

STÜWE®

CARDAN SHAFT CONNECTING FLANGE TYPE GF



CARDAN SHAFT CONNECTING FLANGE TYPE GF – GENERAL INFORMATION

Application Description

The type GF cardan shaft connecting flange is suited for the connection of standard cardan shafts to cylindrical shaft ends. It is characterized by optimal power transmission, easy installation and safe connection in cases of varying or jerky torques. Differentiation is made in the standard delivery programme between three series (21, 22, 23) each with two models so that an optimum variance exists for the achievement of your ideal connection.

Areas of Use



Driveline
technology



Measurement &
testing equipment



Steel- &
rolling mill equipment

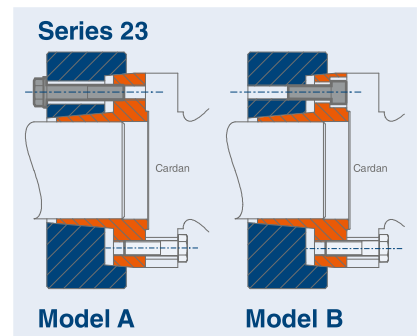
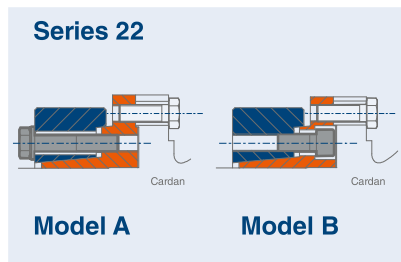
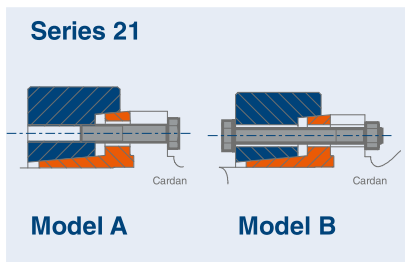


