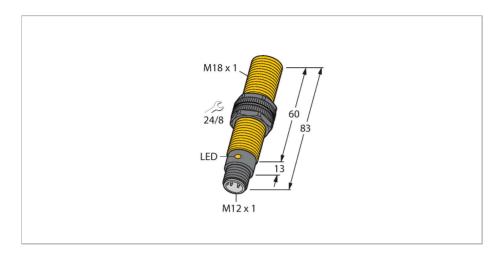


# BC5-S18-AP4X-H1141/S250 Capacitive Sensor



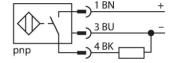
#### Technical data

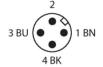
| Туре                                      | BC5-S18-AP4X-H1141/S250 |
|---|-------------------------|
| Ident. no.                                | 2503602                 |
| Rated switching distance (flush)          | 5 mm                    |
| Rated switching distance (non-flush)      | 5 mm                    |
| Secured operating distance                | ≤ (0.72 × Sn)           |
| Hysteresis                                | 220 %                   |
| Temperature drift                         | type 20 %               |
| Repeat accuracy                           | ≤ 2 % of full scale     |
| Ambient temperature                       | -25+70 °C               |
| Electrical data                           |                         |
| Operating voltage                         | 1065 VDC                |
| Residual ripple                           | ≤ 10 % U <sub>ss</sub>  |
| DC rated operational current              | ≤ 200 mA                |
| No-load current                           | ≤ 15 mA                 |
| Residual current                          | ≤ 0.1 mA                |
| Switching frequency                       | 0.1 kHz                 |
| Isolation test voltage                    | ≤ 0.5 kV                |
| Output function                           | 3-wire, NO contact, PNP |
| Short-circuit protection                  | yes / Cyclic            |
| Voltage drop at I。                        | ≤ 1.8 V                 |
| Wire breakage/Reverse polarity protection | yes / Complete          |
| Approvals                                 | UL                      |
| -   |                         |

### **Features**

- ■M18 × 1 threaded barrel ■ Plastic, PA12-GF30 Fixed settings ■DC 3-wire, 10...65 VDC
- ■NO contact, PNP output
- ■M12 × 1 connector

## Wiring diagram





## Functional principle

Capacitive proximity switches are designed for non-contact and wear-free detection of electrically conductive as well as nonconductive metal objects.

Flush mounting may result in a change of switching behaviour.

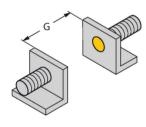


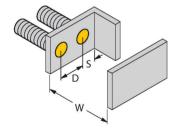
### Technical data

| Mechanical data                       |  |
|---------------------------------------|--|
| Design                                | Threaded barrel, M18 × 1                   |
| Dimensions                            | 83 mm                                      |
| Housing material                      | Plastic, PA12-GF30, PEI                    |
| Active area material                  | PA12-GF30, yellow                          |
| Admissible pressure on front cap      | ≤ 6 bar                                    |
| Max. tightening torque of housing nut | 2 Nm                                       |
| Electrical connection                 | Connector, M12 × 1                         |
| Vibration resistance                  | 55 Hz (1 mm)                               |
| Shock resistance                      | 30 g (11 ms)                               |
| Protection class                      | IP67                                       |
| MTTF                                  | 1080 years acc. to SN 29500 (Ed. 99) 40 °C |
| Switching state                       | LED, Yellow                                |

# Mounting instructions

#### **Product features**





| Distance D             | 36 mm   |
|------------------------|---------|
| Distance W             | 15 mm   |
| Distance S             | 27 mm   |
| Distance G             | 30 mm   |
| Diameter active area B | Ø 18 mm |

The given minimum distances have been checked against the standard switching distance.

Should the sensitivity of the sensors be changed via potentiometer, the data sheet specifications no longer apply.