


TURCK

Inductive Sensors - Barrels

S Barrel



Barrel, Plastic with Potted-In Cable Partial Threading

2-Wire AC 
 35-250 VAC, 10-300 VDC
 Normally Open (AZ31X) or Normally Closed (RZ31X)



Sensor Selection

Part Number	Embeddable	Rated Operating Distance (mm)	Barrel Diameter (mm)	Normally Open	Normally Closed	Drawing #	Wiring Diagram	# of LEDs	Weld Field Immune (S34)	Switching Frequency (Hz)	ID Number
Bi 2-S12-AZ31X	•	2	12	•	1	A	1		60	T1302000	
Ni 4-S12-AZ31X		4	12	•	1	A	1		60	T1302200	
Bi 2-S12-RZ31X	•	2	12		•	B	1		60	T1312000	
Ni 4-S12-RZ31X		4	12		•	B	1		60	T1312200	

Cable/Conductor

Cable: PVC Jacket; 2 and 7 meter standard length
 Copper Conductor: 21 AWG
 (PVC insulated)

Material

Barrel: PA 12-GF30 Plastic
 End Cap: PUR Plastic

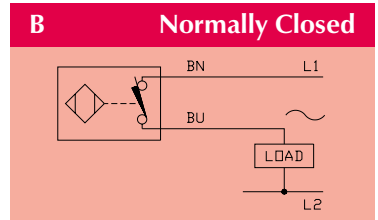
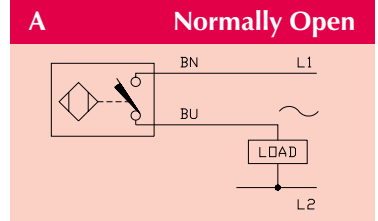
Accessories

Accessories and mounting devices can be found in Section J.

Specifications

Line Frequency	40-60 Hz
Differential Travel (Hysteresis)	3-15% (5% typical)
Voltage Drop Across Conducting Sensor	≤11.0 V at 200 mA
Continuous Load Current	≤200 mA
Off-State (Leakage) Current	≤1.7 mA
Minimum Load Current	≥5.0 mA
Inrush Current	≤1.0 A (≤10 ms, 5% Duty Cycle)
Time Delay Before Availability	≤8 ms
Power-On Effect	Per IEC 947-5-2
Transient Protection	Per EN 60947-5-2
Operating Temperature	-25°C to +70°C (-13°F to +158°F)
Enclosure	Meets NEMA 1,3,4,4X,6,13 and IEC IP 67
Shock	30 g, 11 ms
Vibration	55 Hz, 1 mm Amplitude in all 3 Planes
Repeatability.	≤2% of Rated Operating Distance
LED On	Output Energized

Wiring Diagrams



Barrels

Dimensions

