

COMMERCIAL GRADE PUSHBUTTONS

P3

COMMERCIAL
PUSHBUTTONS

MOMENTARY ACTION, SEALED, SNAP-ACTION, DOUBLE BREAK

Makes and breaks every time! Less than 25mΩ contact resistance because the OTTO design features inherent rocking action that breaks welds and wipes contacts clean.

The P3 is the commercial version of the P1 Pushbutton switch, offering vastly improved life under extreme conditions found in some industrial environments. The pushbutton is sealed by a silicone boot operating on our patented "rolling sleeve," providing longer life and smoother operation over a wide temperature range. Epoxy protects the contacts and terminals from hostile environments and solder flux.

High contact force (120g/4.2 oz), low contact resistance (25mΩ max) and short contact bounce are the result of our snap-action mechanism. These characteristics provide exceptional current carrying capabilities over the life of the switch. With the optional low level (gold plate) configuration, the P3 is well suited to interface directly to computers and other solid state devices.

Watertight sealing is available by simply adding "W" to your part number. Because the P3 is a double break switch, wide connection possibilities, longer life and greater capacity are offered. The P3 design provides a unique terminal connection to the moving element for added flexibility. Special versions can be provided with five terminals to control up to four circuits.

Features:

- Button sealed with patented "rolling sleeve" principle
- Contact area sealed at button & terminals
- Less than 25mΩ contact resistance
- Positive tactile feedback
- Engraved buttons & bezels available
- UL recognized & CSA certified
- 1 million mechanical cycle life
- Watertight to IP68S available in all versions
- Watertight to IP69K available in non push-pull versions
- RoHS/WEEE/Reach compliant



Standard Characteristics/Ratings:

ELECTRICAL RATINGS:

Load	Sea Level @ 28VDC or 115VAC, 60/400Hz	50,000 feet @ 28VDC or 115VAC, 60/400Hz	Cycles
Resistive	10A	N/A	100,000
Inductive	5A	5A	100,000
Lamp	3A	N/A	100,000
Center Contact	3A max	N/A	100,000
DWV	1050Vrms	400Vrms	
Low Level	10mA @ 30mV max DC or peak AC		

Electrical Life: 25,000 or 100,000 cycles (depending on configuration)
High Force Push Pull 5,000 cycles

Mechanical Life: 1 million cycles, circuit forms 1, 2 & 6
100,000 cycles, circuit forms 3, 4 & 5
High Force Push Pull 5,000 cycles

Seal: IP64 or IP68S and IP69K
IP64 or IP68S on push-pull versions

Shock: MIL-STD-202, method 207

Operating Temp Range: -55°C to +85°C

Operating Force: 2.5 lbs. or 4.0 lbs.
Push-Pull: .5 to 2.0 lbs.
Push-Pull High Force: 3.0 lbs. min.

Reset Force: 0.75 lb. min or 1.0 lb.

Total Travel: 0.085 +/- 0.015 inches

Overtravel: 0.012 inches min

Movement Differential: 0.015 inches min

MATERIALS:

Case: Anodized aluminum alloy

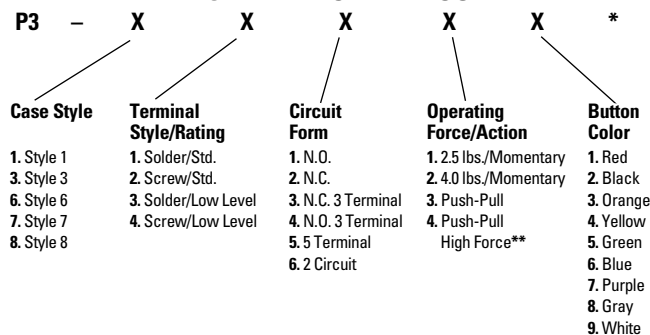
Button: Thermoplastic

Terminals: Brass with silver, gold for low level

Terminal Hardware: Screws, lockwasher and terminal lug for screw terminal option

Mounting Hardware: Hex nut, lockwasher and panel seal when applicable

P3 PART NUMBER CODE

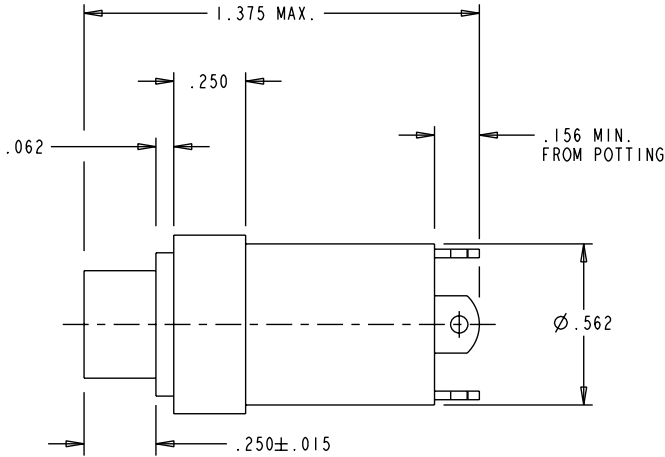


* Add "W" suffix for watertight to IP68S and IP69K for Operating Force/Action selections 1 and 2.

