

# Proximity Sensors Capacitive Thermoplastic Polyester Housing Types CA, M18, M30, DC, Teach-in

**TRIPLESIELD™**

**CARLO GAVAZZI**



- Featuring **TRIPLESIELD™** Sensor Protection
- Sensing distance: 0.5 - 12 mm (M18) and 1.0 - 30 mm (M30)
- Teach-in of sensing distance via push-button or COM-input
- Automatic detection of NPN or PNP load
- Selectable make or break switching by means of Teach-in function
- Protection: Short-circuit, transients and reverse polarity
- Humidity compensation
- Alarm output
- 5 years of warranty
- On request: Delay on output. New line autotune to compensate for heavy dirt build-up

## Product Description

Capacitive proximity switches with a sensing distance of either 8 mm flush mounted in metal or 12 mm non-flush mounted for the M18 version, and either 16 mm flush mounted in metal or 30 mm non-flush mounted for the M30 version. The

switching points can be altered by means of the Teach-in function. 3-wire DC output with selectable make (NO) or break (NC) switching and NPN Alarm. Grey polyester housing with 2 m PVC cable or M12 plug.

## Ordering Key

**CA18CLC12BPM1**

Capacitive proximity switch	CA
Housing diameter (mm)	18
Housing material	CLC
Housing length	12
Detection principle	B
Rated operating dist. (mm)	12
Output type	M
Output configuration	P
Connection type	1

## Type Selection

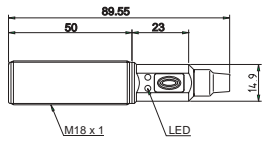
Housing diameter	Rated operating distance (S <sub>n</sub> )	Ordering no. Cable	Ordering no. Plug
M18	12 mm	CA18CLC12BP	CA18CLC12BPM1
M30	30 mm	CA30CLC30BP	CA30CLC30BPM1

## Specifications

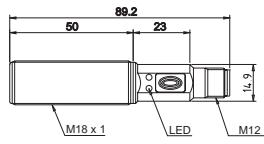
<b>Sensing range (S<sub>d</sub>)</b> CA18CLC12	0.5 - 12 mm factory set at 8 mm	<b>Frequency of operating cycles (f)</b>	15 Hz
CA30CLC30	1.0 - 30 mm factory set at 15 mm	<b>Indication</b> For output ON For safe/unsafe	LED, yellow LED, green
<b>Sensitivity</b>	Adjustable (Teach-in)	<b>Environment</b> Degree of protection Operating temperature Storage temperature	IP 68 -20° to +85°C (-4° to +185°F) -40° to +85°C (-40° to +176°F)
<b>Effective operating dist. (S<sub>r</sub>)</b>	0.9 x S <sub>n</sub> ≤ S <sub>r</sub> ≤ 1.1 x S <sub>n</sub>	<b>Housing material</b> Body Cable end Nuts	Grey, thermoplastic polyester Polyester, softened Black, PA12 Grilamid
<b>Usable operating dist. (S<sub>u</sub>)</b>	0.8 x S <sub>r</sub> ≤ S <sub>u</sub> ≤ 1.2 x S <sub>r</sub>	<b>Connection</b> Cable  Plug (M1) Cable for plug (M1)	Grey, 2 m, 4 x 0.25 mm <sup>2</sup> Oil proof, PVC M12 x 1 CON.1A-series
<b>Repeat accuracy (R)</b>	≤ 5%	<b>Weight</b> Cable version - M18 / M30 Plug version - M18 / M30	110 g/160 g 30 g/70 g
<b>Hysteresis (H)</b>	Depending on Teach-in	<b>Approvals</b>	UL, CSA
<b>Rated operational volt. (U<sub>B</sub>)</b>	10 to 40 VDC (ripple incl.)	<b>CE-marking</b>	Yes
<b>Ripple</b>	≤ 10%		
<b>Rated operational current (I<sub>a</sub>)</b>	≤ 250 mA (continuous)		
<b>No-load supply current (I<sub>o</sub>)</b>	≤ 12 mA		
<b>Voltage drop (U<sub>d</sub>)</b>	≤ 2.5 VDC @ max. load		
<b>Protection</b>	Short-circuit, reverse polarity, transients		
<b>TRIPLESIELD™ protection-EMC</b> IEC 1000-4-2/EN 61000-4-2 IEC 1000-4-3/EN 61000-4-3 IEC 1000-4-4/EN 61000-4-4 IEC 1000-4-6/EN 61000-4-6	30 kV > 15 V/m 3 kV > 10 V <sub>rms</sub>		

## Dimensions

### CA18

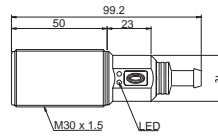


Cable

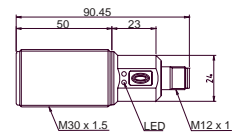


Plug

### CA30



Cable



Plug