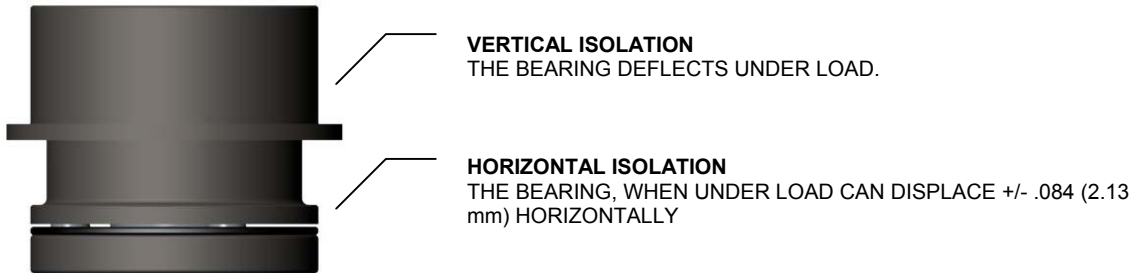


### **Series 320 Overview and Specification**

*The Vistek Series 320 Vibration Isolation Bearing (VIB) is a passive, mechanical six-degree-of-freedom isolation bearing. It is small and efficient. It does not require air hoses or supporting hardware or software of any type.*

*Contending with vibration complicates tool design and operation - - The solution does not have to.*



This is an illustration of the standard configuration. There are numerous attachment options for the top and the base of the bearing, and the dimensions will vary. The Series 320 VIB bearings are more robust and provide for a larger payload operating range. As a result, they also have a larger deflection range.

#### **Product Features**

- x-y-z Isolation – Exceptional six degrees-of-freedom isolation. Tangential, and secant compliance. Fast settling time.
- Horizontal Isolation – A horizontal, non-linear spring results in isolation that is constant and independent of the frequency and amplitude of the input vibrations. As a result, the horizontal WVF spring filter whites out or filters out a broad band of input frequencies and insures a constant level of vibration transmission reduction.
- Vertical Isolation – Broadband filtering with substantially non-linear spring filters.

**Maintenance** - None.

#### **Transportability**

Bearings need to be secured during transportation to prevent displacement. Vistek will advise with designing the locking method into a tool as appropriate.

#### **Material**

Alloy, heat treated steel, a nickel and Teflon coating, and anodized aluminum.

**Aug. 2006**

**VIB320 Features & Options: Selecting the Right Part Number**

The Series 320 Vibration Isolation Bearing (VIB) is a passive, mechanical six-degree-of-freedom isolation bearing. It is small, efficient, and does not require air hoses or supporting hardware or software.

Vistek has a complete selection of Series 320 Bearings for a wide range of payload weight capacities, and with numerous mechanical attachment options.

**Part Number Designation**

The Part Number System requires you to determine the Part Number Prefix and the Part Number Suffix.

**Part Number Prefix.** Designates the bearing weight capacity. Make your selection from the document entitled "VIB300 Weight Capacity Size selection Chart". Example: VIB320-1831.

**Part Number Suffix.** Designates the bearing base and bearing top attachment configuration. Select an option for both the top and the base even if selecting the standard bearing.

Bearing Base Adapter Plates

Description	Suffix Designation
Standard – nothing added	A
Square Adapter	B
Round Adapter	C
Rectangular Adapter	D
Damping Collar	E

Example: (The 'xxxx' represents the Prefix)

VIB320-xxxx:A01



Bearing Top Leveler Attachments

Leveler Description	Suffix Designation
Standard – nothing added	01
Sm. Leveler Mount - Delrin	02
Sm. Leveler Mount - Alum/SS	03
Lg. Leveler Mount – Alum/SS	04
7/16-14 UNC 2B insert	05
3/8-16 UNC 2B insert	06
1/2-13 UNC 2B insert	07
5/8-11 UNC 2B insert	08
3/8-16 UNC 2A stud	09
1/2-13 UNC 2A stud	10
5/8-11 UNC 2A stud	11
3/4-10 UNC 2A stud	12

Details for each of these options are available.

If your needs require an attachment option we have not designated, then contact the factory for a custom design.

Aug. 2006

**Series 320 Size Selection Chart**

Part No. Designation Prefix	Payload Range	
	Lbs (Kgs)	
	Min	Max
VIB320-0812	8 (3.6)	12 (5.4)
VIB320-1318	13 (5.9)	18 (8.2)
VIB320-1630	16 (7.3)	30 (13.6)
VIB320-2240	22 (10)	40 (18)
VIB320-2947	29 (13)	47 (21)
VIB320-3658	36 (16)	58 (26)
VIB320-4484	44 (20)	84 (38)
VIB320-66105	66 (30)	105 (48)
VIB320-85130	85 (39)	130 (59)
VIB320-92150	92 (42)	150 (68)
VIB320-100160	100 (45)	160 (73)
VIB320-110180	110 (50)	180 (82)

**Horizontal Weight Capacity**

*Crushing capacity:* Not a factor, the vertical capacity controls.

*Weight that can be effectively isolated:* Not a factor. The bearing's ability to isolate for the horizontal vibration component is weight independent.

**Vertical Weight Capacity**

*Crushing capacity:* Not a factor, the payload that can be effectively isolated from the vertical vibration component controls, and is far less than the crushing capacity

*Weight that can be effectively isolated:* The bearing's ability to isolate a payload from the vertical component of vibration is weight dependent. Select the Part No. Designation Prefix from this chart that has a Payload Range that brackets the weight that each bearing will carry.

If the payload falls within the Min and Max range of more than one Part No., select the Part No. for which the payload falls closest to the middle of the range.

Call the factory for Vibration Isolation Bearings with weight capacities that exceed the maximum available from a bearing on this chart.

**Selecting the Complete Part Number for a Series 320 Vibration Isolation Bearing**

The Part No. Designation prefix in the left-hand column is the first half of the complete Part Number. In order to complete the Part Number, you must select the appropriate base and top attachment configuration.

See the document entitled "VIB320 Features & Options: Selecting the Right Part Number"

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