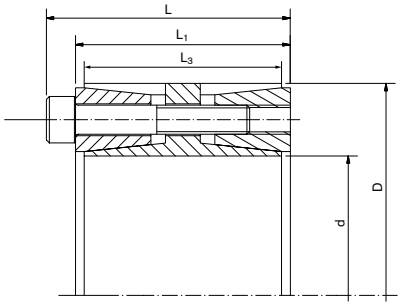
# Locking Assemblies
# RINGFEDER® RfN 7015.1
## Reduced surface pressures

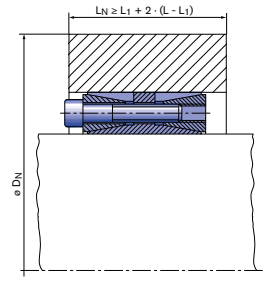


**self-centering** | **without axial displacement** | **with low surface pressure**

Dimensions




Location




| Locking Assembly dimensions | | | | | | Transmissible torques or axial forces | | Surface pressure | | Locking screws | | | | $D_{N\,min}$ at $R_{p0,2}$ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Shaft | Hub | | | | | 200 | 300 | 400 | |
| d | x | D | L | $L_1$ | $L_3$ | T | $F_{ax}$ | $p_W$ | $p_N$ | $n_{Sc}$ | $D_G$ | $T_A$ | Gw | [N/mm²] | | | $T_{max}$ |
| mm | | | mm | | | Nm | kN | N/mm² | | | | Nm | kg | mm | | | Nm |
| 100 | x | 145 | 75 | 65 | 60 | 6575 | 132 | 91 | 63 | 9 | M10 x 55 | 83 | 4,1 | 184 | 171 | 166 | 7736 |
| 110 | x | 155 | 75 | 65 | 60 | 8037 | 146 | 92 | 65 | 10 | M10 x 55 | 83 | 4,4 | 199 | 184 | 178 | 9455 |
| 120 | x | 165 | 75 | 65 | 60 | 10521 | 175 | 101 | 74 | 12 | M10 x 55 | 83 | 4,8 | 220 | 201 | 193 | 12377 |
| 130 | x | 180 | 84 | 74 | 68 | 14247 | 219 | 101 | 73 | 15 | M10 x 60 | 83 | 6,5 | 240 | 219 | 211 | 16761 |
| 140 | x | 190 | 84 | 74 | 68 | 15343 | 219 | 94 | 69 | 15 | M10 x 60 | 83 | 7 | 248 | 229 | 221 | 18050 |
| 150 | x | 200 | 84 | 74 | 68 | 17534 | 234 | 94 | 70 | 16 | M10 x 60 | 83 | 7,4 | 263 | 242 | 233 | 20629 |
| 160 | x | 210 | 84 | 74 | 68 | 21041 | 263 | 99 | 75 | 18 | M10 x 60 | 83 | 7,8 | 282 | 257 | 247 | 24754 |
| 170 | x | 225 | 93 | 81 | 75 | 27352 | 322 | 105 | 80 | 15 | M12 x 65 | 145 | 10 | 309 | 279 | 267 | 32179 |
| 180 | x | 235 | 93 | 81 | 75 | 30892 | 343 | 106 | 81 | 16 | M12 x 65 | 145 | 10,6 | 325 | 293 | 280 | 36344 |
| 190 | x | 250 | 106 | 94 | 88 | 36684 | 386 | 96 | 73 | 18 | M12 x 75 | 145 | 14,3 | 355 | 306 | 294 | 43158 |
