

Ameriloc® Internal Locking Devices



Internal Ameridrives Locking Assemblies



MODEL 3003

Locking Assembly, consisting of internally slotted bush and externally slotted ring. These are clamped together by locking screws, thus mating the shaft with the bore of the hub. High degree of concentricity. Removal by means of jacking screws.



MODEL 3006

When compared with the model 3003, the difference is the larger flange of the internal bush, preventing axial movements of shaft and hub.



MODEL 3012, MODEL 3015

Higher torque transmission values than for models 3003 and 3006. Additionally, collar on the inner face of the external bush results in shorter fitting and removal time.

MODEL RB

Especially for conveyor pulleys (with low surface pressure).



MODEL 3020

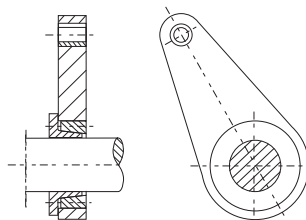
Two tapered rings are locked together by screws forcing one slotted internal and one slotted external ring against the respective shaft and hub surfaces. Machining tolerances are loosened to allow for greater range of fit. Removal is simple as the cone angles prevent binding. For the transmission of higher torque values several locking assemblies can be used in series.

Typical Applications

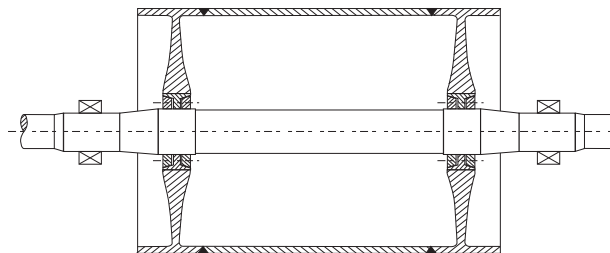
Ameridrives internal locking devices are offered in a wide range of sizes for use on all types of industrial applications including:

- Test Stands
- Printing Presses
- Ski Lifts
- Mining Crushers
- Meat Processing
- Drilling
- Milling
- Moving Sidewalks
- Industrial Sewing
- Wind Turbines
- Winches
- Compressors

Application Samples

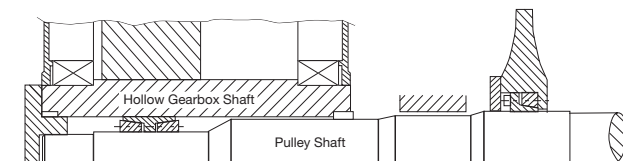


Lever mounting in every desired position using locking assembly 3006



Mounting of a belt conveyor pulley using locking assemblies 3012, 3015, RB

Important: Shaft deflections should not exceed 1/2500 of the bearing center distance



Fastening of a shaft mounted gearbox using Model 3012

Model No.	Range	Torque Range	Page
3003 3003 Hub	.78" Shaft x 1.85" Bore - 15.74" Shaft x 19.48" Bore	221 ft. lbs. - 291,706 ft. lbs.	5,6 7,8
3006 3006 Hub	.78" Shaft x 1.85" Bore - 15.74" Shaft x 19.48" Bore	207 ft. lbs. - 261,835 ft. lbs.	9,10 11,12
3003 & 3006	Installation and Removal		13
3012 3012 Hub	.98" Shaft x 1.96" Bore - 20.47" Shaft x 24.21" Bore	479 ft. lbs. - 1,025,211 ft. lbs.	14,15 16,17
3015 3015 Hub	2.75" Shaft x 4.33" Bore - 23.62" Shaft x 27.36" Bore	5,274 ft. lbs. - 914,577 ft. lbs.	18,19 20,21
3015.1 3015.1 Hub	2.75" Shaft x 4.33" Bore - 23.62" Shaft x 27.36" Bore	221 ft. lbs. - 291,706 ft. lbs.	22,23 24,25
3012, 3015 & 3015.1	Installation and Removal		26
3020 3020 Hub	.78" Shaft x 1.85" Bore - 19.68" Shaft x 23.81" Bore	236 ft. lbs. - 494,167 ft. lbs.	27,28 29,30
3020A 3020A Hub	.78" Shaft x 1.85" Bore - 19.68" Shaft x 23.81" Bore	199 ft. lbs. - 560,000 ft. lbs.	31,32 33,34
3020S1 3020S1 Hub	.78" Shaft x 1.85" Bore - 3.74" Shaft x 5.31" Bore	80 ft. lbs. - 2,331 ft. lbs.	35 37
3020S2 3020S2 Hub	.78" Shaft x 1.85" Bore - 3.74" Shaft x 5.31" Bore	199 ft. lbs. - 5,827 ft. lbs.	36 37
3020, 3020A, 3021S1 & 3021S2	Installation and Removal		38
RB RB Hub	3.94" Shaft x 5.71" Bore - 24.41" Shaft x 28.74" Bore	5,863 ft. lbs. - 576,183 ft. lbs.	39,40 41,42
RB	Installation and Removal		43

Internal Locking Device Engineering Data

Surface Finish:

Recommended surface finish for shafts and hubs to be used is at maximum 63 RMS or 16µm.

Hub OD Tolerances

Series 3003, 3006, 3012, 3015 & RB

Basic Shaft Size	.394 to .709	.710 to 1.181	1.182 to 1.968	1.969 to 3.149	3.150 to 4.724	4.725 to 7.086	7.087 to 9.842	9.843 to 12.401	12.402 to 15.748	15.749 to 19.685	19.686 to 24.803
Shaft OD	-0.000 to -0.011	-0.000 to -0.013	-0.000 to -0.015	-0.000 to -0.018	-0.000 to -0.021	-0.000 to -0.025	-0.000 to -0.028	-0.000 to -0.031	-0.000 to -0.035	-0.000 to -0.038	+0.000 to -0.043
Bore ID	+0.0011 to -0.0000	+0.0013 to -0.0000	+0.0015 to -0.0000	+0.0018 to -0.0000	+0.0021 to -0.0000	+0.0025 to -0.0000	+0.0028 to -0.0000	+0.0031 to -0.0000	+0.0035 to -0.0000	+0.0038 to -0.0000	+0.0043 to -0.0000

Series 3020

Basic Shaft Size	.394 to .709	.710 to 1.181	1.182 to 1.968	1.969 to 3.149	3.150 to 4.724	4.725 to 7.086	7.087 to 9.842	9.843 to 12.401	12.402 to 15.748	15.749 to 19.685	19.686 to 24.803
Shaft OD	-0.000 to -0.043	-0.000 to -0.051	-0.000 to -0.063	-0.000 to -0.075	-0.000 to -0.086	-0.000 to -0.098	-0.000 to -0.114	-0.000 to -0.126	-0.000 to -0.141	-0.000 to -0.157	+0.0173 to -0.0000
Bore ID	+0.0043 to -0.0000	+0.0051 to -0.0000	+0.0063 to -0.0000	+0.0075 to -0.0000	+0.0086 to -0.0000	+0.0098 to -0.0000	+0.0114 to -0.0000	+0.0126 to -0.0000	+0.0141 to -0.0000	+0.0157 to -0.0000	+0.0000 to -0.0173

Metric Tolerances

Series 3003, 3006, 3012, 3015 & RB

Shaft OD: h8
Bore ID: H8

Series 3020

Shaft OD: h11
Bore ID: H11

Values of Various Materials

.2% Yield Stress PSI	21,756	26,107	29,008	31,909	36,260	39,160	43,512	50,764	58,016
Material	GG-22	GG-26 GS-38 V2A-S A-216 4340	GG-30 V2A-E V4A-S GTS-35 CLASS45 32510	GS-45 ST35 ST37-3 V4A-E	GS-52 GGG-38 ST42-3 C22 1022	GGG-42 ST50-2 C35 AlCuNiC 1035	GS-60 ST60-2 ST55 GTS-45 40010	GS-62 GGG-50 ST70-2 C45 1045 80-55-06	GS-70 GGG-60 C60 1060

Torque:

For proper selection of hydraulic locking devices, nominal torque and peak torque must be established. Nominal drive torque can be calculated as follows:

$$*T_n \text{ (Torque Nominal) ft.lbs.} = \frac{5252 \times \text{HP}}{\text{rpm}}$$

$$\text{(Nm)} = \frac{7097 \times \text{HP}}{\text{rpm}}$$

$$*T_p \text{ (Torque Peak) ft.lbs.} = T_n \times \text{Safety Factor}$$

Always select a unit where M_t is greater than T_p .

Combined Torque & Axial Load:

If an axial load is present, the resulting torque must be calculated as followed:

$$M_{\text{red}} = \sqrt{M_t^2 - (F_{\text{ax}} \cdot \frac{d_w}{2})^2}$$

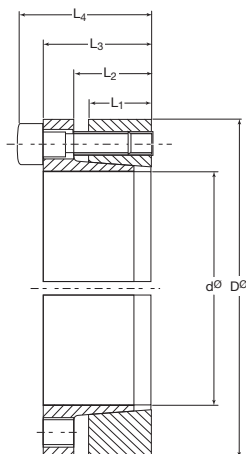
M_t = maximum transmissible torque

M_{red} = reduced maximum torque with simultaneous axial force

F_{ax} = maximum transmissible axial force

d_w = shaft diameter

3003 Series General Purpose



M_t = Transmissible torque per locking assembly
M_A = Tightening torque per screw
P_{ax} = Transmission axial force
P_w P_N = Contact pressure between locking assembly
 Shaft (p_w)-Hub (p_N)
L₂-L₄ are for unlocked assemblies

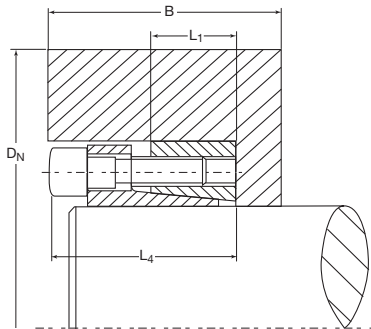
Dimensions

Part No.	d x D in. (mm)		M _t lb. ft. (Nm)	P _{ax} lb. ft. (kN)	L ₁ in. (mm)	L ₂ in. (mm)	L ₃ in. (mm)	L ₄ in. (mm)	Pieces	S	M _A in. lbs. (Nm)	P _w lb. in. ² (N/mm ²)	P _N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
3003/ 20/47	.7874/1.7861 (20)	x	1.8519/1.8504 (47)	221 (300)	6,744 (30)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	5	M 6 x 20	124 (14)	34,083 (235)	14,504 (100)	0.6 (0.25)
3003/ 22/47	.8661/1.8648 (22)	x	1.8519/1.8504 (47)	243 (330)	6,744 (30)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	5	M 6 x 20	124 (14)	31,183 (215)	14,504 (100)	0.6 (0.25)
3003/ 24/50	.9449/1.9436 (24)	x	1.9700/1.9685 (50)	266 (360)	6,744 (30)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	5	M 6 x 20	124 (14)	28,282 (195)	13,779 (95)	0.6 (0.27)
3003/ 25/50	.9843/1.9830 (25)	x	1.9700/1.9685 (50)	332 (450)	8,093 (36)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	6	M 6 x 20	124 (14)	32,633 (225)	15,954 (110)	0.6 (0.27)
3003/ 28/55	1.1024/1.1011 (28)	x	2.1672/2.1654 (55)	369 (500)	8,093 (36)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	6	M 6 x 20	124 (14)	29,007 (200)	14,503 (100)	0.7 (0.32)
3003/ 30/55	1.1811/1.1798 (30)	x	2.1672/2.1654 (55)	398 (540)	8,093 (36)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	6	M 6 x 20	124 (14)	27,557 (190)	14,503 (100)	0.7 (0.31)
3003/ 32/60	1.2598/1.2583 (32)	x	2.3640/2.3622 (60)	561 (760)	10,791 (48)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	8	M 6 x 20	124 (14)	33,358 (230)	18,129 (125)	0.8 (0.37)
3003/ 35/60	1.3780/1.3764 (35)	x	2.3640/2.3622 (60)	612 (830)	10,791 (48)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	8	M 6 x 20	124 (14)	31,183 (215)	18,129 (125)	0.7 (0.34)
3003/ 38/65	1.4961/1.4954 (38)	x	2.5609/2.5591 (65)	671 (910)	10,791 (48)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	8	M 6 x 20	124 (14)	29,007 (200)	16,679 (115)	1.0 (0.44)
3003/ 40/65	1.5748/1.5733 (40)	x	2.5609/2.5591 (65)	701 (950)	10,791 (48)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	8	M 6 x 20	124 (14)	26,831 (185)	16,679 (115)	0.9 (0.40)
3003/ 45/75	1.7717/1.7701 (45)	x	2.9546/2.9528 (75)	1,291 (1750)	17,310 (77)	0.79 (20)	0.98 (25)	1.34 (34)	1.65 (42)	8	M 8 x 25	310 (35)	33,358 (230)	19,580 (135)	1.4 (0.63)
3003/ 50/80	1.9685/1.9670 (50)	x	3.1514/3.1496 (80)	1,416 (1920)	17,310 (77)	0.79 (20)	0.98 (25)	1.34 (34)	1.65 (42)	8	M 8 x 25	310 (35)	29,732 (205)	18,854 (130)	1.5 (0.70)
3003/ 55/85	2.1654/2.1635 (55)	x	3.3486/3.3465 (85)	1,770 (2400)	19,783 (88)	0.79 (20)	0.98 (25)	1.34 (34)	1.65 (42)	8	M 8 x 25	310 (35)	30,457 (210)	20,305 (140)	1.7 (0.78)
3003/ 60/90	2.3622/2.3604 (60)	x	3.5454/3.5433 (90)	1,950 (2650)	19,783 (88)	0.79 (20)	0.98 (25)	1.34 (34)	1.65 (42)	8	M 8 x 25	310 (35)	28,282 (195)	18,854 (130)	1.8 (0.82)
3003/ 65/95	2.5591/2.5572 (65)	x	3.7423/3.7402 (95)	2,360 (3200)	22,256 (99)	0.79 (20)	0.98 (25)	1.34 (34)	1.65 (42)	9	M 8 x 25	310 (35)	29,732 (205)	20,305 (140)	1.9 (0.88)
3003/ 70/110	2.7559/2.7541 (70)	x	4.3328/4.3307 (110)	3,614 (4900)	31,473 (140)	0.95 (24)	1.18 (30)	1.65 (42)	2.05 (52)	8	M 10 x 30	611 (69)	31,908 (220)	20,305 (140)	3.5 (1.60)
3003/ 75/115	2.9528/2.9509 (75)	x	4.5297/4.5276 (115)	3,872 (5250)	31,473 (140)	0.95 (24)	1.18 (30)	1.65 (42)	2.05 (52)	8	M 10 x 30	611 (69)	29,732 (205)	19,580 (135)	3.7 (1.70)
3003/ 80/120	3.1496/3.1478 (80)	x	4.7265/4.7244 (120)	4,130 (5600)	31,473 (140)	0.95 (24)	1.18 (30)	1.65 (42)	2.05 (52)	8	M 10 x 30	611 (69)	28,282 (195)	18,854 (130)	4.0 (1.80)
3003/ 85/125	3.3465/3.3443 (85)	x	4.9237/4.9213 (125)	4,923 (6675)	35,295 (157)	0.95 (24)	1.18 (30)	1.65 (42)	2.05 (52)	9	M 10 x 30	611 (69)	29,732 (205)	20,305 (140)	4.2 (1.90)
3003/ 90/130	3.5412/3.5424 (90)	x	5.1206/5.1181 (130)	5,237 (7100)	35,295 (158)	0.95 (24)	1.18 (30)	1.65 (42)	2.05 (52)	9	M 10 x 30	611 (69)	28,282 (195)	19,580 (135)	4.4 (2.00)
3003/ 95/135	3.7402/3.7380 (95)	x	5.3174/5.3150 (135)	6,122 (8300)	39,342 (175)	0.95 (24)	1.18 (30)	1.65 (42)	2.05 (52)	10	M 10 x 30	611 (69)	29,732 (205)	21,030 (145)	4.6 (2.10)
3003/ 100/145	3.9370/3.9349 (100)	x	5.7111/5.7087 (145)	7,523 (10200)	45,861 (204)	1.02 (26)	1.26 (32)	1.81 (46)	2.28 (58)	9	M 12 x 35	1,062 (120)	30,457 (210)	21,030 (145)	6.2 (2.80)

3003 Series General Purpose

Dimensions (continued)

Part No.	d x D in. (mm)		Mt lb. ft. (Nm)	Pax lb. ft. (kN)	L1 in. (mm)	L2 in. (mm)	L3 in. (mm)	L4 in. (mm)	Pieces	S	M _A in. lbs. (Nm)	P _w lb. in. ² (N/mm ²)	P _N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
3003/ 110/155	4.3307/4.3286 (110)	x	6.1048/6.1024 (155)	8,298 (11250)	46,086 (205)	1.02 (26)	1.26 (32)	1.81 (46)	2.28 (58)	9	M 12 x 35	1,062 (120)	27,557 (190)	19,580 (135)	6.6 (3.00)
3003/ 120/165	4.7223/4.7235 (120)	x	6.4985/6.4961 (165)	10,178 (13800)	51,706 (230)	1.02 (26)	1.26 (32)	1.81 (46)	2.28 (58)	9	M 12 x 35	1,062 (120)	28,282 (195)	20,305 (140)	7.1 (3.20)
3003/ 130/180	5.1181/5.1156 (130)	x	7.0891/7.0866 (180)	14,677 (19900)	68,792 (306)	1.34 (34)	1.58 (40)	2.24 (57)	2.80 (71)	9	M 14 x 40	1,682 (190)	26,831 (185)	19,580 (135)	10.6 (4.80)
3003/ 140/190	5.5118/5.5093 (140)	x	7.4831/7.4803 (190)	16,263 (22050)	70,815 (315)	1.34 (34)	1.58 (40)	2.24 (57)	2.80 (71)	9	M 14 x 40	1,682 (190)	25,382 (175)	18,854 (130)	11.2 (5.10)
3003/ 150/200	5.9055/5.9030 (150)	x	7.8769/7.8740 (200)	19,361 (26250)	74,187 (330)	1.34 (34)	1.58 (40)	2.24 (57)	2.80 (71)	10	M 14 x 40	1,682 (190)	26,106 (180)	20,305 (140)	11.9 (5.40)
3003/ 160/210	6.2992/6.2967 (160)	x	8.2706/8.2677 (210)	22,717 (30800)	86,551 (385)	1.34 (34)	1.58 (40)	2.24 (57)	2.80 (71)	12	M 14 x 40	1,682 (190)	27,557 (190)	21,030 (145)	12.6 (5.70)
3003/ 170/225	6.6929/6.6904 (170)	x	8.8611/8.8583 (225)	26,331 (35700)	94,420 (420)	1.73 (44)	1.97 (50)	2.64 (67)	3.19 (81)	12	M 14 x 40	1,682 (190)	21,755 (150)	16,679 (115)	17.4 (7.90)
3003/ 180/235	7.0866/7.0841 (180)	x	9.2548/9.2520 (235)	27,880 (37800)	94,420 (420)	1.73 (44)	1.97 (50)	2.64 (67)	3.19 (81)	12	M 14 x 40	1,682 (190)	20,305 (140)	16,679 (115)	18.5 (8.40)
3003/ 190/250	7.4803/7.4775 (190)	x	9.8454/9.8425 (250)	36,804 (49900)	118,025 (525)	1.73 (44)	1.97 (50)	2.64 (67)	3.27 (83)	12	M 16 x 50	2,611 (295)	24,656 (170)	18,854 (130)	20.9 (9.50)
3003/ 200/260	7.8740/7.8712 (200)	x	10.2394/10.2362 (260)	38,722 (52500)	118,025 (525)	1.73 (44)	1.97 (50)	2.64 (67)	3.27 (83)	12	M 16 x 50	2,611 (295)	23,206 (160)	17,404 (120)	22.9 (10.40)
3003/ 220/285	8.6614/8.6586 (220)	x	11.2237/11.2205 (285)	46,983 (63700)	130,164 (579)	1.97 (50)	2.21 (56)	2.95 (75)	3.58 (91)	12	M 16 x 50	2,611 (295)	20,305 (140)	15,954 (110)	30.9 (14.00)
3003/ 240/305	9.4488/9.4460 (240)	x	12.0111/12.0079 (305)	64,168 (87000)	162,986 (725)	1.97 (50)	2.21 (56)	2.95 (75)	3.58 (91)	15	M 16 x 50	2,611 (295)	23,206 (160)	18,129 (125)	33.5 (15.20)
3003/ 260/325	10.2362/10.2330 (260)	x	12.7988/12.7953 (325)	83,344 (113000)	195,359 (869)	1.97 (50)	2.21 (56)	2.95 (75)	3.58 (91)	18	M 16 x 50	2,611 (295)	26,106 (180)	20,305 (140)	35.7 (16.20)
3003/ 280/355	11.0236/11.0204 (280)	x	13.9799/13.9764 (355)	96,989 (131500)	211,096 (939)	2.36 (60)	2.60 (66)	3.43 (87)	4.13 (105)	16	M 18 x 60	3,585 (405)	21,755 (150)	17,404 (120)	50.5 (22.90)
3003/ 300/375	11.8110/11.8078 (300)	x	14.7673/14.7638 (375)	116,903 (158500)	238,297 (1060)	2.36 (60)	2.60 (66)	3.43 (87)	4.13 (105)	18	M 18 x 60	3,585 (405)	22,480 (155)	18,129 (125)	53.8 (24.40)
3003/ 320/405	12.5984/12.5949 (320)	x	15.9487/15.9449 (405)	160,788 (218000)	306,415 (1363)	2.91 (74)	3.19 (81)	4.09 (104)	4.88 (124)	18	M 20 x 60	5,133 (580)	22,480 (155)	17,404 (120)	79.6 (36.10)
3003/ 340/425	13.3858/13.3823 (340)	x	16.7361/16.7323 (425)	199,141 (270000)	356,997 (1588)	2.91 (74)	3.19 (81)	4.09 (104)	4.88 (124)	21	M 20 x 60	5,133 (580)	24,656 (170)	19,580 (135)	84.7 (38.40)
3003/ 360/455	14.1732/14.1697 (360)	x	17.9172/17.9134 (455)	224,956 (305000)	380,826 (1694)	3.39 (86)	3.70 (94)	4.72 (120)	5.59 (142)	18	M 22 x 60	6,904 (780)	21,030 (145)	16,679 (115)	101.9 (46.20)
3003/ 380/475	14.9606/14.9571 (380)	x	18.7046/18.7008 (475)	276,954 (375500)	444,222 (1976)	3.39 (86)	3.70 (94)	4.72 (120)	5.59 (142)	21	M 22 x 60	6,904 (780)	23,206 (160)	18,854 (130)	121.3 (55.00)
3003/ 400/495	15.7480/15.7445 (400)	x	19.4920/19.4882 (495)	291,705 (395500)	444,672 (1978)	3.39 (86)	3.70 (94)	4.72 (120)	5.59 (142)	21	M 22 x 60	6,904 (780)	22,480 (155)	18,129 (125)	134.5 (61.00)



B = Is to be greater than 2 x L1
b = Depth of bore is to be greater than L4
DN = Minimum diameter of hub & material yield point

HUB OD Requirements

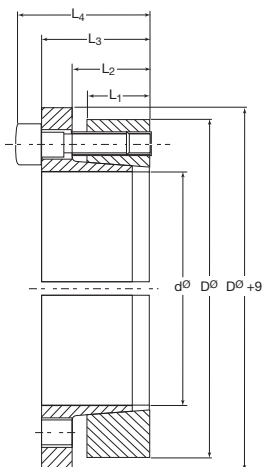
Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
3003/ 20/47	2.96 (75)	2.76 (70)	2.56 (65)	2.56 (65)	2.37 (60)	2.37 (60)	2.37 (60)	2.25 (57)	2.17 (55)
3003/ 25/50	3.15 (80)	2.96 (75)	2.84 (72)	2.72 (69)	2.60 (66)	2.52 (64)	2.48 (63)	2.40 (61)	2.33 (59)
3003/ 30/55	3.35 (85)	3.10 (78)	2.96 (75)	2.88 (73)	2.80 (71)	2.72 (69)	2.68 (68)	2.60 (66)	2.52 (64)
3003/ 35/60	4.10 (104)	3.70 (94)	3.51 (89)	3.39 (86)	3.23 (82)	3.15 (80)	3.10 (78)	2.96 (75)	2.88 (73)
3003/ 40/65	4.26 (108)	3.86 (98)	3.67 (93)	3.55 (90)	3.43 (87)	3.35 (85)	3.27 (83)	3.15 (80)	3.10 (78)
3003/ 45/75	5.44 (138)	4.85 (123)	4.57 (116)	4.37 (111)	4.14 (105)	4.02 (102)	3.90 (99)	3.78 (96)	3.67 (93)
3003/ 50/80	5.63 (143)	5.04 (128)	4.77 (121)	4.57 (116)	4.37 (111)	4.26 (108)	4.10 (104)	3.98 (101)	3.86 (98)
3003/ 55/85	6.42 (163)	5.59 (142)	5.24 (133)	5.04 (128)	4.77 (121)	4.65 (118)	4.49 (114)	4.30 (109)	4.14 (105)
3003/ 60/90	6.34 (161)	5.63 (143)	5.36 (136)	5.16 (131)	4.93 (125)	4.81 (122)	4.61 (117)	4.49 (114)	4.33 (110)
3003/ 65/95	7.17 (182)	6.22 (158)	5.87 (149)	5.63 (143)	5.32 (135)	5.20 (132)	5.00 (127)	4.81 (122)	4.61 (117)
3003/ 70/110	8.31 (211)	7.21 (183)	6.78 (172)	6.50 (165)	6.19 (157)	5.99 (152)	5.79 (147)	5.56 (141)	5.36 (136)
3003/ 75/115	8.31 (211)	7.41 (188)	7.01 (178)	6.70 (170)	6.34 (161)	6.19 (157)	5.99 (152)	5.79 (147)	5.59 (142)
3003/ 80/120	8.43 (214)	7.52 (191)	7.17 (182)	6.85 (174)	6.54 (166)	6.38 (162)	6.15 (156)	5.99 (152)	5.79 (147)
3003/ 85/125	9.41 (239)	8.19 (208)	7.68 (195)	7.41 (188)	7.01 (178)	6.82 (173)	6.58 (167)	6.30 (160)	6.07 (154)
3003/ 90/130	9.37 (238)	8.35 (212)	7.92 (201)	7.56 (192)	7.17 (182)	6.97 (177)	6.78 (172)	6.54 (166)	6.30 (160)
3003/ 95/135	10.32 (262)	9.02 (229)	8.47 (215)	8.11 (206)	7.68 (195)	7.44 (189)	7.21 (183)	6.89 (175)	6.62 (168)
3003/ 100/145	11.11 (282)	9.69 (246)	9.10 (231)	8.37 (221)	8.23 (209)	8.00 (203)	7.72 (196)	7.41 (188)	7.09 (180)
3003/ 110/155	11.19 (284)	9.96 (253)	9.41 (239)	8.98 (228)	8.55 (217)	8.31 (211)	8.08 (205)	7.76 (197)	7.52 (191)
3003/ 120/165	12.44 (316)	10.79 (274)	10.16 (258)	9.77 (248)	9.26 (235)	8.98 (228)	8.67 (220)	8.35 (212)	8.00 (203)
3003/ 130/180	13.00 (330)	11.58 (294)	10.95 (278)	10.44 (265)	9.93 (252)	9.65 (245)	9.37 (238)	9.02 (229)	8.74 (222)
3003/ 140/190	13.35 (339)	11.93 (303)	11.30 (287)	10.87 (276)	10.36 (263)	10.12 (257)	9.73 (247)	9.45 (240)	9.14 (232)
3003/ 150/200	15.04 (382)	13.07 (332)	12.29 (312)	11.82 (300)	11.19 (284)	10.87 (276)	10.48 (266)	10.08 (256)	9.69 (246)
3003/ 160/210	16.07 (408)	13.98 (355)	13.15 (334)	12.60 (320)	11.93 (303)	11.58 (294)	11.19 (284)	10.67 (271)	10.28 (261)

