FLENDER COUPLINGS
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FLEXIBLE COUPLINGS
N-EUPEX, RUPEX AND N-BIPEX

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INTRODUCTION

The mechanical drive train comprises individual units such as motor, gear unit and driven machine. The coupling connects these component assemblies.
As well as the transmission of rotary motion and torque, other requirements may be made of the coupling.

- Compensation for shaft misalignment with low restorative forces
- Control of characteristic angular vibration frequency and damping
- Interruption or limitation of torque
- Noise insulation, electrical insulation

Couplings are frequently chosen after the machines to be connected have already been selected. Thanks to a large number of different coupling assembly options, specified marginal conditions for clearance and connection geometry can be met from the standard range. The coupling also performs secondary functions, e.g. providing a brake disk or brake drum for operating or blocking brakes, devices to record speed or the attachment of sprockets or pulleys.

Couplings are divided into two main groups, couplings and clutches.

Clutches interrupt or limited the transmissible torque. The engaging and disengaging forces on externally operated clutches are introduced via a mechanically, electrically, hydraulically or pneumatically operating mechanism. Overload, centrifugal or freewheel clutches draw their engaging energy from the transmitted output.

Rigid couplings, designed as clamp, flanged or mechanism couplings, connect machines which must not undergo any shaft misalignment. Hydrodynamic couplings, often also called fluid or Föttinger couplings, are used as starting couplings in drives with high mass moments of inertia of the driven machine. In drive technology very often flexible, positive couplings, which may be designed to be torsionally rigid, torsionally flexible or highly flexible, are used.

Torsionally rigid couplings are designed to be rigid in a peripheral direction and flexible in radial and axial directions. The angle of rotation and torque are conducted through the coupling without a phase shift.

Torsionally flexible couplings have resilient elements usually manufactured from elastomer materials. Using an elastomer material with a suitable ShoreA hardness provides the most advantageous torsional stiffness and damping for the application. Shaft misalignment causes the resilient elements to deform.

Highly flexible couplings have large-volume (elastomer) resilient elements of low stiffness. The angle of rotation and torque are conducted through the coupling with a considerable phase shift.

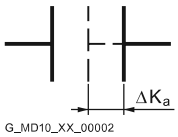
TECHNICAL INFORMATION

Shaft misalignment

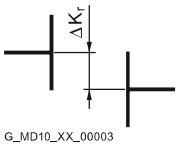
Shaft misalignment is the result of displacement during assembly and operation and, where machines constructed with two radial bearings each are rigidly coupled, will cause high loads being placed on the bearings. Elastic deformation of base frame, foundation and machine housing will lead to shaft misalignment which cannot be prevented, even by precise alignment.

Furthermore, because individual components of the drive train heat up differently during operation, heat expansion of the machine housings causes shaft misalignment. Poorly aligned drives are often the cause of seal, rolling bearing or coupling failure. Alignment should be carried out by specialist personnel in accordance with operating instructions.

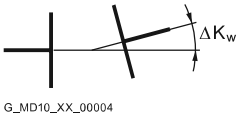
Depending on the direction of the effective shaft misalignment a distinction is made between:



Axial misalignment



Radial misalignment



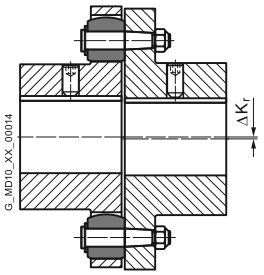
Angular misalignment

Couplings can be categorized into one of the following groups:

Single-joint couplings

Couplings with flexible elements mainly made of elastomer materials. Shaft misalignment results in deformation of the elastomer elements. The elastomer elements can absorb shaft misalignment as deformations in an axial, radial and angular direction. The degree of permissible misalignment depends on the coupling size, the speed and the type of elastomer element.
Single-joint couplings do not require an adapter and are therefore short versions.

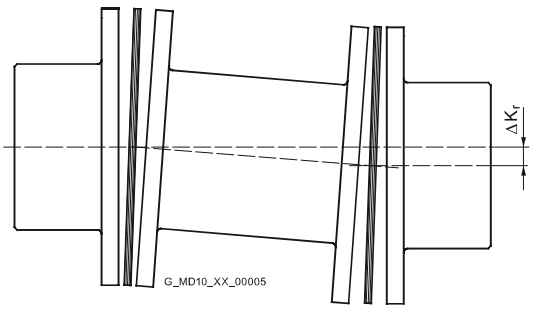
Example:
In the case of a RUPEX RWN 198 coupling with an outer diameter of 198 mm and a speed of 1500 rpm, the permitted radial misalignment is Δ_{Kr} = 0.3 mm.



Two-joint couplings

Two-joint couplings are always designed with an adapter. The two joint levels are able to absorb axial and angular misalignment. Radial misalignment occurs via the gap between the two joint levels and the angular displacement of the joint levels. The permitted angular misalignment per joint level is frequently about 0.5°. The permitted shaft misalignment of the coupling can be adjusted via the length of the adapter. If there are more than two joint levels, it is not possible to define the position of the coupling parts relative to the axis of rotation. (The less frequently used parallel-crank couplings are an exception).

Example:
N-ARPEX ARN-6 NEN 217-6 with a shaft distance of 140 mm with a permitted radial misalignment of ΔK_r = 2.2 mm (angle per joint level 1.0°).



Balancing

Balance quality levels
The so-called quality level G to DIN ISO 21940 indicates a range of permitted residual imbalance from zero up to an upper limit. Applications can be grouped on the basis of similarity analysis. For many applications a coupling balance quality of G 16 is sufficient. On drives susceptible to vibration the balance quality should be G 6.3. Only in special cases is a better balance quality required.

Balancing standard in accordance with DIN ISO 21940-32
Besides the required balance quality, it is necessary to set standards which define how the mass of the parallel key is to be taken into consideration when balancing. In the past, motor rotors have frequently been balanced in accordance with the full parallel key standard. The "appropriate" balance condition of the coupling hub was described as "balancing with open keyway" or "balancing after keyseating". Today it is usual for the motor rotor, as well as the gear unit and driven machine shaft, to be balanced in accordance with the half parallel key standard.

Full parallel key standard

The parallel key is inserted in the shaft keyway, then balancing is carried out. The coupling hub must be balanced without parallel key after keyseating.

Marking of shaft and hub with "F" (for "full").

Half parallel key standard

The balancing standard normally applied today. Before balancing, a half parallel key is inserted in the shaft and another in the coupling hub. Alternatively, balancing can be carried out before cutting the keyway.

The balanced parts must be marked with an "H". This marking can be dispensed with if it is absolutely clear which parallel key standard has been applied.

No parallel key standard

Balancing of shaft and coupling hub after keyseating, but without parallel key. Not used in practice. Marking of shaft and hub with "N" (for "no").
The length of the parallel key is determined by the shaft keyway. Coupling hubs may be designed considerably shorter than the shaft.

To prevent imbalance forces caused by projecting parallel key factors when balancing in accordance with the half parallel key standard in the case of applications with high balancing quality requirements, grooved spacer rings can be fitted or stepped parallel keys used.

Flender Balancing Standard

The balancing quality level, together with the operating speed, results in the maximum permissible eccentricity of the center of gravity of the coupling or the coupling subassembly. In the Flender article number the balancing quality can be preset with the help of the order code. Additionally, also the balance quality level to DIN ISO 21940 can be preset together with the operating speed belonging to it, which then be taken as priority.

Eccentricity of center of gravity of coupling e_{coupl}	Flender balancing quality	Order code
maximum 100 µm	standard balancing	without specification
maximum 40 µm	fine balancing	W02
maximum 16 µm	micro-balancing	W03
better than 16 µm	special balancing	on request

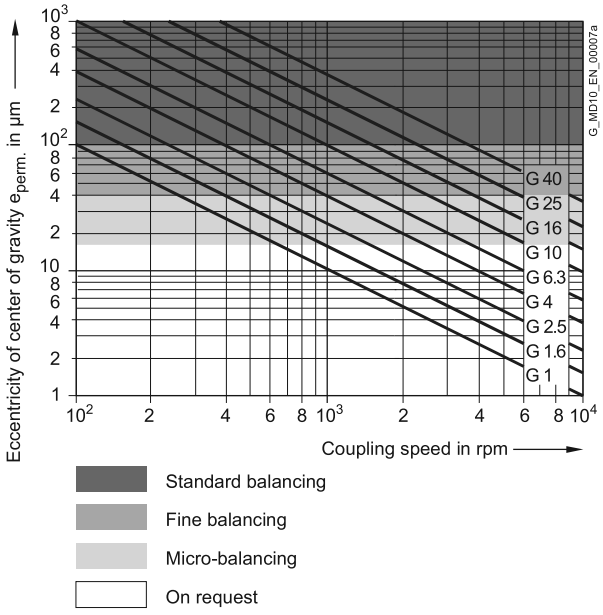
$$e_{perm} = 9550 \cdot \frac{G}{n}$$

$$e_{coupl} \leq e_{perm}$$

Permitted eccentricity of center of gravity	e_{perm}	in µm
Eccentricity of center of gravity of coupling	e_{coupl}	in µm
Balancing quality level	G	in mm/s
Coupling speed	n	in rpm

TECHNICAL INFORMATION

E



Example:
Coupling speed = 1450 rpm
required balancing quality level G 6.3

$$e_{perm} = 9550 \cdot \frac{G}{n} = 9550 \cdot \frac{6.3}{1450}\ \mu m$$

Thus, the required eccentricity of center of gravity is 41.5 µm. The fine balancing with a maximum eccentricity of center of gravity of 40 mm fulfills this requirement; therefore, the order code W02 has to be specified when ordering.

For many applications the following balancing quality recommendation applies:

Coupling	standard balancing v = DA · n/19100	fine balancing
short version with LG ⩽ 3 × DA	v ⩽ 30 m/s	v > 30 m/s
long version with LG > 3 × DA	v ⩽ 15 m/s	v > 15 m/s

Peripheral speed	v	in mm/s
Coupling outer diameter	DA	in mm
Coupling speed	n	in rpm
Coupling length	LG	in mm

The following standards on balancing must be observed:

- couplings are balanced in subassemblies.
- hub parts without finished bore are unbalanced.
- the number of balancing levels (one- or two-level balancing) is specified by Flender.
- without special specification balancing is done in accordance with the half-parallel-key standard. Balancing in accordance with the full-parallel-key standard must be specified in the order number.
- For FLUDEX couplings special balancing standards specified in Section 13 apply.
- ARPEX couplings in standard balancing quality are unbalanced. Thanks to steel components machined all over and precisely guided adapters the balancing quality of standard balancing is nearly always adhered to.

Shaft-hub connections

The bore and the shaft-hub connection of the coupling are determined by the design of the machine shaft. In the case of IEC standard motors, the shaft diameters and parallel key connections are specified in accordance with DIN EN 50347. For diesel motors, the flywheel connections are frequently specified in accordance with SAE J620d or DIN 6288. Besides the very widely used connection of shaft and hub with parallel keys to DIN 6885 and cylindrically bored hubs, couplings with Taper clamping bushes, clamping sets, shrink-fit connections and splines to DIN 5480 are common.

The form stability of the shaft/hub connection can only be demonstrated when shaft dimensions and details of the connection are available. The coupling torques specified in the tables of power ratings of the coupling series do not apply to the shaft-hub connection unrestrictedly.

In the case of the shaft-hub connection with parallel key, the coupling hub must be axially secured, e.g. with a set screw or end washer. The parallel key must be secured against axial displacement in the machine shaft.

All Flender couplings with a finished bore and parallel keyway are designed with a set screw. Exceptions are some couplings of the FLUDEX series, in which end washers are used. During assembly, Taper clamping bushes are frictionally connected to the machine shaft.

TECHNICAL INFORMATION

Standards

Machines

2006/42/EG	EC Machinery Directive
2014/34/EU	ATEX Directive – Manufacturer
1999/92/EG	ATEX Directive – Operator – and ATEX Guideline to Directive 1999/92/EC
DIN EN 80079-36	Non-electrical equipment for use in potentially explosive atmospheres
DIN EN 1127	Explosive atmospheres, explosion prevention and protection
DIN EN 50347	General-purpose three-phase induction motors having standard dimensions and outputs

Couplings

DIN 740	Flexible shaft couplings Part 1 and Part 2
VDI Guideline 2240	Shaft couplings - Systematic subdivision according to their properties VDI Technical Group Engineering Design 1971
API 610	Centrifugal Pumps for Petroleum, Chemical and Gas Industry Services
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
ISO 13709	Centrifugal pumps for petroleum, petrochemical and natural gas industries

Balancing

DIN ISO 21940	Requirements for the balancing quality of rigid rotors
DIN ISO 21940-32	Mechanical vibrations; standard governing the type of parallel key during balancing of shafts and composite parts

Shaft-hub connections

DIN 6885	Driver connections without taper action – parallel keys – keyways
SAE J620d	Flywheels for industrial engines ...
DIN 6288	Reciprocating internal combustion engines Dimensions and requirements for flywheels and flexible couplings
ASME B17.1	Keys and keyseats
DIN EN 50347	General-purpose three-phase induction motors with standard dimensions and output data
BS 46-1:1958	Keys and keyways and taper pins Specification

Key to symbols

Name	Symbols	Unit	Explanation
Torsional stiffness, dynamic	C_{Tdyn}	Nm/rad	For calculating torsional vibration
Excitation frequency	f_{err}	Hz	Excitation frequency of motor or driven machine
Moment of inertia	J	kgm^2	Moment of inertia of coupling sides 1 and 2
Axial misalignment	ΔK_a	mm	Axial misalignment of the coupling halves
Radial misalignment	ΔK_r	mm	Radial misalignment of the coupling halves
Angular misalignment	ΔK_w	°	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_{Kmax}	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_W	Nm	Amplitude of the dynamic coupling load
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_{KN}	Nm	Torque which can be transmitted as static torque by the coupling over the period of use.
Maximum coupling torque	T_{Kmax}	Nm	Torque which can be frequently transmitted (up to 25 times an hour) as maximum torque by the coupling.
Coupling overload torque	T_{KOL}	Nm	Torque which can very infrequently be transmitted as maximum torque by the coupling.
Fatigue coupling torque	T_{KW}	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	V_R		Factor specifying the torque increase at resonance
Temperature	T_a	°C	Ambient temperature of the coupling in operation
Damping coefficient	Ψ	psi	Damping parameter

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 FLUDEX couplings.

In the case of highly flexible couplings of the ELPEX, ELPEX-S and ELPEX-B series, deviating application factors are stated in the product descriptions.
FLUDEX couplings are mostly mounted on the high-speed gear shaft.

