420-3AH00-0AA0	
171-6	GG	29	9	0.0097	2LC0420-4AE00-0AA0	1.96
	GJ				2LC0420-4AH00-0AA0	
182-6	GG	35	11	0.0143	2LC0420-5AE00-0AA0	2.58
	GJ				2LC0420-5AH00-0AA0	
202-6	GG	35	11	0.0240	2LC0420-6AE00-0AA0	3.53
	GJ				2LC0420-6AH00-0AA0	
218-6	GG	44	14	0.0383	2LC0420-7AE00-0AA0	4.89
	GJ				2LC0420-7AH00-0AA0	
252-6	GG	54	17	0.0812	2LC0420-8AE00-0AA0	7.90
	GJ				2LC0420-8AH00-0AA0	
267-6	GG	55	17	0.1152	2LC0421-0AE00-0AA0	9.60
	GJ				2LC0421-0AH00-0AA0	

The plate pack unit for the ARF-6 series is readily available as a spare part in most sizes.

The plate pack unit comprises two preassembled plate packs with adapter disk, including screw connection.
The standard screw connection comprises hexagon socket head cap screws and close-fitting bolts with nuts.