

X axis | MN30-8mm

Linear Piezo Motor





MN30-8mm linear piezo motor adopts piezo step direct drive, and features long travel and small size. Optional servo sensors (incremental encoder) is for high positioning accuracy and motion platform are available.

Characteristics >>

- Piezo drive
- Small size
- Nanometer resolution
- 8mm travel
- Optional closed-loop version, vacuum version

Applications >>

- Wafer inspection
- Profilometry
- Nano lithography
- Nanotechnology and metrology
- Microscopy
- · Semiconductor technology
- Surface measurement technique
- Motion in strong magnetic fields or vaccum



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Technical Data >>

| Туре | MN30-8mm | Units |
|-----------------------------|----------|---------|
| Width | 30 | mm |
| Height | 12.5 | mm |
| Depth | 30 | mm |
| Travel | 8 | mm |
| Speed | 1.2 | mm/s |
| Mass | 32 | g |
| Load capacity | | |
| Torque Mx | 5 | Ncm |
| TorqueMy | 5 | Ncm |
| TorqueMz | 5 | Ncm |
| Blocking force Fx | 4.5 | N |
| Fy、Fz | 30 | N |
| Resolution(cal.) | | |
| Single step | ~450 | nm |
| 1/16 step | ~30 | nm |
| 1/64 step | ~10 | nm |
| 1/2 step | ~250 | nm |
| Double steps | ~900 | nm |
| Guiding accuracy (unloaded) | | |
| Yaw angle | 20 | arc sec |
| Pitch angle | 60 | arc sec |
| Vertical deviation | 1 | μm |
| Lateral deviation | 2 | μm |

Note: Closed-loop version available with larger size. The closed-loop accuracy is up to $\pm 1\mu m/m$. The frequency is up to 400kHz.

Communication via RS-422 port. Operating temperature is $0\sim55^{\circ}$ C. 2-axis or 3-axis motion versions are available.

Optional Sensor >>



Recommended Controllers >>



E53.D1E/C1K-J Software control suitable for 1-axis stage Open loop or servo control



E71.D3E/C3K-J
Software control
suitable for 2 or 3-axis stage
Open loop or servo control

Drawing(without sensor) >>



