

PA-102 Miniature Piston Actuator



The PA-102 Miniature Piston Actuator is a pyrotechnic-actuated device that delivers linear force.

Remarkably small and lightweight, it is ideal for high-volume applications such as submunitions. Its co-axial design facilitates automatic insertion into the next assembly.

Variations

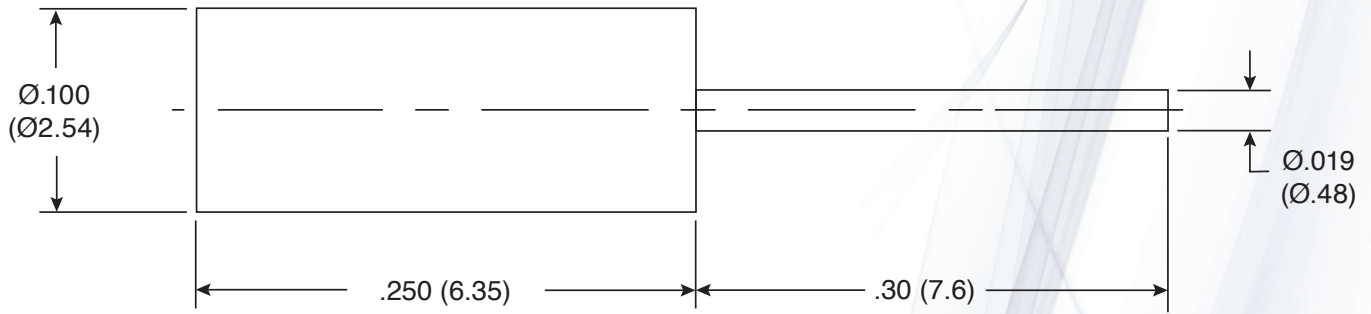
Actuator modifications can be made to meet customer requirements. Modifications can be made in lead lengths, firing characteristics, and force. The electrode can be nickel or gold plated, or altered in shape. Quantity and/or type of pyrotechnic charge can be changed to alter output force characteristics.

Characteristics

Some of the characteristics listed here are nominal; others are levels to which the units have been tested. There are no limits on design capabilities. Please consult an EaglePicher representative before using this data as a specification.

Specifications

Electrical	
Bridge Resistance @ 70°F (21°C)	3.0 - 7.5 ohm
All-Fire Energies @ -65°F (-54°C)	Capacitor discharge: 1.6 V, 100 microfarad (1280 erg)
	Constant current: 0.15 amp, 10 ms
No-Fire Current @ 165°F (74°C)	0.010 amp, 10 sec 0.7 V, 100 microfarad (245 erg)
Mechanical	
Size	See drawing
Weight	0.15 gm
Stroke	0.125" (3.17 mm)
Load	60 lb to 140 lb
Function Time	Ignites in less than 1.0 ms. Function time will be slightly longer depending on load.
Environmental	
Temperature	Operating range: -65°F to +165°F (-54°C to +74°C)
Chemical	
Ignition Compound	KDNBF
Freight Classification	
Shipping Name	Release Devices, Explosive
Identification Number	UN0173
Hazard Classification	1.4S



DIMENSIONS ARE NOMINAL
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