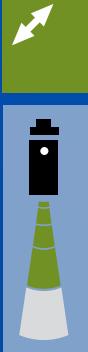




# C18 series

M18 cylindrical capacitive sensors



## features

- DC or AC supply voltage
- High noise immunity
- Shielded and unshielded models
- Adjustable sensitivity
- Plastic housing



## web contents

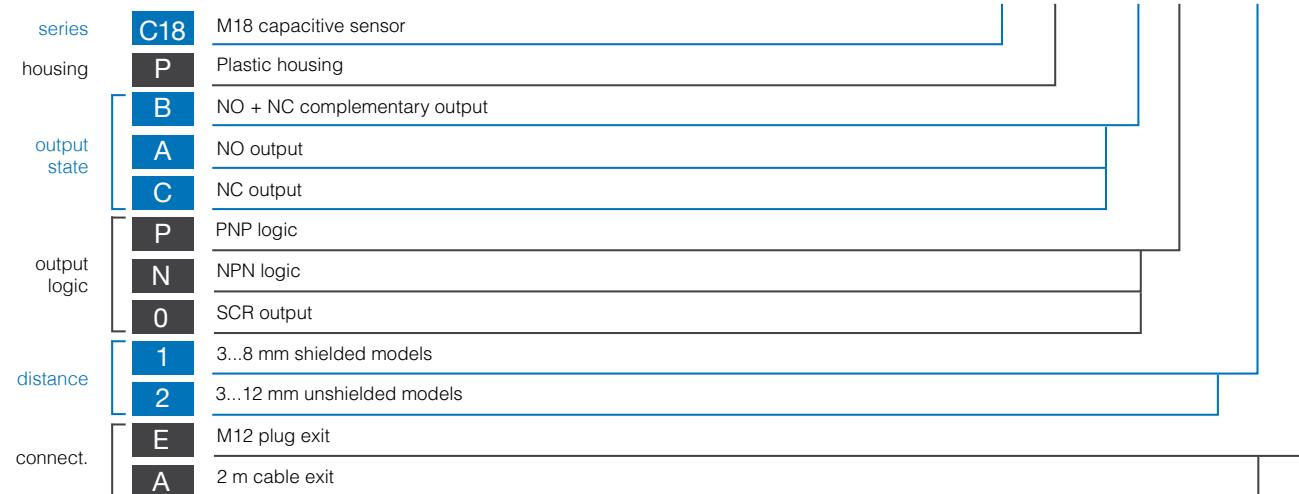


- Application notes
- Photos
- Catalogue / Manuals



## available models

C18 | P | / | B | P | - | 1 | E



## available models

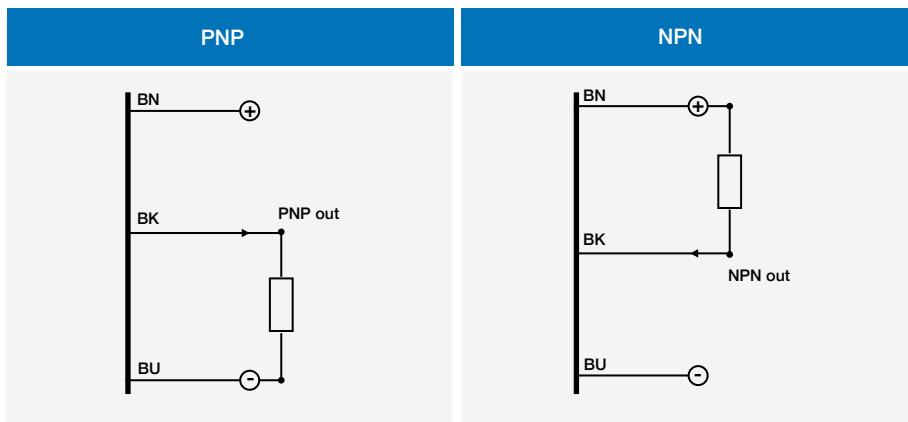
M18 cylindrical

| supply       | installation | connections | distance  | NPN NO + NC | PNP NO + NC | NO         | NC         |
|--------------|--------------|-------------|-----------|-------------|-------------|------------|------------|
| 10...40 Vcc  | shielded     | cable 2 m   | 3...8 mm  | C18P/BN-1A  | C18P/BP-1A  | -          | -          |
|              |              | M12         |           | C18P/BN-1E  | C18P/BP-1E  | -          | -          |
|              | unshielded   | cable 2 m   | 3...12 mm | C18P/BN-2A  | C18P/BP-2A  | -          | -          |
|              |              | M12         |           | C18P/BN-2E  | C18P/BP-2E  | -          | -          |
| 20...250 Vac | shielded     | cable 2 m   | 3...8 mm  | -           | -           | C18P/A0-1A | C18P/C0-1A |
|              |              | M12         |           | -           | -           | C18P/A0-1E | C18P/C0-1E |
|              | unshielded   | cable 2 m   | 3...12 mm | -           | -           | C18P/A0-2A | C18P/C0-2A |
|              |              | M12         |           | -           | -           | C18P/A0-2E | C18P/C0-2E |

## technical specification

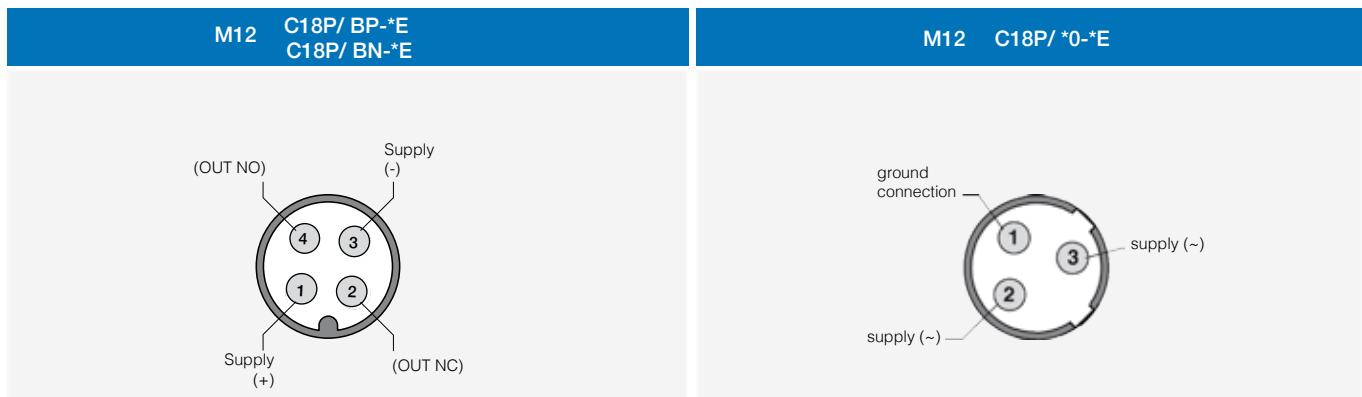
|                             | C18P/**-1*  | C18P/**-2* |
|-----------------------------|---|------------|
| nominal sensing distance    | 8 mm  | 12 mm      |
| hysteresis                  | ≤ 20%   |            |
| repeatability               | 5%  |            |