Example applications	Application factor FB
Electric motor without gear unit	
Centrifugal pumps	1.0
Piston pumps	1.5
Vacuum pumps	1.5
Fans with T_N less than 75 Nm	1.5
Fans with T_N from 75 to 750 Nm	1.75
Fans with T_N larger than 750 Nm	1.75
Blowers	1.5
Frequency converters / generators	1.25
Reciprocating compressors	1.75
Screw-type compressors	1.5
Internal-combustion engine without gear unit	
Generators	1.75
Pumps	1.5
Fans	1.75
Hydraulic pumps, excavators, construction machines	1.5
Compressors / screw-type compressors	1.5
Agricultural machinery	1.75
Other	
Turbine gear units	1.5
Hydraulic motor - gear unit	1.25
Electric motor with gear unit	
Chemical industry	
Extruders	1.5
Pumps - centrifugal pumps	1.0
Pumps - piston pumps	1.75
Pumps - plunger pumps	1.5
Reciprocating compressors	1.75
Calenders	1.5
Kneaders	1.75
Cooling drums	1.25
Mixers	1.25
Stirrers	1.25
Toasters	1.25
Drying drums	1.25
Centrifuges	1.25
Crushers	1.5
Power generation and conversion	
Compressed air, reciprocating compressors	1.75
Compressed air, screw-type compressors	1.25
Air - Blowers	1.5
Air - Cooling tower fans	1.5
Air - Turbine blowers	1.5
Generators, converters	1.25
Welding generators	1.25
Metal production, iron and steel works	
Plate tilters	1.5
Ingot pushers	1.75
Slabbing mill	1.75
Coiling machines	1.5
Roller straightening machines	1.5
Roller tables	1.75
Shears	1.75
Rollers	1.75
Metal working machines	
Plate bending machines	1.5
Plate straightening machines	1.5
Hammers	1.75
Planing machines	1.75
Presses, forging presses	1.75
Shears	1.5
Grinding machines	1.25
Punches	1.5
Machine tools: Main drives	1.5
Machine tools: Auxiliary drives	1.25
Food industry	
Filling machines	1.25
Kneading machines	1.5
Mashers	1.5
Sugar cane production	1.5
Production machines	
Construction machines, hydraulic pumps	1.25
Construction machines, traversing gears	1.5
Construction machines, suction pumps	1.5
Construction machines, concrete mixers	1.5
Printing machines	1.25
Woodworking - barking drums	1.5
Woodworking - planing machines	1.5
Woodworking - reciprocating saws	1.5
Grinding machines	1.5
Textile machines - winders	1.5
Textile machines - printing machines	1.5
Textile machines - tanning vats	1.5
Textile machines - shredders	1.5
Textile machines - looms	1.5
Packaging machines	1.5
Brick molding machines	1.75
Transport and logistics	
Passenger transport - elevators	1.5
Passenger transport - escalators	1.5
Conveyor systems - bucket elevators	1.5
Conveyor systems - hauling winches	1.5
Conveyor systems - belt conveyors	1.5
Conveyor systems - endless-chain conveyors	1.5
Conveyor systems - circular conveyors	1.5
Conveyor systems - screw conveyors	1.5
Conveyor systems - inclined hoists	1.5
Crane traversing gear	1.5
Hoisting gear	1.5
Crane lifting gear	2.0
Crane traveling gear	1.5
Crane slewing gear	1.5
Crane fly jib hoists	1.5
Cable railways	1.5
Drag lifts	1.5
Winches	1.5
Cellulose and paper	
Paper-making machines, all	1.5
Pulper drives	1.5
Cement industry	
Crushers	1.75
Rotary furnaces	1.5
Hammer mills	1.75
Ball mills	1.75
Pug mills	1.75
Mixers	1.5
Pipe mills	1.5
Beater mills	1.75
Separators	1.5
Roller presses	1.75

SELECTION OF THE COUPLING SIZE

The torque load of the coupling must be determined from the output of the driven machine and the coupling speed.

Rated coupling load $T_N = 9550 \times P_N / n_N$
(T_N in Nm; P_N in kW; n_N in rpm)

The rated coupling load obtained in this way must be multiplied by factors and compared with the rated coupling torque. An ideal but expensive method is to measure the torque characteristic on the coupling. For this, Flender offers special adapters fitted with torque measuring devices.

The rated coupling torque T_{KN} is the torque which can be transmitted by the coupling over an appropriate period of use if the load is applied to the coupling purely statically at room temperature.

Application factors are to express the deviation of the real coupling load from the "ideal" load condition.

Coupling load in continuous operation

The operating principles of the driving and driven machines are divided into categories and the application factor FB derived from these in accordance with DIN 3990-1.

Application factor for N-EUPEX, N-EUPEX-DS, RUPEX, N-BIPEX, ELPEX-B, N-ARPEX, ARPEX, ZAPEX and FLUDEX

Application factor FB				
	Torque characteristic of the driven machine			
Torque characteristic of the driving machine	uniform	uniform with moderate shock loads	non uniform	very rough
uniform	1.0	1.25	1.5	1.75
uniform with moderate shock loads	1.25	1.5	1.75	2.0
non uniform	1.5	1.75	2.0	2.5

Examples of torque characteristic of driving machines:

- uniform: Electric motors with soft starting, steam turbines
- uniform with moderate shock loads: Electric motors without soft starting, hydraulic motors, gas and water turbines
- non uniform: Internal-combustion engines

Examples of torque characteristic in driven machines:

- uniform: Generators, centrifugal pumps for light fluids
- uniform with moderate shock loads: Centrifugal pumps for viscous fluids, elevators, machine tool drives, centrifuges, extruders, blowers, crane drives
- non uniform: Excavators, kneaders, conveyor systems, presses, mills
- very rough: Crushers, excavators, shredders, iron/smelting machinery

Temperature factor FT											
			Temperature T_a on the coupling								
Coupling	Elastomer material	Low temperature °C	under -30 °C	-30 °C up to 50 °C	up to 60 °C	up to 70 °C	up to 80 °C	up to 90 °C	up to 100 °C	up to 110 °C	up to 120 °C
N-EUPEX	NBR	-30	–	1.0	1.0	1.0	1.0	–	–	–	–
N-EUPEX	NR	-50	1.1 [1]	1.0	–	–	–	–	–	–	–
N-EUPEX	HNBR	-10	–	1.0	1.0	1.0	1.0	1.25	1.25	–	–
N-EUPEX	TPU	-50	1.0	1.0	1.05	1.10	1.15	–	–	–	–
N-EUPEX DS	NBR	-30	–	1.0	1.0	1.0	1.0	–	–	–	–
RUPEX	NBR	-30	–	1.0	1.0	1.0	1.0	–	–	–	–
RUPEX	NR	-50	1.1	1.0	–	–	–	–	–	–	–
RUPEX	HNBR	-10	–	1.0	1.0	1.0	1.0	1.25	1.25	–	–
N-BIPEX	TPU	-50	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.3	1.5
ELPEX	NR	-40	1.1	1.0	1.25	1.40	1.60	–	–	–	–
ELPEX-B	NR	-50	1.1	1.0	–	–	–	–	–	–	–
ELPEX-B	CR	-15	–	1.0	1.0	1.0	–	–	–	–	–
ELPEX-S SN, NN, WN	NR	-40	1.1	1.0	1.25	1.40	1.60	–	–	–	–
ELPEX-S NX	VMQ	-40	1.1	1.0	1.0	1.0	1.0	1.1	1.25	1.4	1.6

NR = natural rubber, natural-synthetic rubber mixture
NBR = nitril-butadiene-rubber (Perbunan)
HNBR = hydrated acrylonitrile butadiene rubber
CR = chloroprene rubber (FRAS fire-resistant and anti-static)
VMQ = silicone
TPU = polyurethane

[1] The N-EUPEX coupling is not suitable for shock loads when used at low temperatures.

Coupling size $T_{KN} \geq T_N \cdot FB \cdot FT$

In the case of ARPEX and ZAPEX coupling types, no temperature factor (FT = 1.0) need be taken into account.

Coupling load at maximum and overload conditions

The maximum torque is the highest load acting on the coupling in normal operation.
Maximum torques at a frequency of up to 25 times an hour are permitted and must be lower than the maximum coupling torque. Examples of maximum torque conditions are: Starting operations, stopping operations or usual operating conditions with maximum load.

$T_{Kmax} \geq T_{Max} \cdot FT$

Overload torques are maximum loads which occur only in combination with special, infrequent operating conditions. Examples of overload torque conditions are: Motor short circuit, emergency stop or blocking because of component breakage. Overload torques at a frequency of once a month are permitted and must be lower than the maximum overload torque of the coupling. The overload condition may last only a short while, i.e. fractions of a second.

$T_{KOL} \geq T_{OL} \cdot FT$

Coupling load due to dynamic torque load

Applying the frequency factor FF, the dynamic torque load must be lower than the coupling fatigue torque.

Dynamic torque load

$T_{KW} \geq T_W \cdot FF$

Frequency of the dynamic torque load
$f_{err} \leq 10$ Hz frequency factor FF = 1.0

Frequency of the dynamic torque load
$f_{err} > 10$ Hz frequency factor $FF = \sqrt{(f_{err}/10\ Hz)}$

For the ZAPEX and ARPEX series, the frequency factor is always FF = 1.0.

SELECTION OF THE COUPLING SIZE

Checking the maximum speed

For all load situations $n_{Kmax} \geq n_{max}$

Checking permitted shaft misalignment

For all load situations, the actual shaft misalignment must be less than the permitted shaft misalignment.

Checking bore diameter, mounting geometry and coupling design

The check must be made on the basis of the dimension tables. The maximum bore diameter applies to parallel keyways to DIN 6885. For other keyway geometries, the maximum bore diameter can be reduced.

On request, couplings with adapted geometry can be provided.

Coupling behavior under overload conditions

The ZAPEX, N-ARPEX, ARPEX, N-EUPEX, RUPEX and N-BIPEX coupling series can withstand overloads until the breakage of metal parts. These coupling series are designated as fail-safe.
The N-EUPEX DS, ELPEX-B, ELPEX-S and ELPEX coupling series throw overload. The elastomer element of these couplings is irreparably damaged without damage to metal parts when subjected to excessive overload.

These coupling series are designated as non-fail-safe. These types that fail can be fitted with a so-called fail-safe device. This additional component enables emergency operation, even after the rubber element of the coupling has been irreparably damaged.

Checking shaft-hub connection

The torques specified in the tables of power ratings data of the coupling series do not necessarily apply to the shaft-hub connection. Depending on the shaft-hub connection, proof of form stability is required. Flender recommends obtaining proof of form strength by using calculation methods in accordance with the current state of the art.

Shaft-hub connection	Suggestion for calculation method
Keyway connection to DIN 6885-1	DIN 6892
Shrink fit	DIN 7190
Spline to DIN 5480	
Bolted flange connection	VDI 2230
Flange connection with close-fitting bolts	

Fitting recommendations for the shaft-hub connection are given in the **Appendix**.

The coupling hub is frequently fitted flush with the shaft end face. If the shaft projects, the risk of collision with other coupling parts must be checked. If the shaft is set back, in addition to the load-bearing capacity of the shaft-hub connection, the correct positioning of the hub must be ensured as well. If the bearing hub length is insufficient, restorative forces may cause tilting movements and so wear to and impairment of the axial retention. Also, the position of the set screw to be positioned on sufficient shaft or parallel key material must be noted.

Checking low temperature and chemically aggressive environment

The minimum permitted coupling temperature is specified in the Temperature factor FT table. In the case of chemically aggressive environments, please consult the manufacturer.

FEATURES OF THE STANDARD TYPE

Couplings	Features of the standard type
All coupling series except ARPEX clamping hubs and FLUDEX with keyway to ASME B17.1	Bore tolerance H7
N-ARPEX and ARPEX clamping hubs	Bore tolerance G6 (suitable for shaft tolerance h6)
FLUDEX couplings with keyway to ASME B17.1	Hollow shafts: bore tolerance K7
	other parts: bore tolerance M7
All coupling series with bore diameter - imperial	Parallel keyway to ASME B17.1
Bore diameter metric in the case of ZAPEX, N-ARPEX and ARPEX coupling series as well as coupling hubs with applied brake disks or brake drums of the N-EUPEX and RUPEX series	Parallel keyway to DIN 6885-1 keyway width P9
Bore diameter metric in the case of the N-EUPEX, RUPEX, N-BIPEX, ELPEX-S, ELPEX-B, ELPEX, FLUDEX coupling series	Parallel keyway to DIN 6885-1 keyway width JS9
All coupling series except FLUDEX	Axial locking by means of set screw
FLUDEX coupling series	Axial lock by means of set screw or end washer
All coupling series	Balancing in accordance with half parallel key standard
ZAPEX, N-ARPEX, ARPEX, N-EUPEX, RUPEX, N-BIPEX, ELPEX-S, ELPEX-B and ELPEX coupling series	Balancing quality G16
FLUDEX coupling series	Balancing quality G6.3
SIPEX and BIPEX-S coupling series	Balancing quality G6.3 for 3600 rpm
All series	Unpainted
All series	Preservation with cleaning emulsion
FLUDEX couplings	Fuse 140 °C

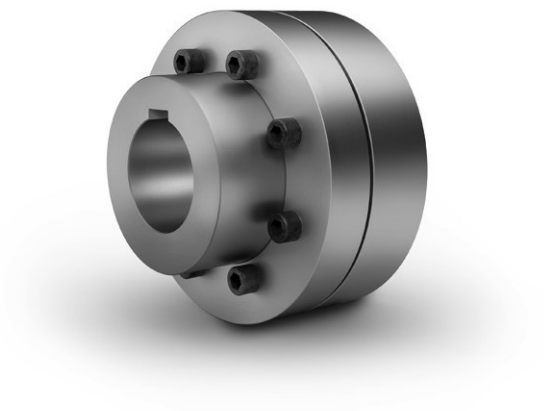
Configurator

The article number can be obtained with the help of the Configurator. The coupling can be selected in a product configurator and specified using selection menus.

The Configurator is available under **flender.com**.

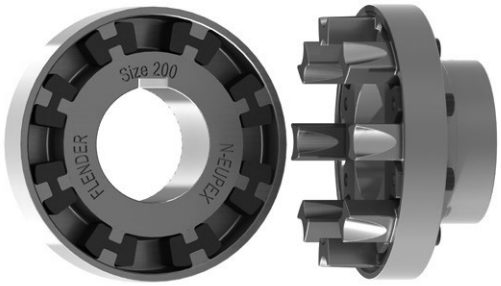
The coupling can be selected via "Technical selection" (technical selection) or via "Direct selection" (via article no.).

FLEXIBLE COUPLINGS – N-EUPEX, N-EUPEX DS SERIES



N-EUPEX
FLENDER

GENERAL



N-EUPEX as overload-holding, fail-safe series

N-EUPEX DS as overload-shedding, non-fail-safe series

N-EUPEX and N-EUPEX DS pin couplings connect machines. They compensate for shaft misalignment, generating only low restorative forces.
The torque is conducted through elastomer flexibles, so the coupling has typically flexible rubber properties.

N-EUPEX couplings are overload-holding. By contrast, the N-EUPEX DS series is designed so that overload or advanced wear causes irreparable damage to the elastomer flexibles. The metal parts of N-EUPEX DS couplings can then rotate freely against one another without contact.

Coupling suitable for use in potentially explosive atmospheres.
Complies with the current ATEX Directive for:

II 2G Ex h IIC T6 ... T4 Gb X

II 2D Ex h IIIC T85 °C ... 110 °C Db X

I M2 Ex h Mb X

Benefits

N-EUPEX couplings are designed on the modular principle and have a very simple construction. N-EUPEX types are made up of subassemblies to suit requirements. The couplings are assembled by simply fitting the coupling halves together. Wear is restricted to the elastomer flexibles, which must be replaced at the end of their service life.

Depending on type, the elastomer flexibles can be changed without moving the coupled machines.
The coupling parts are readily available from stock and are mostly finish-machined, i.e. with finished bore, keyway, set screw and balancing.

Application

The N-EUPEX coupling is available as a catalog standard in 23 sizes with a rated torque of between 28 Nm and 71000 Nm. The coupling is suitable for ambient temperatures of between -30 °C and +80 °C. By using alternative elastomer flexibles, the permissible ambient temperature range can be extended to between -50 °C and +100 °C. Frequently, the coupling is used to connect the motor to the gear unit input shaft. The coupling is suitable especially for drives with uniform to average dynamic loads.

Examples of applications are pump drives, ventilator drives or crane running gear. Furthermore, N-EUPEX couplings can be used as add-on couplings, particularly on FLUDEX fluid couplings or ARPEX AKR safety couplings. In the case of drives with a diesel engine, N-EUPEX couplings are suitable for driven machines with a low mass moment of inertia. In the case of diesel engine drives, the actual dynamic coupling load should be checked by measurement or torsional vibration calculations.

Design and configurations

N-EUPEX and N-EUPEX DS couplings consist of two coupling halves mounted on the machine shafts. The coupling parts are connected positively by means of elastomer flexibles. On the two-part variant, the elastomer flexibles can be changed only if one of the coupled machines is moved.

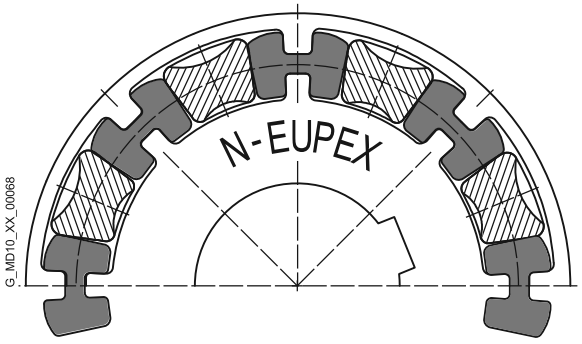
On the three-part variants, the bolted cam ring can be released and moved to enable the flexible to be changed without moving the coupled machines.