3003 Series Hub

HUB OD Requirements (continued)

Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
3003/ 170/225	14.65 (372)	13.31 (338)	12.68 (322)	12.25 (311)	11.82 (300)	11.54 (293)	11.26 (286)	10.83 (275)	10.56 (268)
3003/ 180/235	15.28 (388)	13.90 (353)	13.27 (337)	12.80 (325)	12.33 (313)	12.05 (306)	11.78 (299)	11.30 (287)	11.03 (280)
3003/ 190/250	17.52 (445)	15.67 (398)	15.24 (387)	14.30 (363)	13.59 (345)	13.31 (338)	12.80 (325)	12.40 (315)	12.01 (305)
3003/ 200/260	17.33 (440)	15.67 (398)	14.96 (380)	14.45 (367)	13.82 (351)	13.55 (344)	13.11 (333)	12.72 (323)	12.29 (312)
3003/ 220/285	17.96 (456)	16.50 (419)	15.83 (402)	15.28 (388)	14.73 (374)	14.37 (365)	14.06 (357)	13.59 (345)	13.27 (337)
3003/ 240/305	20.79 (528)	18.74 (476)	17.80 (452)	17.21 (437)	16.34 (415)	15.99 (406)	15.52 (394)	15.04 (382)	14.57 (370)
3003/ 260/325	24.45 (621)	21.26 (540)	19.96 (507)	19.22 (488)	18.19 (462)	17.68 (449)	17.05 (433)	16.38 (416)	15.75 (400)
3003/ 280/355	23.63 (600)	21.38 (543)	20.44 (519)	19.73 (501)	18.90 (480)	18.47 (469)	17.92 (455)	17.37 (441)	16.78 (426)
3003/ 300/375	25.56 (649)	23.03 (585)	21.85 (555)	21.15 (537)	20.08 (510)	19.65 (499)	19.06 (484)	18.47 (469)	17.88 (454)
3003/ 320/405	26.97 (685)	24.41 (620)	23.31 (592)	22.52 (572)	21.54 (547)	21.07 (535)	20.44 (519)	19.81 (503)	19.14 (486)
3003/ 340/425	30.63 (778)	27.29 (693)	25.79 (655)	24.61 (625)	23.43 (595)	22.76 (578)	22.09 (561)	21.26 (540)	20.59 (523)
3003/ 360/455	29.57 (751)	26.89 (683)	25.63 (651)	24.73 (628)	23.86 (606)	23.31 (592)	22.76 (578)	21.89 (556)	21.34 (542)
3003/ 380/475	33.31 (846)	29.77 (756)	28.27 (718)	27.13 (689)	25.83 (656)	25.28 (642)	24.33 (618)	23.59 (599)	22.84 (580)
3003/ 400/495	33.74 (857)	30.44 (773)	28.86 (733)	27.88 (708)	26.54 (674)	25.95 (659)	25.16 (639)	24.37 (619)	23.59 (599)

3006 Series General Purpose



- M_t** = Transmissible torque per locking assembly
- M_A** = Tightening torque per screw
- P_{ax}** = Transmission axial force
- P_w P_N** = Contact pressure between locking assembly Shaft (pw)-Hub (pN)
- L2-L4** are for unlocked assemblies

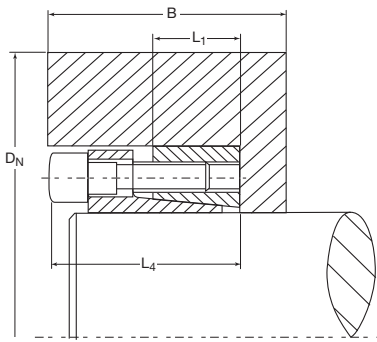
Dimensions

Part No.	d x D in. (mm)		M _t lb. ft. (Nm)	P _{ax} lb. ft. (kN)	L ₁ in. (mm)	L ₂ in. (mm)	L ₃ in. (mm)	L ₄ in. (mm)	Pieces	S	M _A in. lbs. (Nm)	P _w lb. in. ² (N/mm ²)	P _N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
3006/ 20/47	.7874/.7861 (20)	x	1.8519/1.8504 (47)	207 (280)	6,295 (28)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	5	M 6 x 20	150 (17)	31,763 (219)	13,489 (93)	0.6 (0.28)
3006/ 22/47	.8661/.8648 (22)	x	1.8519/1.8504 (47)	229 (310)	6,295 (28)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	5	M 6 x 20	150 (17)	29,007 (200)	13,634 (94)	0.6 (0.28)
3006/ 24/50	.9449/.9436 (24)	x	1.9700/1.9685 (50)	251 (340)	6,295 (28)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	5	M 6 x 20	150 (17)	26,831 (185)	12,908 (89)	0.7 (0.32)
3006/ 25/50	.9843/.9830 (25)	x	1.9700/1.9685 (50)	310 (420)	7,644 (34)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	6	M 6 x 20	150 (17)	30,457 (210)	15,229 (105)	0.7 (0.30)
3006/ 28/55	1.1024/1.1011 (28)	x	2.1672/2.1654 (55)	347 (470)	7,419 (33)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	6	M 6 x 20	150 (17)	27,122 (187)	13,924 (96)	0.9 (0.40)
3006/ 30/55	1.1811/1.1798 (30)	x	2.1672/2.1654 (55)	369 (500)	7,419 (33)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	6	M 6 x 20	150 (17)	25,236 (174)	13,779 (95)	0.8 (0.35)
3006/ 32/60	1.2598/1.2583 (32)	x	2.3640/2.3622 (60)	531 (720)	10,116 (45)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	8	M 6 x 20	150 (17)	31,908 (220)	17,114 (118)	0.9 (0.40)
3006/ 35/60	1.3780/1.3764 (35)	x	2.3640/2.3622 (60)	575 (780)	10,116 (45)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	8	M 6 x 20	150 (17)	28,862 (199)	16,824 (116)	0.9 (0.39)
3006/ 38/65	1.4945/1.4954 (38)	x	2.5609/2.5591 (65)	627 (850)	10,116 (45)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	8	M 6 x 20	150 (17)	26,686 (184)	15,664 (108)	1.1 (0.49)
3006/ 40/65	1.5748/1.5733 (40)	x	2.5609/2.5591 (65)	664 (900)	10,116 (45)	0.67 (17)	0.87 (22)	1.18 (30)	1.42 (36)	8	M 6 x 20	150 (17)	25,526 (176)	15,664 (108)	1.0 (0.45)
3006/ 45/75	1.7717/1.7701 (45)	x	2.9546/2.9528 (75)	1,291 (1750)	17,310 (77)	0.79 (20)	0.98 (25)	1.34 (34)	1.65 (42)	8	M 8 x 25	363 (41)	31,038 (214)	18,565 (128)	1.6 (0.72)
3006/ 50/80	1.9685/1.9670 (50)	x	3.1514/3.1496 (80)	1,438 (1950)	17,535 (78)	0.79 (20)	0.98 (25)	1.34 (34)	1.65 (42)	8	M 8 x 25	363 (41)	30,893 (213)	17,405 (120)	1.8 (0.80)
3006/ 55/85	2.1654/2.1635 (55)	x	3.3486/3.3465 (85)	1,660 (2250)	22,482 (100)	0.79 (20)	0.98 (25)	1.34 (34)	1.65 (42)	8	M 8 x 25	363 (41)	32,198 (222)	18,855 (130)	1.9 (0.85)
3006/ 60/90	2.3622/2.3604 (60)	x	3.5454/3.5433 (90)	1,825 (2475)	18,659 (83)	0.79 (20)	0.98 (25)	1.34 (34)	1.65 (42)	8	M 8 x 25	363 (41)	29,442 (203)	17,695 (122)	2.0 (0.92)
3006/ 65/95	2.5591/2.5572 (65)	x	3.7423/3.7402 (95)	2,231 (3025)	20,907 (93)	0.79 (20)	0.98 (25)	1.34 (34)	1.65 (42)	9	M 8 x 25	363 (41)	29,732 (205)	19,000 (131)	2.2 (0.99)
3006/ 70/110	2.7559/2.7541 (70)	x	4.3328/4.3307 (110)	3,393 (4600)	29,450 (131)	0.95 (24)	1.18 (30)	1.65 (42)	2.05 (52)	8	M 10 x 30	735 (83)	32,923 (227)	19,145 (132)	3.9 (1.75)
3006/ 75/115	2.9528/2.9509 (75)	x	4.5297/4.5276 (115)	3,632 (4925)	29,450 (131)	0.95 (24)	1.18 (30)	1.65 (42)	2.05 (52)	8	M 10 x 30	735 (83)	30,748 (212)	18,275 (126)	4.1 (1.85)
3006/ 80/120	3.1496/3.1478 (80)	x	4.7265/4.7244 (120)	3,872 (5250)	29,450 (131)	0.95 (24)	1.18 (30)	1.65 (42)	2.05 (52)	8	M 10 x 30	735 (83)	28,717 (198)	17,550 (121)	4.3 (1.95)
3006/ 85/125	3.3465/3.3443 (85)	x	4.9237/4.9213 (125)	4,647 (6300)	33,272 (148)	0.95 (24)	1.18 (30)	1.65 (42)	2.05 (52)	9	M 10 x 30	735 (83)	30,457 (210)	19,000 (131)	4.5 (2.05)
3006/ 90/130	3.5433/3.5412 (90)	x	5.1206/5.1181 (130)	4,905 (6650)	33,272 (148)	0.95 (24)	1.18 (30)	1.65 (42)	2.05 (52)	9	M 10 x 30	735 (83)	28,717 (198)	18,275 (126)	4.7 (2.15)
3006/ 95/135	3.7402/3.7380 (95)	x	5.3174/5.3150 (135)	5,753 (7800)	36,869 (164)	0.95 (24)	1.18 (30)	1.65 (42)	2.05 (52)	10	M 10 x 30	735 (83)	30,312 (209)	19,580 (135)	5.0 (2.25)
3006/ 100/145	3.9370/3.9349 (100)	x	5.7111/5.7087 (145)	7,929 (10750)	48,334 (215)	1.02 (26)	1.26 (32)	1.81 (46)	2.28 (58)	9	M 12 x 35	1,283 (145)	33,213 (229)	22,046 (152)	6.6 (3.00)

3006 Series General Purpose

Dimensions (continued)

Part No.	d x D in. (mm)		Mt lb. ft. (Nm)	Pax lb. ft. (kN)	L1 in. (mm)	L2 in. (mm)	L3 in. (mm)	L4 in. (mm)	Pieces	S	M _A in. lbs. (Nm)	P _w lb. in. ² (N/mm ²)	P _N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
3006/ 110/155	4.3307/4.3286 (110)	x	6.1048/6.1024 (155)	8,740 (11850)	48,334 (215)	1.02 (26)	1.26 (32)	1.81 (46)	2.28 (58)	9	M 12 x 35	1,283 (145)	30,167 (208)	20,595 (142)	7.1 (3.20)
3006/ 120/165	4.7244/4.7223 (120)	x	6.4985/6.4961 (165)	9,515 (12900)	48,334 (215)	1.02 (26)	1.26 (32)	1.81 (46)	2.28 (58)	9	M 12 x 35	1,283 (145)	27,702 (191)	19,290 (133)	7.7 (3.05)
3006/ 130/180	5.1181/5.1156 (130)	x	7.0891/7.0866 (180)	14,161 (19200)	66,319 (295)	1.34 (34)	1.58 (40)	2.24 (57)	2.80 (71)	9	M 14 x 40	2,036 (230)	28,282 (195)	18,565 (128)	11.2 (5.10)
3006/ 140/190	5.5118/5.5093 (140)	x	7.4831/7.4803 (190)	15,268 (20700)	66,543 (296)	1.34 (34)	1.58 (40)	2.24 (57)	2.80 (71)	9	M 14 x 40	2,036 (230)	26,251 (181)	17,550 (121)	11.9 (5.40)
3006/ 150/200	5.9055/5.9030 (150)	x	7.8769/7.8740 (200)	18,144 (24600)	73,737 (328)	1.34 (34)	1.58 (40)	2.24 (57)	2.80 (71)	10	M 14 x 40	2,036 (230)	27,122 (187)	18,565 (128)	12.8 (5.80)
3006/ 160/210	6.2992/6.2967 (160)	x	8.2706/8.2677 (210)	21,316 (28900)	81,156 (361)	1.34 (34)	1.58 (40)	2.24 (57)	2.80 (71)	12	M 14 x 40	2,036 (230)	27,992 (193)	19,435 (134)	13.2 (6.00)
3006/ 170/225	6.6929/6.6904 (170)	x	8.8611/8.8583 (225)	24,708 (33500)	88,575 (394)	1.73 (44)	1.97 (50)	2.64 (67)	3.19 (81)	12	M 14 x 40	2,036 (230)	21,755 (150)	15,374 (106)	18.3 (8.30)
3006/ 180/235	7.0866/7.0841 (180)	x	9.2548/9.2520 (235)	26,183 (35500)	88,575 (394)	1.73 (44)	1.97 (50)	2.64 (67)	3.19 (81)	12	M 14 x 40	2,036 (230)	20,595 (142)	14,649 (101)	19.4 (8.80)
3006/ 190/250	7.4803/7.4775 (190)	x	9.8454/9.8425 (250)	38,353 (52000)	134,211 (597)	1.73 (44)	1.97 (50)	2.64 (67)	3.27 (83)	12	M 16 x 50	3,142 (355)	27,122 (187)	19,145 (132)	22.9 (10.40)
3006/ 200/260	7.8740/7.8712 (200)	x	10.2394/10.2362 (260)	40,418 (54800)	123,195 (548)	1.73 (44)	1.97 (50)	2.64 (67)	3.27 (83)	12	M 16 x 50	3,142 (355)	25,671 (177)	18,420 (127)	24.0 (10.90)
3006/ 220/285	8.6614/8.6586 (220)	x	11.2237/11.2205 (285)	44,401 (60200)	123,195 (548)	1.97 (50)	2.21 (56)	2.95 (75)	3.58 (91)	12	M 16 x 50	3,142 (355)	20,450 (141)	14,794 (102)	32.4 (14.70)
3006/ 240/305	9.4488/9.4460 (240)	x	12.0111/12.0079 (305)	60,628 (82200)	153,994 (685)	1.97 (50)	2.21 (56)	2.95 (75)	3.58 (91)	15	M 16 x 50	3,142 (355)	23,351 (161)	17,259 (119)	35.1 (15.90)
3006/ 260/325	10.2362/10.2330 (260)	x	12.7988/12.7953 (325)	84,082 (114000)	197,157 (877)	1.97 (50)	2.21 (56)	2.95 (75)	3.58 (91)	18	M 16 x 50	3,142 (355)	26,106 (180)	21,030 (145)	37.5 (17.00)
3006/ 280/355	11.0236/11.0204 (280)	x	13.9799/13.9764 (355)	90,757 (123050)	197,607 (879)	2.36 (60)	2.60 (66)	3.43 (87)	4.13 (105)	16	M 18 x 60	4,293 (485)	20,160 (139)	15,954 (110)	54.5 (24.70)
3006/ 300/375	11.8110/11.8078 (300)	x	14.7673/14.7638 (375)	109,380 (148300)	222,336 (989)	2.36 (60)	2.60 (66)	3.43 (87)	4.13 (105)	18	M 18 x 60	4,293 (485)	21,175 (146)	16,969 (117)	58.2 (26.40)
3006/ 320/405	12.5984/12.5949 (320)	x	15.9487/15.9449 (405)	134,605 (182500)	256,507 (1141)	2.93 (74)	3.19 (81)	4.09 (104)	4.88 (124)	18	M 20 x 60	6,107 (690)	18,564 (128)	14,649 (101)	83.8 (38.00)
3006/ 340/425	13.3858/13.3823 (340)	x	16.7361/16.7323 (425)	160,788 (218000)	288,205 (1282)	2.91 (74)	3.19 (81)	4.09 (104)	4.88 (124)	21	M 20 x 60	6,107 (690)	19,725 (136)	15,809 (109)	88.2 (40.00)
3006/ 360/455	14.1732/14.1697 (360)	x	17.9172/17.9134 (455)	213,893 (290000)	362,167 (1611)	3.39 (86)	3.70 (94)	4.72 (120)	5.59 (142)	18	M 22 x 60	8,231 (930)	20,015 (138)	15,809 (109)	105.8 (48.00)
3006/ 380/475	14.9606/14.9571 (380)	x	18.7046/18.7008 (475)	224,956 (305000)	360,818 (1605)	3.39 (86)	3.70 (94)	4.72 (120)	5.59 (142)	21	M 22 x 60	8,231 (930)	18,999 (131)	15,229 (105)	125.7 (57.00)
3006/ 400/495	15.7480/15.7445 (400)	x	19.4920/19.4882 (495)	261,834 (355000)	399,036 (1775)	3.39 (86)	3.701 (94)	4.72 (120)	5.59 (142)	21	M 22 x 60	8,231 (930)	19,870 (137)	16,099 (111)	138.9 (63.00)



B = Is to be greater than $2 \times L_1$
b = Depth of bore is to be greater than L_4
DN = Minimum diameter of hub & material yield point

HUB OD Requirements

Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
3006/ 20/47	2.76 (70)	2.56 (65)	2.48 (63)	2.40 (61)	2.33 (59)	2.29 (58)	2.25 (57)	2.17 (55)	2.13 (54)
3006/ 25/50	3.10 (78)	2.84 (72)	2.76 (70)	2.64 (67)	2.37 (60)	2.52 (64)	2.44 (62)	2.37 (60)	2.33 (59)
3006/ 30/55	3.23 (82)	3.04 (77)	2.92 (74)	2.84 (72)	2.76 (70)	2.72 (69)	2.64 (67)	2.56 (65)	2.52 (64)
3006/ 35/60	3.94 (100)	3.59 (91)	3.43 (87)	3.31 (84)	3.19 (81)	3.11 (79)	3.03 (77)	2.92 (74)	2.84 (72)
3006/ 40/65	4.10 (104)	3.74 (95)	3.59 (91)	3.47 (88)	3.35 (85)	3.27 (83)	3.23 (82)	3.11 (79)	3.03 (77)
3006/ 45/75	5.20 (132)	4.69 (119)	4.45 (113)	4.26 (108)	4.06 (103)	3.98 (101)	3.86 (98)	3.74 (95)	3.63 (92)
3006/ 50/80	5.36 (136)	4.85 (123)	4.61 (117)	4.45 (113)	4.26 (108)	4.18 (106)	4.06 (103)	3.94 (100)	3.78 (96)
3006/ 55/85	5.99 (152)	5.36 (136)	5.08 (129)	4.89 (124)	4.65 (118)	4.53 (115)	4.37 (111)	4.26 (108)	4.10 (104)
3006/ 60/90	6.07 (154)	5.52 (140)	5.24 (133)	5.04 (128)	4.85 (123)	4.73 (120)	4.61 (117)	4.45 (113)	4.30 (109)
3006/ 65/95	6.70 (170)	5.99 (152)	5.71 (145)	5.48 (139)	5.20 (132)	5.08 (129)	4.93 (125)	4.77 (121)	4.61 (117)
3006/ 70/110	7.76 (197)	6.93 (176)	6.62 (168)	6.34 (161)	6.03 (153)	5.87 (149)	5.71 (145)	5.52 (140)	5.36 (136)
3006/ 75/115	7.92 (201)	7.05 (179)	6.78 (172)	6.50 (165)	6.19 (157)	6.07 (154)	5.91 (150)	5.67 (144)	5.52 (140)
3006/ 80/120	8.04 (204)	7.29 (185)	6.93 (176)	6.70 (170)	6.38 (162)	6.26 (159)	6.07 (154)	5.87 (149)	5.71 (145)
3006/ 85/125	8.82 (224)	7.88 (200)	7.52 (191)	7.21 (183)	6.85 (174)	6.70 (170)	6.50 (165)	6.30 (160)	6.07 (154)
3006/ 90/130	8.98 (228)	8.00 (203)	7.68 (195)	7.37 (187)	7.01 (178)	6.89 (175)	6.70 (170)	6.42 (163)	6.26 (159)
3006/ 95/135	9.85 (250)	8.370 (221)	8.19 (208)	7.84 (199)	7.44 (189)	7.25 (184)	7.05 (179)	6.78 (172)	6.58 (167)
3006/ 100/145	11.62 (295)	10.00 (254)	9.37 (238)	8.86 (225)	8.43 (214)	8.11 (206)	7.841 (199)	7.48 (190)	7.21 (183)
3006/ 110/155	11.74 (298)	10.20 (259)	9.61 (244)	9.22 (234)	8.74 (222)	8.51 (216)	8.19 (208)	7.88 (200)	7.56 (192)
3006/ 120/165	11.78 (299)	10.67 (271)	9.96 (253)	9.53 (242)	9.10 (231)	8.82 (224)	8.59 (218)	8.27 (210)	8.00 (203)
3006/ 130/180	12.48 (317)	11.26 (286)	10.71 (272)	10.24 (260)	9.77 (248)	9.57 (243)	9.30 (236)	8.98 (228)	8.37 (221)
3006/ 140/190	12.72 (323)	11.54 (293)	10.99 (279)	10.59 (269)	10.12 (257)	9.93 (252)	9.61 (244)	9.30 (236)	9.06 (230)
3006/ 150/200	13.86 (352)	12.52 (318)	11.89 (302)	11.34 (288)	10.83 (275)	10.63 (270)	10.32 (262)	10.00 (254)	9.69 (246)
3006/ 160/210	15.12 (384)	13.47 (342)	12.72 (323)	12.52 (318)	11.58 (294)	11.26 (286)	10.91 (277)	10.52 (267)	10.16 (258)

3006 Series Hub

HUB OD Requirements (continued)

Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
3006/ 170/225	13.86 (352)	12.80 (325)	12.25 (311)	11.89 (302)	11.42 (290)	11.26 (286)	10.99 (279)	10.63 (270)	10.40 (264)
3006/ 180/235	14.18 (360)	13.07 (332)	12.60 (320)	12.25 (311)	11.85 (301)	11.58 (294)	11.30 (287)	11.03 (280)	10.75 (273)
3006/ 190/250	17.64 (448)	15.75 (400)	15.04 (382)	14.41 (366)	13.70 (348)	13.35 (339)	13.00 (330)	12.52 (318)	12.17 (309)
3006/ 200/260	17.96 (456)	16.22 (412)	15.44 (392)	14.73 (374)	14.06 (357)	13.78 (350)	13.39 (340)	12.92 (328)	12.52 (318)
3006/ 220/285	17.29 (439)	15.95 (405)	15.40 (391)	14.93 (379)	14.45 (367)	14.14 (359)	13.82 (351)	13.39 (340)	13.04 (331)
3006/ 240/305	20.28 (515)	18.74 (476)	17.52 (445)	16.93 (430)	16.22 (412)	15.87 (403)	15.36 (390)	15.24 (387)	14.41 (366)
3006/ 260/325	24.81 (630)	21.62 (549)	20.36 (517)	19.45 (494)	18.43 (468)	17.92 (455)	17.29 (439)	16.50 (419)	15.87 (403)
3006/ 280/355	22.37 (568)	20.56 (522)	19.73 (501)	19.02 (483)	18.31 (465)	17.88 (454)	17.48 (444)	16.93 (430)	16.50 (419)
3006/ 300/375	24.65 (626)	22.44 (570)	21.42 (544)	20.67 (525)	19.77 (502)	19.33 (491)	18.15 (461)	17.72 (450)	17.44 (443)
3006/ 320/405	24.41 (620)	24.48 (571)	21.70 (551)	21.07 (535)	20.40 (518)	19.93 (506)	19.45 (494)	18.98 (482)	18.51 (470)
3006/ 340/425	26.78 (680)	24.61 (625)	23.59 (599)	22.76 (578)	21.93 (557)	21.42 (544)	20.91 (531)	20.24 (514)	19.73 (501)
3006/ 360/455	28.67 (728)	26.34 (669)	25.24 (641)	24.33 (618)	23.47 (596)	22.92 (582)	22.36 (568)	21.66 (550)	21.11 (536)
3006/ 380/475	29.18 (741)	26.93 (684)	25.99 (660)	25.08 (637)	21.14 (613)	23.74 (603)	23.19 (589)	22.44 (570)	21.89 (556)
3006/ 400/495	31.19 (792)	28.67 (728)	27.48 (698)	26.50 (673)	25.56 (649)	24.96 (634)	24.37 (619)	23.59 (599)	23.03 (585)

3003 & 3006 Series Installation and Removal

N. B. Do Not use any molybdenum disulphide.

The locking assemblies are delivered by the manufacturers oiled and are ready to be fitted. Additional hub centering arrangements are not absolutely necessary as the concentricity is 0.02 to 0.04 mm.

