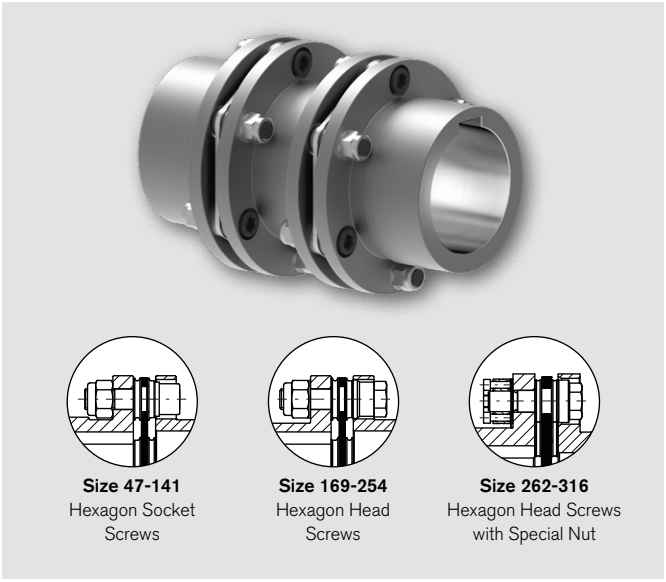
Steel Disc Couplings

RINGFEDER® TND HDH

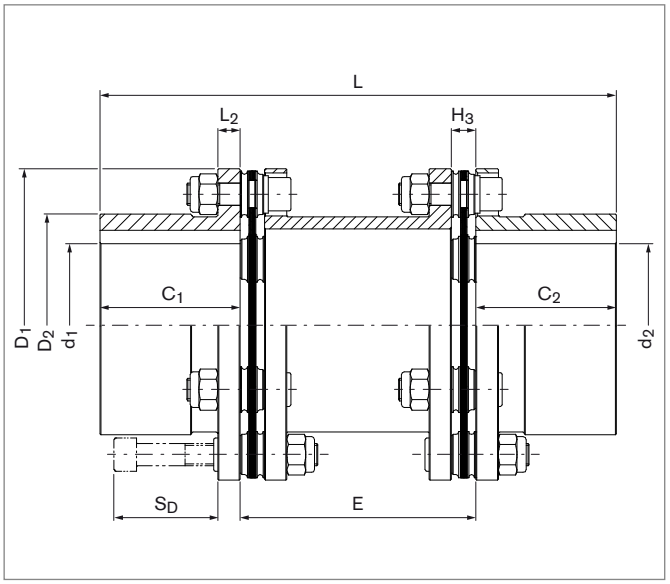
Standard Hubs, Double-Jointed, with Spacer, Shaft-Hub Connection by Keyway



Size 47-141
Hexagon Socket Screws

Size 169-254
Hexagon Head Screws

Size 262-316
Hexagon Head Screws with Special Nut



Size	$T_{KN}HD$ [1]	$T_{KN}HT$ [1]	n_{max} [2]	d_{pre} [3]	$d_{1k};d_{2k}$ max [4]	C_1 / C_2	E [5]	H_3	D_1	D_2	L_2	L	S_D	n_{Sc}
HDH	Nm	Nm	1/min	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Quantity
47	170	230	12200	10	32	39,5	60 100 140	7,5	70,5	47	5	139 179 219	24	6
63	320	420	9900	14	42	45	70 80 100 140	9	88	62,5	8	160 170 190 230	32	6
82	750	1050	7500	15	55	55	100 140 180	10,5	116	82	10	210 250 290	40	6
98	1350	1750	6200	19	65	60	100 140 180	12	140,5	98	11	220 260 300	47	6
118	2400	3000	5250	25	85	75	100 140 180	13	166,5	118	12	250 290 330	55	6
141	4000	5200	4400	30	95	90	140 180	15	198,5	141	14	320 360	64	6
169	6500	8500	3650	39	115	125	140 180 250	21	238	169	16	390 430 500	81	6

