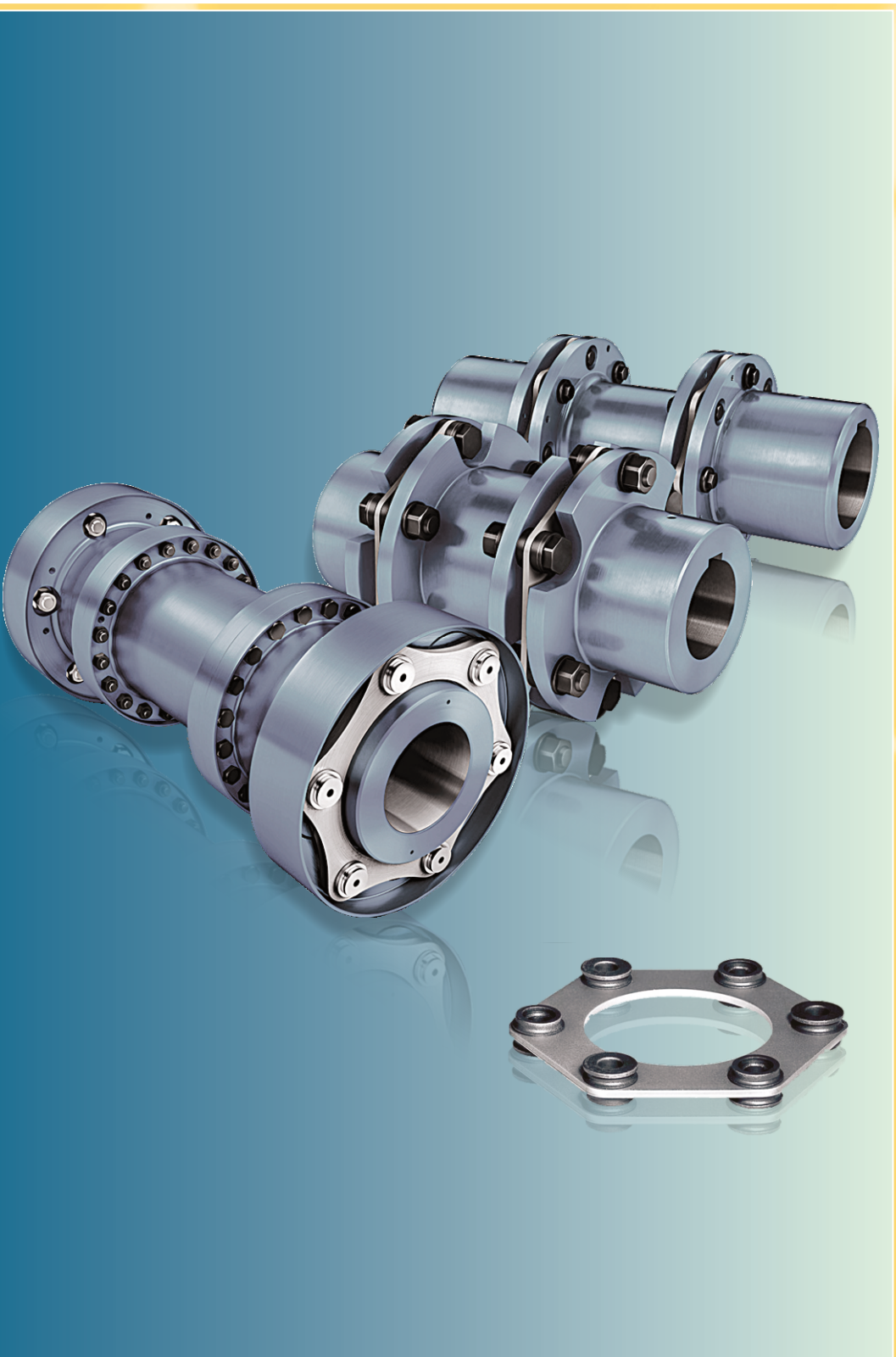
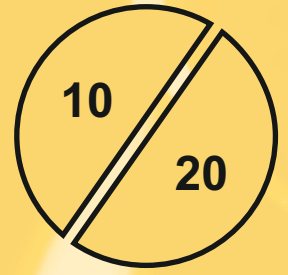




Quality products for Mechanical
& Fluid Power

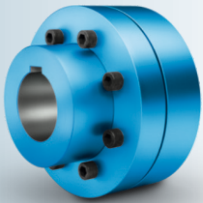


N-ARPEX[®] ALL-STEEL DISC COUPLINGS

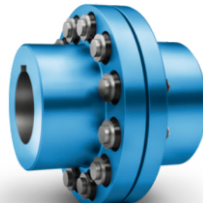


N-EUPEX[®], RUPEX[®] and N-BIPEX[®]
Flexible Couplings

Flexible Flender couplings have a wide range of possible applications. A broad standard modular system as well as specially designed application specific couplings are available.



N-EUPEX
 cam couplings
 Rated torque: 19 Nm ... 85,000 Nm



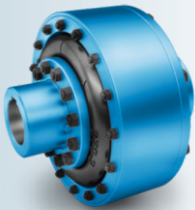
RUPEX
 pin-and-bush couplings
 Rated torque: 200 Nm ... 1,300,000 Nm



N-BIPEX
 cam couplings
 Rated torque: 12 Nm ... 1,300 Nm

ELPEX[®], ELPEX-B[®] and ELPEX-S[®]
Highly Flexible Couplings

ELPEX[®] couplings are free of circumferential back-lash. Their damping capacity and low torsional stiffness make them especially well-suited for coupling machines with widely variable torque characteristics or large shaft misalignment.



ELPEX
 elastic ring couplings
 Rated torque: 1,600 Nm ... 90,000 Nm



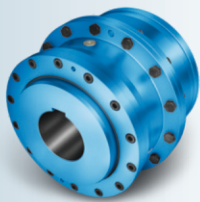
ELPEX-B
 elastic tire couplings
 Rated torque: 24 Nm ... 14,500 Nm



ELPEX-S
 rubber disk couplings
 Rated torque: 330 Nm ... 63,000 Nm

ZAPEX[®] gear couplings and ARPEX[®] all-steel couplings
Torsionally Rigid Couplings

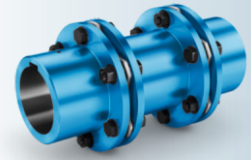
For transmission of high torques, we offer both ARPEX all-steel disc couplings and ZAPEX gear couplings in a range of versions. The applications vary according to specific requirements, with respect to shaft misalignment, temperature and torque.



ZAPEX
 gear couplings
 Rated torque: 1,300 Nm ... 7,200,000 Nm



ARPEX
 high performance disc couplings
 Rated torque: 1,000 Nm ... 80,000 Nm



N-ARPEX and ARPEX
 all-steel disc couplings
 Rated torque: 92 Nm ... 2,000,000 Nm

BIPEX-S[®] and SIPEX[®]
Backlash-Free Couplings

The vibration-damping, electrically insulating plug-in BIPEX-S elastomer couplings and SIPEX metal bellows couplings deliver especially accurate component positioning.



BIPEX-S and SIPEX
 Rated torque: 0.1 Nm ... 5,000 Nm





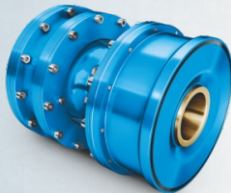
FLUDEX® couplings are hydrodynamic fluid couplings which operate on the Fottinger principle.

FLUDEX® couplings limit starting and maximum torque in the drive train and, through the property of rotational slip, serve as an aid to starting the motor, as overload protection in the event of fault and for isolating torsional vibration. To compensate for shaft misalignment, the FLUDEX® coupling is combined with a displacement coupling e.g. of the N-EUPEX® type.

#FLUDEX

Railway Couplings

Couplings for rail vehicles developed, tested and produced for reliability and safety.



ZBG series [read info ...](#)



LBK series [read info ...](#)



GKG series [read info ...](#)



MBG series [read info ...](#)



MBG-ISO series [read info ...](#)



ARS series [read info ...](#)

Couplings designed for partially and fully suspended drives which can be mounted between motor and gear unit or gear unit and wheel-set shaft. Designed and tested to withstand the high forces created by axle loads of up to 32 t, motor speeds of over 6,000 rpm and driving speeds of more than 400 km/h. All models tested under extreme conditions to guarantee maximum reliability. A broad range of products in all necessary sizes and designs as standard.

FLENDER Railway Couplings offer:

- » High quality.
- » 100% component traceability.
- » Great depth within an extensive product range.
- » Component compatibility with Flender gear units for rail vehicles.
- » Low maintenance costs and a high level of serviceability.

#railway-couplings



Mechanical Power Transmission Couplings

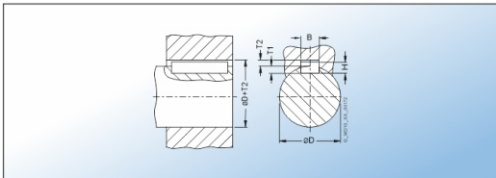
Fitting Recommendations



FLENDER

Parallel Key Connections to Din 6885-1

For moderate operating conditions, the hub keyway tolerance J50 is recommended. In harsh operating conditions or during reversing operation, the keyway width tolerance P9 must be preferred. With two parallel keyways, the keyway width tolerance J50 should be specified in order to simplify the assembly. The shaft keyway width has to be specified with the tolerance H9.



Diameter above D mm	up to D mm	B mm	H mm	Shaft keyway depth		Deviation for shaft B keyway depth		Deviation for hub keyway width B	
				T1 mm	T2 mm	J50 µm	P9 µm	H9 µm	H9 µm
66	110	28	18	10	0.4	+0.2	+28	-22	-28
110	130	32	18	11	7.4	+0.2	+31	-22	-28
130	150	36	20	12	8.4	+0.3	+31	-22	-28
150	170	40	22	13	9.4	+0.3	+31	-22	-28
170	200	45	25	15	10.4				
200	230	50	28	17	11.4				
230	260	56	32	20	12.4				
260	290	63	32	20	12.4				
290	330	70	36	22	14.4				
330	380	80	40	25	15.4				
380	440	90	45	28	17.4				
440	500	100	50	31	19.4				

#DriveLineHarmony

14

Mechanical Power Transmission Couplings

Technical Information



FLENDER

Standards

Year	Standard	Description
2009/2010	EC Machinery Directive	ATEX Directive - Manufacturer - and ATEX Guideline to Directive 1999/92/EC
2014/34/EU	ATEX Directive - Manufacturer	ATEX Directive - Operator - and ATEX Guideline to Directive 1999/92/EC
1999/92/EC	ATEX Directive - Operator	ATEX Directive - Manufacturer
DIN EN 13483	Non-electrical equipment for use in potentially explosive atmospheres	Explosive atmospheres, explosion prevention and protection
DIN EN 1127	General-purpose three-phase induction motors having standard dimensions and outputs	
DIN EN 60347	General-purpose three-phase induction motors having standard dimensions and outputs	

Couplings

Standard	Description
DIN 740	Flexible shaft couplings Part 1 and Part 2
VCI Guideline 2240	Shaft couplings - Systematic subdivision according to gear production VCI Technical Drive Engineering Design 1071
API 610	Centrifugal Pumps for Petroleum, Chemical and Gas Industry Services
API 670	Machinery Protection System
API 671	Special Purpose Couplings for Petroleum, Chemical and Gas Industry Services
ISO 10441	Petroleum, petrochemical and natural gas industries - flexible couplings for mechanical power transmission - special-purpose applications

Balancing

Standard	Description
DIN ISO 1940	Requirements for the balancing quality of rigid rotors
DIN ISO 21940-1	Mechanical vibrations, standard governing the type of parallel key during balancing of shafts and complete parts

Shaft hub connections

Standard	Description
DIN 8885	Driver connections without taper action - parallel keys
SAE J2024	Flywheels for industrial engines
DIN 6288	Internal-combustion piston engines

Formula symbols

Key to the formula symbols

Name	Symbol	Unit	Explanation
Torsional stiffness, dynamic	C_{dyn}	Nm/rad	For calculating torsional vibration
Excitation frequency	f_{exc}	Hz	Excitation frequency of motor or driven machine
Moment of inertia	J	kgm ²	Moment of inertia of coupling sides 1 and 2
Radial misalignment	Δr_{μ}	mm	Radial misalignment of the coupling halves
Angular misalignment	$\Delta \alpha_{\mu}$	°	Angular misalignment of the coupling halves
Rigid misalignment	Δr_{μ}	mm	Radial misalignment of the coupling halves
Angular misalignment	$\Delta \alpha_{\mu}$	°	Angular misalignment of the coupling halves
Service factor	FB	-	Factor expressing the real coupling load as a ratio of the nominal coupling load
Frequency factor	FF	-	Factor expressing the frequency dependence of the fatigue torque load
Temperature factor	FT	-	Factor taking into account the reduction in strength of flexible rubber materials at a higher temperature
Weight	m	kg	Weight of the coupling
Rated speed	n_N	rpm	Coupling speed
Maximum coupling speed	n_{max}	rpm	Maximum permissible coupling speed
Rated power	P_N	kW	Rated output on the coupling, usually the output of the driven machine
Rated torque	T_N	Nm	Rated torque as nominal load on the coupling
Fatigue torque	T_{dyn}	Nm	Amplitude of the dynamic coupling load, e.g. during starting
Overload torque	T_{OL}	Nm	Very infrequently occurring maximum load, e.g. during short circuit or blocking conditions
Rated coupling torque	T_{CN}	Nm	Torque which can be transmitted as static torque by the coupling over the period of use
Maximum coupling torque	T_{Cmax}	Nm	Torque which can be frequently transmitted (up to 25 times an hour) as maximum torque by the coupling
Coupling overload	T_{CO}	Nm	Torque which can very infrequently

Mechanical Power Transmission Couplings

Technical Information



FLENDER

Key to symbols

Name	Symbol	Unit	Explanation
Torsional stiffness, dynamic	C_{dyn}	Nm/rad	For calculating torsional vibration
Excitation frequency	f_{exc}	Hz	Excitation frequency of motor or driven machine
Moment of inertia	J	kgm ²	Moment of inertia of coupling sides 1 and 2
Radial misalignment	Δr_{μ}	mm	Radial misalignment of the coupling halves
Angular misalignment	$\Delta \alpha_{\mu}$	°	Angular misalignment of the coupling halves
Service factor	FB	-	Factor expressing the real coupling load as a ratio of the nominal coupling load
Frequency factor	FF	-	Factor expressing the frequency dependence of the fatigue torque load
Temperature factor	FT	-	Factor taking into account the reduction in strength of flexible rubber materials at a higher temperature
Weight	m	kg	Weight of the coupling
Rated speed	n_N	rpm	Coupling speed
Maximum coupling speed	n_{max}	rpm	Maximum permissible coupling speed
Rated power	P_N	kW	Rated output on the coupling, usually the output of the driven machine
Rated torque	T_N	Nm	Rated torque as nominal load on the coupling
Fatigue torque	T_{dyn}	Nm	Amplitude of the dynamic coupling load, e.g. during starting
Maximum torque	T_{max}	Nm	More frequently occurring maximum load, e.g. during starting
Overload torque	T_{OL}	Nm	Very infrequently occurring maximum load, e.g. during short circuit or blocking conditions
Rated coupling torque	T_{CN}	Nm	Torque which can be transmitted as static torque by the coupling over the period of use
Maximum coupling torque	T_{Cmax}	Nm	Torque which can be frequently transmitted (up to 25 times an hour) as maximum torque by the coupling
Coupling overload torque	T_{CO}	Nm	Torque which can very infrequently be transmitted as maximum torque by the coupling
Fatigue coupling torque	T_{CN}	Nm	Torque amplitude which can be transmitted by the coupling as dynamic torque at a frequency of 10 Hz over the period of use
Resonance factor	VR	-	Factor specifying the torque increase at resonance
Temperature	t_a	°C	Ambient temperature of the coupling in operation
Damping coefficient	ζ	-	Damping parameter

Selection of the Coupling Series

The coupling series is frequently determined by the driven machine and the design of the drive train. Common selection criteria are listed below and assigned to coupling properties, which are used to select the coupling series. Additionally, the price of the coupling and availability are important criteria for determining the coupling series to be used. The FLENDER series operates positively and transmits the torque with the aid of a floating oil/water film. FLENDER couplings are used to reduce starting and/or overload torque. During starting, the motor may, for example, run up within a very short time, because of the FLENDER coupling, the drive train with the driven machine may accelerate after a delay and without increased torque load. The FLENDER coupling cannot compensate for shaft misalignment and is therefore designed in combination with a displacement coupling, a cardan shaft or a bevel drive. The displacement coupling may be selected in accordance with the criteria described below.

Coupling Type	Torque Range Rated Coupling Torque T_N	Speed Range Permissible Speed $v_{max} = \Delta n \cdot \sqrt{v_{N1}/T_N}$	Torsionally Rigid	Torsionally Flexible	Highly Flexible	Operating Temperature Range
SAPLEX	50 - 200000 Nm	83 m/s	●	—	—	-30 ... +80 °C
NARPEX	350 - 3000000 Nm	110 m/s	●	—	—	-50 ... +280 °C
ARPEX	62 - 2000000 Nm	100 m/s	●	—	—	-40 ... +280 °C
IN-DEUPER	18 - 62000 Nm	99 m/s	—	●	—	-50 ... +100 °C

Mechanical Power Transmission Couplings

Technical Information



FLENDER

Typical coupling solutions for different example applications

The specified application factors are recommendations, regulations, rules and practical experience take priority as assessment criteria. No application factor need be taken into account with FLENDER couplings. In the case of highly flexible couplings of the ELPEX, ELPEX-D and ELPEX-B series, deviating application factors are stated in the product descriptions. FLENDER couplings are mostly mounted on the high-speed gear shaft.

Example applications	Application factor FB	Example applications	Application factor FB	Example applications	Application factor FB
Electric motor without gear unit	1.0	Compressed air, screw-type compressors	1.25	Woodworking - reciprocating saws	1.5
Centrifugal pumps	1.0	Air-blowers	1.5	Grinding machines	1.6
Piston pumps	1.5	Generators, converters	1.25	Textile machines - winders	1.5
Vacuum pumps	1.5	Blowers	1.25	Textile machines - printing machines	1.5
Fans with TN less than 750 Nm	1.5	Frequency converters / generators	1.25	Textile machines - spinning spindles	1.5
Fans with TN from 750 to 1750 Nm	1.75	Blowers	1.25	Textile machines - looms	1.5
Fans with TN larger than 1750 Nm	1.75	Frequency converters / generators	1.25	Packaging machines	1.5
Blowers	1.5	Plate filters	1.5	Book binding machines	1.75
Reciprocating compressors	1.25	High blowers	1.75	Transport and logistics	1.5
Screw-type compressors	1.5	Shredding mills	1.75	Passenger transport - elevators	1.5
Internal-combustion engine without gear unit	1.0	Coining machines	1.5	Passenger transport - escalators	1.5
Generators	1.75	Roller shapers	1.5	Conveyor systems - bucket elevators	1.5
Pumps	1.5	Rollers	1.75	Conveyor systems - belt conveyors	1.5
Fans	1.75	Rollers	1.75	Conveyor systems - endless-chain conveyors	1.5
Hydraulic pumps, excavators, construction machines	1.5	Plate bending machines	1.5	Conveyor systems - circular conveyors	1.5
Compressors / screw-type compressors	1.5	Plate straightening machines	1.5	Conveyor systems - screw conveyors	1.5
Agricultural machinery	1.75	Hammers	1.75	Conveyor systems - inclined hoists	1.5
Other	1.0	Presses, forging presses	1.75	Conveyor systems - inclined hoists	1.5
Turbine gear units	1.5	Shears	1.5	Crate traveling gear	1.5
Hydraulic motor gear unit	1.25	Grinding machines	1.25	Hoisting gear	1.5
Electric motor with gear unit	1.0	Punches	1.5	Crate traveling gear	2.0
Chemical industry	1.5	Machine tools, Main drives	1.5	Crate traveling gear	1.5
Extruders	1.0	Machine tools, Auxiliary drives	1.5	Cable reeling gear	1.5
Pumps - centrifugal pumps	1.5	Food industry	1.25	Cable reeling gear	1.5
Pumps - piston pumps	1.75	Filling machines	1.5	Crane fly hoists	1.5
Pumps - plunger pumps	1.5	Knitting machines	1.5	Crane fly hoists	1.5
Reciprocating compressors	1.75	Machines	1.5	Winches	1.5
Calenders	1.5	Sugar cane production	1.5	Cellulose and paper	1.5
Feeders	1.75	Construction machines, at	1.25	Paper-making machines, at	1.5
Cooling drums	1.25	Construction machines, at	1.25	Pulverizers	1.5
Mixers	1.25	Hydraulic pumps	1.25	Cement industry	1.5
Silencers	1.25	Construction machines, at	1.25	Crossers	1.75
Toasters	1.25	Traveling gears	1.5	Rotary furnaces	1.5
Drying drums	1.25	Construction machines, suction pumps	1.5	Hammer mills	1.75
Centrifuges	1.25	Construction machines, at	1.25	Belt mills	1.75
Crushers	1.5	Construction machines, at	1.25	Pug mills	1.75
Power generation and conversion	1.5	concrete mixers	1.5	Mixers	1.5
Compressed air, reciprocating	1.25	Printing machines	1.25	Blower mills	1.75
				Separators	1.5
				Bar presses	1.75



See the **FLENDER COUPLINGS INTRODUCTION** for:

- » Shaft coupling types.
- » Shaft misalignment.
- » Balancing.
- » Shaft hub connections.
- » Key to symbols & selection of coupling series.
- » Typical coupling solutions for different applications.
- » Selection of coupling size.
- » Checking shaft hub connection & environmental conditions.
- » Fitting recommendations including DIN ISO 286 details.
- » Cylindrical shaft ends, extract from DIN 748 Part 1 (long) & central holes according to DIN 332 Part 2.
- » Parallel Key Connections to Din 6885-1.

