

# Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output	
<b>12 mm - Nonembeddable, eurofast® Connection</b>  	Ni 4-M12-AD4X-H1141	T4406700		4	2-Wire DC	
	Ni 4-M12-AD4X-H1144	M4406701		4		
	Ni 8-M12-AD4X-H1141	T4411241	Ext. Range	8		
	Ni 8-M12-AD4X-H1144	T4411289	Ext. Range	8		
	Ni 4-EM12-AN7X-H1141	T4606893	TTL Compatible	4	3-Wire DC NPN	
	Ni 4-M12-AN6X-H1141	T4606800		4		
	Ni 5-EM12WD-AN6X-H1141	M4653431	Washdown	5		
	Ni 5-M12-AN6X-H1141	T4671390		5		
	Ni 8-M12-AN6X-H1141	T4611315	Ext. Range	8		
	Ni 8U-EM12-AN6X-H1141	M1644350	Uprox	8		
	Ni 8U-M12-AN6X-H1141	M1644150	Uprox	8		
	Ni 8U-M12-AN6X2-H1141	M1644155	Uprox, Dual LED	8		
	Ni 4-M12-AP6X-H1141	T4606700		4	3-Wire DC PNP	
	Ni 5-EM12WD-AP6X-H1141	M1634331	Washdown	5		
	Ni 5-M12-AP6X-H1141	T4653400		5		
	Ni 8-M12-AP6X-H1141	T4611310	Ext. Range	8		
	Ni 8U-EM12-AP6X-H1141	M1644340	Uprox	8		
	Ni 8U-M12-AP6X-H1141	M1644140	Uprox	8		
	Ni 8U-M12-AP6X2-H1141	M1644145	Uprox, Dual LED	8		
	Ni 4-M12-VN6X-H1141	T1643100	Comp. Output	4	4-Wire DC NPN	
	Ni 8-M12-VN6X-H1141	T4611323	Ext. Range, Comp. Output	8		
	Ni 4-EM12-VP6X-H1141	M1633101	Comp. Output	4	4-Wire DC PNP	
	Ni 4-M12-VP6X-H1141	T1633100	Comp. Output	4		
	Ni 8-M12-VP6X-H1141	T4611324	Ext. Range, Comp. Output	8		
	Ni 5-M12-Y1X-H1141	M4010300			5	2-Wire DC NAMUR

Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Mating Cordset	Wiring Diagram #	Wiring Diagrams
10-65 VDC	2000	≤100	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.2T-*	1	<p><b>Diagram 1</b></p>
	2000	≤100	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.2T-*/S674	2	
	2000	≤100	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.2T-*	1	
	2000	≤100	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.2T-*/S674	2	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RKV 4T-*	3	<p><b>Diagram 2</b></p> <p><b>Diagram 3</b></p>
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	3	
	1500	≤200	-25 to +85	IP 68, 69K	SS	PVDF	N/A	YE	RK 4T-*	3	
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	3	
	2000	≤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 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	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	4	<p><b>Diagram 4</b></p> <p><b>Diagram 5</b></p>
	1500	≤200	-25 to +85	IP 68, 69K	SS	PVDF	N/A	YE	RK 4T-*	4	
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	4	
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	4	
	2000	≤200	-30 to +85	IP 68	SS	PA 12	N/A	YE	RKV 4T-*	4	
	2000	≤200	-30 to +85	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	4	
	2000	≤200	-30 to +85	IP 67	CPB	PA 12	GN	YE	RK 4T-*	4	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	5	<p><b>Diagram 6</b></p>
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	5	
10-30 VDC	2000	≤200	-25 to +70	IP 67	SS	PA 12	N/A	YE	RKV 4.4T-*	6	<p><b>Diagram 7</b></p>
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	6	
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	6	
5-30 VDC	2000	Remote	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.21T-*	7	

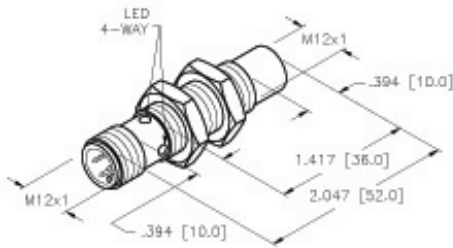
\* Length in meters.

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 AMPITUDE (IN ALL 3 PLANES)
LED FUNCTION	YELLOW: OUTPUT ENERGIZED
RATED OPERATING DISTANCE(S <sub>th</sub> )	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
MATING PLUGS/CABLES	4-PIN "EUROFAST" CONSTRUCTION

SOURCE DRAWING - FOR REFERENCE ONLY

NOTE:

MATERIAL:  
 BARREL - CHROME PLATED BRASS  
 LOCKNUTS - CHROME PLATED BRASS  
 CONNECTOR - CHROME PLATED BRASS  
 SENSING FACE - PA12-GF30 PLASTIC

RELATED DOCUMENTS 1. 2. 3. 4.	3RD ANGLE PROJECTION 	THIS DRAWING IS PROPERTY OF TURCK INC. USE OF THIS DOCUMENT WITHOUT WRITTEN PERMISSION IS PROHIBITED.	<b>TURCK INC</b> High Technology Sensors and Automation Controls	
MATERIAL SEE NOTE	TOLERANCES UNLESS OTHERWISE SPECIFIED .X ±0.02 .XX ±0.01 .XXX ±0.005 ANGLES ±1° ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY	DWGT IK USDR	DATE 03/14/01 SCALE 1=1.5	DESCRIPTION Ni 8-M12-AP6X-H1141
FRESH SEE NOTE		UNIT OF MEASUREMENT <b>INCH [ MILLIMETER ]</b>		IDENTIFICATION NO. T4611310
A DRAWING RELEASE REV DESCRIPTION	IK BY D4/30/01 DATE EDO NO.	DO NOT SCALE THIS DRAWING		REV A FILE: T4611310 SHEET 1 OF 1