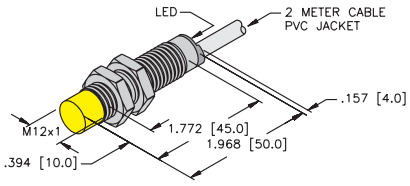
Inductive Sensors

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 #
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
	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
	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
	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
	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
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	5

Wiring Diagrams

Diagram 1

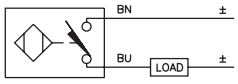


Diagram 2

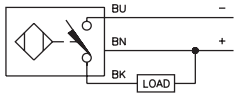


Diagram 3

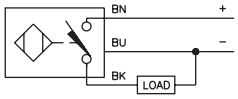


Diagram 4

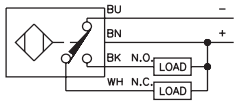
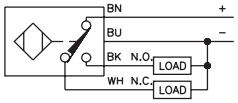
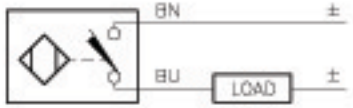


Diagram 5



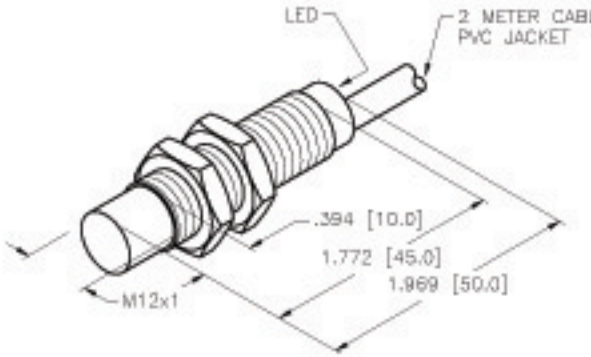
WIRING DIAGRAM



OUTPUT: AD4X

SHORT-CIRCUIT AND OVERLOAD PROTECTED

SPECIFICATIONS	
OPERATING VOLTAGE	10-65 VDC
RIPPLE	≤10%
DIFFERENTIAL TRAVEL (HYSTERESIS)	1-15% (5% TYPICAL)
VOLTAGE DROP ACROSS CONDUCTING SENSOR	≤5 V at 100 mA
OUTPUT FUNCTION	NORMALLY OPEN 2-WIRE DC
TTL COMPATIBLE	NO
SHORT-CIRCUIT PROTECTED	YES
TRIGGER CURRENT FOR OVERLOAD PROTECTION	≥120 mA
CONTINUOUS LOAD CURRENT	≤100 mA
OFF-STATE (LEAKAGE) CURRENT	≤0.8 mA
TIME DELAY BEFORE AVAILABILITY	≤3 ms
POWER-ON EFFECT	Per IEC 947-5-2
REVERSE POLARITY PROTECTION	INCORPORATED
PROTECTION AGAINST TRANSIENTS	Per EN 60947-5-2
OPERATING TEMPERATURE (10% DRIFT)	-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)	8mm = .315" (NOMINAL)
SWITCHING FREQUENCY	1000 Hz
REPEATABILITY	≤2% of RATED OPERATING DISTANCE
EMBEDDABLE (SHIELDED)	NO
LOCKNUT M12x1	17 mm AF, 19.5 mm AC, 4 mm THK



NOTES:

1. MATERIALS:
   CHROME PLATED BRASS BARREL
   CHROME PLATED BRASS LOCKNUTS
   PA 12-GF30 PLASTIC SENSING FACE
   TPE-O ELASTOMER END CAP

REV	DESCRIPTION	BY	DATE	ECO NO.
C	REDRAW PART, ADD NOTE 1, UPDATE SPEC, WIR. DIAGRAM	IK	01/05/01	T4222

RELATED DOCUMENTS
1.
2.
3.
4.

3RD ANGLE PROJECTION

TURCK INC
High Technology Sensors and Automation Controls

MATERIAL: SEE NOTE 1

FINISH: SEE NOTE 1

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: Ni 8-M12-AD4X

IDENTIFICATION NO.: T4411235

REV: C

FILE: T4411235

SHEET 1 OF 1