

TURCK

Level Sensors - Capacitive



Housing Style	Part Number	ID Number	Features	Embeddable Range (mm)	Nonembed. Range (mm)	Output	
5.5 mm - Embeddable, Potted-In Cable 	BC 5-QF5. 5-AN6X2/S250	S2620120	No Potentiometer	5	5	3-Wire DC NPN	
	BC10-QF5. 5-AN6X2	S2620121		10	10		
	BC10-QF5. 5-AN6X2/S250	S2620119	No Potentiometer	10	10		
	BC10-QF5. 5-AN6X2/S932	S2620137	Covered Pot.	10	10		
	8 mm - Embeddable, Potted-In Cable 	BC 5-QF5. 5-AP6X2/S250	S2620116	No Potentiometer	5	5	3-Wire DC PNP
		BC10-QF5. 5-AP6X2	S2620117		10	10	
		BC10-QF5. 5-AP6X2/S250	S2620115	No Potentiometer	10	10	
		BC10-QF5. 5-AP6X2/S932	S2620109	Covered Pot.	10	10	
		BC 5-QF5. 5-Y1X/S250	S2030000	No Potentiometer	5	5	2-Wire DC NAMUR
	8 mm - Embeddable, Potted-In Cable 	BC 5-Q08-AN6X2	S2620100	No Potentiometer	5	5	3-Wire DC NPN
BC 5-Q08-AP6X2		S2620000	No Potentiometer	5	5	3-Wire DC PNP	
8 mm - Embeddable, picofast® Connector 	BC 5-Q08-AN6X2-V1131	S2621100	No Potentiometer	5	5	3-Wire DC NPN	
	BC 5-Q08-AP6X2-V1131	S2621000	No Potentiometer	5	5	3-Wire DC PNP	

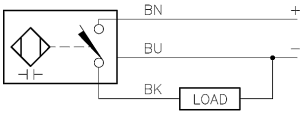
"/S250" designates without potentiometer.
 "/S932" designates Covered potentiometer.

Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection Class	Housing Mat.	Face/ Front Cap	Power LED	Output LED	Mating Cord, Cable Length/Jacket	Wiring Diagram #	Wiring Diagrams
10-30 VDC	100	≤200	-25 to +70	IP 67	PP	PP	GN	YE	2M/PUR	1	<p>Diagram 1</p>
	100	≤200	-25 to +70	IP 67	PP	PP	GN	YE	2M/PUR	1	
	100	≤200	-25 to +70	IP 67	PP	PP	GN	YE	2M/PUR	1	
	100	≤200	-25 to +70	IP 67	PP	PP	GN	YE	2M/PUR	1	
10-30 VDC	100	≤200	-25 to +70	IP 67	PP	PP	GN	Ye	2M/PUR	2	<p>Diagram 2</p>
	100	≤200	-25 to +70	IP 67	PP	PP	GN	YE	2M/PUR	2	
	100	≤200	-25 to +70	IP 67	PP	PP	GN	YE	2M/PUR	2	
	100	≤200	-25 to +70	IP 67	PP	PP	GN	YE	2M/PUR	2	
5-30 VDC	100	Remote	-25 to +70	IP 67	PP	PP	N/A	YE	2M/PUR	5	<p>Diagram 3</p>
10-30 VDC	100	≤200	-25 to +70	IP 67	Zinc	PA 12	GN	YE	2M/PVC	1	<p>Diagram 4</p>
10-30 VDC	100	≤200	-25 to +70	IP 67	Zinc	PA 12	GN	YE	2M/PVC	2	<p>Diagram 5</p>
10-30 VDC	100	≤200	-25 to +70	IP 67	Zinc	PA 12	GN	YE	PKG 3Z-*	3	<p>Diagram 5</p>
10-30 VDC	100	≤200	-25 to +70	IP 67	Zinc	PA 12	GN	YE	PKG 3Z-*	4	<p>Diagram 5</p>

* Length in meters.