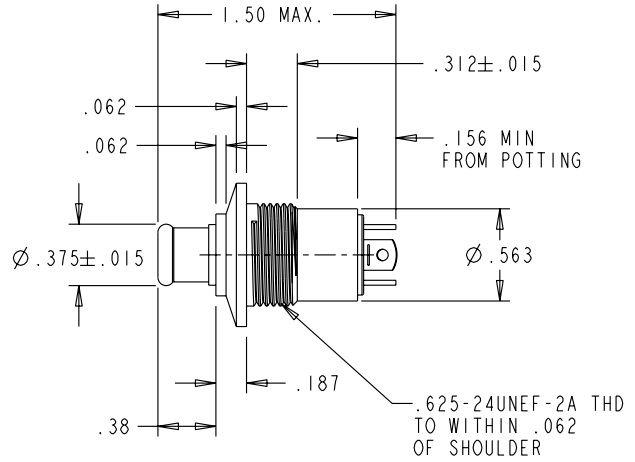
Add "W" suffix for watertight to IP68S for Operating Force/Action selections 3 and 4.

**Available in Case Style 3 only.

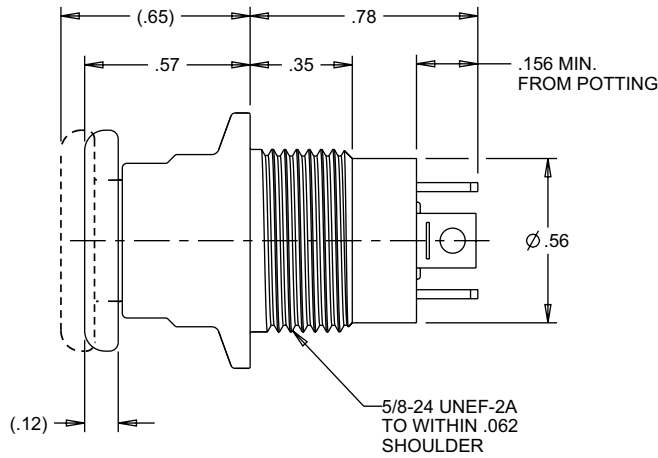
IDEAL FOR USE IN HEAVY MACHINERY & COMMERCIAL APPLICATIONS



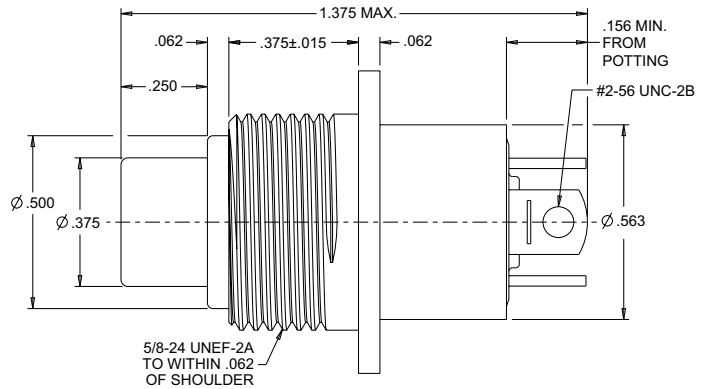
Style P3-11_2



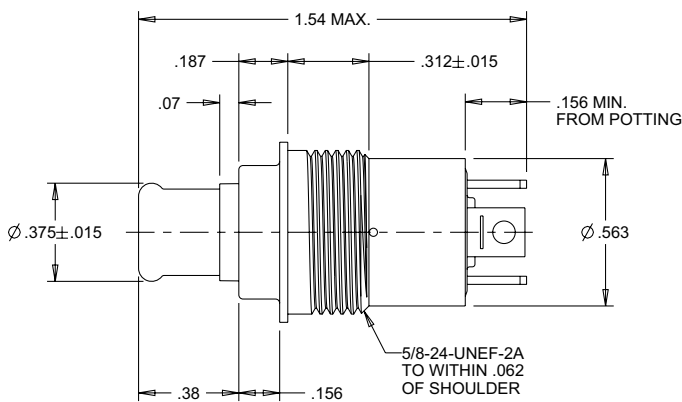
Style P3-33_3 Push-Pull



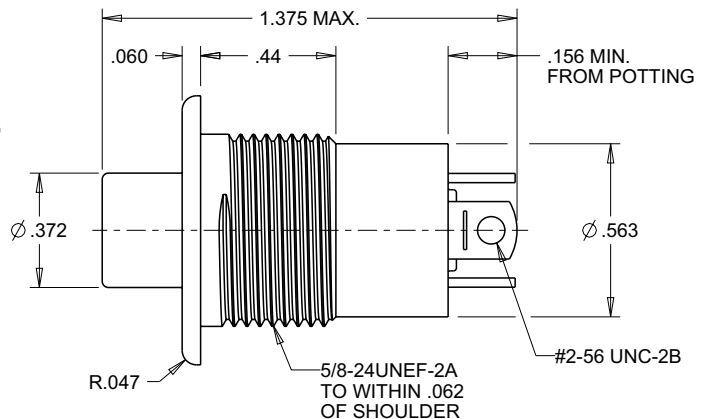
Style P3-33_4 Push-Pull High Force



Style P3-61_1



Style P3-71_3



Style P3-83_1

EXAMPLES OF CUSTOMIZED P3 SERIES SEALED PUSHBUTTONS

Special Shaped Bezel

Total Travel: 0.085" +/- 0.015"
Operating Force: 2.5, +0.5, -1.0 lb.
Reset Force: 0.75 lb. min
Circuit: SPNO-DB (Other circuits available)
Mechanical Life: 1,000,000 cycles
Button: Red nylon
Housing: Clear anodized aluminum
P3-30017



Special Journalled Button

Watertight to IP68S, black anodized case and thermoplastic button available in nine colors.
Circuit: SPNO-DB
Mechanical Life: 1,000,000 cycles
Electrical Life: 100,000 cycles
P3-90308-X
 (X denotes button color)



Special Large Round Button, Quick Connect Tab Terminals

Total Travel: 0.085" +/- 0.015"
Operating Force: 4.0 +/- 1.0 lb.
Reset Force: 1.0 lb. min
Circuit: SPNO-DB (Other circuits available)
Mechanical Life: 1,000,000 cycles
Button: Black nylon
Housing: Clear anodized aluminum
P3-30031



Large Diameter Button

Nine different button colors, black anodized protective shroud, watertight to IP68S.
Circuit: SPNO-DB
Mechanical Life: 1,000,000 cycles
Electrical Life: 100,000 cycles at full load
P3-90207-X
 (X denotes button color)



