

Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output	
12 mm - Nonembeddable, eurofast® Connection 	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	T4606893	TTL Compatible	4	3-Wire DC NPN
	Ni 4-M12-AN6X-H1141	T4606800	T4606800		4	
	Ni 5-EM12WD-AN6X-H1141	M4653431	M4653431	Washdown	5	
	Ni 5-M12-AN6X-H1141	T4671390	T4671390		5	
	Ni 8-M12-AN6X-H1141	T4611315	T4611315	Ext. Range	8	
	Ni 8U-EM12-AN6X-H1141	M1644350	M1644350	Uprox	8	
	Ni 8U-M12-AN6X-H1141	M1644150	M1644150	Uprox	8	
	Ni 8U-M12-AN6X2-H1141	M1644155	M1644155	Uprox, Dual LED	8	
	Ni 4-M12-AP6X-H1141	T4606700	T4606700		4	3-Wire DC PNP
	Ni 5-EM12WD-AP6X-H1141	M1634331	M1634331	Washdown	5	
	Ni 5-M12-AP6X-H1141	T4653400	T4653400		5	
	Ni 8-M12-AP6X-H1141	T4611310	T4611310	Ext. Range	8	
	Ni 8U-EM12-AP6X-H1141	M1644340	M1644340	Uprox	8	
	Ni 8U-M12-AP6X-H1141	M1644140	M1644140	Uprox	8	
	Ni 8U-M12-AP6X2-H1141	M1644145	M1644145	Uprox, Dual LED	8	
	Ni 4-M12-VN6X-H1141	T1643100	T1643100	Comp. Output	4	4-Wire DC NPN
	Ni 8-M12-VN6X-H1141	T4611323	T4611323	Ext. Range, Comp. Output	8	
	Ni 4-EM12-VP6X-H1141	M1633101	M1633101	Comp. Output	4	4-Wire DC PNP
	Ni 4-M12-VP6X-H1141	T1633100	T1633100	Comp. Output	4	
	Ni 8-M12-VP6X-H1141	T4611324	T4611324	Ext. Range, Comp. Output	8	
	Ni 5-M12-Y1X-H1141	M4010300	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>Diagram 1</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>Diagram 2</p> <p>Diagram 3</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>Diagram 4</p> <p>Diagram 5</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>Diagram 6</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>Diagram 7</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	

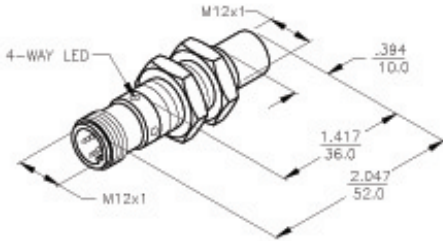
* Length in meters.

WIRING DIAGRAM



OUTPUT: AD4X

SHORT-CIRCUIT AND OVERLOAD PROTECTED



SPECIFICATIONS

OPERATING VOLTAGE	10-85 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	-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
MATING PLUGS/CABLES	4-PIN "EUROFAST" CONSTRUCTION
LOCKNUT M12x1	17 mm AF, 19.5 mm AC, 4 mm THK

NOTES:

1. MATERIALS:
 CHROME PLATED BRASS BARREL
 CHROME PLATED BRASS LOCKNUTS
 CHROME PLATED BRASS CONNECTOR
 PA 12-GF30 PLASTIC SENSING FACE

RELATED DOCUMENTS	3RD ANGLE PROJECTION	THIS DRAWING IS PROPERTY OF TURCK INC. USE OF THIS DOCUMENT WITHOUT WRITTEN PERMISSION IS PROHIBITED.		TURCK INC High Technology Sensors and Automation Controls	
1. 2. 3. 4.		DRAWN	CBM	DATE	09/26/99
MATERIAL	TOLERANCES UNLESS OTHERWISE SPECIFIED	USDR	SCALE	NONE	DESCRIPTION
SEE NOTE 1	0.0384in [1.00mm]	UNIT OF MEASUREMENT		Ni 8-M12-AD4X-H1141	
FRESH	SEE NOTE 1	INCH [MILLIMETER]		IDENTIFICATION NO.	T4411241
REV	DESCRIPTION	BY	DATE	EDD NO.	FILE: T4411241
C	UPDATE SPEC, WIRING DIAG, ADD NOTE 1	IK	01/05/01	T4222	REV
					C
					SHEET 1 OF 1