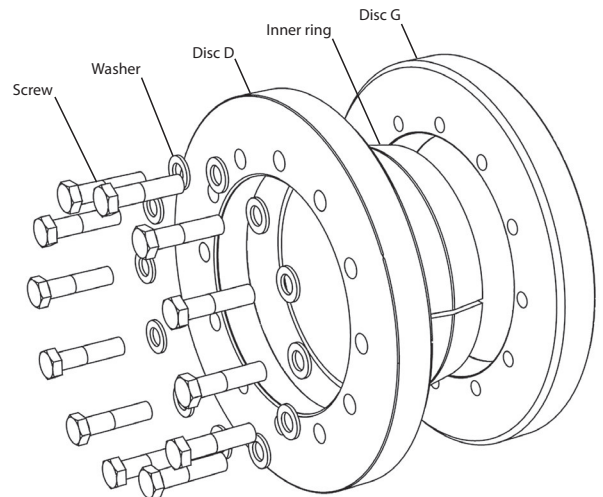


### Used symbols

$d$	[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 <sup>-1</sup> ]	Permitted rotational frequency
$p_N$	[N/mm <sup>2</sup> ]	Moderate pressure to the hub
$I$	[kgm <sup>2</sup> ]	Moment of inertia



### Design of the shrink disc

$d < 140$  - Discs galvanized - without washers

$d \geq 140$  - 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
100	170	-5	5
170	230	-10	5
230	320	-10	10
320	480	-15	10
480	510	-20	10

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

(see Basics - Calculation)

min. yield strength $R_{p0.2}$	N/mm <sup>2</sup>
Solid shaft	290
Hub	350

Ordering information: TAS 3051 -  $d$  (e.g.: TAS 3051-200 ... further sizes on request)  
with Inbus: TAS 3051 -  $d$  - Inbus (e.g.: TAS 3051-200-Inbus)

# 3051 Light-Range

<b>d</b> mm	<b>d<sub>w</sub></b> mm	<b>M<sub>max</sub></b> Nm	<b>D</b> mm	<b>l</b> mm	<b>e</b> mm	<b>H</b> mm	<b>A</b> mm	<b>B</b> mm	<b>M<sub>A</sub></b> Nm	<b>Z</b> Stk	<b>S</b>	<b>DIN</b>	<b>Class</b>	<b>n<sub>max</sub></b> min <sup>-1</sup>	<b>p<sub>N</sub></b> N/mm <sup>2</sup>	<b>I</b> kgm <sup>2</sup>	<b>Weight</b> kg
120	100	11900	185	39	6	51	158	129	59	8	M 10 x 40	931	10.9	3000	169	0,0328219	5,4
125	100	10900	185	39	6	51	158	129	59	8	M 10 x 40	931	10.9	3000	163	0,0317794	5,1
140	120	17300	220	39	6	51	175	144	59	9	M 10 x 40	931	10.9	2600	163	0,0663000	7,8
155	135	24800	245	39	6	51	192	159	59	11	M 10 x 40	931	10.9	2300	180	0,1029612	9,8
165	140	33100	260	46	8	62	210	169	100	10	M 12 x 50	931	10.9	2200	190	0,1540906	13
175	150	40000	275	46	8	62	220	179	100	11	M 12 x 50	931	10.9	2000	198	0,1859375	14
185	160	47000	295	46	8	62	225	189	100	12	M 12 x 50	931	10.9	1900	204	0,2576562	17
195	170	63400	315	56	8	72	237	199	100	15	M 12 x 55	931	10.9	1800	199	0,3945938	23
200	180	75700	330	56	8	72	242	204	100	16	M 12 x 55	931	10.9	1700	207	0,4839250	26
220	190	96500	345	66	9	84	265	224	250	10	M 16 x 70	931	10.9	1600	205	0,6487719	31
240	210	132000	370	66	9	84	290	244	250	12	M 16 x 70	931	10.9	1500	226	0,8509	35
260	230	172000	395	72	10	92	310	265	250	14	M 16 x 70	931	10.9	1400	223	1,2299	44
280	240	196000	425	84	10	104	333	285	250	16	M 16 x 75	931	10.9	1300	203	1,8779	58
300	260	243000	460	84	10	104	358	305	250	18	M 16 x 75	931	10.9	1200	213	2,6013	69
320	280	297000	495	84	11	106	378	325	250	20	M 16 x 75	931	10.9	1100	222	3,6914	85
340	300	339000	535	84	11	106	402	345	250	21	M 16 x 75	931	10.9	1000	219	5,0730	101
350	300	388000	545	100	11	122	413	360	490	16	M 20 x 90	931	10.9	1000	213	6,0831	116
360	310	404000	555	100	11	122	423	365	490	16	M 20 x 90	931	10.9	1000	207	6,5097	119
380	330	487000	585	112	12	136	442	387	490	18	M 20 x 100	931	10.9	970	197	8,94	147
390	340	564000	595	112	12	136	452	397	490	20	M 20 x 100	931	10.9	960	214	9,49	150
400	350	614000	615	112	12	136	462	407	490	21	M 20 x 100	931	10.9	930	219	10,90	162
420	360	643000	630	120	12	144	485	427	490	22	M 20 x 100	931	10.9	900	204	12,47	174
440	380	751000	660	120	12	144	505	447	490	24	M 20 x 100	931	10.9	860	212	15,02	191
460	400	934000	685	132	13	158	527	468	490	28	M 20 x 110	931	10.9	830	215	19,23	226
480	420	981000	715	132	13	158	547	488	490	28	M 20 x 110	931	10.9	800	206	22,80	246
500	440	1113000	750	132	13	158	567	508	490	30	M 20 x 110	931	10.9	760	212	27,83	274
530	470	1319000	800	150	12,5	175	600	540	490	33	M 20 x 120	931	10.9	710	194	39,83	346
560	500	1550000	850	150	12,5	175	630	570	490	36	M 20 x 120	931	10.9	670	200	51,03	394
590	530	1652000	870	150	12,5	175	676	602	490	36	M 20 x 130	931	10.9	650	190	54,42	394
620	560	1759000	880	150	12,5	175	686	624	490	36	M 20 x 130	931	10.9	650	181	54,46	376