

# Capacitive Sensors for Level Detection

## SMARTLEVEL, block design, DC 3-wire, 40x40x10 mm Uniflat



SmartLevel sensors are assigned to fluid sensors, which we label in orange.



SMARTLEVEL 15



SMARTLEVEL 15

Size		40x40x10 mm Uniflat	40x40x10 mm Uniflat
Installation type		Flush	Flush
Rated switching distance $s_n$		Media-dependent	Media-dependent
PNP/NPN and NO/NC, wiring selected	<b>Ordering code</b>	<b>BCS00TP</b> <sup>①</sup>	
	Part number	BCS Q40BBAA-GPCFAC-EP02	
PNP NO	<b>Ordering code</b>		<b>BCS00U8</b> <sup>②</sup>
	Part number		BCS Q40BBAA-PSCFAC-EP00,3-GS49
PNP NC	<b>Ordering code</b>		<b>BCS00U7</b> <sup>③</sup>
	Part number		BCS Q40BBAA-POCFAC-EP00,3-GS49
Supply voltage $U_B$		10...30 V DC	10...30 V DC
Voltage drop $U_d$ at $I_B$		≤ 2.5 V	≤ 2.5 V
Rated insulation voltage $U_i$		75 V DC	75 V DC
Output current max.		100 mA	100 mA
No-load supply current $I_0$ max.		≤ 11 mA	≤ 11 mA
Polarity reversal protected/output miswiring protected/short-circuit protected		No/No/Yes	Yes/Yes/Yes
Ambient temperature $T_a$		-5...+85 °C	-5...+85 °C
Switching frequency $f$		10 Hz	10 Hz
Supply voltage/Output function indicator		Green LED/Yellow LED	Green LED/Yellow LED
Degree of protection as per IEC 60529		IP 67	IP 67
Material	Housing	PBT	PBT
	Sensing surface	PBT	PBT
	Cover	PBT	PBT
Connection		2 m PUR cable, 3x26 AWG	0.3 m PUR cable with M8 3-pin connector
Suggested mating cable			BCC M313-0000-10-001-PX43T2-050



Capacitive sensors

Capacitive sensors for object detection

Capacitive sensors for level detection

Standard sensors

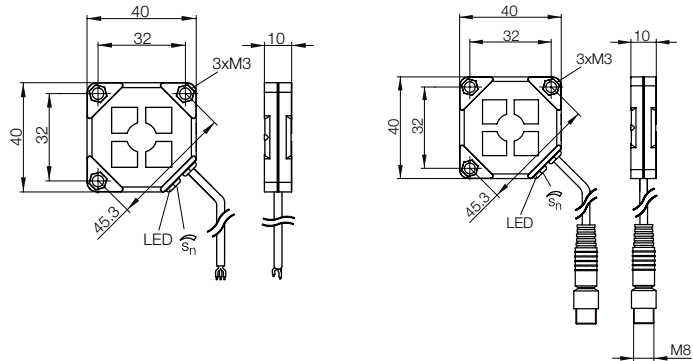
SmartLevel sensors

Capacitive sensors with special properties

Capacitive sensors for analog distance measurement

Accessories for capacitive sensors

① = Connection-Switching diagram, see page 849.



The new capacitive SmartLevel sensors in the Uniflat design detects conductive media through non-metallic container walls with a thickness up to 10 mm.

Installation is quick and easy. This is because they can be screwed on or attached to bypass tubes with cable ties. The connection is made using a 2 m cable or a short pigtail line with an M8 plug.

The codable output function provides PNP or NPN and normally open or normally closed functionality.

### SmartLevel

- Suppress foam and deposits
- Easy to install on tubes with cable ties
- Regular cleaning can be omitted