

Simplicity® Square Bearings and Shafting

Product Overview

- Runs on a single, square shaft eliminating costly components
- Maintains radial integrity and can eliminate the need for parallel shafting
- Can be mounted in any orientation
- Housings are aluminum alloy with a standard anodized finish
- Utilizes standard bearing plugs
- Adjustable to maintain tight running clearances, contingent upon shafting
- Bearing plugs are easily replaced

SAME CHARACTERISTICS OF THE STANDARD ROUND-WAY SIMPLICITY BEARINGS:

- Self-lubricating
- High load capacity
- Wide temperature range:
(-400°F/+400°F)
(-240°C/+204°C)
- Excel in contaminated environments
- High shock loading abilities
- Low wear rates

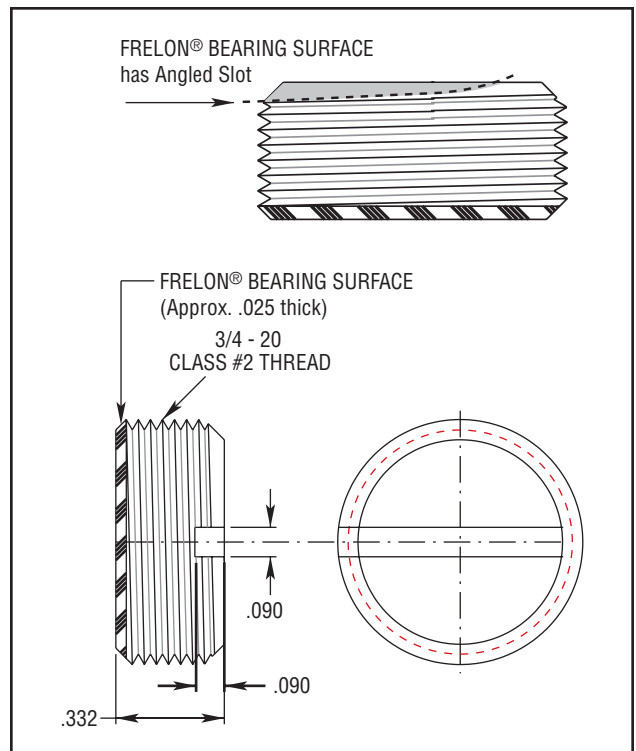
Adjustable Bearing Plugs

BEARING MATERIAL: Part number APN16E plug with Frelon® J is standard for PST stainless steel square shafting. Part number APN16 plug with FrelonGOLD® is also available for applications to be run on steel. Plug material is 316 stainless steel.

- Bearing plugs can be purchased separately
- Ideal for use in many applications as a wear pad
- Bearing surface area = .300 in²
- Max static load capacity per plug (Frelon J) = 450 lbs.
- The use of green Loctite or similar is recommended to hold the adjustable bearing plugs in position while allowing relative ease of adjustment

ORDERING INFORMATION

PART NO.	DESCRIPTION
APN16E	Standard: Adjustable bearing plug with Frelon J bearing liner. Use with 300 series stainless or soft shafting.
APN16	Optional: Adjustable bearing plug with FrelonGOLD bearing liner. Use with steel shafting.



**FrelonGOLD
APN16**



**Frelon J
APN16E**



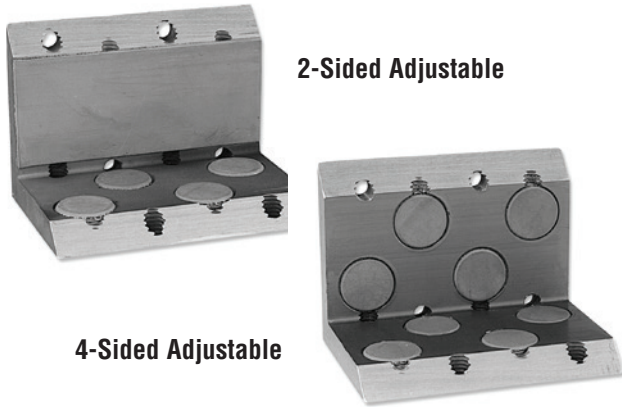
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Simplicity® Square Shafting, Bearings & Plugs

Square Bearing Cutaway View



2-Sided Adjustable

4-Sided Adjustable

APPLICATION NOTE

Use removable Loctite thread locker to hold the adjustable bearing plugs in position.

