

MOMENTARY OR PUSH-PULL ACTION, SHORTER BEHIND PANEL, SUBMINIATURE DOUBLE BREAK

Makes and breaks every time!
OTTO's inherent rocking action
breaks welds and wipes contacts clean.

The P8 series pushbutton switches feature a shortened back panel depth while offering all the features of the regular size P1 and P3 series switches. P8 series switches offer vastly improved electrical and mechanical life under extreme conditions found in most military and industrial environments.

On sealed models, a silicone boot operating on our patented "rolling sleeve" principle protects the contact area against contamination at the button area. This boot provides long life and smooth operation over a wide temperature range. Sealed terminals protect the contact area from hostile environments and solder flux on both sealed and unsealed models.

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 guarantee exceptional current carrying capabilities over the life of the switch. With the optional low level configuration the P8 is well suited to interface directly to computers and other solid state devices.

The P8 series is a quality precision snap-action switch designed for use in panel boards, control sticks, computers, instruments, pressure switches and other hand or machine operated applications where rugged pushbutton switches are required. In addition, its precision permits the OTTO P8 to also be used as a limit switch. The P8 offers unique size, high electrical ratings and a wide choice of mounting styles.

Features:

- Shorter behind panel depth than OTTO's P1/P3
- Patented "rolling sleeve" button seal
- Contact area sealed at button & terminals
- Positive tactile feedback
- Variety of mounting styles
- Variety of button lengths & shapes
- Engraved buttons & bezels available
- Mechanical life 1 million cycles
- UL recognized & CSA certified
- Sealed to IP64 or IP68S
- RoHS/WEEE/Reach compliant



Standard Characteristics/Ratings:

ELECTRICAL RATINGS:

| Load | Sea Level @ 28VDC or 115VAC, 60/400Hz |
|------------------------------|--|
| Resistive | 10A |
| Inductive | 5A |
| Lamp | 3A |
| DWV | 1050Vrms |
| Low Level | 10mA @ 30mV |
| Electrical Life: | 100,000 cycles (25,000 low level) |
| Mechanical Life: | 1,000,000 cycles |
| Seal: | IP64 or IP68S |
| Operating Temp Range: | -55°C to +85°C |
| Operating Force: | 2.5 lbs. +0.5/-1.0 lb. or 4.0 lbs. +/- 1.0 lb. |
| Total Travel: | 0.085 +/- 0.015 inches |
| Overtravel: | 0.012 inches min |

MATERIALS:

| | |
|---------------------------|---|
| Case: | Anodized aluminum alloy |
| Button: | Thermoplastic |
| Terminals: | Brass with silver or brass with gold over silver for low level |
| Terminal Hardware: | Terminal lugs, screws and lockwasher where applicable |
| Mounting Hardware: | Hex nut, lockwasher, panel seal gasket, flat washer when applicable |

