# PHA Series Short Stroke Pushbutton Switches



## Features/Benefits

- Momentary or latching action
- Low cost, reliable contact design
- 2 & 4 pole configurations
- Sealed contacts
- Optional buttons
- RoHS compliant

# Typical Applications

- Computers and peripherals
- Instrumentation and measurement equipment
- Non-power, on-off switch applications

# **Specifications**

SWITCHING POWER MAX.: 3 W DC SWITCHING VOLTAGE MAX.: 30 V DC SWITCHING CURRENT MAX.: 100 mA DC

DIELECTRIC STRENGTH (50 Hz/1 min.): 500 V between open contacts. 1500 V between chassis and contacts.

OPERATING LIFE: 10,000 cycles at rated load CONTACT RESISTANCE: 20 m ohms initial  $\Omega$  INSULATION RESISTANCE: 100 M ohms  $\Omega$ 

TOTAL TRAVEL/LATCHING TRAVEL: 2.5mm/1.5mm

(.098 inch/.059 inch)
OPERATING FORCE:

170 grams  $\pm$  50 grams (1.67  $\pm$  0.98N) 230 grams  $\pm$ 50 grams (2.26  $\pm$  0.98N)

SEALING: Sealed contacts.

#### **Materials**

FIXED TERMINAL: Brass, silver plated.

MOVABLE CONTACT: Phosphor bronze, silver plated.

SWITCH BODY: PPE
ACTUATOR: POM
STANDOFF CLIP: POM

RETURN SPRING: Music wire.

RETURN SPRING RETAINER: Carbon steel, tin plated.

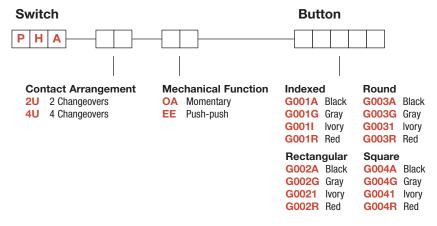
DETENT SPRING PLATE: Phosphor bronze.

DETENT SPRING: Stainless steel.
BASE: Laminated phenolic.
TERMINAL SEAL: Epoxy.

**NOTE:** Specifications and materials listed above are for switches with standard options. For information on specific and custom switches, consult Customer Service Center.

## **Build-A-Switch**

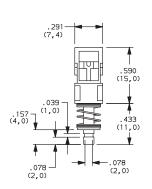
To order, simply select desired option from each category and place in the appropriate box. Available options are shown and described on pages A-85 thru A-87. For additional options not shown in catalog, consult Customer Service Center.

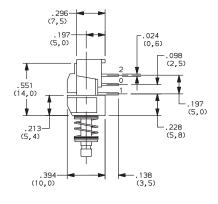


#### **BUTTON REMOVAL**

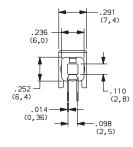
A button of a push-push switch should only be removed in the "OFF" non-latching position.

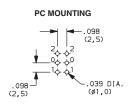




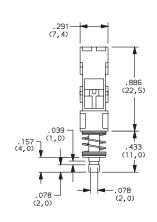


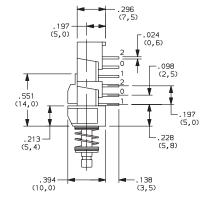




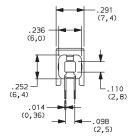


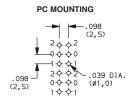
# **4U** 4 CHANGEOVERS













Dimensions are shown: Inches (mm) Specifications and dimensions subject to change



# **PHA Series Short Stroke Pushbutton Switches**

# CONTACT ARRANGEMENT ----

OPTION CODE	NO. OF POLES *	SCHEMATIC
<b>2</b> U	2PDT	0 0 0 1 0 0 2
4U	4PDT	2X 1 0 0 2 1 0 2

<sup>\*</sup>Non-shorting contacts.

# MECHANICAL FUNCTION

OPTION CODE	FUNCTION
OA	Momentary
EE	Push-push



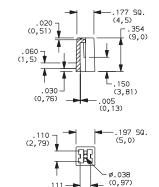


# **BUTTONS**

## Indexed

G001A G001G Gray G001I Ivory G001R Red

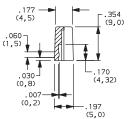


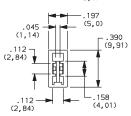


# Rectangular

G002A Black G002G Gray G002I Ivory G002R Red



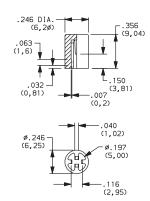




#### Round

G003A Gray G003G G003I Ivory G003R Red

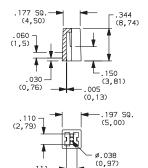




# **Square**

G004A Black G004G Gray G004I Ivory G004R Red





.111 (2,82)



Dimensions are shown: Inches (mm) Specifications and dimensions subject to change