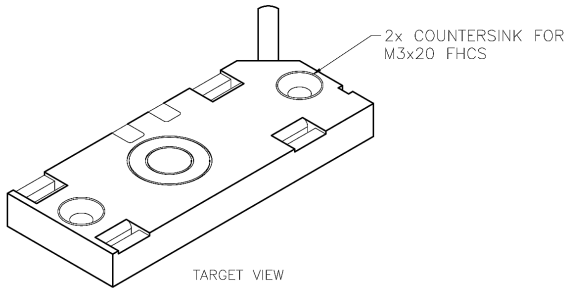
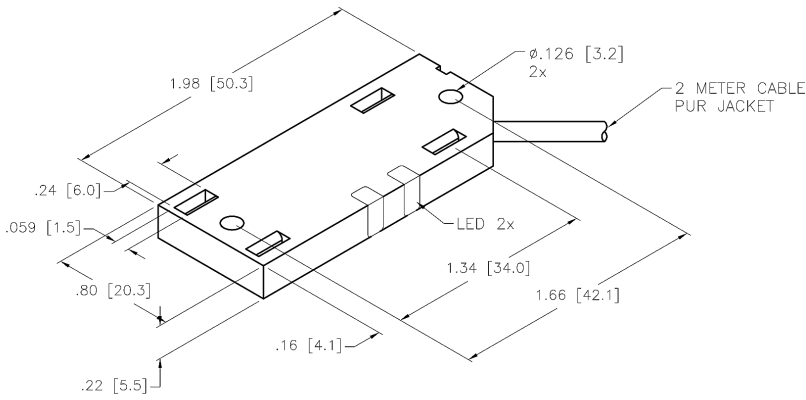
CAPACITIVE

WIRING DIAGRAM



OUTPUT: AP6X2

SHORT-CIRCUIT AND OVERLOAD PROTECTED



NOTES: 1. "/S250" DESIGNATES CAPACITIVE SENSOR WITH FIXED CALIBRATION, NO POTENTIOMETER.

SOURCE DRAWING - FOR REFERENCE ONLY

SPECIFICATIONS

OPERATING VOLTAGE	10-30 VDC
RIPPLE	≤10%
DIFFERENTIAL TRAVEL (HYSTERESIS)	2-20% (5% TYPICAL)
VOLTAGE DROP ACROSS CONDUCTING SENSOR	≤1.8 V at 200 mA
OUTPUT FUNCTION	NORMALLY OPEN, PNP
TTL COMPATIBLE	NO
SHORT-CIRCUIT PROTECTED	YES
TRIGGER CURRENT FOR OVERLOAD PROTECTION	≥ 220 mA
CONTINUOUS LOAD CURRENT	≤ 200 mA
OFF-STATE (LEAKAGE) CURRENT	<100 μA
NO-LOAD CURRENT	≤15 mA
TIME DELAY BEFORE AVAILABILITY	≤ 8 ms
POWER-ON EFFECT	Per IEC 947-5-2
REVERSE POLARITY PROTECTION	YES
WIRE BREAK PROTECTION	YES
TRANSIENT PROTECTION	Per EN 60947-5-2
OPERATING TEMPERATURE	-25°C to +70°C (-13°F to +158°F)
MAX RELATIVE TEMPERATURE DRIFT	≤ 20 %
ENCLOSURE	MEETS NEMA 1, 3, 4, 6, 13 AND IEC IP67
SHOCK	30 g, 11 ms
VIBRATION	55 Hz, 1 mm AMPLITUDE (IN ALL 3 PLANES)
LED FUNCTION	YELLOW = OUTPUT ENERGIZED GREEN = POWER ON
RATED OPERATING DISTANCE(S _n)	10 mm = .394" (ADJUSTABLE)
SWITCHING FREQUENCY	100 Hz
REPEATABILITY	≤ 2% OF RATED OPERATING DISTANCE
EMBEDDABLE (SHIELDED)	YES

RELATED DOCUMENTS 1. 2. 3. 4.	3RD ANGLE PROJECTION	THIS DRAWING IS PROPERTY OF TURCK INC. USE OF THIS DOCUMENT WITHOUT WRITTEN PERMISSION IS PROHIBITED.	TURCK INC High Technology Sensors and Automation Controls		
			DRFT JBJ DATE 06/13/03	DESCRIPTION BC10-QF5.5-AP6X2/S250	
MATERIAL POLYPROPYLENE PLASTIC	TOLERANCES UNLESS OTHERWISE SPECIFIED .X ±0.02 .XX ±0.01 .XXX ±0.005 ANGLES ±1°	DSGN	SCALE NONE	IDENTIFICATION NO. S2620115	REV A
FINISH	ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY	UNIT OF MEASUREMENT INCH [MILLIMETER]		FILE: S2620115	SHEET 1 OF 1
A DRAWING RELEASE	JBJ 06/13/03	DO NOT SCALE THIS DRAWING			
REV DESCRIPTION	BY DATE ECO NO.				