Two parameters must be met in the design and use of square bearings:

1. The 2:1 ratio for cantilevered loads applies to square bearings in the same way as roundway Simplicity® bearings. Binding will occur if the ratio is not met.

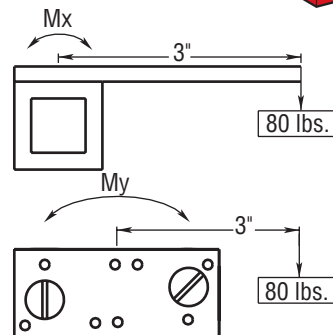
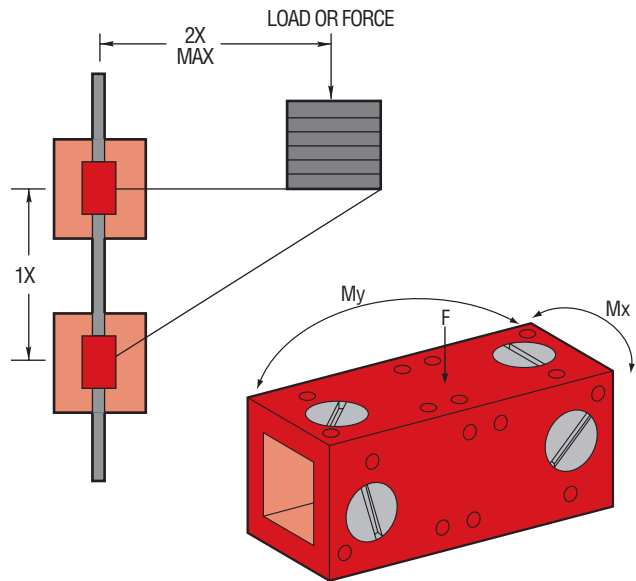
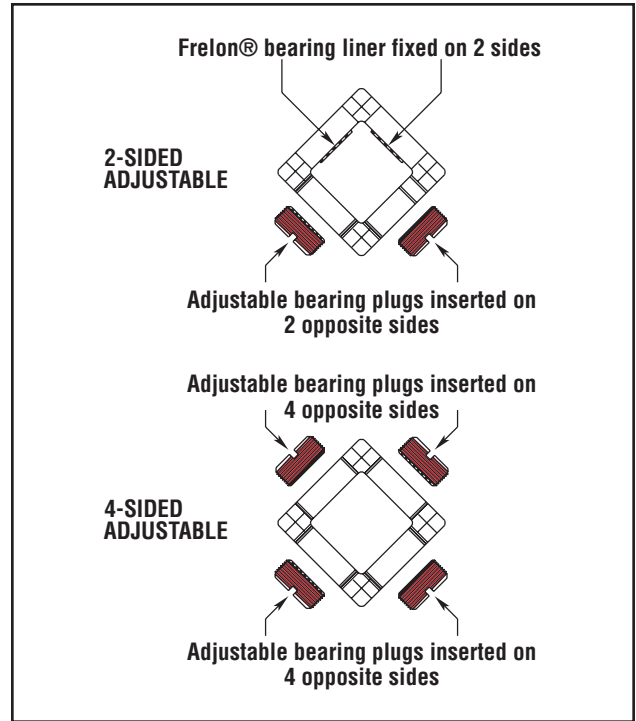
Note: If only one bearing is used, the 2:1 applies from plug centers.

2. The maximum load and moment load must be met. To calculate the acceptable cantilever or lever arm, multiply the length (from center of the bearing to the center of the load) times the weight. The result must be less than the moment load for that orientation.

Example: Distance of cantilever = 3"
 Amount of load = 40 lbs.
 3" x 80 lbs. = 240 in-lbs.

