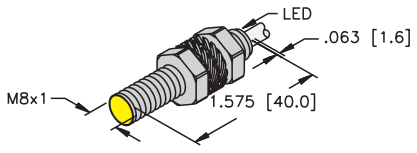
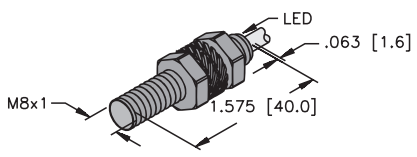
Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable 	Bi 2-EG08-AG41X	S4562000		2	**2-Wire DC**
	Bi 2-EG08-AG41X/S1589	S4562088	*weldguard*	2	
	Bi 1.5-EG08-AN6X	S4602340		1.5	**3-Wire DC NPN**
	Bi 1.5U-EG08-AN6X	S4600510	*Uprox*	1.5	
	Bi 2-EG08-AN6X	S4602140	*Ext. Range*	2	
	Bi 2-EG08-AN6X/S1589	S4602181	*weldguard*	2	
	Bi 2U-EG08-AN6X	S4602035	*Uprox*	2	
	Bi 1.5-EG08-AN7X	S1766110	*TTL Compatible*	1.5	
	Bi 1.5-EG08-AP6X	S4602240		1.5	**3-Wire DC PNP**
	Bi 1.5U-EG08-AP6X	S4600500	*Uprox*	1.5	
	Bi 2-EG08-AP6X	S4602040	*Ext. Range*	2	
	Bi 2-EG08-AP6X/S100	S4602047	*High Temp. 100°C*	2	
	Bi 2-EG08-AP6X/S957	S4602008	*Flush Mount*	2	
	Bi 2-EG08-AP6X/S1589	S4602085	*weldguard*	2	
	Bi 2-EG08-AP6X/S1610	S4602086-1	*armorguard*	2	
	Bi 2U-EG08-AP6X	S4602032	*Uprox*	2	
	Bi 1.5-EG08-Y1	S1003500		1.5	**2-Wire DC NAMUR**
	Bi 2-EG08-AZ14X	S4100001		2	**2-Wire AC/DC**
	Bi 2-EG08-VP6X	S1604610	*Comp. Outputs*	2	**4-Wire DC PNP**
8 mm - Embeddable, Miniature Threaded Barrel, Potted-In Cable, Teflon Coated 	Bi 2-EGT08-AG41X	S4602540		2	**2-Wire DC**
	Bi 1.5-EGT08-AP/S100	S4602256	*High Temp. 100°C*	1.5	**3-Wire DC PNP**

Industrial Automation

TURCK mold-on connectors available on all cable sensors. See page A5.



TURCK works
Industrial Automation

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 #
10-55 VDC	1000	≤100	-25 to +70	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	4
	1000	≤100	-25 to +70	IP 67	SS	WG	TROG	N/A	YE	2M/PUR	4
10-30 VDC	3000	≤150	-25 to +70	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	1
	2000	≤150	-30 to +85	IP 68	SS	PA 12	TROG	N/A	YE	2M/PUR	1
	3000	≤150	-25 to +70	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	1
	3000	≤150	-25 to +70	IP 67	SS	WG	TROG	N/A	YE	2M/PUR	1
	2000	≤150	-30 to +85	IP 68	SS	PA 12	TROG	N/A	YE	2M/PUR	1
	3000	≤150	-25 to +70	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	1
10-30 VDC	3000	≤150	-25 to +70	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	2
	2000	≤150	-30 to +85	IP 68	SS	PA 12	TROG	N/A	YE	2M/PUR	2
	3000	≤150	-25 to +70	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	2
	3000	≤150	-25 to +100	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	2
	3000	≤150	-25 to +70	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	2
	3000	≤150	-25 to +70	IP 67	SS	WG	TROG	N/A	YE	2M/PUR	2
	3000	≤150	-25 to +70	IP 67	AG	WG	TROG	N/A	YE	2M/PUR	2
	2000	≤150	-30 to +85	IP 68	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/PUR	3
20-132 VAC 10-140 VDC	20	≤100	-25 to +70	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	5
10-30 VDC	3000	≤150	-25 to +70	IP 67	SS	PA 12	TROG	N/A	YE	2M/PUR	6
10-55 VDC	1000	≤100	-25 to +70	IP 67	TC	PA 12	TC	N/A	YE	2M/PUR	4
10-30 VDC	2000	≤150	-25 to +100	IP 67	TC	PA 12	TC	N/A	YE	2M/PUR	2

