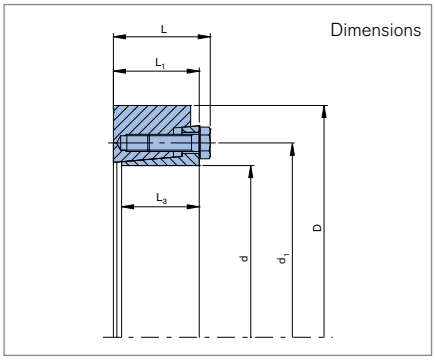
Shrink Discs

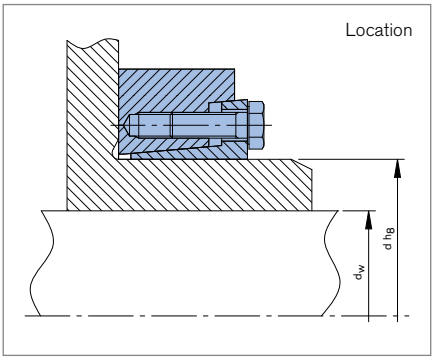
RINGFEDER® RfN 4181

Size-Extended Series of RfN 4161 for Larger Shaft Diameters and Maximum Torques



2-part | 3-part





Shrink Discs dimensions									Transmissible torques or axial forces		Locking screws ISO 4014/4017 - 12.9		
d	x	D	d_w	d_1	L	L_1	L_3	T_A	T	F_{ax}	D_G	Gw	T_{max}
mm			mm	mm	mm	mm	mm	Nm	Nm	kN	mm	kg	Nm
			160						160000	2000			176000
220	x	370	170	270	115,8	103,3	87	570	182000	2150	M20	52,11	200200
			180						206000	2300			226600
			170						190000	2250			209000
240	x	405	180	296	121,4	108,9	92	570	215000	2400	M20	66,58	236500
			200						269000	2700			295900
			190						247000	2600			271700
260	x	430	200	318	128,4	115,9	102	580	277000	2750	M20	77,29	304700
			220						340000	3100			374000
			210						282000	2686			310200
280	x	460	220	340	146,4	133,9	121	570	313000	2845	M20	103,28	344300
			240						380000	3167			418000
			220						385000	3500			423500
300	x	485	230	360	154,1	139,1	122	980	425000	3700	M24	117,05	467500
			250						505000	4050			555500
			240						444000	3700			488400
320	x	520	250	380	156,6	141,6	124	980	488000	3904	M24	132,1	536800
			270						580000	4296			638000
			250						564000	4500			620400
340	x	570	260	402	167,5	152,5	135	980	612000	4700	M24	184,25	673200
			270						668000	4950			734800
			270						658000	4850			723800
360	x	590	280	424	182,7	167,7	150	980	712000	5100	M24	208,11	783200
			300						825000	5500			907500

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Shrink Discs RINGFEDER® RfN 4181

Shrink Discs dimensions									Transmissible torques or axial forces		Locking screws ISO 4014/4017 - 12.9		
d	x	D	d_w	d_1	L	L_1	L_3	T_A	T	F_{ax}	D_G	Gw	T_{max}
mm			mm	mm	mm	mm	mm	Nm	Nm	kN	mm	kg	Nm
			290						735000	5069			808500
380	x	640	300	444	185,1	168,1	148	1450	790000	5266	M27	247,5	869000
			310						845000	5452			929500
			290						903000	6250			993300
390	x	650	300	470	186,3	167,6	144	1900	970000	6450	M30	259,55	1067000
			320						1101000	6950			1221000
			320						969000	6056			1065900
420	x	670	330	495	203,9	186,9	166	1450	1038000	6291	M27	284,75	1141800
			350						1183000	6762			1301300
			340						1212000	7129			1333200
440	x	740	350	518	212,9	195,9	178	1450	1292000	7383	M27	398	1421200
			370						1460000	7892			1606000
			380						1815000	9552			1996500
480	x	790	390	552	243,7	225,0	201	1900	1920000	9845	M30	495,4	2112000
			410						2118000	10331			2329800
			400						2054000	10270			2259400
500	x	835	410	572	238,7	220,0	198	1900	2145000	10463	M30	626,3	2359500
			430						2377000	11055			2614700
			430						2397000	11150			2636700
530	x	850	440	608	260,0	240,0	206	1900	2520520	11457	M30	653,4	2772572
			460						2777417	12076			3055159
			450						2545000	11311			2799500
560	x	940	460	632	260,0	240,0	206	1900	2670006	11609	M30	748,7	2937006
			480						2929521	12206			3222473
			470						4012000	17072			4413200
590	x	960	480	654	380,0	361,0	286	1900	4199188	17497	M30	1173,9	4619106
			500						4587043	18348			5045747
			500						3402000	13608			3742200
620	x	970	520	720	304,0	285,0	244	1900	3708000	14261	M30	886,7	4078800
			540						4028000	14918			4430800
			530						5758000	21750			6333800
660	x	1040	550	728	418,0	396,0	310	3500	6236900	22680	M36	1448,2	6860590
			570						6735919	23635			7409510
			560						4518700	16138			4970570
700	x	1140	580	815	315,0	294,0	260	2700	4880000	16828	M33	1467,5	5368000
			600						5258000	17527			5783800
			600						7669000	25563			8435900
750	x	1150	620	900	340,0	428,0	360	3500	8228643	26544	M36	1847,5	9051507
			650						9106895	28021			10017584
			640						6897960	21226			7587756
800	x	1230	660	935	373,0	352,0	296	2700	7378000	22358	M33	1894,4	8115800
			700						8390500	23973			9229550

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Shrink Discs RINGFEDER® RfN 4181

Explanation

d	= Inner diameter	**L_1**	= Overall length (without screws)	**n_{Sc}**	= Quantity of screws
D	= Outer diameter	**L_3**	= Width of ring	**D_G**	= Thread
d_w	= Solid shaft diameter	**T_A**	= Tightening torque of the clamping screws	**Gw**	= Weight
d_1	= Pitch circle diameter	**T**	= Transmissible torque at given T_A	**T_{max}**	= Max. transmissible torque
L	= Overall length	**F_{ax}**	= Transmissible axial force		

Ordering example

Series	d	D
RfN 4181	260	430

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.
- Hub with yield strength Rp0,2 ≥ 360 N/mm²
- 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.

Further information on
RINGFEDER® RfN 4181 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.