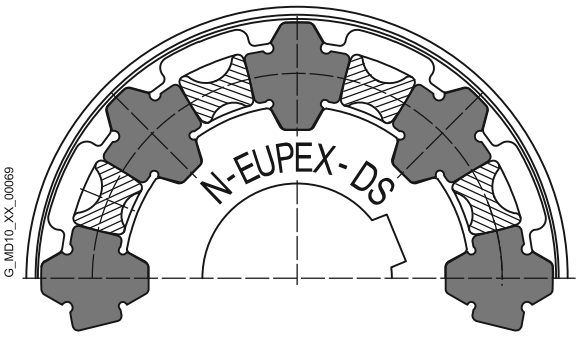
Elastomer flexible of the N-EUPEX series

The flexibles of the N-EUPEX coupling are subjected to compression. This results in progressive torsion spring characteristics. If the flexibles are irreparably damaged, the hub parts come into contact with metal. This causes the torque to continue to be transmitted in "emergency mode" for a short period of time.

Elastomer flexible of the N-EUPEX DS series

The flexibles of the N-EUPEX DS series are subjected to compression and bending forces. A linear torsion spring characteristic curve is characteristic in this regard. If the flexibles are irreparably damaged, the metal parts turn against one another without contact, and the power transmission is separated. Fitting new flexibles will make the coupling once more usable. The capacity of the N-EUPEX DS series to shed overloads is especially in demand for highly sensitive machines.





GENERAL

Materials

All coupling parts such as cam parts, pocket parts, spacers, hub parts and mounting parts are manufactured from high grade cast iron with lamellar or spheroidal graphite, or from steel. The sleeve pipes of the type DK spacers are made from aluminum.

Flexible materials

Material/description	Hardness	Marking	Ambient temperature
N-EUPEX series			
NBR standard type	**80 ShoreA**	**Flexible black with blue stripe**	**-30 °C ... +80 °C**
NBR electrically insulating	80 ShoreA	Flexible green	-30 °C ... +80 °C
NBR soft	65 ShoreA	Flexible black with green stripe	-30 °C ... +80 °C
HP (TPU) (size 80 to 280)	97 ShoreA	Flexible blue	-50 °C ... +80 °C
HP (NBR) (size 315 to 710)	90 ShoreA	Flexible black, fabric reinforced	-30 °C ... +80 °C
HP (NBR) (size 58 to 68)	90 ShoreA	Flexible black with magenta stripe	-30 °C ... +80 °C
NBR normal low-backlash	80 ShoreA	Flexible black with yellow stripe	-30 °C ... +80 °C
NBR soft low-backlash	65 ShoreA	Flexible black with white stripe	-30 °C ... +80 °C
NR for low temperature	80 ShoreA	Flexible black with orange stripe	-50 °C ... +50 °C
HNBR high temperature	80 ShoreA	Flexible black with red stripe	-10 °C ... +100 °C
Type N-EUPEX DK/DKS			
HP (TPU) (size 80 to 280)	97 ShoreA	Flexible blue	-50 °C ... +80 °C
HP (NBR) (size 68)	90 ShoreA	Flexible black with magenta stripe	-30 °C ... +80 °C
N-EUPEX DS series			
NBR hard	**90 ShoreA**	**Flexible black**	**-30 °C ... +80 °C**

The technical data do not include the flexible variants NBR low-backlash, HNBR high temperature and NR low temperature. Technical data, prices and article numbers can be found at **www.flender.com**

Standard types of N-EUPEX and N-EUPEX DS pin coupling

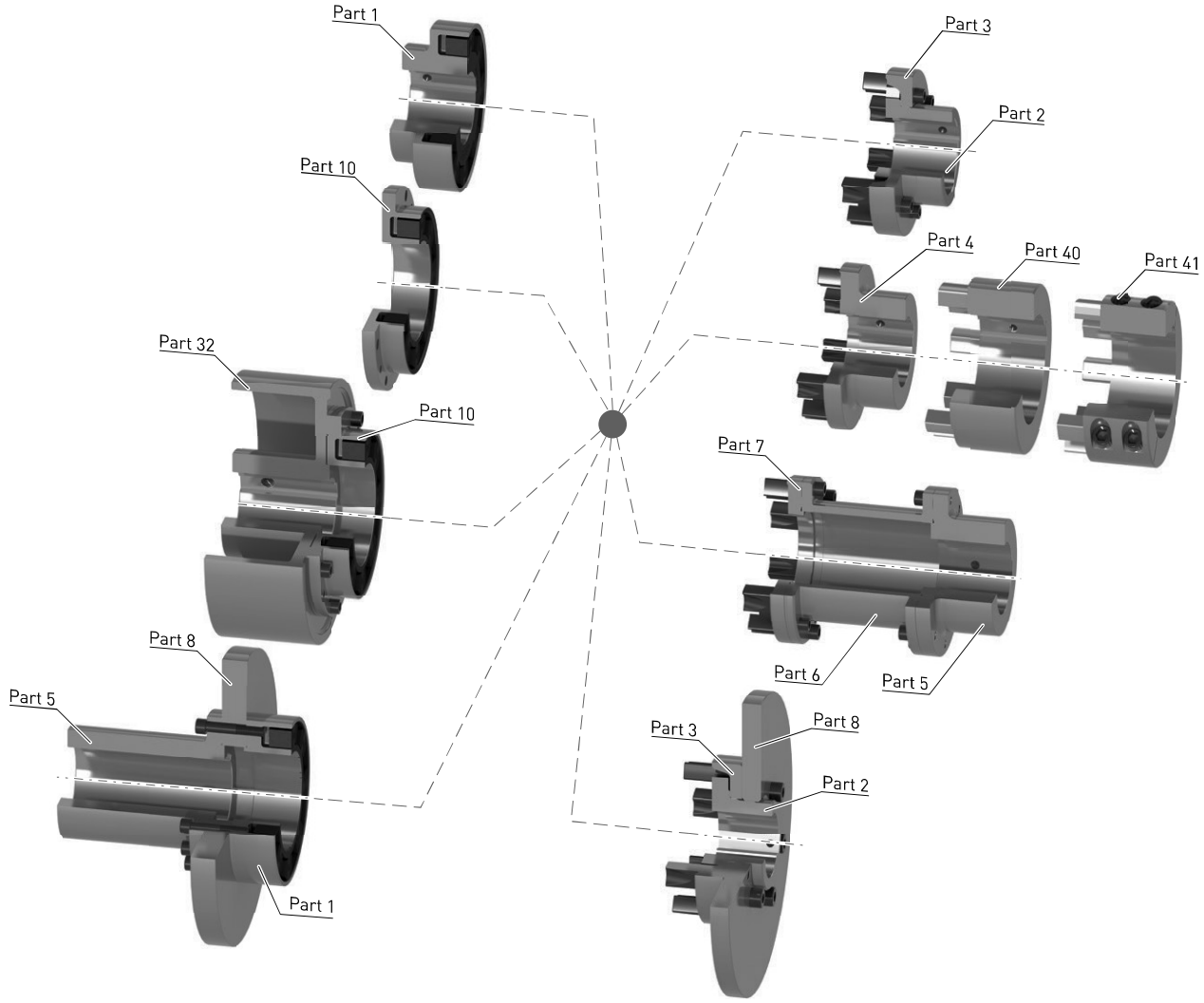
Type	Description
A	Fail-safe, 3-part
B	Fail-safe, 2-part
D	Fail-safe, 3-part, flange variant
E	Fail-safe, 2-part, flange variant
DK	Fail-safe, double-cardanic, with spacer
DKS	Fail-safe, double-cardanic, short length
H	Fail-safe, with adapter
P	Fail-safe, 3-part, with brake drum
O	Fail-safe, 2-part, with brake drum
DBDR	Fail-safe, 3-part, with brake disk, brake disk radially dismountable
ABD	Fail-safe, 3-part, with brake disk
ERN	Fail-safe, 2-part, with slip unit
ADS	Non-fail-safe, 3-part
BDS	Non-fail-safe, 2-part
HDS	Non-fail-safe, with adapter

Special types of N-EUPEX pin coupling on request

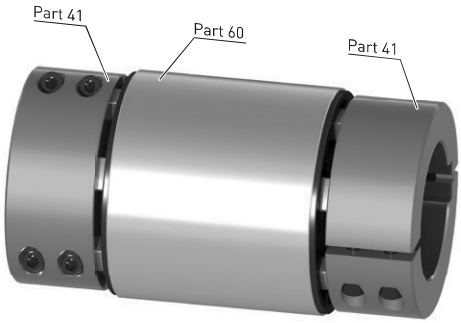
Type	Description
AT	Fail-safe, 3-part, with Taper clamping bush
BT	Fail-safe, 2-part, with Taper clamping bush
F	Fail-safe, 3-part, with intermediate shaft
G	Fail-safe, 2-part, with intermediate shaft
K	Fail-safe, 3-part, with brake drum to customer's requirement
L	Fail-safe, 2-part, with brake drum to customer's requirement
M	Fail-safe, 2-part, with flange dimensions to SAE J620d
DBD	Fail-safe, 3-part, with brake disk
EBD	Fail-safe, 2-part, with brake disk

Further application-related coupling types are available. Dimension sheets for and information on these are available on request.

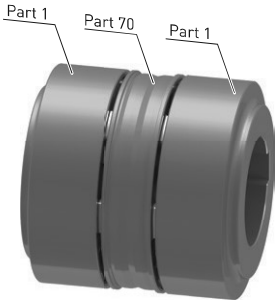
Modular principle of N-EUPEX types



N-EUPEX DK/DKS



Type DK

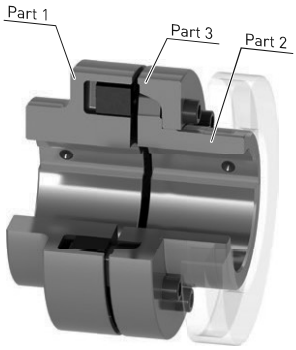


Type DKS

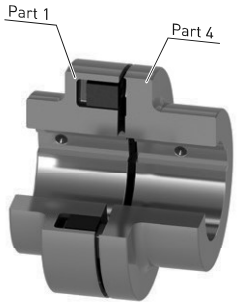
In the case of larger radial misalignment, double-cardanic N-EUPEX couplings can be supplied in addition to the modular system. The spacer (part 60 resp. 70) is centered with the help of the N-EUPEX elastomer elements. Any radial misalignment that emerges between the shaft ends will accordingly be equalized through a corresponding tilt angle in the elastomer joints with this two-joint versions. In the DK version, the separated hubs (part 41) made from steel facilitate simple installation. The DKS version is characterized by a reduced shaft distance.

GENERAL

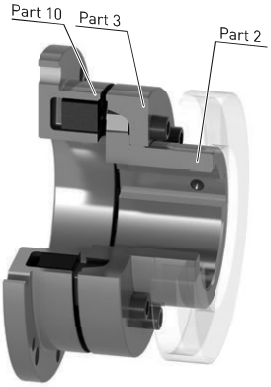
Types N-EUPEX



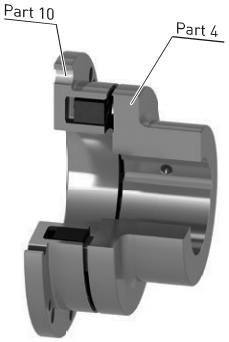
Types A and ADS



Types B and BDS

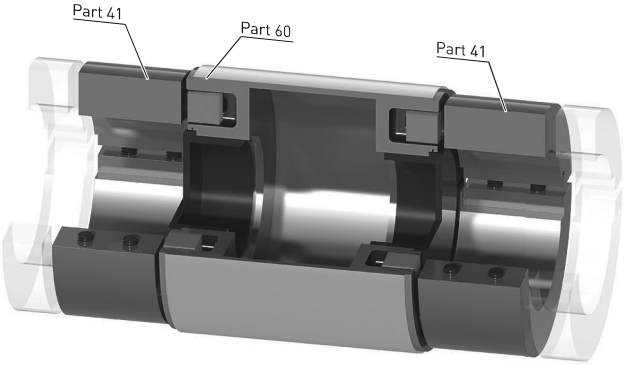


Type D

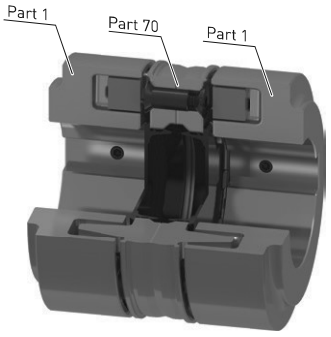


Type E

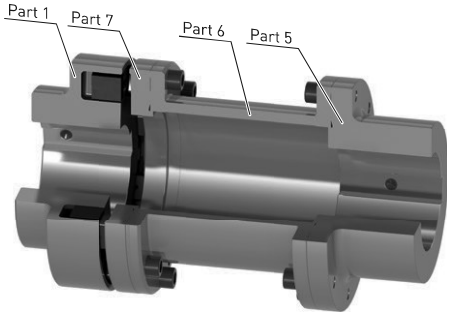
Types N-EUPEX with adapter



Type DK

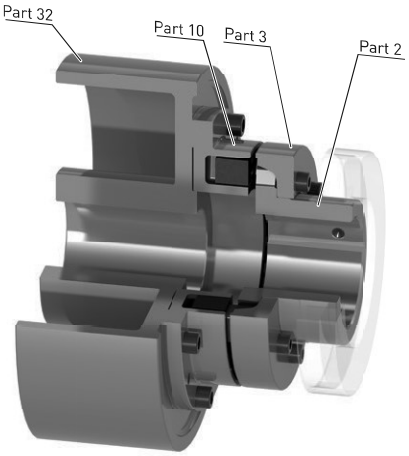


Type DKS

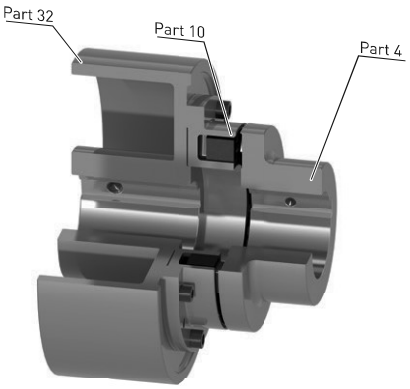


Types H and HDS

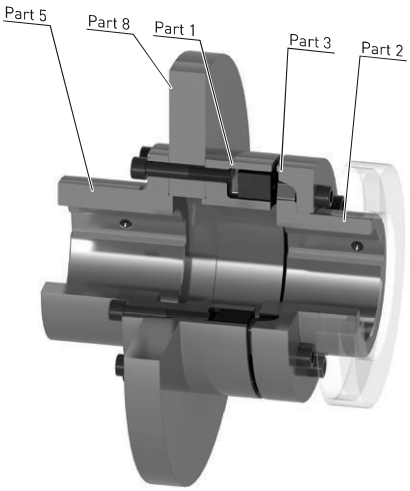
Type N-EUPEX with brake disk/brake drum



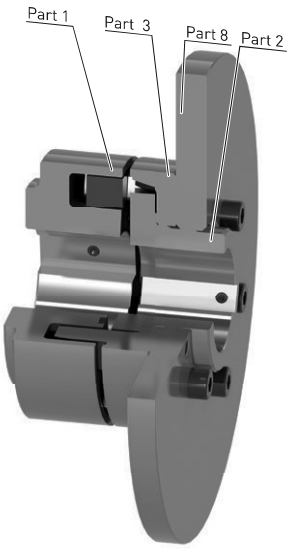
Type P



Type O

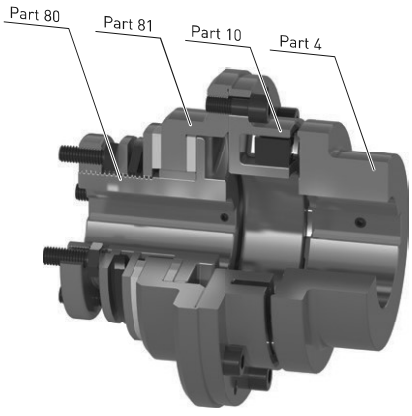


Type DBDR



Type ABD

Type N-EUPEX with torque control



Type ERN

Note

- Further application-specific coupling types are available. Dimension sheets for and information on these are available on request.