Wiring Diagrams

Diagram 1

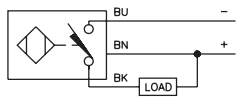


Diagram 2

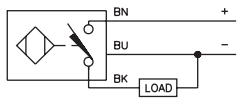


Diagram 3

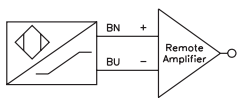


Diagram 4

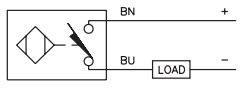


Diagram 5

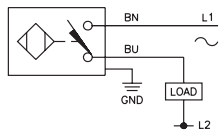
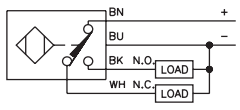
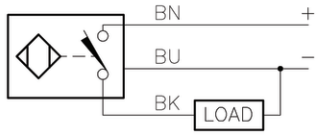


Diagram 6



Barrels

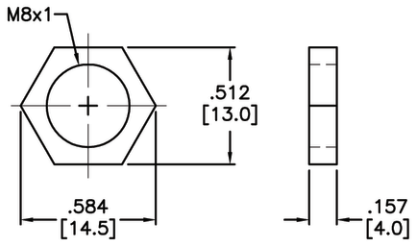
WIRING DIAGRAM



OUTPUT: AP6X

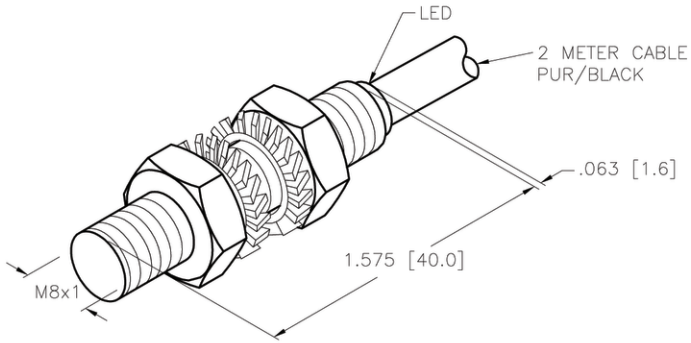
SHORT–CIRCUIT AND OVERLOAD PROTECTED

LOCKNUT LN–SS8



SPECIFICATIONS

OPERATING VOLTAGE	10–30 VDC
RIPPLE	≤10%
DIFFERENTIAL TRAVEL (HYSTERESIS)	3–15% (5% TYPICAL)
VOLTAGE DROP ACROSS CONDUCTING SENSOR	≤1.8 V at 150 mA
OUTPUT FUNCTION	NORMALLY OPEN/3–WIRE DC
TTL COMPATIBLE	NO
SHORT–CIRCUIT PROTECTED	YES
TRIGGER CURRENT FOR OVERLOAD PROTECTION	≥170 mA
CONTINUOUS LOAD CURRENT	≤150 mA
LEAKAGE (OFF–STATE) CURRENT	<100 µA
NO–LOAD CURRENT	1.0–9.5 mA
TIME DELAY BEFORE AVAILABILITY	≤ 8 ms
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, 4X, 6, 13 AND IEC IP67
SHOCK	30 g, 11 ms
VIBRATION	55 Hz, 1 mm AMPLITUDE (IN ALL 3 PLANES)
LED FUNCTION	RED: OUTPUT ENERGIZED
RATED OPERATING DISTANCE(Sn)	1.5 mm = .059" (NOMINAL)
SWITCHING FREQUENCY	2000 Hz
REPEATABILITY	≤2% of RATED OPERATING DISTANCE
EMBEDDABLE (SHIELDED)	YES



NOTE
PRELIMINARY SPECIFICATIONS

SOURCE DRAWING - FOR REFERENCE ONLY

NOTES: 1. MATERIALS:
BARREL – STAINLESS STEEL
LOCKNUTS – STAINLESS STEEL
LOCKWASHERS – STAINLESS STEEL
SENSING FACE –PA12–GF30 PLASTIC
END CAP – TPE–O ELASTOMER

REV	DESCRIPTION	BY	DATE	ECO NO.
P1		JBJ	11/06/03	

RELATED DOCUMENTS
1.
2.
3.
4.

3RD ANGLE PROJECTION

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TURCK INC
High Technology Sensors and Automation Controls

MATERIAL: SEE NOTES

FINISH: SEE NOTES

TOLERANCES UNLESS OTHERWISE SPECIFIED
.X ±0.02
.XX ±0.01
.XXX ±0.005
ANGLES ±1°
ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY

DRFT: JBJ | DATE: 11/06/03
DSGN: | SCALE: 1=1.0

UNIT OF MEASUREMENT
INCH [MILLIMETER]
DO NOT SCALE THIS DRAWING

DESCRIPTION: BI 1.5–EG08–AP6X
IDENTIFICATION NO.: S4602240
REV: P1
FILE: S4602240
SHEET 1 OF 1