

Sentry™ Belt-Driven Spindles

- CO17 Cartridge Spindle
- B035, B040, B050, B070 & B090 Block Spindles



Sentry Precision Spindles

Value-Priced Sentry Precision Belt-Driven Spindles

The Sentry line is our standard building block spindle and is offered as a low-cost solution for many applications that call for a precision, high performance, standard design. Sentry spindles are built tough to deliver years of trouble-free performance. They feature a 100% inch design permanent grease lubrication, class 7 extra precision steel ball bearings, and can be applied at any attitude: horizontal, vertical, angular, ceiling, and side-mounted attitudes and rotational need.

The Sentry line includes 6 models – 1 cartridge and 5 block configurations:

- C017 Cartridge Spindle
- B035 Block Spindle
- B040 Block Spindle
- B050 Block Spindle
- B070 Block Spindle
- B090 Block Spindle



The C017 and B035 are the smallest Sentry spindles. These spindles are equipped with labyrinth seals. The Sentry C017 is our newest cartridge spindle, a drop-in replacement for the Gilman 1875.

The C017 is available in two basic configurations and offered with three spindle nose options and two spindle mounting brackets. Built to stock, these configurations are offered with 1-2 week shipment and a standard one year warranty.

The Sentry B035 is our smallest block spindle. Its compact size makes it ideal for small work that may require precision boring, drilling, and milling. The B035 is offered with a variety of motor drive packages – up to 3 hp and 9,000 rpm and features 4-6 week shipment. The B035 is a drop-in replacement for the Gilman 2750.

Models B040, B050, B070, and B090 represent the high end of the Sentry precision spindle line. These spindles are equipped with the patented SETCO AirShield™ and feature a standard 2-year warranty and 6-8 week shipment with standard options. All Sentry block-style spindles are equipped with a cross keyway and jackscrew holes, and can be configured with a variety of options such as triplex and quad front bearing arrangements, a wide assortment of motor drive packages, manual drawbar, and arrangement for through-spindle coolant. Like the B035, these spindles can be equipped with a variety of motor drive packages – up to 10 hp and 13,500 rpm.



Sentry B035 Block Spindle



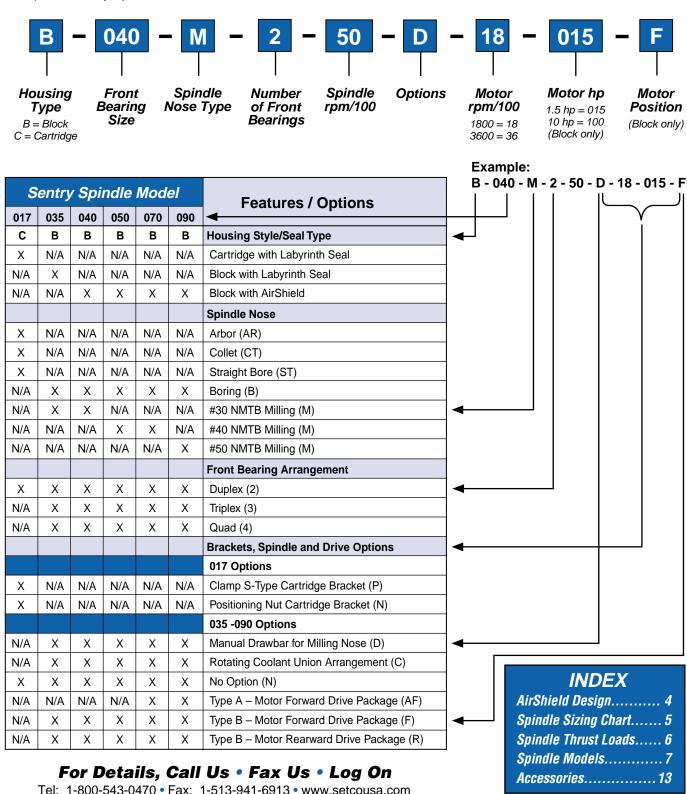
Sentry B035 Spindle with Optional Motor Drive Package in Motor-front Position

Note: Due to continual improvements, specifications are subject to change without notice. For current specifications, request a certified print when placing your order.

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How to Order Sentry Spindles

The following example identifies the Sentry spindle model code. When ordering a spindle, refer to this chart to specify the desired spindle and option package. The chart below is a matrix of options for the complete Sentry spindle line.



Patented AirShield™ Technology

SETCO's Exclusive Patented AirShield™ Provides the Industry's Best Spindle Sealing System!

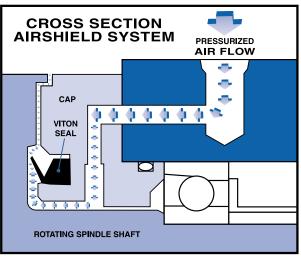
Warranty!

With over 600 AirShield-equipped spindles in the field, over 4 years of runtime *without a failure*, the SETCO AirShield sealing system is the most reliable spindle seal in the industry!

