

STÜWE®

SHAFT COUPLING TYPE WK AND WKL



SHAFT COUPLING TYPE WK AND WKL – GENERAL INFORMATION

Application Description

The shaft couplings WK and WKL are suited in all cases where a secure, fixed connection between two free shaft ends with little effort is demanded. The couplings are provided for shafts with identical or differing shaft diameters and fitting tolerances. Type WKL shaft couplings are used for larger axial distances between the shaft ends. Type WK shaft couplings are suitable for smaller axial distances.

Areas of Use



Driveline
technology



Steel- &
rolling mill equipment



Crushing
equipment



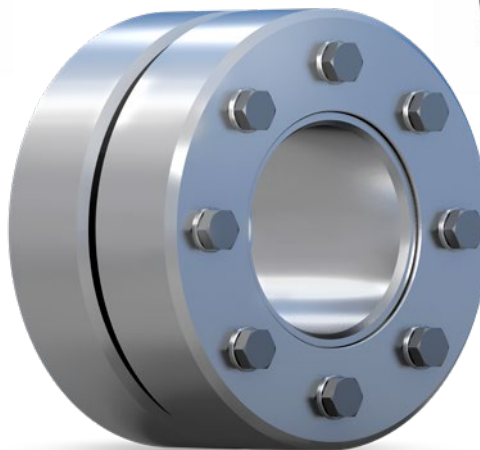
Conveying
equipment



Agitation &
mixing equipment

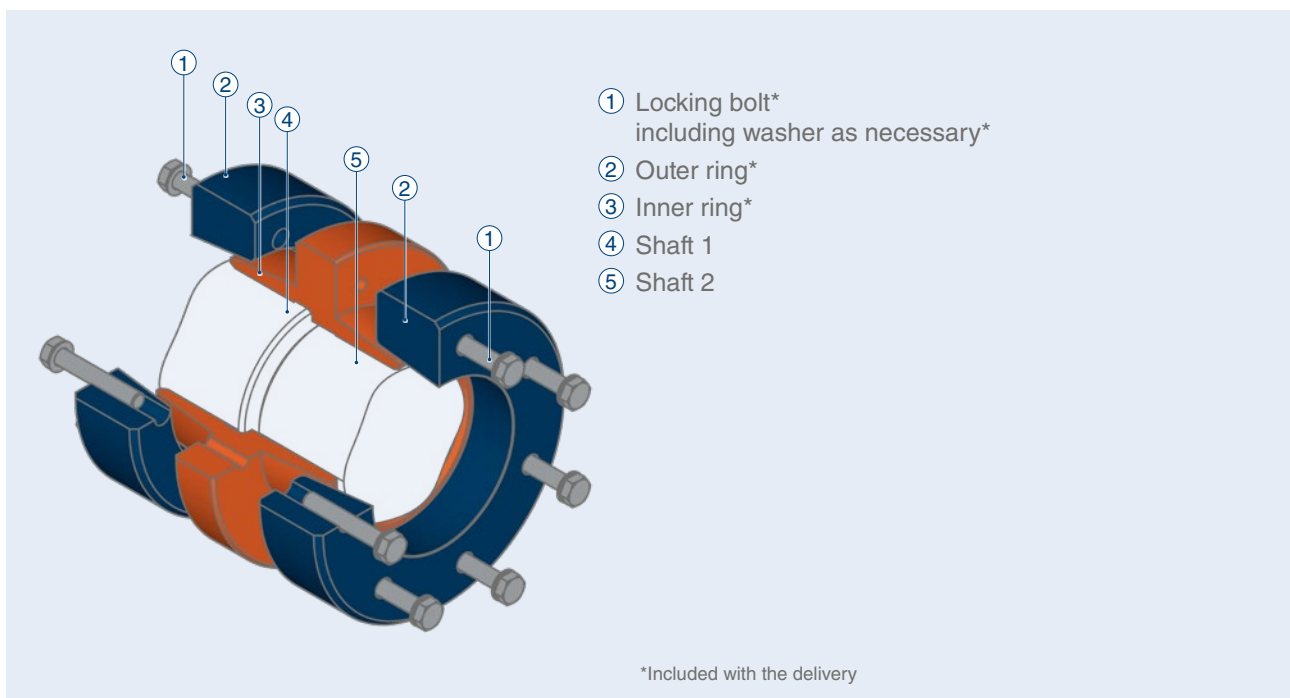


Shipbuilding



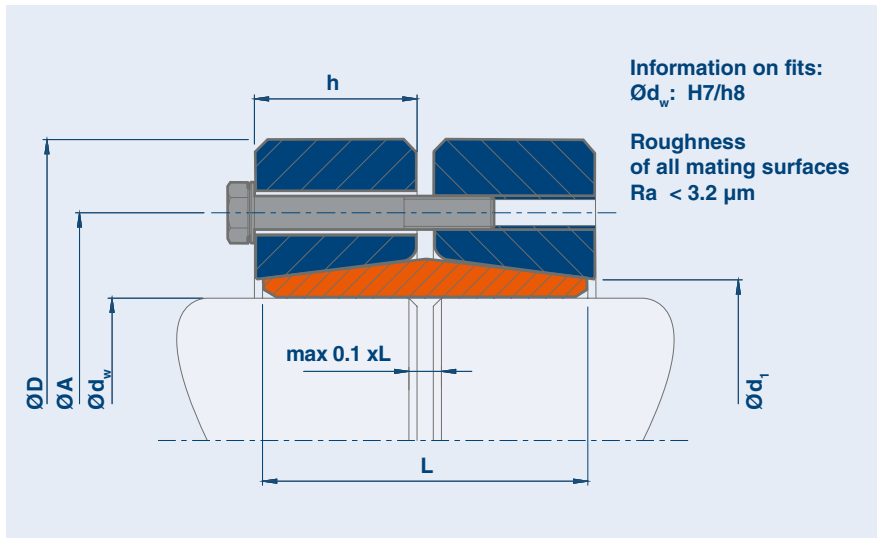
SHAFT COUPLING TYPE WK AND WKL – SERIES

Description	Shaft diameter	Transmissible torque	Features
WK 12	9 - 750 mm	0.04 - 7116 kNm	The maximum distance of the shaft ends is 0.1 x L.
WKL 12	9 - 750 mm	0.04 - 7116 kNm	Long version



