GEISLINGER
GESILCO®

LIGHTWEIGHT

GEISLINGER®

POWERTRAIN SOLUTIONS. BUILT TO LAST.

GEISLINGER GESILCO®

The Geislinger Gesilco® product range is based on more than 20 years of experience in developing fibre composite couplings and shafts. The maintenance-free composite membranes enable a lightweight, highly flexible misalignment coupling design.

Our corrugated carbon fibre membranes provide the lowest reaction force possible. This technology increases the system's reliability by protecting the drive line and bearings from overload. Different designs provide easy adaption to various connection interfaces.

DESCRIPTION

The main components of the Geislinger Gesilco® coupling are:

- Maintenance-free composite membranes
- Composite shafts or one-piece intermediate sections
- Spacers for length adjustment to accommodate the installation situation

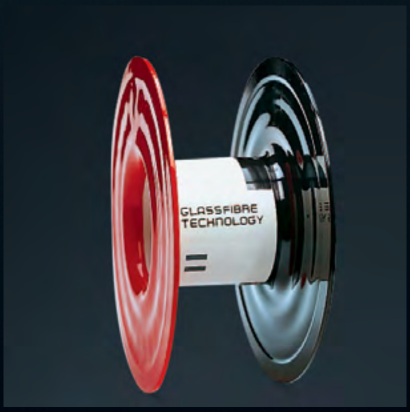
Our couplings are made from advanced materials which are lifetime-calculated. They provide superior chemical resistance.
Geislinger Gesilco® shafts feature one-piece manufacturing with an included composite flange. This combination reduces the weight by approximately 50% compared to other composite shaft line solutions. Outstanding shock capabilities and excellent acoustic attenuation further underline its use in advanced vessels running at high speeds.

ADVANTAGES

- Lightweight
- Maintenance-free
- Excellent acoustic attenuation
- Low reaction force

TECHNICAL DATA

- Torque range: up to 16 MNm
- Ambient temperature: -45°C to 100°C
- Angular misalignments: up to 6°



Gesilco® Classic Coupling

APPLICATIONS

- Marine
- Wind power
- Power generation
- Rail
- Industrial applications

Gesilco® Monobrane

Gesilco® Composhaft®

Geislinger Gesilco® Disc

Preamble

This catalog replaces all old catalog versions.

The content of this catalog is indicative and - based on new developments - Geislinger reserves the right to change the content without prior notice.

Should you have questions, remarks or inquiries please contact us per e-mail (info@geislinger.com) or telephone (+43 662 66999-0).

The latest version of all Geislinger catalogs can be found on our website Geislinger.com.

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Gesilco Coupling Description

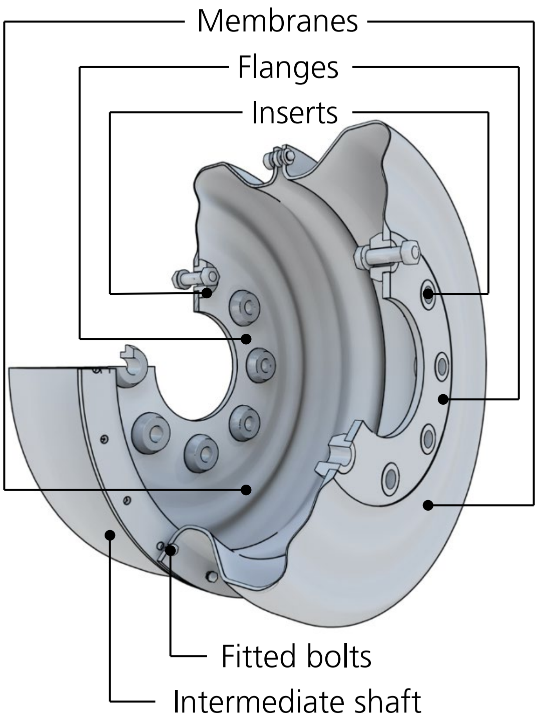
Gesilco Coupling Application

The Geislinger Gesilco coupling has been designed to compensate for radial, axial and angular misalignments. This versatility allows Gesilco couplings to connect resiliently mounted engines to power trains and / or compensate for misalignments in virtually any other application. Due to the coupling's low mass and excellent sound insulation character, it is possible to economically design low noise installations that were formerly prohibitively expensive. Combination of a classic Geislinger torsionally elastic coupling and a Gesilco coupling results in an excellent functional separation of torsional isolation / damping (Geislinger Coupling) and high misalignment compensation (Gesilco coupling) with extremely low reaction forces. As an added benefit, a significantly reduced coupling length can be realized by mounting the classic Geislinger Coupling inside the Gesilco coupling. Some illustrations can be seen in the chapter "Examples".

Coupling Design

The standard design of the patented Gesilco **Butterfly "BF"** coupling (Fig.1) consists of two membranes, an intermediate shaft and two flanges. Membranes, intermediate shafts and flanges are manufactured as a single piece, advanced composite structure. The halves of the coupling are bolted together at the flanges with fitted bolts. By use of variable thickness spacers, installation tolerances and centering recess can be compensated. At the inner radius of the membranes fitted steel ring inserts into drilled holes are foreseen. Pre-stressed screws are used to connect the membranes to the driving and driven components.

Fig. 1



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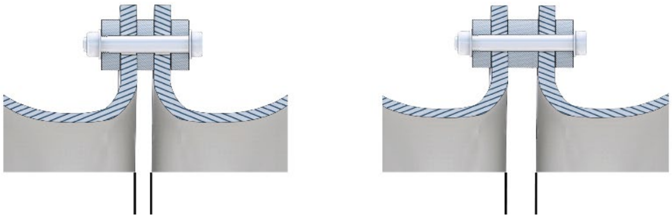
It is possible to adjust the Gesilco BF coupling to compensate for axial misalignment (i.e. washer thickness influences the overall length of the coupling):

Fig. 2



HSO-Design: The Gesilco BF coupling inner flange bolts are mounted through the openings. See fig.3. Afterwards the coupling halves are turned into the operating position and bolted together. See fig. 4.

Fig. 3

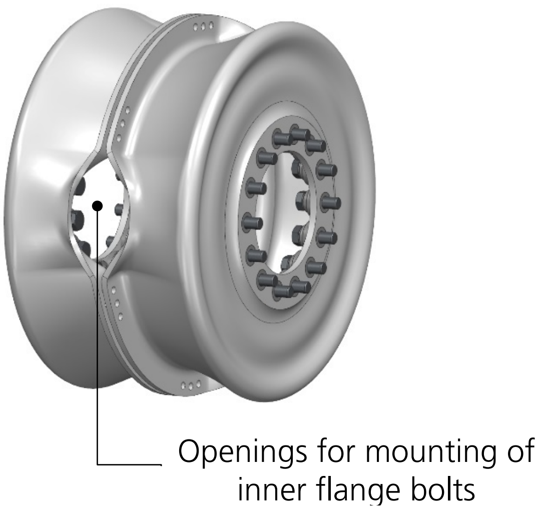
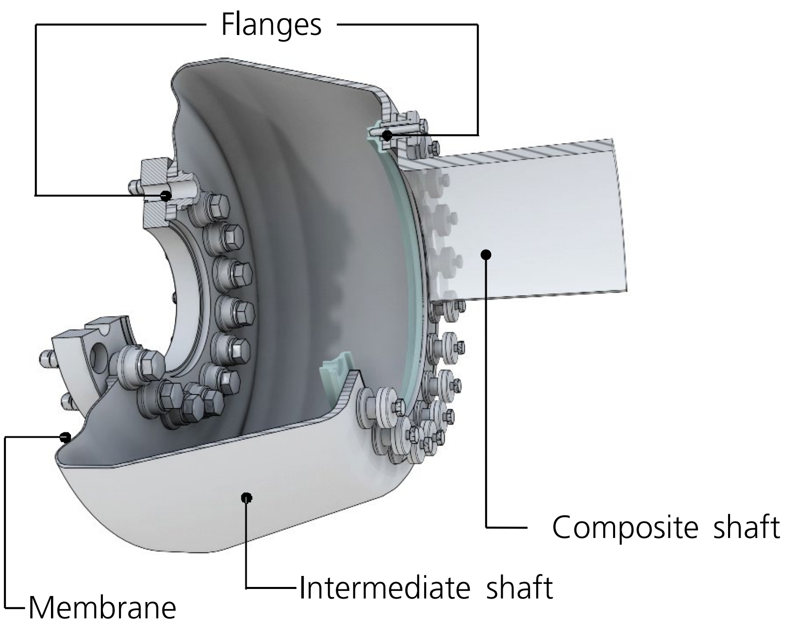


Fig. 4

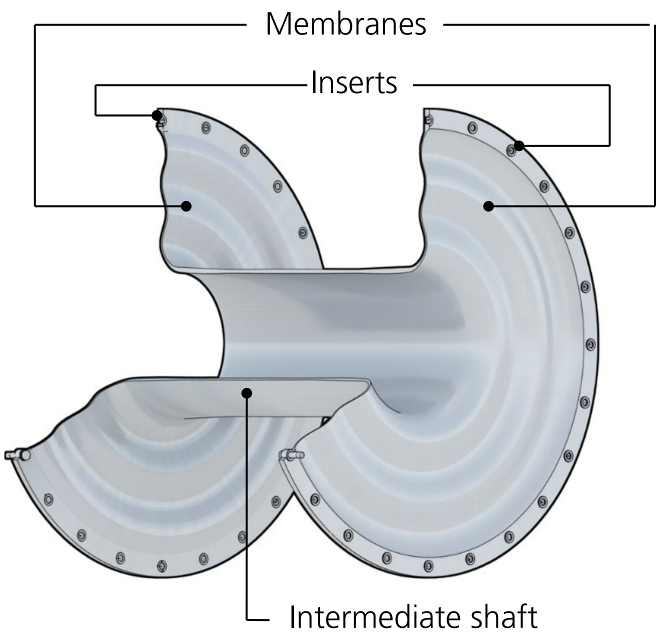
The modified design of the BF coupling is the **Monobrane "MB"** coupling (Fig. 5). This design has the same membrane design like the BF coupling but an intermediate flange which is arranged at a smaller diameter. This design allows the connection of the coupling directly to a Gesilco composite shaft.

Fig. 5



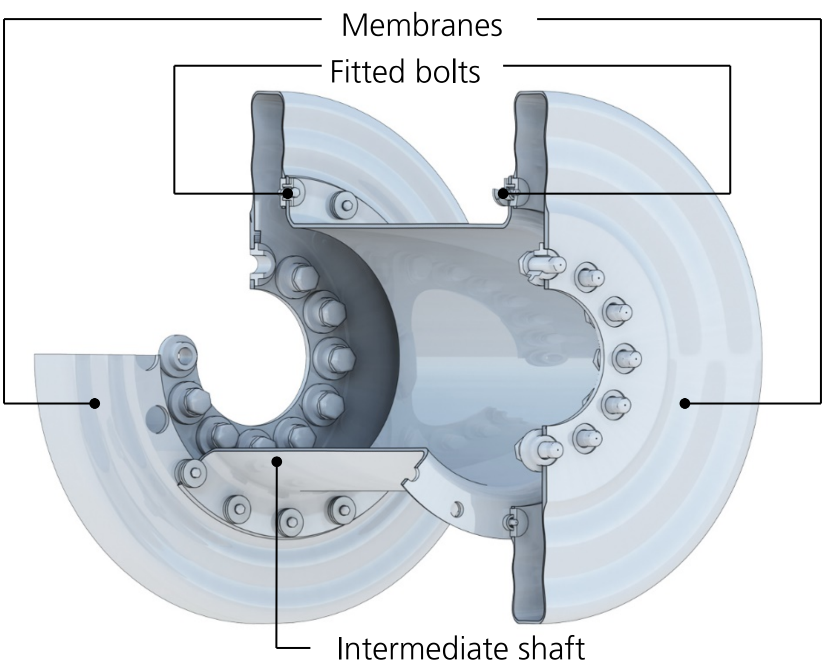
The standard design of the patented Gesilco **Classic "CI"** coupling (Fig.6) consists of two membranes and an intermediate shaft made of advanced composites. The membranes and the intermediate shaft are bonded together at the inside diameter of the membrane by a tapered collar. The membrane and tapered collar are constructed as a single piece. Fitted steel ring inserts at the outer radius of the membranes are inserted into the coupling for reinforcement. Pre-stressed screws are used to connect the membranes to the driving and driven components.

Fig. 6



The standard design of the patented Gesilco **Composhaft "CS"** coupling (Fig.7) consists of two separate double membranes and an intermediate shaft made of advanced composites. The membranes and the intermediate shaft are bolted together at the flanges with fitted bolts. By use of variable thickness spacers, installation tolerances and centering recess can be compensated. Pre-stressed screws are used to connect the membranes to the driving and driven components. The Composhaft can transmit the same torque and the same misalignments with a smaller outer diameter compared to the Butterfly and Classic coupling.

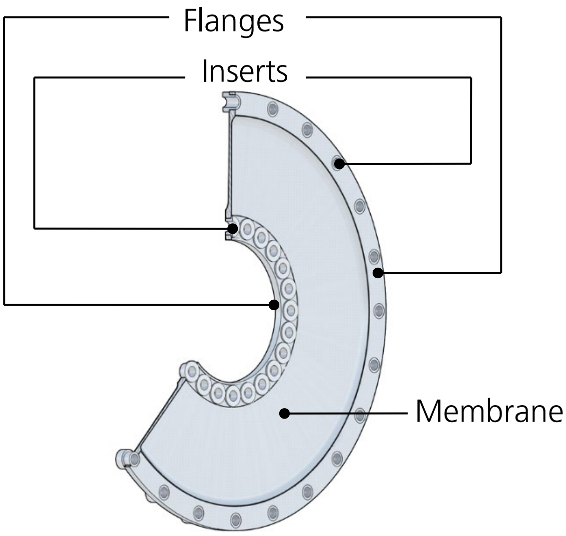
Fig. 7



The Gesilco membranes are corrugated with decreasing wall thickness as the diameter increases. The superior advantages of the corrugated membrane design, in comparison to a flat membrane, are higher deflection capacity and lower, almost linear reaction forces.

The standard design of the **Gesilco Disc "DI"** coupling (Fig.8) consists of one flat membrane, which is completely made of composite materials. The Disc is mainly used for diesel-electrically drives with single bearing generators. Due to the use of long-fibre reinforced composites the Gesilco Disc is able to carry the generator load and of providing very low reaction forces in case of thermal elongation. The mix of carbon fibre and glass fibre ensures high strength, excellent shock torque resistance (short circuit) and electrical isolation at the same time. The coupling is bolted at the outer diameter to the flywheel of the engine and at the inner diameter to the flange of the single bearing generator.

Fig. 8



Coupling Materials

Membranes and intermediate shafts of Gesilco couplings are made of advanced composites. Depending on the application, glass and carbon fibers with formulated epoxy resins are used. These materials, commonly used in aerospace structural applications, are processed by a special manufacturing method. This method provides highly consistent material properties from part to part. The membranes can be tailored to any required geometric and structural parameter. Filament wound, fiber reinforced tubes are used for the intermediate shafts. Glass fiber reinforced epoxy resins are non-magnetic and electrically non-conductive materials.

Coupling Installation

The coupling can be adapted to general installation parameters. Due to the Gesilco coupling's design flexibility, complicated installation configurations can be realized, according to customer's requirements.

During the initial installation of a Gesilco coupling, care must be taken to ensure the static misalignments are minimized. This is important because a permanent static deflection decreases the lifetime of the coupling.

Permissible Misalignments of a Gesilco Coupling

Each Gesilco membrane is able to compensate for angular and axial misalignments. In order to compensate for axial misalignment, only one membrane is required. In radial direction, a single Gesilco membrane is relatively stiff.

The combination of two membranes, coupled by a given length, allows for compensation of radial, angular and axial misalignments. Reaction forces caused by axial and angular deflections are nearly linear within a wide range.

Sound Insulation

Due to the advanced composite material's low mass, low axial and radial stiffness and homokinetic torque transmission, Gesilco couplings have excellent sound insulating properties in comparison with other couplings.

Approvals

Gesilco couplings have been developed in accordance with DIN/ISO 9001 standards. The couplings can be delivered with certificates from all major classification societies.

Advantages of Gesilco Coupling

- Extremely low mass
- Highest degree of sound insulation
- Maintenance free

Four standard Gesilco coupling designs are presented in this catalogue. Each design is presented with different levels of angular deflection capacity. The Composite material that comprises the coupling's membranes is asymmetrically arranged. Therefore, the couplings are defined as semi reversible.

Designation

▪ The Coupling Designation has the following Significance

CI 110/50/2H

CI Gesilco coupling with internally located intermediate shaft (type “Classic”)
110 nominal outside diameter of the coupling [cm]
50 stiffness series
2 number of membranes
H semi reversible

BF 100/50/2H

BF Gesilco coupling with split intermediate shaft at the O.D. (type ‘Butterfly’)
100 nominal outside diameter of the coupling [cm]
50 stiffness series
2 number of membranes
H semi reversible

CS 100/40/2H

CS Gesilco coupling with double membranes and internally located intermediate shaft (type “Composhaft”)
100 nominal outside diameter of the coupling [cm]
40 stiffness series
2 number of double membrane sets
H semi reversible

MB 90/35/1H

MB Gesilco coupling with one membrane and two flanges (type “Monobrane”)
90 nominal outside diameter of the coupling [cm]
35 stiffness series
1 number of membranes
H semi reversible

DI 70/2/1HS

DI Gesilco Disc
70 nominal outside diameter of the coupling [cm]
2 stiffness series
1 number of double membrane sets
H semi reversible
S manufacturing technique

Series

Series 42 $\Delta K_{w,max}$ = 48 mrad (type CI)
Series 50 $\Delta K_{w,max}$ = 55 mrad (type CI)

Series 35 $\Delta K_{w,max}$ = 40 mrad (type BF) *
Series 40 $\Delta K_{w,max}$ = 45 mrad (type BF)
Series 50 $\Delta K_{w,max}$ = 55 mrad (type BF)

Series 35 $\Delta K_{w,max}$ = 40 mrad (type CS)
Series 40 $\Delta K_{w,max}$ = 44 mrad (type CS) *
Series 60 $\Delta K_{w,max}$ = 55 mrad (type CS)

Series 35 $\Delta K_{w,max}$ = 48 mrad (type MB)

Series 2 $\Delta K_{w,max}$ = 1.75 mrad (type DI)

*Coupling type BF series 35 and coupling type CS series 40 have corresponding torque range and connection dimensions. Coupling type BF series 35, 40 and 50 have corresponding connection dimensions with coupling type CS series 35 and 40.

Selection

The technical data for the coupling series mentioned above are given in the "technical data" section. The selection of a coupling should first take into account the required deflection capacity and then the required mean torque.

▪ Nominal Torque T_{KN}

The mean torque T is calculated from the engine power P and the engine speed n

$$T = 9.55 \cdot \frac{P}{n}$$

T	mean torque	kNm
P	engine power	kW
n	engine speed	min^{-1}

The coupling size should be selected so that the nominal torque of the coupling T_{KN} is higher than or equal to the mean torque to be transmitted.

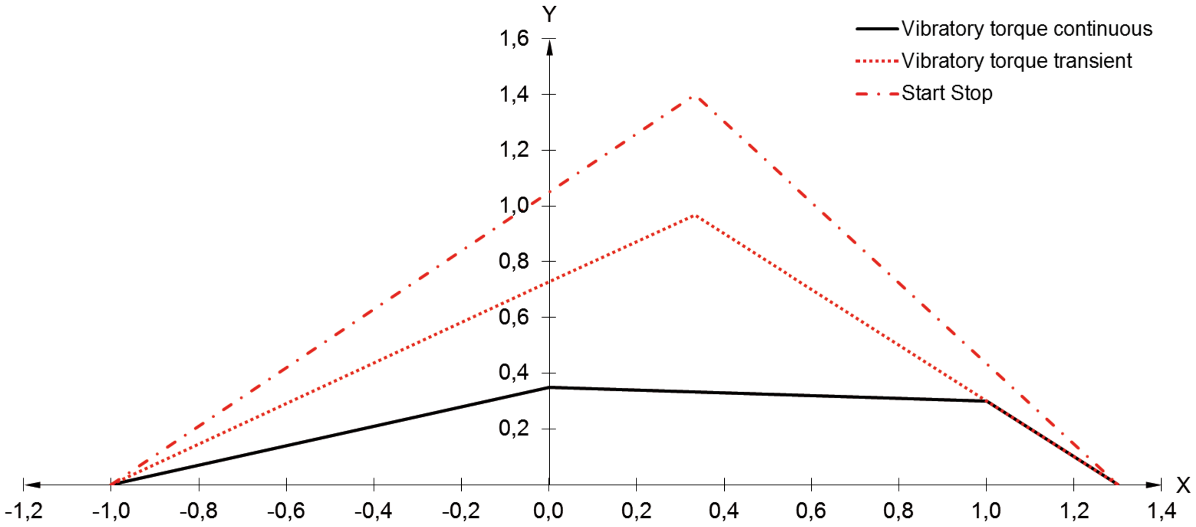
$$T_{KN} \geq T$$

It should be noted that the selection of a coupling with a higher nominal torque than the application's operational mean torque (in the same series of membranes) does not result in a higher angular deflection capacity. Angular deflection capacity remains constant within the same series of membranes.

