

Inductive Sensors



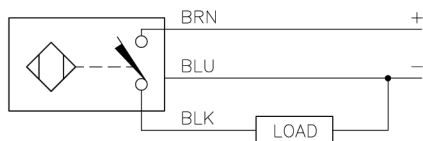
Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
3 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable 	Bi 1-EH03-AN7X*	M1619323	<i>TTL Compatible</i>	1	3-Wire DC NPN
	Bi 1-EH03-AP7X*	M1619322	<i>TTL Compatible</i>	1	3-Wire DC PNP
4 mm - Embeddable, Miniature Smooth Barrel, Potted-In Cable 	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
5 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable 	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	Diagram 1 Diagram 2 Diagram 3
10-30 VDC	5000	≤100	-25 to +70	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	2	
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	
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	

WIRING DIAGRAM

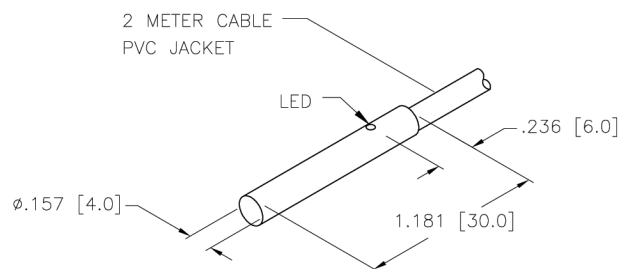


OUTPUT: AP6X

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.			TURCK INC High Technology Sensors and Automation Controls	
	MATERIAL 304 STAINLESS STEEL	TOLERANCES UNLESS OTHERWISE SPECIFIED	DRFT CBM	DATE 1/12/98	DESCRIPTION Bi1–EH04–AP6X	
		.X ±0.02 .XX ±0.01 .XXX ±0.005 ANGLES ±1° ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY	DSGN	SCALE 1=1.0		
	FINISH	UNIT OF MEASUREMENT INCH [MILLIMETER]			IDENTIFICATION NO. S4609540	REV C
C	ADD LED LOCATION	RDS	01/15/08	19457	DO NOT SCALE THIS DRAWING	
REV	DESCRIPTION	BY	DATE	ECO NO.	FILE: S4609540	SHEET 1 OF 1