## Suggested Panel Cutout



Maximum Panel Thickness: 0.315 [8.0]

## Actuator Options



Terminal Options


## FEATURES:

- Vandal and Water Resistant
- Long Life Expectancy
- Custom Laser Engraved Markings


## SPECIFICATIONS:

Rating: 2A 48VDC
Temperature: $-20^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$
Electrical Life: 200,000 Cycles
Contact Resistance: $50 \mathrm{~m} \Omega$ Max. at 1A 12VDC Insulation Resistance: $1,000 \mathrm{M} \Omega$ Min. Dielectric Strength: 2,000VAC for 1 Minute
Intrusion Protection: IP65

## MATERIALS:

Bushing: Gold Plated Brass Nickel Plated Brass Stainless Steel
Actuator: Gold Plated Brass Nickel Plated Brass Stainless Steel
BASE: Polybutylene Terephthalate, UL94 V-2
Sealing: Silicone
Stainless Steel
Inner Assembly: Polyamide 6/6 Brass
Spring: Steel
Contact: Silver Plated Brass
Terminals: Silver Plated Brass Steel
Hardware: Nickel Plated Brass


PV1H640NN


PV1F640SS

## EXAMPLE PART NUMBERS:

PV1F640GG $\underset{\text { Flat Actuator, Gold Plated Finish }}{\text { 1P Off-(On) }}$
PV1F640NN 1P Off-(On)
Flat Actuator, Nickel Plated Finish
PV1F640SS 1 Off-(On)
Flat Actuator, Stainless Steel Body
PV1H640GG 1 Off-(On)
High Actuator, Gold Plated Finish High Actuator, Gold Plated Finish
PV1H640NN 1P Off-(On
High Actuator, Nickel Plated Finish
PV1H640SS 1P Off-(On)

High Actuator, Stainless Steel Body
PV1S640GG 1P Off-(On)
Domed Actuator, Gold Plated Finish
PV1S640NN $1 P$ Off-(On)
Domed Actuator, Nickel Plated Finish
PV1S640SS $1 P$ Off-(On)
Domed Actuator, Stainless Steel Body

PV1S640GG



Suggested Panel Cutout


Maximum Panel Thickness: 0.236 [6.0]

## Actuator Options


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Terminal Options


## FEATURES:

- Vandal Resistant
- Water Resistant
- Long Life Expectancy


## SPECIFICATIONS:

Rating: 2A 48VDC
Temperature: $-20^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$
Electrical Life: 200,000 Cycles
Contact Resistance: $50 \mathrm{~m} \Omega$ Max. at 1A 12VDC
Insulation Resistance: $1,000 \mathrm{M} \Omega$ Min.
Dielectric Strength: 2,000VAC for 1 Minute
Ingress Protection: IP65

## MATERIALS:

Bushing: Gold Plated Brass

> Nickel Plated Brass Stainless Steel
Actuator: Gold Plated Brass Nickel Plated Brass Stainless Steel
BASE: Polybutylene Terephthalate, UL94 V-2
Sealing: Silicone
Inner Assembly: Polyamide 6/6
Brass
Spring: Stainless Steel
Contact: Silver Plated Brass
Terminals: Silver Plated Brass Steel
Hardware: Nickel Plated Brass


PV2F640SS


PV2S640NN

EXAMPLE PART NUMBERS:
PV2S640GG
PV2H640SS


## PV3 Series

## Long Body Version



Short Body Version


Illumination Options


Suggested Panel Cutout


Maximum Panel Thickness: Long Body: 0.551 [14.0 Short Body: 0.394 [10.0]

Actuator Options



## FEATURES:

- Vandal and Water Resistant
- Many Function, Illumination, and Materials
- Long Life Expectancy


## SPECIFICATIONS:

Rating: 2A 48VDC
Illumination Base Rating:
Red, Yellow, and Orange: 20 mA 1.8 V
Blue, Green, and White: 20 mA 2.8 V
Temperature: $-20^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$
Electrical Life: 50,000 Cycles
Contact Resistance: $50 \mathrm{~m} \Omega$ Max. at 1 A 12 VDC
Insulation Resistance: $1,000 \mathrm{M} \Omega$ Min.
Dielectric Strength: 2,000 VAC for 1 Minute Ingress Protection: IP40 / IP67

## MATERIALS:

Bushing: Gold Plated Brass Nickel Plated Brass Stainless Steel Aluminum
Actuator: Gold Plated Brass Nickel Plated Brass Stainless Steel Aluminum
BASE: Polybutylene Terephthalate, UL94 V-2 Polycarbonate, UL94 V-2
Inner Assembly: Polyoxymethlene, UL94 HB Polycarbonate, UL94 V-2 Brass
Spring: Phosphor Bronze
Mobile Contact: Phosphor Bronze
Contact: Nickel-Silver
Terminals: Silver Plated Brass
Hardware: Nickel Plated Brass

