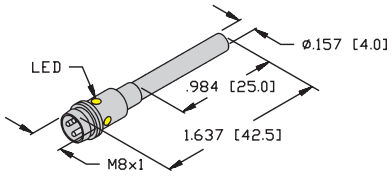
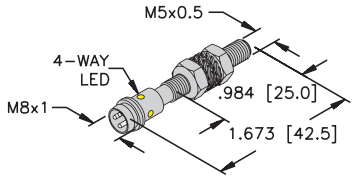
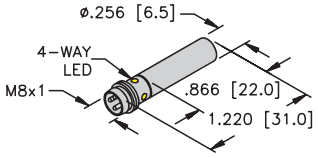
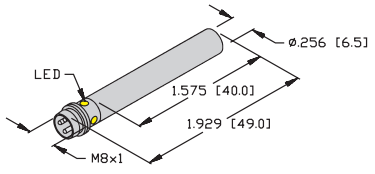
Inductive Sensors





Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
4 mm - Embeddable, Miniature Smooth, *picofast*® Quick Disconnect 	Bi 1-EH04-AN6X-V1331	S4608540		1	3-Wire DC NPN
	Bi 1-EH04-AP6X-V1331	S4608440		1	3-Wire DC PNP
	Bi 1-EH04-Y1-V1330	S1003044		1	2-Wire DC NAMUR
5 mm - Embeddable, Miniature Threaded, *picofast* Quick Disconnect 	Bi 1-EG05-AN6X-V1331	S4608740		1	3-Wire DC NPN
	Bi 1-EG05-AP6X-V1331	S4608640		1	3-Wire DC PNP
	Bi 1-EG05-Y1-V1331	S1003241		1	2-Wire DC NAMUR
6.5 mm - Embeddable, Miniature Smooth, *picofast* Quick Disconnect 	Bi 1.5-EH6.5K-AN6X-V1131	S4610840	*Short Barrel*	1.5	3-Wire DC NPN
	Bi 2-EH6.5K-AN6X-V1131	S4610120	*Short Barrel*	2	
	Bi 1.5-EH6.5K-AP6X-V1131	S4610740	*Short Barrel*	1.5	3-Wire DC PNP
	Bi 1.5-EH6.5K-AP6X-V1131/S100	S4612003	*High Temp. 100°C*	1.5	
	Bi 2-EH6.5K-AP6X-V1131	S4610020	*Short Barrel*	2	
6.5 mm - Embeddable, Miniature Smooth, *picofast* Quick Disconnect 	Bi 1.5-EH6.5-AN6X-V1131	S4612120		1.5	3-Wire DC NPN
	Bi 1.5U-EH6.5-AN6X-V1131	S4600687	*Uprox*	1.5	
	Bi 2-EH6.5-AN6X-V1131	S4612320		2	
	Bi 2U-EH6.5-AN6X-V1131	S4281180	*Uprox*	2	
	Bi 1.5-EH6.5-AP6X-V1131	S4612020		1.5	3-Wire DC PNP
	Bi 2-EH6.5-AP6X-V1131	S4612220		2	
	Bi 2U-EH6.5-AP6X-V1131	S4281160	*Uprox*	2	
	Bi 1.5-EH6.5-AP6X-V1131/S100	S4612002	*High Temp. 100°C*	1.5	
	Bi 1.5-EH6.5-Y1-V1130	S1004621		1.5	2-Wire DC NAMUR

Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Mating Cordset	Wiring Diagram #
10-30 VDC	3000	≤100	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
10-30 VDC	3000	≤100	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
5-30 VDC	5000	Remote	-25 to +70	IP 67	SS	PA 12	N/A	N/A	PKG 3Z-*	3
10-30 VDC	3000	≤100	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
10-30 VDC	3000	≤100	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
5-30 VDC	5000	Remote	-25 to +70	IP 67	SS	PA 12	N/A	N/A	PKG 3Z-*	3
10-30 VDC	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
10-30 VDC	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
	3000	≤150	-25 to +100	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
10-30 VDC	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
	2000	≤150	-30 to +85	IP 68	SS	PA 12	N/A	YE	PKG 3Z-*	1
	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	1
	2000	≤150	-30 to +85	IP 68	SS	PA 12	N/A	YE	PKG 3Z-*	1
10-30 VDC	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
	3000	≤150	-25 to +70	IP 67	SS	PA 12	N/A	YE	PKG 3Z-*	2
	2000	≤150	-30 to +85	IP 68	SS	PA 12	N/A	YE	PKG 3Z-*	2
	3000	≤150	-25 to +100	IP 67	SS	EPTR	N/A	YE	PKG 3Z-*	2
5-30 VDC	5000	Remote	-25 to +70	IP 67	SS	PA 12	N/A	N/A	PKG 3Z-*	3

Wiring Diagrams

Diagram 1

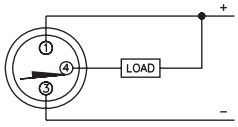


Diagram 2

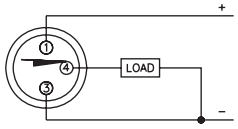
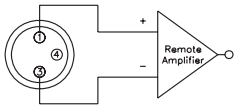


Diagram 3



* Length in meters.