Shipbuilding

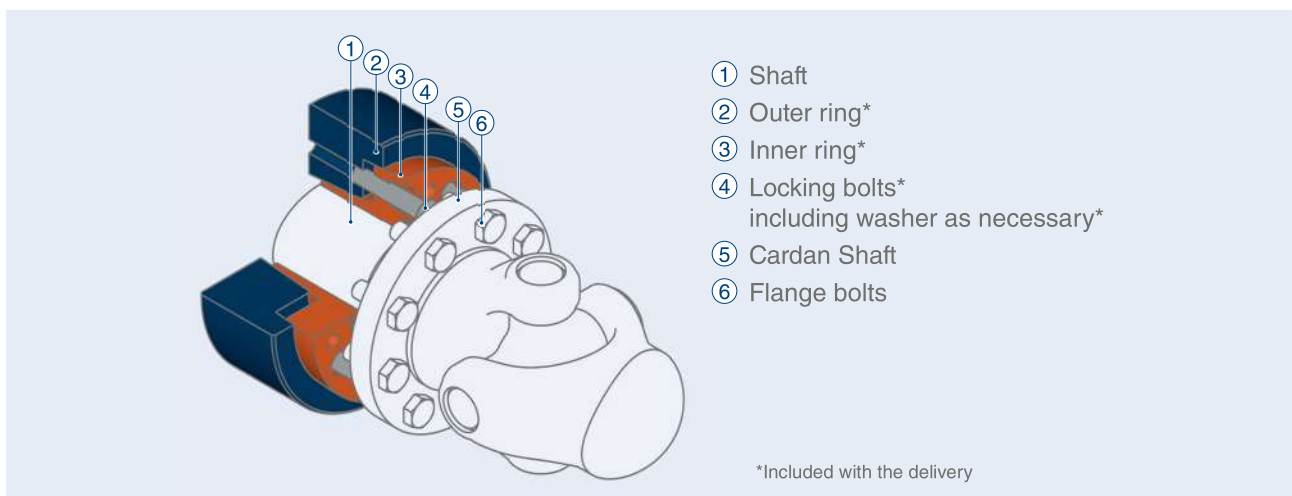


Conveying
equipment

CARDAN SHAFT CONNECTING FLANGE TYPE GF – SERIES

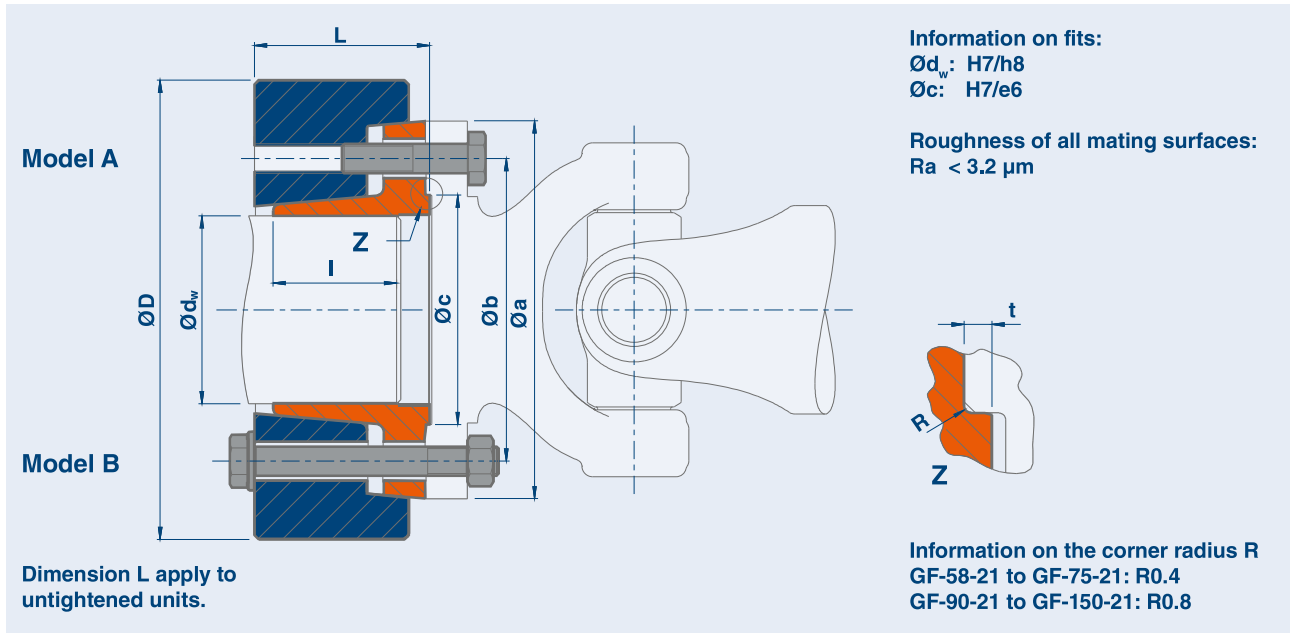


Description	Shaft diameter	Transmissible torque	Features
21	20 - 85 mm	0.12 - 9.52 kNm	Flange bolts are also used for tensioning
22	65 - 220 mm	7 - 229 kNm	Primarily for the connection of small shaft end diameters with large cardan shaft flanges
23	90 - 300 mm	13 - 507 kNm	Primarily for the connection of large shaft end diameters



All types may be protected against environmental influences by zinc and nickel coating or by a paint which has an appropriate corrosion protection class. We are able to achieve both desired colours which conform with the RAL colour range and products with lubricants in accordance with NSF H1. More detailed information on this may be found in this catalogue on page 151.