Permissible Elastic Vibratory Torque T_{el} for CI, BF and CS couplings

In addition to the static nominal torque T_{KN} the coupling can transmit a vibratory torque. Transient vibratory torque limit values (i.e. moving through resonances) and continuous vibratory torque limit values are shown in Fig.9. The lower the mean torque T is, the higher the permissible vibratory torque T_{el} can be. The limit values shown in Fig. 9 must not be exceeded, even in the case of one cylinder misfiring.

Fig. 9



Type H, semi reversible

$$Y = \frac{T_{el}}{T_{KN}} = \frac{perm.\ elast.\ vibratory\ torque}{nominal\ torque}$$

$$X = \frac{T}{T_{KN}} = \frac{mean\ torque}{nominal\ torque}$$

Reverse: $Y = 0.35 - 0.35\,X$

Forward: $0 \leq X \leq 1$ $\quad Y = 0.35 - 0.05\,X$

$1 < X \leq 1.3$ $\quad Y = 1.3 - X$

The Gesilco Disc “DI” coupling has much higher vibratory torque limits, which are specified in the table on page 31.

Permissible Transient Shock Torque for Gesilco couplings

Transient shock torques up to 2.5 times of the nominal torque are allowed for a limited number of load cycles.

Torsional Vibration Calculation

For the purpose of analysis, the Gesilco coupling is basically considered a torsionally stiff coupling. In order to perform the necessary torsional vibration calculations, one must use: torsional stiffnesses, mass moments of inertia and the undimensioned damping factors (given in the 'technical data' section of the catalogue). The undimensioned damping factor is defined as the ratio of damping torque T_d to elastic torque T_e.

$$\kappa = \frac{T_d}{T_e}$$

κ undimensioned damping factor
T_d damping torque
T_e elastic torque

Permissible Misalignment Values

A coupling's lifetime can be theoretically determined by analyzing an applications load spectrum data (magnitudes and frequencies). In fact, misalignment capacities of the Gesilco coupling are defined by predetermined load cycle values. Therefore, the data tables that follow show angular deflection capacities (transient and continuous) along with their corresponding load cycles. Since the correct coupling selection is predominately influenced by the expected lifetime or load cycles, it is very important to determine accurate values for the required transient and continuous deflections. When accurate deflection data are available, a more suitable and economical coupling can be selected.

Permissible combinations of angular and axial deformation of the coupling can be calculated using the formulas in the chapter "Calculation of the Maximum Misalignment Capacity of various Gesilco Coupling Combinations". If it is required, axial and angular misalignment capacities can be shown for each coupling as load versus deflection diagrams (please contact Geislinger).

Axial Misalignment ΔW_a

An axial misalignment ΔW_a is the deviation from the theoretical nominal length of the coupling. This deviation in length is caused by axial displacements of the adjoining shafts. Reasons for axial displacements include: errors in assembly distances, shaft movements, variations in foundations (i.e. resiliently mounted engines), or thermal expansion. Axial misalignments can be compensated using one or two membranes in series.

$\Delta K_{a, max}$ (transient) is the maximum permissible axial misalignment capacity of one membrane and must not be exceeded during operation. Using the formula given in the selection guidelines, $\Delta K_{a, max}$ can be calculated from the maximum permissible angular deflection capacity $\Delta K_{w, max}$ (transient) and the geometry parameter i of the membrane.

Radial Misalignment ΔW_r

Radial misalignment ΔW_r is the movement between driving and the driven shafts in a perpendicular direction (radial) to the axis of rotation. Radial misalignments can only be accommodated by use of two membranes with angular deflection capacity ΔK_w. Causes for radial misalignment are: assembly errors, shaft displacements, thermal expansions or elastically mounted driving or driven shafts.

$\Delta K_{w, max}$ (transient) is the maximum permissible angular deflection capacity of one membrane and must not be exceeded by static and dynamic misalignments during operation. $\Delta K_{w, max}$ (transient) has constant value for each series. The maximum permissible radial misalignment capacity of the coupling depends on the bending length L_b (distance between the planes of the membranes). Based on the bending length, $\Delta K_{w, max}$ (transient) and the formulas that follow, each coupling's max permissible misalignment capacity can be determined.

Angular Misalignment ΔW_w

The angular misalignment ΔW_w is defined as the inclination of the axis of rotation between the driving and the driven sides of the coupling. Angular misalignment ΔW_w can be compensated by using one membrane with a given angular deflection capacity ΔK_w.

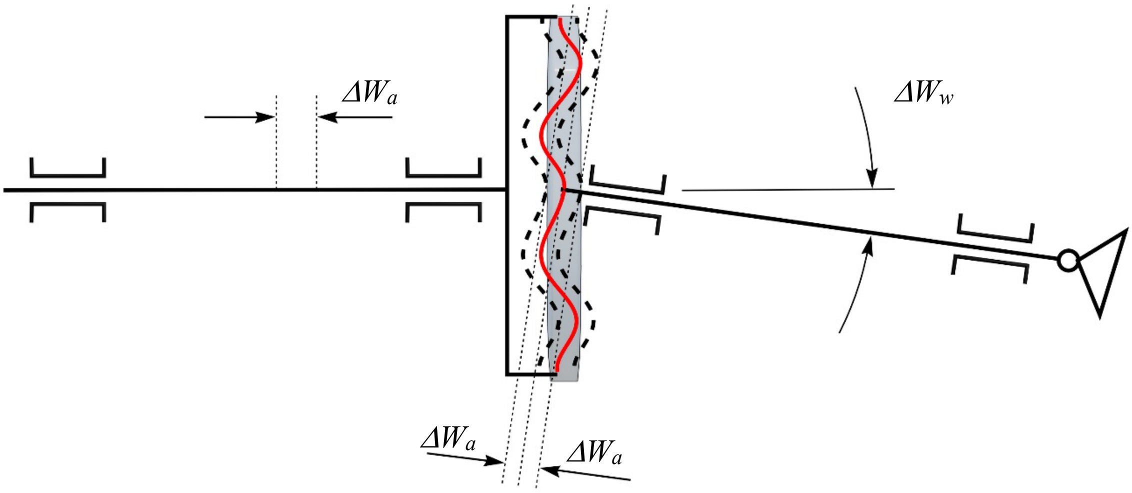
$\Delta K_{w, max}$ (transient) is defined as the maximum permissible angular deflection of one membrane and should not be exceeded during operation. $\Delta K_{w, max}$ (transient) is constant for each series.

The relationship between axial and angular misalignments is shown in the formulae of the following chapter.

Calculation of the Maximum Misalignment Capacity

Connection of two shafts using one Gesilco Membrane

This combination compensates for axial ΔW_a and angular ΔW_w misalignments.



Continuous $$\Delta W_w + \frac{|\Delta W_a|}{i} \leq \Delta K_w$$

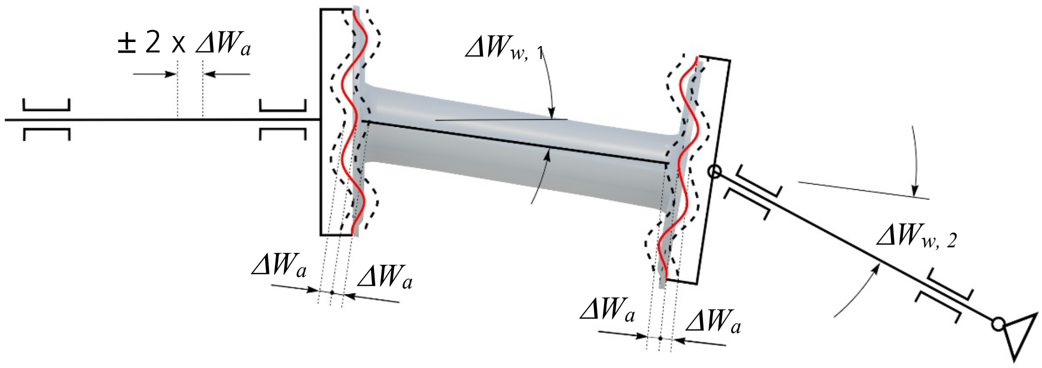
Transient $$\Delta W_w + \frac{|\Delta W_a|}{i} \leq \Delta K_{w,\ max}$$

ΔW_a	axial misalignment	mm
ΔW_w	angular misalignment	rad
i	geometric parameter of the membrane	mm
ΔK_w	max. angular deflection of one membrane (continuous)	rad
$\Delta K_{w,\ max}$	max. angular deflection of one membrane (transient)	rad

(For values of ΔK_w , $\Delta K_{w,\ max}$ and i, see 'Technical Data')

Connection of two shafts using two Gesilco Membranes with an intermediate shaft (W-Arrangement)

This combination compensates for axial ΔW_a and angular ΔW_w misalignments. For both membranes, it must be proven that the maximum angular misalignment does not exceed the coupling's maximum permissible angular deflection capacity.



Continuous

$$\Delta W_{w,1} + \frac{|\Delta W_a|}{i} \leq \Delta K_w$$

$$\Delta W_{w,2} + \frac{|\Delta W_a|}{i} \leq \Delta K_w$$

Transient

$$\Delta W_{w,1} + \frac{|\Delta W_a|}{i} \leq \Delta K_{w,\ max}$$

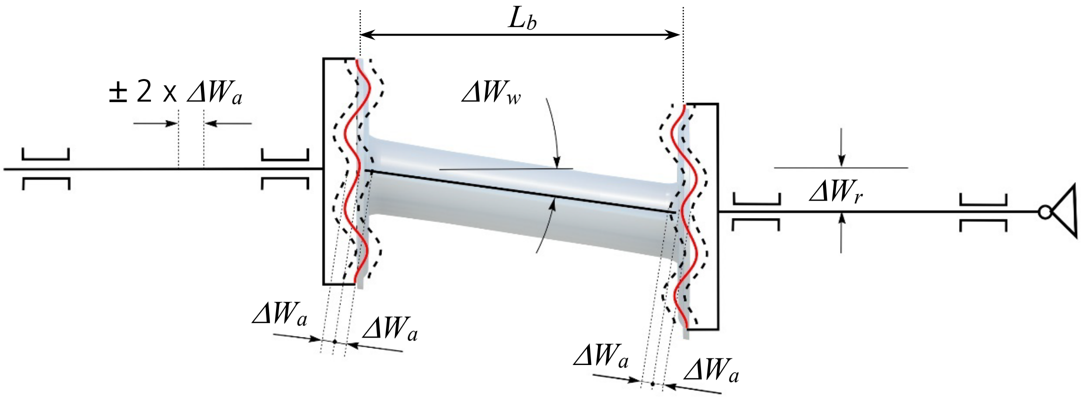
$$\Delta W_{w,2} + \frac{|\Delta W_a|}{i} \leq \Delta K_{w,\ max}$$

ΔW_a	axial misalignment	mm
$\Delta W_{w,1}$	angle between input and intermediate shaft	rad
$\Delta W_{w,2}$	angle between intermediate and output shaft	rad
i	geometric parameter of the membrane	mm
ΔK_w	max. angular deflection of one membrane (continuous)	rad
$\Delta K_{w,\ max}$	max. angular deflection of one membrane (transient)	rad
1	First membrane	
2	Second membrane	

(ΔK_w, $\Delta K_{w,\ max}$ and i, see chapter 'Technical Data')

Connection of two shafts using two Gesilco Membranes with an Intermediate Shaft (Z-Arrangement)

This combination compensates axial ΔW_a and radial ΔW_r misalignments



Continuous $$\frac{|\Delta W_r|}{L_b} + \frac{|\Delta W_a|}{i} \leq \Delta K_w$$

Transient $$\frac{|\Delta W_r|}{L_b} + \frac{|\Delta W_a|}{i} \leq \Delta K_{w,\ max}$$

ΔW_a	axial misalignment	mm
ΔW_w	angular misalignment	rad
ΔW_r	radial misalignment	mm
i	geometric parameter of the membrane	mm
ΔK_w	max. angular deflection of one membrane (continuous)	rad
$\Delta K_{w,\ max}$	max. angular deflection of one membrane (transient)	rad
L_b	bending length of the coupling	mm

(ΔK_w , $\Delta K_{w,\ max}$ and i, see chapter 'Technical Data')

Number of Membranes

Depending on the required deflection capacity of the coupling, one or two membranes can be installed. The number of membranes selected depends on technical and economical considerations.

Speed n_{max}

The maximum permissible speed for each membrane type is given in the 'technical data' section.

Temperature and Humidity

Proper selection of raw materials for the coupling depends on the desired service temperature and humidity. Normally, the Gesilco coupling is designed for an ambient temperature of 80°C continuous engine room operation and 100°C for short term engine room environment. Higher temperature raw materials can be delivered upon request.

Flange Connections

In order to connect the coupling to a flange or shaft by the best possible method, predefined flange designs are available. In addition, Geislinger is always prepared to manufacture other connections, if economically and technically feasible. Should other assembly dimensions be required, please contact Geislinger.

Membrane`s Spring Rates

Torsional Stiffness C_T

The Gesilco coupling can be considered torsionally stiff. Values for the torsional stiffness of membranes and intermediate shafts are given in the 'technical data' section.

Bending Stiffness C_w

The angular deflection ΔW_w of one Gesilco membrane produces a reaction moment M_b which acts as a bending moment on the driving and driven shafts. The bending moment is proportional to the bending stiffness C_w of the membrane.

The reaction moment M_b can be calculated as follows:

$$M_b = C_w \, \Delta W_w$$

M_b	reaction moment	kNm
C_w	bending stiffness	kNm/rad
ΔW_w	angular deflection	rad

Axial Stiffness C_a

The axial deflection ΔW_a of the Gesilco membrane produces a reaction force F_a, which acts as an axial force on the driving and driven shafts. The axial force is proportional to the axial stiffness C_a of the membrane.

$$F_a = C_a \, \Delta W_a$$

F_a	axial reaction force	N
C_a	axial stiffness	N/mm
ΔW_a	axial deflection	mm

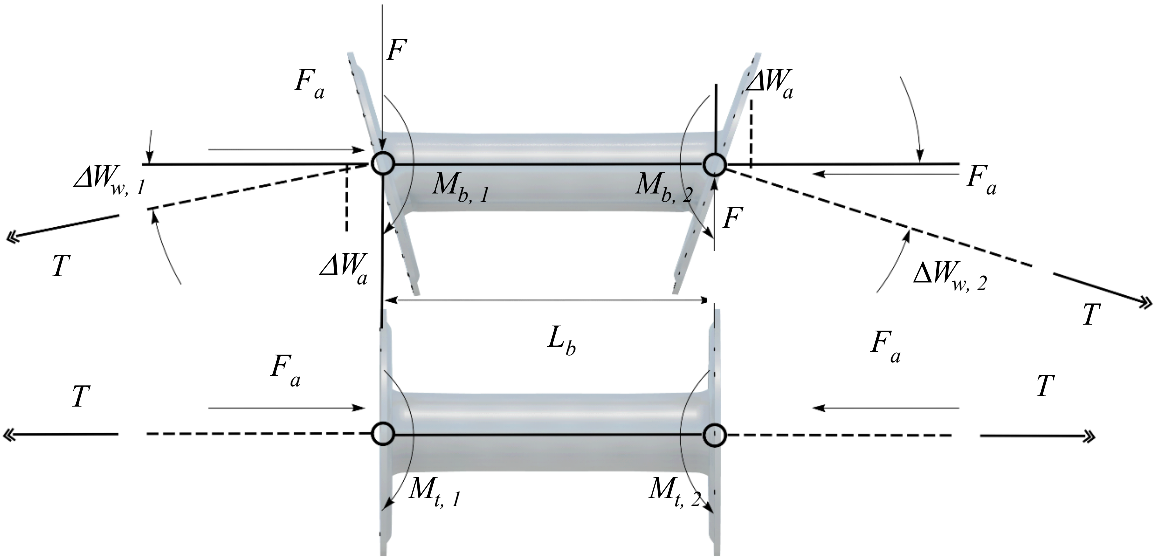
Radial Loading of Gesilco Membranes

Due to the Gesilco membrane's high radial stiffness, any radial loading of the membrane should be avoided. In the case of radial misalignment, a dual membrane coupling is necessary.

Reaction Forces of Different Gesilco Coupling Combinations

In the following chapter, the calculation of membrane reaction forces, due to torque and elastic deflection, are shown for different Gesilco coupling arrangements. For a given coupling arrangement, membranes of the same series and size are always used.

Gesilco Coupling in W-Arrangement



$$M_{b,1} = C_w \Delta W_{w,1}$$

$$M_{b,2} = C_w \Delta W_{w,2}$$

$$F = \frac{(M_{b,1} - M_{b,2})}{L_b}$$

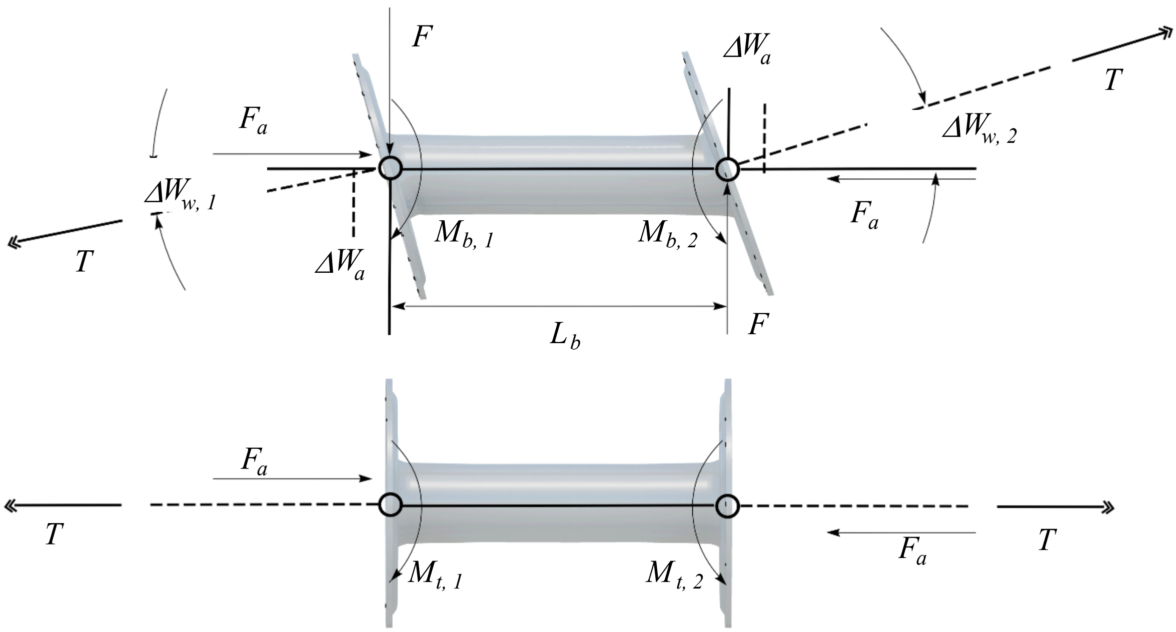
$$F_a = C_a \Delta W_a$$

$$M_{t,1} = T \Delta W_{w,1}$$

$$M_{t,2} = T \Delta W_{w,2}$$

M_b	reaction moment due to the membranes bending stiffness	kNm
F	radial reaction force	N
F_a	axial reaction force	N
T	mean torque	kNm
M_t	reaction moment due to the mean torque T	kNm
C_w	bending stiffness	kNm/rad
C_a	axial stiffness	N/mm
ΔW_a	axial misalignment	mm
$\Delta W_{w,1}$, $\Delta W_{w,2}$	angular misalignment	rad
L_b	bending length	m

Gesilco Coupling in Z-Arrangement



$$M_{b,1} = C_w \Delta W_{w,1}$$

$$M_{b,2} = C_w \Delta W_{w,2}$$

$$F = \frac{(M_{b,1} + M_{b,2})}{L_b}$$

$$C_r = \frac{2C_w}{L_b^2}$$

$$F_a = C_a \Delta W_a$$

$$M_{t,1} = T \Delta W_{w,1}$$

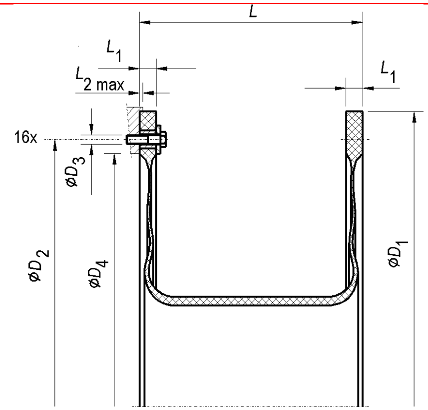
$$M_{t,2} = T \Delta W_{w,2}$$

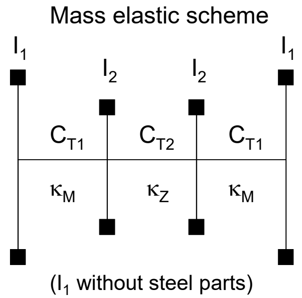
M_b	reaction moment due to the membrane's bending stiffness	kNm
F	radial reaction force	N
F_a	axial reaction force	N
T	mean torque	kNm
M_t	reaction moment due to mean the torque T	kNm
C_w	bending stiffness	kNm/rad
C_a	axial stiffness	N/mm
C_r	radial stiffness	N/mm
ΔW_a	axial misalignment	mm
$\Delta W_{w,1}$, $\Delta W_{w,2}$	angular misalignment	rad
L_b	bending length	m

