

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	
	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, <i>picofast</i> ® 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

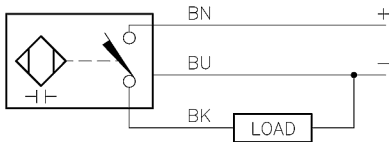
"/S250" designates without potentiometer.

"/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	Diagram 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	
	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	Diagram 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	
	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	Diagram 3
10-30 VDC	100	≤200	-25 to +70	IP 67	Zinc	PA 12	GN	YE	2M/PVC	1	
10-30 VDC	100	≤200	-25 to +70	IP 67	Zinc	PA 12	GN	YE	2M/PVC	2	
10-30 VDC	100	≤200	-25 to +70	IP 67	Zinc	PA 12	GN	YE	PKG 3Z-*	3	
10-30 VDC	100	≤200	-25 to +70	IP 67	Zinc	PA 12	GN	YE	PKG 3Z-*	4	Diagram 5

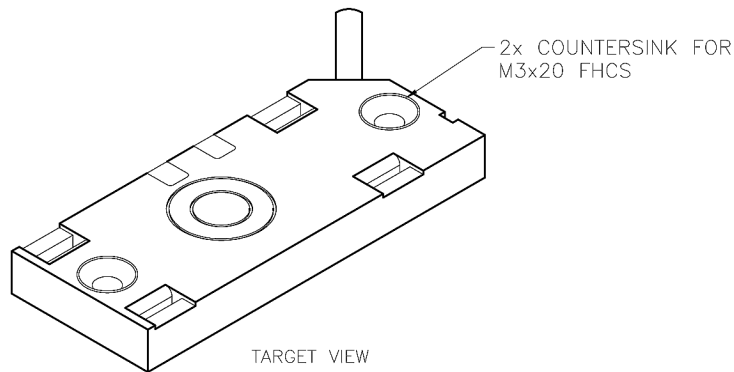
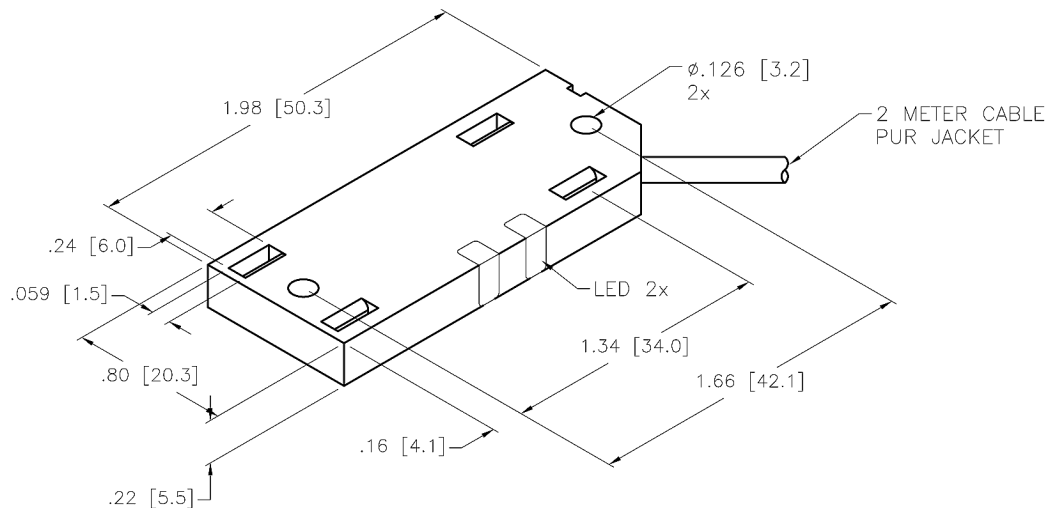
* Length in meters.

WIRING DIAGRAM



OUTPUT: AP6X2

SHORT-CIRCUIT AND OVERLOAD PROTECTED



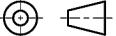
TARGET VIEW

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

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(Sn)	10 mm = .394" (ADJUSTABLE)
SWITCHING FREQUENCY	100 Hz
REPEATABILITY	≤ 2% OF RATED OPERATING DISTANCE
EMBEDDABLE (SHIELDED)	YES

SOURCE DRAWING - FOR REFERENCE ONLY

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 <i>High Technology Sensors and Automation Controls</i>			
	MATERIAL POLYPROPYLENE PLASTIC	TOLERANCES UNLESS OTHERWISE SPECIFIED	DRFT JBK	DATE 06/13/03	DESCRIPTION BC10-QF5.5-AP6X2/S250
		FINISH	.X ±0.02 .XX ±0.01 .XXX ±0.005 ANGLES ±1° ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY	DSGN	
UNIT OF MEASUREMENT INCH [MILLIMETER] DO NOT SCALE THIS DRAWING				IDENTIFICATION NO. S2620115	REV A
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