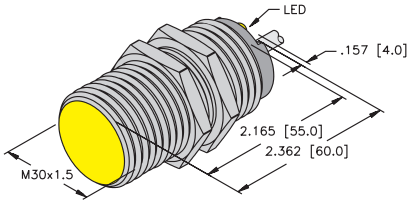
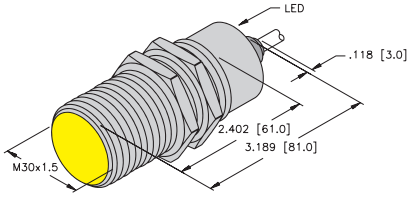
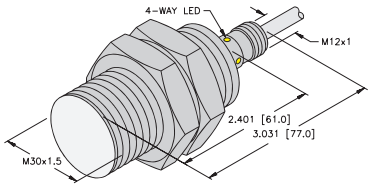
Inductive Sensors

Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
30 mm - Embeddable, Potted-In Cable 	Bi10-M30-AD4X	T4417000		10	2-Wire DC
	Bi12-M30-AD4X	T4417035	*Extended Range*	12	
	Bi10-EM30-AN6XLD	T4617109	*Load Dump*	10	3-Wire DC NPN
	Bi10U-EM30-AN6X	M1636320	*Uprox*	10	
	Bi10U-M30-AN6X	M1636120	*Uprox*	10	
	Bi15-M30-AN6X	T4618620	*Extended Range*	15	
	Bi10-M30-AN6X	T4617691		10	
	Bi10-EM30-AP6XLD	T4617003	*Load Dump*	10	3-Wire DC PNP
	Bi10-M30-AP6X/S100	M4617004	*High Temp. 100°C*	10	
	Bi10U-EM30-AP6X	M1636300	*Uprox*	10	
	Bi10U-M30-AP6X	M1636100	*Uprox*	10	
	Bi15-M30-AP6X	T4618530	*Extended Range*	15	
	Bi10-M30-VN4X	T1571400	*Comp. Outputs*	10	4-Wire DC NPN
	Bi15-M30-VN4X	T4570712	*Extended Range*	15	
	Bi10-M30-VP4X	T1561400	*Comp. Outputs*	10	4-Wire DC PNP
	Bi15-M30-VP4X	T4570713	*Extended Range*	15	
	Bi10U-MT30-ADZ30X2	M4209430	*Uprox*	10	2-Wire AC/DC Short-Circuit Protected
30 mm - Embeddable, Potted-In Cable 	Bi10NF-M30-AN6X	M1616100	*Nonferrous*	10	3-Wire DC NPN
	Bi10NF-M30-AP6X	M1606100	*Nonferrous*	10	3-Wire DC PNP
30 mm - Embeddable, Potted-In Cable 	Bi12-EM30WD-AN6X	M4614543	*Washdown*	12	3-Wire DC NPN
	Bi12-EM30WD-AP6X	M4614540	*Washdown*	12	3-Wire DC PNP

Voltage	Switching Freq. (Hz)	Operating Current (mA) AC/DC	Operating Temp. (°C)	Protection	Housing	Face	End Cap	Power LED	Output LED	Cable Length/ Cable Mat.	Wiring Diagram #
10-65 VDC	500	≤100	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1
	400	≤100	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1
10-30 VDC	500	≤200	-25 to +70	IP 67	SS	PA 12	EPTR	N/A	YE	2M/PVC	2
	2000	≤200	-30 to +85	IP 68	SS	PA 12	EPTR	N/A	YE	2M/PVC	2
	2000	≤200	-30 to +85	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	2
	500	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	2
	500	≤200	-25 to +70	IP 67	CPB	PA 12		N/A	YE	2M/PVC	2
10-30 VDC	500	≤200	-25 to +70	IP 67	SS	PA 12	EPTR	N/A	YE	2M/PVC	3
	500	≤200	-25 to +100	IP 67	CPB	IRPA	EPTR	N/A	YE	2M/PVC	3
	2000	≤200	-30 to +85	IP 68	SS	PA 12	EPTR	N/A	YE	2M/PVC	3
	2000	≤200	-30 to +85	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	3
	500	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	3
10-65 VDC	500	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	4
	500	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	4
10-65 VDC	500	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	5
	500	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	5
20-250 VAC 10-300 VDC	20	≤400/300	-25 to +70	IP 67	TC	TC		GN	RD	2M/PUR	6
10-30 VDC	500	≤200	0 to +60	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	2
10-30 VDC	500	≤200	0 to +60	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	3
10-30 VDC	1000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	EPTR	N/A	YE	2M/PUR	2
10-30 VDC	1000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	EPTR	N/A	YE	2M/PUR	3

