

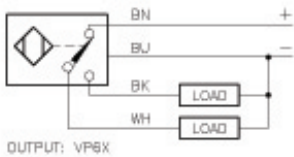
Inductive Sensors



| Housing Style | Part Number | ID Number | Features | Sensing Range (mm) | Output |
|--|--------------------|------------|---------------------------------|--------------------|---------------|
| 12 mm - Non-Embeddable, Potted-In Cable | Ni 4-M12-AD4X | T4405200 | | 4 | 2-Wire DC |
| | Ni 8-M12-AD4X | T4411235 | <i>Extended Range</i> | 8 | |
| | Ni 8-M12-AD4X/S90 | T4411235-1 | <i>Extended Range</i> | 8 | |
| | Ni 4-M12-AN6X | T4606380 | | 4 | 3-Wire DC NPN |
| | Ni 8-M12-AN6X | T4611318 | <i>Extended Range</i> | 8 | |
| | Ni 8U-EM12-AN6X | M1644320 | <i>Ext. Range, Uprox</i> | 8 | |
| | Ni 8U-M12-AN6X | M1644120 | <i>Ext. Range, Uprox</i> | 8 | |
| | Ni 4-M12-AP6X | T4605200 | | 4 | 3-Wire DC PNP |
| | Ni 4-M12-AP6X/S100 | M4605201 | <i>High Temp. 100°C</i> | 4 | |
| | Ni 8-M12-AP6X | T4611319 | <i>Extended Range</i> | 8 | |
| | Ni 8U-EM12-AP6X | M1644300 | <i>Uprox</i> | 8 | |
| | Ni 8U-M12-AP6X | M1644100 | <i>Uprox</i> | 8 | |
| | Ni 4-M12-VN6X | T1640400 | <i>Ext. Range, Comp. Output</i> | 4 | 4-Wire DC NPN |
| | Ni 8-M12-VN6X | T4611321 | <i>Ext. Range, Comp. Output</i> | 8 | |
| | Ni 4-M12-VP6X | T1630400 | <i>Ext. Range</i> | 4 | 4-Wire DC PNP |
| | Ni 8-M12-VP6X | T4611322 | <i>Ext. Range, Comp. Output</i> | 8 | |

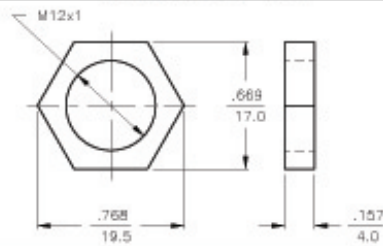
| Voltage | Switching Freq. (Hz) | Operating Current (mA) | Operating Temp. (°C) | Protection | Housing | Face | End Cap | Power LED | Output LED | Cable Length/ Cable /Mat. | Wiring Diagram # | Wiring Diagrams |
|-----------|----------------------|------------------------|----------------------|------------|---------|-------|---------|-----------|------------|---------------------------|------------------|----------------------|
| 10-65 VDC | 1000 | ≤100 | -25 to +70 | IP 67 | CPB | PA 12 | EPTR | N/A | YE | 2M/PVC | 1 | Diagram 1 |
| | 1000 | ≤100 | -25 to +70 | IP 67 | CPB | PA 12 | EPTR | N/A | YE | 2M/PVC | 1 | |
| | 1000 | ≤100 | -25 to +70 | IP 67 | CPB | PA 12 | EPTR | N/A | YE | 2M/PUR | 1 | |
| 10-30 VDC | 2000 | ≤200 | -25 to +70 | IP 67 | CPB | PA 12 | EPTR | N/A | YE | 2M/PVC | 2 | Diagram 2 |
| | 2000 | ≤200 | -25 to +70 | IP 67 | CPB | PA 12 | EPTR | N/A | YE | 2M/PVC | 2 | |
| | 2000 | ≤200 | -30 to +85 | IP 68 | SS | PA 12 | EPTR | N/A | YE | 2M/PVC | 2 | |
| | 2000 | ≤200 | -30 to +85 | IP 67 | CPB | PA 12 | EPTR | N/A | YE | 2M/PVC | 2 | |
| 10-30 VDC | 2000 | ≤200 | -25 to +70 | IP 67 | CPB | PA 12 | EPTR | N/A | YE | 2M/PVC | 3 | Diagram 3 |
| | 2000 | ≤200 | -25 to +100 | IP 67 | CPB | PA 12 | EPTR | N/A | YE | 2M/PVC | 3 | |
| | 2000 | ≤200 | -25 to +70 | IP 67 | CPB | PA 12 | EPTR | N/A | YE | 2M/PVC | 3 | |
| | 2000 | ≤200 | -30 to +85 | IP 68 | 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 | |
| 10-30 VDC | 2000 | ≤200 | -25 to +70 | IP 67 | CPB | PA 12 | EPTR | N/A | YE | 2M/PVC | 4 | Diagram 4 |
| | 2000 | ≤200 | -25 to +70 | IP 67 | CPB | PA 12 | EPTR | N/A | YE | 2M/PVC | 4 | |
| 10-30 VDC | 2000 | ≤200 | -25 to +70 | IP 67 | CPB | PA 12 | EPTR | N/A | YE | 2M/PVC | 5 | Diagram 5 |
| | 2000 | ≤200 | -25 to +70 | IP 67 | CPB | PA 12 | EPTR | N/A | YE | 2M/PVC | 5 | |