SQUARE BEARING LOAD INFORMATION

PART NO.	MAX MOMENTS TORSIONAL CAPACITIES IN.-LBS.		MAX FORCE LBS.
	Mx	My	F
SB16	74	165	920
SBL16	74	475	920
SB24	416	402	1840
SBL24	416	1413	1840



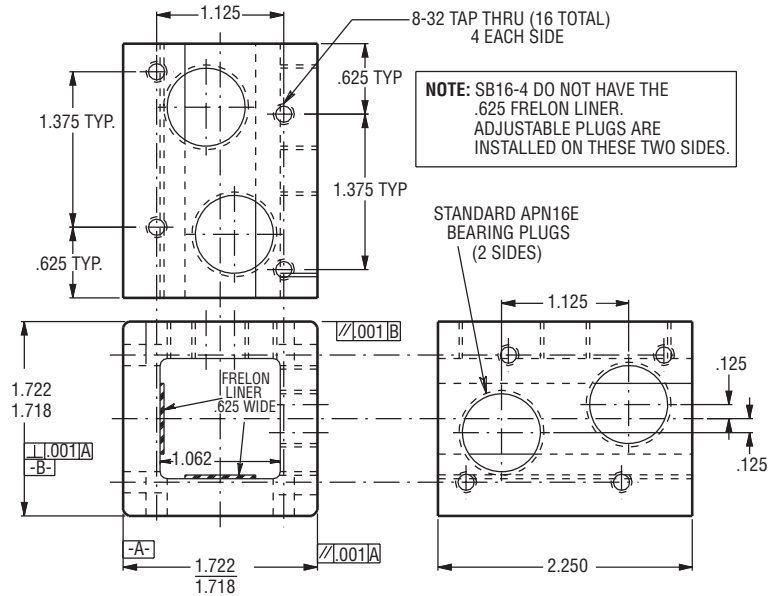
Simplicity[®] Square Bearings • 1.0 Inch

ORDERING INFORMATION

PART NO.	DESCRIPTION	BEARING WEIGHT LBS.
SB16-2E	Standard 1.0" two-sided adjustable square bearing with Frelon [®] J plugs for stainless steel shafting.	.48
SB16-2	Optional 1.0" two-sided adjustable square bearing with FrelonGOLD [®] plugs for steel shafting.	.48
SB16-4E	Standard 1.0" four-sided adjustable square bearing with Frelon J plugs for stainless steel shafting.	.56
SB16-4	Optional 1.0" four-sided adjustable square bearing with FrelonGOLD plugs for steel shafting.	.56
SBL16-2E	Standard 1.0" extended length, two-sided adjustable square bearing with Frelon J plugs for stainless steel shafting.	.77
SBL16-2	Optional 1.0" extended length, two-sided adjustable square bearing with FrelonGOLD plugs for steel shafting.	.77
SBL16-4E	Standard 1.0" extended length, four-sided adjustable square bearing with Frelon J plugs for stainless steel shafting.	.85
SBL16-4	Optional 1.0" extended length, four-sided adjustable square bearing with FrelonGOLD plugs for steel shafting.	.85

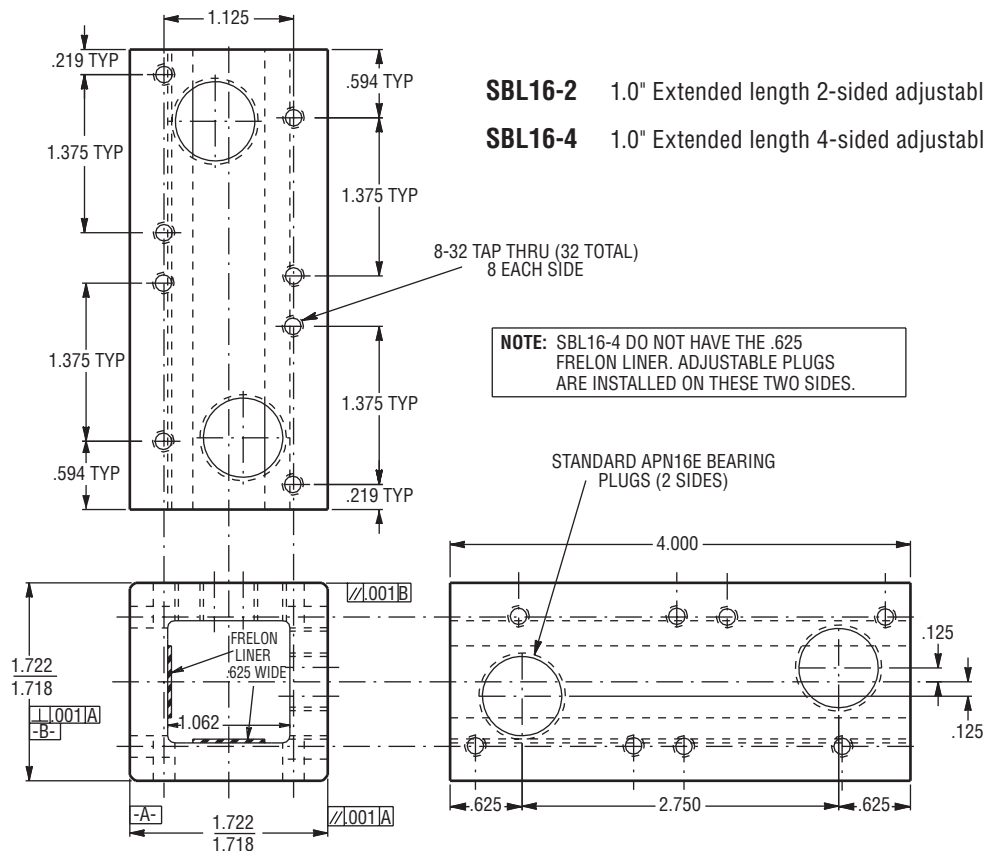
SB16-2 1.0" 2-sided adjustable square bearing