Fitting:

1. At least 3 screws, evenly spaced around the circumference, must be screwed into the flanges' lifting screw holes which are protected by plastic plugs. As a result, the bushes and rings are held apart due to the stopping effect of the taper and cannot tilt during fitting.
2. Tighten locking screws delicately and carefully until the locking assembly is located in place without any play. Remove lifting screws and tighten with the remaining screws.
3. Tighten all screws evenly by tightening them crosswise covering the whole circumference several times, until the given torque has been reached for each screw. Make sure that the screws to the left and right of the slot are tightened one after the other.

Removal:

Loosen all locking screws several turns and insert one screw into each of the bush's lifting screw holes after removing the plastic plugs. Tighten these screws crosswise to loosen the connection. Tighten the screws to the left and right of the slot one after the other.

Tightening torques in Nm for DIN 912 screws

DIN 912		M6	M8	M10	M12	M14	M16	M18	M20	M22
10.9	$\mu=0.14$	14	35	69	120	190	295	405	580	780
	$\mu=0.125$	13	32	64	110	180	275	390	540	720
12.9	$\mu=0.14$	17	41	83	145	230	355	485	690	930
	$\mu=0.125$	16	39	77	135	215	330	455	650	870

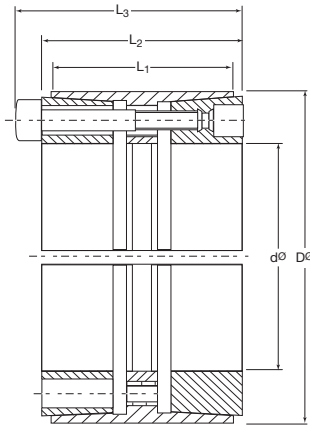
N.B.

Screws which are re-oiled on fitting should be tightened to a reduced torque ($\mu_{scr.}=0.125$) to avoid possible overloading, especially in the case of screw of 12.9 quality.

Series 3006



3012 Series General Purpose



- M_t** = Transmissible torque per locking assembly
- M_A** = Tightening torque per screw
- P_{ax}** = Transmission axial force
- p_w p_N** = Contact pressure between locking assembly
Shaft (p_w)-Hub (p_N)
- L1-L3** are for unlocked assemblies

Dimensions

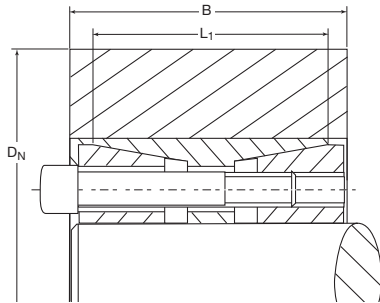
Part No.	d x D in. (mm)		M _t lb. ft. (Nm)	P _{ax} lb. ft. (kN)	L1 in. (mm)	L2 in. (mm)	L3 in. (mm)	Pieces	S	M _A in. lbs. (Nm)	p _w lb. in. ² (N/mm ²)	p _N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
3012/ 25/50	.9843/.9830 (25)	x	1.9700/1.9685 (50)	479 (650)	11,690 (52)	1.77 (45)	2.17 (55)	2.40 (61)	5	M 6 x 45	150 (17)	22,626 (156)	11,313 (78)	1.10 (0.5)
3012/ 30/55	1.1811/1.1798 (30)	x	2.1672/2.1654 (55)	701 (950)	14,163 (63)	1.77 (45)	2.17 (55)	2.40 (61)	6	M 6 x 45	150 (17)	22,916 (158)	12,473 (86)	1.32 (0.6)
3012/ 35/60	1.3780/1.3764 (35)	x	2.3640/2.3622 (30)	944 (1280)	16,411 (73)	1.77 (45)	2.17 (55)	2.40 (61)	7	M 6 x 45	150 (17)	22,626 (156)	13,198 (91)	1.54 (0.7)
3012/ 38/65	1.4961/1.4945 (38)	x	2.5609/2.5591 (65)	1,180 (1600)	18,884 (84)	1.77 (45)	2.17 (55)	2.40 (61)	8	M 6 x 45	150 (17)	23,786 (164)	13,924 (96)	1.76 (0.8)
3012/ 40/65	1.5748/1.5733 (40)	x	2.5609/2.5591 (65)	1,239 (1680)	18,884 (84)	1.77 (45)	2.17 (55)	2.40 (61)	8	M 6 x 45	150 (17)	22,626 (156)	13,924 (96)	1.76 (0.8)
3012/ 45/75	1.7717/1.7701 (45)	x	2.9546/2.9528 (75)	2,360 (3200)	31,923 (142)	1.73 (44)	2.13 (54)	2.44 (62)	7	M 8 x 50	363 (41)	35,244 (243)	21,176 (146)	2.20 (1.0)
3012/ 50/80	1.9685/1.9670 (50)	x	3.1514/3.1496 (80)	3,061 (4150)	37,093 (165)	2.21 (56)	2.52 (64)	2.84 (72)	8	M 8 x 50	363 (41)	29,008 (200)	14,214 (98)	2.65 (1.2)
3012/ 55/85	2.1654/2.1635 (55)	x	3.3486/3.3465 (85)	3,798 (5150)	41,814 (186)	2.21 (56)	2.52 (64)	2.84 (72)	9	M 8 x 50	363 (41)	29,733 (205)	15,084 (104)	2.87 (1.3)
3012/ 60/90	2.3622/2.3604 (60)	x	3.5454/3.5433 (90)	4,573 (6200)	46,535 (207)	2.21 (56)	2.52 (64)	2.84 (72)	10	M 8 x 50	363 (41)	29,298 (202)	15,374 (106)	3.09 (1.4)
3012/ 65/95	2.5572/2.5583 (65)	x	3.7423/3.7402 (95)	4,979 (6750)	46,535 (207)	2.21 (56)	2.52 (64)	2.834 (72)	10	M 8 x 50	363 (41)	27,122 (187)	14,504 (100)	3.31 (1.5)
3012/ 70/110	2.7559/2.7541 (70)	x	4.3328/4.3307 (110)	3,482 (11500)	73,962 (329)	2.76 (70)	3.07 (78)	3.47 (88)	10	M 10 x 60	735 (83)	32,343 (223)	16,534 (114)	6.17 (2.8)
3012/ 80/120	3.1496/3.1478 (80)	x	4.7265/4.7244 (120)	10,695 (14500)	81,381 (362)	2.76 (70)	3.07 (78)	3.47 (88)	11	M 10 x 60	735 (83)	31,183 (215)	16,679 (115)	6.83 (3.1)
3012/ 90/130	3.5433/3.5412 (90)	x	5.1206/5.1181 (130)	13,129 (17800)	87,675 (390)	2.76 (70)	3.07 (78)	3.47 (88)	12	M 10 x 60	735 (83)	30,168 (208)	16,679 (115)	7.50 (3.4)
3012/ 100/145	3.9370/3.9349 (100)	x	5.7111/5.7087 (145)	19,398 (26300)	118,474 (527)	3.54 (90)	3.94 (100)	4.41 (112)	11	M 12 x 80	1,283 (145)	29,008 (200)	15,519 (107)	12.13 (5.5)
3012/ 110/155	4.3307/4.3286 (110)	x	6.1048/6.1024 (155)	23,454 (31800)	129,265 (575)	3.54 (90)	3.94 (100)	4.41 (112)	12	M 12 x 80	1,283 (145)	28,717 (198)	15,954 (110)	13.23 (6.0)
3012/ 120/165	4.7244/4.7223 (120)	x	6.4985/6.4961 (165)	29,797 (40400)	150,622 (670)	3.54 (90)	3.94 (100)	4.41 (112)	14	M 12 x 80	1,283 (145)	30,748 (212)	17,405 (120)	14.11 (6.4)
3012/ 130/180	5.1181/5.1156 (130)	x	7.0891/7.0866 (180)	37,984 (51500)	177,374 (789)	4.09 (104)	4.57 (116)	5.12 (130)	12	M 14 x 90	2,036 (230)	27,847 (192)	16,244 (112)	19.84 (9.0)
3012/ 140/190	5.5118/5.5093 (140)	x	7.4831/7.4803 (190)	47,720 (64700)	206,824 (920)	4.09 (104)	4.57 (116)	5.12 (130)	14	M 14 x 90	2,036 (230)	30,168 (208)	17,985 (124)	20.72 (9.4)
3012/ 150/200	5.9055/5.9030 (150)	x	7.8769/7.8740 (200)	54,727 (74200)	222,336 (989)	4.09 (104)	4.57 (116)	5.12 (130)	15	M 14 x 90	2,036 (230)	30,168 (208)	18,420 (127)	22.05 (10.0)
3012/ 160/210	6.2992/6.2967 (160)	x	8.2706/8.2677 (210)	62,324 (84500)	236,049 (1050)	4.09 (104)	4.57 (116)	5.12 (130)	16	M 14 x 90	2,036 (230)	30,168 (208)	18,565 (128)	23.81 (10.8)
3012/ 170/225	6.6929/6.6904 (170)	x	8.8611/8.8583 (225)	79,804 (108200)	287,755 (1280)	5.28 (134)	5.75 (146)	6.38 (162)	14	M 16 x 110	3,142 (355)	26,397 (182)	16,389 (113)	35.27 (16.0)
3012/ 180/235	7.0866/7.0841 (180)	x	9.2548/9.2520 (235)	90,904 (123250)	307,988 (1370)	5.28 (134)	5.75 (146)	6.38 (162)	15	M 16 x 110	3,142 (355)	26,687 (184)	16,679 (115)	37.04 (16.8)

3012 Series General Purpose

Dimensions (continued)

Part No.	d x D in. (mm)		Mt lb. ft. (Nm)	Pax lb. ft. (kN)	L1 in. (mm)	L2 in. (mm)	L3 in. (mm)	Pieces	S	M _A in. lbs. (Nm)	P _W lb. in. ² (N/mm ²)	P _N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
3012/ 190/250	7.4803/7.4775 (190)	x	9.8454/9.8425 (250)	98,686 (133800)	328,221 (1460)	5.28 (134)	5.75 (146)	6.38 (162)	16	M 16 x 110	3,142 (355)	26,977 (186)	16,824 (116)	48.28 (21.9)
3012/ 200/260	7.8740/7.8712 (200)	x	10.2394/10.2362 (260)	107,684 (146000)	328,221 (1460)	5.28 (134)	5.75 (146)	6.38 (162)	16	M 16 x 110	3,142 (355)	25,672 (177)	16,244 (112)	45.64 (20.7)
3012/ 220/285	8.6614/8.6586 (220)	x	11.2237/11.2205 (285)	133,499 (181000)	368,687 (1640)	5.28 (134)	5.75 (146)	6.38 (162)	18	M 16 x 110	3,142 (355)	27,267 (188)	16,679 (115)	54.23 (24.6)
3012/ 240/305	9.4488/9.4460 (240)	x	12.0111/12.0079 (305)	160,788 (218000)	409,152 (1860)	5.28 (134)	5.75 (146)	6.38 (162)	20	M 16 x 110	3,142 (355)	26,687 (184)	17,259 (119)	58.42 (26.5)
3012/ 260/325	10.2362/10.2330 (260)	x	12.7988/12.7953 (325)	175,540 (238000)	431,633 (1920)	5.28 (134)	5.75 (146)	6.38 (162)	20	M 16 x 110	3,142 (355)	25,817 (178)	16,969 (117)	63.05 (28.6)
3012/ 280/355	11.0236/11.0204 (280)	x	13.9799/13.9764 (355)	265,522 (360000)	573,263 (2550)	6.50 (165)	6.97 (177)	7.76 (197)	18	M 20 x 130	6,107 (690)	26,832 (185)	16,969 (117)	93.92 (42.6)
3012/ 300/375	11.8110/11.8078 (300)	x	14.7673/14.7638 (375)	315,676 (428000)	641,829 (2855)	6.50 (165)	6.97 (177)	7.76 (197)	20	M 20 x 130	6,107 (690)	27,847 (192)	17,840 (123)	99.65 (45.2)
3012/ 320/405	12.5984/12.5949 (320)	x	15.9487/15.9449 (405)	354,029 (480000)	674,427 (3000)	6.50 (165)	6.97 (177)	7.76 (197)	21	M 20 x 130	6,107 (690)	27,267 (188)	17,259 (119)	128.75 (58.4)
3012/ 340/425	13.3858/13.3823 (340)	x	16.7361/16.7323 (425)	393,858 (534000)	705,900 (3140)	6.50 (165)	6.97 (177)	7.76 (197)	22	M 20 x 130	6,107 (690)	26,977 (186)	17,259 (119)	135.36 (61.4)
3012/ 360/455	14.1732/14.1697 (360)	x	17.9172/17.9134 (455)	494,166 (670000)	838,537 (3730)	7.48 (190)	7.95 (202)	8.82 (224)	21	M 22 x 150	8,231 (930)	25,527 (176)	16,679 (115)	183.42 (83.2)
3012/ 380/475	14.9606/14.9571 (380)	x	18.7046/18.7008 (475)	547,270 (742000)	876,755 (3900)	7.48 (190)	7.95 (202)	8.82 (224)	22	M 22 x 150	8,231 (930)	25,382 (175)	16,679 (115)	195.33 (88.6)
3012/ 400/495	15.7480/15.7445 (400)	x	19.4920/19.4882 (495)	628,402 (852000)	957,686 (4260)	7.48 (190)	7.95 (202)	8.82 (224)	24	M 22 x 150	8,231 (930)	26,252 (181)	17,405 (120)	220.46 (100.0)
3012/ 420/515	16.5354/16.5316 (420)	x	20.2799/20.2756 (515)	659,380 (894000)	957,686 (4260)	7.48 (190)	7.95 (202)	8.82 (224)	24	M 22 x 150	8,231 (930)	25,092 (173)	16,824 (116)	229.28 (104.0)
3012/ 440/535	17.3228/17.3190 (440)	x	21.0673/21.0630 (535)	691,095 (937000)	957,686 (4260)	7.48 (190)	7.95 (202)	8.82 (224)	24	M 22 x 150	8,231 (930)	23,931 (165)	16,244 (112)	240.3 (109.0)
3012/ 460/555	18.1102/18.1064 (460)	x	21.8547/21.8504 (555)	722,810 (980000)	957,686 (4260)	7.48 (190)	7.95 (202)	8.82 (224)	24	M 22 x 150	8,231 (930)	22,916 (158)	15,519 (107)	249.12 (113.0)
3012/ 480/575	18.8976/18.8938 (480)	x	22.6421/22.6378 (575)	885,073 (1200000)	1,124,045 (5000)	7.48 (190)	7.95 (202)	8.82 (224)	28	M 22 x 150	8,231 (930)	25,527 (176)	17,550 (121)	260.15 (118.0)
3012/ 500/595	19.6850/19.6812 (500)	x	23.4295/23.4252 (595)	914,576 (1240000)	1,124,045 (5000)	7.48 (190)	7.95 (202)	8.82 (224)	28	M 22 x 150	8,231 (930)	24,511 (169)	16,969 (117)	268.96 (122.0)
3012/ 520/615	20.4724/20.4681 (520)	x	24.2169/24.2126 (615)	1,025,210 (1390000)	1,198,232 (5330)	7.40 (190)	7.95 (202)	8.82 (224)	30	M 22 x 150	8,231 (930)	25,237 (174)	17,550 (121)	277.78 (126.0)

3012 Series Hub



B = Is to be greater than 2 x L₁
b = Depth of bore is to be greater than L₃
DN = Minimum diameter of hub & material yield point

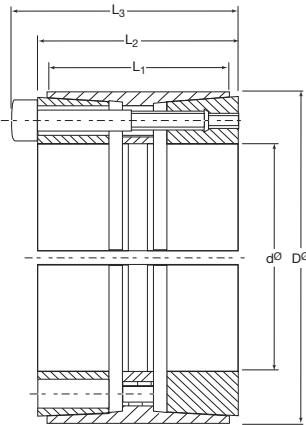
HUB OD Requirements

Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
3012/ 25/50	3.51 (89)	3.15 (80)	3.00 (76)	2.88 (73)	2.72 (69)	2.68 (68)	2.56 (65)	2.48 (63)	2.37 (60)
3012/ 30/55	4.18 (106)	3.67 (93)	3.47 (88)	3.31 (84)	3.11 (79)	3.04 (77)	2.92 (74)	2.80 (71)	2.72 (69)
3012/ 35/60	4.81 (122)	4.14 (105)	3.90 (99)	3.74 (95)	3.47 (88)	3.39 (86)	3.27 (83)	3.11 (79)	3.00 (76)
3012/ 38/65	5.48 (139)	4.69 (119)	4.33 (110)	4.10 (104)	3.86 (98)	3.74 (95)	3.59 (91)	3.39 (86)	3.27 (83)
3012/ 40/65	5.48 (139)	4.69 (119)	4.33 (110)	4.10 (104)	3.86 (98)	3.74 (95)	3.59 (91)	3.39 (86)	3.27 (83)
3012/ 45/75	22.68 (576)	8.98 (228)	7.41 (188)	6.54 (166)	5.75 (146)	5.40 (137)	5.04 (128)	4.57 (116)	4.22 (107)
3012/ 50/80	6.82 (173)	5.83 (148)	5.40 (137)	5.08 (129)	4.77 (121)	4.65 (118)	4.41 (112)	4.18 (106)	4.06 (103)
3012/ 55/85	7.96 (202)	6.15 (156)	5.99 (152)	5.63 (143)	5.24 (133)	5.04 (128)	4.81 (122)	4.57 (116)	4.37 (111)
3012/ 60/90	8.55 (217)	6.93 (176)	6.38 (162)	5.99 (152)	5.56 (141)	5.40 (137)	5.12 (130)	4.85 (123)	4.65 (118)
3012/ 65/95	8.35 (212)	7.01 (178)	6.50 (165)	6.11 (155)	5.71 (145)	5.56 (141)	5.28 (134)	5.04 (128)	4.85 (123)
3012/ 70/110	11.89 (302)	9.22 (234)	8.35 (212)	7.72 (196)	7.09 (180)	6.82 (173)	6.50 (165)	6.11 (155)	5.83 (148)
3012/ 80/120	13.00 (330)	10.08 (256)	9.14 (232)	8.47 (215)	7.76 (197)	7.48 (190)	7.09 (180)	6.70 (170)	6.38 (162)
3012/ 90/130	14.10 (358)	10.91 (277)	9.88 (251)	9.18 (233)	8.39 (213)	8.11 (206)	7.68 (195)	7.25 (184)	6.93 (176)
3012/ 100/145	14.06 (357)	11.26 (286)	10.40 (264)	9.73 (247)	9.02 (229)	8.67 (220)	8.31 (211)	7.84 (199)	7.56 (192)
3012/ 110/155	15.56 (395)	12.40 (315)	11.34 (288)	10.56 (268)	9.77 (248)	9.41 (239)	8.98 (228)	8.43 (214)	8.11 (206)
3012/ 120/165	19.49 (495)	14.57 (370)	13.00 (330)	11.97 (304)	10.99 (279)	10.48 (266)	9.96 (253)	9.30 (236)	8.90 (226)
3012/ 130/180	18.63 (473)	14.69 (373)	13.31 (338)	12.40 (315)	11.50 (292)	11.06 (281)	10.52 (267)	9.88 (251)	9.49 (241)
3012/ 140/190	24.37 (619)	17.44 (443)	15.48 (393)	14.14 (359)	13.00 (330)	12.29 (312)	11.62 (295)	10.83 (275)	10.40 (264)
3012/ 150/200	27.41 (696)	18.98 (482)	16.70 (424)	15.20 (386)	13.78 (350)	13.15 (334)	12.37 (314)	11.50 (292)	10.95 (278)
3012/ 160/210	28.78 (731)	19.93 (506)	17.52 (445)	15.95 (405)	14.49 (368)	13.82 (351)	13.00 (330)	12.09 (307)	11.50 (292)
3012/ 170/225	23.66 (601)	18.51 (470)	16.93 (430)	15.67 (398)	14.33 (364)	13.86 (352)	13.19 (335)	12.40 (315)	11.89 (302)
3012/ 180/235	25.44 (646)	19.73 (501)	17.88 (454)	16.58 (421)	15.20 (386)	14.65 (372)	13.90 (353)	13.07 (332)	12.52 (318)
3012/ 190/250	27.56 (700)	21.19 (538)	19.18 (487)	17.72 (450)	16.26 (413)	15.67 (398)	14.88 (378)	13.90 (353)	13.35 (339)

HUB OD Requirements (continued)

Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
3012/ 200/260	26.93 (684)	21.19 (538)	19.57 (497)	17.92 (455)	16.50 (419)	15.95 (405)	15.16 (385)	14.25 (362)	13.74 (349)
3012/ 220/285	30.87 (784)	23.90 (607)	21.66 (550)	20.08 (510)	18.43 (468)	17.72 (450)	16.85 (428)	15.83 (402)	15.16 (385)
3012/ 240/305	35.44 (900)	26.66 (677)	23.78 (604)	21.97 (558)	20.16 (512)	19.25 (489)	18.35 (466)	17.17 (436)	16.42 (417)
3012/ 260/325	36.46 (926)	27.88 (708)	25.08 (637)	23.15 (588)	21.26 (540)	20.36 (517)	19.33 (491)	18.15 (461)	17.40 (442)
3012/ 280/355	39.76 (1010)	30.40 (772)	27.36 (695)	25.24 (641)	23.19 (589)	22.20 (564)	21.11 (536)	19.81 (503)	18.98 (482)
3012/ 300/375	46.97 (1193)	33.98 (863)	30.40 (772)	27.76 (705)	25.40 (645)	24.10 (612)	22.88 (581)	21.26 (540)	20.40 (518)
3012/ 320/405	47.05 (1195)	35.40 (899)	31.58 (802)	29.18 (741)	26.78 (680)	25.51 (648)	24.25 (616)	22.64 (575)	21.66 (550)
3012/ 340/425	49.37 (1254)	37.17 (944)	33.15 (842)	30.63 (778)	28.11 (714)	26.78 (680)	25.47 (647)	23.74 (603)	22.72 (577)
3012/ 360/455	49.29 (1252)	38.15 (969)	34.57 (878)	32.05 (814)	29.37 (746)	28.31 (719)	26.89 (683)	25.28 (642)	24.18 (614)
3012/ 380/475	51.42 (1306)	39.84 (1012)	36.10 (917)	33.47 (850)	30.67 (779)	29.57 (751)	28.07 (713)	26.38 (670)	25.24 (641)
3012/ 400/495	58.47 (1485)	43.66 (1109)	38.98 (990)	35.87 (911)	32.96 (837)	31.38 (797)	29.85 (758)	27.88 (708)	26.70 (678)
3012/ 420/515	56.77 (1442)	43.58 (1107)	39.53 (1004)	36.50 (927)	33.47 (850)	32.25 (819)	30.63 (778)	28.78 (731)	27.56 (700)
3012/ 440/535	55.40 (1407)	43.58 (1107)	39.80 (1011)	36.85 (936)	34.13 (867)	32.88 (835)	31.19 (792)	29.29 (744)	28.23 (717)
3012/ 460/555	53.54 (1360)	43.27 (1099)	39.76 (1010)	37.17 (944)	34.53 (877)	33.23 (844)	31.70 (805)	29.92 (760)	28.86 (733)
3012/ 480/575	70.63 (1794)	51.62 (1311)	45.71 (1161)	42.13 (1070)	38.50 (978)	36.69 (932)	34.88 (886)	32.60 (828)	31.26 (794)
3012/ 500/595	66.77 (1696)	50.83 (1291)	45.91 (1166)	42.41 (1077)	38.90 (988)	37.25 (946)	35.35 (898)	33.27 (845)	31.85 (809)
3012/ 520/615	75.55 (1919)	55.20 (1402)	48.90 (1242)	45.04 (1144)	41.19 (1046)	39.22 (996)	37.28 (947)	34.88 (886)	33.43 (849)
3012/ 540/635	71.26 (1810)	54.26 (1378)	49.02 (1245)	45.24 (1149)	41.50 (1054)	39.76 (1010)	37.76 (959)	35.52 (902)	34.02 (864)
3012/ 560/655	80.48 (2044)	58.78 (1493)	52.09 (1323)	47.96 (1218)	43.86 (1114)	41.78 (1061)	39.73 (1009)	37.13 (943)	35.59 (904)
3012/ 580/675	82.92 (2106)	60.59 (1539)	53.70 (1364)	49.45 (1256)	45.20 (1148)	43.07 (1094)	40.95 (1040)	38.27 (972)	36.69 (932)
3012/ 600/695	79.37 (2016)	60.20 (1529)	54.18 (1376)	49.80 (1265)	45.71 (1161)	43.78 (1112)	41.58 (1056)	38.86 (987)	37.21 (945)

3015 Series General Purpose



M_t = Transmissible torque per locking assembly
M_A = Tightening torque per screw
P_{ax} = Transmission axial force
P_w P_N = Contact pressure between locking assembly
 Shaft (pw)-Hub (pN)
L1-L3 are for unlocked assemblies