STÜWE® Cardan Shaft Coupling Type GF – Series 21



Code

- M_t Maximum transmissible torque of a connecting flange for $P_{ax} = 0$
 P_{ax} Maximum transmissible axial load of a connecting flange for $M_t = 0$
 M_a Maximum tightening torque of the locking bolts (see also "Installation and Removal Instructions")

Cardan Shaft Coupling Type GF – Series 21

Type	d_w^* mm	M_t kNm	D mm	l mm	L mm	a mm	b mm	c mm	t mm	Flange bolts**	M_a Nm	kg
GF 58 - 21	20	0.12	60	18	22	58	47	30	1.3	4 x M5	9	0.5
	24	0.17										
	28	0.24										
GF 65 - 21	20	0.16	72	20	24	65	52	35	1.5	4 x M6	14.5	0.9
	24	0.22										
	30	0.33										
GF 75 - 21	25	0.29	80	22	27	75	62	42	1.8	6 x M6	14.5	1.2
	30	0.41										
	40	0.66										
GF 90 - 21	30	0.38	100	26	31	90	74.5	47	2	4 x M8	35	1.8
	40	0.59										
	45	0.80										
GF 100 - 21	40	0.80	115	26	32	100	84	57	2	6 x M8	35	2.4
	50	1.17										
	55	1.54										
GF 120 - 21	40	1.73	138	28	35	120	101.5	75	2	8 x M10	70	4.0
	60	3.03										
	70	4.24										
GF 150 - 21	50	4.00	170	39	47	150	130	90	2.5	8 x M12	120	7.0
	70	6.53										
	85	9.52										

Further sizes on request, subject to technical changes.

*Hole diameter can be freely chosen within given limitations. **Grade 12.9

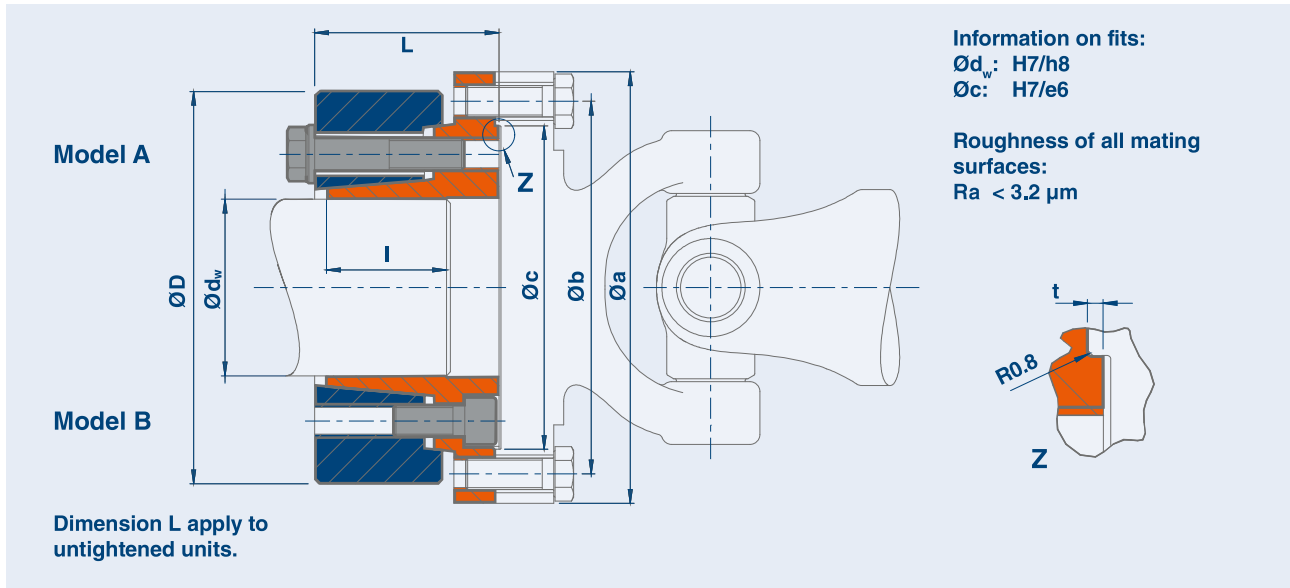
Connecting dimensions can be adapted if desired.