SB16-4 1.0" 4-sided adjustable square bearing



SBL16-2 1.0" Extended length 2-sided adjustable square bearing

SBL16-4 1.0" Extended length 4-sided adjustable square bearing



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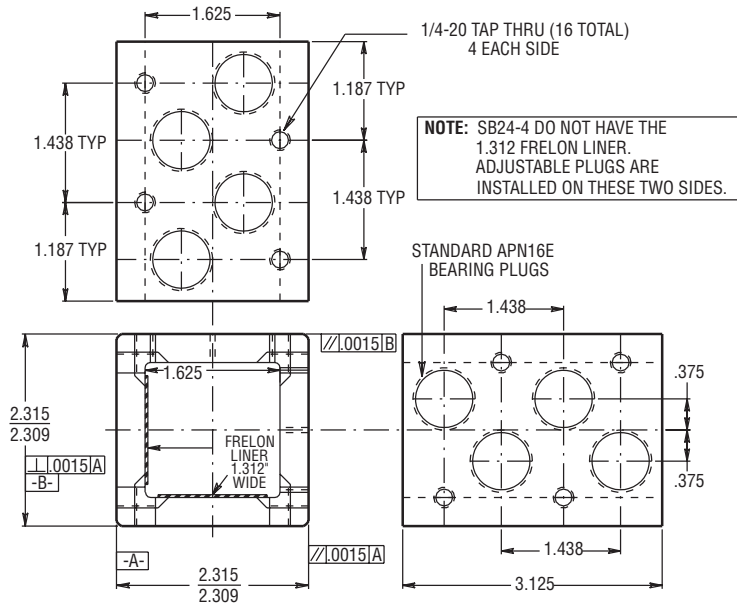
Simplicity® 1.5 Inch • Square Bearings

ORDERING INFORMATION

PART NO.	DESCRIPTION	BEARING WEIGHT LBS.
SB24-2E	Standard 1.5" two-sided adjustable square bearing with Frelon® J plugs for stainless steel shafting.	.96
SB24-2	Optional 1.5" two-sided adjustable square bearing with FrelonGOLD® plugs for steel shafting.	.96
SB24-4E	Standard 1.5" four-sided adjustable square bearing with Frelon J plugs for stainless steel shafting.	1.12
SB24-4	Optional 1.5" four-sided adjustable square bearing with FrelonGOLD plugs for steel shafting.	1.12
SBL24-2E	Standard 1.5" extended length, two-sided adjustable square bearing with Frelon J plugs for stainless steel shafting.	1.71
SBL24-2	Optional 1.5" extended length, two-sided adjustable square bearing with FrelonGOLD plugs for steel shafting.	1.71
SBL24-4E	Standard 1.5" extended length, four-sided adjustable square bearing with Frelon J plugs for stainless steel shafting.	1.84
SBL24-4	Optional 1.5" extended length, four-sided adjustable square bearing with FrelonGOLD plugs for steel shafting.	1.84

SB24-2 1.5" 2-Sided adjustable square bearing

SB24-4 1.5" 4-Sided adjustable square bearing



SBL24-2 1.5" Extended length 2-sided adjustable square bearing

SBL24-4 1.5" Extended length 4-sided adjustable square bearing

