

MOMENTARY ACTION, SEALED SUB-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 allow the switch density today's technologies require in control grips and panels.

The long life snap-action design is protected from the environment by a silicon 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 case style has 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**
- **Six circuit variations**
- **Positive tactile feedback**
- **Variety of mounting styles**
- **Qualified to MIL-PRF-8805/110**
- **Moistureproof & dusttight to IP64 & MIL-PRF-8805 Design 2 or watertight to IP68S & MIL-PRF-8805 Design 3**



Standard Characteristics/Ratings:

ELECTRICAL RATINGS:		Sea Level @ 28VDC			50,000 feet @ 28VDC		
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
DVV		1050Vrms			400Vrms		
Center Contact		3A max					
Low Level		10mA @ 30mV					
Electrical Life:		25,000 cycles					
Mechanical Life:		1,000,000 cycles					
Seal:		IP64 and MIL-PRF-8805 Design 2 or 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 plate over silver plate					
Terminal Hardware:		None provided					
Mounting Hardware:		Hex nut, lockwasher and panel gasket when applicable					

MINI-SIZED PER MIL-PRF-8805/110

P7
SUBMINIATURE
PUSHBUTTONS

SEALED AGAINST DUST & MOISTURE, LOW LEVEL SWITCHING OPTION

<p>P7-1 Series</p> <p>Case Style 1 Press Fit Mount</p> <p>Also available with PC terminals.</p>		<p>P7-6 Series</p> <p>Case Style 6 15/32" Threaded Bushing</p> <p>Also available with PC pins.</p>	
<p>P7-2 Series</p> <p>Case Style 2 Press Fit Mount</p> <p>Also available with PC pins.</p>		<p>P7-7 Series</p> <p>Case Style 7 Press Fit Mount</p> <p>Also available with PC pins.</p>	
<p>P7-3 Series</p> <p>Case Style 3 Bezel/Threaded Bushing</p> <p>Also available with PC pins.</p>		<p>P7-8 Series</p> <p>Case Style 8 Press Fit Mount Guarded Button</p> <p>Also available with PC pins.</p>	
<p>P7-5 Series</p> <p>Case Style 5 1/4" Threaded Bushing</p> <p>Also available with PC pins.</p>		<p>Terminal Style "A" & "B"</p> <p>Standard</p>	
<p>PC Pin Mounting Pattern</p> <p>(As viewed from switch bottom. See above drawings for terminal identification.)</p>	<p>P.C. MOUNTING PATTERN (BOARD VIEW)</p>		

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. Std. Commercial Solder	1. N.O.	1. Std.	1. Clear/Std.	1. Red
2. Style 2	B. Std. Watertight	2. N.C.	2. Low Level	2. Black/Std.	2. Black
3. Style 3	Commercial Solder	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. Green
7. Style 7	3. Solder/Mil. Watertight/Short	6. 2 Circuit			6. Blue
8. Style 8	4. PC Pin/Commercial				7. Purple
	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.

PUSHBUTTONS