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® Shaft Coupling TYPE WK Series 12



Code

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

Shaft Coupling Type WK – Series 12

Type	d_w^* mm	M_t kNm	P_{ax} kN	M_a Nm	B**	D mm	L mm	h mm	A mm	d_1 mm	kg
WK 10 - 12	9	0.04	8	12	M6	39	20	10	25	13	0.2
	10	0.04	9								
	11	0.05	10								
WK 12 - 12	12	0.07	11	12	M6	44	26	13	28	16	0.3
	13	0.08	12								
	14	0.09	13								
WK 15 - 12	15	0.16	21	29	M8	52	30	15	36	21	0.5
	17	0.20	24								
	19	0.26	27								
WK 20 - 12	20	0.29	29	29	M8	60	34	17	42	25	0.7
	22	0.35	32								
	24	0.41	35								
WK 25 - 12	25	0.49	40	29	M8	66	38	19	48	32	0.9
	27	0.58	43								
	29	0.66	46								
WK 30 - 12	30	0.77	51	29	M8	76	42	21	56	38	1.3
	32	0.87	55								
	35	1.05	60								
WK 40 - 12	36	1.3	70	58	M10	96	50	25	70	47	2.5
	40	1.8	92								
	43	2.3	109								
WK 50 - 12	44	2.3	102	100	M12	112	60	30	84	58	4.2
	50	3.4	137								
	54	4.3	161								
WK 60 - 12	55	4.1	150	100	M12	120	68	34	94	66	4.8
	60	5.5	184								
	62	6.1	197								

*Hole diameter can be freely chosen within given limitations.

