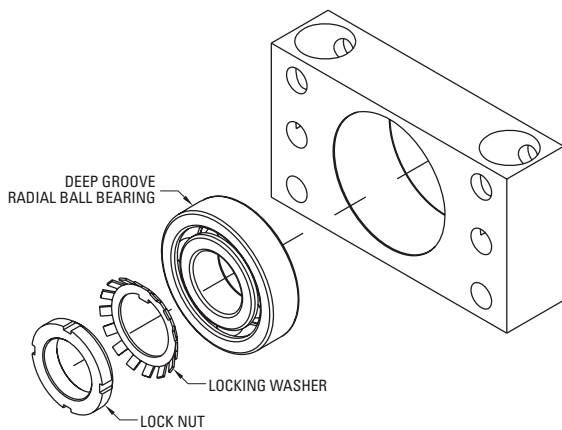


Bearing Supports/End Machining Product Overview

Thomson Bearing Supports — a unitized package for simple mounting of Thomson ball screw and ball spline assemblies. Both “Floating” and “Quick Mount” style bearing supports are available.

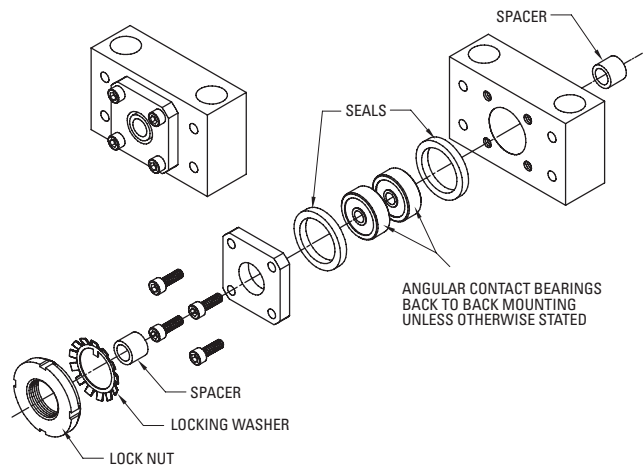
- Rugged steel construction
- Low profile, compact design
- Foot or face mounting
- Pre-assembled and ready for installation
- Available off-the-shelf for quick building convenience

Floating Bearing Support⁽¹⁾⁽²⁾



The Floating Bearing Support provides a single deep groove radial ball bearing. Design dimensions fit standard Type 1A or 1A1 end machining (see page 146 for details).

Quick Mount Bearing Support⁽¹⁾⁽²⁾



The Quick Mount Bearing Support contains high angular contact bearings arranged in a back-to-back (DB) configuration for high stiffness. Design dimensions fit standard Type 3C or 3C1 end machining (see page 146 for details)

(1) Both Floating and Quick Mount Bearings Supports are classified as “simple” for purposes of critical speed and column strength calculations.

(2) Installation accessories (locknut and washer) included for complete assembly.

Bearing Supports/End Machining Product Overview

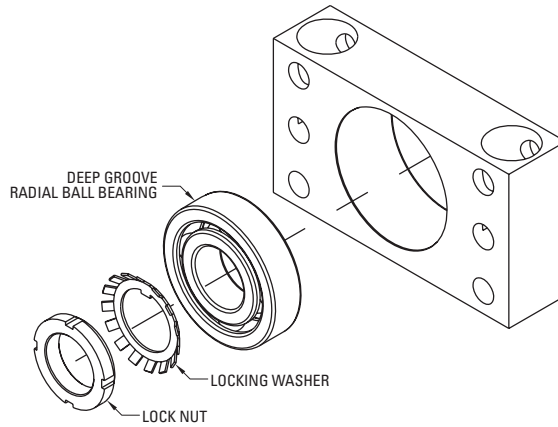
Inch Series Ball Screws		
Dia. x Lead	Floating Support	Quick Mount
0.500 x 0.200	7833291	7828282
0.500 x 0.500		
0.631 x 0.200	7833256	7824154
0.631 x 1.000		
0.750 x 0.200	7833259	7824155
0.750 x 0.500		
0.875 x 0.200	7833262	7824156
1.000 x 0.200	7833265	7824157
1.000 x 0.250		
1.000 x 0.500		
1.000 x 1.000		
1.171 x 0.413		
1.150 x 0.200	7833268	7824158
1.250 x 0.200		
1.250 x 0.250		
1.250 x 0.500		
1.500 x 0.200	7833270	7824159
1.500 x 0.250		
1.500 x 0.473	7833268	7824158
1.500 x 0.500	7833270	7824159
1.500 x 1.000	7833268	7824158
1.500 x 1.875	7833270	7824159
1.750 x 0.200	7833273	7829544
2.000 x 0.200	7833276	7824160
2.000 x 0.500		
2.000 x 1.000		
2.250 x 0.500		
2.250 x 1.000	7833279	7824161
2.500 x 0.250		
2.500 x 0.500		