Dimensions

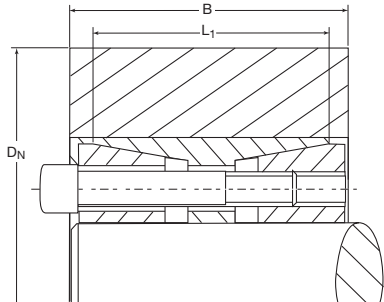
Part No.	d x D in. (mm)	M _t lb. ft. (Nm)	P _{ax} lb. ft. (kN)	L1 in. (mm)	L2 in. (mm)	L3 in. (mm)	Pieces	S	M _A in. lbs. (Nm)	P _w lb. in. ² (N/mm ²)	P _N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
3015/ 70/110	2.7559/2.7541 (70) x	4.3328/4.3307 (110)	5,274 (7150)	45,861 (204)	1.97 (50)	2.36 (60)	2.76 (70)	8	M 10 x 55	735 (83)	28,137 (194)	15,519 (107)	5.07 (2.30)
3015/ 80/120	3.1496/3.1478 (80) x	4.7265/4.7244 (120)	7,560 (10250)	56,202 (250)	1.97 (50)	2.36 (60)	2.76 (70)	10	M 10 x 55	735 (83)	30,748 (212)	17,839 (123)	5.51 (2.50)
3015/ 90/130	3.5433/3.5412 (90) x	5.1206/5.1181 (130)	9,293 (12600)	62,947 (280)	1.97 (50)	2.36 (60)	2.76 (70)	11	M 10 x 55	735 (83)	30,023 (207)	18,129 (125)	5.95 (2.70)
3015/ 100/145	3.9370/3.9349 (100) x	5.7111/5.7087 (145)	13,719 (18600)	83,269 (372)	2.36 (60)	2.76 (70)	3.23 (82)	10	M 12 x 60	1,283 (145)	29,733 (205)	18,274 (126)	8.82 (4.00)
3015/ 110/155	4.3307/4.7223 (110) x	6.1048/6.1024 (155)	15,120 (20500)	83,269 (372)	2.36 (60)	2.76 (70)	3.23 (82)	10	M 12 x 60	1,283 (145)	27,122 (187)	17,114 (118)	9.48 (4.30)
3015/ 120/165	4.7244/4.7223 (120) x	6.4985/6.4961 (165)	18,070 (24500)	91,722 (408)	2.36 (60)	2.76 (70)	3.23 (82)	11	M 12 x 60	1,283 (145)	27,267 (188)	17,694 (122)	10.14 (4.60)
3015/ 130/180	5.1181/5.1156 (130) x	7.0891/7.0866 (180)	24,930 (33800)	116,901 (520)	2.56 (65)	3.11 (79)	3.58 (91)	14	M 12 x 65	1,283 (145)	28,572 (197)	18,564 (128)	13.89 (6.30)
3015/ 140/190	5.5118/5.5093 (140) x	7.4831/7.4803 (190)	28,765 (39000)	125,219 (557)	2.56 (65)	3.11 (79)	3.58 (91)	15	M 12 x 65	1,283 (145)	28,427 (196)	18,854 (130)	14.55 (6.60)
3015/ 150/200	5.9055/5.9030 (150) x	7.8769/7.8740 (200)	30,830 (41800)	125,219 (557)	2.56 (65)	3.11 (79)	3.58 (91)	15	M 12 x 65	1,283 (145)	26,542 (183)	17,839 (123)	15.65 (7.10)
3015/ 160/210	6.2992/6.2967 (160) x	8.2706/8.2677 (210)	35,034 (47500)	133,312 (593)	2.56 (65)	3.11 (79)	3.58 (91)	16	M 12 x 65	1,283 (145)	26,542 (183)	18,129 (125)	16.53 (7.50)
3015/ 170/225	6.6929/6.6904 (170) x	8.8611/8.8583 (225)	47,941 (65000)	171,754 (764)	3.07 (78)	3.62 (92)	4.17 (106)	15	M 14 x 75	2,036 (230)	27,992 (193)	19,290 (133)	22.71 (10.30)
3015/ 180/235	7.0866/7.0841 (180) x	9.2548/9.2520 (235)	50,892 (69000)	171,979 (765)	3.07 (78)	3.62 (92)	4.17 (106)	15	M 14 x 75	2,036 (230)	26,397 (182)	18,419 (127)	24.03 (10.90)
3015/ 190/250	7.4803/7.4775 (190) x	9.8454/9.8425 (250)	57,161 (77500)	183,219 (815)	3.47 (88)	4.02 (102)	4.57 (116)	16	M 14 x 80	2,036 (230)	23,641 (163)	14,938 (103)	30.86 (14.00)
3015/ 200/260	7.8740/7.8712 (200) x	10.2394/10.2362 (260)	75,231 (102000)	229,305 (1020)	3.47 (88)	4.02 (102)	4.57 (116)	18	M 14 x 80	2,036 (230)	28,137 (194)	17,984 (124)	32.41 (14.70)
3015/ 220/285	8.6614/8.6586 (220) x	11.2237/11.2205 (285)	86,295 (117000)	238,297 (1060)	3.78 (96)	4.25 (108)	4.88 (124)	15	M 16 x 90	3,142 (355)	25,237 (174)	16,389 (113)	42.11 (19.10)
3015/ 240/305	9.4488/9.4460 (240) x	12.0111/12.0079 (305)	125,385 (170000)	316,981 (1410)	3.78 (96)	4.25 (108)	4.88 (124)	20	M 16 x 90	3,142 (355)	30,748 (212)	20,305 (140)	44.75 (20.30)
3015/ 260/325	10.2362/10.2330 (260) x	12.7988/12.7953 (325)	142,349 (193000)	332,717 (1480)	3.78 (96)	4.25 (108)	4.88 (124)	20	M 16 x 90	3,142 (355)	29,733 (205)	20,015 (138)	48.28 (21.90)
3015/ 280/355	11.0236/11.0204 (280) x	13.9799/13.9764 (355)	171,114 (232000)	370,935 (1650)	3.78 (96)	4.33 (110)	5.12 (130)	15	M 20 x 100	6,107 (690)	30,893 (213)	20,450 (141)	61.95 (28.10)
3015/ 300/375	11.8110/11.8078 (300) x	14.7673/14.7638 (375)	183,653 (249000)	370,935 (1650)	3.78 (96)	4.33 (110)	5.12 (130)	16	M 20 x 100	6,107 (690)	28,717 (198)	19,435 (134)	66.36 (30.10)
3015/ 320/405	12.5984/12.5949 (320) x	15.9487/15.9449 (405)	261,097 (354000)	496,828 (2210)	4.82 (124)	5.35 (136)	6.14 (156)	20	M 20 x 110	6,107 (690)	27,702 (191)	18,129 (125)	97.00 (44.00)
3015/ 340/425	13.3858/13.3823 (340) x	16.7361/16.7323 (425)	277,323 (376000)	496,828 (2210)	4.88 (124)	5.35 (136)	6.14 (156)	20	M 20 x 110	6,107 (690)	26,107 (180)	17,259 (119)	102.96 (46.70)
3015/ 360/455	14.1732/14.1697 (360) x	17.9172/17.9134 (455)	365,830 (496000)	618,225 (2750)	5.51 (140)	6.10 (155)	6.97 (177)	20	M 22 x 130	8,231 (930)	26,832 (185)	17,114 (118)	145.50 (66.00)

3015 Series General Purpose

Dimensions (continued)

Part No.	d x D in. (mm)	Mt lb. ft. (Nm)	Pax lb. ft. (kN)	L1 in. (mm)	L2 in. (mm)	L3 in. (mm)	Pieces	S	M _A in. lbs. (Nm)	P _W lb. in. ² (N/mm ²)	P _N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
3015/ 380/475	14.9606/14.9571 (380) x	18.7046/18.7008 (475)	386,482 (524000)	618,225 (2750)	5.512 (140)	6.102 (155)	6.969 (177)	20	M 22 x 130	8,231 (930)	25,382 (175)	16,389 (113)	160.94 (73.00)
3015/ 400/495	15.7480/15.7445 (400) x	19.4920/19.4882 (495)	444,012 (602000)	676,675 (3010)	5.512 (140)	6.102 (155)	6.969 (177)	22	M 22 x 130	8,231 (930)	26,542 (183)	17,694 (122)	167.55 (76.00)
3015/ 420/515	16.5354/16.5316 (420) x	20.2799/20.2756 (515)	511,867 (694000)	741,869 (3300)	5.512 (140)	6.102 (155)	6.969 (177)	24	M 22 x 130	8,231 (930)	27,557 (190)	18,419 (127)	176.37 (80.00)
3015/ 440/535	17.3228/17.3190 (440) x	21.0673/21.0630 (535)	536,944 (728000)	741,869 (3300)	5.512 (140)	6.102 (155)	6.969 (177)	24	M 22 x 130	8,231 (930)	24,076 (166)	17,839 (123)	178.57 (81.00)
3015/ 460/555	18.1102/18.1064 (460) x	21.8547/21.8504 (555)	560,546 (760000)	741,869 (3300)	5.512 (140)	6.102 (155)	6.969 (177)	24	M 22 x 130	8,231 (930)	23,061 (159)	17,114 (118)	187.39 (85.00)
3015/ 480/575	18.8976/18.8938 (480) x	22.6421/22.6378 (575)	612,176 (830000)	773,343 (3440)	5.512 (140)	6.102 (155)	6.969 (177)	25	M 22 x 130	8,231 (930)	23,061 (159)	17,259 (119)	194.01 (88.00)
3015/ 500/595	19.6850/19.6812 (500) x	23.4295/23.4252 (595)	635,040 (861000)	773,343 (3440)	5.512 (140)	6.102 (155)	6.969 (177)	25	M 22 x 130	8,231 (930)	22,191 (153)	16,679 (115)	200.62 (91.00)
3015/ 520/615	20.4724/20.4681 (520) x	24.2169/24.2126 (615)	739,774 (1003000)	865,514 (3850)	5.512 (140)	6.102 (155)	6.969 (177)	28	M 22 x 130	8,231 (930)	23,786 (164)	17,984 (124)	209.44 (95.00)
3015/ 540/635	21.2598/21.2555 (540) x	25.0049/25.0000 (635)	768,539 (1042000)	865,514 (3850)	5.512 (140)	6.102 (155)	6.969 (177)	28	M 22 x 130	8,231 (930)	22,916 (158)	17,404 (120)	216.05 (98.00)
3015/ 560/655	22.0472/22.0429 (560) x	25.7923/25.7874 (655)	853,358 (1157000)	928,461 (4130)	5.512 (140)	6.102 (155)	6.969 (177)	30	M 22 x 130	8,231 (930)	23,641 (163)	18,129 (125)	222.67 (101.00)
3015/ 580/675	22.8346/22.8303 (580) x	26.5797/26.5748 (675)	884,336 (1199000)	928,461 (4130)	5.512 (140)	6.102 (155)	6.969 (177)	30	M 22 x 130	8,231 (930)	22,916 (158)	17,549 (121)	229.28 (104.00)
3015/ 600/695	23.6220/23.6177 (600) x	27.3671/27.3622 (695)	914,576 (1240000)	928,461 (4130)	5.512 (140)	6.102 (155)	6.969 (177)	30	M 22 x 130	8,231 (930)	22,191 (153)	17,114 (118)	238.10 (108.00)

3015 Series Hub



B = Is to be greater than 2 x L₁
b = Depth of bore is to be greater than L₃
D_N = Minimum diameter of hub & material yield point

HUB OD Requirements

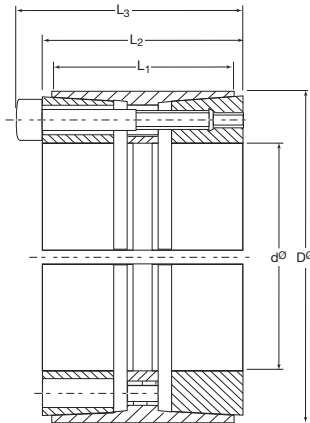
Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
3015/ 70/110	11.03 (280)	8.86 (225)	8.08 (205)	7.48 (190)	6.93 (176)	6.66 (169)	6.34 (161)	5.99 (152)	5.75 (146)
3015/ 80/120	15.55 (395)	11.11 (282)	9.85 (250)	9.02 (229)	8.19 (208)	7.80 (198)	7.37 (187)	6.85 (174)	6.58 (167)
3015/ 90/135	17.64 (448)	11.58 (294)	11.03 (280)	10.16 (258)	9.22 (234)	8.78 (223)	8.27 (210)	7.72 (196)	7.48 (190)
3015/ 100/145	18.94 (481)	13.39 (340)	11.82 (300)	10.91 (277)	9.88 (251)	9.45 (240)	8.90 (226)	8.62 (219)	7.92 (201)
3015/ 110/155	18.31 (465)	13.66 (347)	12.21 (310)	11.22 (285)	10.28 (261)	9.85 (250)	9.33 (237)	8.74 (222)	8.35 (212)
3015/ 120/165	19.49 (495)	14.57 (370)	13.55 (344)	11.97 (304)	11.22 (285)	10.71 (272)	10.40 (264)	9.41 (239)	9.06 (230)
3015/ 130/180	26.50 (673)	17.64 (448)	15.44 (392)	13.98 (355)	12.60 (320)	11.97 (304)	11.26 (286)	10.48 (266)	9.93 (252)
3015 /140/190	27.96 (710)	18.63 (473)	16.22 (412)	14.77 (375)	13.31 (338)	12.64 (321)	11.89 (302)	11.06 (281)	10.48 (266)
3015/ 150/200	26.15 (664)	18.51 (470)	16.38 (416)	15.04 (382)	13.63 (346)	13.00 (330)	12.29 (312)	11.42 (290)	10.95 (278)
3015/ 160/2010	27.44 (697)	19.41 (493)	17.21 (437)	15.79 (401)	14.30 (363)	13.66 (347)	12.88 (327)	12.01 (305)	11.50 (292)
3015/ 170/225	38.50 (978)	23.47 (596)	20.12 (511)	18.07 (459)	16.22 (412)	15.32 (389)	14.33 (364)	13.31 (338)	12.48 (317)
3015/ 180/235	34.57 (878)	23.03 (585)	20.08 (510)	18.47 (469)	16.46 (418)	15.67 (398)	14.73 (374)	13.70 (348)	12.96 (329)
3015/ 190/250	23.43 (595)	19.22 (488)	17.01 (432)	16.54 (420)	15.36 (390)	14.88 (378)	14.18 (360)	13.39 (340)	12.88 (327)
3015/ 200/260	32.92 (836)	24.06 (611)	21.26 (540)	19.57 (497)	17.72 (450)	16.93 (430)	15.95 (405)	14.85 (377)	14.21 (361)
3015/ 220/285	30.83 (783)	23.90 (607)	21.66 (550)	20.08 (510)	18.43 (468)	17.72 (450)	16.82 (427)	15.83 (402)	15.16 (385)
3015/ 240/305	69.88 (1775)	33.98 (863)	28.59 (726)	25.44 (646)	22.56 (573)	21.38 (543)	19.93 (506)	18.39 (467)	17.05 (433)
3015/ 260/325	74.57 (1894)	36.22 (920)	30.48 (774)	27.13 (689)	24.06 (611)	22.80 (579)	21.26 (540)	19.57 (497)	18.15 (461)
3015/ 280/355	81.50 (2070)	39.96 (1015)	19.96 (507)	29.65 (753)	26.26 (667)	24.88 (632)	23.19 (589)	21.38 (543)	19.85 (504)
3015/ 300/375	64.22 (1631)	39.10 (993)	33.51 (851)	30.12 (765)	27.01 (686)	25.56 (649)	23.90 (607)	22.13 (562)	20.83 (529)
3015/ 320/405	52.92 (1344)	37.48 (952)	33.15 (842)	30.48 (774)	27.56 (700)	26.30 (668)	24.88 (632)	23.11 (587)	22.17 (563)
3015/ 340/425	50.20 (1275)	37.48 (952)	33.47 (850)	30.79 (782)	28.27 (718)	26.93 (684)	25.59 (650)	23.94 (608)	22.92 (582)
3015/ 360/455	53.74 (1365)	40.16 (1020)	35.83 (910)	32.96 (837)	30.24 (768)	28.86 (733)	27.41 (696)	25.63 (651)	24.53 (623)
3015/ 380/475	51.42 (1306)	39.76 (1010)	36.10 (917)	33.47 (850)	30.71 (780)	29.53 (750)	28.03 (712)	26.38 (670)	25.24 (641)

HUB OD Requirements (continued)

Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
3015/ 400/495	64.69 (1643)	45.79 (1163)	38.98 (990)	35.87 (911)	33.70 (856)	32.17 (817)	30.40 (772)	28.27 (718)	27.09 (688)
3015/ 420/515	75.83 (1926)	50.48 (1282)	44.02 (1118)	39.93 (1014)	36.10 (917)	34.25 (870)	32.25 (819)	30.00 (762)	28.39 (721)
3015/ 440/535	69.92 (1776)	49.49 (1257)	43.82 (1113)	40.24 (1022)	36.42 (925)	34.77 (883)	32.88 (835)	30.55 (776)	29.25 (743)
3015/ 460/555	65.55 (1665)	48.94 (1243)	43.70 (1110)	40.16 (1020)	36.93 (938)	35.20 (894)	33.43 (849)	31.26 (794)	29.92 (760)
3015/ 480/575	67.92 (1725)	50.71 (1288)	45.28 (1150)	41.73 (1060)	38.27 (972)	36.46 (926)	34.65 (880)	32.37 (822)	31.02 (788)
3015/ 500/595	64.41 (1636)	49.88 (1267)	45.20 (1148)	41.93 (1065)	38.43 (976)	37.01 (940)	35.12 (892)	33.03 (839)	31.62 (803)
3015/ 520/615	80.32 (2040)	56.89 (1445)	50.40 (1280)	46.26 (1175)	41.89 (1064)	39.96 (1015)	37.76 (959)	35.12 (892)	33.66 (855)
3015/ 540/635	75.00 (1905)	55.98 (1422)	50.00 (1270)	45.99 (1168)	42.25 (1073)	40.24 (1022)	38.27 (972)	35.75 (908)	34.25 (870)
3015/ 560/655	85.59 (2174)	60.63 (1540)	53.63 (1362)	49.22 (1250)	44.61 (1133)	42.56 (1081)	40.20 (1021)	37.40 (950)	35.83 (910)
3015/ 580/675	79.73 (2025)	59.53 (1512)	53.15 (1350)	48.90 (1242)	44.88 (1140)	42.80 (1087)	40.67 (1033)	38.00 (965)	36.93 (938)
3015/ 600/695	82.09 (2085)	61.26 (1556)	54.73 (1390)	50.32 (1278)	46.26 (1175)	44.10 (1120)	41.85 (1063)	39.14 (994)	37.48 (952)

3015.1 Series Reduced Pressures

Designed for Conveyor Pulleys



M_t = Transmissible torque per locking assembly
M_A = Tightening torque per screw
P_{ax} = Transmission axial force
P_w P_N = Contact pressure between locking assembly
 Shaft (pw)-Hub (pN)
L1-L3 are for unlocked assemblies

Dimensions

Part No.	d x D in. (mm)		M _t lb. ft. (Nm)	P _{ax} lb. ft. (kN)	L1 in. (mm)	L2 in. (mm)	L3 in. (mm)	Pieces	S	M _A in. lbs. (Nm)	P _w lb. in. ² (N/mm ²)	P _N lb. in. ² (N/mm ²)	Weight lbs. (kg)
3015.1/ 70/110	2.7559/2.7541 (70)	x 4.3328/4.3307 (110)	3,135 (4250)	27,202 (121)	1.97 (50)	2.36 (60)	2.76 (70)	8	M 10 x 55	434 (49)	16,679 (115)	9,282 (64)	5.07 (2.30)
3015.1/ 80/120	3.1496/3.1478 (80)	x 4.7265/4.7244 (120)	4,499 (6100)	34,171 (152)	1.97 (50)	2.36 (60)	2.76 (70)	10	M 10 x 55	434 (49)	18,130 (125)	10,588 (73)	5.51 (2.50)
3015.1/ 90/130	3.5433/3.5412 (90)	x 5.1206/5.1181 (130)	5,532 (7500)	37,543 (167)	1.97 (50)	2.36 (60)	2.76 (70)	11	M 10 x 55	434 (49)	17,695 (122)	10,733 (74)	5.95 (2.70)
3015.1/ 100/145	3.9370/3.9349 (100)	x 5.7111/5.7087 (145)	6,520 (8840)	39,791 (177)	2.36 (60)	2.77 (70)	3.23 (82)	10	M 12 x 60	611 (69)	14,069 (97)	8,702 (60)	8.82 (4.00)
3015.1/ 110/155	4.3307/4.7223 (110)	x 6.1048/6.1024 (155)	7,184 (9740)	39,791 (177)	2.36 (60)	2.77 (70)	3.23 (82)	10	M 12 x 60	611 (69)	12,908 (89)	8,122 (56)	9.48 (4.30)
3015.1/ 120/165	4.7244/4.7223 (120)	x 6.4985/6.4961 (165)	8,556 (11600)	43,388 (193)	2.36 (60)	2.77 (70)	3.23 (82)	11	M 12 x 60	611 (69)	12,908 (89)	8,412 (58)	10.14 (4.60)
3015.1/ 130/180	5.1181/5.1156 (130)	x 7.0891/7.0866 (180)	11,845 (16060)	55,528 (247)	2.56 (65)	3.11 (79)	3.58 (91)	14	M 12 x 65	611 (69)	13,489 (93)	8,847 (61)	13.89 (6.30)
3015.1/ 140/190	5.5118/5.5093 (140)	x 7.4831/7.4803 (190)	13,645 (18500)	59,350 (264)	2.56 (65)	3.11 (79)	3.58 (91)	15	M 12 x 65	611 (69)	13,489 (93)	8,992 (62)	14.55 (6.60)
3015.1/ 150/200	5.9055/5.9030 (150)	x 7.8769/7.8740 (200)	14,648 (19860)	59,350 (264)	2.56 (65)	3.11 (79)	3.58 (91)	15	M 12 x 65	611 (69)	12,618 (87)	8,557 (59)	15.65 (7.10)
3015.1/ 160/210	6.2992/6.2967 (160)	x 8.2706/8.2677 (210)	17,163 (23270)	65,195 (290)	2.56 (65)	3.11 (79)	3.58 (91)	16	M 12 x 65	611 (69)	12,618 (87)	8,702 (60)	16.53 (7.50)
3015.1/ 170/225	6.6929/6.6904 (170)	x 8.8611/8.8583 (225)	22,769 (30870)	81,606 (363)	3.07 (78)	3.62 (92)	4.17 (106)	15	M 14 x 75	956 (108)	13,343 (92)	9,137 (63)	22.71 (10.30)
3015.1/ 180/235	7.0866/7.0841 (180)	x 9.2548/9.2520 (235)	24,155 (32750)	81,606 (363)	3.07 (78)	3.62 (92)	4.17 (106)	15	M 14 x 75	956 (108)	12,618 (87)	8,702 (60)	24.03 (10.90)
3015.1/ 190/250	7.4803/7.4775 (190)	x 9.8454/9.8425 (250)	27,142 (36800)	87,001 (387)	3.47 (88)	4.02 (102)	4.57 (116)	16	M 14 x 80	956 (108)	11,313 (78)	7,252 (50)	30.86 (14.00)
3015.1/ 200/260	7.8740/7.8712 (200)	x 10.2394/10.2362 (260)	35,735 (48450)	108,808 (484)	3.47 (88)	4.02 (102)	4.57 (116)	18	M 14 x 80	956 (108)	13,343 (92)	8,557 (59)	32.41 (14.70)
3015.1/ 220/285	8.6614/8.6586 (220)	x 11.2237/11.2205 (285)	40,986 (55570)	113,529 (505)	3.78 (96)	4.25 (108)	4.88 (124)	15	M 16 x 90	1,487 (168)	12,038 (83)	7,832 (54)	42.11 (19.10)
3015.1/ 240/305	9.4488/9.4460 (240)	x 12.0111/12.0079 (305)	59,558 (80750)	151,296 (673)	3.78 (96)	4.25 (108)	4.88 (124)	20	M 16 x 90	1,487 (168)	14,504 (100)	9,718 (67)	44.75 (20.30)
3015.1/ 260/325	10.2362/10.2330 (260)	x 12.7988/12.7953 (325)	67,612 (91670)	158,490 (705)	3.78 (96)	4.25 (108)	4.88 (124)	20	M 16 x 90	1,487 (168)	14,069 (97)	9,572 (66)	48.28 (21.90)
3015.1/ 280/355	11.0236/11.0204 (280)	x 13.9799/13.9764 (355)	90,572 (122800)	197,157 (877)	3.78 (96)	4.33 (110)	5.12 (130)	15	M 20 x 100	3,266 (369)	16,534 (114)	10,878 (75)	61.95 (28.10)
3015.1/ 300/375	11.8110/11.8078 (300)	x 14.7673/14.7638 (375)	98,096 (133000)	199,406 (887)	3.78 (96)	4.33 (110)	5.12 (130)	16	M 20 x 100	3,266 (369)	15,374 (106)	10,443 (72)	66.36 (30.10)
3015.1/ 320/405	12.5984/12.5949 (320)	x 15.9487/15.9449 (405)	139,399 (189000)	265,499 (1181)	4.88 (124)	5.35 (136)	6.14 (156)	20	M 20 x 110	3,266 (369)	14,794 (102)	9,718 (67)	97.00 (44.00)
3015.1/ 340/425	13.3858/13.3823 (340)	x 16.7361/16.7323 (425)	148,102 (200800)	265,499 (1181)	4.88 (124)	5.35 (136)	6.14 (156)	20	M 20 x 110	3,266 (369)	13,924 (96)	9,282 (64)	102.96 (46.70)
3015.1/ 360/455	14.1732/14.1697 (360)	x 17.9172/17.9134 (455)	193,241 (262000)	327,097 (1455)	5.51 (140)	6.10 (155)	6.97 (177)	20	M 22 x 130	4,381 (495)	14,214 (98)	8,992 (62)	145.50 (66.00)

