GEISLINGER
FLEXLINK

MAINTENANCE-
FREE

TORSIONAL
VIBRATION
CENTER

GEISLINGER®
POWERTRAIN SOLUTIONS. BUILT TO LAST.

GEISLINGER FLEXLINK

The Geislinger Flexlink Coupling is a sturdy solution for offset compensation. Its proven maintenance-free design and high permissible torques make it a solution for all applications – particularly where long service life and reliability are critical requirements. Marine, power generation, and the oil and gas industry are some examples.

The coupling is designed to provide a low reaction force even at maximum combined misalignments in axial-, radial- and angular directions. This reduces the bearing load. Torsional excitations are avoided, increasing the drive train lifetime. The Geislinger Flexlink also delivers a high power density, resulting in a very compact design. Combined with other Geislinger products, a compact and reliable coupling solution is provided – customized to your system.

DESCRIPTION

The Geislinger Flexlink coupling consists of inner- and outer components which are connected with pairs of crossed steel links. The Geislinger Flexlink is a torsional stiff coupling which provides low bending stiffness and nearly infinite lifetime. One Flexlink element in combination with a torsional elastic Geislinger Coupling or two Flexlinks provide a cardanic system which enables maximum misalignments.

The Geislinger Flexlink design also implements an emergency backup system, which is an important factor when considering solutions for marine propulsion applications.

APPLICATIONS

- Marine
- Power generation
- Industrial applications
- Oil and Gas
- Rail

TECHNICAL DATA

- Torque range: virtually unlimited torque
- Ambient temperature: -45°C to 150°C

ADVANTAGES

- Maintenance-free
- High misalignment capacities
- Reduced reaction force
- Radial installation
- Heat and oil resistant

Fatigue-resistant links

No moving parts

Coupling combination

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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Description

Application

The Geislinger Flexlink is a flexible, torsionally rigid steel coupling which has been especially developed to compensate for high axial -, angular - and, in a dual version, radial shaft misalignments.

The main advantages of the Geislinger Flexlink are:

- Compensates for high misalignments
- Low reaction forces
- Noise isolation
- Torsionally rigid
- Small in size and low weight
- Unaffected by high temperatures, oil and dirt
- Long Lifetime
- Low maintenance cost

Design

Tangentially arranged links serve as flexible element. They are mounted at their ends to the inner and outer member of the coupling. The links bend if an angular or axial misalignment occurs. Depending on the type, 6 or 8 pairs of links are arranged, resulting in larger or smaller capacity for misalignments.

The Geislinger Flexlink has no components that are exposed to wear all movements are absorbed by the elastic deflection of the links.

Between Geislinger Flexlink units, extra guide or support bearings are not necessary for the suspension of the intermediate shaft as the links of the 2 Flexlink units keep it centered.

In case the Geislinger Flexlink has to transmit axial loads or be axially rigid, axial bearings can be added. Their dimensions can be adjusted to customer's requirements.

Coupling Designation

Example: GFL S 63 F 8A

GFL: Geislinger Flexlink
S: Series
63: Size
F: Type
8: Number of links
A: Axial support

Technical data for each coupling can be selected from the technical data sheets depending on size, series and number of links.

Nominal Torque T_{KN}

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

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

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

The coupling size should be selected so that the coupling's nominal torque T_{KN} is greater or equal to the mean torque T specified by the prime mover / application.

$$T_{KN} \geq T$$

It is not recommended to choose an oversized coupling however, in combination with a Geislinger Coupling, the nominal torque of the Geislinger Flexlink should be equal or greater than that of the Geislinger torsional elastic Coupling.

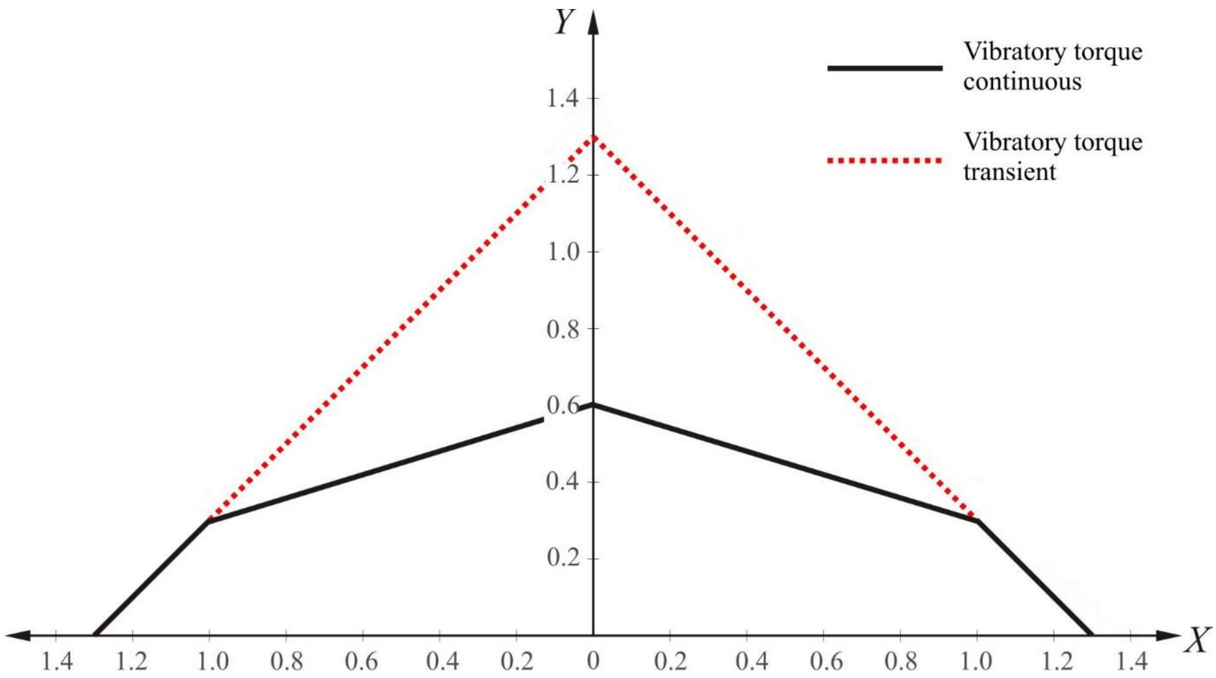
Permissible Vibratory Torque T_v

In addition to the static nominal torque T_{KN}, the coupling can also transmit a vibratory torque. The limits for vibratory torques T_v both under transient and continuous conditions are shown in diagram 1. Smaller engine mean torques T allow for greater vibratory torques T_v.

The limits shown in the diagram 1 should not be exceeded, not even during cylinder misfiring.

DIAGRAM 1

$$Y = \frac{T_v}{T_{KN}} = \frac{perm.\,vibratory torque}{nominal\ torque}$$



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

$0 \leq X \leq 1$ $\qquad$ $Y = 0.6 - 0.3 \cdot X$

$1 < X < 1.3$ $\qquad$ $Y = 1.3 - X$

Permissible Shock Torques

The coupling can transmit transient shock torques of 2.5 times the nominal torque.

Permissible Misalignment Values

The maximum permitted misalignment values are determined based upon the various combination possibilities described in chapter „Determination of the maximum misalignment possibilities for various Geislinger Flexlink combinations".

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 GFL units in series.

The maximum permissible axial misalignment capacity ΔW_a (static + transient misalignment) must not be exceeded during operation. Using the appropriate formula (see chapter "Determination of the maximum misalignment possibilities for various Geislinger Flexlink combinations), ΔW_a can be calculated.

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 GFL units with angular deflection capacity ΔW_w. Causes for radial misalignment are: errors in assembly alignment, shaft movements, elastically mounted driving or driven shafts (i.e. resiliently mounted engines) or thermal expansions.

The maximum permissible radial misalignment capacity of the coupling (static + transient misalignments) depends on the bending length L_b (distance between the planes of the GFL units) and the maximum transient angular misalignment capacity $\Delta K_{w,\ max}$. The maximum permissible radial misalignment capacity can be calculated by using the appropriate formula (see chapter "Connection of two parallel shafts using two Geislinger Flexlinks with an intermediate shaft Z-Arrangement" on page 13)

Angular Misalignment: ΔW_w

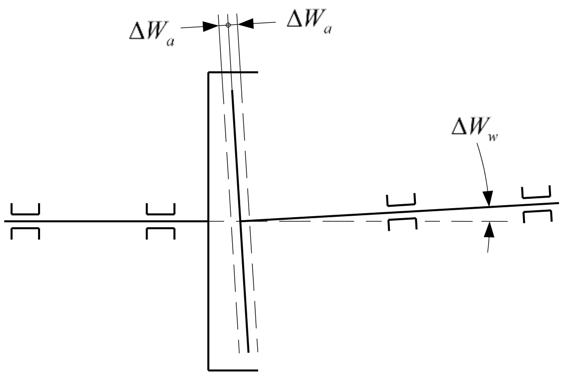
The angular misalignment ΔW_w is defined as the inclination of the axes of rotation of the driving and the driven sides of the coupling. ΔW_w is the maximum permissible angular misalignment for continuous operation. $\Delta K_{w,\ max}$ is the maximum permissible angular misalignment that can momentarily occur (e.g. transient condition).

Selection

Maximum Misalignment for Various Geislinger Flexlink Combinations

Connection of two shafts using a single Geislinger Flexlink

Fig. 1



continuous $\Delta W_w \leq \Delta K_w - \frac{\Delta W_a}{i}$

transient $\Delta W_w \leq \Delta K_{w,max} - \frac{\Delta W_a}{i}$

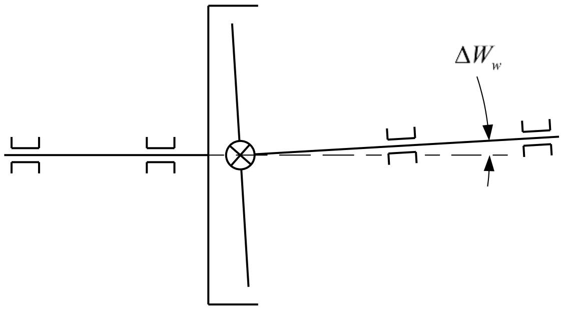
ΔW_a	axial misalignment	mm
ΔW_w	angle between the two shaft centrelines	rad
ΔK_w	maximum angular misalignment capacity of coupling, continuous	rad
$\Delta K_{w,max}$	maximum angular misalignment capacity of coupling, transient	rad
i	parameter depending on coupling size	

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

Connection of two shafts using a single Geislinger Flexlink with axial support

Only angular misalignment is possible in this case

Fig. 2



continuous $\Delta W_w \leq \Delta K_w$

transient $\Delta W_w \leq \Delta K_{w,max}$

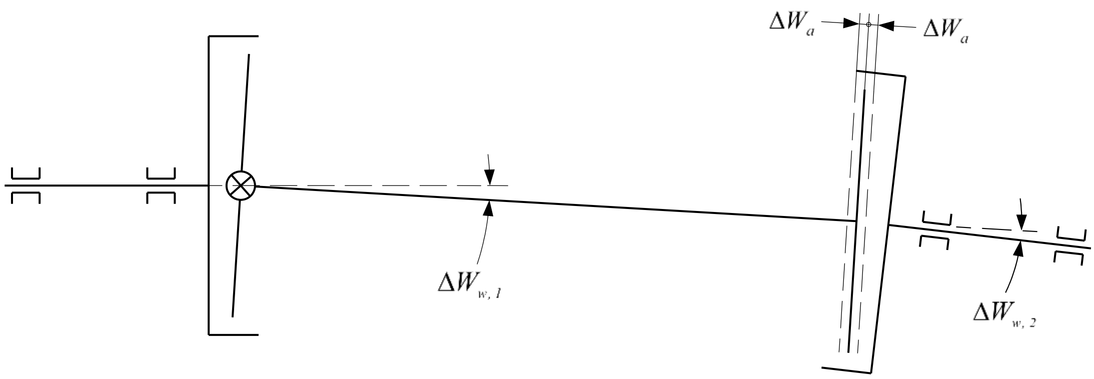
ΔW_w	angle between the two shaft centrelines	rad
ΔK_w	maximum angular misalignment capacity of coupling, continuous	rad
$\Delta K_{w,max}$	maximum angular misalignment capacity of coupling, transient	rad

