

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.

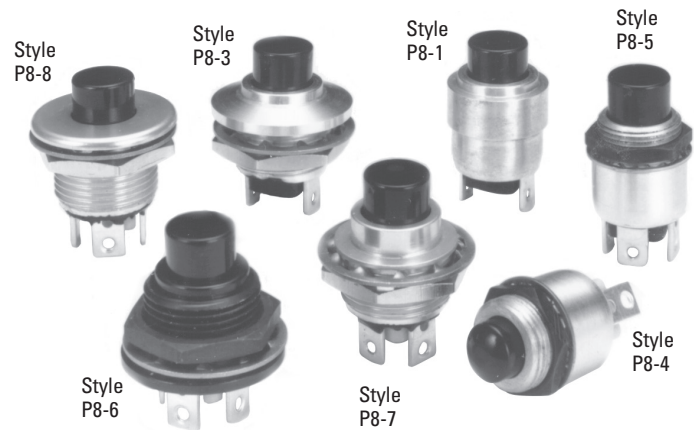
On sealed models, a silicone boot operating on our patented "rolling sleeve" principle protects the contact area against contamination at the button area. This boot provides long life and smooth operation over a wide temperature range. Sealed terminals protect the contact area from hostile environments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

High contact force (120g/4.2 oz), low contact resistance 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 logic 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 compliant



### Standard Characteristics/Ratings:

#### ELECTRICAL RATINGS:

| Load        | Sea Level @<br>28VDC or 115VAC, 60/400Hz |
|-------------|------------------------------------------|
| Resistive   | 10A                                      |
| Inductive   | 5A                                       |
| Lamp        | 3A                                       |
| DWV         | 1000Vrms                                 |
| Logic Level | 10mA @ 5VDC                              |

**Electrical Life:** 100,000 cycles (1,000,000 logic level)

**Mechanical Life:** 1,000,000 cycles

**Seal:** Unsealed, 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

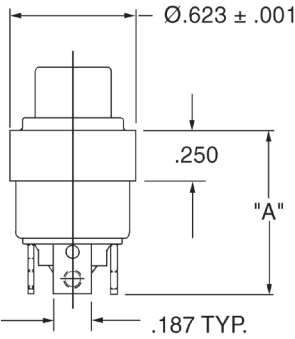
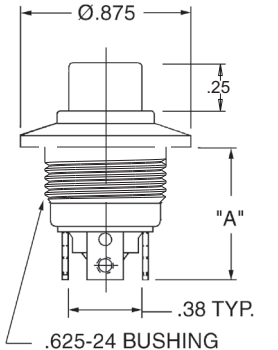
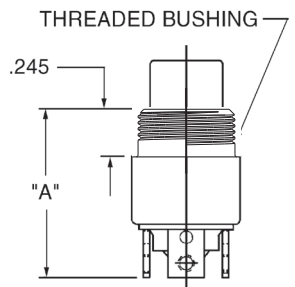
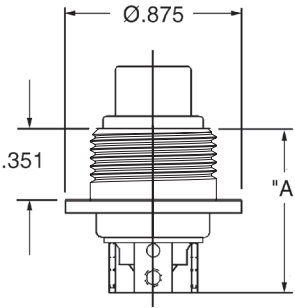
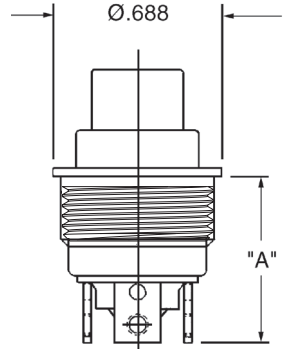
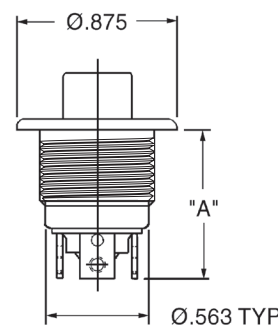
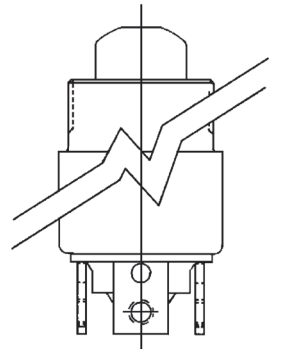
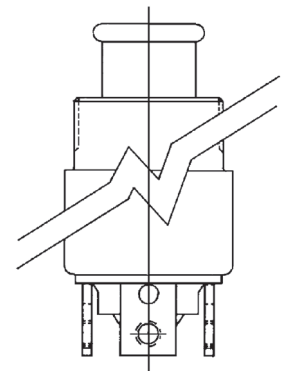
**Button:** Thermoplastic

