

Backstopping Clutches

RSBW

Backstopping Sleeve Bearing Supported, Sprag Clutches



Model RSBW is a DC sprag type back-stop. It is self-contained, centered by plain bearings for low rotational speeds and sealed using shield protected O-Rings.

Unit is shipped grease lubricated ready for installation in either a horizontal or vertical position.

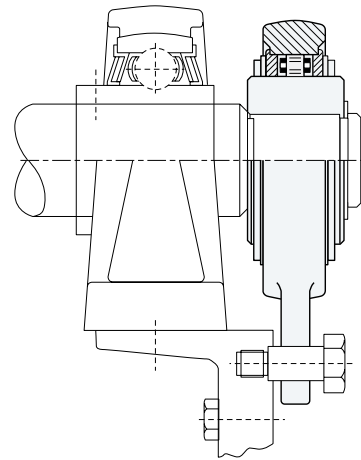
Primarily used as a backstop, this model provides high torque capacity with a minimum space requirement.

A bolt, secured to a fixed part of the machine and passing through the slot in the torque arm, provides the rotational stop. Radial clearance on this bolt should be equal to 1% of the slot width. The torque arm must not be rigidly mounted.

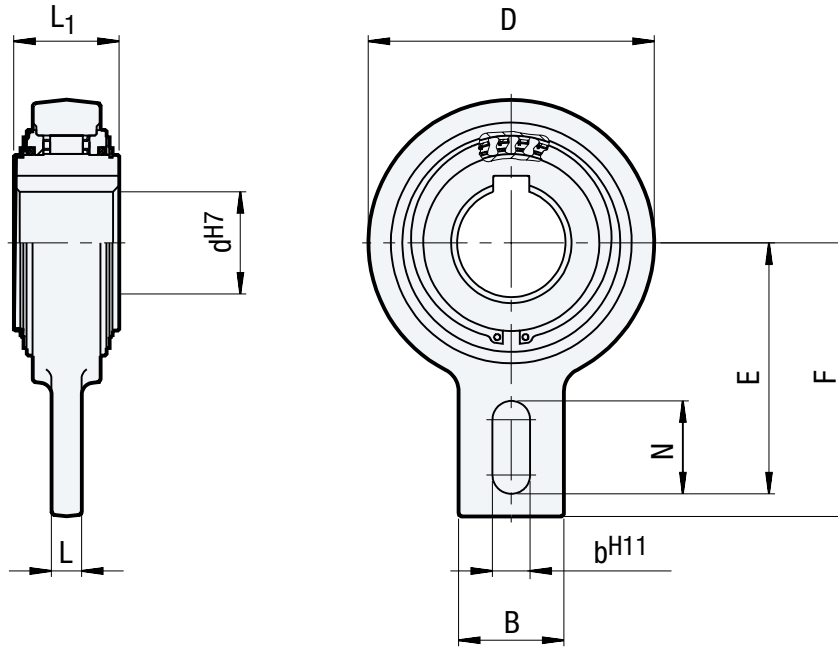
Specifications

Size	Torque Capacity lb.ft. (Nm)	Overrunning Speed Max. RPM Inner Race	Lubrication	Shipping Weight lb. (kg)
20	276 (375)	400	Grease	4.5 (2)
25	447 (606)	400	Grease	5.73 (2.6)
30	447 (606)	400	Grease	5.51 (2.5)
35	447 (606)	400	Grease	5.29 (2.4)
40	956 (1295)	300	Grease	10.14 (4.6)
45	956 (1295)	300	Grease	9.92 (4.5)
50	956 (1295)	300	Grease	9.92 (4.5)
55	956 (1295)	300	Grease	9.70 (4.4)
60	1,882 (2550)	250	Grease	14.33 (6.5)
70	1,882 (2550)	250	Grease	14.11 (6.4)
80	3,598 (4875)	200	Grease	21.83 (9.9)
90	3,598 (4875)	200	Grease	21.61 (9.8)

Typical Mounting Arrangement



The Model RSBW clutches must be axially restrained on the shaft to avoid binding of the torque arm.



Dimensions inches (mm)

Size	D	L ₁	F	E	B	N	L	b ^{H11}
20	4.17 (106)	1.38 (35)	4.45 (113)	4.04 (102.5)	1.57 (40)	1.38 (35)	0.59 (15)	0.71 (18)
25	4.17 (106)	1.89 (48)	4.45 (113)	4.04 (102.5)	1.57 (40)	1.38 (35)	0.59 (15)	0.71 (18)
30	4.17 (106)	1.89 (48)	4.45 (113)	4.04 (102.5)	1.57 (40)	1.38 (35)	0.59 (15)	0.71 (18)
35	4.17 (106)	1.89 (48)	4.45 (113)	4.04 (102.5)	1.57 (40)	1.38 (35)	0.59 (15)	0.71 (18)
40	5.20 (132)	2.05 (52)	4.92 (125)	4.53 (115)	2.36 (60)	1.38 (35)	0.59 (15)	0.71 (18)
45	5.20 (132)	2.05 (52)	4.92 (125)	4.53 (115)	2.36 (60)	1.38 (35)	0.59 (15)	0.71 (18)
50	5.20 (132)	2.05 (52)	4.92 (125)	4.53 (115)	2.36 (60)	1.38 (35)	0.59 (15)	0.71 (18)
55	5.20 (132)	2.05 (52)	4.92 (125)	4.53 (115)	2.36 (60)	1.38 (35)	0.59 (15)	0.71 (18)
60	6.34 (161)	2.13 (54)	5.51 (140)	5.12 (130)	2.76 (70)	1.38 (35)	0.59 (15)	0.71 (18)
70	6.34 (161)	2.13 (54)	5.51 (140)	5.12 (130)	2.76 (70)	1.38 (35)	0.59 (15)	0.71 (18)
80	7.48 (190)	2.76 (70)	6.50 (165)	5.91 (150)	2.76 (70)	1.77 (45)	0.79 (20)	0.98 (25)
90	7.48 (190)	2.76 (70)	6.50 (165)	5.91 (150)	2.76 (70)	1.77 (45)	0.79 (20)	0.98 (25)

Bore sizes and keyseats

inches (mm)

Size	d ^{H7} Bore Size	Keyseat*
20	0.78 (20)	(6 X 2.8)
25	0.98 (25)	(8 X 3.3)
30	1.18 (30)	(8 X 3.3)
35	1.38 (35)	(10 X 3.3)
40	1.57 (40)	(12 X 3.3)
45	1.77 (45)	(14 X 3.8)
50	1.97 (50)	(16 X 4.3)
55	2.17 (55)	(16 X 4.3)
60	2.36 (60)	(18 X 4.4)
70	2.76 (70)	(20 X 4.9)
80	3.15 (80)	(22 X 5.4)
90	3.54 (90)	(25 X 5.4)

* For keyseat sizes see DIN 6885.1 table on page 129.