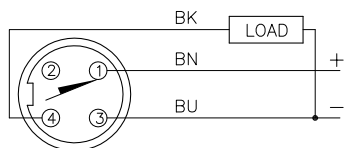


### WIRING DIAGRAM

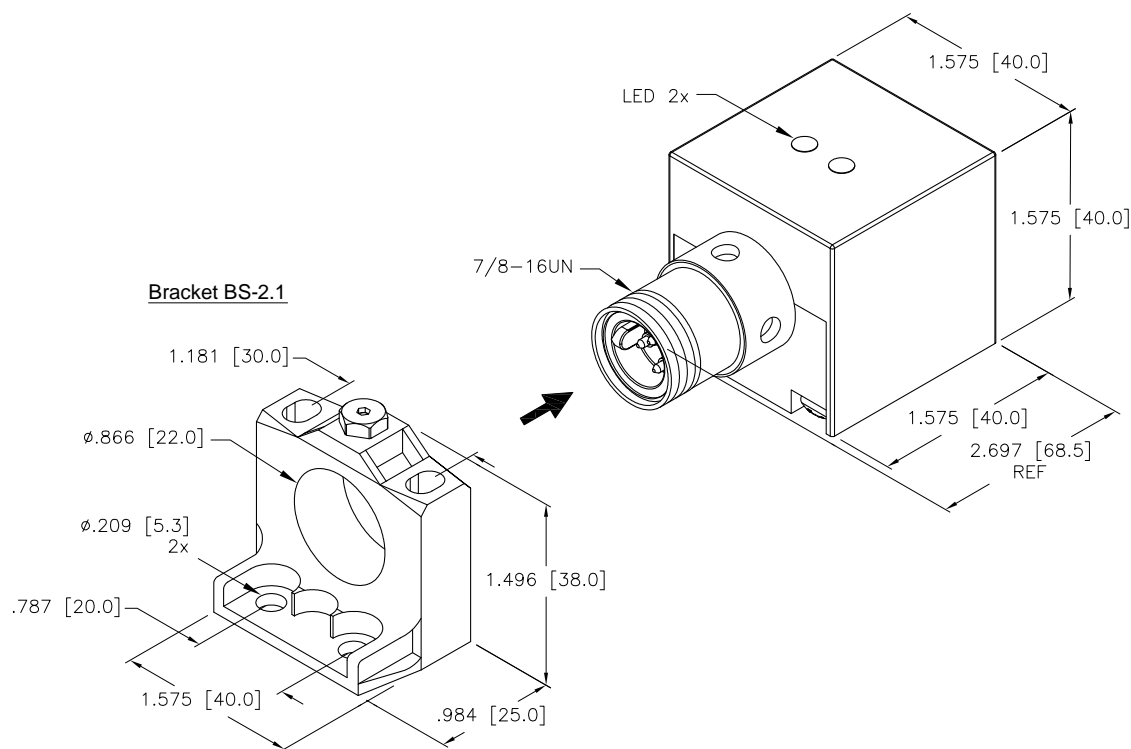


OUTPUT: AP6X2

SHORT-CIRCUIT AND OVERLOAD PROTECTED

### SPECIFICATIONS

|   |   |
|---|---|
| OPERATING VOLTAGE                         | 10-30 VDC   |
| RIPPLE                                    | ≤10%  |
| DIFFERENTIAL TRAVEL (HYSTERESIS)          | 3-15% (5% TYPICAL)  |
| VOLTAGE DROP ACROSS CONDUCTING SENSOR     | ≤1.8 V at 200 mA  |
| OUTPUT FUNCTION                           | NORMALLY OPEN<br>3-WIRE DC SELF-CONTAINED   |
| SHORT-CIRCUIT PROTECTED                   | YES   |
| TRIGGER CURRENT FOR OVERLOAD PROTECTION   | ≥220 mA   |
| CONTINUOUS LOAD CURRENT                   | ≤200 mA   |
| OFF-STATE (LEAKAGE) CURRENT               | <0.1 mA   |
| NO-LOAD CURRENT                           | < 15 mA   |
| TIME DELAY BEFORE AVAILABILITY            | ≤8 ms   |
| POWER-ON EFFECT PROTECTION                | PER IEC 947-5-2   |
| REVERSE POLARITY PROTECTION               | INCORPORATED  |
| WIRE-BREAK PROTECTION                     | INCORPORATED  |
| PROTECTION AGAINST TRANSIENTS             | EN60947-5-7   |
| OPERATING TEMPERATURE                     | 0°C to +70°C (+32°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: POWER ON<br>YELLOW: OUTPUT ENERGIZED<br>YELLOW FLASHING: SHORT-CIRCUIT WARNING |
| RATED OPERATING DISTANCE(S <sub>n</sub> ) | 20 mm = .787" (NOMINAL)   |
| EMBEDDABLE (SHIELDED)                     | YES   |
| SWITCHING FREQUENCY                       | 260 Hz  |
| REPEATABILITY                             | ≤2% of RATED OPERATING DISTANCE   |



SOURCE DRAWING - FOR REFERENCE ONLY

NOTES:

1. SENSING HEAD CAN ROTATE TO 5 DIFFERENT SENSING POSITIONS.
2. UPROX HAS WELD FIELD IMMUNITY, SENSOR IS SUITABLE FOR USE ON RESISTANCE MACHINES.

|   |   |   |                             |   |                |
|---|---|---|-----------------------------|---|----------------|
| 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. |                             | 3000 CAMPUS DRIVE<br>MINNEAPOLIS, MN 55441<br>1-800-544-7769<br>(763) 553-7300<br>(763) 553-0708 fax<br>turck.com |                |
|   | MATERIAL<br>HOUSING: GD-ALSI12<br>FRONTCAP: THERMOSET PLASTIC   | DRFT RDS<br>DSGN AF   | DATE 09/20/07<br>SCALE NONE | DESCRIPTION<br>B120U-CA40-AP6X2-B1141 W/BS 2.1  |                |
| FINISH                                    | ALL DIMENSIONS DISPLAYED ON THIS DRAWING ARE FOR REFERENCE ONLY | UNIT OF MEASUREMENT<br><b>INCH [ MILLIMETER ]</b>   |                             | IDENTIFICATION NO.<br>M1627292  | REV<br>B       |
| B   | UPDATE OPERATING TEMPERATURE, SEE ECO                           | RWC   | 12/09/10                    | 33512   |                |
| REV                                       | DESCRIPTION   | BY  | DATE                        | ECO NO.   |                |
|   |   |   |                             | DO NOT SCALE THIS DRAWING   | FILE: M1627292 |
|   |   |   |                             |   | SHEET 1 OF 1   |