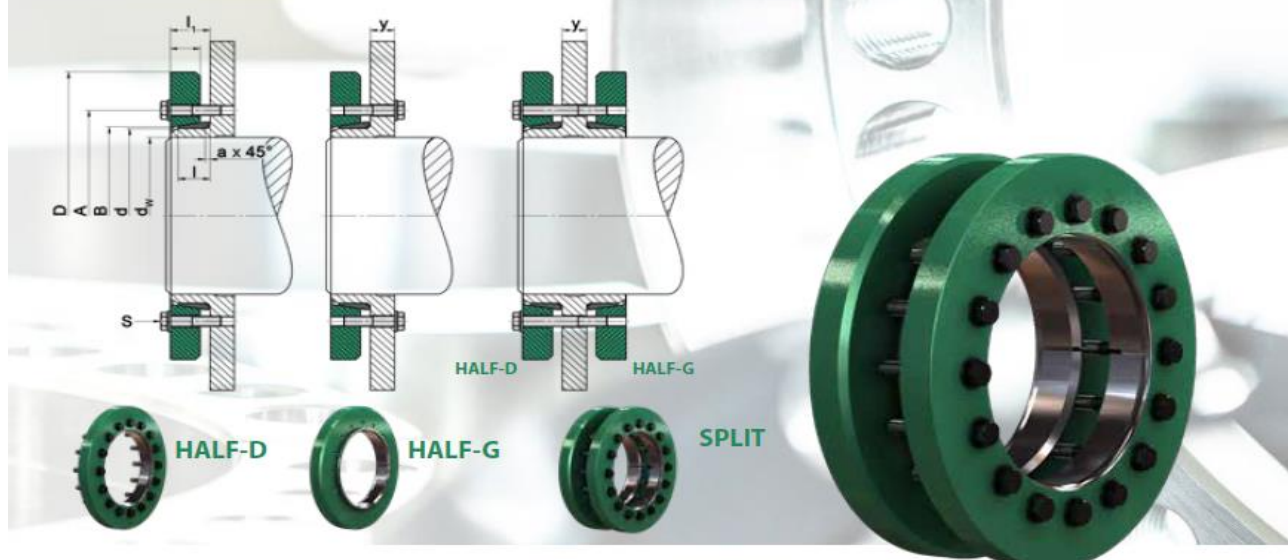


## 3051 Half/Split (Light-Range)



### Used symbols (使用される記号)

d	[mm]	Nominal diameter of the shrink disc (シュリンクディスク内径)
dW	[mm]	Shaft diameter (軸径)
M <sub>max</sub>	[mm]	Maximal transmittable torque (伝達トルク)
D	[mm]	Outer diameter (シュリンクディスク外径)
ℓ	[mm]	Length of the bush (内輪高さ)
e	[mm]	Excess length (余長 (約))
H	[mm]	Width of the shrink disc (シュリンクディスク高さ)
A	[mm]	Pitch circle diameter (ボルトピッチ形)
B	[mm]	Attachment size (外輪内径)
M <sub>A</sub>	[Nm]	Tightening torque of the clamping screws (ボルト締付トルク)
Z		Number of clamping screws (ボルト数)
S		Size of the clamping screws (ボルトサイズ)
n <sub>max</sub>	[min <sup>-1</sup> ]	Permitted rotational frequency (最大許容回転数)
P <sub>N</sub>	[N/mm <sup>2</sup> ]	Moderate pressure to the hub (中空軸 面圧 (中間値))
I	[kgm <sup>2</sup> ]	Moment of inertia (慣性モーメント)

### Design of the shrink disc (シュリンクディスクのデザイン)

d < 140	Discs galvanized - without washers (外輪亜鉛メッキ、ワッシャなし)
d ≥ 140	Discs painted - with washers (外輪塗装、ワッシャあり)

Dimensions H & e in unlocked position (H,e寸法は、無負荷時)

