



STÜWE[®]

Catalogue Shrink Disc TYPE SDG & SDGH



Certified in accordance with
DIN ISO 9001:2008

STÜWE[®]

SHRINK DISC TYPE SDG AND SDGH



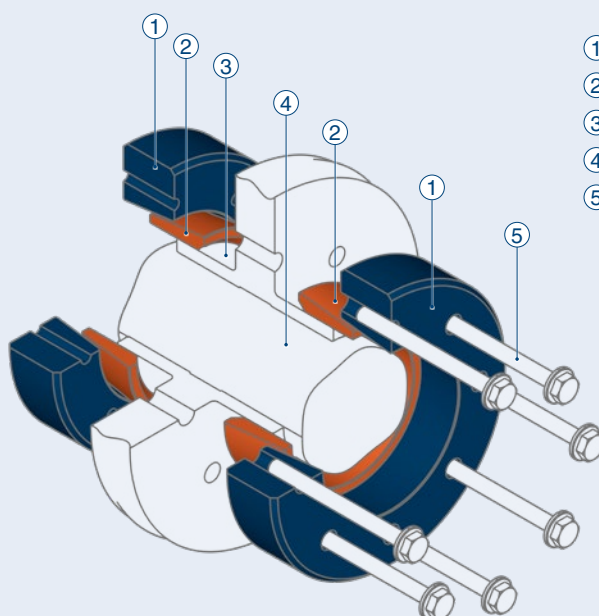
SHRINK DISC TYPE SDG AND SDGH – GENERAL INFORMATION

Description of Application

The shrink disc Type SDG is a four-piece shrink disc for the space-saving shrinking of disc-shaped components such as gear wheels. A variant of the Type SDG is the two-piece shrink disc Type SDGH. This is frequently used where there is only small fitment space.

Areas of Application

Series	Shaft diameter	Transmissible torque	Feature
SDG 71/72	19 - 470 mm	0,26 - 2386 kNm	High torques
SDG 91	95 - 320 mm	23 - 919 kNm	Highest possible torques

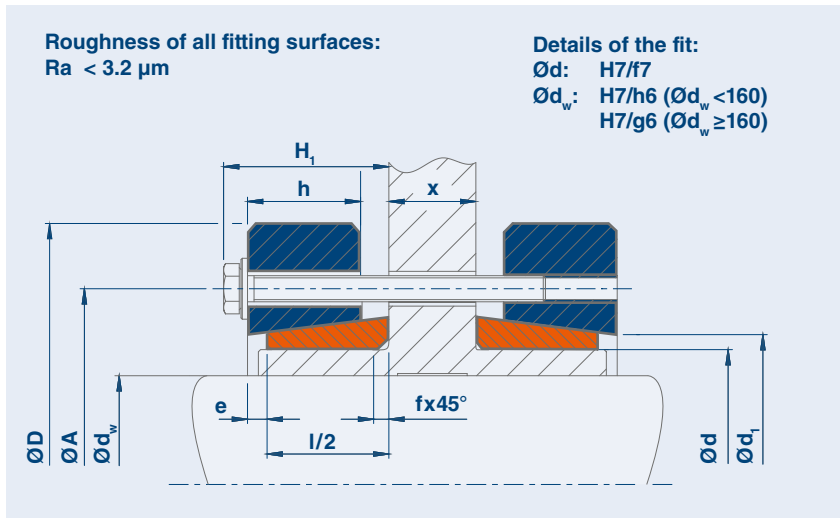


- ① Outer ring*
- ② Inner ring*
- ③ Hub (such as a gear-wheel)
- ④ Shaft
- ⑤ Tightening bolts including washers where necessary

*Included in the scope of delivery

STÜWE® Shrink Disc Type SDG

Series 71 | 72



Code

M_t Maximum transmissible torque of a shrink disc where $P_{ax} = 0$

P_{ax} Maximum transmissible axial load of shrink disc where $M_t = 0$

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

Dimensions H_1 and e apply to untightened units.

