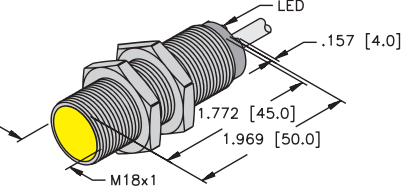
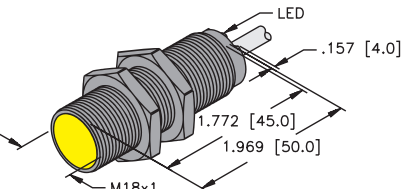


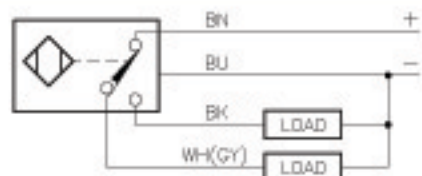
# Inductive Sensors



| Housing Style                                                                                                                                                           | Part Number        | ID Number | Features         | Sensing Range (mm) | Output        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-----------|------------------|--------------------|---------------|
| <b>18 mm - Embeddable, Potted-In Cable, Partial Threading</b><br><br>                  | Bi 5-M18-AD4X      | T4411000  |                  | 5                  | 2-Wire DC     |
|                                                                                                                                                                         | Bi 7-M18-AD4X      | T4414535  | Ext. Range       | 7                  |               |
|                                                                                                                                                                         | Bi 5U-EM18-AN6X    | M1635320  | Uprox            | 5                  | 3-Wire DC NPN |
|                                                                                                                                                                         | Bi 5U-M18-AN6X     | M1635120  | Uprox            | 5                  |               |
|                                                                                                                                                                         | Bi 8-M18-AN6X      | T4615130  | Ext. Range       | 8                  |               |
|                                                                                                                                                                         | Bi 5-M18-AN6X      | M4611100  |                  | 5                  |               |
|                                                                                                                                                                         | Bi 5-M18-AP6X/S100 | M4611004  | High Temp. 100°C | 5                  | 3-Wire DC PNP |
|                                                                                                                                                                         | Bi 5U-EM18-AP6X    | M1635300  | Uprox            | 5                  |               |
|                                                                                                                                                                         | Bi 5U-M18-AP6X     | M1635100  | Uprox            | 5                  |               |
|                                                                                                                                                                         | Bi 8-M18-AP6X      | T4615030  | Ext. Range       | 8                  |               |
|                                                                                                                                                                         | Bi 5-M18-VN4X      | T1571100  | Comp. Outputs    | 5                  | 4-Wire DC NPN |
|                                                                                                                                                                         | Bi 8-M18-VN4X      | T4590703  | Comp. Outputs    | 8                  |               |
|                                                                                                                                                                         | Bi 5-M18-VP4X      | T1561100  | Comp. Outputs    | 5                  | 4-Wire DC PNP |
|                                                                                                                                                                         | Bi 8-M18-VP4X      | T4590704  | Comp. Outputs    | 8                  |               |
| <b>18 mm - Embeddable, Potted-In Cable, Partial Threading, Teflon Coated</b><br><br> | Bi 5U-MT18-ADZ30X2 | M4209410  | Uprox            | 5                  | 2-Wire AC/DC  |
|                                                                                                                                                                         |                    |           |                  |                    |               |

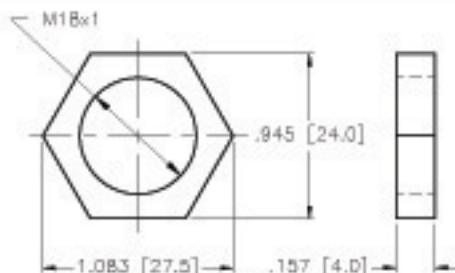
| Output                   | Switching Freq. (Hz) | Operating Current (mA) | Operating Temp. (°C) | Protection | Housing | Face  | End Cap | Power LED | Output LED | Cable Length/<br>Cable Mat. | Wiring Diagram # | Wiring Diagrams      |
|--------------------------|----------------------|------------------------|----------------------|------------|---------|-------|---------|-----------|------------|-----------------------------|------------------|----------------------|
| 10-65 VDC                | 1000                 | ≤100                   | -25 to +70           | IP 67      | CPB     | PA 12 | EPTR    | N/A       | YE         | 2M/PVC                      | 1                | <b>Diagram 1</b><br> |
|                          | 1000                 | ≤100                   | -25 to +70           | IP 67      | CPB     | PA 12 | EPTR    | N/A       | YE         | 2M/PVC                      | 1                |                      |
| 10-30 VDC                | 2500                 | ≤200                   | -30 to +85           | IP 68      | SS      | PA 12 | EPTR    | N/A       | YE         | 2M/PVC                      | 2                | <b>Diagram 2</b><br> |
|                          | 2500                 | ≤200                   | -30 to +85           | IP 67      | CPB     | PA 12 | EPTR    | N/A       | YE         | 2M/PVC                      | 2                |                      |
|                          | 500                  | ≤200                   | -25 to +70           | IP 67      | SS      | PA 12 | EPTR    | N/A       | YE         | 2M/PVC                      | 2                |                      |
|                          | 1000                 | ≤200                   | -25 to +70           | IP 67      | CPB     | PA 12 | EPTR    | N/A       | YE         | RK 4T-*                     | 2                |                      |
| 10-30 VDC                | 1000                 | ≤200                   | -25 to +100          | IP 67      | CPB     | IRPA  | EPTR    | N/A       | YE         | 2M/PVC                      | 3                | <b>Diagram 3</b><br> |
|                          | 2500                 | ≤200                   | -30 to +85           | IP 68      | SS      | PA 12 | EPTR    | N/A       | YE         | 2M/PVC                      | 3                |                      |
|                          | 2500                 | ≤200                   | -30 to +85           | IP 67      | CPB     | PA 12 | EPTR    | N/A       | YE         | 2M/PVC                      | 3                |                      |
|                          | 500                  | ≤200                   | -25 to +70           | IP 67      | SS      | 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><br> |
|                          | 500                  | ≤200                   | -25 to +70           | IP 67      | SS      | 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><br> |
|                          | 500                  | ≤200                   | -25 to +70           | IP 67      | SS      | PA 12 | EPTR    | N/A       | YE         | 2M/PVC                      | 5                |                      |
| 20-250 VAC<br>10-300 VDC | 20                   | ≤400/300               | -30 to +85           | IP 67      | TC      | TC    | EPTR    | GN        | YE         | 2M/PVC                      | 6                | <b>Diagram 6</b><br> |