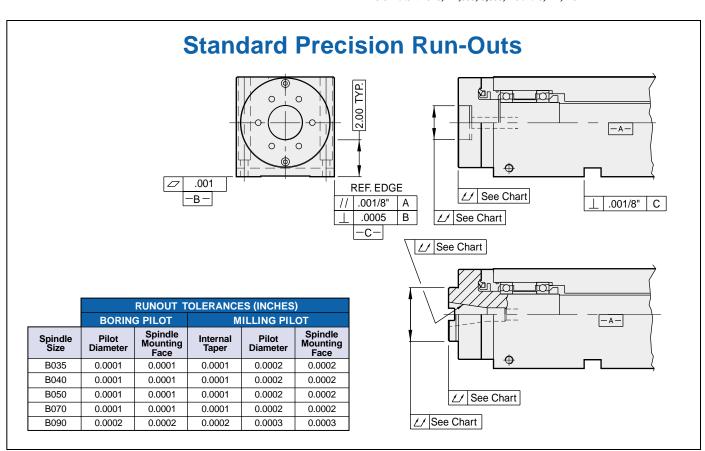
As standard, an AirShield-equipped SETCO spindle delivers:

- 2-year warranty on standard speed spindles
- · Increased spindle reliability
- Reduced maintenance
- Increased runtime
- Increased production
- Protection from coolant ingress in dynamic and static modes
- Corrosion-resistant design





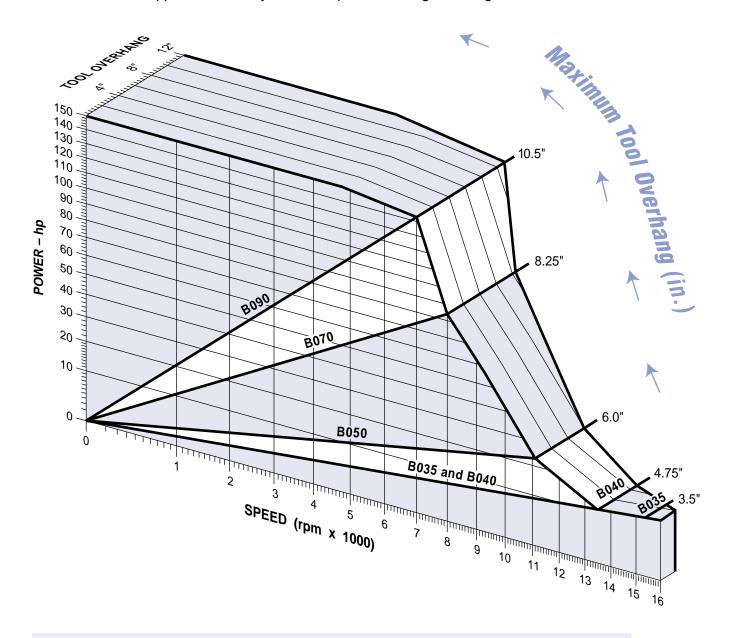
U.S. Patent No. 5,727,095, 5,980,115 and 6,217,219



How to Size Your Spindle to the Application

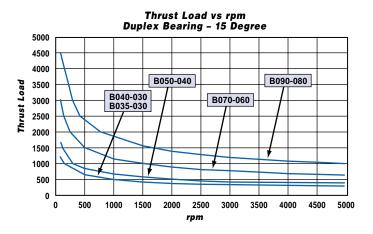
Spindle Selection Procedure

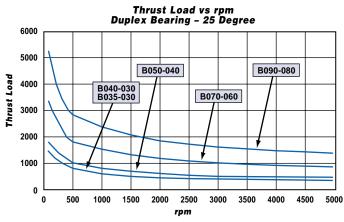
- 1. Determine the Power and Speed requirements for the application. Refer to the cutting data found in tool catalogs. For assistance, consult the SETCO Application Group.
- 2. Locate the Spindle Speed (rpm) on the chart and follow the line up until it intersects with the required Power (hp).
- 3. Continue up until it crosses the Spindle Size (model) line. This line is the minimum spindle size.
- 4. Verify that the Tool Overhang, measured from the spindle nose, falls within the maximum for the spindle.
- 5. For finish bore applications, verify the front spindle bearing is as large as the bore to be machined.



Note: The maximum rpm noted is based upon grease lubrication and light preload bearing.

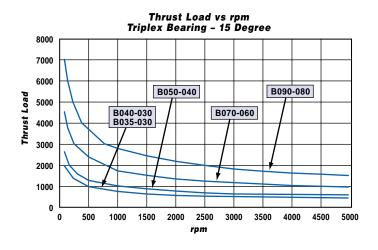
Sentry Spindle Thrust Load vs. rpm

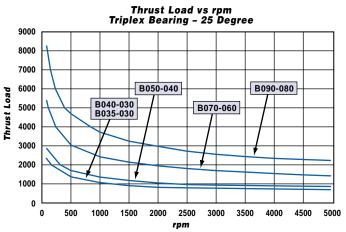




| THRUST LOAD FORMULA Duplex Bearing – 15 Degrees | | | | | | |
|--|---------------------------------|--|--|--|--|--|
| B035 | TL = 7461*rpm ^{-0.39} | | | | | |
| B040 | 1L = 7461 1pm 5.55 | | | | | |
| B050 | TL = 9640*rpm ^{-0.39} | | | | | |
| B070 | TL = 17013*rpm ^{-0.39} | | | | | |
| B090 | TL = 26056*rpm ^{-0.39} | | | | | |

| THRUST LOAD FORMULA Duplex Bearing – 25 Degrees | | | | | | |
|--|---------------------------------|--|--|--|--|--|
| B035 | TI 6545*rpm-0.33 | | | | | |
| B040 | TL = 6545*rpm ^{-0.33} | | | | | |
| B050 | TL = 8318*rpm ^{-0.33} | | | | | |
| B070 | TL = 15001*rpm ^{-0.33} | | | | | |
| B090 | TL = 23592*rpm ^{-0.33} | | | | | |