Technical Data Coupling Type CI - Series 42

Continuous, angular deflection capacity ΔK_w = 14 mrad
Transient, angular deflection capacity $\Delta K_{w,\,max}$ = 29 mrad
Shock angular deflection capacity $\Delta K_{w,\,max}$ = 48 mrad

Undimensioned damping factor membrane κ_M = 0.0053
Undimensioned damping factor interm. shaft κ_Z = 0.0053





Size	Nominal torque	Parameter	Torsional stiffness membrane	Torsional stiffness intermediate shaft	Bending stiffness	Axial stiffness	Mass moment of inertia		Bending length (min)	Length	Max. cent. recess	Outer diameter	Pitch circle dia.	Bolt size	Diameter	Mass	Max. speed
	T_{KN} kNm	i * mm	C_{T1}* MNm/rad	C_{T2} MNm/rad	C_w* kNm/rad	C_a* N/mm	I_1* kgm²	I_2* kgm²	L_b mm	L_1 mm	L_{2max} mm	D_1 mm	D_2 mm	D_3 mm	D_4 mm	m kg	n_{max} min⁻¹
CI 44/42/2H	5.9	198	4.3	3058 *Lb $^{-1.2001}$	2.85	244	0.0255	0.0017 + Lb*1.57*10 $^{-5}$	189	8	5	440	412	M 10	383	1.44 + 0.0053 * Lb	3000
CI 55/42/2H	11.4	247.5	8.4	7467 *Lb $^{-1.2001}$	5.57	305	0.0778	0.0051 + Lb*3.83*10 $^{-5}$	236	10	5	550	515	M 12	479	2.81 + 0.0082 * Lb	2400
CI 69/42/2H	22.6	310.5	16.6	18496 *Lb $^{-1.2001}$	11.00	382	0.2419	0.0159 + Lb*9.49*10 $^{-5}$	296	13	5	690	646	M 16	601	5.55 + 0.0130 * Lb	1900
CI 87/42/2H	45.3	391.5	33.4	46747 *Lb $^{-1.2001}$	22.05	482	0.7709	0.0507 + Lb*24.00*10 $^{-5}$	374	16	6	870	815	M 20	758	11.12 + 0.0206 * Lb	1500
CI 110/42/2H	90.0	492.3	66.3	116881 *Lb $^{-1.2001}$	43.85	606	2.4239	0.1594 + Lb*60.00*10 $^{-5}$	470	20	6	1094	1025	M 24	953	22.10 + 0.0326 * Lb	1200

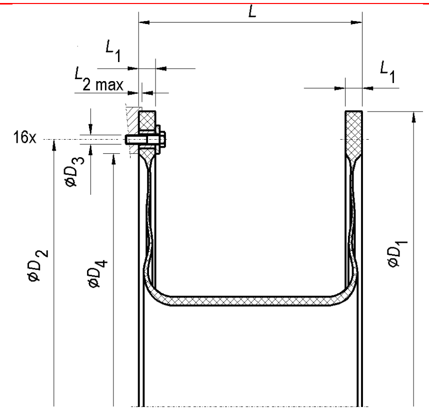
*value for one half of the coupling, L≈L_b

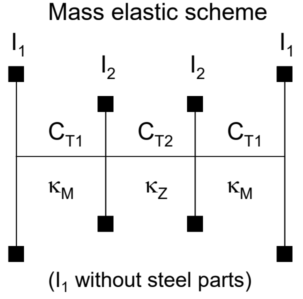
All technical data are without warranty. Modifications of dimensions and design reserved.

Technical Data Coupling Type CI - Series 50

Continuous, angular deflection capacity ΔK_w = 17 mrad
Transient, angular deflection capacity $\Delta K_{w,\,max}$ = 34 mrad
Shock angular deflection capacity $\Delta K_{w,\,max}$ = 55 mrad

Undimensioned damping factor membrane $\kappa_M = 0.0053$
Undimensioned damping factor interm. shaft $\kappa_Z = 0.0053$





Size	Nominal torque	Parameter	Torsional stiffness membrane	Torsional stiffness intermediate shaft	Bending stiffness	Axial stiffness	Mass moment of inertia		Bending length (min)	Length	Max. cent. recess	Outer diameter	Pitch circle dia.	Bolt size	Diameter	Mass	Max. speed
	T_{KN} kNm	i * mm	C_{T1} * MNm/rad	C_{T2} MNm/rad	C_w * kNm/rad	C_a * N/mm	I_1 * kgm²	I_2 * kgm²	L_b mm	L_1 mm	L_{2max} mm	D_1 mm	D_2 mm	D_3	D_4 mm	m kg	n_{max} min⁻¹
CI 44/50/2H	3.9	198	3.5	2506 *Lb $^{-1.1984}$	1.73	143	0.0251	0.0014 + Lb*1.31*10 $^{-5}$	189	8	5	440	412	M 8	383	1.38 + 0.0044 * Lb	3000
CI 55/50/2H	7.6	247.5	6.8	6117 *Lb $^{-1.1984}$	3.38	179	0.0765	0.0043 + Lb*3.19*10 $^{-5}$	236	10	5	550	515	M 10	479	2.70 + 0.0068 * Lb	2400
CI 69/50/2H	15.1	310.5	13.5	15153 *Lb $^{-1.1984}$	6.67	225	0.2378	0.0135 + Lb*7.91*10 $^{-5}$	296	13	5	690	646	M 16	601	5.34 + 0.0107 * Lb	1900
CI 87/50/2H	30.2	391.5	27.1	38298 *Lb $^{-1.1984}$	13.36	284	0.7578	0.0429 + Lb*20.00*10 $^{-5}$	374	16	6	870	815	M 16	758	10.70 + 0.0170 * Lb	1500
CI 110/50/2H	60.0	492.3	53.9	95757 *Lb $^{-1.1984}$	26.57	357	2.3826	0.1349 + Lb*50.00*10 $^{-5}$	470	20	6	1094	1025	M 20	953	21.27 + 0.0269 * Lb	1200

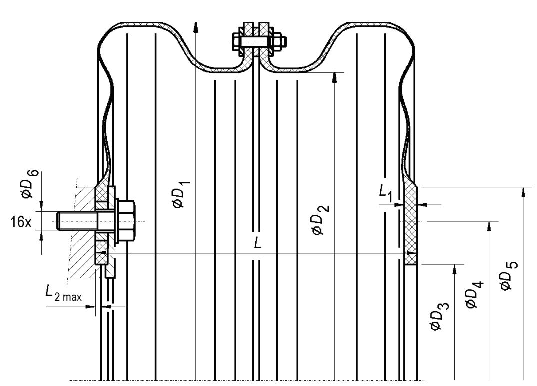
*value for one half of the coupling, L≈L_b

All technical data are without warranty. Modifications of dimensions and design reserved.

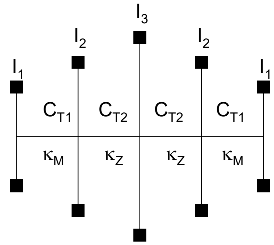
Technical Data Coupling Type BF – Series 35

Continuous, angular deflection capacity ΔK_w = 12 mrad
Transient, angular deflection capacity $\Delta K_{w,\,max}$ = 24 mrad
Shock angular deflection capacity $\Delta K_{w,\,max}$ = 40 mrad

Undimensioned damping factor membrane κ_M = 0.0064
Undimensioned damping factor interm. shaft κ_Z = 0.008



Mass elastic scheme



(I_1 without steel parts)

Size	Nominal torque	Parameter	Torsional stiffness membrane	Torsional stiffness intermediate shaft	Bending stiffness	Axial stiffness	Mass moment of inertia			Bending length (min)	Length	Max. cent. recess	Inner diameter	Cent. diameter	Pitch circle dia.	Flange dia.	Bolt size	Mass	Max. speed
	T_{KN} kNm	i * mm	C_{T1} * MNm/rad	C_{T2} * MNm/rad	C_w * kNm/rad	C_a * N/mm	I_1 * kgm²	I_2 * kgm²	I_3 kgm²	L_b mm	L_1 mm	L_{2max} mm	D_2 mm	D_3 mm	D_4 mm	D_5 mm	D_6 mm	m kg	n_{max} min⁻¹
BF 50/35/2H	10.0	225	10.0	20884 $*Lb^{-1.1873}$	5.50	266	0.0134	0.0124 $+ Lb*18.94*10^{-5}$	0.0733 $+ Lb*37.94*10^{-5}$	207	9	5	430	162	223	270	M 18	4.65 + 0.0081 *Lb	3500
BF 63/35/2H	20.0	283.5	20.0	52636 $*Lb^{-1.1873}$	11.00	335	0.0427	0.0395 $+ Lb*47.75*10^{-5}$	0.2328 $+ Lb*95.63*10^{-5}$	261	11	5	542	204	281	340	M 22	9.30 + 0.0129 *Lb	2800
BF 80/35/2H	41.0	360	41.0	136862 $*Lb^{-1.1873}$	22.52	425	0.1409	0.1305 $+ Lb*124.16*10^{-5}$	0.7687 $+ Lb*248.64*10^{-5}$	331	14	5	688	259	356	432	M 27	19.04 + 0.0207 *Lb	2200
BF 100/35/2H	80.0	450	80.0	334136 $*Lb^{-1.1873}$	43.99	532	0.4301	0.3983 $+ Lb*303.12*10^{-5}$	2.3459 $+ Lb*607.03*10^{-5}$	414	17	6	860	324	445	540	M 33	37.19 + 0.0324 *Lb	1800
BF 110/35/2H	106.5	495	106.5	489209 $*Lb^{-1.1873}$	58.55	585	0.6927	0.6415 $+ Lb*443.79*10^{-5}$	3.7780 $+ Lb*888.75*10^{-5}$	456	19	6	945	356	490	594	M 36	49.50 + 0.0392 *Lb	1600
BF 126/35/2H	160.0	567	160.0	842182 $*Lb^{-1.1873}$	88.00	670	1.3660	1.2650 $+ Lb*764.00*10^{-5}$	7.4500 $+ Lb*1530.00*10^{-5}$	522	22	6	1083	408	561	680	M 42	74.40 + 0.0514 *Lb	1400

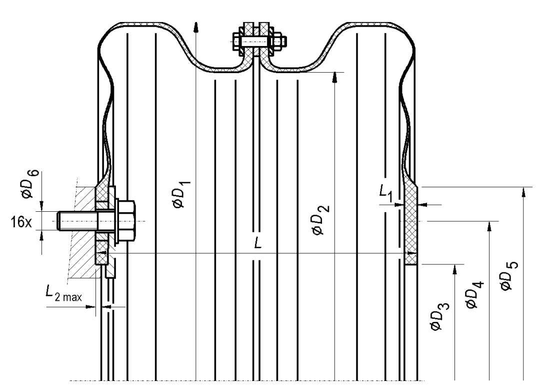
*value for one half of the coupling, $L \approx L_b$

All technical data are without warranty. Modifications of dimensions and design reserved.

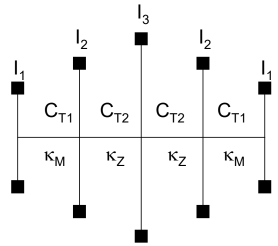
Technical Data Coupling Type BF – Series 40

Continuous, angular deflection capacity ΔK_w = 13 mrad
Transient, angular deflection capacity $\Delta K_{w,\,max}$ = 28 mrad
Shock angular deflection capacity $\Delta K_{w,\,max}$ = 45 mrad

Undimensioned damping factor membrane κ_M = 0.0064
Undimensioned damping factor interm. shaft κ_Z = 0.008



Mass elastic scheme



(I1 without steel parts)

Size	Nominal torque	Parameter	Torsional stiffness membrane	Torsional stiffness intermediate shaft	Bending stiffness	Axial stiffness	Mass moment of inertia			Bending length (min)	Length	Max. cent. recess	Inner diameter	Lent. diameter	Pitch circle dia.	Flange dia.	Bolt size	Mass	Max. speed
	T_{KN} kNm	i * mm	C_{T1} * MNm/rad	C_{T2} * MNm/rad	C_w * kNm/rad	C_a * N/mm	I_1 * kgm²	I_2 * kgm²	I_3 kgm²	L_b	L_1	L_{2max}	D_2 mm	D_3	D_4	D_5	D_6	m kg	n_{max} min^{-1}
BF 50/40/2H	8.7	225	8.5	16649 *Lb $^{-1.1873}$	4.40	194	0.0130	0.0118 + Lb*18.94*10 $^{-5}$	0.0666 + Lb*37.94*10 $^{-5}$	207	9	5	430	162	223	270	M 20	4.47 + 0.0081 *Lb	3500
BF 63/40/2H	17.5	283.5	17.0	41963 *Lb $^{-1.1873}$	8.80	244	0.0413	0.0373 + Lb*47.75*10 $^{-5}$	0.2114 + Lb*95.63*10 $^{-5}$	261	11	5	542	204	281	340	M 20	8.94 + 0.0129 *Lb	2800
BF 80/40/2H	35.8	360	34.8	109109 *Lb $^{-1.1873}$	18.02	310	0.1364	0.1233 + Lb*124.16*10 $^{-5}$	0.6979 + Lb*248.64*10 $^{-5}$	331	14	5	688	259	356	432	M 24	18.31 + 0.0207 *Lb	2200
BF 100/40/2H	70.0	450	68.0	266378 *Lb $^{-1.1873}$	35.19	387	0.4163	0.3763 + Lb*303.12*10 $^{-5}$	2.1299 + Lb*607.03*10 $^{-5}$	414	17	6	860	324	445	540	M 30	35.77 + 0.0324 *Lb	1800
BF 110/40/2H	93.2	495	90.5	390005 *Lb $^{-1.1873}$	46.84	426	0.6704	0.6060 + Lb*443.79*10 $^{-5}$	3.4302 + Lb*888.75*10 $^{-5}$	456	19	6	945	356	490	594	M 36	47.61 + 0.0392 *Lb	1600
BF 126/40/2H	140.0	567	136.0	671400 *Lb $^{-1.1873}$	70.40	488	1.3220	1.1950 + Lb*764.00*10 $^{-5}$	6.7640 + Lb*1530.00*10 $^{-5}$	522	22	6	1083	408	561	680	M 36	71.55 + 0.0514 *Lb	1400

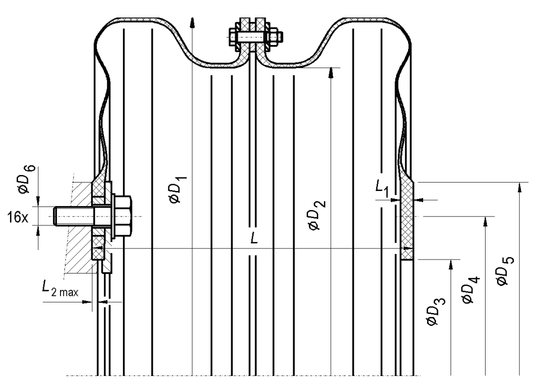
*value for one half of the coupling, L≈Lb

All technical data are without warranty. Modifications of dimensions and design reserved.

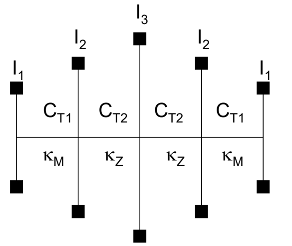
Technical Data   Coupling Type BF – Series 50

Continuous, angular deflection capacity ΔK_w = 17 mrad
Transient, angular deflection capacity $\Delta K_{w,\,max}$ = 34 mrad
Shock angular deflection capacity $\Delta K_{w,\,max}$ = 55 mrad

Undimensioned damping factor membrane κM = 0.0064
Undimensioned damping factor interm. shaft κZ = 0.008



Mass elastic scheme



(I1 without steel parts)

Size	Nominal torque	Parameter	Torsional stiffness membrane	Torsional stiffness intermediate shaft	Bending stiffness	Axial stiffness	Mass moment of inertia			Bending length (min)	Length	Max. cent. recess	Inner diameter	Cent. diameter	Pitch circle dia.	Flange dia.	Bolt size	Mass	Max. speed
	T_{KN}	i *	C_{T1} *	C_{T2} *	C_w *	C_a *	I_1 *	I_2 *	I_3	L_b	L_1	L_{2max}	D_2	D_3	D_4	D_5	D_6	m	n_{max}
	kNm	mm	MNm/rad	MNm/rad	kNm/rad	N/mm	kgm²	kgm²	kgm²	mm								kg	min^{-1}
BF 50/50/2H	6.5	225	6.4	12633 $*Lb^{-1.1873}$	2.78	130	0.0121	0.0104 $+ Lb*18.94*10^{-5}$	0.0531 $+ Lb*37.94*10^{-5}$	207	9	5	430	162	223	270	M 20	4.11 + 0.0081 *Lb	3500
BF 63/50/2H	13.0	283,5	12.9	31842 $*Lb^{-1.1873}$	5.55	164	0.0384	0.0330 $+ Lb*47.75*10^{-5}$	0.1687 $+ Lb*95.63*10^{-5}$	261	11	5	542	204	281	340	M 20	8.22 + 0.0129 *Lb	2800
BF 80/50/2H	26.6	360	26.4	82794 $*Lb^{-1.1873}$	11.37	208	0.1269	0.1089 $+ Lb*124.16*10^{-5}$	0.5570 $+ Lb*248.64*10^{-5}$	331	14	5	688	259	356	432	M 24	16.82 + 0.0207 *Lb	2200
BF 100/50/2H	52.0	450	51.6	202135 $*Lb^{-1.1873}$	22.21	260	0.3873	0.3322 $+ Lb*303.12*10^{-5}$	1.6997 $+ Lb*607.03*10^{-5}$	414	17	6	860	324	445	540	M 30	32.85 + 0.0324 *Lb	1800
BF 110/50/2H	69.2	495	68.7	295945 $*Lb^{-1.1873}$	29.56	286	0.6238	0.5350 $+ Lb*443.79*10^{-5}$	2.7374 $+ Lb*888.75*10^{-5}$	456	19	6	945	356	490	594	M 36	43.73 + 0.0392 *Lb	1600
BF 126/50/2H	104.0	567	103.2	509475 $*Lb^{-1.1873}$	44.42	328	1.2300	1.0550 $+ Lb*764.00*10^{-5}$	5.3980 $+ Lb*1530.00*10^{-5}$	522	22	6	1083	408	561	680	M 36	65.72 + 0.0514 *Lb	1400

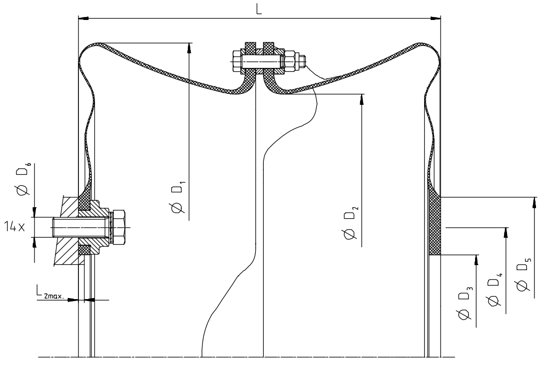
*value for one half of the coupling, $L \approx L_b$

All technical data are without warranty. Modifications of dimensions and design reserved.

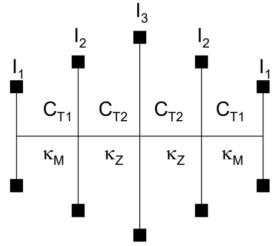
Technical Data Coupling Type BF – Series 50 HSO

Continuous, angular deflection capacity ΔK_w = 14 mrad
Transient, angular deflection capacity $\Delta K_{w,\,max}$ = 28 mrad
Shock angular deflection capacity $\Delta K_{w,\,max}$ = 42 mrad

Undimensioned damping factor membrane κM = 0.0064
Undimensioned damping factor interm. shaft κZ = 0.008



Mass elastic scheme



(I_1 without steel parts)

Size	Nominal torque	Parameter	Torsional stiffness membrane	Torsional stiffness intermediate shaft	Bending stiffness	Axial stiffness	Mass moment of inertia			Bending length (min)	Length	Max. cent. recess	Outer diameter	Cent. diameter	Pitch circle dia.	Flange dia.	Bolt size	Mass	Max. speed
	T_{KN} kNm	i * mm	C_{T1} * MNm/rad	C_{T2} * MNm/rad	C_w * kNm/rad	C_a * N/mm	I_1 * kgm²	I_2 * kgm²	I_3 kgm²	L_b	L	L_{2max}	D_1	D_3	D_4	D_5	D_6	m kg	n_{max} min⁻¹
										mm									
BF 50/50/2HSO	10	225	10	11	6.4	320	0.05	0.04	0.19	235	250	5	500	160	205	254	M 16	13	3500
BF 63/50/2HSO	20	283,5	20	22	12.2	304	0.09	0.13	0.63	344	363	5	630	205	260	320	M 20	27	2800
BF 80/50/2HSO	41	360	41	45	26.2	512	0.49	0.37	1.98	376	400	5	800	256	328	406	M 24	54	2200

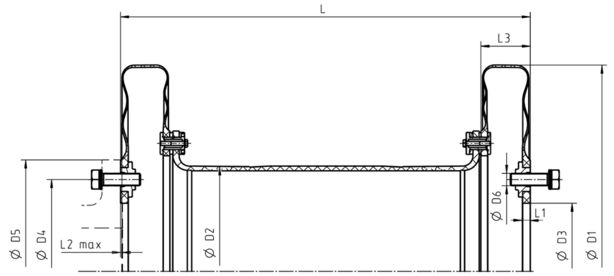
*value for one half of the coupling, L≈L_b

All technical data are without warranty. Modifications of dimensions and design reserved.

