CG series

Capacitive switches for underlay applications

DISTINCTIVE FEATURES

Activated by the touch of a finger

50 million cycles

Auto-calibration function

Mounting under non-conductive surfaces

Mating harness on request

ENVIRONMENTAL SPECIFICATIONS

• Triggered by flowing water

• Temperature range : -40 °C to +70 °C (-40 °F to +158 °F)

• Adhesive and connector resistant to vibrations

ELECTRICAL AND GENERAL SPECIFICATIONS

• Supply voltage : 5 VDC, 12 VDC or 24 VDC

• Supply current : 15 mA max. (12 V)

• Max. current/voltage rating : 200 mA 24 VDC

• Life expectancy : 50 million cycles

• Switch resistance ON : 1 Ohm max.

• Power consumption : 10 mA max. mode OFF

• Output type : NPN

MATERIALS

• Case : ABS

• Sealing : epoxy

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

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⤫ WIRING DIAGRAMS

|	Non-illuminated	Illuminated 1 LED	
		Output indicator	Independent
OFF-ON OFF - MOM	VCC Output GND	VCC Output GND	+LED VCC Output GND
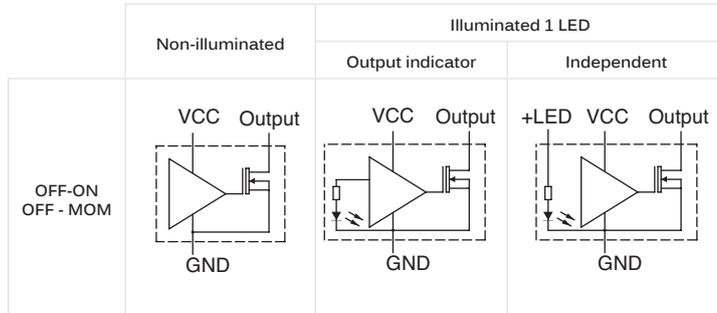
⤫ WIRING FOR MATING CONNECTOR HARWIN M30-1100400

• Pin 1 : output
  Pin 2 : GND
  Pin 3 : +LED
  Pin 4 : +VCC

• Mating harness (connector + wires) available on request.

⚠ This switch should not be used in safety applications.

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BUILD YOUR PART NUMBER

BASIC PART NUMBER

CG		

SERIES

ELECTRICAL FUNCTIONS

1	OFF - MOM
2	OFF - ON

OPTIONS

TERMINALS

1	Connector

Different length, gauge or connector : on request

SENSITIVITY

1	Medium (6 mm glass or 4 mm polycarbonate)

Other on request.

SURFACE ADHESIVE

A	For common glass or polycarbonate

For a specific surface, contact APEM.

TYPES OF ILLUMINATION/VOLTAGE

0	Non-illuminated - 5 VDC
1	Non-illuminated - 12 VDC
2	Non-illuminated - 24 VDC
3	Non-illuminated - 4,5 - 28 VDC
L	Dot - 5 VDC
P	Dot - 12 VDC
J	Dot - 24 VDC

LED COLORS

Blank	Non-illuminated
0B	Blue
0G	Green
0R	Red
0Y	Amber

Other on request.

LED FUNCTIONS

Blank	Non-illuminated
S	Independent
C	Output indicator

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.

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CONNECTOR OUTPUT

	Momentary		
	CG1	OFF	ON
	Latching		
	CG2	OFF	ON

Ø29.00
(1.141)

5.00
(.196)

LED

VCC

2.00
(.078)

7.40
(.291)
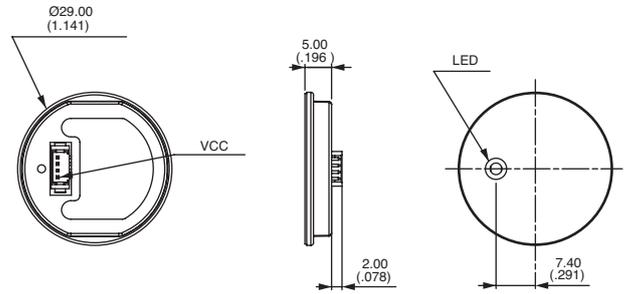
For connector wiring, see specifications.

TERMINALS

BASIC P/N
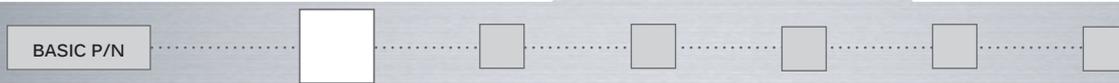
1   Connector

SENSITIVITY

BASIC P/N

1   Medium (6 mm glass or 4 mm polycarbonate)

Other on request.

SURFACE ADHESIVE

BASIC P/N

A   For common glass or polycarbonate

For a specific surface, contact APEM.

TYPE OF ILLUMINATION

BASIC P/N

0   Non-illuminated - 5 VDC
1   Non-illuminated - 12 VDC
2   Non-illuminated - 24 VDC
3   Non-illuminated - 4,5 - 28 VDC - momentary version only
L   Dot - 5 VDC
P   Dot - 12 VDC
J   Dot - 24 VDC

CG series

Capacitive switches for underlay applications

LED COLORS

BASIC P/N

Blank Non-illuminated
0B Blue
0G Green
0R Red
0Y Amber

Other on request.

LED FUNCTION

BASIC P/N

Blank Non-illuminated
S Independent
C Output indicator

ACCESSORIES

Order separately.

U7120 Mating harness for independent LED (version S)
U7040 Mating harness for all other versions

Connector : Harwin M30-1100400
Wires : AWG28, 150 mm

1 2 3 4

U7120

1 2 4
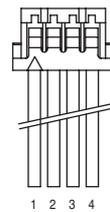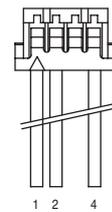
U7040

EXAMPLE OF CUSTOM SWITCH

CG1F1AJ0WS002

• Flying leads with connector
• Customisable wires lenght
• Easy mounting
• Epoxy wire terminal : high sealing level