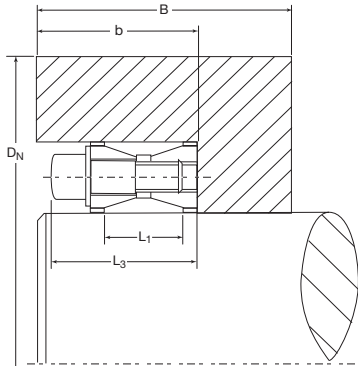
3015.1 Series Reduced Pressures

Designed for Conveyor Pulleys

Dimensions (continued)

Part No.	d x D in. (mm)	Mt lb. ft. (Nm)	Pax lb. ft. (kN)	L1 in. (mm)	L2 in. (mm)	L3 in. (mm)	Pieces	S	M _A in. lbs. (Nm)	P _W lb. in. ² (N/mm ²)	P _N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
3015.1/ 380/475	14.9606/14.9571 (380) x	18.7046/18.7008 (475)	204,821 (277700)	327,097 (1455)	5.51 (140)	6.10 (155)	6.97 (177)	20	M 22 x 130	4,381 (495)	13,489 (93)	8,702 (60)	160.94 (73.00)
3015.1/ 400/495	15.7480/15.7445 (400) x	19.4920/19.4882 (495)	235,282 (319000)	358,570 (1595)	5.51 (140)	6.10 (155)	6.97 (177)	22	M 22 x 130	4,381 (495)	14,069 (97)	9,427 (65)	167.55 (76.00)
3015.1/ 420/515	16.5354/16.5316 (420) x	20.2799/20.2756 (515)	271,275 (367800)	393,640 (1751)	5.51 (140)	6.10 (155)	6.97 (177)	24	M 22 x 130	4,381 (495)	14,504 (100)	9,863 (68)	176.37 (80.00)
3015.1/ 440/535	17.3228/17.3190 (440) x	21.0673/21.0630 (535)	316,782 (429500)	438,827 (1952)	5.51 (140)	6.10 (155)	6.97 (177)	24	M 22 x 130	4,868 (550)	14,214 (98)	10,588 (73)	178.57 (81.00)
3015.1/ 460/555	18.1102/18.1064 (460) x	21.8547/21.8504 (555)	330,722 (448400)	438,827 (1952)	5.51 (140)	6.10 (155)	6.97 (177)	24	M 22 x 130	4,868 (550)	13,634 (94)	10,153 (70)	187.39 (85.00)
3015.1/ 480/575	19.8976/19.8938 (480) x	22.6421/22.6378 (575)	361,184 (489700)	458,610 (2040)	5.51 (140)	6.10 (155)	6.97 (177)	25	M 22 x 130	4,868 (550)	13,634 (94)	10,153 (70)	194.01 (88.00)
3015.1/ 500/595	19.6850/19.6812 (500) x	23.4295/23.4252 (595)	374,681 (508000)	458,610 (2040)	5.51 (140)	6.10 (155)	6.97 (177)	25	M 22 x 130	4,868 (550)	13,053 (90)	9,863 (68)	200.62 (91.00)
3015.1/ 520/615	20.4724/20.4681 (520) x	24.2169/24.2126 (615)	435,899 (591000)	510,991 (2273)	5.51 (140)	6.10 (155)	6.97 (177)	28	M 22 x 130	4,868 (550)	14,069 (97)	10,588 (73)	209.44 (95.00)
3015.1/ 540/635	21.2598/21.2555 (540) x	25.0049/25.0000 (635)	452,863 (614000)	510,991 (2273)	5.51 (140)	6.10 (155)	6.97 (177)	28	M 22 x 130	4,868 (550)	13,489 (93)	10,298 (71)	216.05 (98.00)
3015.1/ 560/655	22.0472/22.0429 (560) x	25.7923/25.7874 (655)	503,017 (682000)	547,859 (2437)	5.51 (140)	6.10 (155)	6.97 (177)	30	M 22 x 130	4,868 (550)	13,924 (96)	10,733 (74)	222.67 (101.00)
3015.1/ 580/675	22.8346/22.8303 (580) x	26.5797/26.5748 (675)	521,751 (707400)	547,859 (2437)	5.51 (140)	6.10 (155)	6.97 (177)	30	M 22 x 130	4,868 (550)	13,489 (93)	10,443 (72)	229.28 (104.00)
3015.1/ 600/695	23.6220/23.6177 (600) x	27.3671/27.3622 (695)	539,600 (731600)	547,859 (2437)	5.51 (140)	6.10 (155)	6.97 (177)	30	M 22 x 130	4,868 (550)	13,053 (90)	10,153 (70)	238.10 (108.00)

3015.1 Series Hub



B = Is to be greater than 2 x L1
b = Depth of bore is to be greater than L3
DN = Minimum diameter of hub & material yield point

HUB OD Requirements

Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
3015.1/ 70/110	6.85 (174)	6.30 (160)	6.03 (153)	5.87 (149)	5.63 (143)	5.52 (140)	5.44 (138)	5.24 (133)	5.12 (130)
3015.1/ 80/120	8.11 (206)	7.29 (185)	6.89 (175)	6.62 (168)	6.30 (160)	6.22 (158)	6.07 (154)	5.87 (149)	5.67 (144)
3015.1/ 90/130	8.78 (223)	7.92 (201)	7.52 (191)	7.29 (185)	6.97 (177)	6.82 (173)	6.62 (168)	6.34 (161)	6.19 (157)
3015.1/ 100/145	8.74 (222)	7.21 (183)	7.76 (197)	7.52 (191)	7.33 (186)	7.13 (181)	7.01 (178)	6.78 (172)	6.66 (169)
3015.1/ 110/155	9.06 (230)	8.43 (214)	8.19 (208)	7.88 (200)	7.64 (194)	7.52 (191)	7.33 (186)	7.13 (181)	7.01 (178)
3015.1/ 120/165	9.80 (249)	9.02 (229)	8.78 (223)	8.47 (215)	8.31 (211)	8.08 (205)	8.00 (203)	7.72 (196)	7.52 (191)
3015.1/ 130/180	10.91 (277)	10.00 (254)	9.73 (247)	9.41 (239)	9.06 (230)	8.86 (225)	8.37 (221)	8.43 (214)	8.15 (207)
3015.1/ 140/190	11.50 (292)	10.63 (270)	10.24 (260)	9.96 (253)	9.73 (247)	9.41 (239)	9.30 (236)	8.98 (228)	8.74 (222)
3015.1/ 150/200	11.97 (304)	11.11 (282)	10.71 (272)	10.40 (264)	10.08 (256)	9.85 (250)	9.69 (246)	9.37 (238)	9.14 (232)
3015.1/ 160/2010	12.64 (321)	11.65 (296)	11.22 (285)	10.91 (277)	10.59 (269)	10.32 (262)	10.16 (258)	9.85 (250)	9.61 (244)
3015.1/ 170/225	13.82 (351)	12.76 (324)	12.21 (310)	11.89 (302)	11.54 (293)	11.26 (286)	11.06 (281)	10.63 (270)	10.40 (264)
3015.1/ 180/235	14.14 (359)	13.04 (331)	12.60 (320)	12.21 (310)	11.85 (301)	11.58 (294)	11.38 (289)	11.03 (280)	10.75 (273)
3015.1/ 190/250	13.98 (355)	13.00 (330)	12.80 (325)	12.33 (313)	12.13 (308)	11.93 (303)	11.54 (293)	11.42 (290)	11.14 (283)
3015.1/ 200/260	15.55 (395)	14.33 (364)	13.94 (354)	13.50 (343)	13.11 (333)	12.80 (325)	12.60 (320)	12.17 (309)	11.89 (302)
3015.1/ 220/285	16.50 (419)	15.36 (390)	14.93 (379)	14.45 (367)	14.02 (356)	13.82 (351)	13.47 (342)	13.11 (333)	12.84 (326)
3015.1/ 240/305	19.45 (494)	17.80 (452)	17.17 (436)	16.46 (418)	15.75 (400)	15.48 (393)	15.12 (384)	14.65 (372)	14.21 (361)
3015.1/ 260/325	20.48 (520)	18.82 (478)	18.43 (468)	17.52 (445)	16.78 (426)	16.38 (416)	15.99 (406)	15.75 (400)	15.12 (384)
3015.1/ 280/355	24.18 (614)	21.82 (554)	20.67 (525)	20.00 (508)	19.02 (483)	18.59 (472)	18.03 (458)	17.33 (440)	16.89 (429)
3015.1/ 300/375	25.24 (641)	22.60 (574)	21.54 (547)	20.83 (529)	19.81 (503)	19.49 (495)	19.06 (484)	18.31 (465)	17.72 (450)
3015.1/ 320/405	25.99 (660)	23.74 (603)	22.64 (575)	20.01 (559)	21.07 (535)	20.56 (522)	20.24 (514)	19.45 (494)	18.90 (480)
3015.1/ 340/425	26.42 (671)	24.25 (616)	23.43 (595)	22.60 (574)	21.93 (557)	21.42 (544)	20.91 (531)	20.24 (514)	19.69 (500)
3015.1/ 360/455	27.60 (701)	27.76 (705)	24.73 (628)	23.82 (605)	23.31 (592)	22.56 (573)	22.20 (564)	21.66 (550)	20.95 (532)
3015.1/ 380/475	26.63 (727)	26.38 (670)	25.44 (646)	24.69 (627)	23.94 (608)	23.39 (594)	23.00 (584)	22.25 (565)	21.77 (553)

HUB OD Requirements (continued)

Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
3015.1/ 400/495	30.99 (787)	28.47 (723)	27.29 (693)	26.50 (673)	25.51 (648)	24.96 (634)	24.37 (619)	23.59 (599)	22.96 (583)
3015.1/ 420/515	33.03 (839)	30.20 (767)	28.78 (731)	27.80 (706)	26.97 (685)	26.15 (664)	25.56 (649)	24.92 (633)	24.06 (611)
3015.1/ 440/535	36.03 (915)	32.44 (824)	30.75 (781)	29.69 (754)	28.43 (722)	27.60 (701)	26.97 (685)	26.11 (663)	25.28 (642)
3015.1/ 460/555	36.26 (921)	33.00 (838)	31.46 (799)	30.40 (772)	29.06 (738)	28.43 (722)	27.76 (705)	26.89 (683)	26.07 (662)
3015.1/ 480/575	37.56 (954)	34.18 (868)	32.60 (828)	31.46 (799)	30.12 (765)	29.41 (747)	28.74 (730)	27.84 (707)	27.01 (686)
3015.1/ 500/595	38.43 (976)	34.88 (886)	33.51 (851)	32.32 (821)	30.91 (785)	30.44 (773)	29.53 (750)	28.82 (732)	27.80 (706)
3015.1/ 520/615	41.38 (1051)	37.52 (953)	35.35 (898)	34.13 (867)	32.68 (830)	31.74 (806)	30.99 (787)	29.77 (756)	29.14 (740)
3015.1/ 540/635	41.73 (1060)	38.00 (965)	35.98 (914)	34.77 (883)	33.27 (845)	32.48 (825)	31.74 (806)	30.75 (781)	29.92 (760)
3015.1/ 560/655	44.33 (1126)	39.96 (1015)	37.92 (963)	36.89 (937)	35.08 (891)	33.78 (858)	33.00 (838)	31.97 (812)	31.11 (790)
3015.1/ 580/675	44.65 (1134)	40.63 (1032)	38.54 (979)	37.21 (945)	35.87 (911)	34.80 (884)	34.02 (864)	32.68 (830)	31.89 (810)
3015.1/ 600/695	45.44 (1154)	41.30 (1049)	39.37 (1000)	38.04 (966)	36.38 (924)	35.59 (904)	34.77 (883)	33.66 (855)	32.64 (829)

3012, 3015 & 3015.1 Series Installation and Removal

Fitting:

Power is transmitted by means of pressure and friction between the functional surfaces. Therefore, make a particular check of the locking screw torques and the condition of the contact surfaces (see point 1).

1. All contact surfaces, including the threads and surfaces on which the locking screw heads rest, must be clean and provided with a film of oil. Fit shaft, hub, and locking assembly having been oiled.
2. Unscrew all locking screws several turns and screw at least three screws into the threads of Parts 3 and 2, so that they press against the stop and hold Parts 1 and 3 away from Part 2.
3. Place locking assembly in hub bore. Take screws from the lifting screw holes and screw back into the threaded holes of Part 1.
4. Tighten screws evenly to the given torque, MA, crosswise covering the circumference several times. (Tighten the screws on the two sides of the slot one after the other.) When none of the screws can be tightened any further with the torque wench, fitting is complete.

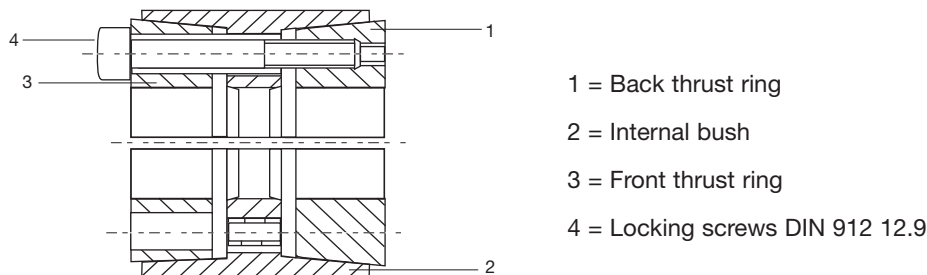


Figure 1

Used locking assemblies must be cleaned, lightly oiled and put together as in Fig. 1. When being fitted together it should be ensured that the thrust rings and the internal bush are correctly arranged together, i.e. all threaded holes in the back thrust ring must be opposite through-holes in the arm of the bush and front thrust ring.

Removal:

1. Remove sealing plugs.
2. Loosen all screws several turns.
3. Insert screws into all lifting screw holes in the front thrust ring and the arm of the internal bush, which are screwed out of the back thrust ring.
4. By tightening the screws in the lifting screw holes evenly (the screws on the two sides of the slot one after the other), the connection is loosened.

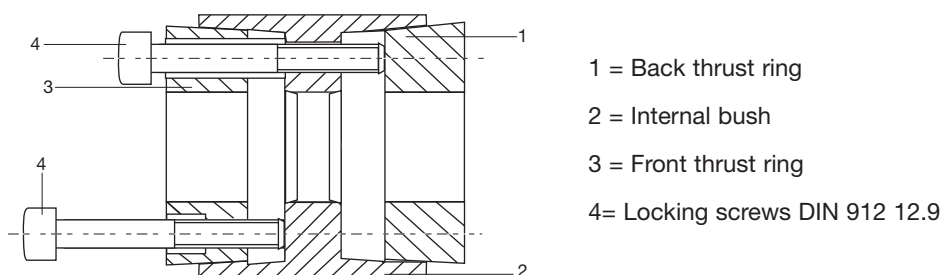
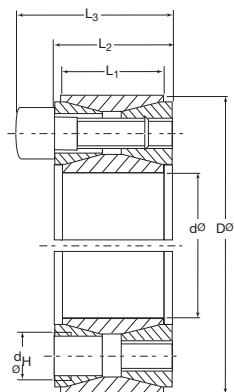


Figure 2

3020 Series General Purpose



- M_t** = Transmissible torque per locking assembly
- M_A** = Tightening torque per screw
- P_{ax}** = Transmission axial force
- P_w P_N** = Contact pressure between locking assembly
Shaft (p_w)-Hub (p_N)
- d_H** = 3 auxiliary threads in the front thrust ring.
The screw heads are marked...
- Not to be used for pullers
- L1-L3** are for unlocked assemblies

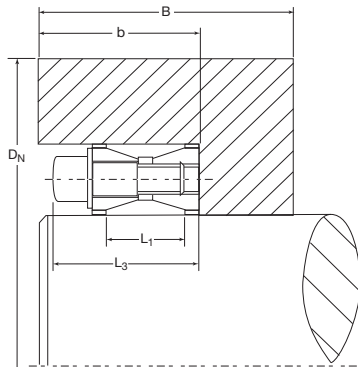
Dimensions

Part No.	d x D in. (mm)	M _t lb. ft. (Nm)	P _{ax} lb. ft. (kN)	L1 in. (mm)	L2 in. (mm)	L3 in. (mm)	Pieces	S	M _A in. lbs. (Nm)	P _w lb. in. ² (N/mm ²)	P _N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
3020/ 17/47	.6693/.6650 (17)	x 1.8567/1.8504 (47)	202 (274)	7,194 (32)	0.67 (17)	0.79 (20)	1.08 (27.5)	8	M 6 x 18	150 (17)	42,931 (296)	15,954 (110)	0.51 (0.23)
3020/ 18/47	.7087/.7043 (18)	x 1.8567/1.8504 (47)	214 (290)	7,194 (32)	0.67 (17)	0.79 (20)	1.08 (27.5)	8	M 6 x 18	150 (17)	40,611 (280)	15,954 (110)	0.51 (0.23)
3020/ 19/47	.7480/.7429 (19)	x 1.8567/1.8504 (47)	226 (306)	7,194 (32)	0.67 (17)	0.79 (20)	1.08 (27.5)	8	M 6 x 18	150 (17)	38,435 (265)	15,954 (110)	0.51 (0.23)
3020/ 20/47	.7874/.7823 (20)	x 1.8567/1.8504 (47)	236 (320)	7,194 (32)	0.67 (17)	0.79 (20)	1.08 (27.5)	8	M 6 x 18	150 (17)	36,985 (255)	15,954 (110)	0.51 (0.23)
3020/ 22/47	.8661/.8610 (22)	x 1.8567/1.8504 (47)	266 (360)	7,194 (32)	0.67 (17)	0.79 (20)	1.08 (27.5)	8	M 6 x 18	150 (17)	34,374 (237)	15,954 (110)	0.51 (0.23)
3020/ 24/50	.9449/.9398 (24)	x 1.9748/1.9685 (50)	285 (387)	7,419 (33)	0.67 (17)	0.79 (20)	1.08 (27.5)	8	M 6 x 18	150 (17)	30,458 (210)	14,649 (101)	0.57 (0.26)
3020/ 25/50	.9843/.9791 (25)	x 1.9748/1.9685 (50)	296 (402)	7,419 (33)	0.67 (17)	0.79 (20)	1.08 (27.5)	8	M 6 x 18	150 (17)	29,153 (201)	14,649 (101)	0.55 (0.25)
3020/ 28/55	1.1024/1.0972 (28)	x 2.1728/2.1654 (55)	500 (678)	10,791 (48)	0.67 (17)	0.79 (20)	1.08 (27.5)	12	M 6 x 18	150 (17)	39,160 (270)	19,870 (137)	0.66 (0.30)
3020/ 30/55	1.1811/1.1760 (30)	x 2.1728/2.1654 (55)	535 (726)	10,791 (48)	0.67 (17)	0.79 (20)	1.08 (27.5)	12	M 6 x 18	150 (17)	36,550 (252)	19,870 (137)	0.64 (0.29)
3020/ 32/60	1.2598/1.2535 (32)	x 2.3697/2.3622 (60)	571 (774)	10,791 (48)	0.67 (17)	0.79 (20)	1.08 (27.5)	12	M 6 x 18	150 (17)	34,229 (236)	18,565 (128)	0.71 (0.32)
3020/ 35/60	1.3780/1.3717 (35)	x 2.3697/2.3622 (60)	627 (850)	10,791 (48)	0.67 (17)	0.79 (20)	1.08 (27.5)	12	M 6 x 18	150 (17)	31,763 (219)	18,565 (128)	0.71 (0.32)
3020/ 38/65	1.4961/1.4898 (38)	x 2.5665/2.5591 (65)	774 (1050)	12,364 (55)	0.67 (17)	0.79 (20)	1.08 (27.5)	15	M 6 x 18	133 (15)	33,359 (230)	19,435 (134)	0.75 (0.34)
3020/ 40/65	1.5748/1.5685 (40)	x 2.5665/2.5591 (65)	819 (1110)	12,364 (55)	0.67 (17)	0.79 (20)	1.08 (27.5)	15	M 6 x 18	150 (17)	31,763 (219)	19,435 (134)	0.75 (0.34)
3020/ 42/75	1.6535/1.6472 (42)	x 2.9602/2.9528 (75)	1,291 (1750)	18,884 (84)	0.79 (20)	0.95 (24)	1.32 (33.5)	12	M 8 x 22	363 (41)	38,290 (264)	21,321 (147)	1.26 (0.57)
3020/ 45/75	1.7717/1.7654 (45)	x 2.9602/2.9528 (75)	1,387 (1880)	18,884 (84)	0.79 (20)	0.95 (24)	1.32 (33.5)	12	M 8 x 22	363 (41)	35,679 (246)	21,321 (147)	1.26 (0.57)
3020/ 48/80	1.8898/1.8835 (48)	x 3.1571/3.1496 (80)	1,490 (2020)	18,884 (84)	0.79 (20)	0.95 (24)	1.32 (33.5)	12	M 8 x 22	363 (41)	33,794 (233)	19,580 (135)	1.32 (0.60)
3020/ 50/80	1.9685/1.9622 (50)	x 3.1571/3.1496 (80)	1,527 (2070)	18,659 (83)	0.79 (20)	0.95 (24)	1.32 (33.5)	12	M 8 x 22	363 (41)	32,343 (223)	19,580 (135)	1.32 (0.60)
3020/ 55/85	2.1654/2.1579 (55)	x 3.3551/3.3465 (85)	2,132 (2890)	23,605 (105)	0.79 (20)	0.95 (24)	1.32 (33.5)	15	M 8 x 22	363 (41)	36,840 (254)	23,786 (164)	1.39 (0.63)
3020/ 60/90	2.3622/2.3547 (60)	x 3.5520/3.5433 (90)	2,331 (3160)	23,605 (105)	0.79 (20)	0.95 (24)	1.32 (33.5)	15	M 8 x 22	363 (41)	33,794 (233)	22,481 (155)	1.52 (0.69)
3020/ 65/95	2.5591/2.5516 (65)	x 3.7488/3.7402 (95)	2,522 (3420)	23,605 (105)	0.79 (20)	0.95 (24)	1.32 (33.5)	15	M 8 x 22	363 (41)	31,183 (215)	21,321 (147)	1.61 (0.73)
3020/ 70/110	2.7559/2.7484 (70)	x 4.3394/4.3307 (110)	4,477 (6070)	38,892 (173)	0.95 (24)	1.10 (28)	1.56 (39.5)	15	M 10 x 25	735 (83)	39,740 (274)	25,382 (175)	2.78 (1.26)
3020/ 75/115	2.9528/2.9453 (75)	x 4.5362/4.5276 (115)	4,794 (6500)	38,892 (173)	0.95 (24)	1.10 (28)	1.56 (39.5)	15	M 10 x 25	735 (83)	37,130 (256)	24,221 (167)	2.93 (1.33)

3020 Series General Purpose

Dimensions (continued)

Part No.	d x D in. (mm)		Mt lb. ft. (Nm)	Pax lb. ft. (kN)	L1 in. (mm)	L2 in. (mm)	L3 in. (mm)	Pieces	S	M _A in. lbs. (Nm)	P _W lb. in. ² (N/mm ²)	P _N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
3020/ 80/120	3.1496/3.1421 (80)	x	4.7331/4.7244 (120)	5,089 (6900)	38,892 (173)	0.95 (24)	1.10 (28)	1.56 (39.5)	15	M 10 x 25	735 (83)	34,809 (240)	23,206 (160)	3.09 (1.40)
3020/ 85/125	3.3465/3.3378 (85)	x	4.9311/4.9213 (125)	5,443 (7380)	39,117 (174)	0.95 (24)	1.10 (28)	1.56 (39.5)	15	M 10 x 25	735 (83)	32,779 (226)	22,191 (153)	3.28 (1.49)
3020/ 90/130	3.5433/3.5346 (90)	x	5.1280/5.1181 (130)	5,753 (7800)	39,117 (174)	0.95 (24)	1.10 (28)	1.56 (39.5)	15	M 10 x 25	735 (83)	31,038 (214)	25,817 (178)	3.37 (1.53)
3020/ 95/135	3.7402/3.7315 (95)	x	5.3248/5.3150 (135)	6,904 (9360)	44,512 (198)	0.95 (24)	1.10 (28)	1.56 (39.5)	18	M 10 x 25	735 (83)	33,504 (231)	23,206 (160)	3.57 (1.62)
3020/ 100/145	3.9370/3.9283 (100)	x	5.7185/5.7087 (145)	9,441 (12800)	57,551 (256)	1.02 (26)	1.30 (33)	1.85 (47.0)	15	M 12 x 30	1,283 (145)	38,000 (262)	26,107 (180)	4.43 (2.01)
3020/ 110/55	4.3307/4.3220 (110)	x	6.1122/6.1024 (155)	10,400 (14100)	57,551 (256)	1.02 (26)	1.30 (33)	1.85 (47.0)	15	M 12 x 30	1,283 (145)	34,519 (238)	24,511 (169)	4.74 (2.15)
3020/ 120/165	4.7244/4.7157 (120)	x	6.5059/6.4961 (165)	11,211 (15200)	59,125 (263)	1.02 (26)	1.30 (33)	1.85 (47.0)	16	M 12 x 30	1,283 (145)	31,183 (215)	22,771 (157)	5.18 (2.35)
3020/ 130/180	5.1181/5.1083 (130)	x	7.0965/7.0866 (180)	15,046 (20400)	70,815 (315)	1.34 (34)	1.50 (38)	2.05 (52.0)	20	M 12 x 35	1,283 (145)	27,702 (191)	19,290 (133)	7.74 (3.51)
3020/ 140/190	5.5118/5.5020 (140)	x	7.4917/7.4803 (190)	17,849 (24200)	77,559 (345)	1.34 (34)	1.50 (38)	2.05 (52.0)	22	M 12 x 35	1,283 (145)	27,702 (191)	21,030 (145)	8.49 (3.85)
3020/ 150/200	5.9055/5.8957 (150)	x	7.8854/7.8740 (200)	20,652 (28000)	84,528 (376)	1.34 (34)	1.50 (38)	2.05 (52.0)	24	M 12 x 35	1,283 (145)	28,572 (197)	21,030 (145)	8.97 (4.07)
3020/ 160/210	6.2992/6.2894 (160)	x	8.2791/8.2677 (210)	23,971 (32500)	91,272 (406)	1.34 (34)	1.50 (38)	2.05 (52.0)	26	M 12 x 35	1,283 (145)	28,572 (197)	21,901 (151)	8.88 (4.03)
3020/ 170/225	6.6929/6.6831 (170)	x	8.8697/8.8583 (225)	29,281 (39700)	104,986 (467)	1.50 (38)	1.73 (44)	2.36 (60.0)	22	M 14 x 40	2,039 (230)	28,137 (194)	21,030 (145)	12.74 (5.78)
3020/ 180/235	7.0866/7.0768 (180)		9.2634/9.2520 (235)	33,707 (45700)	114,203 (508)	1.50 (38)	1.73 (44)	2.36 (60.0)	24	M 14 x 40	2,039 (230)	29,008 (200)	21,901 (151)	13.34 (6.05)
3020/ 190/250	7.4803/7.4689 (190)		9.8539/9.8425 (250)	41,525 (56300)	133,312 (593)	1.81 (46)	2.05 (52)	2.68 (68.0)	28	M 14 x 45	2,039 (230)	26,397 (182)	20,160 (139)	18.19 (8.25)
3020/ 200/260	7.8740/7.8626 (200)		10.2488/10.2362 (260)	46,835 (63500)	142,754 (635)	1.81 (46)	2.05 (52)	2.68 (68.0)	30	M 14 x 45	2,039 (230)	26,397 (182)	20,160 (139)	19.07 (8.65)
3020/ 220/285	8.6614/8.6500 (220)		11.2331/11.2205 (285)	60,332 (81800)	167,707 (746)	1.97 (50)	2.21 (56)	2.91 (74.0)	26	M 16 x 50	3,142 (355)	26,252 (181)	20,015 (138)	24.74 (11.22)
3020/ 240/305	9.4488/9.4374 (240)		12.0205/12.0079 (305)	75,895 (102900)	193,336 (860)	1.97 (50)	2.21 (56)	2.91 (74.0)	30	M 16 x 50	3,142 (355)	27,992 (193)	21,756 (150)	26.90 (12.20)
3020/ 260/325	10.2362/10.2236 (260)		12.8094/12.7953 (325)	92,195 (125000)	216,266 (962)	1.97 (50)	2.21 (56)	2.91 (74.0)	34	M 16 x 50	3,142 (355)	28,863 (199)	22,626 (156)	29.10 (13.20)