Model B: M16 and upwards with washers: DINENISO7416

When ordering please state: (Type x $\varnothing d_w$ x model), e.g. GF 120 - 21 x 60 x A

Additional: holes, bolt size and bolt quantity if different from that given in the table

STÜWE® Cardan Shaft Coupling Type GF – Series 22



Code

- M_t Maximum transmissible torque of a connecting flange for $P_{ax} = 0$
 P_{ax} Maximum transmissible axial load of a connecting flange for $M_t = 0$
 M_a Maximum tightening torque of the locking bolts (see also "Installation and Removal Instructions")

Cardan Shaft Coupling Type GF – Series 22

Type	d_w^* mm	M_t kNm	Locking bolts Size of	M_a Nm	D mm	I mm	L mm	a mm	b mm	c mm	t mm	Flange bolts**	M_a Nm	kg
GF 180 - 22	65	7	M14	160	170	40	71	180	155.5	110	2	8 x M14	160	10.5
	75	10												
	85	15												
GF 225 - 22	80	12	M16	240	197	51	86	225	196	140	4	8 x M16	240	17.7
	90	17												
	100	24												
GF 250 - 22	90	18	M16	240	215	54	91	250	218	140	4	8 x M18	340	22.5
	100	25												
	110	33												
GF 285 - 22	90	20	M20	470	230	62	102	285	245	175	5	8 x M20	470	31.6
	110	34												
	120	43												
GF 315 - 22	110	37	M24	820	290	73	122	315	280	175	5	8 x M22	640	52.4
	130	58												
	140	71												
GF 350 - 22	130	52	M24	820	320	83	137	350	310	220	7	10 x M22	640	71.2
	160	91												
	180	124												
GF 390 - 22	160	95	M24	820	370	104	154	390	345	250	7	10 x M24	820	100.0
	180	131												
	200	172												
GF 435 - 22	180	136	M27	1210	405	115	181	435	385	280	8	10 x M27	1210	132.6
	200	179												
	220	229												

Further sizes on request, subject to technical changes.

*Hole diameter can be freely chosen within given limitations. **Grade 10.9

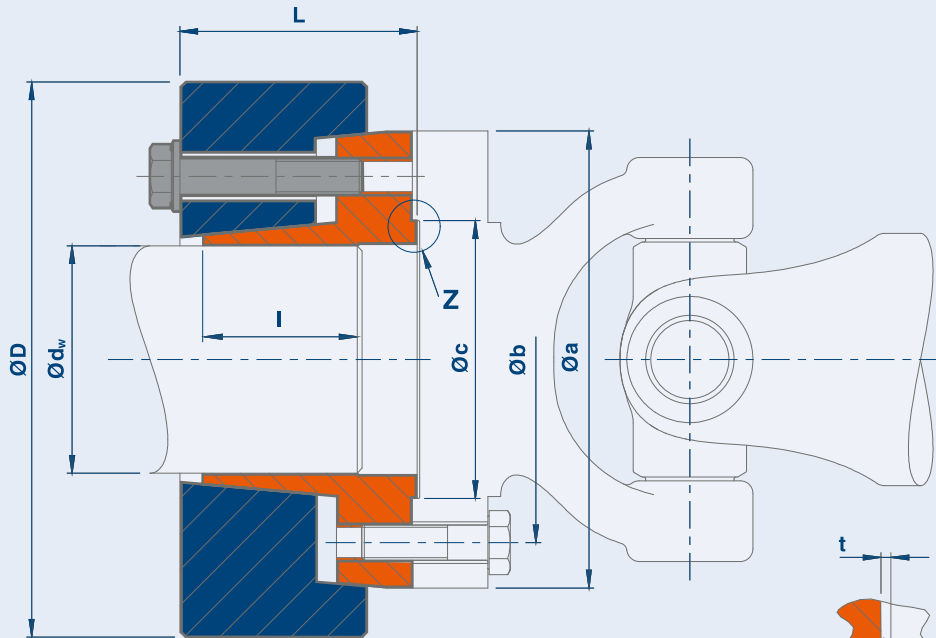
Connecting dimensions can be adapted if desired.

