

# 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 NO/NC 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
<b>BX80B-1N-0H</b>	\$197.00	Receiver	2m (78.74in)	N.O./N.C. selectable	NPN	M12 (12mm) connector	Figure 1
<b>BX80B-1P-0H</b>	\$197.00	Receiver			PNP		Figure 2
<b>BX80S-10-0H</b>	\$166.00	Emitter			Receiver dependent		Receiver dependent

### BX Series Specifications

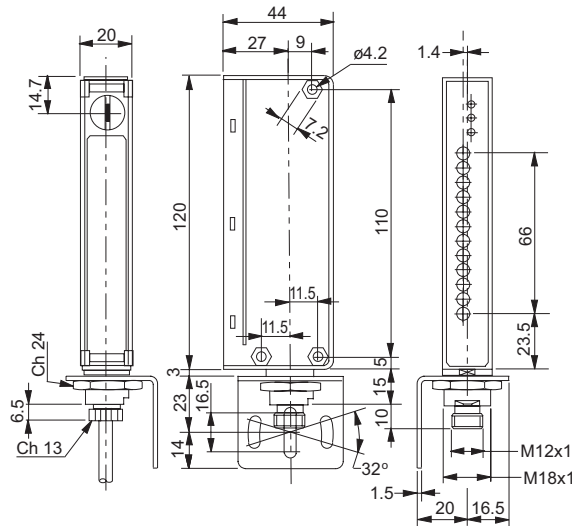
Model	BX
<b>Type</b>	Through-Beam
<b>Sensing Distance</b>	2m
<b>Light Spot Diameter</b>	NA
<b>Detection Height</b>	70mm
<b>Number of beams</b>	12
<b>Emission</b>	IR 880nm
<b>Sensitivity</b>	Fixed
<b>Time teach-in process (s)</b>	NA
<b>Time blanking (s)</b>	NA
<b>Output Type</b>	PNP or NPN
<b>Operating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

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## Dimensions

(mm)



See our website, [www.AutomationDirect.com](http://www.AutomationDirect.com), for complete Engineering drawings.

## Wiring diagrams

Figure 1

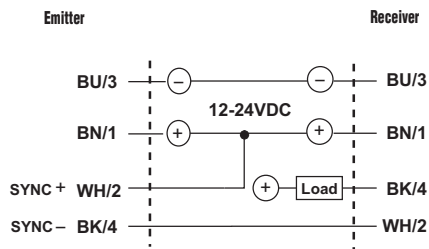
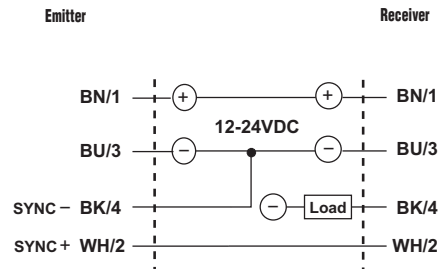


Figure 2



## Connectors

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