**Locking bolts: DIN EN ISO 4017/4014 grade 10.9 as standard, alternatively DIN EN ISO 4762 grade 10.9 M16 and upwards with washers: DIN EN ISO 7416

When ordering please state: (Type x $\varnothing d_w$), e.g. WK 40 - 12 x 43

Shaft Coupling Type WK – Series 12

Type	d _w * mm	M _t kNm	P _{ax} kN	M _a Nm	B**	D mm	L mm	h mm	A mm	d ₁ mm	kg
WK 70 - 12	63	6.2	196	100	M12	148	80	40	112	79	9.1
	70	8.6	245								
	73	9.7	266								
WK 80 - 12	74	10	275	160	M14	170	94	44	130	94	13.4
	80	13	320								
	85	15	358								
WK 90 - 12	86	16	381	240	M16	185	104	50	144	104	17.5
	90	19	417								
	95	22	461								
WK 100 - 12	96	23	483	240	M16	197	114	54	156	113	20.9
	100	26	521								
	106	31	578								
WK 120 - 12	107	35	648	240	M16	230	138	65	174	133	34.6
	120	47	787								
	125	53	841								
WK 140 - 12	126	56	881	470	M20	290	160	76	216	160	67.5
	140	74	1052								
	150	88	1178								
WK 160 - 12	150	81	1081	470	M20	320	176	83	234	180	85
	160	96	1202								
	165	104	1264								
WK 180 - 12	165	114	1381	470	M20	340	200	94	260	205	107
	180	143	1594								
	185	154	1665								
WK 200 - 12	185	164	1778	470	M20	370	228	96	290	226	134
	200	201	2011								
	210	228	2169								
WK 220 - 12	210	231	2199	820	M24	405	250	118	320	246	184
	220	260	2362								
	230	291	2527								
WK 240 - 12	230	271	2353	820	M24	430	270	128	340	267	221
	240	302	2513								
	250	334	2675								
WK 260 - 12	240	322	2683	1210	M27	460	290	138	366	288	268
	250	357	2860								
	260	395	3039								
WK 280 - 12	260	424	3265	1210	M27	485	330	166	400	308	347
	270	467	3459								
	280	512	3656								
WK 300 - 12	280	530	3787	1210	M27	520	346	174	420	328	415
	290	579	3990								
	300	629	4195								
WK 320 - 12	300	662	4414	1640	M30	550	376	190	446	348	501
	310	718	4631								
	320	776	4849								
WK 340 - 12	320	806	5038	1640	M30	590	380	194	466	368	589
	330	869	5267								
	340	935	5499								
WK 360 - 12	340	967	5686	2210	M33	650	400	202	500	398	770
	350	1037	5924								
	360	1109	6163								

Further sizes on request, subject to technical changes.

*Hole diameter can be freely chosen within given limitations.

**Locking bolts: DIN EN ISO 4017/4014 grade 10.9 as standard, alternatively DIN EN ISO 4762 grade 10.9

M16 and upwards with washers: DIN EN ISO 7416

When ordering please state: (Type x Ød_w), e.g. WK 220 - 12 x 210

Shaft Coupling Type WK – Series 12

Type	d _w * mm	M _t kNm	P _{ax} kN	M _a Nm	B**	D mm	L mm	h mm	A mm	d ₁ mm	kg
WK 390 - 12	370	1195	6459	2210	M33	670	440	224	530	428	891
	380	1274	6706								
	390	1356	6954								
WK 420 - 12	400	1637	8187	2210	M33	740	470	238	560	448	1175
	410	1737	8471								
	420	1839	8758								
WK 460 - 12	430	1841	8561	2210	M33	780	500	246	590	498	1291
	450	2050	9112								
	460	2160	9390								
WK 500 - 12	470	2568	10929	2850	M36	860	560	276	656	540	1772
	480	2700	11249								
	500	2974	11895								
WK 550 - 12	510	3014	11820	2850	M36	960	600	296	710	600	2421
	530	3301	12456								
	550	3602	13097								
WK 600 - 12	560	3610	12893	2850	M36	1000	620	310	760	650	2614
	580	3921	13520								
	600	4245	14151								
WK 650 - 12	620	4555	14695	2850	M36	1080	640	320	824	700	3074
	630	4732	15023								
	650	5097	15684								
WK 700 - 12	660	5360	16243	2850	M36	1140	680	340	890	760	3608
	680	5751	16916								
	700	6158	17593								
WK 750 - 12	710	6256	17623	2850	M36	1280	720	360	950	814	5016
	730	6679	18298								
	750	7116	18977								