GENERAL

Technical specifications, N-EUPEX series

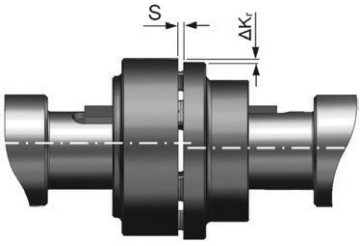
Power ratings of the N-EUPEX series (single-joint coupling)

Size	Rated torque for flexible type			Maximum torque		Torsional stiffness at 50 % capacity utilization for flexible type			Permitted shaft misalignment at speed [1] n = 1500 rpm	
	65 ShoreA T_{KN} Nm	80 ShoreA T_{KN} Nm	HP [2] T_{KN} Nm	65 ShoreA T_{Kmax} Nm	80 ShoreA / HP T_{Kmax} Nm	65 ShoreA $C_{Tdyn\ 50\ \%}$ kNm/rad	80 ShoreA $C_{Tdyn\ 50\ \%}$ kNm/rad	HP $C_{Tdyn\ 50\ \%}$ kNm/rad	Radial ΔK_r mm	Angle ΔK_w °
58	12	**28**	34	36	**85**	0.22	**0.75**	1,51	0.2	0.15
68	23	**48**	58	69	**145**	0.42	**1.26**	2,79	0.2	0.15
80	40	**85**	120	120	**300**	1.13	**3.21**	14,2	0.2	0.12
95	69	**140**	200	207	**500**	1.77	**5.32**	23,1	0.2	0.12
110	110	**225**	325	330	**812**	2.70	**8.15**	36,1	0.2	0.10
125	165	**345**	490	495	**1225**	4.0	**12.3**	53,6	0.25	0.10
140	250	**500**	700	750	**1750**	6.0	**18**	77,8	0.25	0.10
160	385	**840**	1200	1150	**3000**	12.2	**39.4**	162	0.3	0.10
180	600	**1250**	1750	1800	**4375**	20.6	**63.6**	270	0.3	0.10
200	935	**1950**	2650	2800	**6625**	34.2	**106.8**	426	0.3	0.09
225	1380	**2300**	3400	4150	**8500**	52	**131**	619	0.35	0.09
250	1930	**3900**	5500	5800	**13750**	73	**221**	927	0.35	0.08
280	2700	**5500**	7400	8100	**18500**	103	**313**	1261	0.4	0.08
315	3850	**7100**	9350	11550	**23375**	186	**472**	1130	0.4	0.08
350	5335	**10800**	13000	16000	**32500**	255	**708**	1450	0.5	0.08
400	7150	**14000**	18000	21450	**45000**	343	**997**	2250	0.5	0.08
440	9350	**19000**	25000	28050	**62500**	427	**1280**	3200	0.6	0.08
480	11550	**25100**	33000	34650	**82500**	550	**1781**	4100	0.6	0.07
520	14630	**32400**	42000	43890	**105000**	650	**2124**	4800	0.65	0.07
560	20130	**39000**	50600	60390	**126500**	1095	**3119**	7600	0.65	0.07
610	26400	**49000**	63800	79200	**159500**	1422	**3873**	9400	0.75	0.07
660	33990	**63000**	79000	101970	**197500**	1799	**4834**	11300	0.8	0.07
710	42900	**71000**	93500	128700	**233750**	2339	**5608**	13400	0.9	0.07

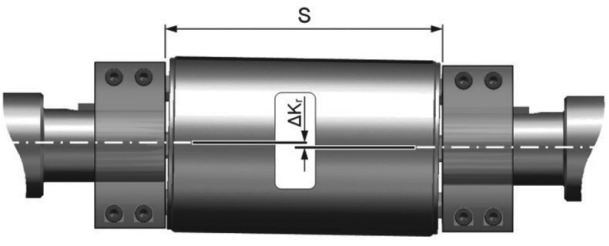
For coupling fatigue torque:
$T_{KW} = 0{,}15 \cdot T_{KN}$, where $T_N > T_W$ must be adhered to.

N-EUPEX shaft distance S and radial misalignment ΔK_r

N-EUPEX (single-joint coupling)
Radial misalignment ΔK_r and angular misalignment ΔK_w as well as changes in gap dimension are equalized in a elastomer joint. Values for ΔS can be found in the respective type selection tables.



N-EUPEX DK/DKS (two-joint coupling)
Radial misalignment ΔK_r and angular misalignment ΔK_w as well as changes in gap dimension are equalized in two elastomer joints. Values for ΔS can be found in the corresponding type selection tables.



[1] The maximum speed for the respective type must be noted. For additional information on the allowable shaft misalignment, please refer to the operating instructions.

[2] For sizes 80 to 280, in case of higher temperatures the temperature factor FT according to the table on **page E/19** in the Introduction has to be considered.

Performance data for type N-EUPEX DK (two-joint coupling)

Size	Rated torque	Maximum torque	Torsional stiffness at 50 % capacity utilization for flexible type	Permitted shaft misalignment [1] at n = 1500 rpm Radial						Angle [2]
				Type DK					Type DKS	
	HP T_{KN} Nm	HP T_{Kmax} Nm	HP $C_{Tdyn\ 50\ \%}$ kNm/rad	S=100 mm $\Delta K_{r\,100}$ mm	S=140 mm $\Delta K_{r\,140}$ mm	S=180 mm $\Delta K_{r\,180}$ mm	S=200 mm $\Delta K_{r\,200}$ mm	S=250 mm $\Delta K_{r\,250}$ mm	ΔK_r mm	ΔK_w °
68	48	120	1.18	**1.2**	–	–	–	–	–	0.15
80	85	212	5.6	**1.2**	1.7	–	–	–	0.5	0.12
95	140	350	9	**1.1**	1.6	–	–	–	0.5	0.12
110	225	562	14	**1.1**	1.5	2.1	–	–	0.6	0.10
125	345	862	21	1.0	**1.5**	2.0	2.3	–	0.6	0.10
140	500	1250	31	1.0	**1.4**	1.8	2.1	2.7	0.7	0.10
160	840	2100	63	–	**1.3**	1.8	2.1	2.7	0.7	0.10
180	1250	3125	107	–	1.3	**1.8**	2.0	2.6	0.7	0.10
200	1950	4875	170	–	1.2	**1.7**	2.0	2.6	0.8	0.09
225	2300	5750	240	–	–	**1.7**	1.9	2.6	0.9	0.09
250	3900	9750	370	–	–	–	–	–	1.1	0.08
280	5500	13750	525	–	–	–	–	–	1.1	0.08

For coupling fatigue torque:
$T_{KW} = 0{,}15 \cdot T_{KN}$, where $T_N > T_W$ must be adhered to.

Torsional stiffness and damping (single-joint or two-joint coupling)

The values stated in the above table apply to a capacity utilization of 50 %, an excitation amplitude of 10 % T_{KN} with frequency 10 Hz and an ambient temperature of 20 °C. The dynamic torsional stiffness is load-dependent and increases in proportion to capacity utilization. The following table shows the correction factors for different rated loads.

$C_{Tdyn} = C_{Tdyn\ 50\ \%} \cdot FKC$

	Load T_N / T_{KN}						
	20 %	40 %	50 %	60 %	70 %	80 %	100 %
Correction factor FKC							
65/80 ShoreA HP (size 58–68, 315–710)	0,50	0,82	1,00	1,20	1,40	1,63	2,10
HP (size 80 – 280)	0,55	0,85	1,00	1,14	1,29	1,42	1,69

The damping coefficient is Ψ = 1.4 for the 65/80 ShoreA packages and Ψ = 1.2 for the HP package

Furthermore, torsional stiffness and damping depend on the ambient temperature, on the frequency and on the amplitude of the torsional vibration excitation. More precise torsional stiffness and damping parameters on request.
Due to the manufacturing process and ageing of the elastomers, the tolerance for the dynamic stiffness is ±20 %.

Permitted shaft misalignment (single-joint or two-joint coupling)

The permitted shaft misalignment depends on the operating speed. As the speed increases, lower shaft misalignment values are permitted. The correction factors for different speeds are specified in the following table.
The maximum speed for the respective coupling size must be noted!

$\Delta K_{perm} = \Delta K_{1500} \cdot FKV$

	Speed in rpm			
	500	1000	1500	3000
Correction factor FKV	1.7	1.2	1.0	0.7

For fitting, the maximum gap dimension of S max. = S + ΔS and the minimum gap dimension of S min. = S – ΔS are permitted.

Shaft misalignments ΔK_r and ΔK_w may occur simultaneously.

[1] The maximum speed for the respective type must be noted. For additional information on the allowable shaft misalignment, please refer to the operating instructions.

[2] The angular misalignment ΔK_w refers to the maximum additional tilting of the shaft axes.

GENERAL

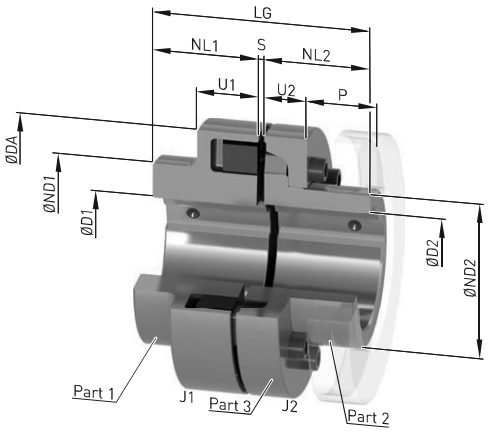
Assignment of N-EUPEX sizes to IEC standard motors (selected operating factor = 1.25) [1]

Three-phase motor Size	Output at ≈ 3000 rpm		Output at ≈ 1500 rpm		Output at ≈ 1000 rpm		Output at ≈ 750 rpm		DE (ASI) shaft end D x E acc. to IEC	
	P_M kW	N-EUPEX size	P_M kW	N-EUPEX size	P_M kW	N-EUPEX size	P_M kW	N-EUPEX size	D mm	E mm
56	0.09	58	0.06	58					9	20
56	0.12	58	0.09	58					9	20
63	0.18	58	0.12	58					11	23
63	0.25	58	0.18	58					11	23
71	0.37	58	0.25	58					14	30
71	0.55	58	0.37	58					14	30
80	0.75	58	0.55	58	0.37	58			19	40
80	1.1	58	0.75	58	0.55	58			19	40
90 S	1.5	58	1.1	58	0.75	58			24	50
90 L	2.2	58	1.5	58	1.1	58			24	50
100 L	3	68	2.2	68	1.5	68	0.75	68	28	60
100 L			3	68			1.1	68	28	60
112 M	4	68	4	68	2.2	68	1.5	68	28	60
132 S	5.5	80	5.5	80	3	80	2.2	80	38	80
132 S	7.5	80							38	80
132 M			7.5	80	4	80	3	80	38	80
132 M					5.5	80			38	80
160 M	11	80	11	95	7.5	95	4	80	42	110
160 M	15	80					5.5	95	42	110
160 L	18.5	80	15	95	11	95	7.5	95	42	110
180 M	22	95	18.5	110					48	110
180 L			22	110	15	110	11	110	48	110
200 L	30	110	30	125	18.5	110	15	125	55	110
200 L	37	110			22	125			55	110
225 S									55	110
225 S			37	125			18.5	125	60	140
225 M	45	110							55	110
225 M			45	140	30	140	22	140	60	140
250 M	55	125							60	140
250 M			55	140	37	140	30	140	65	140
280 S	75	140							65	140
280 S			75	180	45	180	37	180	75	140
280 M	90	140							65	140
280 M			90	180	55	180	45	180	75	140
315 S	110	140							65	140
315 S			110	180	75	180	55	180	80	170
315 M	132	160							65	140
315 M			132	180	90	180	75	180	80	170
315 L	160	160							65	140
315 L	200	160							65	140
315 L			160	200	110	200	90	200	80	170
315 L			200	200	132	200	110	200	80	170
315 L					160	200	132	225	85	170
315	250	180							65	140
315	315	200							65	140
315			250	225	200	250			85	170
355	355	200							75	140
355	400	200							75	140
355	500	225							75	140

[1] Outputs P_M of IEC motors and assigned N-EUPEX couplings (80 ShoreA)

TYPE A

for easy elastomer flexible replacement



Size	Rated torque flexible type 80 ShoreA	Speed	Dimensions in mm Bore with keyway to DIN 6885-1														Mass moment of inertia	↗ Article no. [1]	Weight
	T_{KN}	n_{Kmax}	D1		D2		DA	ND1 [2]	ND2	NL1/ NL2	S	ΔS	U1	U2	P	LG	J_1/J_2		m
	Nm	rpm	min.	max.	min.	max.						+/–					kgm²		kg
110	**225**	6300	–	**55**	–	**45**	110	86	60.5	40	3	1.0	34	20	33	83	0.002	**2LC0170-4AB**	2.7
125	**345**	6100	–	**60**	–	**55**	125	100	73.5	50	3	1.0	36	23	38	103	0.004	**2LC0170-5AB**	4.2
140	**500**	5800	–	**65**	–	**60**	140	100	80.5	55	3	1.0	34	28	43	113	0.007	**2LC0170-6AB**	5.6
160	**840**	5100	–	**70**	–	**70**	160	108	93.5	60	4	2.0	39	28	47	124	0.013	**2LC0170-7AB**	7.8
180	**1250**	4500	–	**80**	–	**80**	180	125	106	70	4	2.0	42	30	50	144	0.023	**2LC0170-8AB**	11
200	**1950**	4000	–	**85**	–	**90**	200	140	119	80	4	2.0	47	32	53	164	0.04	**2LC0171-0AB**	16
225	**2300**	3600	–	**90**	–	**100**	225	150	135	90	4	2.0	52	38	61	184	0.07	**2LC0171-1AB**	23
250	**3900**	3300	46	**100**	–	**115**	250	165	153	100	5.5	2.5	60	42	69	205.5	0.13	**2LC0171-2AB**	32
280	**5500**	3000	49	**110**	54	**125**	280	180	168	110	5.5	2.5	65	42	73	225.5	0.20	**2LC0171-3AB**	42
315	**7100**	2600	49	**120**	45	**145**	315	200	196	125	5.5	2.5	70	47	78	255.5	0.37	**2LC0171-4AB**	61
350	**10800**	2400	61	**140**	60	**165**	350	230	226	140	5.5	2.5	74	51	83	285.5	0.64	**2LC0171-5AB**	85
400	**14000**	2000	66	**150**	65	**180**	400	250	246	160	5.5	2.5	78	56	88	325.5	1.1	**2LC0171-6AB**	119
440	**19000**	1900	80	**160**	80	**190**	440	265	261	180	7.5	2.5	86	64	99	367.5	1.7	**2LC0171-7AB**	156
480	**25100**	1800	90	**180**	90	**215**	480	300	296	190	7.5	2.5	90	65	104	387.5	2.7	**2LC0171-8AB**	199
520	**32400**	1500	100	**190**	100	**225**	520	315	310	210	7.5	2.5	102	68	115	427.5	3.8	**2LC0172-0AB**	251
560	**39000**	1500	120	**200**	120	**230**	560	320	316	220	9	3.0	115	80	125	449	5.3	**2LC0172-1AB**	303
610	**49000**	1300	130	**220**	130	**250**	610	352	348	240	9	3.0	121	88	135	489	8.2	**2LC0172-2AB**	393
660	**63000**	1200	140	**240**	140	**275**	660	384	380	260	9	3.0	132	96	145	529	12.3	**2LC0172-3AB**	501
710	**71000**	1100	140	**260**	140	**300**	710	416	412	290	9	3.0	138	102	155	589	17.4	**2LC0172-4AB**	623

Configurable variants [1]

- ØD1 Without finished bore
  With finished bore
- ØD2 Without finished bore
  With finished bore

Notes

- Weights and mass moments of inertia apply to maximum bores.

