

UHV WobbleStick

LINEAR / ROTARY AND ANGULAR MOVEMENT IN HV or UHV

- ➔ **Strong magnetic coupling**
- ➔ **Bakeable to 250°C**
- ➔ **Hydroformed bellows give reliable seal**
- ➔ **Constructed of all UHV-compatible material**
- ➔ **Linear - rotation - angular motions**
- ➔ **Handles flag-style plates, pucks & sample stubs**
- ➔ **Customizable**



3 Axis MCTS Shown with Custom Sample Gripper for Discs

Typical Applications

A wide range of uses include:

- ➔ **MBE substrate exchange**
- ➔ **Operating shutters**
- ➔ **Any short simple transfer**

The Model MCTS, Magnetically-Coupled WobbleSticks are an economical way to perform simple linear / rotary / angular motion within a vacuum system. Robust and reliable, these WobbleSticks reduce the risk of leaks by eliminating the use of edge welded bellows.

Rare earth magnets provide a strong magnetic coupling. This completely UHV-compatible unit is bakeable to 250°C with the external magnet carriage assembly removed.

With customer specified linear travel and an angular tilt of $\pm 15^\circ$, WobbleSticks with one, two or three axis of motion can operate a variety of grippers and end-effectors including flag style sample holders.

A complete family of UHV Precision Magnetic Manipulators are available to perform more complex linear and/or rotary motions under vacuum. Call us to discuss your requirements and request datasheets with specifications.

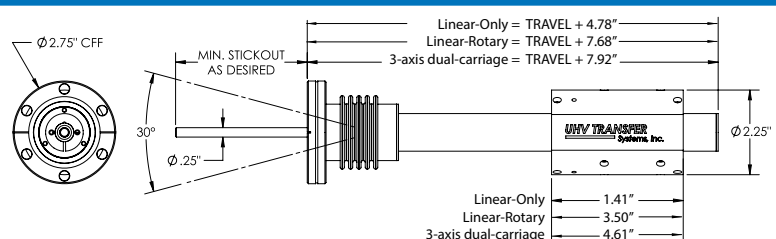
SPECIFICATIONS

Material	
Flange, outer tube and shaft	304ss
Seals	Hydroformed ss Bellows
Rare earth magnets	SmCo
Vacuum range	1 x 10 ⁻¹¹ Torr
Bakeout temperature	250°C magnet removed 150°C magnet on
Linear force	8 lbs (35.58N)
Angular movement	$\pm 15^\circ$
Standard mounting	2.75" OD CFF
Weight	Approx. 2 lbs
Dimensions	See drawing
See website or call us for complete dimensions.	

UHV TRANSFER
Systems, Inc.

40523 Encyclopedia Circle
Fremont, California 94538-2469
Phone 510.440.8303
Fax 510.440.8323
info@uhvtransfer.com
http://www.uhvtransfer.com

DIAGRAM OF MAGNETICALLY-COUPLED WOBBLSTICK



See website or contact us for additional dimensions.