

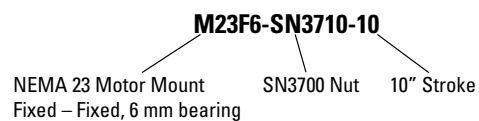
Screw Assemblies - Selection Process



Available in most screw sizes our Drive Assemblies free designers to concentrate on larger design issues. Our standard Drive Assemblies can be assembled and shipped quickly, providing the right solution when you need it.

- Step 1.** Select your screw-nut combination depending on load, cost, speed, stroke, backlash, accuracy and environmental constraints. Use critical speed and column loading charts as general guides (pages 46 to 49). Note allowable bearing sizes for your screw-nut selection before returning to this section.
- Step 2.** Determine end configuration due to load, length and rotational velocity. Refer to critical speed and column loading charts as required (pages 46 to 49). We offer fixed-fixed, fixed-simple and fixed free bearing arrangements.
- Step 3.** Noting allowable bearing size, turn to correct NEMA motor size page for assembly dimensions.
- Step 4.** Add Nut Part Number with Stroke to Drive Assembly Part Number.

(EXAMPLE)

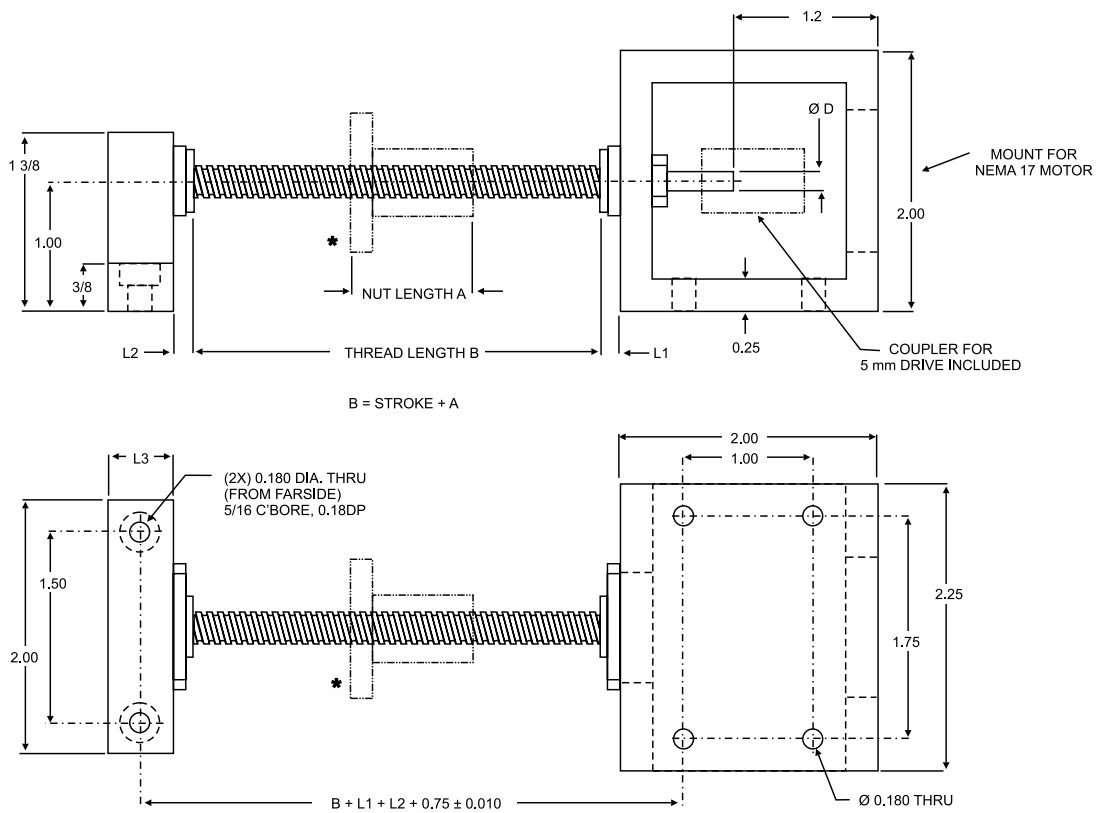


- Step 5.** Contact customer support.