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Steel Disc Couplings RINGFEDER® TND HDH

Size	$T_{KN}HD$ [1]	$T_{KN}HT$ [1]	n_{max} [2]	d_{pre} [3]	$d_{1k};d_{2k}$ max [4]	C_1 / C_2	E [5]	H_3	D_1	D_2	L_2	L	S_D	n_{Sc}
HDH	Nm	Nm	1/min	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Quantity
205	21000	26000	2950	59	140	160	200 250	28	295	205	22	520 570	112	8
254	36000	44000	2500	79	175	200	224 250 300	32,2	345	254	26	624 650 700	133	8
262	74000	---	2050	90	180	210	280	34	420	262	32	700	137	8
316	130000	---	1700	100	215	240	350	47	510	316	38	830	172	8

Size	E [5]	Gw_{SB} [6]	J_{SB} [6]	C_{TdynHD}	C_{TdynHT}	Max. Permissible Misalignment [7] axial ΔK_aHD	axial ΔK_aHT	angular ΔK_wHD	angular ΔK_wHT	radial ΔK_rHD	radial ΔK_rHT
HDH	mm	kg	$10^{-3}kgm^2$	10^6 Nm/rad	10^6 Nm/rad	mm	mm	Degrees	Degrees	mm	mm
47	60	1,7	0,76	0,071	0,075	1,0	0,6	2	1,4	0,8	0,6
	100	1,8	0,76	0,059	0,062					1,5	1,1
	140	1,9	0,76	0,071	0,075					2,2	1,5
	Δ per 100 mm	*0,31*	*0,14*	*0,14*							
63	70	3,3	2,5	0,126	0,139	1,0	0,8	2	1,4	1	0,7
	80	3,3	2,6	0,123	0,134					1,1	0,8
	100	3,5	2,7	0,116	0,127					1,5	1,1
	140	3,7	2,8	0,105	0,114					2,1	1,6
	Δ per 100 mm	*0,55*	*0,44*	*0,44*							
82	100	7,1	9,1	0,271	0,308	1,4	0,8	2	1,4	1,4	1,1
	140	7,4	9,5	0,246	0,277					2,1	1,5
	180	7,7	9,9	0,226	0,251					2,8	2,1
	Δ per 100 mm	*0,74*	*0,10*	*1,06*							
98	100	11,1	21	0,513	0,543	2,0	1,2	2	1,4	1,5	1
	140	11,5	22	0,469	0,494					2,1	1,5
	180	12	23	0,433	0,454					2,8	2
	Δ per 100 mm	*1,09*	*1,04*	*2,18*							
118	100	18,9	52	0,914	0,948	2,4	1,6	2	1,4	1,4	1
	140	19,6	54	0,855	0,884					2,1	1,5
	180	20,3	56	0,803	0,829					2,8	2
	Δ per 100 mm	*1,74*	*5,14*	*5,24*							
141	140	31,7	120	1,306	1,362	2,8	1,6	2	1,4	2	1,5
	180	32,5	130	1,229	1,279					2,7	2
	Δ per 100 mm	*1,92*	*8,14*	*8,3*							
169	140	60,2	340	2,467	3,035	3	2,4	2	1,4	2	1,4
	180	61,8	350	2,375	2,898					2,6	1,9
	250	64,5	360	2,231	2,686					3,8	2,7
	Δ per 100 mm	*3,92*	*24,88*	*25,36*							
205	200	119,6	1070	8,995	9,142	2,2	1,2	1	0,8	1,4	1,2
	250	122,4	1100	8,265	8,389					1,8	1,5
	Δ per 100 mm	*5,56*	*49,36*	*50,3*							

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Steel Disc Couplings RINGFEDER® TND HDH