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

Connection of two shafts using two Geislinger Flexlinks with an intermediate shaft W-arrangement

If two Geislinger Flexlinks are combined at least one of them should be provided with an axial bearing

Fig. 3



continuous

$$\Delta W_{w1} \leq \Delta K_w$$

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

transient

$$\Delta W_{w,1} \leq \Delta K_{w,max}$$

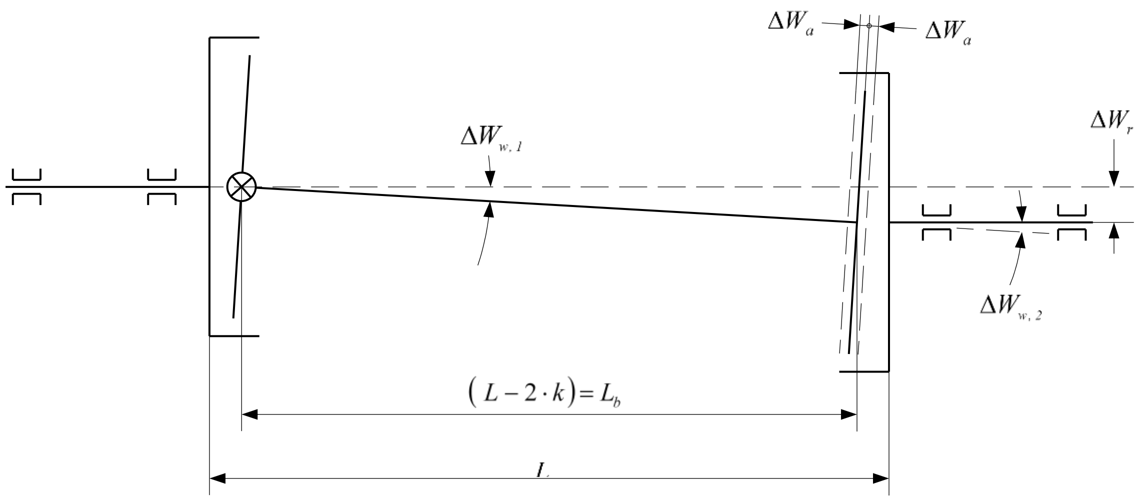
$$\Delta W_{w,2} \leq \Delta K_{w,max} - \frac{\Delta W_a}{i}$$

$\Delta W_{w,1}$	angle between input and intermediate shaft	rad
$\Delta W_{w,2}$	angle between intermediate and output shaft	rad
ΔK_w	maximum angular misalignment capacity of coupling, continuous	rad
$\Delta K_{w,max}$	maximum angular misalignment capacity of coupling, transient	rad
ΔW_a	axial misalignment	mm
i	parameter depending on coupling size	

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

Connection of two parallel shafts using two Geislinger Flexlinks with an intermediate shaft Z-Arrangement

Fig. 4



The maximum value for the parallel misalignment is therefore

continuous $$\Delta W_r = \left(\Delta K_w - \frac{\Delta W_a}{i} \right) \cdot (L - 2 \cdot k)$$

transient $$\Delta W_r = \Delta K_w \cdot (L - 2 \cdot k)$$

If both Geislinger Flexlinks are provided with an axial bearing ΔW_a becomes zero, therefore

continuous
$$\Delta W_{w,1} = \Delta W_{w,2} \le \Delta K_w$$
$$\Delta W_r = \Delta K_w \cdot (L - 2 \cdot k)$$

transient
$$\Delta W_{w,1} = \Delta W_{w,2} \le \Delta K_{w,max}$$
$$\Delta W_r = \Delta K_{w,max} \cdot (L - 2 \cdot k)$$

$\Delta W_{w,1}$	angle between input and intermediate shaft	rad
$\Delta W_{w,2}$	angle between intermediate and output shaft	rad
ΔK_{w}	maximum angular misalignment capacity of coupling, continuous	rad
$\Delta K_{w,max}$	maximum angular misalignment capacity of coupling, transient	rad
ΔW_{a}	axial misalignment	mm
ΔW_{r}	distance between the two parallel shaft centre lines	mm
L	length over flanges	mm
i, k	parameter depending on coupling size	
L_{b}	bending length	mm

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

Number of Links

Depending on the misalignment requirements of the installation, options with either 6 or 8 links are available. Assuming a same size coupling model, couplings with 6 links have a greater capacity for angular misalignment at a somewhat lower nominal torque when compared to couplings with 8 links. The permitted values for the angular misalignment (ΔK_w, $\Delta K_{w,max}$) are given in the technical data sheets.

There are also special designs available with more than 8 links. An example can be seen in the section „Installation Examples" of this catalog. Technical data can be obtained upon request.

Rotational Speed n

For standard speed diesel engines a coupling of series S should be selected. For higher rotational speeds a coupling of series H should be selected. The permitted values are given in the chapter "Dimensions".

Flange Connections

Numerous types of flanges are available to ensure that the coupling can be connected to the counter flanges of driving and driven parts in the most efficient way.

The types listed below show the most commonly used flanges. In addition, Geislinger is always prepared to customize flange connections if feasible. Please contact Geislinger, should other assembly dimensions be required.

Torsional Stiffness C_T

The Geislinger Flexlink is torsionally rigid compared to torsionally soft couplings.

Bending Stiffness C_w

Angular misalignments produce a reaction torque M_w which in turn has an effect on the driving - and driven side of the power-train. For one (1) Geislinger Flexlink the reaction torque M_w is.

$$M_w = C_w \cdot \Delta W_w$$

M_w	reaction torque	Nm
C_w	bending stiffness	kNm/rad
ΔW_w	angular misalignment	mrad

Axial Stiffness C_a

Axial misalignments produce an axial reaction force F_a in Flexlinks without axial bearings which in turn has an effect on the driving - and driven side of the power-train.

$$F_a = C_a \cdot \Delta W_a$$

F_a	axial reaction torque	N
C_a	axial stiffness	N/mm
ΔW_a	axial misalignment	mm

Radial load capacity of Geislinger Flexlink without axial bearings

The following formula is used to calculate the maximum radial load capacity of Geislinger Flexlinks without axial bearings:

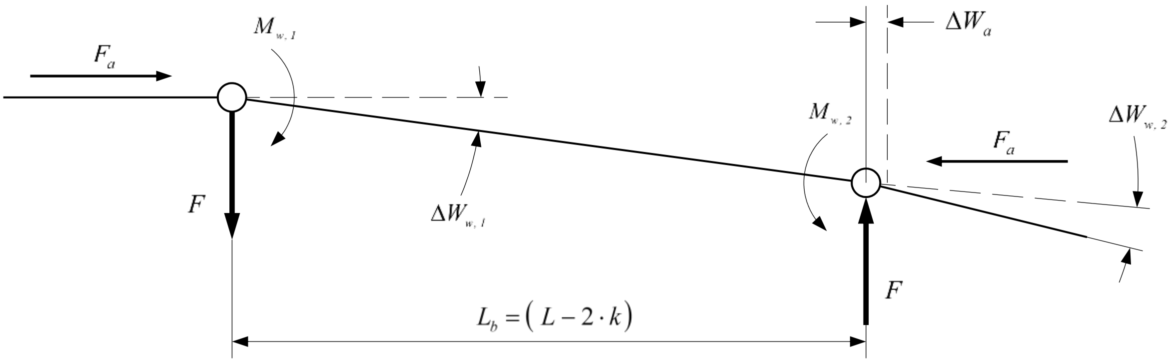
$$F_r = \sqrt[3]{T_{KN}^{\ 2}} \cdot B$$

F_r	max. radial load capacity	N
T_{KN}	nominal torque	Nm
B	factor, depending on series and number of links, see next table	

	Factor B	Flexlink S	Flexlink H
8	Links	6.65	6.15
6	Links	6.05	5.60

Calculation of the reaction forces for a W-arrangement

Fig. 5



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

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

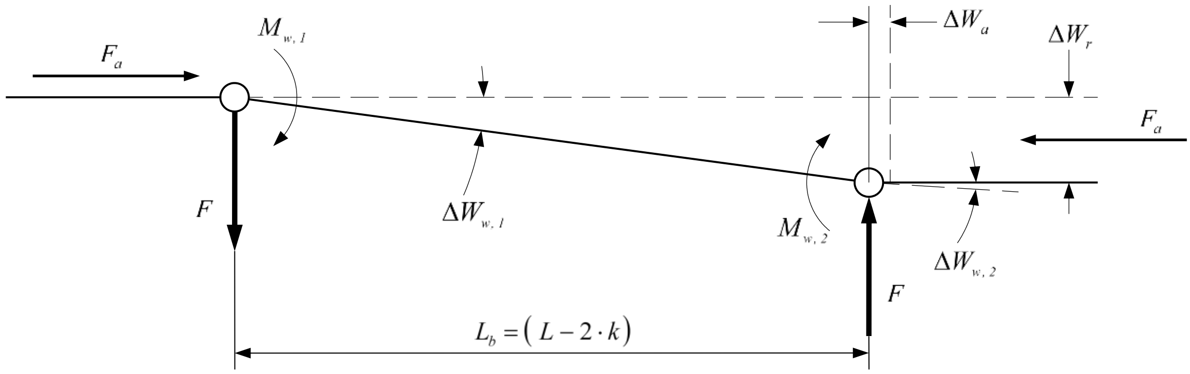
$$F = \frac{M_{w,1} - M_{w,2}}{L - 2 \cdot k}$$

$$F_a = C_a \cdot \Delta W_a$$

$M_{w,1}$	reaction torque due to angular misalignment	Nm
$M_{w,2}$	reaction torque due to angular misalignment	Nm
C_w	bending stiffness	kNm/rad
$\Delta W_{w,1}$	angular misalignment	mrad
$\Delta W_{w,2}$	angular misalignment	mrad
F	radial force	N
F_a	axial force	N
C_a	axial stiffness	N/mm
ΔW_a	axial misalignment	mm
L_b	bending length	m
L	length over flanges	m
k	parameter according to data sheet	

Calculation of the reaction forces for a Z-arrangement

Fig. 6



$$\Delta W_{w,1} = \Delta W_{w,2} = \Delta W_w$$

$$M_{w,1} = M_{w,2} = M_w = C_w \cdot \Delta W_w$$

$$F = \frac{2 \cdot M_w}{L - 2 \cdot k}$$

$$F_a = C_a \cdot \Delta W_a$$

$M_{w,1}$	reaction torque due to angular misalignment	Nm
$M_{w,2}$	reaction torque due to angular misalignment	Nm
C_w	bending stiffness	kNm/rad
$\Delta W_{w,1}$	angular misalignment	mrad
$\Delta W_{w,2}$	angular misalignment	mrad
F	radial force	N
F_a	axial force	N
C_a	axial stiffness	N/mm
ΔW_a	axial misalignment	mm
ΔW_r	distance between the two parallel shaft centre lines	mm
L_b	bending length	m
L	length over flanges	m
k	parameter according to data sheet	

Combination of Geislinger Flexlink with Geislinger Coupling

The Geislinger Flexlink is often combined with a torsional elastic Geislinger Coupling. This arrangement is used for resiliently mounted engines that connect to a resiliently or rigidly mounted gearbox. It represents a complete solution between the engine flywheel and the input shaft of the gearbox.

Because of its unique design, the Geislinger Coupling Combination not only allows for misalignments in all three directions but also controls torsional vibrations with the torsional elastic segment of the Geislinger Coupling.

