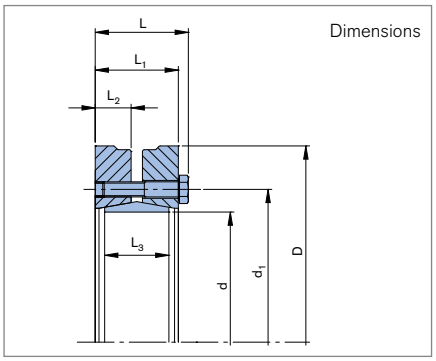
Shrink Discs

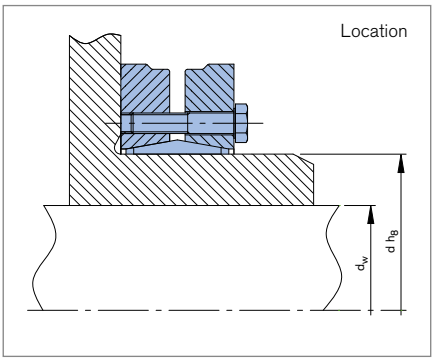
RINGFEDER® RfN 4061

Universally Applicable Series for Smaller Shaft Diameters and High Torques



2-part | **3-part**





Shrink Discs dimensions											Transmissible torques or axial forces				Locking screws ISO 4014/4017 - 10.9			
d	x	D	d_w	d_1	L	L_1	L_2	L_3	L_B	T_A	T	F_{ax}	P	σ_v	n_{Sc}	D_G	Gw	T_{max}
mm			mm	mm	mm	mm	mm	mm	mm	Nm	Nm	kN	N/mm²	N/mm²		mm	kg	Nm
			10								30	8		415				37,5
14	x	37	11	24	14,8	12	5	9	9,5	2,4	37	8	278	474	3	M4*)	0,1	46
			12								48	10		557				60
			12								70	15		509				90
16	x	41	13	27	18,5	15	6,25	12	9,5	4	90	18	336	575	4	M5	0,1	110
			14								110	20		774				130
			14								90	16		459				110
18	x	44	15	29	18,5	15	6,25	12	9,5	4	100	18	299	523	4	M5	0,2	130
			16								120	20		705				160
			15								110	20		462				140
20	x	46	16	32	21	17,5	7	12	11,5	4	140	22	336	497	5	M5	0,2	170
			17								160	24		580				200
			16								200	31		534				250
21	x	50	17	36	22,5	19	8	15	11,8	5	230	34	384	602	6	M5	0,2	290
			18								260	37		746				330
			19								240	32		495				300
24	x	50	20	36	22,5	19	8	15	11,8	5	270	35	336	554	6	M5	0,2	340
			21								300	38		679				390
			24								350	38		390				450
30	x	52	25	41,5	26	22,5	9,5	18	12,8	5	400	41	261	426	7	M5	0,2	500
			26								440	43		492				560
			28								590	53		390				730
36	x	72	30	52	27,5	23,5	10	18	13,8	12	690	58	303	438	5	M6	0,5	860
			31								700	58		536				890

*) Different quality of screws. ISO 4014/4017 - 8.8

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Shrink Discs RINGFEDER® RfN 4061

Shrink Discs dimensions											Transmissible torques or axial forces				Locking screws ISO 4014/4017 - 10.9			
d	x	D	d_w	d_1	L	L_1	L_2	L_3	L_B	T_A	T	F_{ax}	P	σ_v	n_{Sc}	D_G	Gw	T_{max}
mm			mm	mm	mm	mm	mm	mm	mm	Nm	Nm	kN	N/mm²	N/mm²		mm	kg	Nm
			29								700	62		378				890
38	x	72	30	55	30	26	10,5	21	15,2	12	770	65	295	394	6	M6	0,5	970
			31								780	63		474				980
			30								720	61		375				900
40	x	72	31	57	28,5	24,5	10,5	19	14,8	12	730	59	310	450	6	M6	0,5	910
			32								790	62		460				990
			32								800	63		429				1000
44	x	80	35	63	30	26	11	20	15,3	12	1000	73	312	444	7	M6	0,5	1250
			36								1050	76		458				1350
			36								900	65		371				1150
48	x	80	38	68	30	26	11	22	15,8	12	1050	72	260	380	7	M6	0,6	1350
			40								1200	78		403				1550
			38								1350	89		418				1650
50	x	90	40	70	31,5	27,5	12	22,5	16,3	12	1500	96	314	433	9	M6	0,9	1900
			42								1700	103		467				2150
			42								1300	78		343				1600
55	x	100	45	75	34,5	30,5	13	23	17,8	12	1550	87	248	359	8	M6	1,1	1950
			48								1800	96		410				2300
			48								2400	126		407				3000
62	x	110	50	86	34,5	30,5	13	23	17,8	12	2650	133	330	419	12	M6	1,3	3300
			52								2800	136		482				3500
			50								1900	95		314				2350
68	x	115	55	86	34,5	30,5	13	23,5	17,8	12	2250	104	245	367	10	M6	1,4	2850
			60								2850	121		411				3600
			55								2650	121		377				3300
75	x	138	60	100	37,8	32,5	14	25	19,7	30	3300	139	277	382	7	M8	2,3	4150
			65								4050	158		416				5100
			60								3200	126		353				4000
80	x	145	65	100	37,8	32,5	14	25	19,7	30	3900	143	259	358	7	M8	2,5	4900
			70								4600	160		392				5750
			60								4850	189		404				6050
85	x	155	65	114	45,8	40,5	16	30	23	30	5800	212	325	407	11	M8	3,5	7250
			70								6800	235		427				8500
			65								4800	174		353				6000
90	x	155	70	114	44,5	39	17	30	23	30	6050	195	274	356	10	M8	3,3	7550
			75								7300	215		372				9150
			65								5350	195		349				6700
95	x	170	70	127	52,5	47,2	19	34	23,5	30	6750	217	275	349	12	M8	4,7	8450
			75								8150	240		355				10200
			70								6950	202		331				8700
100	x	170	75	127	52,5	47,2	19	34	25,5	30	7600	223	261	331	12	M8	4,5	9500
			80								9100	245		338				11350
			75								8150	259		316				10150
110	x	185	80	145	59,4	53	23	42	28,5	59	10100	285	254	316	10	M10	6,3	12600
			85								12200	296		357				15250
			80								9500	267		302				11850
115	x	185	90	145	62,4	56	23	42	32	59	12100	302	243	342	10	M10	6,1	15100
			95								14050	329		353				17550

