

CP series

Capacitive switches



DISTINCTIVE FEATURES

Activated by the touch of a finger

50 million cycles

Auto-calibration function

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

Momentary or latching



ENVIRONMENTAL SPECIFICATIONS

- Sealing : IP68 and IP69K according to IEC 60529
- Triggered by flowing water
- Impact resistance : IK10
- Operating temperature : -20 °C to +65 °C (-4 °F to +149 °F)
- ESD : complies with EN61000-4-2 (extended) ± 8KV (20 contacts) and ± 15KV (20 air discharges)



ELECTRICAL AND GENERAL SPECIFICATIONS

- Max. current/voltage rating : 200 mA 24 VDC
- Supply voltage : 5 VDC, 12 VDC or 24 VDC
- Life expectancy : 50 million cycles
- Power consumption non-illuminated : 7 mA
- Power consumption illuminated : 25 mA
- Operating force : 0 N
- LED state for output image option :
 - 1 LED : the LED is ON when the output is closed.
 - 2 LEDs : first color is ON when the output is open. Second color is ON when the output is closed.
- Output type : NPN



MATERIALS

- Case : aluminum, anodized
- Multi-wire leads section 0.22 mm² length 300 mm
- Cable, length 300 mm, section depending on switch model
- Connector : HE14 6V compatible with AMP/TYCO281839-3

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

The company reserves the right to change specifications without notice.



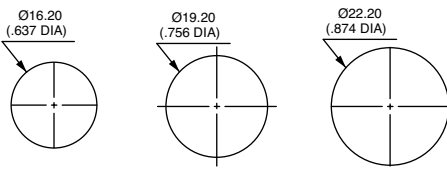
CP series

Capacitive switches

ADJUSTABLE SENSITIVITY

- Connection to ground by means of the yellow wire increases sensitivity (momentary version only).

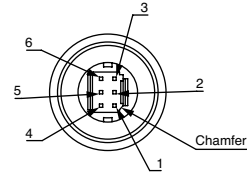
PANEL CUT-OUT



⚠ This switch should not be used in safety applications.

WIRING FOR SWITCH CONNECTOR

- Pin 1 : GND
- Pin 2 : output
- Pin 3 : +V
- Pin 4 : LED 2
- Pin 5 : sensitivity
- Pin 6 : LED 1



WIRING DIAGRAMS

	Non-illuminated	Illuminated 1 LED		Illuminated 2 LEDs	
		Output indicator	Independent	Output indicator	Independent
OFF-ON					
OFF - MOM					

Legend :

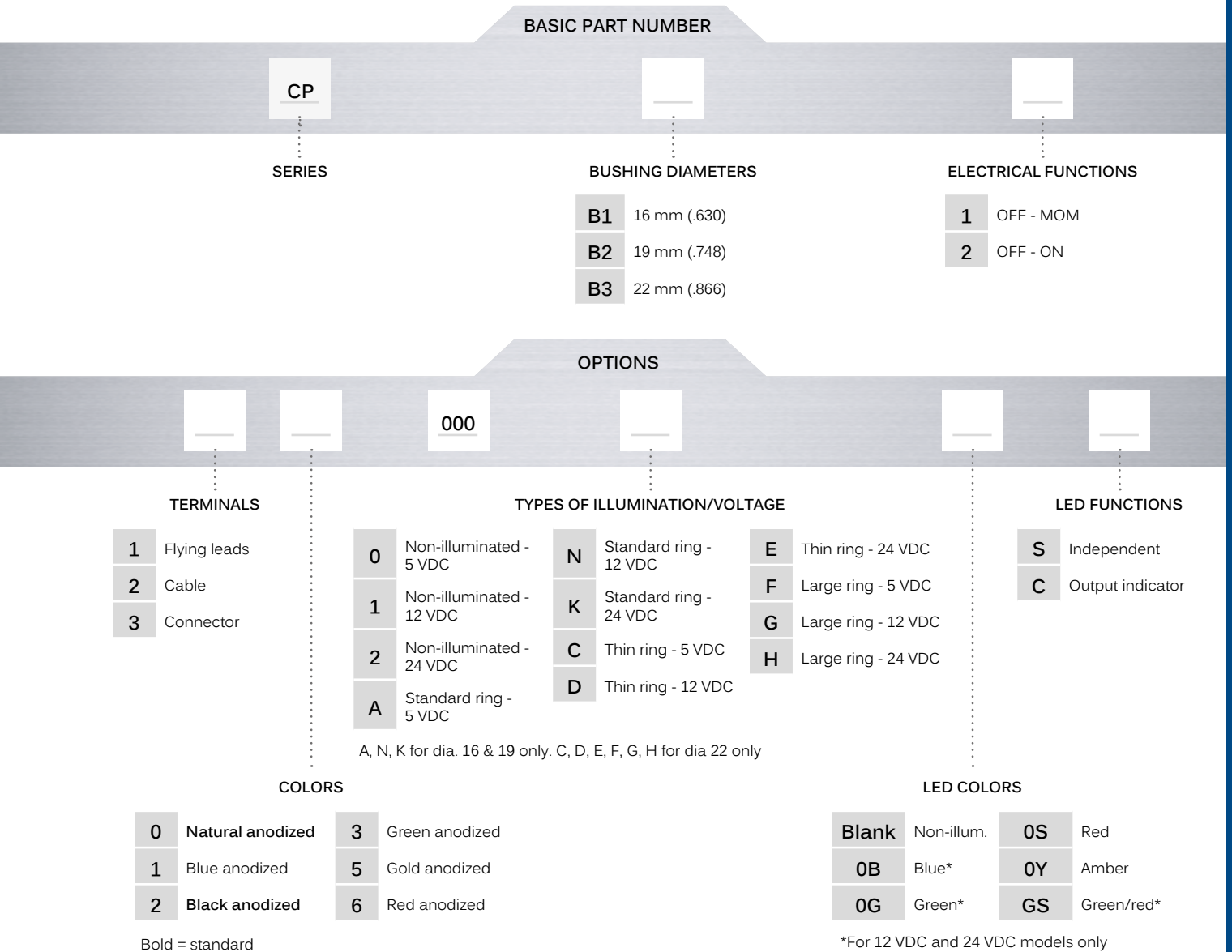
R : red / +V, **Black** : black / GND, W : white / output, Y : yellow / sensitivity, G : green / LED 1, **Blue** : blue / LED2
 Wire colors may vary. Always refer to the label on the switch.

