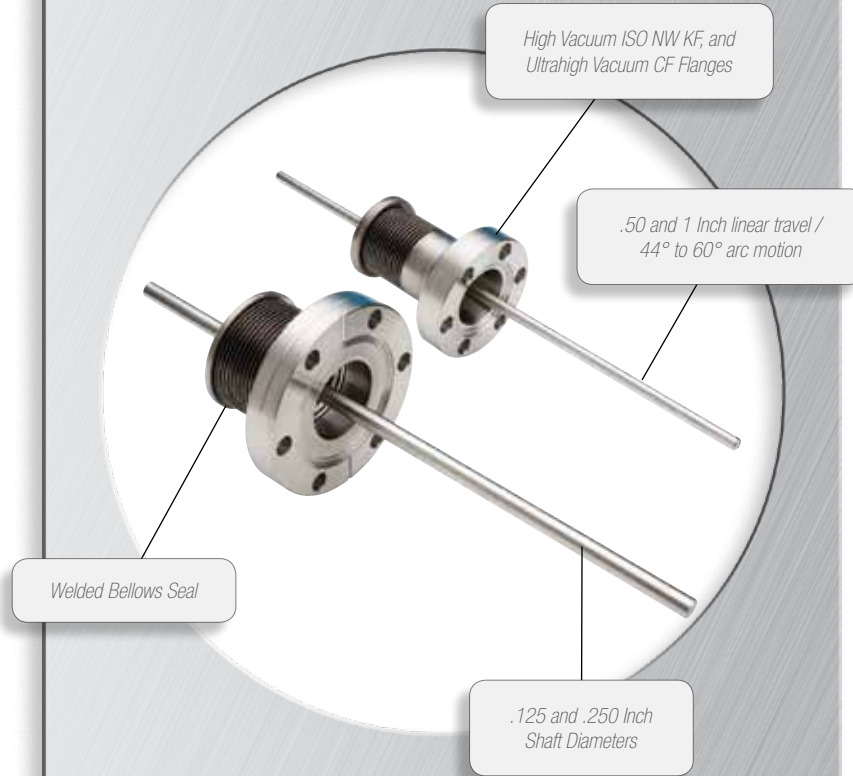




Wobble Stick, Linear - Angular Travel Feedthroughs

Manual Actuator Solutions



Features

- 1/2 Inch / 44° linear-angular travel
- 1 inch / 60° linear-angular travel
- UHV compatible construction
- Leak tight to 2×10^{-10} Std cc/sec Helium
- Conflat® and ISO compatible mounts
- Edge-welded bellows seal

Specifications

Material	
Body, Stainless Steel	304
Bellows, Edge-Welded	AM-350

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

Temperature Range ¹	
Feedthrough	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

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.

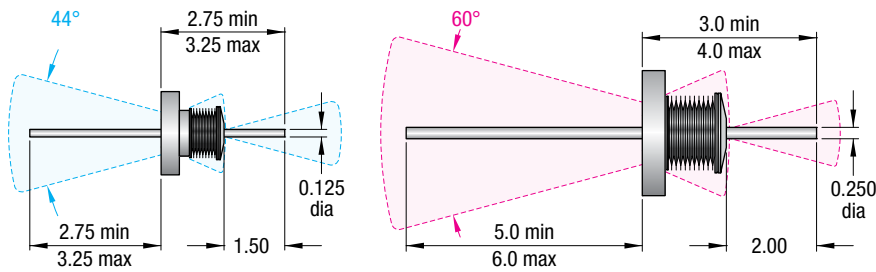
Wobble Stick, Linear-Angular Travel

Wobble stick feedthroughs offer an economical method of providing both angular and linear movement.

Position of the wobble stick must be manually held by the operator or customer provided position lock. Under vacuum load the bellows are compressed and the shaft is completely extended into the vacuum chamber, unless restrained.

The two models offered are capable of 44° (0.5-inch linear) and 60° (1-inch linear) of angular motion, respectively. However, when mounted on a typical necked port, the angular motion can be reduced to 20° and 30° respectively.

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



111900 / UHV Wobble Stick

CF Flange¹ — Wobble Stick, Linear-Angular / 250°C / UHV to 1×10^{-10} Torr

Linear / Angular Travel	CF Flange	Flange OD	Bellows End Cap Diameter	Model Number	Part Number	Unit Price \$
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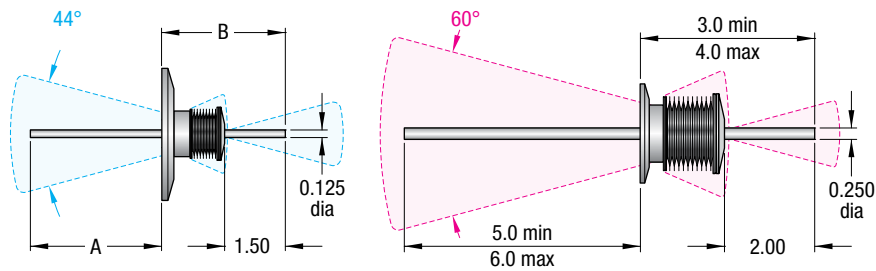
Ultrahigh Vacuum

0.50 / 44°	133 CF	1.33	0.900	WS-133-050	111900	330
1.00 / 60°	275 CF	2.73	1.750	WS-275-100	111901	360

1. Compatible with Conflat® flanges and hardware



111901 / UHV Wobble Stick



111902 / HV Wobble Stick

ISO KF Flange¹ — Wobble Stick, Linear-Angular / 150°C / UHV to 1×10^{-8} Torr

Linear / Angular Travel	ISO Flange	Flange OD	A		B		Bellows End Cap Dia.	Model Number	Part Number	Unit Price \$
			Min.	Max.	Max.	Min.				

High Vacuum

0.50 / 44°	NW16 KF	1.18	2.75	3.25	2.75	3.25	0.900	WS-K16-050	111902	320
0.50 / 44°	NW40 KF	2.16	3.25	3.75	2.25	2.75	0.900	WS-K40-050	111903	345
1.00 / 60°	NW40 KF	2.16	5.00	6.00	3.00	4.00	1.750	WS-K40-100	111904	360

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



111904 / HV Wobble Stick