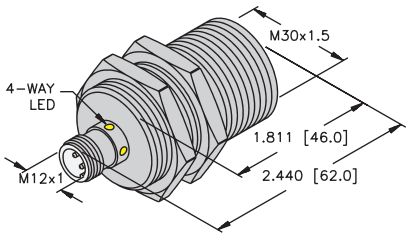
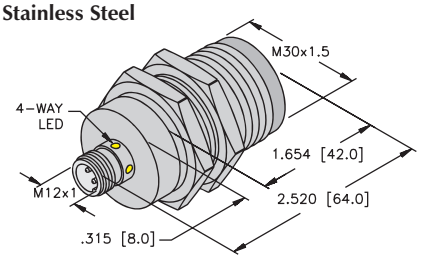
Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
30 mm - Embeddable, *eurofast*® Connection 	Bi10-M30-AD4X-H1141	T4417500		10	**2-Wire DC**
	Bi12-M30-AD4X-H1141	T4417041	***Extended Range***	12	
	Bi10-M30-AN6X-H1141	T4617600		10	**3-Wire DC NPN**
	Bi10U-EM30-AN6X-H1141	M1636350	***Uprox***	10	
	Bi10U-EM30H-AN6X2-H1141	M1636407	***Uprox, Stoneface***	10	
	Bi10U-EM30H-AN6X2-H1141/S1589	M1636490	***weldguard, Uprox***	10	
	Bi10U-M30-AN6X-H1141	M1636150	***Uprox***	10	
	Bi10U-M30-AN6X2-H1141	M1636155	***Uprox***	10	
	Bi12-EM30WD-AN6X-H1141	M4614544	***Washdown***	12	
	Bi15-M30-AN6X-H1141	T4618600	***Extended Range***	15	
	Bi15-EM30H-AN6X-H1141	T4618692	***Extended Range***	15	
	Bi15-EM30H-AN6X-H1141/S1589	T4618693	***weldguard***	15	
	Bi10-M30-AP6X-H1141	T4617500		10	**3-Wire DC PNP**
	Bi10U-EM30-AP6X-H1141	M1636340	***Uprox***	10	
	Bi10U-EM30H-AP6X2-H1141	M1636406	***Uprox, Stoneface***	10	
	Bi10U-EM30H-AP6X2-H1141/S1589	M1636491	***weldguard, Uprox***	10	
	Bi10U-M30-AP6X-H1141	M1636140	***Uprox***	10	
	Bi10U-M30-AP6X2-H1141	M1636145	***Uprox***	10	
	Bi12-EM30WD-AP6X-H1141	M4614541	***Washdown***	12	
	Bi15-M30-AP6X-H1141	T4618500	***Extended Range***	15	
	Bi15-EM30H-AP6X-H1141	T4618592	***Extended Range***	15	
	Bi15-EM30H-AP6X-H1141/S1589	T4618593	***weldguard***	15	
	Bi15-EM30H-AP6X-H1141/S1610	T4618589	***Weld/armorguard***	15	
	Bi10-M30-VN4X-H1141	T1571600	***Comp. Outputs***	10	**4-Wire DC NPN**
	Bi10U-M30-VN4X-H1141	M1582352	***Uprox, Comp. Outputs***	10	
	Bi15-M30-VN4X-H1141	T4570711	***Comp. Outputs***	15	
	Bi10-M30-VP4X-H1141	T1561600	***Comp. Outputs***	10	**4-Wire DC PNP**
	Bi10U-M30-VP4X-H1141	M1582253	***Uprox, Comp. Outputs***	10	
	Bi15-M30-VP4X-H1141	T4570710	***Comp. Outputs***	15	
	Bi10-M30-Y1X-H1141	M4020200		10	**2-Wire DC**
30 mm - Embeddable, *eurofast* Connection, Stainless Steel 	Bi 10-EM30F-AP6X-H1141	M4614537	***Stainless Steel Front Cap***	10	**3-Wire DC PNP**

Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Mating Cordset	Wiring Diagram #
10-65 VDC	500	≤100	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.2T-*	1
	500	≤100	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.2T-*	1
10-30 VDC	500	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	2
	2000	≤200	-30 to +85	IP 68	SS	PA 12	N/A	YE	RKV 4T-*	2
	2000	≤200	-30 to +85	IP 68	SS	SF	GN	YE	RKV 4T-*	2
	2000	≤200	-30 to +85	IP 68	SS	WG	GN	YE	RKG 4T-*/S600	2
	2000	≤200	-30 to +85	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	2
	2000	≤200	-30 to +85	IP 67	CPB	PA 12	GN	YE	RK 4T-*	2
	1000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	N/A	YE	RK 4T-*	2
	300	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	2
	300	≤200	-25 to +70	IP 67	SS	SF	N/A	YE	RKG 4T-*/S600	2
	300	≤200	-25 to +70	IP 67	SS	WG	N/A	YE	RKG 4T-*/S600	2
10-30 VDC	500	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	3
	2000	≤200	-30 to +85	IP 68	SS	PA 12	N/A	YE	RKV 4T-*	3
	2000	≤200	-30 to +85	IP 68	SS	SF	GN	YE	RKV 4T-*	3
	2000	≤200	-30 to +85	IP 68	SS	WG	GN	YE	RKG 4T-*/S600	3
	2000	≤200	-30 to +85	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	3
	2000	≤200	-30 to +85	IP 67	CPB	PA 12	GN	YE	RK 4T-*	3
	1000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	N/A	YE	RK 4T-*	3
	300	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	3
	300	≤200	-25 to +70	IP 67	SS	SF	N/A	YE	RKV 4T-*	3
	300	≤200	-25 to +70	IP 67	SS	WG	N/A	YE	RKG 4T-*/S600	3
	300	≤200	-25 to +70	IP 67	AG	WG	N/A	YE	RKG 4T-*/S600	3
10-65 VDC	500	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	4
	2000	≤200	-30 to +85	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	4
	500	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	4
10-65 VDC	500	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	5
	2000	≤200	-30 to +85	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	5
	300	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	5
5-30 VDC	2000	Remote	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.21T-*	6
10-30 VDC	180	≤200	-25 to +80	IP 68, 69K	SS	SS	N/A	YE	RKV 4T-*	3

