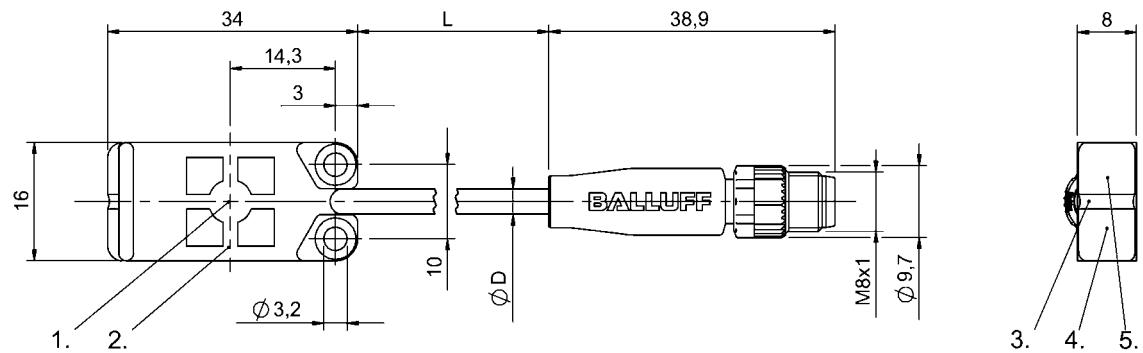


Capacitive Sensors

BCS R08RRE-PSM80C-EP00,3-GS75

Order Code: BCS012T

**BALLUFF**

1) Sensing surface, 2) Housing, 3) Cover, 4) Power indicator green, 5) Function indicator yellow



#### Basic features

Approval/Conformity	cULus CE UKCA WEEE
Basic standard	IEC 60947-5-2
Scope of delivery	Holder Installation guide
Sensitivity	Switching distance teachable
Series	R08
Trademark	Global

#### Display/Operation

Function indicator	yes
Power indicator	yes
Setting	Teachable

#### Electrical connection

Cable diameter D	3.40 mm
Cable length L	0.3 m
Conductor cross-section	0.14 mm <sup>2</sup>
Connection	4-pin
Number of conductors	4
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

#### Electrical data

Load capacitance max. at Ue	0.33 µF
No-load current I <sub>0</sub> max. at Ue	12.5 mA
Operating voltage U <sub>b</sub>	12...30 VDC
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating current I <sub>e</sub>	50 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Ready delay t <sub>v</sub> max.	200 ms
Residual current I <sub>r</sub> max.	10 µA
Ripple max. (% of U <sub>e</sub> )	10 %
Switching frequency	50 Hz
Utilization category	DC-13
Voltage drop static max.	1.5 V

#### Environmental conditions

Ambient temperature	-25...70 °C
Contamination scale	1
IP rating	IP67

#### Functional safety

MTTF (40 °C)	98 a
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#### Interface

Switching output	PNP normally open (NO)
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#### Material

Cover material	PP
Housing material	PP
Material jacket	PUR
Material sensing surface	PP

#### Range/Distance

Hysteresis H max. (% of Sr)	20.0 %
Measuring range	1...8 mm
Real switching distance sr	8 mm
Repeat accuracy max. (% of Sr)	5.0 %
Temperature drift max. (% of Sr)	20 % [-5...55 °C]

#### Mechanical data

Dimension	34 x 16 x 8 mm
Installation	for flush mounting
Size	Block style
Tightening torque	0.2 Nm

#### Remarks

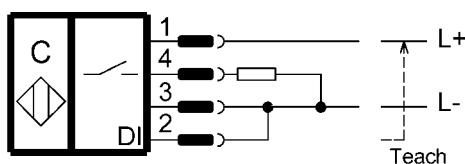
For full calibration connect input DI to L+ for 2...7 seconds. For empty calibration connect to L+ for 7..12 seconds.  
Input DI can be used for teaching the switching point. In normal operation input DI should be connected continuously to L-.  
For more information about MTTF and B10d see MTTF / B10d 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



Capacitive Sensors

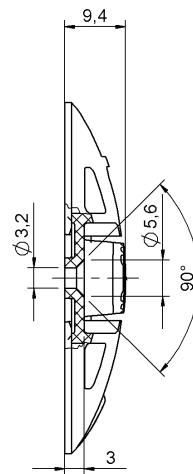
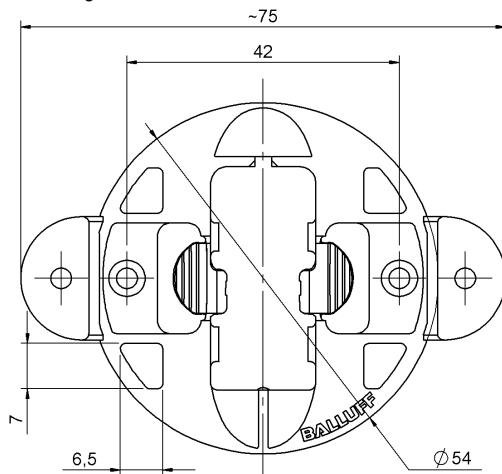
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**BALLUFF**

## Help Views

**Zubehör - Halter**  
Accessories - Mounting frame



Werkstoff Halter: PP  
Material mounting frame: PP