Ordering example

- N-EUPEX A coupling, size 200
- Part 1: Bore D1 65H7 mm, keyway to DIN 6885-1 and set screw
- Part 2: Bore D2 50H7 mm, keyway to DIN 6885-1 and set screw

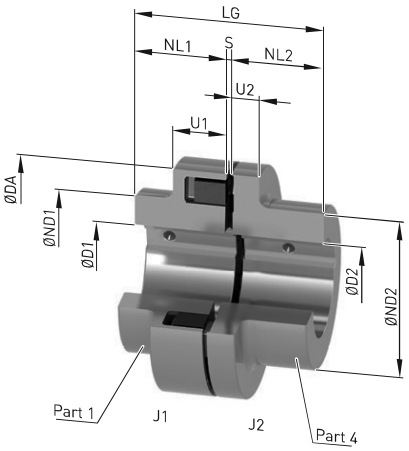
Article no.: 2LC0171-0AB99-0AA0 L1F+M1C

[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com**.

[2] The hub diameter HD1 can be smaller for small bores.

↗ For online configuration on **flender.com**, click on the item no.

TYPE B



7

Size	Rated torque flexible type 80 ShoreA	Speed	Dimensions in mm Bore with keyway to DIN 6885-1														Mass moment of inertia	↗ Article no. [1]	Weight
	T_{KN}	n_{Kmax}	D1		D2			DA	ND1	ND2	NL1/ NL2	S	ΔS	U1	U2	LG	J_1/J_2		m
							Part 40 [2]												
	Nm	rpm	min.	max.	min.	max.	max.						+/–				kgm²		kg
58	**28**	9000	–	**22**	–	**25**	32	58	58	40	20	3	1.0	20	8	43	0.0001	**2LC0170-0AA**	0.4
68	**48**	8400	–	**28**	–	**30**	40	68	68	50	20	3	1.0	20	8	43	0.0002	**2LC0170-1AA**	0.6
80	**85**	7200	–	**38**	–	**42**	48	80	80	68	30	3	1.0	30	10	63	0.0006	**2LC0170-2AA**	1.3
95	**140**	6600	–	**48**	–	**48**	60	95	76	76	35	3	1.0	30	12	73	0.0012	**2LC0170-3AA**	1.8
110	**225**	6300	–	**55**	–	**55**	70	110	86	86	40	3	1.0	34	14	83	0.0024	**2LC0170-4AA**	2.8
125	**345**	6100	–	**60**	–	**60**	82	125	100	100	50	3	1.0	36	18	103	0.005	**2LC0170-5AA**	4.7
140	**500**	5800	–	**65**	–	**65**	90	140	100	100	55	3	1.0	34	20	113	0.007	**2LC0170-6AA**	5.7
160	**840**	5100	–	**70**	–	**70**	105	160	108	108	60	4	2.0	39	20	124	0.01	**2LC0170-7AA**	7.8
180	**1250**	4500	–	**80**	–	**80**	120	180	125	125	70	4	2.0	42	20	144	0.02	**2LC0170-8AA**	12
200	**1950**	4000	–	**85**	–	**85**	130	200	140	140	80	4	2.0	47	24	164	0.04	**2LC0171-0AA**	17
225	**2300**	3600	–	**90**	–	**90**	150	225	150	150	90	4	2.0	52	18	184	0.06	**2LC0171-1AA**	23
250	**3900**	3300	46	**100**	46	**100**	170	250	165	165	100	5.5	2.5	60	18	205.5	0.11	**2LC0171-2AA**	30
280	**5500**	3000	49	**110**	54	**110**	190	280	180	180	110	5.5	2.5	65	20	225.5	0.18	**2LC0171-3AA**	41

Configurable variants [1]

- ØD1 Without finished bore
  With finished bore
- ØD2 Without finished bore
  With finished bore

Notes

- Weights and mass moments of inertia apply to maximum bores.

Ordering example

- N-EUPEX B coupling, size 95
- Part 1: Bore D1 42H7 mm, keyway to DIN 6885-1 and set screw
- Part 2: Bore D2 32H7 mm, keyway to DIN 6885-1 and set screw

Article no.: 2LC0170-3AA99-0AA0 L0X+M0T

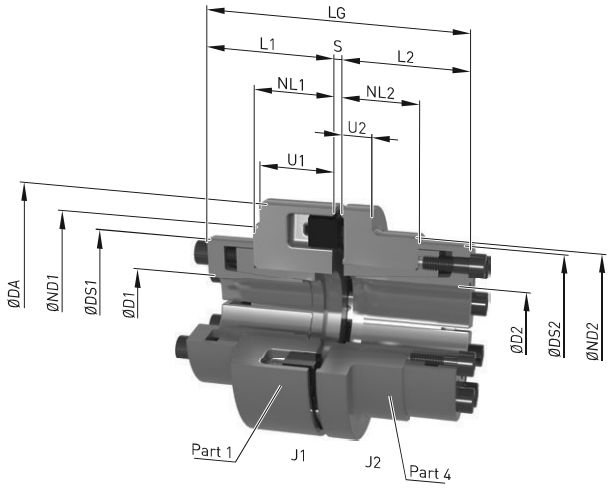
[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com**.

[2] Version with part 40 (jumbo hub) available on request.

↗ For online configuration on **flender.com**, click on the item no.

TYPE B

with clamping elements



Size	Rated torque [2] flexible type 80 ShoreA	Speed	Dimensions in mm														Mass moment of inertia		↗ Article no. [1]	Weight
	T_{KN} Nm	n_{Kmax} rpm	D1 max.	D2 max.	DA	ND1	ND2	NL1	NL2	S	ΔS +/–	DS1	DS2	L1	L2	LG	J_1 kgm²	J_2 kgm²		m kg
80	**85**	7200	**25**	**30**	80	80	68	30	26	3	1.0	56	62	50	46	99	0.0007	0.0011	**2LC0170-2BF**	2.0
95	**140**	6600	**30**	**38**	95	95	76	30	31	3	1.0	62	72	50	51	104	0.0013	0.0012	**2LC0170-3BF**	2.7
110	**225**	6300	**38**	**40**	110	88	86	35	31	3	1.0	72	75	55	51	109	0.0027	0.0035	**2LC0170-4BF**	3.8
125	**345**	6100	**40**	**48**	125	125	100	35	46	3	1.0	75	87	55	71	129	0.0046	0.0062	**2LC0170-5BF**	5.9
140	**500**	5800	**40**	**48**	140	101	100	39	46	3	1.0	75	87	59	71	133	0.0067	0.0089	**2LC0170-6BF**	7.1
160	**840**	5100	**55**	**55**	160	108	108	52	52	4	2.0	98	98	77	77	158	0.013	0.014	**2LC0170-7BF**	10
180	**1250**	4500	**65**	**65**	180	125	125	52	52	4	2.0	111	111	77	77	158	0.021	0.024	**2LC0170-8BF**	13
200	**1950**	4000	**70**	**75**	200	140	140	62	62	4	2.0	119	126	93	93	190	0.039	0.047	**2LC0171-0BF**	19
225	**2300**	3600	**75**	**75**	225	150	150	63	63	4	2.0	126	126	94	94	192	0.064	0.063	**2LC0171-1BF**	24
250	**3900**	3300	**85**	**85**	250	165	165	70	70	5.5	2.5	137	137	101	101	207.5	0.11	0.10	**2LC0171-2BF**	32
280	**5500**	3000	**85**	**85**	280	180	180	77	77	5.5	2.5	137	137	108	108	221.5	0.18	0.16	**2LC0171-3BF**	43

Configurable variants [1]

- ØD1 with clamping element
- ØD2 with clamping element

Notes

- For dimensions U1 and U2, see type B on **page 7/12**.
- Weights and mass moments of inertia apply to maximum bores.
- Recommended shaft tolerances h8 to m6

Ordering example

- N-EUPEX B coupling with clamping element, size 95
- Part 1: Bore D1 30 mm
  recommended shaft tolerances h8 to m6
- Part 4: Bore D2 38 mm
  recommended shaft tolerances h8 to m6

Article no.: 2LC0170-3BF99-0AA0 L0S+M0V

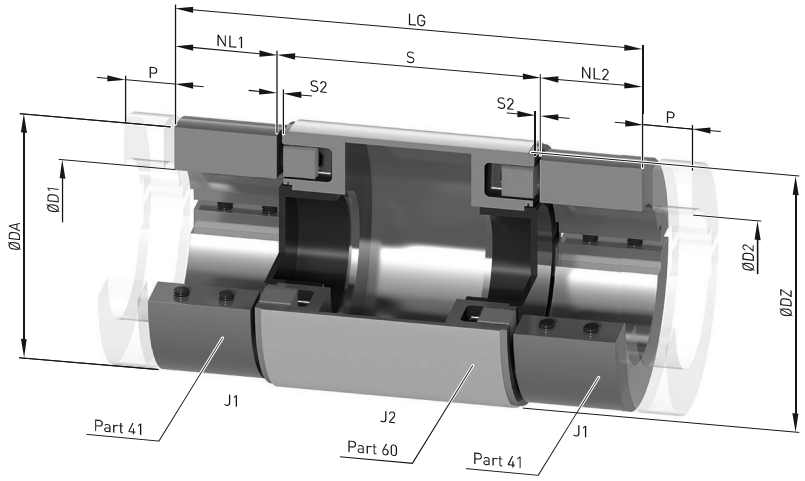
[1] To identify complete item numbers specifying the available size of the clamping element and – if necessary – further order options, please use our configurators on **flender.com**.

[2] If clamping elements are used, their maximum permissible torques must be observed. The relevant information can be consulted through our configurators on **flender.com**.

↗ For online configuration on **flender.com**, click on the item no.

TYPE DK

for large misalignment with simple installation and removal



Size	Rated torque flexible type HP	Speed	Dimensions in mm											Mass moment of inertia		↗ Article no. [1]	Weight
			Bore with keyway to DIN 6885-1														
	T_{KN}	n_{Kmax}	D1/D2		DA	DZ	NL1/ NL2	Shaft distances S [2]		ΔS	S2	P	LG	J_1	J_2		m
								Preferred dimension	Available standard dimensions								
	Nm	rpm	min.	max.						+/–				kgm²	kgm²		kg
68	**48**	5500	20	**40**	68	70	30	**100**		1	2	15	160	0.0004	0.0003	**2LC0170-1BA**	1.66
80	**85**	5300	25	**48**	80	86	34	**100**	140	1	2	16	168	0.001	0.001	**2LC0170-2BA**	2.64
95	**140**	5100	25	**60**	95	100	40	**100**	140	1	2	18	180	0.002	0.002	**2LC0170-3BA**	4.0
110	**225**	4800	30	**70**	110	120	45	**100**	140, 180	1	2	21	190	0.004	0.005	**2LC0170-4BA**	6.0
125	**345**	4600	30	**82**	125	130	50	**140**	100, 180, 200	1	2.5	24	240	0.008	0.007	**2LC0170-5BA**	8.2
140	**500**	4400	40	**90**	140	150	54	**140**	100, 180, 200, 250	1	2.5	26	248	0.013	0.014	**2LC0170-6BA**	11.8
160	**840**	4000	40	**105**	160	170	70	**140**	180, 200, 250	1.5	3	30	280	0.030	0.024	**2LC0170-7BA**	18.3
180	**1250**	3700	40	**120**	180	190	75	**180**	140, 200, 250	1.5	3	32	330	0.051	0.043	**2LC0170-8BA**	24.8
200	**1950**	3400	45	**130**	200	210	80	**180**	140, 200, 250	1.5	3.5	35	340	0.085	0.069	**2LC0171-0BA**	33.7
225	**2300**	3000	45	**150**	225	240	90	**180**	200, 250	1.5	3.5	39	360	0.152	0.123	**2LC0171-1BA**	46.9

Configurable variants [1]

- ØD1 With finished bore
- ØD2 With finished bore

Notes

- The total length, weight and mass moments of inertia apply to maximal bores and shaft distances according to the preferred dimension.
- Recommended share tolerances j6 to p6
- A combination of part 60 with other cam parts as part 41 is not permitted.

Ordering example

- N-EUPEX DK coupling, size 95, S = 100 mm
- Part 41-1: Bore D1 42 mm, with keyway as per DIN 6885-1, recommended shaft tolerances j6 to p6
- Part 41-2: Bore D1 32 mm, with keyway as per DIN 6885-1, recommended shaft tolerances j6 to p6

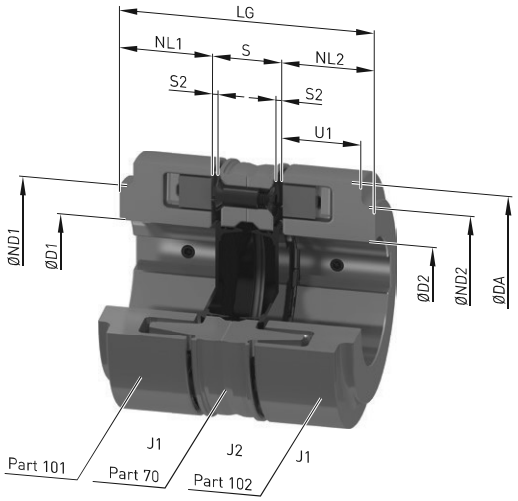
Article no.: 2LC0170-3BA99-0AA0 L0X+M0T

[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com**.

[2] Special lengths on request.

↗ For online configuration on **flender.com**, click on the item no.

TYPE DKS



Size	Rated torque flexible type HP	Speed	Dimensions in mm										Mass moment of inertia		↗ Article no. [1]	Weight
			Bore with keyway to DIN 6885-1													
	T_{KN}	n_{Kmax}	D1/D2		DA	ND1/ ND2	NL1/ NL2	S	ΔS	S2	U1	LG	J_1	J_2		m
	Nm	rpm	min.	max.					+/–				kgm²	kgm²		kg
80	**85**	5300	–	**38**	80	80	30	26	1.0	2	30	86	0.0006	0.0007	**2LC0170-2BD**	1.8
95	**140**	5100	–	**48**	95	76	35	26	1.0	2	30	96	0.0012	0.0013	**2LC0170-3BD**	2.6
110	**225**	4800	–	**55**	110	86	40	28	1.0	2	34	108	0.0024	0.0025	**2LC0170-4BD**	4.0
125	**345**	4600	–	**60**	125	100	50	29	1.0	2.5	36	129	0.005	0.004	**2LC0170-5BD**	5.9
140	**500**	4400	–	**65**	140	100	55	35	1.0	2.5	34	145	0.006	0.008	**2LC0170-6BD**	7.6
160	**840**	4000	–	**70**	160	108	60	36	1.5	3	39	156	0.012	0.014	**2LC0170-7BD**	11
180	**1250**	3700	–	**80**	180	125	70	36	1.5	3	42	176	0.021	0.023	**2LC0170-8BD**	15
200	**1950**	3400	–	**85**	200	140	80	41	1.5	3.5	47	201	0.038	0.040	**2LC0171-0BD**	22
225	**2300**	3000	–	**90**	225	150	90	41	1.5	3.5	52	221	0.065	0.070	**2LC0171-1BD**	31
250	**3900**	2600	46	**100**	250	165	100	54	2.0	4	60	254	0.11	0.14	**2LC0171-2BD**	44
280	**5500**	2400	49	**110**	280	180	110	54	2.0	4	65	274	0.19	0.21	**2LC0171-3BD**	58

Configurable variants [1]

- ØD1 Without finished bore
  With finished bore
- ØD2 Without finished bore
  With finished bore

Notes

- The total length, weight and mass moments of inertia apply to maximal bores and shaft distances according to the preferred dimension.