Metric Series Ball Screws		
Dia. x Lead	Floating Support	Quick Mount
12 x 10	7833292	7829546
16 x 5	7833282	7829547
16 x 10		
16 x 16		
20 x 5	7833283	7829548
20 x 10		
20 x 20		
25 x 5	7833284	7829549
25 x 10		
25 x 25		
32 x 5	7833285	7829550
32 x 10		
32 x 32		
40 x 5	7833286	7829551
40 x 10		
40 x 20		
40 x 32		
40 x 40		
40 x 50		
50 x 10	7833287	7829552
50 x 20		
63 x 10	7833288	7829553
63 x 20		

Ball Splines		
Nominal Size	Floating Support	Quick Mount
0.625	7833291	7828282
1.000	7833265	7824157
1.500	7833268	7824158
2.000	7833273	7829554
2.500	7833279	7824161

Bearing Supports/End Machining — Metric Series Ball Screws

Floating Bearing Support Blocks

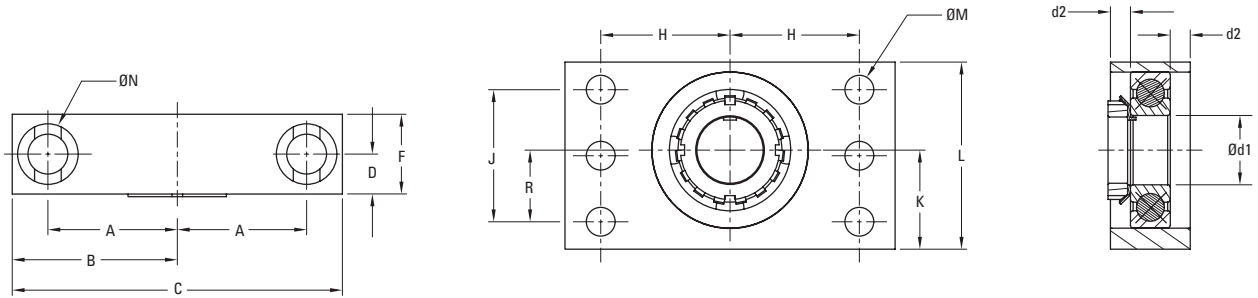


Standard P/N	Dia. x Lead (mm)	Bearing Rating				Lock Nut Type	Bearing Block Weight lbs (kg)
		Static Rating C_0		Dynamic Rating C_{am}			
		lbs	N	lbs	N		
7833292	12 x 10	366	1630	821	3650	M8-1.25	0.36 (0.16)
7833282	16 x 5 & 10 & 16	674	3000	1708	7600	KM-01	0.59 (0.27)
7833283	20 x 5 & 10 & 20	780	3470	1945	8650	KM-02	0.73 (0.33)
7833284	25 x 5 & 10 & 25	1461	6500	3237	14400	KM-04	2.63 (1.19)
7833285	32 x 5 & 10 & 32	1753	7800	3597	16000	KM-05	3.08 (1.40)
7833286	40 x 5 & 10 & 20 40 x 32 & 40 & 50	2540	11300	4991	22200	KM-06	3.95 (1.79)
7833287	50 x 10 & 50	5822	25900	11375	50600	KM-08	4.40 (2.00)
7833288	63 x 10 & 20	7081	31500	13376	59500	KM-10	8.39 (3.81)

Note: Design dimensions fit standard Type 1A or 1A1 end machining. See page 152 for details.

