

Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
30 mm - Embeddable, eurofast® Connection 	Bi 10-M30-AD4X-H1141	T4417500		10	2-Wire DC
	Bi 12-M30-AD4X-H1141	T4417041	Extended Range	12	
	Bi 10-M30-AN6X-H1141	T4617600		10	3-Wire DC NPN
	Bi 10U-EM30-AN6X-H1141	M1636350	Uprox	10	
	Bi 10U-EM30H-AN6X2-H1141	M1636407	Uprox, Stoneface	10	
	Bi 10U-EM30H-AN6X2-H1141/S1589	M1636490	weldguard, Uprox	10	
	Bi 10U-M30-AN6X-H1141	M1636150	Uprox	10	
	Bi 10U-M30-AN6X2-H1141	M1636155	Uprox	10	
	Bi 12-EM30WD-AN6X-H1141	M4614544	Washdown	12	
	Bi 15-M30-AN6X-H1141	T4618600	Extended Range	15	
	Bi 15-EM30H-AN6X-H1141	T4618692	Extended Range	15	
	Bi 15-EM30H-AN6X-H1141/S1589	T4618693	weldguard	15	
	Bi 10-M30-AP6X-H1141	T4617500		10	3-Wire DC PNP
	Bi 10U-EM30-AP6X-H1141	M1636340	Uprox	10	
	Bi 10U-EM30H-AP6X2-H1141	M1636406	Uprox, Stoneface	10	
	Bi 10U-EM30H-AP6X2-H1141/S1589	M1636491	weldguard, Uprox	10	
	Bi 10U-M30-AP6X-H1141	M1636140	Uprox	10	
	Bi 10U-M30-AP6X2-H1141	M1636145	Uprox	10	
	Bi 12-EM30WD-AP6X-H1141	M4614541	Washdown	12	
	Bi 15-M30-AP6X-H1141	T4618500	Extended Range	15	
	Bi 15-EM30H-AP6X-H1141	T4618592	Extended Range	15	
	Bi 15-EM30H-AP6X-H1141/S1589	T4618593	weldguard	15	
	Bi 15-EM30H-AP6X-H1141/S1610	T4618589	Weld/armorguard	15	
	Bi 10-M30-VN4X-H1141	T1571600	Comp. Outputs	10	4-Wire DC NPN
	Bi 10U-M30-VN4X-H1141	M1582352	Uprox, Comp. Outputs	10	
	Bi 15-M30-VN4X-H1141	T4570711	Comp. Outputs	15	4-Wire DC PNP
	Bi 10-M30-VP4X-H1141	T1561600	Comp. Outputs	10	
	Bi 10U-M30-VP4X-H1141	M1582253	Uprox, Comp. Outputs	10	
	Bi 15-M30-VP4X-H1141	T4570710	Comp. Outputs	15	4-Wire DC PNP
	Bi 10-M30-Y1X-H1141	M4020200		10	
					2-Wire DC
30 mm - Embeddable, eurofast Connection, Stainless Steel 	Bi 10-EM30F-AP6X-H1141	M4614537	Stainless Steel Front Cap	10	3-Wire DC PNP

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	500	≤100	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.2T-*	1	Diagram 1
	500	≤100	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.2T-*	1	
10-30 VDC	500	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	2	Diagram 2
	2000	≤200	-30 to +85	IP 68	SS	PA 12	N/A	YE	RKV 4T-*	2	
	2000	≤200	-30 to +85	IP 68	SS	SF	GN	YE	RKV 4T-*	2	
	2000	≤200	-30 to +85	IP 68	SS	WG	GN	YE	RKG 4T-*/S600	2	
	2000	≤200	-30 to +85	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	2	
	2000	≤200	-30 to +85	IP 67	CPB	PA 12	GN	YE	RK 4T-*	2	
	1000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	N/A	YE	RK 4T-*	2	
	300	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	2	
	300	≤200	-25 to +70	IP 67	SS	SF	N/A	YE	RKG 4T-*/S600	2	
	300	≤200	-25 to +70	IP 67	SS	WG	N/A	YE	RKG 4T-*/S600	2	
10-30 VDC	500	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	3	Diagram 3
	2000	≤200	-30 to +85	IP 68	SS	PA 12	N/A	YE	RKV 4T-*	3	
	2000	≤200	-30 to +85	IP 68	SS	SF	GN	YE	RKV 4T-*	3	
	2000	≤200	-30 to +85	IP 68	SS	WG	GN	YE	RKG 4T-*/S600	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	
	1000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	N/A	YE	RK 4T-*	3	
	300	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	3	
	300	≤200	-25 to +70	IP 67	SS	SF	N/A	YE	RKV 4T-*	3	
	300	≤200	-25 to +70	IP 67	SS	WG	N/A	YE	RKG 4T-*/S600	3	
10-30 VDC	500	≤200	-25 to +70	IP 67	AG	WG	N/A	YE	RKG 4T-*/S600	3	Diagram 4
	2000	≤200	-30 to +85	IP 68	SS	PA 12	N/A	YE	RKV 4T-*	3	
	2000	≤200	-30 to +85	IP 68	SS	SF	GN	YE	RKV 4T-*	3	
	2000	≤200	-30 to +85	IP 68	SS	WG	GN	YE	RKG 4T-*/S600	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	
	1000	≤200	-25 to +85	IP 68, 69K	SS	PVDF	N/A	YE	RK 4T-*	3	
	300	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4T-*	3	
	300	≤200	-25 to +70	IP 67	SS	SF	N/A	YE	RKV 4T-*	3	
	300	≤200	-25 to +70	IP 67	SS	WG	N/A	YE	RKG 4T-*/S600	3	
10-65 VDC	500	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	4	Diagram 5
	2000	≤200	-30 to +85	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	4	
	500	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	4	
10-65 VDC	500	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	5	Diagram 6
	2000	≤200	-30 to +85	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	5	
	300	≤200	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.4T-*	5	
5-30 VDC	2000	Remote	-25 to +70	IP 67	CPB	PA 12	N/A	YE	RK 4.21T-*	6	
10-30 VDC	180	≤200	-25 to +80	IP 68, 69K	SS	SS	N/A	YE	RKV 4T-*	3	

* Length in meters.

