

Preliminary Information

Miniature Linear Motion Series • **LS6**

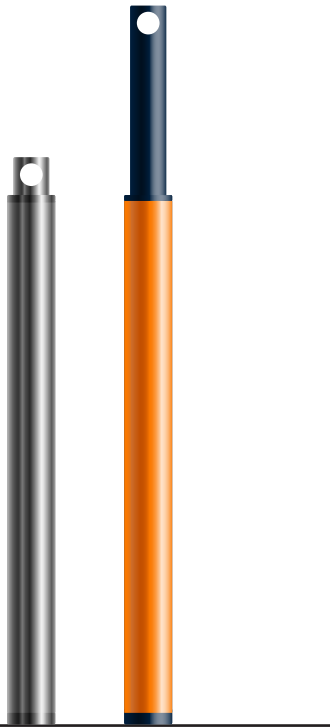
Firgelli Technologies' unique line of Miniature Linear Actuators enables a new generation of micro linear motion with capabilities that have never before been combined in a device of this size.

The LS actuators are complete, self-contained linear motion devices that require no additional guiding mechanism or control electronics, greatly simplifying your system design and integration. Controlling the LS6 could not be simpler: apply positive and negative DC voltage, and reverse polarity to change the actuator direction.

The LS series features integrated limit switching that allows the actuator to shut-off when maximum positions or force thresholds are exceeded in either axial direction. If a limit has been triggered, the actuator can still be reversed away from the excessive force or position. As soon as the actuator is within force and position limits, it returns to normal operation.

Firgelli is currently developing feedback control versions of this actuator series, that allow for precise control of both the actuator's position and output force. The LS6 is available in steel or plastic housing. This actuator is also available in a more powerful 9mm model, the LS9. We can also customize these actuators to meet the requirements of your specific application. Please contact Firgelli for more information.

The LS6 actuator in steel and plastic housing.



Benefits

- Compact miniature size
- Built-in limit switching, for both position and force thresholds
- Simple control
- Quiet operation
- Low voltage
- Equal push / pull force
- Easy mounting

Applications

- Robotics
- Consumer appliances
- Toys
- Automotive
- Industrial automation

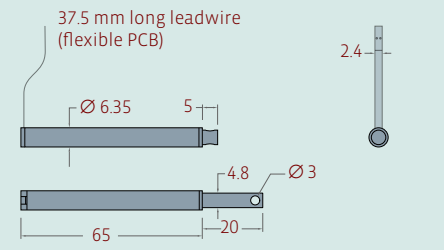
LS6 Specifications

Rated Force (at peak power)	4 N
Trigger Force (actuator shut-off) ^{1,2}	5 N
Speed (at peak power)	5 mm/s at 4 N
Max Speed (peak efficiency)	8 mm/s at 2 N
Stroke ²	20 mm
Diameter	6.35 mm
Length Collapsed	70 mm
Input Voltage	3 Vdc
Current Draw (at peak power)	250 mA

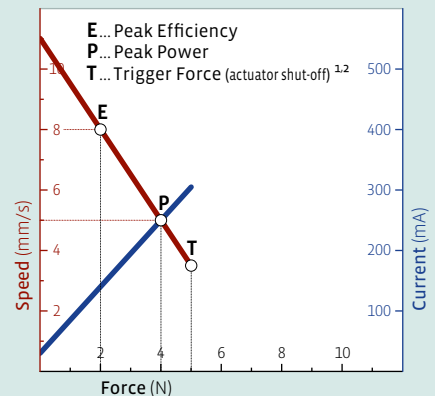
¹ When the axial force in either direction exceeds the trigger force, power to the actuator is cut. The actuator may still be reversed away from the force or position that triggered the shut-off.

² Can be customized in manufacturing to meet the requirements of your application.

Dimensions (mm) 1:2.5



Load Curve



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