P1 per MIL-PRF-8805/3 *(MS25089)*

The P1 is a sealed, momentary action, military-qualified pushbutton. This snap-action switch is designed for panel boards, control grips, computers, instruments, pressure switches, and other hand- or machine-operated applications. Its precision also permits the P1 to be used as a limit switch with unique size, high electrical ratings and a wide choice of mounting styles.

The P1's mechanical life is well beyond the 50,000 cycles required by MIL-PRF-8805. It is sealed with a silicone boot operating on a patented “rolling sleeve,” providing longer life and smoother operation over a wide temperature range. Epoxy seals protect the contacts and terminals from hostile environments and solder flux.

The double-break switching mechanism has an incredibly fast transfer time, reducing arcing and increasing contact life. The inherent wiping action breaks welds and scrubs the contacts clean on every actuation.

High contact force *(120g/4.2 oz.)*, low contact resistance *(25mΩ max initial)* and short contact bounce result from the snap-action mechanism.



FEATURES:

- Military-qualified and commercial-grade, momentary action switches
- Button sealed with patented “rolling sleeve” principle
- Sealed to MIL-PRF-8805 Design 3
- Contact area sealed at button and terminals
- Watertight to IP6K8S available *(see the P3 pushbuttons)*
- Less than 25mΩ initial contact resistance
- Ideal for low level switching as well as up to 10 amp duty
- With the optional low level *(gold plate)* configuration, the P1 is well suited to interface directly to computers and other solid-state devices.
- Positive tactile feedback
- Variety of mounting styles
- Engraved buttons and bezels available
- UL1500 ignition protected
- RoHS compliant

Standard Characteristics/Ratings:

ELECTRICAL RATINGS:		
Load	**Sea Level @ 28VDC or 115VAC, 60/400Hz**	**50,000 feet @ 28VDC or 115VAC, 60/400Hz**
Resistive	10A	N/A
Inductive	5A	5A
Lamp	3A	N/A
Center Contact	3A	N/A
DWV	1000Vrms	
Low Level	10mA @ 30mV	
Electrical Life:	Up to 25,000 cycles or 5,000 cycles at 50,000 feet	
Mechanical Life:	Up to 50,000 cycles, circuit forms 3, 4, & 5 Up to 250,000 cycles, circuit forms 1, 2 & 6	
Seal:	Dusttight per MIL-PRF-8805 Design 2 or Watertight per IP6K8S or MIL-PRF-8805 Design 3	
Operating Temp Range:	-55°C to +85°C	
Operating Force:	2.5 lbs. or 4.0 lbs Push-Pull: .5 to 2.0 lbs.	
Reset Force:	0.75 lb. or 1.0 lb.	
Total Travel:	0.085 +/- 0.015 inches	
Overtravel:	0.012 inches min	
Movement Differential:	0.015 inches min	
MATERIALS:		
Case:	Black anodized aluminum alloy	
Button:	Thermoplastic	
Terminals:	Brass with silver plate, gold plate for low level	
Terminal Hardware:	Screws, lockwasher and solder lugs for screw terminal option	
Mounting Hardware:	Hex nut and lockwasher, panel seal on watertight switches	

Your official representative

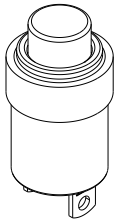
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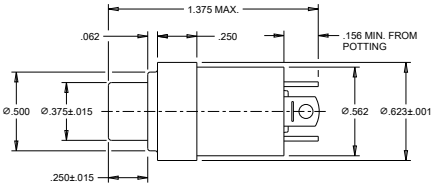
ALDERS electronic GmbH
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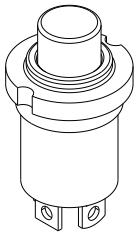
sales@alders.de

