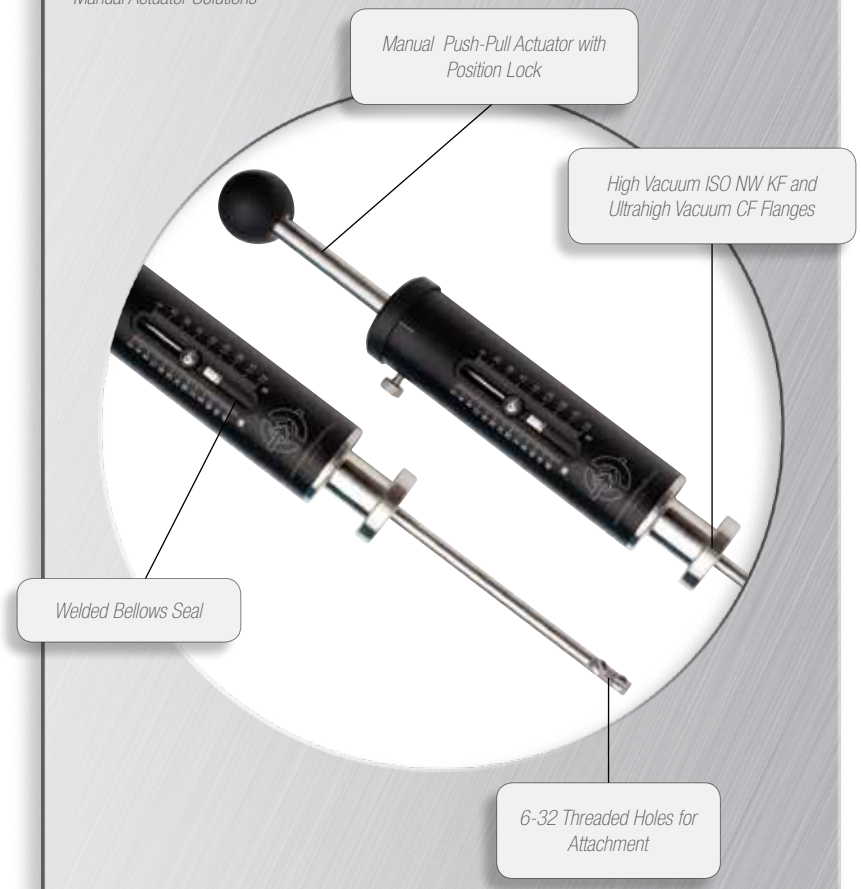
Push-Pull, Linear Travel Feedthroughs

Manual Actuator Solutions



Push-Pull, Linear Travel

Accu-Glass Products' push-pull linear motion feedthroughs are designed to provide quick action linear motion. A knob is provided on the end of a stainless steel shaft to allow the operator to push the shaft in or out to the desired position. Linear movement is measured in 0.025-inch increments on the linear body scale, which is laser etched into the black anodized aluminum finish. The linear position can be locked at any point with a convenient thumb wheel located on the side of the body.

The push-pull feedthroughs are constructed of aluminum and stainless steel, where only stainless steel surfaces are exposed to the vacuum environment.

In-vacuum bearings are film lubricated with a UHV compatible Krytox® lubricant, while air side bearings are lubricated with high-temperature Krytox® lubricant. The linear shaft is sealed with an AM-350 edge-welded bellows.

Feedthroughs are available on Conflat® style CF metal seal or ISO-KF style elastomer seal flanges.