| THRUST LOAD FORMULA Triplex Bearing – 15 Degrees | | | | | | |
|---|---------------------------------|--|--|--|--|--|
| B035 | TL = 11688*rpm ^{-0.39} | | | | | |
| B040 | 1L = 11000 1piii 5:55 | | | | | |
| B050 | TL = 15018*rpm ^{-0.39} | | | | | |
| B070 | TL = 26618*rpm ^{-0.39} | | | | | |
| B090 TL = 39940*rpm ^{-0.39} | | | | | | |

| THRUST LOAD FORMULA Triplex Bearing – 25 Degrees | | | | | | |
|---|---------------------------------|--|--|--|--|--|
| B035 | TL = 10634*rpm ^{-0.33} | | | | | |
| B040 | 1L = 10634 1piii 5.55 | | | | | |
| B050 | TL = 13514*rpm ^{-0.33} | | | | | |
| B070 | TL = 24369*rpm ^{-0.33} | | | | | |
| B090 TL = 38325*rpm ^{-0.33} | | | | | | |

C017 Cartridge Spindle

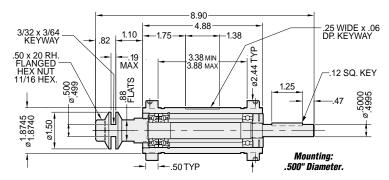
Plain Cartridge

Shown with Collet Nose

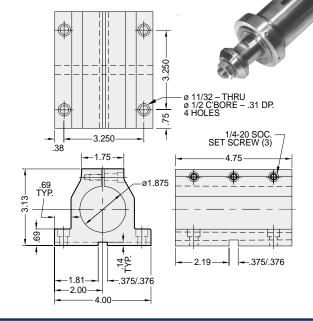
7.88 -.88 4.88 2.62 50 .12 SQ. KEY .75 SET SCREW FLAT 1.51 .34 1.25 a.37 Collet Capacity: .81 FLATS 1/8 to 3/8" Diameter. ERICKSON COLLET NUT ASSEMBLY 1" HEX. FOR 200DA SERIES COLLET COLLET RANGE 1/16 TO 3/8 DIA (COLLET NOT INCLUDED)

Positioning Nut Cartridge

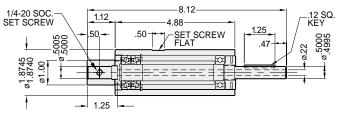
Shown with .500" Arbor Nose



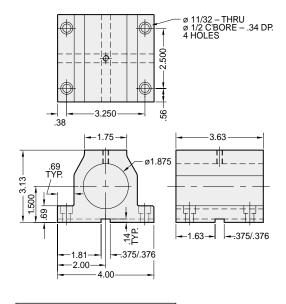
Clamp-Style Bracket

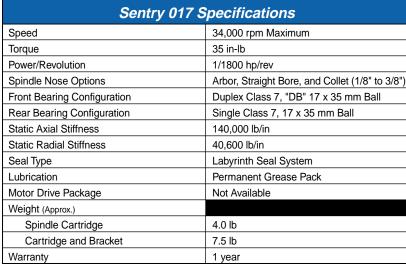


Straight Bore Nose



Positioning Nut Bracket





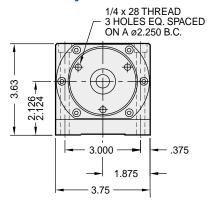


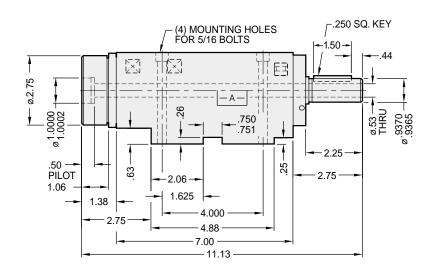
C017 Spindle shown with positioning nut cartridge and positioning nut bracket

B035 Block Spindle

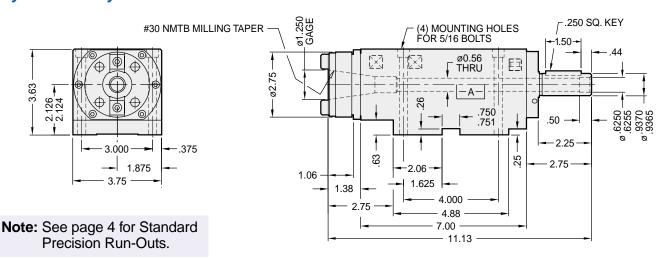
Sentry Belt-Driven Spindle

B035B *Keyed Block Style*





B035M *Keyed Block Style*



Note: Erickson 075 collet nose also available.

| | 035 TECHNICAL DATA | | | | | | | | |
|---|--------------------|-------|-----------|--------|--------|-------------------------|--------------------------------|------------------------------|--|
| TorquePower/ RatingSpindlerpmSpindleStaticMax.Max.SealMax.InertiaRadialMax.Max.TypeWarranty(Grease)*wk²Stiffness | | | | | | Radial | Static Axial Stiffness** | | |
| 60 in-lb | 1/1000 hp/rev | 25 lb | Labyrinth | 1 year | 15,300 | 12.0 lb-in ² | 2.46 x 10 ⁵ lb/in | 2.45 x 10 ⁵ lb/in | |

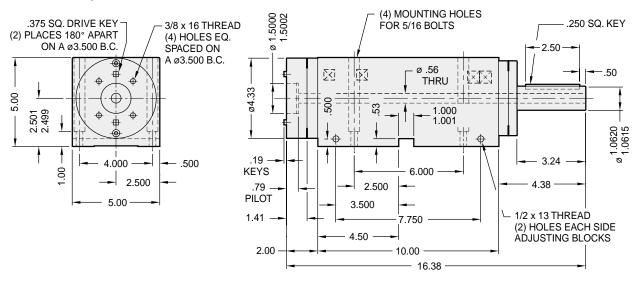
^{*}All data is based upon light preload, duplex bearing setup.