Shrink Disc Type SDG – Series 71 | 72

Type	d mm	d_w mm	M_t kNm	P_{ax} kN	M_a Nm	tightening bolts*	D mm	l/2 mm	h mm	H_1 mm	A mm	d_1 mm	e mm	f mm	kg
SDG 24 - 72	24	19	0.26	28	5	6 x M5	50	9	7.8	16	36	25.5	4	1.5	0.2
		20	0.31	31											
		21	0.36	34											
SDG 30 - 72	30	24	0.34	28	5	6 x M5	60	10	8.5	17	44	32	4	1.5	0.3
		25	0.39	31											
		26	0.44	34											
SDG 36 - 72	36	28	0.61	44	12	5 x M6	70	11	10	19	52	38	4	2	0.5
		30	0.76	50											
		33	1.00	60											
SDG 44 - 72	44	34	0.83	49	12	6 x M6	80	12	10.5	20	61	46.5	4	2	0.6
		35	0.91	52											
		36	1.00	55											
SDG 50 - 72	50	38	1.4	72	12	8 x M6	90	13	11.5	20	75	52.5	3	2.5	0.8
		40	1.6	79											
		42	1.8	87											
SDG 55 - 72	55	42	1.5	71	12	8 x M6	100	14	12.5	23	75	57.5	5	2.5	1.1
		45	1.8	81											
		48	2.2	92											
SDG 62 - 72	62	48	2.0	85	12	9 x M6	110	14	12.5	23	86	65	5	2.5	1.3
		50	2.3	92											
		52	2.6	98											
SDG 68 - 72	68	50	2.0	79	12	9 x M6	115	14	12.5	23	86	71	5	2.5	1.4
		55	2.6	94											
		60	3.3	110											

*Tightening bolts: standard DIN EN ISO 4014/4017 Grade 10.9, alternative DIN EN ISO 4762 Grade 10.9

From M16 and larger with washers: DIN EN ISO 7416

Dimension X is specified by the customer and determines the screw length

When ordering please state: (Type x $\varnothing d$) Dimension X, e.g. SDG 62 - 72 x 62 X=15 mm

Shrink Disc Type SDG – Series 71 | 72

Type	d mm	d _w mm	M _t kNm	P _{ax} kN	M _a Nm	tightening bolts*	D mm	l/2 mm	h mm	H ₁ mm	A mm	d ₁ mm	e mm	f mm	kg
SDG 80 - 72	80	60	3.8	128	29	7 x M8	138	17	13	27	100	83.5	5	4	2.5
	75	65	4.8	147											
		70	5.8	165											
SDG 90 - 72	90	65	5.8	178	29	10 x M8	155	20	16.5	31	114	96	6	5	3.7
	85	70	7.0	200											
		75	8.4	223											
SDG 100 - 72	100	70	7.3	209	29	12 x M8	168	24.3	19	32	124	104	2	5	4.9
	95	75	8.7	233											
		80	10.3	257											
SDG 110 - 72	110	80	10.5	261	58	9 x M10	185	24	21.5	37	136	115	7	5	6.2
	105	85	12.2	288											
		90	14.2	315											
SDG 125 - 72	125	90	15.0	333	58	12 x M10	215	26	23	39	160	134	7	5	9.3
	120	95	17.1	361											
	130	100	19.5	389											
SDG 140 - 71	140	95	19.3	407	100	10 x M12	230	28	25	43	176	146	8	5	12
	135	105	24.6	469											
		110	27.6	501											
SDG 155 - 71	155	110	28.0	510	100	12 x M12	263	30	26	45	192	165	8	5	16
	150	115	31.2	542											
	160	120	34.5	575											
SDG 165 - 71	160	120	40	669	240	8 x M16	290	33	29	54	210	174	7	5	22
	165	125	44	707											
	170	130	49	747											
SDG 175 - 71	175	130	45	695	240	8 x M16	300	33	29	54	220	185	7	5	23
	180	135	49	732											
		140	54	770											
SDG 185 - 71	185	140	62	885	240	10 x M16	320	40	36	63	236	195	9	5	32
	190	145	67	929											
		150	73	973											
SDG 200 - 71	200	150	82	1088	240	12 x M16	340	40	37	63	246	206	9	5	39
	195	155	88	1136											
		160	95	1184											
SDG 220 - 71	220	160	102	1276	240	15 x M16	370	52	45	77	276	230	11	8	54
		165	110	1332											
		170	118	1388											
SDG 240 - 71	240	170	125	1474	470	12 x M20	405	54	49	81	295	248	11	8	67
		180	143	1591											
		190	162	1710											
SDG 260 - 71	260	190	173	1824	470	12 x M20	430	59	53	84	321	268	9	8	81
		200	196	1957											
		210	219	2090											
SDG 280 - 71	280	210	228	2168	470	15 x M20	460	67	58	95	346	288	12	10	104
		220	254	2308											
		230	282	2449											
SDG 300 - 71	300	220	247	2250	470	16 x M20	485	71	60	97	364	308	10	10	120
		230	275	2389											
		240	304	2529											
SDG 320 - 71	320	240	316	2631	470	18 x M20	520	71	60	97	386	328	10	10	139
		250	347	2779											
		260	381	2928											