The design is of low-weight, very compact and subsequently saving space. Intermediate bearings are not needed. Since the reaction forces are very low, the extra load because of these restoring forces on the crank- and gearbox shaft-bearings is small. The Geislinger Coupling Combination is a highly reliable system that is comprised of carefully selected and perfectly matching components

Two versions are available:

1) Combination of Geislinger Coupling with one Flexlink

This is a combination of a torsional elastic, high damping Geislinger Coupling featuring an extended inner star shaft with a torsional rigid Geislinger Flexlink at the other end (see examples of installation).
Sample combinations of a Geislinger Flexlink with a Geislinger Coupling can also be found in the technical data section sheets of the Geislinger Coupling catalog.

The ability for angular misalignment of the Coupling's inner star is increased by up to 8 mrad (approx.) through the following measures.

- Reduction of the total width of the Geislinger Coupling
- Slight increase of the radial clearance between inner star and intermediate pieces of the Geislinger Coupling

In this setup only one Geislinger Flexlink is required. The Geislinger Coupling takes up the function of the second joint. The necessary bending length (L_b) is calculated based upon the required radial misalignment value. The calculation of the maximum misalignment capacity and the reaction forces is described in paragraph „Maximum Misalignments and Reaction Forces ".

2) Combination of Geislinger Coupling with two Flexlinks

This is a combination of a torsional elastic, high damping Geislinger Coupling with two torsional rigid Flexlinks, which are connected by a shaft (see "Examples").

By using Geislinger Flexlinks with 6 links a shorter assembly length can be achieved. The calculation of the maximum misalignment capacity and the reaction forces is described in paragraph „ Maximum Misalignments and Reaction Forces ".

Selection of Coupling Combination

The proper selection of the Geislinger Coupling Combination is achieved by determining a Geislinger Coupling that effectively controls torsional vibrations as well as a Geislinger Flexlink that fits inside the given space claim and compensates for the system's misalignments.

Technical data and dimensions for each coupling can be found in the technical data section in the Coupling and Flexlink catalog.

The shown minimum axial fitting dimension $L_{\min}$ is only a guide line as in most cases the axial fitting dimension will be determined by the required radial misalignment capacity and its corresponding bending length (L_b).

To enable us to offer you an optimum selection of couplings or coupling combinations, we kindly ask you to inform us about your special applications.

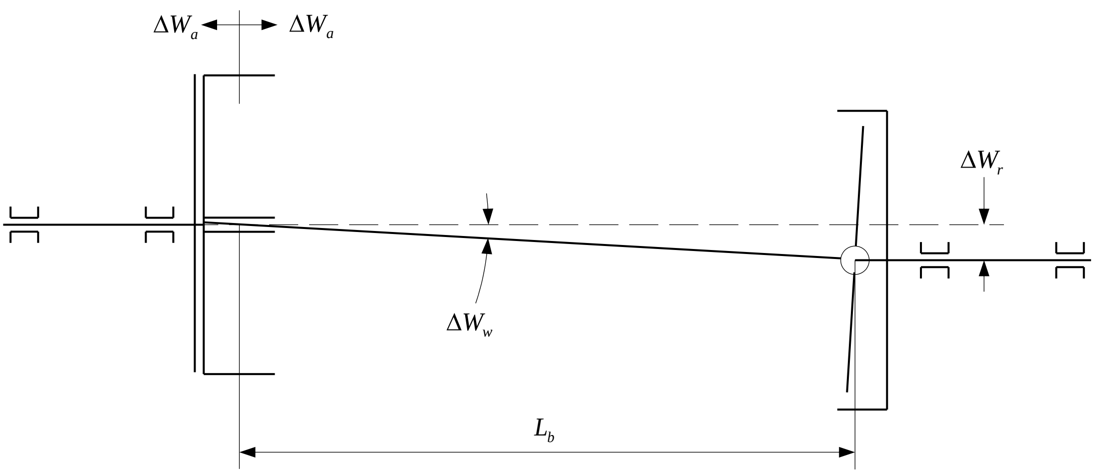
Maximum Misalignments and Reaction Forces

Combination of one Geislinger Coupling with one Geislinger Flexlink

For combinations of one Geislinger Coupling with one Geislinger Flexlink normally the Flexlink type K is used. The series (S or H), size and axial support should be selected depending on the requirements of the application. Combinations with other Flexlink types are possible on request. Sample combinations can be found in the technical data section of the Geislinger Coupling catalog.

Misalignments

Fig. 7



continuous and transient $\Delta W_w \leq \Delta K_w$

$$\Delta W_a \leq \Delta K_a$$

For calculation of the maximum misalignment ΔW_r :

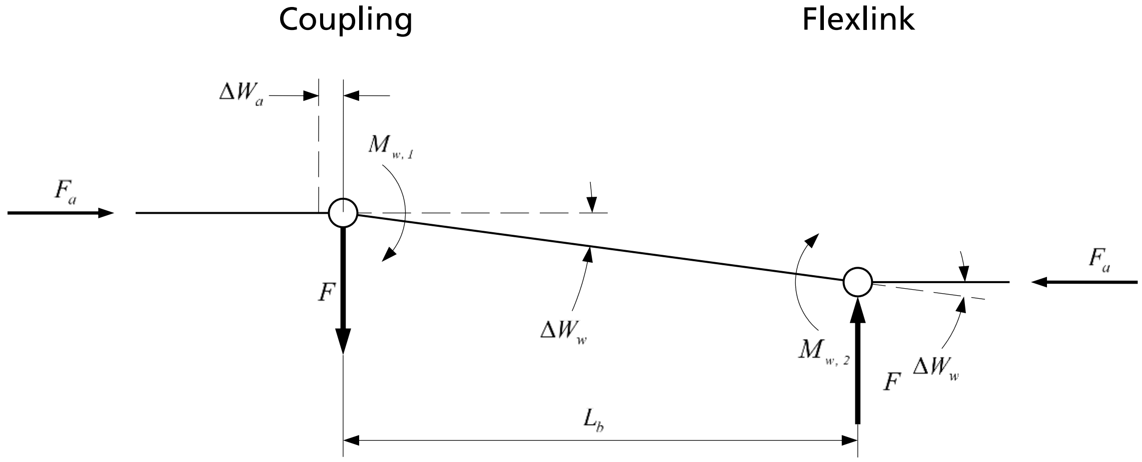
continuous and transient $\Delta W_r \leq L_b \cdot \Delta K_w$

ΔW_w	actual angular misalignment	mrad
ΔW_a	axial misalignment	mm
ΔK_a	max. permissible axial misalignment of Geislinger Coupling	mm
ΔK_w	max. perm. angular misalignment of Geislinger Coupling	mrad
ΔW_r	actual radial misalignment	mm
L_b	bending length	mm

Since the axial reaction force of the Geislinger Flexlink is usually smaller than the one of the Geislinger Coupling, the Geislinger Flexlink requires an axial bearing. Axial movements will not affect the angular misalignment capacity of the Geislinger Coupling, if the given axial misalignment values are not exceeded.

Reaction forces

Fig. 8



$$M_{w,1} = C_{w,1} \cdot \Delta W_w$$

$$M_{w,2} = C_{w,2} \cdot \Delta W_w$$

$$F = \frac{M_{w,1} + M_{w,2}}{L_b}$$

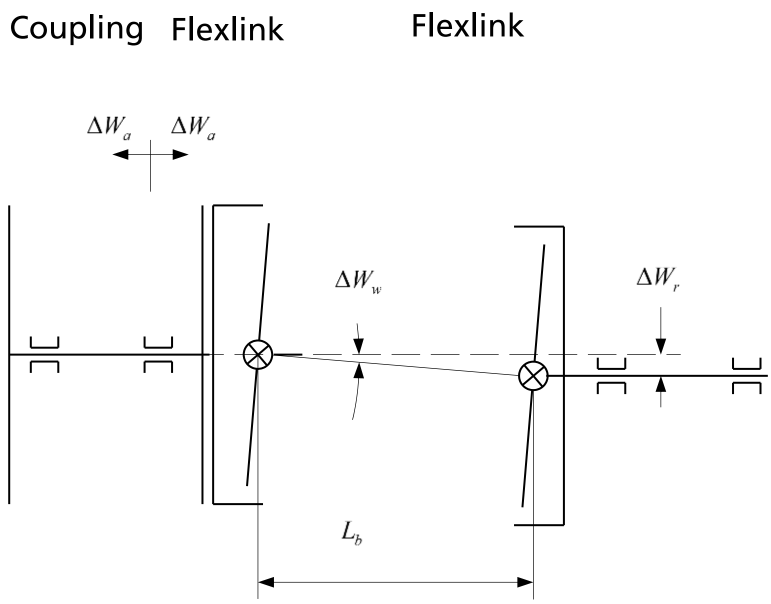
F_a	axial reaction force of the Geislinger Coupling (acc. to catalog)	kN
$C_{w,1}$	bending stiffness	kNm/rad
$C_{w,2}$	bending stiffness	kNm/rad
$M_{w,1}$	reaction torque	Nm
$M_{w,2}$	reaction torque	Nm
F	radial reaction force	N
ΔW_w	angular misalignment	mrad
L_b	bending length	m

Combination of one Geislinger Coupling with two Geislinger Flexlinks

The complete series of Geislinger Couplings can be combined with two Geislinger Flexlinks, e.g. of series „T".

Misalignments

Fig. 9



continuous $\Delta W_w \leq \Delta K_w$

$\Delta W_a \leq \Delta K_a$

transient $\Delta W_w \leq \Delta K_{w,max}$

For calculation of the maximum misalignment:

continuous $\Delta W_r = L_b \cdot \Delta K_w$

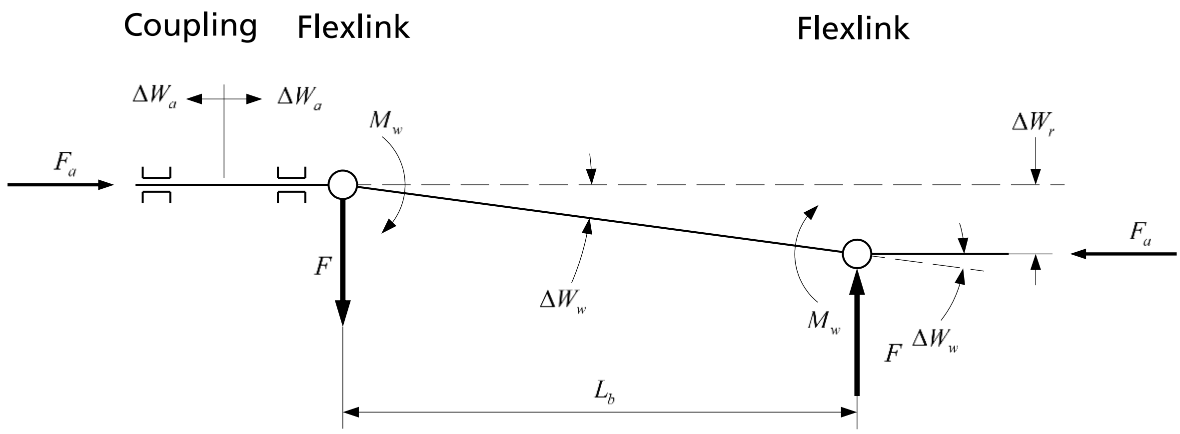
transient $\Delta W_r = L_b \cdot \Delta K_{w,max}$

ΔW_w	actual angular misalignment	mrad
ΔW_a	axial misalignment	mm
ΔK_w	angular misalignment capacity continuous (Flexlink)	mrad
$\Delta K_{w,max}$	angular misalignment capacity transient (Flexlink)	mrad
ΔK_a	max. permissible axial misalignment of the Coupling	mm
ΔW_r	actual radial misalignment	mm
L_b	bending length	mm

As the axial stiffness of the Geislinger Flexlink is usually smaller than of the Geislinger Coupling, normally the Geislinger Flexlinks are equipped with an axial bearing. The Geislinger Coupling takes up the axial misalignments.