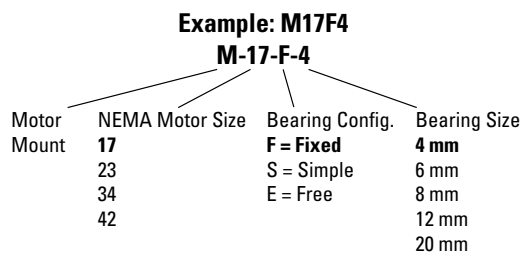
Screw Assemblies - NEMA 17 Motor Mounts

For 1/4" to 3/8" and 6 to 10 mm Ball and Lead Screws



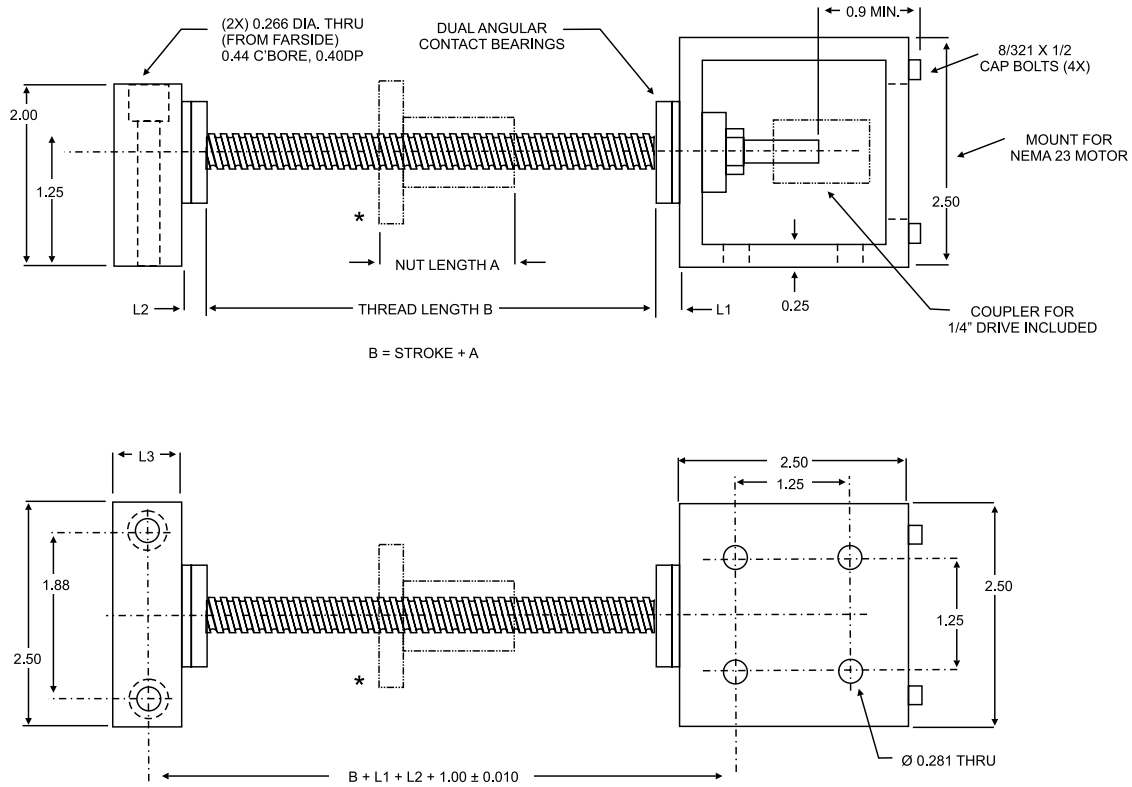
Part Number (See Example)	Axial* Load	Bearing Support	D	L1	L2	L3
M17F4	50 lbs	4 mm	3 mm	0.155	0.155	0.50
M17S4			3 mm	0.155	—	0.50
M17E4			3 mm	0.155	—	—

* Maximum assembly thrust load, Do Not Exceed. Do not exceed dynamic load rating of the lead nut.