#couplings-technical-info



The details contained within this catalogue are reproduced with kind permission of FLENDER in accordance with the latest information available at time of production of this publication E & OE.

TORSIONALLY RIGID COUPLINGS	<i>Page</i>
N-Arpex ARN-6/-8/-10 Series Introduction	1 - 8
N-Arpex ARN-6/-8/-10 Type NEN/NHN Technical Specifications	19 - 10
N-Arpex ARN-6/-8/-10 Type MCECM/MCHCM Technical Specifications	11 - 12
N-Arpex ARN-6/-8/-10 Type MFEFM/MFHFM Technical Specifications	13 - 14
N-Arpex ARN-6/-8/-10 Type BEB Technical Specifications	15
Clamping Hubs, Type 124 & 125	16 - 18
Spare & Wear Parts	19
Length-Dependent Specifications	20 - 22
Other Design Options	23
ARPEX ARW-4/-6 Series Introduction	24 - 26
Arpex ARW-4/-6 Type NHN Technical Specifications	27 - 28
ARPEX ARW-4/-6 Series Spare & Wear Parts	29
ARPEX ARF-6 Series Introduction	30 - 31
ARPEX ARF-6 Series Types GG & GJ Technical Specifications	32
ARPEX ARF-6 Series Spare & Wear Parts	33
Getting the most from your machinery	34 - 35
<i>#DriveLineHarmony</i>	36 - 37



FLENDER **Flender**
9,544 followers
1w • 🌐

<https://lnkd.in/eArCCRi>

New distribution partnership in the UK: We have now partnered with **jbj Techniques Limited** as the official partner for our whole couplings range in the United Kingdom and kicked off our cooperation by a digital signing of the partnership contract. JBJ has a wealth of experience in established and niche applications, such examples are: Mechanical drives for subsea wave energy, steel works crucible handling equipment or marine winch drives. We are happy to have them on our side for our UK coupling customers, especially for the supply of the recently optimized N-EUPEX!

Get to know the industry benchmark in couplings and reach out to **Mat Jackson**, Product Manager Couplings at Flender UK, and **Mike Davis**, Managing Director at JBJ for further queries.

Learn more about our couplings range here: <https://lnkd.in/dAir-av>




#flender #couplings #neupex #newpartnership #cooperation #WeMoveTheWorld





Coupling suitable for use in potentially explosive atmospheres.

Complies with the current ATEX Directive for:

- CE  II 2G Ex h IIC T6 ... T2 Gb X
-  II 2D Ex h IIIC T85 °C ... 250 °C Db X
-  IM2 Ex h Mb X

Benefits

N-ARPEX couplings of the ARN-6/-8/-10 series are outstanding for their application-optimized construction.

The NEN, BEB, MCECM, MFEFM series meet the requirement of API 610. Couplings in accordance with API 671 are also possible. For speeds of over 1,800 rpm the five-part version with pre-assembled intermediate unit is used.

A special catching device acts to secure the intermediate spacer in the event of plate breakage. Application of the N-ARPEX couplings in potentially explosive atmospheres in accordance with the current ATEX Directive are available.

Application

N-ARPEX couplings of the ARN-6/-8/-10 series are used wherever reliable torque transmission is called for, even in cases of often unavoidable shaft misalignment. They are universally applicable over a temperature range of from -50 °C (or even as low as -60 °C on request) up to +280 °C, are torsionally rigid, free of torsional backlash and enable quiet running at a constant angular velocity. They are wear-free and maintenance-free and, if correctly fitted, can be expected to have an unlimited service life.

Special consideration is given for use in pump and compressor drives. For this type of application are couplings with standardised intermediate spacer lengths from stock (see following tables).

Main areas of application for the ARN-6/-8/-10 series:

- » Pumps
- » Fans
- » Compressors
- » Generator and turbine drives
- » Axial and radial blowers
- » Paper-making machines and printing machines
- » Mixers, Stirrers
- » Extruders
- » Lifting and traversing gears
- » Marine drive
- » Water screw drives



An optimised plate pack and a reworked component part design enable even higher torques and speeds to be transmitted.

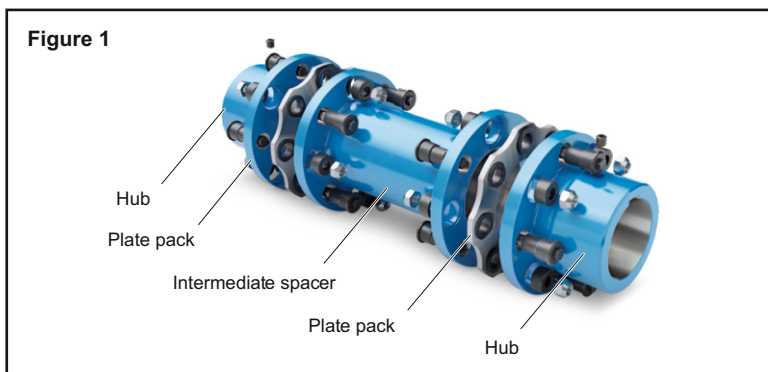


Design and Configurations

Materials

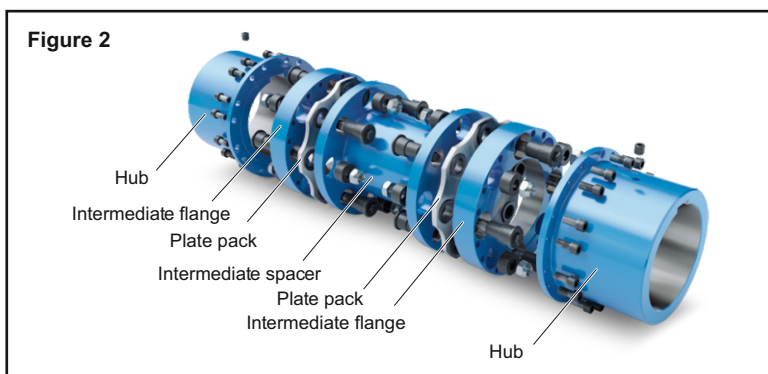
NEN

The design of an N-ARPEX type NEN is shown in illustration, figure 1. The coupling comprises two hubs, an intermediate spacer and two plate packs that in the ARN-6 series are bolted together alternately with close-fitting bolts and in the ARN-8/-10 series by means of a Flender conical screw connection. The coupling is available in fixed lengths from stock. Other spacer lengths are manufactured to order. Hubs are designed with threaded pull-off holes.



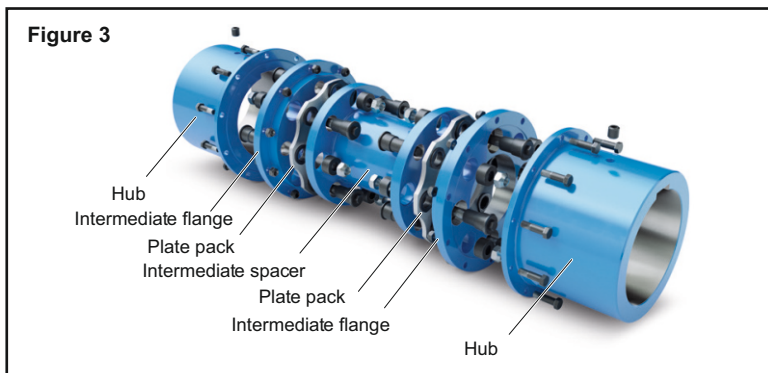
MCECM

The design of an N-ARPEX type MCECM is shown in illustration, figure 2. The coupling comprises two hubs and a pre-assembled intermediate unit (CEC), where the plate packs are bolted together with an intermediate spacer and intermediate flanges at the factory. All that needs to be done at the construction site is to bolt the hubs with the intermediate flanges. The coupling is available in fixed lengths from stock. Other spacer lengths are manufactured to order. Hubs are designed with threaded pull-off holes.



MFEFM

The following illustration figure 3, shows the N-ARPEX type MFEFM. It most differs from the type MCECM by the considerably increased bore capacity, for which reason this type is intended precisely for comparatively large shaft diameters. The coupling is available in fixed lengths from stock. Other spacer lengths are manufactured to order. Hubs are designed with threaded pull-off holes.



Variants of the N-ARPEX coupling, ARN-6/-8/-10 series

Type	Series			Description
	ARN-6	ARN-8	ARN-10	
NEN	■	■	■	Variant with intermediate spacer machined on all sides, length variable
BEB	■	–	–	Variant with intermediate spacer machined on all sides
MCECM	■	■	–	Variant with preassembled intermediate unit and intermediate spacer machined on all sides, length variable
MFEFM	■	■	■	
NHN	■	■	■	Version with variable spacer tube – specially for greater shaft distances (up to 6,500 mm)
MCHCM	■	■	–	Version with pre-assembled intermediate unit and with variable spacer tube –
MFHFM	■	■	■	specially for greater shaft distances (up to 6,500 mm)

The coupling parts of the N-ARPEX ARN-6/-8/-10 series with the exception of the H spacers have been machined on all sides. The H spacers are delivered with unmachined, primed spacer tube. Dimension sheets and 3D models of the standard types as well as application-related coupling types are available on request. Please contact jbj Techniques Limited technical office, telephone +44 (0)1737 767493 or email: info@jbj.co.uk



Plate-pack designs

The plate packs of the N-ARPEX ARN series are designed with hexagon, octagon and decagon plates, depending on the coupling size. The number of screw connections is indicated in the denomination of the ARN-6/-8/-10 series. Hexagon plates have 6 bolting points, octagon plates have 8 bolting points and decagon plates have 10 bolting points. The hexagon plates, octagon plates and decagon plates up to size 631 are designed as ring plates. Sizes 694 to 988 are designed as segmented plates.

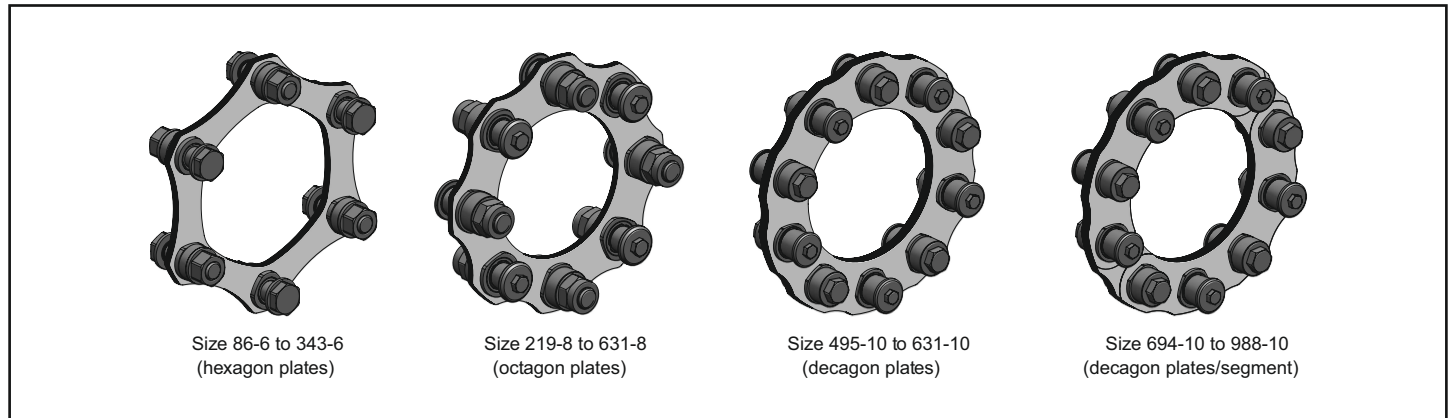
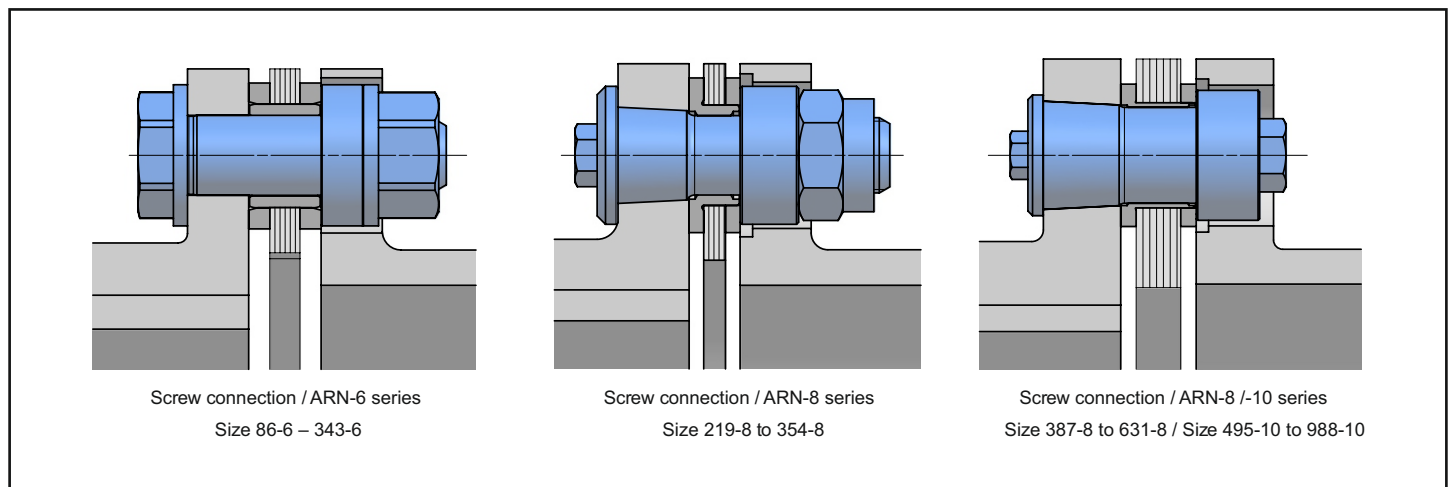


Plate pack screw connection

In the ARN-6 series the plate pack screw connection on N-ARPEX couplings is designed in the form of a close fitting screw connection. In the ARN-8 and ARN-10 series a conical bolt connection by Flender is used. The advantage of this screw connection is the considerably simplified installation in the case of large screw connections.





Size DA (mm)	Type	Rated Torque T_{KN} (kNm)	Maximum Torque T_{Kmax} (kNm)	Overload Torque T_{KOL} (kNm)	Fatigue Torque				Maximum Speed n_{Kmax} (rpm)	Maximum permitted shaft misalignment. (Permissible radial misalignment ΔK_r depends on the total length of the coupling)		Torsional stiffness for a disc pack C_{Tdyn} (MNm/rad)
					T_{KW0} $T_N = 0\% T_{KN}$ (kNm)	$T_{KW} = T_{KW0} \cdot (1 - T_N/T_{KN})$				$\pm \Delta K_a$	$\pm \Delta K_w$	
						25% T_{KN}	50% T_{KN}	75% T_{KN}				
86-6	6-Bolt	0.35	0.7	0.875	0.175	0.131	0.088	0.044	24000	1.2	1.0 °	0.132
103-6		0.5	1	1.25	0.25	0.188	0.125	0.063	20000	1.4		0.206
122-6		0.95	1.9	2.375	0.475	0.356	0.238	0.119	17000	2		0.463
133-6		1.25	2.5	3.125	0.625	0.469	0.313	0.156	15000	2.2		0.608
159-6		2.1	4.2	5.25	1.05	0.788	0.525	0.263	13000	2.6		0.986
174-6		2.5	5	6.25	1.3	0.975	0.65	0.325	12000	3		1.19
184-6		3.8	7.6	9.5	1.9	1.425	0.95	0.475	11000	3.2		1.83
203-6		5	10	12.5	2.5	1.875	1.25	0.625	10000	3.4		2.59
217-6		6.2	12.4	15.5	3.1	2.325	1.55	0.775	9500	3.4		3.28
251-6		10.5	21	26.25	5.5	4.125	2.75	1.375	8000	4.1		4.71
268-6		13.8	27.6	34.5	6.9	5.175	3.45	1.725	7500	4.2		5.63
291-6		18.2	36.4	45.5	9.1	6.825	4.55	2.275	7000	4.6		8.27
318-6		23	46	57.5	11.5	8.625	5.75	2.875	6500	5		10.94
343-6		28	56	70	14	10.5	7	3.5	6000	5.3		12.15
219-8	8-Bolt	10	20	25	5	3.75	2.5	1.25	9500	1.7	0.4 °	6.31
241-8		15	30	37	7.5	5.625	3.75	1.875	8700	1.9		7.64
262-8		20	40	50	10	7.5	5	2.5	8000	2.1		9.09
285-8		27	54	67	13.5	10.125	6.75	3.375	7300	2.2		11.9
302-8		35	70	87	17.5	13.125	8.75	4.375	6900	2.4		16.2
321-8		43	86	107	21.5	16.125	10.75	5.375	6500	2.5		21.9
354-8		56	112	140	28	21	14	7	5900	3		29.1
387-8		72	144	180	36	27	18	9	5400	3.3		40
411-8		93	186	232	46.5	34.875	23.25	11.625	5100	3.4		46.9
447-8		122	244	305	61	45.75	30.5	15.25	4600	2.5		60.3
495-8		160	320	400	80	60	40	20	4200	3		76.9
546-8		212	424	530	106	79.5	53	26.5	3800	3.4		100
587-8		270	540	675	135	101.25	67.5	33.75	3500	3.6		116
631-8		350	700	875	175	131.25	87.5	43.75	3300	3.8		138
495-10	10-Bolt	200	350	450	80	60	40	20	4200	2	0.3 °	150
546-10		270	473	608	108	81	54	27	3800	2.3		194
587-10		352	616	792	140.8	105.6	70.4	35.2	3500	2.4		236
631-10		450	788	1013	180	135	90	45	3300	2.5		274
694-10		630	1103	1418	252	189	126	63	3000	2.7	0.2 °	405
734-10		760	1330	1710	304	228	152	76	2800	2.8		501
790-10		950	1663	2138	380	285	190	95	2600	3		632
887-10		1400	2450	3150	560	420	280	140	2300	3.5		858
988-10		2000	3500	4500	800	600	400	200	2100	3.9		1163

Notes

» The permitted shaft misalignments ΔK_a , ΔK_r and ΔK_w are maximum values and must not occur at the same time (see table on page 5).

» The maximum permissible radial misalignment depends on the shaft distance S. It can be determined for the stated types by using the following formulas:

NEN/NHN: $\Delta K_r = (S - S1) \cdot \tan(\Delta K_w)$

BEB, MCECM/MCHCM and MFEFM/MFHFM: $\Delta K_r = (LZ + S1) \cdot \tan(\Delta K_w)$

» T_{Kmax} is permitted five times per hour.

