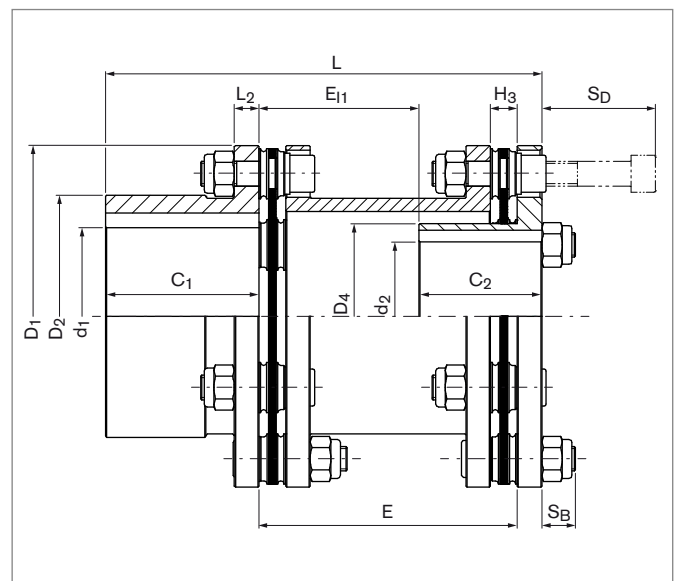
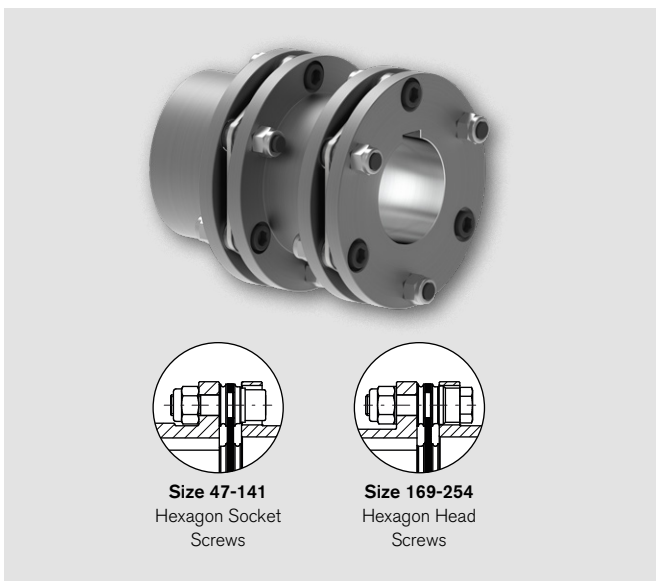


Steel Disc Couplings

RINGFEDER® TND HDV

Combination of Standard Hub and Inverted Hub, Double-Jointed, with Spacer, Shaft-Hub Connection by Keyway



| Size | T _{KNHD} ¹⁾ | T _{KNHT} ¹⁾ | n _{max} ²⁾ | d _{pre} ³⁾ | d _{1kmax} ⁴⁾ | d _{2kmax} ⁴⁾ | C ₁ /C ₂ | E ₁₁ | E ⁵⁾ | H ₃ | D ₁ | D ₂ | D ₄ | L ₂ | L | S _B | S _D | n _{Sc} |
|------|---------------------------------|---------------------------------|--------------------------------|--------------------------------|----------------------------------|----------------------------------|--------------------------------|-----------------|-----------------|----------------|----------------|----------------|----------------|----------------|-----|----------------|----------------|-----------------|
| HDV | Nm | Nm | 1/min | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | Quantity |
| 47 | 170 | 230 | 8400 | 10 | 32 | 25 | 39,5 | 25,5 | 60 | 7,5 | 70,5 | 47 | 37 | 5 | 105 | 11 | 24 | 6 |
| | | | | | | | | 65,5 | 100 | | | | | | 185 | | | |
| | | | | | | | | 105,5 | 140 | | | | | | 185 | | | |
| 63 | 320 | 420 | 6800 | 14 | 42 | 32 | 45 | 33 | 70 | 9 | 88 | 62,5 | 48 | 8 | 123 | 14 | 32 | 6 |
| | | | | | | | | 43 | 80 | | | | | | 133 | | | |
| | | | | | | | | 63 | 100 | | | | | | 153 | | | |
| | | | | | | | | 103 | 140 | | | | | | 193 | | | |
| 82 | 750 | 1050 | 5400 | 15 | 55 | 44 | 55 | 55 | 100 | 10,5 | 116 | 82 | 64 | 10 | 165 | 16 | 40 | 6 |
| | | | | | | | | 95 | 140 | | | | | | 205 | | | |
| | | | | | | | | 135 | 180 | | | | | | 245 | | | |
| 98 | 1350 | 1750 | 4600 | 19 | 65 | 50 | 60 | 51 | 100 | 12 | 140,5 | 98 | 77 | 11 | 171 | 19 | 47 | 6 |
| | | | | | | | | 91 | 140 | | | | | | 211 | | | |
| | | | | | | | | 131 | 180 | | | | | | 251 | | | |
| 118 | 2400 | 3000 | 3800 | 25 | 85 | 60 | 75 | 37 | 100 | 13 | 166,5 | 118 | 90,5 | 12 | 187 | 21 | 55 | 6 |
| | | | | | | | | 77 | 140 | | | | | | 227 | | | |
| | | | | | | | | 117 | 180 | | | | | | 267 | | | |
| 141 | 4000 | 5200 | 3400 | 30 | 95 | 75 | 90 | 64 | 140 | 15 | 198,5 | 141 | 114 | 14 | 244 | 23 | 64 | 6 |
| | | | | | | | | 104 | 180 | | | | | | 284 | | | |
| | | | | | | | | 31 | 140 | | | | | | 281 | | | |
| 169 | 6500 | 8500 | 3000 | 39 | 115 | 90 | 125 | 71 | 180 | 21 | 238 | 169 | 135 | 16 | 321 | 29 | 81 | 6 |
| | | | | | | | | 141 | 250 | | | | | | 391 | | | |

