Capacitive Sensors
BCW M18B4M1-ICM80C-DV02
Order Code: BCW0001

BALLUFF

1) Sensing surface, 2) Housing, 3) Cover, 4) Potentiometer, 5) Signal LED

Basic features

Approval/Conformity	CE
	cULus
	WEEE
Basic standard	IEC 60947-5-7
Scope of delivery	Nut (2x)
	Screwdriver
	Short guide
Series	M18

Display/Operation

Function indicator	yes
Power indicator	yes

Electrical connection

Cable length L	2 m
Conductor cross-section	0.25 mm²
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

No-load current Io max. at Ue	17 mA
Operating voltage Ub	12...35 VDC
Rated insulation voltage Ui	75 V DC
Rated operating voltage Ue DC	24 V
Switching frequency	100 Hz
Utilization category	DC -12

Environmental conditions

Ambient temperature	10...55 °C
Contamination scale	1
IP rating	IP67

Functional safety

MTTF (40 °C)	217 a

Interface

Analog output	Analog, current falling on approach

Material

Cover material	PBT
Housing material	1.4301 stainless steel
Material jacket	PVC
Material sensing surface	PBT

Mechanical data

Dimension	Ø 18 x 65 mm
Installation	for flush mounting
Size	M18x1
Thread (A)	M18x1
Tightening torque	30 Nm

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Range/Distance

Measuring range	0...8 mm	Rated operating distance Sn	8 mm
		Repeat accuracy max. (% of Sr)	1 %
		Temperature drift max. (% of Sr)	10 %

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.

Wiring Diagrams