



LTM Z-Axis Manipulator

A compact Z-Axis bellows sealed transfer mechanism with 38mm clear bore. The LTM is a manual or motor driven z-axis transfer device providing controlled Z-axis motion, allowing samples and probes up to a diameter of 38mm to be inserted with high accuracy and stability into a vacuum envelope.



Product Overview

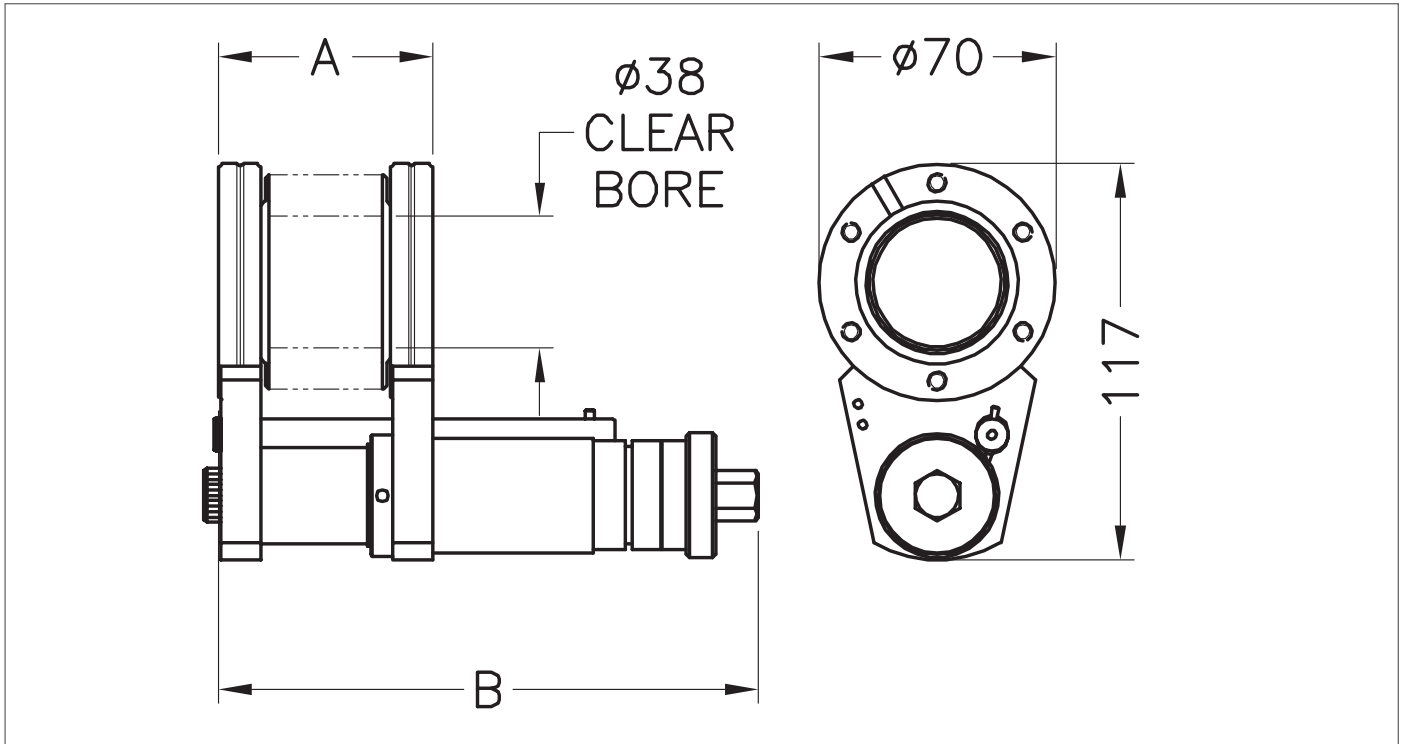
- 38mm Clear bore through edge welded bellows
- Range of travel 25 to 150mm
- Graduated scale in 1mm increments
- Fully bakeable to 250°C, with motors removed
- Operating temperature range -20°C to +200°C
- Fitted with M6 tapped flanges
- Positive stops at extremes of movement
- Motorised resolution is 2.5 microns per half step
- Concentricity of flange bore within 0.5mm
- 1.2Nm Approximate torque required to elevate
- 200N Maximum applied axial load
- 50N Maximum applied radial load
- Operating pressure 1 bar to 10⁻¹¹ mbar
- leak rate 1x10⁻¹⁰ mbar ls⁻¹

LTM Lubrication Kit

| Drive | Lubrication Kit |
|-------------|-----------------|
| ZLTM Series | ZLUBEK |



LTM Z-Axis Manipulator



LTM Series Linear Transfer Mechanism

| DN Type | Flange OD mm | Travel mm | Operation | A Extended mm | A Compressed mm | B Extended mm | B Compressed mm | Bake temp | Order Code |
|---------|--------------|-----------|----------------------|---------------|-----------------|---------------|-----------------|-----------|------------|
| DN40 | 70 Tapped | 25 | Manual | 63 | 38 | 159 | 134 | 250°C | ZLTM25 |
| DN40 | 70 Tapped | 50 | Manual | 92 | 42 | 215 | 165 | 250°C | ZLTM50 |
| DN40 | 70 Tapped | 75 | Manual | 125 | 50 | 258 | 183 | 250°C | ZLTM75 |
| DN40 | 70 Tapped | 100 | Manual | 163 | 63 | 310 | 210 | 250°C | ZLTM100 |
| DN40 | 70 Tapped | 150 | Manual | 215 | 65 | 434 | 284 | 250°C | ZLTM150 |
| DN40 | 70 Tapped | 25 | Stepper motor | 63 | 38 | 162 | 137 | 250°C* | ZLTM25W |
| DN40 | 70 Tapped | 50 | Stepper motor | 92 | 42 | 218 | 168 | 250°C* | ZLTM50W |
| DN40 | 70 Tapped | 75 | Stepper motor | 125 | 50 | 261 | 186 | 250°C* | ZLTM75W |
| DN40 | 70 Tapped | 100 | Stepper motor | 163 | 63 | 313 | 213 | 250°C* | ZLTM100W |
| DN40 | 70 Tapped | 150 | Stepper motor | 215 | 65 | 437 | 287 | 250°C* | ZLTM150W |
| DN40 | 70 Tapped | 25 | Stepper with encoder | 63 | 38 | 162 | 137 | 250°C* | ZLTM25ME |
| DN40 | 70 Tapped | 50 | Stepper with encoder | 92 | 42 | 218 | 168 | 250°C* | ZLTM50ME |
| DN40 | 70 Tapped | 75 | Stepper with encoder | 125 | 50 | 261 | 186 | 250°C* | ZLTM75ME |
| DN40 | 70 Tapped | 100 | Stepper with encoder | 163 | 63 | 313 | 213 | 250°C* | ZLTM100ME |
| DN40 | 70 Tapped | 150 | Stepper with encoder | 215 | 65 | 437 | 287 | 250°C* | ZLTM150ME |

*With motor and encoder removed