B = Is to be greater than 2 x L₁
b = Depth of bore is to be greater than L₃
DN = Minimum diameter of hub & material yield point

HUB OD Requirements

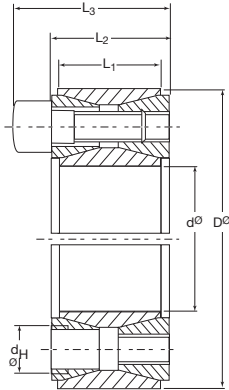
Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
3020/ 20/47	3.00 (76)	2.76 (70)	2.68 (68)	2.56 (65)	2.44 (62)	2.44 (62)	2.37 (60)	2.29 (58)	2.21 (56)
3020/ 25/50	3.31 (84)	2.96 (75)	2.84 (72)	2.76 (70)	2.68 (68)	2.56 (65)	2.52 (64)	2.44 (62)	2.37 (60)
3020/ 30/55	3.63 (92)	3.31 (84)	3.15 (80)	3.10 (78)	2.92 (74)	2.84 (72)	2.76 (70)	2.68 (68)	2.60 (66)
3020/ 35/60	4.18 (106)	3.74 (95)	3.55 (90)	3.47 (88)	3.31 (84)	3.23 (82)	3.10 (78)	2.96 (75)	2.92 (74)
3020/ 40/65	4.73 (120)	4.18 (106)	3.94 (100)	3.78 (96)	3.63 (92)	3.55 (90)	3.39 (86)	3.23 (82)	3.15 (80)
3020/ 45/75	5.83 (148)	5.12 (130)	4.81 (122)	4.53 (115)	4.33 (110)	4.14 (105)	4.02 (102)	3.86 (98)	3.74 (95)
3020/ 50/80	5.83 (148)	5.12 (130)	4.89 (124)	4.65 (118)	4.41 (112)	4.33 (110)	4.18 (106)	4.02 (102)	3.94 (100)
3020/ 55/85	6.50 (165)	5.91 (150)	5.52 (140)	5.20 (132)	4.93 (125)	4.81 (122)	4.65 (118)	4.41 (112)	4.26 (108)
3020/ 60/90	6.70 (170)	5.91 (150)	5.59 (142)	5.32 (135)	5.04 (128)	4.89 (124)	4.73 (120)	4.57 (116)	4.41 (112)
3020/ 65/95	7.48 (190)	6.62 (168)	6.15 (156)	5.83 (148)	5.52 (140)	5.32 (135)	5.20 (132)	4.93 (125)	4.73 (120)
3020/ 70/110	8.27 (210)	7.68 (195)	7.17 (182)	6.78 (172)	6.38 (162)	6.22 (158)	5.99 (152)	5.71 (145)	5.52 (140)
3020/ 75/115	8.98 (228)	7.80 (198)	7.33 (186)	6.93 (176)	6.62 (168)	6.46 (164)	6.22 (158)	5.91 (150)	5.67 (144)
3020/ 80/120	9.06 (230)	7.96 (202)	7.48 (190)	7.17 (182)	6.78 (172)	6.62 (168)	6.38 (162)	6.11 (155)	5.91 (150)
3020/ 85/125	9.65 (245)	8.67 (220)	8.19 (208)	7.68 (195)	7.29 (185)	7.09 (180)	6.78 (172)	6.50 (165)	6.22 (158)
3020/ 90/130	10.16 (258)	8.86 (225)	8.27 (210)	7.88 (200)	7.48 (190)	7.29 (185)	7.01 (178)	6.70 (170)	6.50 (165)
3020/ 95/135	10.63 (270)	9.65 (245)	9.06 (230)	8.59 (218)	8.08 (205)	7.80 (198)	7.41 (188)	7.09 (180)	6.89 (175)
3020/ 100/145	11.22 (285)	10.24 (260)	9.65 (245)	9.06 (230)	8.67 (220)	8.27 (210)	7.96 (202)	7.56 (192)	7.29 (185)
3020/ 110/155	12.01 (305)	10.44 (265)	9.77 (248)	9.37 (238)	8.86 (225)	8.67 (220)	8.27 (210)	7.88 (200)	7.68 (195)
3020/ 120/165	12.21 (310)	11.74 (298)	10.95 (278)	10.32 (262)	9.77 (248)	9.37 (238)	9.06 (230)	8.67 (220)	8.27 (210)
3020/ 130/180	12.92 (328)	11.42 (290)	10.95 (278)	10.44 (265)	9.93 (252)	9.65 (245)	9.37 (238)	8.98 (228)	8.74 (222)
3020/ 140/190	14.57 (370)	12.80 (325)	12.01 (305)	11.42 (290)	10.83 (275)	10.56 (268)	10.16 (258)	9.77 (248)	9.37 (238)
3020/ 150/200	15.36 (390)	13.39 (340)	12.60 (320)	12.01 (305)	11.42 (290)	11.03 (280)	10.63 (270)	10.24 (260)	9.85 (250)
3020/ 160/210	16.15 (410)	14.49 (368)	13.59 (345)	12.92 (328)	12.13 (308)	11.82 (300)	11.42 (290)	10.83 (275)	10.44 (265)

3020 Series Hub

HUB OD Requirements (continued)

Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
3020/ 170/225	17.25 (438)	15.04 (382)	14.10 (358)	13.59 (345)	12.80 (325)	12.40 (315)	12.01 (305)	11.50 (292)	11.11 (282)
3020/ 180/235	17.72 (450)	16.15 (410)	15.16 (385)	14.37 (365)	13.59 (345)	13.19 (335)	12.80 (325)	12.13 (308)	11.82 (300)
3020/ 190/250	18.43 (468)	16.34 (415)	15.36 (390)	14.77 (375)	13.98 (355)	13.59 (345)	13.19 (335)	12.60 (320)	12.21 (310)
3020/ 200/260	19.22 (488)	16.93 (430)	16.07 (408)	15.28 (388)	14.57 (370)	14.18 (360)	13.70 (348)	13.19 (335)	12.80 (325)
3020/ 220/285	20.95 (532)	18.59 (472)	17.52 (445)	16.74 (425)	15.83 (402)	15.44 (392)	14.96 (380)	14.37 (365)	13.98 (355)
3020/ 240/305	22.44 (570)	20.79 (528)	19.49 (495)	18.51 (470)	17.64 (448)	16.93 (430)	16.34 (415)	15.67 (398)	15.16 (385)
3020/ 260/325	24.41 (620)	22.84 (580)	21.26 (540)	20.28 (515)	18.98 (482)	18.51 (470)	17.72 (450)	16.93 (430)	16.34 (415)
3020/ 280/355	26.07 (662)	23.15 (588)	21.74 (552)	20.87 (530)	19.77 (502)	19.22 (488)	18.70 (475)	17.92 (455)	17.40 (442)
3020/ 300/375	28.55 (725)	25.00 (635)	23.63 (600)	22.44 (570)	21.26 (540)	20.67 (525)	20.00 (508)	19.09 (485)	18.51 (470)
3020/ 320/405	30.71 (780)	26.85 (682)	25.20 (640)	24.22 (615)	22.84 (580)	22.25 (565)	21.46 (545)	20.67 (525)	20.00 (508)
3020/ 340/425	31.11 (790)	27.56 (700)	25.99 (660)	24.81 (630)	23.63 (600)	23.03 (585)	22.13 (562)	21.26 (540)	20.67 (525)
3020/ 360/455	33.27 (845)	29.45 (748)	27.88 (708)	26.58 (675)	25.28 (642)	24.61 (625)	23.70 (602)	22.84 (580)	22.05 (560)
3020/ 380/475	33.55 (852)	29.92 (760)	28.35 (720)	27.17 (690)	25.91 (658)	25.40 (645)	24.61 (625)	23.63 (600)	22.84 (580)
3020/ 400/495	33.78 (858)	30.51 (775)	28.94 (735)	27.96 (710)	26.58 (675)	25.99 (660)	25.20 (640)	24.22 (615)	23.63 (600)
3020/ 420/515	36.42 (925)	32.52 (826)	30.71 (780)	29.53 (750)	28.15 (715)	27.56 (700)	26.58 (675)	25.59 (650)	24.81 (630)
3020/ 440/545	37.40 (950)	33.55 (852)	32.09 (815)	30.71 (780)	29.22 (742)	28.55 (725)	27.76 (705)	26.70 (678)	25.99 (660)
3020/ 460/565	37.60 (955)	34.06 (865)	32.48 (825)	31.50 (800)	30.12 (765)	29.22 (742)	28.55 (725)	27.36 (695)	26.78 (680)
3020/ 480/585	38.98 (990)	35.28 (896)	33.66 (855)	32.48 (825)	31.11 (790)	30.24 (768)	29.53 (750)	28.35 (720)	27.76 (705)
3020/ 500/605	40.36 (1025)	36.54 (928)	34.84 (885)	33.66 (855)	32.29 (820)	31.30 (795)	30.51 (775)	29.33 (745)	28.67 (728)

3020A Series General Purpose



- M_t** = Transmissible torque per locking assembly
- M_A** = Tightening torque per screw
- P_{ax}** = Transmission axial force
- P_w P_N** = Contact pressure between locking assembly
Shaft (p_w)-Hub (p_N)
- d_H** = 3 auxiliary threads in the front thrust ring.
The screw heads are marked...
Not to be used for pullers
- L1-L3** are for unlocked assemblies

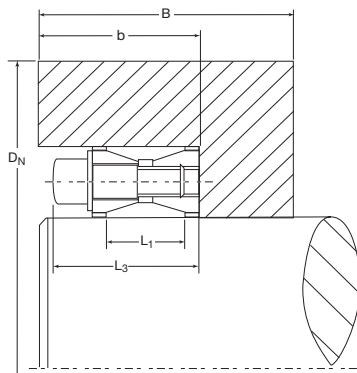
Dimensions

Part No.	d x D in. (mm)	M _t lb. ft. (Nm)	P _{ax} lb. ft. (kN)	L1 in. (mm)	L2 in. (mm)	L3 in. (mm)	Pieces	S	M _A in. lbs. (Nm)	P _w lb. in. ² (N/mm ²)	P _N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
3020A/ 20/47	.7874/1.7823 (20) x	1.8567/1.8504 (47)	199 (270)	6,070 (27)	0.67 (17)	0.79 (20)	1.08 (27.5)	8	M 6 x 18	124 (14)	30,458 (210)	13,053 (90)	0.53 (0.24)
3020A/ 22/47	.8661/1.8610 (22) x	1.8567/1.8504 (47)	221 (300)	6,070 (27)	0.67 (17)	0.79 (20)	1.08 (27.5)	8	M 6 x 18	124 (14)	28,282 (195)	13,053 (90)	0.51 (0.23)
3020A/ 24/50	.9449/1.9398 (24) x	1.9748/1.9685 (50)	266 (360)	6,744 (30)	0.67 (17)	0.79 (20)	1.08 (27.5)	8	M 6 x 18	124 (14)	28,282 (195)	13,779 (95)	0.57 (0.26)
3020A/ 25/50	.9843/1.9791 (25) x	1.9748/1.9685 (50)	280 (380)	6,744 (30)	0.67 (17)	0.79 (20)	1.08 (27.5)	8	M 6 x 18	124 (14)	27,557 (190)	13,779 (95)	0.55 (0.25)
3020A/ 28/55	1.1024/1.0972 (28) x	2.1728/2.1654 (55)	347 (470)	7,419 (33)	0.67 (17)	0.79 (20)	1.08 (27.5)	12	M 6 x 18	124 (14)	26,832 (185)	13,779 (95)	0.66 (0.30)
3020A/ 30/55	1.1811/1.1760 (30) x	2.1728/2.1654 (55)	369 (500)	7,419 (33)	0.67 (17)	0.79 (20)	1.08 (27.5)	12	M 6 x 18	124 (14)	25,382 (175)	13,779 (95)	0.64 (0.29)
3020A/ 35/60	1.3780/1.3717 (35) x	2.3697/2.3622 (60)	516 (700)	8,992 (40)	0.67 (17)	0.79 (20)	1.08 (27.5)	12	M 6 x 18	124 (14)	26,107 (180)	15,229 (105)	0.71 (0.32)
3020A/ 40/65	1.5748/1.5685 (40) x	2.5665/2.5591 (65)	679 (920)	10,341 (46)	0.67 (17)	0.79 (20)	1.08 (27.5)	15	M 6 x 18	124 (14)	26,107 (180)	15,954 (110)	0.75 (0.34)
3020A/ 45/75	1.7717/1.7654 (45) x	2.9602/2.9528 (75)	1,187 (1610)	16,186 (72)	0.79 (20)	0.95 (24)	1.32 (33.5)	12	M 8 x 22	310 (35)	30,458 (210)	18,130 (125)	1.26 (0.57)
3020A/ 50/80	1.9685/1.9622 (50) x	3.1571/3.1496 (80)	1,305 (1770)	15,961 (71)	0.79 (20)	0.95 (24)	1.32 (33.5)	12	M 8 x 22	310 (35)	27,557 (190)	16,679 (115)	1.32 (0.60)
3020A/ 55/85	2.1654/2.1579 (55) x	3.3551/3.3465 (85)	1,674 (2270)	18,659 (83)	0.79 (20)	0.95 (24)	1.32 (33.5)	15	M 8 x 22	310 (35)	29,008 (200)	18,855 (130)	1.39 (0.63)
3020A/ 60/90	2.3622/2.3547 (60) x	3.5520/3.5433 (90)	1,822 (2470)	18,659 (83)	0.79 (20)	0.95 (24)	1.32 (33.5)	15	M 8 x 22	310 (35)	26,107 (180)	17,405 (120)	1.52 (0.69)
3020A/ 65/95	2.5591/2.5516 (65) x	3.7488/3.7402 (95)	2,242 (3040)	20,907 (93)	0.79 (20)	0.95 (24)	1.32 (33.5)	15	M 8 x 22	310 (35)	27,557 (190)	18,855 (130)	1.61 (0.73)
3020A/ 70/110	2.7559/2.7484 (70) x	4.3394/4.3307 (110)	3,393 (4600)	29,675 (132)	0.95 (24)	1.10 (28)	1.56 (39.5)	15	M 10 x 25	620 (70)	30,458 (210)	18,855 (130)	2.78 (1.26)
3020A/ 75/115	2.9528/2.9453 (75) x	4.5362/4.5276 (115)	3,614 (4900)	29,450 (131)	0.95 (24)	1.10 (28)	1.56 (39.5)	15	M 10 x 25	620 (70)	28,282 (195)	18,130 (125)	2.93 (1.33)
3020A/ 80/120	3.1496/3.1421 (80) x	4.7331/4.7244 (120)	3,835 (5200)	29,450 (131)	0.95 (24)	1.10 (28)	1.56 (39.5)	15	M 10 x 25	620 (70)	26,107 (180)	17,050 (120)	3.09 (1.40)
3020A/ 85/125	3.3465/3.3378 (85) x	4.9311/4.9213 (125)	4,647 (6300)	33,272 (148)	0.95 (24)	1.10 (28)	1.56 (39.5)	15	M 10 x 25	620 (70)	28,282 (195)	18,855 (130)	3.28 (1.49)
3020A/ 90/130	3.5433/3.5346 (90) x	5.1280/5.1181 (130)	4,868 (6600)	33,047 (147)	0.95 (24)	1.10 (28)	1.56 (39.5)	15	M 10 x 25	620 (70)	26,107 (180)	18,130 (125)	3.37 (1.53)
3020A/ 95/135	3.7402/3.7315 (95) x	5.3248/5.3150 (135)	5,827 (7900)	37,543 (167)	0.95 (24)	1.10 (28)	1.56 (39.5)	18	M 10 x 25	620 (70)	28,282 (195)	19,580 (135)	3.57 (1.62)
3020A/ 100/145	3.9370/3.9283 (100) x	5.7185/5.7087 (145)	7,081 (9600)	43,163 (192)	1.02 (26)	1.30 (33)	1.85 (47.0)	15	M 12 x 30	1,106 (125)	28,282 (195)	19,580 (135)	4.43 (2.01)
3020A/ 110/155	4.3307/4.3220 (110) x	6.1122/6.1024 (155)	7,744 (10500)	42,939 (191)	1.02 (26)	1.30 (33)	1.85 (47.0)	15	M 12 x 30	1,106 (125)	26,107 (180)	18,130 (125)	4.74 (2.15)
3020A/ 120/165	4.7244/4.7157 (120) x	6.5059/6.4961 (165)	9,662 (13100)	49,008 (218)	1.02 (26)	1.30 (33)	1.85 (47.0)	16	M 12 x 30	1,106 (125)	26,320 (185)	19,580 (135)	5.18 (2.35)

3020A Series General Purpose

Dimensions (continued)

Part No.	d x D in. (mm)	Mt lb. ft. (Nm)	Pax lb. ft. (kN)	L1 in. (mm)	L2 in. (mm)	L3 in. (mm)	Pieces	S	M _A in. lbs. (Nm)	P W lb. in. ² (N/mm ²)	P N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
3020A/ 130/180	5.1181/5.1083 (130) x	7.0965/7.0866 (180)	12,981 (17600)	61,148 (272)	1.34 (34)	1.50 (38)	2.05 (52.0)	20	M 12 x 35	1,106 (125)	23,931 (165)	16,679 (115)	7.74 (3.51)
3020A/ 140/190	5.5118/5.5020 (140) x	7.4917/7.4803 (190)	15,415 (20900)	66,993 (298)	1.34 (34)	1.50 (38)	2.05 (52.0)	22	M 12 x 35	1,106 (125)	23,931 (165)	18,130 (125)	8.49 (3.85)
3020A/ 150/200	5.9055/5.8957 (150) x	7.8854/7.8740 (200)	17,849 (24200)	72,838 (324)	1.34 (34)	1.50 (38)	2.05 (52.0)	24	M 12 x 35	1,106 (125)	24,656 (170)	18,130 (125)	8.97 (4.07)
3020A/ 160/210	6.2992/6.2894 (160) x	8.2791/8.2677 (210)	20,652 (28000)	78,683 (350)	1.34 (34)	1.50 (38)	2.05 (52.0)	26	M 12 x 35	1,106 (125)	24,656 (170)	18,855 (130)	8.88 (4.03)
3020A/ 170/225	6.6929/6.6831 (170) x	8.8697/8.8583 (225)	24,192 (32800)	86,776 (386)	1.50 (38)	1.73 (44)	2.36 (60.0)	22	M 14 x 40	1,682 (190)	23,206 (160)	17,405 (120)	12.74 (5.78)
3020A/ 180/235	7.0866/7.0768 (180) x	9.2634/9.2520 (235)	27,880 (37800)	94,420 (420)	1.50 (38)	1.73 (44)	2.36 (60.0)	24	M 14 x 40	1,682 (190)	23,931 (165)	18,130 (125)	13.34 (6.05)
3020A/ 190/250	7.4803/7.4689 (190) x	9.8539/9.8425 (250)	34,297 (46500)	110,156 (490)	1.81 (46)	2.05 (52)	2.68 (68.0)	28	M 14 x 45	1,682 (190)	21,756 (150)	16,679 (115)	18.19 (8.25)
3020A/ 200/260	7.8740/7.8626 (200) x	10.2488/10.2362 (260)	38,722 (52500)	118,025 (525)	1.81 (46)	2.05 (52)	2.68 (68.0)	30	M 14 x 45	1,682 (190)	21,756 (150)	16,679 (115)	19.07 (8.65)
3020A/ 220/285	8.6614/8.6500 (220) x	11.2331/11.2205 (285)	50,154 (68000)	139,382 (620)	1.97 (50)	2.21 (56)	2.91 (74.0)	26	M 16 x 50	2,611 (295)	21,756 (150)	16,679 (115)	24.74 (11.22)
3020A/ 240/305	9.4488/9.4374 (240) x	12.0205/12.0079 (305)	63,061 (85500)	160,738 (715)	1.97 (50)	2.21 (56)	2.91 (74.0)	30	M 16 x 50	2,611 (295)	23,206 (160)	18,130 (125)	26.90 (12.20)
3020A/ 260/325	10.2362/10.2236 (260) x	12.8094/12.7953 (325)	76,706 (104000)	179,847 (800)	1.967 (50)	2.21 (56)	2.91 (74.0)	34	M 16 x 50	2,611 (295)	23,931 (165)	18,855 (130)	29.10 (13.20)
3020A/ 280/355	11.0263/11.0110 (280) x	13.9906/13.9764 (355)	94,408 (128000)	205,700 (915)	2.36 (60)	2.60 (66)	3.41 (86.5)	32	M 18 x 60	3,585 (405)	21,030 (145)	16,679 (115)	42.33 (19.20)
3020A/ 300/375	11.8110/11.7984 (300) x	14.7780/14.7638 (375)	112,847 (153000)	229,305 (1020)	2.36 (60)	2.60 (66)	3.41 (86.5)	36	M 18 x 60	3,585 (405)	21,756 (150)	17,405 (120)	45.19 (20.50)
3020A/ 320/405	12.5984/12.5843 (320) x	15.9606/15.9449 (405)	154,888 (210000)	294,500 (1310)	2.84 (72)	3.07 (78)	3.96 (100.5)	36	M 20 x 70	5,133 (580)	21,756 (150)	17,405 (120)	65.26 (29.60)
3020A/ 340/425	13.3858/13.3717 (340) x	16.7480/16.7323 (425)	165,214 (224000)	294,500 (1310)	2.84 (72)	3.07 (78)	3.96 (100.5)	36	M 20 x 70	5,133 (580)	21,030 (145)	16,679 (115)	68.56 (31.10)
3020A/ 360/455	14.1732/14.1591 (360) x	17.9291/17.9134 (455)	216,843 (294000)	366,439 (1630)	3.31 (84)	3.54 (90)	4.57 (116.0)	36	M 22 x 80	6,904 (780)	21,030 (145)	16,679 (115)	93.03 (42.20)
3020A/ 380/475	14.9606/14.9465 (380) x	18.7165/18.7008 (475)	227,169 (308000)	364,190 (1620)	3.31 (84)	3.54 (90)	4.57 (116.0)	36	M 22 x 80	6,904 (780)	19,580 (135)	15,954 (110)	97.00 (44.00)
3020A/ 400/495	15.7480/15.7339 (400) x	19.5039/19.4882 (495)	237,495 (322000)	361,942 (1610)	3.31 (84)	3.54 (90)	4.57 (116.0)	36	M 22 x 80	6,904 (780)	18,855 (130)	15,229 (105)	101.41 (46.00)
3020A/ 420/515	16.5354/16.5197 (420) x	20.2929/20.2756 (515)	275,848 (374000)	400,160 (1780)	3.31 (84)	3.54 (90)	4.57 (116.0)	40	M 22 x 80	6,904 (780)	19,580 (135)	15,954 (110)	110.23 (50.00)
3020A/ 440/545	17.3228/17.3071 (440) x	21.4740/21.4567 (545)	335,590 (455000)	463,106 (2060)	3.78 (96)	4.02 (102)	5.12 (130.0)	40	M 24 x 90	8,851 (1000)	18,855 (130)	15,229 (105)	142.42 (64.60)
3020A/ 460/565	18.1102/18.0945 (460) x	22.2614/22.2441 (565)	346,654 (470000)	458,610 (2040)	3.78 (96)	4.02 (102)	5.12 (130.0)	40	M 24 x 90	8,851 (1000)	18,130 (125)	14,504 (100)	148.59 (67.40)
3020A/ 480/585	18.8976/18.8819 (480) x	23.0488/23.0315 (585)	379,844 (515000)	485,587 (2160)	3.78 (96)	4.02 (102)	5.12 (130.0)	42	M 24 x 90	8,851 (1000)	18,130 (125)	14,504 (100)	156.53 (71.00)
3020A/ 500/605	19.6850/19.6693 (500) x	23.8362/23.8189 (605)	413,034 (560000)	503,572 (2240)	3.78 (96)	4.02 (102)	5.12 (130.0)	44	M 24 x 90	8,851 (1000)	18,130 (125)	14,504 (100)	160.06 (72.60)



