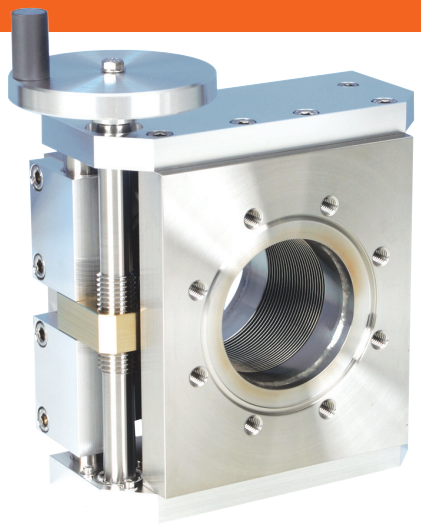
Precise Y manipulation



Y-shift Range

Y-Shifts provide accurate, repeatable axial alignment on a single axis, and might be used in conjunction with a sample transfer arm, such as a PowerProbe, to effect sample handoff. The robust, production-proven devices offer true UHV performance and are available in two sizes providing +/-7.5mm or +/-31mm Y axis adjustment, with four different fixed/travelling flange combinations.

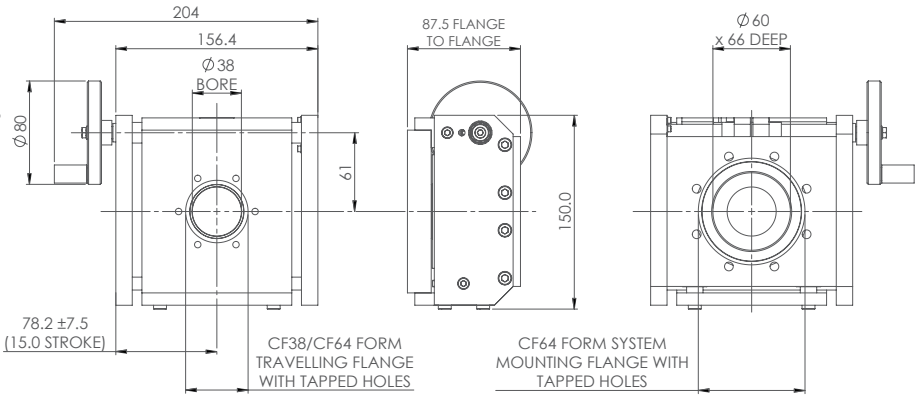
Y-SHIFT KEY ADVANTAGES

- Kinematic design provides smooth, precise motion in parallel plane
- Four different fixed/travelling flange combinations
- Any-orientation mounting
- Bellows-sealed all-metal vacuum enclosure

Suitable for use in both production and R&D applications, the Y-Shifts are supplied with a range of actuation methods including manual hand wheels or stepper motors. Motorised Y-Shifts are supplied with pre-wired bakeable limit switches, terminating with a bakeable, frame-mounted connector. Plug and play motor controllers are available.

Example Dimensions (mm)