## WIRING DIAGRAM



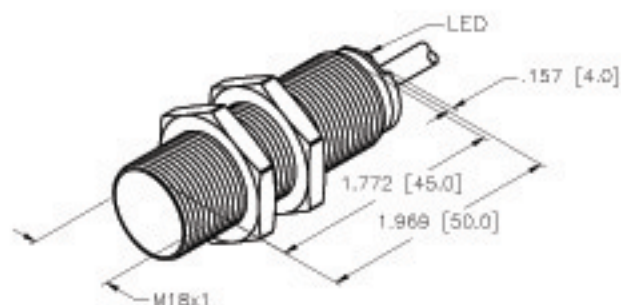
SHORT-CIRCUIT AND OVERLOAD PROTECTED

## LOCKNUT LN-M18



## SPECIFICATIONS

|                               |                                  |
|-------------------------------|----------------------------------|
| RATED OPERATING DISTANCE      | 8 mm = .315" (NOMINAL)           |
| MOUNTING MODE                 | FLUSH                            |
| TEMPERATURE DRIFT             | ±10%                             |
| HYSTERESIS                    | 3-15%                            |
| MIN. REPEAT ACCURACY          | ±2%                              |
| OPERATING TEMPERATURE         | -25°C to +70°C (-13°F to +158°F) |
| RATED OPERATIONAL VOLTAGE     | 10-65 VDC                        |
| RESIDUAL RIPPLE               | ≤10%                             |
| DC RATED OPERATIONAL CURRENT  | ≤200 mA                          |
| NO-LOAD CURRENT               | ≤15 mA                           |
| RESIDUAL CURRENT              | ≤0.1 mA                          |
| RATED INSULATION VOLTAGE      | ≤0.5 kV                          |
| SHORT-CIRCUIT PROTECTION      | YES                              |
| MAX. VOLTAGE DROP             | ≤1.8 V                           |
| POLARITY INVERSION PROTECTION | INCORPORATED                     |
| WIRE-BREAK PROTECTION         | INCORPORATED                     |
| OUTPUT FUNCTION               | 4-WIRE, CHANGE-OVER, PNP         |
| MAX. SWITCHING FREQUENCY      | ≤0.5 kHz                         |
| HOUSING MATERIAL              | BRASS, CHROME-PLATED             |
| ACTIVE FACE MATERIAL          | PLASTIC, PA12-GF30               |
| 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  | + .45 (ØF 50mm) OF LENGTH<br>- .05 (ØF 50mm) OF LENGTH<br>WHICHEVER IS GREATER |
| STRIP LENGTH | TOLERANCE                                                                      |
| 0-7mm        | ±0.0mm                                                                         |
| 8-25mm       | ±1.0mm                                                                         |
| 26-45mm      | ±2.0mm                                                                         |
| 46-65mm      | ±3.0mm                                                                         |
| 66-100mm     | ±4.0mm                                                                         |
| ØF 100mm     | ±5.0mm                                                                         |

SOURCE DRAWING - FOR REFERENCE ONLY

|                                           |                                                                                                                                             |                                                                                                       |     |                                                                     |                                |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|-----|---------------------------------------------------------------------|--------------------------------|
| RELATED DOCUMENTS<br>1.<br>2.<br>3.<br>4. | 3RD ANGLE PROJECTION<br>                               | THIS DRAWING IS PROPERTY OF TURCK INC. USE OF THIS DOCUMENT WITHOUT WRITTEN PERMISSION IS PROHIBITED. |     | <b>TURCK INC</b><br>High Technology Sensors and Automation Controls |                                |
| MATERIAL<br>SEE SPECIFICATIONS            | TOLERANCES UNLESS OTHERWISE SPECIFIED<br>.X ±0.02<br>.XX ±0.01<br>.XXX ±0.005<br>ANGLES ±1°<br>ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY | DWGT                                                                                                  | RDS | DATE 05/07/07                                                       | DESCRIPTION<br>BI 8-M18-VP4X   |
|                                           |                                                                                                                                             | CSGN                                                                                                  | AF  | SCALE 1=1.3                                                         |                                |
| FINISH<br>SEE SPECIFICATIONS              |                                                                                                                                             | UNIT OF MEASUREMENT<br><b>INCH [ MILLIMETER ]</b>                                                     |     |                                                                     | IDENTIFICATION NO.<br>T4590704 |
|                                           |                                                                                                                                             | DO NOT SCALE THIS DRAWING                                                                             |     |                                                                     | REV<br>A                       |
|                                           |                                                                                                                                             | FILE: T4590704                                                                                        |     |                                                                     | SHEET 1 OF 1                   |