

# Inductive Sensors

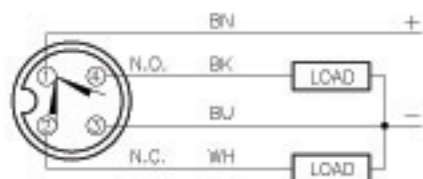


Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output	
<b>12 mm - Nonembeddable, eurofast® Connection</b>  	Ni 4-M12-AD4X-H1141	T4406700		4	2-Wire DC	
	Ni 4-M12-AD4X-H1144	M4406701		4		
	Ni 8-M12-AD4X-H1141	T4411241	Ext. Range	8		
	Ni 8-M12-AD4X-H1144	T4411289	Ext. Range	8		
	Ni 4-EM12-AN7X-H1141	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> <p><b>Diagram 2</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 3</b></p> <p><b>Diagram 4</b></p> <p><b>Diagram 5</b></p> <p><b>Diagram 6</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	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	4	<p><b>Diagram 7</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 7</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	<p><b>Diagram 7</b></p>

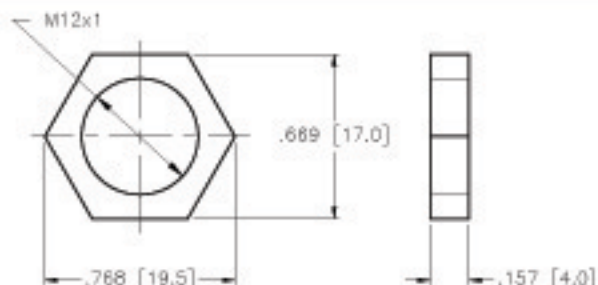
\* Length in meters.

## WIRING DIAGRAM



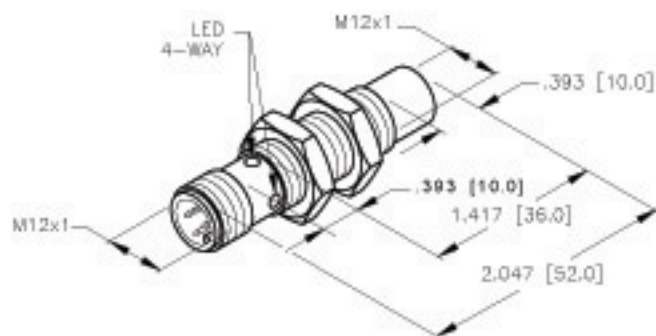
OUTPUT: VP6X

## LOCKNUT LN-M12



## SPECIFICATIONS

OPERATING VOLTAGE	10-30 V DC (SHORT-CIRCUIT PROTECTED)
RIPPLE	≤ 10%
HYSTERESIS (DIFFERENTIAL TRAVEL)	3-15% (5% TYPICAL)
VOLTAGE DROP ACROSS CONDUCTING SENSOR	≤ 1.8 V at 200 mA
OUTPUT FUNCTION	COMPLEMENTARY OUTPUT ONE N.O., ONE N.C. (SPST)
TTL COMPATIBLE	NO
SHORT-CIRCUIT PROTECTED	YES
TRIGGER CURRENT FOR OVERLOAD PROTECTION	≥ 220 mA
CONTINUOUS LOAD CURRENT	≤ 200 mA
OFF-STATE (LEAKAGE) CURRENT	< 10 $\mu$ A
NO-LOAD CURRENT	5.5-9.5 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	95 Hz, 1 mm AMPLITUDE (IN ALL 3 PLANES)
LED FUNCTION	YELLOW: OUTPUT ENERGIZED
RATED OPERATING DISTANCE(S <sub>RI</sub> )	4mm = 0.158" (NOMINAL)
SWITCHING FREQUENCY	2000 Hz
REPEATABILITY	≤ 2% of RATED OPERATING DISTANCE
SHIELDED	NO



SOURCE DRAWING - FOR REFERENCE ONLY

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	TOLERANCES UNLESS OTHERWISE SPECIFIED	DWGT IK	DATE 11/12/98	DESCRIPTION Ni 4-M12-VP6X-H1141
FINISH	±0.0394 in. [±1.00 mm]	UNIT OF MEASUREMENT <b>INCH [ MILLIMETER ]</b>	USDR	SCALE 1 = 1.5	IDENTIFICATION NO. T1633100
		DO NOT SCALE THIS DRAWING	REV B	FILE: T1633100	SHEET 1 OF 1

NOTE: ALL TOLERANCES ±1.0 mm.

BY	IK	03/09/00	T3437
REV	DESCRIPTION	BY	DATE