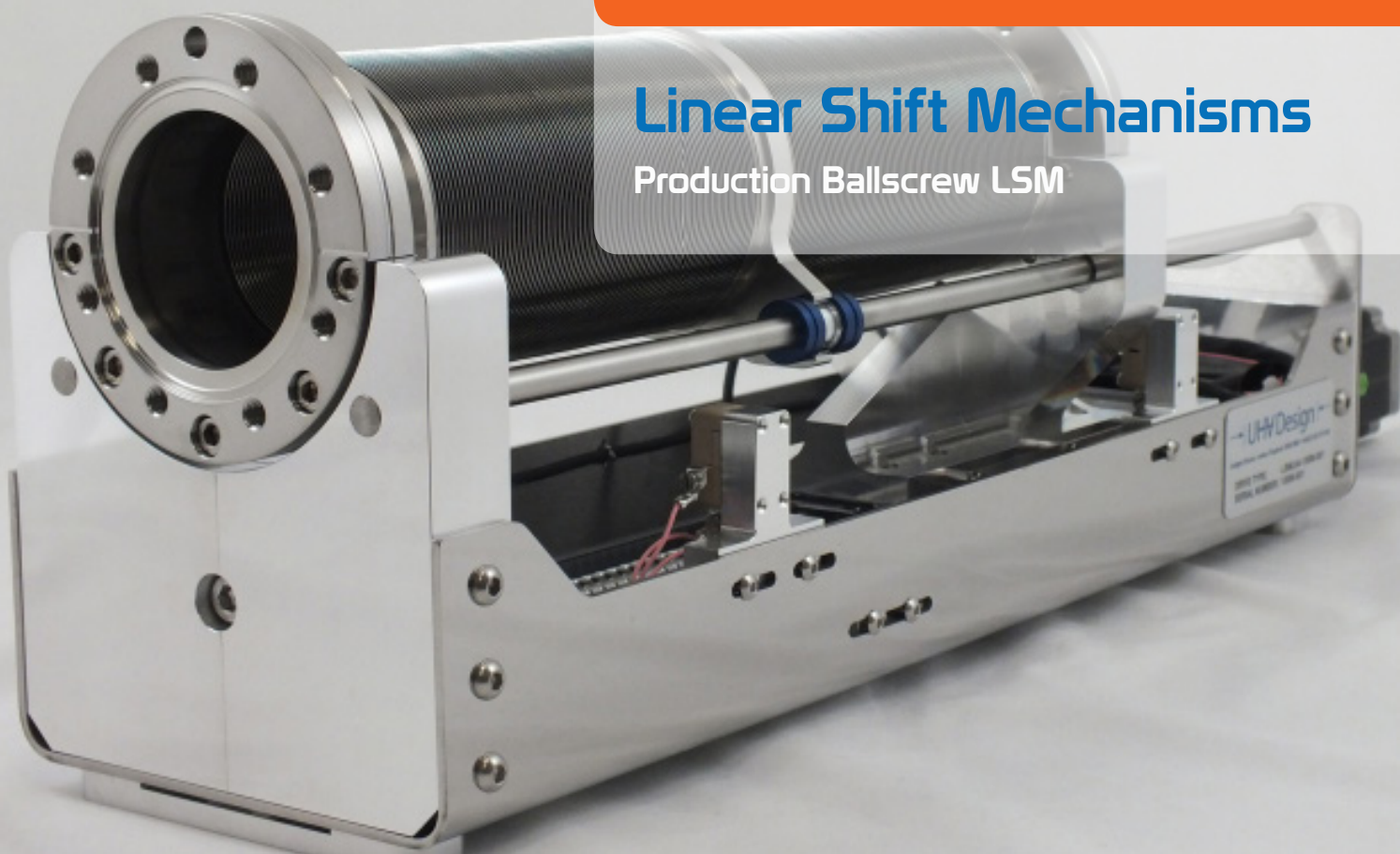


Linear Shift Mechanisms

Production Ballscrew LSM



Ballscrew Linear Shift Mechanisms are specifically designed to provide outstanding reliability, even in the most demanding of applications.