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Steel Disc Couplings RINGFEDER® TND HDV

| Size | T _{KN} HD ¹⁾ | T _{KN} HT ¹⁾ | n _{max} ²⁾ | d _{pre} ³⁾ | d _{1kmax} ⁴⁾ | d _{2kmax} ⁴⁾ | C ₁ /C ₂ | E _{I1} | E ⁵⁾ | H ₃ | D ₁ | D ₂ | D ₄ | L ₂ | L | S _B | S _D | n _{Sc} |
|------|----------------------------------|----------------------------------|--------------------------------|--------------------------------|----------------------------------|----------------------------------|--------------------------------|-----------------|-------------------|----------------|----------------|----------------|----------------|----------------|-------------------|----------------|----------------|-----------------|
| HDV | Nm | Nm | 1/min | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | mm | Quantity |
| 205 | 21000 | 26000 | 2500 | 59 | 140 | 115 | 160 | 62 112 | 200 250 | 28 | 295 | 205 | 170 | 22 | 382 432 | 32 | 112 | 8 |
| 254 | 36000 | 44000 | 2100 | 79 | 175 | 120 | 200 | 50 76 126 | 224 250 300 | 32,5 | 345 | 254 | 180 | 26 | 450 476 526 | 40 | 133 | 8 |

| Size | E ⁵⁾ | G _{WSB} ⁶⁾ | J _{SB} ⁶⁾ | C _{Tdyn} HD | C _{Tdyn} HT | Max. Permissible Misalignment ⁷⁾ | | | | | |
|------|-----------------|--------------------------------|-----------------------------------|------------------------|------------------------|---|--------------------|--------------------|--------------------|--------------------|--------------------|
| | | | | | | axial | | angular | | radial | |
| HDV | mm | kg | 10 ⁻⁹ kgm ² | 10 ⁶ Nm/rad | 10 ⁶ Nm/rad | ΔK _a HD | ΔK _a HT | ΔK _w HD | ΔK _w HT | ΔK _r HD | ΔK _r HT |
| | | | | | | mm | mm | Degrees | Degrees | mm | mm |
| 47 | 60 | 1,4 | 0,69 | 0,071 | 0,075 | | | | | 0,8 | 0,6 |
| | 100 | 1,6 | 0,75 | 0,059 | 0,062 | 1,0 | 0,6 | 2 | 1,4 | 1,5 | 1,1 |
| | 140 | 1,7 | 0,8 | 0,051 | 0,053 | | | | | 2,2 | 1,5 |
| 63 | 70 | 2,9 | 2,33 | 0,123 | 0,134 | | | | | 1 | 0,7 |
| | 80 | 2,9 | 2,37 | 0,123 | 0,134 | | | | | 1,1 | 0,8 |
| | 100 | 3 | 2,46 | 0,116 | 0,127 | 1,0 | 0,8 | 2 | 1,4 | 1,5 | 1,1 |
| | 140 | 3,2 | 2,63 | 0,105 | 0,114 | | | | | 2,1 | 1,6 |
| 82 | 100 | 5,4 | 8,83 | 0,271 | 0,308 | | | | | 1,4 | 1,1 |
| | 140 | 6,7 | 9,23 | 0,246 | 0,277 | 1,4 | 0,8 | 2 | 1,4 | 2,1 | 1,5 |
| | 180 | 7 | 9,65 | 0,226 | 0,251 | | | | | 2,8 | 2,1 |
| 98 | 100 | 9,9 | 20,35 | 0,513 | 0,543 | | | | | 1,5 | 1 |
| | 140 | 10,4 | 21,21 | 0,469 | 0,494 | 2,0 | 1,2 | 2 | 1,4 | 2,1 | 1,5 |
| | 180 | 10,8 | 22,07 | 0,433 | 0,454 | | | | | 2,8 | 2 |
| 118 | 100 | 16 | 46,28 | 0,914 | 0,948 | | | | | 1,4 | 1 |
| | 140 | 16,7 | 48,34 | 0,855 | 0,884 | 2,4 | 1,6 | 2 | 1,4 | 2,1 | 1,5 |
| | 180 | 17,3 | 50,39 | 0,803 | 0,829 | | | | | 2,8 | 2 |
