IP68S Sealed Construction

P4 series auxiliary actuators are designed to work with OTTO B2 (single break) and B3 (double break) basic switches. Auxiliary type actuators offer a wide variety of styles and types. Special basic switch characteristics can be specified to match your application needs. All case styles, except 1 and 4, feature OTTO’s patented “rolling sleeve” principle and are sealed to IP68S.

Unsealed Construction

These unsealed pushbutton actuators feature a choice of 1/4” and 15/32” mounting bushings with nylon buttons available in nine colors. Choose single, two, three and four pole models. To order standard models, use the Part Number Code shown below.

Sealed Construction

Moistureproof at the front panel. Choice of one and two pole configurations. Select from a variety of six bezel/bushing mount case styles in clear (silver) or black anodized aluminum. Styles C, H and F are illustrated here. For styles A, B and G, see P1 series information. Buttons are available in nine colors.

Operating Force: 4.0 lbs. max

Use Part Number Code below to specify your requirements.

RFI Shielding Option with Moistureproof Panel Seal

RFI shielding can be included along with the moistureproof sealing feature in all case styles (except styles 1 and 4) and in single or double pole momentary action. Case styles are illustrated at left. The plunger seal is dusttight and moistureproof.

Operating Force: 5.0 lbs. max

To order, see Part Number Code below.

ORDERING INFORMATION:

Standard Auxiliary Actuator Assemblies for Basics

Select the OTTO P4 pushbutton switch assembly to match your specific application needs. Standard and special features are shown at right. Specify your choice by building the OTTO Part Number Code.

Example: P4-61421 features the style “F” case, DPDT (4 terminals each), PC terminals, single step momentary action, black bezel with red button.

P4 PART NUMBER CODE

1. See P1 Series information for front panel appearance details.
2. Available in case styles 1 and 4 only.
3. Not available in case styles 1 and 4.
4. Available in circuit form 3 and 4 only.
5. Add “W” suffix for watertight to IP68S (not available in case styles 1 and 4)
Rugged Sealed Panel

These rugged, sealed aluminum pushbutton actuators are anodized in a variety of colors. Available in one and two pole models. An O-ring provides the panel seal to keep out water and dust from the basic switches behind the panel.

Operating Force:
1 Pole: 2.5 lbs. max
2 Pole: 4.0 lbs.

To order, please use Table A.

Table A

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Part No.</th>
<th>Button</th>
<th>Color</th>
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<tr>
<td>P4-10050-1</td>
<td>P4-10149-1</td>
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<td>P4-10149-2</td>
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<tr>
<td>P4-10100-3</td>
<td>P4-10149-3</td>
<td>Orange</td>
<td>P4-10149-4</td>
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<td>Blue</td>
<td>P4-10149-7</td>
<td>Purple</td>
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<tr>
<td>N/A</td>
<td>P4-10149-9</td>
<td>Clear</td>
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</tr>
</tbody>
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Standard Sealed TwoStep™

Ideal for applications requiring three modes of operation: “OFF,” Level 1 and Level 2. Plunger seal is dusttight and moistureproof. Available in P1 series bezel styles C, F and H. Two pole only.

Standard Operating Force:
Position 1: 2.25 lbs. max
Position 2: 3.25 lbs. max

Total Travel: 0.140 inches max

Special TwoStep™ Pushbutton, Dusttight Sealed

Switch “A” operates at Level 1; stays “on” when Level 2 operates Switch “B”.

Circuit: SPDT 2 circuit
Rating: 5 amps Resistive
3 amps Inductive @ 28VDC

Operating Force: Level 1: 1.75 +/- 0.5 lb.
Level 2: 2.75 +/- 0.5 lb.

Button: Red nylon
P4-20002

Style F, Panel Sealed, 2 Pole

Moistureproof and dusttight sealed switch features the “F” style bezel, as illustrated on previous page. Button is molded of gray nylon.

Total Travel: 0.100” max

Operating Force: 4.0 lbs. +/- 1.0 lb.