| operating voltage           | 10 ... 40 Vcc oppure 20 ... 250 Vac   |            |
| max ripple content          | ≤ 10 %  |            |
| no-Load supply current      | ≤ 12 mA   |            |
| load current                | ≤ 200 mA (dc models), ≤ 500 mA; max. 2,5 A max. 20 ms (ca models)   |            |
| leakage current             | ≤ 100 µA  |            |
| output voltage drop Ud      | 2.5 Vmax @ IL= 200 mA (dc models), ≤ 10 VAC @ IL ≥ 20 mA (ca models)  |            |
| output type                 | NPN or PNP - NO + NC; SCR - NO or NC  |            |
| switching frequency         | 50 Hz (dc models); 10 Hz (ca models)  |            |
| power on delay              | ≤ 200 ms  |            |
| power supply protections    | polarity reversal, impulsive overvoltage  |            |
| output protection           | autoreset short circuit, overvoltage (dc models)  |            |
| sensitivity adjustment      | ●   |            |
| storage temperature         | -40 ... +85° C  |            |
| operating temperature range | -25 ... +80° C (without freeze) (ca models); -35 ... +85° C (without freeze) (dc models)  |            |
| temperature drift           | ≤ 20 %  |            |
| EMC                         | in conformity with the EMC Directive, according to IEC 60947-5-2  |            |
| protection degree           | IP67 (IEC 60529) NEMA 1,3,4,6,13 (ca models); IP67 - IP68/60 min - IP69K (IEC 60529; 60943-1) NEMA 1,2,4,4x,5,6,6p,12 (models dc) |            |
| LEDs                        | yellow (output status) (ca-models), yellow (object detected), green (supply/stability) (dc models)                                |            |
| housing material            | thermoplastic polyester   |            |
| active head material        | polyester   |            |
| weight                      | 65 g M12 connector / 150 g cable  |            |
| tightening torque           | 2.6 Nm  |            |

