## FluoroNyliner 1VB Linear Guide \#5

Corrosive/Contaminated Environments


INCH

Double Unsupported Linear Guide with 4 Pillow Blocks


Double Unsupported Linear Guide with 2 Twin Pillow Blocks


| FluoroNyliner* Linear Guide 1VB Double Unsupported with 4 Pillow Blocks |  |  |  |  |  | (Dimensions in inches) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Part Number | Nominal Diameter | L1 | H8 | H9 | B9 | Pillow Block |
| 1VB-06-AOO | . 375 | 1.31 | . 500 | . 94 | 1.75 | FNYBUPB06A-XS |
| 1VB-08-AOO | . 500 | 1.69 | . 687 | 1.25 | 2.00 | FNYBUPB08A-XS |
| 1VB-10-A00 | . 625 | 1.94 | . 875 | 1.63 | 2.50 | FNYBUPB10A-XS |
| 1VB-12-A00 | . 750 | 2.06 | . 937 | 1.75 | 2.75 | FNYBUPB12A-XS |
| 1VB-16-A00 | 1.000 | 2.81 | 1.187 | 2.19 | 3.25 | FNYBUPB16A-XS |
| 1VB-20-AOO | 1.250 | 3.63 | 1.500 | 2.81 | 4.00 | FNYBUPB20A-XS |
| 1VB-24-AOO | 1.500 | 4.00 | 1.750 | 3.25 | 4.75 | FNYBUPB24A-XS |


| uoroNyliner | Guide 1 | Uns | 2 TW | ocks |  | mensions in inches) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Part Number | Nominal Diameter | L2 | H8 | H9 | B9 | Pillow Block |
| 1VB-06-B00 | . 375 | 2.75 | . 500 | . 94 | 1.75 | FNYBUTWN06A-XS |
| 1VB-08-B00 | . 500 | 3.50 | . 687 | 1.25 | 2.00 | FNYBUTWN08A-XS |
| 1VB-10-B00 | . 625 | 4.00 | . 875 | 1.63 | 2.50 | FNYBUTWN10A-XS |
| 1VB-12-B00 | . 750 | 4.50 | . 937 | 1.75 | 2.75 | FNYBUTWN12A-XS |
| 1VB-16-B00 | 1.000 | 6.00 | 1.187 | 2.19 | 3.25 | FNYBUTWN16A-XS |
| 1VB-20-BOO | 1.250 | 7.50 | 1.500 | 2.81 | 4.00 | FNYBUTWN20A-XS |
| 1VB-24-BOO | 1.500 | 9.00 | 1.750 | 3.25 | 4.75 | FNYBUTWN24A-XS |

Maximum Operating Parameters per Bearing

## Shaft Deflection Note:

Load limit may be below the dynamic load rating due to shaft deflection. Bearings can accommodate up to $1 / 20$ deflection. See Engineering Section (pg 204) for deflection calculations.

| Characteristic |  |
| :--- | :--- |
| Liner Temperature Range | $-240^{\circ} \mathrm{C}$ to $288^{\circ} \mathrm{C}$ <br> $\left(-400^{\circ} \mathrm{F}\right.$ to $\left.550^{\circ} \mathrm{F}\right)$ |
| Velocity, dry | $42.7 \mathrm{~m} / \mathrm{min}$. Continuous |
| Velocity, dry | $122 \mathrm{~m} / \mathrm{min}$. Intermittent |
| Velocity, lubricated | $122 \mathrm{~m} / \mathrm{min}$. Continuous |
| Pressure | 10.35 MPa |
| PV | $21 \mathrm{MPa} / \mathrm{m} / \mathrm{min}$ |

## FluoroNyliner* Linear Guide 1VB Benefits:

- Allows for custom table mounting.
- Design flexibility for custom end supports.
- Double LinearRace* shaft configuration resists torque
- Used in end supported applications when spanning or bridging a gap.


## FluoroNyliner Linear Guide 1VB Components:

- 4 self-aligning FluoroNyliner Bushing bearing pillow blocks or 2 self-aligning FluoroNyliner
Bushing bearing Twin Pillow blocks.
- 2 Stainless Steel 60 Case* LinearRace shafts.

