

### WIRING DIAGRAM

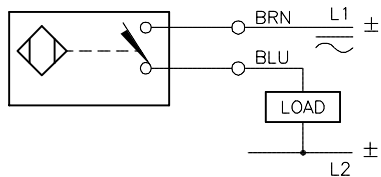
BRN L1 ±

BLU

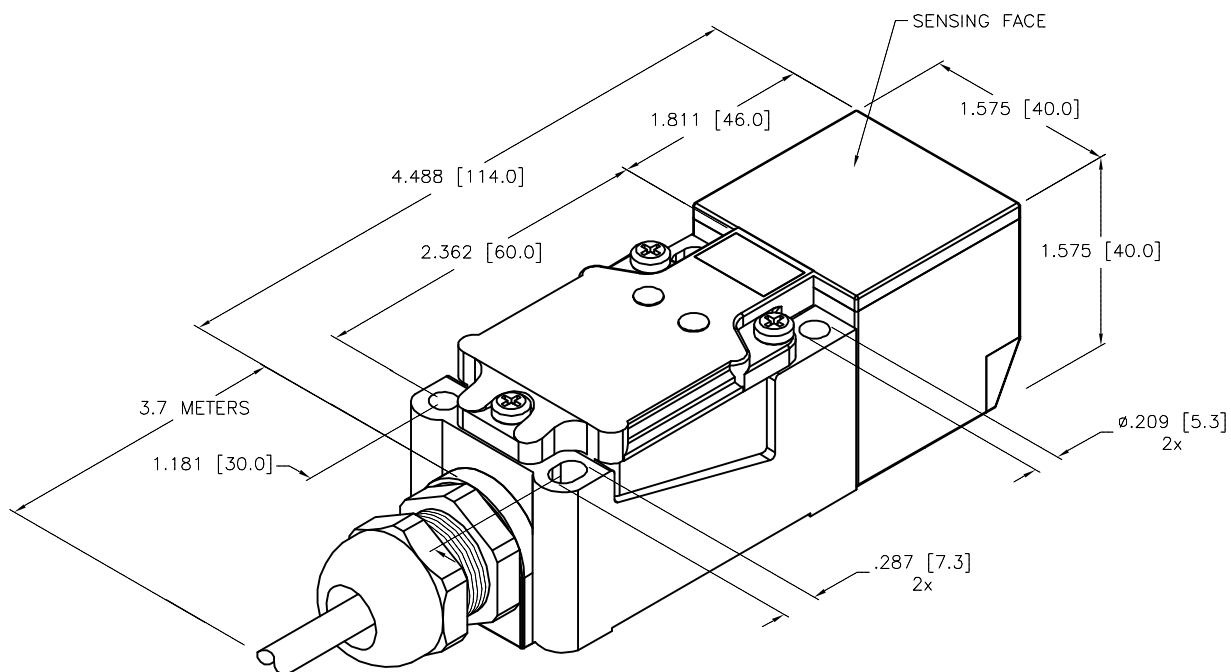
LOAD

L2 ±

### SHORT-CIRCUIT AND OVERLOAD PROTECTED



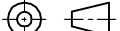
SHORT-CIRCUIT AND OVERLOAD PROTECTED



|                                            |                                                                                       |
|--------------------------------------------|---------------------------------------------------------------------------------------|
| OPERATING VOLTAGE                          | 20–250 VAC/10–300 VDC                                                                 |
| LINE FREQUENCY                             | >50–<60 Hz                                                                            |
| HYSTERESIS                                 | 3–15% (5% TYPICAL)                                                                    |
| VOLTAGE DROP ACROSS CONDUCTING SENSOR      | ≤6.0 V at 400 mA                                                                      |
| OUTPUT FUNCTION                            | CONNECTION PROGRAMMABLE<br>NORMALLY OPEN OR NORMALLY CLOSED                           |
| SHORT–CIRCUIT PROTECTED                    | YES                                                                                   |
| TRIGGER CURRENT FOR<br>OVERLOAD PROTECTION | ≥500 mA                                                                               |
| CONTINUOUS LOAD CURRENT                    | ≤400 mA                                                                               |
| RESIDUAL CURRENT                           | ≤1.7 mA                                                                               |
| MINIMUM LOAD CURRENT                       | ≥3.0 mA                                                                               |
| INRUSH CURRENT                             | ≤3.0 A (≤20 ms/5 Hz)                                                                  |
| TIME DELAY BEFORE AVAILABILITY             | ≤30 ms                                                                                |
| POWER–ON EFFECT PROTECTION                 | INCORPORATED                                                                          |
| PROTECTION AGAINST TRANSIENTS              | 5 kV, 10ms, 10 kΩ                                                                     |
| 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                                  | 55 Hz, 1 mm AMPLITUDE<br>(IN ALL 3 PLANES)                                            |
| LED FUNCTION                               | GREEN: STEADY = POWER ON<br>FLASHING = SHORT–CIRCUIT WARNING<br>RED: OUTPUT ENERGIZED |
| SENSING RANGE                              | 15 mm = .591" (NOMINAL)                                                               |
| SWITCHING FREQUENCY                        | 0.02 kHz                                                                              |
| REPEATABILITY                              | ≤2% of NOMINAL SENSING RANGE                                                          |
| SHIELDED                                   | YES                                                                                   |
| CABLE                                      | 20 AWG, GREY                                                                          |

1. "PTNO" DESIGNATES FULLY POTTED CHAMBER, NORMALLY OPEN OUTPUT.  
TOP FACE SENSING.

|     |                 |     |          |         |
|-----|-----------------|-----|----------|---------|
| A   | DRAWING RELEASE | RDS | 07/14/20 |         |
| REV | DESCRIPTION     | BY  | DATE     | ECO NO. |

|                                                           |                                          |                                                                                        |      |                                                                                                                                              |       |                                                                                       |                                                |                                                                                                                      |  |  |