*Tightening bolts: standard DIN EN ISO 4014/4017 Grade 10.9, alternative DIN EN ISO 4762 Grade 10.9
From M16 and larger with washers: DIN EN ISO 7416

When ordering please state: (Type x Ød) Dimension X, e.g. SDG 200 - 71 x 200 X=40 mm

Shrink Disc Type SDG – Series 71 | 72

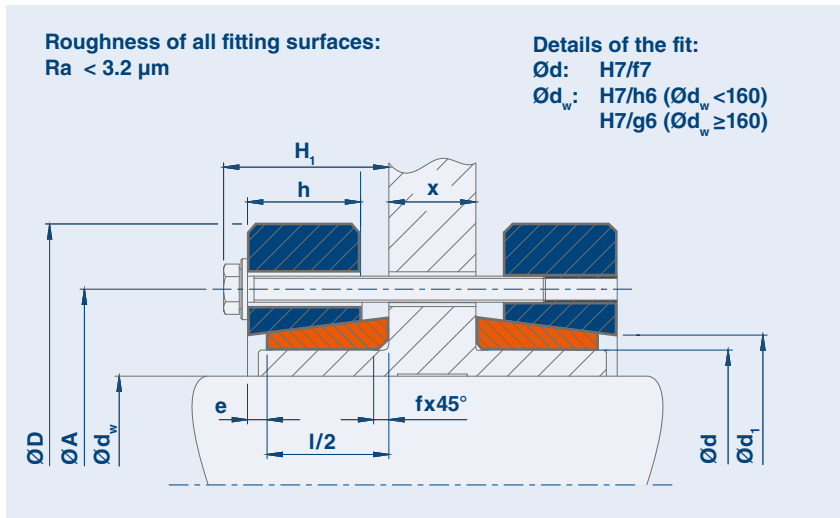
Type	d mm	d _w mm	M _t kNm	P _{ax} kN	M _a Nm	tightening bolts*	D mm	l/2 mm	h mm	H ₁ mm	A mm	d ₁ mm	e mm	f mm	kg
SDG 340 - 71	340	250	439	3511	470	24 x M20	570	77	69	103	420	348	10	10	188
		260	480	3691											
		270	523	3873											
SDG 360 - 71	360	270	485	3593	470	24 x M20	590	80	73	107	432	367	11	10	204
		280	527	3765											
		290	571	3939											
SDG 390 - 71	390	290	696	4798	820	20 x M24	650	85	76	113	468	397	9	13	268
		300	751	5005											
		310	808	5213											
SDG 420 - 71	420	320	763	4768	820	20 x M24	670	95	82	123	504	428	9	13	302
		330	818	4960											
		340	876	5153											
SDG 440 - 71	440	340	927	5456	820	24 x M24	740	99	86	128	527	448	10	13	409
		350	990	5660											
		360	1056	5864											
SDG 460 - 71	460	360	1085	6028	820	24 x M24	760	99	86	127	547	468	9	13	441
		370	1154	6237											
		380	1225	6447											
SDG 480 - 71	480	380	1257	6618	820	28 x M24	785	109	97	143	570	490	15	15	521
		390	1333	6835											
		400	1411	7053											
SDG 500 - 71	500	400	1521	7603	1100	24 x M27	850	109	96	145	590	508	14	15	601
		410	1607	7839											
		420	1696	8076											
SDG 530 - 71	530	430	2086	9704	1100	30 x M27	910	122	108	156	620	538	12	15	779
		440	2195	9978											
		450	2307	10253											
SDG 560 - 71	560	450	2167	9631	1100	30 x M27	940	122	108	156	650	568	12	15	811
		460	2275	9891											
		470	2386	10152											

