

# Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
<b>3 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable</b> 	Bi 1-EH03-AN7X*	M1619323	TTL Compatible	1	3-Wire DC NPN
	Bi 1-EH03-AP7X*	M1619322	TTL Compatible	1	3-Wire DC PNP
<b>4 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable</b> 	Bi 1-EH04-AN6X	S4609640		1	3-Wire DC NPN
	Bi 1-EH04-AP6X	S4609540		1	3-Wire DC PNP
	Bi 1-EH04-Y1	S1003040		1	2-Wire DC NAMUR
<b>5 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable</b> 	Bi 1-EG05-AN6X	S4609840		1	3-Wire DC NPN
	Bi 1-EG05-AP6X	S4609740		1	3-Wire DC PNP
	Bi 1-EG05-Y1	S1003240		1	2-Wire DC NAMUR

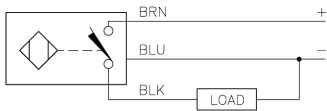
\* Flush mountable only in non-ferrous metals.



Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	End Cap	Power LED	Output LED	Cable Length/ Cable /Mat.	Wiring Diagram #	Wiring Diagrams
10-30 VDC	5000	≤100	-25 to +70	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	1	<p><b>Diagram 1</b></p>
10-30 VDC	5000	≤100	-25 to +70	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	2	<p><b>Diagram 2</b></p>
10-30 VDC	3000	≤100	-25 to +70	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	1	<p><b>Diagram 3</b></p>
10-30 VDC	3000	≤100	-25 to +70	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	2	
5-30 VDC	5000	Remote	-25 to +70	IP 67	SS	PA 12	TROG	N/A	N/A	2M/PVC	3	
10-30 VDC	3000	≤100	-25 to +70	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	1	
10-30 VDC	3000	≤100	-25 to +70	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	2	
5-30 VDC	5000	Remote	-25 to +70	IP 67	SS	PA 12	TROG	N/A	N/A	2M/PVC	3	

Barrels

WIRING DIAGRAM

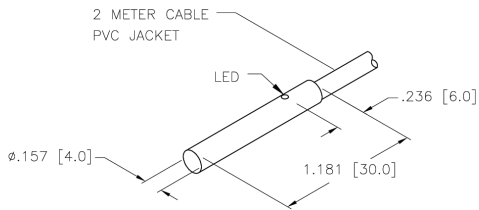


OUTPUT: AP6X

SHORT-CIRCUIT AND OVERLOAD PROTECTED

SPECIFICATIONS

OPERATING VOLTAGE	10-30 VDC
RIPPLE	≤ 10%
DIFFERENTIAL TRAVEL (HYSTERESIS)	1-15% (5% TYPICAL)
VOLTAGE DROP ACROSS CONDUCTING SENSOR	1.8 V @ 100 mA
OUTPUT FUNCTION	NORMALLY OPEN, 3-WIRE, PNP
TTL COMPATIBLE	NO
SHORT-CIRCUIT PROTECTED	YES
CONTINUOUS LOAD CURRENT	≤ 100 mA
LEAKAGE (OFF-STATE) CURRENT	≤ 0.1 mA
TIME DELAY BEFORE AVAILABILITY	≤ 8 ms
NO-LOAD CURRENT	≤ 15 mA
POWER-ON EFFECT	PER IEC 947-5-2
REVERSE POLARITY PROTECTION	INCORPORATED
WIRE-BREAK PROTECTION	INCORPORATED
PROTECTION AGAINST TRANSIENTS	PER EN 60947-5-2
OPERATING TEMPERATURE	-25°C to +70°C (-13°F to +158°F)
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
SENSING RANGE	1.0 mm = .039" (NOMINAL)
SWITCHING FREQUENCY	3000 Hz
REPEATABILITY	≤ 2% of NOMINAL SENSING RANGE
SHIELDED	YES
HOUSING MATERIAL	304 STAINLESS STEEL
SENSING FACE MATERIAL	PA12-GF20



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.	<b>TURCK INC</b> High Technology Sensors and Automation Controls	
MATERIAL 304 STAINLESS STEEL	TOLERANCES UNLESS OTHERWISE SPECIFIED .X ±0.02 .XX ±0.01 .XXX ±0.005 ANGLES ±1° ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY	DRFT CBM DGSN	DATE 1/12/98 SCALE 1=1.0	DESCRIPTION B11-EH04-AP6X
FINISH		UNIT OF MEASUREMENT <b>INCH [ MILLIMETER ]</b>		IDENTIFICATION NO. S4609540
C ADD LED LOCATION	RDS 01/15/08 19457	DO NOT SCALE THIS DRAWING		REV C
REV DESCRIPTION	BY DATE ECO NO.	FILE: S4609540		SHEET 1 OF 1