

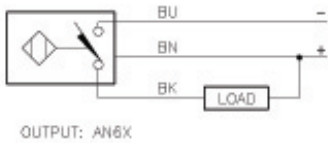
# Inductive Sensors



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

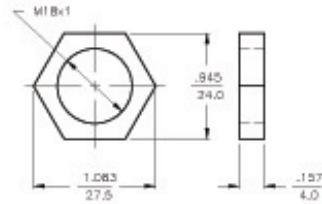
Output	Switching Freq. (Hz)	Operating Current (mA)	Operating Temp. (°C)	Protection	Housing	Face	End Cap	Power LED	Output LED	Cable Length/ Cable Mat.	Wiring Diagram #	Wiring Diagrams
10-65 VDC	500	≤100	-25 to +70	IP 67	CPB	PA 12	EPTR	N/A	YE	2M/PVC	1	<b>Diagram 1</b> 
	500	≤100	-25 to +70	IP 67	CPB	PA 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**



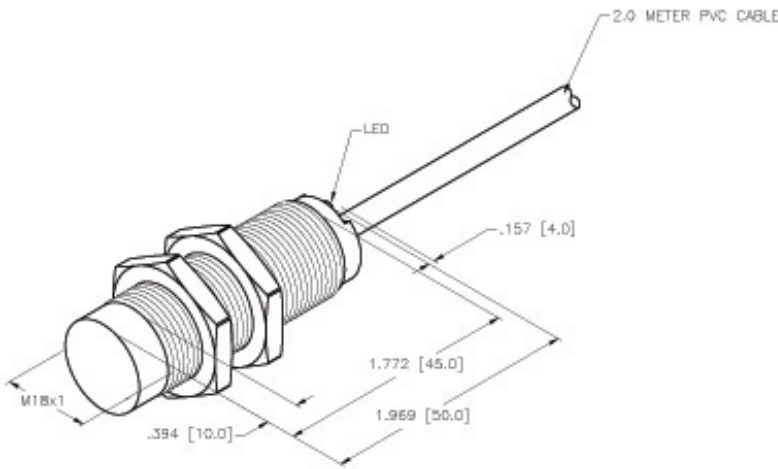
SHORT-CIRCUIT AND OVERLOAD PROTECTED

**LOCKNUT LN-M18**



**SPECIFICATIONS**

RATED OPERATING DISTANCE	12mm = .472"
MOUNTING MODE	NON-FLUSH, PARTIAL EMBEDDING POSSIBLE
MIN. REPEAT ACCURACY	≤ 2%
TEMPERATURE DRIFT	≤ ±10% ≤ ±15%, ≤ -25°C v ≥ +70°C
HYSTERESIS (SWITCHING DISTANCE)	3-15%
OPERATING TEMPERATURE	-30°C to +85°C (-22°F to +185°F)
RATED OPERATIONAL VOLTAGE	10-30 VDC
MAX. RIPPLE	≤ 10%
DC RATED OPERATIONAL CURRENT	≤ 200 mA
NO-LOAD CURRENT	≤ 15 mA
MAX. OFF-STATE CURRENT	≤ 0.1 mA
RATED INSULATION VOLTAGE	≤ 0.5 kW
SHORT-CIRCUIT PROTECTION	INCORPORATED
MAX. VOLTAGE DROP	≤ 1.8 V
WIRE BREAKAGE PROTECTION	INCORPORATED
REVERSE POLARITY PROTECTION	INCORPORATED
OUTPUT FUNCTION	3-WIRE, NORMALLY OPEN, NPN
MAX. SWITCHING FREQUENCY	≤ 2.0 kHz
HOUSING MATERIAL	METAL, BRASS/CHROME-PLATED
ACTIVE FACE	PLASTIC, PBT
END CAP	PLASTIC, EPTR
CABLE	#5.2, LITTY, PVC
VIBRATION RESISTANCE	55 Hz, 1 mm AMPLITUDE (IN ALL 3 PLANES)
SHOCK RESISTANCE	30 g, 11 ms
DEGREE OF PROTECTION	IP67
SWITCHING STATUS INDICATION	LED, YELLOW



CABLE LENGTH	TOLERANCE
ALL LENGTHS	+ 4% (OR 50mm) OF LENGTH - 0% (OR 0mm) OF LENGTH WHICHEVER IS GREATER
STRIP LENGTH	TOLERANCE
5-7mm	±0.2mm
8-24mm	±1.0mm
25-30mm	±2.0mm
31-36mm	±3.0mm
37-100mm	±4.0mm
OVER 100mm	±5.0mm

SOURCE DRAWING - FOR REFERENCE ONLY

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1.		DWPT	RDS	DATE 06/12/07	DESCRIPTION
2.		OSGN	AF	SCALE 1=1.0	NI12U-M18-AN6X
3.		UNIT OF MEASUREMENT			IDENTIFICATION NO.
4.		<b>INCH (MILLIMETER)</b>			M1645120
MATERIAL	TOLERANCES UNLESS OTHERWISE SPECIFIED	DO NOT SCALE THIS DRAWING		FILE: M1645120	REV
FINISH	.X ±0.02 .XX ±0.01 .XXX ±0.005 ANGLES ±1° ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY				A
A DRAWING RELEASE	RDS 06/12/07				
REV DESCRIPTION	BY DATE EDO NO.				