» Length-related values like torsional stiffness, total weight and mass moment of inertia are listed in the tables on pages 20 to 22.

» The torsional stiffness of the plate packs relates to the nominal range of the coupling. For determination of torsional stiffness for a specific operating point outside the nominal range contact jbj Techniques technical office, telephone +44 (0)1737 767493 or email info@jbj.co.uk



Permitted shaft misalignments, types NEN/NHN, BEB, MCECM/MCHCM and MFEFM/MFHFM

The permitted shaft misalignments ΔK_a , ΔK_r and ΔK_w are maximum values and must not occur at the same time. The specified axial misalignments apply to the complete coupling. The permissible angular misalignments have been specified per coupling joint. As all N-ARPEX types are designed to be double-jointed, there is a direct interrelation between radial and angular misalignment.

NEN/NHN: $\Delta K_r = (S - S1) \cdot \tan(\Delta K_w)$

BEB, MCECM/MCHCM and MFEFM/MFHFM: $\Delta K_r = (LZ + S1) \cdot \tan(\Delta K_w)$

To determine the permissible misalignment, values must, if necessary, be converted.

Size	Permitted Angular Misalignment $\pm\Delta K_w$										
	0.0°	0.1°	0.2°	0.3°	0.4°	0.5°	0.6°	0.7°	0.8°	0.9°	1.0°
DA	Permitted Axial Misalignment $\pm\Delta K_a$ in mm										
86-6	1.2	1.1	1	0.8	0.7	0.6	0.5	0.4	0.2	0.1	0
103-6	1.4	1.3	1.1	1	0.8	0.7	0.6	0.4	0.3	0.1	0
122-6	2	1.8	1.6	1.4	1.2	1	0.8	0.6	0.4	0.2	0
133-6	2.2	2	1.8	1.5	1.3	1.1	0.9	0.7	0.4	0.2	0
159-6	2.6	2.3	2.1	1.8	1.6	1.3	1	0.8	0.5	0.3	0
174-6	3	2.7	2.4	2.1	1.8	1.5	1.2	0.9	0.6	0.3	0
184-6	3.2	2.9	2.6	2.2	1.9	1.6	1.3	1	0.6	0.3	0
203-6	3.4	3.1	2.7	2.4	2	1.7	1.4	1	0.7	0.3	0
217-6	3.4	3.1	2.7	2.4	2	1.7	1.4	1	0.7	0.3	0
251-6	4.1	3.7	3.3	2.9	2.5	2.1	1.6	1.2	0.8	0.4	0
268-6	4.2	3.8	3.4	2.9	2.5	2.1	1.7	1.3	0.8	0.4	0
291-6	4.6	4.1	3.7	3.2	2.8	2.3	1.8	1.4	0.9	0.5	0
318-6	5	4.5	4	3.5	3	2.5	2	1.5	1	0.5	0
343-6	5.3	4.8	4.2	3.7	3.2	2.7	2.1	1.6	1.1	0.5	0
219-8	1.7	1.28	0.85	0.43	0	-	-	-	-	-	-
241-8	1.9	1.43	0.95	0.48	0	-	-	-	-	-	-
262-8	2.1	1.58	1.05	0.53	0	-	-	-	-	-	-
285-8	2.2	1.65	1.1	0.55	0	-	-	-	-	-	-
302-8	2.4	1.8	1.2	0.6	0	-	-	-	-	-	-
321-8	2.5	1.88	1.25	0.63	0	-	-	-	-	-	-
354-8	3	2.25	1.5	0.75	0	-	-	-	-	-	-
387-8	3.3	2.48	1.65	0.83	0	-	-	-	-	-	-
411-8	3.4	2.55	1.7	0.85	0	-	-	-	-	-	-
447-8	2.5	1.88	1.25	0.63	0	-	-	-	-	-	-
495-8	3	2.25	1.5	0.75	0	-	-	-	-	-	-
546-8	3.4	2.55	1.7	0.85	0	-	-	-	-	-	-
587-8	3.6	2.7	1.8	0.9	0	-	-	-	-	-	-
631-8	3.8	2.85	1.9	0.95	0	-	-	-	-	-	-
495-10	2	1.33	0.67	0	-	-	-	-	-	-	-
546-10	2.3	1.53	0.77	0	-	-	-	-	-	-	-
587-10	2.4	1.6	0.8	0	-	-	-	-	-	-	-
631-10	2.5	1.67	0.83	0	-	-	-	-	-	-	-
694-10	2.7	1.35	0	-	-	-	-	-	-	-	-
734-10	2.8	1.4	0	-	-	-	-	-	-	-	-
790-10	3	1.5	0	-	-	-	-	-	-	-	-
887-10	3.5	1.75	0	-	-	-	-	-	-	-	-
988-10	3.9	1.95	0	-	-	-	-	-	-	-	-



Size DA (mm)	Shaft distance S		Preferred dimension V NEN	Type NEN/NHN											
	NEN min. (mm)	NHN min. (mm)		NEN											
				100	140	180	200	250	300	(88.9) 3.5"	(127) 5"	(177.8) 7"	(228.6) 9"	-	
86-6	60	300	100	■	§	§	§	§			§	§	§		
103-6	60	300	100	■	§	§	§	§			§	§	§		
122-6	71	300	100	■	§	§	§	§			§	§	§		
133-6	73	300	100	■	§	§	§	§			§	§	§	§	
159-6	91	300	100	■	§	§	§	§			§	§	§	§	
174-6	92	300	100	■	§	§	§	§			§	§	§	§	
184-6	119	350	140		■	§	§	§				§	§	§	
203-6	120	350	140		■	§	§	§				§	§	§	
217-6	123	350	140		■	§	§	§				§	§	§	
251-6	149	350	180			■	§	§					§	§	
268-6	175	350	180			■	§	§					§	§	
291-6	177	350	180			■	§	§					§	§	
318-6	189	400	200				■	§	§					§	
343-6	190	400	200				■	§	§					§	
219-8	129	350	140		■										
241-8	135	350	140		■										
262-8	145	350	180			■									
285-8	162	350	180			■									
302-8	179	350	180			■									
321-8	196	400	200				■								
354-8	214	400	250					■							
387-8	246	400	250					■							
411-8	256	400	300						■						
447-8	270	400	300						■						
495-8	281	600	300						■						
546-8	299	600	300						■						
587-8	315	600	320							■					■
631-8	334	600	340								■				■
495-10	281	600	300				■								
546-10	299	600	300				■								
587-10	315	600	320												■
631-10	334	600	340												■
694-10	400	600	400												■
734-10	436	600	440												■
790-10	466	750	470												■
887-10	543	750	550												■
988-10	617	750	620												■

■ Preferred dimensions § Available standard dimensions



Type MCECM/MCHCM													
Size DA (mm)	Shaft distance S		Preferred dimension V MCECM										
	MCECM min. (mm)	MCHCM min. (mm)		100	140	180	200	250	300	(127) 5"	(177.8) 7"	(228.6) 9"	-
86-6	100	340	140	§	■	§	§	§		§	§	§	
103-6	100	340	140	§	■	§	§	§		§	§	§	
122-6	111	340	140		■	§	§	§		§	§	§	
133-6	113	340	140		■	§	§	§			§	§	
159-6	131	340	140		■	§	§	§			§	§	
174-6	132	340	140		■	§	§	§			§	§	
184-6	179	410	200				■	§				§	
203-6	180	410	200				■	§				§	
217-6	183	410	200				■	§				§	
251-6	219	420	250					■				§	
268-6	245	420	250					■					
291-6	247	420	250					■					
318-6	289	500	300						■				
343-6	290	500	300						■				

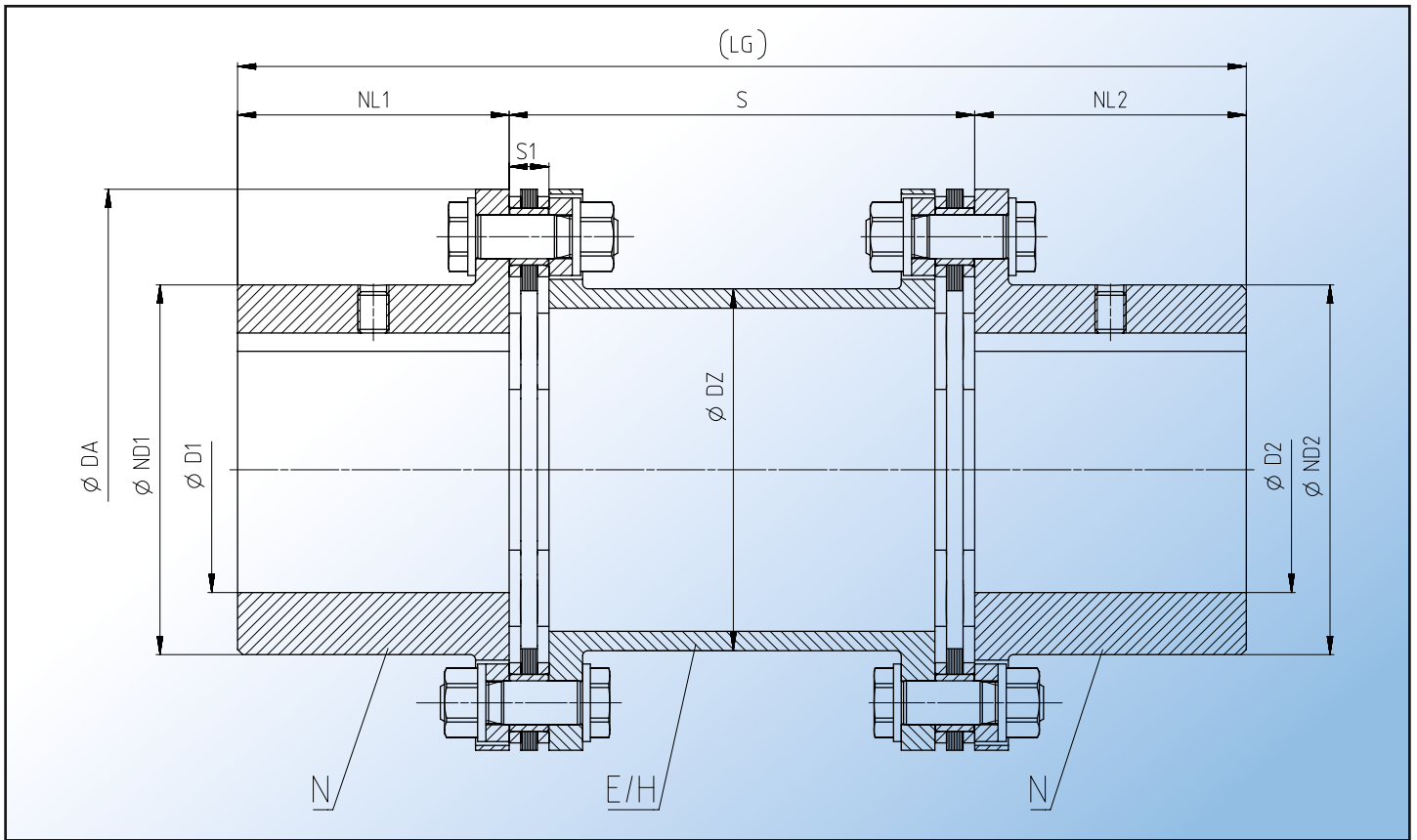
Type MCECM/MCHCM													
Size DA (mm)	Shaft distance S		Preferred dimension V MCECM										
	MCECM min. (mm)	MCHCM min. (mm)		100	140	180	200	250	300	(127) 5"	(177.8) 7"	(228.6) 9"	-
219-8	207	428	218										■
241-8	217	432	222										■
262-8	233	438	268										■
285-8	260	448	278										■
302-8	285	456	286										■
321-8	308	512	312										■
354-8	330	516	366										■
387-8	338	492	342										■
411-8	350	494	394										■
447-8	372	502	402										■
495-8	387	706	406										■
546-8	413	714	414										■
587-8	435	720	440										■
631-8	458	724	464										■

■ Preferred dimensions § Available standard dimensions



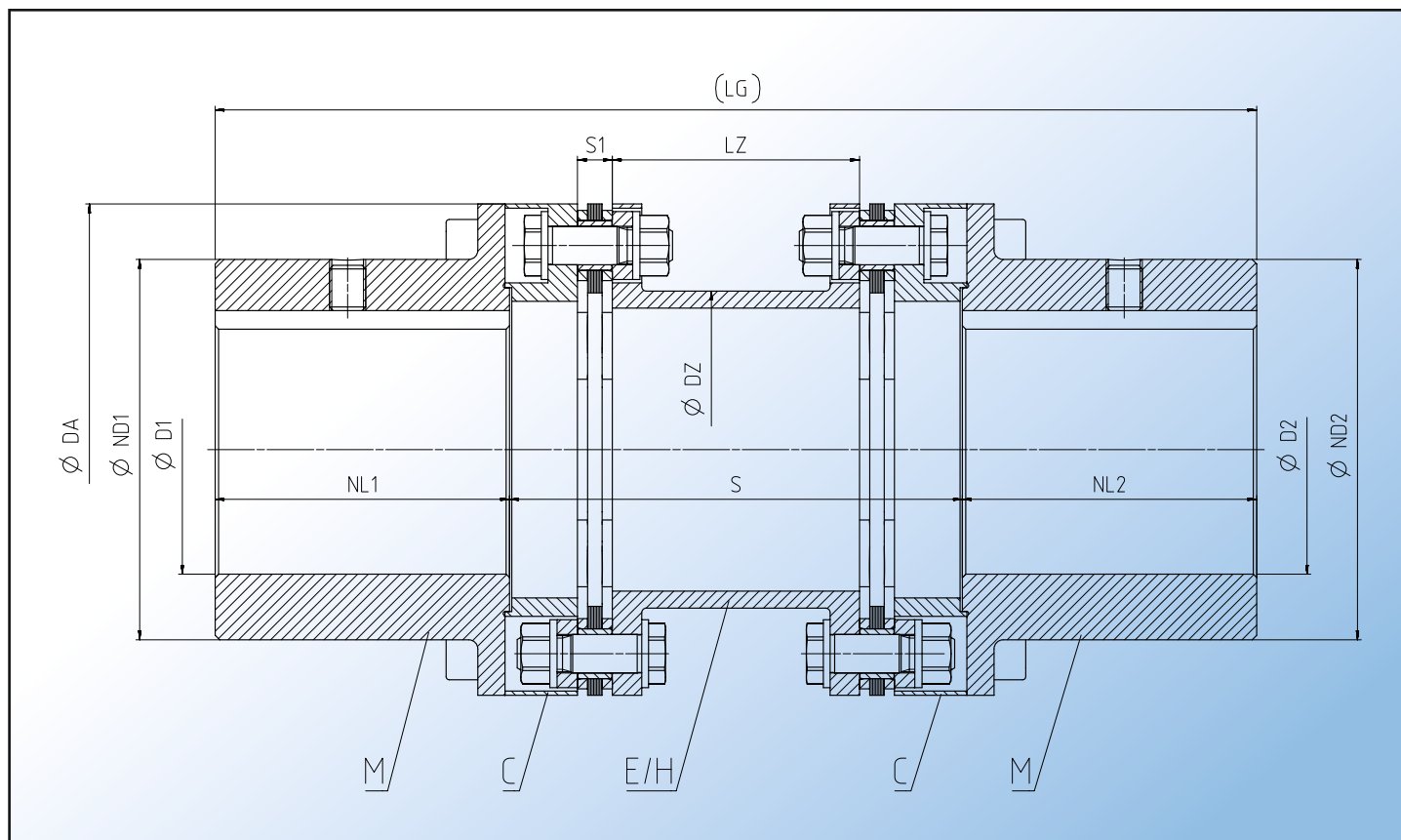
Size DA (mm)	Shaft distance S		Preferred dimension V MFEFM	Type MFEFM/MFHFM									
	MFEFM min. (mm)	MFHFM min. (mm)		100	140	180	200	250	300	(127) 5"	(177.8) 7"	(228.6) 9"	-
	86-6	100		340	140	§	■	§	§	§		§	§
103-6	100	340	140	§	■	§	§	§		§	§	§	
122-6	111	340	140		■	§	§	§		§	§	§	
133-6	113	340	140		■	§	§	§			§	§	
159-6	131	340	140		■	§	§	§			§	§	
174-6	132	340	140		■	§	§	§			§	§	
184-6	179	410	200				■	§				§	
203-6	180	410	200				■	§				§	
217-6	183	410	200				■	§				§	
251-6	219	420	250					■				§	
268-6	245	420	250					■					
291-6	297	470	300						■				
318-6	289	500	300						■				
343-6	290	500	300						■				
219-8	207	428	218										■
241-8	217	432	222										■
262-8	233	438	268										■
285-8	260	448	278										■
302-8	285	456	286										■
321-8	308	512	312										■
354-8	330	516	366										■
387-8	338	492	342										■
411-8	350	494	394										■
447-8	372	502	402										■
495-8	387	706	406										■
546-8	413	714	414										■
587-8	435	720	440										■
631-8	458	724	464										■
495-10	387	706	406										■
546-10	413	714	414										■
587-10	435	720	440										■
631-10	458	724	464										■
694-10	552	752	552										■
734-10	600	764	604										■
790-10	646	930	650										■
887-10	749	956	756										■
988-10	857	900	860										■

■ Preferred dimensions § Available standard dimensions



Torsionally rigid couplings of type NEN (NHN) with radially freely demountable intermediate spacer and catching device to secure the intermediate spacer in the event of plate breakage. Standard coupling type in accordance with API 610. Coupling type in accordance with API 671 (up to n = 1800 rpm) possible.

Size DA (mm)	Rated Torque T_{KN} (kNm)	Max Speed n_{Kmax} (rpm)	Dimensions (mm)									Part Number ¹⁾		Weight m (kg)
			D1/D2 Keyway DIN 6885 max	ND1/ ND2	NL1/ NL2	DZ	S1	Shaft Distance S		Preferred Dimension V	LG	Intermediate Spacer		
								NEN min	NHN min			E Spacer (NEN)	H Spacer (NHN)	
86-6	0.35	24000	42	56	45	45	8	60	300	100	190	2LC0370-0AA	2LC0370-0AL	1.9
103-6	0.5	20000	55	73	55	60	8.4	60	300	100	210	2LC0370-1AA	2LC0370-1AL	3
122-6	0.95	17000	65	85	65	73	8.8	71	300	100	230	2LC0370-2AA	2LC0370-2AL	5.1
133-6	1.25	15000	75	96	75	85	9.6	73	300	100	250	2LC0370-3AA	2LC0370-3AL	6.4
159-6	2.1	13000	80	104	80	97	11.6	91	300	100	260	2LC0370-4AA	2LC0370-4AL	9.6
174-6	2.5	12000	90	118	85	116	12.8	92	300	100	270	2LC0370-5AA	2LC0370-5AL	11.8
184-6	3.8	11000	95	124	90	123	14.6	119	350	140	320	2LC0370-6AA	2LC0370-6AL	16.4
203-6	5	10000	100	135	95	128	15	120	350	140	330	2LC0370-7AA	2LC0370-7AL	21.3
217-6	6.2	9500	110	143	105	140	15.4	123	350	140	350	2LC0370-8AA	2LC0370-8AL	24.4
251-6	10.5	8000	120	160	110	160	20.6	149	350	180	400	2LC0371-0AA	2LC0371-0AL	38
268-6	13.8	7500	130	170	130	166	22	175	350	180	440	2LC0371-1AA	2LC0371-1AL	48.6
291-6	18.2	7000	145	190	140	188	22.8	177	350	180	460	2LC0371-2AA	2LC0371-2AL	62.8
318-6	23	6500	155	205	150	197	23.2	189	400	200	500	2LC0371-3AA	2LC0371-3AL	83.9
343-6	28	6000	170	230	160	223	24	190	400	200	520	2LC0371-4AA	2LC0371-4AL	104



Torsionally rigid couplings of type MCECM (MCHCM) with radially freely demountable pre-assembled intermediate unit and catching device to secure 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.