Features

- Precision bearing guides — no bushings
- 1 and 2 inch linear travel
- High temperature rated to 250°C
- UHV compatible construction
- Conflat® and ISO compatible mounts
- Edge-welded bellows seal
- Push-Pull actuator
- Linear position lock

Specifications

Material	
Body, Stainless Steel	304
Housing, Anodized Aluminum	2011
Bellows, Edge-Welded	AM-350

Vacuum Range	
UHV, Ultrahigh vacuum	$1x10^{-10}$ Torr
HV, High vacuum	$1x10^{-8}$ Torr

Temperature Range [1]	
Feedthrough [2]	250°C
Flange, Conflat®	450°C
Flange, ISO	150°C

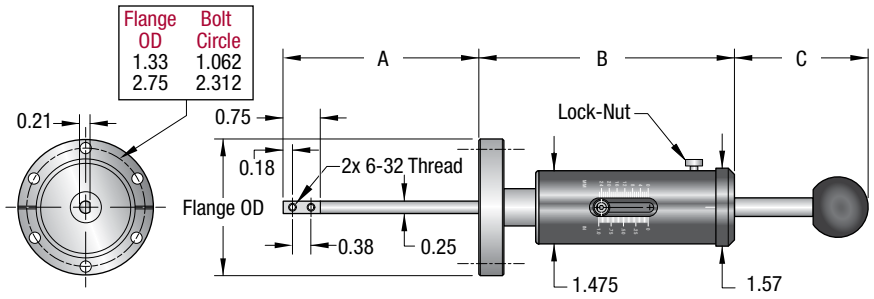
Load	
Axial, Maximum	5 lb
Lateral, Maximum at 2 inch from flange face	5 lb

Resolution	
Linear Scale	0.025 Inch

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
2. Plastic knob must be removed prior to bakeout.

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



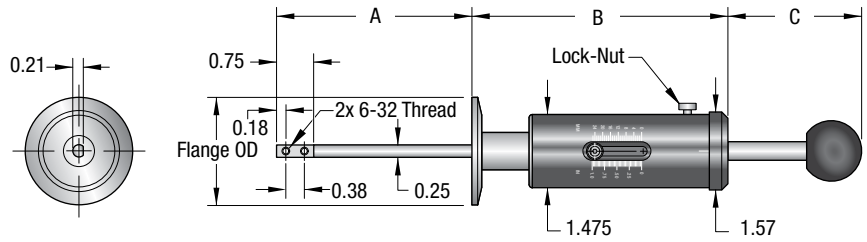
112050 / Linear Push-Pull on a 1.33" CF Flange

CF Flange[1] — Push-Pull Linear/ 250°C / UHV to 1x10^{-10} Torr

Linear Travel	Flange Model	Flange OD	A Min.	A Max.	B	C Max.	C Min.	Model Number	**Part Number**	Unit Price $
Ultrahigh Vacuum										
1	133 CF	1.33	3.55	4.55	5.00	3.62	2.62	PHTL-133-1	**112050**	640
1	275 CF	2.73	3.55	4.55	5.00	3.62	2.62	PHTL-275-1	**112051**	650
2	133 CF	1.33	3.55	4.55	6.40	4.50	2.50	PHTL-133-2	**112052**	790
2	275 CF	2.73	3.55	4.55	6.40	4.50	2.50	PHTL-275-2	**112053**	800

1. Compatible with Conflat® flanges and hardware

112052 / Linear Push-Pull on a 1.33" CF Flange



112055 / Linear Push-Pull on a NW-16 KF Flange

ISO KF Flange[1] — Push-Pull Linear / 150°C / HV to 1x10^{-8} Torr

Linear Travel	Flange Model	Flange OD	A Min.	A Max.	B	C Max.	C Min.	Model Number	**Part Number**	Unit Price $
High Vacuum										
1	NW16 KF	1.18	3.50	4.50	5.06	3.62	2.62	PHTL-K16-1	**112055**	640
1	NW40 KF	2.16	3.60	4.60	4.96	3.62	2.62	PHTL-K40-1	**112056**	650
2	NW16 KF	1.18	3.50	5.50	6.46	4.50	2.50	PHTL-K16-2	**112057**	790
2	NW40 KF	2.16	3.60	5.60	6.36	4.50	2.50	PHTL-K40-2	**112058**	800

1. Compatible with ISO 2861/1 specification flanges and hardware

112056 / Linear Push-Pull on a NWK40 KF Flange