

S Barrel



High Temperature Sensors

Plastic Barrel, Partial Threading, Potted-In Cable

3-Wire DC

10-30 VDC, TTL Compatible

Normally Open, NPN (Sinking) or PNP (Sourcing)

Sensor Selection

| Part Number        | Embeddable | Rated Operating Distance (mm) | Barrel Diameter (mm) | NPN (Sinking) | PNP (Sourcing) | Drawing # | Wiring Diagram | # of LEDs | Switching Frequency (Hz) | ID Number | Connection                |
|--------------------|------------|-------------------------------|----------------------|---------------|----------------|-----------|----------------|-----------|--------------------------|-----------|---------------------------|
| Bi 2-S12-AN7X/S100 | •          | 2                             | 12                   | •             |                | 1         | A              | 1         | 2000                     | M1773100  | 2 meter cable, PVC jacket |
| Bi 5-S18-AN7X/S100 | •          | 5                             | 18                   | •             |                | 2         | A              | 1         | 1000                     | M1773400  |                           |
| Bi10-S30-AN7X/S100 | •          | 10                            | 30                   | •             |                | 3         | A              | 1         | 500                      | M1777700  |                           |
| Ni 4-S12-AN7X/S100 |            | 4                             | 12                   | •             |                | 1         | A              | 1         | 1500                     | M1773000  |                           |
| Ni 8-S18-AN7X/S100 |            | 8                             | 18                   | •             |                | 2         | A              | 1         | 1000                     | M1773250  |                           |
| Ni15-S30-AN7X/S100 |            | 15                            | 30                   | •             |                | 3         | A              | 1         | 500                      | M1777600  |                           |
| Bi 2-S12-AP7X/S100 | •          | 2                             | 12                   |               | •              | 1         | B              | 1         | 2000                     | M1755500  |                           |
| Bi 5-S18-AP7X/S100 | •          | 5                             | 18                   |               | •              | 2         | B              | 1         | 1000                     | M1754200  |                           |
| Bi10-S30-AP7X/S100 | •          | 10                            | 30                   |               | •              | 3         | B              | 1         | 500                      | M1752200  |                           |
| Ni 4-S12-AP7X/S100 |            | 4                             | 12                   |               | •              | 1         | B              | 1         | 1500                     | M1768100  |                           |
| Ni 8-S18-AP7X/S100 |            | 8                             | 18                   |               | •              | 2         | B              | 1         | 1000                     | M1749850  |                           |
| Ni15-S30-AP7X/S100 |            | 15                            | 30                   |               | •              | 3         | B              | 1         | 500                      | M1768501  |                           |

\*/S100" - These sensors will operate up to 100°C (212°F)

Cable/Conductor

Cable: PVC Jacket; 2 meter standard  
 Copper Conductor: S12: 24 AWG  
 (PVC insulated) S18/S30 and all S100 sensors: 21 AWG

Material

Barrel: PA 12-GF30 Plastic  
 End Cap: PUR Plastic

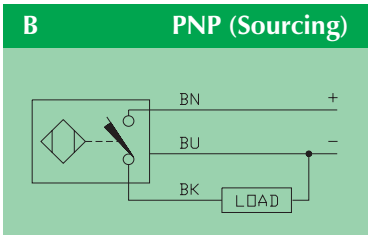
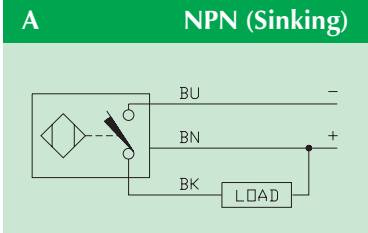
Accessories

Accessories and mounting devices can be found in "Sensors" catalog.

## Specifications

|   |  |
|---|--|
| Ripple . . . . .                                | ≤10%                                   |
| Differential Travel (Hysteresis) . . . . .      | 3-15% (5% typical)                     |
| Voltage Drop Across Conducting Sensor . . . . . | ≤0.7 V at 150 mA (0.3 V typical)       |
| Continuous Load Current . . . . .               | ≤150 mA                                |
| Off-State (Leakage) Current . . . . .           | <10 μA                                 |
| No-Load Current . . . . .                       | 5.5-9.5 mA                             |
| Time Delay Before Availability . . . . .        | ≤8 ms                                  |
| Power-On Effect . . . . .                       | Per IEC 947-5-2                        |
| Reverse Polarity Protection . . . . .           | Incorporated                           |
| Wire-Break Protection . . . . .                 | Incorporated                           |
| Transient Protection . . . . .                  | Per EN 60947-5-2                       |
| Operating Temperature . . . . .                 | -25°C to +100°C (-13°F to +212°F)      |
| Enclosure . . . . .                             | Meets NEMA 1,3,4,4x,6,13 and IEC IP 67 |
| Shock . . . . .                                 | 30 g, 11 ms                            |
| Vibration . . . . .                             | 55 Hz, 1 mm Amplitude in all 3 Planes  |
| Repeatability . . . . .                         | ≤2% of Rated Operating Distance        |
| LED On . . . . .                                | Output Energized                       |

## Wiring Diagrams



## Dimensions

