

PBA series

Piezo switches Ø 30 mm



DISTINCTIVE FEATURES

Bushing diameter 16 (.630), 19 (.748), 22 (.866) or 30 mm (1.181)

Sealed to IP68 and IP69K (switches mounted on panel)

Easy to clean metal surface

Very long life expectancy

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 °C to +75 °C (-40 °F to + 167 °F)



ELECTRICAL SPECIFICATIONS

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



GENERAL SPECIFICATIONS

- Operating force : 6 to 12 N
- Torque : 1.5 Nm min. - 10 Nm max.



MATERIALS

- Case : aluminum, anodized or stainless steel 316L
- Multi-wire leads section 0.22 mm² length 300 mm, twisted by pair
- Cable, length 300 mm, section depending on switch model

APEM products may be recycled at end-of-life for the re-claiming of valuable metal components.

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.

The company reserves the right to change specifications without notice.



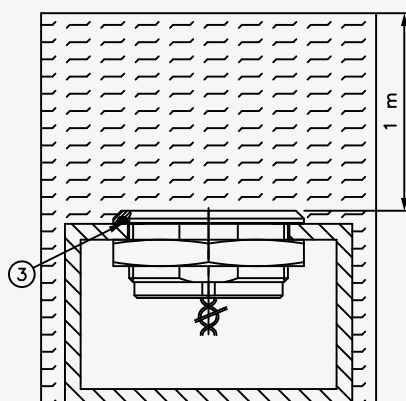
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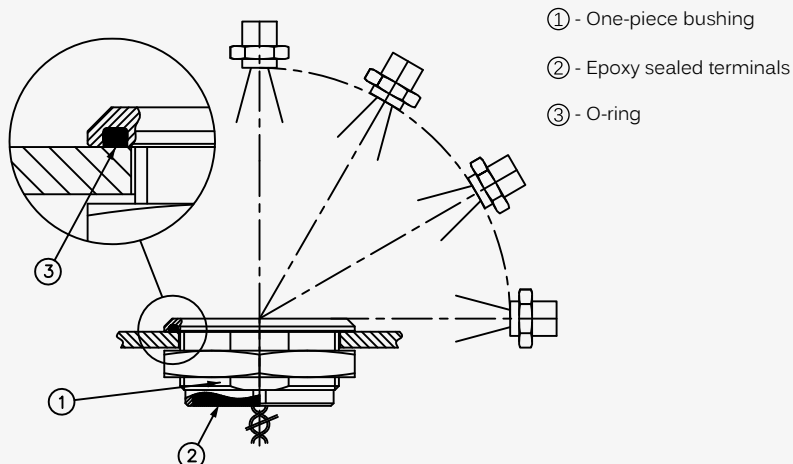
SEALING

SEALING IP68



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

SEALING IP69K

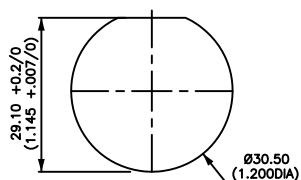


High pressure, high temperature wash down
IP69K test conditions

- . Pressure : 80 - 120 bars
- . Distance : 15 cm
- . Temperature : 80 °C ± 5 °C (176 °F ± 41 °F)
- . Flow : 14 - 16 l/mn
- . Duration : 30 seconds per position



PANEL CUT-OUT



PBA series

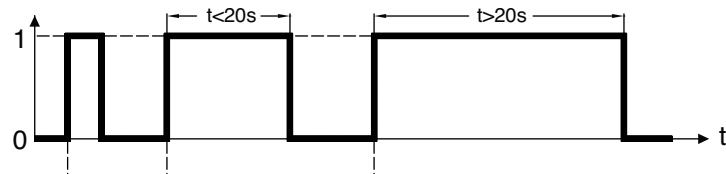
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ELECTRICAL FUNCTIONS

