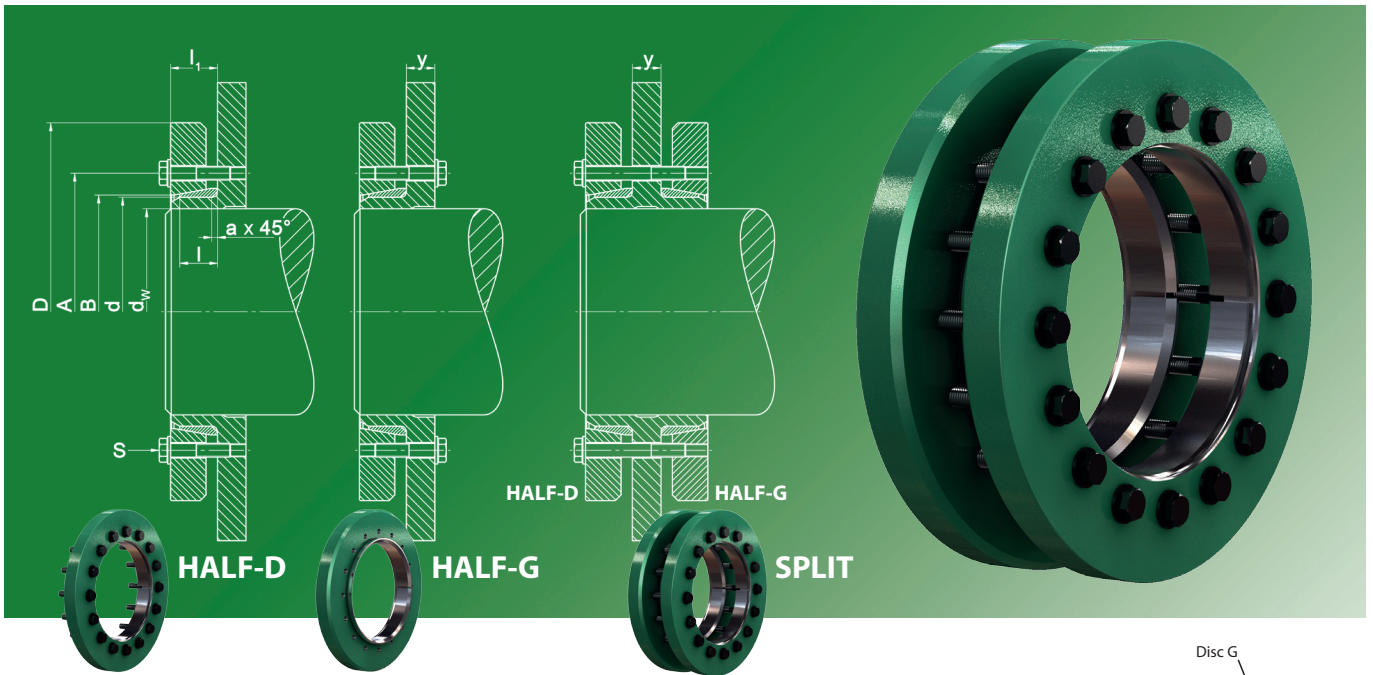


# 3051 HALF / SPLIT Light-Range



## 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
$a$	[mm]	Width of the chamfer on the inner ring
$l_1$	[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

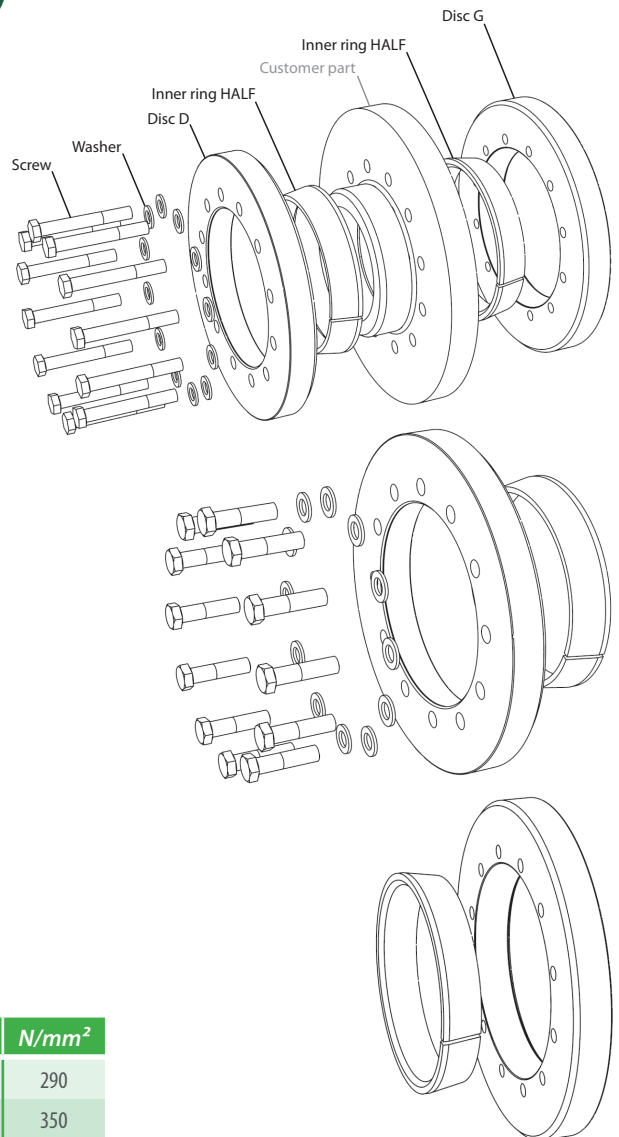
Dimensions **H** & **e** in unlocked position

Deviation from the standard shaft diameter  $d_w$   
see the table „3051 Light-Range“  
and „Calculation of transmissible torques and forces“

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

For **Typ** in ordering information:  
**GET** means **SPLIT**  
**HALB** means **HALF**

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



Ordering information: TAS 3051Type -  $d$  -  $y$  (e.g.: TAS 3051GET-200-Y60 or TAS 3051HALB-G-200-Y30 or TAS 3051HALB-D-200)

with Inbus: TAS 3051Type -  $d$  -  $y$  - Inbus (e.g.: TAS 3051GET-200-Y60-Inbus etc.)