Bearing Supports/End Machining — Metric Series Ball Screws

Floating Bearing Support Blocks

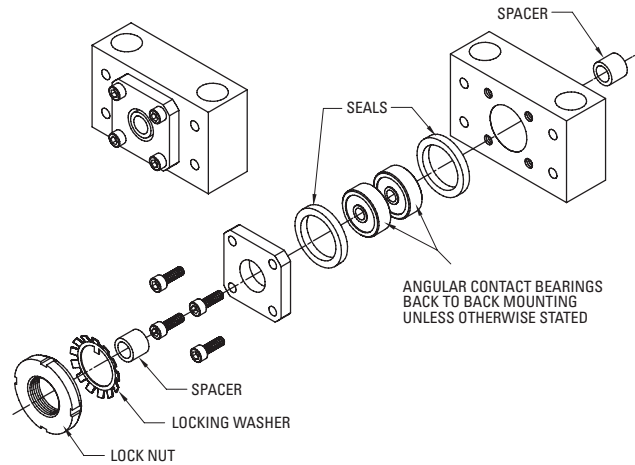


Standard P/N	Bearing Block Dimensions (mm)													
	d1	d2	A & H	B	C	D	F	J	K	L	M	N	Q	R
7833292	9.0	3.5	25.4	35.0	70.0	7.0	14.0	34.9	25.4	50.8	4 Holes 7.1 dia.	2 Holes 7.1 dia. Thru 12.7 C-Bore x 14.3 DP	18.5	17.5
7833282	12.0	5.0	28.6	38.0	76.0	10.0	20.0	28.6	25.4	47.6	4 Holes 7.1 dia.	2 Holes 10.3 dia. Thru 15.9 C-Bore x 22.2 DP	20.0	15.9
7833283	15.0	5.5	31.8	45.0	89.0	11.0	22.0	34.9	28.6	54.0	4 Holes 7.1 dia.	2 Holes 10.3 dia. Thru 15.9 C-Bore x 22.2 DP	22.0	19.1
7833284	20.0	7.0	41.3	57.0	114.0	14.0	28.0	44.5	36.5	69.9	4 Holes 11.9 dia.	2 Holes 16.7 dia. Thru 25.4 C-Bore x 33.3 DP	28.0	23.8
7833285	25.0	13.5	54.0	76.0	152.0	21.0	42.0	50.8	44.5	85.7	4 Holes 16.7 dia.	2 Holes 23.0 dia. Thru 34.9 C-Bore x 50.8 DP	42.0	25.4
7833286	30.0	13.0	60.3	83.0	165.0	21.0	42.0	50.8	47.6	92.1	4 Holes 16.7 dia.	2 Holes 23.0 dia. Thru 34.9 C-Bore x 52.4 DP	42.0	25.4
7833287	40.0	11.5	74.6	96.0	192.0	23.0	46.0	76.2	57.2	108.0	6 Holes 16.7 dia.	2 Holes 23.0 dia. Thru 34.9 C-Bore x 57.2 DP	46.0	41.3
7833288	50.0	13.5	90.5	115.0	230.0	27.0	54.0	92.1	71.4	142.9	6 Holes 20.6 dia.	2 Holes 26.2 dia. Thru 41.3 C-Bore x 88.9 DP	54.0	46.0

