

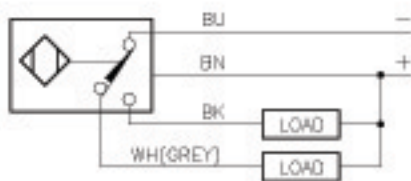
# Inductive Sensors



Housing Style	Part Number	ID Number	Features	Sensing Range (mm)	Output
<b>18 mm - Nonembeddable, Partial Threading, Potted-In Cable</b> 	Ni 8-M18-AD4X	T4411200		8	2-Wire DC
	Ni14-M18-AD4X	T4417235	<i>Extended Range</i>	14	
	Ni12U-M18-AN6X	M1645120	<i>Uprox</i>	12	3-Wire DC NPN
	Ni12U-EM18-AN6X	M1645320	<i>Uprox</i>	12	
	Ni14-M18-AN6X	T4611411	<i>Extended Range</i>	14	
	Ni 8-M18-AN6X	T4614889		8	
	Ni 8-M18-AP6X/S100	M4611201	<i>High Temp. 100°C</i>	8	3-Wire DC PNP
	Ni12U-EM18-AP6X	M1645300	<i>Uprox</i>	12	
	Ni12U-M18-AP6X	M1645100	<i>Uprox</i>	12	
	Ni14-M18-AP6X	T4611401	<i>Extended Range</i>	14	
	Ni 8-M18-AP6X	T4614395		8	
	Ni 8-M18-VN4X	T1571200	<i>Comp. Output</i>	8	4-Wire DC NPN
	Ni14-M18-VN4X	T4590600	<i>Extended Range</i>	14	
	Ni 8-M18-VP4X	T1561200	<i>Comp. Output</i>	8	4-Wire DC PNP
Ni14-M18-VP4X	T4590601	<i>Extended Range</i>	14		
	Ni12U-M18-ADZ30X2	M4282410	<i>Uprox</i>	12	2-Wire AC/DC Short-Circuit Protected
<b>18 mm - Nonembeddable, Partial Threading, Potted-In Cable, Teflon Coated</b> 	Ni12U-MT18-ADZ30X2	M4209420	<i>Uprox</i>	12	2-Wire AC/DC Short-Circuit Protected

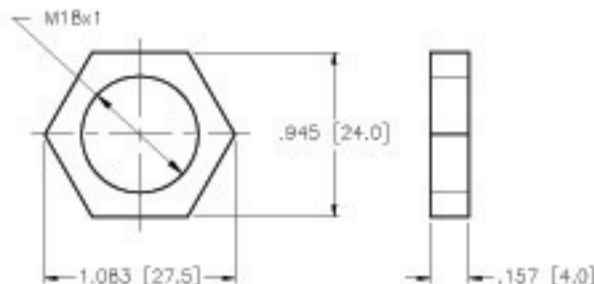
Output	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	End Cap	Power LED	Output LED	Cable Length/ Cable Mat.	Wiring Diagram #	Wiring Diagrams
10-65 VDC	500	≤100	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1	<b>Diagram 1</b> 
	500	≤100	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1	
10-30 VDC	2000	≤200	-30 to +85	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	2	<b>Diagram 2</b> 
	2000	≤200	-30 to +85	IP 68	SS	PA 12	EPTR	N/A	YE	2M/PVC	2	
	500	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	2	
	1000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	2	
10-30 VDC	1000	≤200	-25 to +100	IP 67	CPB	IRPA	EPTR	N/A	YE	2M/PVC	3	<b>Diagram 3</b> 
	2000	≤200	-30 to +85	IP 67	SS	PA 12	EPTR	N/A	YE	2M/PVC	3	
	2000	≤200	-30 to +85	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	3	
	500	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	3	
	1000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	3	
10-65 VDC	1000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	4	<b>Diagram 4</b> 
	1000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	4	
10-65 VDC	1000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	5	<b>Diagram 5</b> 
	1000	≤200	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	5	
20-250 VAC 10-300 VDC	20	≤400/300	-30 to +85	IP 67	CPB	PA 12	EPTR	YE	RD	2M/PVC	6	<b>Diagram 6</b> 
20-250 VAC 10-300 VDC	20	≤400/300	-30 to +85	IP 67	TC	TC	EPTR	YE	RD	2M/PVC	6	

WIRING DIAGRAM



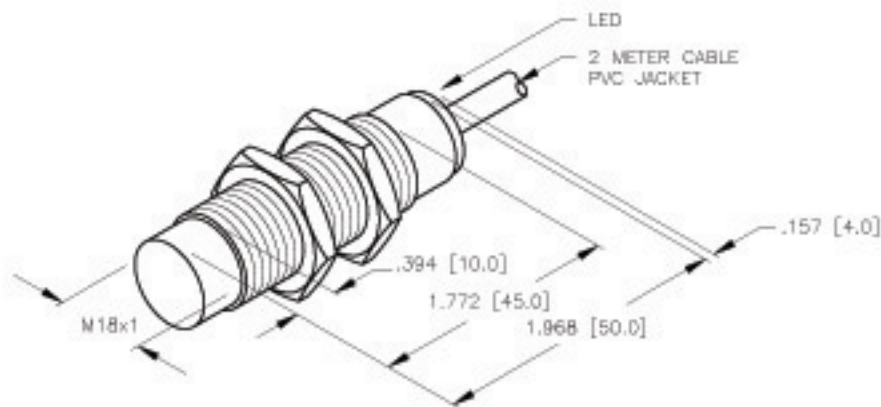
OUTPUT: VN4X

LOCKNUT LN-M18



SPECIFICATIONS

OPERATING VOLTAGE	10-65 VDC (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	4.0-9.5 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(Sr)	8mm = .315" (NOMINAL)
SWITCHING FREQUENCY	1000 Hz
REPEATABILITY	≤ 2% of RATED OPERATING DISTANCE
SHIELDED	NO



SOURCE DRAWING - FOR REFERENCE ONLY

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	MATERIAL	TOLERANCES UNLESS OTHERWISE SPECIFIED	DWG: IK	DATE: 11/12/98	DESCRIPTION: N18-M18-VN4X
FINISH	±0.0394 in [±1.00 mm]	UNIT OF MEASUREMENT <b>INCH [ MILLIMETER ]</b>	SCALE: 1=2.0	IDENTIFICATION NO.: T1571200	REV: B
DO NOT SCALE THIS DRAWING			FILE: T1571200	SHEET 1 OF 1	

B	UPDATE DRAWING	IK	08/29/00	T3745
REV	DESCRIPTION	BY	DATE	EDD NO.