COMMERCIAL & MILITARY GRADES

MOMENTARY ACTION, SEALED SUBMINIATURE PUSHBUTTON SNAP-ACTION SWITCHES

The P7 series incorporates OTTO's patented double break design in a significantly smaller package than the P1 series. These subminiature switches embrace today's technology requirements by allowing for a large number of switches to fit within a faceplate or a small panel space.

The long life snap-action design offers low contact resistance (25mΩ max initial) and is protected from the environment by a silicone rubber boot, operating on a "rolling sleeve" principle that gives long sealed life and smooth operation.

The P7 series is designed to meet the requirements of MIL-PRF-8805 including low level switching (10mA @ 30mV) with power switching up to 5 amps at 28VDC as well.

A variety of mounting styles are offered to best match the application. The P7-1, P7-2, P7-7 and P7-8 case styles feature a swaged bushing shape to allow press fit installation in aircraft flight control and hand grips and similar applications. The other styles feature threaded bushing mounting. The P7-3 and P7-A case styles have a front panel bezel, while the P7-5 and P7-6 have conventional bushings for rear panel mounted installations. Silver or black bezels are standard. Other colors available on special order.

Pushbuttons are available in a choice of nine colors. Excellent tactile feedback assures the operator that contact transfer has been made.

A choice of MIL-SPEC and commercial versions of these switches are offered: Moistureproof and dusttight to IP64 and MIL-PRF-8805 Design 2 or watertight to IP68S and to MIL-PRF-8805 Design 3.

Features:

- **Low level switching capability**
- **Less than 25mΩ contact resistance**
- **High contact pressure**
- **6 circuit variations**
- **Positive tactile feedback**
- **Variety of mounting styles**
- **Square button option with case style A**
- **Qualified to MIL-PRF-8805/110**
- **Moistureproof and dusttight to IP64 and MIL-PRF-8805 Design 2 or Watertight to IP68S and MIL-PRF-8805 Design 3**
- **RoHS/WEEE/Reach compliant**

Style P7-5

Style P7-2

Style P7-3

Style P7-5

Style P7-1

Style P7-6

Style P7-8

Style P7-A

Style P7-A

Style P7-A

Standard Characteristics/Ratings:

ELECTRICAL RATINGS:		Sea Level @ 28VDC or 115VAC, 60Hz			50,000 feet @ 28VDC or 115VAC, 60Hz		
Load	Circuits:	1 & 2	3–5	6	1 & 2	3–5	6
Resistive		5A	2.5A	4A	5A	2.5A	4A
Inductive		3A	1.5A	2A	3A	1.5A	2A
Lamp		1A	0.5A	N/A	N/A	N/A	N/A
Motor		3A	1.5A	N/A	N/A	N/A	N/A
DWV		1050Vrms			400Vrms		
Center Contact		3A max					
Low Level		10mA @ 30mV					

Electrical Life:	25,000 cycles
Mechanical Life:	1,000,000 cycles
Seal:	Moistureproof and dusttight to IP64 and MIL-PRF-8805 Design 2 or Watertight to IP68S and MIL-PRF-8805 Design 3
Operating Temp Range:	-55°C to +85°C
Operating Force:	1.7 +/- 0.5 lb.
Total Travel:	0.080 inches max
Overtravel:	0.010 inches min

MATERIALS:	
Case:	Anodized aluminum alloy
Button:	Thermoplastic
Terminals:	Brass with gold over silver
Terminal Hardware:	None provided
Mounting Hardware:	Hex nut, lockwasher and panel gasket when applicable

PUSHBUTTONS

SEALED AGAINST DUST & MOISTURE, LOW LEVEL SWITCHING OPTION

P7-1 Series

Case Style 1
Press Fit Mount

Also available with PC terminals.

P7-6 Series

Case Style 6
15/32" Threaded Bushing

Also available with PC pins.

P7-2 Series

Case Style 2
Press Fit Mount

Also available with PC pins.

P7-7 Series

Case Style 7
Press Fit Mount

Also available with PC pins.

P7-3 Series

Case Style 3
Bezel/Threaded Bushing

Also available with PC pins.

P7-8 Series

Case Style 8
Press Fit Mount
Guarded Button

Also available with PC pins.

P7-5 Series

Case Style 5
1/4" Threaded Bushing

Also available with PC pins.

Terminal Style "A" & "B"

Standard

P7-A Series

Case Style A
15/32" Threaded Bushing
Square Button Shown

Also available with PC pins and round buttons.

Important Note: Because the base case interface has epoxy applied over it, dimensions to this surface are difficult to measure. This surface is not recommended as a hard stop, due to the extra variation of the epoxy surface.

P7 PART NUMBER CODE

P7 – X   X   X   X   X   X

Case Style	Terminal Style/ Construction Grade	Circuit Form	Contact Rating	Bezel Color/ Button Dia.	Button Color
1. Style 1	**A.** Solder/Commercial	**1.** N.O.	**1.** Std.	**1.** Clear/Std.	**1.** Red
2. Style 2	**B.** Solder/Watertight Commercial	**2.** N.C.	**2.** Low Level	**2.** Black/Std.	**2.** Black
3. Style 3		**3.** N.C. 3 Terminal		**3.** Clear/0.312 ①	**3.** Orange
5. Style 5	**1.** Solder/Military/Short	**4.** N.O. 3 Terminal		**4.** Black/0.312 ①	**4.** Yellow
6. Style 6	**2.** Solder/Commercial/Short	**5.** 5 Terminal		**5.** Clear/ Square .50 ②	**5.** Green
7. Style 7	**3.** Solder/Mil. Watertight/Short	**6.** 2 Circuit		**6.** Black/ Square .50 ②	**6.** Blue
8. Style 8	**4.** PC Pin/Commercial				**7.** Purple
A. Style A	**5.** PC Pin/Military				**8.** Gray
	6. PC Pin/Mil. Watertight				**9.** White
	7. Solder/Com. Watertight/Short				
	8. PC Pin/Com. Watertight				

① Not available with Case Styles 1, 2 & 5
② Available with Case Style A only