^{**}Spindle stiffness calculated using 100 lb radial load applied at the spindle nose.

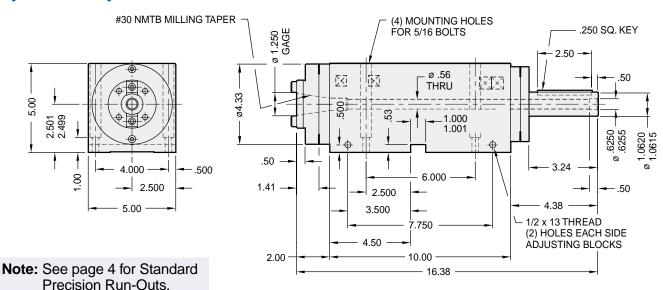
B040 Block Spindle

Sentry Belt-Driven Spindle

B040B *Keyed Block Style*



B040M *Keyed Block Style*



| 040 TECHNICAL DATA | | | | | | | | |
|---|--------------|-------|-----------|--------|--------|--------------------------------|------------------------------|------------------------------|
| Rating Revolution Weight Seal Max. Inertia Radial A | | | | | | Static Axial Stiffness** | | |
| 66 in-lb | 1/900 hp/rev | 71 lb | AirShield | 2 year | 13,500 | 17.0 lb-in ² | 2.11 x 10 ⁵ lb/in | 2.57 x 10 ⁵ lb/in |

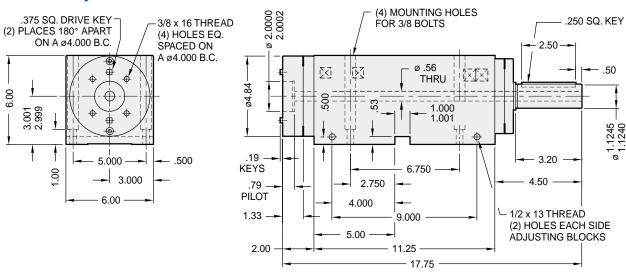
^{*}All data is based upon light preload, duplex bearing setup.

^{**}Spindle stiffness calculated using 100 lb radial load applied at the spindle nose.

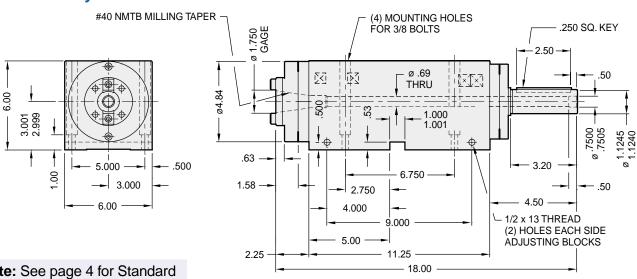
B050 Block Spindle

Sentry Belt-Driven Spindle

B050B *Keyed Block Style*



B050M *Keyed Block Style*



Note: See page 4 for Standard Precision Run-Outs.

| | 050 TECHNICAL DATA | | | | | | | | |
|---|--------------------|--------|-----------|--------|--------|-------------------------|------------------------------|------------------------------|--|
| TorquePower/ RatingSpindlerpm Max.SpindleStaticStaticMax.Max.SealMax.InertiaRadialAxialMax.Max.TypeWarranty(Grease)*wk²StiffnessStiffness** | | | | | | | Axial | | |
| 180 in-lb | 1/350 hp/rev | 113 lb | AirShield | 2 year | 11,100 | 30.0 lb-in ² | 3.31 x 10 ⁵ lb/in | 3.20 x 10 ⁵ lb/in | |

^{*}All data is based upon light preload, duplex bearing setup.

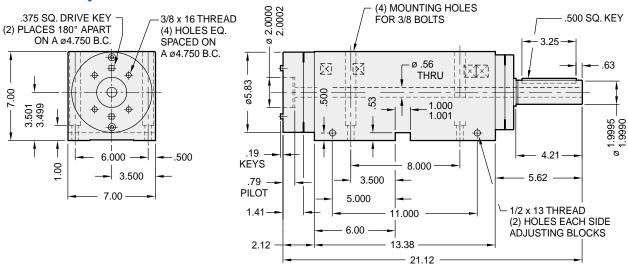
^{**}Spindle stiffness calculated using 100 lb radial load applied at the spindle nose.

