

# Proximity Sensors Capacitive Thermoplastic Polyester Housing Type CA, M18, AC

**TRIPLESIELD™**

**CARLO GAVAZZI**



- Featuring **TRIPLESIELD™** sensor protection
- Adjustable sensing distance 3-8 mm or 3-12 mm
- Rated operational voltage: 20-250 VAC
- Output: SCR
- Make or break switching function
- LED indication
- High noise immunity
- Flush and non-flush types
- Plug and cable versions
- DC versions in the same housing

## Product Description

Capacitive proximity switches with either sensing distance 8 mm flush mounted in metal or sensing distance 12 mm non-flush mounted. 2-wire AC output with make (NO) or break

(NC) switching. Grey M18 polyester housing with 2 m PVC cable or M12 plug. Ideal for use in level and plastic machinery applications.

## Ordering Key

**CA18CLN12TOM6**

|                      |    |
|----------------------|----|
| Type                 | CA |
| Housing style        | 18 |
| Housing size         | CL |
| Housing material     | N  |
| Housing length       | 12 |
| Detection principle  | T  |
| Sensing distance     | O  |
| Output type          | M  |
| Output configuration | 6  |
| Connection type      |    |

## Type Selection

| Housing diameter | Rated operating dist. (S <sub>n</sub> ) <sup>1)</sup> | Mounting         | Ordering no. SCR/cable Make switching | Ordering no. SCR/plug Make switching | Ordering no. SCR/cable Break switching | Ordering no. SCR/plug Break switching |
|------------------|---|------------------|---------------------------------------|--------------------------------------|--|---------------------------------------|
| M18              | 8 mm  | Flush (built-in) | CA18CLF08TO                           | CA18CLF08TOM6                        | CA18CLF08TC                            | CA18CLF08TCM6                         |
| M18              | 12 mm   | Non-flush        | CA18CLN12TO                           | CA18CLN12TOM6                        | CA18CLN12TC                            | CA18CLN12TCM6                         |

<sup>1)</sup> Object: Grounded steel plate

## Specifications

|  |  |  |   |
|--|--|--|---|
| <b>Rated operating dist. (S<sub>n</sub>)</b><br>CA18CLF08                    | 3 to 8 mm<br>factory set at 8 mm                             | <b>Frequency of operating cycles (f)</b>                           | 10 Hz   |
| CA18CLN12  | 3 to 12 mm<br>factory set at 12 mm                           | <b>Indication for output ON</b>                                    | LED, yellow   |
| <b>Sensitivity</b>   | Adj. 270° turn pot. meter                                    | <b>Environment</b><br>Degree of protection                         | IP 67 (Nema 1, 3, 4, 6, 13)   |
| <b>Effectiv operation 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>Temperature</b><br>Operating temperature<br>Storage temperature | -25° to +80°C (-13° to +176°F)<br>-40° to +85°C (-40° to +185°F)                              |
| <b>Usable operation 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>Housing material</b><br>Body<br>Front<br>Cable end<br>Nuts      | Grey, thermoplastic polyester<br>Grey, polyester<br>Polyester<br>Black, reinforced nylon      |
| <b>Repeat accuracy (R)</b>   | ≤ 5%   | <b>Connection</b><br>Cable<br><br>Plug (M6)<br>Cable for plug (M6) | Grey, 2 m, 2 x 0.5 mm <sup>2</sup><br>Oil proof PVC<br>M12 x 1, double keyed<br>CON.6A-series |
| <b>Hysteresis (H)</b>  | 4 to 20% of sensing distance                                 | <b>Weight</b><br>Cable version<br>Plug version                     | 110 g<br>30 g   |
| <b>Rated operational volt. (U<sub>B</sub>)</b>                               | 20 to 250 VAC<br>(ripple included)                           | <b>Approvals</b>   | UL, CSA   |
| <b>Ripple</b>  | ≤ 10%  | <b>CE-marking</b>  | Yes   |
| <b>Rated operational current (I<sub>e</sub>)</b><br>Continuous<br>Short-time | ≤ 500 mA<br>< 2.5 A (max. 20 ms)                             |  |   |
| <b>Min. load current</b>   | ≤ 10 mA  |  |   |
| <b>Voltage drop (U<sub>d</sub>)</b>  | ≤ 10 VAC (at loads ≥ 20 mA)                                  |  |   |
| <b>Protection</b>  | Reverse polarity,<br>short-circuit, transients               |  |   |
| <b>Power ON delay</b>  | ≤ 100 ms   |  |   |

## Dimensions