Size DA (mm)	Rated Torque T_{KN} (kNm)	Max Speed n_{Kmax} (rpm)	Dimensions (mm)										Part Number ¹⁾		Weight m (kg)
			D1/D2 Keyway DIN 6885 max	ND1/ ND2	NL1/ NL2	DZ	LZ	S1	Shaft Distance S		Preferred Dimension V	LG	Intermediate Spacer		
									MCECM min	MCHCM min			E Spacer (MCECM)	H Spacer (MCHCM)	
86-6	0.35	24000	42	62	42	45	84	8	100	340	140	224	2LC0370-0AC	2LC0370-0AM	3.1
103-6	0.5	20000	55	72	55	60	83.2	8.4	100	340	140	250	2LC0370-1AC	2LC0370-1AM	4.7
122-6	0.95	17000	70	91	70	73	82.4	8.8	111	340	140	280	2LC0370-2AC	2LC0370-2AM	7.7
133-6	1.25	15000	80	103	80	85	80.8	9.6	113	340	140	300	2LC0370-3AC	2LC0370-3AM	9.6
159-6	2.1	13000	95	123	95	97	76.8	11.6	131	340	140	330	2LC0370-4AC	2LC0370-4AM	15.9
174-6	2.5	12000	105	136	105	116	74.4	12.8	132	340	140	350	2LC0370-5AC	2LC0370-5AM	19.3
184-6	3.8	11000	110	142	110	123	110.8	14.6	179	410	200	420	2LC0370-6AC	2LC0370-6AM	26.6
203-6	5	10000	115	150	115	128	110	15	180	410	200	430	2LC0370-7AC	2LC0370-7AM	33.7
217-6	6.2	9500	130	168	130	140	109.2	15.4	183	410	200	460	2LC0370-8AC	2LC0370-8AM	40.3
251-6	10.5	8000	150	193	150	160	138.8	20.6	219	420	250	550	2LC0371-0AC	2LC0371-0AM	64.4
268-6	13.8	7500	160	206	160	166	136	22	245	420	250	570	2LC0371-1AC	2LC0371-1AM	78.8
291-6	18.2	7000	170	221	170	188	134.4	22.8	247	420	250	590	2LC0371-2AC	2LC0371-2AM	98.3
318-6	23	6500	190	245	190	197	153.6	23.2	289	500	300	680	2LC0371-3AC	2LC0371-3AM	139
343-6	28	6000	205	267	205	223	152	24	290	500	300	710	2LC0371-4AC	2LC0371-4AM	168



Size DA (mm)	Rated Torque T _{KN} (kNm)	Max Speed n _{Kmax} (rpm)	Dimensions (mm)										Part Number ¹⁾		Weight m (kg)
			D1/D2 Keyway DIN 6885 max	ND1/ ND2	NL1/ NL2	DZ	LZ	S1	Shaft Distance S		Preferred Dimension V NEN	LG	Intermediate Spacer		
									MCECM min	MCHCM min			E Spacer (NEN)	H Spacer (NHN)	
219-8	10	9500	140	179	140	124	115.6	12.2	207	428	218	498	2LC0380-0AC	2LC0380-0AM	50.3
241-8	15	8700	155	201	155	135	114.8	12.6	217	432	222	532	2LC0380-1AC	2LC0380-1AM	68.2
262-8	20	8000	165	218	165	148	152.4	13.8	233	438	268	598	2LC0380-2AC	2LC0380-2AM	89
285-8	27	7300	185	239	185	162	149.6	15.2	260	448	278	648	2LC0380-3AC	2LC0380-3AM	115
302-8	35	6900	190	250	190	174	145.6	17.2	285	456	286	666	2LC0380-4AC	2LC0380-4AM	140
321-8	43	6500	205	269	205	189	158	21	308	512	312	722	2LC0380-5AC	2LC0380-5AM	171
354-8	56	5900	230	296	230	216	202.8	23.6	330	516	366	826	2LC0380-6AC	2LC0380-6AM	220
387-8	72	5400	255	329	255	240	198	26	338	492	342	852	2LC0380-7AC	2LC0380-7AM	275
411-8	93	5100	270	347	270	250	240.8	29.6	350	494	394	934	2LC0380-8AC	2LC0380-8AM	332
447-8	122	4600	290	375	290	275	234.8	32.6	372	502	402	982	2LC0381-0AC	2LC0381-0AM	419
495-8	160	4200	325	423	325	312	232.4	33.8	387	706	406	1056	2LC0381-1AC	2LC0381-1AM	561
546-8	212	3800	360	468	360	351	220	40	413	714	414	1134	2LC0381-2AC	2LC0381-2AM	752
587-8	270	3500	380	499	380	363	230	45	435	720	440	1200	2LC0381-3AC	2LC0381-3AM	945
631-8	350	3300	410	535	410	399	242.4	48.8	458	724	464	1284	2LC0381-4AC	2LC0381-4AM	1146

Configurable variants¹⁾

- » OD1 Without finished bore. » OD2 Without finished bore.
- With finished bore. With finished bore.

- » Shaft distance S²⁾ Metric (mm): 100 mm, 140 mm, 180 mm, 200 mm, 250 mm, 300 mm
- Imperial (inches): 3.5" (88.9 mm), 5" (127 mm), 7" (177.8 mm), 9" (228.6 mm)
- Any required (mm)

Notes

- » Spacer sleeves (type MCECM) designed as electrical cable sleeves are API compliant.
- » Hubs are designed with threaded pull-off holes. Special lengths available upon request.
- » The total lengths, the spacer lengths and the weights apply to the whole coupling of type MCECM with maximum bores D1/D2 and the preferred shaft distance S = V.
- » In cases with large shaft distances S the intermediate spacer can be designed as an H-spacer. The tube diameters here may slightly diverge. More precise coupling data in cases of variable shaft distances and E- / H-spacers are given on pages 20 to 22 of this catalogue.
- » Plate packs in the CEC/CHC intermediate unit assembled at the factory.
- » E-spacers in preferred lengths up to size 343-6 are available from stock.

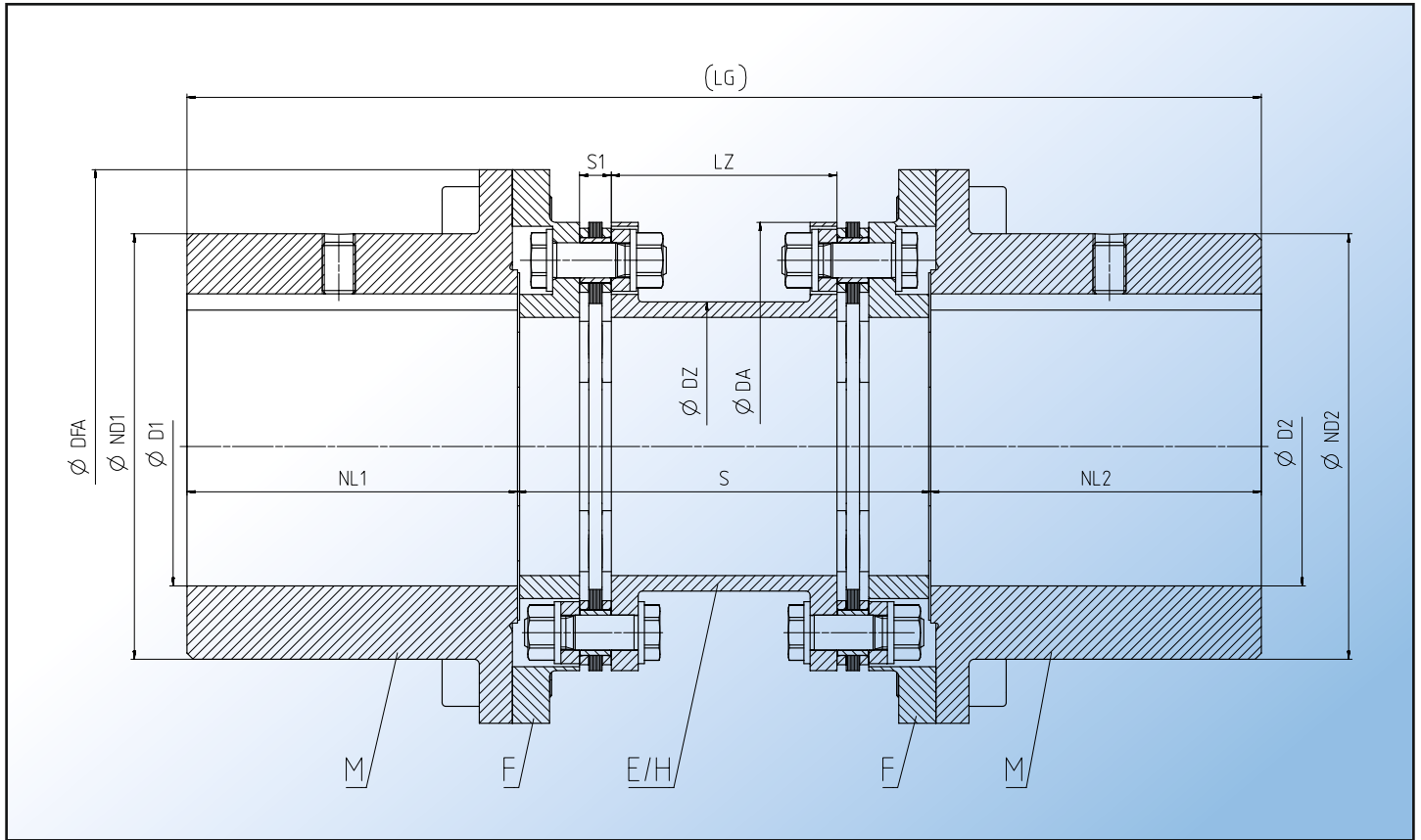
Ordering example

- » N-ARPEX ARN-6 MCECM coupling, size 217-6, with shaft distance S = 200 mm
- » Bore OD1 60H7 mm, keyway to DIN 6885-1 P9 and set screw (L1G).
- » Bore OD2 70H7 mm, keyway to DIN 6885-1 P9 and set screw (M1G).

Ordering Code: 2LC0370-8AC99-0AD0-Z L1G+M1G

¹⁾To identify complete item numbers specifying the available finish boring options and further order options, please contact jbj Techniques Ltd. technical office, telephone: +44 (0)1737 767493 or email: info@jbj.co.uk

²⁾The S shaft spacing standard dimensions available for each size can be found on page 6.



Torsionally rigid type MFEFM (MFHFM) couplings with enlarged bore capacity and radially freely demountable intermediate unit and catching device to secure 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.

Size DA (mm)	Rated Torque T _{KN} (kNm)	Max Speed n _{Kmax} (rpm)	Dimensions (mm)										Part Number ¹⁾		Weight m (kg)	
			LG	D1/D2 Keyway DIN 6885 max	ND1/ ND2	NL1/ NL2	DZ	LZ	S1	Shaft Distance S		Preferred Dimension V	LG	Intermediate Spacer		
										MFEFM min	MFHFM min			E Spacer (MFEFM)		H Spacer (MFHFM)
86-6	0.35	17000	122	70	91	70	45	84	8	100	340	140	280	2LC0370-0BA	2LC0370-0BC	6
103-6	0.5	15000	133	80	103	80	60	83.2	8.4	100	340	140	300	2LC0370-1BA	2LC0370-1BC	8
122-6	0.95	13000	159	95	123	95	73	82.4	8.8	111	340	140	330	2LC0370-2BA	2LC0370-2BC	13.6
133-6	1.25	12000	174	105	136	105	85	80.8	9.6	113	340	140	350	2LC0370-3BA	2LC0370-3BC	17.1
159-6	2.1	10000	203	115	150	115	97	76.8	11.6	131	340	140	370	2LC0370-4BA	2LC0370-4BC	22.9
174-6	2.5	9500	217	130	168	130	116	74.4	12.8	132	340	140	400	2LC0370-5BA	2LC0370-5BC	26.8
184-6	3.8	8000	251	150	193	150	123	110.8	14.6	179	410	200	500	2LC0370-6BA	2LC0370-6BC	40.1
203-6	5	8000	251	150	193	150	128	110	15	180	410	200	500	2LC0370-7BA	2LC0370-7BC	52.8
217-6	6.2	7500	268	160	206	160	140	109.2	15.4	183	410	200	520	2LC0370-8BA	2LC0370-8BC	63.4
251-6	10.5	6500	318	190	245	190	160	138.8	20.6	219	420	250	630	2LC0371-0BA	2LC0371-0BC	109
268-6	13.8	6000	343	205	267	205	166	136	22	245	420	250	660	2LC0371-1BA	2LC0371-1BC	136
291-6	18.2	5500	356	230	302	230	188	134.4	22.8	297	470	300	760	2LC0371-2BA	2LC0371-2BC	190
318-6	23	5500	375	245	321	245	197	153.6	23.2	289	500	300	790	2LC0371-3BA	2LC0371-3BC	221
343-6	28	4500	424	270	354	270	223	152	24	290	500	300	840	2LC0371-4BA	2LC0371-4BC	284



Size DA (mm)	Rated Torque T _{KN} (kNm)	Max Speed n _{Kmax} (rpm)	Dimensions (mm)										Part Number ¹⁾		Weight m (kg)	
			LG	D1/D2 Keyway DIN 6885 max	ND1/ ND2	NL1/ NL2	DZ	LZ	S1	Shaft Distance S		Preferred Dimension V MFEFM	LG	Intermediate Spacer		
										MFEFM min	MFHFM min			E Spacer (MFEFM)		H Spacer (MFHFM)
219-8	10	7800	267	165	219	165	124	115.6	12.2	207	428	218	548	2LC0380-0BA	2LC0380-0BC	77.7
241-8	15	7200	289	185	241	185	135	114.8	12.6	217	432	222	592	2LC0380-1BA	2LC0380-1BC	98.6
262-8	20	6600	314	200	262	200	148	152.4	13.8	233	438	268	668	2LC0380-2BA	2LC0380-2BC	131
285-8	27	6100	339	215	285	215	162	149.6	15.2	260	448	278	708	2LC0380-3BA	2LC0380-3BC	169
302-8	35	5900	356	230	302	230	174	145.6	17.2	285	456	286	746	2LC0380-4BA	2LC0380-4BC	200
321-8	43	5600	375	245	321	245	189	158	21	308	512	312	802	2LC0380-5BA	2LC0380-5BC	237
354-8	56	4900	424	270	354	270	216	202.8	23.6	330	516	366	906	2LC0380-6BA	2LC0380-6BC	315
387-8	72	4500	457	295	387	295	240	198	26	338	492	342	932	2LC0380-7BA	2LC0380-7BC	384
411-8	93	4300	481	315	411	315	250	240.8	29.6	350	494	394	1024	2LC0380-8BA	2LC0380-8BC	460
447-8	122	4000	519	340	447	340	275	234.8	32.6	372	502	402	1082	2LC0381-0BA	2LC0381-0BC	586
495-8	160	3700	567	380	495	380	312	232.4	33.8	387	706	406	1166	2LC0381-1BA	2LC0381-1BC	758
546-8	212	3300	624	420	546	420	351	220	40	413	714	414	1254	2LC0381-2BA	2LC0381-2BC	1011
587-8	270	3100	669	450	587	450	363	230	45	435	720	440	1340	2LC0381-3BA	2LC0381-3BC	1270
631-8	350	2900	719	480	631	480	399	242.4	48.8	458	724	464	1424	2LC0381-4BA	2LC0381-4BC	1581
495-10	200	3700	567	380	495	380	312	232.4	33.8	387	706	406	1166	2LC0390-0BA	2LC0390-0BC	757
546-10	270	3300	624	420	546	420	351	220	40	413	714	414	1254	2LC0390-1BA	2LC0390-1BC	1010
587-10	350	3100	669	450	587	450	363	230	45	435	720	440	1340	2LC0390-2BA	2LC0390-2BC	1268
631-10	450	2900	719	480	631	480	399	242.4	48.8	458	724	464	1424	2LC0390-3BA	2LC0390-3BC	1578
694-10	630	2600	790	530	694	530	435	284	58	552	752	552	1612	2LC0390-4BA	2LC0390-4BC	2165
734-10	750	2500	830	560	734	560	459	314	63	600	764	604	1724	2LC0390-5BA	2LC0390-5BC	2586
790-10	950	2300	896	600	790	600	496	338	66	646	930	650	1850	2LC0390-6BA	2LC0390-6BC	3263
887-10	1400	2000	1013	680	887	680	546	394	78	749	956	756	2116	2LC0390-7BA	2LC0390-7BC	4716
988-10	2000	1800	1114	760	988	760	596	448	86	857	900	860	2380	2LC0390-8BA	2LC0390-8BC	6574

Configurable variants¹⁾

- » OD1 Without finished bore. » OD2 Without finished bore.
- With finished bore. With finished bore.

- » Shaft distance S²⁾ Metric (mm): 100 mm, 140 mm, 180 mm, 200 mm, 250 mm, 300 mm
- Imperial (inches): 3.5" (88.9 mm), 5" (127 mm), 7" (177.8 mm), 9" (228.6 mm)
- Any required (mm)

Notes

- » Spacer sleeves (type MFEFM) designed as electrical cable sleeves are API compliant.
- » Hubs are designed with threaded pull-off holes. Special lengths available upon request.
- » The total lengths, the spacer lengths and the weights apply to the whole coupling of type MFEFM with maximum bores D1/D2 and the preferred shaft distance S=V.
- » In cases with large shaft distances S the intermediate spacer can be designed as an H-spacer. The tube diameters here may slightly diverge. More precise coupling data in cases of variable shaft distances and E- / H-spacers are given on pages 20 to 22 of this catalogue.
- » Plate packs in the FEF/FHF intermediate unit assembled at the factory.
- » E-spacers in preferred lengths up to size 343-6 are available from stock.

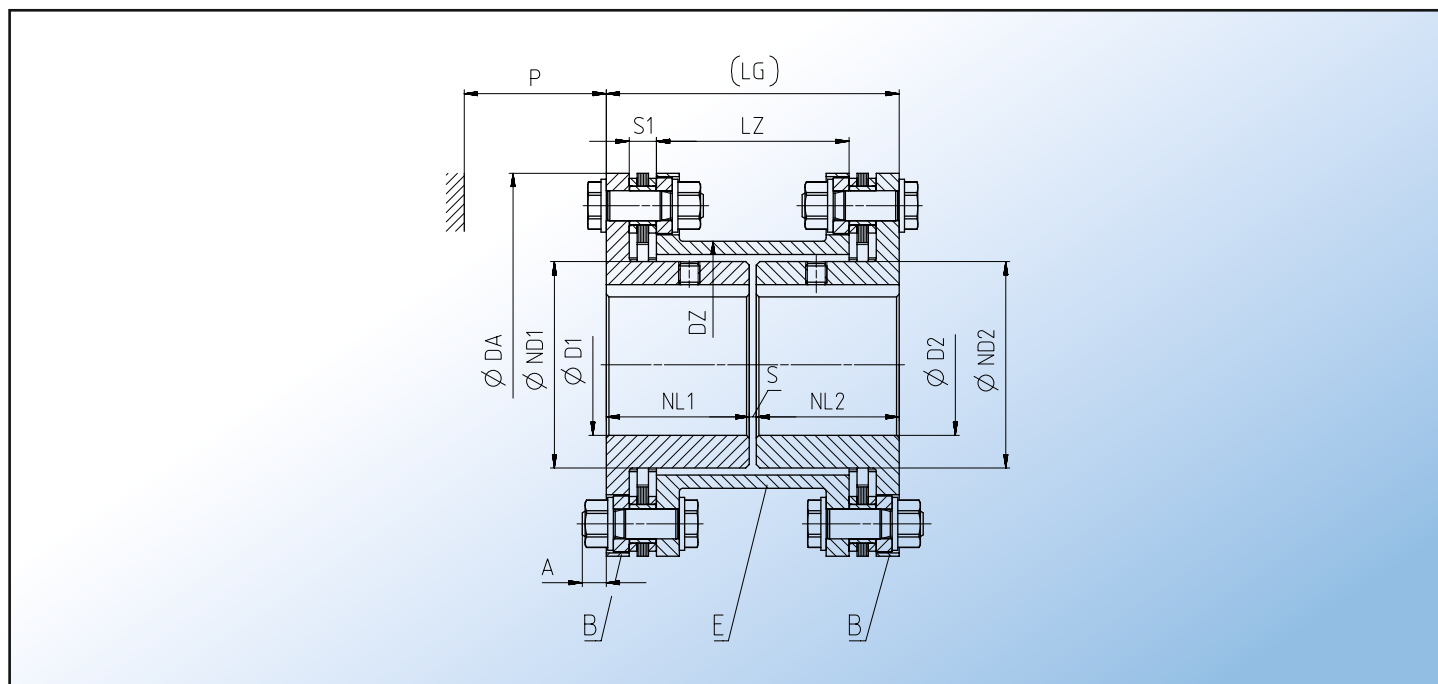
Ordering example

- » N-ARPEX ARN-6 MFEFM coupling, size 217-6, with shaft distance S = 200 mm.
- » Bore OD1 80H7 mm, keyway to DIN 6885-1 P9 and set screw (L1J).
- » Bore OD2 90H7 mm, keyway to DIN 6885-1 P9 and set screw (M1L).