B070 Block Spindle

Sentry Belt-Driven Spindle

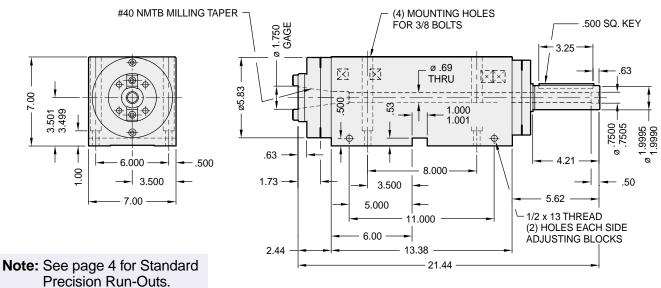
B070B

Keyed Block Style



B070M

Keyed Block Style



| | 070 TECHNICAL DATA | | | | | | | | |
|--|--------------------|--------|-----------|--------|---------------------------------------|-------------------------------|--------------------------------|------------------------------|--|
| Rating Revolution Weight Seal Max. Inc | | | | | Spindle Inertia wk ² | Static Radial Stiffness | Static Axial Stiffness** | | |
| 974 in-lb | 1/60 hp/rev | 187 lb | AirShield | 2 year | 8,000 | 87.0 lb-in ² | 7.08 x 10 ⁵ lb/in | 4.80 x 10 ⁵ lb/in | |

^{*}All data is based upon light preload, duplex bearing setup.

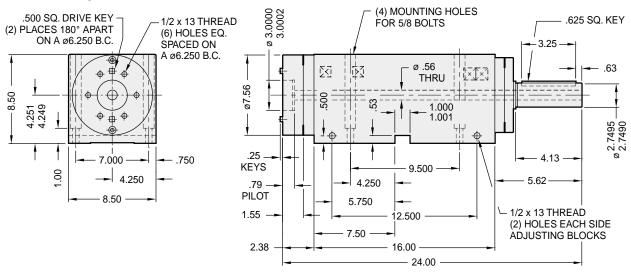
^{**}Spindle stiffness calculated using 200 lb radial load applied at the spindle nose.

B090 Block Spindle

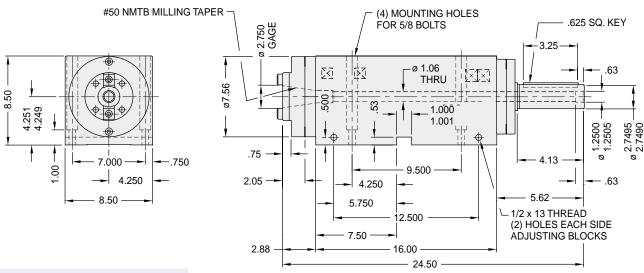
Sentry Belt-Driven Spindle

B090B

Keyed Block Style



B090M *Keyed Block Style*



Note: See page 4 for Standard Precision Run-Outs.

| | 090 TECHNICAL DATA | | | | | | | | | |
|---|--------------------|--------|-----------|--------|-------|--------------------------|------------------------------|------------------------------|--|--|
| Torque Power/ Spindle rpm Spindle Static Static Rating Revolution Weight Seal Max. Max. Type Warranty (Grease)* wk2 Stiffness Stiffness | | | | | | | | | | |
| 2600 in-lb | 1/25 hp/rev | 330 lb | AirShield | 2 year | 6,200 | 273.0 lb-in ² | 9.65 x 10 ⁵ lb/in | 6.05 x 10 ⁵ lb/in | | |

^{*}All data is based upon light preload, duplex bearing setup.

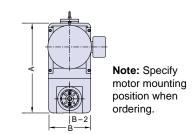
^{**}Spindle stiffness calculated using 200 lb radial load applied at the spindle nose.

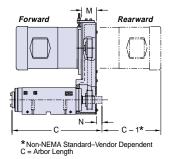
Accessories: Motor Drive

Type 'B' Belt Drive Package

The Type 'B' Belt Drive Packages provide a complete drive system for the Sentry series precision spindles. Mounted on the rear of the spindle housing is an integral belt guard/mounting bracket with motor mounting plate having screw type belt adjustment. Belt guard/mounting bracket allows for mounting of the motor toward or away from the spindle nose. Belt and pulleys are included to provide a wide range of incremental operating speeds for the application. The motor plate accommodates 'C' - face mounted motors.







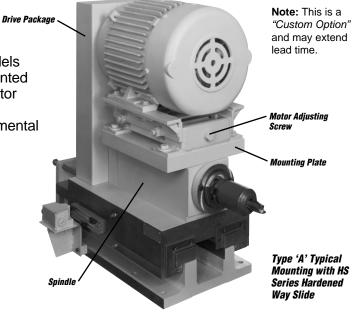
| hp | Base Speed | Frame Size | C-1 |
|-----|---------------|---------------|-------|
| | 3600 | 56C | 9.69 |
| 1 | 1800 | 143TC | 10.31 |
| | 1200 | 145TC | 11.62 |
| | 3600 | 143TC | 10.31 |
| 1.5 | 1800 | 145TC | 10.50 |
| | 1200 | 182TC | 13.44 |
| | 3600 | 145TC | 11.62 |
| 2 | 1800 | 145TC | 11.62 |
| | 1200 | 184TC | 14.44 |
| | 3600 | 145TC | 12.00 |
| 3 | 1800 | 182TC | 13.31 |
| | 1200 | 213TC | 16.31 |
| | 3600 | 184TC | 14.44 |
| 5 | 1800 | 184TC | 14.44 |
| | 1200 | 215TC | 17.44 |
| 7.5 | 3600 | 213TC | 16.31 |
| 7.5 | 1800 | 213TC | 16.31 |
| 10 | 3600 | 215TC | 16.31 |
| 10 | 1800 | 215TC | 17.44 |

| Size | Motor Frame Size (max.) | Spindle Size | A | В | B-2 | M | N |
|------|-------------------------------|-----------------|-------|-------|------|------|------|
| 675 | 145TC | B035 | 17.38 | 6.75 | 3.38 | 2.12 | |
| 850 | 850 145TC | B040 | 20.65 | 8.50 | 4.25 | 2.88 | |
| 050 | 14510 | B050 | | | 4.23 | | 0.12 |
| 1025 | 215TC B070 | B070 | 22.65 | 10.25 | 5 12 | 2 88 | 0.12 |
| 1023 | 21310 | B090 | 22.00 | 10.23 | 5.12 | 3.00 | |
| 1075 | 215TC | B070 | 24.91 | 10.75 | 5.38 | 3.88 | |
| 10/3 | 21310 | B090 | 24.91 | 10.75 | 5.56 | 3.00 | |