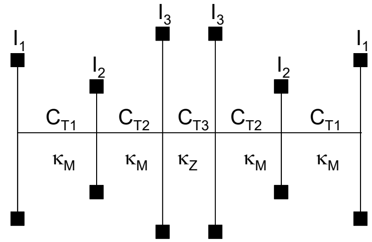
Technical Data Coupling Type CS – Series 35

Continuous, angular deflection capacity: ΔK_w = 12 mrad
Transient, angular deflection capacity $\Delta K_{w,\,max}$ = 24 mrad
Shock angular deflection capacity $\Delta K_{w,\,max}$ = 40 mrad

Undimensioned damping factor membrane κ_M = 0.0053
Undimensioned damping factor interm. shaft κ_Z = 0.0053



Mass elastic scheme



(I_1 without steel parts)

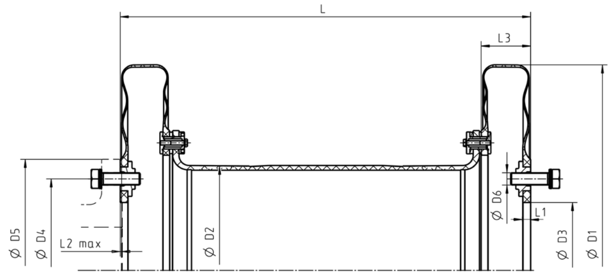
Size	Nominal torque	Parameter	Torsional stiffness membrane		Torsional stiffness intermediate shaft	Bending stiffness	Axial stiffness	Mass moment of inertia			Bending length (min)	Length	Max. cent. recess	Length	Outer diameter	Inner diameter	Cent. diameter	Pitch circle dia.	Flange dia.	Bolt size	Mass	Max. speed
	T_{KN}	i *	C_{T1} *	C_{T2} *	C_{T3}	C_w *	C_a *	I_1 *	I_2 *	I_3	L_b	L_1	L_{2max}	L_3	D_1	D_2	D_3	D_4	D_5	D_6	m	n_{max}
	kNm	mm	MNm/rad	MNm/rad	MNm/rad	kNm/rad	N/mm	kgm²	kgm²	kgm²	mm										kg	min⁻¹
CS 48/35/2H	14.0	216	14.7	15.5	25743 *Lb $^{-1.2664}$	19.11	812	0.0466	0.0546	0.0841 + Lb*8.41*10 $^{-5}$	267	9	5	64	480	272	162	223	270	M 20	18 + 0.0050 *Lb	2600
CS 56/35/2H	22.2	252	23.4	24.6	47692 *Lb $^{-1.2664}$	30.35	948	0.1007	0.1180	0.1819 + Lb*15.59*10 $^{-5}$	311	11	5	75	560	317	204	281	340	M 22	29 + 0.0079 *Lb	2300
CS 72/35/2H	47.1	324	49.7	52.2	130322 *Lb $^{-1.2664}$	64.51	1218	0.3539	0.4145	0.6390 + Lb*42.60*10 $^{-5}$	400	14	5	96	720	408	259	356	432	M 30	62 + 0.0169 *Lb	1800
CS 90/35/2H	92.0	405	97.0	102.0	318170 *Lb $^{-1.2664}$	126.00	1523	1.0800	1.2650	1.9500 + Lb*104.00*10 $^{-5}$	500	17	6	120	900	510	324	445	540	M 36	121 + 0.0330 *Lb	1400
CS 110/35/2H	168.0	495	177.1	186.2	710003 *Lb $^{-1.2664}$	230.05	1861	2.9456	3.4502	5.3185 + Lb*232.08*10 $^{-5}$	611	19	6	147	1100	623	408	561	680	M 42	221 + 0.0603 *Lb	1100

*value for one half of the coupling, L≈L_b

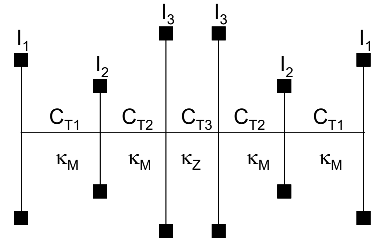
All technical data are without warranty. Modifications of dimensions and design reserved.

Technical Data — Coupling Type CS – Series 40

Continuous, angular deflection capacity	ΔK_w	= 14 mrad
Transient, angular deflection capacity	$\Delta K_{w,\,max}$	= 28 mrad
Shock angular deflection capacity	$\Delta K_{w,\,max}$	= 44 mrad
Undimensioned damping factor membrane	κ_M	= 0.0053
Undimensioned damping factor interm. shaft	κ_Z	= 0.0053



Mass elastic scheme



(I_1 without steel parts)

Size	Nominal torque	Parameter	Torsional stiffness membrane		Torsional stiffness intermediate shaft	Bending stiffness	Axial stiffness	Mass moment of inertia			Bending length (min)	Length	Max. cent. recess	Length	Outer diameter	Inner diameter	Cent. diameter	Pitch circle dia.	Flange dia.	Bolt size	Mass	Max. speed
	T_{KN}	i *	C_{T1} *	C_{T2} *	C_{T3}	C_w *	C_a *	I_1 *	I_2 *	I_3	L_b	L_1	L_{2max}	L_3	D_1	D_2	D_3	D_4	D_5	D_6	m	n_{max}
	kNm	mm	MNm/rad	MNm/rad	MNm/rad	kNm/rad	N/mm	kgm²	kgm²	kgm²	mm										kg	min⁻¹
CS 48/40/2H	12.1	216	12.7	13.0	22368 $*Lb^{-1.2664}$	13.05	560	0.0406	0.0475	0.0737 + $Lb*7.20*10^{-5}$	267	9	5	64	480	272	162	223	270	M 20	16 + 0.0044 *Lb	2600
CS 56/40/2H	19.3	252	20.2	20.7	41439 $*Lb^{-1.2664}$	20.72	653	0.0877	0.1026	0.1593 + $Lb*13.34*10^{-5}$	311	11	5	75	560	317	204	281	340	M 24	26 + 0.0069 *Lb	2300
CS 72/40/2H	41.0	324	43.0	44.0	113236 $*Lb^{-1.2664}$	44.03	840	0.3080	0.3604	0.5597 + $Lb*36.45*10^{-5}$	400	14	5	96	720	408	259	356	432	M 30	54 + 0.0147 *Lb	1800
CS 90/40/2H	80.0	405	84.0	86.0	276456 $*Lb^{-1.2664}$	86.00	1050	0.9400	1.1000	1.7080 + $Lb*89.00*10^{-5}$	500	17	6	120	900	510	324	445	540	M 36	106 + 0.0288 *Lb	1400
CS 110/40/2H	146.1	495	153.4	157.0	616917 $*Lb^{-1.2664}$	157.02	1283	2.5638	3.0002	4.6584 + $Lb*198.61*10^{-5}$	611	19	6	147	1100	623	408	561	680	M 42	194 + 0.0526 *Lb	1100

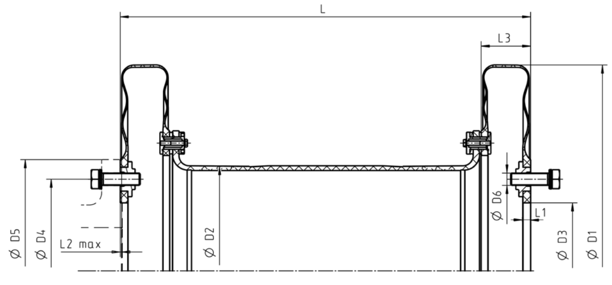
*value for one half of the coupling, $L \approx L_b$

All technical data are without warranty. Modifications of dimensions and design reserved.

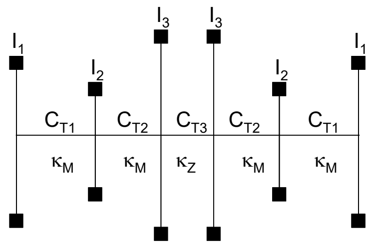
Technical Data   Coupling Type CS – Series 60

Continuous, angular deflection capacity ΔK_w = 18 mrad
Transient, angular deflection capacity $\Delta K_{w,\,max}$ = 36 mrad
shock angular deflection capacity $\Delta K_{w,\,max}$ = 55 mrad

Undimensioned damping factor membrane κ_M = 0.0053
Undimensioned damping factor interm. shaft κ_Z = 0.0053



Mass elastic scheme



(I_1 without steel parts)

Size	Nominal torque	Parameter	Torsional stiffness membrane		Torsional stiffness intermediate shaft	Bending stiffness	Axial stiffness	Mass moment of inertia			Bending length (min)	Length	Max. cent. recess	Length	Outer diameter	Inner diameter	Cent. diameter	Pitch circle dia.	Flange dia.	Bolt size	Mass	Max. speed
	T_{KN} kNm	i * mm	C_{T1}* MNm/ra	C_{T2}* MNm/ra	C_{T3} MNm/rad	C_w* kNm/ra	C_a* N/mm	I_1* kgm²	I_2* kgm²	I_3 kgm²	L_b mm	L_1	L_{2max}	L_3	D_1	D_2	D_3	D_4	D_5	D_6	m kg	n_{max} min⁻¹
CS 50/60/2H	10.0	225	13.1	10.3	15805 $*Lb^{-1.2554}$	7.50	280	0.0294	0.0344	0.0534 + Lb*5.56*10^{-5}	250	9	5	60	500	255	162	223	270	M 20	13 + 0.0036 *Lb	2800
CS 63/60/2H	20.0	284	26.3	20.5	39835 $*Lb^{-1.2554}$	15.00	353	0.0933	0.1092	0.1695 + Lb*14.02*10^{-5}	315	11	5	76	630	321	204	280	340	M 24	27 + 0.0072 *Lb	2200
CS 80/60/2H	41.0	360	53.8	42.0	103576 $*Lb^{-1.2554}$	30.72	448	0.3080	0.3604	0.5597 + Lb*36.45*10^{-5}	400	14	5	96	800	408	259	356	432	M 30	54 + 0.0147 *Lb	1800
CS 100/60/2H	80.0	450	105.0	82.0	252872 $*Lb^{-1.2554}$	60.00	560	0.9400	1.1000	1.7080 + Lb*89.00*10^{-5}	500	17	6	120	1000	510	324	445	540	M 36	106 + 0.0288 *Lb	1400
CS 110/60/2H	106.5	495	139.8	109.1	370230 $*Lb^{-1.2554}$	79.86	616	1.5139	1.7716	2.7508 + Lb*130.30*10^{-5}	550	19	6	132	1100	561	356	490	594	M 36	141 + 0.0383 *Lb	1300
CS 126/60/2H	160.0	567	210.0	164.0	637357 $*Lb^{-1.2554}$	120.02	706	2.9852	3.4934	5.4243 + Lb*224.32*10^{-5}	630	22	6	151	1260	643	408	561	680	M 42	213 + 0.0576 *Lb	1100

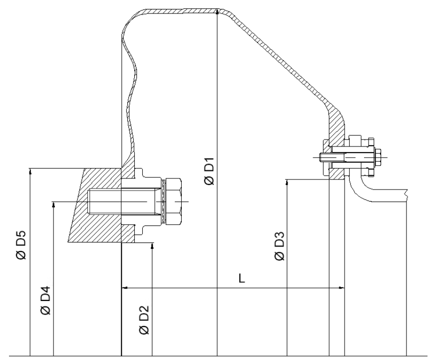
*value for one half of the coupling, $L \approx L_b$

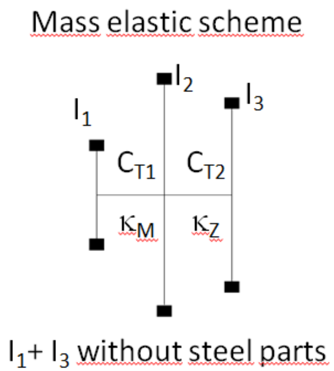
All technical data are without warranty. Modifications of dimensions and design reserved.

Technical Data Coupling Type MB – Series 35

Continuous, angular deflection capacity ΔK_w = 16 mrad
Transient, angular deflection capacity $\Delta K_{w,\,max}$ = 32 mrad
Shock angular deflection capacity $\Delta K_{w,\,max}$ = 48 mrad

Undimensioned damping factor membrane κ_M = 0.0064
Undimensioned damping factor interm. shaft κ_Z = 0.008





Size	Nominal torque	Parameter	Torsional stiffness membrane		Bending stiffness	Axial stiffness	Mass moment of inertia			Length (min)	Outer diameter	Cent. diameter	Inner diameter	Pitch circle dia.	Flange dia.	Bolt size	Mass	Max. speed
	T_{KN} kNm	i mm	C_{T1} MNm/rad	C_{T2} MNm/rad	C_w kNm/rad	C_a N/mm	I_1 kgm²	I_2 kgm²	I_3 kgm²	L	D_1	D_2	D_3 mm	D_4	D_5	D_6	m kg	n_{max} min⁻¹
MB 40/35/1H	5.1	180	6.4	4.6	2.82	229	0.0038	0.0226	0.0116	127	400	130	190	178	216	M 16	3	4400
MB 50/35/1H	10.0	225	12.5	9.0	5.50	286	0.0117	0.0690	0.0353	159	500	163	238	222	270	M 20	6	3500
MB 63/35/1H	20.0	283.5	25.0	18.0	11.00	360	0.0371	0.2192	0.1120	200	630	205	300	280	340	M 24	12	2800
MB 80/35/1H	41.0	360	51.2	36.9	22.52	457	0.1225	0.7237	0.3698	254	800	260	381	356	432	M 30	25	2200
MB 90/35/1H	58.3	405	72.9	52.5	32.07	514	0.2207	1.3042	0.6664	286	900	293	429	400	486	M 34	35	2000
MB 100/35/1H	80.0	450	100.0	72.0	43.99	571	0.3738	2.2087	1.1285	317	1000	325	476	444	540	M 38	48	1800
MB 110/35/1H	106.5	495	133.1	95.8	58.55	629	0.6021	3.5571	1.8175	349	1100	358	524	489	594	M 42	64	1600
MB 126/35/1H	160.0	567	200.0	144.0	88.00	720	1.1872	7.0144	3.5840	400	1260	410	600	560	680	M 48	96	1400

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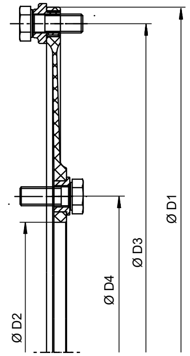
Technical Data Coupling Type DI

Angular deflection capacity $\Delta K_w = 1.75$ mrad

Undimensioned damping factor membrane $\kappa_M = 0.0053$

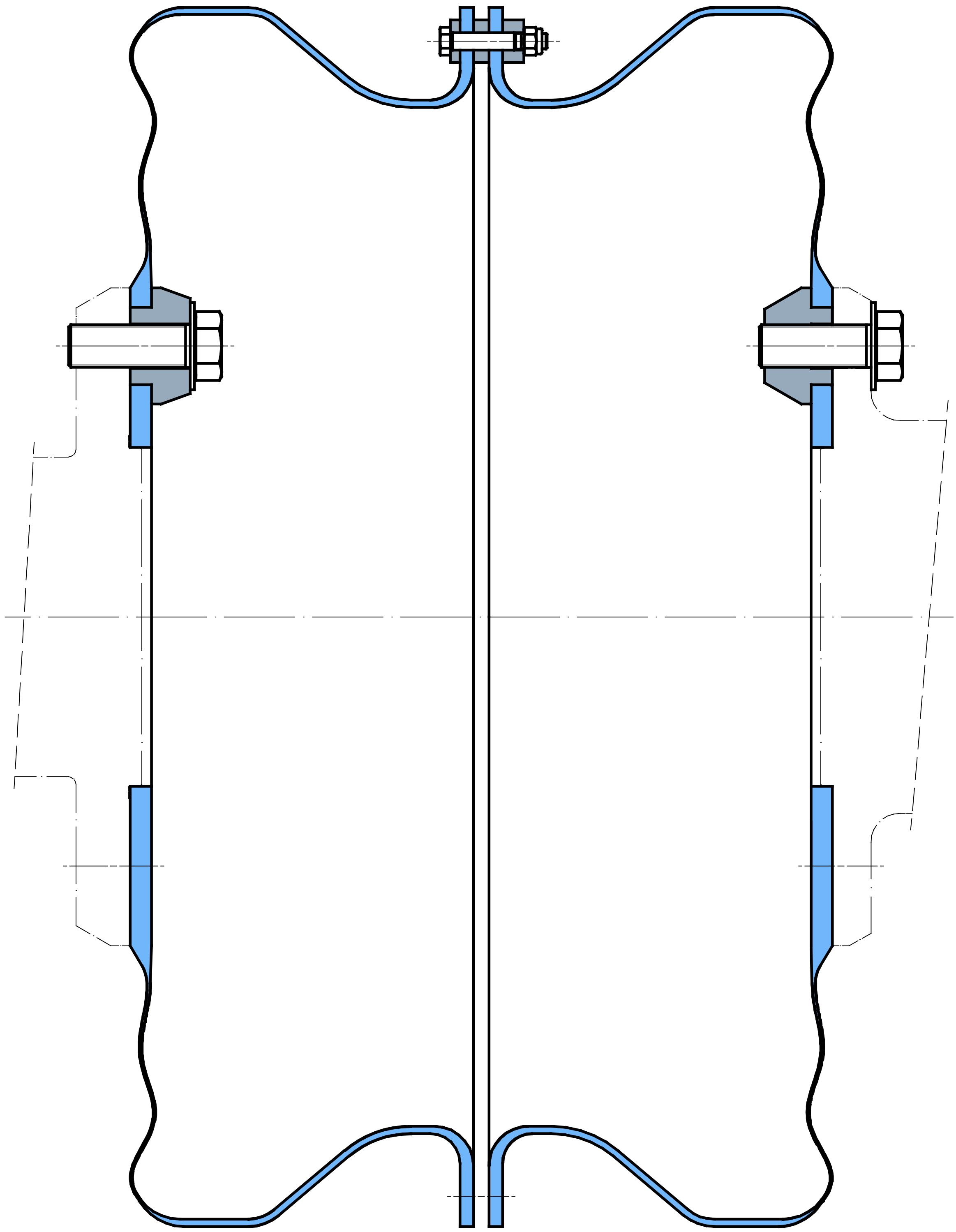


Size	SAE	Nominal torque	Vibratory torque	Parameter	Torsional stiffness	Bending stiffness	Axial stiffness	Mass moment of inertia			Outer diameter	Inner diameter	Outer Pitch circle	Inner Pitch circle	Bolt size	Mass	Max. speed
		T_{KN}	T_{el}	i	C_T	C_w	C_a	I	I_1	I_2	D_1	D_2	D_3	D_4	D_5	m	n_{max}
		kNm	kNm	mm	MNm/rad	kNm/rad	N/mm	kgm^2	kgm^2	kgm^2	mm					kg	min^{-1}
DI 50/2/1HS	14	5	10	793	11	30	1665	0.063	0.05	0.013	467	176	445	212	M 12	2	2882
DI 60/2/1HS	18	9	18	971	21	55	2040	0.175	0.14	0.035	572	216	545	259	M 14	4	2353
DI 70/2/1HS	21	15	30	1143	34	90	2400	0.394	0.315	0.079	673	254	641	305	M 16	6	2000
DI 90/2/1HS	Tailor-made	36	72	1528	81	215	3210	1.685	1.348	0.337	900	340	858	408	M 22	14	1496
DI 110/2/1HS	Tailor-made	65	131	1868	148	393	3923	4.596	3.677	0.919	1100	415	1048	498	M 27	26	1224
DI 140/2/1HS	Tailor-made	135	270	2377	306	810	4993	15.348	12.278	3.07	1400	528	1334	634	M 33	54	961

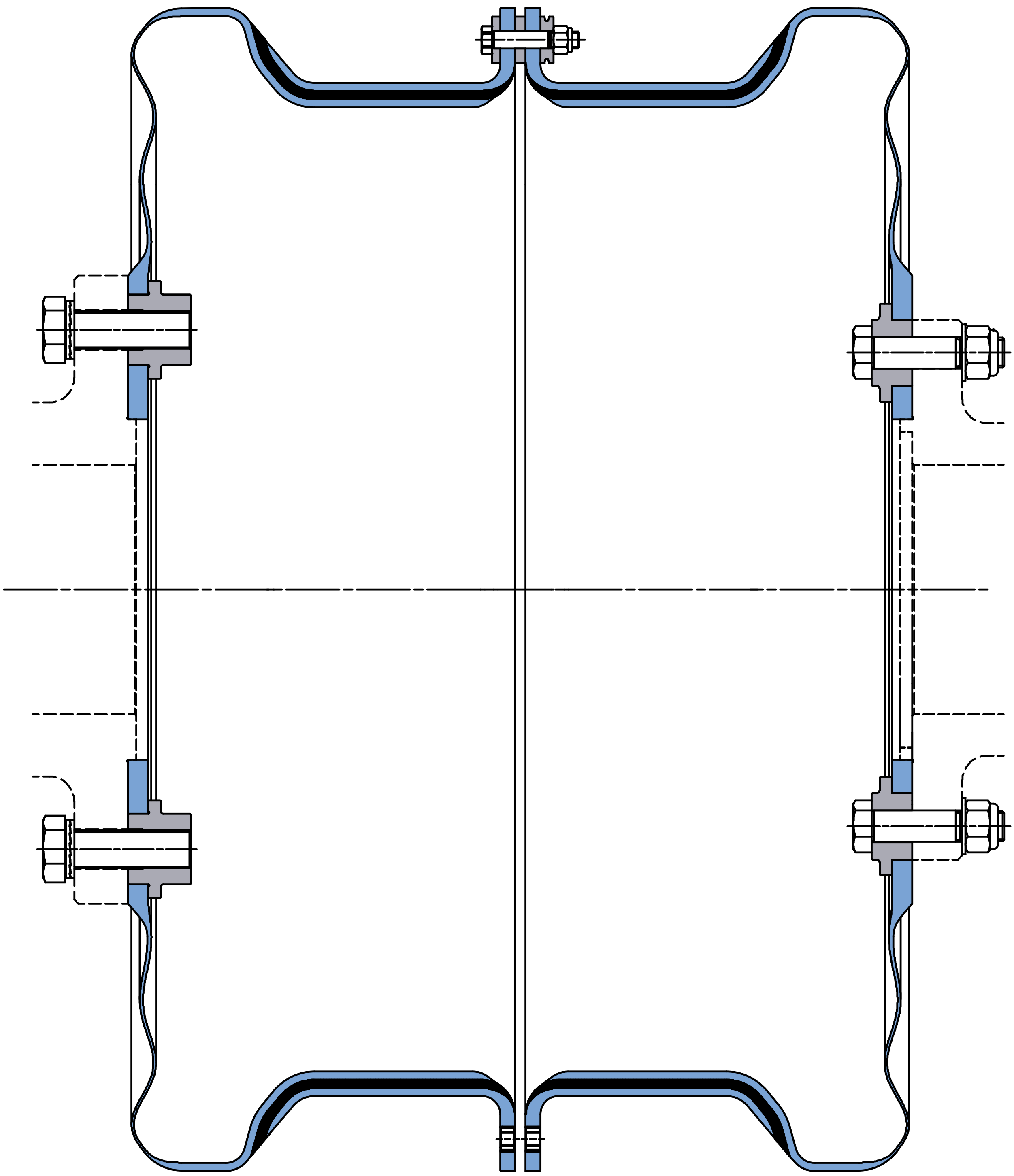
All technical data are without warranty. Modifications of dimensions and design reserved.