Size	E [5]	Gw_{SB} [6]	J_{SB} [6]	C_{TdynHD}	C_{TdynHT}	Max. Permissible Misalignment [7] axial ΔK_aHD	axial ΔK_aHT	angular ΔK_wHD	angular ΔK_wHT	radial ΔK_rHD	radial ΔK_rHT
HDH	mm	kg	$10^{-3}kgm^2$	10^6 Nm/rad	10^6 Nm/rad	mm	mm	Degrees	Degrees	mm	mm
	224	207,5	2620	14,975	15,19					1,6	1,3
254	250	209,5	2640	14,302	14,497	2,2	1,6	1	0,8	1,8	1,5
	300	213,3	2680	13,163	13,328					2,2	1,8
	Δ per 100 mm	*7,58*	*80,10*	*81,63*							
262	280	261,9	5350	18,116	---	3,2	---	1	---	2,5	---
	Δ per 100 mm	*8,75*	*121,28*	*122,81*							
316	350	450,1	14430	36,134	---	3,8	---	1	---	3	---
	Δ per 100 mm	*11,05*	*221,59*	*224,4*							

1) When selecting the size, it is essential to observe the instructions on coupling dimensioning in the document "Product Paper & Tech Paper RINGFEDER® Steel Disc Couplings". Short-term peak torque T_{kmax} is limited to 1.75 multiples of T_{KN}.

2) For longer spacers, check bending critical rotational speed.

3) Pre-bore has free tolerance.

4) Maximum finished bore with keyways according to DIN 6885-1.

5) Longer spacers on request. The figures given at "Δ per 100 mm" for Gw_{SB}, J_{SB}, C_{TdynHD} and C_{TdynHT} are approximate values.

6) Weight and mass moments of inertia for pre-bored hubs.

7) The maximum misalignment values must not apply simultaneously. The instructions on coupling dimensioning in the document "Product Paper & Tech Paper RINGFEDER® Steel Disc Couplings" are to be observed.

Explanations

$T_{KN}HD$ = Nom. transmissible torque with disc pack HD

$T_{KN}HT$ = Nom. transmissible torque with disc pack HT

n_{max} = Max. rotational speed

d_{pre} = Diamater pre-bore

d_{1kmax} = Max. bore diameter d_1 with keyway acc. to DIN 6885-1

d_{2kmax} = Max. bore diameter d_2 with keyway acc. to DIN 6885-1

C_1 = Guided length in hub bore

C_2 = Guided length in hub bore

E = Distance between hubs

H_3 = Width of the disc pack

D_1 = Max. outer diameter

D_2 = Outer diameter hub

L_2 = Hub flange thickness

L = Total length

S_D = Disassembly space

n_{Sc} = Quantity of screws

Gw_{SB} = Weight at smallest bore diameter

J_{SB} = Moment of inertia at smallest bore diameter.

C_{TdynHD} = Dynamic torsional stiffness with disc pack HD

C_{TdynHT} = Dynamic torsional stiffness with disc pack HT

ΔK_aHD = Max. permissible axial misalignment with disc pack HD

ΔK_aHT = Max. permissible axial misalignment with disc pack HT

ΔK_wHD = Max. permissible angular misalignment with disc pack HD

ΔK_wHT = Max. permissible angular misalignment with disc pack HT

ΔK_rHD = Max. permissible radial misalignment with disc pack HD

ΔK_rHT = Max. permissible radial misalignment with disc pack HT

Ordering example

Type	Size	Disc pack	Distance between hubs E	Bore diameter d_1	Bore diameter d_2
TND HDH	118	HT	140	60	80

Further information on
RINGFEDER® TND HDH
on **www.ringfeder.com**

Technical Information

- Without further specifications, we deliver as standard: Bore tolerance H7; Keyway acc. to DIN 6885-1; Keyway width tolerance P9; Set screw per hub.
- From a peripheral speed of 30 m/s, separate balancing of the individual coupling parts is recommended.
- Without further instructions on balancing, the coupling parts are balanced individually according to DIN 21940-11 in quality G 6,3 at 1,500 1/min. The hubs are balanced half key (before grooving), the spacer without screwed-on disc packs.

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 to carry out modifications at any time in the interests of technical progress.

RINGFEDER POWER TRANSMISSION