Model A: M16 and upwards with washers: DINENISO7416

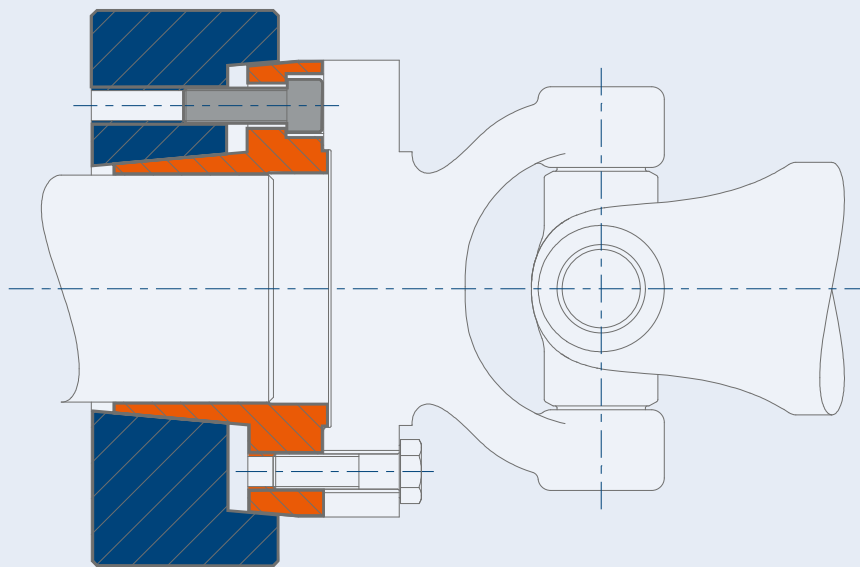
When ordering please state: (Type x $\text{Ø}d_w$ x model), e.g. GF 250 - 22 x 100 x A

Additional: holes, bolt size and bolt quantity if different from that given in the table

STÜWE® Cardan Shaft Coupling Type GF – Series 23



Model A



Model B

Information on fits:

Ød_w : H7/h8

Øc : H7/e6

Roughness
of all mating surfaces
 $R_a < 3.2 \mu\text{m}$

Dimension L apply to
untightened units.

Code

M_t Maximum transmissible torque of a connecting flange for $P_{ax} = 0$

P_{ax} Maximum transmissible axial load of a connecting flange for $M_t = 0$

M_a Maximum tightening torque of the locking bolts (see also "Installation and Removal Instructions")

Cardan Shaft Coupling Type GF – Series 23

Type	d _w * mm	M _t kNm	Locking bolts Size of	M _a Nm	D mm	l mm	L mm	a mm	b mm	c mm	t mm	Flange bolts**	M _a Nm	kg
GF 180 - 23	90	13	M14	160	215	42	76	180	155.5	110	2.5	8 x M14	160	14.8
	110	23												
	120	29												
GF 225 - 23	110	26	M16	240	263	50	87	225	196	140	4	8 x M16	240	24.9
	130	41												
	150	60												
GF 250 - 23	120	35	M16	240	300	61	99	250	218	140	5	8 x M18	340	35.6
	150	65												
	170	90												
GF 285 - 23	130	56	M20	470	320	74	117	285	245	175	5	8 x M20	470	49.1
	160	94												
	180	127												
GF 315 - 23	150	81	M24	820	370	88	138	315	280	175	5	8 x M22	640	80.2
	180	131												
	200	171												
GF 350 - 23	190	147	M24	820	430	103	155	350	310	220	7	10 x M22	640	113.0
	220	213												
	240	265												
GF 390 - 23	210	213	M24	820	460	123	177	390	345	250	7	10 x M24	820	146.5
	240	298												
	260	363												
GF 435 - 23	230	262	M27	1210	520	128	192	435	385	280	7	10 x M27	1210	206.0
	260	356												
	300	507												

Further sizes on request, subject to technical changes.