## electrical diagrams of connections



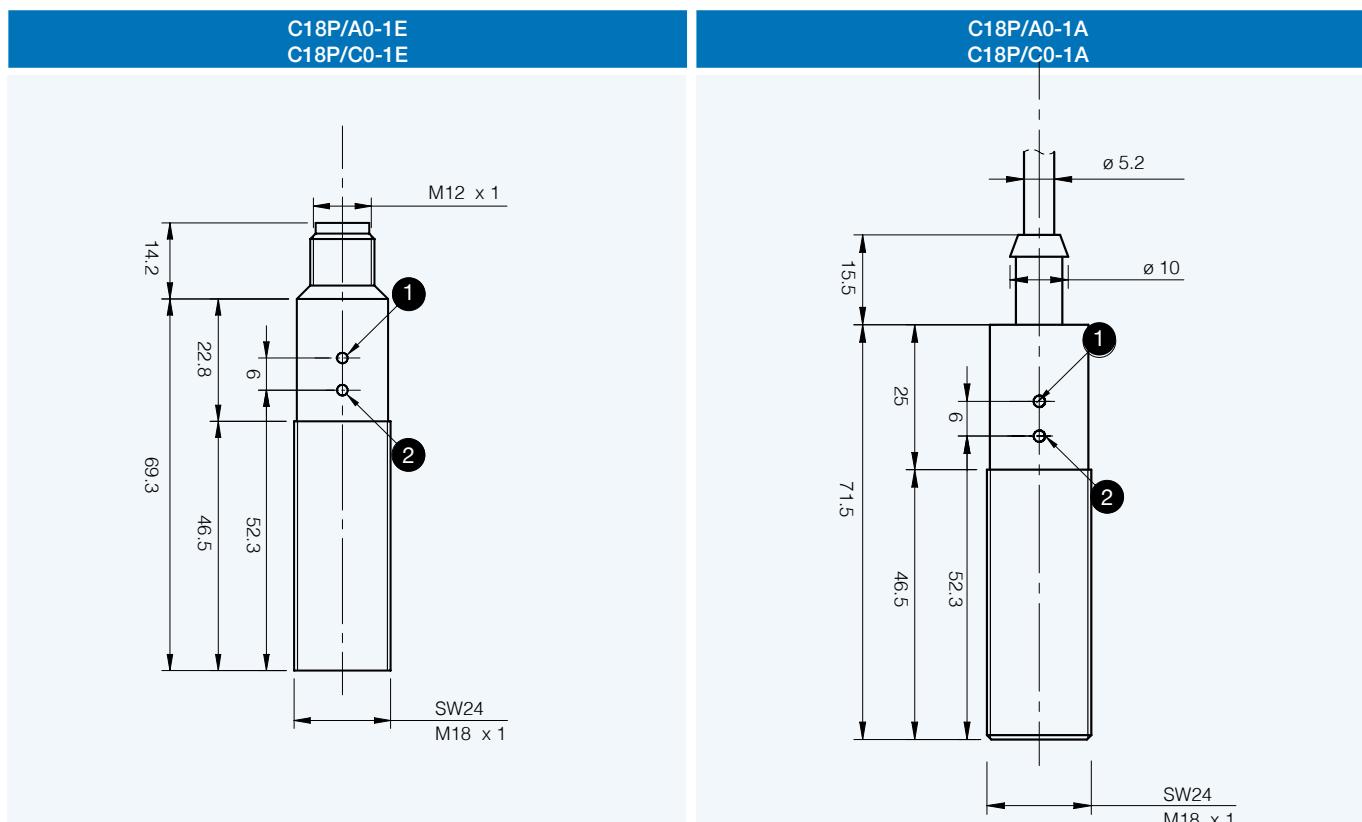
BN brown  
 BU blue  
 BK black  
 WH white