Reaction forces

Fig. 10



$$M_w = C_w \cdot \Delta W_w$$

$$F = \frac{2 \cdot M_w}{L_b}$$

F_a	axial reaction force of the Geislinger Coupling (acc. to catalog)	kN
ΔW_a	axial misalignment	mm
C_w	bending stiffness	kNm/rad
ΔW_w	actual angular misalignment	mrad
L_b	bending length	m
M_w	reaction torque	Nm
F	radial reaction force	N
ΔW_r	actual radial misalignment	mm

Technical Data

Series S

8 links

Size	Nominal torque	Torsional stiffness	Bending stiffness	Axial stiffness	Maximum speed	Parameters	
	T_{KN} kNm	C_T MNm/rad	C_w kNm/rad	C_a N/mm	n_{max} min^{-1}	i mm	k mm
25	7.9	10.1	10.4	2375	5300	135	34
28	11.2	14.3	14.7	2665	4800	150	37
31.5	15.8	20.2	20.8	2990	4200	170	42
35.5	22.3	28.5	29.4	3355	3700	190	47
40	31.5	40.2	41.5	3765	3300	210	51
45	44.5	56.8	58.5	4223	2900	240	58
50	62.9	80.2	82.7	4739	2700	270	63
56	88.9	113.3	116.8	5317	2400	300	71
63	125.5	160.1	165.0	5966	2100	335	79
71	177.5	226.1	233.1	6694	1900	375	92
80	250.5	319.4	329.2	7511	1650	420	100
90	354.0	451.2	465.1	8427	1500	470	112
100	500.0	637.2	656.8	9455	1350	530	123
112	706.0	900.2	927.8	10609	1200	600	142
125	997.0	1271.7	1310.7	11904	1050	670	156
140	1410.0	1796.3	1851.4	13356	950	750	174
160	1990.0	2537.1	2615.0	14985	850	840	194
180	2810.0	3584.0	3694.0	16814	750	945	216

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Angular misalignment capacity

Continuous ΔK_w = 11 mrad

transient $\Delta K_{w\,max}$ = 17 mrad

Series H
8 links

Size	Nominal torque	Torsional stiffness	Bending stiffness	Axial stiffness	Maximum speed	Parameters	
	T_{KN} kNm	C_T MNm/rad	C_w kNm/rad	C_a N/mm	n_{max} min^{-1}	i mm	k mm
25	6.3	10.1	10.4	2375	10700	135	34
28	9	14.3	14.7	2665	9500	150	37
31.5	12.6	20.2	20.8	2990	8500	170	42
35.5	17.8	28.5	29.4	3355	7500	190	47
40	25.2	40.2	41.5	3765	6700	210	51
45	35.6	56.8	58.5	4223	5900	240	58
50	50.3	80.2	82.7	4739	5300	270	63
56	71.1	113.3	116.8	5317	4800	300	71
63	100.5	160.1	165.0	5966	4200	335	79
71	142	226.1	233.1	6694	3800	375	92
80	200.5	319.4	329.2	7511	3300	420	100
90	283	451.2	465.1	8427	3000	470	112
100	400	637.2	656.8	9455	2700	530	123
112	565	900.2	927.8	10609	2400	600	142
125	798	1271.7	1310.7	11904	2100	670	156
140	1128	1796.3	1851.4	13356	1900	750	174
160	1590	2537.1	2615.0	14985	1700	840	194
180	2250	3584.0	3694.0	16814	1500	945	216

All technical data are without warranty. Dimensions and design modifications reserved.

Angular misalignment capacity

Continuous ΔK_w = 8 mrad

transient $\Delta K_{w\ max}$ = 13 mrad

Series S
6 links

Size	Nominal torque	Torsional stiffness	Bending stiffness	Axial stiffness	Maximum speed	Parameters	
	T_{KN} kNm	C_T MNm/rad	C_w kNm/rad	C_a N/mm	n_{max} min^{-1}	i mm	k mm
25	5.9	6.4	5.3	1351	5300	135	34
28	8.4	9.0	7.4	1516	4800	150	37
31.5	11.8	12.7	10.5	1701	4200	170	42
35.5	16.7	18.0	14.8	1909	3700	190	47
40	23.6	25.4	20.9	2141	3300	210	51
45	33.4	35.9	29.6	2402	2900	240	58
50	47.2	50.7	41.7	2696	2700	270	63
56	66.6	71.6	59.0	3024	2400	300	71
63	94.0	101.1	83.3	3394	2100	335	79
71	133.0	142.9	117.7	3808	1900	375	92
80	188.0	201.8	166.2	4272	1650	420	100
90	265.5	285.1	234.8	4794	1500	470	112
100	375.0	402.6	331.6	5378	1350	530	123
112	529.0	568.7	468.5	6035	1200	600	142
125	748.0	803.4	661.8	6771	1050	670	156
140	1056.0	1134.9	934.8	7598	950	750	174
160	1490.0	1602.9	1320.3	8534	850	840	194
180	2107.0	2264.3	1865.1	9565	750	945	216

All technical data are without warranty. Dimensions and design modifications reserved.

Angular misalignment capacity

Continuous ΔK_w = 16 mrad

transient $\Delta K_{w\,max}$ = 21 mrad

Series H
6 links

Size	Nominal torque	Torsional stiffness	Bending stiffness	Axial stiffness	Maximum speed	Parameters	
	T_{KN} kNm	C_T MNm/rad	C_w kNm/rad	C_a N/mm	n_{max} min^{-1}	i mm	k mm
25	4.7	6.4	5.3	1351	10700	135	34
28	6.7	9.0	7.4	1516	9500	150	37
31.5	9.5	12.7	10.5	1701	8500	170	42
35.5	13.4	18	14.8	1909	7500	190	47
40	18.9	25.4	20.9	2141	6700	210	51
45	26.7	35.9	29.6	2402	5900	240	58
50	37.7	50.7	41.7	2696	5300	270	63
56	53.3	71.6	59	3024	4800	300	71
63	75.3	101.1	83.3	3394	4200	335	79
71	106.5	142.9	117.7	3808	3800	375	92
80	150	201.8	166.2	4272	3300	420	100
90	212	285.1	234.8	4794	3000	470	112
100	300	402.6	331.6	5378	2700	530	123
112	423	568.7	468.5	6035	2400	600	142
125	598	803.4	661.8	6771	2100	670	156
140	845	1134.9	934.8	7598	1900	750	174
160	1190	1602.9	1320.3	8524	1700	840	194
180	1680	2264.3	1865.1	9565	1500	945	216

All technical data are without warranty. Dimensions and design modifications reserved.

Angular misalignment capacity

Continuous ΔK_w = 12 mrad

transient $\Delta K_{w\,max}$ = 15 mrad

Dimensions

Standard Coupling Type K

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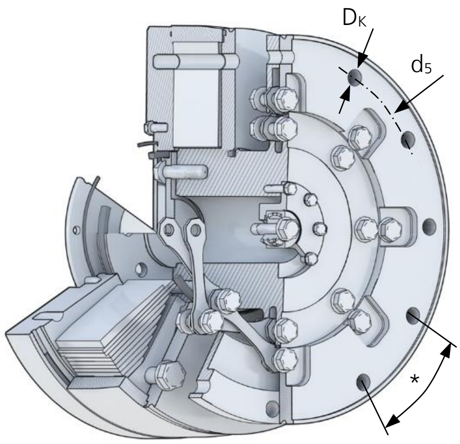
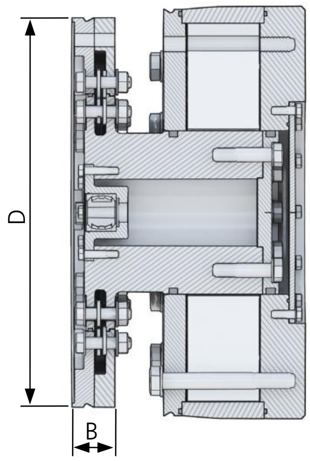




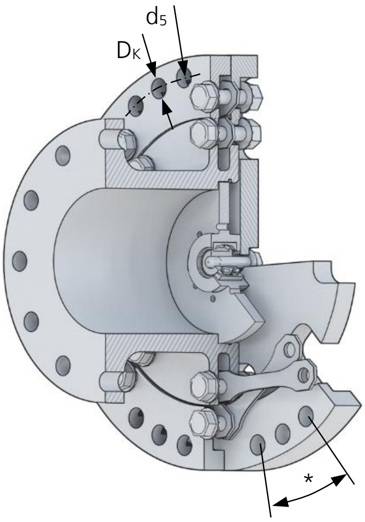
Axial support - if necessary

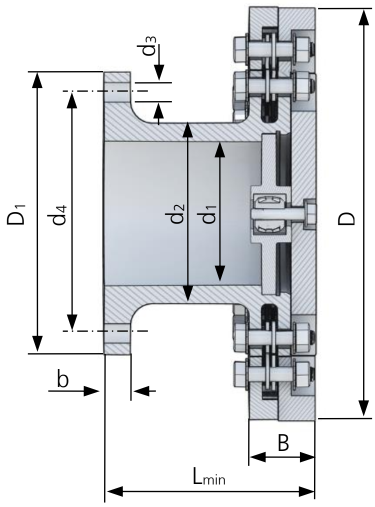
* Pitch of connection — 12 x 30° if 6 links; 16 x 22.5° if 8 links

Size	Dimensions				Inertia		Weight
	D	B	d_5	d_k	inner	outer	total
	mm				kgm^2		kg
25	301	49	271	17	0.03	0.21	22
28	337	54	304	19	0.06	0.37	31
31.5	378	61	341	21	0.1	0.68	44
35.5	425	68	382	23	0.18	1.16	60
40	476	75	429	25	0.32	2.08	85
45	535	85	481	28	0.57	3.77	122
50	600	93	540	31	1.01	6.6	169
56	673	104	606	34	1.8	11.7	237
63	755	116	680	40	3.2	21	335
71	847	134	763	43	5.7	38	478
80	950	147	856	50	10.1	65.8	657
90	1066	165	961	54	18	116.9	925
100	1197	182	1078	62	32	207	1293
112	1343	208	1209	66	57	373	1839
125	1506	230	1357	74	101	653	2549
140	1690	257	1522	82	180	1150	3555
160	1896	287	1708	93	320	2029	4961
180	2128	321	1917	104	570	3595	6951

Standard Coupling Type F

All technical data are without warranty. Dimensions and design modifications reserved.