**Terminals:** Brass with silver or brass with gold over silver for logic level

**Terminal Hardware:** Terminal lugs, screws and lockwasher where applicable

**Mounting Hardware:** Hex nut, lockwasher, panel seal gasket, flat washer when applicable

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| <p><b>P8-1, Style A Bezel</b><br/><b>Press Fit Bushing</b><br/>Flat Button Shape Shown<br/>Specify Dia.: 0.312" or 0.375"<br/>Height: 0.187" or 0.250"</p>  <table><tr><th>Terminal Styles</th><th>"A" (inches)</th></tr><tr><td>1, 2, 4 &amp; 5</td><td>0.808</td></tr><tr><td>3 &amp; 6</td><td>0.922</td></tr></table>  | Terminal Styles | "A" (inches) | 1, 2, 4 & 5 | 0.808 | 3 & 6 | 0.922 | <p><b>P8-3, Style C Bezel</b><br/><b>0.625-24 Bushing</b><br/>Flat Button Shape Shown<br/>Specify Dia.: 0.312" or 0.375"<br/>Height: 0.187" or 0.250"</p>  <table><tr><th>Terminal Styles</th><th>"A" (inches)</th></tr><tr><td>1, 2, 4 &amp; 5</td><td>0.683</td></tr><tr><td>3 &amp; 6</td><td>0.797</td></tr></table>   | Terminal Styles | "A" (inches) | 1, 2, 4 & 5 | 0.683 | 3 & 6 | 0.797 | <p><b>Small Bushing</b><br/><b>P8-4: 0.500-32 Bushing</b><br/><b>P8-5: 0.469-32 Bushing</b><br/>Flat Button Shape Shown<br/>Specify Dia.: 0.312" or 0.375"<br/>Height: 0.187" or 0.250"</p> <p>THREADED BUSHING</p>  <table><tr><th>Model</th><th>Terminal Styles</th><th>"A" (inches)</th></tr><tr><td>P8-4</td><td>1, 2, 4 &amp; 5</td><td>0.870</td></tr><tr><td></td><td>3 &amp; 6</td><td>0.984</td></tr><tr><td>P8-5</td><td>1, 2, 4 &amp; 5</td><td>1.097</td></tr><tr><td></td><td>3 &amp; 6</td><td>1.211</td></tr></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><b>P8-6, Style F Bezel</b><br/><b>0.625-24 Bushing</b><br/>Flat Button Shape Shown<br/>Specify Dia.: 0.312" or 0.375"<br/>Height: 0.187" or 0.250"</p>  <table><tr><th>Terminal Styles</th><th>"A" (inches)</th></tr><tr><td>1, 2, 4 &amp; 5</td><td>0.808</td></tr><tr><td>3 &amp; 6</td><td>0.922</td></tr></table> | Terminal Styles | "A" (inches) | 1, 2, 4 & 5 | 0.808 | 3 & 6 | 0.922 |
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| Terminal Styles                                                                                                                                                                                                                                                                                                                                                                                             | "A" (inches)    |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                             |                 |              |      |             |       |  |       |       |      |             |       |  |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |
| 1, 2, 4 & 5                                                                                                                                                                                                                                                                                                                                                                                                 | 0.808           |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                             |                 |              |      |             |       |  |       |       |      |             |       |  |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |
| 3 & 6                                                                                                                                                                                                                                                                                                                                                                                                       | 0.922           |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                             |                 |              |      |             |       |  |       |       |      |             |       |  |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |
| Terminal Styles                                                                                                                                                                                                                                                                                                                                                                                             | "A" (inches)    |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                             |                 |              |      |             |       |  |       |       |      |             |       |  |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |
| 1, 2, 4 & 5                                                                                                                                                                                                                                                                                                                                                                                                 | 0.683           |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                             |                 |              |      |             |       |  |       |       |      |             |       |  |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |
| 3 & 6                                                                                                                                                                                                                                                                                                                                                                                                       | 0.797           |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                             |                 |              |      |             |       |  |       |       |      |             |       |  |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |
| 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        |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                             |                 |              |      |             |       |  |       |       |      |             |       |  |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |
| Terminal Styles                                                                                                                                                                                                                                                                                                                                                                                             | "A" (inches)    |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                             |                 |              |      |             |       |  |       |       |      |             |       |  |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |
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| <p><b>P8-7, Style G Bezel</b><br/><b>0.625-24 Bushing</b><br/>Flat Button Shape Shown<br/>Specify Dia.: 0.312" or 0.375"<br/>Height: 0.187" or 0.250"</p>  <table><tr><th>Terminal Styles</th><th>"A" (inches)</th></tr><tr><td>1, 2, 4 &amp; 5</td><td>0.683</td></tr><tr><td>3 &amp; 6</td><td>0.797</td></tr></table> | Terminal Styles | "A" (inches) | 1, 2, 4 & 5 | 0.683 | 3 & 6 | 0.797 | <p><b>P8-8, Style H Bezel</b><br/><b>0.625-24 Bushing</b><br/>Flat Button Shape Shown<br/>Specify Dia.: 0.312" or 0.375"<br/>Height: 0.187" or 0.250"</p>  <table><tr><th>Terminal Styles</th><th>"A" (inches)</th></tr><tr><td>1, 2, 4 &amp; 5</td><td>0.810</td></tr><tr><td>3 &amp; 6</td><td>0.924</td></tr></table> | Terminal Styles | "A" (inches) | 1, 2, 4 & 5 | 0.810 | 3 & 6 | 0.924 | <p><b>Dome</b><br/><b>Button Shape</b><br/>Specify Dia.: 0.312" or 0.375"<br/>Height: 0.187" or 0.250"</p>                                                                                                                                                                                                                                                                                                                                                                                                                         | <p><b>Push-Pull</b><br/><b>Button Shape</b><br/>Available as Button Style P only.</p>  |                 |              |      |             |       |  |       |       |      |             |       |  |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |
| Terminal Styles                                                                                                                                                                                                                                                                                                                                                                                             | "A" (inches)    |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                             |                 |              |      |             |       |  |       |       |      |             |       |  |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |
| 1, 2, 4 & 5                                                                                                                                                                                                                                                                                                                                                                                                 | 0.683           |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                             |                 |              |      |             |       |  |       |       |      |             |       |  |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |
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| Terminal Styles                                                                                                                                                                                                                                                                                                                                                                                             | "A" (inches)    |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                             |                 |              |      |             |       |  |       |       |      |             |       |  |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |
| 1, 2, 4 & 5                                                                                                                                                                                                                                                                                                                                                                                                 | 0.810           |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                             |                 |              |      |             |       |  |       |       |      |             |       |  |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |
| 3 & 6                                                                                                                                                                                                                                                                                                                                                                                                       | 0.924           |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                             |                 |              |      |             |       |  |       |       |      |             |       |  |       |       |                                                                                                                                                                                                                                                                                                                                                                                                             |                 |              |             |       |       |       |