Examples

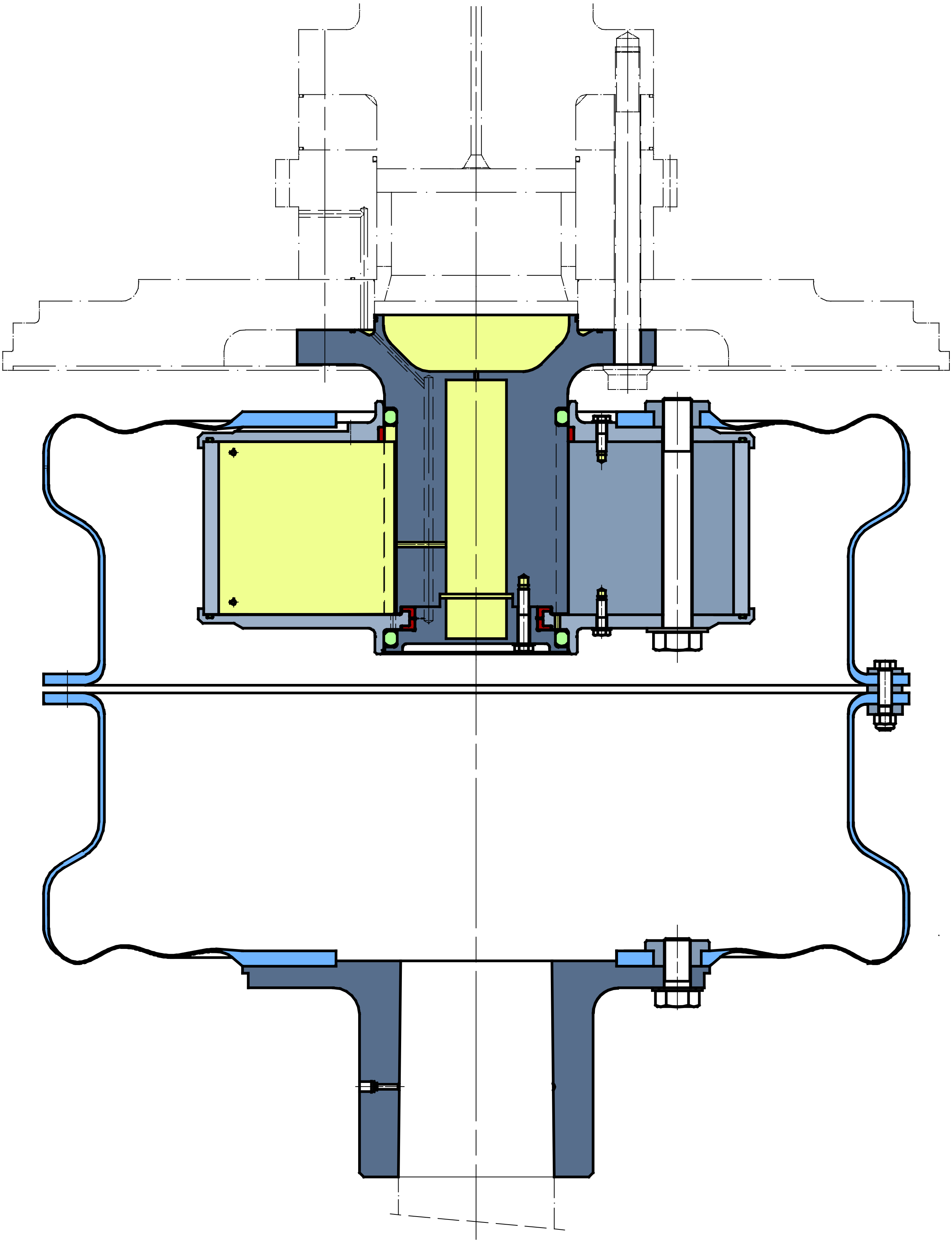
Gesilco BF Coupling – standard design



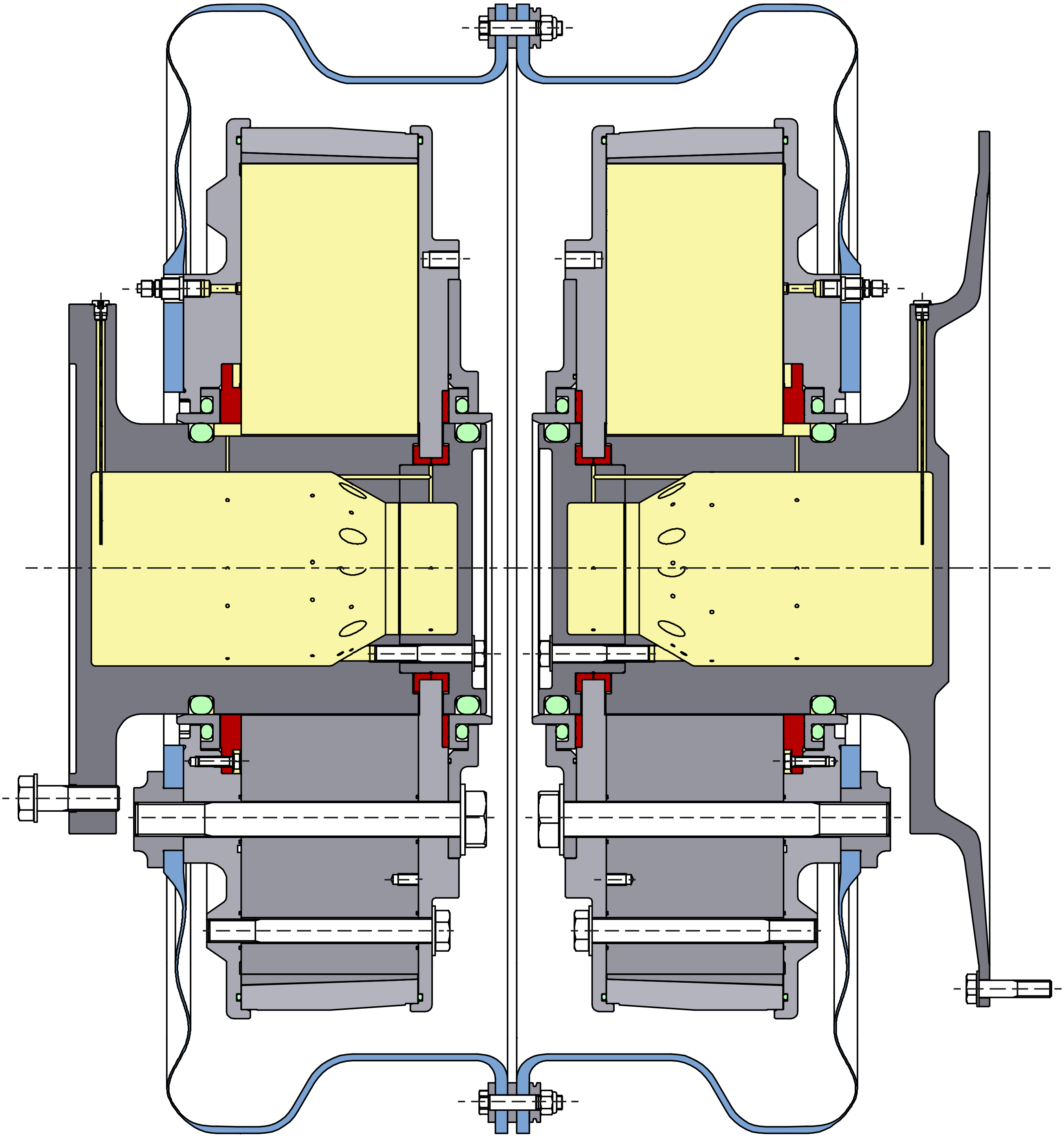
Geislinger Gesilco BF Coupling with elastomer for acoustic optimization



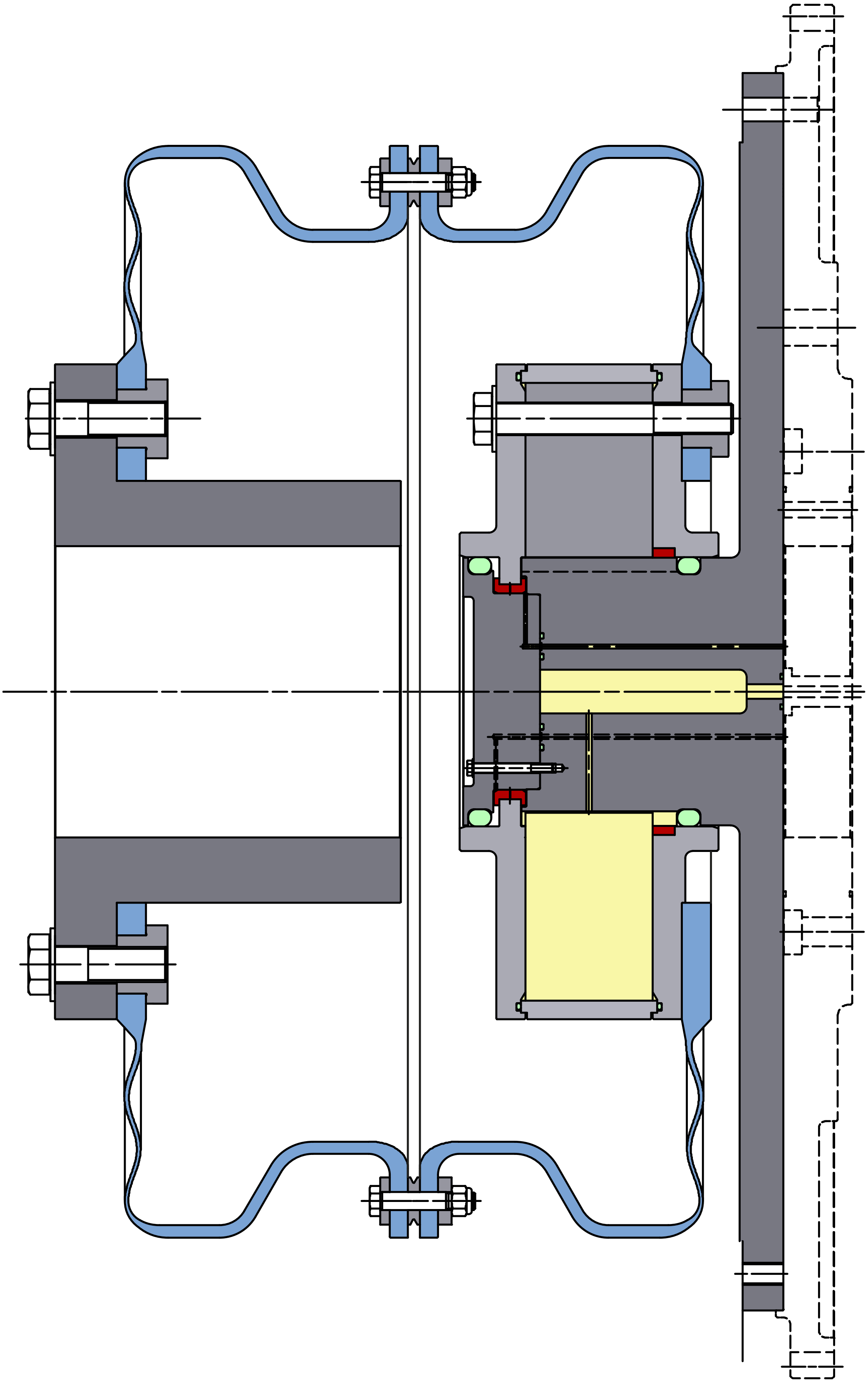
Gesilco BF Coupling + integrated Geislinger BE Coupling



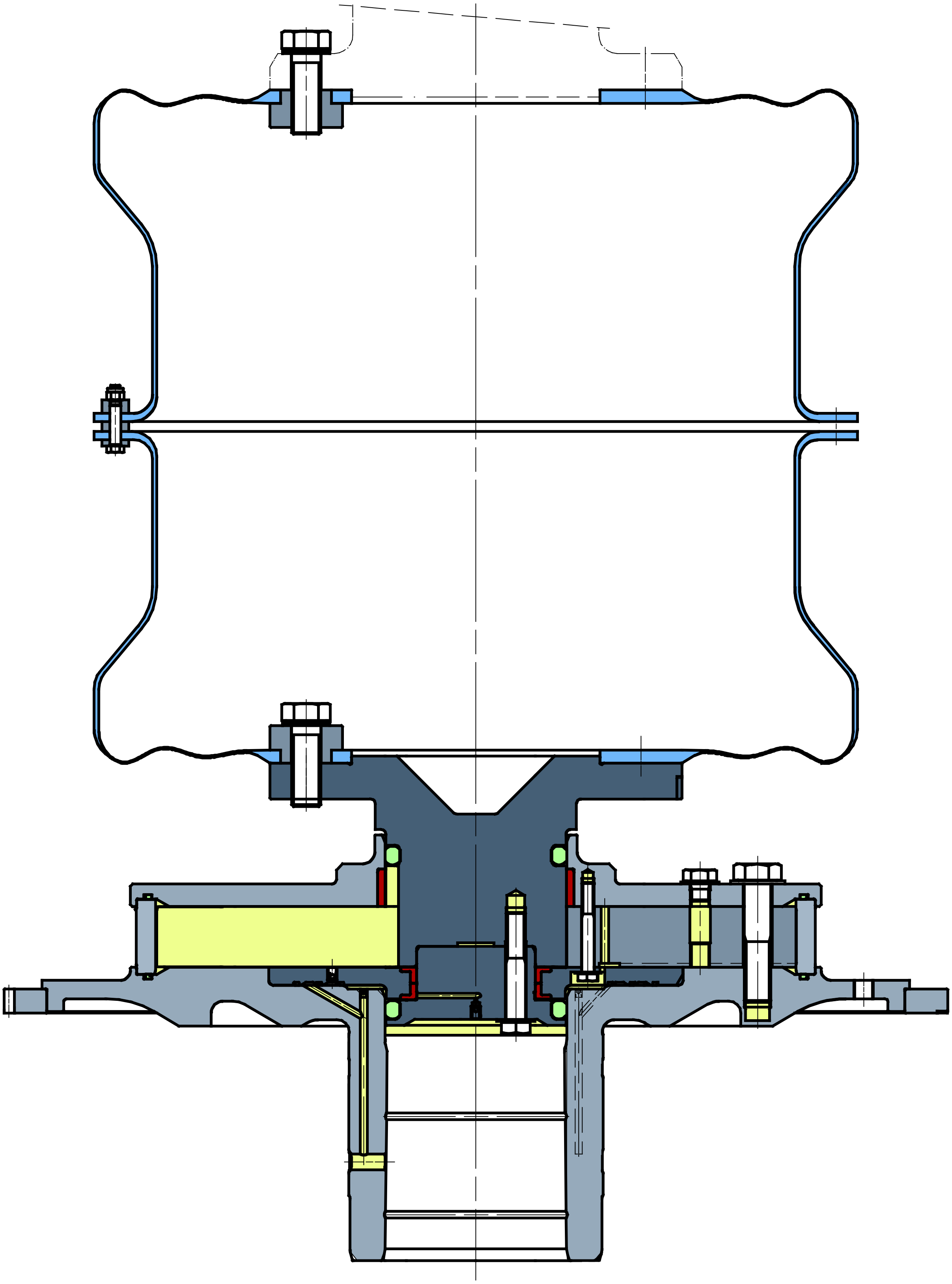
Gesilco BF Coupling + two integrated Geislinger BE Couplings (oil filled)



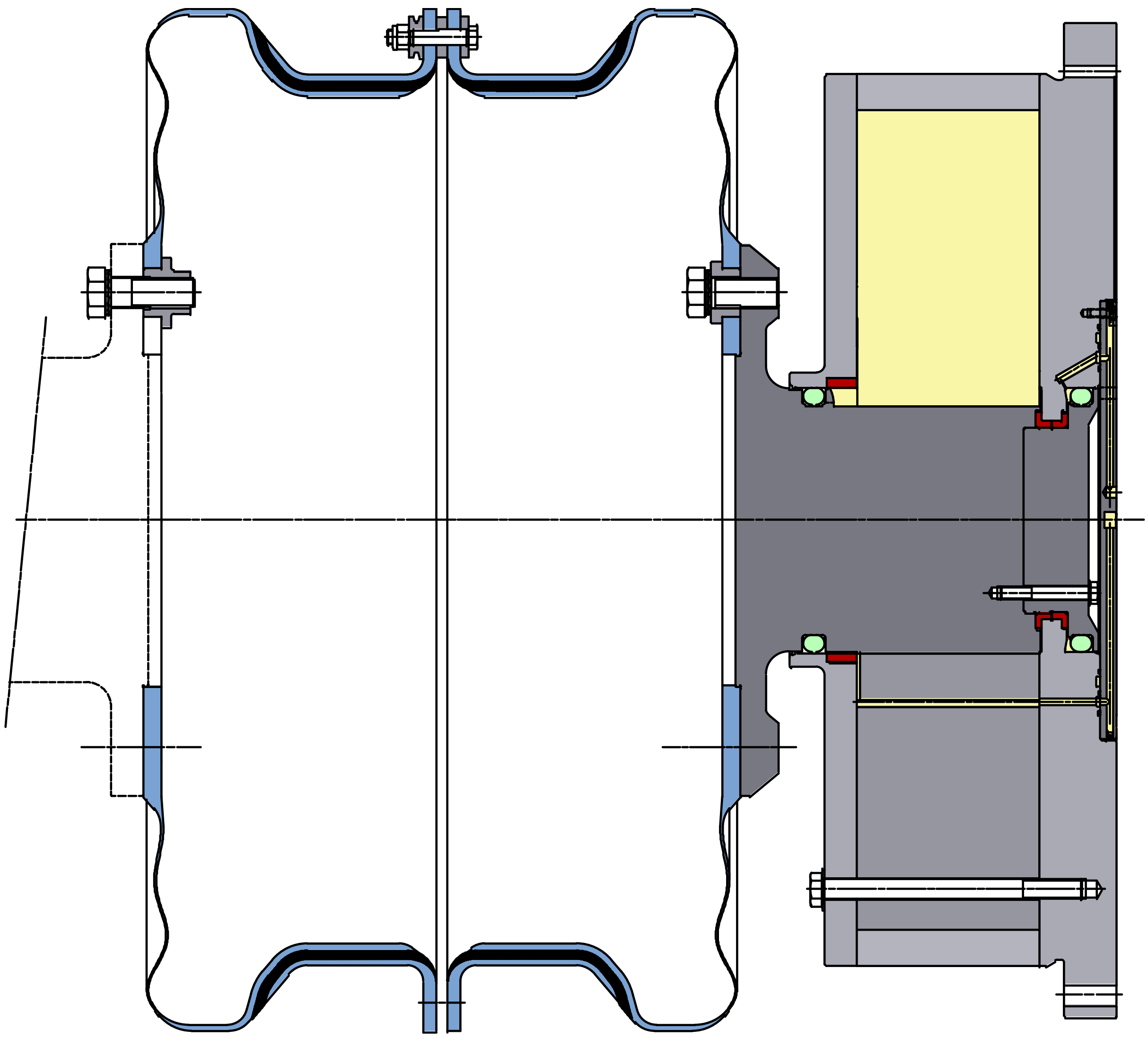
Geislinger Gesilco BF Coupling + Geislinger BE Coupling + internal hub