Wiring Diagrams

Diagram 1

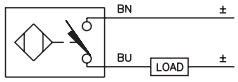


Diagram 2

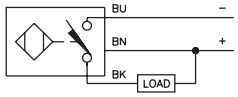


Diagram 3

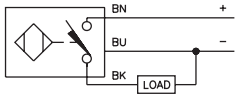


Diagram 4

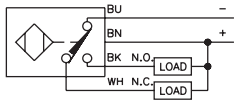


Diagram 5

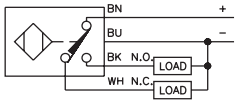
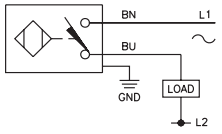
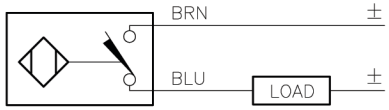


Diagram 6



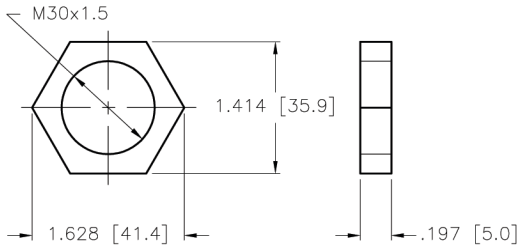
WIRING DIAGRAM



OUTPUT: AD4X

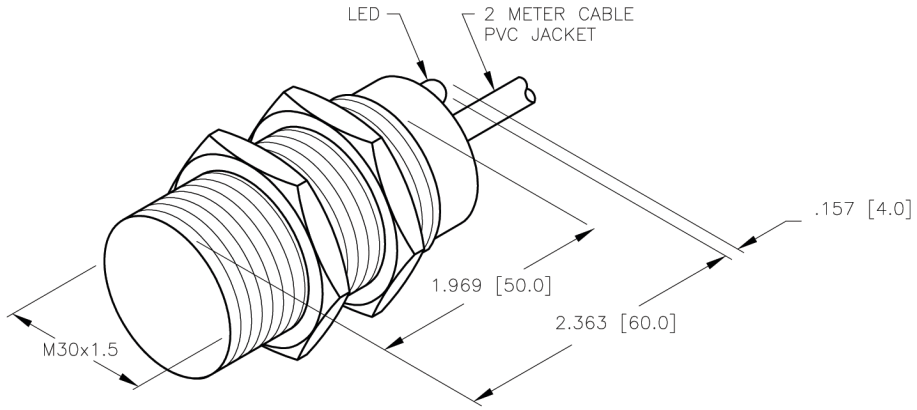
SHORT–CIRCUIT AND OVERLOAD PROTECTED

LOCKNUT LN–M30



SPECIFICATIONS

OPERATING VOLTAGE	10–65 VDC
RIPPLE	≤10%
DIFFERENTIAL TRAVEL (HYSTERESIS)	3–15% (5% TYPICAL)
VOLTAGE DROP ACROSS CONDUCTING SENSOR	≤5.0 V at 100 mA
OUTPUT FUNCTION	NORMALLY OPEN 2–WIRE DC SELF–CONTAINED
TTL COMPATIBLE	NO
SHORT–CIRCUIT PROTECTED	YES
TRIGGER CURRENT FOR OVERLOAD PROTECTION	≥120 mA
MAXIMUM LOAD CURRENT	≤100 mA
MINIMUM LOAD CURRENT	≥3.0 mA
OFF–STATE (LEAKAGE) CURRENT	≤0.8 mA
TIME DELAY BEFORE AVAILABILITY	≤10 ms
POWER–ON EFFECT PROTECTION	INCORPORATED
PROTECTION AGAINST TRANSIENTS	INCORPORATED
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	10 mm = .394" (NOMINAL)
SWITCHING FREQUENCY	500 Hz
REPEATABILITY	≤2% of RATED OPERATING DISTANCE
SHIELDED	YES



SOURCE DRAWING - FOR REFERENCE ONLY

NOTE: ALL DIMENSIONAL TOLERANCES: ±1.0mm.

REV	DESCRIPTION	BY	DATE	ECO NO.
C	CHANGE LED COLOR	CBM	03/03/00	B3393

RELATED DOCUMENTS
1.
2.
3.
4.

3RD ANGLE PROJECTION

TURCK INC
High Technology Sensors and Automation Controls

MATERIAL: BRASS BARREL

FINISH: COPPER NICKEL CHROME PLATING

TOLERANCES UNLESS OTHERWISE SPECIFIED: ±0.0394 in [±1.00 mm]

DRFT: SMW | DATE: 04/29/87

DSGN: | SCALE: NONE

UNIT OF MEASUREMENT: **INCH [MILLIMETER]**

DO NOT SCALE THIS DRAWING

DESCRIPTION: Bi10–M30–AD4X

IDENTIFICATION NO.: T4417000 | REV: C

FILE: T4417000 | SHEET 1 OF 1