Wiring Diagrams

Diagram 1

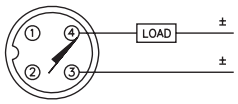


Diagram 2

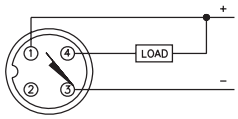


Diagram 3

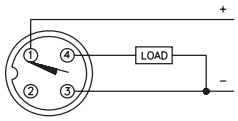


Diagram 4

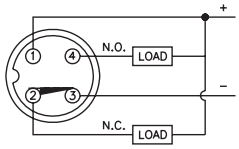


Diagram 5

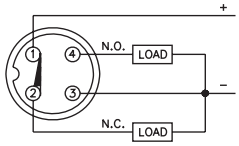
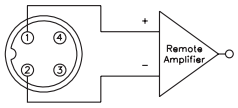


Diagram 6



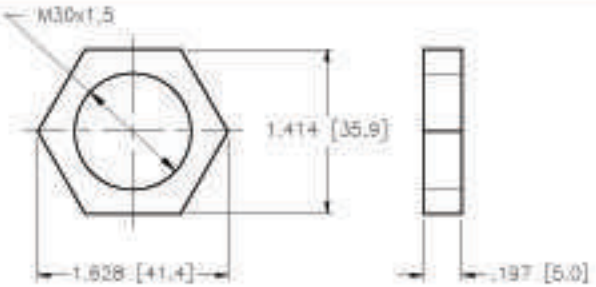
* Length in meters.

WIRING DIAGRAM



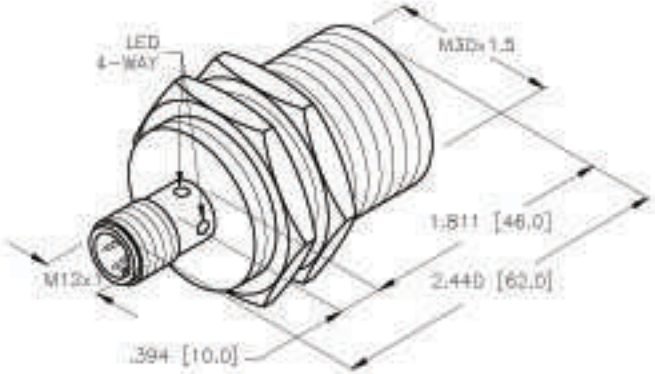
OUTPUT: AP6X

LOCKNUT LN-M18



SPECIFICATIONS

OPERATING VOLTAGE	10–30 VDC
RIPPLE	≤10%
HYSTERESIS (DIFFERENTIAL TRAVEL)	3–15% (5% TYPICAL)
VOLTAGE DROP ACROSS CONDUCTING SENSOR	≤1.8 V at 200 mA
OUTPUT FUNCTION	NORMALLY OPEN 3-WIRE DC SELF-CONTAINED
TTL COMPATIBLE	NO
SHORT-CIRCUIT PROTECTED	YES
TRIGGER CURRENT FOR OVERLOAD PROTECTION	≥220 mA
CONTINUOUS LOAD CURRENT	≤200 mA
OFF-STATE (LEAKAGE) CURRENT	≤ 10 µA
NO-LOAD CURRENT	5.5–8.5 mA
TIME DELAY BEFORE AVAILABILITY	≤8 ms
POWER-ON EFFECT	Per IEC 947-5-2
REVERSE POLARITY PROTECTION	INCORPORATED
WIRE-BREAK PROTECTION	INCORPORATED
TRANSIENT PROTECTION	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
RATED OPERATING DISTANCE(Sn)	10 mm = .394" (NOMINAL)
SWITCHING FREQUENCY	500 Hz
REPEATABILITY	≤2% of RATED OPERATING DISTANCE
SHIELDED	YES



SOURCE DRAWING – FOR REFERENCE ONLY

NOTE: ALL TOLERANCES ±1.0 mm.

REV.	DESCRIPTION	BY	DATE	ECO NO.
C	MODIFY DRAWING, NEW FORMAT	IK	03/09/00	T3438

RELATED DOCUMENTS
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2.
3.
4.

3RD ANGLE PROJECTION

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TURCK INC
High Technology Sensors and Automation Controls

MATERIAL: BRASS BARREL

FINISH: COPPER/NICKEL/CHROME PLATING

TOLERANCES UNLESS OTHERWISE SPECIFIED
.X ±0.0?
.XX ±0.01
.XXX ±0.005
ANGLES ±1°
ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY

DRT: SNW
DSGN:
DATE: 10/01/87
SCALE: 1=1.5

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

DESCRIPTION: BI10-M30-AP6X-H1141

IDENTIFICATION NO.: T4617500

REV: C

FILE: T4617500

SHEET 1 OF 1