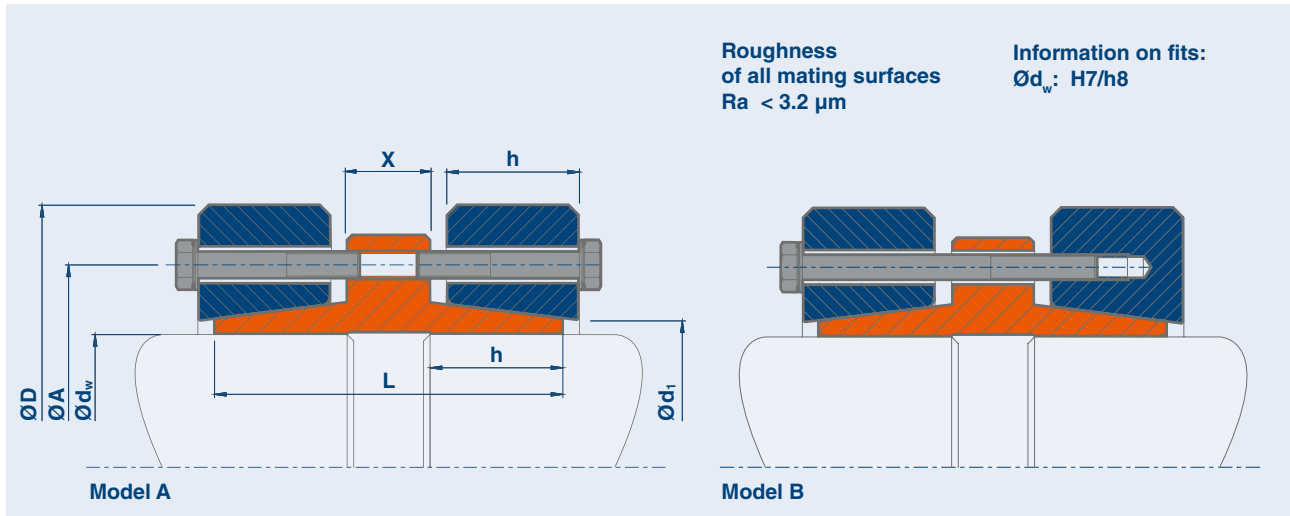
Further sizes on request, subject to technical changes.

*Hole diameter can be freely chosen within given limitations.

**Locking bolts: DIN EN ISO 4017/4014 grade 10.9 as standard, alternatively DIN EN ISO 4762 grade 10.9
M16 and upwards with washers: DIN EN ISO 7416

When ordering please state: (Type x Ød_w), e.g. WK 750 - 12 x 710

STÜWE® Shaft Coupling Type WKL Series 12



Code

- M_t** Maximum transmissible torque of a shaft coupling for $P_{ax} = 0$
P_{ax} Maximum transmissible axial load of a shaft coupling for $M_t = 0$
M_a Maximum tightening torque of the locking bolts (see also "Installation and Removal Instructions")
X $L - 2 \cdot h$, the design of this length can be varied

Shaft Coupling Type WKL – Series 12

Type	d _w * mm	M _t kNm	P _{ax} kN	M _a Nm	B**	D mm	L mm	h mm	A mm	d ₁ mm	kg
WKL 10 - 12	9	0.04	8	12	M6	39	32	10	25	13	0.3
	10	0.04	9								
	11	0.05	10								
WKL 12 - 12	12	0.07	11	12	M6	44	38	13	28	16	0.4
	13	0.08	12								
	14	0.09	13								
WKL 15 - 12	15	0.16	21	29	M8	52	50	15	36	21	0.8
	17	0.20	24								
	19	0.26	27								
WKL 20 - 12	20	0.29	29	29	M8	60	54	17	42	25	1.0
	22	0.35	32								
	24	0.41	35								
WKL 25 - 12	25	0.49	40	29	M8	66	62	19	48	32	1.3
	27	0.58	43								
	29	0.66	46								
WKL 30 - 12	30	0.77	51	29	M8	76	70	21	56	38	1.9
	32	0.87	55								
	35	1.05	60								

*Hole diameter can be freely chosen within given limitations.

