

1) Sensing surface, 2) Power indicator green, 3) Function indicator yellow, 4) Potentiometer, 5) Fastening: Cable tie, 6) Fastening: screw 3xM3



#### Basic features

Approval/Conformity	CE UKCA cULus WEEE
Basic standard	IEC 60947-5-2
Sensitivity	Switching distance adjustable
Series	Q40

#### Display/Operation

Function indicator	yes
Power indicator	yes

#### Electrical connection

Cable diameter D	3.00 mm
Cable length L	3 m
Conductor cross-section	0.14 mm <sup>2</sup>
Number of conductors	3
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

#### Electrical data

Load capacitance max. at Ue	10 µF
No-load current I <sub>0</sub> max. at Ue	15 mA
Operating voltage U <sub>b</sub>	10...30 VDC
Rated insulation voltage U <sub>i</sub>	75 V DC
Rated operating current I <sub>e</sub>	100 mA
Rated operating voltage U <sub>e</sub> DC	24 V
Ready delay t <sub>v</sub> max.	25 ms
Ripple max. (% of Ue)	10 %
Switching frequency	100 Hz
Utilization category	DC-13
Voltage drop static max.	2.5 V

#### Environmental conditions

Ambient temperature	-5...85 °C
Contamination scale	1
IP rating	IP67

#### Functional safety

MTTF (40 °C)	195 a
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#### Interface

Switching output	PNP/NPN NO/NC programmable
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#### Material

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

#### Range/Distance

Hysteresis H max. (% of Sr)	15.0 %
Measuring range	1...20 mm
Rated operating distance Sn	20 mm
Repeat accuracy max. (% of Sr)	5.0 %
Temperature drift max. (% of Sr)	20 % [-5...55 °C]

#### Mechanical data

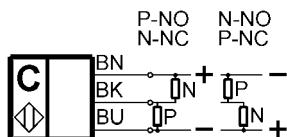
Dimension	40 x 40 x 10 mm
Installation	for flush mounting
Size	Block style

#### Remarks

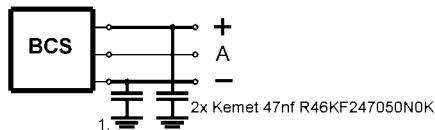
The push-pull switching outputs must not be connected in parallel.  
The potentiometer does not have a fixed stop, but can be turned endlessly without destroying anything.  
If no change in the switching signal is detected, the potentiometer should be turned forwards or backwards until a signal change 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



#### Installation remarks



1) Machine GND