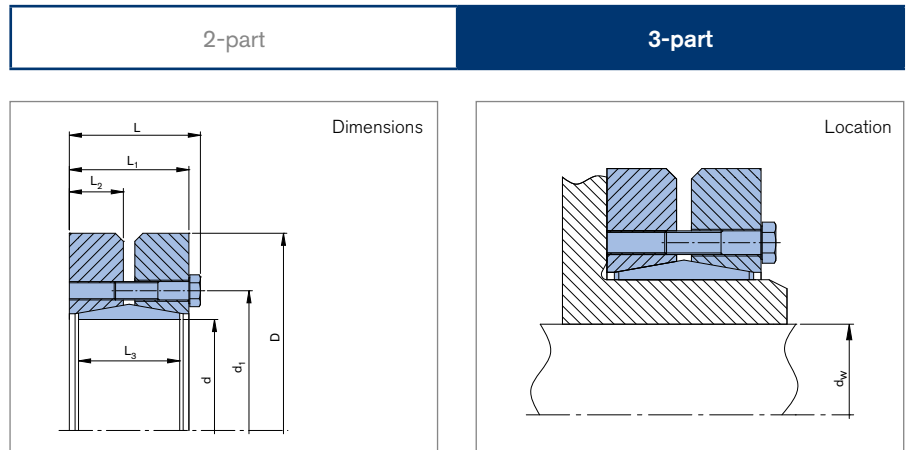


# Shrink Discs

## RINGFEDER® RfN 4071

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>	ISO 4014/4017 - 10.9			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>	n <sub>Sc</sub>	D <sub>G</sub>	G <sub>w</sub>	Nm
220	x	370	160	270	114	104	47	88	59,5	250	95000	1190	248	295	15	M16	54	118750
			165								102000	1239		298				127500
			170								110000	1290		303				137500
240	x	405	170	295	122	109	49	92	62	490	120000	1464	272	309	12	M20	67	150000
			180								138000	1576		315				172500
			190								156000	1675		334				195000
260	x	430	190	321	133	120	54	103	67,5	490	164000	1760	262	306	14	M20	82	205000
			200								184000	1880		314				230000
			210								205000	2010		329				256250
280	x	460	210	346	147	134	60	114	76,5	490	217000	2090	251	295	16	M20	102	271250
			220								244000	2220		306				305000
			230								270000	2350		324				337500
300	x	485	230	364	155	142	64	122	79,5	490	275000	2431	246	291	18	M20	118	343750
			240								295000	2567		303				368750
			245								315000	2636		312				393750
320	x	520	240	386	155	142	64	122	79,5	490	312000	2647	257	293	20	M20	131	390000
			250								340000	2786		301				425000
			260								374000	2900		320				467500
340	x	570	250	408	169	156	71	134	86,5	490	390000	3119	264	295	24	M20	186	487500
			260								422500	3249		307				528125
			270								460000	3400		317				575000
350	x	580	270	432	175	162	73	140	89,5	490	442000	3276	245	289	24	M20	195	552500
			280								480000	3430		300				600000
			285								500000	3500		307				625000

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**Shrink Discs RINGFEDER® RfN 4071**

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>	ISO 4014/4017 - 10.9			
mm			mm	mm	mm	mm	mm	mm	mm	Nm	Nm	kN	N/mm <sup>2</sup>	N/mm <sup>2</sup>	n <sub>Sc</sub>	D <sub>G</sub>	G <sub>w</sub>	T <sub>max</sub>
																mm	kg	Nm
360	x	590	280	432	175	162	73	140	89,5	490	463000	3310	238	282	24	M20	204	578750
			290								502000	3461		292				627500
			295								522000	3536		298				652500
380	x	645	290	458	183	168	76	144	92,5	840	567000	3910	263	300	20	M24	239	708750
			300								610000	4080		307				762500
			310								658000	4248		320				822500
390	x	660	300	468	183	168	76	144	92,5	840	624000	4160	270	305	21	M24	260	780000
			310								671000	4330		314				838750
			320								718000	4484		331				897500
400	x	680	315	480	183	168	76	144	92,5	840	670000	4260	263	302	21	M24	280	837500
			320								695000	4345		310				868750
			330								744000	4500		324				930000
420	x	690	330	504	203	188	86	164	106,5	840	780000	4850	251	295	24	M24	316	975000
			340								840000	5040		306				1050000
			350								900000	5220		322				1125000
440	x	750	340	527	217	202	91	177	113,5	840	806000	4740	223	267	24	M24	408	1007500
			350								860000	4910		274				1075000
			360								917000	5090		285				1146250
460	x	770	360	547	217	202	91	177	113,5	840	1000000	5670	248	293	28	M24	420	1250000
			370								1070000	5860		301				1337500
			380								1400000	6050		314				1750000
480	x	800	380	570	228	213	96	188	119	840	1170000	6150	240	282	30	M24	505	1462500
			390								1240000	6350		292				1550000
			400								1310000	6550		306				1637500
500	x	850	400	590	230	213	96	188	119	1250	1312000	6560	242	284	24	M27	575	1640000
			410								1380000	6730		297				1725000
			420								1455000	6930		311				1818750

More sizes on request  
To continue see next page

## Shrink Discs RINGFEDER® RfN 4071

### Explanation

<b>d</b> = Inner diameter	<b>L<sub>2</sub></b> = Thrust ring width	<b>P</b> = Hub surface pressure
<b>D</b> = Outer diameter	<b>L<sub>3</sub></b> = Width of ring	<b>σ<sub>v</sub></b> = Equivalent stress in the hub
<b>d<sub>w</sub></b> = Solid shaft 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>1</sub></b> = Pitch circle diameter	<b>T<sub>A</sub></b> = Tightening torque of the clamping screws	<b>D<sub>G</sub></b> = Thread
<b>L</b> = Overall length	<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

### Ordering example

Series	d	D
RfN 4071	420	520

### 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 4071** 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.