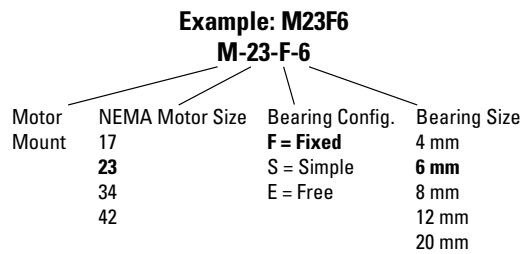
Screw Assemblies - NEMA 23 Motor Mounts

For 3/8" to 5/8" and 6 to 14 mm Ball and Lead Screws



Part Number (See Example)	Axial* Load	Bearing Support	D	L1	L2	L3
M23F4	50 lbs	4 mm	3 mm	0.155	0.155	0.75
M23S4			3 mm	0.155	—	0.75
M23E4			3 mm	0.155	—	—
M23F6	230 lbs	6 mm	0.187	0.275	0.275	0.75
M23S6			0.187	0.275	—	0.75
M23E6			0.187	0.275	—	—
M23F8	326 lbs	8 mm	0.250	0.354	0.354	0.75
M23S8			0.250	0.354	—	0.75
M23E8			0.250	0.354	—	—

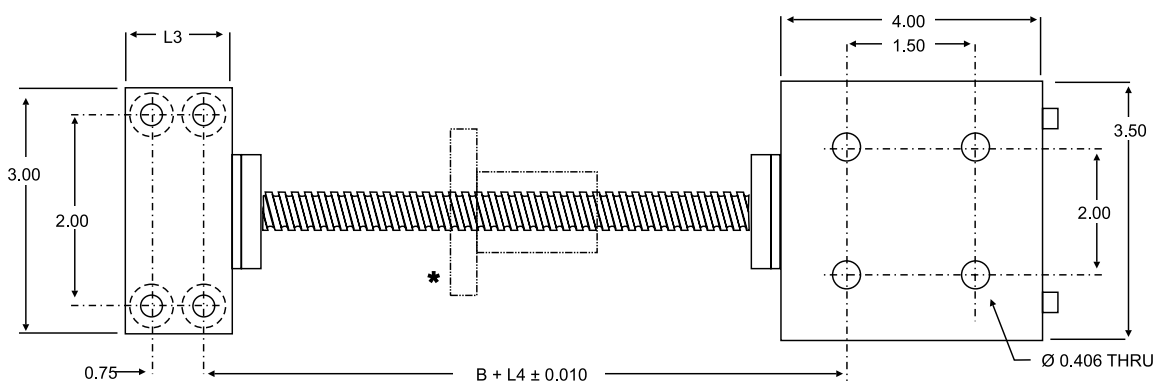
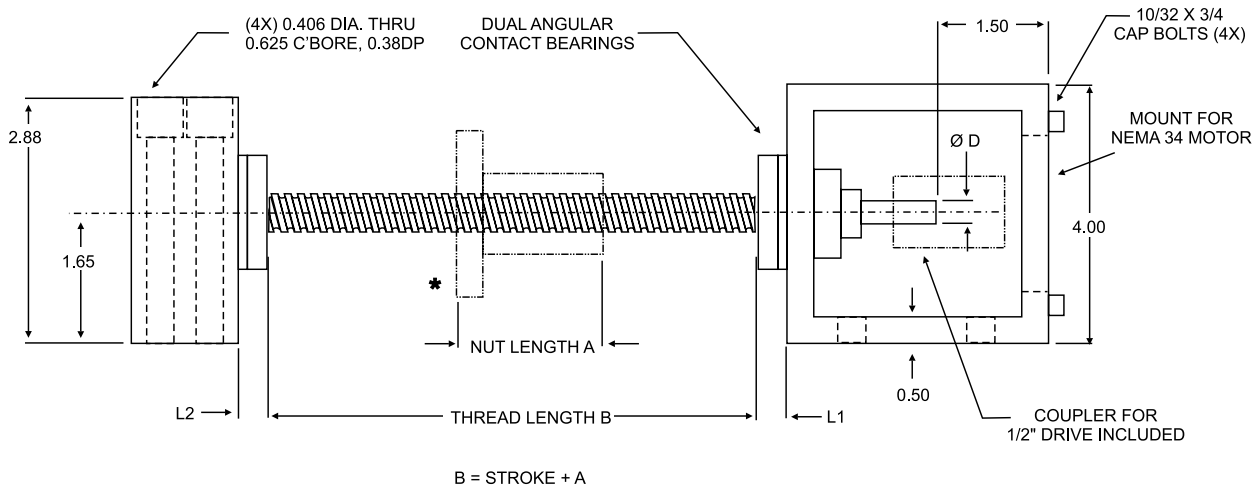
* Maximum assembly thrust load, Do Not Exceed. Do not exceed dynamic load rating of the lead nut.