Ordering example

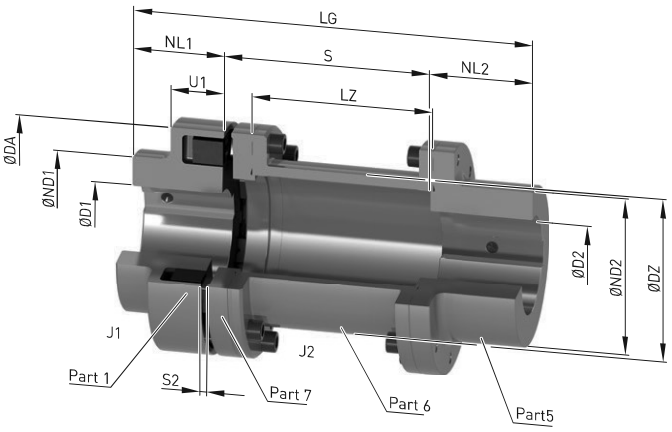
- N-EUPEX DKS coupling, size 95
- Part 1-01: Bore D1 42H7 mm , with keyway as per DIN 6885-1 and set screw
- Part 1-02: Bore D2 32H7 mm, with keyway as per DIN 6885-1 and set screw

Article no.: 2LC0170-3BD99-0AA0 L0X+M0T

[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com**.

↗ For online configuration on **flender.com**, click on the item no.

TYPE H



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Size	Rated torque flexible type 80 ShoreA	Speed	Dimensions in mm Bore with keyway to DIN 6885-1														Mass moment of inertia		↗ Article no. [1]	Weight
	T_{KN}	n_{Kmax}	D1		D2		DA	ND1 [2]	ND2	NL1	NL2	S	S2	LZ	DZ	LG	J_1	J_2		m
	Nm	rpm	min.	max.	min.	max.											kgm²	kgm²		kg
80	**85**	7200	–	**38**	–	**38** [3]	80	80	55	30	45	100	5	87	51	175	0.0006	0.001	**2LC0170-2AG**	2.4
												140		127		215		0.001	**2LC0170-2AG**	2.5
95	**140**	6600	–	**48**	–	**48** [3]	95	76	70	35	45	100	5	87	63	180	0.0009	0.003	**2LC0170-3AG**	3.3
												140		127		220		0.003	**2LC0170-3AG**	3.6
110	**225**	6300	–	**55**	–	**55** [3]	110	86	80	40	50	100	5	85	73	190	0.003	0.005	**2LC0170-4AG**	4.8
											50	140		125		230		0.006	**2LC0170-4AG**	5.0
											60	180		165		280		0.006	**2LC0170-4AG**	5.6
125	**345**	6100	–	**60**	–	**60** [3]	125	100	90	50	50	100	5	85	85	200	0.005	0.01	**2LC0170-5AG**	6.9
											50	140		125		240		0.01	**2LC0170-5AG**	7.4
											60	180		165		290		0.011	**2LC0170-5AG**	7.8
											70	200		185		320		0.012	**2LC0170-5AG**	8.1
											80	250		235		380		0.012	**2LC0170-5AG**	8.6
140	**500**	5800	–	**65**	–	**65** [3]	140	100	100	55	65	100	5	82	91	220	0.007	0.018	**2LC0170-6AG**	9.6
											65	140		122		260		0.019	**2LC0170-6AG**	10.1
											65	180		162		300		0.02	**2LC0170-6AG**	10.6
											65	200		182		320		0.021	**2LC0170-6AG**	10.9
											80	250		232		385		0.022	**2LC0170-6AG**	11.5

Configurable variants [1]

- ØD1 Without finished bore
  With finished bore
- ØD2 Without finished bore
  With finished bore

[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com**.

[2] The hub diameter HD1 can be smaller for small bores.

[3] For bore diameters greater than the following values, the feather key must be at least 3 mm behind the shaft end. Size 80 D2 > 32 mm; size 95 D2 > 42 mm; size 110 D2 > 50 mm; size 125 D2 > 59 mm; size 140 D2 > 64 mm.

↗ For online configuration on **flender.com**, click on the item no.

Size	Rated torque flexible type 80 ShoreA	Speed	Dimensions in mm Bore with keyway to DIN 6885-1															Mass moment of inertia		↗ Article no. [1]	Weight
	T_{KN}	n_{Kmax}	D1		D2		DA	ND1 [2]	ND2	NL1	NL2	S	S2	LZ	DZ	LG		J_1	J_2		m
	Nm	rpm	min.	max.	min.	max.												kgm²	kgm²		kg
											70	100		81.5		230		0.03		2LC0170-7AG	12.5
											70	140		121.5		270		0.032		2LC0170-7AG	13
160	**840**	5100	–	**70**	–	**70**	160	108	108	60	70	180	6	161.5	111	310	0.013	0.034		2LC0170-7AG	14
											70	200		181.5		330		0.035		2LC0170-7AG	14
											80	250		231.5		390		0.037		2LC0170-7AG	15
												140		121.5		290		0.053		2LC0170-8AG	18
180	**1250**	4500	–	**80**	–	**80**	180	125	125	70	80	180	6	161.5	131	330	0.023	0.057		2LC0170-8AG	19
												200		181.5		350		0.059		2LC0170-8AG	20
												250		231.5		400		0.064		2LC0170-8AG	21
												140		118.5		310		0.094		2LC0171-0AG	25
200	**1950**	4000	–	**85**	–	**90**	200	140	140	80	90	180	6	158.5	144	350	0.04	0.099		2LC0171-0AG	26
												200		178.5		370		0.104		2LC0171-0AG	27
												250		228.5		420		0.109		2LC0171-0AG	28
												140		118.5		330		0.157		2LC0171-1AG	33
225	**2300**	3600	–	**90**	–	**100**	225	150	150	90	100	180	6	158.5	169	370	0.07	0.16		2LC0171-1AG	34
												200		178.5		390		0.17		2LC0171-1AG	35
												250		228.5		440		0.18		2LC0171-1AG	37
												180		152.5		390		0.27		2LC0171-2AG	48
250	**3900**	3300	46	**100**	46	**110**	250	165	165	100	110	200	8	172.5	185	410	0.12	0.28		2LC0171-2AG	50
												250		222.5		460		0.3		2LC0171-2AG	52
280	**5500**	3000	49	**110**	51	**130**	280	180	180	110	120	250	8	222.5	215	480	0.20	0.51		2LC0171-3AG	67
315	**7100**	2600	49	**120**	51	**140**	315	200	200	125	140	250	8	222.5	246	515	0.35	0.85		2LC0171-4AG	96
350	**10800**	2400	61	**140**	51	**160**	350	230	230	140	150	250	8	220.5	272	540	0.61	1.4		2LC0171-5AG	120
400	**14000**	2000	66	**150**	51	**180**	400	250	250	160	180	250	8	185.5	311	590	1.1	2.8		2LC0171-6AG	190
440	**19000**	1900	80	**160**	51	**190**	440	265	265	180	180	250	10	182	354	610	1.7	4.0		2LC0171-7AG	219

Configurable variants [1]

- ØD1 Without finished bore
  With finished bore
- ØD2 Without finished bore
  With finished bore

Notes

- For dimension U1, see type A on **page 7/11**.
- During assembly, the gap dimension S2 must not exceed the permissible tolerance of +1 mm.
- Weights and mass moments of inertia apply to maximum bores.

Ordering example

- N-EUPEX H coupling, size 160, S = 200 mm
- Part 1: Bore D1 60H7 mm, keyway to DIN 6885-1 and set screw
- Part 2: Bore D2 55H7 mm, keyway to DIN 6885-1 and set screw

Article no.: 2LC0170-7AG99-0AD0 L1E+M1D

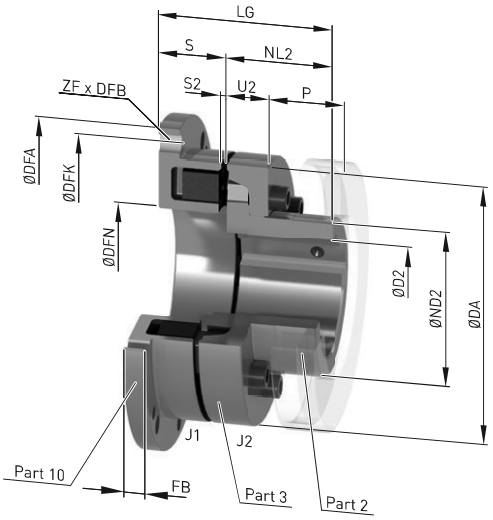
[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com.**

[2] The hub diameter HD1 can be smaller for small bores

↗ For online configuration on **flender.com**, click on the item no.

TYPE D

for easy elastomer flexible replacement



Size	Rated torque flexible type 80 ShoreA	Speed	Dimensions in mm									Flange connection dimensions						Mass moment of inertia		↗ Article no. [1]	Weight
			Bore with keyway to DIN 6885-1																		
	T_{KN}	n_{Kmax}	D2		DA	ND2	NL2	S	ΔS	S2	LG	DFA	DFN	DFK	FB	ZF	DFB	J_1	J_2		m
	Nm	rpm	min.	max.					+/–			h8	H7					kgm²	kgm²		kg
110	**225**	6300	–	**45**	110	60.5	40	30	1.0	3	70	144	62	128	10	6	9 / M8	0.0033	0.002	**2LC0170-4AD1** **2LC0170-4AD2**	2.6
125	**345**	6000	–	**55**	125	73.5	50	34	1.0	3	84	158	75	142	10	6	9 / M8	0.005	0.004	**2LC0170-5AD1** **2LC0170-5AD2**	3.5
140	**500**	5300	–	**60**	140	80.5	55	37	1.0	3	92	180	82	160	13	6	11 / M10	0.010	0.007	**2LC0170-6AD1** **2LC0170-6AD2**	5.4
160	**840**	4800	–	**70**	160	93.5	60	43	2.0	4	103	200	95	180	13	7	11 / M10	0.016	0.013	**2LC0170-7AD1** **2LC0170-7AD2**	7.1
180	**1250**	4300	–	**80**	180	106	70	46	2.0	4	116	220	110	200	13	8	11 / M10	0.025	0.023	**2LC0170-8AD1** **2LC0170-8AD2**	9.5
200	**1950**	3900	–	**90**	200	119	80	51	2.0	4	131	248	120	224	16	8	14 / M12	0.049	0.04	**2LC0171-0AD1** **2LC0171-0AD2**	14
225	**2300**	3600	–	**100**	225	135	90	56	2.0	4	146	274	135	250	16	8	14 / M12	0.076	0.07	**2LC0171-1AD1** **2LC0171-1AD2**	19
250	**3900**	3000	–	**115**	250	153	100	65.5	2.5	5.5	165.5	314	150	282	20	8	18 / M16	0.15	0.13	**2LC0171-2AD1** **2LC0171-2AD2**	28
280	**5500**	3000	54	**125**	280	168	110	70.5	2.5	5.5	180.5	344	170	312	20	8	18 / M16	0.23	0.2	**2LC0171-3AD1** **2LC0171-3AD2**	35

Configurable variants [1]

- ØD2 Without finished bore
  With finished bore

[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com**.

↗ For online configuration on **flender.com**, click on the item no.

Size	Rated torque flexible type 80 ShoreA	Speed	Dimensions in mm																Mass moment of inertia		↗ Article no. [1]	Weight
			Bore with keyway to DIN 6885-1									Flange connection dimensions										
	T_{KN}	n_{Kmax}	D2		DA	ND2	NL2	S	ΔS	S2	LG	DFA	DFN	DFK	FB	ZF	DFB		J_1	J_2		m
	Nm	rpm	min.	max.					+/–			h8	H7						kgm²	kgm²		kg
315	**7100**	2500	45	**145**	315	196	125	75.5	2.5	5.5	200.5	380	200	348	22	9	18 M16		0.4	0.37	**2LC0171-4AD1** **2LC0171-4AD2**	48
350	**10800**	2200	60	**165**	350	226	140	79.5	2.5	5.5	219.5	430	225	390	25	9	22 M20		0.7	0.64	**2LC0171-5AD1** **2LC0171-5AD2**	68
400	**14000**	2000	65	**180**	400	246	160	83.5	2.5	5.5	243.5	480	265	440	25	10	22 M20		1.1	1.1	**2LC0171-6AD1** **2LC0171-6AD2**	89
440	**19000**	1800	80	**190**	440	261	180	93.5	2.5	7.5	273.5	520	295	480	25	10	22 M20		1.6	1.7	**2LC0171-7AD1** **2LC0171-7AD2**	117
480	**25100**	1800	90	**215**	480	296	190	97.5	2.5	7.5	287.5	575	325	528	30	10	26 M24		2.6	2.7	**2LC0171-8AD1** **2LC0171-8AD2**	149
520	**32400**	1500	100	**225**	520	310	210	109.5	2.5	7.5	319.5	615	355	568	30	10	26 M24		3.6	3.8	**2LC0172-0AD1** **2LC0172-0AD2**	182

Configurable variants [1]

- ØD2 Without finished bore
  With finished bore

Notes

- For dimensions U2 and P, see type A on **page 7/11**.
- Weights and mass moments of inertia apply to maximum bores.

Ordering example

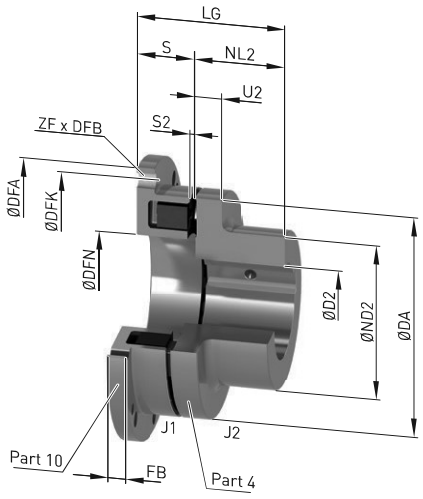
- N-EUPEX D coupling, size 125
- Part 10: with through bores
- Part 2: Bore D2 38H7 mm, with keyway to DIN 6885-1 and set screw

Article no.: 2LC0170-5AD19-0AA0 M0V

[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com**.

↗ For online configuration on **flender.com**, click on the item no.

TYPE E



Size	Rated torque flexible type 80 ShoreA	Speed	Dimensions in mm																Mass moment of inertia		↗ Article no. [1]	Weight
			Bore with keyway to DIN 6885-1									Flange connection dimensions										
	T_{KN}	n_{Kmax}	D2		DA	ND2	NL2	S	ΔS	S2	LG	DFA	DFN	DFK	FB	ZF	DFB		J_1	J_2		m
	Nm	rpm	min.	max.					+/–			h8	H7						kgm²	kgm²		kg
68	**48**	8400	–	**30**	68	50	20	23	1.0	3	43	90	34	80	7	6	5.5 / M5		0.0004	0.0002	**2LC0170-1AC1** **2LC0170-1AC2**	0.7
80	**85**	7200	–	**42**	80	68	30	24	1.0	3	54	106	42	94	8	6	6.6 / M6		0.0008	0.0006	**2LC0170-2AC1** **2LC0170-2AC2**	1.2
95	**140**	6600	–	**48**	95	76	35	27	1.0	3	62	120	52	108	8	6	6.6 / M6		0.0013	0.0012	**2LC0170-3AC1** **2LC0170-3AC2**	1.7
110	**225**	6300	–	**55**	110	86	40	30	1.0	3	70	144	62	128	10	6	9 / M8		0.0033	0.0024	**2LC0170-4AC1** **2LC0170-4AC2**	2.6
125	**345**	6000	–	**60**	125	100	50	34	1.0	3	84	158	75	142	10	6	9 / M8		0.005	0.005	**2LC0170-5AC1** **2LC0170-5AC2**	4.0
140	**500**	5300	–	**65**	140	100	55	37	1.0	3	92	180	82	160	13	6	11 / M10		0.010	0.007	**2LC0170-6AC1** **2LC0170-6AC2**	5.5
160	**840**	4800	–	**70**	160	108	60	43	2.0	4	103	200	95	180	13	7	11 / M10		0.016	0.01	**2LC0170-7AC1** **2LC0170-7AC2**	7.1

Configurable variants [1]

- ØD2 Without finished bore
  With finished bore

[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com**.

↗ For online configuration on **flender.com**, click on the item no.