| 200 | x | 260 | 106 | 94 | 88 | 42906 | 429 | 101 | 78 | 20 | M12 x 75 | 145 | 15 | 358 | 323 | 309 | 50477 |
| 220 | x | 285 | 116 | 104 | 98 | 49556 | 451 | 89 | 69 | 21 | M12 x 80 | 145 | 19,8 | 376 | 345 | 332 | 58301 |
| 240 | x | 305 | 116 | 104 | 98 | 61784 | 515 | 93 | 73 | 24 | M12 x 80 | 145 | 21,4 | 412 | 375 | 359 | 72688 |
| 260 | x | 325 | 116 | 104 | 98 | 75300 | 579 | 97 | 77 | 27 | M12 x 80 | 145 | 23 | 449 | 405 | 387 | 88588 |
| 280 | x | 355 | 140 | 126 | 120 | 115034 | 822 | 106 | 84 | 28 | M14 x 100 | 230 | 35,2 | 512 | 454 | 431 | 135334 |
| 300 | x | 375 | 140 | 126 | 120 | 123250 | 822 | 99 | 80 | 28 | M14 x 100 | 230 | 37,4 | 527 | 472 | 450 | 145001 |
| 320 | x | 405 | 158 | 142 | 135 | 179962 | 1125 | 110 | 87 | 28 | M16 x 110 | 355 | 51,3 | 593 | 522 | 495 | 211720 |
| 340 | x | 425 | 158 | 142 | 135 | 191209 | 1125 | 103 | 83 | 28 | M16 x 110 | 355 | 54,1 | 607 | 540 | 514 | 224952 |
| 360 | x | 455 | 183 | 165 | 158 | 209622 | 1165 | 84 | 67 | 24 | M18 x 140 | 485 | 75,4 | 598 | 550 | 529 | 246615 |
| 380 | x | 475 | 183 | 165 | 158 | 248927 | 1310 | 90 | 72 | 27 | M18 x 140 | 485 | 79 | 642 | 584 | 559 | 292855 |
| 400 | x | 495 | 183 | 165 | 158 | 310552 | 1553 | 101 | 82 | 32 | M18 x 140 | 485 | 82,8 | 706 | 629 | 598 | 365355 |
| 420 | x | 515 | 183 | 165 | 158 | 326079 | 1553 | 96 | 78 | 32 | M18 x 140 | 485 | 86,5 | 721 | 647 | 617 | 383623 |
| 440 | x | 545 | 200 | 180 | 172 | 372775 | 1694 | 91 | 74 | 27 | M20 x 140 | 690 | 110 | 742 | 673 | 644 | 438558 |
| 460 | x | 565 | 200 | 180 | 172 | 389719 | 1694 | 87 | 71 | 27 | M20 x 140 | 690 | 114 | 759 | 691 | 663 | 458493 |
| 480 | x | 585 | 200 | 180 | 172 | 451848 | 1883 | 93 | 76 | 30 | M20 x 140 | 690 | 119 | 807 | 728 | 696 | 531586 |
| 500 | x | 605 | 200 | 180 | 172 | 470675 | 1883 | 89 | 74 | 30 | M20 x 140 | 690 | 123 | 824 | 747 | 715 | 553735 |