Ordering Code: 2LC0370-8BA99-0AD0-Z L1GJ+M1L

¹⁾To identify complete item numbers specifying the available finish boring options and further order options, please contact jbj Techniques Ltd. technical office, telephone: +44 (0)1737 767493 or email: info@jbj.co.uk

²⁾The S shaft spacing standard dimensions available for each size can be found on page 6.



Torsionally rigid type BEB couplings with smallest possible shaft distance. Type BEB cannot be freely demounted radially without shifting the units.

Size DA (mm)	Rated Torque T_{KN} (kNm)	Max Speed n_{Kmax} (rpm)	Dimensions (mm)										Part Number ¹⁾	Weight m (kg)
			D1/D2 Keyway DIN 6885-1 max	ND1/ ND2	NL1/ NL2	DZ	LZ	S1	Shaft Distance S	A	P	LG		
86-6	350	24000	22	35	30	45	44	8	12	8	32	72	SLC0370-0AB	1.5
103-6	500	20000	38	50	34	60	43.2	8.4	4	8	32	72	SLC0370-1AB	2.0
122-6	950	17000	48	62	56	73	82.4	8.8	4	8	38	116	2LC0370-2AB	4.2
133-6	1250	15000	55	72	56	85	80.8	9.6	4	7	38	116	2LC0370-3AB	5.1
159-6	2100	13000	65	84	57	97	76.8	11.6	6	9	48	120	2LC0370-4AB	8.1
174-6	2500	12000	75	102	77	116	114.4	12.8	4	10	48	158	2LC0370-5AB	11.4
184-6	3800	11000	80	106	80	123	110.8	14.6	6	15	64	166	2LC0370-6AB	15.2
203-6	5000	10000	85	111	80	128	110	15	6	14	64	166	2LC0370-7AB	18.2
217-6	6200	9500	90	124	81	140	109.2	15.4	4	14	66	166	2LC0370-8AB	22.0
251-6	10500	8000	100	137	102	160	138.8	20.6	6	15	77	210	2LC0371-0AB	35.6
268-6	13800	7500	108	143	105	166	136	22	12	11	89	222	2LC0371-1AB	44.8
291-6	18200	7000	120	162	106	188	134.4	22.8	10	11	89	222	2LC0371-2AB	56.7
318-6	23000	6500	130	164	118	197	153.6	23.2	6	20	100	242	2LC0371-3AB	70.2
343-6	28000	6000	150	186	143	223	202	24	6	19	100	292	2LC0371-4AB	87.7

Configurable variants¹⁾

- » OD1 Without finished bore.
With finished bore.
- » OD2 Without finished bore.
With finished bore.

Notes

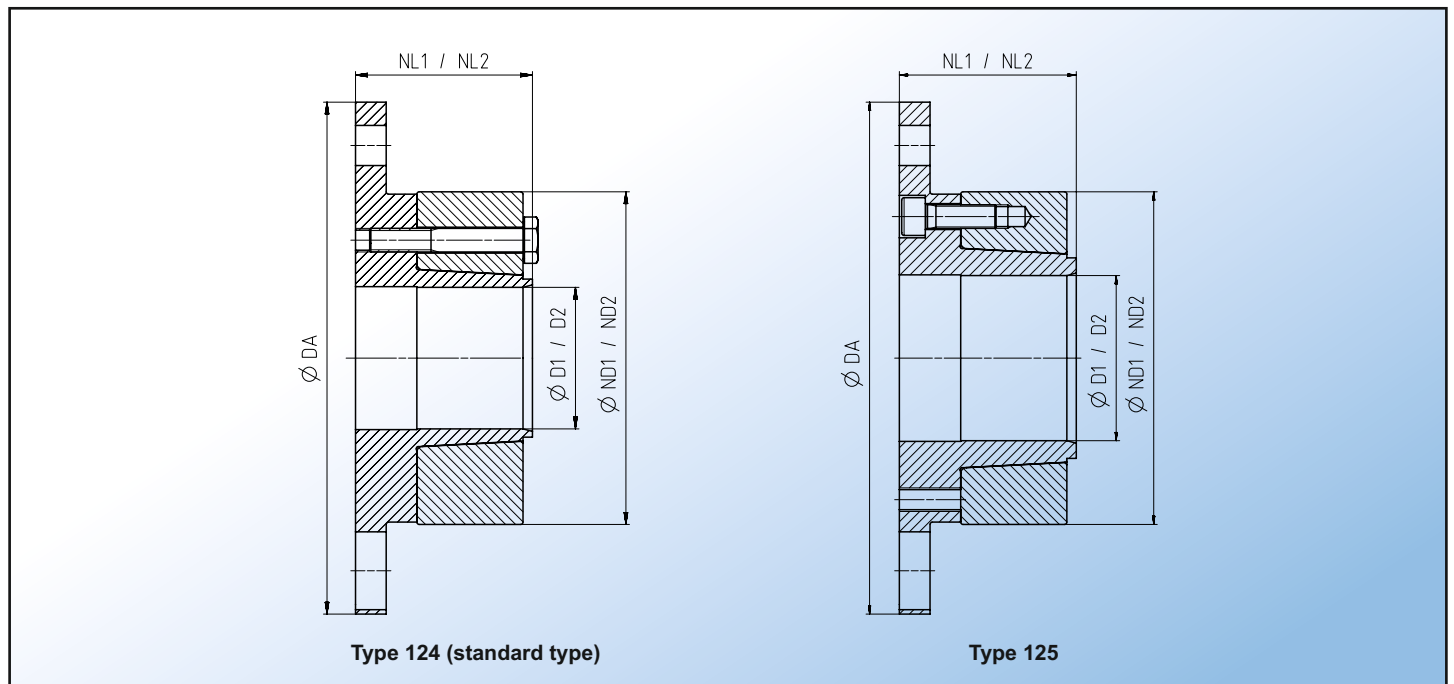
- » Hubs are designed with threaded pull-off holes. Special lengths available upon request.
- » The total lengths and the weights apply to the whole coupling with maximum bores D1/D2 and the preferred shaft distance $S = V$.

Ordering example

- » N-ARPEX ARN-6 BEB coupling, size 217-6, with shaft distance $S = 4$ mm
- » Bore OD1 50H7 mm, keyway to DIN 6885-1 and set screw (L1C).
- » Bore OD2 60H7 mm, keyway to DIN 6885-1 and set screw (M1E).

Ordering Code: 2LC0370-8AB99-0AA0-Z L1C+M1E

¹⁾To identify complete item numbers specifying the available finish boring options and further order options, please contact jbj Techniques Ltd. technical office, telephone: +44 (0)1737 767493 or email: info@jbj.co.uk



Type 124 and 125 standard clamping hubs can be combined with any spacer of the ARN-6 series. It should be noted that the clamping hub can be used only as an "N hub" (hub core outside).

Function

N-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.

Transmissible torque

The clamping connections are designed to enable the specified maximum torques to be transmitted. These maximum torques must not be exceeded, even in the case of overload.

Fitting clearance and surface roughness

The transmissible torques allow for the maximum fitting clearance for a quality IT6 bore and shaft 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 $\leq Ra = 1.6 \mu m$.

The fit pairing G6/h6 should be used wherever possible. Divergent shaft tolerances must be specified when ordering.

The product code for the specification must end in "-Z" and include the code "Y26" for the fit.

Size DA (mm)	Clamping Hub Type	Dimensions (mm)				Mass Moment of Inertia J (kgm ²)	Part Number ¹⁾	Weight m (kg)
		D1/D2		ND1/ND2	NL1/NL2			
		min	max					
86-6	124	19	25	50	35	0.0003	2LC0370-0LM90-0AA0	0.5
	125						2LC0370-0LN90-0AA0	
103-6	124	25	38	67	40	0.0009	2LC0370-1LM90-0AA0	0.9
	125						2LC0370-1LN90-0AA0	
122-6	124	30	42	77	45	0.0021	2LC0370-2LM90-0AA0	1.5
	125						2LC0370-2LN90-0AA0	
133-6	124	32	50	88	50	0.0034	2LC0370-3LM90-0AA0	2
	125						2LC0370-3LN90-0AA0	
159-6	124	35	60	105	55	0.0077	2LC0370-4LM90-0AA0	3.2
	125						2LC0370-4LN90-0AA0	
174-6	124	40	70	120	65	0.0135	2LC0370-5LM90-0AA0	4.6
	125						2LC0370-5LN90-0AA0	
184-6	124	45	70	126	70	0.0195	2LC0370-6LM90-0AA0	5.9
	125						2LC0370-6LN90-0AA0	
203-6	124	50	80	139	75	0.0298	2LC0370-7LM90-0AA0	7.4
	125						2LC0370-7LN90-0AA0	
217-6	124	60	90	147	90	0.0429	2LC0370-8LM90-0AA0	9.2
	125						2LC0370-8LN90-0AA0	
251-6	124	70	95	168	95	0.0837	2LC0371-0LM90-0AA0	14
	125						2LC0371-0LN90-0AA0	
268-6	124	75	100	175	115	0.1236	2LC0371-1LM90-0AA0	18.5
	125						2LC0371-1LN90-0AA0	
291-6	124	80	120	195	125	0.1907	2LC0371-2LM90-0AA0	22.9
	125						2LC0371-2LN90-0AA0	
318-6	124	85	120	209	140	0.2975	2LC0371-3LM90-0AA0	31.5
	125						2LC0371-3LN90-0AA0	
343-6	124	95	140	234	150	0.4539	2LC0371-4LM90-0AA0	39.6
	125						2LC0371-4LN90-0AA0	

Notes

- » Weights and mass moments of inertia apply to a clamping hub with a maximum bore D1/D2.

Ordering example

- » NN-ARPEX clamping hub, type 124, size 133-6.
- » Shaft OD1 = 40k6 (L0W).
- » Y26 / fit specification supplied.

Ordering Code: 2LC0370-3LM90-0AA0-Z L0W+Y26

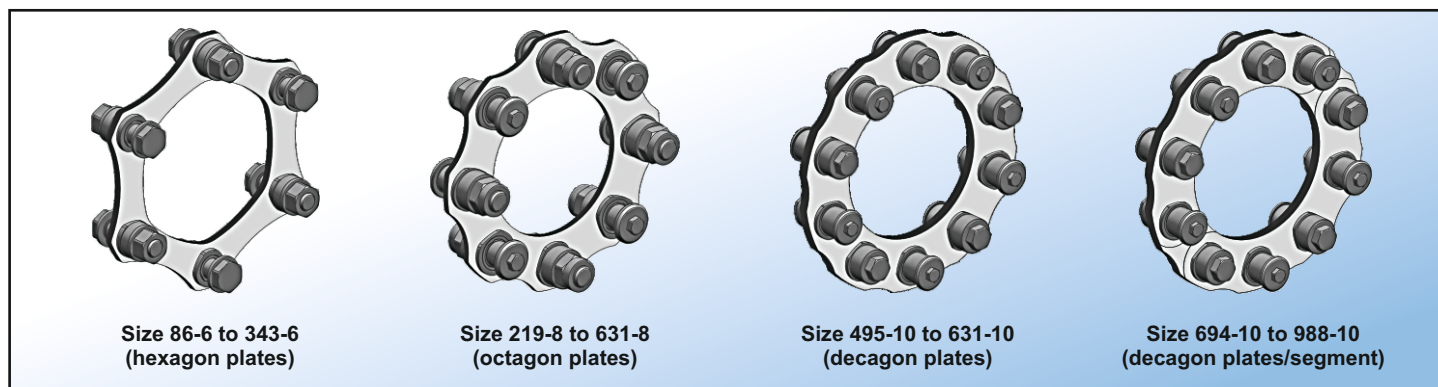
Plain text Y26: k6

¹⁾To identify complete item numbers specifying the available finish boring options and further order options, please contact jbj Techniques Ltd. technical office, telephone: +44 (0)1737 767493 or email: info@jbj.co.uk



Finished bore/shaft in standard fit	DA Size (mm)													
	86-6	103-6	122-6	133-6	159-6	174-6	184-6	203-6	217-6	251-6	268-6	291-6	318-6	343-6
	Rated Coupling torque TKN in Nm													
D1 ^{G6} / _{h6} (mm)	350	500	950	1250	2100	2400	3800	5000	6200	10500	13800	18200	23000	28000
	Maximum transmissible torque of the clamping hub (Nm)													
19	400	-	-	-	-	-	-	-	-	-	-	-	-	-
20	460	-	-	-	-	-	-	-	-	-	-	-	-	-
22	470	-	-	-	-	-	-	-	-	-	-	-	-	-
24	350	-	-	-	-	-	-	-	-	-	-	-	-	-
25	370	480	-	-	-	-	-	-	-	-	-	-	-	-
28	-	870	-	-	-	-	-	-	-	-	-	-	-	-
30	-	1150	1770	-	-	-	-	-	-	-	-	-	-	-
32	-	1140	1830	2300	-	-	-	-	-	-	-	-	-	-
35	-	570	1420	2360	3050	-	-	-	-	-	-	-	-	-
38	-	830	1720	3040	2710	-	-	-	-	-	-	-	-	-
40	-	-	1370	2610	3660	3680	-	-	-	-	-	-	-	-
42	-	-	1670	2930	2180	4020	-	-	-	-	-	-	-	-
45	-	-	-	2120	3750	4110	5780	-	-	-	-	-	-	-
48	-	-	-	2480	4160	4930	6200	-	-	-	-	-	-	-
50	-	-	-	2240	2300	4300	5840	7190	-	-	-	-	-	-
55	-	-	-	-	3310	5370	6410	7970	-	-	-	-	-	-
60	-	-	-	-	3260	3730	5370	8840	7570	-	-	-	-	-
65	-	-	-	-	-	4700	6240	8890	10390	-	-	-	-	-
70	-	-	-	-	-	4150	5920	8460	10640	14050	-	-	-	-
75	-	-	-	-	-	-	-	7960	9590	15350	20710	-	-	-
80	-	-	-	-	-	-	-	7340	8850	13510	20120	31840	-	-
85	-	-	-	-	-	-	-	-	7890	16370	21130	31230	36420	-
90	-	-	-	-	-	-	-	-	6290	14300	20810	33300	39050	-
95	-	-	-	-	-	-	-	-	-	13310	18570	33530	35940	54230
100	-	-	-	-	-	-	-	-	-	-	14440	31710	37500	56580
110	-	-	-	-	-	-	-	-	-	-	-	29020	35200	56900
120	-	-	-	-	-	-	-	-	-	-	-	22600	31490	53580
130	-	-	-	-	-	-	-	-	-	-	-	-	-	50910
140	-	-	-	-	-	-	-	-	-	-	-	-	-	43600

Notes
 The maximum transmissible torque of the clamping hub must not be exceeded! Further clamping hub sizes and higher torques on request.



Size	Dimensions	Mass Moment of Inertia	Product Code	Weight
DA	S1 (mm)	J (kgm ²)		m (kg)
86-6	8	0.00018	2LC0370-0LP00-0AA0	0.17
103-6	8.4	0.00032	2LC0370-1LP00-0AA0	0.19
122-6	8.8	0.001	2LC0370-2LP00-0AA0	0.43
133-6	9.6	0.0014	2LC0370-3LP00-0AA0	0.49
159-6	11.6	0.0033	2LC0370-4LP00-0AA0	0.8
174-6	12.8	0.0047	2LC0370-5LP00-0AA0	0.93
184-6	14.6	0.0078	2LC0370-6LP00-0AA0	1.38
203-6	15	0.012	2LC0370-7LP00-0AA0	1.79
217-6	15.4	0.018	2LC0370-8LP00-0AA0	2.25
251-6	20.6	0.037	2LC0371-0LP00-0AA0	3.61
268-6	22	0.056	2LC0371-1LP00-0AA0	4.83
291-6	22.8	0.08	2LC0371-2LP00-0AA0	5.78
318-6	23.2	0.13	2LC0371-3LP00-0AA0	8.12
343-6	24	0.17	2LC0371-4LP00-0AA0	8.68
219-8	12.2	0.028	2LC0380-0LP00-0AA0	3.58
241-8	12.6	0.042	2LC0380-1LP00-0AA0	4.67
262-8	13.8	0.067	2LC0380-2LP00-0AA0	6.05
285-8	15.2	0.11	2LC0380-3LP00-0AA0	8.28
302-8	17.2	0.15	2LC0380-4LP00-0AA0	10.3
321-8	21	0.22	2LC0380-5LP00-0AA0	13.6
354-8	23.6	0.34	2LC0380-6LP00-0AA0	17
387-8	26	0.49	2LC0380-7LP00-0AA0	20.2
411-8	29.6	0.7	2LC0380-8LP00-0AA0	26
447-8	32.6	1.01	2LC0381-0LP00-0AA0	31.5
495-8	33.8	1.54	2LC0381-1LP00-0AA0	38.7
546-8	40	2.57	2LC0381-2LP00-0AA0	52.9
587-8	45	3.74	2LC0381-3LP00-0AA0	67.2
631-8	48.8	5.38	2LC0381-4LP00-0AA0	85
495-10	33.8	1.76	2LC0390-0LP00-0AA0	43.4
546-10	40	2.9	2LC0390-1LP00-0AA0	58.5
587-10	45	4.19	2LC0390-2LP00-0AA0	73.7
631-10	48.8	5.98	2LC0390-3LP00-0AA0	92.6
694-10	58	11.8	2LC0390-4LP00-0AA0	148
734-10	63	16.3	2LC0390-5LP00-0AA0	182
790-10	66	23.4	2LC0390-6LP00-0AA0	226
887-10	78	43.7	2LC0390-7LP00-0AA0	335
988-10	86	75.8	2LC0390-8LP00-0AA0	468

Notes

- » The plate pack of the ARN-6/-8 series is readily available as a spare part.
- » The plate pack is delivered with screw connection.
- » Mainly ring plates are used for the plate packs. Sizes 694-10 to 988-10 plate packs are designed with segmented plates.

Ordering example

- » N-ARPEX ARN-8 plate pack, size 354-8, complete with screw connection.

Ordering code: **2LC0380-6LP00-0AA0**

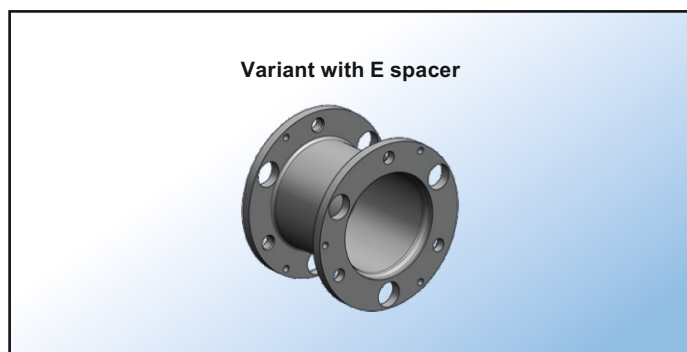


Types NEN/NHN, BEB, MCECM/MCHCM and MFEFM/MFHFM

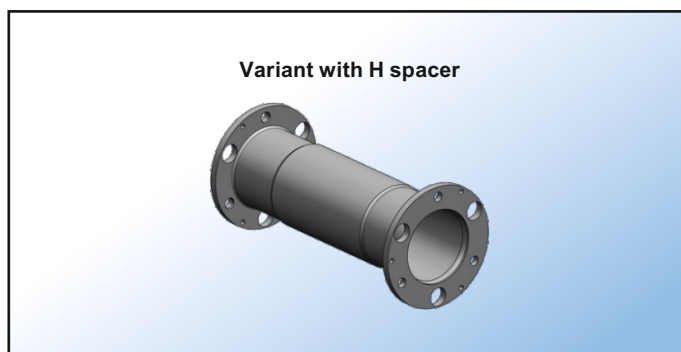
A variant with an E-spacer is available for each N-ARPEX type. This has been machined all over in accordance with the requirements of API 610 and 671. Particularly for large shaft distances S and therefore for correspondingly long intermediate spacer it is usual to leave the inside and outside diameters of the tube in the condition in which it was delivered. These spacers are then referred to as H-spacers.

