

Overview of “LS-Linear Series” Piezoelectric Motion Unit

Low Temperature Piezoelectric Motion - Scanner Series

Choose your suitable MultiFields® “LS-linear Series” product



LS-Linear30



LS-Linear50



LS-Linear75

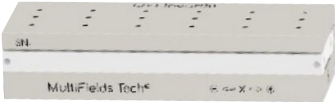
Series defined by size			
1	Work Environment	Default: 1.4 K ~ 400 K; 1e-7 mbar; 35 Tesla Option1 - .ULT, lowest use temperature 30 mK; Option2 - .UHV, highest vacuum environment 2E-11 mbar;	
2	Motion Axes	X Axis	
3	Dimensions	60 × 32 × 19.5 mm	90 × 32 × 19.5 mm 135 × 32 × 19.5 mm
4	Travel Range	30 mm	50 mm 75 mm
5	Max. Load	0.75 kg	1.5 kg
6	Positioner Sensor	Resistive sensor	
	Sensor Range	30 mm	50 mm 75 mm
	Sensor Resolution	150 nm	
	Sensor Repeatability	1 ~ 2 μm	
7	Drive Voltage	Max.200 V	
8	Pins	Drive - 2 pins, Sensor - 3 pins	
9	Main Body	Default: Pure Ti; ULT: BeCu	
10	Weight	120 g	150 g 200 g

“LS-Linear Series” – LS-Linear50 (closed-loop)

Linear motion stage with long travel range of 50 mm at cryogenic temperature

- ➔ Features
- High load & force
 - Non-magnetic material
 - Ultra-high vacuum & low temperature compatible
 - 50 mm travel range
 - Closed-loop control

➔ Picture & dimensions



➔ Specifications

Optional Versions ➡		.HV (default)	.ULT	.UHV	.ULT.UHV
		.HV version, compatible with 1E-7 mbar .ULT version, used at He3 or dilution cryogenics systems .UHV version, compatible with 2E-11 mbar			
1	Footprint × hight	90 × 32 × 19.5 mm			
2	Weight	150 g			
3	Work environment	Temperature range: 1.4 ~ 400 K, Max. Magnetic field: 35 Tesla			
4	Option1 - 30 mK		✓		✓
5	Option2 - 2e-11 mbar			✓	✓
6	Mainbody	Pure Ti	BeCu	Pure Ti	BeCu
7	Wires	Phosphor Bronze Twisted Paired Wires, 20cm			
8	Pin materials	Polyster (glass fiber filled), BeCu		Peek, BeCu	
9	Pins number	Drive - 2 pins, Sensor - 3 pins			
10	Travel range	50 mm			
11	Max. Velocity @300 K	~ 3 mm/s			
12	Drive voltage	Max. 200 V			
13	Max. Load	750 g			
14	Dynamic force	3 N			
15	Position encoder	Resistive Sensor			
16	Encoder range	50 mm			
17	Sensor resolution	~ 150 nm			
18	Repeatability	1 - 2 μm			

For detail drawing and 3D model please contact us.