

1MT1118 Piston Actuator



The 1MT1118 Piston Actuator is a pyrotechnic-actuated device that produces linear motion.

Typically, this device is used to release mechanical locking mechanisms, e.g. gag rods. Both case and piston are 303 stainless steel.

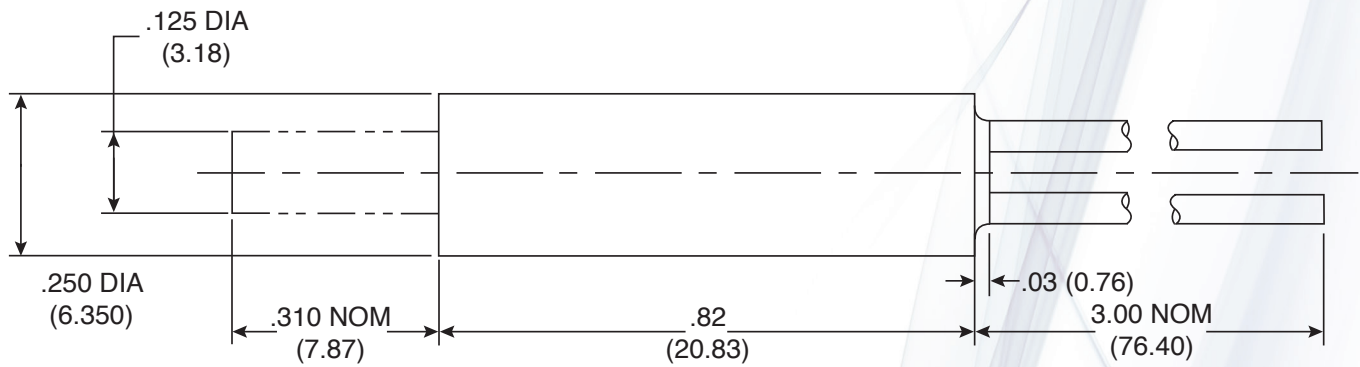
Characteristics

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)	4.0 - 6.0 ohm
All-Fire Energy @ -67°F (-55°C)	Capacitor discharge: 36 microfarad capacitor charged to 7.0 V through a 1.575 ohm series resistor. (5200 erg)
No-Fire Level @ 70°F (21°C)	50 milliamp, 30 sec
Insulation Resistance @ 300 Vdc, Leads to Case, Before Firing	20 megohm Min.
Function Time	Less than 5 ms
Mechanical	
Case and Pin Material	303 SS
Size	See drawing
Weight	4 gm Max.
Stroke	.310"
Load	Piston restrained, axial force: 125 lb Min. Full stroke with 20 lb load.

Specifications Continued	
Environmental	
Temperature	Operating range: -67°F to +221°F (-55°C to 105°C)
Vibration	MIL-STD-202, Method 204, Test Condition E (50 g's peak, 10 to 2000 Hz).
Shock	MIL-STD-202, Method 213, Test Condition E (18 shocks, 1,000 g's, 0.5 ms).
Extreme Temperature Storage	MIL-STD-331, Test 112, -67°F (-55°C) for 28 days, followed by +160°F (+71°C) for 28 days.
Temperature Cycling	MIL-STD-202, Method 107, Test Condition A, except temperature extremes are -55°C to +85°C.
Chemical	
Ignition Compound	Lead Styphnate
Freight Classification	
Shipping Name	Release Devices, Explosive
Identification Number	UN0173
Hazard Classification	1.4S

1MT1118



DIMENSIONS ARE NOMINAL
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EaglePicher Technologies, LLC

PO Box 47, Joplin, Missouri 64802-0047, USA
tel 417.623.8000 | fax 417.623.0850

www.eaglepicher.com