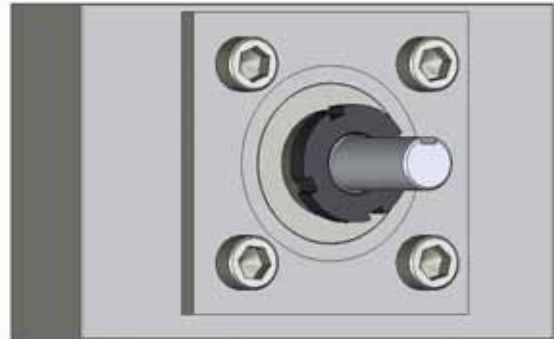


Duff-Norton offers the traditional style Type 1 & 3 journal end screws with and without keyed drive ends. These traditional styled journals coordinate well with the Duff-Norton End Blocks and can be delivered quickly. Additionally, Duff-Norton does have the machining capability to provide custom journal ends.



Journal End Features

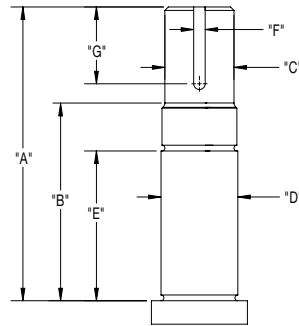
- Common Type 1 and 3 journal ends for Acme or Ball Screws
- Close bearing journal tolerances, for simple bearing installation
- Specialty journals integrate with Duff-Norton Drive and Control components
- Integrate with standard self-locking lock nuts
- Custom journals available for many applications



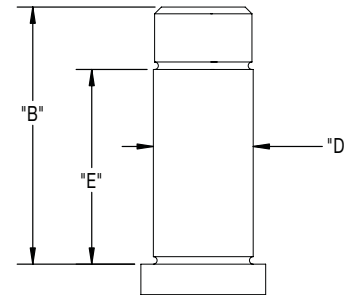
Typical Journal End Dimensions - Simple and Fixed

Journals and End Blocks

Fixed Journal Ends



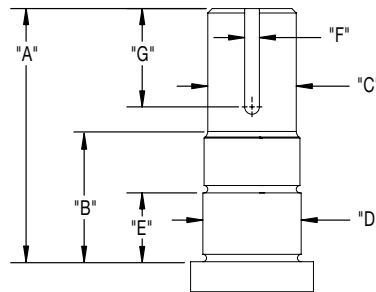
Type 3A - with Drive End



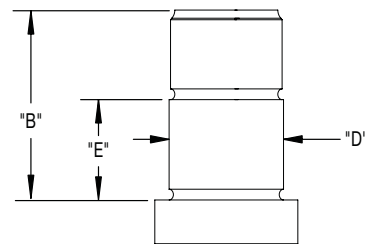
Type 3B - without Drive End

Acme Screw & Lead	Ball Screw & Lead	Type 3A, Type 3B - Fixed Ends					Motor Flange Fixed "A"	Common Dimensions				Lock Nut#
		A	B	E	End Block#	Bearing Number		C	D**	F	G	
0.5 - all*	0.5 - all*	3.03	1.75	1.36	EB000F	7200	Special	0.313	0.3936	1/8	1.12	SN-00
0.63 - all*, 0.75 - all*	0.63 - all*	3.28	2.10	1.62	EB001F	7301	Special	0.406	0.4723	1/8	1.12	SN-01
1 - all*	0.75 - all*	3.65	2.38	1.82	EB003F	7303	Special	0.562	0.6692	1/8	1.12	SN-03
1 x .100	1, 1.17 - all*	4.03	2.73	2.09	EB004F	7304	Special	0.625	0.7873	3/16	1.25	SN-04
1.5 x .375	1.5 - all*	4.44	2.93	2.25	EB005F	7305	Special	0.875	0.9842	3/16	1.25	SN-05
1.5 - all*, 2 x .500	1.5 x 1.875	4.69	2.92	2.22	EB006F	7306	Special	1.00	1.1810	1/4	1.38	SN-06
2 x .250, 2.25 x .500	2 - all*	6.19	4.00	3.25	EB008F	7308	Special	1.375	1.5747	5/16	1.88	SN-08
2.25 x .250	2.25 - all*	6.81	4.62	3.70	EB009F	7309	Special	1.375	1.7716	5/16	1.88	SN-09
2.5 - all*	-	7.56	4.62	3.70	EB010F	7310	Special	1.75	1.9684	3/8	2.50	SN-10
3 - all*	3 - all*	8.56	5.04	4.24	EB012F	7312	Special	2.25	2.3621	1/2	3.25	SN-12

