

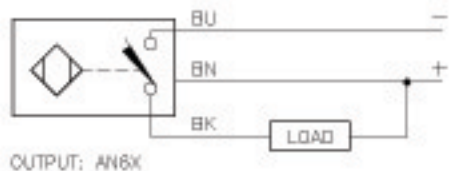
Inductive Sensors



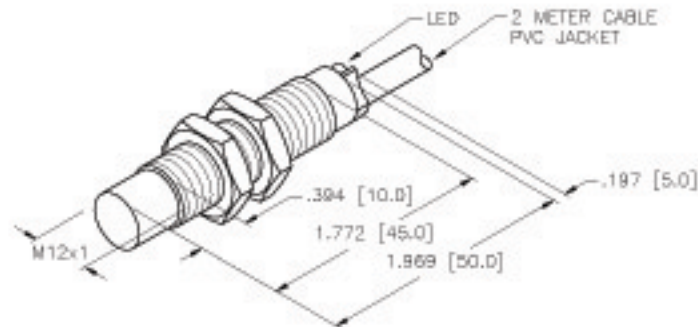
Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
12 mm - Non-Embeddable, Potted-In Cable 	Ni 4-M12-AD4X	T4405200		4	2-Wire DC
	Ni 8-M12-AD4X	T4411235	<i>Extended Range</i>	8	
	Ni 8-M12-AD4X/S90	T4411235-1	<i>Extended Range</i>	8	
	Ni 4-M12-AN6X	T4606380		4	3-Wire DC NPN
	Ni 8-M12-AN6X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



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

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MATERIAL SEE NOTE	TOLERANCES UNLESS OTHERWISE SPECIFIED ±0.0394 in [±1.00 mm]	DRP-1 IK	DATE 03/14/01	DESCRIPTION Ni 8-M12-AN6X
FINISH SEE NOTE		OSGN	SCALE 1=1.5	
		UNIT OF MEASUREMENT NCH [MILLIMETER]		IDENTIFICATION NO. T4611318
		DO NOT SCALE THIS DRAWING		REV P1
P1	IK	03/14/01		
REV	DESCRIPTION	BY	DATE	ECO NO.
			FILE: T4611318	SHEET 1 OF 1