Specifying a Thomson Linear Guide:

1. Determine the proper system for your load and life requirements. 2. Select the part number
2. Add the letter "L" followed by the overall length in inches, as a suffix to the part number.

## Part Numbering System

1VB-12-A00 L24


## FluoroNyliner Linear Guide Pillow Block Dimensions



FluoroNyliner Linear Guide Twin Pillow Block Dimensions


Pillow Block
Mounting Hole Position for Size . 375


View A-A

| Self-Aligning Pillow Blocks |  |  |  |  |  |  |  |  |  | (Dimensions in inches) |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Part | Nom. Dia. | L1 | H9 | H8 | H5 | B9 | B7 | J | J 1 | F |  | Wt. lb . |
| Number |  |  |  |  |  |  |  |  |  | Bolt | Hole |  |
| FNYBUPB06A-XS | . 375 | . 131 | . 94 | . 500 | . 19 | 1.75 | 1.12 | 1.44 | . $88{ }^{(2)}$ | \#6 | . 16 | . 13 |
| FNYBUPB08A-XS | . 500 | 1.69 | 1.25 | . 687 | . 25 | 2.00 | 1.38 | 1.69 | 1.00 | \#6 | . 16 | . 20 |
| FNYBUPB10A-XS | . 625 | 1.94 | 1.63 | . 875 | . 28 | 2.50 | 1.75 | 2.125 | 1.125 | \#8 | . 19 | . 50 |
| FNYBUPB12A-XS | . 750 | 2.06 | 1.75 | . 937 | . 31 | 2.75 | 1.88 | 2.38 | 1.25 | \#8 | . 19 | . 62 |
| FNYBUPB16A-XS | 1.000 | 2.81 | 2.19 | 1.187 | . 38 | 3.25 | 2.38 | 2.88 | 1.75 | \#10 | . 22 | 1.24 |
| FNYBUPB20A-XS | 1.250 | 3.63 | 2.81 | 1.500 | . 43 | 4.00 | 3.00 | 3.50 | 2.00 | \#10 | . 22 | 2.57 |
| FNYBUPB24A-XS | 1.500 | 4.00 | 3.25 | 1.750 | . 50 | 4.75 | 3.50 | 4.12 | 2.50 | $1 / 4$ | . 28 | 3.94 |

Housing Material: Aluminum Alloy Black Anodized
${ }^{(2) T w o ~ m o u n t i n g ~ h o l e s ~ a s ~ s h o w n ~ i n ~ v i e w ~ A-A ~ f o r ~ s i z e ~ . ~} 375$

| Self-Aligning Twin Pillow Blocks |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Part <br> Number | Nom. <br> Dia. | L2 | J3 | Wt. <br> lb |
| FNYBUTWNO6A-XS | .375 | 2.75 | 2.25 | .25 |
| FNYBUTWN08A-XS | .500 | 3.50 | 2.50 | .40 |
| FNYBUTWN10A-XS | .625 | 4.00 | 3.00 | 1.00 |
| FNYBUTWN12A-XS | .750 | 4.50 | 3.50 | 1.24 |
| FNYBUTWN16A-XS | 1.000 | 6.00 | 4.50 | 2.48 |
| FNYBUTWN20A-XS | 1.250 | 7.50 | 5.50 | 5.14 |
| FNYBUTWN24A-XS | 1.500 | 9.00 | 6.50 | 8.08 |

Housing Material: Aluminum Alloy Black Anodized

Performance Note: For detailed explanations of FluoroNyliner Linear Guide Dynamic and Static Load Capacities, Frictional Characteristics, Wear Rates, Speeds, and Life Expectancy please contact Thomson Linear Guides Applications Engineering department.

Product Note: FluoroNyliner linear guides are shipped free of all lubricants. It is the responsibility of the product user to determine lubricant compatibility with the FluoroNyliner bearing material.

Product Options: FluoroNyliner linear guides are available with various inner race materials and platings to accommodate different environments.

