



HIGH-DYNAMICS VOICE-COIL NANO-POSITIONER

- High-speed response with fast settling times for dynamic optical adjustments
- Sub-micron accuracy and repeatability for precise lens, objective, or sensor positioning
- Compact footprint with integrated motion controller
- Custom-engineered designs to meet specific optical and packaging constraints

TECHNICAL SPECIFICATIONS

Dimensions - including electronics	[mm]	65x60x38
Z Stroke (possibility to extend to 7mm with the current voice coil)	[μm]	2880
Z Position accuracy for		360μm stroke in 10ms: ±1μm
Z Position accuracy for		360μm stroke in 6ms: ±2.5μm
Time for back movement		20ms for the 2880μm Z stroke
Z Minimal incremental motion	[nm]	40
Z Max speed	[mm/s]	150
Z Max acceleration	[G]	9
Z Peak force	[N]	24.9
Z Continuous force	[N]	5.62
Back EMF Cst	[Vs/m]	6.18±10%
Motor		AVM 30-7
Motor Cst	[N/SqrtW]	1.37N/SqrtW
Resistance @25°C	[Ω]	5.94±10%
Inductance	[mH]	1.41±20%

GUIDANCE TECHNOLOGY		L-SERIES LINEAR BEARING	BALL BUSHING
X-Y Absolute lateral deviation	[μm]	±1.5	±1
X-Y Repeatable lateral deviation	[μm]	±1.5	±0.5
TX-TY Absolute angular error	[μrad]	±70	±30
TX-TY Repeatable angular error	[μrad]	±30	±10

Remark: Device under development, values subject to modification

* Please feel free to contact us for any customization request