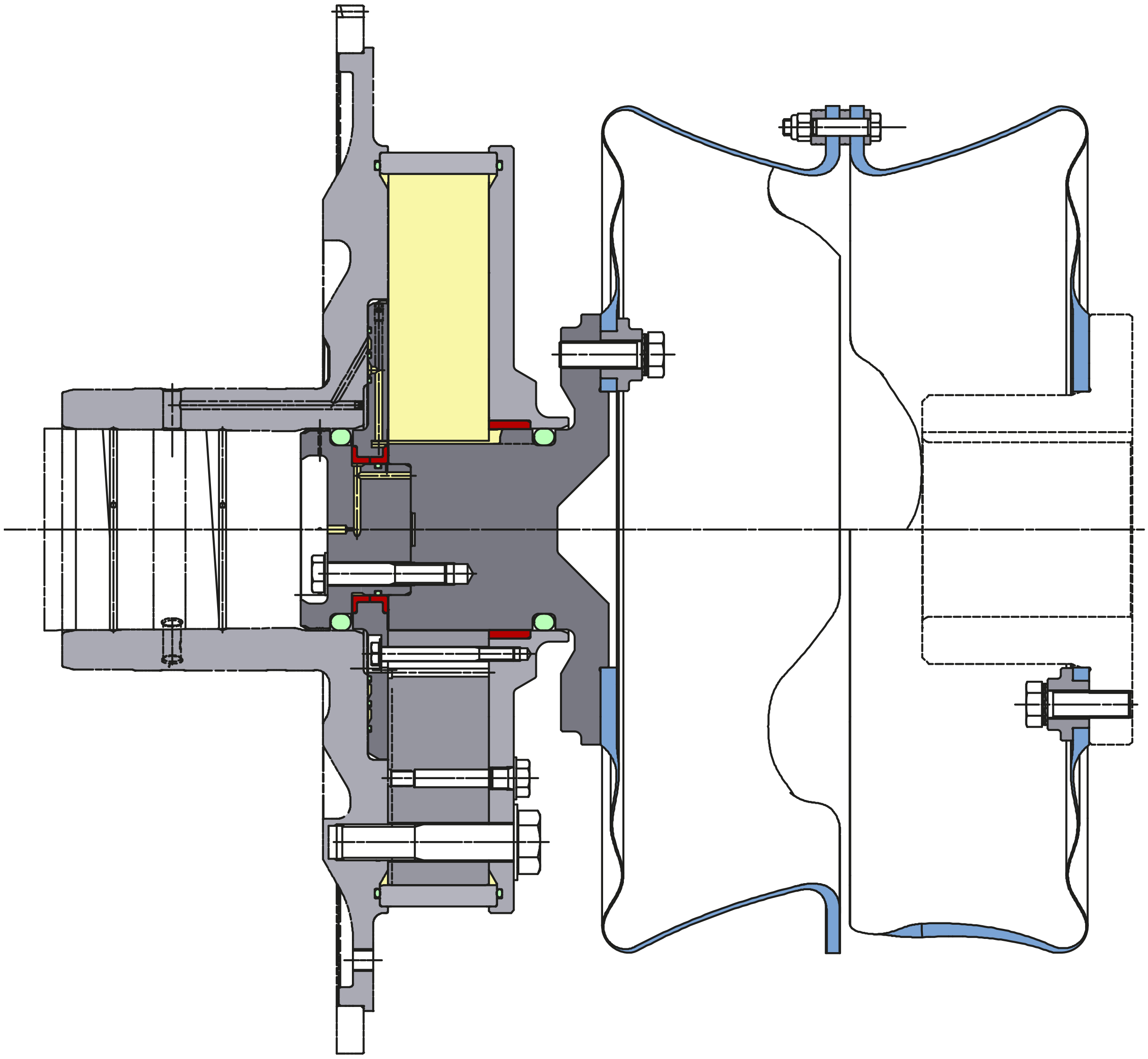
Gesilco BF Coupling + Geislinger F Coupling



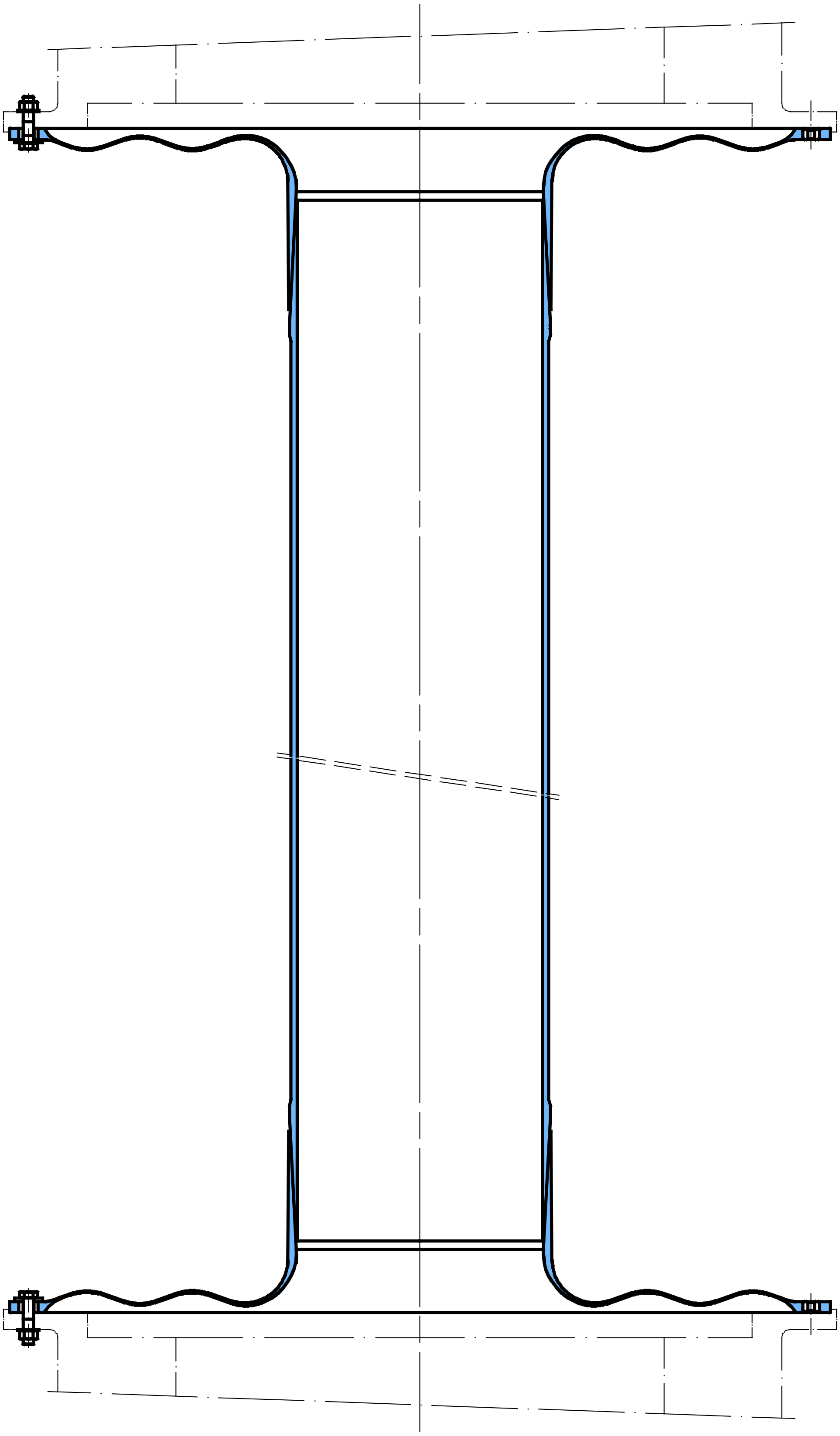
Geislinger Gesilco BF Coupling + Geislinger BC Coupling with elastomer for acoustic optimation



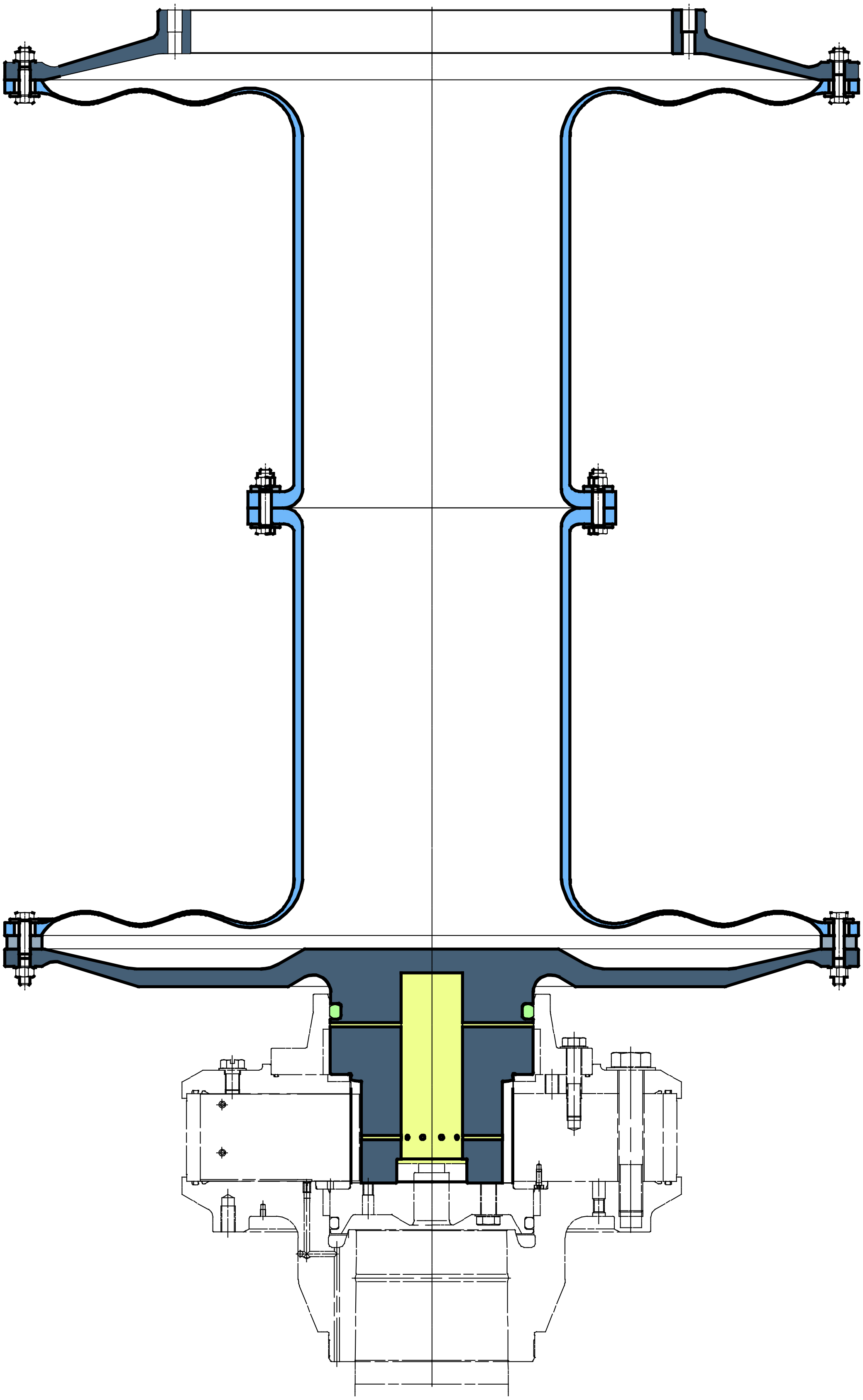
Geislinger Gesilco BF HSO design + Geislinger F Coupling



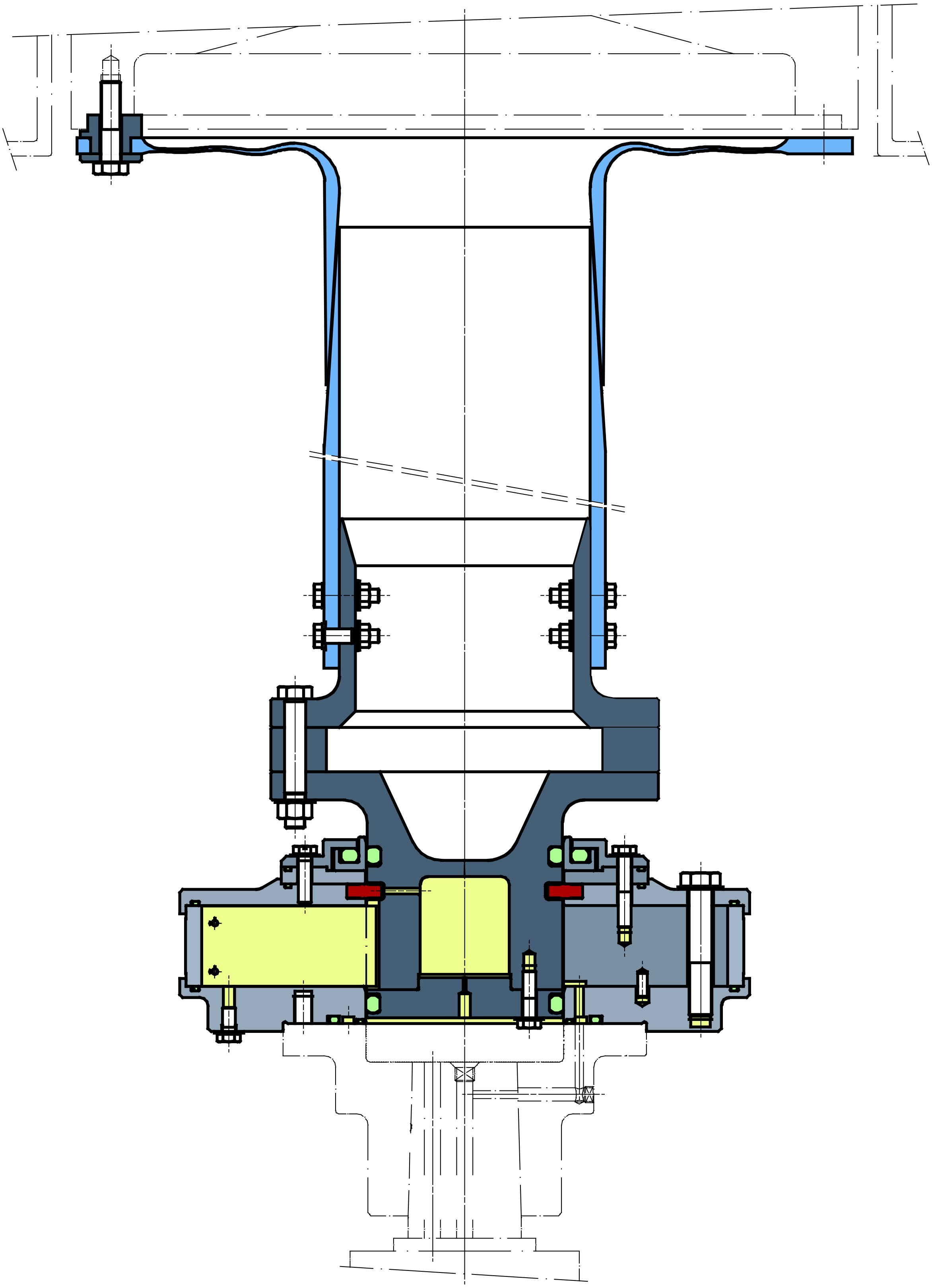
Gesilco CI Coupling – standard design



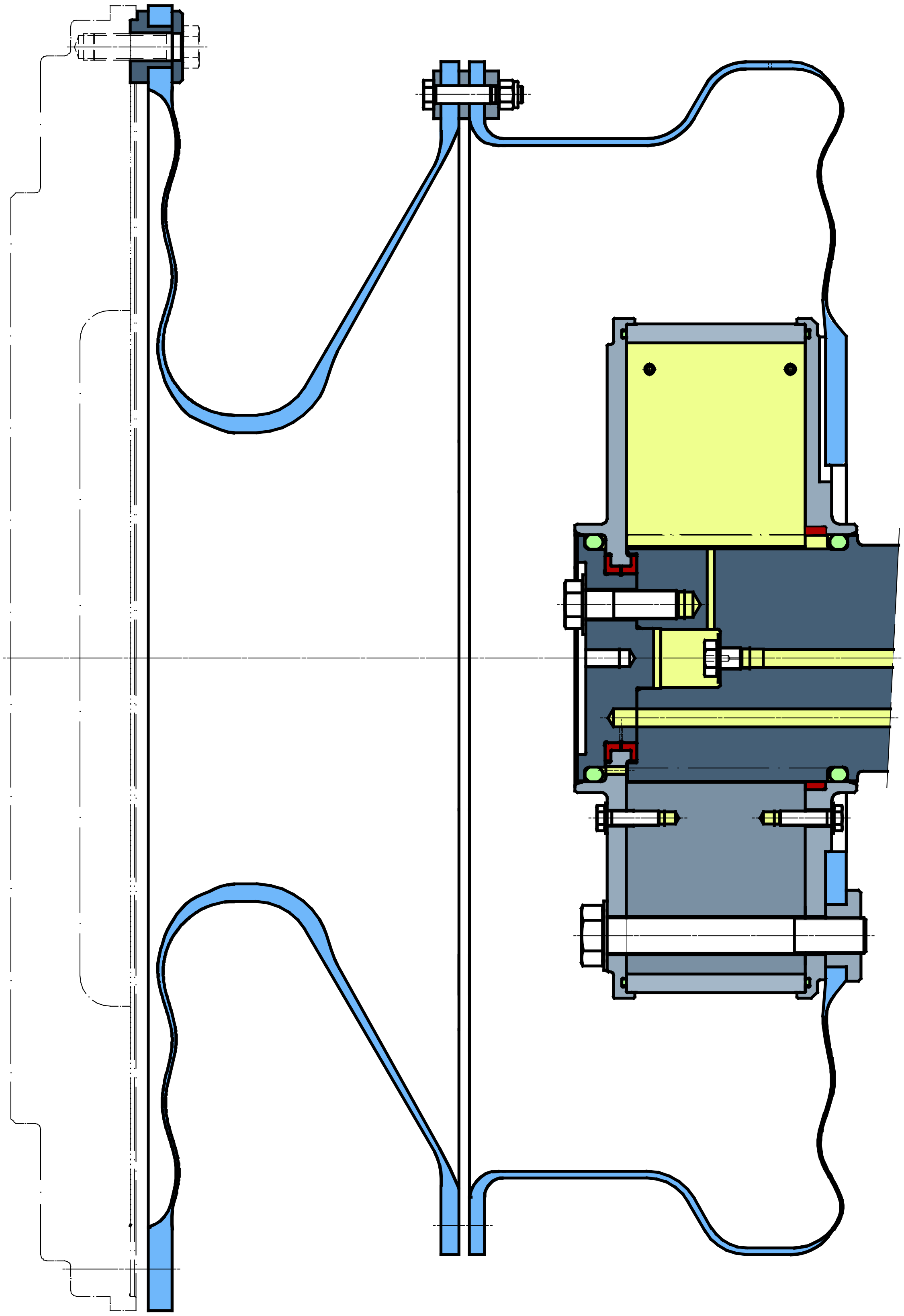
Gesilco CF Coupling + Geislinger F Coupling



