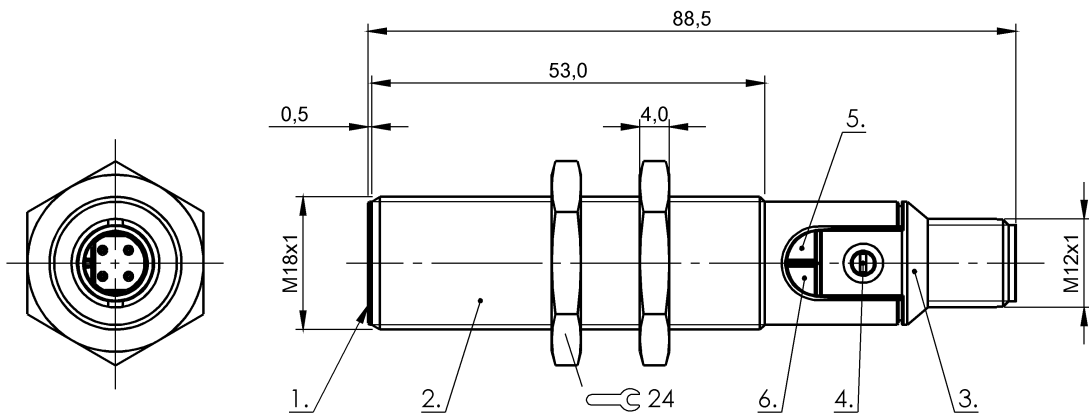




1) Sensing surface, 2) Housing, 3) Cover, 4) Potentiometer, 5) LED Power, 6) LED function indicator



Basic features

|                     |                                      |
|---------------------|--------------------------------------|
| Additional features | weld-immune (magnetic field 100kA/m) |
| Approval/Conformity | CE<br>UKCA<br>cULus<br>WEEE          |
| Basic standard      | IEC 60947-5-2                        |
| Scope of delivery   | Nut (2x)                             |
| Sensitivity         | Switching distance adjustable        |
| Series              | M18                                  |
| Trademark           | Global                               |

Display/Operation

|                    |     |
|--------------------|-----|
| Function indicator | yes |
| Power indicator    | yes |

Electrical connection

|                                   |                            |
|-----------------------------------|----------------------------|
| Connection                        | M12x1-Male, 3-pin, A-coded |
| Polarity reversal protected       | yes                        |
| Protection against device mix-ups | no                         |
| Short-circuit protection          | yes                        |

Electrical data

|                                     |             |
|-------------------------------------|-------------|
| No-load current $I_o$ max. at $U_e$ | 20 mA       |
| Operating voltage $U_b$             | 10...30 VDC |
| Rated insulation voltage $U_i$      | 75 V DC     |
| Rated operating current $I_e$       | 100 mA      |
| Rated operating voltage $U_e$ DC    | 24 V        |
| Ready delay $t_v$ max.              | 300 ms      |
| Ripple max. (% of $U_e$ )           | 10 %        |
| Switching frequency                 | 100 Hz      |
| Utilization category                | DC -13      |
| Voltage drop static max.            | 1.5 V       |

Environmental conditions

|                     |             |
|---------------------|-------------|
| Ambient temperature | -25...85 °C |
| Contamination scale | 1           |
| IP rating           | IP67        |

Functional safety

|              |       |
|--------------|-------|
| MTTF (40 °C) | 343 a |
|--------------|-------|

Interface

|                  |                        |
|------------------|------------------------|
| Switching output | PNP normally open (NO) |
|------------------|------------------------|

Material

|                          |                        |
|--------------------------|------------------------|
| Cover material           | PBT<br>PA              |
| Housing material         | 1.4305 stainless steel |
| Material sensing surface | PBT                    |

Capacitive Sensors  
BCS M18B4I3-PSC80D-S04K  
Order Code: BCS00MF



Mechanical data

|                   |                    |
|-------------------|--------------------|
| Dimension         | Ø 18 x 88.5 mm     |
| Installation      | for flush mounting |
| Size              | M18x1              |
| Thread (A)        | M18x1              |
| Tightening torque | 30 Nm              |

Range/Distance

|                                  |                   |
|----------------------------------|-------------------|
| Hysteresis H max. (% of Sr)      | 15.0 %            |
| Measuring range                  | 1...8 mm          |
| Rated operating distance Sn      | 8 mm              |
| Repeat accuracy max. (% of Sr)   | 2.0 %             |
| Temperature drift max. (% of Sr) | 20 % [-5...55 °C] |

Remarks

The potentiometer does not have a fixed stop, but can be turned endlessly without destroying anything.  
If no change in the switching signal is detected, the potentiometer should be turned forwards or backwards until a signal change occurs at the output.  
For more information about MTTF and B10d see MTTF / B10d Certificate

Indication of the MTTF- / B10d value does not represent a binding composition and/or life expectancy assurance; these are simply experiential values with no warranty implications. These declared values also do not extend the expiration period for defect claims or affect it in any way.

Connector Drawings



Wiring Diagrams