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Shrink Discs RINGFEDER® RfN 4061

Shrink Discs dimensions											Transmissible torques or axial forces				Locking screws ISO 4014/4017 - 10.9			
d	x	D	d_w	d_1	L	L_1	L_2	L_3	L_B	T_A	T	F_{ax}	P	σ_v	n_{Sc}	D_G	Gw	T_{max}
mm			mm	mm	mm	mm	mm	mm	mm	Nm	Nm	kN	N/mm²	N/mm²		mm	kg	Nm
			85								11050	300		354				13800
125	x	215	90	160	60,4	54	23	42	32	59	13100	327	269	352	12	M10	8,7	16350
			95								15150	355		352				18950
			95								15100	365		336				18850
140	x	230	100	175	68	60,5	26	46	35,5	100	17550	395	263	335	10	M12	10,6	21900
			105								20000	424		335				25000
			105								22000	447		320				27500
155	x	265	110	192	72,5	64,5	28	50	37,2	100	25000	478	263	320	12	M12	15	31250
			115								28000	509		322				35000
			115								31400	601		334				39300
165	x	290	120	210	81	71	31	56	40,5	250	35500	637	280	335	8	M16	21,7	44400
			125								39400	664		348				49250
			125								36000	605		334				45000
175	x	300	130	220	81	71	31	56	40,5	250	41000	639	261	321	8	M16	22	51250
			135								45000	675		324				56250
			135								52500	786		307				65600
185	x	330	140	236	96,4	86,4	38,2	71	48	250	57350	828	246	310	10	M16	36	71650
			145								62400	870		314				78000
			140								65950	943		332				82450
195	x	350	150	246	96	86	38,2	71	48	250	77600	1035	280	338	12	M16	40	97000
			155								83750	1081		345				104700
			150								75000	1000		326				93750
200	x	350	155	246	96	86	38,2	71	48	250	81000	1045	273	330	12	M16	39	101200
			160								87200	1091		337				109000

More sizes on request

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Shrink Discs RINGFEDER® RfN 4061

Explanation

d	= Inner diameter	**L_2**	= Thrust ring width	**P**	= Hub surface pressure
D	= Outer diameter	**L_3**	= Width of ring	**σ_v**	= Equivalent stress in the hub
d_w	= Solid shaft diameter	**L_B**	= Width of the half Shrink Disc	**n_{Sc}**	= Quantity of screws
d_1	= Pitch circle diameter	**T_A**	= Tightening torque of the clamping screws	**D_G**	= Thread
L	= Overall length	**T**	= Transmissible torque at given T_A	**Gw**	= Weight
L_1	= Overall length (without screws)	**F_{ax}**	= Transmissible axial force	**T_{max}**	= Max. transmissible torque

Ordering example

Series	d	D	Version
RfN 4061	185	330	
RfN 4061	185	330	N

N = Nickel plated series

Table Clearance

d_w above	d_w up to	ISO	Max. clearance S mm
6	**10**	**H6/j6**	**0,011**
10	**18**		**0,014**
18	**30**		**0,017**
30	**50**	**H6/h6**	**0,032**
50	**80**	**H6/g6**	**0,048**
80	**120**	**H7/g6**	**0,069**
120	**180**		**0,079**
180	**250**		**0,090**
250	**315**		**0,101**
315	**400**		**0,111**
400	**500**		**0,123**
500	**630**		**0,136**
630	**800**		**0,154**

Clearances considered for the calculation of the function values

Technical information

- Surface finishes: For shaft $R_a \leq 3{,}2$ µm
- Tolerances: For shaft see table
- When using a hollow shaft instead of a solid shaft please contact our Engineering-Team.
- Additional loads, e.g. tension, thrust or bending have to be taken into consideration accordingly
- Function values: The functional characteristics are valid with the screw tightening torque listed in the tables and the following assumed conditions: The locking screws are lubricated using MoS_2 (μ_{tot}= 0,1). The tapered cones are lubricated using MoS_2 (µ = 0,05). The contact surfaces (d_w) are in lightly oiled condition with coefficient of friction µ = 0,12. The hub and shaft materials have a modulus of elasticity of 210,000 N/mm². (Lower values result in increased values for T and Fax with reduced tangential stress.) The maximum clearance S is being fully utilized. The shaft being used is solid, for hollow shaft applications the functional values will change. In cases where the assumed conditions do not apply then contact our Technical Department where we will be happy to assist you with your application.

Safety Covers

As an effective, safe contact protection against screw heads of rotating shrink discs, original **RINGFEDER® Safety Covers** made of high-quality synthetic material are available for series RINGFEDER® RfN 4061 up to size 140 x 230 mm.

Further information on
RINGFEDER® RfN 4061 on
www.ringfeder.com

Disclaimer of liability
All technical details and notes are non-binding and cannot be used as a basis for legal claims. The user is obligated to determine whether the represented products meet his requirements. We reserve the right carry out modifications at any time in the interests of technical progress.

RINGFEDER POWER TRANSMISSION