**Locking bolts: DIN EN ISO 4017/4014 grade 10.9 as standard, alternatively DIN EN ISO 4762 grade 10.9
M16 and upwards with washers: DIN EN ISO 7416

When ordering please state: (Type x Ød_w x desired model), e.g. WKL 30 - 12 x 32 x A

Shaft Coupling Type WKL – Series 12

Type	d _w * mm	M _t kNm	P _{ax} kN	M _a Nm	B**	D mm	L mm	h mm	A mm	d ₁ mm	kg
WKL 40 - 12	36	1.3	70	58	M10	96	80	25	70	47	3.5
	40	1.8	92								
	43	2.3	109								
WKL 50 - 12	44	2.3	102	100	M12	112	90	30	84	58	5.5
	50	3.4	137								
	54	4.3	161								
WKL 60 - 12	55	4.1	150	100	M12	120	120	34	94	66	7.9
	60	5.5	183								
	62	6.1	197								
WKL 70 - 12	63	6.2	196	100	M12	148	140	40	112	79	13.7
	70	8.6	245								
	73	9.7	266								
WKL 80 - 12	74	10	282	160	M14	170	170	44	130	94	21.4
	80	13	326								
	85	15	364								
WKL 90 - 12	86	17	387	240	M16	185	200	50	144	104	29.5
	90	19	421								
	95	22	466								
WKL 100 - 12	96	23	487	240	M16	197	210	54	148	114	33.0
	100	26	523								
	106	31	579								
WKL 120 - 12	107	35	659	240	M16	230	230	65	174	134	54.2
	120	48	796								
	125	53	850								
WKL 140 - 12	126	56	895	470	M20	290	250	76	206	160	95.4
	140	74	1064								
	150	89	1188								
WKL 160 - 12	150	82	1096	470	M20	320	280	83	234	180	115
	160	97	1216								
	165	105	1277								
WKL 180 - 12	165	116	1404	470	M20	340	310	94	260	205	152
	180	145	1613								
	185	156	1684								
WKL 200 - 12	185	167	1805	470	M20	370	350	96	266	226	192
	200	203	2034								
	210	230	2190								
WKL 220 - 12	210	234	2224	820	M24	405	390	118	320	246	252
	220	262	2385								
	230	293	2548								
WKL 240 - 12	230	273	2377	820	M24	430	430	128	340	267	302
	240	304	2536								
	250	337	2696								
WKL 260 - 12	240	325	2712	1210	M27	460	450	138	366	288	376
	250	361	2888								
	260	398	3065								
WKL 280 - 12	260	431	3312	1210	M27	485	470	154	400	308	443
	270	473	3504								
	280	518	3698								
WKL 300 - 12	280	537	3834	1210	M27	520	470	162	420	328	502
	290	585	4035								
	300	636	4237								

*Hole diameter can be freely chosen within given limitations.

**Locking bolts: DIN EN ISO 4017/4014 grade 10.9 as standard, alternatively DIN EN ISO 4762 grade 10.9
M16 and upwards with washers: DIN EN ISO 7416

When ordering please state: (Type x Ød_w x desired model), e.g. WKL 240 - 12 x 230 x B

Shaft Coupling Type WKL – Series 12

Type	d _w * mm	M _t kNm	P _{ax} kN	M _a Nm	B**	D mm	L mm	h mm	A mm	d ₁ mm	kg
WKL 320 - 12	300	667	4450	1640	M30	550	510	180	446	348	609
	310	723	4664								
	320	781	4881								
WKL 340 - 12	320	811	5066	1640	M30	590	510	184	466	368	694
	330	874	5294								
	340	939	5525								
WKL 360 - 12	340	973	5725	2210	M33	650	530	192	490	398	881
	350	1043	5961								
	360	1116	6199								
WKL 390 - 12	370	1199	6479	2210	M33	670	580	216	526	428	1004
	380	1278	6725								
	390	1360	6972								
WKL 420 - 12	400	1647	8234	2210	M33	740	600	226	550	448	1257
	410	1746	8517								
	420	1848	8801								
WKL 460 - 12	430	1841	8561	2210	M33	780	640	246	590	498	1483
	450	2050	9112								
	460	2160	9390								
WKL 500 - 12	470	2568	10929	2850	M36	860	690	276	648	540	1989
	480	2700	11249								
	500	2974	11895								
WKL 550 - 12	510	3014	11820	2850	M36	960	760	296	710	600	2739
	530	3301	12456								
	550	3602	13097								
WKL 600 - 12	560	3610	12893	2850	M36	1000	780	310	760	650	2957
	580	3921	13520								
	600	4245	14151								
WKL 650 - 12	620	4555	14695	2850	M36	1080	820	320	824	700	3501
	630	4732	15023								
	650	5097	15684								
WKL 700 - 12	660	5360	16243	2850	M36	1140	840	340	890	760	4056
	680	5751	16916								
	700	6158	17593								
WKL 750 - 12	710	6256	17623	2850	M36	1280	880	360	950	814	5511
	730	6679	18298								
	750	7116	18977								