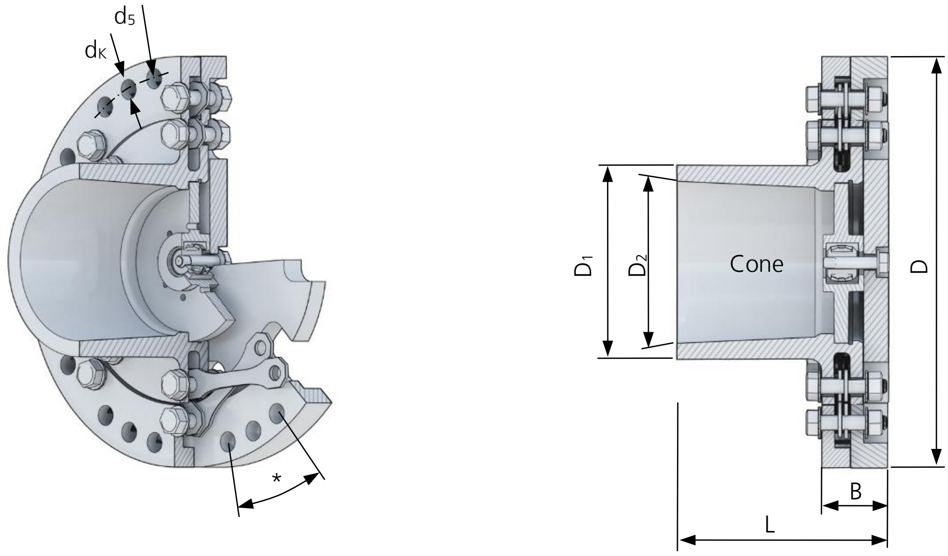
Axial support - if necessary

* Pitch of connection — 12 x 30° if 6 links; 16 x 22.5° if 8 links

Size	Dimensions											Inertia		Weight
	D	B	d_5	d_k	D_1	d_4	b	l x d_3	d_1	d_2	L_{min}	inner	outer	total
	mm											kgm²		kg
25	301	49	271	17	238	200	18	20x13	119	147	140	0.09	0.21	30
28	337	54	304	19	250	220	20	20x15	134	165	160	0.16	0.37	42
31.5	378	61	341	21	275	240	23	20x17	150	185	182	0.26	0.68	59
35.5	425	68	382	23	310	270	25	20x19	169	208	206	0.46	1.16	81
40	476	75	429	25	355	312	28	20x21	189	233	227	0.85	2.08	114
45	535	85	481	28	415	370	32	20x23	212	262	259	1.61	3.77	169
50	600	93	540	31	430	380	35	24x25	238	294	279	2.74	6.6	226
56	673	104	606	34	475	420	38	24x28	267	330	315	4.28	11.7	317
63	755	116	680	40	550	490	45	24x32	300	370	342	7.94	21	452
71	847	134	763	43	625	560	48	24x34	337	415	380	14.1	38	643
80	950	147	856	50	710	635	54	24x38	378	466	409	25.5	65.8	891
90	1066	165	961	54	885	810	60	24x40	424	523	461	59.5	116.9	1319
100	1197	182	1078	62	920	840	70	30x44	475	586	507	91.6	207	1756
112	1343	208	1209	66	1070	980	75	30x46	533	658	566	158	373	2579
125	1506	230	1357	74	1270	1170	85	30x50	599	738	611	309	653	3614
140	1690	257	1522	82	1480	1370	95	30x55	672	828	677	594	1150	5208
160	1896	287	1708	93	1860	1740	105	30x58	754	929	748	1419	2029	7715
180	2128	321	1917	104	2030	1900	120	30x66	846	1043	830	2359	3595	10738

Standard Coupling Type S

All technical data are without warranty. Dimensions and design modifications reserved.



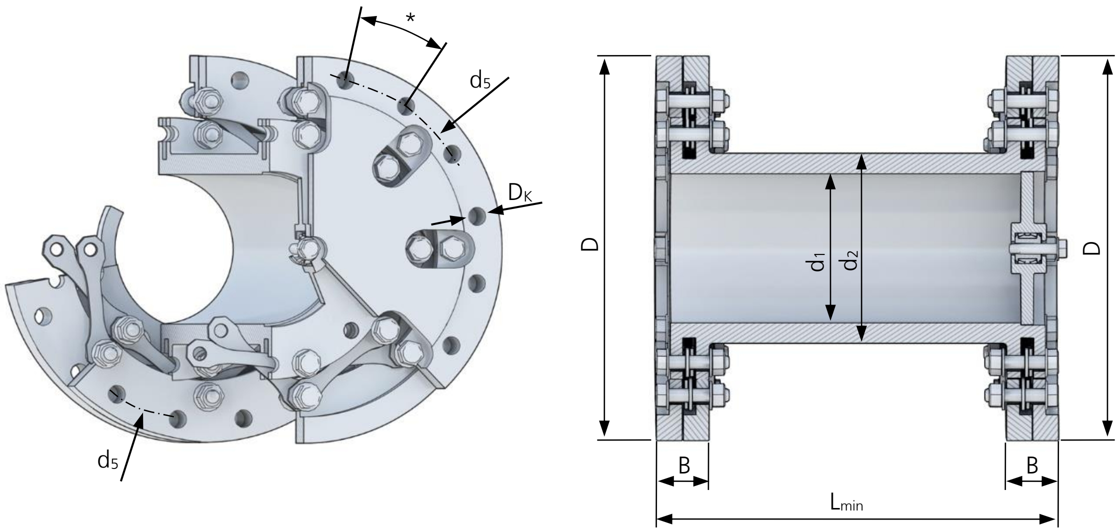
Axial support - if necessary

* Pitch of connection — 12 x 30° if 6 links; 16 x 22.5° if 8 links

Size	Dimensions							Inertia		Weight
	D	B	d_5	d_k	D_1	D_2	L	inner	outer	total
	mm							kgm^2		kg
25	301	49	271	17	147	107	152	0.06	0.21	27
28	337	54	304	19	165	120	170	0.11	0.37	38
31.5	378	61	341	21	185	135	192	0.18	0.68	53
35.5	425	68	382	23	208	151	213	0.32	1.16	74
40	476	75	429	25	233	170	240	0.56	2.08	106
45	535	85	481	28	262	190	270	1	3.77	151
50	600	93	540	31	294	213	301	2	6.6	209
56	673	104	606	34	330	239	338	3.1	11.7	295
63	755	116	680	40	370	269	381	5.5	21	418
71	847	134	763	43	415	301	428	9.8	38	597
80	950	147	856	50	466	338	478	17.6	65.8	829
90	1066	165	961	54	523	379	536	35.8	116.9	1177

Standard Coupling Type T

All technical data are without warranty. Dimensions and design modifications reserved.



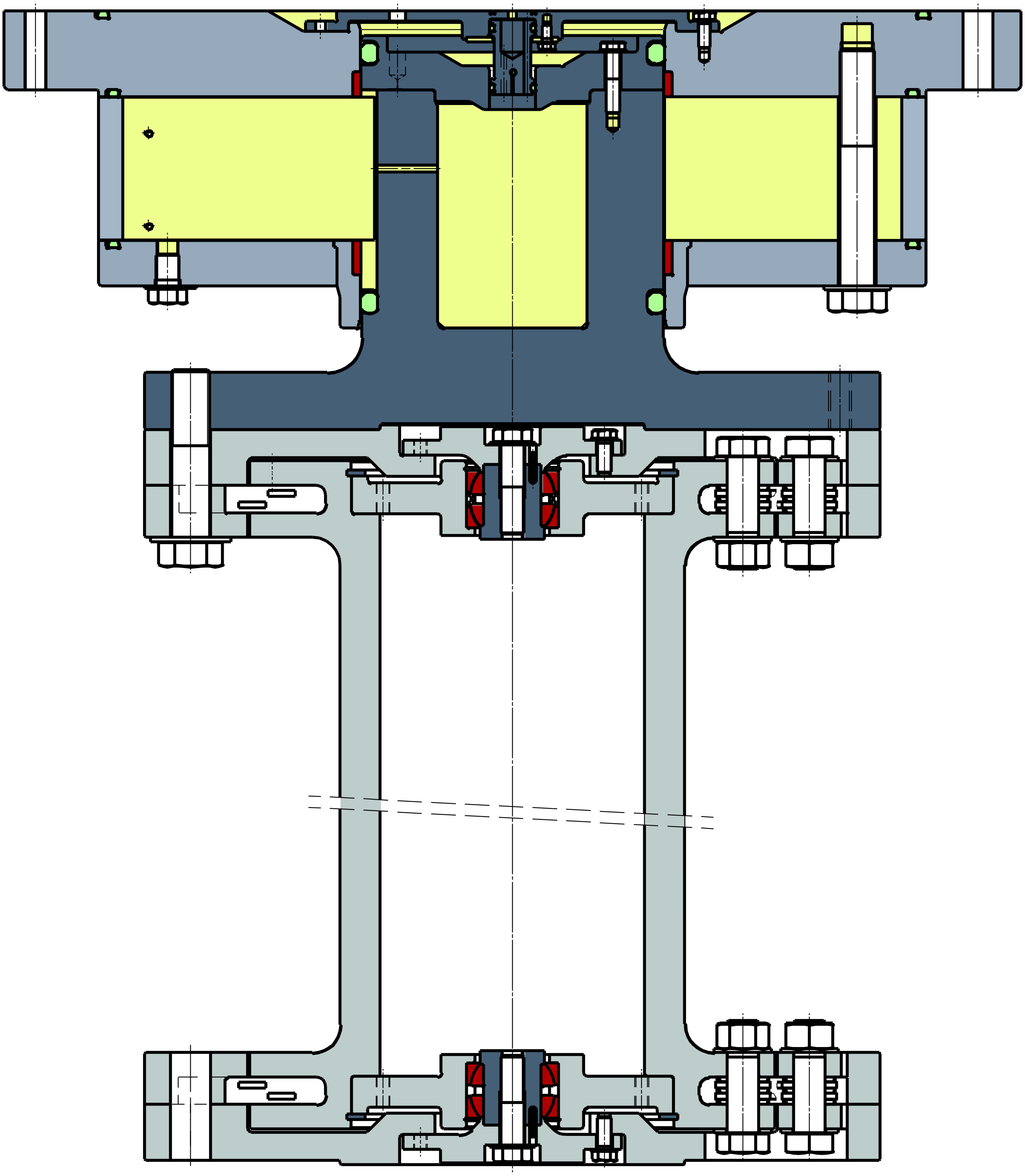
Axial support - if necessary

* Pitch of connection — 12 x 30° if 6 links; 16 x 22.5° if 8 links

Size	Dimensions							Inertia			Weight	
	D	B	d_5	d_k	d_1	d_2	L_{min}	inner	outer	100 mm pipe	1 Flexlink	100 mm pipe
	mm							kgm²			kg	
25	301	49	271	17	119	147	156	0.03	0.21	0.02	21	4.6
28	337	54	304	19	134	165	178	0.06	0.37	0.03	29	5.7
31.5	378	61	341	21	150	185	199	0.09	0.68	0.05	40	7.2
35.5	425	68	382	23	169	208	221	0.16	1.16	0.08	55	9.1
40	476	75	429	25	189	233	246	0.28	2.08	0.13	79	11.4
45	535	85	481	28	212	262	280	0.5	3.77	0.21	113	14.6
50	600	93	540	31	238	294	307	1.13	6.6	0.33	155	18.4
56	673	104	606	34	267	330	339	1.54	11.7	0.52	219	23.2
63	755	116	680	40	300	370	388	2.71	21	0.82	311	28.9
71	847	134	763	43	337	415	432	4.8	38	1.29	446	36.2
80	950	147	856	50	378	466	478	8.7	65.8	2.06	615	45.8
90	1066	165	961	54	424	523	532	20	116.9	3.28	873	57.8
100	1197	182	1078	62	475	586	600	34	207	5.16	1183	72.6
112	1343	208	1209	66	533	658	664	48	373	8.23	1750	91.8
125	1506	230	1357	74	599	738	744	82	653	12.94	2378	114.6
140	1690	257	1522	82	672	828	822	143	1150	20.51	3382	144.3
160	1896	287	1708	93	754	929	914	275	2029	32.49	4717	181.6
180	2128	321	1917	104	846	1043	1022	490	3595	51.72	6648	229.5

Examples

Geislinger BC Coupling + Geislinger Flexlink K8(F8)