Type 'A' Belt Drive Package

The Type 'A' Belt Drive Packages are offered on models B070 and B090 for motors of 15, 20, and 25 hp. Mounted on the top of the spindle housing is an adjustable motor mounting plate that controls belt tensioning. Belt and pulleys are included to provide a wide range of incremental operating speeds for the application. Motor plate accommodates foot-mounted motors.

| Spindle Size | hp | Base Speed | Frame Size | Belt Drive Ratio (Max.) |
|-----------------|----|---------------|---------------|----------------------------|
| B070 | 15 | 1800 | | |
| Б070 | 15 | 3600 | 0547 | |
| | 15 | 1800 | 254T | 2 to 1 |
| | 15 | 3600 | | |
| B090 | 20 | 1800 | OFOT | 2 10 1 |
| B090 | 20 | 3600 | 256T | |
| | 25 | 1800 | 284T | |
| | 25 | 3600 | 284TS | |



Accessories: Standard Sentry Drive Packages

| Model | Motor hp | Motor rpm (Nominal) | Spindle Speed (rpm) | Speed Ratio | | | |
|-------|-------------|---------------------------|---------------------------|---|--|--|--|
| | | 1000 | 800 | 1.5 to 1 | | | |
| | 1.5 | | 960 | 1.25 to 1 | | | |
| | 1.5 | 1200 | 1200 | 1 to 1 | | | |
| | | | 1500 | 1 to 1.25 | | | |
| | | | 1800 | 1 to1 | | | |
| | 2 | 4000 | 2250 | 1 to 1.25 | | | |
| | 2 | 1800 | 2700 | 1 to 1.5 | | | |
| | | | 3168 | 1 to 1.76 | | | |
| | | | 3600 | 1 to 1 | | | |
| 035 | | | 4032 | 1 to 1.12 | | | |
| 3 | | | 1200 (rpm) Ratio | | | | |
| 0 | | | 4986 | 1 to 1.385 | | | |
| | | | 5400 | 960 1.25 to 1 1200 1 to 1 1500 1 to 1.25 1800 1 to 1.25 1800 1 to 1.25 2700 1 to 1.5 3700 1 to 1.25 4500 1 to 1.25 4500 1 to 1.38 5400 1 to 1.38 5400 1 to 1.38 5400 1 to 1.5 5890 1 to 1.636 6750 1 to 1.87 57200 1 to 2.87 57200 1 to 2.83 58100 1 to 2.364 | | | |
| | 3 | 2000 | 5890 | 1 to 1.25 1 to 1.5 1 to 1.76 1 to 1.12 1 to 1.25 1 to 1.385 1 to 1.5 1 to 1.636 1 to 1.76 1 to 1.875 1 to 2.083 | | | |
| | 3 | 3600 | 6336 | 1 to 1.76 | | | |
| | | | 6750 | 1 to 1.76 1 to 1 1 to 1.12 1 to 1.25 1 to 1.385 1 to 1.5 1 to 1.636 1 to 1.76 1 to 1.875 1 to 2 1 to 2.083 1 to 2.25 | | | |
| | | | 7200 | 1 to 2 | | | |
| | | | 7499 | 1 to 2.083 | | | |
| | | | | | | | |
| | | | 8510 | 1 to 2.364 | | | |
| | | | 9000 | 1 to 2.5 | | | |

| Model | Motor hp | Motor rpm (Nominal) | Spindle Speed (rpm) | Speed Ratio | |
|-------|-------------|---------------------------|---------------------------|----------------|--|
| | 1.5 | 1200 | 600 | 2 to 1 | |
| | 1.0 | | 902 | 1.333 to 1 | |
| | | | 1200 | 1.5 to 1 | |
| | 2 | 1000 | 1500 | 1.2 to 1 | |
| | | 1000 | 1800 | 1 to1 | |
| | | | 2138 | 1 to 1.188 | |
| | | | 2400 | 1.5 to 1 | |
| | | | 2707 | 1.333 to 1 | |
| | | | 3000 | 1.2 to 1 | |
| 040 | | | 3374 | 1.067 to 1 | |
| | | | 3600 | 1 to 1 | |
| | | | 4000 | 1 to 1.111 | |
| | 3 | 3600 | 4320 | 1 to 1.2 | |
| | 3 | 3000 | 4561 | 1 to 1.267 | |
| | | | 4799 | 1 to 1.333 | |
| | | Nominal (rpm) Ratio | | | |
| | 5760 | 1 to 1.6 | | | |
| | | | 6232 | 1 to 1.731 | |
| | | | 6646 | 1 to 1.846 | |
| | | | 6923 | 1 to 1.923 | |
| | | | 7200 | 1 to 2 | |