Size	Rated torque flexible type 80 ShoreA	Speed	Dimensions in mm																Mass moment of inertia		↗ Article no. [1]	Weight
			Bore with keyway to DIN 6885-1									Flange connection dimensions										
	T_{KN}	n_{Kmax}	D2		DA	ND2	NL2	S	ΔS	S2	LG	DFA	DFN	DFK	FB	ZF	DFB		J_1	J_2		m
	Nm	rpm	min.	max.					+/–			h8	H7						kgm²	kgm²		kg
180	**1250**	4300	–	**80**	180	125	70	46	2.0	4	116	220	110	200	13	8	11 / M10		0.025	0.02	**2LC0170-8AC1** / **2LC0170-8AC2**	10
200	**1950**	3900	–	**85**	200	140	80	51	2.0	4	131	248	120	224	16	8	14 / M12		0.049	0.04	**2LC0171-0AC1** / **2LC0171-0AC2**	15
225	**2300**	3600	–	**90**	225	150	90	56	2.0	4	146	274	135	250	16	8	14 / M12		0.076	0.06	**2LC0171-1AC1** / **2LC0171-1AC2**	19
250	**3900**	3000	46	**100**	250	165	100	65.5	2.5	5.5	165.5	314	150	282	20	8	18 / M16		0.15	0.11	**2LC0171-2AC1** / **2LC0171-2AC2**	26
280	**5500**	3000	54	**110**	280	180	110	70.5	2.5	5.5	180.5	344	170	312	20	8	18 / M16		0.23	0.18	**2LC0171-3AC1** / **2LC0171-3AC2**	34

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Configurable variants [1]

- ØD2 Without finished bore
  With finished bore

Notes

- For dimension U2, see type B on **page 7/12**.
- Weights and mass moments of inertia apply to maximum bores.

Ordering example

- N-EUPEX E coupling, size 125
- Part 10: with through bores
- Part 4: Bore D2 38H7 mm, with keyway to DIN 6885-1 and set screw

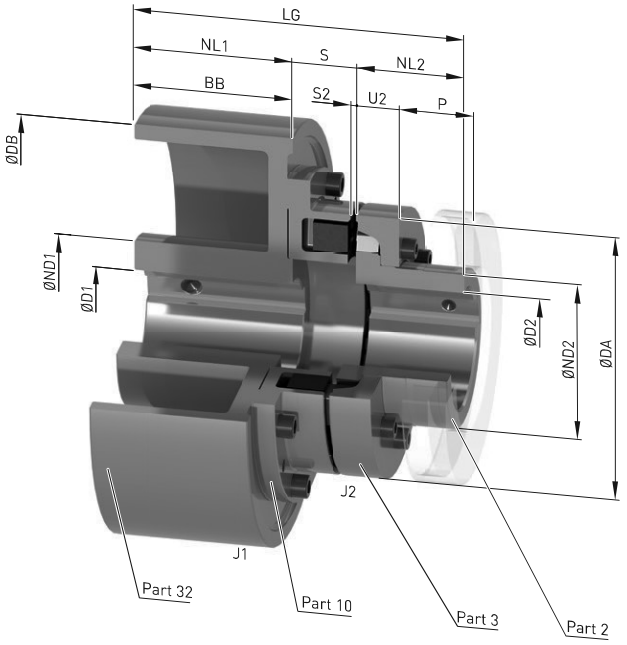
Article no.: 2LC0170-5AC19-0AA0 M0V

[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com.**

↗ For online configuration on **flender.com**, click on the item no.

TYPE P

with brake drum



Size	Rated torque flexible type 80 ShoreA	Speed	Dimensions in mm																Mass moment of inertia		↗ Article no. [1]	Weight
			Bore with keyway to DIN 6885-1																			
	T_{KN}	n_{Kmax}	D1		D2		DA	ND1	ND2	NL1/BB	NL2	S	ΔS	S2	DB	U2	LG		J_1	J_2		m
	Nm	rpm	min.	max.	min.	max.							+/–						kgm²	kgm²		kg
125	**345**	4800	–	**55**	–	**55**	125	84	73.5	75	50	31	1.0	3	200	23	156		0.043	0.004	**2LC0170-5AF**	11
140	**500**	3800	–	**60**	–	**60**	140	128	80.5	95	55	34	1.0	3	250	28	184		0.13	0.007	**2LC0170-6AF**	21
160	**840**	3800	–	**70**	–	**70**	160	128	93.5	95	60	40	2.0	4	250	28	195		0.14	0.013	**2LC0170-7AF**	21
180	**1250**	3800	–	**80**	–	**80**	180	128	106	95	70	41	2.0	4	250	30	206		0.16	0.023	**2LC0170-8AF**	27
		3000	–	**80**				128		118		43			315		231		0.35		**2LC0170-8AF**	34
200	**1950**	3000	–	**80**	–	**90**	200	128	119	118	80	48	2.0	4	315	32	246		0.37	0.04	**2LC0171-0AF**	39
		2400	–	**90**				160		150		48			400		278		1.1		**2LC0171-0AF**	59
		1900	–	**110**				175		190		48			500		318		2.8		**2LC0171-0AF**	97
225	**2300**	3000	–	**80**	–	**100**	225	128	135	118	90	51	2.0	4	315	38	259		0.39	0.07	**2LC0171-1AF**	46
		2400	–	**90**				160		150		53			400		293		1.1		**2LC0171-1AF**	64
		1900	38	**110**				175		190		53			500		333		3.1		**2LC0171-1AF**	103

Configurable variants [1]

- ØD1 Without finished bore
  With finished bore
- ØD2 Without finished bore
  With finished bore

[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com**.

↗ For online configuration on **flender.com**, click on the item no.

Size	Rated torque flexible type 80 ShoreA	Speed	Dimensions in mm															Mass moment of inertia		↗ Article no. [1]	Weight
			Bore with keyway to DIN 6885-1																		
	T_{KN}	n_{Kmax}	D1		D2		DA	ND1	ND2	NL1/BB	NL2	S	ΔS	S2	DB	U2	LG	J_1	J_2		m
	Nm	rpm	min.	max.	min.	max.							+/–					kgm²	kgm²		kg
250	**3900**	2400	–	**100**	–	**115**	250	160	153	150	100	62.5	2.5	5.5	400	42	312.5	1.16	0.13	**2LC0171-2AF**	74
		1900	38	**110**				175		190		62.5			500		352.5	2.9		**2LC0171-2AF**	111
280	**5500**	2400	–	**100**	54	**125**	280	160	168	150	110	65.5	2.5	5.5	400	42	325.5	1.24	0.2	**2LC0171-3AF**	82
		1900	48	**110**				175		190		67.5			500		367.5	3.1		**2LC0171-3AF**	115
		1500	48	**110**				175		236		67.5			630		413.5	8.0		**2LC0171-3AF**	168
315	**7100**	2400	–	**100**	45	**145**	315	160	196	150	125	72.5	2.5	5.5	400	47	347.5	1.4	0.37	**2LC0171-4AF**	92
		1900	48	**110**				175		190		72.5			500		387.5	3.3		**2LC0171-4AF**	131
		1500	48	**110**				175		236		72.5			630		433.5	8.2		**2LC0171-4AF**	180
		1300	55	**120**				192		265		72.5			710		462.5	14.2		**2LC0171-4AF**	233
350	**10800**	1500	48	**110**	60	**165**	350	175	226	236	140	76.5	2.5	5.5	630	51	452.5	8.5	0.64	**2LC0171-5AF**	197
		1300	55	**120**				192		265		76.5			710		481.5	14.6		**2LC0171-5AF**	251

Configurable variants [1]

- ØD1 Without finished bore
  With finished bore
- ØD2 Without finished bore
  With finished bore

Notes

- For dimension P, see type A on **page 7/11**.
- Weights and mass moments of inertia apply to maximum bores.

Ordering example

- N-EUPEX P coupling, size 200, brake drum 315 x 118 mm
- Part 32: Bore D1 55H7 mm, keyway to DIN 6885-1 P9 and set screw
- Part 4: Bore D2 60H7 mm, keyway to DIN 6885-1 and set screw
- Coupling micro-balanced G 6.3 at 1500 rpm in accordance with half parallel key standard

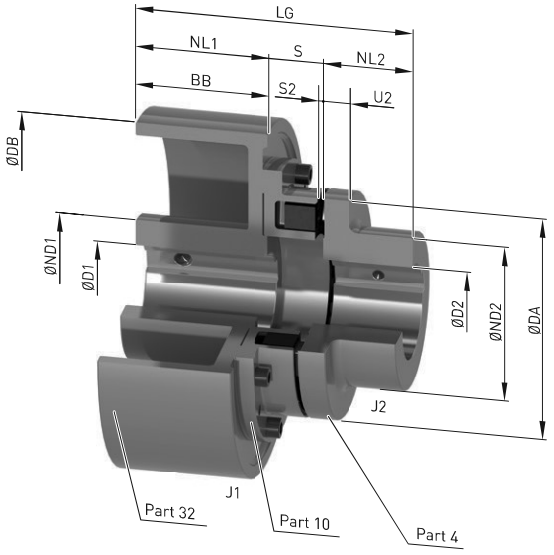
Article no.: 2LC0171-0AF99-0DA0-Z L1D+M1E+W02+Y95
Plain text to Y95: G=6.3;n=1500rpm

[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com**.

↗ For online configuration on **flender.com**, click on the item no.

TYPE O

with brake drum



7

Size	Rated torque flexible type 80 ShoreA	Speed	Dimensions in mm Bore with keyway to DIN 6885-1																Mass moment of inertia		↗ Article no.[1]	Weight
	T_{KN}	n_{Kmax}	D1		D2		DA	ND1	ND2	NL1/BB	NL2	S	ΔS	S2	DB	U2	LG		J_1	J_2		m
	Nm	rpm	min.	max.	min.	max.							+/–						kgm²	kgm²		kg
125	**345**	4800	–	**55**	–	**60**	125	84	100	75	50	31	1.0	3	200	18	156		0.043	0.005	**2LC0170-5AE**	11
140	**500**	3800	–	**60**	–	**65**	140	128	100	95	55	34	1.0	3	250	20	184		0.13	0.007	**2LC0170-6AE**	22
160	**840**	3800	–	**70**	–	**70**	160	128	108	95	60	40	2.0	4	250	20	195		0.14	0.01	**2LC0170-7AE**	24
180	**1250**	3800	–	**80**	–	**80**	180	128	125	95	70	41	2.0	4	250	20	206		0.16	0.02	**2LC0170-8AE**	28
		3000	–	**80**						118		43			315		231		0.35		**2LC0170-8AE**	35
200	**1950**	3000	–	**80**	–	**85**	200	128	140	118	80	48	2.0	4	315	24	246		0.37	0.04	**2LC0171-0AE**	40
		2400	–	**90**				160		150		48			400		278		1.10		**2LC0171-0AE**	60
		1900	–	**110**				175		190		48			500		318		2.80		**2LC0171-0AE**	98

Configurable variants [1]

- ØD1 Without finished bore
  With finished bore
- ØD2 Without finished bore
  With finished bore

[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com**.

↗ For online configuration on **flender.com**, click on the item no.

Size	Rated torque flexible type 80 ShoreA	Speed	Dimensions in mm															Mass moment of inertia		↗ Article no. [1]	Weight
			Bore with keyway to DIN 6885-1																		
	T_{KN}	n_{Kmax}	D1		D2		DA	ND1	ND2	NL1/BB	NL2	S	ΔS	S2	DB	U2	LG	J_1	J_2		m
	Nm	rpm	min.	max.	min.	max.							+/–					kgm²	kgm²		kg
225	2300	3000	-	80	–	90	225	128	150	118	90	51	2.0	4	315	18	259	0.39	0.06	2LC0171-1AE	45
		2400	-	90				160		150		53			400		293	1.10		2LC0171-1AE	63
		1900	38	110				175		190		53			500		333	3.10		2LC0171-1AE	102
250	3900	2400	-	100	46	100	250	160	165	150	100	62.5	2.5	5.5	400	18	312.5	1.16	0.11	2LC0171-2AE	73
		1900	38	110				175		190		62.5			500		352.5	2.90		2LC0171-2AE	108
280	5500	2400	-	100	54	110	280	160	180	150	110	65.5	2.5	5.5	400	20	325.5	1.24	0.18	2LC0171-3AE	82
		1900	48	110				175		190		67.5			500		367.5	3.10		2LC0171-3AE	115
		1500	48	110				175		236		67.5			630		413.5	8.0		2LC0171-3AE	168

Configurable variants [1]

- ØD1 Without finished bore
  With finished bore
- ØD2 Without finished bore
  With finished bore

Notes

- Weights and mass moments of inertia apply to maximum bores.

Ordering example

- N-EUPEX O coupling, size 200, brake drum 315 x 118 mm
- Part 32: Bore D1 55H7 mm, keyway to DIN 6885-1 P9 and set screw
- Part 4: Bore D2 60H7 mm, keyway to DIN 6885-1 and set screw
- Coupling micro-balanced G 6.3 at 1500 rpm in accordance with half parallel key standard

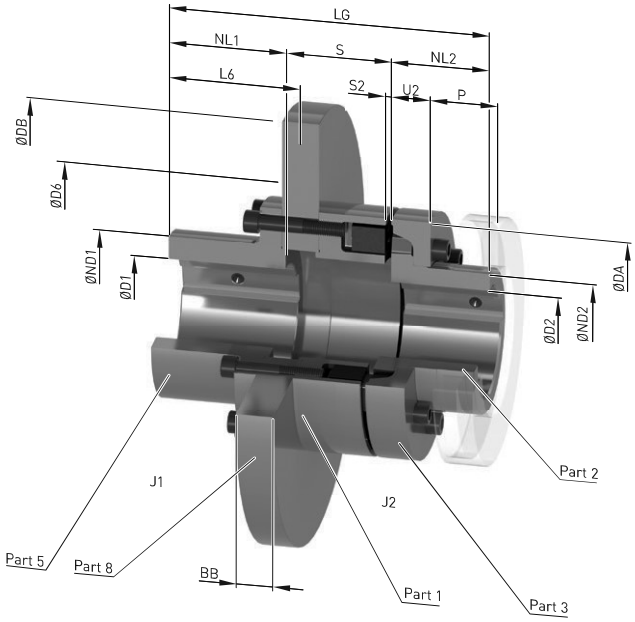
Article no.: 2LC0171-0AE99-0DA0-Z L1D+M1E+W02+Y95
Plain text to Y95: G=6.3;n=1500rpm

[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com.**

↗ For online configuration on **flender.com**, click on the item no.

TYPE DBDR

with brake disk



Size	Rated torque flexible type 80 ShoreA	Dimensions in mm																Mass moment of inertia		↗ Article no. [1]	Weight
		Bore with keyway to DIN 6885-1																			
	T_{KN}	D1	D2		DA	ND1	ND2	NL1	NL2	S	ΔS	S2	DB [2]	D6	BB [2]	L6	LG	J_1	J_2		*m*
	Nm	max.	min.	max.							+/–		min.	min.				min. kgm²	kgm²		kg
								72		54.35					12.7	74	181.35	0.11			14.7
140	**500**	**60**	–	**60**	140	85	80.5	72	55	57.5	1.0	3	315	150	15	76	184.5	0.13	0.008	**2LC0170-6AV**	16.2
								188		73					30	200	316	0.24			26.9
								90		58.35					12.7	91	208.35	0.12			18.5
160	**840**	**75**	–	**70**	160	105	93.5	90	60	62.5	2.0	4	315	170	15	94	212.5	0.14	0.013	**2LC0170-7AV**	20
								188		78					30	200	326	0.26			31
								90		60.35					12.7	91	220.35	0.35			25
180	**1250**	**90**	–	**80**	180	125	106	90	70	64.5	2.0	4	315	190	15	94	224.5	0.37	0.024	**2LC0170-8AV**	26
								188		80					30	200	338	0.57			42
								95		67.35					12.7	97	242.35	0.32			32
200	**1950**	**95**	–	**90**	200	135	119	95	80	70.5	2.0	4	355	210	15	99	245.5	0.36	0.04	**2LC0171-0AV**	35
								188		86					30	200	354	0.67			54

Configurable variants [1]

• ØD1	With finished bore
• ØD2	Without finished bore With finished bore

[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com**.