If a coupling is fitted with an H-spacer, the type designation changes accordingly. For example, an NEN becomes an NHN, an MFEFM becomes an MFHFM. No version with an H-spacer is provided for the BEB type. Length-dependent technical specifications for the various coupling types are shown on the following table. The shaft distance S must be specified in mm. The specifications with regard to weight and mass moment of inertia refer to the whole coupling with maximum bores D1/D2.

The values for torsional stiffness apply to the whole coupling (not including the hubs and customer shafts) and refer to the rated coupling torque TKN. For determination of torsional stiffness for a specific operating point outside the nominal range Flender must be consulted.



Size DA	Type	m kg	J kgm2	C MNm/rad
86-6	NEN	$1.55 + 0.003 \cdot S$	$0.001 + 0.000002 \cdot S$	$1/(1/0,08 + S/15)$
	BEB	$1.42 + 0.003 \cdot S$	$0.001 + 0.000002 \cdot S$	$1/(1/0,06 + S/15)$
	MCECM	$2.64 + 0.003 \cdot S$	$0.003 + 0.000002 \cdot S$	$1/(1/0,09 + S/15)$
	MFEFM	$5.54 + 0.003 \cdot S$	$0.01 + 0.000002 \cdot S$	$1/(1/0,09 + S/15)$
103-6	NEN	$2.52 + 0.005 \cdot S$	$0.004 + 0.000004 \cdot S$	$1/(1/0,11 + S/42)$
	BEB	$2.01 + 0.005 \cdot S$	$0.003 + 0.000004 \cdot S$	$1/(1/0,1 + S/42)$
	MCECM	$4 + 0.005 \cdot S$	$0.006 + 0.000004 \cdot S$	$1/(1/0,12 + S/42)$
	MFEFM	$7.28 + 0.005 \cdot S$	$0.017 + 0.000004 \cdot S$	$1/(1/0,12 + S/42)$
122-6	NEN	$4.39 + 0.007 \cdot S$	$0.009 + 0.000008 \cdot S$	$1/(1/0,26 + S/82)$
	BEB	$4.19 + 0.007 \cdot S$	$0.008 + 0.000008 \cdot S$	$1/(1/0,2 + S/82)$
	MCECM	$6.78 + 0.007 \cdot S$	$0.015 + 0.000008 \cdot S$	$1/(1/0,29 + S/82)$
	MFEFM	$12.6 + 0.007 \cdot S$	$0.042 + 0.000008 \cdot S$	$1/(1/0,29 + S/82)$
133-6	NEN	$5.5 + 0.009 \cdot S$	$0.013 + 0.000014 \cdot S$	$1/(1/0,33 + S/142)$
	BEB	$5.09 + 0.009 \cdot S$	$0.011 + 0.000014 \cdot S$	$1/(1/0,27 + S/142)$
	MCECM	$8.44 + 0.009 \cdot S$	$0.023 + 0.000014 \cdot S$	$1/(1/0,36 + S/142)$
	MFEFM	$15.86 + 0.009 \cdot S$	$0.064 + 0.000014 \cdot S$	$1/(1/0,36 + S/142)$
159-6	NEN	$8.54 + 0.011 \cdot S$	$0.028 + 0.000023 \cdot S$	$1/(1/0,54 + S/234)$
	BEB	$8 + 0.011 \cdot S$	$0.026 + 0.000023 \cdot S$	$1/(1/0,45 + S/234)$
	MCECM	$14.35 + 0.011 \cdot S$	$0.055 + 0.000023 \cdot S$	$1/(1/0,6 + S/234)$
	MFEFM	$21.37 + 0.011 \cdot S$	$0.068 + 0.000023 \cdot S$	$1/(1/0,6 + S/234)$
174-6	NEN	$10.57 + 0.013 \cdot S$	$0.042 + 0.000039 \cdot S$	$1/(1/0,64 + S/394)$
	BEB	$11.36 + 0.013 \cdot S$	$0.041 + 0.000039 \cdot S$	$1/(1/0,52 + S/394)$
	MCECM	$17.54 + 0.013 \cdot S$	$0.08 + 0.000039 \cdot S$	$1/(1/0,68 + S/394)$
	MFEFM	$25.02 + 0.013 \cdot S$	$0.146 + 0.000039 \cdot S$	$1/(1/0,68 + S/394)$
184-6	NEN	$13.94 + 0.017 \cdot S$	$0.065 + 0.000059 \cdot S$	$1/(1/1 + S/597)$
	BEB	$15.1 + 0.017 \cdot S$	$0.066 + 0.000059 \cdot S$	$1/(1/0,81 + S/597)$
	MCECM	$23.12 + 0.017 \cdot S$	$0.081 + 0.000059 \cdot S$	$1/(1/1,11 + S/597)$
	MFEFM	$36.59 + 0.017 \cdot S$	$0.267 + 0.000059 \cdot S$	$1/(1/1,11 + S/597)$
203-6	NEN	$18.62 + 0.019 \cdot S$	$0.102 + 0.00007 \cdot S$	$1/(1/1,44 + S/705)$
	BEB	$18.09 + 0.019 \cdot S$	$0.096 + 0.00007 \cdot S$	$1/(1/1,13 + S/705)$
	MCECM	$29.96 + 0.019 \cdot S$	$0.185 + 0.00007 \cdot S$	$1/(1/1,65 + S/705)$
	MFEFM	$49.06 + 0.019 \cdot S$	$0.414 + 0.00007 \cdot S$	$1/(1/1,65 + S/705)$

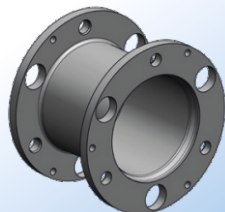


Size DA	Type	m kg	J kgm2	C MNm/rad
86-6	NHN	$1.11 + 0.005 \cdot S$	$0.001 + 0.000003 \cdot S$	$1/(1/0,05 + S/25)$
	-	-	-	-
	MCHCM	$2.13 + 0.005 \cdot S$	$0.003 + 0.000003 \cdot S$	$1/(1/0,06 + S/25)$
	MFHFM	$5.03 + 0.005 \cdot S$	$0.01 + 0.000003 \cdot S$	$1/(1/0,06 + S/25)$
103-6	NHN	$1.91 + 0.008 \cdot S$	$0.003 + 0.000007 \cdot S$	$1/(1/0,09 + S/68)$
	-	-	-	-
	MCHCM	$3.28 + 0.008 \cdot S$	$0.006 + 0.000007 \cdot S$	$1/(1/0,1 + S/68)$
	MFHFM	$6.56 + 0.008 \cdot S$	$0.016 + 0.000007 \cdot S$	$1/(1/0,1 + S/68)$
122-6	NHN	$3.72 + 0.01 \cdot S$	$0.008 + 0.000012 \cdot S$	$1/(1/0,21 + S/122)$
	-	-	-	-
	MCHCM	$6 + 0.01 \cdot S$	$0.014 + 0.000012 \cdot S$	$1/(1/0,22 + S/122)$
	MFHFM	$11.82 + 0.01 \cdot S$	$0.041 + 0.000012 \cdot S$	$1/(1/0,22 + S/122)$
133-6	NHN	$4.52 + 0.013 \cdot S$	$0.012 + 0.000022 \cdot S$	$1/(1/0,28 + S/221)$
	-	-	-	-
	MCHCM	$7.29 + 0.013 \cdot S$	$0.021 + 0.000022 \cdot S$	$1/(1/0,29 + S/221)$
	MFHFM	$14.71 + 0.013 \cdot S$	$0.062 + 0.000022 \cdot S$	$1/(1/0,29 + S/221)$
159-6	NHN	$7.17 + 0.017 \cdot S$	$0.025 + 0.000037 \cdot S$	$1/(1/0,45 + S/373)$
	-	-	-	-
	MCHCM	$12.76 + 0.017 \cdot S$	$0.051 + 0.000037 \cdot S$	$1/(1/0,47 + S/373)$
	MFHFM	$19.78 + 0.017 \cdot S$	$0.064 + 0.000037 \cdot S$	$1/(1/0,47 + S/373)$
174-6	NHN	$8.79 + 0.02 \cdot S$	$0.036 + 0.000065 \cdot S$	$1/(1/0,55 + S/652)$
	-	-	-	-
	MCHCM	$15.46 + 0.02 \cdot S$	$0.073 + 0.000065 \cdot S$	$1/(1/0,57 + S/652)$
	MFHFM	$22.95 + 0.02 \cdot S$	$0.139 + 0.000065 \cdot S$	$1/(1/0,57 + S/652)$
184-6	NHN	$12.36 + 0.023 \cdot S$	$0.059 + 0.000083 \cdot S$	$1/(1/0,89 + S/839)$
	-	-	-	-
	MCHCM	$21.18 + 0.023 \cdot S$	$0.074 + 0.000083 \cdot S$	$1/(1/0,95 + S/839)$
	MFHFM	$34.65 + 0.023 \cdot S$	$0.259 + 0.000083 \cdot S$	$1/(1/0,95 + S/839)$
203-6	NHN	$16.56 + 0.027 \cdot S$	$0.093 + 0.0001 \cdot S$	$1/(1/1,23 + S/1049)$
	-	-	-	-
	MCHCM	$27.42 + 0.027 \cdot S$	$0.174 + 0.0001 \cdot S$	$1/(1/1,33 + S/1049)$
	MFHFM	$46.52 + 0.027 \cdot S$	$0.403 + 0.0001 \cdot S$	$1/(1/1,33 + S/1049)$



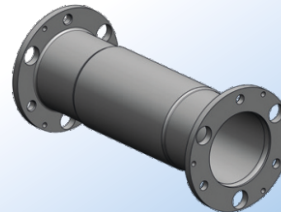
Types NEN/ NHN, BEB, MCECM/MCHCM and MFEFM/MFHFM

Variant with E spacer



Size DA	Type	m kg	J kgm2	C MNm/rad
217-6	NEN	21.68 + 0.019 · S	0.137 + 0.000087 · S	1/(1/1,84 + S/870)
	BEB	21.93 + 0.019 · S	0.131 + 0.000087 · S	1/(1/1,43 + S/870)
	MCECM	36.46 + 0.019 · S	0.262 + 0.000087 · S	1/(1/2,11 + S/870)
	MFEFM	59.53 + 0.019 · S	0.579 + 0.000087 · S	1/(1/2,11 + S/870)
251-6	NEN	32.32 + 0.032 · S	0.271 + 0.00018 · S	1/(1/2,24 + S/1827)
	BEB	35.42 + 0.032 · S	0.276 + 0.00018 · S	1/(1/1,85 + S/1827)
	MCECM	56.48 + 0.032 · S	0.539 + 0.00018 · S	1/(1/2,45 + S/1827)
	MFEFM	101.1 + 0.032 · S	1.397 + 0.00018 · S	1/(1/2,45 + S/1827)
268-6	NEN	44.91 + 0.02 · S	0.434 + 0.00013 · S	1/(1/2,78 + S/2063)
	BEB	44.58 + 0.02 · S	0.425 + 0.00013 · S	1/(1/2,27 + S/2063)
	MCECM	73.71 + 0.02 · S	0.8 + 0.00013 · S	1/(1/3,07 + S/2063)
	MFEFM	131.4 + 0.02 · S	2.07 + 0.00013 · S	1/(1/3,07 + S/2063)
291-6	NEN	55.18 + 0.042 · S	0.634 + 0.00034 · S	1/(1/3,77 + S/3400)
	BEB	56.23 + 0.042 · S	0.624 + 0.00034 · S	1/(1/3,17 + S/3400)
	MCECM	87.66 + 0.042 · S	1.124 + 0.00034 · S	1/(1/4,09 + S/3400)
	MFEFM	176.8 + 0.042 · S	3.213 + 0.00034 · S	1/(1/4,09 + S/3400)
318-6	NEN	72.12 + 0.059 · S	0.979 + 0.0005 · S	1/(1/5,13 + S/5040)
	BEB	69.81 + 0.059 · S	0.922 + 0.0005 · S	1/(1/4,29 + S/5040)
	MCECM	121.4 + 0.059 · S	1.89 + 0.0005 · S	1/(1/5,72 + S/5040)
	MFEFM	203.7 + 0.059 · S	4.214 + 0.0005 · S	1/(1/5,72 + S/5040)
343-6	NEN	89.26 + 0.075 · S	1.394 + 0.00081 · S	1/(1/5,26 + S/8178)
	BEB	87.3 + 0.075 · S	1.322 + 0.00081 · S	1/(1/4,55 + S/8178)
	MCECM	145.8 + 0.075 · S	2.639 + 0.00081 · S	1/(1/5,62 + S/8178)
	MFEFM	261.5 + 0.075 · S	6.626 + 0.00081 · S	1/(1/5,62 + S/8178)
219-8	NEN	28.17 + 0.027 · S	0.177 + 0.000089 · S	1/(1/3,98 + S/889)
	MCECM	44.48 + 0.027 · S	0.338 + 0.000089 · S	1/(1/6,11 + S/889)
	MFEFM	71.89 + 0.027 · S	0.703 + 0.000089 · S	1/(1/6,11 + S/889)
241-8	NEN	36.79 + 0.032 · S	0.276 + 0.00013 · S	1/(1/4,69 + S/1264)
	MCECM	61.04 + 0.032 · S	0.56 + 0.00013 · S	1/(1/6,74 + S/1264)
	MFEFM	91.45 + 0.032 · S	1.074 + 0.00013 · S	1/(1/6,74 + S/1264)
262-8	NEN	46.53 + 0.04 · S	0.414 + 0.00019 · S	1/(1/5,4 + S/1884)
	MCECM	78.23 + 0.04 · S	0.846 + 0.00019 · S	1/(1/7,22 + S/1884)
	MFEFM	120.1 + 0.04 · S	1.692 + 0.00019 · S	1/(1/7,22 + S/1884)
285-8	NEN	61.59 + 0.051 · S	0.656 + 0.00028 · S	1/(1/7,04 + S/2836)
	MCECM	100.8 + 0.051 · S	1.315 + 0.00028 · S	1/(1/9,31 + S/2836)
	MFEFM	155 + 0.051 · S	2.552 + 0.00028 · S	1/(1/9,31 + S/2836)
302-8	NEN	78.21 + 0.062 · S	0.948 + 0.00039 · S	1/(1/9,87 + S/3948)
	MCECM	122.3 + 0.062 · S	1.774 + 0.00039 · S	1/(1/13,4 + S/3948)
	MFEFM	182 + 0.062 · S	3.359 + 0.00039 · S	1/(1/13,4 + S/3948)
321-8	NEN	96.07 + 0.066 · S	1.317 + 0.0005 · S	1/(1/13,9 + S/5053)
	MCECM	150 + 0.066 · S	2.469 + 0.0005 · S	1/(1/20,1 + S/5053)
	MFEFM	216.6 + 0.066 · S	4.48 + 0.0005 · S	1/(1/20,1 + S/5053)

Variant with H spacer

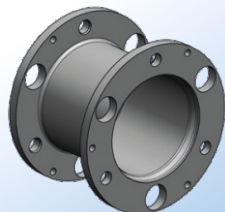


Size DA	Type	m kg	J kgm2	C MNm/rad
217-6	NHN	18.96 + 0.03 · S	0.123 + 0.00014 · S	1/(1/1,52 + S/1413)
	-	-	-	-
	MCHCM	33.11 + 0.03 · S	0.245 + 0.00014 · S	1/(1/1,63 + S/1413)
	MFHFM	56.18 + 0.03 · S	0.562 + 0.00014 · S	1/(1/1,63 + S/1413)
251-6	NHN	29.54 + 0.042 · S	0.253 + 0.00025 · S	1/(1/2,05 + S/2505)
	-	-	-	-
	MCHCM	53 + 0.042 · S	0.516 + 0.00025 · S	1/(1/2,18 + S/2505)
	MFHFM	97.57 + 0.042 · S	1.374 + 0.00025 · S	1/(1/2,18 + S/2505)
268-6	NHN	41.38 + 0.043 · S	0.41 + 0.00028 · S	1/(1/2,52 + S/2803)
	-	-	-	-
	MCHCM	68.56 + 0.043 · S	0.765 + 0.00028 · S	1/(1/2,69 + S/2803)
	MFHFM	126.3 + 0.043 · S	2.035 + 0.00028 · S	1/(1/2,69 + S/2803)
291-6	NHN	51.32 + 0.056 · S	0.598 + 0.00046 · S	1/(1/3,48 + S/4627)
	-	-	-	-
	MCHCM	82.87 + 0.056 · S	1.08 + 0.00046 · S	1/(1/3,67 + S/4627)
	MFHFM	171.4 + 0.056 · S	3.163 + 0.00046 · S	1/(1/3,67 + S/4627)
318-6	NHN	67.86 + 0.074 · S	0.936 + 0.00065 · S	1/(1/4,81 + S/6527)
	-	-	-	-
	MCHCM	115.6 + 0.074 · S	1.832 + 0.00065 · S	1/(1/5,2 + S/6527)
	MFHFM	198 + 0.074 · S	4.157 + 0.00065 · S	1/(1/5,2 + S/6527)
343-6	NHN	84.41 + 0.091 · S	1.332 + 0.001 · S	1/(1/5,07 + S/10323)
	-	-	-	-
	MCHCM	139.3 + 0.091 · S	2.556 + 0.001 · S	1/(1/5,33 + S/10323)
	MFHFM	255 + 0.091 · S	6.542 + 0.001 · S	1/(1/5,33 + S/10323)
219-8	NHN	26.88 + 0.035 · S	0.172 + 0.00012 · S	1/(1/3,35 + S/1176)
	MCHCM	42.52 + 0.035 · S	0.33 + 0.00012 · S	1/(1/4,3 + S/1176)
	MFHFM	69.94 + 0.035 · S	0.695 + 0.00012 · S	1/(1/4,3 + S/1176)
	241-8	NHN	34.62 + 0.044 · S	0.266 + 0.00018 · S
MCHCM		57.91 + 0.044 · S	0.546 + 0.00018 · S	1/(1/4,73 + S/1760)
MFHFM		88.32 + 0.044 · S	1.06 + 0.00018 · S	1/(1/4,73 + S/1760)
262-8		NHN	44.21 + 0.054 · S	0.402 + 0.00025 · S
	MCHCM	74.72 + 0.054 · S	0.828 + 0.00025 · S	1/(1/5,65 + S/2549)
	MFHFM	116.5 + 0.054 · S	1.673 + 0.00025 · S	1/(1/5,65 + S/2549)
	285-8	NHN	59.68 + 0.064 · S	0.643 + 0.00035 · S
MCHCM		97.63 + 0.064 · S	1.296 + 0.00035 · S	1/(1/7,87 + S/3534)
MFHFM		151.8 + 0.064 · S	2.533 + 0.00035 · S	1/(1/7,87 + S/3534)
302-8		NHN	75.6 + 0.078 · S	0.928 + 0.00049 · S
	MCHCM	118.1 + 0.078 · S	1.744 + 0.00049 · S	1/(1/11,1 + S/4945)
	MFHFM	177.7 + 0.078 · S	3.329 + 0.00049 · S	1/(1/11,1 + S/4945)
	321-8	NHN	92.41 + 0.086 · S	1.285 + 0.00065 · S
MCHCM		144.2 + 0.086 · S	2.419 + 0.00065 · S	1/(1/15,4 + S/6577)
MFHFM		210.8 + 0.086 · S	4.43 + 0.00065 · S	1/(1/15,4 + S/6577)