| Model | Motor hp | Motor rpm (Nominal) | Spindle Speed (rpm) | Speed Ratio |
|-------|--|---------------------------|---------------------------|------------------------|
| | 1.5 | 1200 | 600 | 2 to 1 |
| | 1.5 | 1200 | 900 | 1.333 to 1 |
| | | 1200 | 600 | 2 to 1 |
| | _ | 1200 | 900 | 1.333 to 1 |
| | 2 | 4000 | 1200 | 1.5 to 1 |
| | | 1800 | 1500 | 1.2 to 1 |
| | | | 1800 | 1 to 1 |
| | | | 2100 | 1.714 to 1 |
| | | | 2400 | 1.5 to 1 |
| | | | 2701 | 1.333 to 1 |
| | | | 3000 | 1.2 to 1 |
| | | | 3374 | 1.067 to 1 |
| | 3 | 2000 | 3600 | 1 to 1 |
| | 3 | 3600 | 4000 | 1 to 1.111 |
| | | | 4500 | 1 to 1.25 |
| | | | 5040 | 1 to 1.4 |
| | | | 5400 | 1 to 1.5 1 to 1.667 |
| | | | 6001 6750 | 1 to 1.875 |
| | | | 600 | 2 to 1 |
| | | 1200 | 900 | 1.333 to 1 |
| | | | 1200 | 1.555 to 1 |
| | | 1800 | 1500 | 1.2 to 1 |
| | | 1000 | 1800 | 1.2 to 1 |
| | | | 2100 | 1.714 to 1 |
| 070 | | 3600 | 2400 | 1.5 to 1 |
| | | | 2701 | 1.333 to 1 |
| | 5 | | 3000 | 1.2 to 1 |
| | | | 3374 | 1.067 to 1 |
| | | | 3600 | 1 to 1 |
| | 4000 1 4500 1 5040 5400 6001 1 | | | 1 to 1.111 |
| | | | | 1 to 1.25 |
| | | | 5040 | 1 to 1.4 |
| | | 1 to 1.5 | | |
| | | | 6001 | 1 to 1.667 |
| | | | 6750 | 1 to 1.875 |
| | | | 1200 | 1.5 to 1 |
| | | 1800 | 1500 | 1.2 to 1 |
| | | | 1800 | 1 to 1 |
| | | | 2100 | 1.714 to 1 |
| | | | 2400 | 1.5 to 1 |
| | 10 | | 2701 | 1.333 to 1 |
| | | | 3000 | 1.2 to 1 |
| | | | 3374 | 1.067 to 1 |
| | | 3600 | 3600 | 1 to 1 |
| | | | 4000 | 1 to 1.111 |
| | | | 4500 | 1 to 1.25 |
| | | | 5040 | 1 to 1.4 |
| | | | 5400 | 1 to 1.5 |
| | | | 6001 | 1 to 1.667 |
| | | | 6750 | 1 to 1.875 |

| Model | Motor hp | Motor rpm (Nominal) | Spindle Speed (rpm) | Speed Ratio | | | |
|-------|-------------|---------------------------|---------------------------|---|--|--|--|
| | 1.5 | 1200 | 600 | 2 to 1 | | | |
| | | .200 | 923 | 1.3 to 1 | | | |
| | | 1200 | 600 | 2 to 1 | | | |
| | | .200 | 923 | 1.3 to 1 | | | |
| | 2 | 1800 | 1177 | 1.529 to 1 | | | |
| | _ | | 1523 | 1.182 to 1 | | | |
| | | | 1800 | 1 to 1 | | | |
| | | | 2077 | 1 to 1.154 | | | |
| | | | 2493 | 1.444 to 1 | | | |
| | | | 2769 | 1.3 to 1 | | | |
| | | | 3046 | 1.182 to 1 | | | |
| | | | 3324 | 1.083 to 1 | | | |
| | 3 | 3600 | 3600 | 1 to 1 | | | |
| | | | 3877 | 1 to 1.077 | | | |
| | | | 4500 | 1 to 1.25 | | | |
| | | | 4820 | 1 to 1.339 | | | |
| | | | 5191 | 1 to 1.442 | | | |
| | | | 5400 | 1 to 1.5 | | | |
| | | 1200 | 600 | 2 to 1 | | | |
| | | 1200 | 923 | 1.3 to 1 | | | |
| | | | 1177 | 1.529 to 1 | | | |
| | | 1800 | 1523 | 1.182 to 1 | | | |
| | | 1000 | 1800 | 1 to 1 | | | |
| 9(| | | 2077 | 1 to 1.154 | | | |
| 60 | | | 2493 | 1.444 to 1 | | | |
| | 5 | | 2769 | 1.3 to 1 | | | |
| | , | | 3046 | 1.182 to 1 | | | |
| | | | 3324 | | | | |
| | | 3600 | 3600 | | | | |
| | | 3000 | | | | | |
| | | | | | | | |
| | | 4820 1 to 1.3 | | | | | |
| | | | 5191 1 to 1.44 | | | | |
| | | | 5400 | 1.083 to 1 1 to 1 1 to 1.077 1 to 1.25 1 to 1.339 1 to 1.442 1 to 1.5 1.529 to 1 1.182 to 1 1 to 1.154 | | | |
| | | | 1177 | | | | |
| | | 1800 | 1523 | | | | |
| | | 1000 | 1800 | | | | |
| | | | 2077 | | | | |
| | | | 2493 | 1.444 to 1 | | | |
| | | | 2769 | 1.3 to 1 | | | |
| | 10 | | 3046 | 1.182 to 1 | | | |
| | 10 | | 3324 | 1.083 to 1 | | | |
| | | 3600 | 3600 | 1 to 1 | | | |
| | | | 3877 | 1 to 1.077 | | | |
| | | | 4500 | 1 to 1.25 | | | |
| | | | 4820 | 1 to 1.339 | | | |
| | | | 5191 | 1 to 1.442 | | | |
| | | | 5400 | 1 to 1.5 | | | |
| | | | 5400 | 1 to 1.5 | | | |

