

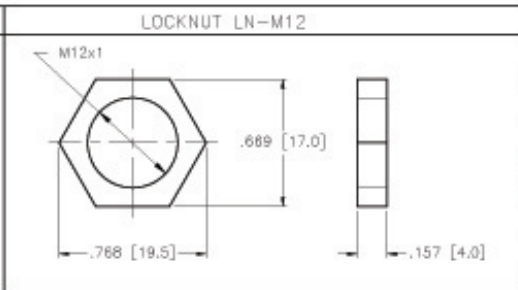
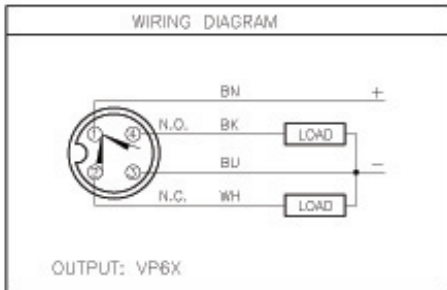
# Inductive Sensors



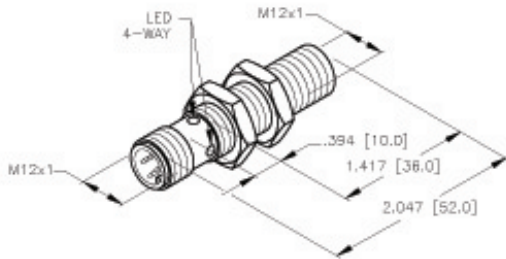
Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
<b>12 mm - Embeddable, eurofast® Connection</b> 	Bi 4-M12K-AN6X-H1141	T4607101	Short Barrel	4	3-Wire DC PNP
	Bi 4-M12K-AP6X-H1141	T4607082	Short Barrel	4	3-Wire DC PNP
	Bi 2-M12K-VP6X-H1141	M1633005	Short Barrel	2	4-Wire DC PNP
<b>12 mm - Embeddable, eurofast Connection</b> 	Bi 2-M12-AD4X-H1141	T4406500		2	2-Wire DC
	Bi 3-M12-AD4X-H1141	T4405041	Ext. Range	3	
	Bi 2-EM12-AN6X-H1141	T4606601		2	3-Wire DC NPN
	Bi 2-M12-AN6X-H1141	T4606600		2	
	Bi 3-EM12WD-AN6X-H1141	M1634334	Washdown	3	
	Bi 3-M12WD-AN6X-H1141	M4607120	Washdown	3	
	Bi 3U-EM12-AN6X-H1141	M1634350	Uprox	3	
	Bi 3U-M12-AN6X-H1141	M1634150	Uprox	3	
	Bi 3U-M12-AN6X2-H1141	M1634155	Uprox	3	
	Bi 4-M12-AN6X-H1141	T4607100	Extended Range	4	
	Bi 2-EM12-AP6X-H1141	T4606501		2	3-Wire DC PNP
	Bi 2-M12-AP6X-H1141	T4606500		2	
	Bi 3-EM12WD-AP6X-H1141	M1634331	Washdown	3	
	Bi 3-M12WD-AP6X-H1141	M4607121	Washdown	3	
	Bi 3U-EM12-AP6X-H1141	M1634340	Uprox	3	
	Bi 3U-EM12H-AP6X-H1141	M1634312	Uprox, Stoneface	3	
	Bi 3U-M12-AP6X-H1141	M1634140	Uprox	3	
	Bi 3U-M12-AP6X2-H1141	M1634145	Uprox	3	
	Bi 4-M12-AP6X-H1141	T4607000	Extended Range	4	
	Bi 2-M12-VN6X-H1141	T1643000	Comp. Outputs	2	4-Wire DC NPN
	Bi 4-M12-VN6X-H1141	T1643200	Ext. Range, Comp. Outputs	4	
	Bi 2-M12-VP6X-H1141	T1633000	Comp. Outputs	2	4-Wire DC PNP
	Bi 4-M12-VP6X-H1141	T1633200	Ext. Range, Comp. Outputs	4	
Bi 4-EM12-VP6X-H1141	T1633201	Ext. Range, Comp. Outputs	4		
Bi 2-EM12-Y0X-H1141	T4010098		2	2-Wire DC NAMUR	
Bi 2-M12-Y1X-H1141	M4010200		2		

Voltage	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	Power LED	Output LED	Mating Cordset	Wiring Diagram #	Wiring Diagrams
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	2	<b>Diagram 1</b>
10-30 VDC	2000	≤200	-25 to +70	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 4.4T-*	5	<b>Diagram 2</b>
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	5	
10-65 VDC	1000	≤100	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.2T-*	1	<b>Diagram 3</b>
	1000	≤100	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.2T-*	1	
10-30 VDC	2000	≤200	-25 to +70	IP 67	SS	PA 12	N/A	YE	RKV 4T-*	2	<b>Diagram 4</b>
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	2	
	2000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	N/A	YE	RK 4T-*	2	
	3000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	N/A	YE	RK 4T-*	2	
	3000	≤200	-30 to +85	IP 68	SS	PA 12	N/A	YE	RKV 4T-*	2	
	3000	≤200	-30 to +85	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	2	
	3000	≤200	-30 to +85	IP 67	CPB	PA 12	GN	YE	RK 4T-*	2	
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	2	
10-30 VDC	2000	≤200	-25 to +70	IP 67	SS	PA 12	N/A	YE	RKV 4T-*	3	<b>Diagram 5</b>
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	3	
	2000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	N/A	YE	RK 4T-*	3	
	3000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	N/A	YE	RK 4T-*	3	
	3000	≤200	-30 to +85	IP 68	SS	PA 12	N/A	YE	RKV 4T-*	3	
	3000	≤200	-30 to +85	IP 68	SS	SF	N/A	YE	RKG 4T-*/S600	3	
	3000	≤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	N/A	YE	RK 4T-*	3	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	4	<b>Diagram 6</b>
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	4	
10-30 VDC	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	5	
	2000	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	5	
	2000	≤200	-25 to +70	IP 67	SS	PA 12	N/A	YE	RKV 4.4T-*	5	
5-30 VDC	5000	Remote	-25 to +70	IP 67	SS	PA 12	N/A	YE	RKV 4.21T-*	6	
	5000	Remote	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.21T-*	6	

\* Length in meters.



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. (SPDT)
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	55 Hz, 1 mm AMPLITUDE (IN ALL 3 PLANES)
LED FUNCTION	YELLOW: OUTPUT ENERGIZED
RATED OPERATING DISTANCE(S <sub>n</sub> )	2mm = 0.079" (NOMINAL)
SWITCHING FREQUENCY	2000 Hz
REPEATABILITY	≤ 2% of RATED OPERATING DISTANCE
SHIELDED	YES



SOURCE DRAWING - FOR REFERENCE ONLY

NOTE: ALL TOLERANCES ±1.0 mm.

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 FINISH	TOLERANCES UNLESS OTHERWISE SPECIFIED $\pm 0.0394$ in $(\pm 1.00$ mm)	DWT IK USCR	DATE 11/12/98 SCALE 1=1.5	DESCRIPTION Bi 2-M12-VP6X-H1141
B MODIFY DRAWING REV DESCRIPTION	IK BY DATE EDO NO.	UNIT OF MEASUREMENT <b>INCH [ MILLIMETER ]</b>		IDENTIFICATION NO. T1633000	REV B
		DO NOT SCALE THIS DRAWING		FILE: T1633000	SHEET 1 OF 1