## EXAMPLE PART NUMBERS:

PV3F230NN 1P On-On
Flat Actuator, Nickel Plated Finish

PV3F230SS 1POn-On Flat Actuator, Stainless Steel Body
PV3F2B0NN $1 P$ On-(On) Flat Actuator, Nickel Plated Finish
PV3F2B0SS 1POn-(On)

Flat Actuator, Stainless Steel Body
PV3F2G0NN 2 On On On
Flat Actuator, Nickel Plated Finish

PV3F2GONN-214 2P On-On Flat Actuator, Red Dot Illum., Nickel Plated
PV3F2G0NN-314 2POn-On Flat Actuator, Red Ring Illum., Nickel Plated
PV3F2G0SS 2POn-On Flat Actuator, Stainless Steel Body
PV3F2HONN 2POn-(On) Flat Actuator, Nickel Plated Finish
PV3F2H0NN-214 2P On-(On) Flat Actuator, Red Dot Illum., Nickel Plated

PV3F2HONN-314 2P On-(On) Flat Actuator, Red Ring Illum., Nickel Plated
PV3F2H0SS 2P On-(On) Flat Actuator, Stainless Steel Body
PV3H230NN 1POn-On High Actuator, Nickel Plated Finish
PV3H2B0NN $1 P \mathrm{On}$-(On) High Actuator, Nickel Plated Finish
PV3H2BOSS 1POn-(On) High Actuator, Stainless Steel Finish
PV3H2GONN 2P On-On High Actuator, Nickel Plated Finish

PV3H2GONN-214 2P On-On High Actuator, Red Dot Illum., Nickel Plated
PV3H2GONN-314 2P On-On High Actuator, Red Ring Illum., Nickel Plated
PV3H2HONN 2P On-(On) High Actuator, Nickel Plated Finish

## PV4 Series

Double Throw Style


Suggested Panel Cutout


Maximum Panel Thickness: 0.394 [10.0]

## Illumination Options



## FEATURES:

- Vandal and Water Resistant
- Long Life Expectancy
- Colored Bezel and Actuator Options


## SPECIFICATIONS:

Rating: 2A 24VDC; .7A 125VAC (cURus)
Illumination Base Rating:
Red, Yellow, and Orange: 20 mA 1.8 V
Blue, Green, and White: 20 mA 2.8 V
Temperature: $-20^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$
Electrical Life: 50,000 Cycles
Contact Resistance: $50 \mathrm{~m} \Omega$ Max. at 1A 12VDC
Insulation Resistance: $1,000 \mathrm{M} \Omega$ Min. 500VDC
Dielectric Strength: $2,000 \mathrm{VAC}$ for 1 Minute
Intrusion Protection: IP65

## MATERIALS:

Bushing: Stainless Steel
Aluminum
Actuator: Stainless Steel
Aluminum
Base: Polybutylene Terephthalate, UL94 V-2
Sealing: Silicone
Inner Assembly: Polyamide 6/6
Brass

Spring: Stainless Steel
Contact: Silver Plated Brass
Terminals: Silver Plated Brass
Hardware: Nickel Plated Brass


## EXAMPLE PART NUMBERS:

PV4F2YOSS-201 2P Off-(On), On-(Off) Stainless Steel Finish, Clear Dot Illum., 2V
PV4F2YOSS-211 2P Off-(On), On-(Off) Stainless Steel Finish, Red Dot Illum., 2V

PV4F2Y0SS-214 2P Off-(On), On-(Off) Stainless Steel Finish, Red Dot Illum., 12V

PV4F2YOSS-216 2P Off-(On), On-(Off) Stainless Steel Finish, Red Dot Illum., 125V

PV4F2Y0SS-241 2P Off-(On), On-(Off) Stainless Steel Finish, Blue Dot Illum., 2 V
PV4F2YOSS-244 2P Off-(On), On-(Off) Stainless Steel Finish, Blue Dot Illum., 12V

PV4F2Y0SS-301 2P Off-(On), On-(Off) Stainless Steel Finish, Clear Ring Illum., 2V

PV4F2Y0SS-311 2P Off-(On), On-(Off) Stainless Steel Finish, Red Ring Illum., 2V

PV4F2Y0SS-314 2P Off-(On), On-(Off) Stainless Steel Finish, Red Ring Illum., 12V
PV4F2Y0SS-316 2P Off-(On), On-(Off) Stainless Steel Finish, Red Ring Illum., 125V

