

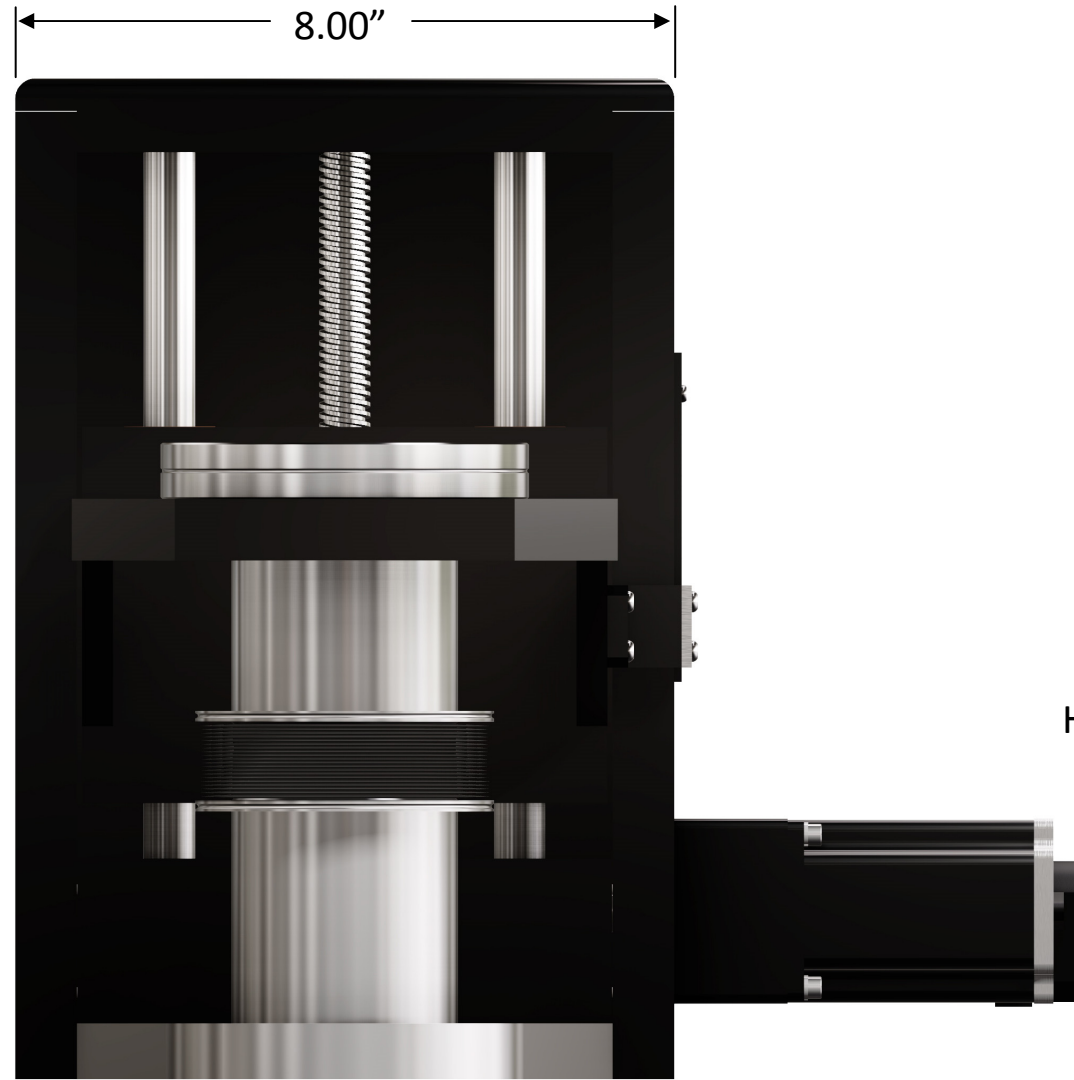
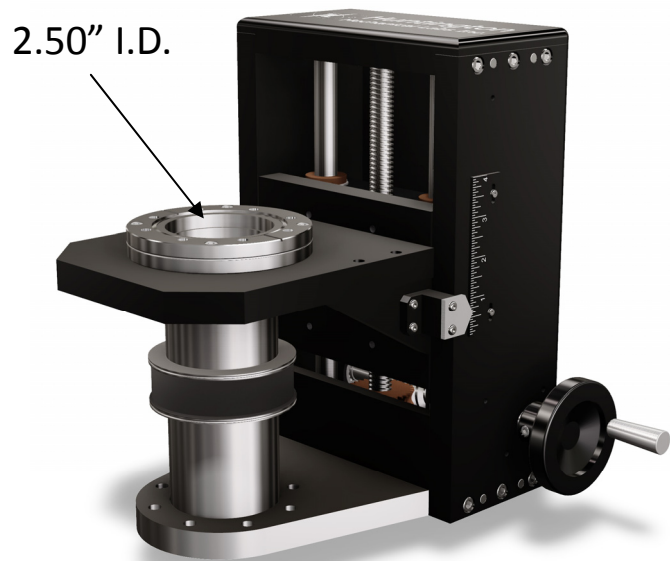
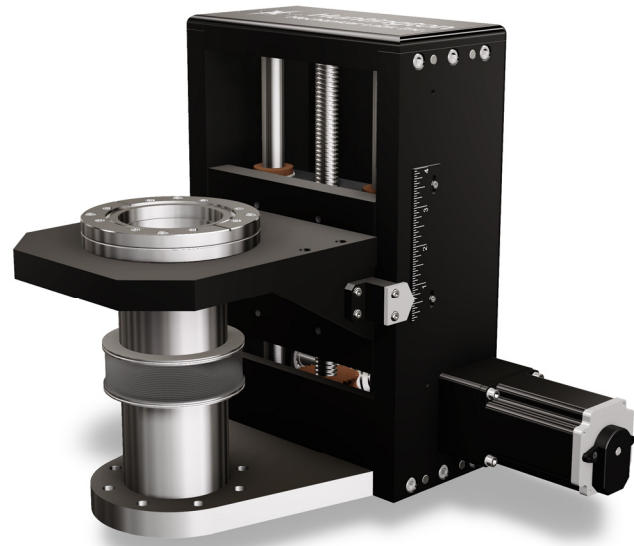
**Specifications**

