# CP series

### Capacitive switches

Distinctive features and specifications



- □ Activated by the touch of a finger Even with surgeon gloves
- □ 50 million cycles
- □ Auto-calibration function
- ☐ Bushing diameter 16, 19 or 22 mm
- Momentary or latching

#### **ENVIRONMENTAL SPECIFICATIONS**

• Sealing: IP68 and IP69K according to IEC 60529

New!

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

#### **ELECTRICAL AND GENERAL SPECIFICATIONS**

- Max. current/voltage rating: 200mA 24VDC
- Supply voltage : 5 to 24VDC
  Life expectancy : 50 million cycles
- Power consumption non-illuminated: 7mA
- Power consumption illuminated : 25mA

- Operating force: 0N
  LED state for output image option:
  1 LED: the LED is ON when the output is closed.
  - 2 LEDs : first colour is ON when the output is open. Second colour is ON
  - when the output is closed.
- Output type: NPN

#### **MATERIALS**

- Case: aluminium, anodized
- Multi-wire leads section 0,22 mm<sup>2</sup> length 300 mm
- Cable, length 300 mm, section
- depending on switch model

  Connector: HE14 6V compatible with AMP/TYCO281839-3

#### **ADJUSTABLE SENSITIVITY**

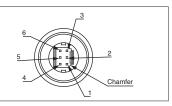
Connection to ground by means of the yellow wire increases sensitivity (momentary version only).

This switch should not be used in safety applications.

	Non-illuminated	Non-illuminated 1 LED		2 LEDs		
	14011-1110111111alea	Output indicator	Independent	Output indicator	Independent	Legend
OFF-ON	R W Black	R W Black	R W G Black	R W Black	R W Blue G Black	R red +V Black black GND W white output Y yellow sensitivity G green -LED 1 Blue blue -LED2
OFF-MOM	R Y W Black	R Y W	R Y W	R Y W Black	R Y W Blue G Black	Wire colours may vary. Always refer to the label on the switch.

### Wiring for switch connector

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

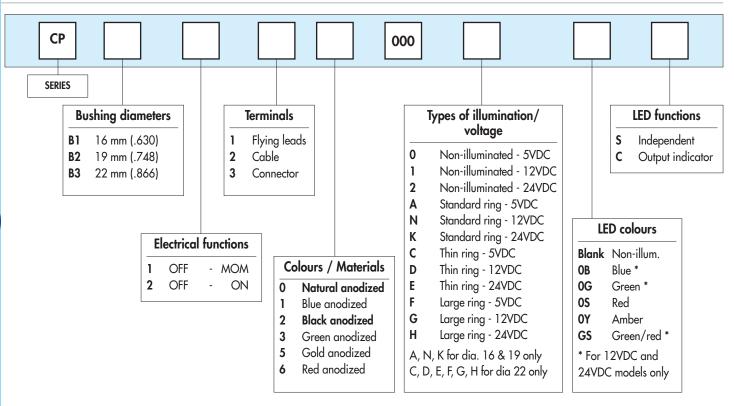




## Capacitive switches

New!

**Overview** 



### On request

- Duration of activation 15 minutes for latching models (standard duration is infinite)
- Different lengths, gauges or colours for flying lead terminals
- Different cable lengths

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



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



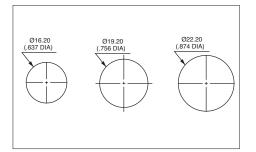
Packaging unit: 20 pieces





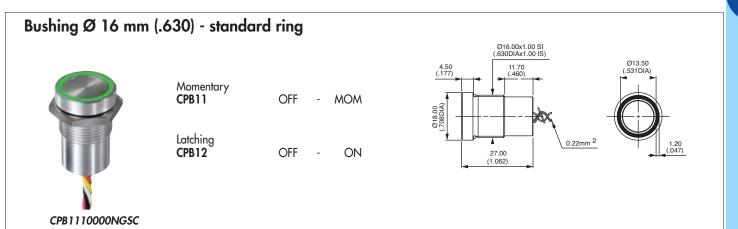
Capacitive switches

Illuminated or non-illuminated



Shown with flying lead terminals





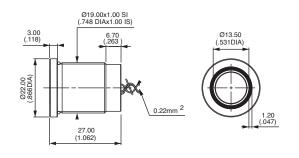
### Bushing Ø 19 mm (.748) - standard ring



Momentary CPB21

OFF - MOM

Latching CPB22 OFF - ON



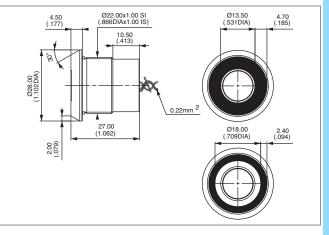
### Bushing Ø 22 mm (.866) - large or thin ring



Momentary

CPB31 OFF - MOM

Latching CPB32 OFF - ON



APEM www.apem.com B2-127



# **Capacitive switches**

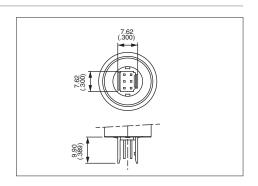
### New!

**Options** 

### **TERMINALS**



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



CASE COLOURS / MATERIALS



	2	Black anodised aluminium		
	1	Blue anodized aluminium		
0 Natural anodized alumi		Natural anodized aluminium		
	Code	Colour		

Code	Colour
3 Green anodized aluminium	
5	Gold anodized aluminium
6	Red anodised aluminium

### TYPES OF ILLUMINATION



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

### **LED COLOURS**



Non-illuminated **Blank** 

**OB**: blue - **OG**: green - **OS**: red - **OY**: amber - **GS**: green/red

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

### **LED FUNCTIONS**



S Independent Output indicator