

**Rotary Feedthroughs**
*Manual Actuator Solution / Elastomer Sealed Shaft*
*Standard and extended shaft configurations*
*Two precision stainless steel ball-bearing guides*
*Viton® elastomer rotary shaft seal*
*Conflat® CF and ISO NW compatible flanges*
*Ground .250 inch shaft diameter with set screw dimples*
**Rotary / Elastomer Sealed Shaft**

The ORR series 'elastomer sealed' rotary motion feedthrough is an economical alternative to our bellows sealed devices. They are ideally suited for less critical applications in the high vacuum regime.

They are constructed of black-anodized aluminum and stainless steel. In vacuum bearings are dry-film lubricated with tungsten-disulfide, while air side bearings are lubricated with high-temperature Krytox® lubricant. The rotation shaft is sealed with a Viton® elastomer O-ring located at end opposite vacuum mounting flange.

Standard rotary feedthroughs are fitted with a manual actuator, and are also available with an air-side shaft extension for added drive flexibility.

These rotary feedthroughs are available on Conflat® compatible CF style metal seal or ISO-KF elastomer seal flanges.

**Features**

- Economical alternative to bellows seal
- 360° angular rotation
- HV compatible construction
- Leak tight to  $2 \times 10^{-10}$  Std cc/sec Helium
- Conflat® and ISO compatible mounts
- Viton® elastomer shaft seal
- Custom solutions on request

**Specifications**
**Material**

Body, flange, and shaft...	Stainless Steel	304
Actuator Knob, Aluminum		2011
Elastomer shaft seal		Viton®

**Vacuum Range**

HV, High vacuum	$1 \times 10^{-8}$ Torr
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**Temperature Range <sup>1</sup>**

Feedthrough	150°C
Flange, Conflat®	450°C
Flange, ISO	150°C

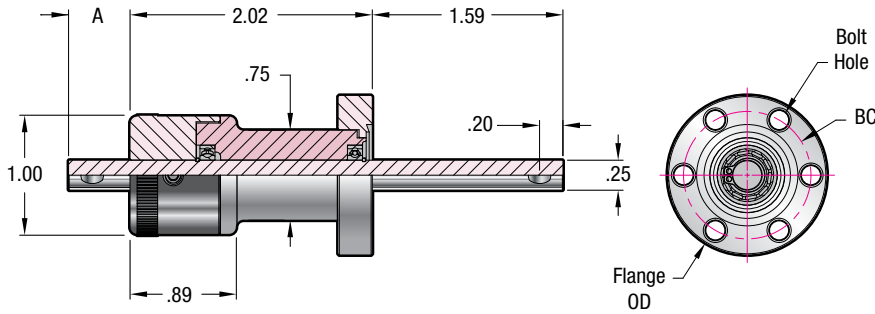
**Load**

Axial	5 lb maximum
Lateral	5 lb at 2 inch extension maximum

**Notes**

1. Overall assembly ratings must be adjusted to that of its lowest rated component. For cryogenic service, the lowest recommended temperature is -80°C

§ Unless specified otherwise, dimensional units in all sections of this catalog are expressed in inches.



### CF Flange<sup>1</sup> — Elastomer Sealed Shaft / 150°C / HV to 1x10<sup>-8</sup> Torr

Angular Rotation	CF Flange	Flange OD	BC	Bolt Hole	A	Model Number	Part Number	Unit Price \$
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#### Standard Shaft — 1/4 Inch Diameter

360	133 CF	1.33	1.062	.172	—	ORR-1/4-133	<b>113200</b>	280
360	275 CF	2.73	2.312	.265	—	ORR-1/4-275	<b>113205</b>	295

#### Extended Shaft — 1/4 Inch Diameter

360	133 CF	1.33	1.062	.172	.51	ORR-1/4-133-ES	<b>113201</b>	280
360	275 CF	2.73	2.312	.265	.51	ORR-1/4-275-ES	<b>113206</b>	295

Service Kit <sup>2</sup> / Replacement parts...						ORR-1/4-SK	<b>113220</b>	125
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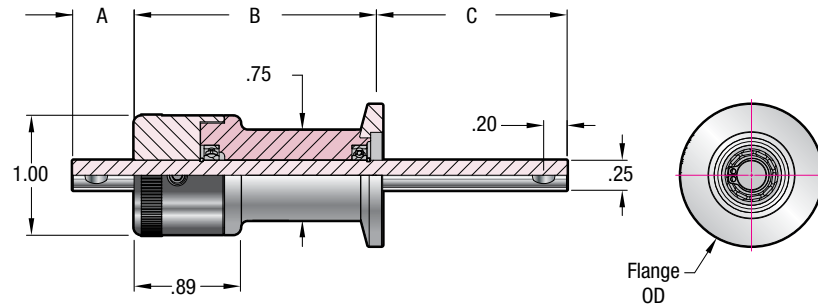
1. Compatible with Conflat® flanges and hardware 2. Includes snap rings, bearings, O-ring and fits all parts above.



**113200** / Standard 1/4 Inch Shaft on 1.33 CF Flange



**113201** / Extended 1/4 Inch Shaft on 1.33 CF Flange



### ISO KF Flange<sup>1</sup> — Elastomer Sealed Shaft / 150°C / HV to 1x10<sup>-8</sup> Torr

Angular Rotation	KF Flange	Flange OD	A	B	C	Model Number	Part Number	Unit Price \$
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#### Standard Shaft — 1/4 Inch Diameter

360	NW16 KF	1.18	—	2.07	1.54	ORR-1/4-K16	<b>113210</b>	280
360	NW40 KF	2.16	—	1.97	1.64	ORR-1/4-K40	<b>113215</b>	290

#### Extended Shaft — 1/4 Inch Diameter

360	NW16 KF	1.18	0.51	2.07	1.54	ORR-1/4-K16-ES	<b>113211</b>	280
360	NW40 KF	2.16	0.51	1.97	1.64	ORR-1/4-K40-ES	<b>113216</b>	290

Service Kit <sup>2</sup> / Replacement parts...						ORR-1/4-SK	<b>113220</b>	125
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1. Compatible with ISO 2861/1 specification flanges and hardware 2. Includes snap rings, bearings, O-ring and fits all parts above.



**113210** / Standard 1/4 Inch Shaft on ISO NW16 KF Flange



**113211** / Extended 1/4 Inch Shaft on ISO NW16 KF Flange