Light Grids BX80 Series

Sender and Receiver - Object Detection BX80 Series

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

Light Grids BX80 Series Selection Chart

Part Number	Price	Function	Beam Resolution	Detection Height	Operating Distance	Output	Logic	Connection	Wiring
BX80B-1N-0H	$242.00	Receiver	6mm [0.23 in]	70mm [2.75 in]	0.3 - 2m [0.98 - 6.56 in]	N.O./N.C. selectable	NPN	4-pin M12 quick-disconnect	Figure 1
BX80B-1P-0H	$242.00	Receiver					PNP		Figure 2
BX80S-10-0H	$204.00	Sender					Receiver dependent		Receiver dependent

Purchase a Receiver and Sender for a complete set.
Purchase cable separately.

Light Grids BX80 Series Specifications

Type	Through-Beam
Beam Resolution	6mm [0.23 in]
Sensing Distance	0.3-2 m [11.81-78.74 in]
Detection Height	70mm [2.75 in]
Number of beams	12
Emission	IR 880nm
Sensitivity	Receiver - Fixed / Sender - Adjustable
Output Type	PNP or NPN
Operating Voltage	12 - 24 VDC
No-load Supply Current	Sender: 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
Sender LED Indicators - Switching Status	Green (power), Red (sync. alarm), Yellow (area occupied)
Receiver LED Indicators - Switching Status	Green (power), Red (alignment alarm), Yellow (output energized)
Housing Material	PBT (Polybutylene terephthalate)
Lens Material	PC (Polycarbonate)
Shock/Vibration	Acc. To IEC 60947-5-2
Tightening Torque	25Nm (18.44 lb-ft) max.
Weight	300g [10.58 oz]
Agency Approvals	UL Listed E187310, CE

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

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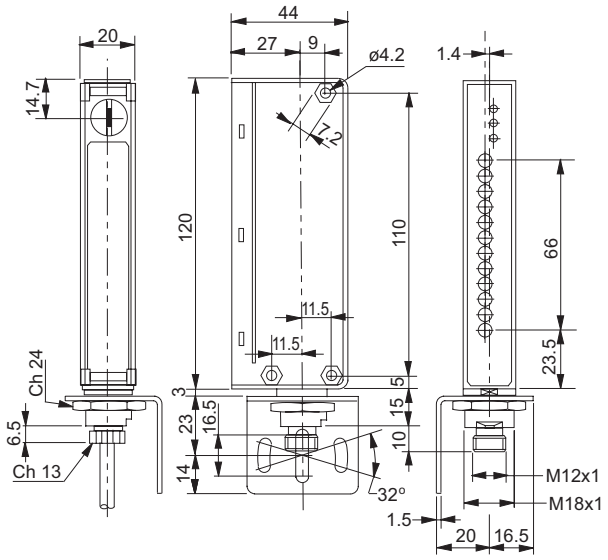
Dimensions

(mm)



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

Wiring diagrams

Figure 1

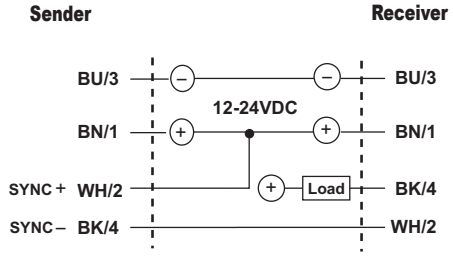
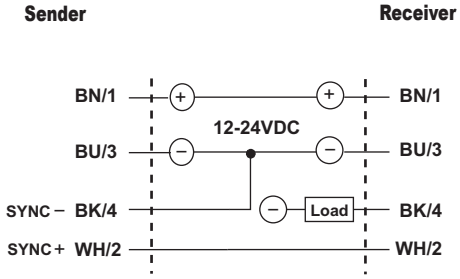


Figure 2



Connectors

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