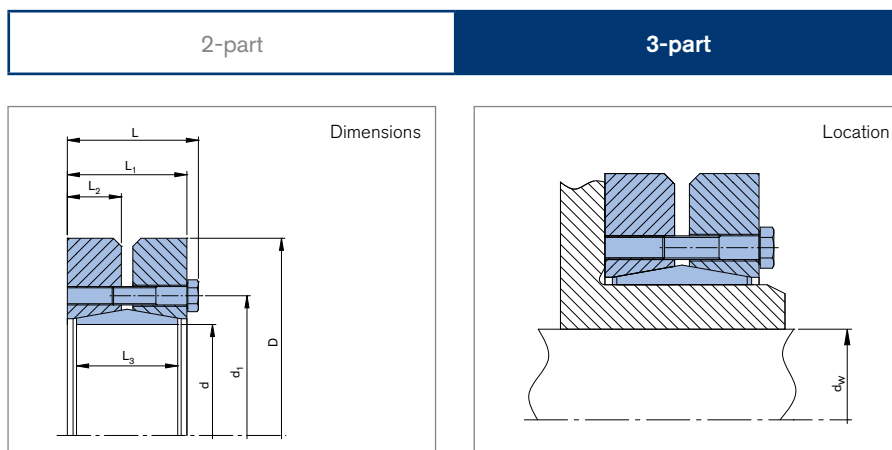


Shrink Discs

RINGFEDER® RfN 4071

Standard series for high torque



Shrink Discs dimensions										Transmissible torques or axial forces		P	σ_v	Locking screws		Gw	T_{max}
d	x	D	d _w	d ₁	L	L ₁	L ₂	L ₃	L _B	T _A	T	F _{ax}		n _{Sc}	D _G		
mm			mm	mm	mm	mm	mm	mm	mm	Nm	Nm	kN	N/mm ²	Stück	mm	kg	Nm
220	x	370	160								95000	1190					118750
			165	270	114	104	47	88	59,5	250	102000	1239		15	M16	54	127500
			170								110000	1290					137500
			170								120000	1464					150000
240	x	405	180	295	122	109	49	92	62	490	138000	1576	272	12	M20	67	172500
			190								156000	1675					195000
			190								164000	1760					205000
260	x	430	200	321	133	120	54	103	67,5	490	184000	1880	262	14	M20	82	230000
			210								205000	2010					256250
			210								217000	2090					271250
280	x	460	220	346	147	134	60	114	76,5	490	244000	2220	251	16	M20	102	305000
			230								270000	2350					337500
			230								275000	2431					343750
300	x	485	240	364	155	142	64	122	79,5	490	295000	2567	246	18	M20	118	368750
			245								315000	2636					393750
			240								312000	2647					390000
320	x	520	250	386	155	142	64	122	79,5	490	340000	2786	257	20	M20	131	425000
			260								374000	2900					467500
			250								390000	3119					487500
340	x	570	260	408	169	156	71	134	86,5	490	422500	3249	264	24	M20	186	528125
			270								460000	3400					575000
			270								442000	3276					552500
350	x	580	280	432	175	162	73	140	89,5	490	480000	3430	245	24	M20	195	600000
			285								500000	3500					625000

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Shrink Discs RINGFEDER® RfN 4071

Shrink Discs dimensions											Transmissible torques or axial forces				Locking screws			
d	x	D	d _w	d ₁	L	L ₁	L ₂	L ₃	L _B	T _A	T	F _{ax}	P	σ _V	ISO 4014/4017 - 10.9 n _{Sc}	D _G	G _w	T _{max}
mm			mm	mm	mm	mm	mm	mm		Nm	Nm	kN	N/mm ²	N/mm ²	Stück	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						627500
			295								522000	3536						652500
380	x	645	290	458	183	168	76	144	92,5	840	567000	3910	263	300	20	M24	239	708750
			300								610000	4080						762500
			310								658000	4248						822500
390	x	660	300	468	183	168	76	144	92,5	840	624000	4160	270	305	21	M24	260	780000
			310								671000	4330						838750
			320								718000	4484						897500
400	x	680	315	480	183	168	76	144	92,5	840	670000	4260	263	302	21	M24	280	837500
			320								695000	4345						868750
			330								744000	4500						930000
420	x	690	330	504	203	188	86	164	106,5	840	780000	4850	251	295	24	M24	316	975000
			340								840000	5040						1050000
			350								900000	5220						1125000
440	x	750	340	527	217	202	91	177	113,5	840	806000	4740	223	267	24	M24	408	1007500
			350								860000	4910						1075000
			360								917000	5090						1146250
460	x	770	360	547	217	202	91	177	113,5	840	1000000	5670	248	293	28	M24	420	1250000
			370								1070000	5860						1337500
			380								1400000	6050						1750000
480	x	800	380	570	228	213	96	188	119	840	1170000	6150	240	282	30	M24	505	1462500
			390								1240000	6350						1550000
			400								1310000	6550						1637500
500	x	850	400	590	230	213	96	188	119	1250	1312000	6560	242	284	24	M27	575	1640000
			410								1380000	6730						1725000
			420								1455000	6930						1818750

More sizes on request
To continue see next page

Shrink Discs RINGFEDER® RfN 4071

Explanation

d = Inner diameter	L₂ = Thrust ring width	P = Hub surface pressure
D = Outer diameter	L₃ = 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
d₁ = Pitch circle diameter	T_A = Max tightened torque of the clamping screws	D_G = Thread
L = Overall length	T = Transmissible torque at given T _A	Gw = Weight
L₁ = Overall length (without screws)	F_{ax} = Transmissible axial force	T_{max} = Max. transmissible torque

Ordering example

Series	d	D
RfN 4071	420	520

Table Clearance

d _w		ISO	Max. clearance S
above	up to		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

Technical information

- Surface finishes: For shaft $R_a \leq 3,2 \mu\text{m}$
- 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 MoS₂ ($\mu_{\text{tot}} = 0,1$). The tapered cones are lubricated using MoS₂ ($\mu = 0,05$). The contact surfaces (d_w) are in lightly oiled condition with coefficient of friction $\mu = 0,12$. 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.

Clearances considered for the calculation of the function values

Further information on
RINGFEDER® RfN 4071 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.