(Further sizes on request)

# 3051 HALF / SPLIT Light-Range

## Please note:

All values refer to shrink disk design **HALF!**

Please provide us the dimension of „y“ or the length of screws. Otherwise we can not provide appropriate screws!  
(see ordering information)

Applies to shrink disc design **HALF-G:**

- The required screw length is:  $Screw\ length\ (3051\ Light-Range) - l_1 + 2a + y$  (rounded up to standard lengths)

Applies to shrink disc design **SPLIT:**

- The design consists of 1x **HALF-D** + 1x **HALF-G**
- Delivery is possible with or without screws
- Maximum transmittable torque:  $M_{ges} = 2 M_{max}$
- The required screw length:  $Screw\ length\ (3051\ Light-Range) + 2a + y$  (rounded up to standard lengths)

d mm	d <sub>w</sub> mm	M <sub>max</sub> Nm	D mm	l mm	a mm	l <sub>1</sub> mm	A mm	B mm	M <sub>A</sub> Nm	Z Stk	HALF-D only				n <sub>max</sub> min <sup>-1</sup>	p <sub>N</sub> N/mm <sup>2</sup>	I kgm <sup>2</sup>	Weight kg
											d <sub>B</sub> mm	S	DIN	Class				
120	100	5900	185	24,5	5	30,5	158	129	59	8	11	M 10 x 40	931	10.9	3000	169	0,0164109	2,7
125	100	5400	185	24,5	5	30,5	158	129	59	8	11	M 10 x 40	931	10.9	3000	163	0,0155781	2,5
140	120	8600	220	24,5	5	30,5	175	144	59	9	11	M 10 x 40	931	10.9	2600	163	0,0331500	3,9
155	135	12400	245	24,5	5	30,5	192	159	59	11	11	M 10 x 40	931	10.9	2300	180	0,0514806	4,9
165	140	16500	260	28	5	36	210	169	100	10	13,5	M 12 x 50	931	10.9	2200	190	0,0770453	6,5
175	150	20000	275	28	5	36	220	179	100	11	13,5	M 12 x 50	931	10.9	2000	198	0,0956250	7,2
185	160	23500	295	28	5	36	225	189	100	12	13,5	M 12 x 50	931	10.9	1900	204	0,1288281	8,5
195	170	31700	315	33	5	41	237	199	100	15	13,5	M 12 x 55	931	10.9	1800	199	0,2058750	12
200	180	37800	330	33	5	41	242	204	100	16	13,5	M 12 x 55	931	10.9	1700	207	0,2419625	13
220	190	48200	345	41	6	50	265	224	250	10	17,5	M 16 x 70	931	10.9	1600	205	0,3348500	16
240	210	66100	370	41	6	50	290	244	250	12	17,5	M 16 x 70	931	10.9	1500	226	0,4376250	18
260	230	86200	395	44	6	54	310	265	250	14	17,5	M 16 x 70	931	10.9	1400	223	0,6149687	22
280	240	98100	425	52	8	62	333	285	250	16	17,5	M 16 x 80	931	10.9	1300	203	0,9390	29
300	260	121000	460	52	8	62	358	305	250	18	17,5	M 16 x 80	931	10.9	1200	213	1,3195	35
320	280	148000	495	52	8	63	378	325	250	20	17,5	M 16 x 80	931	10.9	1100	222	1,8240	42
340	300	169000	535	52	8	63	402	345	250	21	17,5	M 16 x 80	931	10.9	1000	219	2,5616	51
350	305	202000	545	60	10	71	413	360	490	16	22	M 20 x 90	931	10.9	1000	213	3,0416	58
360	310	202000	555	60	10	71	423	365	490	16	22	M 20 x 90	931	10.9	1000	207	3,2275	59
380	330	243000	585	69	12	81	442	387	490	18	22	M 20 x 100	931	10.9	970	197	4,4405	73
390	340	282000	595	69	12	81	452	397	490	20	22	M 20 x 100	931	10.9	960	214	4,7449	75
400	350	307000	615	69	12	81	462	407	490	21	22	M 20 x 100	931	10.9	930	219	5,4495	81
420	360	321000	630	73	12	85	485	427	490	22	22	M 20 x 110	931	10.9	900	204	6,2346	87
440	380	375000	660	73	12	85	505	447	490	24	22	M 20 x 110	931	10.9	860	212	7,5504	96
460	400	467000	685	79	14	92	527	468	490	28	22	M 20 x 120	931	10.9	830	215	9,6167	113
480	420	490000	715	81	14	94	547	488	490	28	22	M 20 x 120	931	10.9	800	206	11,40	123
500	440	556000	750	81	14	94	567	508	490	30	22	M 20 x 120	931	10.9	760	212	13,91	137
530	470	659000	800	90	14	102,5	600	540	490	33	22	M 20 x 120	931	10.9	710	194	19,91	173
560	500	775000	850	90	14	102,5	630	570	490	36	22	M 20 x 120	931	10.9	670	200	25,51	197
590	530	826000	870	90	14	102,5	676	602	490	36	22	M 20 x 130	931	10.9	650	190	27,21	197
620	560	879000	880	90	14	102,5	686	624	490	36	22	M 20 x 130	931	10.9	650	181	27,23	188