

BX Series High Resolution Area Sensor



High resolution area sensor (light screen) - DC

- 70mm 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
<u>BX80B-1N-0H</u>	\$242.00	Receiver	2m [78.74in]	N.O./N.C. selectable	NPN	M12 [12mm] connector	Figure 1
<u>BX80B-1P-0H</u>	\$242.00	Receiver			PNP		Figure 2
<u>BX80S-10-0H</u>	\$204.00	Emitter			Receiver dependent		Receiver dependent

BX80 Series Area Sensor Specifications

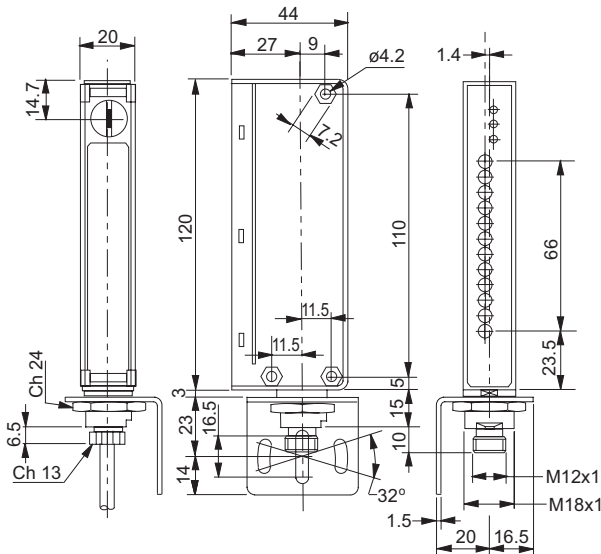
Type	Through-Beam
Sensing Distance	2m
Light Spot Diameter	NA
Detection Height	70mm
Number of beams	12
Emission	IR 880nm
Sensitivity	Receiver - Fixed / Emitter - Adjustable
Time teach-in process (s)	NA
Time blanking (s)	NA
Output Type	PNP or NPN
Operating Voltage	12 - 24 Vdc
No-load Supply Current	Emitter 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 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
Agency Approvals	UL Listed E187310, CE

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

BX Series High Resolution Area Sensor

Dimensions

(mm)



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

Wiring diagrams

Figure 1

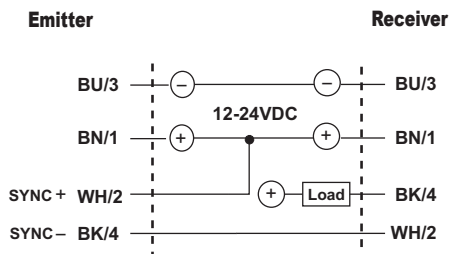
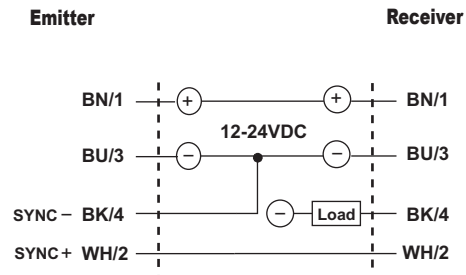


Figure 2



Connectors

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