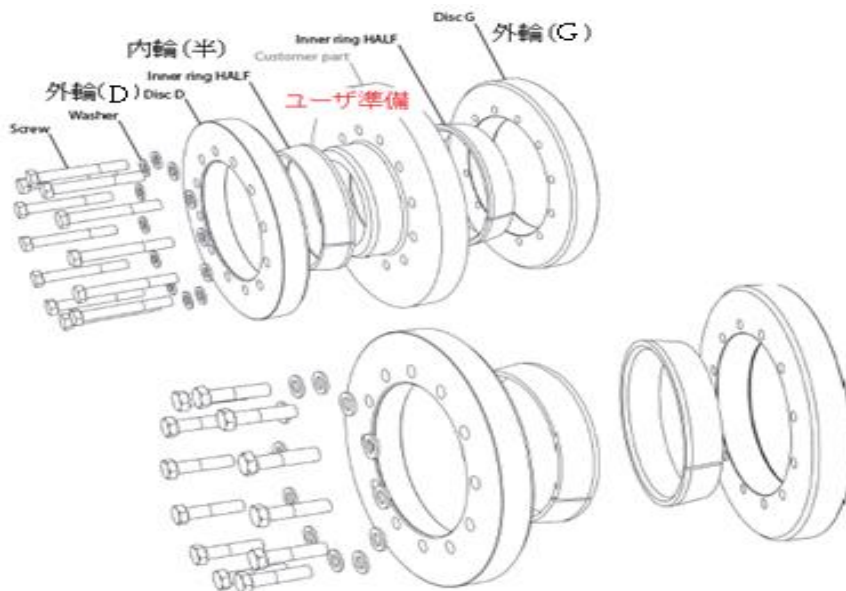
Hexagon head bolts are used as standard. Upon request we provide all sized shrink discs with hexagon socket head bolts (Inbus). (六角ボルト(標準)、六角穴付ボルト(対応可能))

min. yield strength Rp0,2	N/mm <sup>2</sup>	
Solid shaft	290	(軸 降伏応力最小値)
Hub	350	(中空軸 降伏応力最小値)

標準シャフト径dwからの派生対応領域			
dw径		minimal	maximal
>	≤	-	+
mm	mm	mm	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)



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

(3051Lightとは、数値が異なります。ご注意ください。)

Ordering information: TAS 3051Typ - d - y (for Example: TAS 3051GET-200-Y60 or TAS 3051HALB-G-200-Y30 or TAS 3051HALB-D-200)

(型番指定例：TAS3051 typ-d-y (例：TAS3051**GET**-200-Y60、  
TAS3051**HALB**-G-200-Y30、TAS3051 **HALB**-D-200)  
GETはスプリットです。  
HALB=HALF でも構いません。詳細は問合せください。)

**Please note: ( ご注意下さい )**

All values refer to shrink disk design HALF! (ハーフ選択時)

Please provide us the dimension of „y“ or the length of screws.

Otherwise we can not provide appropriate screws! ( y寸法をかならず教えてください )

Applies to shrink disc design HALF-G: ( 外輪G選択時 : )

- The required screw length is: ( 必要ボルト長さは以下 )

Screw length (3051 Light-Range) - l1 + 2 a + y (rounded up to standard lengths)

Applies to shrink disc design SPLIT: ( スプリット選択時 : )

- The design consists of 1x HALF-D + 1x HALF-G ( Dタイプ : 1set + Gタイプ : 1set )
- Delivery is possible with or without screws ( ボルト付き/無指定 )
- Maximum transmittable torque:  $M_{ges} = 2 M_{max}$  ( MTは下記表 $M_{max}$ の2倍 )
- The required screw length:

Screw length(3051 Light-Range) + 2 a + y (rounded up to standard lengths)

## 《寸法性能表》

以下、標準サイズ表示(表記以外のものでも、対応可否検討しますのでお問い合わせください。)