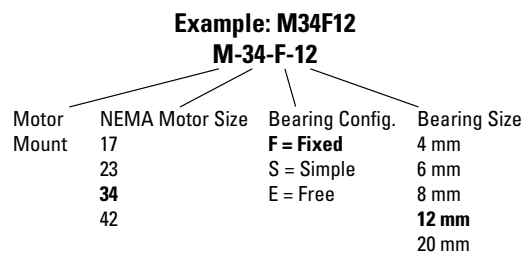
Screw Assemblies - NEMA 34 Motor Mounts

For 3/4" to 1" and 16 to 24 mm Ball and Lead Screws



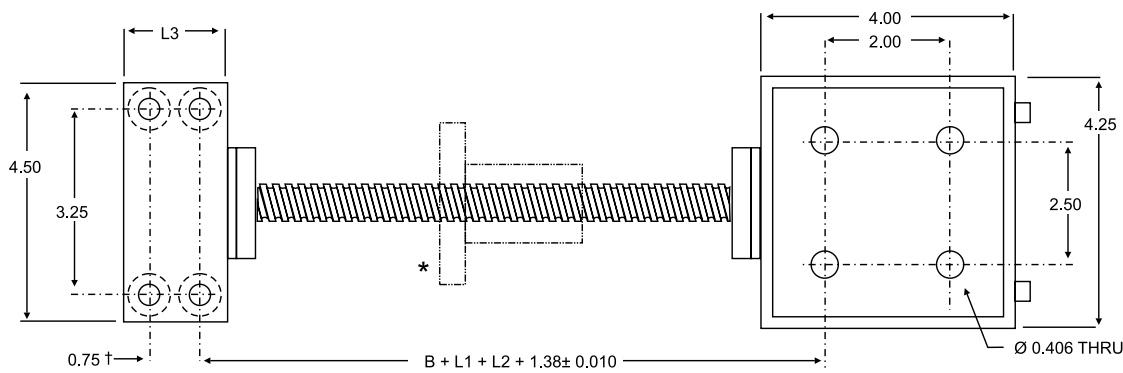
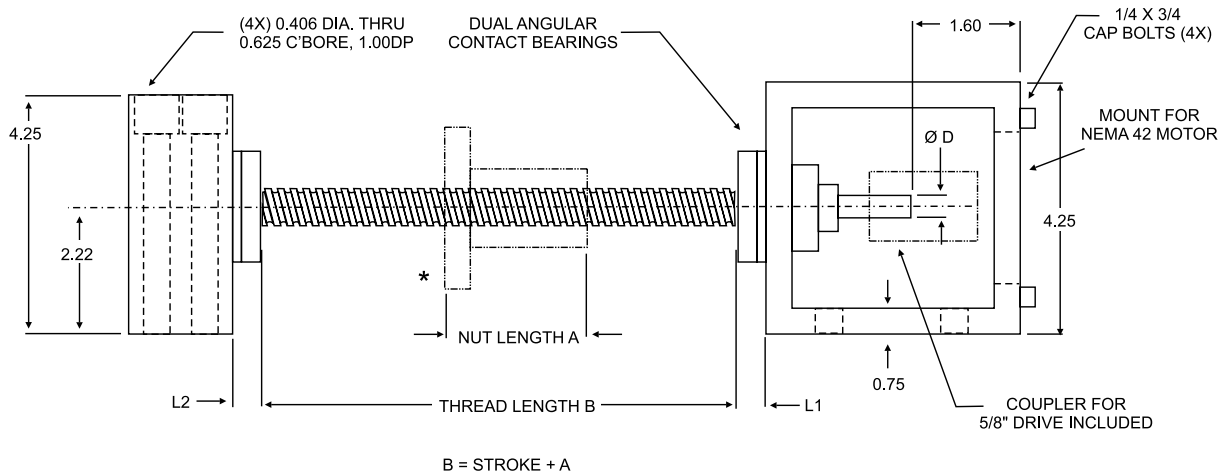
Part Number (See Example)	Axial* Load	Bearing Support	D	L1	L2	L3	L4
M34F12	680 lbs	12 mm	0.375	0.395	0.395	1.50	2.42
M34S12			0.375	0.395	-	1.00	2.15
M34E12			0.375	0.395	-	-	-