Further sizes on request. Subject to technical change without notice.

*Tightening bolts: standard DIN EN ISO 4014/4017 Grade 10.9, alternative DIN EN ISO 4762 Grade 10.9
From M16 and larger with washers: DIN EN ISO 7416

When ordering please state: (Type x Ød) Dimension X, e.g. SDG 560 - 71 x 560 X=110 mm

STÜWE® Shrink Disc Type SDG Series 91



Code

M_t Maximum transmissible torque of a shrink disc where $P_{ax} = 0$

P_{ax} Maximum transmissible axial load of shrink disc where $M_t = 0$

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

Dimensions H_1 and e apply to untightened units.

Shrink Disc Type SDG – Series 91

Type	d mm	d _w mm	M _t kNm	P _{ax} kN	M _a Nm	tightening bolts*	D mm	l/2 mm	h mm	H ₁ mm	A mm	d ₁ mm	e mm	f mm	kg
SDG 140 - 91	140	95	23	476	100	12 x M12	230	35	32	51	175	145	9	5	14
		100	26	514											
		110	32	591											
SDG 155 - 91	155	110	34	618	100	15 x M12	263	38	35	54	198	165	9	5	20
		160	38	659											
		120	42	699											
SDG 165 - 91	165	120	49	818	240	10 x M16	290	41	38	64	210	176	9	5	27
		170	54	866											
		130	59	915											
SDG 175 - 91	175	130	55	852	240	10 x M16	300	41	38	65	220	186	10	5	28
		180	61	898											
		140	66	944											
SDG 185 - 91	185	140	93	1329	240	15 x M16	320	50	50	76	236	189	12	5	41
		145	101	1392											
		150	109	1456											
SDG 200 - 91	200	150	105	1393	240	15 x M16	340	51	50	76	246	205	11	5	45
		195	113	1455											
		160	121	1517											
SDG 220 - 91	220	160	140	1744	240	20 x M16	370	65	57	90	270	225	11	8	67
		165	150	1820											
		170	161	1895											
SDG 240 - 91	240	170	172	2025	470	15 x M20	405	68	65	98	295	246	14	8	84
		180	197	2184											
		190	223	2345											
SDG 260 - 91	260	190	205	2162	470	16 x M20	430	75.5	72	105	321	266	13	8	104
		200	232	2323											
		210	261	2486											

*Tightening bolts: standard DIN EN ISO 4014/4017 Grade 10.9, alternative DIN EN ISO 4762 Grade 10.9

From M16 and larger with washers: DIN EN ISO 7416

Dimension X is specified by the customer and determines the screw length

When ordering please state: (Type x Ød) Dimension X, e.g. SDG 260 - 91 x 260 X=70 mm

