

B Bushing diameter 30 mm (1.181)
Sealed to IP68 and IP69K (switches mounted on panel)
Easy to clean metal surface
Very long life expectancy
$\square$ Ring illumination: flush or prominent ring

| ENVIRONMENTAL SPECIFICATIONS |
| :--- |
| - Sealing : IP68 per IEC 60529 , IP69K per DIN 40050-9 |
| (switches mounted on panel), |
| - Operating temperature : $-40^{\circ} \mathrm{C}$ to $+75^{\circ} \mathrm{C}\left(-40^{\circ} \mathrm{F}\right.$ to $\left.+167^{\circ} \mathrm{F}\right)$ |

## ELECTRICAL SPECIFICATIONS

- Max. current/voltage rating with resistive load : 1 A 24 VAC/DC
- Switch resistance ON : $10 \Omega$ max.
- Switch resistance OFF : $5 \mathrm{M} \Omega \mathrm{min}$.
- Life expectancy : 50 million cycles
- LED consumption : 20 mA



Continuous immersion in water IP68 test conditions
Continuous immersion in water (1m, 24 hours)


High pressure, high temperature wash down IP69K test conditions
. Pressure : 80-120 bars
. Distance : 15 cm
. Temperature : $80^{\circ} \mathrm{C} \pm 5^{\circ} \mathrm{C}$
. Flow : $14-16 \mathrm{l} / \mathrm{mn}$
. Duration : 30 seconds per position

| MATERIALS |
| :--- |
| - Case : aluminum, anodized |
| or stainless steel 316 L |
| - Multi-wire leads section $0,22 \mathrm{~mm}^{2}$ |
| length 300 mm , twisted by pair |
| - Cable, length 300 mm , section |
| depending on switch model |

Note : to maintain the ESD performance, always add a ground washer when the panel is made of non-conductive material (PVC, polycarbonate).
For part numbers, see "Mounting accessories" on the following pages.
(1) One-piece bushing
(2) Epoxy sealed terminals
(3) O-ring

Piezo switches
Electrical functions

FINGER PRESSURE applied to switch

1 = pressure
$0=$ no pressure


## OUTPUT

- Momentary NO (pulse)

No external power supply required
$1=$ closed output
$0=$ open output


Wiring diagrams

|  | Non-illuminated | 1 LED * | 2 LEDs | 3 LEDs |
| :---: | :---: | :---: | :---: | :---: |
| Momentary NO |  |  |  |  |

Legend : $\mathrm{C}=$ yellow, $\mathrm{D}=$ blue, $\mathrm{B}=$ black, $\mathrm{A}=$ same colour as LED $\quad{ }^{*}$ LED colour is indicated by the bottom of the product.


For options not listed above, please contact APEM.

Dimensions : First dimensions are in mm while inches are shown as bracketed numbers.


[^0]

Mounting accessories : standard hardware supplied :1 hex nut U6730 (36 mm ac. flats) and 1 O-ring.
Always add a ground washer U7340 when the panel is non-conductive (PVC, polycarbonate).

## PBA series

Piezo switches Ø 30 mm
Illuminated or non-illuminated

MODEL STRUCTURE $\square$

Shown with flying lead terminals
Non-illuminated, operator height $2.50 \mathrm{~mm}(.098)$


PBAMI $\longrightarrow$ O-ring居

## ELECTRICAL FUNCTION



A $\quad$ NO pulse

## TERMINALS



| F $\quad \begin{array}{l}\text { Flying leads } \\ \text { Cable }\end{array}$ |
| :--- |



CASE COLOURS / MATERIALS


## RATINGS



002
1 A 24 VAC or DC

## LED VOLTAGE



Blank : non-illuminated
C $\quad 5 \mathrm{VDC}$
D $\quad 12 \mathrm{VDC}$
E 24 VDC

## PBA series

Piezo switches $\emptyset 30 \mathrm{~mm}$

## Options

## LED COLOURS



Blank : non-illuminated
Illuminated 1 LED *
OB : blue- OG : green- OS : red - OY : yellow - OW : white
Illuminated 2 LEDs (with translucent ring)
2A: red/green-2B : red/yellow-2C: red/blue-2D : red/white-2E : green/blue-2F : green/yellow-2G: green/white
2 H : blue/yellow-2I : blue/white - 2K : yellow/white
Illuminated 3 LEDs (with translucent ring)
3A : red/green/blue - 3B : red/green/yellow - 3D : red/green/white - 3E : red/blue/yellow - 3F : red/blue/white 3G: red/yellow/white - 3H : green/blue/yellow-3I : green/blue/white-3J : green/yellow/white - 3K : blue/yellow/white

* LED colour is indicated by the bottom of the product.


[^0]:    NOTICE : please note that not all combinations of above numbers are available.
    Refer to the following pages for further information.