## plug



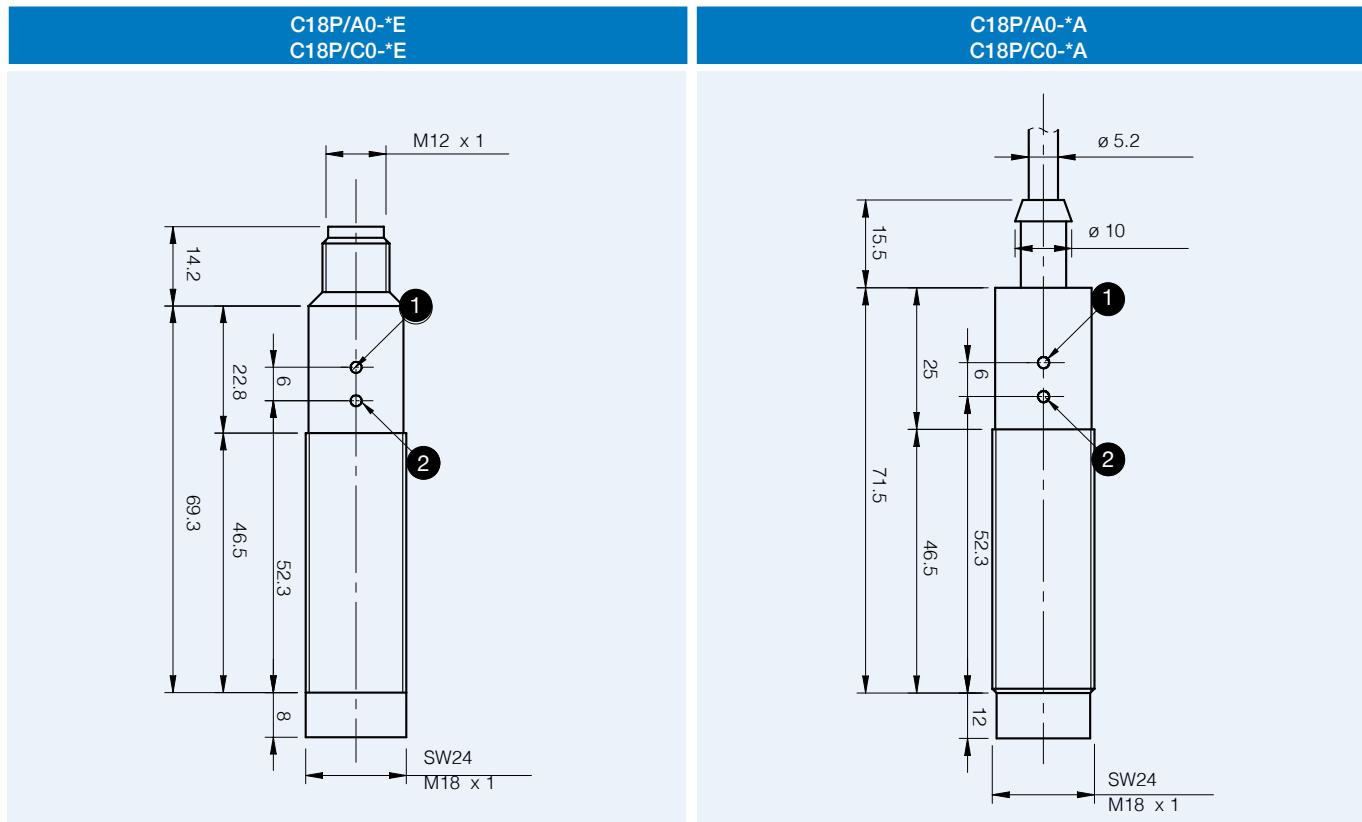
For models with AC power supply using the connection cable series CD12M/AC

## dimensions (mm)



1 LED    2 TRIMMER

## dimensions (mm)



## dimensions (mm)

accessories included in all models