*Hole diameter can be freely chosen within given limitations. **Grade 10.9

Connecting dimensions can be adapted if desired.

Model A: M16 and upwards with washers: DINENISO7416

When ordering please state: (Type x Ød_w x model), e.g. GF 250 - 23 x 150 x A

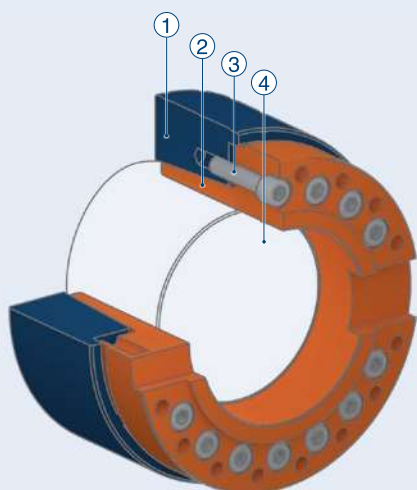
Additional: holes, bolt size and bolt quantity if different from that given in the table

**You have not found what you are looking for in our comprehensive range of standard-products?
We will be happy to promptly prepare any form of custom-made product and development innovation
even using special materials such as 1.3974. Please feel free to contact us.**

CARDAN SHAFT CONNECTING FLANGE TYPE GF – SPECIAL SOLUTIONS

STÜWE® GF with Cross Keyway on the Facing Side

easy-to-install cardan shaft connecting flange

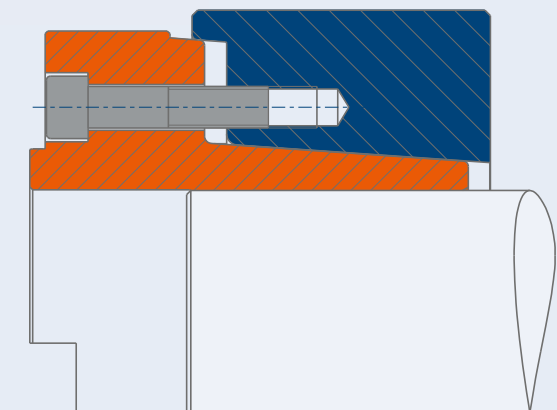


Benefits

- Transmission of high torques
- Simplification of positioning

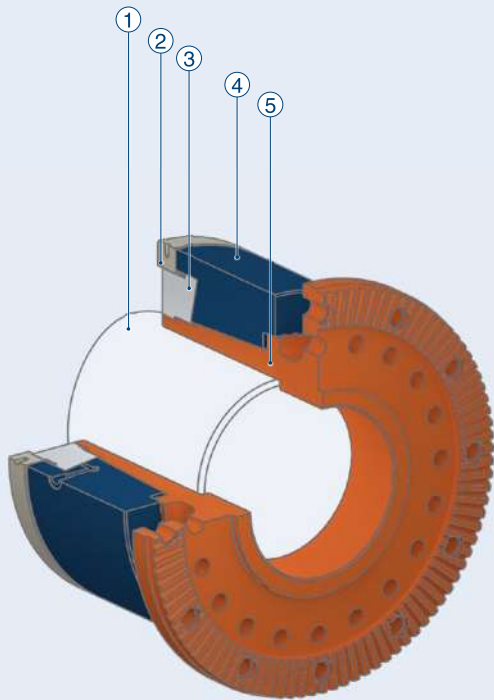
- ① Outer ring*
- ② Inner ring*
- ③ Locking bolts* including washer as necessary*
- ④ Shaft

*Included with the delivery



STÜWE® GFHYD with Hirth gearing

Optimal positioning thanks to teeth on the face



Benefits

- Reduced installation time
- Simplified positioning
- Transmission of high torques

- ① Shaft
- ② Nut*
- ③ Support ring*
- ④ Outer ring*
- ⑤ Inner ring*

*Included with the delivery