|-----------------------------------------------------------|------------------------------------------|----------------------------------------------------------------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------|-------|---------------------------------------------------------------------------------------|------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|--|--|
| RELATED DOCUMENTS<br><br>1.<br><br>2.<br><br>3.<br><br>4. | 3RD ANGLE<br>PROJECTION                  |   |      | THIS DRAWING IS<br>CONFIDENTIAL AND THE<br>PROPERTY OF TURCK<br>INC. USE OF THIS<br>DOCUMENT WITHOUT<br>WRITTEN PERMISSION IS<br>PROHIBITED. |       |  |                                                | 3000 CAMPUS DRIVE<br>MINNEAPOLIS, MN 55441<br>1-800-544-7769<br>(763) 553-7300<br>(763) 553-0708 fax<br>www.turck.us |  |  |
|                                                           |                                          |                                                                                        |      |                                                                                                                                              |       |                                                                                       |                                                |                                                                                                                      |  |  |
|                                                           | MATERIAL                                 | ALL DIMENSIONS<br>DISPLAYED ON THIS<br>DRAWING ARE FOR<br>REFERENCE ONLY               | DRFT | RDS                                                                                                                                          | DATE  | 07/14/20                                                                              | DESCRIPTION<br><br>BI15-CP40-FDZ30X2/PTNO 3.7M |                                                                                                                      |  |  |
|                                                           |                                          |                                                                                        | APVD | A.F.                                                                                                                                         | SCALE | 1=1.3                                                                                 |                                                |                                                                                                                      |  |  |
| FINISH                                                    | CONTACT TURCK<br>FOR MORE<br>INFORMATION | UNIT OF MEASUREMENT<br><br><b>INCH [ MILLIMETER ]</b><br><br>DO NOT SCALE THIS DRAWING |      |                                                                                                                                              |       | IDENTIFICATION NO.<br><br>100021762                                                   |                                                | REV<br><br>A                                                                                                         |  |  |
|                                                           |                                          |                                                                                        |      |                                                                                                                                              |       | FILE: 100021762                                                                       |                                                | SHEET 1 OF 1                                                                                                         |  |  |

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