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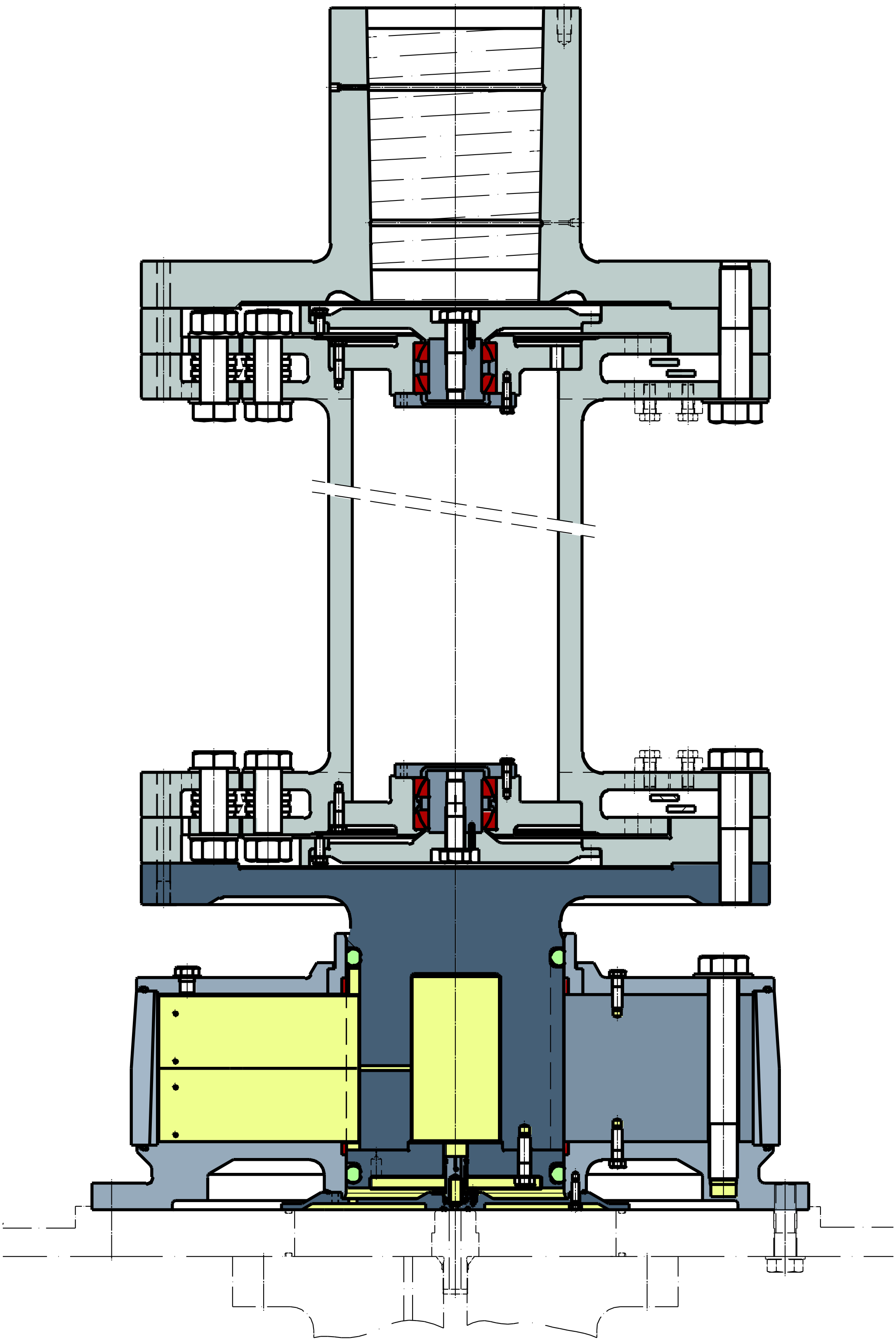
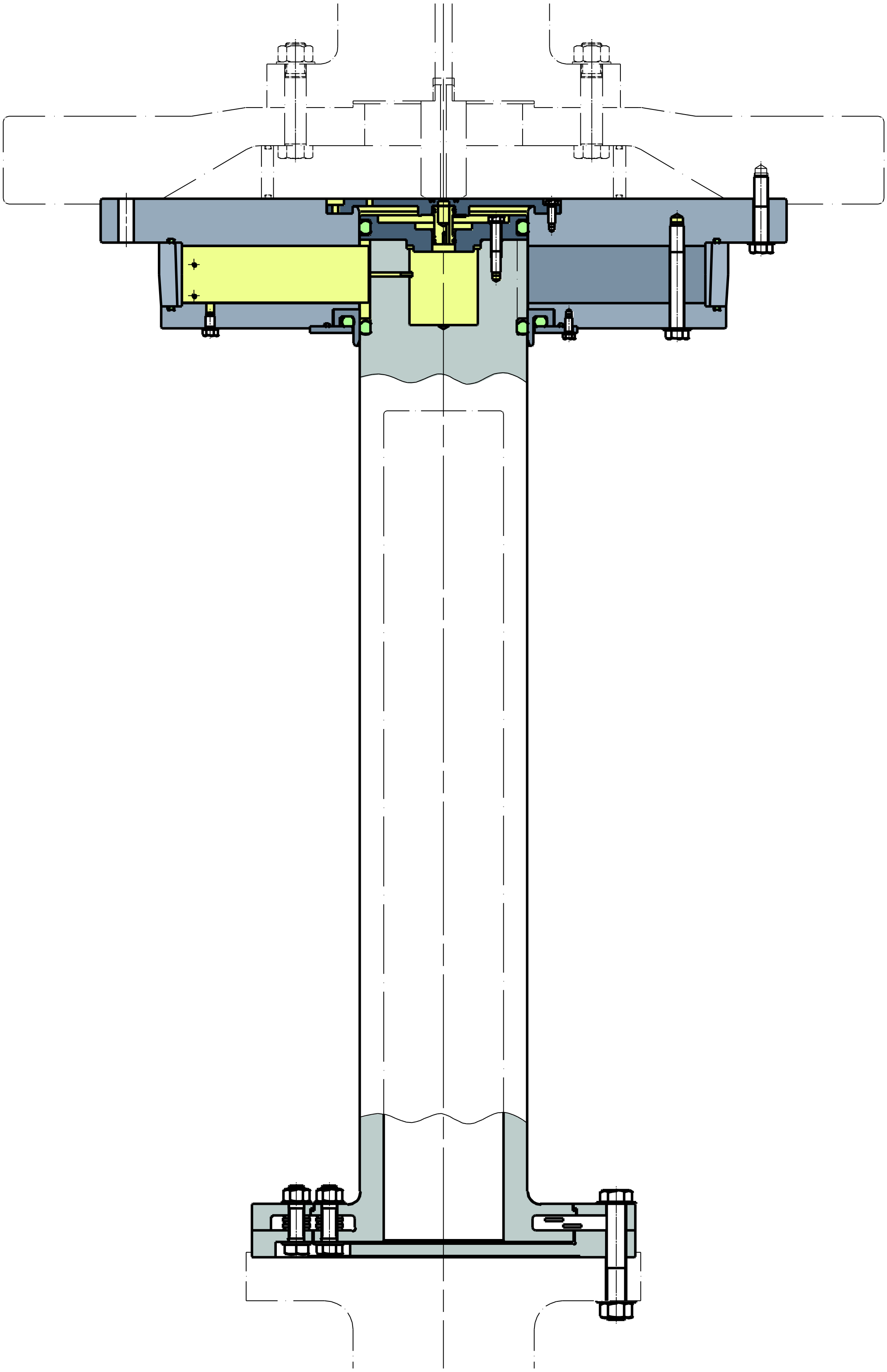
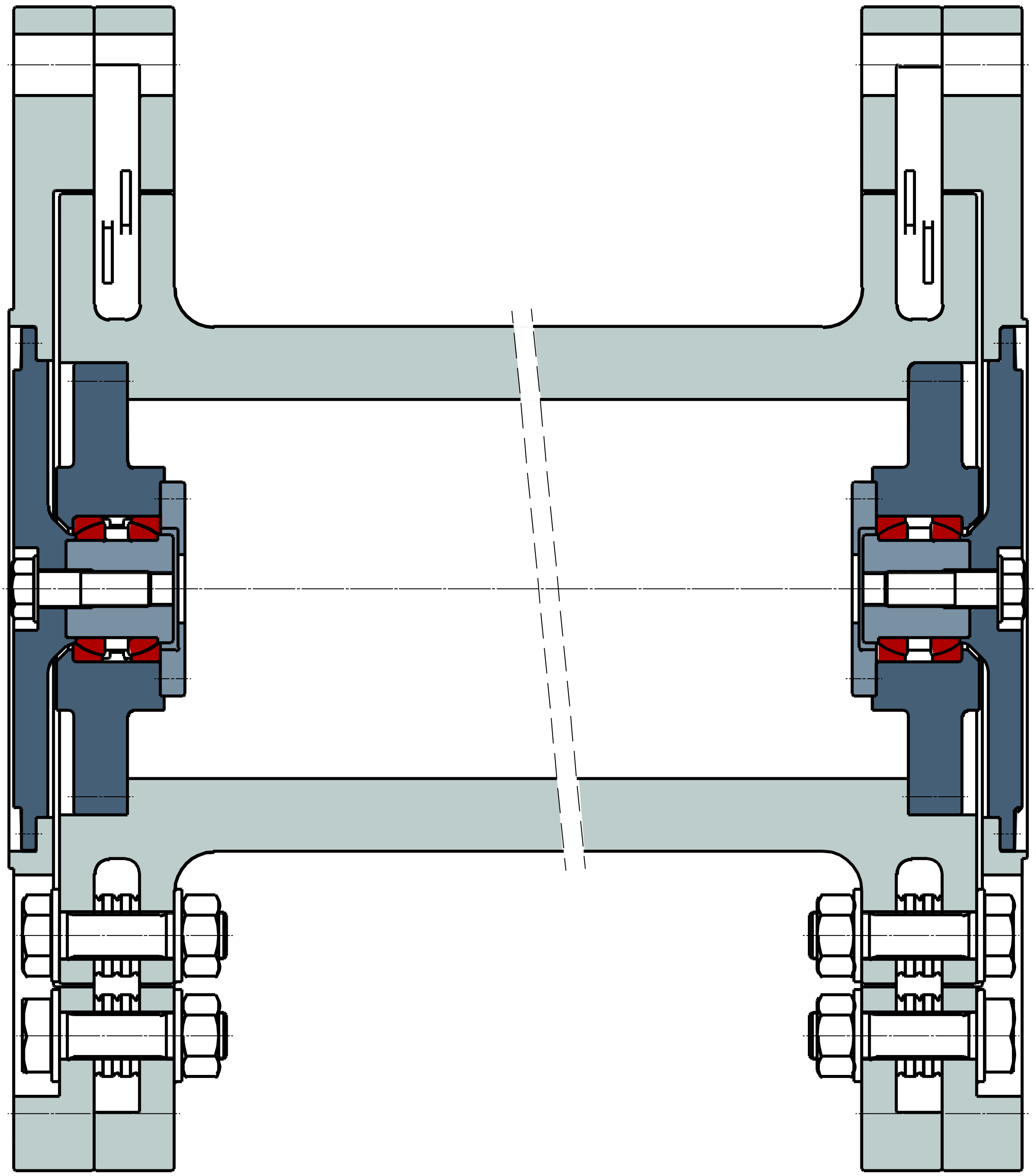
Geislinger BC Coupling + Geislinger Flexlink T6 + flangehub