FINGER PRESSURE APPLIED TO SWITCH

1 : pressure / 0 : no pressure

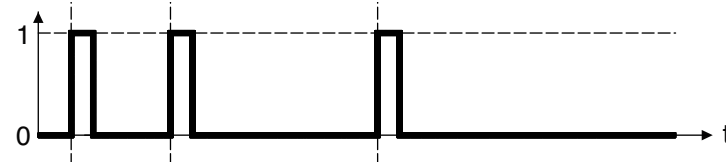


OUTPUT

1 : closed output / 0 : open output

Momentary NO (pulse)

No external power supply required



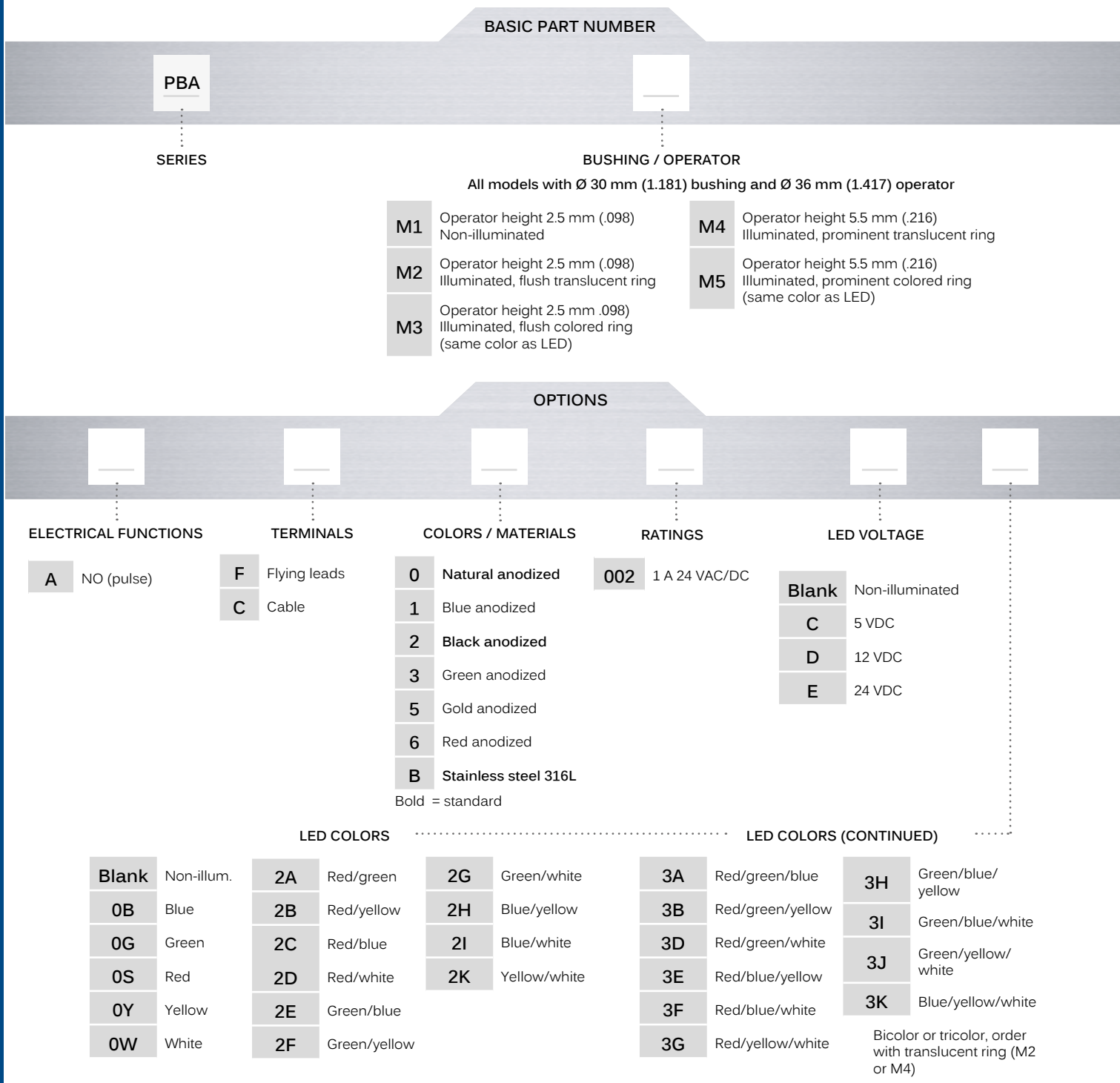
WIRING DIAGRAMS

	Non-illuminated	1 LED *	2 LEDs	3 LEDs
Momentary NO				
Legend : C : yellow, D : blue, B : black , A : same color as LED			* LED color is indicated by the bottom of the product.	