**To continue see next page**

# Locking Assemblies RINGFEDER® RfN 7015.1

| Locking Assembly dimensions | | | | | | Transmissible torques or axial forces | | Surface pressure | | Locking screws | | | | $D_{N\,min}$ at $Rp_{0,2}$ | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | Shaft | Hub | | | | | 200 | 300 | 400 | |
| d | x | D | L | $L_1$ | $L_3$ | T | $F_{ax}$ | $p_W$ | $p_N$ | $n_{Sc}$ | $D_G$ | $T_A$ | Gw | [N/mm²] | | | $T_{max}$ |
| mm | | | mm | | | Nm | kN | N/mm² | | | | Nm | kg | mm | | | Nm |
| 520 | x | 630 | 220 | 200 | 190 | 522135 | 2008 | 80 | 66 | 32 | M20 x 150 | 690 | 148 | 827 | 760 | 732 | 614277 |
| 540 | x | 650 | 220 | 200 | 190 | 542218 | 2008 | 77 | 64 | 32 | M20 x 150 | 690 | 154 | 845 | 779 | 751 | 637903 |
| 560 | x | 670 | 220 | 200 | 190 | 632587 | 2259 | 84 | 70 | 36 | M20 x 150 | 690 | 160 | 897 | 818 | 785 | 744220 |
| 580 | x | 690 | 220 | 200 | 190 | 655180 | 2259 | 81 | 68 | 36 | M20 x 150 | 690 | 165 | 914 | 837 | 805 | 770800 |
| 600 | x | 710 | 220 | 200 | 190 | 677772 | 2259 | 78 | 66 | 36 | M20 x 150 | 690 | 170 | 932 | 856 | 824 | 797379 |
| 620 | x | 730 | 220 | 200 | 190 | 700364 | 2259 | 76 | 64 | 36 | M20 x 150 | 690 | 175 | 949 | 875 | 844 | 823958 |
| 640 | x | 750 | 220 | 200 | 190 | 722957 | 2259 | 73 | 63 | 36 | M20 x 150 | 690 | 180 | 967 | 894 | 863 | 850537 |
| 660 | x | 770 | 220 | 200 | 190 | 745549 | 2259 | 71 | 61 | 36 | M20 x 150 | 690 | 194 | 985 | 914 | 882 | 877117 |
| 680 | x | 790 | 220 | 200 | 190 | 768142 | 2259 | 69 | 59 | 36 | M20 x 150 | 690 | 199 | 1003 | 933 | 902 | 903696 |
| 700 | x | 810 | 220 | 200 | 190 | 790734 | 2259 | 67 | 58 | 36 | M20 x 150 | 690 | 205 | 1021 | 952 | 922 | 930275 |
| 720 | x | 830 | 220 | 200 | 190 | 813326 | 2259 | 65 | 57 | 36 | M20 x 150 | 690 | 210 | 1039 | 971 | 941 | 956855 |
| 740 | x | 850 | 220 | 200 | 190 | 835919 | 2259 | 64 | 55 | 36 | M20 x 150 | 690 | 216 | 1058 | 991 | 961 | 983434 |
| 760 | x | 870 | 220 | 200 | 190 | 858511 | 2259 | 62 | 54 | 36 | M20 x 150 | 690 | 221 | 1076 | 1010 | 980 | 1010013 |
| 780 | x | 890 | 220 | 200 | 190 | 881104 | 2259 | 60 | 53 | 36 | M20 x 150 | 690 | 227 | 1095 | 1029 | 1000 | 1036593 |
| 800 | x | 910 | 220 | 200 | 190 | 903696 | 2259 | 59 | 52 | 36 | M20 x 150 | 690 | 232 | 1114 | 1049 | 1020 | 1063172 |

**More sizes on request**

## Explanation

- **d** = Inner diameter
- **D** = Outer diameter
- **L** = Overall length
- **$L_1$** = Overall length (without screws)
- **$L_3$** = Width of ring
- **T** = Transmissible torque at given $T_A$
- **$F_{ax}$** = Transmissible axial force
- **$p_W$** = Surface pressure on shaft at given $T_A$
- **$p_N$** = Surface pressure on hub at given $T_A$
- **$n_{Sc}$** = Quantity of screws
- **$D_G$** = Thread
- **$T_A$** = Tightening torque of the clamping screws
- **Gw** = Weight
- **$D_N$ min** = Min. hub outer diam. depending of the given hub yield point Rp0,2
- **$T_{max}$** = Max. transmissible torque

## Ordering example

| Locking assembly | d | D |
|---|---|---|
| RfN 7015.1 | 150 | 200 |

Further information on
**RINGFEDER® RfN 7015.1**
on **www.ringfeder.com**

**Technical Information**

- The values for T, $F_{ax}$, $p_W$ and $p_N$ apply to Locking Assemblies installed in oiled condition.
- Surface finishes: Shaft and hub bores $R_a \leq 3{,}2$ µm
- Tolerances: Shaft: h8 · Hub: H8
- Max. two Locking Assemblies can be used in series, the transmissible torques and axial forces are added.
- A reduction of the contact pressures and the transmission values by reducing the tightening torque of the screws is possible. Please contact our specialists for assistance.

**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.

RINGFEDER POWER TRANSMISSION