

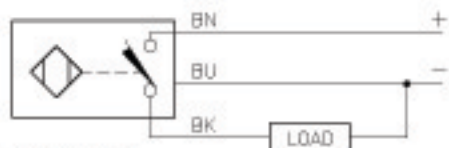
Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output	
12 mm - Non-Embeddable, Potted-In Cable 	Ni 4-M12-AD4X	T4405200		4	2-Wire DC	
	Ni 8-M12-AD4X	T4411235	Extended Range	8		
	Ni 8-M12-AD4X/S90	T4411235-1	Extended Range	8		
	Ni 4-M12-AN6X	T4606380			4	3-Wire DC NPN
	Ni 8-M12-AN6X	T4611318	Extended Range	8		
	Ni 8U-EM12-AN6X	M1644320	Ext. Range, Uprox	8		
	Ni 8U-M12-AN6X	M1644120	Ext. Range, Uprox	8		
	Ni 4-M12-AP6X	T4605200			4	3-Wire DC PNP
	Ni 4-M12-AP6X/S100	M4605201	High Temp. 100°C	4		
	Ni 8-M12-AP6X	T4611319	Extended Range	8		
	Ni 8U-EM12-AP6X	M1644300	Uprox	8		
	Ni 8U-M12-AP6X	M1644100	Uprox	8		
	Ni 4-M12-VN6X	T1640400	Ext. Range, Comp. Output		4	4-Wire DC NPN
	Ni 8-M12-VN6X	T4611321	Ext. Range, Comp. Output		8	
	Ni 4-M12-VP6X	T1630400	Ext. Range		4	4-Wire DC PNP
	Ni 8-M12-VP6X	T4611322	Ext. Range, Comp. Output		8	

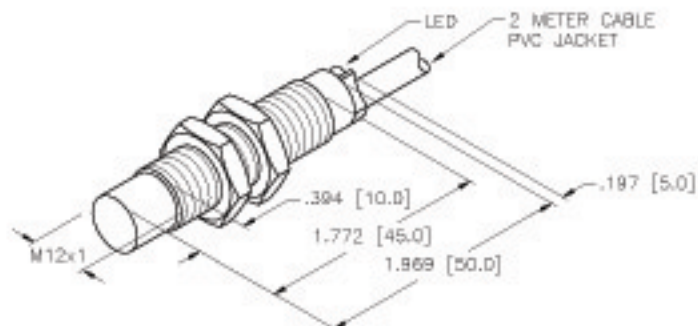
Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	End Cap	Power LED	Output LED	Cable Length/ Cable Mat.	Wiring Diagram #	Wiring Diagrams
10-65 VDC	1000	≤100	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1	Diagram 1
	1000	≤100	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1	
	1000	≤100	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PUR	1	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	2	Diagram 2
	2000	≤200	-25 to +70	IP 67	CPB	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	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	3	Diagram 3
	2000	≤200	-25 to +100	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	3	
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	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	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	4	Diagram 4
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	4	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	5	Diagram 5
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	5	

WIRING DIAGRAM



OUTPUT: AP6X

SHORT-CIRCUIT AND OVERLOAD PROTECTED



SPECIFICATIONS

OPERATING VOLTAGE	10-30 VDC
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
TTL COMPATIBLE	NO
SHORT-CIRCUIT PROTECTED	YES
TRIGGER CURRENT FOR OVERLOAD PROTECTION	≥ 220 mA
CONTINUOUS LOAD CURRENT	≤ 200 mA
OFF-STATE (LEAKAGE) CURRENT	<100 μA
NO-LOAD CURRENT	≤ 10 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)	8 mm = 0.315" (NOMINAL)
SWITCHING FREQUENCY	2000 Hz
REPEATABILITY	±2% OF RATED OPERATING DISTANCE
TEMPERATURE DRIFT	<-15%/+10%
EMBEDDABLE (SHIELDED)	NO
LOCKNUT M12x1	17 mm AF, 19.5 mm AC, 4.0 mm THK

NOTE
PRELIMINARY
SPECIFICATIONS

SOURCE DRAWING - FOR REFERENCE ONLY

NOTE:

MATERIAL:

BARREL - CHROME PLATED BRASS
LOCKNUTS - CHROME PLATED BRASS
SENSING FACE - PA12-GF30 PLASTIC
END CAP - TPE-O ELASTOMER

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 SEE NOTE	TOLERANCES UNLESS OTHERWISE SPECIFIED ± 0.0394 in [± 1.00 mm]	DRW-1 IK	DATE 03/14/01	DESCRIPTION Ni 8-M12-AP6X	
FINISH SEE NOTE		UNIT OF MEASUREMENT NCH [MILLIMETER]		IDENTIFICATION NO. T4611319	REV P1
P1	IK	03/14/01	DO NOT SCALE THIS DRAWING		
REV	DESCRIPTION	By	DATE	ECO NO.	FILE: T4611319 SHEET 1 OF 1