PV4F2Y0SS-341 2P Off-(On), On-(Off) Stainless Steel Finish, Blue Ring Illum., 2V

PV4F2YOSS-344 2P Off-(On), On-(Off) Stainless Steel Finish, Blue Ring Illum., 12V


Suggested Panel Cutout


Maximum Panel Thickness: 0.138 [3.5]

## Terminal Options



## FEATURES:

- Vandal Resistant
- Water Resistant
- Long Life Expectancy


## SPECIFICATIONS:

Rating: 2A 48VDC
Temperature: $-20^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$
Electrical Life: 200,000 Cycles
Contact Resistance: $50 \mathrm{~m} \Omega$ Max, at 1 A 12 VDC
Insulation Resistance: $1,000 \mathrm{M} 2 \mathrm{Min}$. at 500VDC
Dielectric Strength: $2,000 \mathrm{VAC}$ for 1 Minute
Ingress Protection: IP65

## MATERIALS

Bushing: Aluminum
Nickel Plated Brass
Stainless Steel
Actuator: Polybutylene Terephthalate, UL94 V-2 Nickel Plated Brass Stainless Steel
Base: Polybutylene Terephthalate, UL94 V-2
Sealing: Silicone
Inner Assembly: Polyamide 6/6 Brass
Spring: Steel
Contact: Silver Plated Brass
Terminals: Silver Plated Brass Steel
Hardware: Brass


PV5S640SS


E*SWITCH

## PV6 Series Anti-vandal Switch



Applications / Markets


## Specifications

Electrical Rating: 2A, 48VDC
Mechanical Life: 1,000,000 Cycles
Electrical Life: 50,000 Cycles
Contact Resistance: $50 \mathrm{~m} \Omega$ Max.
Insulation Resistance: $1000 \mathrm{M} \Omega \mathrm{Min}$.
Dielectric Strength: 2,000VAC
Operating/Storage Temperature: $-20^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$
Travel: 1.50 mm
Moisture Protection: IP65
Contact Arrangement: SPST Off-(On)
Actuation Force: 400 gf
Panel Thickness: 1-10mm
Mounting Nut Torque: $5-14 \mathrm{Nm}$

## Features \& Benefits

- 16 mm diameter panel cutout
- RGB LED option
- Dot or ring illumination options available
- Multiple actuator options
- Pilot indicator option
- IP65 rated, Off-(On), SPST


## Part Number Configurator



E-SWITCH $\qquad$

## PV6 Series Anti-vandal Switch




## Suggested Panel Cutout



Maximum Panel Thickness: Momentary Version: 0.315 [8.0mm] Maintained Version: 0.472 [12.0mm]

## FEATURES:

- Vandal and Water Resistant
- Long Life Expectancy


## SPECIFICATIONS:

Rating: 2A 48VDC
Illumination Base Rating:
Red, Yellow, and Orange: 20 mA 1.8 V
Blue, Green, and White: 20 mA 2.8 V
Temperature: $-20^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$
Contact Resistance: $50 \mathrm{~m} \Omega$ Max.
Insulation Resistance: $1,000 \mathrm{M} \Omega$ Min.
Dielectric Strength: $2,000 \mathrm{VAC}$
Mechanical Life: 1,000,000 Cycles
Electrical Life: 50,000 Cycles

## MATERIALS:

Button: Stainless Steel Nickel Plated Brass
Body: Stainless Steel
Nickel Plated Brass
Base: PBT
contacts: Gold Plated Over Silver Alloy

Illumination Options



PV7F2Y0SS-311


EXAMPLE PART NUMBERS:
PV7F2TOSS-344 1P Off-On/1P On-Off Flat Actuator, Blue Ring Illumination, 12V PV7F2YOSS $1 P$ Off-(On)/1P On-(Off) Flat Actuator
PV7F2Y0SS-241 1P Off-(On)/1P On-(Off) Flat Actuator, Blue Dot Illumination, 2.8 V

PV7F2Y0SS-313 1P Off-(On)/1P On-(Off) Flat Actuator, Red Ring Illumination, 6V
PV7F2Y0SS-351 $1 P$ Off-(On)/1P On-(Off) Flat Actuator, Yellow Ring Illumination, 1.8 V

## PV8 Series

Suggested Panel Cutout


Maximum Panel Thickness Momentary Version: 0.394 [10.0mm] Maintained Version: 0.472 [12.0mm]


## FEATURES:

- Vandal and Vandal Resistant
- Long Life Expectancy
- Many Function and Illumination Options