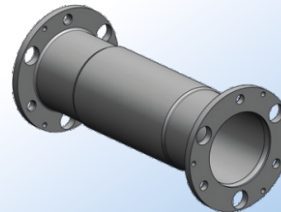
Types NEN/ NHN, BEB, MCECM/MCHCM and MFEFM/MFHFM

Variant with E spacer



Size DA	Type	m kg	J kgm2	C MNm/rad
354-8	NEN	129.1 + 0.079 · S	2.163 + 0.00079 · S	1/(1/18,2 + S/7977)
	MCECM	191.4 + 0.079 · S	3.866 + 0.00079 · S	1/(1/24,7 + S/7977)
	MFEFM	286.5 + 0.079 · S	7.246 + 0.00079 · S	1/(1/24,7 + S/7977)
387-8	NEN	169.6 + 0.093 · S	3.414 + 0.0012 · S	1/(1/25,3 + S/11742)
	MCECM	242.5 + 0.093 · S	5.88 + 0.0012 · S	1/(1/31,5 + S/11742)
	MFEFM	351.7 + 0.093 · S	10.62 + 0.0012 · S	1/(1/31,5 + S/11742)
411-8	NEN	201.9 + 0.113 · S	4.565 + 0.0015 · S	1/(1/29,4 + S/15183)
	MCECM	287.1 + 0.113 · S	7.821 + 0.0015 · S	1/(1/36 + S/15183)
	MFEFM	415.8 + 0.113 · S	14.1 + 0.0015 · S	1/(1/36 + S/15183)
447-8	NEN	260.7 + 0.129 · S	6.985 + 0.0021 · S	1/(1/38 + S/21062)
	MCECM	367.1 + 0.129 · S	11.74 + 0.0021 · S	1/(1/46,5 + S/21062)
	MFEFM	534.1 + 0.129 · S	21.22 + 0.0021 · S	1/(1/46,5 + S/21062)
495-8	NEN	354.4 + 0.157 · S	11.61 + 0.0033 · S	1/(1/46,4 + S/33418)
	MCECM	497.5 + 0.157 · S	19.74 + 0.0033 · S	1/(1/54,5 + S/33418)
	MFEFM	693.8 + 0.157 · S	33.95 + 0.0033 · S	1/(1/54,5 + S/33418)
546-8	NEN	483.3 + 0.212 · S	19.43 + 0.0056 · S	1/(1/59 + S/56448)
	MCECM	663.8 + 0.212 · S	32.27 + 0.0056 · S	1/(1/67 + S/56448)
	MFEFM	923.1 + 0.212 · S	55.39 + 0.0056 · S	1/(1/67 + S/56448)
587-8	NEN	600.7 + 0.279 · S	27.94 + 0.0076 · S	1/(1/67,3 + S/76570)
	MCECM	821.9 + 0.279 · S	45.85 + 0.0076 · S	1/(1/75,3 + S/76570)
	MFEFM	1147 + 0.279 · S	79.25 + 0.0076 · S	1/(1/75,3 + S/76570)
631-8	NEN	731.9 + 0.302 · S	39.04 + 0.01 · S	1/(1/79,6 + S/102143)
	MCECM	1006 + 0.302 · S	64.52 + 0.01 · S	1/(1/88,2 + S/102143)
	MFEFM	1441 + 0.302 · S	114.7 + 0.01 · S	1/(1/88,2 + S/102143)
495-10	NEN	355.1 + 0.157 · S	11.7 + 0.0033 · S	1/(1/113 + S/33418)
	MFEFM	693 + 0.157 · S	33.97 + 0.0033 · S	1/(1/176 + S/33418)
546-10	NEN	483.7 + 0.212 · S	19.56 + 0.0056 · S	1/(1/138 + S/56448)
	MFEFM	921.8 + 0.212 · S	55.43 + 0.0056 · S	1/(1/190 + S/56448)
587-10	NEN	600.5 + 0.279 · S	28.09 + 0.0076 · S	1/(1/165 + S/76570)
	MFEFM	1145 + 0.279 · S	79.29 + 0.0076 · S	1/(1/223 + S/76570)
631-10	NEN	731.3 + 0.302 · S	39.23 + 0.01 · S	1/(1/187 + S/102143)
	MFEFM	1438 + 0.302 · S	114.8 + 0.01 · S	1/(1/241 + S/102143)
694-10	NEN	1057 + 0.39 · S	69.77 + 0.015 · S	1/(1/293 + S/154224)
	MFEFM	1950 + 0.39 · S	188.1 + 0.015 · S	1/(1/412 + S/154224)
734-10	NEN	1265 + 0.45 · S	94.03 + 0.02 · S	1/(1/373 + S/196935)
	MFEFM	2314 + 0.45 · S	248.7 + 0.02 · S	1/(1/542 + S/196935)
790-10	NEN	1587 + 0.53 · S	136.9 + 0.027 · S	1/(1/467 + S/270335)
	MFEFM	2919 + 0.53 · S	363.4 + 0.027 · S	1/(1/677 + S/270335)
887-10	NEN	2335 + 0.687 · S	256 + 0.042 · S	1/(1/644 + S/418343)
	MFEFM	4197 + 0.687 · S	665.8 + 0.042 · S	1/(1/944 + S/418343)
988-10	NEN	3264 + 0.975 · S	447.8 + 0.067 · S	1/(1/856 + S/675886)
	MFEFM	5736 + 0.975 · S	1129 + 0.067 · S	1/(1/1229 + S/675886)

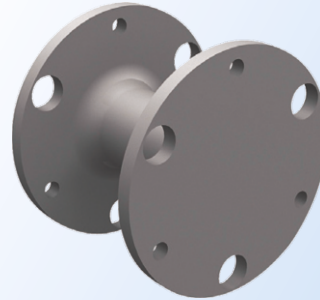
Variant with H spacer



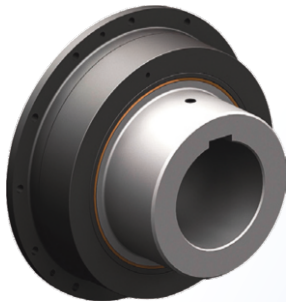
Size DA	Type	m kg	J kgm2	C MNm/rad
354-8	NHN	126 + 0.098 · S	2.129 + 0.00098 · S	1/(1/16,7 + S/9874)
	MCHCM	186 + 0.098 · S	3.809 + 0.00098 · S	1/(1/20,8 + S/9874)
	MFHFM	281.2 + 0.098 · S	7.189 + 0.00098 · S	1/(1/20,8 + S/9874)
387-8	NHN	164.5 + 0.122 · S	3.343 + 0.0015 · S	1/(1/22,8 + S/15253)
	MCHCM	234.9 + 0.122 · S	5.777 + 0.0015 · S	1/(1/26,4 + S/15253)
	MFHFM	344.1 + 0.122 · S	10.51 + 0.0015 · S	1/(1/26,4 + S/15253)
411-8	NHN	196.8 + 0.141 · S	4.49 + 0.0019 · S	1/(1/27,1 + S/18813)
	MCHCM	279.5 + 0.141 · S	7.712 + 0.0019 · S	1/(1/31,3 + S/18813)
	MFHFM	408.1 + 0.141 · S	13.99 + 0.0019 · S	1/(1/31,3 + S/18813)
447-8	NHN	255.1 + 0.157 · S	6.883 + 0.0026 · S	1/(1/35,1 + S/25615)
	MCHCM	358.7 + 0.157 · S	11.59 + 0.0026 · S	1/(1/40,9 + S/25615)
	MFHFM	525.6 + 0.157 · S	21.07 + 0.0026 · S	1/(1/40,9 + S/25615)
495-8	NHN	345 + 0.2 · S	11.39 + 0.0042 · S	1/(1/43 + S/42683)
	MCHCM	483.5 + 0.2 · S	19.42 + 0.0042 · S	1/(1/48,2 + S/42683)
	MFHFM	679.8 + 0.2 · S	33.62 + 0.0042 · S	1/(1/48,2 + S/42683)
546-8	NHN	474 + 0.255 · S	19.16 + 0.0068 · S	1/(1/56,3 + S/67807)
	MCHCM	649.6 + 0.255 · S	31.86 + 0.0068 · S	1/(1/62,2 + S/67807)
	MFHFM	908.9 + 0.255 · S	54.99 + 0.0068 · S	1/(1/62,2 + S/67807)
587-8	NHN	590 + 0.324 · S	27.6 + 0.0088 · S	1/(1/65 + S/88708)
	MCHCM	806 + 0.324 · S	45.37 + 0.0088 · S	1/(1/71,2 + S/88708)
	MFHFM	1131 + 0.324 · S	78.77 + 0.0088 · S	1/(1/71,2 + S/88708)
631-8	NHN	715.1 + 0.361 · S	38.39 + 0.012 · S	1/(1/76,3 + S/123294)
	MCHCM	981.7 + 0.361 · S	63.61 + 0.012 · S	1/(1/82,6 + S/123294)
	MFHFM	1417 + 0.361 · S	113.8 + 0.012 · S	1/(1/82,6 + S/123294)
495-10	NHN	345.7 + 0.2 · S	11.47 + 0.0042 · S	1/(1/94,7 + S/42683)
	MFHFM	678.9 + 0.2 · S	33.65 + 0.0042 · S	1/(1/124 + S/42683)
546-10	NHN	474.4 + 0.255 · S	19.28 + 0.0068 · S	1/(1/124 + S/67807)
	MFHFM	907.5 + 0.255 · S	55.03 + 0.0068 · S	1/(1/156 + S/67807)
587-10	NHN	589.9 + 0.324 · S	27.76 + 0.0088 · S	1/(1/152 + S/88708)
	MFHFM	1129 + 0.324 · S	78.81 + 0.0088 · S	1/(1/191 + S/88708)
631-10	NHN	714.5 + 0.361 · S	38.57 + 0.012 · S	1/(1/169 + S/123294)
	MFHFM	1414 + 0.361 · S	113.9 + 0.012 · S	1/(1/204 + S/123294)
694-10	NHN	1028 + 0.487 · S	68.47 + 0.019 · S	1/(1/257 + S/193881)
	MFHFM	1906 + 0.487 · S	186.2 + 0.019 · S	1/(1/322 + S/193881)
734-10	NHN	1229 + 0.563 · S	92.27 + 0.025 · S	1/(1/325 + S/247708)
	MFHFM	2260 + 0.563 · S	246.1 + 0.025 · S	1/(1/414 + S/247708)
790-10	NHN	1544 + 0.663 · S	134.4 + 0.034 · S	1/(1/409 + S/340076)
	MFHFM	2852 + 0.663 · S	359.6 + 0.034 · S	1/(1/522 + S/340076)
887-10	NHN	2278 + 0.844 · S	252 + 0.051 · S	1/(1/568 + S/517255)
	MFHFM	4107 + 0.844 · S	659.8 + 0.051 · S	1/(1/734 + S/517255)
988-10	NHN	3192 + 1.154 · S	441.8 + 0.08 · S	1/(1/774 + S/807126)
	MFHFM	5620 + 1.154 · S	1120 + 0.08 · S	1/(1/1006 + S/807126)



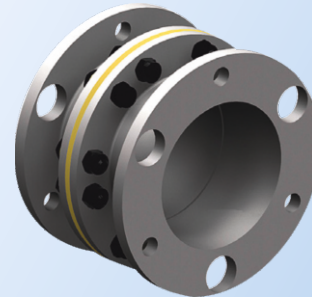
Flange version for adaptation to a customer flange



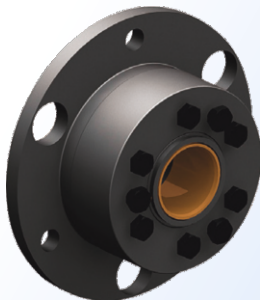
Intermediate spacer as a torsion shaft for reducing the torsional stiffness



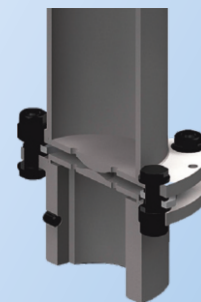
Slipping flanges for overload protection against brief high-frequency torque shock loads



Version for avoiding leakage currents between the connected units



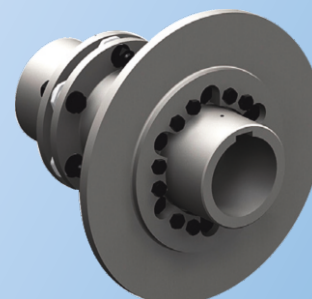
Slipping hubs for overload protection against brief high-frequency torque shock loads



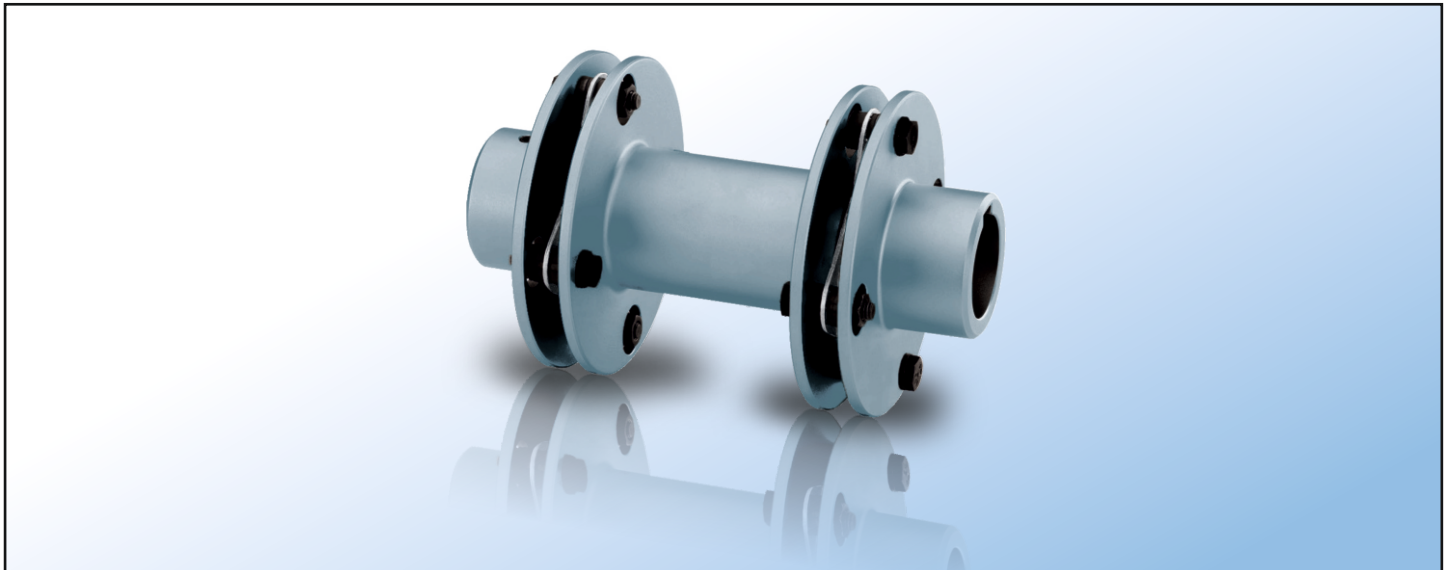
Vertical support for avoiding excessive axial loading of the plate packs by the weight of the intermediate spacer



Axial backlash limiter



Brake disk/brake drum



Coupling suitable for use in potentially explosive atmospheres.

Complies with the current ATEX Directive for:

- II 2G Ex h IIC T6 ... T2 Gb X
- II 2D Ex h IIIC T85 °C ... 250 °C Db X
- I M2 Ex h Mb X

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 high misalignment capacities are required. In the papermaking 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.

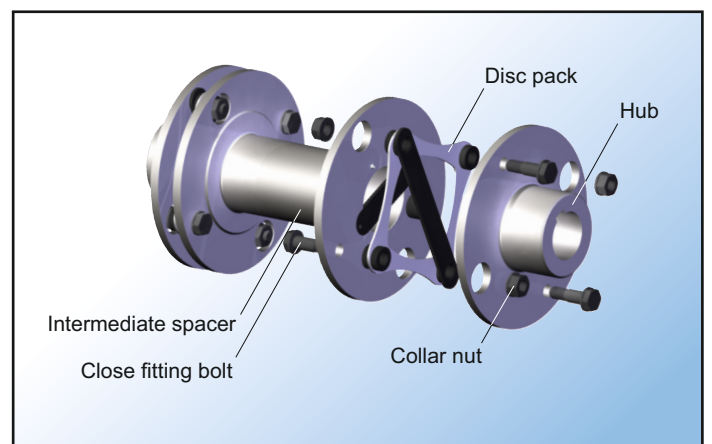
Main areas of application for the ARW-4/-6 series:

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

Design and configurations

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.

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 specifications

Power Ratings										
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 C_{Tdyn} (MNm/rad)
						+ ΔK_a Tension (mm)	- ΔK_a Compression (mm)	+ ΔK_w	+ ΔK_r (mm)	
101-4	92	140	230	37	10400	2.4	2	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	2.25		1.6	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	2.25		1.6	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	2.8		51.4	0.622
389-4	6650	10000	16700	2660	2700	10	2.8		51.4	0.657
439-4	9850	15000	25000	3940	2350	11.1	3		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	4.8		50.6	3.93
695-6	41000	62000	103000	16400	1500	17	4.8		50.7	10.1
756-6	52000	78000	130000	20800	1350	18	4.8		50.6	14
817-6	65000	98000	163000	26000	1250	20	4.8		50.5	16.9
880-6	80000	120000	200000	32000	1150	22	4.8		50.5	21.2

Note: for S = 1000 mm

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

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).

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.

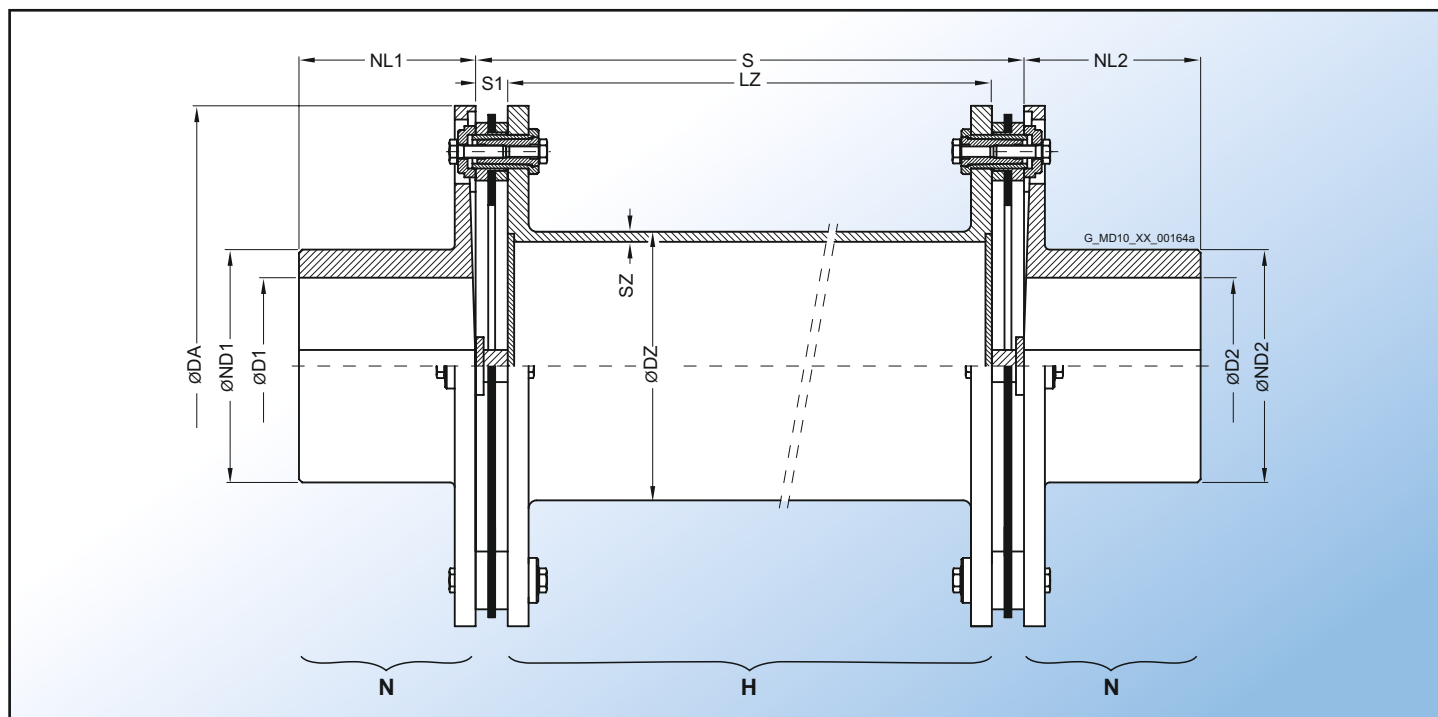
- » T_{Kmax} permitted only five times per hour.
- » T_{KW} for medium torque $T_N = 0$ Nm.
- » If T_N and T_{KW} occur at the same time, the manufacturer must be consulted.