**Sealing Mechanism:** Welded Bellows  
**Bakeout Temperature:** 300°C (Bellows only)  
**Operating Temp:** -20° to 80°C

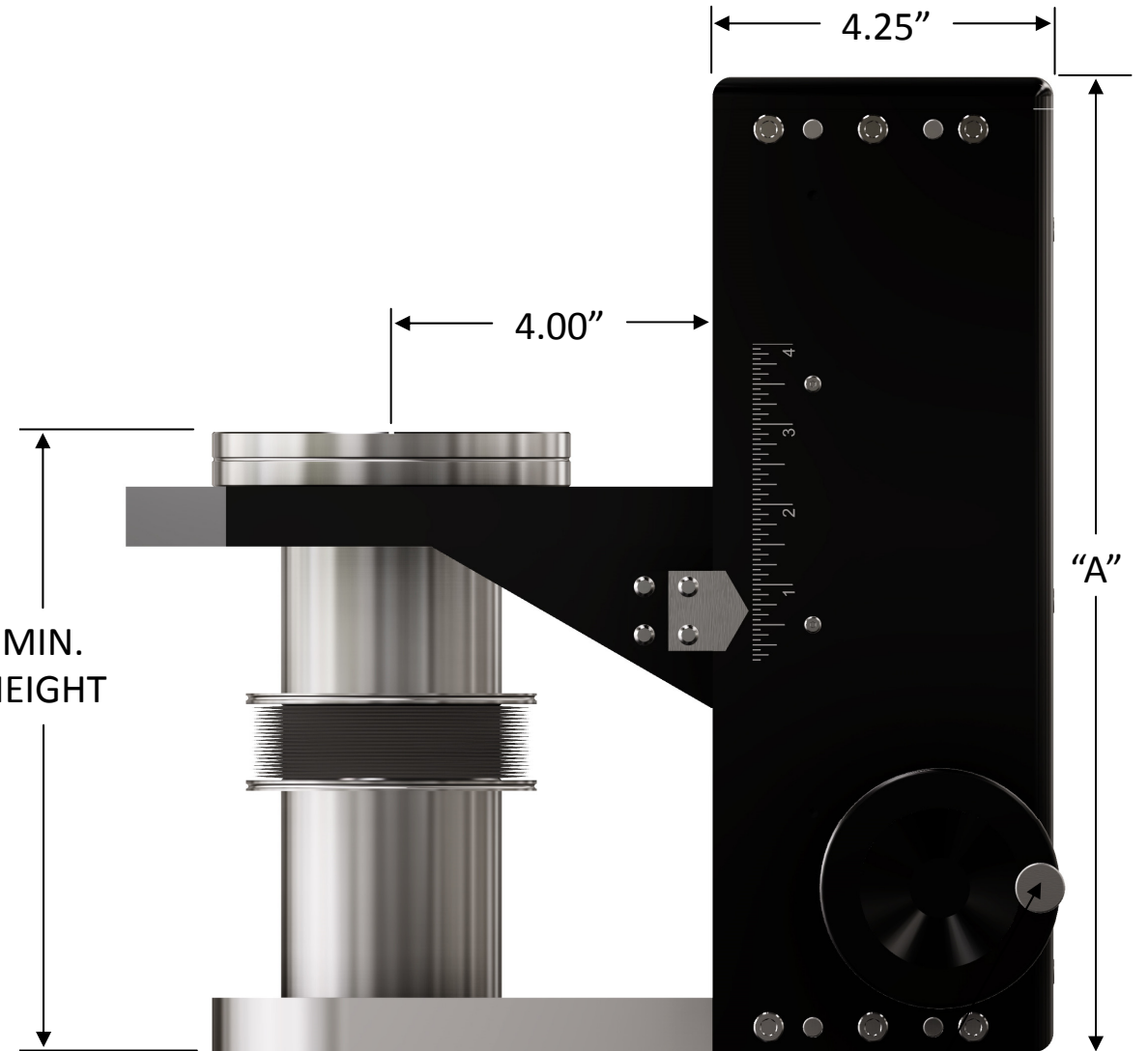
**Bellows ID:** 2.50"  
**Pressure Range:** Atmosphere to 1 x 10<sup>-11</sup> Torr  
**Work Load:** 50 lbs. concentric MAX  
**Stepper Motor:** 1.8° full step, 51,200 microsteps/rev

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**Huntington's** Z-axis manipulators feature a robust backbone and a self-locking worm drive gearbox. The entire line has been upgraded to ensure greater accuracy and improve cost effectiveness. All PMZ Series manipulators feature a tapped top flange with a clearance hole type bottom flange for ease of mounting.



MOTORIZED VERSION



MANUAL VERSION w/HAND WHEEL

Dimensions: inches (mm)

**Z-AXIS MANIPULATOR - 4 1/2" VAC-U-FLANGE®**

STROKE	MINIMUM HEIGHT	"A"	WEIGHT (lbs.)	MANUAL	MOTORIZED
4.0	4.80	12.16	35.0	PMZ-450-4	MPMZ-450-4
8.0	5.80	16.16	41.5	PMZ-450-8	MPMZ-450-8
12.0	6.87	20.16	53.2	PMZ-450-12	MPMZ-450-12

Other stroke lengths & options available. For quotes, please call 800-227-8059 or visit our website at [www.huntvac.com](http://www.huntvac.com). Email: [vacman@huntvac.com](mailto:vacman@huntvac.com)

		13355 NEVADA CITY AVENUE GRASS VALLEY, CA. 95945
MANIPULATOR, Z-AXIS US STANDARD W/SCALE		
B	DWG (M)PMZ-450-X OUTLINE	REV. -
SCALE: NO SCALE	SHEET: 1	OF 1