

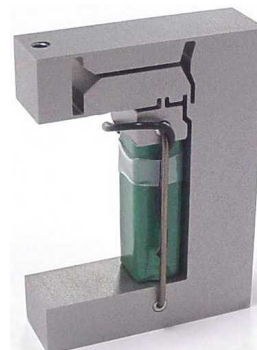
LPA-0100E-P-0518-150-SS

FlexFrame PiezoActuator™



Description

DSM's LPA-100 is a flexure-based piezoelectric actuator ideal for both dynamic and static applications where precise and accurate positioning is required. The LPA-100 is mechanically preloaded to ensure bidirectional operation, providing increased resilience to mechanical load when compared to non-preloaded actuators. The mechanism design provides high-stroke operation in an exceptionally small package. The LPA architecture offers relatively high dynamic bandwidth capabilities for the nominal travel range and mechanism size.



Specifications

		Units	Tolerance
Motion Direction	Expanding		
Nominal Travel, 0V to 150V	80	μm	Min 68
Nominal Travel, -30V to 150V	100	μm	Min 85
Nominal Stiffness	1.75	N/μm	Min 1.48
Unloaded Resonant Frequency	3450	Hz	±20%
Blocked Force*	140	N	
Capacitance	1.60	μF	±20%
Material	Stainless Steel		
Mass**	40	g	
Electrical Interface	Flying leads		
Mechanical Interface	Single M3x0.5		
Height	36	mm	
Width	27	mm	
Depth	8	mm	

* Blocked force calculated as [Stiffness x Travel Range at 0V to 150V]

** Mass stated for reference

Options

- Integrated Position Sensor
- Vacuum Compatibility
- Custom Mounting Holes
- Custom wire lengths and connectors
- Non-Magnetic compatibility