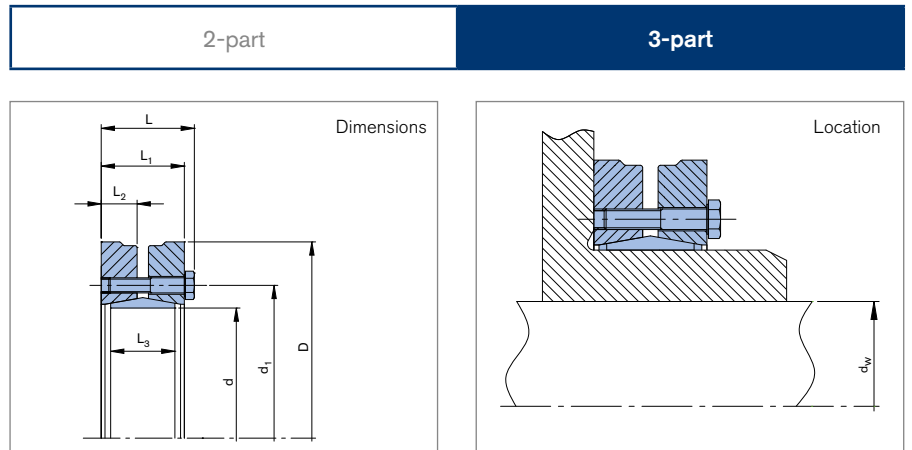


# Shrink Discs

## RINGFEDER® RfN 4061

Standard series for high torque



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

<sup>1)</sup> Different quality of screws. ISO 4014/4017 - 8.8

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Shrink Discs dimensions									Transmissible torques or axial forces				Locking screws					
d	x	D	d <sub>w</sub>	d <sub>1</sub>	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>B</sub>	T <sub>A</sub>	T	F <sub>ax</sub>	P	σ <sub>v</sub>	n <sub>Sc</sub>	D <sub>G</sub>	G <sub>w</sub>	T <sub>max</sub>
mm		mm	mm	mm	mm	mm	mm	mm	mm	Nm	Nm	kN	N/mm <sup>2</sup>	N/mm <sup>2</sup>		mm	kg	Nm
38	x	72	29	55	30	26	10,5	21	15,2	12	700	62	295	378	6	M6	0,5	890
			30								770	65		394				970
			31								780	63		474				980
40	x	72	30	57	28,5	24,5	10,5	19	14,8	12	720	61	310	375	6	M6	0,5	900
			31								730	59		450				910
			32								790	62		460				990
44	x	80	32	63	30	26	11	20	15,3	12	800	63	312	429	7	M6	0,5	1000
			35								1000	73		444				1250
			36								1050	76		458				1350
48	x	80	36	68	30	26	11	22	15,8	12	900	65	260	371	7	M6	0,6	1150
			38								1050	72		380				1350
			40								1200	78		403				1550
50	x	90	38	70	31,5	27,5	12	22,5	16,3	12	1350	89	314	418	9	M6	0,9	1650
			40								1500	96		433				1900
			42								1700	103		467				2150
55	x	100	42	75	34,5	30,5	13	23	17,8	12	1300	78	248	343	8	M6	1,1	1600
			45								1550	87		359				1950
			48								1800	96		410				2300
62	x	110	48	86	34,5	30,5	13	23	17,8	12	2400	126	330	407	12	M6	1,3	3000
			50								2650	133		419				3300
			52								2800	136		482				3500
68	x	115	50	86	34,5	30,5	13	23,5	17,8	12	1900	95	245	314	10	M6	1,4	2350
			55								2250	104		367				2850
			60								2850	121		411				3600
75	x	138	55	100	37,8	32,5	14	25	19,7	30	2650	121	277	377	7	M8	2,3	3300
			60								3300	139		382				4150
			65								4050	158		416				5100
80	x	145	60	100	37,8	32,5	14	25	19,7	30	3200	126	259	353	7	M8	2,5	4000
			65								3900	143		358				4900
			70								4600	160		392				5750
85	x	155	60	114	45,8	40,5	16	30	23	30	4850	189	325	404	11	M8	3,5	6050
			65								5800	212		407				7250
			70								6800	235		427				8500
90	x	155	65	114	44,5	39	17	30	23	30	4800	174	274	353	10	M8	3,3	6000
			70								6050	195		356				7550
			75								7300	215		372				9150
95	x	170	65	127	52,5	47,2	19	34	23,5	30	5350	195	275	349	12	M8	4,7	6700
			70								6750	217		349				8450
			75								8150	240		355				10200
100	x	170	70	127	52,5	47,2	19	34	25,5	30	6950	202	261	331	12	M8	4,5	8700
			75								7600	223		331				9500
			80								9100	245		338				11350
110	x	185	75	145	59,4	53	23	42	28,5	59	8150	259	254	316	10	M10	6,3	10150
			80								10100	285		316				12600
			85								12200	296		357				15250
115	x	185	80	145	62,4	56	23	42	32	59	9500	267	243	302	10	M10	6,1	11850
			90								12100	302		342				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			
d x D	d <sub>w</sub>	d <sub>1</sub>	L	L <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	L <sub>B</sub>	T <sub>A</sub>	T	F <sub>ax</sub>	P	σ <sub>v</sub>	n <sub>sc</sub>	D <sub>G</sub>	G <sub>w</sub>	T <sub>max</sub>
mm	mm	mm	mm	mm	mm	mm	mm	Nm	Nm	kN	N/mm <sup>2</sup>	N/mm <sup>2</sup>		mm	kg	Nm
125 x 215	85								11050	300		354				13800
	90	160	60,4	54	23	42	32	59	13100	327		352	12	M10	8,7	16350
	95								15150	355	269	352				18950
140 x 230	95								15100	365		336				18850
	100	175	68	60,5	26	46	35,5	100	17550	395	263	335	10	M12	10,6	21900
	105								20000	424		335				25000
155 x 265	105								22000	447		320				27500
	110	192	72,5	64,5	28	50	37,2	100	25000	478	263	320	12	M12	15	31250
	115								28000	509		322				35000
165 x 290	115								31400	601		334				39300
	120	210	81	71	31	56	40,5	250	35500	637	280	335	8	M16	21,7	44400
	125								39400	664		348				49250
175 x 300	125								36000	605		334				45000
	130	220	81	71	31	56	40,5	250	41000	639	261	321	8	M16	22	51250
	135								45000	675		324				56250
185 x 330	135								52500	786		307				65600
	140	236	96,4	86,4	38,2	71	48	250	57350	828	246	310	10	M16	36	71650
	145								62400	870		314				78000
195 x 350	140								65950	943		332				82450
	150	246	96	86	38,2	71	48	250	77600	1035	280	338	12	M16	40	97000
	155								83750	1081		345				104700
200 x 350	150								75000	1000		326				93750
	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  
To continue see next page