Further sizes on request, subject to technical changes.

*Hole diameter can be freely chosen within given limitations.

**Locking bolts: DIN EN ISO 4017/4014 grade 10.9 as standard, alternatively DIN EN ISO 4762 grade 10.9
M16 and upwards with washers: DIN EN ISO 7416

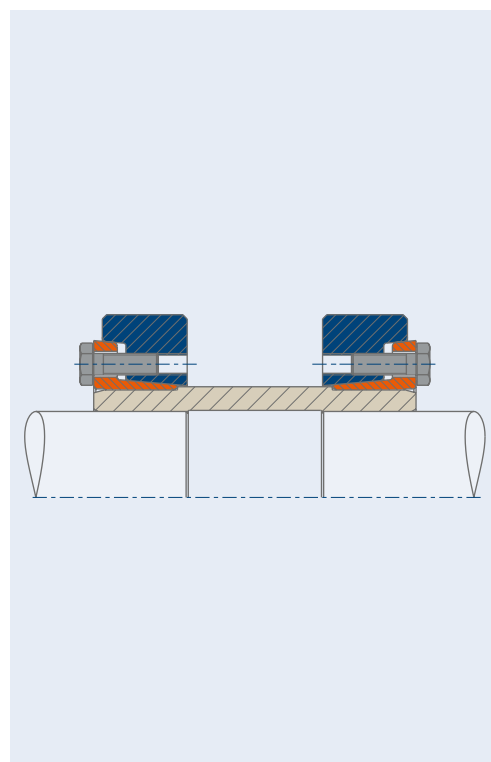
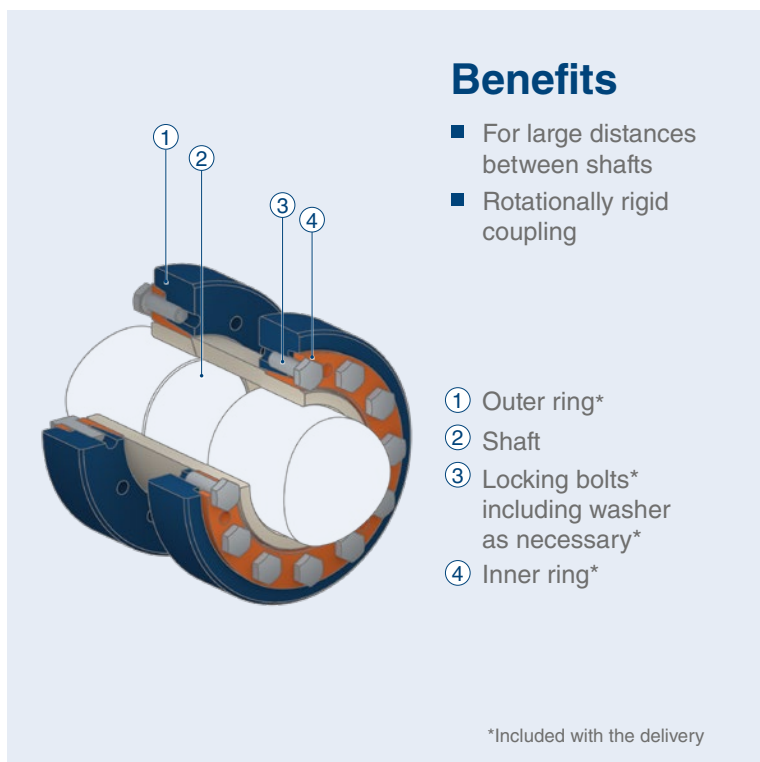
When ordering please state: (Type x Ød_w x desired model), e.g. WKL 750 - 12 x 710 x B