WIRING DIAGRAM



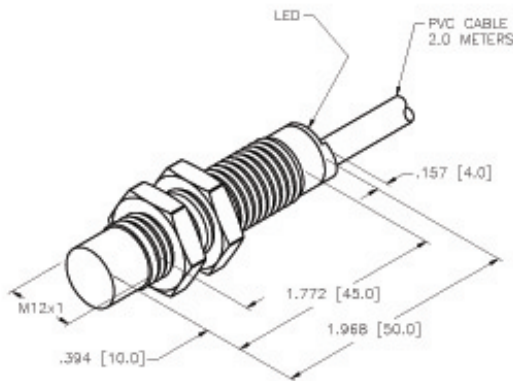
SHORT-CIRCUIT AND OVERLOAD PROTECTED

LOCKNUT LN-M12



SPECIFICATIONS

| | |
|------------------------------|---|
| RATED OPERATING DISTANCE | 8 mm [.315"] |
| MOUNTING MODE | NON-FLUSH |
| MIN. REPEAT ACCURACY | ±2% |
| TEMPERATURE DRIFT | ≤ ±10% |
| HYSTERESIS | 1-15% |
| AMBIENT TEMPERATURE | -25°C to +70°C (-13°F to +158°F) |
| OPERATING CURRENT | 10-30 VDC |
| RESIDUAL RIPPLE | ≤ 10% |
| DC RATED OPERATIONAL CURRENT | ≤ 100 mA |
| RESIDUAL CURRENT | ≤ 0.6 mA |
| RATED INSULATION VOLTAGE | ≤ 0.5 kV |
| SHORT-CIRCUIT PROTECTION | YES |
| MAX. VOLTAGE DROP | ≤ 5.0 V |
| OUTPUT FUNCTION | COMPLEMENTARY OUTPUT ONE N.O., ONE N.C. (SPDT) |
| SMALLEST OPERATING CURRENT | ≥ 3.0 mA |
| MAX. SWITCHING FREQUENCY | ≤ 2.0 kHz |
| HOUSING MATERIAL | BRASS, CHROME-PLATED |
| ACTIVE FACE MATERIAL | PLASTIC, PA12-GF20 |
| END CAP MATERIAL | PLASTIC, EPTR |
| CABLE | Ø5.2, LIYY, PVC |
| VIBRATION RESISTANCE | 55 Hz (IN ALL 3 PLANES) |
| SHOCK RESISTANCE | 30 g, 11 ms |
| DEGREE OF PROTECTION | IP 67 |
| 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 |
| 0-7mm | ±.25mm |
| 8-20mm | ±.30mm |
| 20-30mm | ±.35mm |
| 30-40mm | ±.40mm |
| 40-50mm | ±.45mm |
| 50-60mm | ±.50mm |
| 60-70mm | ±.55mm |
| 70-80mm | ±.60mm |
| 80-90mm | ±.65mm |
| 90-100mm | ±.70mm |

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. | TURCK INC High Technology Sensors and Automation Controls | |
| MATERIAL SEE SPECIFICATIONS | TOLERANCES UNLESS OTHERWISE SPECIFIED .X ±0.02 .XX ±0.01 .XXX ±0.005 ANGLES ±1° | DRAWN RDS USDR AF | DATE 03/22/07 SCALE 1=1.0 | DESCRIPTION NI 8-M12-VP6X |
| FINISH SEE SPECIFICATIONS | ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY | UNIT OF MEASUREMENT INCH [MILLIMETER] | | IDENTIFICATION NO. T4611322 |
| A DRAWING RELEASE | RDS 03/22/07 | DO NOT SCALE THIS DRAWING | | REV A |
| REV DESCRIPTION | BY DATE EDO NO. | FILE: T4611322 | SHEET 1 OF 1 | |