All Ballscrew LSMs benefit from:

- » Ultra-stiff construction for minimal deflection
- » Very high speed - in excess of 100mm/s possible
- » High cantilevered load capacity
- » Ball screw drive mechanism with recirculating linear slides
- » Bellows with option for greater than 1 million cycles guaranteed

Application specific design

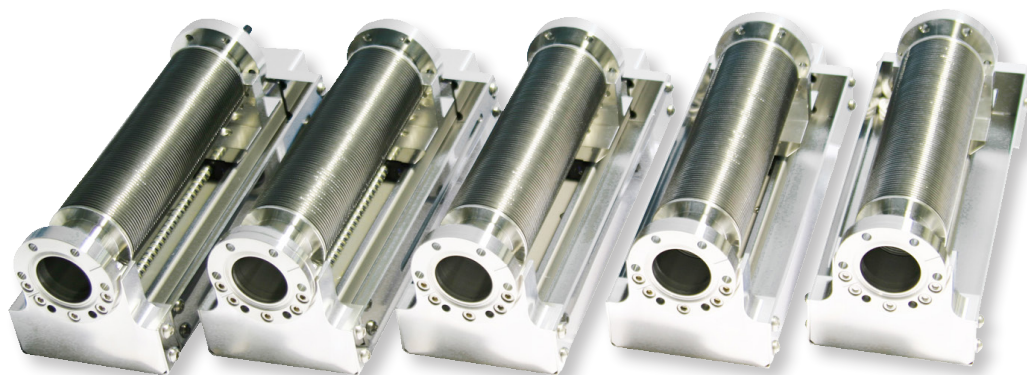
With the world's largest range of LSMs at our disposal, UHV Design's in-house design team can customise any of the standard designs to specifically match production requirements.

Customised designs can accommodate the required flange size, stroke, bore size, duty cycle and space envelope. In addition, any required sensors, motors and encoders can be incorporated and pre-wired for plug and play operation.

Manufactured and assembled for use in ultra clean applications

UHV Design's in-house manufacturing facility enables us to cost-effectively and rapidly produce highly toleranced, high quality components.

Components are cleaned prior to assembly in an ISO 7 Class 10,000 clean room.



Production Ballscrew LSM

| SPECIFICATION | VALUE | | |
|--|--|------|--------|
| | CF38 | CF64 | CF100 |
| Flange Sizes | CF38 | CF64 | CF100 |
| Stroke range (mm) - 50mm increments inclusive | 50-300 | | 50-350 |
| Bellows cycles | 50,000 standard 316L, up to 1 million AM350 (option) | | |
| Ballscrew pitch (mm) | 6, 10 typical | | |
| Actuation options (in line only) | Stepper, SMART or No motor | | |
| Gearbox | Planetary 5:1, 10:1 typical | | |
| Motor brake (option) | Stepper and SMART motors only | | |
| Linear speed stepper option (mm/sec) | >50 | | |
| Linear speed SMART option (mm/sec) | >100 | | |
| Linear Resolution (microns per 1/2 step) stepper option only | 5 | | |
| Travelling flange tilt due to vacuum load (mrad) | <1 | | |
| Total skewing (mrad) | <0.5 | | |
| Maximum additional load on travelling flange (N) | 250 | | |
| Mechanism | Precision ballscrew with integral guide rail | | |
| Switches | Pre-wired limit and home switches | | |
| Linear encoder option | Renishaw LM10 encoder with 10 micron resolution | | |
| Bakeout | 80°C (or 250°C for bellows only) | | |

For more information:

UHV Design Ltd

Judges House, Lewes Road,
Laughton, East Sussex, BN8 6BN, UK
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'.