												HALF-D ONLY						
d	dW	Mmax	D	ℓ	a	l <sub>1</sub>	A	B	M <sub>A</sub>	Z	d <sub>B</sub>	S	DIN	Class	n <sub>max</sub>	P <sub>N</sub>	I	Weight
mm	mm	Nm	mm	mm	mm	mm	mm	mm	Nm	Stk	mm				min-1	N/mm <sup>2</sup>	kgm <sup>2</sup>	kg
120	100	5900	185	24.5	5	30.5	158	129	59	8	11	M10x40	931	10.9	3000	169	0.0164109	2.7
125	100	5400	185	24.5	5	30.5	158	129	59	8	11	M10x40	931	10.9	3000	163	0.0155781	2.5
140	120	8600	220	24.5	5	30.5	175	144	59	9	11	M10x40	931	10.9	2600	163	0.03315	3.9
155	135	12400	245	24.5	5	30.5	192	159	59	11	11	M10x40	931	10.9	2300	180	0.0514806	4.9
165	140	16500	260	28	5	36	210	169	100	10	135	M12x50	931	10.9	2200	190	0.0770453	6.5
175	150	20000	275	28	5	36	220	179	100	11	135	M12x50	931	10.9	2000	198	0.095625	7.2
185	160	23500	295	28	5	36	225	189	100	12	135	M12x50	931	10.9	1900	204	0.1288281	8.5
195	170	31700	315	33	5	41	237	199	100	15	135	M12x55	931	10.9	1800	199	0.205875	12
200	180	37800	330	33	5	41	242	204	100	16	135	M12x55	931	10.9	1700	207	0.2419625	13
220	190	48200	345	41	6	50	265	224	250	10	175	M16x70	931	10.9	1600	205	0.33485	16
240	210	66100	370	41	6	50	290	244	250	12	175	M16x70	931	10.9	1500	226	0.437625	18
260	230	86200	395	44	6	54	310	265	250	14	175	M16x70	931	10.9	1400	223	0.6149687	22
280	240	98100	425	52	8	62	333	285	250	16	175	M16x80	931	10.9	1300	203	0.939	29
300	260	121000	460	52	8	62	358	305	250	18	175	M16x80	931	10.9	1200	213	1.3195	35
320	280	148000	495	52	8	63	378	325	250	20	175	M16x80	931	10.9	1100	222	1.824	42
340	300	169000	535	52	8	63	402	345	250	21	175	M16x80	931	10.9	1000	219	2.5616	51
350	300	202000	545	60	10	71	413	360	490	16	22	M20x90	931	10.9	1000	213	3.0416	58
360	310	202000	555	60	10	71	423	365	490	16	22	M20x90	931	10.9	1000	207	3.2275	59
380	330	243000	585	69	12	81	442	387	490	18	22	M20x100	931	10.9	970	197	4.4405	73
390	340	282000	595	69	12	81	452	397	490	20	22	M20x100	931	10.9	960	214	4.7449	75
400	350	307000	615	69	12	81	462	407	490	21	22	M20x100	931	10.9	930	219	5.4495	81
420	360	321000	630	73	12	85	485	427	490	22	22	M20x110	931	10.9	900	204	6.2346	87
440	380	375000	660	73	12	85	505	447	490	24	22	M20x110	931	10.9	860	212	7.5504	96
460	400	467000	685	79	14	92	527	468	490	28	22	M20x120	931	10.9	830	215	9.6167	113
480	420	490000	715	81	14	94	547	488	490	28	22	M20x120	931	10.9	800	206	11.4	123
500	440	556000	750	81	14	94	567	508	490	30	22	M20x120	931	10.9	760	212	13.91	137
530	470	659000	800	90	14	1025	600	540	490	33	22	M20x120	931	10.9	710	194	19.91	173
560	500	775000	850	90	14	1025	630	570	490	36	22	M20x120	931	10.9	670	200	25.51	197
590	530	826000	870	90	14	1025	676	602	490	36	22	M20x130	931	10.9	650	190	27.21	197
620	560	879000	880	90	14	1025	686	624	490	36	22	M20x130	931	10.9	650	181	27.23	188