Technical specifications

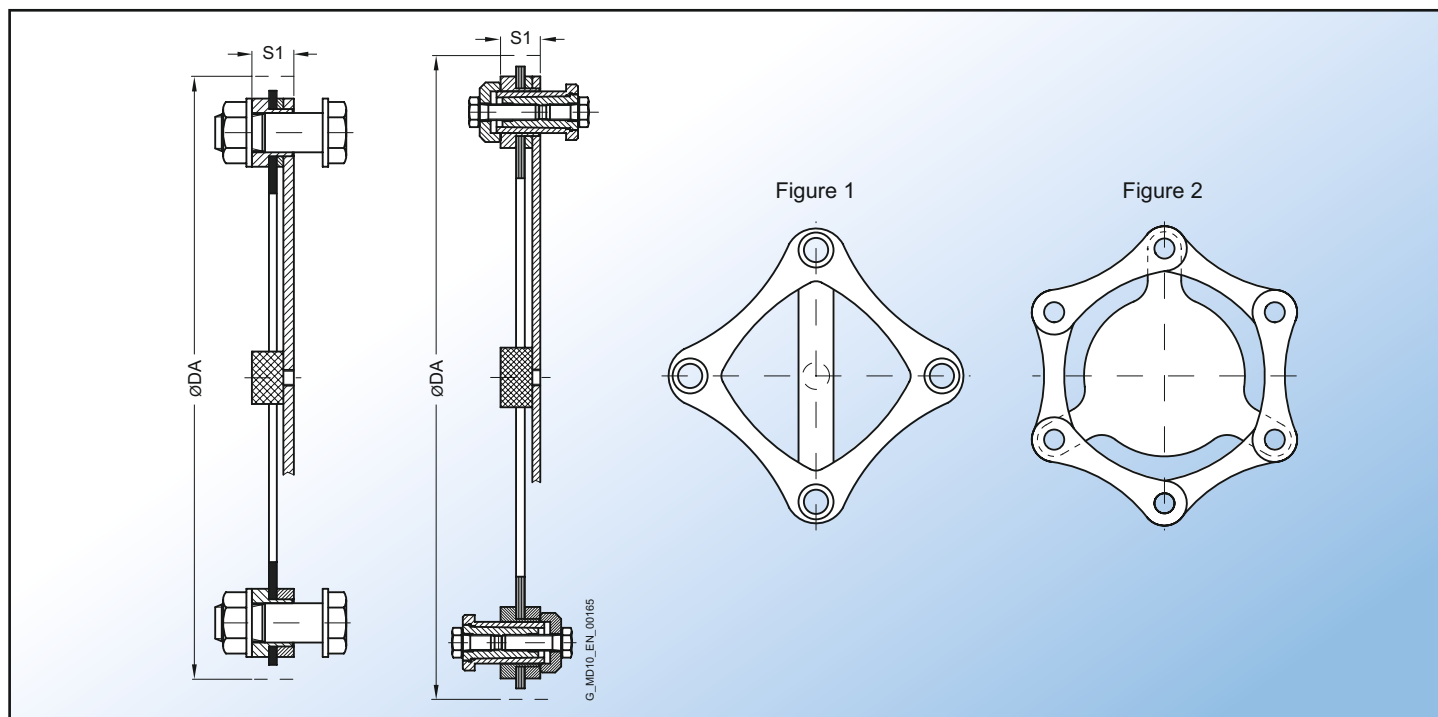
Permitted Shaft Misalignment						
Size	Permitted Angular Misalignment ΔK_w (tension +)			Permitted Angular Misalignment ΔK_w (compression -)		
	3.0°	1.5°	0.0°	3.0°	1.5°	0.0°
	Permitted Axial Misalignment ΔK_s (mm)			Permitted Axial Misalignment ΔK_s (mm)		
101-4	0.8	1.6	2.4	0.8	1.6	2
133-4	1.1	2.2	3.3	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	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	6	9	2.8	2.8	2.8
389-4	3.3	6.7	10	2.8	2.8	2.8
439-4	3.7	7.4	11.1	3	3	3
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	4.8	4.8	4.8
695-6	5.6	11.4	17	4.8	4.8	4.8
756-6	6	12.1	18	4.8	4.8	4.8
817-6	6.7	13.4	20	4.8	4.8	4.8
880-6	7.3	14.8	22	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 -).



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								Mass Moment of Inertia J	Product Code ¹⁾	Weight
			DA	ND1	DZ	SZ	NL1/NL2	S1	LZ	Shaft Distance S			
(mm)	(Nm)	(rpm)	D1,D2 Keyway DIN6885 max	ND1/ND2	DZ	SZ	NL1/NL2	S1	LZ	Shaft Distance S	(kgm ²)		(kg)
101-4	92	10400	32	45	45	2.9	32	11	43	65	0.002	2LC0530-0AD	1.5
133-4	225	7850	45	60	48	2.9	45	13	59	85	0.008	2LC0530-1AD	3.9
167-4	450	6250	50	70	64	4	50	15	70	100	0.022	2LC0530-2AD	7.1
196-4	800	5350	60	80	89	4	60	16	83	115	0.056	2LC0530-3AD	12.1
230-4	1250	4550	75	100	102	5	75	16	83	115	0.109	2LC0530-4AD	17.9
260-4	2000	4000	90	120	133	5	90	17	96	130	0.189	2LC0530-5AD	24.6
292-4	2700	3550	100	130	152	5	100	19	92	130	0.359	2LC0530-6AD	35.1
324-4	3850	3200	110	145	168	6.3	110	20	120	160	0.52	2LC0530-7AD	43.7
355-4	5250	2950	120	160	178	7.1	120	20	125	165	0.856	2LC0530-8AD	59.8
389-4	6650	2700	130	175	194	7.1	130	20	130	170	1.09	2LC0531-0AD	68.9
439-4	9850	2350	150	200	219	7.1	150	22	166	210	2.23	2LC0531-1AD	106
499-4	13300	2100	165	220	245	7.1	165	30	170	230	3.81	2LC0531-2AD	142
547-4	19000	1900	190	250	299	8.8	190	32	176	240	6.24	2LC0531-3AD	191
600-4	25150	1750	205	275	324	8.8	205	34	182	250	10.2	2LC0531-4AD	257
647-4	32500	1600	225	300	343	10	225	35	220	290	16.5	2LC0531-5AD	348
695-6	41000	1500	240	325	368	10	240	33	224	290	23.7	2LC0540-0AD	441
756-6	52000	1350	255	340	394	12.5	255	34	232	300	33.2	2LC0540-1AD	525
817-6	65000	1250	270	360	406	12.5	270	36	238	310	49.1	2LC0540-2AD	659
880-6	80000	1150	300	400	419	12.5	300	37	256	330	72.8	2LC0540-3AD	849



Size DA (mm)	Dimensions S1 (mm)	Mass Moment of Inertia J (kgm ²)	Product Code	Weight m (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
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	1.225	2LC0540-1AB00-0AA0	20.2
817-6	36	1.7497	2LC0540-2AB00-0AA0	23.9
880-6	37	2.546	2LC0540-3AB00-0AA0	28.9

Notes

- » Plate packs of the ARW-4 series comprise ring plates (Fig. 1), those of the ARW-6 series side-bar plates (Fig. 2).
- » 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 conical screw connections are used.

Ordering example

- » ARPEX ARW-4 plate pack, size 133-4, complete with screw connection.

Ordering Code: **2LC0530-1AB00-0AA0**



Coupling suitable for use in potentially explosive atmospheres.

Complies with the current ATEX Directive for:

- II 2G Ex h IIC T6 ... T2 Gb X
- II 2D Ex h IIIC T85 °C ... 250 °C Db X
- I M2 Ex h Mb X

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°.

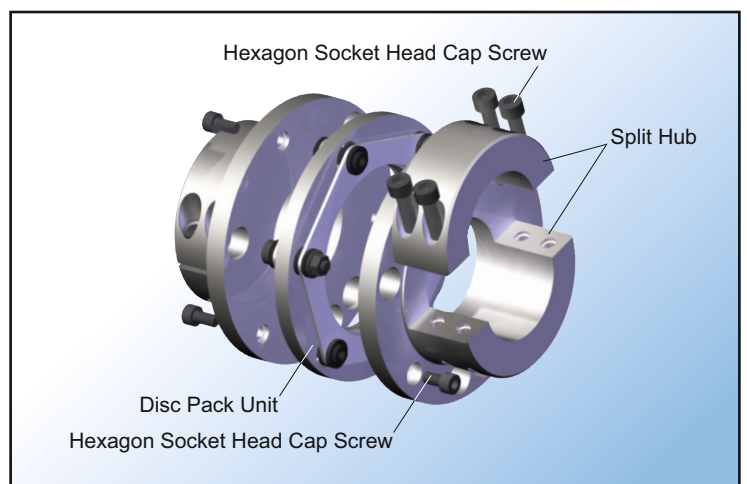
Main areas of application for the ARF-6 series:

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

Design and configurations

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.

- GG: Variant with 2 standard clamping hubs.
- GJ: Variant with 1 jumbo clamping hub for large bore.





Technical specifications

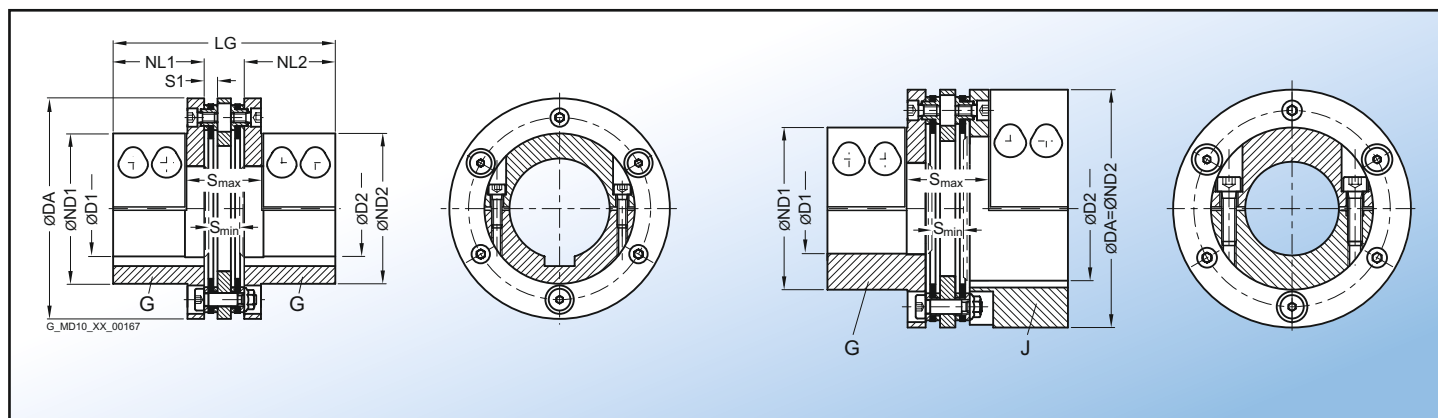
Power Ratings									
Size	Rated Torque T_{KN} (Nm)	Maximum Torque T_{Kmax} (Nm)	Overload Torque T_{KOL} (Nm)	Fatigue Torque T_{KW} (Nm)	Maximum Speed n_{Kmax} (rpm)	Maximum Permitted Shaft Misalignment			Torsional Stiffness C_{Tdyn} (MNm/rad)
						$+\Delta K_a$ (mm)	$+\Delta K_w$	$+\Delta K_r$ (mm)	
84-6	120	220	330	55	12500	1.1	0.7°	0.16	0.07
111-6	190	350	520	90	9450	1.8		0.16	0.13
132-6	350	650	950	160	7950	2.02		0.2	0.2
147-6	500	900	1350	230	7100	2.4		0.2	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	3.7		0.45	1.55
267-6	6100	11000	16500	2800	3900	3.84		0.46	1.8

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.
- » T_{KW} for medium torque $T_N = 0$ Nm.
- » If T_N and T_{KW} occur at the same time, the manufacturer must be consulted.

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 Misalignment								
Size	Permitted Angular Misalignment ΔK_w (tension +)							
	0.0°	0.1°	0.2°	0.3°	0.4°	0.5°	0.6°	0.7°
	Permitted Axial Misalignment ΔK_a (mm)							
84-6	1.1	0.94	0.79	0.63	0.47	0.31	0.16	0
111-6	1.8	1.54	1.29	1.03	0.77	0.51	0.26	0
132-6	2.02	1.73	1.44	1.15	0.87	0.58	0.29	0
147-6	2.4	2.06	1.71	1.37	1.03	0.69	0.34	0
171-6	2.74	2.35	1.96	1.57	1.17	0.78	0.39	0
182-6	2.86	2.45	2.04	1.63	1.23	0.82	0.41	0
202-6	3.06	2.62	2.19	1.75	1.31	0.87	0.44	0
218-6	3.14	2.69	2.24	1.79	1.35	0.9	0.45	0
252-6	3.7	3.17	2.64	2.11	1.59	1.06	0.53	0
267-6	3.84	3.29	2.74	2.19	1.65	1.1	0.55	0



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

Size DA (mm)	Rated Torque T _{KN} (Nm)	Maximum Speed n _{Kmax} (rpm)	Type	Dimensions (mm)										Mass Moment of Inertia J (kgm ²)	Product Code	Weight m (kg)
				Keyway DIN 6885			ND1	ND2	ND1/ NL2	S1	Shaft Distance S		LG			
				D1 maximum Parallel Key/ Clamping Seat	D2 max Parallel Key	D2 max Clamping Seat					min	max				
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	2.1
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	3.6
132-6	350	7950	GG	52	52	52	90	90	55	8	18.5	45	134	0.011	2LC0420-2AB99-0AA0	5.7
			GJ		75	80		132						0.0177	2LC0420-2AC99-0AA0	7
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	10.4
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	16.4
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	20.9
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	25.6
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	33.6
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	49.8
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	58.1

Ordering example

- » ARPEX ARF-6 GG coupling, size 132-6.
- » for shaft diameter OD1 45h6 mm, without keyway
- » for shaft diameter OD2 50k6 mm, with keyway to DIN 6885-1, keyway width P9.

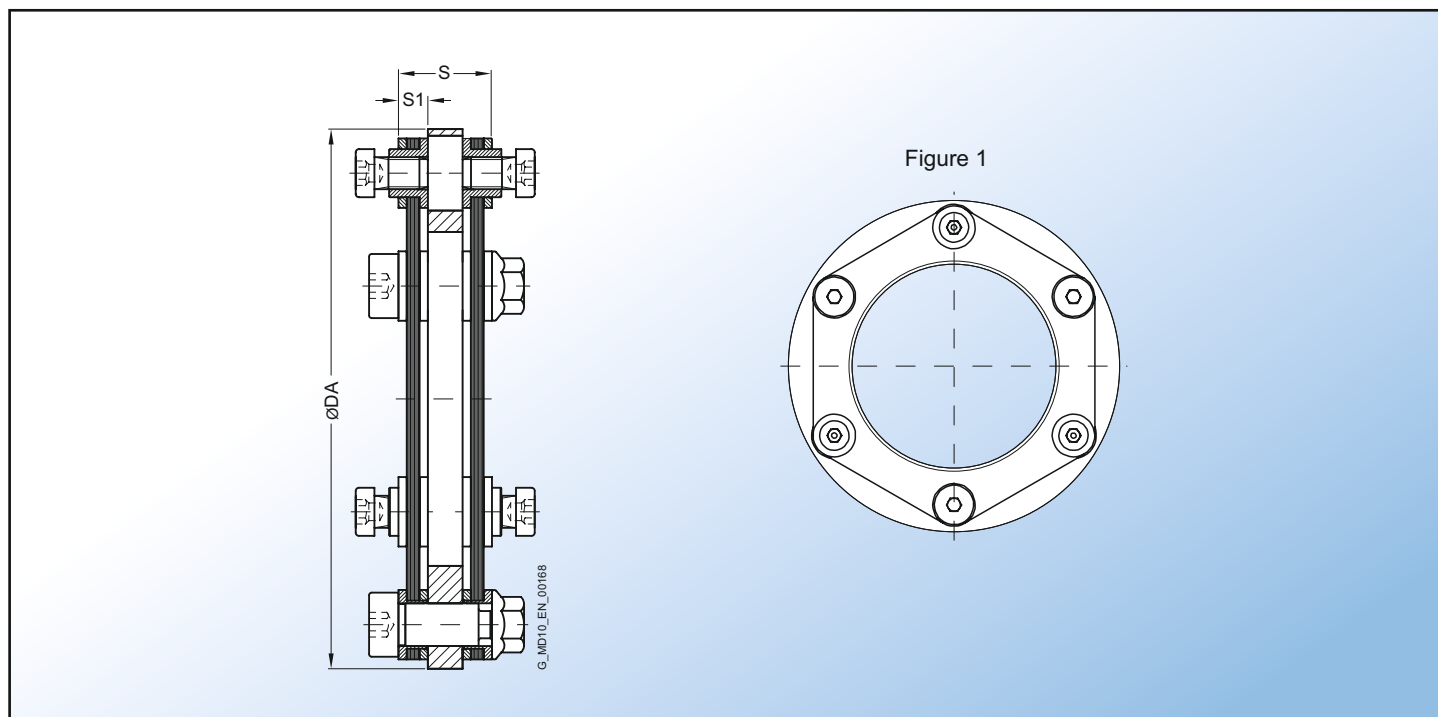
Ordering Code: [2LC0420-2AB99-0AA0-Z](#)
[L1A+M1C+L45+Y26+Y27](#)

Plain text to Y26: h6
 Plain text to Y27: k6

¹⁾To identify complete item numbers specifying the available finish boring options and further order options, please contact jbj Techniques Ltd. technical office, telephone: +44 (0)1737 767493 or email: info@jbj.co.uk

Notes

- » The shaft tolerance must be specified in the order. To specify, "-Z" must be added to the article no. and the order codes "Y26" and "Y27" with plain text specification of the shaft tolerance for D1 and D2 must be added as well.
- » 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 page 33.
- » Weights and mass moments of inertia apply to the entire coupling with maximum bores D1/D2.



Size DA (mm)	Type	Dimensions (mm)		Mass Moment of Inertia J (kgm ²)	Product Code	Weight m (kg)
		S	S1			
84-6	GG	19	6	0.0003	2LC0420-0AE00-0AA0	0.3
	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	0.9
	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	0.024	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	7.9
	GJ				2LC0420-8AH00-0AA0	
267-6	GG	55	17	0.1152	2LC0421-0AE00-0AA0	9.6
	GJ				2LC0421-0AH00-0AA0	

Notes

- » Ring plates (Figure 1) are used for the disc packs.
- » The disc pack unit for the ARF-6 series is readily available as a spare part in most sizes.
- » The disc pack unit comprises two preassembled disc packs with adapter disk, including screw connection. The standard screw connection comprises hexagon socket head cap screws and close fitting bolts with nuts.



jbj Techniques Limited
28 Trowers Way Holmethorpe Industrial Estate
Redhill Surrey RH1 2LW. UNITED KINGDOM

quality products for mechanical & fluid power

 **01737 767493**  **info@jbj.co.uk**  **www.jbj.co.uk**



jbj Techniques Limited is ISO certified,
committed to international coordination &
unification of industrial standards.

registered in England No: 1185469

A range of products ATEX certified
to directive 94/9/EC requirements

