

LEGS-BL02S-10



Key Features

- 450N Piezo LEGS[®] linear motor
- Easy Integration
- High Resolution
- High Speed Dynamics
- Very Simple Electronics

The Piezo LEGS[®] 450N motor is intended for high force and precision applications. This includes applications in vacuum for the semiconductor industry.

The advantage of using the Piezo LEGS[®] technology is the unsurpassed accuracy in positioning resolution as well as automatic locking giving true set-and-forget performance. The technology is based on direct drive which removes the issues of hysteresis and backlash.

Drive Technology

The motor is using the patented Piezo LEGS[®] technology.

Controlling the motor

The range of drivers includes simple full step drivers to more advanced micro-stepping drivers that can fully utilize the excellent performance of the Piezo LEGS[®] technology.

Ordering Information

LEGS-BL02S-10	Standard Vacuum
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ACCESSORIES

PMD90-BL02S	Microstepping Driver for LEGS-BL02S-10
PMMC01-10	Multichannel driver



PMD90

Simple electronics

For users wishing to fully integrate drivers into the overall system PiezoMotor can supply all waveforms and movement patterns to speed up the implementation. The motor is operating in a non-resonant mode and is not sensitive to cable lengths etc.

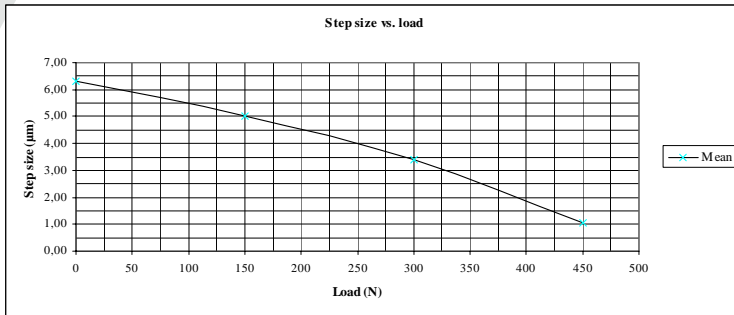
Open Loop/Closed Loop Operation

The motor can be moved in full steps, shorter steps or partial steps (micro-stepping) giving positioning resolution in the nanometer range. For extreme positioning requirements in the subnanometer range a bending mode is possible. Speed is easily adjustable from extremely low up to max specified.

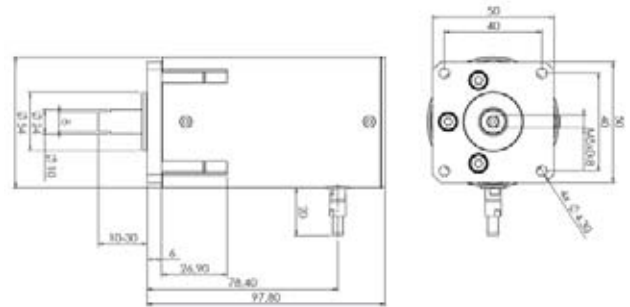
Notes

Additional information is available upon request, info@piezomotor.com

Step Size and Load



Mechanical Drawing



Connector Type and Pin Assignment

The motor connector is LEMO FGG-1B305-CLAM31.

Pin Number	Signal Name	Connector View
1	Phase 1	<p>Pin 1</p> <p>2</p> <p>Rear View</p>
2	Phase 2	
3	Phase 3	
4	Phase 4	
5	GND ¹	

¹ GND is floating from chassis/protective GND (PGND).

Multichannel Driver



Technical Specification			
Type	LEGS-BL02S-10	Unit	Note
Drawing No	LAF300-31010		
Stroke max	20	mm	
Maximum Speed	>0.2	mm/s	
Resolution	<1	nm	Bending mode
Max voltage	65	V	
Stall force max	450	N	
Holding force	>450	N	
Surface	bare metal		
Mechanical size	98x50x50	mm	See drawing for details
Weight	-	gram	
Operating Temp	-20 - +70	°C	
Encoder type	N/A		
Encoder resolution	N/A	nm	
Encoder interface	N/A		

NOTE: All specifications are subject to change without notice.