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

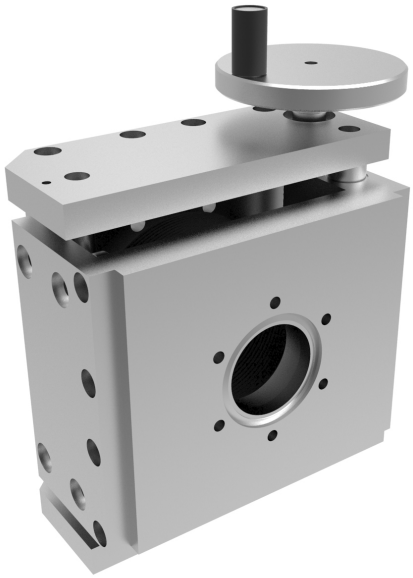


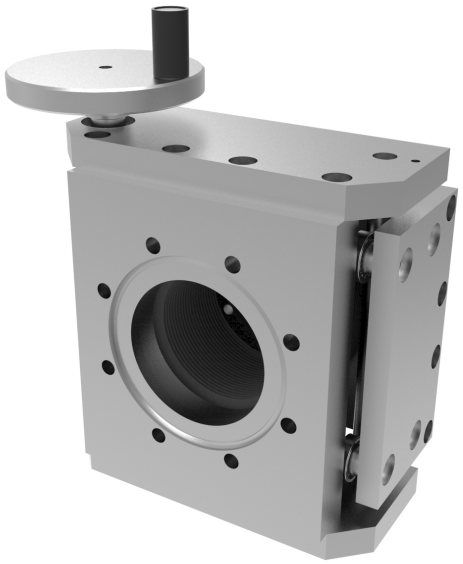
UHV Design
UHV MOTION AND HEATING

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Y-SHIFT Technical Data

LDM64-38 SPECIFICATION	VALUE
Travelling flange size	FC38 (2-3/4") metric tapped straddled
Fixed flange size	FC64 (4 1/2") metric tapped straddled
Stroke to hard stops	+/-7.5mm
Stroke to limit switches	+/-7mm
Clear bore	38 mm
Bellows bore	60 mm
Leadscrew pitch	1mm
Max probe diameter for full stroke	36mm
Max axial load on travelling flange	200 N
Maximum cantilevered moment	20 Nm
Calibrated scale resolution	N/A
Bakeout temperature	250 °C with motor removed
Stepper motor option	23 frame 8 wires 3A / phase
Stepper option - motor wiring	Pre-wired UTO to drawing 23HT18C330
Stepper motor option - switches	Bakeable limit and home switches with lemo socket wired to diagram WD-002
Stepper motor maximum linear speed	10 mm/second
Linear resolution per 1/2 step	0.0025 mm
Repeatability - no backlash compensation	0.1 mm (motorised)
Linear backlash mid stroke	0.2 mm

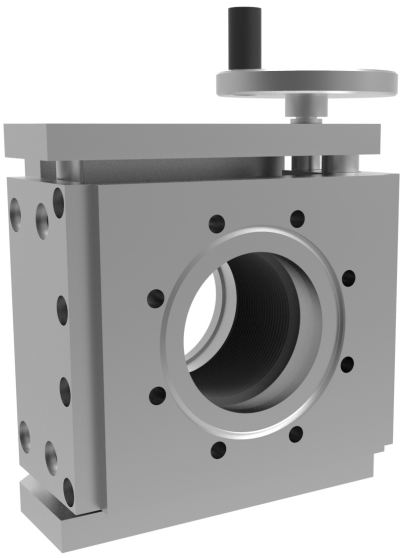


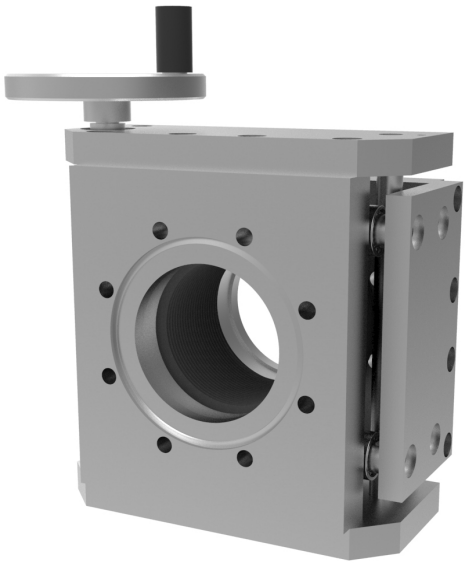


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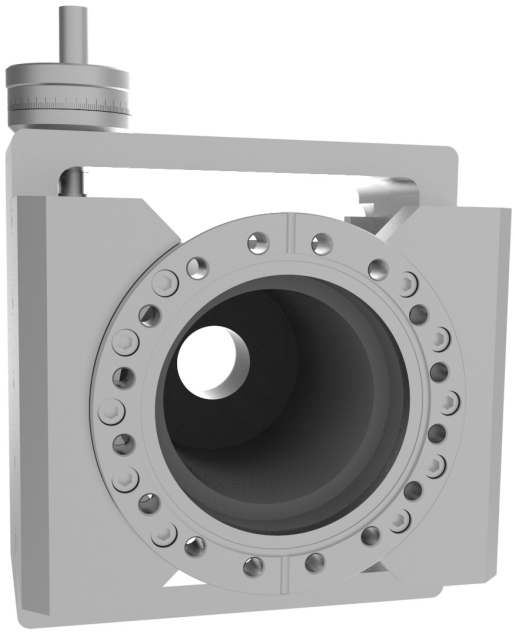