* Maximum assembly thrust load, Do Not Exceed. Do not exceed dynamic load rating of the lead nut.
† M34F12 only. M34S12 has two mounting holes centered on L3.



Screw Assemblies - NEMA 42 Motor Mounts

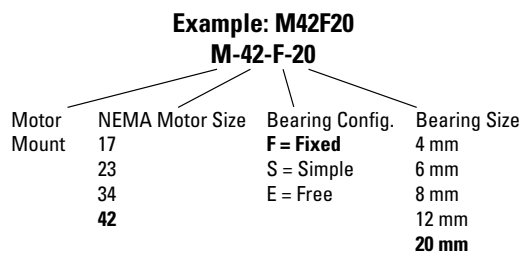
For 1" to 1-1/2" and 25 to 38 mm Ball and Lead Screws



Part Number (See Example)	Axial* Load	Bearing Support	D	L1	L2	L3
M42F20	1,850 lbs	20 mm	0.500	0.869	0.869	1.50
M42S20			0.500	0.869	-	0.75
M42E20			0.500	0.869	-	-

* Maximum assembly thrust load, Do Not Exceed. Do Not Exceed. Do not exceed dynamic load rating of the lead nut.

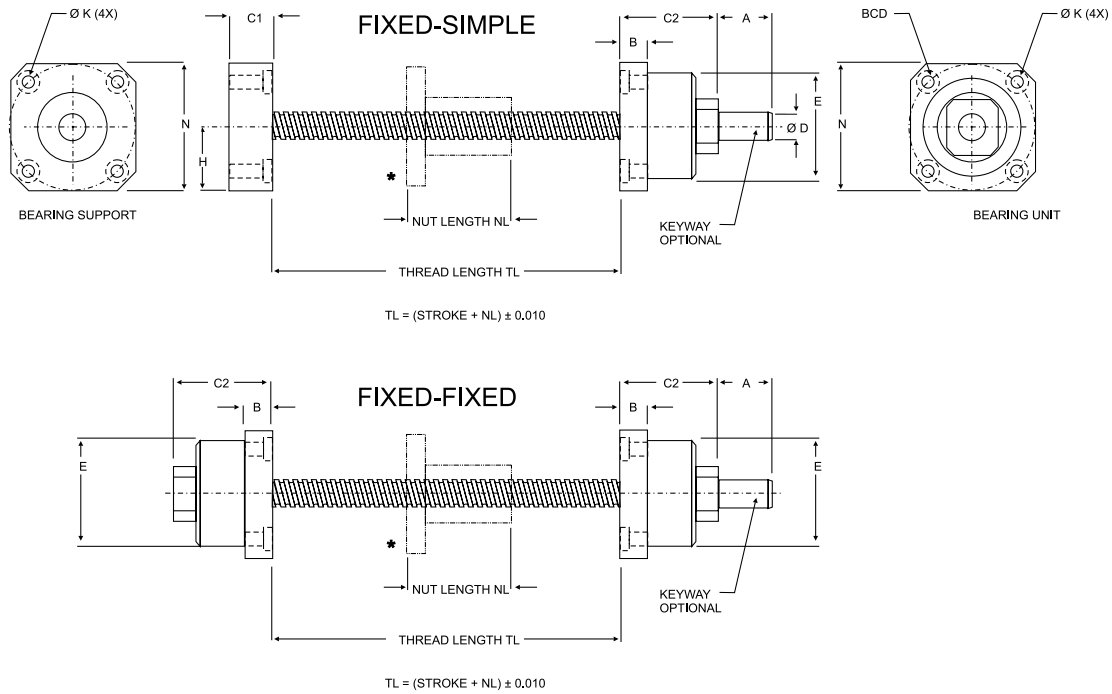
† M42F20 only. M42S20 has two mounting holes centered on L3.





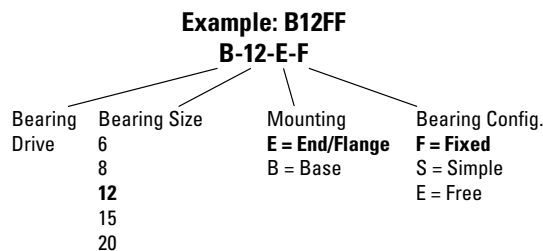
Screw Assemblies - Bearing Mounts

