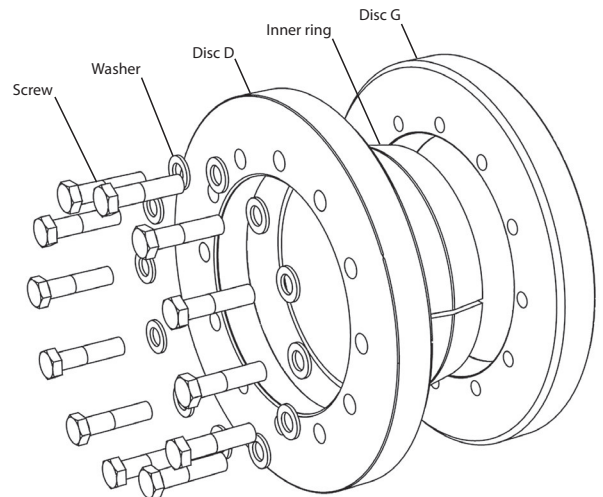


Used symbols

d	[mm]	Nominal diameter of the shrink disc
d_w	[mm]	Shaft diameter
M_{max}	[mm]	Maximal transmittable torque
D	[mm]	Outer diameter
l	[mm]	Length of the inner ring
e	[mm]	Excess length
H	[mm]	Width of the shrink disc
A	[mm]	Pitch circle diameter
B	[mm]	Attachment size
M_A	[Nm]	Tightening torque of the clamping screws
Z		Number of clamping screws
S		Size of the clamping screws
n_{max}	[min ⁻¹]	Permitted rotational frequency
p_N	[N/mm ²]	Moderate pressure to the hub
I	[kgm ²]	Moment of inertia



Design of the shrink disc

$d < 115$ - Discs galvanized - without washers

$d \geq 110$ - Discs painted - with washers

Dimensions **H** & **e** in unlocked position

Hexagon head bolts are used as standard.

Upon request we provide all sized shrink discs with hexagon socket head bolts (Inbus). (See ordering information)

Variation from the standard shaft diameter d_w

> mm	≤ mm	minimal - mm	maximal + mm
10	30	-1	1
30	50	-3	2
50	140	-5	5
140	180	-10	5
180	320	-15	10
320	500	-20	10
500	700	-30	20
700	820	-40	20

min. yield strength $R_{p0,2}$	N/mm ²
Solid shaft	350
Hub	450

$$M = M_{max(Catalog)} \left(\frac{d_w(target)}{d_w(Catalog)} \right)^2$$

(see Basics - Calculation)

Ordering information: TAS 3081 - d (e.g.: TAS 3081-200 ... further sizes on request)
with Inbus: TAS 3081 - d - Inbus (e.g.: TAS 3081-200-Inbus)