[2] For the available DB · BB brake disk dimensions, please refer to the product configurator on **flender.com**.

↗ For online configuration on **flender.com**, click on the item no.

Size	Rated torque flexible type 80 ShoreA	Dimensions in mm																Mass moment of inertia		↗ Article no. [1]	Weight
		Bore with keyway to DIN 6885-1																			
	T_{KN}	D1	D2		DA	ND1	ND2	NL1	NL2	S	ΔS	S2	DB [2]	D6	BB [2]	L6	LG	J_1	J_2		m
	Nm	max.	min.	max.							+/–		min.	min.				min. kgm²	kgm²		kg
								100		72.35					12.7	103	262.35	0.52			43
225	2300	115	–	100	225	160	135	100	90	74.5	2.0	4	400	235	15	104	264.5	0.59	0.08	2LC0171-1AV	46
								188		90					30	200	368	1.1			71
								105		83.35					12.7	107	288.35	1.6			56
250	3900	120	–	115	250	170	153	105	100	86.5	+2/-3	6	450	260	15	109	291.5	1.7	0.12	2LC0171-2AV	59
								188		102					30	200	390	2.5			88
								120		87.35					12.7	122	317.35	1.3			73
280	5500	140	54	125	280	200	168	120	110	90.5	+2/-3	6	500	350	15	124	320.5	1.5	0.19	2LC0171-3AV	77
								188		106					30	200	404	2.7			112
								130		87.35					12.7	130	342.35	2.1			95
315	7100	140	45	145	315	200	196	130	125	92.5	+2/-3	6	500	350	15	134	347.5	2.3	0.33	2LC0171-4AV	100
								188		108					30	200	421	4.2			140
								135		97.35					12.7	136	372.35	3.3			129
350	10800	165	60	165	350	230	226	135	140	101.5	+2/-3	6	500	360	15	139	376.5	3.8	0.57	2LC0171-5AV	134
								188		117					30	200	445	6.7			184

Configurable variants [1]

- ØD1 With finished bore
- ØD2 Without finished bore
  With finished bore

Notes

- For dimensions U2 and P, see type A on **page 7/11**.
- Weights and mass moments of inertia apply to maximum bores.
- Maximum speed n_{max} = 1528/DB (n_{max} in rpm, DB in m)
  Observe maximum speed of type A.
- Other brake disk diameters DB and brake disk widths BB on request.

Ordering example

- N-EUPEX DBDR coupling, size 200, brake disk 450 x 30 mm
- Part 5: Bore D1 55H7 mm, keyway to DIN 6885-1 P9 and set screw
- Part 2: Bore D2 60H7 mm, keyway to DIN 6885-1 and set screw
- Coupling micro-balanced G 6.3 at 1500 rpm in accordance with half parallel key standard

Article no.: 2LC0171-0AV99-0GA0-Z L1D+M1E+W02+Y95
Plain text to Y95: G=6.3;n=1500rpm

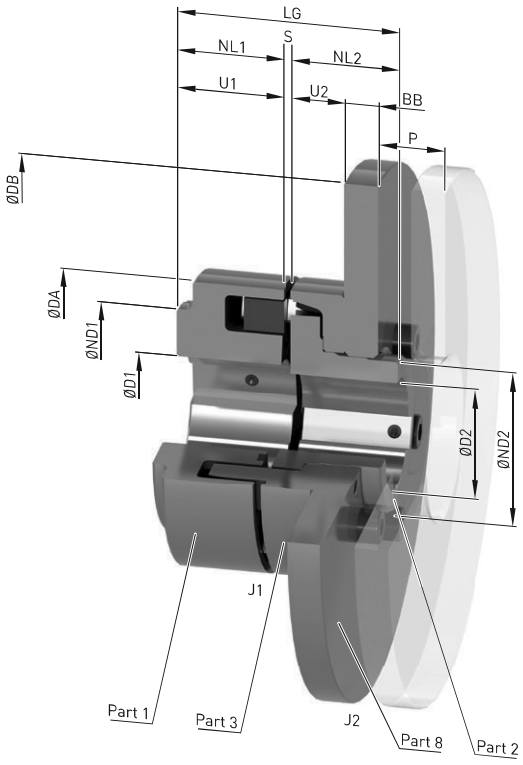
[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com**.

[2] For the available DB · BB brake disk dimensions, please refer to the product configurator on **flender.com**.

↗ For online configuration on **flender.com**, click on the item no.

TYPE ABD

with brake disk



Size	Rated torque flexible type 80 ShoreA	Speed	Dimensions in mm Bore with keyway to DIN 6885-1																Mass moment of inertia		↗ Article no. [1]	Weight
	T_{KN}	n_{Kmax}	D1		D2		DA	ND1 [2]	ND2	NL1/ NL2	S	ΔS	U1	U2	P	DB [3]	BB [3]	LG	J_1	J_2		m
	Nm	rpm	min.	max.	min.	max.						+/–				min.			kgm²	kgm²		kg
140	**500**	5500	–	**65**	–	**60**	140	100	80.5	55	3	1.0	34	28	43	315	12.7	113	0.007	0.10	**2LC0170-6BB**	12.8
160	**840**	5100	–	**70**	–	**70**	160	108	93.5	60	4	2.0	39	28	47	315	12.7	124	0.013	0.11	**2LC0170-7BB**	14.8
180	**1250**	4500	–	**80**	–	**80**	180	125	106	70	4	2.0	42	30	50	355	12.7	144	0.023	0.18	**2LC0170-8BB**	20
200	**1950**	4000	–	**85**	–	**90**	200	140	119	80	4	2.0	47	32	53	400	12.7	164	0.04	0.29	**2LC0171-0BB**	27
225	**2300**	3600	–	**90**	–	**100**	225	150	135	90	4	2.0	52	38	61	450	30	184	0.07	1.0	**2LC0171-1BB**	57
250	**3900**	3300	46	**100**	–	**115**	250	165	153	100	5.5	2.5	60	42	69	500	30	205.5	0.13	1.6	**2LC0171-2BB**	73
280	**5500**	3000	49	**110**	54	**125**	280	180	168	110	5.5	2.5	65	42	73	560	30	225.5	0.20	2.5	**2LC0171-3BB**	94
315	**7100**	2600	49	**120**	45	**145**	315	200	196	125	5.5	2.5	70	47	78	630	30	255.5	0.37	4.0	**2LC0171-4BB**	126
350	**10800**	2400	61	**140**	60	**165**	350	230	226	140	5.5	2.5	74	51	83	710	30	285.5	0.64	6.5	**2LC0171-5BB**	167

Configurable variants [1]

- ØD1 Without finished bore
  With finished bore
- ØD2 Without finished bore
  With finished bore

Notes

- Weights and mass moments of inertia apply to maximum bores.

Ordering example

- N-EUPEX ABD coupling, size 200, brake disk 400 x 12.7 mm
- Part 1: Bore D1 65H7 mm, keyway to DIN 6885-1 and set screw
- Part 2: Bore D2 50H7 mm, keyway to DIN 6885-1 P9 and set screw
- Coupling micro-balanced G 6.3 at 1500 rpm in accordance with half parallel key standard

Article no.: 2LC0171-0BB99-2FA0-Z L1F+M1C+W02+Y95
Plain text to Y95: G=6.3;n=1500rpm

[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com**.

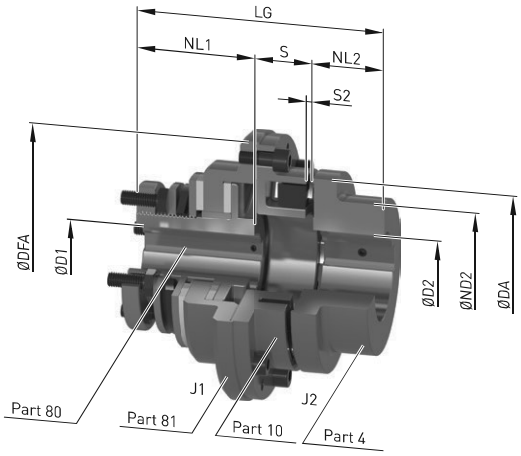
[2] The hub diameter HD1 can be smaller for small bores.

[3] For the available DB · BB brake disk dimensions, please refer to the product configurator on **flender.com**.

↗ For online configuration on **flender.com**, click on the item no.

TYPE ERN

with slip unit



Size	Rated torque flexible type 80 ShoreA	Maximum slip torque [2] Spring set		Speed	Dimensions in mm											Mass moment of inertia		↗ Article no. [1]	Weight
					Bore with keyway to DIN 6885-1														
	T_{KN}	T_{R1}	T_{R2}	n_{Kmax}	D1	D2	DA	ND2	NL1	NL2	S	ΔS	S2	DFA	LG	J_1	J_2		m
	Nm	Nm	Nm	rpm	max.	max.						+/–				kgm²	kgm²		kg
80	**85**	130	240	3800	**30**	**42**	80	68	55	30	25	1.0	3	109	110	0.0039	0.0006	**2LC0170-2BE**	3.3
95	**140**	190	340	3600	**35**	**48**	95	76	66	35	28	1.0	3	123	129	0.007	0.0012	**2LC0170-3BE**	4.8
110	**225**	190	340	3600	**35**	**55**	110	86	66	40	31	1.0	3	147	137	0.010	0.0024	**2LC0170-4BE**	5.8
125	**345**	350	650	3000	**45**	**60**	125	100	77	50	35	1.0	3	161	162	0.017	0.005	**2LC0170-5BE**	8.9
140	**500**	650	1200	2500	**60**	**65**	140	100	86	55	38	1.0	3	183	179	0.035	0.008	**2LC0170-5BE**	13
160	**840**	650	1200	2500	**60**	**70**	160	108	86	60	44	2.0	4	204	190	0.050	0.013	**2LC0170-7BE**	15
180	**1250**	1000	1800	2100	**65**	**80**	180	125	93	70	47	2.0	4	224	210	0.084	0.025	**2LC0170-8BE**	22
200	**1950**	2200	4000	1800	**80**	**85**	200	140	105	80	52	2.0	4	252	237	0.16	0.044	**2LC0171-0BE**	32
225	**2300**	2200	4000	1800	**80**	**90**	225	150	105	90	57	2.0	4	278	252	0.22	0.064	**2LC0171-1BE**	37
250	**3900**	3800	6800	1500	**90**	**100**	250	165	120	100	66.5	2.5	5.5	319	286.5	0.51	0.10	**2LC0171-2BE**	60
280	**5500**	5500	10000	1500	**120**	**110**	280	180	120	110	71.5	2.5	5.5	349	301.5	0.77	0.17	**2LC0171-3BE**	74

Configurable variants [1]

- ØD1 With finished bore
- ØD2 Without finished bore
  With finished bore

Notes

- Weights and mass moments of inertia apply to maximum bores.

Ordering example

- N-EUPEX ERN coupling, size 200
  Slip torque T_R = 4000 Nm
- Part 1: Bore D1 65H7 mm, keyway to DIN 6885-1 and set screw
- Part 2: Bore D2 50H7 mm, keyway to DIN 6885-1 and set screw

Article no.: 2LC0171-0BE99-2AA0 L1F+M1C

[1] To identify complete item numbers specifying the available finish boring options and – if necessary – further order options, please use our configurators on **flender.com.**

[2] Adjustable slip torque according to operating instructions.

↗ For online configuration on **flender.com**, click on the item no.

SPARE AND WEAR PARTS

Elastomer flexibles of the N-EUPEX series

NBR elastomer flexibles 80 ShoreA standard type			
Size	Article No. (flexible set for one coupling)	Number of flexibles per set	Weight per set kg
58	2LC0170-0WA00-0AA0	4	0.012
68	2LC0170-1WA00-0AA0	5	0.015
80	2LC0170-2WA00-0AA0	6	0.02
95	2LC0170-3WA00-0AA0	6	0.03
110	2LC0170-4WA00-0AA0	6	0.045
125	2LC0170-5WA00-0AA0	6	0.06
140	2LC0170-6WA00-0AA0	6	0.09
160	2LC0170-7WA00-0AA0	7	0.12
180	2LC0170-8WA00-0AA0	8	0.17
200	2LC0171-0WA00-0AA0	8	0.23
225	2LC0171-1WA00-0AA0	8	0.3
250	2LC0171-2WA00-0AA0	8	0.38
280	2LC0171-3WA00-0AA0	8	0.55
315	2LC0171-4WA00-0AA0	9	0.7
350	2LC0171-5WA00-0AA0	9	0.85
400	2LC0171-6WA00-0AA0	10	1.2
440	2LC0171-7WA00-0AA0	10	1.5
480	2LC0171-8WA00-0AA0	10	2.1
520	2LC0172-0WA00-0AA0	10	2.6
560	2LC0172-1WA00-0AA0	10	3.6
610	2LC0172-2WA00-0AA0	10	4.9
660	2LC0172-3WA00-0AA0	10	6.3
710	2LC0172-4WA00-0AA0	10	7.6

HP elastomer flexibles for type DK/DKS (two-joint)			
Size	Article No. (flexible set for one coupling)	Number of flexibles per set	Weight per set kg
68	2LC0170-1VD00-0AA0	10	0.03
80	2LC0170-2VD00-0AA0	12	0.04
95	2LC0170-3VD00-0AA0	12	0.06
110	2LC0170-4VD00-0AA0	12	0.09
125	2LC0170-5VD00-0AA0	12	0.12
140	2LC0170-6VD00-0AA0	12	0.18
160	2LC0170-7VD00-0AA0	14	0.24
180	2LC0170-8VD00-0AA0	16	0.34
200	2LC0171-0VD00-0AA0	16	0.46
225	2LC0171-1VD00-0AA0	16	0.6
250	2LC0171-2VD00-0AA0	16	0.8
280	2LC0171-3VD00-0AA0	16	1.1

Notes

- The elastomer flexibles are wear parts. The service life depends on the operating conditions.

Elastomer flexibles of the N-EUPEX DS series

NBR elastomer flexibles standard type			
Size	Article No. (flexible set for one coupling)	Number of flexibles per set	Weight per set kg
66	2LC0110-0WA00-0AA0	4	0.012
76	2LC0110-1WA00-0AA0	5	0.015
88	2LC0110-2WA00-0AA0	6	0.021
103	2LC0110-3WA00-0AA0	6	0.033
118	2LC0110-4WA00-0AA0	6	0.048
135	2LC0110-5WA00-0AA0	6	0.072
152	2LC0110-6WA00-0AA0	6	0.1
172	2LC0110-7WA00-0AA0	7	0.16
194	2LC0110-8WA00-0AA0	8	0.21
218	2LC0111-0WA00-0AA0	8	0.28
245	2LC0111-1WA00-0AA0	8	0.45
272	2LC0111-2WA00-0AA0	8	0.64
305	2LC0111-3WA00-0AA0	8	0.72
340	2LC0111-4WA00-0AA0	9	0.92
380	2LC0111-5WA00-0AA0	9	1.2
430	2LC0111-6WA00-0AA0	10	1.6
472	2LC0111-7WA00-0AA0	10	2.0
514	2LC0111-8WA00-0AA0	10	2.5
556	2LC0112-0WA00-0AA0	10	3.2

Notes

- The elastomer flexibles are wear parts. The service life depends on the operating conditions.

Friction linings of the N-EUPEX type ERN

Friction linings, standard version			
Size	Article No. (set for one coupling)	Number of friction linings per set	Weight per set kg
80	2LC0170-2VK00-0AA0	2	0.05
95	2LC0170-3VK00-0AA0	2	0.06
110	2LC0170-4VK00-0AA0	2	0.06
125	2LC0170-5VK00-0AA0	2	0.10
140	2LC0170-6VK00-0AA0	2	0.12
160	2LC0170-7VK00-0AA0	2	0.12
180	2LC0170-8VK00-0AA0	2	0.23
200	2LC0171-0VK00-0AA0	2	0.34
225	2LC0171-1VK00-0AA0	2	0.34
250	2LC0171-2VK00-0AA0	2	0.60
280	2LC0171-3VK00-0AA0	2	0.66

Notes

- The friction linings are wear parts. The service life depends on the operating conditions.