Flange Mount



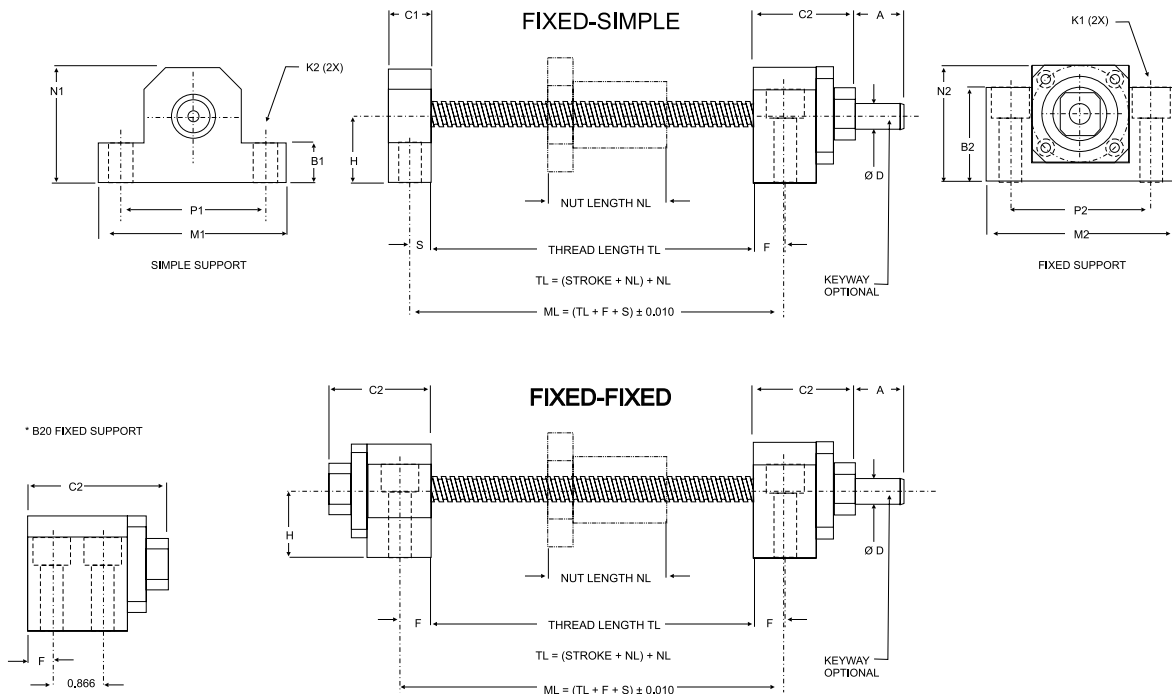
Assembly No.	Axial Load*	A	B	C1	C2	$D \pm 0.000$ 0.001	E	BCD	K	H	N
B6EF	230 lbs	0.63	0.28	—	1.04	0.187	0.866	1.10	0.114 thru 0.22 cbore 0.14 deep	0.55	1.10
B6ES				0.37							
B6EE				—							
B8EF	326 lbs	0.63	0.35	—	1.22	0.250	1.102	1.38	0.134 thru 0.26 cbore 0.16 deep	0.69	1.38
B8ES				0.50							
B8EE				—							
B12EF	680 lbs	0.75	0.40	—	1.40	0.375	1.417	1.73	0.177 thru 0.32 cbore 0.16 deep	0.67	1.73
B12ES				0.62							
B12EE				—							
B15EF	760 lbs	0.75	0.59	—	1.82	0.500	1.575	1.97	0.216 thru 0.37 cbore 0.24 deep	1.02	2.05
B15ES				0.62							
B15EE				—							
B20EF	1,852 lbs	1.00	0.87	—	2.61	0.625	2.244	2.76	0.260 thru 0.43 cbore 0.39 deep	1.34	2.67
B20ES				1.00							
B20EE				—							

