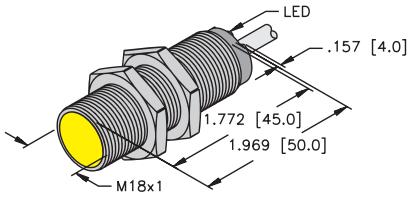
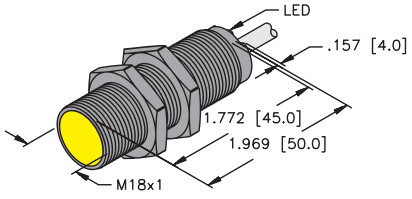
Inductive Sensors

Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
18 mm - Embeddable, Potted-In Cable, Partial Threading 	Bi 5-M18-AD4X	T4411000		5	**2-Wire DC**
	Bi 7-M18-AD4X	T4414535	*Ext. Range*	7	
	Bi 5U-EM18-AN6X	M1635320	*Uprox*	5	**3-Wire DC NPN**
	Bi 5U-M18-AN6X	M1635120	*Uprox*	5	
	Bi 8-M18-AN6X	T4615130	*Ext. Range*	8	
	Bi 5-M18-AN6X	M4611100		5	
	Bi 5-M18-AP6X/S100	M4611004	*High Temp. 100°C*	5	**3-Wire DC PNP**
	Bi 5U-EM18-AP6X	M1635300	*Uprox*	5	
	Bi 5U-M18-AP6X	M1635100	*Uprox*	5	
	Bi 8-M18-AP6X	T4615030	*Ext. Range*	8	
	Bi 5-M18-VN4X	T1571100	*Comp. Outputs*	5	**4-Wire DC NPN**
	Bi 8-M18-VN4X	T4590703	*Comp. Outputs*	8	
	Bi 5-M18-VP4X	T1561100	*Comp. Outputs*	5	**4-Wire DC PNP**
	Bi 8-M18-VP4X	T4590704	*Comp. Outputs*	8	
18 mm - Embeddable, Potted-In Cable, Partial Threading, Teflon Coated 	Bi 5U-MT18-ADZ30X2	M4209410	*Uprox*	5	**2-Wire AC/DC**

Output	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	End Cap	Power LED	Output LED	Cable Length/ Cable Mat.	Wiring Diagram #
10-65 VDC	1000	≤100	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1
	1000	≤100	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1
10-30 VDC	2500	≤200	-30 to +85	IP 68	SS	PA 12	EPTR	N/A	YE	2M/PVC	2
	2500	≤200	-30 to +85	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	2
	500	≤200	-25 to +70	IP 67	SS	PA 12	EPTR	N/A	YE	2M/PVC	2
	1000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	RK 4T-*	2
10-30 VDC	1000	≤200	-25 to +100	IP 67	CPB	IRPA	EPTR	N/A	YE	2M/PVC	3
	2500	≤200	-30 to +85	IP 68	SS	PA 12	EPTR	N/A	YE	2M/PVC	3
	2500	≤200	-30 to +85	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	3
	500	≤200	-25 to +70	IP 67	SS	PA 12	EPTR	N/A	YE	2M/PVC	3
10-65 VDC	1000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	4
	500	≤200	-25 to +70	IP 67	SS	PA 12	EPTR	N/A	YE	2M/PVC	4
10-65 VDC	1000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	5
	500	≤200	-25 to +70	IP 67	SS	PA 12	EPTR	N/A	YE	2M/PVC	5
20-250 VAC 10-300 VDC	20	≤400/300	-30 to +85	IP 67	TC	TC	EPTR	GN	YE	2M/PVC	6

Wiring Diagrams

Diagram 1

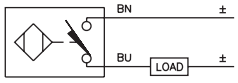


Diagram 2

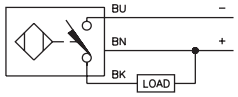


Diagram 3

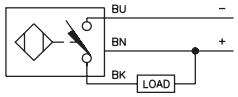


Diagram 4

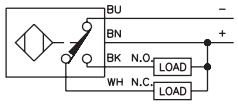


Diagram 5

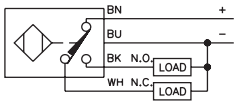
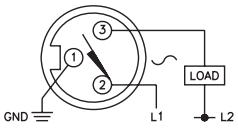


Diagram 6

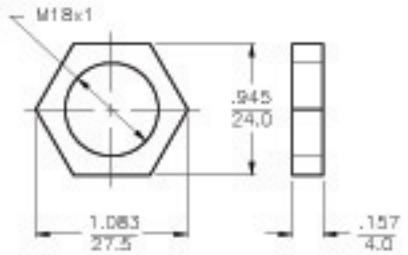


WIRING DIAGRAM

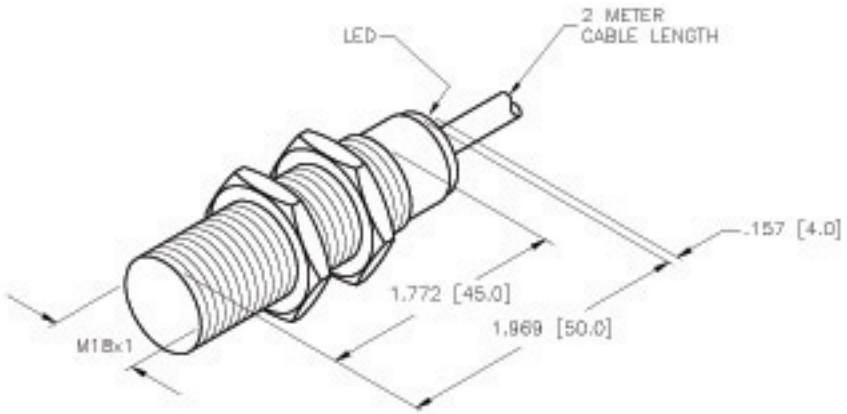
OUTPUT: AP6X

SHORT–CIRCUIT AND OVERLOAD PROTECTED

LOCKNUT LN–M18



SPECIFICATIONS	
OPERATING VOLTAGE	10–30 VDC
RIPPLE	≤ 10%
DIFFERENTIAL TRAVEL (HYSTERESIS)	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	≤ 0.1 mA
NO–LOAD CURRENT	≤ 8 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 (10% DRIFT)	–25°C to +70°C (–13°F to +158°F)
OPERATING TEMPERATURE (15% DRIFT)	–30°C to +85°C (–22°F to +185°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)	8mm = .315" (NOMINAL)
SWITCHING FREQUENCY	400 Hz
REPEATABILITY	≤ 2% of RATED OPERATING DISTANCE
EMBEDDABLE (SHIELDED)	YES
MATING PLUGS/CABLES	4–PIN "EUROFAST" CONSTRUCTION



SOURCE DRAWING – FOR REFERENCE ONLY

REV	DESCRIPTION	BY	DATE	ECO NO.
D	CHANGE DI 40MM TO 45MM	IK	06/29/00	T3745

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: 0.0394in [1.00mm]

DRFT: CBM | DSGN: | DATE: 09/26/99 | SCALE: NONE

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

DESCRIPTION: Bi 8–M18–AP6X

IDENTIFICATION NO.: T4615030 | REV: D

FILE: T4615D30 | SHEET 1 OF 1