

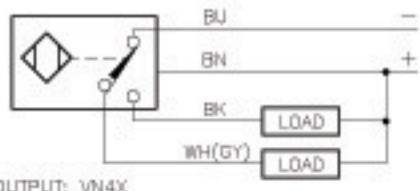
Inductive Sensors



| Housing Style | Part Number | ID Number | Features | Sensing Range (mm) | Output | |
|---|--|--------------------|------------------|--------------------|---------------|--------------|
| 18 mm - Embeddable, Potted-In Cable, Partial Threading | 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 | | |
| | 18 mm - Embeddable, Potted-In Cable, Partial Threading, Teflon Coated | 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/ 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 | |
| 10-30 VDC | 2500 | ≤200 | -30 to +85 | IP 68 | SS | PA 12 | EPTR | N/A | YE | 2M/PVC | 2 | Diagram 2 |
| | 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 | Diagram 3 |
| | 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 | Diagram 4 |
| | 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 | Diagram 5 |
| | 500 | ≤200 | -25 to +70 | IP 67 | SS | PA 12 | EPTR | N/A | YE | 2M/PVC | 5 | |
| 20-250 VAC 10-300 VDC | 20 | ≤400/300 | -30 to +85 | IP 67 | TC | TC | EPTR | GN | YE | 2M/PVC | 6 | Diagram 6 |

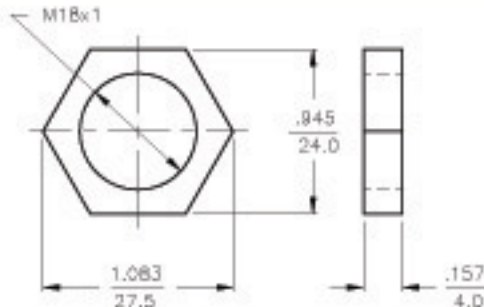
WIRING DIAGRAM



OUTPUT: VN4X

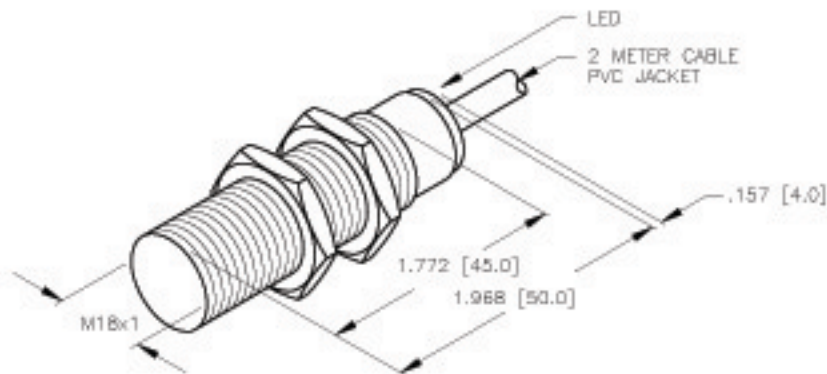
SHORT-CIRCUIT AND OVERLOAD PROTECTED

LOCKNUT LN-M18



SPECIFICATIONS

| | |
|---|--|
| OPERATING VOLTAGE | 10-65 V DC (SHORT-CIRCUIT PROTECTED) |
| RIPPLE | ≤ 10% |
| DIFFERENTIAL TRAVEL (HYSTERESIS) | 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. (SPDT) |
| TTL COMPATIBLE | NO |
| SHORT-CIRCUIT PROTECTED | YES |
| TRIGGER CURRENT FOR OVERLOAD PROTECTION | ≥ 220 mA |
| CONTINUOUS LOAD CURRENT | ≤ 220 mA |
| LEAKAGE (OFF-STATE) CURRENT | < 10 μ A |
| NO-LOAD CURRENT | 4.0-9.5 mA |
| TIME DELAY BEFORE AVAILABILITY | ≤ 8 ms |
| POWER-ON EFFECT PROTECTION | INCORPORATED |
| POLARITY INVERSION 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 EC 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) | 5 mm = .197" (NOMINAL) |
| SWITCHING FREQUENCY | 1000 Hz |
| REPEATABILITY | ≤ 2% of RATED OPERATING DISTANCE |
| SHIELDED | YES |



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 BRASS BARREL | TOLERANCES UNLESS OTHERWISE SPECIFIED .X ±0.02 .XX ±0.01 .XXX ±0.005 ANGLES ±1° ALL MILLIMETER DIMENSIONS ARE REFERENCE ONLY | CRAFT GMB DATE 10/24/89 | DESCRIPTION BI 5-M18-VN4X | IDENTIFICATION NO. T1571100 |
| FINISH COPPER/NICKEL/ CHROME PLATING | UNIT OF MEASUREMENT INCH [MILLIMETER] | SCALE NONE | FILE: T1571100 | SHEET 1 OF 1 | |
| DO NOT SCALE THIS DRAWING | | | | | |

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|-----|--------------------------------|----|----------|---------|
| F | UPDATE DRAWING, WIRING DIAGRAM | IK | 08/29/00 | T3745 |
| REV | DESCRIPTION | BY | DATE | EDD NO. |