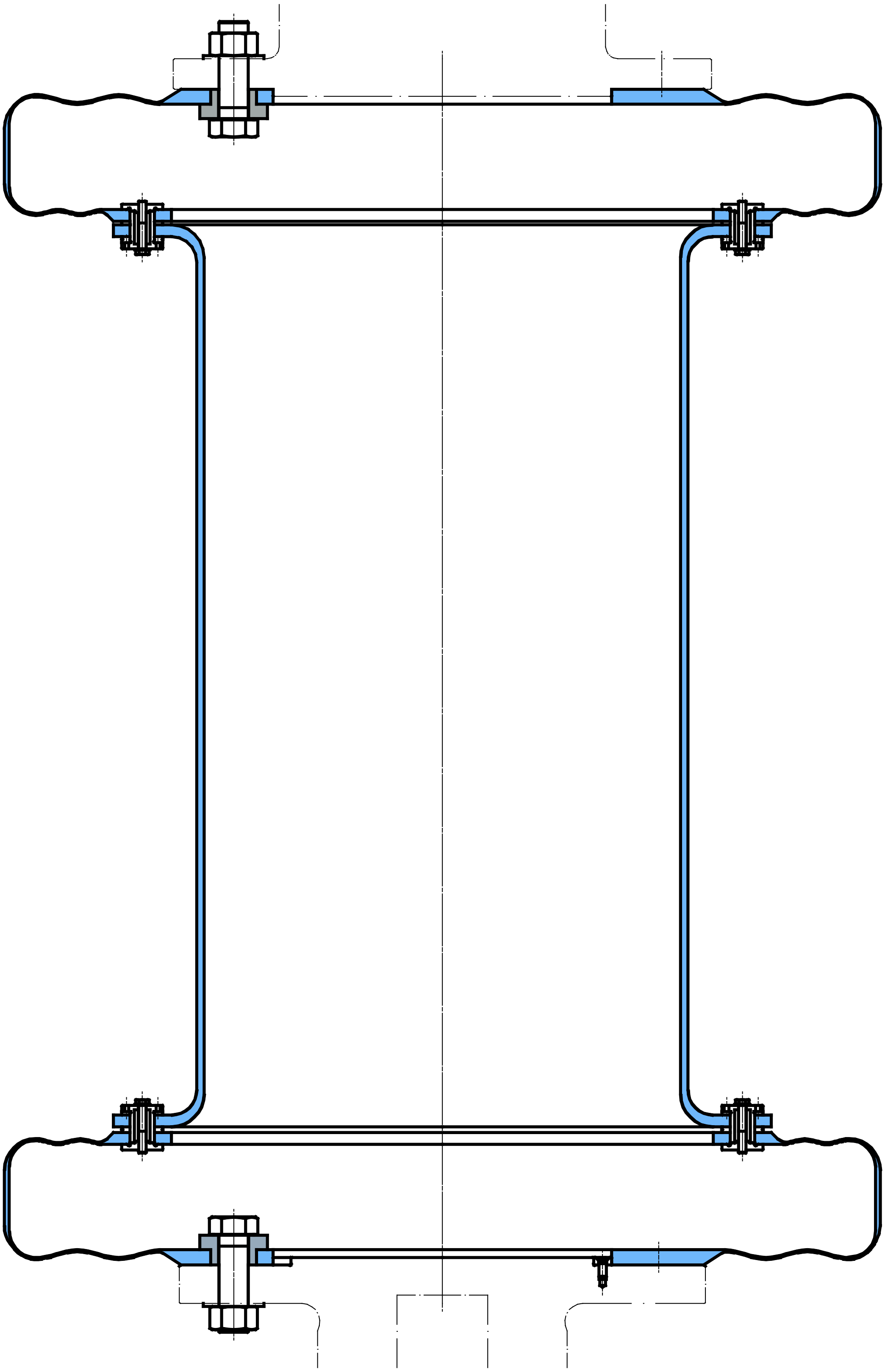
Gesilco CI Coupling + Geislinger BE Coupling



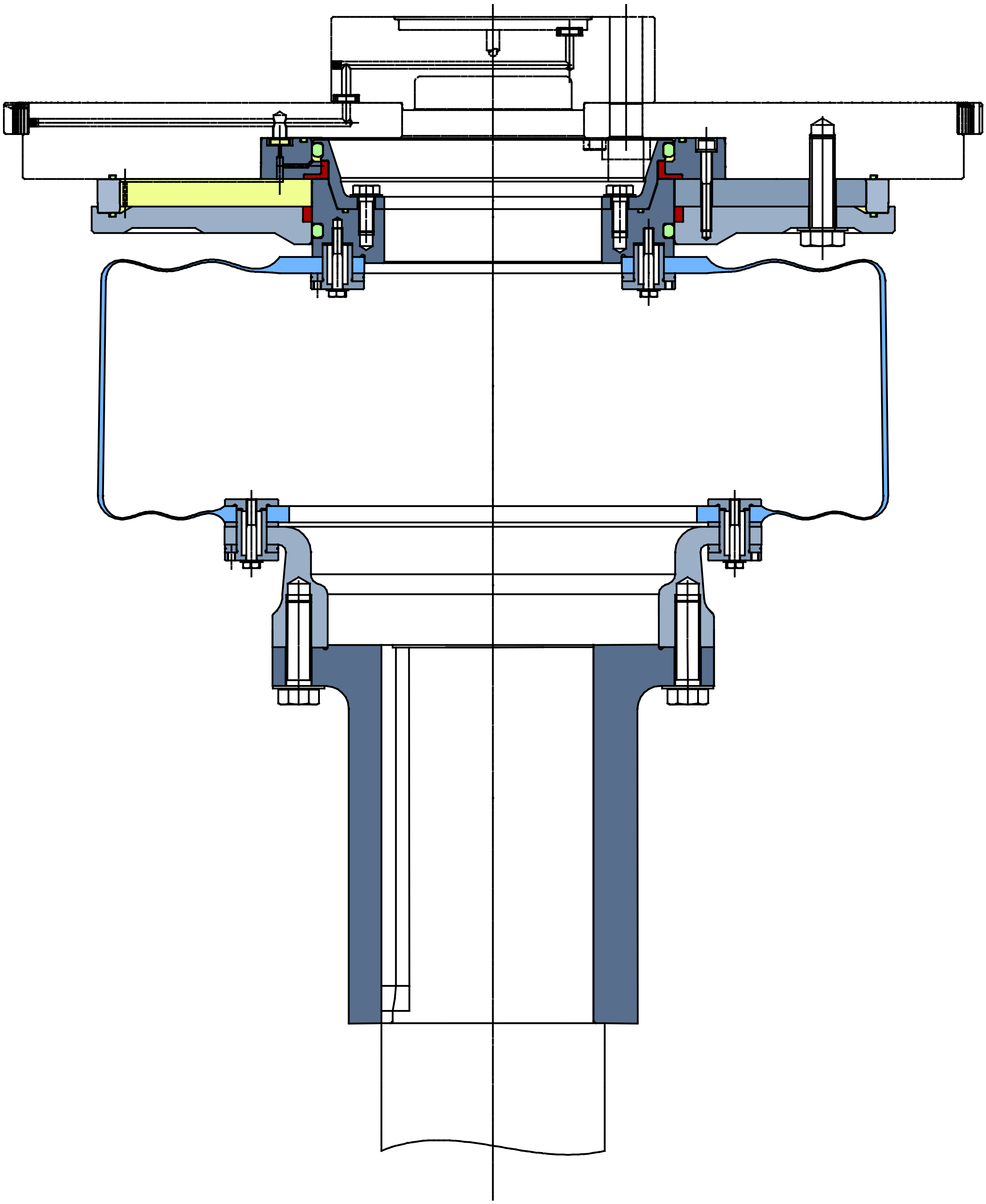
Gesilco BI Coupling + integrated Geislinger E Coupling



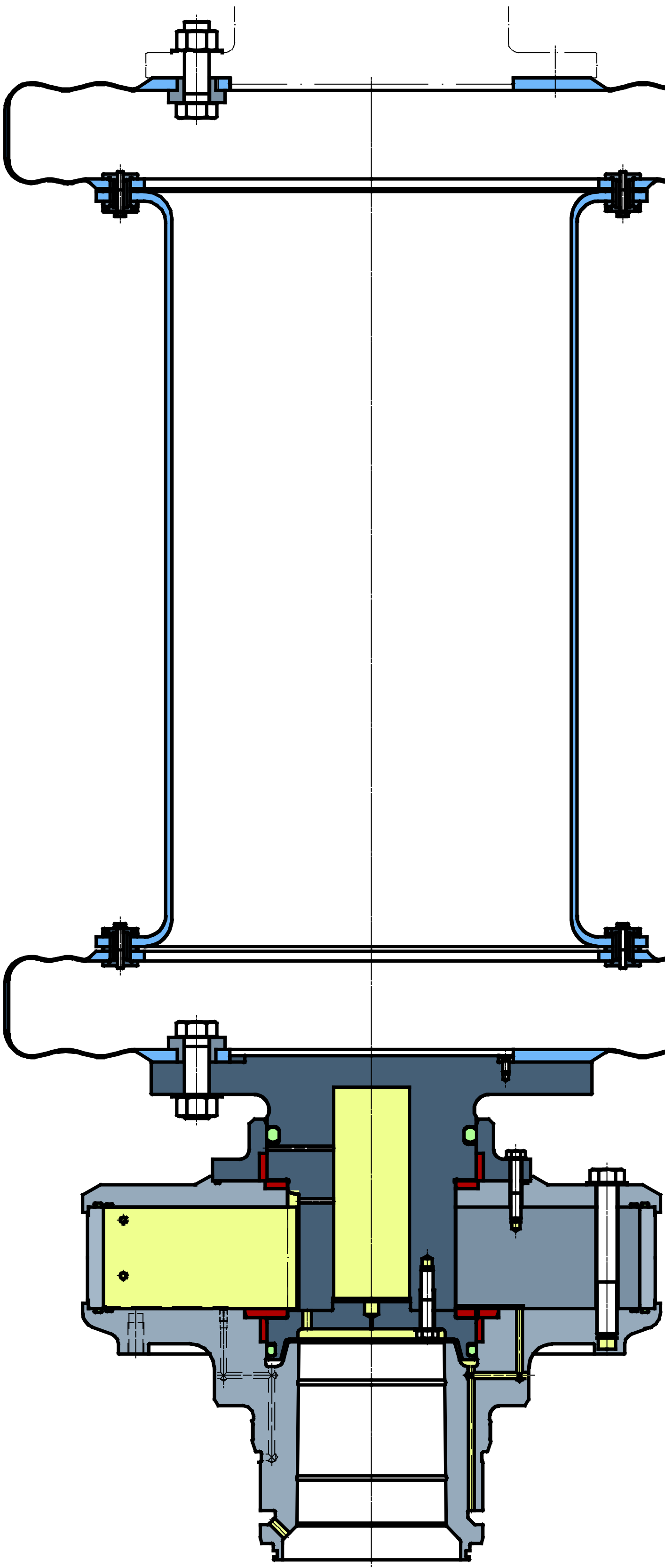
Geislinger Gesilco CS Coupling



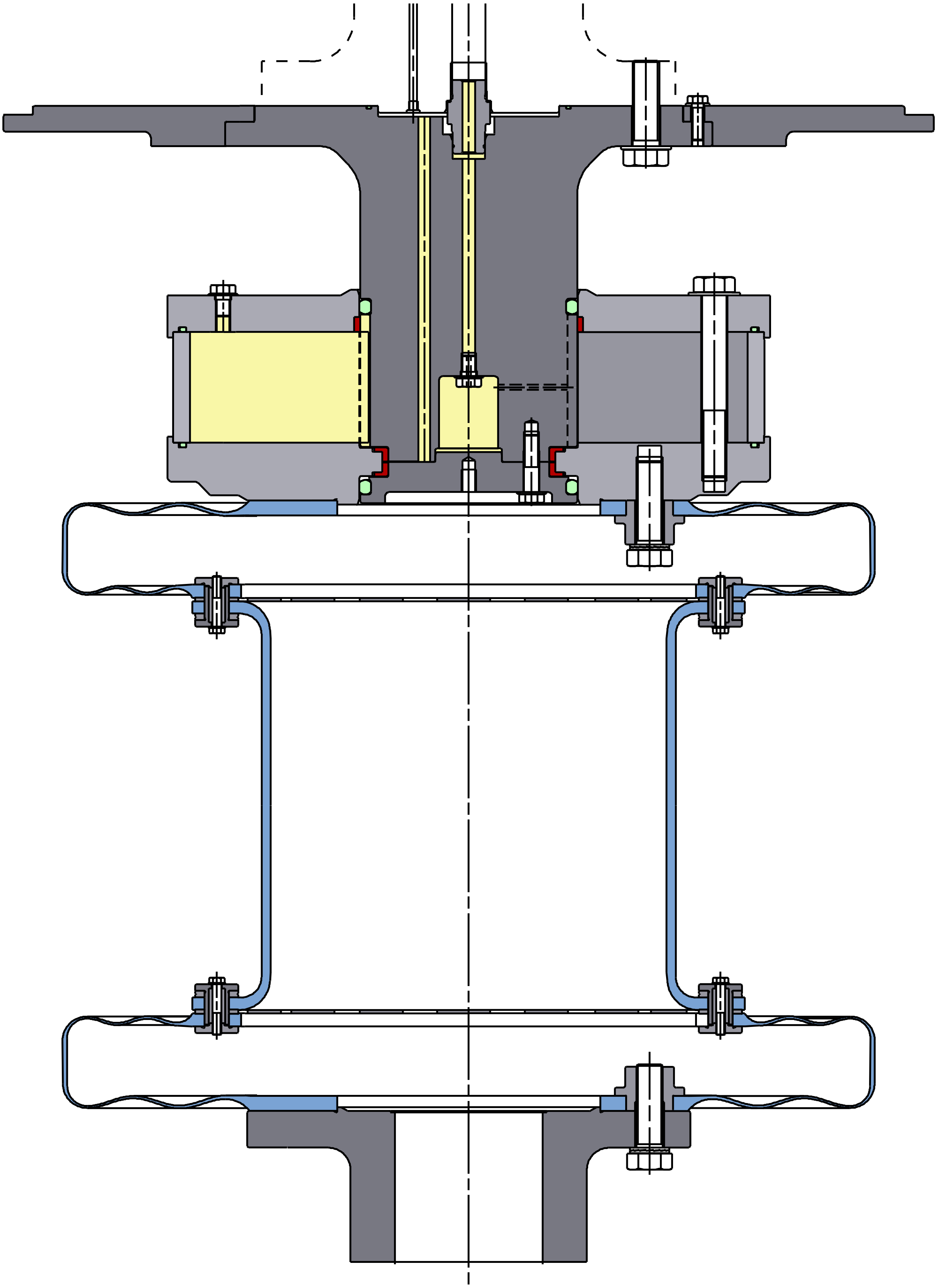
CS Coupling + Geislinger BE Coupling with integrated flywheel



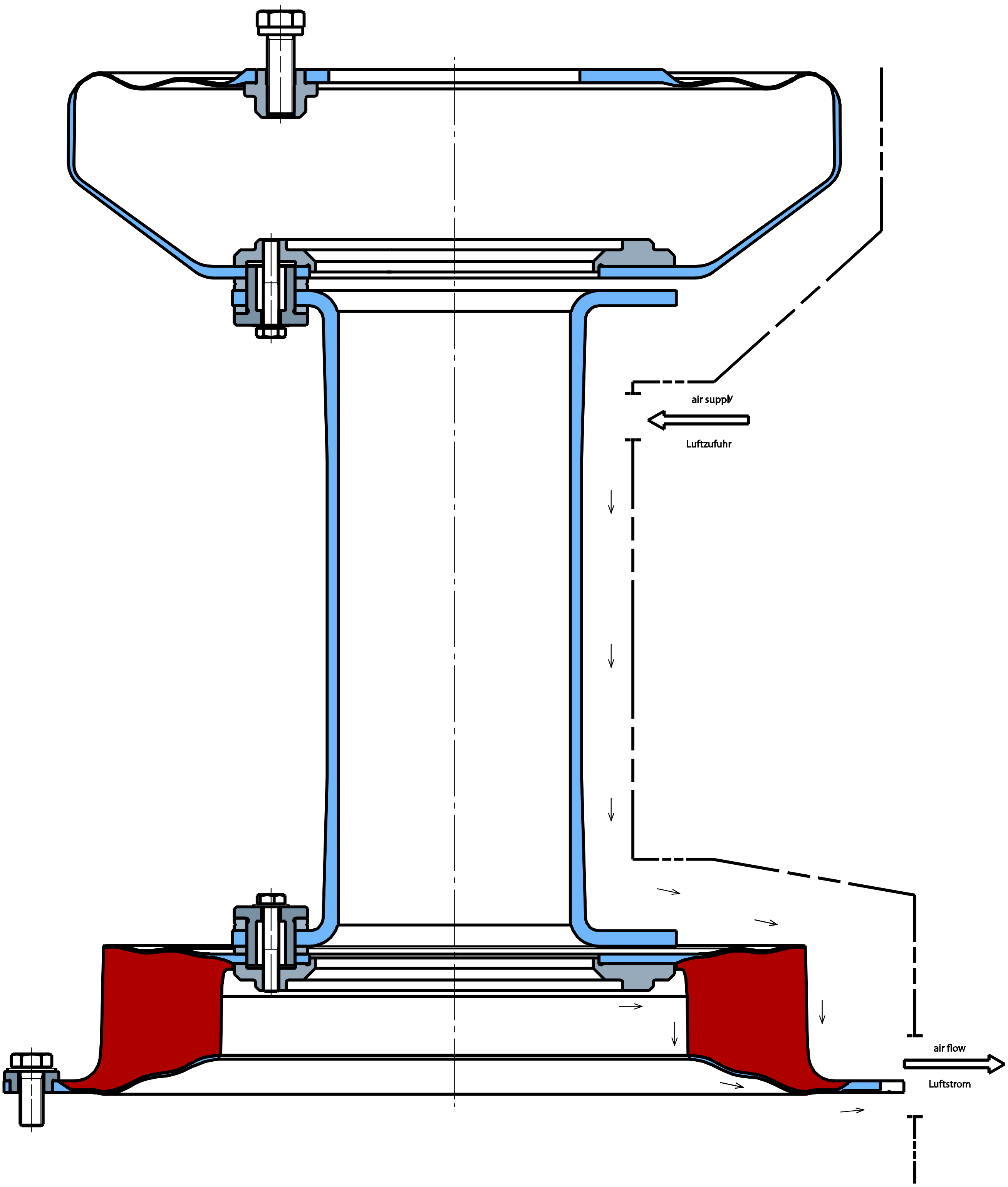
Gesilco CS Coupling + Geislinger F Coupling



