Linear & Rotary Motion

MPPRL Series



Magnetically-coupled Push Pull devices providing rotary and linear motion solutions for low load applications in both high and ultra-high vacuum. Provided on a CF16 flange as standard with a choice of stroke lengths from 50mm to 300mm.

MPPRL KEY ADVANTAGES

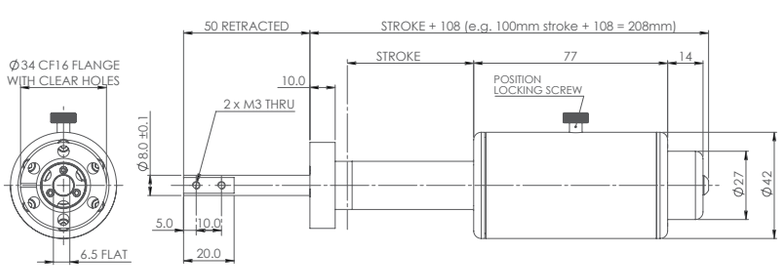
- **Linear and continuous rotary motion**
- **High power-to-size ratio**
- **No bellows - smooth operation**
- **No thrust due to vacuum**
- **Over 90 N (20 lbf) linear thrust**
- **Torque in excess of 0.4 Nm (0.29 lbf ft)**
- **Entire unit bakeable to 250°C**

The MPPRL provides linear and continuous rotary motion of the vacuum shaft. The range provides a simple and intrinsically safe alternative to bellows-sealed push pull systems and is ideal for high duty cycle/performance critical applications such as synchrotrons and MBE systems where downtime is not acceptable. Linear strokes between 50mm and 300mm are offered as standard, with special strokes available upon request.

Utilising UHV Design's magnetic coupling technology, the Magnetic Push Pull removes the need for edge-welded bellows 'stacks', incorporated within traditional push pull designs.

Example Dimensions (mm)

For comprehensive 2D drawings & 3D models please contact us.



MPPRL Technical Data

SPECIFICATION	VALUE
System mounting flange size	FC16 (1 1/3”) with clear holes
System mounting flange size - option	FC38 (2 3/4”) with clear holes
Magnetic rotary breakaway torque	0.4Nm
Magnetic linear breakawy thrust	90 N
Available stroke range	50mm to 300mm
Bakeout temperature	250 °C
Shaft radial runout	1.5mm
Maximum cantilevered load	0.5 Nm
Maximum axial load	45 N

For more information:

UHV Design Ltd
Acorn House, The Broyle, Ringmer,
East Sussex, BN8 5NN
T: +44(0)1323 811188
E:sales@uhvdesign.com
www.uhvdesign.com

To find your nearest UHV Design representative please visit **www.uhvdesign.com** and click ‘Contact’.