Shrink Disc Type SDG – Series 91

Type	d mm	d _w mm	M _t kNm	P _{ax} kN	M _a Nm	tightening bolts*	D mm	l/2 mm	h mm	H ₁ mm	A mm	d ₁ mm	e mm	f mm	kg
SDG 280 - 91	280	210	301	2870	470	20 x M20	460	84	78	114	340	285	14	10	131
		220	336	3054											
		230	373	3239											
SDG 300 - 91	300	220	307	2790	470	20 x M20	485	86	80	116	364	309	14	10	146
		230	341	2962											
		240	376	3137											
SDG 320 - 91	320	240	422	3518	470	24 x M20	520	90	82	118	386	329	12	10	176
		250	464	3710											
		260	507	3903											
SDG 340 - 91	340	250	515	4118	820	20 x M24	570	98	92	131	420	348	14	10	239
		260	564	4335											
		270	615	4554											
SDG 360 - 91	360	270	571	4232	820	20 x M24	590	100	92	131	432	365	12	10	255
		350	622	4440											
		290	674	4648											
SDG 390 - 91	390	300	793	5289	820	24 x M24	660	107	96	140	468	401	14	13	361
		380	855	5514											
		320	919	5741											

Further sizes on request. Subject to technical change without notice.

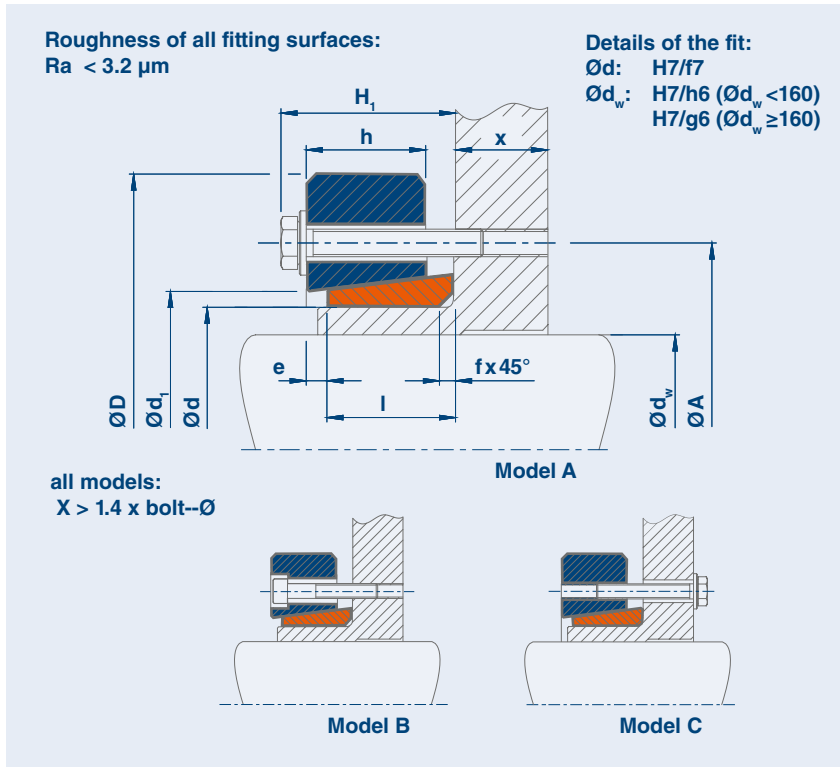
*Tightening bolts: standard DIN EN ISO 4014/4017 Grade 10.9, alternative DIN EN ISO 4762 Grade 10.9

From M16 and larger with washers: DIN EN ISO 7416

When ordering please state: (Type x Ød) Dimension X, e.g. SDG 390 - 91 x 390 X=120 mm

STÜWE® Shrink Disc Type SDGH

Series 71 | 72



Code

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

Dimensions H_1 and e apply to untightened units.