BEARING SUPPORTS/
END MACHINING

Bearing Supports/End Machining — Metric Series Ball Screws

Quick Mount Bearing Support Blocks



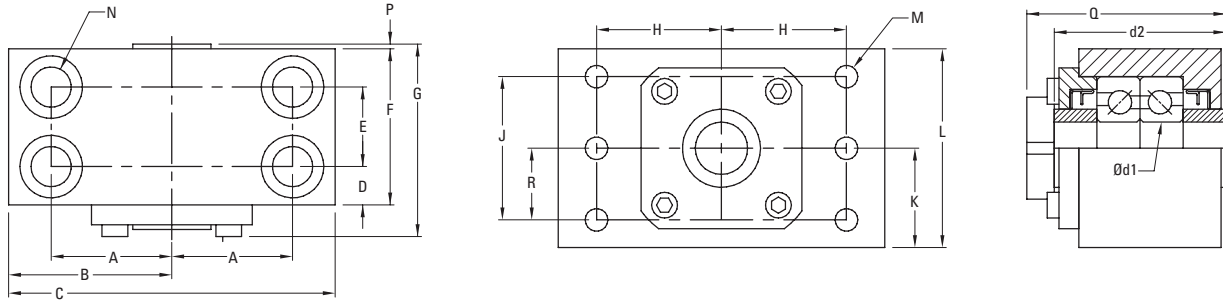
Standard P/N	Dia. (mm)	Bearing Rating				Lock Nut Type	Bearing Block Weight lbs (kg)
		Static Rating C_0		Dynamic Rating C_{am}			
		lbs	N	lbs	N		
7829546	12	320 ⁽¹⁾	1450 ⁽¹⁾	930 ⁽¹⁾	4400 ⁽¹⁾	M8-1.25	2 (.9)
7829547	16	630	2790	1600	7100	KM-01	1.5 (.7)
7829548	20	1060	4700	2320	10300	KM-02	3.5 (1.6)
7829549	25	1838	8150	3225	14300	KM-03	5.5 (2.5)
7829550	32	2120	9400	3750	16600	KM-05	9.5 (4.3)
7829551	40	3050	13500	5200	23000	KM-06	11.5 (5.2)
7829552	50	6800	30200	11400	50600	KM-08	21.5 (9.8)
7829553	63	10800	47900	17300	76800	KM-10	39 (17.7)

(1) Deep groove radial bearing.

Note: Design dimensions fit standard Type 3C or 3C1 end machining. See page 152 for details.

Bearing Supports/End Machining — Metric Series Ball Screws

Quick Mount Bearing Support Blocks



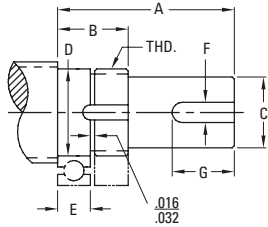
Standard P/N	Bearing Block Dimensions (mm)																
	d1	d2	A & H	B	C	D	E	F	G	J	K	L	M	N	P	Q	R
7829546	9	37	25.40	35	70	16.0	—	30.23	35	35	25.40	50.80	4 Holes 7.13 dia.	2 Holes 7.13 dia. Thru 12.7 C-Bore x 14.22 DP	—	46.20	17.46
7829547	12	32	28.58	38	76	17.0	—	34.00	43	29	25.40	47.75	4 Holes 7.13 dia.	2 Holes 10.31 dia. Thru 15.88 C-Bore x 22.23 DP	0.51	40.64	15.88
7829548	15	44	31.75	45	89	19.0	—	38.00	47	35	28.58	54.10	4 Holes 7.13 dia.	2 Holes 10.31 dia. Thru 15.88 C-Bore x 25.4 DP	0.51	53.34	19.05
7829549	20	56	41.28	57	114	24.0	—	48.00	60	44	36.53	69.85	4 Holes 11.91 dia.	2 Holes 16.66 dia. Thru 25.4 C-Bore x 33.33 DP	1.00	68.58	23.83
7829550	25	60	53.98	76	152	24.5	—	49.00	65	51	44.45	85.85	4 Holes 16.66 dia.	2 Holes 23.01 dia. Thru 34.93 C-Bore x 50.80 DP	0.76	73.66	25.40
7829551	30	64	60.33	83	165	26.0	—	52.00	68	51	47.63	92.20	4 Holes 16.66 dia.	2 Holes 23.01 dia. Thru 34.93 C-Bore x 52.38 DP	1.14	76.20	25.40
7829552	40	92	74.60	96	192	19.2	41.50	80.00	96	76	57.15	107.95	6 Holes 16.66 dia.	4 Holes 23.01 dia. Thru 34.93 C-Bore x 57.15 DP	1.27	106.68	38.10
7829553	50	108	90.51	115	230	23.5	43.75	90.75	113	92	71.45	143.00	4 Holes 20.63 dia.	4 Holes 26.19 dia. Thru 41.28 C-Bore x 88.90 DP	2.29	124.46	46.05