Simple Journal Ends



Type 1A - with Drive End



Type 1B - without Drive End

Acme Screw & Lead	Ball Screw & Lead	Type 1A, Type 1B - Simple Ends					Bearing Number	Common Dimensions				Lock Nut#
		A	B	E	End Block#	C		D**	F	G		
0.5 - all*	0.5 - all*	1.90	0.65	0.35	EB000S	6200	0.313	0.3936	1/8	1.00	SN-00	
0.63 - all*, 0.75 - all*	0.63 - all*	2.10	0.85	0.47	EB001S	6301	0.406	0.4723	1/8	1.13	SN-01	
1 - all*	0.75 - all*	2.25	1.00	0.55	EB003S	6303	0.562	0.6692	1/8	1.13	SN-03	
1 x .100	1, 1.17 - all*	2.38	1.13	0.59	EB004S	6304	0.625	0.7873	3/16	1.25	SN-04	
1.5 x .375	1.5 - all*	2.75	1.25	0.67	EB005S	6305	0.875	0.9842	3/16	1.25	SN-05	
1.5 - all*, 2 x .500	1.5 x 1.875	3.05	1.30	0.75	EB006S	6306	1.00	0.1810	1/4	1.38	SN-06	
2 x .250, 2.25 x .500	2 - all*	3.72	1.48	0.91	EB008S	6308	1.375	1.5747	5/16	1.88	SN-08	
2.25 x .250	2.25 - all*	3.75	1.69	0.98	EB009S	6309	1.375	1.7716	5/16	1.88	SN-09	
2.5 - all*	-	4.75	1.75	1.06	EB010S	6310	1.75	1.9684	3/8	2.50	SN-10	
3 - all*	3 - all*	5.50	1.94	1.22	EB012S	6312	2.25	2.3621	1/2	3.25	SN-12	

NOTE: Unless otherwise specified all dimensions are in Inches.

Duff-Norton does not warrant that each journal's drive end is capable of lifting the full rated load capacity - actual results may vary from application to application.

Bearing journals for some screws may show a slight thread trace along the journal diameter; this is not detrimental, and has been design this way to fit each screw into the largest bearing support possible.

All leads for that diameter screw except where noted

Standard journal tolerances are as follows - Journals 00 - 04 are +.0000 / -.0004, Journals 05 - 10 are +.0000 / -.0005, Journal 12 is +.0000 / -.0006

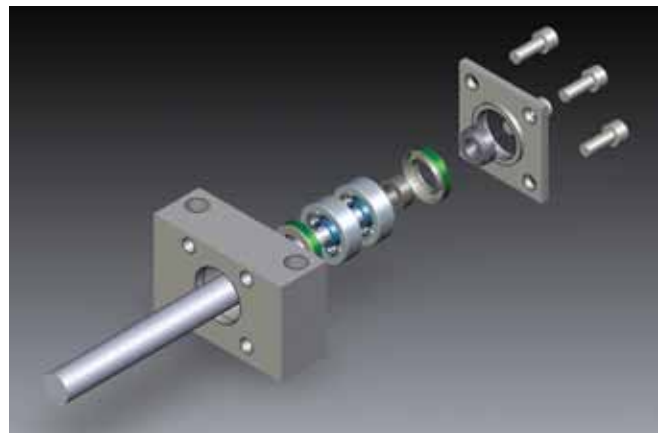
Duff-Norton's End Blocks and Screw End Journals are the key to assembling a complete screw and nut system from the Drive End all the way through to Control End. Our End Blocks follow the conventional style, and together with a special journal design allow the user to integrate the following Duff-Norton components:

- Motor Flanges: Servo, IEC, NEMA frame motors
- Gearmotors: brake, non-brake, IEC, NEMA gearmotors closely coupled with Duff-Norton Motor Flanges
- Ring Kit Encoders: coupled between Duff-Norton motor flanges and motors or gear motors
- Limit Switches and Potentiometers
- Control panels – custom designed for each application

How does this work? Simply remove the bolts from the End Block's face plate, and use the longer bolts provided in the Duff-Norton kit for that drive or control component for mounting that component to the block face. All mounting holes and surfaces have been designed for proper fit. Duff-Norton specialty screw end journals have also been specifically designed to properly mate with each of these control and drive components.

End Block Features

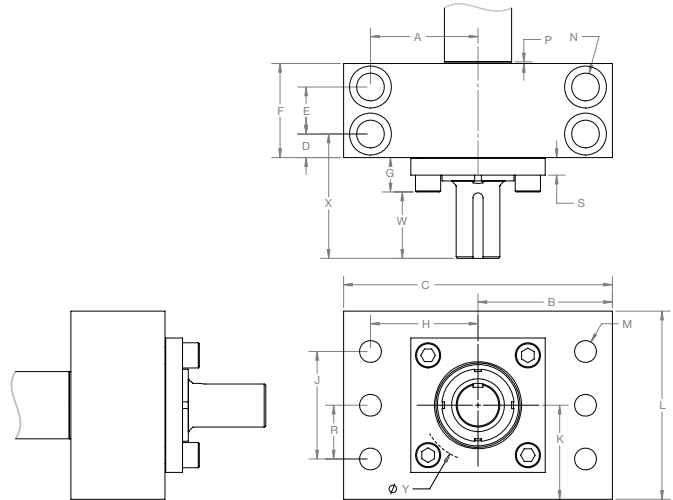
- Angular Contact Bearings for excellent radial and thrust load ratings
- Dust seals on either side of the bearings
- Drilled and/or Tapped to common ANSI dimensions
- Integrate with Duff-Norton Drive and Control components
- Black Oxide treated
- Solid steel housings with compact design
- End Blocks are available for both "Fixed" and "Simple" journal end fixity configurations



End Block Performance Specifications - Fixed

End Block Part #	Acme Screw & Lead	Ball Screw & Lead	Bearing Bore (mm)	Basic Dyn. Cap.	Basic Stat. Cap.	Locknut
EB000F	0.5 - all*	0.5 - all*	10	1826	1124	SN-00
EB001F	0.63 - all*, 0.75 - all*	0.63 - all*	12	3871	2248	SN-01
EB003F	1 - all*	0.75 - all*	17	5843	3732	SN-03
EB004F	1 x .100	1, 1.17 - all*	20	6939	4676	SN-04
EB005F	1.5 x .375	1.5 - all*	25	9495	6744	SN-05
EB006F	1.5 - all*, 2 x .500	1.5 x 1.875	30	11869	8992	SN-06
EB008F	2 x .250, 2.25 x .500	2 - all*	40	18260	14613	SN-08
EB009F	2.25 x .250	2.25 - all*	45	21912	17985	SN-09
EB010F	2.5 - all*	-	50	25382	21357	SN-10
EB012F	3 - all*	3 - all*	60	32868	29450	SN-12