## SPECIFICATIONS:

## Rating: 2A 36VDC

Illumination Base Rating:
Red, Yellow, and Orange: 20 mA 1.8 V
Blue, Green, and White: 20 mA 2.8 V
Temperature: $-20^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$
Contact Resistance: $50 \mathrm{~m} \Omega$ Max.
Insulation Resistance: $1,000 \mathrm{M} \Omega$ Min.
Dielectric Strength: $2,000 \mathrm{VAC}$
Mechanical Life: 1,000,000 Cycles
Electrical Life: 50,000 Cycles
MATERIALS:
Button: Stainless Steel Nickel Plated Brass
Body: Stainless Steel
Nickel Plated Brass
Base: PBT
CONTACTS: Gold Plated Over Silver Alloy

Illumination Options


Maintained Version Dimensions


EXAMPLE PART NUMBERS:
PV8F2U0SS-344 2P Off-On/2P On-Off Flat Actuator, Blue Ring Illumination, 12V
PV8F2V0SS-211 2P Off-(On)/2P On-(Off) Flat Actuator, Red Dot Illumination, 1.8 V
PV8F2V0SS-321 2P Off-(On)/2P On-(Off) Flat Actuator, Orange Ring Illumination, 1.8 V
PV8F2Y0SS-235 1P Off-(On)/1P On-(Off) Flat Actuator, Green Dot Illumination, 24V
PV8F2YOSS-313 1P Off-(On)/1P On-(Off) Flat Actuator, Red Ring Illumination, 6V

E•SWITCH ${ }^{\circ}$

## PV9 Series Anti-vandal Switch



Applications / Markets


RoHS

## Specifications

Electrical Rating: 2A, 48VDC
Mechanical Life: 1,000,000 Cycles
Electrical Life: 50,000 Cycles
Contact Resistance: $50 \mathrm{~m} \Omega$ Max.
Insulation Resistance: $1000 \mathrm{M} \Omega \mathrm{Min}$ @ 500VDC
Dielectric Strength: 2,000VAC
Operating/Storage Temperature: $-20^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$
Travel: 2.8 mm
Moisture Protection: IP65
Contact Arrangement: SPDT or DPDT
Actuation Force: 660 gf
Panel Thickness: $1-10 \mathrm{~mm}$
Hex Nut Torque: $5-14 \mathrm{Nm}$

## Features \& Benefits

- 28mm diameter panel cutout
- Dot or ring illumination options available
- Multiple switch functions available
- Multiple illumination voltage options
- IP65 rated
- SPDT or DPDT


## Part Number Configurator



E-SWITCH $\qquad$

## Body Dimensions



Latching Switch Dimensions


SPDT MOMENTARY（Y）


Momentary Switch Dimensions
$\qquad$

## Actuator Options



Non-Illuminated


Ring Illuminated


Dot Illuminated


## Schematics



| ${ }^{1} \mathrm{O}$ | $\mathrm{O}_{2}$ | ${ }_{1} \mathrm{O}$ | $\mathrm{O}_{2}$ |
| :--- | :--- | :--- | :--- | :--- |
| ${ }_{3} \mathrm{O}$ | $\mathrm{O}_{4}$ | ${ }_{3} \mathrm{O}$ | $\mathrm{O}_{4}$ |
| ${ }_{1} \mathrm{O}$ | $\mathrm{O}_{2}$ | ${ }_{1} \mathrm{O}$ | $\mathrm{O}_{2}$ |
| ${ }_{3} \mathrm{O}$ | $\mathrm{O}_{4}$ | ${ }_{3} \mathrm{O}$ | $\mathrm{O}_{4}$ |
| ${ }_{(-)} \mathrm{O}^{14}$ | $\mathrm{O}_{(+)}$ |  |  |
| ILLUMINATED |  |  |  |
| NON-ILLUMINATED |  |  |  |
| DPDT SCHEMATIC |  |  |  |

$\qquad$

## Specifications

Contact Arrangement: Lamp indicator Operating/Storage Temperature: $-25^{\circ} \mathrm{C}$ to $55^{\circ} \mathrm{C}$ Lamp Life: 40,000 Hours Nominal Ingress Protection: IP67
Panel Thickness: $1-6 \mathrm{~mm}$ or $1-10 \mathrm{~mm}$, (depending on mounting diameter)
Mounting Nut Torque: $5-14 \mathrm{Nm}$

## Features \& Benefits

- Pilot indicator light
- Multiple panel cutout sizes -6 mm to 19 mm dia.
- Multiple illumination voltage options
- Multiple LED color options
- IP67 rated


## Part Number Configurator



E-SWITCH ${ }^{\circ}$ $\qquad$

## Body Dimensions

PVL06


PVL08


## Body Dimensions

PVL10

$\not \varnothing_{10.20}$
[.402 in]


PVL12


LED Schematic

## Body Dimensions

PVL14


PVL16