| Model | Motor hp | Motor rpm (Nominal) | Spindle Speed (rpm) | Speed Ratio | | |
|-------|-------------|---------------------------|--|----------------|--|--|
| | | 4000 | 600 | 2 to 1 | | |
| | 1.5 | 1200 | 902 | 1.333 to 1 | | |
| | | 4000 | 600 | 2 to 1 | | |
| | | 1200 | 900 | 1.333 to 1 | | |
| | 2 | 1800 | 1200 | 1.5 to 1 | | |
| | 2 | | 1500 | 1.2 to 1 | | |
| | | | 1800 | 1 to1 | | |
| | | | 2138 | 1 to1.188 | | |
| | | | 2400 | 1.5 to 1 | | |
| | | | 2707 | 1.333 to 1 | | |
| | | | 3000 | 1.2 to 1 | | |
| | | | 3374 | 1.067 to 1 | | |
| | | | 3600 | 1 to 1 | | |
| | | | 4000 | 1 to 1.111 | | |
| | • | 2000 | 4320 | 1 to 1.2 | | |
| | 3 | 3600 | 4561 | 1 to 1.267 | | |
| | | | 4799 | 1 to 1.333 | | |
| | | | 5263 | 1 to 1.462 | | |
| | | | 5760 | 1 to 1.6 | | |
| | | | 6232 | 1 to 1.731 | | |
| 020 | | | 6646 | 1 to 1.846 | | |
| | | | 6923 | 1 to 1.923 | | |
| | | | 7200 | 1 to 2 | | |
| | | 1900 | 1200 | 1.5 to 1 | | |
| | | | 1500 | 1.2 to 1 | | |
| | | 1800 | 1800 | 1 to1 | | |
| | | | (Nominal) (rpm) Ratio (rpm) (rpm) Ratio (rpm) 1200 | | | |
| | | | 2400 | 1.5 to 1 | | |
| | | | 2701 | 1.333 to 1 | | |
| | | | 3000 | | | |
| | | | | | | |
| | | | 3600 | | | |
| | 5 | | 4000 | | | |
| | э | 2000 | 4320 | | | |
| | | 3600 | 4561 | | | |
| | | | 4799 | 1 to 1.333 | | |
| | | | 5263 | 1 to 1.462 | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | 1 to 1.923 | | |
| | | | 7200 | 1 to 2 | | |
| | | | | | | |

Note: Standard Type 'B' drive packages. For Type 'A' packages consult factory. Speed based on no-load motor rpm. Specifications subject to change without notice. Custom drive packages are available as a "Custom Option." Consult factory.

Accessories: Coolant Union & Drawbar

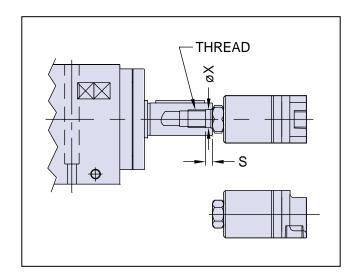
Accessories

Rotating Coolant Union Arrangement

Available on all Sentry series super precision spindles. Rotating coolant unions allow the coolant to enter by way of the rear of the spindle shaft and flow through the spindle to the tooling. Requires hole through and machining of spindle shaft to accommodate mounting of union (standard is customer-supplied, or SETCO can provide).

Available as straight through or 90° union. Specify left-hand or right-hand thread.

| THREAD | X | S |
|----------|----------------|-----|
| 5/8 X 18 | .6556 .6560 | .28 |

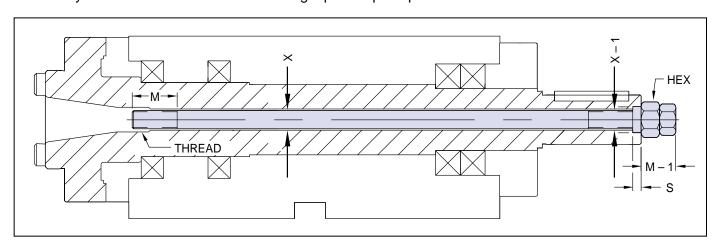


Note: Specify direction of spindle rotation viewing rear of spindle.

Other makes and styles of unions are available upon request.

Manual Drawbar

Commonly used for manual retention of milling taper adapters per ANSI B5.18.



| SIZE | THREAD | M | X | X-1 | S | M-1 | HEX |
|------|--------|------|------|-------|-----|------|------|
| 30 | .50-13 | 1.25 | .50 | .625 | .38 | 1.56 | .88 |
| 40 | .62-11 | 1.50 | .62 | .750 | .38 | 1.81 | 1.06 |
| 50 | 1.00-8 | 2.00 | 1.00 | 1.250 | .50 | 2.50 | 1.62 |

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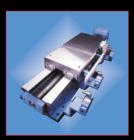
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