Shrink Disc Type SDGH – Series 71 | 72

Type	d mm	d _w mm	M _t kNm	P _{ax} kN	M _a Nm	Tightening bolts*	D mm	l/2 mm	h mm	H ₁ mm	A mm	d ₁ mm	e mm	f mm	kg
SDGH 24 - 72	24	19	0.13	14	5	6 x M5	50	9	7.8	16	36	25.5	4	1.5	0.1
		20	0.16	16											
		21	0.18	17											
SDGH 30 - 72	30	24	0.17	14	5	6 x M5	60	10	8.5	17	44	32	4	1.5	0.2
		25	0.19	15											
		26	0.22	17											
SDGH 36 - 72	36	28	0.30	22	12	5 x M6	70	11	10	19	52	38	4	2	0.3
		30	0.38	25											
		33	0.50	30											
SDGH 44 - 72	44	34	0.41	24	12	6 x M6	80	12	10.5	20	61	46.5	4	2	0.3
		35	0.45	26											
		36	0.50	27											
SDGH 50 - 72	50	38	0.7	36	12	8 x M6	90	13	11.5	20	75	52.5	3	2.5	0.4
		40	0.8	39											
		42	0.9	43											
SDGH 55 - 72	55	42	0.7	35	12	8 x M6	100	14	12.5	23	75	57.5	5	2.5	0.6
		45	0.9	40											
		48	1.1	46											

*Tightening bolts: standard DIN EN ISO 4014/4017 Grade 10.9, alternative DIN EN ISO 4762 Grade 10.9
From M16 and larger with washers: DIN EN ISO 7416

Dimension X is specified by the customer and determines the screw length

When ordering please state: (Type x Ød x desired model) Dimension X for model C,
e.g. SDGH 50 - 72 x 50 x C X=10 mm

Shrink Disc Type SDGH – Series 71 | 72

Type	d mm	d _w mm	M _t kNm	P _{ax} kN	M _a Nm	Tightening bolts*	D mm	l/2 mm	h mm	H ₁ mm	A mm	d ₁ mm	e mm	f mm	kg
SDGH 62 - 72	62	48	1.0	42	12	9 x M6	110	14	12.5	23	86	65	5	2.5	0.7
		50	1.1	46											
		52	1.3	49											
SDGH 68 - 72	68	50	1.0	39	12	9 x M6	115	14	12.5	23	86	71	5	2.5	0.7
		55	1.3	47											
		60	1.6	55											
SDGH 80 - 72	80	60	1.9	64	29	7 x M8	138	17	13	27	100	83.5	5	4	1.3
		75	2.4	73											
		70	2.9	82											
SDGH 90 - 72	90	65	2.9	89	29	10 x M8	155	20	16.5	31	114	96	6	5	1.9
		85	3.5	100											
		75	4.2	111											
SDGH 100 - 72	100	70	3.6	104	29	12 x M8	168	24.3	19	32	124	104	2	5	2.4
		95	4.3	116											
		80	5.1	128											
SDGH 110 - 72	110	80	5.2	130	58	9 x M10	185	24	21.5	37	136	115	7	5	3.1
		105	6.1	144											
		90	7.1	157											
SDGH 125 - 72	125	90	7.5	166	58	12 x M10	215	26	23	39	160	134	7	5	4.6
		120	8.5	180											
		130	9.7	194											
SDGH 140 - 71	140	95	9.6	203	100	10 x M12	230	28	25	43	176	146	8	5	6
		135	12.3	234											
		110	13.8	250											
SDGH 155 - 71	155	110	14.0	255	100	12 x M12	263	30	26	45	192	165	8	5	8
		150	15.6	271											
		160	17.2	287											
SDGH 165 - 71	165	120	20	334	240	8 x M16	290	33	29	54	210	174	7	5	11
		170	22	353											
		130	24	373											
SDGH 175 - 71	175	130	22	348	240	8 x M16	300	33	29	53	220	185	6	5	11
		180	24	366											
		140	27	385											
SDGH 185 - 71	185	140	31	442	240	10 x M16	320	40	36	63	236	195	9	5	16
		190	33	464											
		150	36	468											
SDGH 200 - 71	200	150	41	544	240	12 x M16	340	40	37	63	246	206	9	5	19
		195	44	568											
		160	47	592											
SDGH 220 - 71	220	160	51	638	240	15 x M16	370	52	45	77	276	230	11	8	27
		165	55	666											
		170	59	694											
SDGH 240 - 71	240	170	62	737	470	12 x M20	405	54	49	81	295	248	11	8	34
		180	71	795											
		190	81	855											
SDGH 260 - 71	260	190	86	912	470	12 x M20	430	59	53	83.5	321	268	9	8	41
		200	98	978											
		210	109	1045											