* Maximum assembly thrust load, Do Not Exceed. Do not exceed the dynamic load rating of the lead nut



Screw Assemblies - Bearing Mounts

Base Mount †



Assembly No.	Axial Load*	F	S	A	C1	C2	D ± 0.000 0.001	H	K1	K2	M1	M2	N1	N2	P1	P2	B1	B2	
B6BF	230 lbs	0.40	—	0.63	—	1.00	0.187	0.512	0.216 thru 0.37 c bore 0.43 deep	—	—	1.66	—	0.98	1.26	1.18	—	0.39	0.78
B6BS			0.19		0.37					0.22 thru	1.66		0.95						
B6BE			—		—					—	—		—						
B8BF	326 lbs	0.45	—	0.63	—	1.18	0.250	0.669	0.260 thru 0.43 c bore 0.47 deep	—	—	2.05	—	1.26	1.50	1.50	—	0.51	1.02
B8BS			0.25		0.50					0.26 thru	2.01		1.18						
B8BE			—		—					—	—		—						
B12BF	680 lbs	0.47	—	0.75	—	1.40	0.375	0.984	0.354 thru 0.55 c bore 0.43 deep	—	—	2.76	—	1.70	2.13	2.05	—	0.60	1.38
B12BS			0.31		0.62					0.35 thru	2.76		1.69						
B12BE			—		—					—	—		—						
B15BF	760 lbs	0.49	—	0.75	—	1.67	0.500	1.181	0.433 thru 0.67 c bore 0.59 deep	—	—	3.15	—	1.97	2.44	2.36	—	0.71	1.58
B15BS			0.31		0.62					0.35 thru	3.15		2.00						
B15BE			—		—					—	—		—						
B20BF	1,852 lbs	0.39	—	1.00	—	2.44	0.625	1.181	0.433 thru 0.67 c bore 0.59 deep	—	—	3.74	—	2.28	3.07	2.95	—	0.79	1.77
B20BS			0.50		1.00					0.43 thru	3.74		2.44						
B20BE			—		—					—	—		—						

† Note flange radius. Some flanges may interfere with the mounting surface.

* Maximum assembly load. Do not exceed the dynamic load rating of the lead nut.