



- Rotary and Push/Pull in the Same Feedthrough
- High Torque. Use Either Solid or Hollow Shafts
- High Speeds, Intermittent Use Up To 1200 RPM
- All Feed Throughs (RoHS) 2002/95/EC Compliant
- 303 Stainless Steel or Nickel Plated Brass
- Easy to Replace Viton® or Buna-N Chevron Seals
- Conflat®, NW or Pipe Thread Connection to System
- Available For Four Shaft Sizes: 1/4", 3/8", 1/2", 5/8"
- Includes Frelon® Bearing On Atmosphere Side

Bearings in Vacuum Research shaft seals are self-lubricating because a Teflon® film from the Frelon liner is deposited on the shaft during break in. Factors affecting wear rates include shaft hardness, surface finish, length of travel, contamination, and presence of fluids or lubricants.

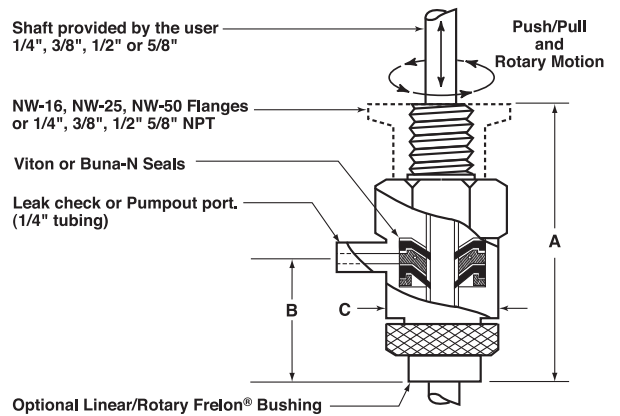
The presence of lubrication can reduce friction, improve life, and can carry away heat. Greases and hydrocarbon oils work well. However, do not use fluorocarbon and/or silicone oils and greases. They disrupt the heat transfer process and adversely affect Frelon bearing life.

Shaft finish and hardness should be 4 to 12 RMS with a minimum surface hardness of RC 50 for best results. Softer shafting can be used, but both bearing and shafting will wear at accelerated rates. Even the type of surface finish can affect the rate of wear. For a given RMS value radiused or polished peaks will provide the best rate of wear so electropolished shafts give best results.

Shaft Diameter Shaft is not included Best performance will result when your shaft diameter is held to these dimensions, but smaller diameters are acceptable. See below for optional shaft material.

Connection to System	1/4 inch	3/8 inch	1/2 inch	5/8 inch
	.2495 - .0000 + .0005	.3745 - .0000 + .0005	.4995 - .0000 + .0005	.6245 - .0000 + .0005
2.75 In. Conflat®	Model No. 2.75-B01-SS 303 Stainless Steel \$391.	Model No. 2.75-B02-SS 303 Stainless Steel \$417.	Model No. 2.75-B03-SS 303 Stainless Steel 1/2" \$437. 5/8" \$566.	
NW-16	Model No. 16-B01-NB Nickel Plated Brass \$201.	Model No. 16-B02-NB Nickel Plated Brass \$216.	Model No. 16-B03-NB Nickel Plated Brass 1/2" \$232. 5/8" \$360.	
	Model No. 16-B01-SS 303 Stainless Steel \$386.	Model No. 16-B02-SS 303 Stainless Steel \$422.	Model No. 16-B03-SS 303 Stainless Steel 1/2" \$422. 5/8" \$545.	
NW-25	Model No. 25-B01-NB Nickel Plated Brass \$216.	Model No. 25-B02-NB Nickel Plated Brass \$216.	Model No. 25-B03-NB Nickel Plated Brass 1/2" \$242. 5/8" \$370.	
	Model No. 25-B01-SS 303 Stainless Steel \$422.	Model No. 25-B02-SS 303 Stainless Steel \$422.	Model No. 25-B03-SS 303 Stainless Steel 1/2" \$437. 5/8" \$567.	
NW-50	Model No. 50-B01-NB Nickel Plated Brass \$288.	Model No. 50-B02-NB Nickel Plated Brass \$304.	Model No. 50-B03-NB Nickel Plated Brass 1/2" \$329. 5/8" \$458.	
	Model No. 50-B01-SS 303 Stainless Steel \$504.	Model No. 50-B02-SS 303 Stainless Steel \$499.	Model No. 50-B03-SS 303 Stainless Steel 1/2" \$525. 5/8" \$659.	
Pipe Thread	Model No. P-B01-NB Nickel Plated Brass \$201.	Model No. P-B02-NB Nickel Plated Brass \$216.	Model No. P-B03-NB Nickel Plated Brass 1/2" \$226. 5/8" \$355.	
	Model No. P-B01-SS 303 Stainless Steel \$422.	Model No. P-B02-SS 303 Stainless Steel \$437.	Model No. P-B03-SS 303 Stainless Steel 1/2" \$463. 5/8" \$592.	
For 1 Inch Baseplate Through Hole	Model No. 1in-B01-NB Nickel Plated Brass \$329.	Model No. 1in-B02-NB Nickel Plated Brass \$350.	Model No. 1in-B03-NB Nickel Plated Brass \$386.	
	Model No. 1in-B01-SS 303 Stainless Steel \$628.	Model No. 1in-B02-SS 303 Stainless Steel \$643.	Model No. 1in-B03-SS 303 Stainless Steel \$684.	
Replacement Seal Washers 2 Req'd.	Buna-N, P/N 701101-B \$3.00 each	Buna-N, P/N 701102-B \$3.00 each	Buna-N, P/N 701103-B \$3.00 each	
	Viton®, P/N 701101-V \$5.00 each	Viton®, P/N 701102-V \$5.00 each	Viton®, P/N 701103-V \$5.00 each	

Rotary & Push/Pull Motion Feedthrough



SHAFT DIAM.	NW-16			NW-25			NW-50			PIPE THREAD		
	A	B	C	A	B	C	A	B	C	A	B	C
1/4 INCH SHAFT	1/4 IN. NPT											
	2.35	1.00	1.00	2.26	.09	1.0	2.26	.09	1.0	2.73	1.39	1.00 ACROSS FLATS
3/8 INCH SHAFT	3/8 IN. NPT											
	2.35	1.00	1.13	2.35	1.00	1.13	2.8	1.50	1.13	2.75	1.38	1.125 ACROSS FLATS
1/2 & 5/8 INCH SHAFT	1/2 IN. NPT											
	2.38	1.00	1.25	2.38	1.00	1.25	2.50	1.13	1.25	2.76	1.38	1.25 ACROSS FLATS

Optional Precision Shaft Material, 316 S.S. The shaft is not included with the feedthrough. Most customers provide their own shaft but we offer this material as a convenience.

1/4 inch O.D. by 18 inch (457 mm) long P/N: SHFT-.25-18-316	...\$31. ea.
3/8 inch O.D. by 18 inch (457 mm) long P/N: SHFT-.37-18-316	...\$65. ea.
1/2 inch O.D. by 18 inch (457 mm) long P/N: SHFT-.50-18-316	...\$76. ea.