

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



Basic features

Additional features	Electrically conductive media Foam and residue compensation
Approval/Conformity	CE cULus EAC WEEE IO-Link
Basic standard	IEC 60947-5-2
Scope of delivery	Installation guide
Sensitivity	teachable depending on media
Series	Q40

Display/Operation

Function indicator	yes
Power indicator	yes

Electrical connection

Cable diameter D	3.00 mm
Cable length L	0.3 m
Conductor cross-section	0.14 mm ²
Connection	M12x1-Male, 3-pin
Electrical version	3-wire
Polarity reversal protected	yes
Protection against device mix-ups	yes
Short-circuit protection	yes

Electrical data

Load capacitance max. at U_e	0.22 µF
No-load current I_o max. at U_e	12.0 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.	200 ms
Ripple max. (% of U_e)	10 %
Switching frequency	10 Hz
Utilization category	DC -13
Voltage drop static max.	2.0 V

Environmental conditions

Ambient temperature	-20...80 °C
IP rating	IP67

Functional safety

MTTF (40 °C)	69 a
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IO-Link

IO-Link Profil IDs	0x0001 SSP0
IO-Link function classes	0x8000 Device Identification 0x8001 Binary Data Channel 0x8002 Process Data Variables 0x8003 Device Diagnosis 0x8004 Teach Commands
Supported IO-Link Profiles	Legacy Smart Sensor Profile

Capacitive Sensors
BCS Q40BBAA-PSICFHC-EP00,3-GS04
Order Code: BCS018A



Interface

Cycle time min.	5 ms
Interface	IO-Link 1.1
Switching output	PNP normally open (NO) Programmable

Material

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

Mechanical data

Dimension	40 x 40 x 10 mm
Installation	flush with container outer wall
Size	Block style

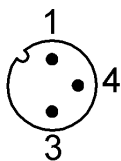
Remarks

Note for using in standard applications with aqueous media: The Smart Level sensors are factory adjusted for standard applications. With this setting the Smart Level sensors can be used without further adjustment for detecting aqueous media through glass or plastic walls. The factory setting can automatically mask glass or plastic walls (approx. 0.5 mm to 6 mm) and compensate for foam, moisture and dirt buildup inside and outside the container. Special applications: The Smart Level sensors can also be used with aqueous media in previously unsolvable and critical applications such as through glass or plastic walls thicker than 6 mm. Here the user can change the factory setting.

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