**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.**

SHAFT COUPLING TYPE WK AND WKL – SPECIAL SOLUTIONS

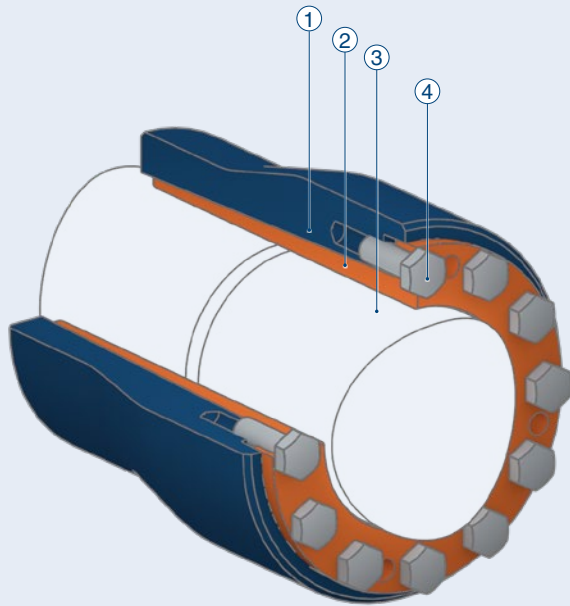
STÜWE® System Solution W Coupling

Locking unit for the bridging of maximum distances between shafts



STÜWE® Individual solution WKD

Compact shaft coupling for small distances between shafts

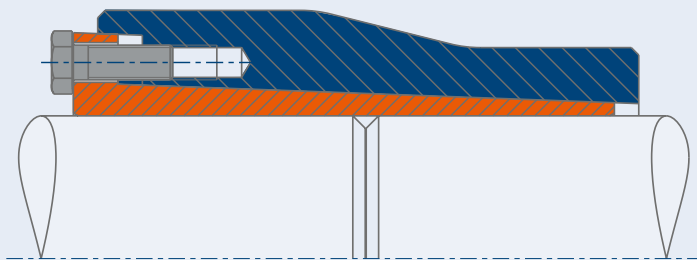


Benefits

- Less components
- Short distances between shafts

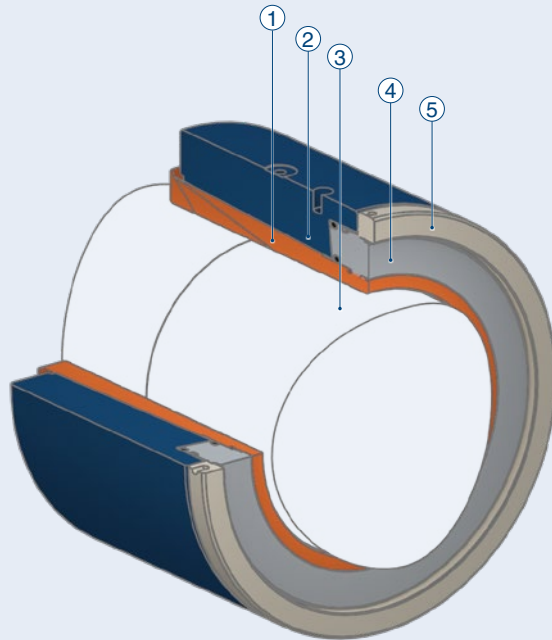
- ① Outer ring*
- ② Inner ring*
- ③ Shaft
- ④ Locking bolts* including washer as necessary*