B = L_s to be greater than $2 \times L_1$
b = Depth of bore is to be greater than L_3
DN = Minimum diameter of hub & material yield point

HUB OD Requirements

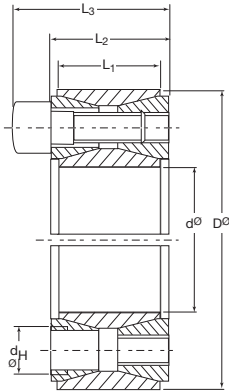
Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
3020A/ 20/47	2.72 (69)	2.56 (65)	2.44 (62)	2.40 (61)	2.33 (59)	2.29 (58)	2.25 (57)	2.17 (55)	2.13 (54)
3020A/ 25/50	2.96 (75)	2.76 (70)	2.64 (67)	2.60 (66)	2.48 (63)	2.44 (62)	2.40 (61)	2.33 (59)	2.29 (58)
3020A/ 30/55	3.23 (82)	3.04 (77)	2.92 (74)	2.84 (72)	2.72 (69)	2.68 (68)	2.64 (67)	2.56 (65)	2.52 (64)
3020A/ 35/60	3.78 (96)	3.43 (87)	3.31 (84)	3.19 (81)	3.10 (78)	3.00 (76)	2.92 (74)	2.84 (72)	2.80 (71)
3020A/ 40/65	4.14 (105)	3.78 (96)	3.63 (92)	3.51 (89)	3.35 (85)	3.31 (84)	3.19 (81)	3.11 (79)	3.04 (77)
3020A/ 45/75	5.12 (130)	4.61 (117)	4.37 (111)	4.22 (107)	4.06 (103)	3.94 (100)	3.82 (97)	3.67 (93)	3.59 (91)
3020A/ 50/80	5.20 (132)	4.73 (120)	4.49 (114)	4.37 (111)	4.18 (106)	4.10 (104)	3.98 (101)	3.86 (98)	3.74 (95)
3020A/ 55/85	5.95 (151)	5.36 (136)	5.04 (128)	4.85 (123)	4.65 (118)	4.53 (115)	4.37 (111)	4.22 (107)	4.10 (104)
3020A/ 60/90	5.99 (152)	5.44 (138)	5.16 (131)	4.96 (126)	4.77 (121)	4.65 (118)	4.53 (115)	4.37 (111)	4.26 (108)
3020A/ 65/95	6.66 (169)	5.99 (152)	5.63 (143)	5.44 (138)	5.20 (132)	5.04 (128)	4.89 (124)	4.73 (120)	4.57 (116)
3020A/ 70/110	7.72 (196)	6.93 (176)	6.54 (166)	6.30 (160)	5.99 (152)	5.87 (149)	5.67 (144)	5.44 (138)	5.28 (134)
3020A/ 75/115	7.88 (200)	7.09 (180)	6.74 (171)	6.50 (165)	6.19 (157)	6.03 (153)	5.83 (148)	5.63 (143)	5.48 (139)
3020A/ 80/120	8.00 (203)	7.25 (184)	6.89 (175)	6.66 (169)	6.34 (161)	6.22 (158)	6.07 (154)	5.83 (148)	5.67 (144)
3020A/ 85/125	8.78 (223)	7.84 (199)	7.44 (189)	7.13 (181)	6.82 (173)	6.66 (169)	6.46 (164)	6.22 (158)	6.03 (153)
3020A/ 90/130	8.90 (226)	8.00 (203)	7.60 (193)	7.33 (186)	7.01 (178)	6.82 (173)	6.62 (168)	6.38 (162)	6.19 (157)
3020A/ 95/135	9.73 (247)	8.62 (219)	8.19 (208)	7.84 (199)	7.44 (189)	7.29 (185)	7.01 (178)	6.78 (172)	6.54 (166)
3020A/ 100/145	10.44 (265)	9.30 (236)	8.78 (223)	8.43 (214)	8.00 (203)	7.80 (198)	7.56 (192)	7.25 (184)	7.01 (178)
3020A/ 110/155	10.59 (269)	9.53 (242)	9.06 (230)	8.74 (222)	8.35 (212)	8.11 (206)	7.88 (200)	7.60 (193)	7.37 (187)
3020A/ 120/165	11.89 (302)	10.56 (268)	10.00 (254)	9.57 (243)	9.10 (231)	8.86 (225)	8.59 (218)	8.23 (209)	8.00 (203)
3020A/ 130/180	11.70 (297)	10.63 (270)	10.12 (257)	9.85 (250)	9.45 (240)	9.22 (234)	8.98 (228)	8.67 (220)	8.43 (214)
3020A/ 140/190	13.00 (330)	11.65 (296)	11.11 (282)	10.71 (272)	10.24 (260)	9.93 (252)	9.65 (245)	9.33 (237)	9.06 (230)
3020A/ 150/200	13.66 (347)	12.29 (312)	11.70 (297)	11.26 (286)	10.75 (273)	10.48 (266)	10.16 (258)	9.80 (249)	9.53 (242)
3020A/ 160/210	14.73 (374)	13.19 (335)	12.48 (317)	11.97 (304)	11.46 (291)	11.19 (284)	10.83 (275)	10.44 (265)	10.12 (257)

3020A Series Hub

HUB OD Requirements (continued)

Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
3020A/ 170/225	14.96 (380)	13.55 (344)	12.92 (328)	12.44 (316)	11.89 (302)	11.65 (296)	11.34 (288)	10.95 (278)	10.63 (270)
3020A/ 180/235	16.07 (408)	14.41 (366)	13.74 (349)	13.23 (336)	12.64 (321)	12.33 (313)	11.93 (303)	11.50 (292)	11.19 (284)
3020A/ 190/250	16.26 (413)	14.77 (375)	14.06 (357)	13.63 (346)	13.11 (333)	12.80 (325)	12.44 (316)	12.01 (305)	11.74 (298)
3020A/ 200/260	16.93 (430)	15.36 (390)	14.65 (372)	14.18 (360)	13.63 (346)	13.31 (338)	12.96 (329)	12.48 (317)	12.21 (310)
3020A/ 220/285	18.51 (470)	16.85 (428)	16.07 (408)	15.55 (395)	14.93 (379)	14.57 (370)	14.18 (360)	13.70 (348)	13.35 (348)
3020A/ 240/305	20.87 (530)	18.70 (475)	17.84 (453)	17.17 (436)	16.38 (416)	15.95 (405)	15.52 (394)	14.96 (380)	14.53 (369)
3020A/ 260/325	22.76 (578)	20.40 (518)	19.29 (490)	18.59 (472)	17.72 (450)	17.33 (440)	16.74 (425)	16.15 (410)	15.59 (396)
3020A/ 280/355	23.03 (585)	20.98 (533)	19.96 (507)	19.37 (492)	18.59 (472)	18.19 (462)	17.72 (450)	17.05 (433)	16.65 (423)
3020A/ 300/375	25.28 (642)	22.52 (572)	21.46 (545)	20.71 (526)	19.88 (505)	19.41 (493)	18.90 (480)	18.19 (462)	17.72 (450)
3020A/ 320/405	27.29 (693)	24.33 (618)	23.23 (590)	22.37 (568)	21.46 (545)	20.98 (533)	20.36 (517)	19.69 (500)	19.14 (486)
3020A/ 340/425	27.56 (700)	25.04 (636)	24.02 (610)	23.15 (588)	22.20 (564)	21.77 (553)	21.15 (537)	20.44 (519)	19.93 (506)
3020A/ 360/455	29.45 (748)	26.78 (680)	25.71 (653)	24.81 (630)	23.82 (605)	23.31 (592)	22.64 (575)	21.89 (556)	21.34 (542)
3020A/ 380/475	30.00 (762)	27.56 (700)	26.38 (670)	25.40 (645)	24.53 (623)	24.02 (610)	23.39 (594)	22.68 (576)	22.13 (562)
3020A/ 400/495	31.11 (790)	28.15 (715)	27.17 (690)	26.18 (665)	25.20 (640)	24.81 (630)	24.22 (615)	23.43 (595)	23.03 (585)
3020A/ 420/515	32.60 (828)	29.85 (758)	28.59 (726)	27.76 (705)	26.58 (675)	25.99 (660)	25.59 (650)	24.61 (625)	23.94 (608)
3020A/ 440/545	33.59 (853)	30.95 (786)	29.73 (755)	28.82 (732)	27.76 (705)	27.36 (695)	26.58 (675)	25.79 (655)	25.20 (640)
3020A/ 460/565	34.06 (865)	31.50 (800)	30.32 (770)	29.53 (750)	28.55 (725)	28.15 (715)	27.36 (695)	26.58 (675)	25.99 (660)
3020A/ 480/585	35.24 (895)	32.48 (825)	31.50 (800)	30.51 (775)	29.53 (750)	29.14 (740)	28.15 (715)	27.36 (695)	26.78 (680)
3020A/ 500/605	36.42 (925)	33.66 (855)	32.48 (825)	31.70 (805)	30.51 (775)	30.12 (765)	29.14 (740)	28.35 (720)	27.76 (705)

3020S1 Series Stainless and Acid Proof Steel

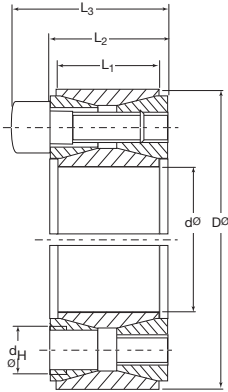


- M_t** = Transmissible torque per locking assembly
- M_A** = Tightening torque per screw
- P_{ax}** = Transmission axial force
- P_w P_N** = Contact pressure between locking assembly
Shaft (p_w)-Hub (p_N)
- d_H** = 3 auxiliary threads in the front thrust ring.
The screw heads are marked...
Not to be used for pullers
- L1-L3** are for unlocked assemblies

Dimensions

Part No.	d x D in. (mm)		M _t lb. ft. (Nm)	P _{ax} lb. ft. (kN)	L1 in. (mm)	L2 in. (mm)	L3 in. (mm)	Pieces	S	M _A in. lbs. (Nm)	P _w lb. in. ² (N/mm ²)	P _N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
3020S1/ 20/47	.7874/.7823 (20)	x	1.8567/1.8504 (47)	80 (108)	2,473 (11)	0.67 (17)	0.79 (20)	1.08 (27.5)	8	M 6 x 18	62 (7)	18,275 (126)	7,832 (54)	0.53 (0.24)
3020S1/ 22/47	.8661/.8610 (22)	x	1.8567/1.8504 (47)	89 (120)	2,473 (11)	0.67 (17)	0.79 (20)	1.08 (27.5)	8	M 6 x 18	62 (7)	16,969 (117)	7,977 (55)	0.51 (0.23)
3020S1/ 24/50	.9449/.9398 (24)	x	1.9748/1.9685 (50)	107 (145)	2,698 (12)	0.67 (17)	0.79 (20)	1.08 (27.5)	9	M 6 x 18	62 (7)	16,969 (117)	8,122 (56)	0.57 (0.26)
3020S1/ 25/50	.9843/.9791 (25)	x	1.9748/1.9685 (50)	112 (152)	2,698 (12)	0.67 (17)	0.79 (20)	1.08 (27.5)	9	M 6 x 18	62 (7)	16,534 (114)	8,267 (57)	0.55 (0.25)
3020S1/ 28/55	1.1024/1.0972 (28)	x	2.1728/2.1654 (55)	139 (188)	2,923 (13)	0.67 (17)	0.79 (20)	1.08 (27.5)	9	M 6 x 18	62 (7)	16,099 (111)	8,267 (57)	0.66 (0.30)
3020S1/ 30/55	1.1811/1.1760 (30)	x	2.1728/2.1654 (55)	148 (200)	2,923 (13)	0.67 (17)	0.79 (20)	1.08 (27.5)	9	M 6 x 18	62 (7)	15,229 (105)	8,267 (57)	0.64 (0.29)
3020S1/ 32/60	1.2598/1.2535 (32)	x	2.3697/2.3622 (60)	186 (252)	3,597 (16)	0.67 (17)	0.79 (20)	1.08 (27.5)	12	M 6 x 18	62 (7)	16,679 (115)	8,847 (61)	0.75 (0.34)
3020S1/ 35/60	1.3780/1.3717 (35)	x	2.3697/2.3622 (60)	207 (280)	3,597 (16)	0.67 (17)	0.79 (20)	1.08 (27.5)	12	M 6 x 18	62 (7)	15,664 (108)	9,137 (63)	0.71 (0.32)
3020S1/ 38/65	1.4961/1.4898 (38)	x	2.5665/2.5591 (65)	257 (348)	4,047 (18)	0.67 (17)	0.79 (20)	1.08 (27.5)	15	M 6 x 18	62 (7)	16,389 (113)	9,572 (66)	0.79 (0.36)
3020S1/ 40/65	1.5748/1.5685 (40)	x	2.5665/2.5591 (65)	273 (370)	4,271 (19)	0.67 (17)	0.79 (20)	1.08 (27.5)	15	M 6 x 18	62 (7)	15,664 (108)	9,718 (67)	0.75 (0.34)
3020S1/ 42/75	1.6535/1.6472 (42)	x	2.9602/2.9528 (75)	443 (600)	6,295 (28)	0.79 (20)	0.95 (24)	1.32 (33.5)	12	M 8 x 22	159 (18)	19,725 (136)	11,023 (76)	1.32 (0.60)
3020S1/ 45/75	1.7717/1.7654 (45)	x	2.9602/2.9528 (75)	476 (645)	6,295 (28)	0.79 (20)	0.95 (24)	1.32 (33.5)	12	M 8 x 22	159 (18)	18,275 (126)	11,023 (76)	1.26 (0.57)
3020S1/ 48/80	1.8898/1.8835 (48)	x	3.1517/3.1496 (80)	502 (680)	6,295 (28)	0.79 (20)	0.95 (24)	1.32 (33.5)	12	M 8 x 22	159 (18)	17,114 (118)	10,298 (71)	1.37 (0.62)
3020S1/ 50/80	1.9685/1.9622 (50)	x	3.1517/3.1496 (80)	516 (700)	6,295 (28)	0.79 (20)	0.95 (24)	1.32 (33.5)	12	M 8 x 22	159 (18)	16,534 (114)	10,298 (71)	1.32 (0.60)
3020S1/ 55/85	2.1654/2.1579 (55)	x	3.3551/3.3465 (85)	671 (910)	7,419 (33)	0.79 (20)	0.95 (24)	1.32 (33.5)	14	M 8 x 22	159 (18)	17,405 (120)	11,313 (78)	1.39 (0.63)
3020S1/ 60/90	2.3622/2.3547 (60)	x	3.5520/3.5433 (90)	730 (990)	7,419 (33)	0.79 (20)	0.95 (24)	1.32 (33.5)	14	M 8 x 22	159 (18)	15,664 (108)	10,443 (72)	1.52 (0.69)
3020S1/ 65/95	2.5591/2.5516 (65)	x	3.7488/3.7402 (95)	822 (1115)	7,644 (34)	0.79 (20)	0.95 (24)	1.32 (33.5)	16	M 8 x 22	159 (18)	16,534 (114)	11,313 (78)	1.61 (0.73)
3020S1/ 70/110	2.7559/2.7488 (70)	x	4.3394/4.3307 (110)	1,357 (1840)	11,590 (52)	0.95 (24)	1.10 (28)	1.56 (39.5)	14	M 10 x 25	310 (35)	18,275 (126)	11,603 (80)	2.78 (1.26)
3020S1/ 75/115	2.9528/2.9453 (75)	x	4.5362/4.5276 (115)	1,446 (1960)	11,690 (52)	0.95 (24)	1.10 (28)	1.56 (39.5)	14	M 10 x 25	310 (35)	16,969 (117)	11,023 (76)	2.93 (1.33)
3020S1/ 80/120	3.1496/3.1421 (80)	x	4.7331/4.7244 (120)	1,534 (2080)	11,690 (52)	0.95 (24)	1.10 (28)	1.56 (39.5)	14	M 10 x 25	310 (35)	17,114 (118)	11,458 (79)	3.09 (1.40)
3020S1/ 85/125	3.3465/3.3378 (85)	x	4.9311/4.9213 (125)	1,859 (2520)	13,264 (59)	0.95 (24)	1.10 (28)	1.56 (39.5)	16	M 10 x 25	310 (35)	16,969 (117)	11,603 (80)	3.28 (1.49)
3020S1/ 90/130	3.5433/3.5346 (90)	x	5.1280/5.1181 (130)	1,947 (2640)	13,264 (59)	0.95 (24)	1.10 (28)	1.56 (39.5)	16	M 10 x 25	310 (35)	15,664 (108)	10,878 (75)	3.37 (1.53)
3020S1/ 95/135	3.7402/3.7315 (95)	x	5.3248/5.3150 (135)	2,331 (3160)	14,837 (66)	0.95 (24)	1.10 (28)	1.56 (39.5)	18	M 10 x 25	310 (35)	16,969 (117)	11,893 (82)	3.57 (1.62)

3020S2 Series Stainless and Stainless Screws

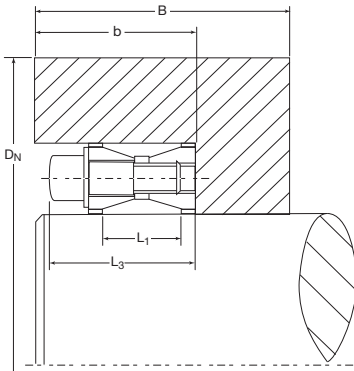


- M_t** = Transmissible torque per locking assembly
- M_A** = Tightening torque per screw
- P_{ax}** = Transmission axial force
- P_w** **P_N** = Contact pressure between locking assembly
Shaft (p_w)-Hub (p_N)
- d_H** = 3 auxiliary threads in the front thrust ring.
The screw heads are marked...
Not to be used for pullers
- L1-L3** are for unlocked assemblies

Dimensions

Part No.	d x D in. (mm)	M _t lb. ft. (Nm)	P _{ax} lb. ft. (kN)	L1 in. (mm)	L2 in. (mm)	L3 in. (mm)	Pieces	S	M _A in. lbs. (Nm)	P _w lb. in. ² (N/mm ²)	P _N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
3020S2/ 20/47	.7874/.7823 (20) x	1.8567/1.8504 (47)	199 (270)	6,070 (27)	0.67 (17)	0.79 (20)	1.08 (27.5)	8	M 6 x 18	150 (117)	30,458 (210)	13,053 (90)	0.53 (0.24)
3020S2/ 22/47	.8661/.8610 (22) x	1.8567/1.8504 (47)	221 (300)	6,070 (27)	0.67 (17)	0.79 (20)	1.08 (27.5)	8	M 6 x 18	150 (117)	28,282 (195)	13,053 (90)	0.51 (0.23)
3020S2/ 24/50	.9449/.9398 (24) x	1.9748/1.9685 (50)	266 (360)	6,744 (30)	0.67 (17)	0.79 (20)	1.08 (27.5)	9	M 6 x 18	150 (117)	28,282 (195)	13,779 (95)	0.57 (0.26)
3020S2/ 25/50	.9843/.9791 (25) x	1.9748/1.9685 (50)	280 (380)	6,744 (30)	0.67 (17)	0.79 (20)	1.08 (27.5)	9	M 6 x 18	150 (117)	27,557 (190)	13,779 (95)	0.55 (0.25)
3020S2/ 28/55	1.1024/1.0972 (28) x	2.1728/2.1654 (55)	347 (470)	7,419 (33)	0.67 (17)	0.79 (20)	1.08 (27.5)	9	M 6 x 18	150 (117)	26,832 (185)	13,779 (95)	0.66 (0.30)
3020S2/ 30/55	1.1811/1.1760 (30) x	2.1728/2.1654 (55)	369 (500)	7,419 (33)	0.67 (17)	0.79 (20)	1.08 (27.5)	9	M 6 x 18	150 (117)	25,382 (175)	13,779 (95)	0.64 (0.29)
3020S2/ 32/60	1.2598/1.2535 (32) x	2.3697/2.3622 (60)	465 (630)	8,992 (40)	0.67 (17)	0.79 (20)	1.08 (27.5)	12	M 6 x 18	150 (117)	27,847 (192)	15,229 (105)	0.75 (0.34)
3020S2/ 35/60	1.3780/1.3717 (35) x	2.3697/2.3622 (60)	516 (700)	8,992 (40)	0.67 (17)	0.79 (20)	1.08 (27.5)	12	M 6 x 18	150 (117)	26,107 (180)	15,229 (105)	0.71 (0.32)
3020S2/ 38/65	1.4961/1.4898 (38) x	2.5665/2.5591 (65)	642 (870)	10,341 (46)	0.67 (17)	0.79 (20)	1.08 (27.5)	15	M 6 x 18	150 (117)	27,267 (188)	15,954 (110)	0.79 (0.36)
3020S2/ 40/65	1.5748/1.5685 (40) x	2.5665/2.5591 (65)	679 (920)	10,341 (46)	0.67 (17)	0.79 (20)	1.08 (27.5)	15	M 6 x 18	150 (117)	26,107 (180)	15,954 (110)	0.75 (0.34)

3020S1, 3020S2 Series Hub



B = l_s to be greater than $2 \times L_1$
b = Depth of bore is to be greater than L_3
Dn = Minimum diameter of hub & material yield point

HUB OD Requirements

Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
3020S1/ 22/47	2.33 (59)	2.25 (57)	2.21 (56)	2.17 (55)	2.13 (54)	2.13 (54)	2.09 (53)	2.05 (52)	2.01 (51)
3020S1/ 25/50	2.52 (64)	2.40 (61)	2.37 (60)	2.33 (59)	2.29 (58)	2.25 (57)	2.21 (56)	2.21 (56)	2.17 (55)
3020S1/ 30/55	2.76 (70)	2.64 (67)	2.60 (66)	2.56 (65)	2.52 (64)	2.48 (63)	2.44 (62)	2.40 (61)	2.37 (60)
3020S1/ 35/60	3.10 (78)	2.96 (75)	2.88 (73)	2.84 (72)	2.80 (71)	2.76 (70)	2.72 (69)	2.64 (67)	2.60 (66)
3020S1/ 40/65	3.39 (86)	3.23 (82)	3.15 (80)	3.11 (79)	3.04 (77)	3.00 (76)	2.96 (75)	2.88 (73)	2.84 (72)
3020S1/ 45/75	4.06 (103)	3.86 (98)	3.74 (95)	3.67 (93)	3.59 (91)	3.51 (89)	3.47 (88)	3.39 (86)	3.35 (85)
3020S1/ 50/80	4.22 (107)	4.02 (102)	3.94 (100)	3.86 (98)	3.74 (95)	3.70 (94)	3.67 (93)	3.59 (91)	3.51 (89)
3020S1/ 55/85	4.65 (118)	4.37 (111)	4.26 (108)	4.18 (106)	4.06 (103)	4.02 (102)	3.94 (100)	3.86 (98)	3.78 (96)
3020S1/ 60/90	4.77 (121)	4.53 (115)	4.45 (113)	4.33 (110)	4.26 (108)	4.18 (106)	4.10 (104)	4.02 (102)	3.98 (101)
3020S1/ 65/95	5.20 (132)	4.89 (124)	4.77 (121)	4.65 (118)	4.53 (115)	4.49 (114)	4.41 (112)	4.30 (109)	4.22 (107)
3020S1/ 70/110	6.07 (154)	5.71 (145)	5.56 (141)	5.44 (138)	5.28 (134)	5.20 (132)	5.12 (130)	5.00 (127)	4.93 (125)
3020S1/ 75/115	6.22 (158)	5.87 (149)	5.71 (145)	5.59 (142)	5.48 (139)	5.40 (137)	5.28 (134)	5.20 (132)	5.08 (129)
3020S1/ 80/120	6.58 (167)	6.22 (158)	6.03 (153)	5.91 (150)	5.75 (146)	5.67 (144)	5.56 (141)	5.44 (138)	5.36 (136)
3020S1/ 85/125	6.89 (175)	6.50 (165)	6.30 (160)	6.15 (156)	5.99 (152)	5.91 (150)	5.79 (147)	5.67 (144)	5.56 (141)
3020S1/ 90/130	7.01 (178)	6.62 (168)	6.46 (164)	6.30 (160)	6.15 (156)	6.07 (154)	5.99 (152)	5.83 (148)	5.75 (146)
3020S1/ 95/135	7.48 (190)	7.05 (179)	6.85 (174)	6.70 (170)	6.50 (165)	6.42 (163)	6.30 (160)	6.15 (156)	6.03 (153)

HUB OD Requirements

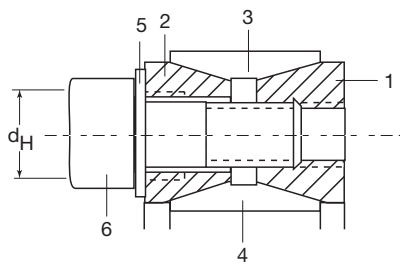
Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
3020S2/ 20/47	2.72 (69)	2.56 (65)	2.44 (62)	2.40 (61)	2.33 (59)	2.29 (58)	2.25 (57)	2.17 (55)	2.13 (54)
3020S2/ 25/50	2.96 (75)	2.76 (70)	2.64 (67)	2.60 (66)	2.48 (63)	2.44 (62)	2.40 (61)	2.33 (59)	2.29 (58)
3020S2/ 30/55	3.23 (82)	3.04 (77)	2.92 (74)	2.84 (72)	2.72 (69)	2.68 (68)	2.64 (67)	2.56 (65)	2.52 (64)
3020S2/ 35/60	3.78 (96)	3.43 (87)	3.31 (84)	3.19 (81)	3.10 (78)	3.00 (76)	2.92 (74)	2.84 (72)	2.80 (71)
3020S2/ 40/65	4.14 (105)	3.78 (96)	3.63 (92)	3.51 (89)	3.35 (85)	3.31 (84)	3.19 (81)	3.11 (79)	3.04 (77)

3020, 3020A, 3020S1 & 3020S2 Series Installation and Removal

Fitting:

Power is transmitted by means of contact pressure and friction between the functional surfaces. It is therefore very important to carefully check the condition surfaces (refer point 1) and to properly tighten the Locking Screws.