3081

Standard-Range strengthened

<i>d</i> mm	<i>d_w</i> mm	<i>M_{max}</i> Nm	<i>D</i> mm	<i>l</i> mm	<i>e</i> mm	<i>H</i> mm	<i>A</i> mm	<i>B</i> mm	<i>M_A</i> Nm	<i>Z</i> Stk	<i>S</i>	<i>DIN</i>	<i>Class</i>	<i>n_{max}</i> min ⁻¹	<i>p_N</i> N/mm ²	<i>I</i> kgm ²	<i>Weight</i> kg
14	11	48	37	9	1,5	12	24	15	4	3	M 4 x 10	933	12.9	15400	344	0,000137	0,07
30	25	520	60	16	2,75	21,5	44	32	8	6	M 5 x 18	931	12.9	9500	300	0,001687	0,30
36	30	780	72	18	2,75	23,5	52	38	14	5	M 6 x 20	933	12.9	7900	271	0,0003888	0,48
38	31	1100	80	20	3	26	56	41	14	7	M 6 x 25	933	12.9	7100	324	0,0006569	0,67
40	32	910	75	19	2,75	24,5	57	43	14	6	M 6 x 20	933	12.9	7600	277	0,0004967	0,55
50	40	1500	90	22	3	28	70	53	14	8	M 6 x 25	933	12.9	6300	255	0,0010998	0,83
55	45	1800	100	23	3,75	30,5	75	58	14	8	M 6 x 25	933	12.9	5700	222	0,0017909	1,1
62	50	2600	110	23	3,75	30,5	86	66	14	10	M 6 x 25	933	12.9	5200	246	0,0025909	1,3
68	55	2700	115	23	3,75	30,5	86	72	14	10	M 6 x 25	933	12.9	4900	225	0,0031236	1,4
75	60	4400	138	25	3,75	32,5	100	79	35	7	M 8 x 30	933	12.9	4100	272	0,0070923	2,3
80	65	4900	145	25	3,75	32,5	100	84	35	7	M 8 x 30	933	12.9	3900	255	0,0085703	2,5
90	70	7200	155	30	4,5	39	114	94	35	10	M 8 x 35	931	12.9	3600	269	0,0132516	3,3
100	75	8800	170	34	5	44	124	104	35	12	M 8 x 35	931	12.9	3300	257	0,0213950	4,4
110	80	10800	185	39	5,5	50	136	114	69	9	M 10 x 40	931	12.9	3000	243	0,0347437	6,0
115	80	11400	200	40	5	50	150	124	69	10	M 10 x 40	931	12.9	2800	252	0,0485678	7,3
120	85	11700	200	40	5	50	150	124	69	10	M 10 x 40	931	12.9	2800	241	0,0476000	7,0
125	90	15900	215	42	6	54	160	134	69	12	M 10 x 40	931	12.9	2600	265	0,0672619	8,7
140	100	21700	230	46	7,25	60,5	175	146	120	10	M 12 x 45	931	12.9	2400	263	0,0996875	11
155	110	28900	265	50	7,25	64,5	192	165	120	12	M 12 x 50	931	12.9	2100	262	0,1885000	16
165	120	46400	290	56	7,5	71	210	175	290	8	M 16 x 55	931	12.9	1900	303	0,3061438	22
175	130	51200	300	56	7,5	71	220	185	290	8	M 16 x 55	931	12.9	1900	286	0,3467969	23
185	140	70700	330	71	7,5	86	236	195	290	10	M 16 x 70	931	12.9	1700	266	0,6261719	35
195	150	94900	350	71	7,5	86	246	210	290	12	M 16 x 70	931	12.9	1600	303	0,8026250	40
200	155	97700	350	71	7,5	86	246	210	290	12	M 16 x 70	931	12.9	1600	296	0,7921875	39
220	165	124000	370	88	8	104	270	230	290	15	M 16 x 80	931	12.9	1500	271	1,1813	51
240	180	171000	405	92	8,5	109	295	248	570	12	M 20 x 80	931	12.9	1400	296	1,7730	64
245	185	175000	410	95	8	111	298	251	570	12	M 20 x 80	931	12.9	1300	281	1,9105	67
260	190	203000	440	103	8,5	120	321	268	570	14	M 20 x 90	931	12.9	1300	285	2,7426	84
280	210	266000	460	114	10	134	346	288	570	16	M 20 x 100	931	12.9	1200	273	3,5888	99
300	230	340000	485	122	10	142	364	308	570	18	M 20 x 100	931	12.9	1100	268	4,6751	115
320	240	386000	520	122	10	142	386	328	570	20	M 20 x 100	931	12.9	1100	279	6,1978	133
340	250	474000	570	134	11	156	408	348	570	24	M 20 x 110	931	12.9	1000	287	10,08	183
350	270	539000	580	140	11	162	432	358	570	24	M 20 x 110	931	12.9	980	267	11,07	193
360	290	613000	590	140	11	162	432	368	570	24	M 20 x 110	931	12.9	970	259	11,76	197
380	300	750000	645	144	12	168	458	387	980	20	M 24 x 120	931	12.9	880	287	17,86	255
390	310	824000	660	144	12	168	468	397	980	21	M 24 x 120	931	12.9	860	294	19,54	266
400	320	853000	680	144	12	168	480	407	980	21	M 24 x 120	931	12.9	840	286	22,10	284
420	340	1052000	690	164	12	188	504	427	980	24	M 24 x 130	931	12.9	830	274	25,94	318
440	350	1054000	750	177	12,5	202	527	447	980	24	M 24 x 140	931	12.9	760	242	39,13	414
460	370	1331000	770	177	12,5	202	547	468	980	28	M 24 x 140	931	12.9	740	270	43,04	428
480	390	1523000	800	188	12,5	213	570	488	980	30	M 24 x 140	931	12.9	710	261	52,77	485
500	410	1691000	850	188	12,5	213	590	508	1450	24	M 27 x 150	931	12.9	670	263	68,08	560
530	440	2314000	900	215	12,5	240	620	538	1450	30	M 27 x 180	931	12.9	630	272	93,54	686
560	460	2554000	950	215	12,5	240	650	568	1450	32	M 27 x 180	931	12.9	600	274	116	763
590	480	2967000	980	235	15	265	685	600	1450	36	M 27 x 180	931	12.9	580	268	142	869
620	510	3370000	1020	235	15	265	715	630	1450	38	M 27 x 180	931	12.9	560	269	166	931

3081

Standard-Range strengthened

d mm	d_w mm	M_{max} Nm	D mm	l mm	e mm	H mm	A mm	B mm	M_A Nm	Z Stk	S	DIN	Class	n_{max} min ⁻¹	p_N N/mm ²	I kgm ²	Weight kg
660	540	4329000	1100	260	15	290	760	670	1950	38	M 30 x 200	931	12.9	520	278	246	1195
700	580	4980000	1200	260	15	290	800	710	1950	40	M 30 x 200	931	12.9	470	276	354	1466
720	600	5456000	1230	260	15	290	820	730	1950	42	M 30 x 200	931	12.9	460	282	390	1535
750	620	5844000	1230	280	17,5	315	855	762	1950	44	M 30 x 220	931	12.9	460	263	420	1619
800	660	6475000	1310	280	17,5	315	905	812	1950	46	M 30 x 220	931	12.9	430	258	540	1833
850	700	7443000	1330	310	17,5	345	965	862	1950	50	M 30 x 250	931	12.9	430	238	604	1938
900	740	8180000	1400	310	17,5	345	1015	912	1950	52	M 30 x 250	931	12.9	400	234	738	2130
950	780	10005000	1550	340	20	380	1075	962	3300	42	M 36 x 260	931	12.9	370	234	1285	3111
1000	820	12541000	1620	340	20	380	1125	1012	3300	50	M 36 x 260	931	12.9	350	265	1526	3369