

BX Series High Resolution Area Sensor



High resolution area sensor (light screen) - DC

- 70 mm detection area height
- Operating distance up to 2m
- Adjustable sensitivity
- NPN or PNP with N.O./N.C. selectable output
- Emitter and receiver LED status indicators
- IP67 rated



BX80 Series Area Sensor Selection Chart

| Part Number | Price | Function | Sensing Range | Output State | Logic | Connection | Wiring |
|--------------------|----------|----------|---------------|-------------------------|-----------------------|-------------------------|-----------------------|
| BX80B-1N-0H | \$213.00 | Receiver | 2m (78.74in) | N.O./N.C. selectable | NPN | M12 (12mm) connector | Figure 1 |
| BX80B-1P-0H | \$213.00 | Receiver | | | PNP | | Figure 2 |
| BX80S-10-0H | \$179.00 | Emitter | | | Receiver dependent | | Receiver dependent |

BX Series Specifications

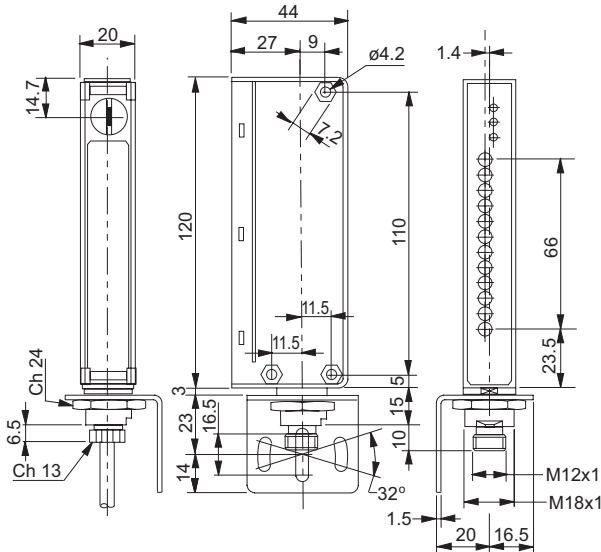
| Model | BX |
|---|---|
| Type | Through-Beam |
| Sensing Distance | 2m |
| Light Spot Diameter | NA |
| Detection Height | 70mm |
| Number of beams | 12 |
| Emission | IR 880nm |
| Sensitivity | Fixed |
| Time teach-in process (s) | NA |
| Time blanking (s) | NA |
| Output Type | PNP or NPN |
| Operating Voltage | 12 - 24 Vdc |
| No-load Supply Current | Emitter 100mA, Receiver 50mA |
| Operating (Load) Current | 100mA |
| Off-state (Leakage) Current | 10µA |
| Voltage Drop | ≤ 1.2V |
| Switching Frequency | 50Hz |
| Ripple | ≤10% |
| Time Delay Before Availability (tv) | 500ms |
| Short-Circuit Protection | Yes |
| Operating Temperature | -25 to 50 °C [-13 °F to 122 °F] |
| Protection Degree (DIN 40050) | IP67 |
| Emitter's LED Indicators - Switching Status | Green (power), Red (sync. alarm), Yellow (area occupied) |
| Receiver's LED Indicators - Switching Status | Green (power), Red (alignment alarm), Yellow (output energized) |
| Housing Material | PBT |
| Lens Material | PC |
| Shock/Vibration | Acc. To IEC 60947-5-2 |
| Tightening Torque | 25Nm (18.44 lb-ft) max. |
| Weight | 300g |

To obtain the most current agency approval information, see the Agency Approval Checklist section on the specific part number's web page at www.AutomationDirect.com

BX Series High Resolution Area Sensor

Dimensions

(mm)



See our website: www.AutomationDirect.com for complete Engineering drawings.

Wiring diagrams

Figure 1

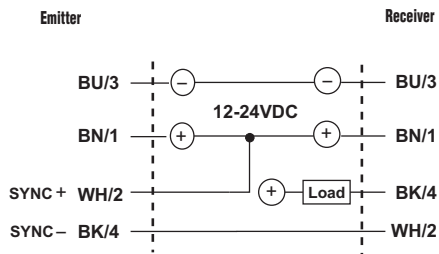
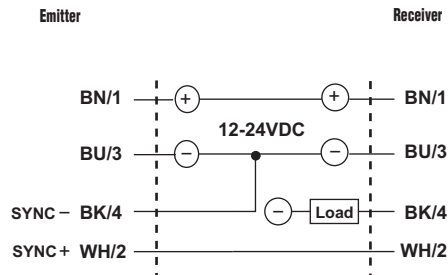


Figure 2



Connectors

| Switching Element Function | | |
|----------------------------|---------------------------------|---------------------------|
| | Thru-beam and Reflective Models | Diffuse Reflective Models |
| Light on | N.C. | N.O. |
| Dark on | N.O. | N.C. |