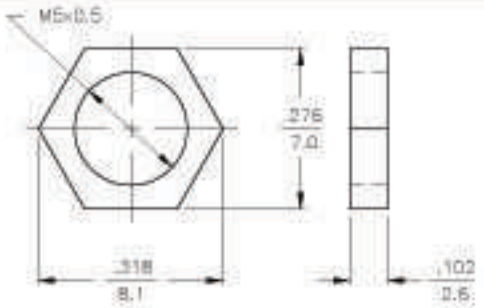
WIRING DIAGRAM



OUTPUT: AP6X

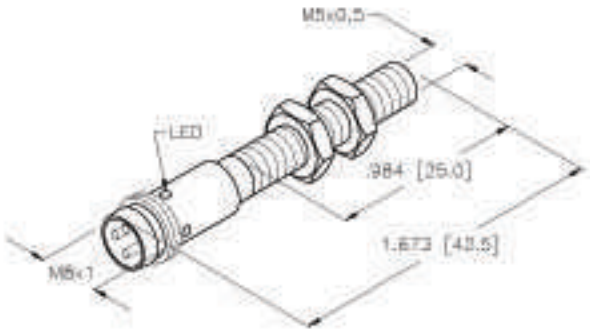
SHORT-CIRCUIT AND OVERLOAD PROTECTED

LOCKNUT LN-SS5



SPECIFICATIONS

OPERATING VOLTAGE	10-30 VDC
RIPPLE	≤10%
DIFFERENTIAL TRAVEL (HYSTERESIS)	1-15% (5% TYPICAL)
VOLTAGE DROP ACROSS CONDUCTING SENSOR	< 1.8 V at 100 mA
OUTPUT FUNCTION	NORMALLY OPEN 3-WIRE DC SELF-CONTAINED
TRIGGER CURRENT FOR OVERLOAD PROTECTION	≥120 mA
CONTINUOUS LOAD CURRENT	≤100 mA
OFF-STATE (LEAKAGE) CURRENT	<100 µA
NO-LOAD CURRENT	1.0-9.5 mA
TIME DELAY BEFORE AVAILABILITY	≤8 ms
POWER-ON EFFECT PROTECTION	INCORPORATED
REVERSE POLARITY PROTECTION	INCORPORATED
WIRE-BREAK PROTECTION	INCORPORATED
PROTECTION AGAINST TRANSIENTS	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_n 11 ms
VIBRATION	55 Hz, 1 mm AMPLITUDE (IN ALL 3 PLANES)
LED FUNCTION	ON: OUTPUT ENERGIZED
RATED OPERATING DISTANCE(Sn)	1.5 mm = .040" (NOMINAL)
SWITCHING FREQUENCY	3000 Hz
REPEATABILITY	3% of RATED OPERATING DISTANCE
EMBEDDABLE (SHIELDED)	YES



NOTE
PRELIMINARY SPECIFICATIONS

RELATED DOCUMENTS: 1. 2. 3. 4.	3RD ANGLE PROJECTION	THIS DOCUMENT IS PROPERTY OF TURCK INC. USE OF THIS DOCUMENT WITHOUT WRITTEN PERMISSION IS PROHIBITED.	TURCK INC High Technology Sensors and Automation Controls	
MATERIAL: CONNECTOR: BRASS BARREL: STAIN. STEEL	TOLERANCES UNLESS OTHERWISE SPECIFIED: .X ±0.02 .XX ±0.01 .XXX ±0.005 ANGLES ±1° ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY	DRFT IK	DATE 01/28/00	DESCRIPTION: BI 1-EG05-AP6X-V1331
		DSGN	SCALE N/A	
FINISH: CONNECTOR: COPPER/ NICKEL/CHROME PLATING		UNIT OF MEASUREMENT: **INCH [MILLIMETER]** DO NOT SCALE THIS DRAWING		IDENTIFICATION NO: 54608640 REV: P1
				FILE: 54608640 SHEET 1 OF 1

REV	DESCRIPTION	BY	DATE	ECO NO.
P1		IK	01/28/00	