

BALL SCREWS & NUTS

Duff-Norton has been manufacturing ball screws and nuts for our actuator products for decades, and is now applying those years of experience to bring you an expanded assortment of ball screws and nuts for your application requirements. Consider these advantages:

Multiple Leads



Multiple Diameters



FEATURES & BENEFITS

Performance

- Excellent performance ratings; over 90% efficient with low torque and power requirements. Long and predictable life ratings.

Quality

- Excellent quality, all screws are precision rolled, heat-treated, inspected, and then manganese phosphate or black oxide coated. Good lead accuracy.

Delivery

- In stock on the most popular sizes.

Broad Assortment

- We offer a very broad assortment of acme diameters and leads.

System Integration

- Duff-Norton can provide you with an entire screw and nut system: mounting components, drive components, controls, and protective coverings.

Customer Service

- Talk to one of our knowledgeable customer service agents or application engineers.

050 - BSE - 050 - X - XXX

Screw Diameter

| Code | Diameter |
|------|----------|
| 050 | 1/2" |
| 063 | .631" |
| 075 | 3/4" |
| 100 | 1" |
| 117 | 1.17" |
| 150 | 1 1/2" |
| 200 | 2" |
| 225 | 2 1/4" |
| 250 | 2 1/2" |
| 300 | 3" |
| 400 | 4" |

Screw Type

Ball

Component Options

Screw
 Nut

Total Lead

Thread Pitch X No. Starts

| Code | Leads |
|------|--------|
| 020 | .200" |
| 025 | .250" |
| 041 | .413" |
| 047 | .473" |
| 050 | .500" |
| 066 | .660" |
| 100 | 1.00" |
| 187 | 1.875" |

Screw or Nut Options

Screw Options
 A - Alloy or Steel

Nut Options
 E - Single, Square
 F - Double, Square
 G - Single, Round
 H - Double, Round
 J - Triple, Round

Suffix

Special Screws or Nuts will have a three digit serialized code

Optional Character

Standard Nut and /or Flange Assembly will contain an "A"

LH Thread Nut and Flange Assemblies will contain a "LA"

Standard RH Screws cut to length will have no suffix code

Special Screws or Nuts will contain a "-"

LH Thread Screws or Nuts will contain a "L"

Standard nuts only will have no suffix code

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QUICK REFERENCE

Ball Screw & Nut Selection Overview - Right Hand

| Screw Dia. (in) | Ball Screw Part Number | Screw Lead (in) | Turns Per Inch | Thread Starts | Standard Length | Root Diameter | Ball Nut Part Number | Ball Nut Description | Flange Part Number |
|-----------------|------------------------|-----------------|----------------|---------------|-----------------|---------------|----------------------|----------------------|--------------------|
| 1/2 | 050BSA020 | .200 | 5 | Single RH | 6 ft. | .360 | 050BNH020 | Round 2 Circuit | FL0937 |
| | 050BSA050 | .500 | 2 | Double RH | | | 050BNH050 | | |
| .631 | 063BSA020 | .200 | 5 | Single RH | 6 ft. | .480 | 063BNE020 | Square 1 Circuit | FL0937 |
| | 063BSA100 | 1.00 | 1 | Double RH | | | 063BNH100 | Round 2 Circuit | |
| 3/4 | 075BSA020 | .200 | 5 | Single RH | 6 ft. | .660 | 075BNG020 | Round 1 Circuit | FL1137 |
| | 075BSA050 | .500 | 2 | Double RH | | | 075BNH020 | Round 2 Circuit | |
| 1 | 100BSA025 | .250 | 4 | Single RH | 16 ft. | .840 | 100BNE025 | Square 1 Circuit | FL1563 |
| | 100BSA050 | .500 | 2 | Double RH | | | 100BNF025 | Square 2 Circuit | |
| | 100BSA100 | 1.00 | 1 | Quad RH | | | 100BNH050 | Round 2 Circuit | |
| 1.17 | 100BSA100 | 1.00 | 1 | Quad RH | 16 ft. | .840 | 100BNF100 | Square 2 Circuit | FL1967 |
| | 117BSA041 | .413 | 2.421 | Single RH | | | 117BNH041 | Round 2 Circuit | |
| 1-1/2 | 150BSA025 | .250 | 4 | Single RH | 16 ft. | 1.32 | 150BNH025 | Round 2 Circuit | FL1967 |
| | 150BSA047 | .473 | 2.114 | | | | 150BNH047 | | FL2548 |
| | 150BSA050 | .500 | 2 | | | | 150BNH050 | | FL2360 |
| | 150BSA100 | 1.00 | 1 | Double RH | 20 ft. | 1.14 | 150BNF100 | Square 2 Circuit | FL2250 |
| | 150BSA187 | 1.875 | .53 | Quad RH | | | 150BNH100 | Round 2 Circuit | |
| 2 | 200BSA050 | .500 | 2 | Single RH | 20 ft. | 1.72 | 200BNH050 | Round 2 Circuit | FL3000 |
| | 200BSA100 | 1.00 | 1 | Double RH | | | 200BNH100 | | |
| 2-1/4 | 225BSA050 | .500 | 2 | Single RH | 20 ft. | 1.85 | 225BNH050 | Round 2 Circuit | FL3137 |
| | 225BSA100 | 1.00 | 1 | Double RH | | | 200BNH100 | | |
| 3 | 300BSA066 | .660 | 1.515 | Single RH | 20 ft. | 2.48 | 300BNJ066 | Round 3 Circuit | FL4325 |
| 4 | 400BSA100 | 1.00 | 1 | Single RH | 20 ft. | 3.34 | 400BNJ100 | Round 3 Circuit | FL5497 |

Ball Screw & Nut Selection Overview - Left Hand

| Screw Dia. (in) | Ball Screw Part Number | Screw Lead (in) | Turns Per Inch | Thread Starts | Standard Length | Root Diameter | Ball Nut Part Number | Ball Nut Description | Flange Part Number |
|-----------------|------------------------|-----------------|----------------|---------------|-----------------|---------------|----------------------|----------------------|--------------------|
| .631 | 063BSA020L | .200 | 5 | Single LH | 6 ft. | .480 | 063BNE020L | Square 1 Circuit | FL0937 |
| 1 | 100BSA025L | .250 | 4 | | 16 ft. | .840 | 100BNE025L | | FL1563 |
| 1-1/2 | 150BSA025L | | 1.32 | | 150BNH025L | FL1967 | | | |
| 1-1/2 | 150BSA050L | .500 | 2 | 20 ft. | 1.27 | 150BNH050L | Round 2 Circuit | FL2360 | |
| 2-1/4 | 225BSA050L | | | | | | | 1.85 | 225BNH050L |

Note: Unless otherwise specified all dimensions are in inches