MOMENTARY OR PUSH-PULL ACTION, SHORTER BEHIND PANEL, SUBMINIATURE DOUBLE BREAK

| <p>P8-1, Style A Bezel Press Fit Bushing Flat Button Shape Shown Specify Dia.: 0.312" or 0.375" Height: 0.187" or 0.250"</p> <table border="1"> <thead> <tr> <th>Terminal Styles</th> <th>"A" (inches)</th> </tr> </thead> <tbody> <tr> <td>1, 2, 4 & 5</td> <td>0.808</td> </tr> <tr> <td>3 & 6</td> <td>0.922</td> </tr> </tbody> </table> | Terminal Styles | "A" (inches) | 1, 2, 4 & 5 | 0.808 | 3 & 6 | 0.922 | <p>P8-3, Style C Bezel 0.625-24 Bushing Flat Button Shape Shown Specify Dia.: 0.312" or 0.375" Height: 0.187" or 0.250"</p> <table border="1"> <thead> <tr> <th>Terminal Styles</th> <th>"A" (inches)</th> </tr> </thead> <tbody> <tr> <td>1, 2, 4 & 5</td> <td>0.683</td> </tr> <tr> <td>3 & 6</td> <td>0.797</td> </tr> </tbody> </table> | Terminal Styles | "A" (inches) | 1, 2, 4 & 5 | 0.683 | 3 & 6 | 0.797 | <p>Small Bushing P8-4: 0.500-32 Bushing P8-5: 0.469-32 Bushing Flat Button Shape Shown Specify Dia.: 0.312" or 0.375" Height: 0.187" or 0.250"</p> <table border="1"> <thead> <tr> <th>Model</th> <th>Terminal Styles</th> <th>"A" (inches)</th> </tr> </thead> <tbody> <tr> <td>P8-4</td> <td>1, 2, 4 & 5</td> <td>0.870</td> </tr> <tr> <td></td> <td>3 & 6</td> <td>0.984</td> </tr> <tr> <td>P8-5</td> <td>1, 2, 4 & 5</td> <td>1.097</td> </tr> <tr> <td></td> <td>3 & 6</td> <td>1.211</td> </tr> </tbody> </table> | Model | Terminal Styles | "A" (inches) | P8-4 | 1, 2, 4 & 5 | 0.870 | | 3 & 6 | 0.984 | P8-5 | 1, 2, 4 & 5 | 1.097 | | 3 & 6 | 1.211 | <p>P8-6, Style F Bezel 0.625-24 Bushing Flat Button Shape Shown Specify Dia.: 0.312" or 0.375" Height: 0.187" or 0.250"</p> <table border="1"> <thead> <tr> <th>Terminal Styles</th> <th>"A" (inches)</th> </tr> </thead> <tbody> <tr> <td>1, 2, 4 & 5</td> <td>0.808</td> </tr> <tr> <td>3 & 6</td> <td>0.922</td> </tr> </tbody> </table> | Terminal Styles | "A" (inches) | 1, 2, 4 & 5 | 0.808 | 3 & 6 | 0.922 |
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ORDERING INFORMATION:

Select the OTTO P8 series switch to match your application requirements. Combinations of features are almost limitless. When ordering, please use the OTTO Part Number.

Example: P8-316329B specifies a "C" style bezel, silver color case, solder terminals, 2 circuit contact configuration, standard contact rating, watertight seal construction, 4.0 lbs. operating force momentary action, white button 0.375" diameter by 0.250" long, dome shaped. For low level switching option, specify P8-316529B.

P8 PART NUMBER CODE

| P8 | - | X | X | X | X | X | X | | | | |
|--------------------|---|----------------------------------|---|---------------------|---|---------------------------------------|---|-------------------------------|--|---------------------|---------------------------------------|
| Bezel Style | | Terminal Style/Case Color | | Circuit Form | | Current Rating Level/Seal Type | | Operating Force/Action | | Button Color | Button Diameter/Length/Shape ② |
| 1. Style A | | 1. Solder/Silver | | 1. N.O. | | 1. Std./Unsealed ③ | | 1. 2.5 lbs./Momentary | | 1. Red | A. 0.375"/0.250"/Flat |
| 3. Style C | | 2. Screw/Silver | | 2. N.C. | | 2. Std./Moistureproof | | 2. 4.0 lbs./Momentary | | 2. Black | B. 0.375"/0.250"/Dome |
| 4. 0.50-32 THD | | 3. Faston/Silver ① | | 6. 2 Circuit | | 3. Std./Watertight | | 3. Push-Pull ② | | 3. Orange | C. 0.375"/0.187"/Flat |
| 5. 0.469-32 THD | | 4. Solder/Black | | | | 4. Low Level/Moistureproof | | | | 4. Yellow | D. 0.375"/0.187"/Dome |
| 6. Style F | | 5. Screw/Black | | | | 5. Low Level/Watertight | | | | 5. Green | E. 0.312"/0.250"/Flat |
| 7. Style G | | 6. Faston/Black ① | | | | 6. Std./Dusttight | | | | 6. Blue | F. 0.312"/0.250"/Dome |
| 8. Style H | | | | | | | | | | 7. Purple | G. 0.312"/0.187"/Flat |
| | | | | | | | | | | 8. Gray | H. 0.312"/0.187"/Dome |
| | | | | | | | | | | 9. White | P. 0.375"/0.250"/Flat ② |

① Faston receptacles: 0.187" on N.O.; 0.110" on N.C. terminals.
② Push-pull action available in button style "P" only.
③ Unsealed units are not recommended for low level current duty.