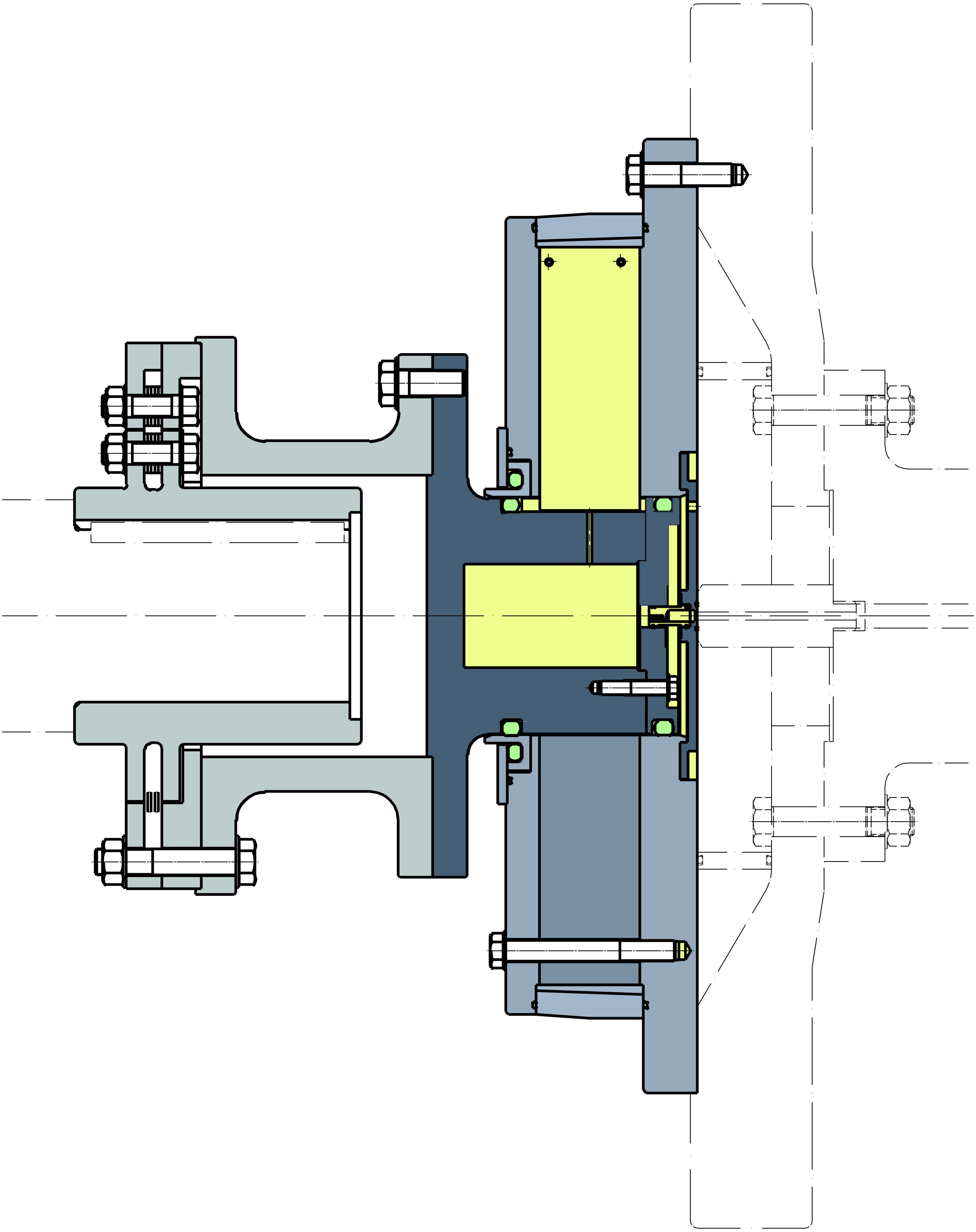
Geislinger BC Coupling + Geislinger Flexlink K6 with long shaft



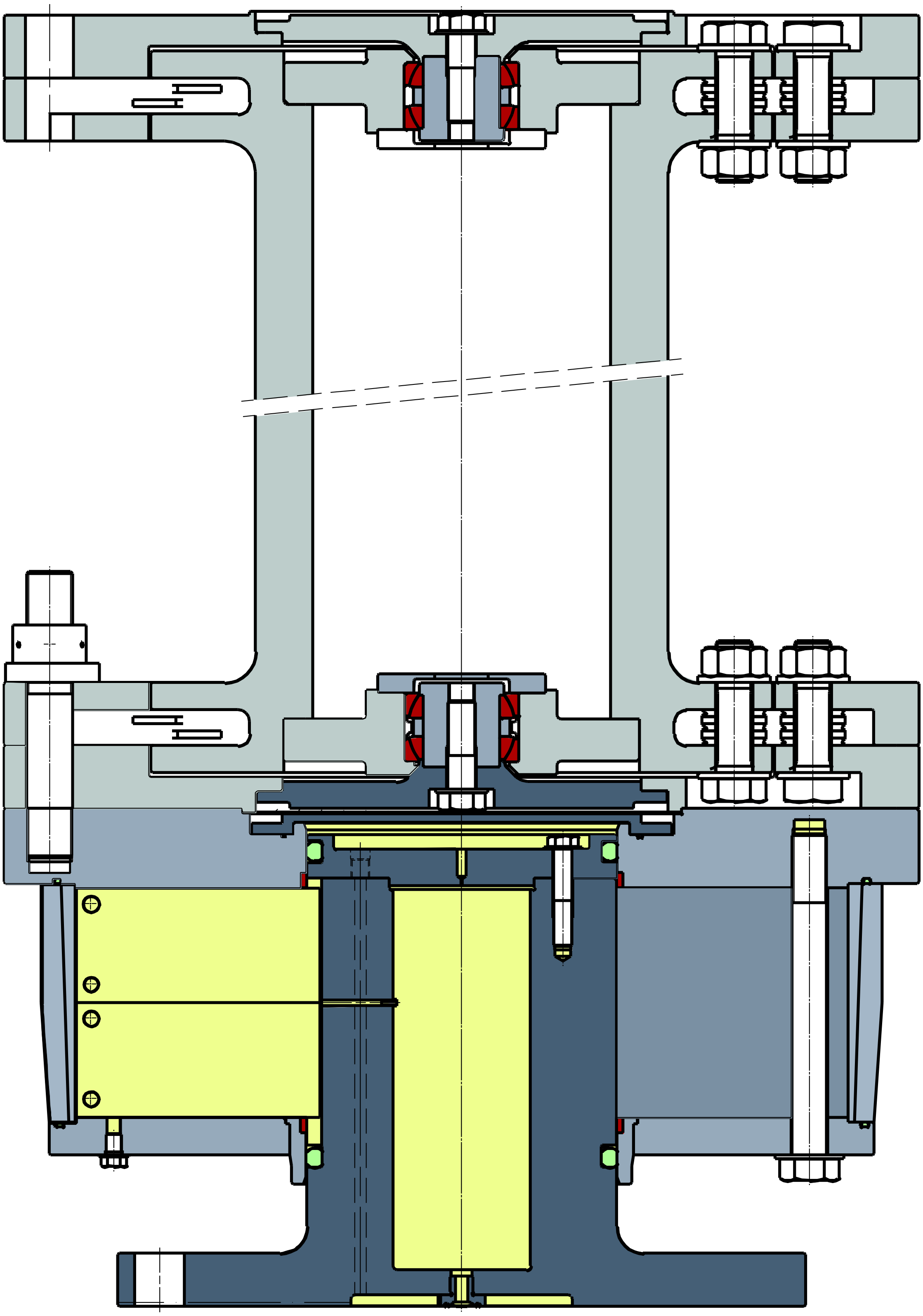
Geislinger Flexlink T6 A



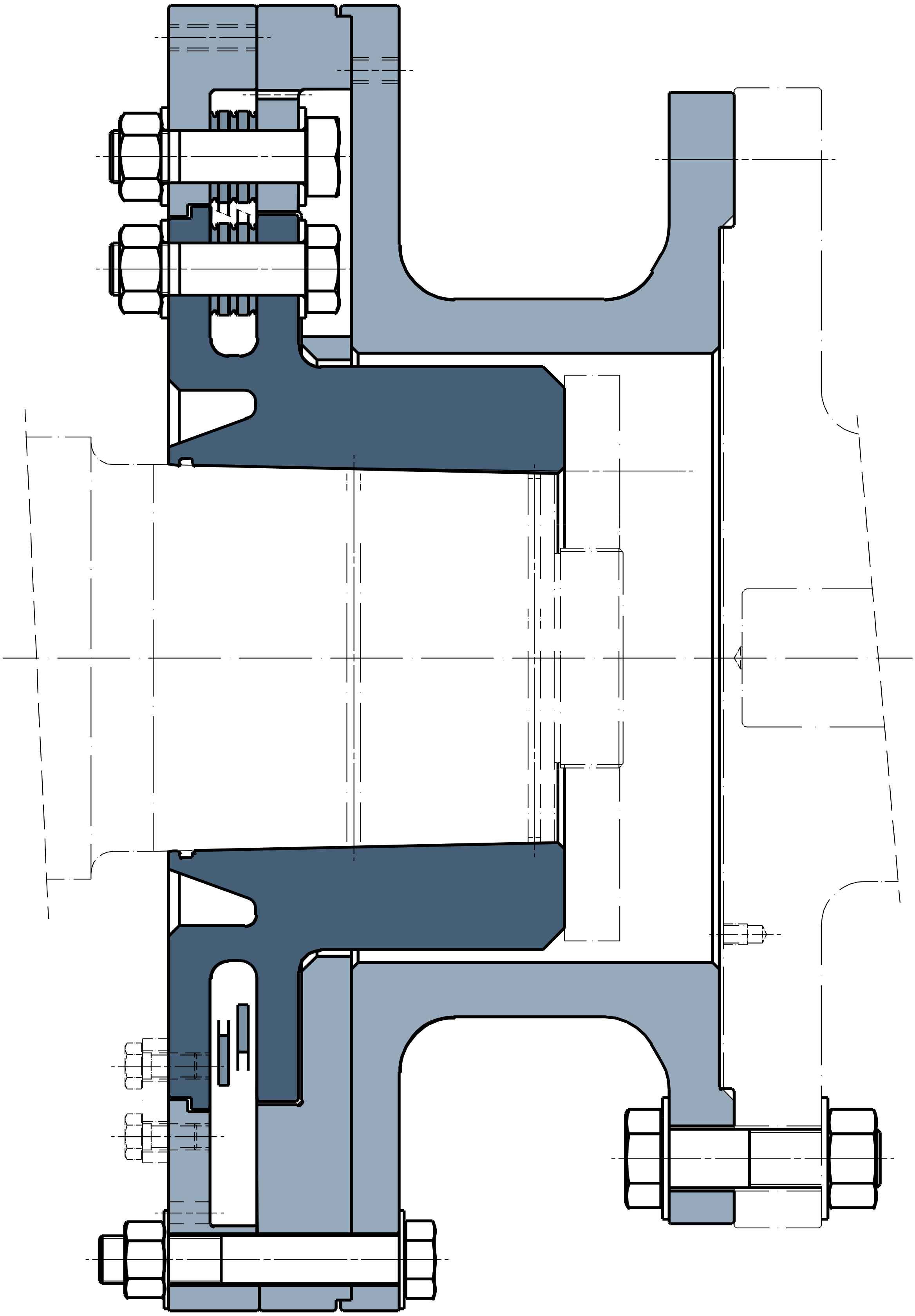
Geislinger Flexlink S8 + Geislinger BC Coupling



