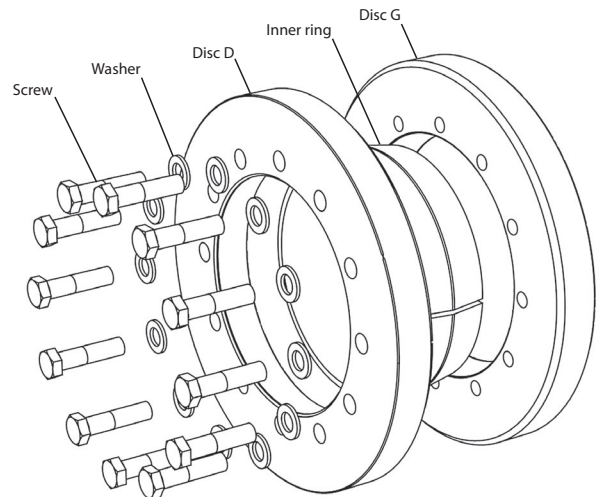


### Used symbols

$d$	[mm]	Nominal diameter of the shrink disc
$d_w$	[mm]	Shaft diameter
$M_{max}$	[mm]	Maximal transmittable torque
$D$	[mm]	Outer diameter
$I$	[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

$d < 115$  - 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
40	50	-3	2
50	140	-5	5
140	180	-10	5
180	320	-15	10
320	440	-20	10
440	600	-30	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 3091 -  $d$  (e.g.: TAS 3091-200 ... further sizes on request)  
with Inbus: TAS 3091 -  $d$  - Inbus (e.g.: TAS 3091-200-Inbus)

# 3091 Heavy-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
40	30	890	80	25	3,5	32	62	43	30	4	M 8 x 30	933	10.9	7100	249	0,0008300	0,83
44	34	1300	85	28	3	34	66	47	30	5	M 8 x 30	933	10.9	6700	253	0,0011451	1,0
50	40	2500	95	30	4,5	39	73	54	30	7	M 8 x 35	933	10.9	6000	291	0,0020169	1,4
55	45	2900	105	30	4,5	39	78	59	30	7	M 8 x 35	933	10.9	5400	264	0,0029856	1,7
62	50	3200	115	30	4,5	39	85	66	30	7	M 8 x 35	933	10.9	4900	235	0,0042672	2,0
68	55	3900	120	30	4,5	39	92	72	30	8	M 8 x 35	933	10.9	4700	244	0,0049938	2,1
75	60	5900	145	36	5	46	105	84	59	7	M 10 x 40	933	10.9	4100	257	0,0101760	3,3
80	65	6600	145	36	5	46	105	84	59	7	M 10 x 40	933	10.9	3900	241	0,0123412	3,6
90	70	7600	160	40	5	50	116	94	59	8	M 10 x 40	933	10.9	3500	220	0,0202200	4,8
100	75	9800	170	44	5	54	126	104	59	10	M 10 x 45	931	10.9	3300	225	0,0262575	5,4
110	80	12000	185	50	5	60	138	114	59	12	M 10 x 45	931	10.9	3000	216	0,0411134	7,1
120	85	14300	210	55	5	65	155	125	100	10	M 12 x 50	931	10.9	2700	219	0,0731250	10
125	90	15600	215	55	5	65	160	129	100	10	M 12 x 50	931	10.9	2600	210	0,0850438	11
140	100	21000	230	60	7	74	175	144	100	12	M 12 x 55	931	10.9	2400	207	0,1178125	13
155	110	29500	265	66	7	80	198	164	100	15	M 12 x 60	931	10.9	2100	212	0,2356250	20
165	120	48100	290	72	8	88	210	174	250	10	M 16 x 70	931	10.9	1900	251	0,3757219	27
175	130	53100	300	72	8	88	220	184	250	10	M 16 x 70	931	10.9	1900	237	0,4221875	28
185	140	83500	330	92	10	112	236	194	250	14	M 16 x 80	931	10.9	1700	245	0,8229688	46
200	150	95400	350	92	10	112	246	204	250	15	M 16 x 80	931	10.9	1600	243	1,0359000	51
220	165	138000	370	114	10	134	270	224	250	20	M 16 x 90	931	10.9	1500	238	1,5287	66
240	180	180000	405	120	12	144	295	244	490	15	M 20 x 100	931	10.9	1400	243	2,3548	85
260	200	247000	430	136	12	160	321	265	490	18	M 20 x 110	931	10.9	1300	238	3,2825	104
280	220	330000	460	148	12	172	346	285	490	21	M 20 x 120	931	10.9	1200	237	4,6400	128
300	240	388000	485	152	12	176	364	305	490	22	M 20 x 120	931	10.9	1100	225	5,8134	143
320	250	428000	520	160	12	184	386	325	490	24	M 20 x 130	931	10.9	1100	219	7,9220	170
340	260	546000	570	176	12	200	420	345	840	21	M 24 x 130	931	10.9	1000	236	13,10	238
350	280	626000	580	176	12	200	425	355	840	21	M 24 x 130	931	10.9	980	229	13,94	243
360	290	687000	590	180	12	204	432	365	840	22	M 24 x 140	931	10.9	970	228	14,81	248
380	305	719000	645	180	12	204	458	387	840	22	M 24 x 140	931	10.9	880	216	21,65	309
390	310	789000	660	188	12	212	468	397	840	24	M 24 x 140	931	10.9	860	220	24,68	336
400	320	817000	680	188	12	212	480	407	840	24	M 24 x 140	931	10.9	840	214	27,85	358
420	340	1110000	690	214	12	238	504	427	840	30	M 24 x 150	931	10.9	830	224	33,52	411
440	350	1173000	750	224	14	252	527	448	1250	24	M 27 x 170	931	10.9	760	215	49,52	524
460	370	1483000	770	224	14	252	547	468	1250	28	M 27 x 170	931	10.9	740	240	54,40	541
480	390	1694000	800	246	14	274	580	488	1250	30	M 27 x 180	931	10.9	710	224	70,39	647
500	410	1910000	850	246	14	274	600	508	1250	32	M 27 x 180	931	10.9	670	229	90,81	747
530	440	2207000	910	275	14	303	630	538	1250	34	M 27 x 200	931	10.9	630	206	130	939
660	540	4116000	1070	310	15	340	780	670	2800	30	M 36 x 240	931	10.9	530	224	263	1331