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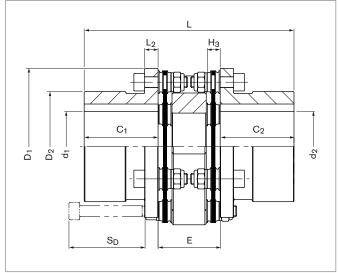
**Tech Paper** 

08.2021

# Steel Disc Couplings RINGFEDER® TND OCO

## Standard Hubs with Open Flange, Double-Jointed, with Compact-Spacer, Shaft-Hub Connection by Keyway





Size	T <sub>KN</sub> HD <sup>1)</sup>	T <sub>KN</sub> HT <sup>1)</sup>	n <sub>max</sub>	d <sub>pre</sub> 3)	d <sub>1k</sub> ;d <sub>2k</sub> max <sup>4)</sup>	C <sub>1</sub> / C <sub>2</sub>	E	H <sub>3</sub>	D <sub>1</sub>	$D_2$	L <sub>2</sub>	L	S <sub>D</sub>	n <sub>Sc</sub>
осо	Nm	Nm	1/min	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	Quantity
47	170	230	8400	10	32	39,5	31,2	7,5	70,5	47	5	110	24	6
63	320	420	6800	14	42	45	38	9	88	62,5	8	128	32	6
82	750	1050	5400	15	55	55	46,5	10,5	116	82	10	156,5	40	6
98	1350	1750	4600	19	65	60	55	12	140,5	98	11	175	47	6

						Max. Permissible Misalignment <sup>7)</sup>					
					ax	ial	ang	ular	radial		
Size	GwsB 6)	J <sub>SB</sub> <sup>6)</sup>	C <sub>Tdyn</sub> HD	C <sub>Tdyn</sub> HT	∆KaHD	∆KaHT	$\Delta K_wHD$	∆K <sub>w</sub> HT	$\Delta K_r HD$	∆K <sub>r</sub> HT	
осо	kg	10 <sup>-3</sup> kgm <sup>2</sup>	10 <sup>6</sup> Nm/rad	10 <sup>6</sup> Nm/rad	mm	mm	Degrees	Degrees	mm	mm	
47	1,6	0,71	0,084	0,089	0,9	0,5	2	1,4	0,3	0,2	
63	3,1	2,2	0,136	0,151	0,8	0,7	2	1,4	0,4	0,3	
82	6,7	8	0,309	0,360	1,4	0,6	2	1,4	0,5	0,4	
98	10,3	18	0,569	0,607	2	1	2	1,4	0,7	0,5	

<sup>1)</sup> 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<sub>kmax</sub> is limited to 1.75 multiples of T<sub>KN</sub>.

- 3) Pre-bore has free tolerance.
- 4) Maximum finished bore with keyways according to DIN 6885-1.
- 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.

To continue see next page

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08.2021

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#### **Explanations**

T <sub>KN</sub> HD	= Nom. transmissible torque with disc pack HD	H <sub>3</sub> D <sub>1</sub>	<ul><li>Width of the disc pack</li><li>Max. outer diameter</li></ul>	C <sub>Tdyn</sub> HT	<ul><li>= Dynamic torsional stiffness with disc pack HT</li></ul>
T <sub>KN</sub> HT	= Nom. transmissible torque with disc pack HT	D <sub>2</sub>	= Outer diameter hub	∆KaHD	<ul><li>Max. permissible axial misalignment with disc pack HD</li></ul>
n <sub>max</sub> d <sub>pre</sub>	<ul><li>= Max. rotational speed</li><li>= Diamater pre-bore</li></ul>	L <sub>2</sub> L	<ul><li>Hub flange thickness</li><li>Total length</li></ul>	∆KaHT	<ul><li>Max. permissible axial misalignment with disc pack HT</li></ul>
d <sub>1kmax</sub>	'	S <sub>D</sub>	<ul><li>Disassembly space</li><li>Quantity of screws</li></ul>	$\Delta K_wHD$	= Max. permissible angular misalignment with disc pack HD
d <sub>2kmax</sub>	= Max. bore diameter d <sub>2</sub> with keyway acc. to DIN 6885-1	Gw <sub>SB</sub> J <sub>SB</sub>	<ul><li>Weight at smallest bore diameter</li><li>Moment of inertia at smallest bore</li></ul>	∆K <sub>w</sub> HT	<ul><li>Max. permissible angular misalignment with disc pack HT</li></ul>
C <sub>1</sub>	<ul><li>Guided length in hub bore</li><li>Guided length in hub bore</li></ul>	C <sub>Tdyn</sub> HI	diameter. <b>D</b> = Dynamic torsional stiffness	$\Delta K_r HD$	<ul> <li>Max. permissible radial misalignment with disc pack HD</li> </ul>
E	= Distance between hubs		with disc pack HD	∆K <sub>r</sub> HT	<ul> <li>Max. permissible radial misalignment with disc pack HT</li> </ul>

#### Ordering example

Туре	Size	Disc pack	Bore diameter d <sub>1</sub>	Bore diameter d <sub>2</sub>		
TND OCO	98	HD	50	60		

Further information on RINGFEDER® TND OCO 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.



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