| 141 | 140 | 26,4 | 98,01 | 1,306 | 1,362 | 2,8 | 1,6 | 2 | 1,4 | 2 | 1,5 |
| | 180 | 28,5 | 105,33 | 1,229 | 1,279 | | | | | 2,7 | 2 |
| 169 | 140 | 50,7 | 289,79 | 2,467 | 3,035 | | | | | 2 | 1,4 |
| | 180 | 52,3 | 299,74 | 2,375 | 2,898 | 3 | 2,4 | 2 | 1,4 | 2,6 | 1,9 |
| | 250 | 55 | 317,15 | 2,231 | 2,686 | | | | | 3,8 | 2,7 |
| 205 | 200 | 105 | 951,03 | 8,995 | 9,142 | 2,2 | 1,2 | 1 | 0,8 | 1,4 | 1,2 |
| | 250 | 107,8 | 975,71 | 8,265 | 8,389 | | | | | 1,8 | 1,5 |
| 254 | 224 | 169,2 | 2131,73 | 14,975 | 15,19 | | | | | 1,6 | 1,3 |
| | 250 | 171,2 | 2152,56 | 14,302 | 14,497 | 2,2 | 1,6 | 1 | 0,8 | 1,8 | 1,5 |
| | 300 | 175 | 2192,61 | 13,163 | 13,328 | | | | | 2,2 | 1,8 |

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.
 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.

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Steel Disc Couplings RINGFEDER® TND HDV

Explanations

| | | |
|---|---|---|
| T_{KNHD} = Nom. transmissible torque with disc pack HD | H₃ = Width of the disc pack | C_{TdynHD} = Dynamic torsional stiffness with disc pack HD |
| T_{KNHT} = Nom. transmissible torque with disc pack HT | D₁ = Max. outer diameter | C_{TdynHT} = Dynamic torsional stiffness with disc pack HT |
| n_{max} = Max. rotational speed | D₂ = Outer diameter hub | ΔK_{aHD} = Max. permissible axial misalignment with disc pack HD |
| d_{pre} = Diameter pre-bore | D₄ = Outer diameter of the inverted hub | ΔK_{aHT} = Max. permissible axial misalignment with disc pack HT |
| d_{1kmax} = Max. bore diameter d ₁ with keyway acc. to DIN 6885-1 | L₂ = Hub flange thickness | ΔK_{wHD} = Max. permissible angular misalignment with disc pack HD |
| d_{2kmax} = Max. bore diameter d ₂ with keyway acc. to DIN 6885-1 | L = Total length | ΔK_{wHT} = Max. permissible angular misalignment with disc pack HT |
| C₁ = Guided length in hub bore | S_B = Protruding of the screw | ΔK_{rHD} = Max. permissible radial misalignment with disc pack HD |
| C₂ = Guided length in hub bore | S_D = Disassembly space | ΔK_{rHT} = Max. permissible radial misalignment with disc pack HT |
| E₁₁ = Distance between hubs | n_{sc} = Quantity of screws | |
| E = Distance between hubs | G_{WSB} = Weight at smallest bore diameter | |
| | J_{SB} = Moment of inertia at smallest bore diameter | |

Ordering example

| Type | Size | Disc pack | Distance between hubs E | Bore diameter d ₁ | Bore diameter d ₂ |
|---------|------|-----------|-------------------------|------------------------------|------------------------------|
| TND HDV | 118 | HD | 140 | 85 | 60 |

Further information on
RINGFEDER® TND HDV
 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.