All leads for that diameter screw except where noted



End Block Dimensions - Fixed

End Block Part #	Bearing ID (mm)	A & H	B	C	D	E	F	G	J	K	L	M	N	P	R	S	W	X	Y
EB000F	10	1.125	1.50	3.00	0.63	-	1.25	0.47	1.375	1.375	2.38	4 holes 0.281 dia.	2 Holes 0.281 Dia. Thru 0.50 C-bore x 0.56 DP	0.03	0.688	0.22	1.28	2.375	1.40
EB001F	12	1.50	2.00	4.00	0.75	-	1.50	0.48	1.500	1.313	2.50	4 Holes 0.281 dia.	2 Holes 0.406 Dia. Thru 0.625 C-Bore x .875 DP	0.03	0.750	0.23	1.27	2.500	1.40
EB003F	17	1.75	2.38	4.50	0.875	-	1.75	0.65	1.500	1.750	3.13	4 holes 0.406 dia.	2 Holes 0.531 Dia. Thru 0.81 C-bore x 1.125 DP	0.03	0.750	0.40	1.22	2.750	2.00
EB004F	20	1.75	2.38	5.00	1.00	-	2.00	0.65	1.750	1.750	3.13	4 Holes 0.469 dia.	2 Holes 0.656 Dia. Thru 1.00 C-Bore x 1.312 DP	0.03	0.875	0.40	1.35	3.000	2.00
EB005F	25	2.38	3.25	6.50	1.00	-	2.00	0.71	2.000	2.500	4.38	4 holes 0.656 dia.	2 Holes 0.906 Dia. Thru 1.375 C-bore x 2.0 DP	0.06	1.000	0.40	1.66	3.375	2.53
EB006F	30	2.50	3.50	6.50	1.00	-	2.00	0.90	2.500	2.500	4.75	4 Holes 0.656 dia.	2 Holes 0.906 Dia. Thru 1.375 C-Bore x 2.0 DP	0.06	1.250	0.53	1.72	3.625	2.94
EB008F	40	4.00	5.00	10.00	0.75	1.50	3.00	1.28	4.000	3.500	7.00	6 holes 0.656 dia.	4 Holes 0.781 Dia. Thru 1.188 C-bore x 2.0 DP	0.06	2.000	0.65	1.85	3.875	4.31
EB009F	45	4.00	5.00	10.00	0.90	1.75	3.50	1.28	4.000	3.500	7.00	6 Holes 0.812 dia.	4 Holes 1.031 Dia. Thru 1.562 C-Bore x 2.0 DP	0.06	2.000	0.65	1.97	4.125	4.31
EB010F	50	4.00	5.00	10.00	1.10	1.75	3.50	1.28	4.000	3.500	7.00	6 Holes 0.812 dia.	4 Holes 1.031 Dia. Thru 1.562 C-Bore x 2.0 DP	0.06	2.000	0.65	2.72	4.875	4.31
EB012F	60	4.00	5.00	10.00	1.00	2.35	4.00	1.28	4.000	3.500	7.00	6 Holes 0.812 dia.	4 Holes 1.031 Dia. Thru 1.562 C-Bore x 2.0 DP	0.06	2.000	0.65	3.22	5.500	5.41

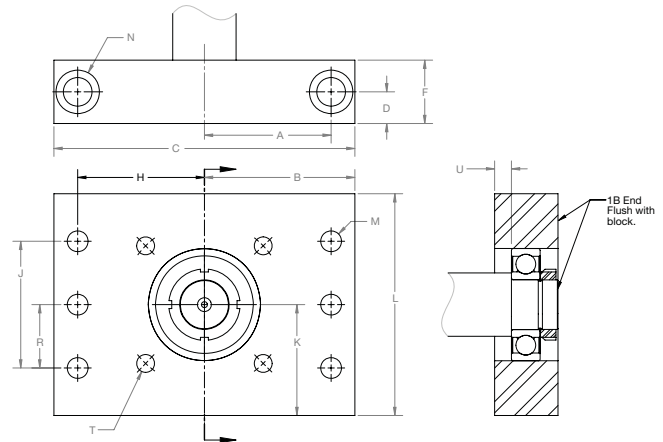
NOTE: Unless otherwise specified all dimensions are in Inches.
 NOTE: Duff-Norton does not warrant that these typical Journal End and End Block combinations are capable of accepting the amount of torque and axial load required to drive their respective screw and nut assembly to its' full rated capacity. Careful analysis by the customer should be done to ensure the Duff-Norton journal end meets the application requirements.

NOTE - Duff-Norton always recommend driving the screw and nut system from the fixed end. The "Fixed" - "Simple" screw end configuration and End Block combination is the recommended configuration for most applications.