Geislinger Gesilco CS Coupling + Geislinger BE Coupling



Geislinger Carbotorq with Gesilco Shaft and MB Coupling



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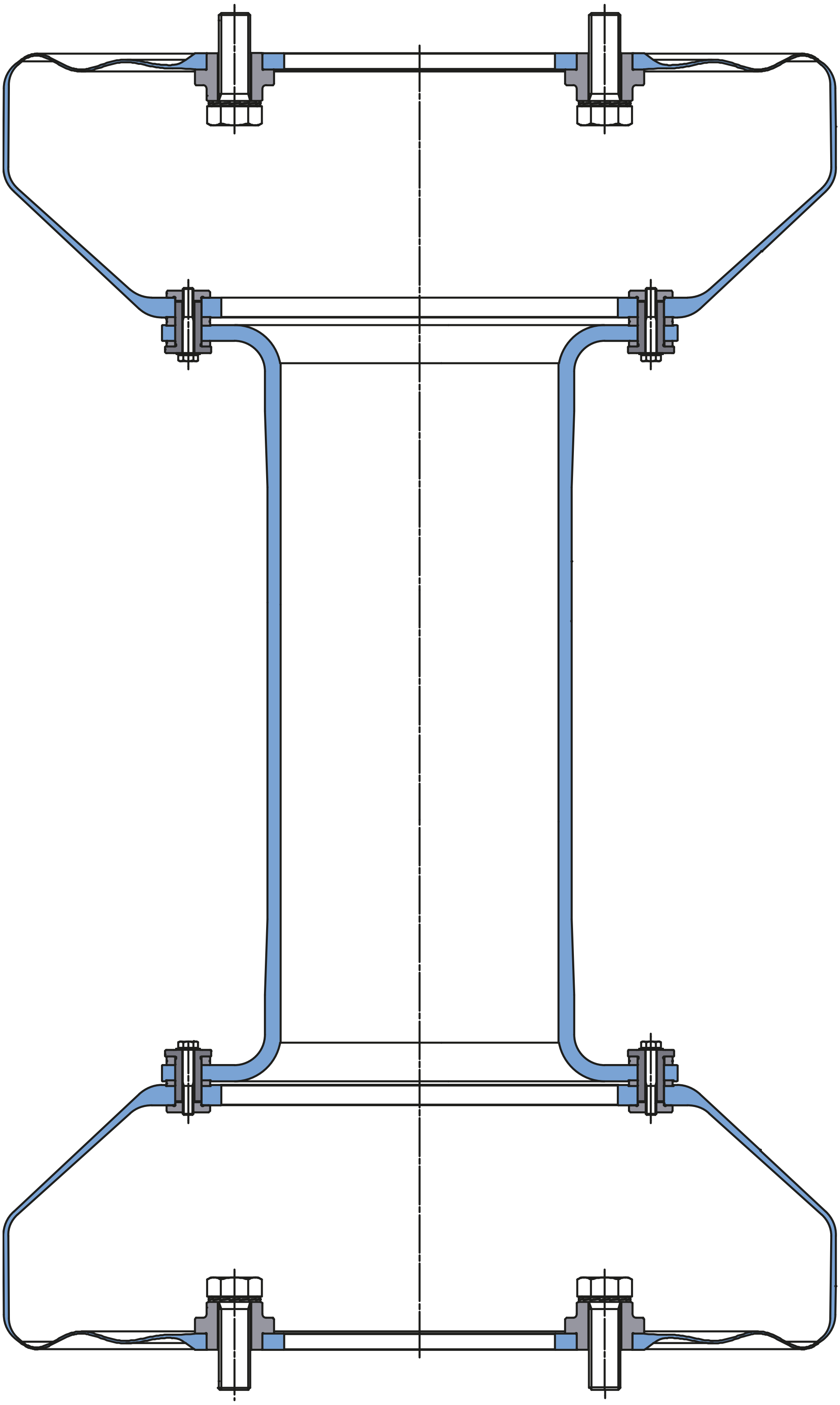
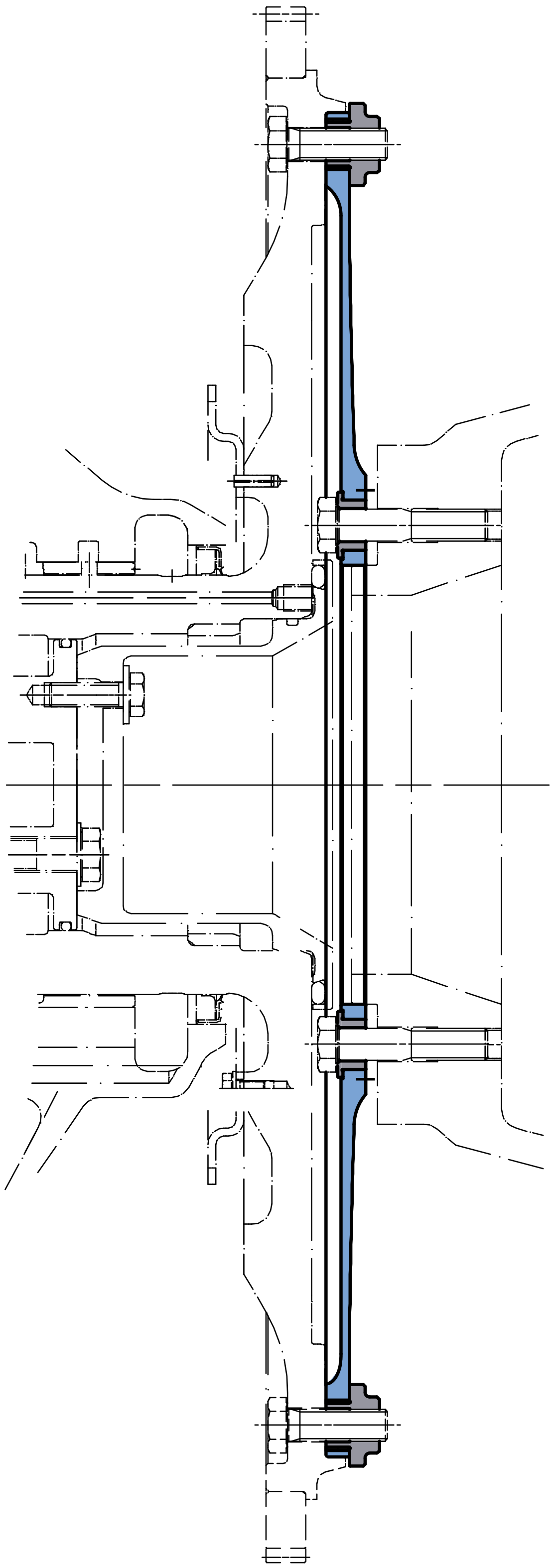
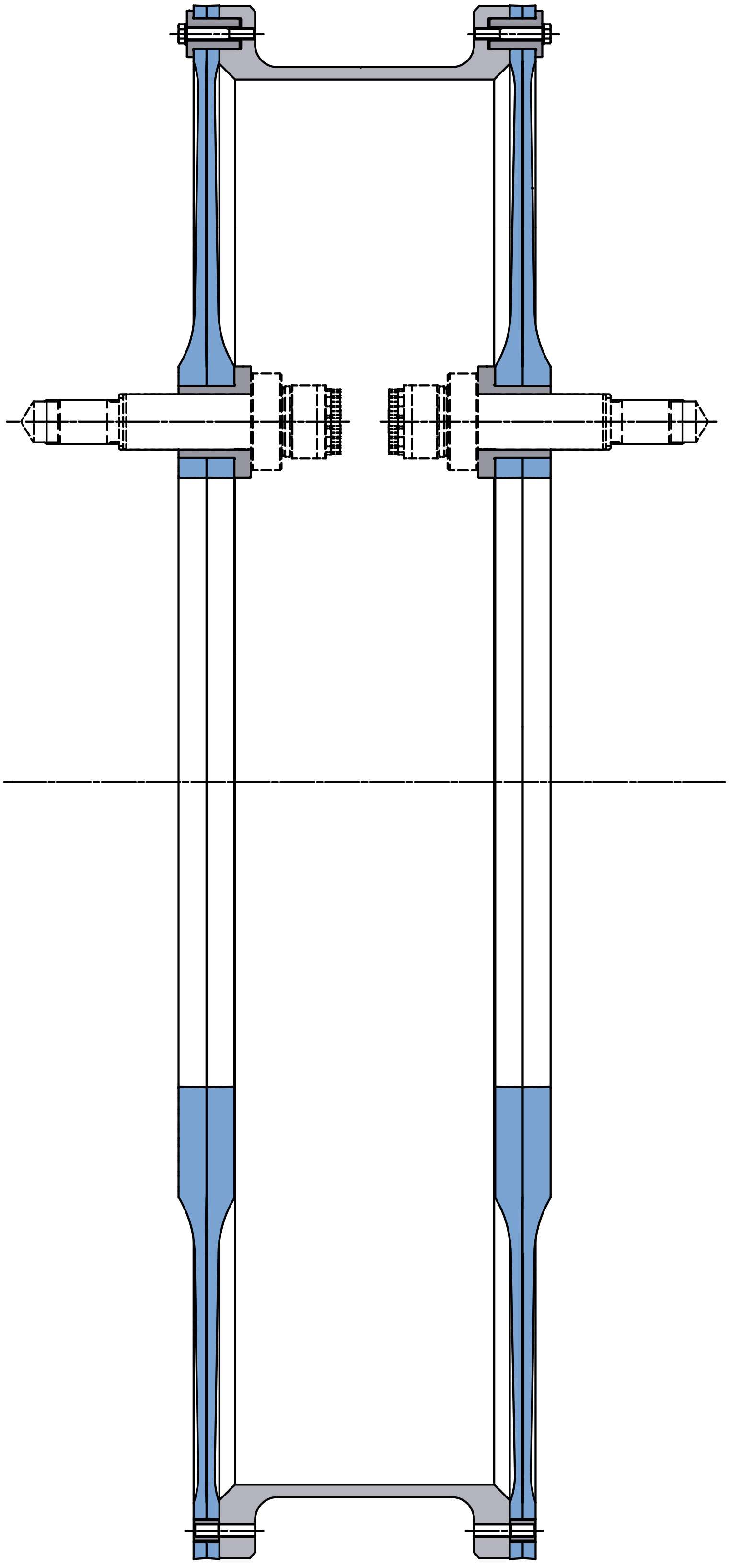
Geislinger MB Coupling Combination



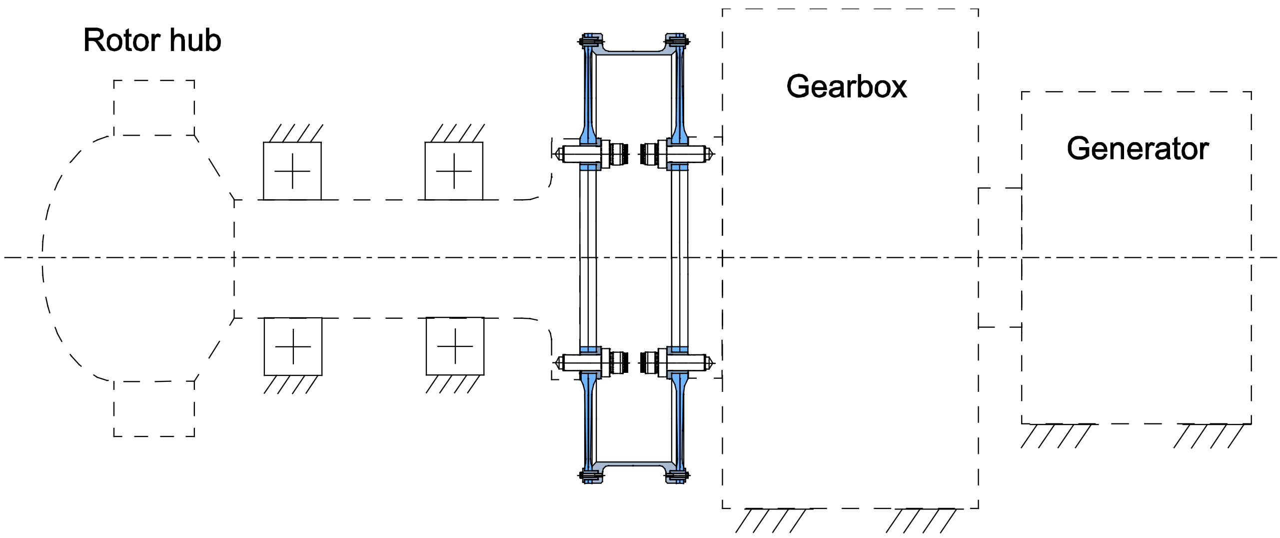
Geislinger Gesilco Disc



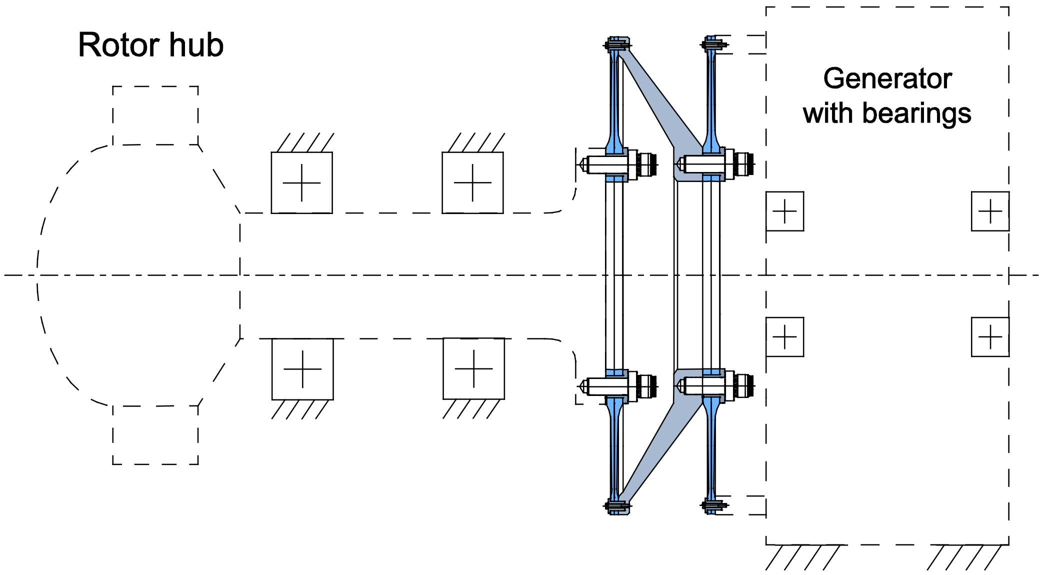
Geislinger Compowind Coupling



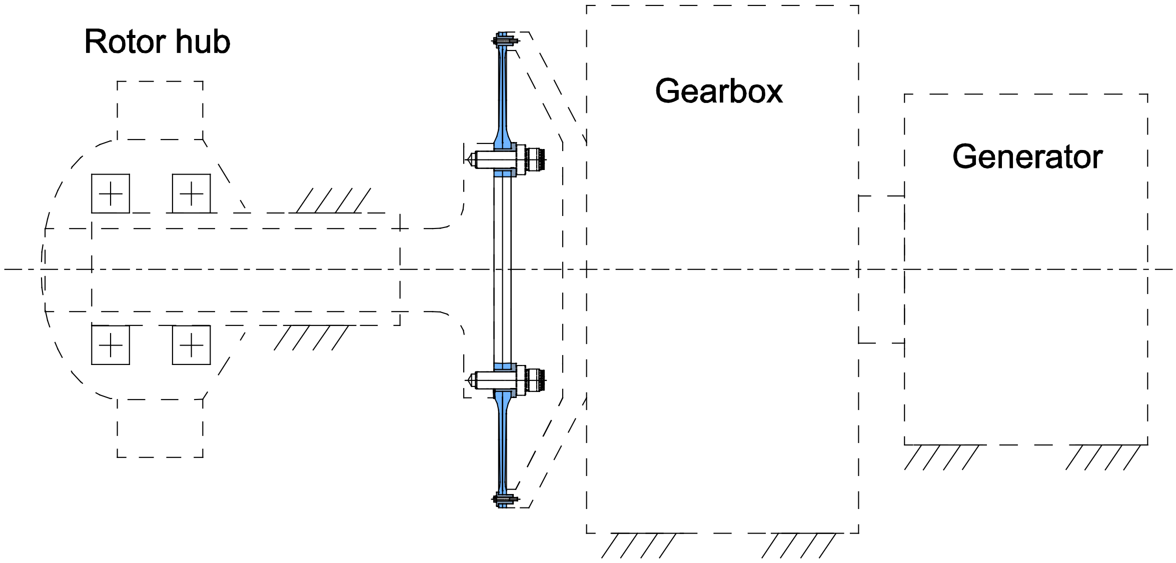
Compowind in geared wind turbine: rotating shaft with four-point suspension



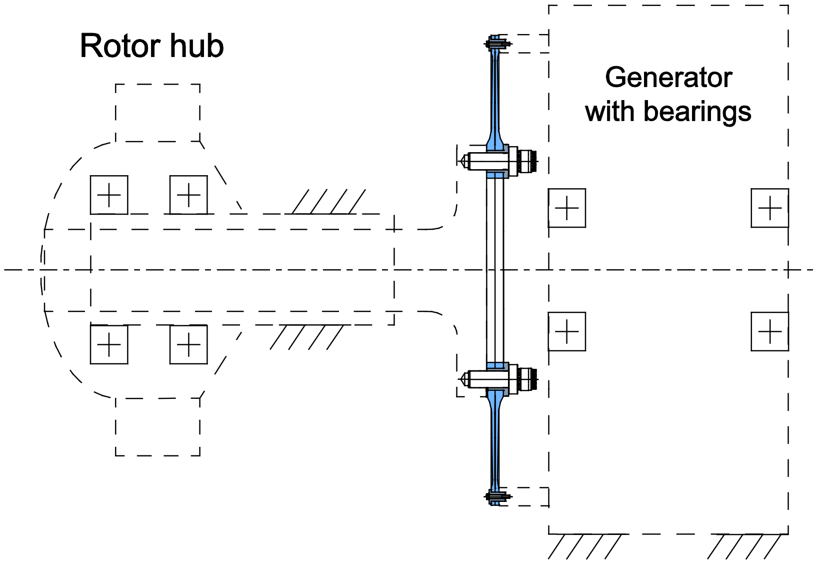
Compowind in direct-drive wind turbine: rotating shaft with four-point suspension



Compowind in geared wind turbine: king pin with two bearings and torque shaft



Compowind in direct-drive wind turbine: king pin with two bearings and torque shaft



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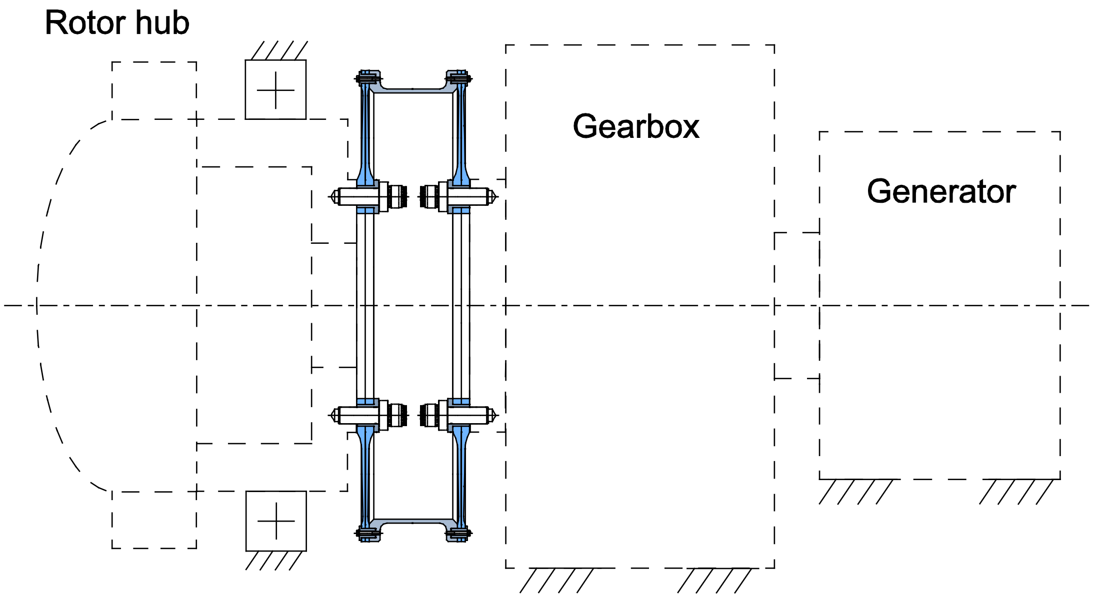
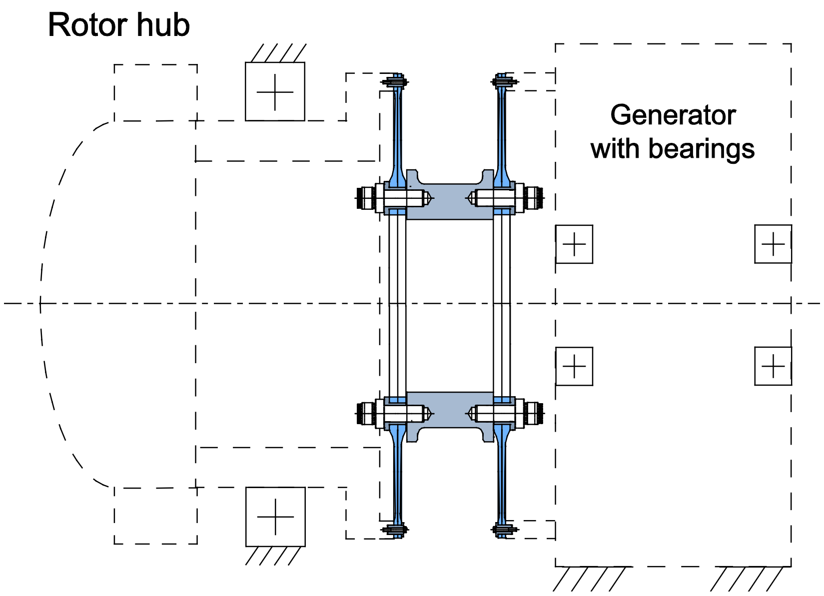
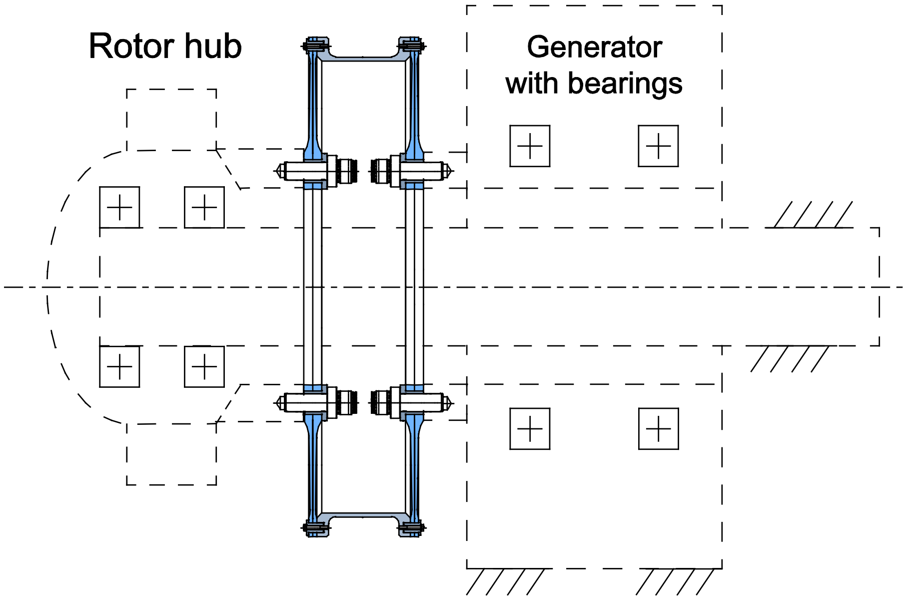
Compowind in geared wind turbine: rotating shaft with single momentum bearing



Compowind in direct-drive wind turbine: rotating shaft with single momentum bearing



Compowind in direct-drive wind turbine: king pin with two bearings, hub connected to generator



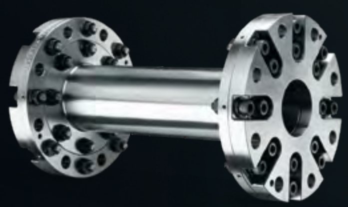
Geislinger Coupling

Geislinger Silenco®

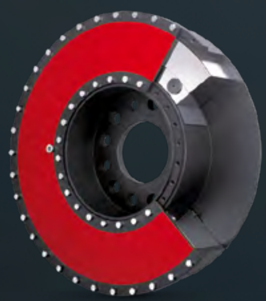
Geislinger Carbotorq®

Geislinger Damper

Geislinger Monitoring



Geislinger Flexlink



Geislinger Vdamp®

Geislinger Gesilco®

Geislinger Gesilco® Shaft

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