## 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 logic level switching option, specify P8-316529B.

## P8 PART NUMBER CODE

| P8              | -                             | X            | X                                  | X                      | X            | X                                  | X |
|-----------------|-------------------------------|--------------|------------------------------------|------------------------|--------------|------------------------------------|---|
| Bezel Style     | Terminal Style/<br>Case Color | Circuit Form | Current Rating Level/<br>Seal Type | Operating Force/Action | Button Color | Button Diameter/<br>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. Logic Level/Moistureproof       |                        | 4. Yellow    | D. 0.375"/0.187"/Dome              |   |
| 6. Style F      | 5. Screw/Black                |              | 5. Logic 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 logic level current duty.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

## OTTO:

[P8-3000017](#) [P8-7000011](#) [P8-1000003](#) [P8-3000024](#) [P8-4000006](#) [P8-4000010](#) [P8-842523A](#) [P8-9000019-2](#) [P8-9000019-3](#) [P8-546632A](#) [P8-441311G](#) [P8-441518B](#) [P8-646311A](#) [P8-5000010](#) [P8-6000001](#) [P8-7000007](#) [P8-9000014](#) [P8-9000017](#) [P8-9000019-1](#) [P8-4000011](#) [P8-4000015](#) [P8-4000020](#) [P8-4000023](#) [P8-4000029](#) [P8-4000030](#)