Special Right Angle, Quick Connect Tabs, P3-6 Style

Total Travel: 0.085" +/- 0.015"
Operating Force: 2.5, +0.5, -1.0 lb.
Reset Force: 0.75 lb. min
Circuit: SPNO-DB
Mechanical Life: 1,000,000 cycles
Button: Red nylon
Housing: Clear anodized aluminum
P3-60024



Special "H" Case with Round Shaped Button

Operating Force: 4.0 +/- 1.0 lb.
Reset Force: 1.0 lb. min
Circuit: SPNC-DB (Other circuits available)
Mechanical Life: 1,000,000 cycles
Button: Red nylon
Housing: Black anodized aluminum
P3-80016



Special Snap-In, Panel-Sealed, Rectangular Shaped Button

Total Travel: 0.125" max
Operating Force: 4.0 +/- 1.0 lb.
Reset Force: 1.0 lb. min
Circuit: SPNO-DB (Other circuits available)
Mechanical Life: 1,000,000 cycles
Button: Black polyester
Housing: Clear anodized celenex
P3-90037



Large Diameter Button

Nylon button is 1.187". Snaps on to special style body with leads. Dusttight to IP64.
Operating Force: 2.5, +0.5, -1.0 lb.
Mechanical Life: 1,000,000 cycles
Rating: 10 amps Resistive
Circuit: SPDT 2 circuit
P3-30101-X



Protective Shroud

This pushbutton is designed to avoid accidental actuation of the switch. The shroud requires the operator to purposely operate the switch. The actuation occurs below the height of the protective shroud, thus protecting against unintentional actuation.

Same ratings and sealing characteristics as the standard P3 series.

SPNC is shown.

P3-90009



Emergency Stop Pushbutton

PART NUMBER	BUTTON COLOR
P330115-1	RED
P330115-2	BLACK
P330115-3	ORANGE
P330115-4	YELLOW
P330115-5	GREEN
P330115-6	BLUE
P330115-7	VIOLET
P330115-8	GRAY
P330115-9	WHITE