*Tightening bolts: standard DIN EN ISO 4014/4017 Grade 10.9, alternative DIN EN ISO 4762 Grade 10.9
From M16 and larger with washers: DIN EN ISO 7416

When ordering please state: (Type x Ød x desired model) Dimension X for desired model C,
e.g. SDGH 260 - 71 x 260 x C X=80 mm

Shrink Disc Type SDGH – Series 71 | 72

Type	d mm	d _w mm	M _t kNm	P _{ax} kN	M _a Nm	Tightening bolts*	D mm	l/2 mm	h mm	H ₁ mm	A mm	d ₁ mm	e mm	f mm	kg
SDGH 280 - 71	280	210	113	1083	470	15 x M20	460	67	58	95	346	288	12	10	52
		220	126	1153											
		230	140	1224											
SDGH 300 - 71	300	220	123	1124	470	16 x M20	485	71	60	96,5	364	308	10	10	60
		230	137	1194											
		240	151	1264											
SDGH 320 - 71	320	240	157	1315	470	18 x M20	520	71	60	96,5	386	328	10	10	70
		250	173	1389											
		260	190	1464											
SDGH 340 - 71	340	250	219	1755	470	24 x M20	570	77	69	102,5	420	348	10	10	94
		260	239	1845											
		270	261	1936											
SDGH 360 - 71	360	270	242	1796	470	24 x M20	590	80	73	107	432	367	11	10	102
		350	263	1882											
		290	285	1969											
SDGH 390 - 71	390	290	347	2399	820	20 x M24	650	85	76	113	468	397	9	13	134
		380	375	2502											
		310	404	2606											
SDGH 420 - 71	420	320	381	2383	820	20 x M24	670	95	82	123	504	428	9	13	151
		330	409	2479											
		340	438	2576											
SDGH 440 - 71	440	340	463	2727	820	24 x M24	740	99	86	128	527	448	10	13	204
		350	495	2829											
		360	527	2932											
SDGH 460 - 71	460	360	542	3014	820	24 x M24	760	99	86	127	547	468	9	13	220
		370	576	3118											
		380	612	3223											
SDGH 480 - 71	480	380	628	3308	820	28 x M24	785	109	97	143	570	490	15	15	260
		390	666	3417											
		400	705	3526											
SDGH 500 - 71	500	400	760	3801	1100	24 x M27	850	109	96	145	590	508	14	15	301
		410	803	3919											
		420	847	4037											
SDGH 530 - 71	530	430	1043	4851	1100	30 x M27	910	122	108	156	620	538	12	15	390
		440	1097	4989											
		450	1153	5126											
SDGH 560 - 71	560	450	1083	4815	1100	30 x M27	940	122	108	156	650	568	12	15	406
		460	1137	4945											
		470	1192	5075											

Further sizes on request. Subject to technical change without notice.

*Tightening bolts: standard DIN EN ISO 4014/4017 Grade 10.9, alternative DIN EN ISO 4762 Grade 10.9

From M16 and larger with washers: DIN EN ISO 7416

When ordering please state: (Type x Ød x desired model) Dimension X for model C,

e.g. SDGH 560 - 71 x 560 x C X=115 mm

STÜWE®

STÜWE® GmbH & Co. KG

Zum Ludwigstal 35 - 45527 Hattingen

Tel. +49 2324 394-0 - Fax +49 2324 394-30

www.stuewe.de - info@stuewe.de

For further information about our international sales agents we kindly refer you to www.stuewe.de/en/contact