## Shrink Discs RINGFEDER® RfN 4061

### Explanation

<b>d</b> = Inner diameter	<b>L<sub>3</sub></b> = Width of ring	<b>σ<sub>v</sub></b> = Equivalent stress in the hub
<b>D</b> = Outer diameter	<b>L<sub>B</sub></b> = Width of the half Shrink Disc	<b>n<sub>sc</sub></b> = Quantity of screws
<b>d<sub>w</sub></b> = Solid shaft diameter	<b>T<sub>A</sub></b> = Tightening torque of the clamping screws	<b>D<sub>G</sub></b> = Thread
<b>d<sub>1</sub></b> = Pitch circle diameter	<b>T</b> = Transmissible torque at given T <sub>A</sub>	<b>G<sub>w</sub></b> = Weight
<b>L<sub>1</sub></b> = Overall length (without screws)	<b>F<sub>ax</sub></b> = Transmissible axial force	<b>T<sub>max</sub></b> = Max. transmissible torque
<b>L<sub>2</sub></b> = Thrust ring width	<b>P</b> = Hub surface pressure	

### Ordering example

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

N = Nickel plated series

### Table Clearance

d <sub>w</sub>		ISO	Max. clearance S mm
above	up to		
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	

#### Technical information

- Surface finishes: For shaft R<sub>a</sub> ≤ 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<sub>2</sub> (μ<sub>tot</sub> = 0,1). The tapered cones are lubricated using MoS<sub>2</sub> (μ = 0,05). The contact surfaces (d<sub>w</sub>) 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/mm<sup>2</sup>. (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.

Clearances considered for the calculation of the function values

Further information on  
**RINGFEDER® RfN 4061** on  
[www.ringfeder.com](http://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.