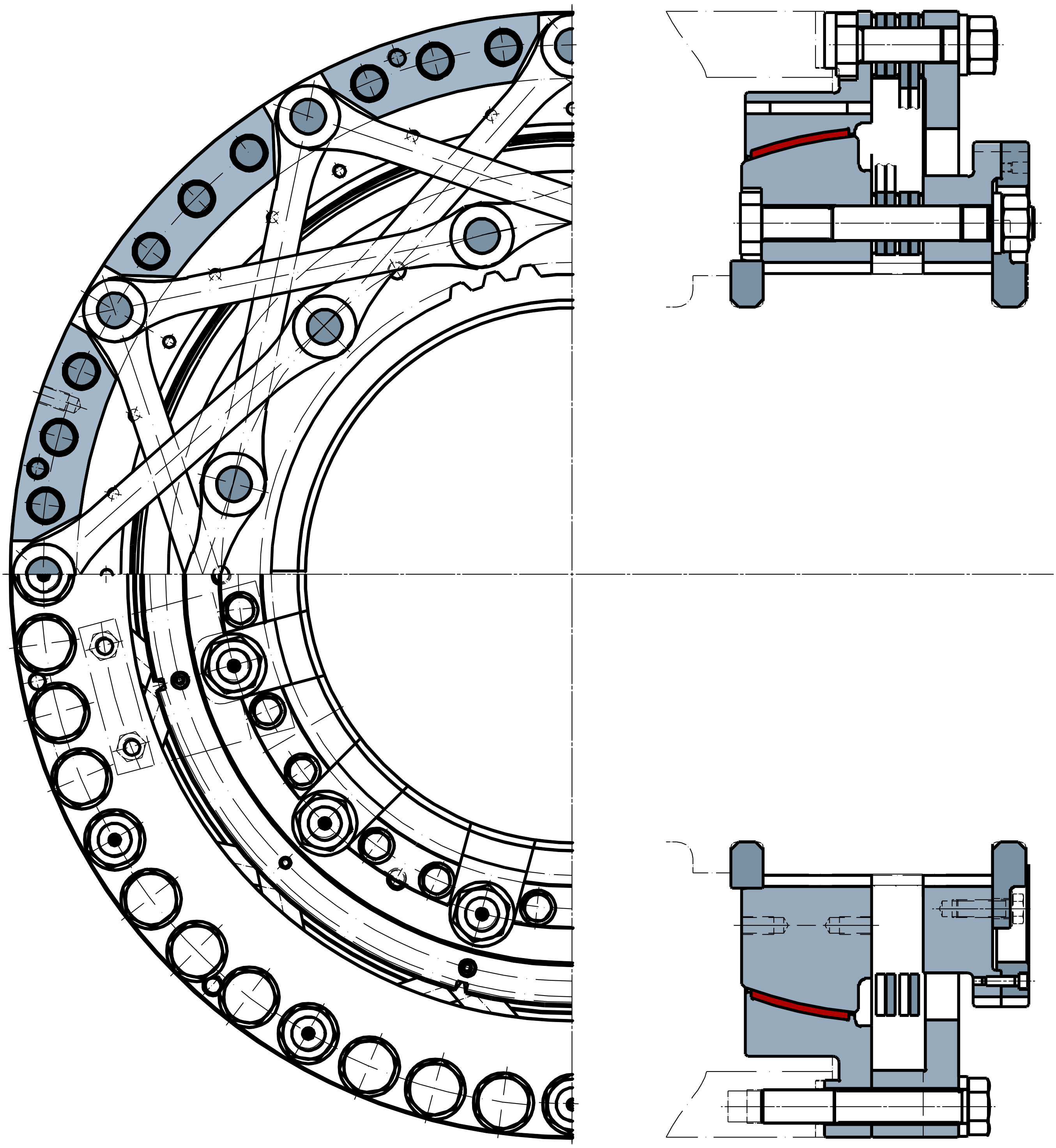
Geislinger Flexlink T6 A + Geislinger Coupling



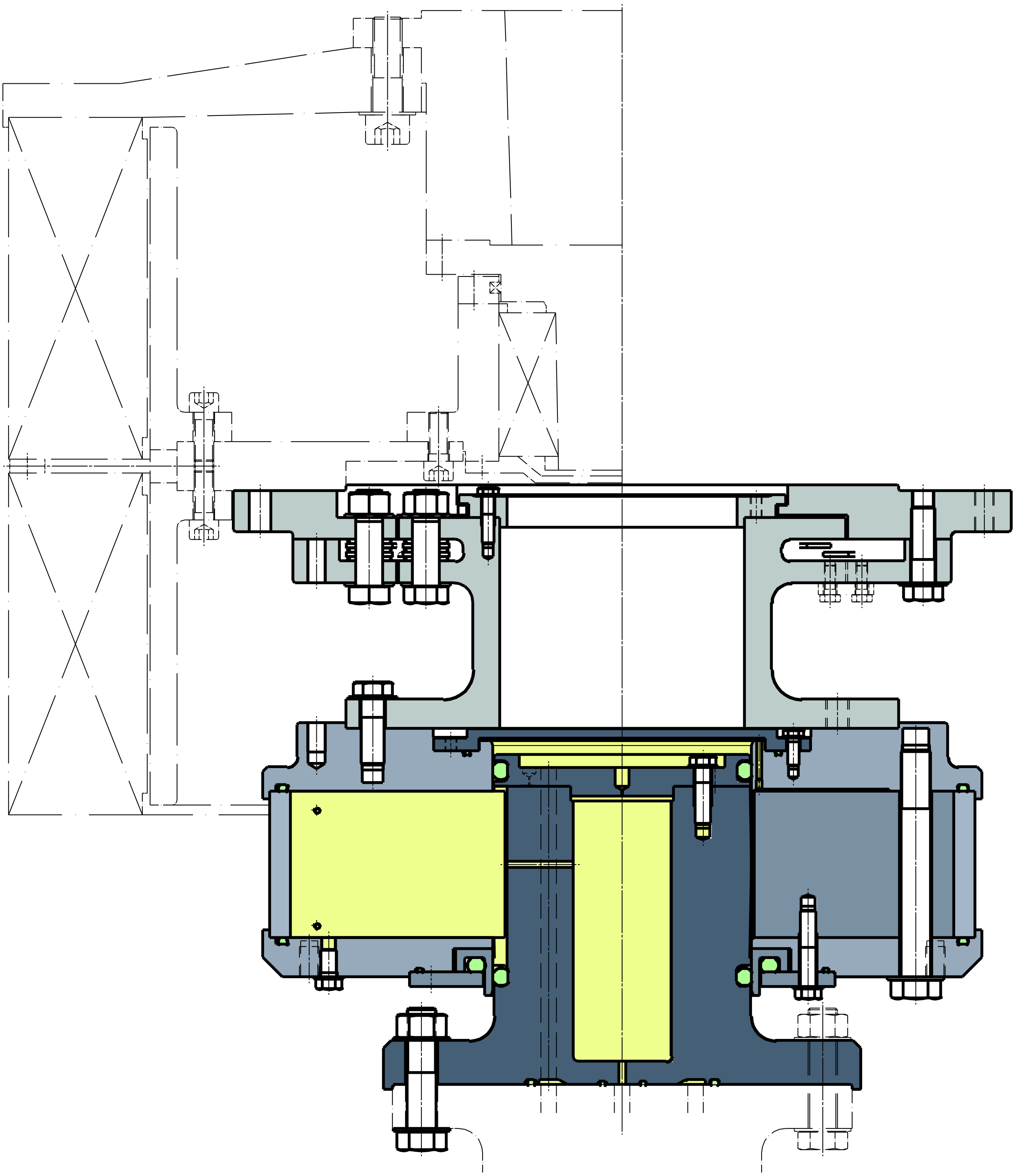
Geislinger Flexlink S8 with adapter



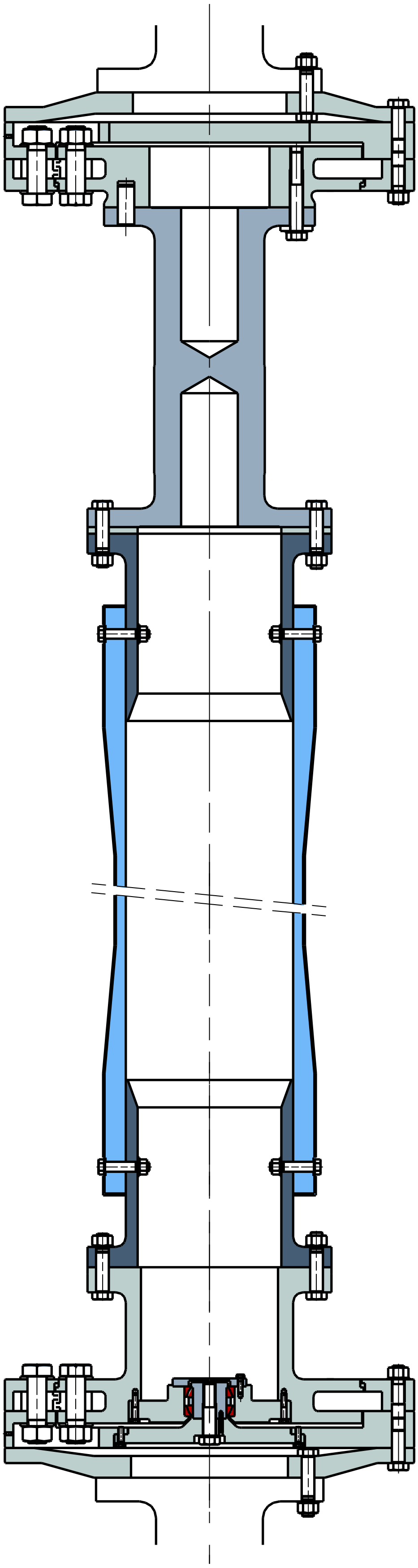
Geislinger Flexlink S12 - special design



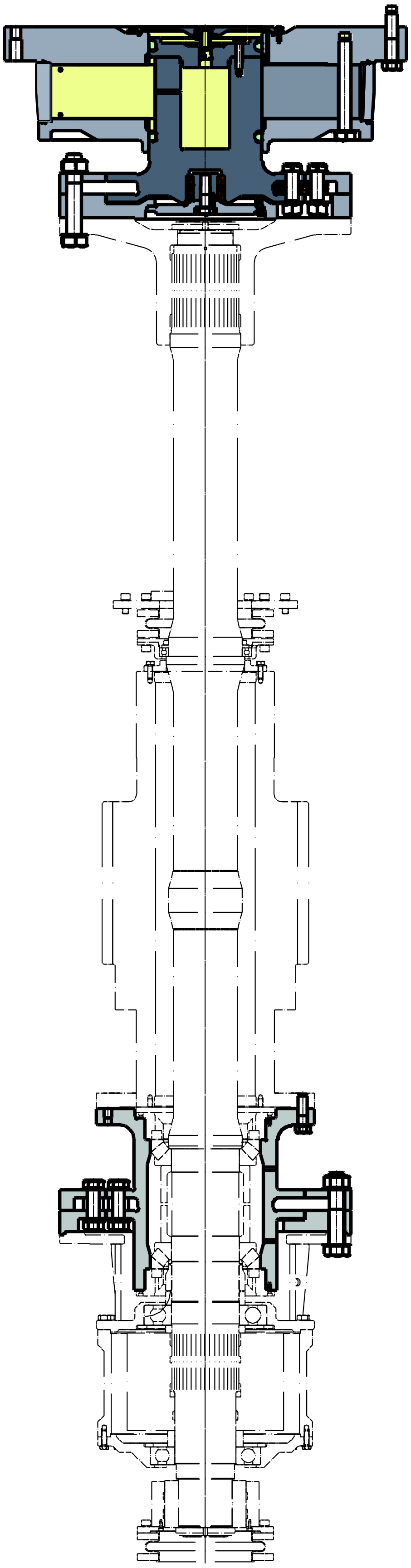
Geislinger BE + Flexlink F8 with clutch



Geislinger Flexlinks with Gesilco composite shaft



Geislinger BC + Flexlink K6A + Flexlink F6A – quillshaft application



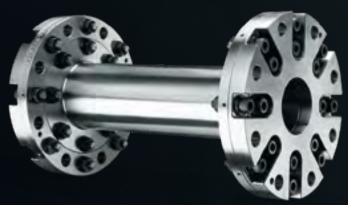
Geislinger Coupling

Geislinger Silenco®

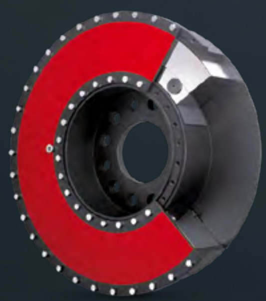
Geislinger Carbotorq®

Geislinger Damper

Geislinger Monitoring



Geislinger Flexlink



Geislinger Vdamp®

Geislinger Gesilco®

Geislinger Gesilco® Shaft

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