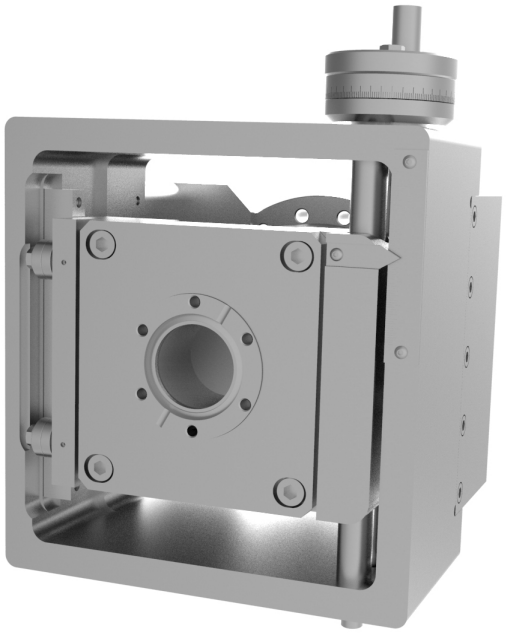


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Y-SHIFT Technical Data

LDM100-38 SPECIFICATION	VALUE
Travelling flange size	FC38 (2-3/4") metric tapped straddled
Fixed flange size	FC100 (6") metric tapped straddled
Stroke to hard stops	+/-31mm
Stroke to limit switches	+/-30.5mm
Clear bore	38 mm
Bellows bore	90 mm
Leadscrew pitch	2mm
Max probe diameter for full stroke	28mm
Max axial load on travelling flange	200 N
Maximum cantilevered moment	20 Nm
Calibrated scale resolution	N/A
Bakeout temperature	250 °C with motor removed
Stepper motor option	23 frame 8 wires 3A / phase
Stepper option - motor wiring	Pre-wired UTO to drawing 23HT18C330
Stepper motor option - switches	Bakeable limit and home switches with lemo socket wired to diagram WD-002
Stepper motor maximum linear speed	10 mm/second
Linear resolution per 1/2 step	0.005 mm
Repeatability - no backlash compensation	0.1 mm (motorised)
Linear backlash mid stroke	0.2 mm

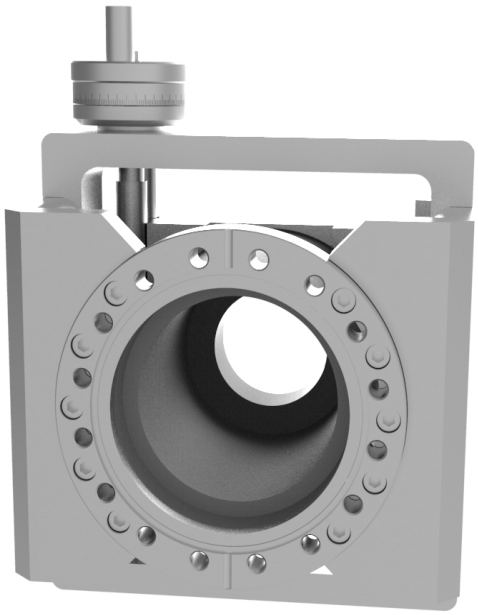


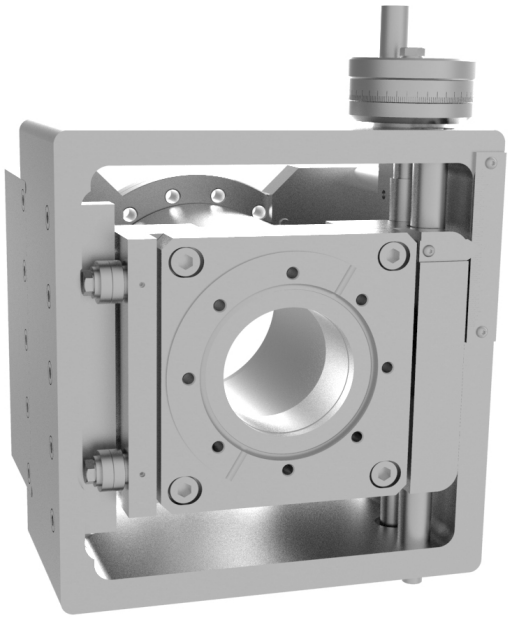


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Y-SHIFT Technical Data

LDM100-64 SPECIFICATION	VALUE
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Stroke to limit switches	+/-30.5mm
Clear bore	60 mm
Bellows bore	90 mm
Leadscrew pitch	2mm
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Maximum cantilevered moment	20 Nm
Calibrated scale resolution	N/A
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