Bearing Supports/End Machining — Metric Series Ball Screws

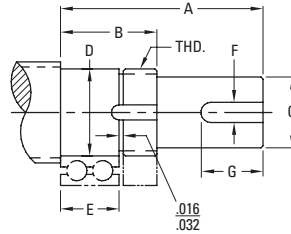
Standard End Machining

The typical ends shown below can be machined on all ball screws. Specific dimensional data is provided in the table.

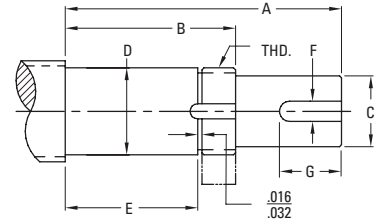
TYPE 1A, REQUIRED FOR FLOATING BEARING



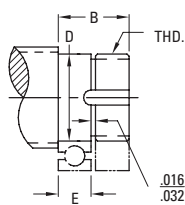
TYPE 2B



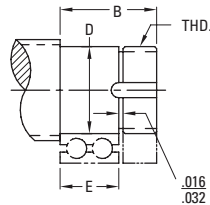
TYPE 3C, REQUIRED FOR QUICK MOUNT BEARING



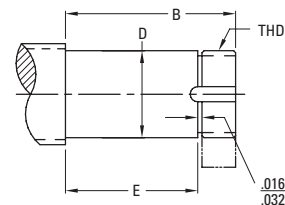
TYPE 1A1, REQUIRED FOR FLOATING BEARING



TYPE 2B1



TYPE 3C1, REQUIRED FOR QUICK MOUNT BEARING



Screw Size	Type 1A Type 1A1					Type 2B Type 2B1			Type 3C Type 3C1					Common Dimensions					
	B.C.D.	A	B	E	Floating Bearing Trade No.	A	B	E	A	B	E	Quick Mount Bearing Trade No.	Bearing Trade No.	C	D	F	G	Lock Nut	Lock Washer
12	46	19	7	7833292	609	53	26	14	73	46	36	7829546	609	6	9	N/A	N/A	M8-1.25	N/A
16	54	21	10	7833282	6201	64	31	20	84	51	40	7829547	7201	10	12	3	1.800	KM-01	MB-01
20	47	22	11	7833283	6202	58	33	22	80	55	44	7829548	7202	12	15	4	2.500	KM-02	MB-02
25	61	27	14	7833284	6204	75	41	28	103	69	56	7829549	7204	16	20	5	3.000	KM-04	MB-04
32	68	29	15	7833285	6205	83	44	30	113	74	60	7829550	7205	20	25	5	3.000	KM-05	MB-05
40	76	30	16	7833286	6206	92	46	32	124	78	64	7829551	7206	25	30	8	4.000	KM-06	MB-06
50	95	40	23	7833287	6308	118	63	46	164	109	92	7829552	7308	32	40	8	4.000	KM-08	MB-08
63	116	43	27	7833288	6310	143	70	54	197	124	108	7829553	7310	40	50	10	5.000	KM-10	MB-10
80	142	48	31	—	6312	173	79	62	235	141	124	—	7312	50	60	12	6.000	N/A	N/A