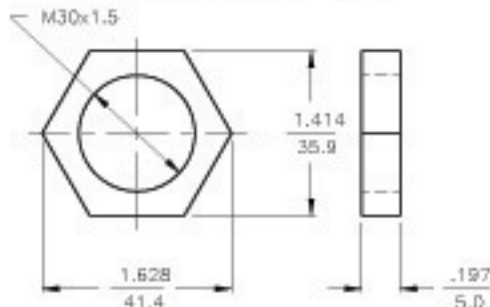
WIRING DIAGRAMS



OUTPUT: AP6X

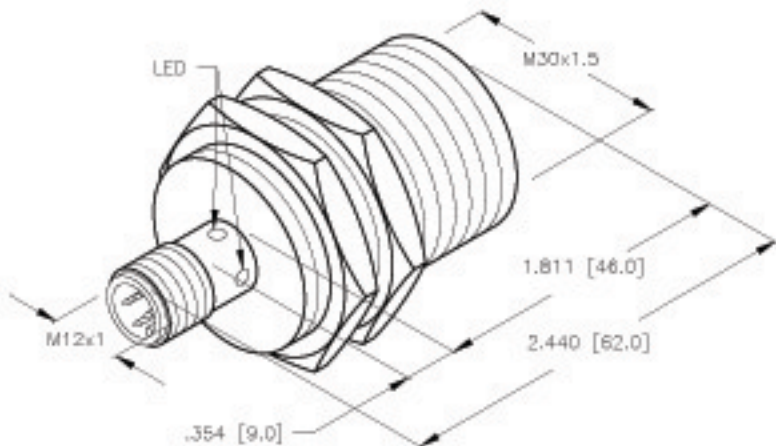
SHORT-CIRCUIT AND OVERLOAD PROTECTED

LOCKNUT LN-M30



SPECIFICATIONS

OPERATING VOLTAGE	10-30 VDC
RIPPLE	≤ 10%
DIFFERENTIAL TRAVEL (HYSTERESIS)	3-15% (5% TYPICAL)
VOLTAGE DROP ACROSS CONDUCTING SENSOR	≤ 1.8 V at 200 mA
OUTPUT FUNCTION	NORMALLY OPEN 3-WIRE DC SELF-CONTAINED
TTL COMPATIBLE	NO
SHORT-CIRCUIT PROTECTED	YES
TRIGGER CURRENT FOR OVERLOAD PROTECTION	≥ 220 mA
CONTINUOUS LOAD CURRENT	≤ 200 mA
OFF-STATE (LEAKAGE) CURRENT	< 10 μA
NO-LOAD CURRENT	≤ 15 mA
TIME DELAY BEFORE AVAILABILITY	≤ 8 ms
POWER-ON EFFECT PROTECTION	INCORPORATED
REVERSE POLARITY PROTECTION	INCORPORATED
WIRE-BREAK PROTECTION	INCORPORATED
PROTECTION AGAINST TRANSIENTS	EN 60947-5-2
OPERATING TEMPERATURE	-35°C to +70°C (-13°F to +158°F) -30°C to +85°C (-22°F to +185°F) N/15% TEMP. DRIFT
ENCLOSURE	MEETS NEMA 1, 3, 4, 6, 13 AND IEC IP67
SHOCK	30 g, 11 ms
VIBRATION	65 Hz, 1 mm AMPLITUDE (IN ALL 3 PLANES)
LED FUNCTION	YELLOW = OUTPUT ENERGIZED
RATED OPERATING DISTANCE(Sn)	10 mm = .394" (NOMINAL)
SWITCHING FREQUENCY	2000 Hz
REPEATABILITY	≤ 2% of RATED OPERATING DISTANCE
EMBEDDABLE (SHIELDED)	YES



NOTES:

1. UPROX HAS WELD FIELD IMMUNITY, SENSOR IS SUITABLE FOR USE ON RESISTANCE MACHINES.

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	MATERIAL BRASS BARREL	TOLERANCES UNLESS OTHERWISE SPECIFIED .X ±0.02 .XX ±0.01 .XXX ±0.005 ANGLES ±1° ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY	DRFT CBM	DATE 5/15/01	DESCRIPTION Bi10U-M30-AP6X-H1141
FINISH BRASS/ NICKEL PLATING		USDR	SCALE NONE	UNIT OF MEASUREMENT INCH [MILLIMETER]	IDENTIFICATION NO. M1636140
A DRAWING RELEASE	RDS 08/27/03	5504	DO NOT SCALE THIS DRAWING		REV A
REV DESCRIPTION	BY DATE	EDD NO.	FILE: M1636140	SHEET 1 OF 1	