1. All contact surfaces, including threads and heads of the locking screws, have to be clean and are to be covered with an oil film. Shaft, hub and locking assembly are to be assembled in this condition.
2. Tighten locking screws lightly and position hub.
3. Tighten locking screws evenly crosswise up to the nominated tightening torque (tightening in 2-3 stages).
4. Re-check the tightening torque of the locking screws all the way round. When no screw can be tightened further with the torque wrench set to the tightening torque MA, the fitting process is completed.



- 1 = Rear thrust ring
- 2 = Front thrust ring
- 3 = Outer ring
- 4 = Inner ring
- 5 = Washer
- 6 = Locking screw grade DIN 912

Figure 1

Prior to fitting, used Locking Assemblies have to be cleaned and lightly oiled and then re-assembled as shown in figure 1. The cadmium plated screws have to be fitted with a washer and placed in the holes of the front thrust ring which have the pull-out threads (dH).

Removal:

1. Loosen all screws crosswise several turns.
2. Now the loosened connection can be disassembled. If necessary, the front and rear thrust rings are to be disassembled as shown in Figures 2 and 3.

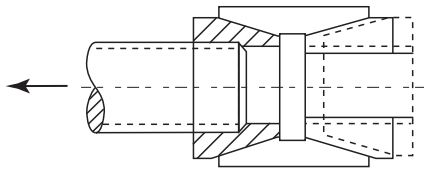


Figure 2

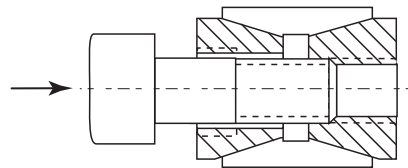
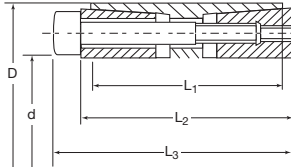


Figure 3

Tightening torque of screw DIN 912

Screw DIN 912	M6	M8	M10	M12	M14	M16	M18	M20	M22	M24
Tightening torque (Nm)	14	35	70	125	190	295	405	580	780	1000
dH	M8	M10	M12	M16	M18	M20	M22	M24	M27	M30

RB Series Conveyor Pulley Locking Assembly



- M_t** = Transmissible torque per locking assembly
- M_A** = Tightening torque per screw
- P_{ax}** = Transmission axial force
- P_w P_N** = Contact pressure between locking assembly Shaft (p_w)-Hub (p_N)
- L1-L3** are for unlocked assemblies

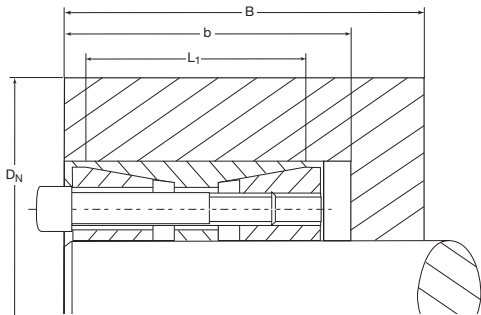
Dimensions

Part No.	d x D in. (mm)		M _t lb. ft. (Nm)	P _{ax} lb. ft. (kN)	L1 in. (mm)	L2 in. (mm)	L3 in. (mm)	Pieces	S	M _A in. lbs. (Nm)	p _w lb. in. ² (N/mm ²)	p _N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
RB/ 100/145	3.9370/3.9349 (100)	x	5.7111/5.7087 (145)	5,864 (7950)	35,745 (159)	3.31 (84)	2.91 (74)	2.44 (62)	7	M 10 x 60	735 (83)	12,662 (87)	8,731 (60)	9.70 (4.4)
RB/ 110/155	4.3307/4.3286 (110)	x	6.1048/6.1024 (155)	7,412 (10050)	40,915 (182)	3.31 (84)	2.91 (74)	2.44 (62)	8	M 10 x 60	735 (83)	13,184 (90)	9,355 (64)	10.58 (4.8)
RB/ 120/165	4.7244/4.7223 (120)	x	6.4985/6.4961 (165)	9,072 (12300)	46,086 (205)	3.39 (86)	2.99 (76)	2.52 (64)	9	M 10 x 60	735 (83)	13,024 (89)	9,471 (65)	11.68 (5.3)
RB/ 130/180	5.1181/5.1156 (130)	x	7.0891/7.0866 (180)	10,916 (14800)	51,032 (227)	3.39 (86)	2.99 (76)	2.52 (64)	10	M 10 x 60	735 (83)	13,387 (92)	9,674 (66)	13.01 (5.9)
RB/ 140/190	5.5118/5.5093 (140)	x	7.4831/7.4803 (190)	12,907 (17500)	56,202 (250)	3.47 (88)	3.07 (78)	2.60 (66)	11	M 10 x 60	735 (83)	13,184 (90)	9,674 (66)	14.99 (6.8)
RB/ 150/200	5.9055/5.9030 (150)	x	7.8769/7.8740 (200)	14,028 (19020)	56,877 (253)	3.70 (94)	3.31 (84)	2.44 (62)	11	M 10 x 70	735 (83)	11,618 (80)	8,702 (60)	19.84 (9.0)
RB/ 160/210	6.2992/6.2967 (160)	x	8.2706/8.2677 (210)	17,628 (23900)	66,993 (298)	4.09 (104)	3.62 (92)	3.07 (78)	9	M 12 x 75	1,283 (145)	11,589 (79)	8,833 (60)	20.50 (9.3)
RB/ 170/225	6.6929/6.6904 (170)	x	8.8611/8.8583 (225)	20,799 (28200)	74,412 (331)	4.09 (104)	3.62 (92)	3.07 (78)	10	M 12 x 75	1,283 (145)	12,096 (83)	9,137 (63)	24.25 (11.0)
RB/ 180/235	7.0866/7.0841 (180)	x	9.2584/9.2520 (235)	22,282 (30210)	75,311 (335)	3.86 (98)	3.39 (86)	2.95 (75)	10	M 12 x 70	1,283 (145)	12,372 (85)	9,152 (63)	28.66 (13.0)
RB/ 190/250	7.4803/7.4775 (190)	x	9.8454/9.8425 (250)	28,691 (38900)	91,947 (409)	4.96 (126)	4.41 (112)	3.35 (85)	9	M 14 x 80	2,036 (230)	12,473 (86)	9,863 (68)	33.07 (15.0)
RB/ 200/260	7.8740/7.8712 (200)	x	10.2394/10.2362 (260)	33,559 (45500)	102,288 (455)	4.96 (126)	4.40 (112)	3.35 (85)	10	M 14 x 90	2,036 (230)	11,603 (80)	10,153 (70)	37.48 (17.0)
RB/ 220/285	8.6614/8.6586 (220)	x	11.2237/11.2205 (285)	40,566 (55000)	112,404 (500)	4.96 (126)	4.41 (112)	3.35 (85)	11	M 14 x 90	2,036 (230)	11,603 (80)	10,298 (71)	45.42 (20.6)
RB/ 240/305	9.4488/9.4460 (240)	x	12.0111/12.0079 (305)	50,988 (69130)	129,490 (576)	4.96 (126)	4.41 (112)	3.35 (85)	9	M 16 x 90	3,142 (355)	12,473 (86)	11,356 (78)	50.71 (23.0)
RB/ 260/325	10.2362/10.2330 (260)	x	12.7988/12.7953 (325)	66,749 (90500)	156,467 (696)	5.51 (140)	4.88 (124)	3.82 (97)	11	M 16 x 100	3,142 (355)	11,806 (81)	9,442 (65)	57.32 (26.0)
RB/ 280/355	11.0236/11.0204 (280)	x	13.9799/13.9764 (355)	85,918 (116490)	187,041 (832)	5.35 (136)	5.35 (136)	4.25 (108)	13	M 16 x 90	3,142 (355)	12,430 (85)	8,833 (60)	81.57 (37.0)
RB/ 300/375	11.8110/11.8078 (300)	x	14.7673/14.7638 (375)	92,055 (124810)	187,041 (832)	5.00 (127)	5.00 (127)	4.25 (108)	13	M 16 x 90	3,142 (355)	11,995 (82)	8,369 (57)	81.57 (37.0)
RB/ 320/405	12.5984/12.5949 (320)	x	15.9487/15.9449 (405)	111,962 (151800)	213,119 (948)	6.58 (167)	5.95 (151)	5.32 (135)	15	M 16 x 110	3,142 (355)	10,240 (70)	8,079 (55)	114.64 (52.0)
RB/ 340/425	13.3858/13.3823 (340)	x	16.7361/16.7323 (425)	110,885 (150340)	198,731 (884)	5.59 (142)	5.59 (142)	4.72 (120)	15	M 16 x 90	3,142 (355)	10,211 (70)	7,020 (48)	116.84 (53.0)
RB/ 360/455	14.1732/14.1697 (360)	x	17.9172/17.9134 (455)	150,691 (204310)	255,158 (1135)	7.01 (178)	6.30 (160)	5.12 (130)	16	M 18 x 130	4,293 (485)	11,226 (77)	7,745 (53)	149.91 (68.0)
RB/ 380/475	14.9606/14.9571 (380)	x	18.7046/18.7008 (475)	182,023 (246790)	291,082 (1298)	7.56 (192)	6.77 (172)	5.71 (145)	13	M 20 x 130	6,107 (690)	10,965 (75)	7,513 (51)	198.42 (90.0)
RB/ 400/495	15.7480/15.7445 (400)	x	19.4920/19.4882 (495)	235,813 (319720)	359,245 (1598)	7.56 (192)	6.77 (172)	5.71 (145)	16	M 20 x 130	6,107 (690)	12,807 (88)	9,413 (64)	198.42 (90.0)
RB/ 420/515	16.5354/16.5316 (420)	x	20.2799/20.2756 (515)	247,607 (335710)	359,245 (1598)	7.48 (190)	7.09 (180)	5.71 (145)	16	M 20 x 130	6,107 (690)	11,443 (78)	9,181 (63)	198.42 (90.0)

RB Series Conveyor Pulley Locking Assembly

Dimensions (continued)

Part No.	d x D in. (mm)		Mt lb. ft. (Nm)	Pax lb. ft. (kN)	L1 in. (mm)	L2 in. (mm)	L3 in. (mm)	Pieces	S	M _A in. lbs. (Nm)	P _W lb. in. ² (N/mm ²)	P _N lb. in. ² (N/mm ²)	Weight lbs. (kg)	
RB/ 440/545	17.3228/17.3190 (440)	x	21.4610/21.4567 (545)	288,386 (391000)	399,485 (1777)	7.87 (200)	7.09 (180)	6.30 (160)	18	M 20 x 130	6,107 (690)	11,792 (81)	9,514 (65)	224.87 (102.0)
RB/ 460/565	18.1102/18.1064 (460)	x	22.2484/22.2441 (565)	305,085 (413640)	404,206 (1798)	7.48 (190)	7.09 (180)	5.71 (145)	18	M 20 x 130	6,107 (690)	11,603 (80)	8,833 (60)	246.92 (112.0)
RB/ 480/585	18.8976/18.8938 (480)	x	23.0358/23.0315 (585)	349,604 (474000)	443,998 (1975)	7.87 (200)	7.09 (180)	6.30 (160)	20	M 20 x 130	6,107 (690)	12,009 (82)	9,848 (67)	242.51 (110.0)
RB/ 500/605	19.6850/19.6812 (500)	x	23.8232/23.8189 (605)	368,412 (499500)	449,168 (1998)	7.48 (190)	7.09 (180)	5.51 (140)	20	M 20 x 130	6,107 (690)	12,009 (82)	11,342 (78)	264.55 (120.0)
RB/ 520/630	20.4724/20.4681 (520)	x	24.8075/24.8031 (630)	424,319 (575300)	497,277 (2212)	8.82 (224)	7.95 (202)	7.09 (180)	18	M 22 x 140	8,231 (930)	10,892 (75)	8,992 (62)	310.85 (141.0)
RB/ 540/650	21.2598/21.2555 (540)	x	25.5955/25.5905 (650)	465,032 (630500)	524,929 (2335)	8.82 (224)	7.95 (202)	7.09 (180)	19	M 22 x 140	8,231 (930)	11,066 (76)	9,195 (63)	321.87 (146.0)
RB/ 560/670	22.0472/22.0429 (560)	x	26.3829/26.3779 (670)	507,442 (688000)	552,356 (2457)	8.82 (224)	7.95 (202)	7.09 (180)	20	M 22 x 140	8,231 (930)	11,240 (77)	9,398 (64)	330.69 (150.0)
RB/ 580/690	22.8346/22.8303 (580)	x	27.1703/27.1653 (690)	490,072 (664450)	515,037 (2291)	8.19 (208)	8.19 (208)	7.09 (180)	20	M 22 x 140	8,231 (930)	11,023 (76)	7,397 (51)	341.72 (155.0)
RB/ 600/710	23.6220/23.6177 (600)	x	27.9577/27.9527 (710)	506,970 (687360)	515,037 (2291)	8.19 (208)	8.19 (208)	7.09 (180)	20	M 22 x 140	8,231 (930)	10,646 (73)	8,267 (57)	361.56 (164.0)
RB/ 620/730	24.4094/24.4051 (620)	x	28.7451/28.7401 (730)	576,183 (781200)	566,519 (2520)	8.19 (208)	8.19 (208)	7.09 (180)	22	M 22 x 140	8,231 (930)	12,952 (89)	8,702 (60)	381.40 (173.0)



B = Is to be greater than 2 x L1
b = Depth of bore is to be greater than L3
Dn = Minimum diameter of hub & material yield point

HUB OD Requirements

Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
RB/100/145	8.37 (221)	8.04 (204)	7.76 (197)	7.52 (191)	7.29 (185)	7.17 (182)	7.05 (179)	6.85 (174)	6.74 (171)
RB/110/155	9.73 (247)	8.90 (226)	8.55 (217)	8.27 (210)	7.96 (202)	7.80 (198)	7.60 (193)	7.37 (187)	7.21 (183)
RB/120/165	10.32 (262)	9.49 (241)	9.10 (231)	8.82 (224)	8.47 (215)	8.31 (211)	8.11 (206)	7.84 (199)	7.64 (194)
RB/130/180	11.46 (291)	10.48 (266)	10.04 (255)	9.73 (247)	9.33 (237)	9.14 (232)	8.90 (226)	8.59 (218)	8.39 (213)
RB/140/190	12.09 (307)	11.06 (281)	10.59 (269)	10.24 (260)	9.85 (250)	9.65 (245)	9.37 (238)	9.10 (231)	8.86 (225)
RB/150/200	12.05 (306)	11.14 (283)	10.75 (273)	10.44 (265)	10.04 (255)	9.88 (251)	9.65 (245)	9.37 (238)	9.18 (233)
RB/160/210	12.72 (323)	11.78 (299)	11.34 (288)	10.99 (279)	10.59 (269)	10.40 (264)	10.16 (258)	9.85 (250)	9.65 (245)
RB/170/225	13.86 (352)	12.76 (324)	12.29 (312)	11.89 (302)	11.46 (291)	11.22 (285)	10.95 (278)	10.63 (270)	10.40 (264)
RB/180/235	14.49 (368)	13.35 (339)	12.84 (326)	12.44 (316)	11.97 (304)	11.74 (298)	11.46 (291)	11.11 (282)	10.83 (275)
RB/190/250	16.07 (408)	14.69 (373)	14.06 (357)	13.63 (346)	13.00 (330)	12.72 (323)	12.40 (315)	12.05 (306)	11.74 (298)
RB/200/260	17.01 (432)	15.48 (393)	14.77 (375)	14.25 (362)	13.63 (346)	13.31 (338)	13.00 (330)	12.60 (320)	12.25 (311)
RB/220/285	18.74 (476)	17.05 (433)	16.26 (413)	15.71 (399)	15.00 (381)	14.65 (372)	14.33 (364)	13.82 (351)	13.43 (341)
RB/240/305	21.34 (542)	19.09 (485)	18.11 (460)	17.40 (442)	16.58 (421)	16.19 (411)	15.67 (398)	15.08 (383)	14.65 (372)
RB/260/325	20.36 (517)	18.66 (474)	17.92 (455)	17.37 (441)	16.70 (424)	16.34 (415)	15.95 (405)	15.44 (392)	15.08 (383)
RB/280/355	21.54 (547)	19.88 (505)	19.14 (486)	18.59 (472)	17.92 (455)	17.60 (447)	17.17 (436)	16.65 (423)	16.30 (414)
RB/300/375	22.20 (564)	20.63 (524)	19.88 (505)	19.33 (491)	18.70 (475)	18.35 (466)	17.96 (456)	17.44 (443)	17.09 (434)
RB/320/405	23.63 (600)	20.01 (559)	21.26 (540)	20.67 (525)	20.04 (509)	19.69 (500)	19.25 (489)	18.74 (476)	18.35 (466)
RB/340/425	23.31 (592)	20.01 (559)	21.38 (543)	20.91 (531)	20.32 (516)	20.04 (509)	19.65 (499)	19.22 (488)	18.86 (479)
RB/360/455	26.11 (663)	24.41 (620)	23.63 (600)	23.03 (585)	22.32 (567)	21.93 (557)	21.50 (546)	20.95 (532)	20.52 (521)
RB/380/475	26.85 (682)	25.16 (639)	24.41 (620)	23.78 (604)	23.11 (587)	22.72 (577)	22.29 (566)	21.74 (552)	21.30 (541)
RB/400/495	30.99 (787)	28.47 (723)	27.33 (694)	26.42 (671)	25.44 (646)	24.92 (633)	24.30 (617)	23.51 (597)	22.96 (583)
RB/420/515	31.74 (806)	29.22 (742)	28.11 (714)	27.21 (691)	26.22 (666)	25.71 (653)	25.08 (637)	24.30 (617)	23.74 (603)
RB/440/545	34.41 (874)	32.54 (801)	30.24 (768)	29.25 (743)	28.11 (714)	27.52 (699)	26.85 (682)	25.99 (660)	25.36 (644)

RB Series Hub

HUB OD Requirements (continued)

Part No.	21,800 psi (150 N/mm ²)	26,110 psi (180 N/mm ²)	29,010 psi (200 N/mm ²)	31,910 psi (220 N/mm ²)	36,260 psi (250 N/mm ²)	39,160 psi (270 N/mm ²)	43,510 psi (300 N/mm ²)	50,760 psi (350 N/mm ²)	58,020 psi (400 N/mm ²)
RB/ 460/565	33.98 (863)	31.46 (799)	30.32 (770)	29.41 (747)	28.43 (722)	27.88 (708)	27.25 (692)	26.46 (672)	25.87 (657)
RB/ 480/585	37.56 (954)	34.30 (871)	32.84 (834)	31.70 (805)	30.44 (773)	29.81 (757)	29.02 (737)	28.03 (712)	27.36 (695)
RB/ 500/605	42.41 (1077)	37.87 (962)	35.94 (913)	34.49 (876)	32.88 (835)	32.09 (815)	31.07 (789)	29.88 (759)	29.02 (737)
RB/ 520/630	38.50 (978)	35.52 (902)	34.18 (868)	33.15 (842)	31.97 (812)	31.34 (796)	30.59 (777)	29.69 (754)	28.98 (736)
RB/ 540/650	40.04 (1017)	36.89 (937)	35.47 (901)	34.37 (873)	33.11 (841)	32.44 (824)	31.66 (804)	30.71 (780)	30.00 (762)
RB/ 560/670	41.97 (1066)	38.50 (978)	36.97 (939)	35.79 (909)	34.41 (874)	33.70 (856)	32.88 (835)	31.82 (808)	31.07 (789)
RB/ 580/690	38.70 (983)	36.34 (923)	35.28 (896)	34.41 (874)	33.43 (849)	32.88 (835)	32.25 (819)	31.46 (799)	30.87 (784)
RB/ 600/710	41.69 (1059)	38.82 (986)	37.48 (952)	36.46 (926)	35.24 (895)	34.65 (880)	33.90 (861)	32.96 (837)	32.29 (820)
RB/ 620/730	43.90 (1115)	40.63 (1032)	39.18 (995)	38.04 (966)	36.69 (932)	36.03 (915)	35.20 (894)	34.18 (868)	33.43 (849)

RB Series Conveyor Pulley Installation and Removal

Fitting:

Power is transmitted by means of contact pressure and friction between the functional surfaces. It is therefore very important to carefully check the condition of the contact surfaces (refer point 1) and to properly tighten the Locking Screws.

1. All contact surfaces, including threads and heads of the locking screws, have to be clean and are to be covered with an oil film. Shaft, hub and locking assembly are to be assembled in this condition.
2. Tighten locking screws lightly and position hub.
3. Tighten locking screws evenly crosswise up to the nominated tightening torque.
4. Re-check the tightening torque of the locking screws all the way round. When no screw can be tightened further with the torque wrench set to the tightening torque MA, the fitting process is completed.

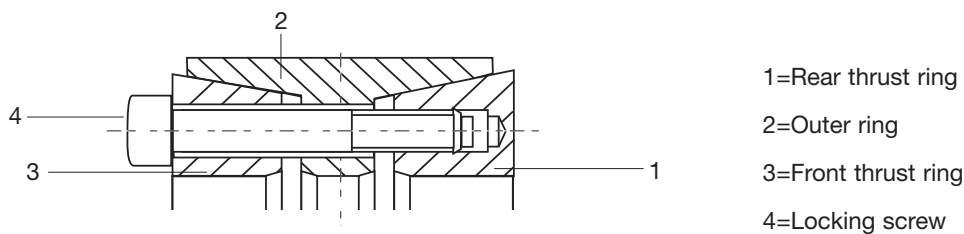


Figure 1

Prior to fitting, used Locking Assemblies have to be cleaned and lightly oiled and then reassembled as shown in figure 1.

When reassembling, it is important to make sure that the thrust rings and the outer ring are properly positioned to each other. All threaded holes of the rear thrust ring (1) are to be in line with the through holes of the web of the outer ring (2) and the front thrust ring (3).

Removal:

Sequence of removal:

1. Remove plugs.
 - 1.1 Loosen all screws several turns.
2. Remove screws adjacent to the puller threads and screw them into these threads.
 - 2.1 The front thrust ring is released by jacking the screws against the web of the outer ring (figure 2).
 - 2.2 Similarly the rear thrust ring is released as per figure 3.

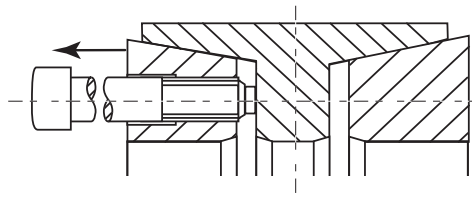


Figure 2

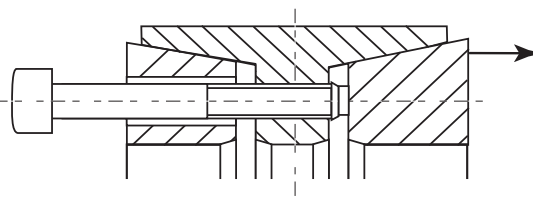


Figure 3

3. Pull or push hub and Locking Assembly off the shaft. The jacking screws should only be taken out after the Locking Assembly has been removed completely.

Undamaged Locking Assemblies are to be disassembled and cleaned before being reused.

Damaged Locking Assemblies can be reused by completing them with appropriate spare-parts.

All Customer Service phone numbers shown in bold

Electromagnetic Clutches and Brakes

Warner Electric

Electromagnetic Clutches and Brakes

New Hartford, CT - USA
1-800-825-6544

*For application assistance:
1-800-825-9050*

St Barthelemy d'Anjou, France
+33 (0) 2 41 21 24 24

Precision Electric Coils and Electromagnetic Clutches and Brakes

Columbia City, IN - USA
1-260-244-6183

Matrix International

Electromagnetic Clutches and Brakes, Pressure Operated Clutches and Brakes

Brechin, Scotland
+44 (0) 1356 602000

New Hartford, CT - USA
1-800-825-6544

Inertia Dynamics

Spring Set Brakes; Power On and Wrap Spring Clutch/Brakes

New Hartford, CT - USA
1-800-800-6445

Overrunning Clutches

Formsprag Clutch

Overrunning Clutches and Holdbacks

Warren, MI - USA
1-800-348-0881 – Press #1

*For application assistance:
1-800-348-0881 – Press #2*

Marland Clutch

Roller Ramp and Sprag Type Overrunning Clutches and Backstops

Burr Ridge, IL - USA
1-800-216-3515

Stieber Clutch

Overrunning Clutches and Holdbacks

Heidelberg, Germany
+49 (0) 6221 30 47 0

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Ameridrives Couplings

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1-814-480-5000

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1-800-458-0887

Bibby Transmissions

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Chambersburg, PA - USA
1-888-829-6637 – Press #5

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1-888-449-9439

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Pneumatic Clutches and Brakes

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*For application assistance:
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Nuttall Gear and Delroyd Worm Gear

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Kilian Manufacturing

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