Circuit: DP/NO-DB
Rating: 10 amps Resistive
5 amps Inductive

Mechanical Life: 50,000 cycles
Electrical Life: 25,000 cycles
P4-600009

Splash and Dusttight Sealed, 2 Pole, 4 Circuit

Operating Force: 4.0 lbs. +/- 1.0 lb.

Circuit: DPDT 4 circuit
Rating: 5 amps Resistive
3 amps Inductive

Contacts: Gold plate per MIL-PRF-8805/101-010
Button: Black nylon
P4-10044

Specifications Subject To Change Without Notice
NOTEWORTHY PUSHBUTTON ACTUATORS

BUSHING MOUNT PUSHBUTTONS FOR B2 & B3 BASICS

Square Button, Single Pole, 2 Circuit
This subminiature pushbutton switch features a button molded of Lexan.
- Operating Force: 24 +/- 4 oz
- Rating: 5 amps Resistive
- Contacts: Gold plate
- White and other colors available.
   P4-300015

Vandal Resistant
Brass plated dull nickel housing and button is watertight sealed. Ideal for unattended machines operated by the public.
- Total Travel: 0.10” max
- Operating Force: 4.0 lbs. max
- Circuit: DPNO-DB
- Mechanical Life: 250,000 cycles
- Bezel: 0.969” dia.
- Button: 0.600” dia.
   P4-10155-2
   For larger 1.5” dia., SPNO-DB design, see P1-90135-2.

Watertight Panel Sealed Double Pole
Dress ring has O-ring provision for watertight panel seal. Button and case are black. Switch uses MIL-PRF-8805/101 basics. Seal is watertight. Operating force is 4.0 lbs.
   P4-900003

1/4-40 Bushing, SPDT 2 Circuit
This subminiature pushbutton switch features an anti-turn device to facilitate installation.
- Operating Force: 10 oz max
- Rating: 8 amps Resistive @ 28VDC
- Bushing: Stainless steel
- Bracket: Stainless steel
- Button: Nylon
   P4-10029

6 Pole, Right Angle, PC Mount
Solders into printed circuit board. Basic switches per MIL-PRF-8805/4.
- Operating Force: 3.5 lbs. max
- Rating: 1 amp Resistive
- Contacts: Gold
- Button Color: Choice of nine colors
   P4-10073-X
   (X denotes button color)

2 Pole, Right Angle, Bushing Mount—Single and TwoStep™ Versions
Right angle bushing mount assembly of basic switches. Either 2-mode momentary or 3-mode. TwoStep™ (OFF-Level 1-Level 2) action.
- Operating Force: 24 +/- 4 oz
- Rating: 8 amps Resistive
- Plunger: Red nylon (Other colors available)
- Bushing: Stainless steel
   P4-10022
   TwoStep™: P4-20003

8 Pole, Positive Detent, Sealed
Circuit: 8 PDT
- Rating: 1 amp Resistive
- 0.5 amps Inductive
- Bracket: Stainless steel
- Bushing: Aluminum black anodized
- Button: Nylon, choice of nine colors
   P4-10082-X
   (X denotes button color)

Shroud Protected Button, 2 Pole
Button is protected against accidental actuation by a black anodized shroud.
- Operating Force: 4.0 lbs. +/- 1.0 lb.
- Rating: 5 amps Resistive
- 2 amps Inductive @ 28VDC
- Button: Red nylon
   P4-900013

Miniature with Shrouded Pushbutton, Unsealed
- Total Travel: 0.070” max
- Operating Force: 2.5 lbs. max
- Circuit: DPDT-DB
- Rating: 8 amps Resistive @ 28VDC
- Button: Black nylon
- Housing: Clear anodized aluminum
- Plunger: Unsealed
   P4-10090

Miniature with Shrouded Pushbutton, Dusttight Sealed
- Total Travel: 0.100” max
- Operating Force: 4.0 lbs. max
- Circuit: DPDT-DB
- Rating: 8 amps Resistive @ 28VDC
- Button: Black nylon
- Housing: Black anodized aluminum
- Plunger: Dusttight sealed
   P4-900019

Specifications Subject To Change Without Notice
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