



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 UKCA cULus 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_0 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
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Interface

Switching output	PNP normally open (NO)
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Material

Cover material	PBT PA
Housing material	1.4305 stainless steel
Material sensing surface	PBT

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

BALLUFF

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