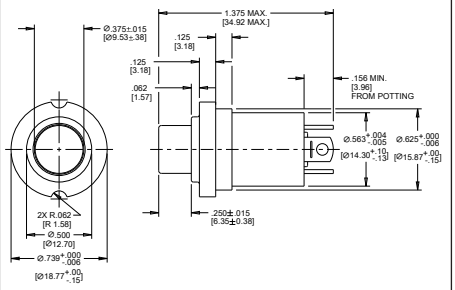
P1-1 *(MIL-A)*



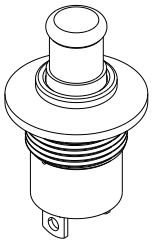


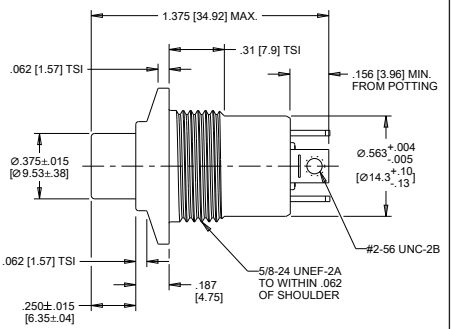
P1-2 *(MIL-B)*



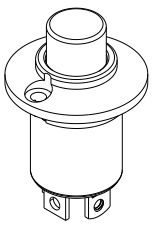


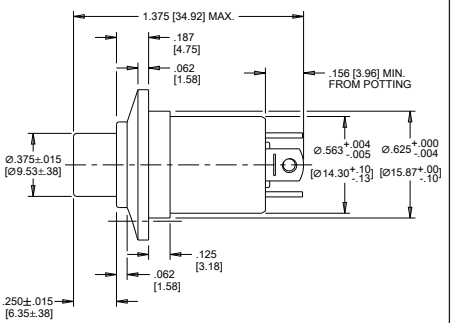
P1-3 *(MIL-C)* PUSH-PULL STYLE SHOWN



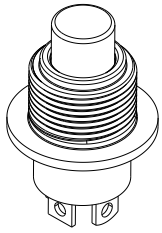


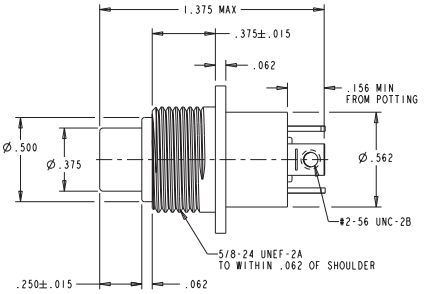
P1-5 *(MIL-E)*



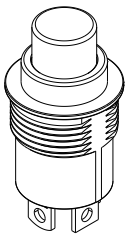


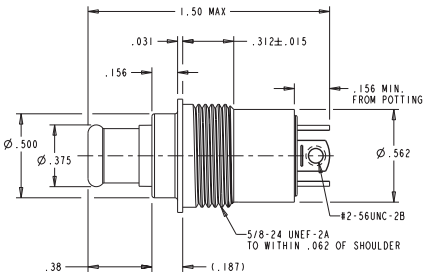
P1-6 *(MIL-F)*



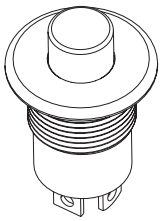


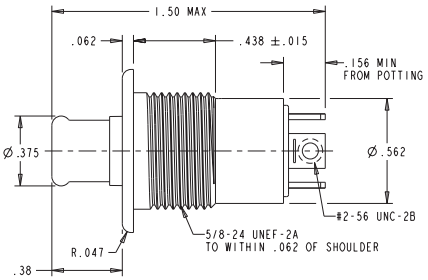
P1-7 *(MIL-G)*





P1-8 *(MIL-H)*

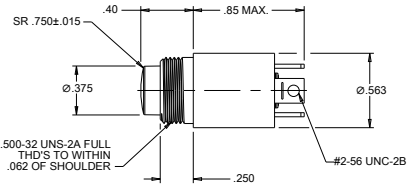




Unsealed P1-90013

Operating Force: 4.0 +/- 1.0 lb.
Circuit: SPDT-DB
Case: Black anodized aluminum
Button: Black nylon

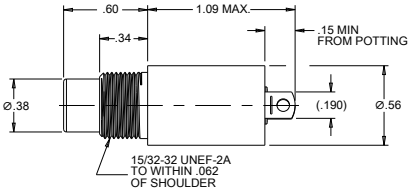




Watertight P1-90024
Dusttight P1-90014

Operating Force: 4.0 +/- 1.0 lb.
Circuit: SPST-N.O.
Case: Black anodized aluminum
Button: Red nylon





P1 Pushbutton
Part Number Code

P1 -	X	X	X	X	X	*
	Case Style	**Terminal Style**	**Circuit Form**	**Switch Action**	**Button Color**	
	1. Style A **2.** Style B **3.** Style C **5.** Style E **6.** Style F **7.** Style G **8.** Style H	**1.** Solder/Std. **2.** Screw/Std. **3.** Solder/Low Level **4.** Screw/Low Level	**1.** N.O. **2.** N.C. **3.** N.C. 3 Terminal ① **4.** N.O. 3 Terminal ① **5.** 5 Terminal ① **6.** 2 Circuit	**1.** 2.5 lbs. Momentary **2.** 4.0 lbs. Momentary ② **3.** Push-Pull	**1.** Red **2.** Black **3.** Orange **4.** Yellow **5.** Green **6.** Blue **7.** Purple **8.** Gray **9.** White	

*** Add "W" for watertight seal to MIL-PRF-8805 Design 3**

① Circuit styles with 3 and 5 terminals have 50,000 cycle mechanical life per MIL-PRF-8805.

② Military standard is 4.0 lbs.

Specifications Subject To Change Without Notice