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BUILD YOUR PART NUMBER



ABOUT THIS SERIES

- On the following pages, you will find successively basic part numbers of switches and options in the same order as in above chart.
- Notice** : please note that not all combinations of above numbers are available. Refer to the following pages for further information.
 - 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).

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NON-ILLUMINATED
OPERATOR HEIGHT 2.50 MM (.098)



PBAM1

FLUSH ILLUMINATED RING
OPERATOR HEIGHT 2.50 MM (.098)



Translucent ring

PBAM2

Colored ring

PBAM3

PROMINENT ILLUMINATED RING
OPERATOR HEIGHT 5.50 MM (.216)



Translucent ring

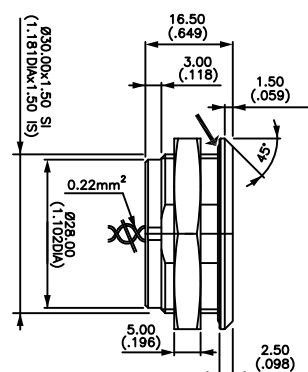
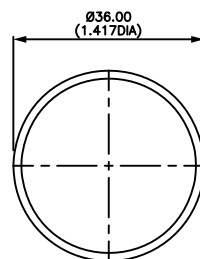
PBAM4

Colored ring

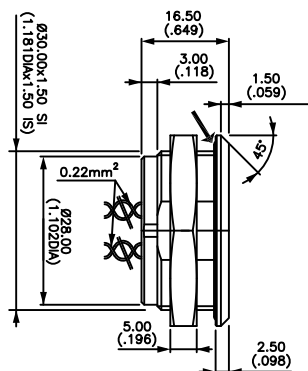
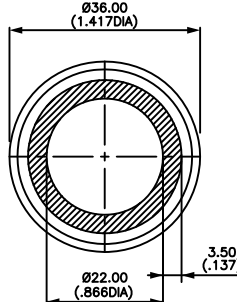
PBAM5

Wire colors : see "Wiring diagrams".

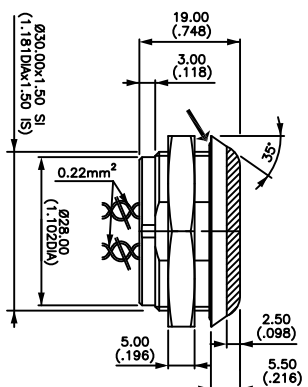
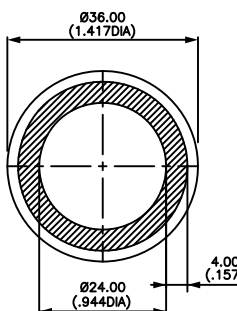
→ O-RING



→ O-RING



→ O-RING



ELECTRICAL FUNCTION

BASIC P/N

A NO pulse

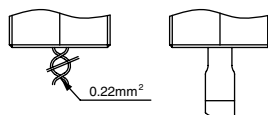
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TERMINALS



- F Flying leads
C Cable



CASE COLORS / MATERIALS



- 0 Natural anodized aluminum
1 Blue anodized aluminum
2 **Black anodised aluminum**
3 Green anodized aluminum

- 5 Gold anodized aluminum
6 Red anodised aluminum
B Stainless steel 316L
Bold = standard

RATINGS



002 1 A 24 VAC or DC

LED VOLTAGE



- Blank Non-illuminated
C 5 VDC
D 12 VDC
E 24 VDC

LED COLORS



Blank Non-illuminated

Integrated LED resistor

Illuminated 1 LED *

0B : blue - 0G : green - 0S : red - 0Y : yellow - 0W : 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
2H : 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 color is indicated by protective resin color on bottom of unit.

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[PBAM1AFB002](#)