CP series

Capacitive switches



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.

CP series

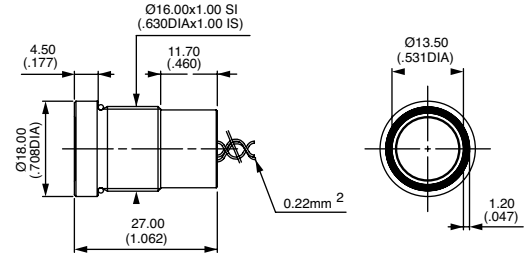
Capacitive switches

BUSHING Ø16 MM (.630) - STANDARD RING



Momentary			
CPB11	OFF	MOM	
Latching			
CPB12	OFF	ON	

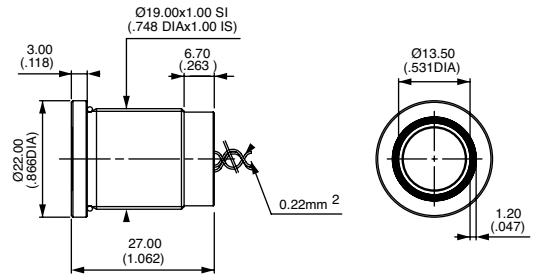
Shown with flying lead terminals



BUSHING Ø19 MM (.748) - STANDARD RING



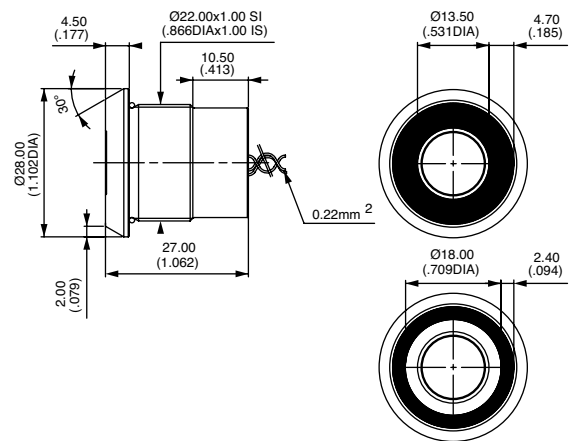
Momentary			
CPB21	OFF	MOM	
Latching			
CPB22	OFF	ON	



BUSHING Ø22 MM (.866) - LARGE OR THIN RING



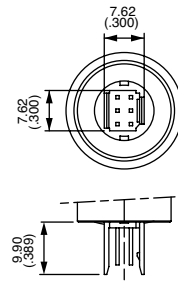
Momentary			
CPB31	OFF	MOM	
Latching			
CPB32	OFF	ON	



TERMINALS



- 1 Flying leads
- 2 Cable
- 3 Connector HE14 6 V (see opposite)



CP series

Capacitive switches

CASE COLORS



- 0 **Natural anodized**
- 1 Blue anodized
- 2 **Black anodised**
- 3 Green anodized
- 5 Gold anodized
- 6 Red anodised

Bold = standard

TYPE OF ILLUMINATION



	5 VDC	12 VDC	24 VDC
Non-illuminated	0	1	2
Standard ring (Ø 16 & 19 only)	A	N	K
Thin ring (Ø 22 only)	C	D	E
Large ring (Ø 22 only)	F	G	H

LED COLORS



- Blank Non-illuminated
- 0B Blue
- 0G Green
- 0S Red
- 0Y Amber
- GS Green/red

⚠ Blue, green and green/red LEDs available on 12 VDC and 24 VDC models only.

LED FUNCTIONS



- S Independent
- C Output indicator