*Included with the delivery



STÜWE® Hydraulic Shaft Coupling WKHYD

Hydraulic shaft coupling for small distances between shafts

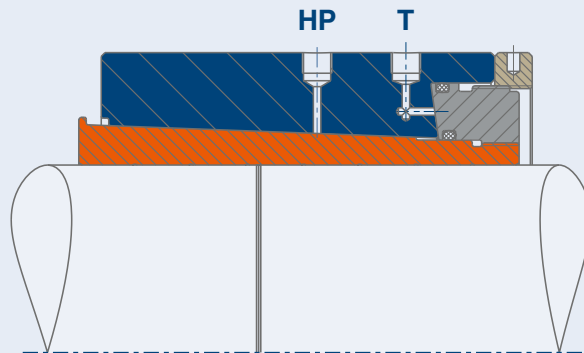


Benefits

- Quicker installation

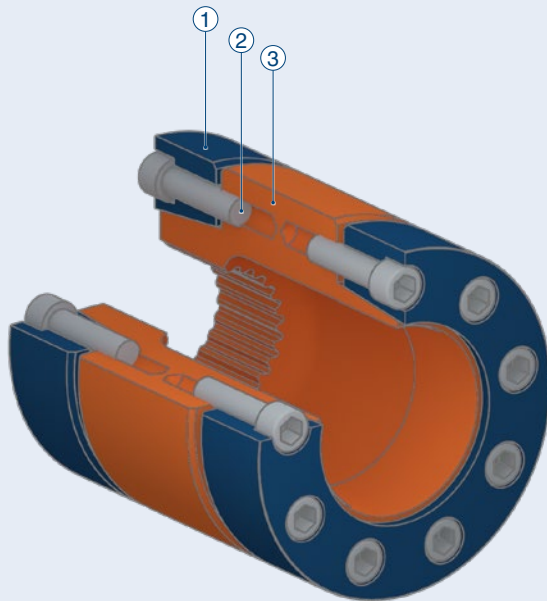
- ① Inner ring*
- ② Outer ring*
- ③ Shaft
- ④ Support ring*
- ⑤ Nut*

*Included with the delivery



STÜWE® WKL with Spline Shaft Teeth

Locking element for the adaption of a splined shaft with smooth shaft (e.g. in hydraulic motors)

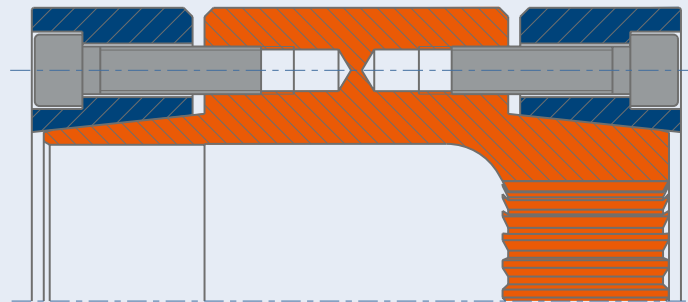


Benefits

- Minimization of wear to the interlocking connection
- Increasing of the service life of the plant shaft

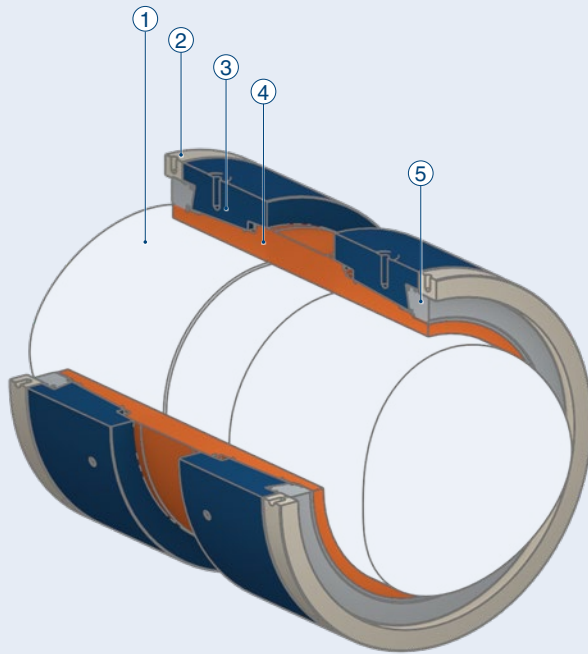
- ① Outer ring*
- ② Locking bolts* including washer as necessary*
- ③ Inner ring*

*Included with the delivery



STÜWE® Hydraulic Shaft Coupling WKLHYD

Hydraulic shaft coupling for large distances between shafts



Benefits

- Quicker installation

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

*Included with the delivery