End Block Performance Specifications - Simple

End Block Part #	Acme Screw & Lead	Ball Screw & Lead	Bearing Bore (mm)	Dynamic Capacity	Static Capacity	Locknut
EB000S	0.5 - all*	0.5 - all*	10	1150	540	SN-00
EB001S	0.63 - all*, 0.75 - all*	0.63 - all*	12	2180	940	SN-01
EB003S	1 - all*	0.75 - all*	17	3050	1470	SN-03
EB004S	1 x .100	1, 1.17 - all*	20	3600	1770	SN-04
EB005S	1.5 x .375	1.5 - all*	25	4750	2460	SN-05
EB006S	1.5 - all*, 2 x .500	1.5 x 1.875	30	6000	3400	SN-06
EB008S	2 x .250, 2.25 x .500	2 - all*	40	9150	5400	SN-08
EB009S	2.25 x .250	2.25 - all*	45	11900	7200	SN-09
EB010S	2.5 - all*	-	50	13900	8600	SN-10
EB012S	3 - all*	3 - all*	60	18400	11700	SN-12

All leads for that diameter screw except where noted Note: Capacity ratings are in Lbs.



End Block Dimensions - Simple

End Block Part #	Bearing ID (mm)	A & H	B	C	D	F	J	K	L	M	N	R	T	U
EB000S	10	1.125	1.50	3.00	0.38	0.75	1.375	1.375	2.38	4 holes 0.281 dia.	2 Holes 0.281 Dia. Thru 0.50 C-bore x 0.56 DP	0.688	4 Holes 1/4-20 tap 1.78" B.C.	0.10
EB001S	12	1.50	2.00	4.00	0.50	1.00	1.500	1.313	2.50	4 Holes 0.281 dia.	2 Holes 0.406 Dia. Thru 0.625 C-Bore x .875 DP	0.750	4 Holes 1/4-20 tap 1.78" B.C.	0.15
EB003S	17	1.75	2.38	4.75	0.50	1.00	1.500	1.750	3.13	4 holes 0.406 dia.	2 Holes 0.531 Dia. Thru 0.81 C-bore x 1.125 DP	0.750	4 Holes 5/16-18 tap 2.375" B.C.	0.00
EB004S	20	1.75	2.38	4.75	0.63	1.25	1.750	1.750	3.13	4 Holes 0.469 dia.	2 Holes 0.656 Dia. Thru 1.00 C-Bore x 1.312 DP	0.875	4 Holes 5/16-18 tap 2.375" B.C.	0.13
EB005S	25	2.38	3.25	6.50	0.88	1.75	2.000	2.500	4.38	4 holes 0.656 dia.	2 Holes 0.906 Dia. Thru 1.375 C-bore x 2.0 DP	1.000	4 Holes 5/16-18 tap 3.00" B.C.	0.50
EB006S	30	2.50	3.50	7.00	0.88	1.75	2.500	2.500	4.75	4 Holes 0.656 dia.	2 Holes 0.906 Dia. Thru 1.375 C-Bore x 2.0 DP	1.250	4 Holes 3/8-16 tap 3.50" B.C.	0.45
EB008S	40	4.00	5.00	10.00	1.25	2.00	4.000	3.500	7.00	6 holes 0.656 dia.	2 Holes 0.781 Dia. Thru 1.188 C-bore x 2.0 DP	2.000	4 Holes 5/8-11 tap 5.25" B.C.	0.53
EB009S	45	4.00	5.00	10.00	1.25	2.50	4.000	3.500	7.00	6 Holes 0.812 dia.	2 Holes 1.031 Dia. Thru 1.562 C-Bore x 2.0 DP	2.000	4 Holes 5/8-11 tap 5.25" B.C.	0.38
EB010S	50	4.00	5.00	10.00	1.25	2.50	4.000	3.500	7.00	6 Holes 0.812 dia.	2 Holes 1.031 Dia. Thru 1.562 C-Bore x 2.0 DP	2.000	4 Holes 5/8-11 tap 5.25" B.C.	0.75
EB012S	60	4.00	5.00	10.00	1.25	2.50	4.000	3.500	7.00	6 Holes 0.812 dia.	2 Holes 1.031 Dia. Thru 1.562 C-Bore x 2.0 DP	2.000	4 Holes 5/8-11 tap 6.36" B.C.	0.62

NOTE: Unless otherwise specified all dimensions are in Inches.

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