

B-Series Safety Light Curtains

Tapeswitch **B-Series Safety Light Curtains** are full-featured, microprocessor-controlled units designed for optical guarding applications. These photoelectric barriers are suitable for high-risk automation and machine control applications. Special capabilities include beam blanking and a flexible interface that is compatible with common safety relay units, controllers, and fail-safe PLCs. A wide range of sizes and resolutions is available.

B-Series Safety Light Curtains include an emitter and receiver pair that, by themselves, constitute a complete light curtain system. They provide two redundant solid state PNP type outputs and qualify as a type 4 safety device in accordance with **EN61496-1**. These outputs can be interfaced directly into a machine control circuit, provided that the circuitry is compatible with PNP type outputs (i.e. safety relays, emergency stop relay packages, fail-safe PLC's, etc.).



Features & Benefits

- **2-unit system does not require a controller**
- **Easily interfaces with external devices**
- **Redundant fail-safe PNP outputs**
- **Beam blanking capability**
- **Rugged one-piece extruded aluminum housing**
- **EN 61496 type 4 design, suitable for the most dangerous machines**
- **CE certified and marked**

General Specifications

Detection Capability (Resolution)	14 mm (1/2") 30 mm (1-3/16") 70 mm (2-3/4")
Operating Distance	6 m (14 mm units) 15 m (30 mm & 70 mm units)
Curtain Lengths	up to 1.8 m (6 ft)
Safety Outputs	2 x PNP (fail-safe) 500 mA @ 24 Vdc max.
Response Time	<18 ms
Aperture Angle	± 2 degrees
Operating Temperature	0 to 50 °C (32 to 122 °F)
Enclosure Rating	IP65
Cross Section	45 mm (1-3/4") x 35 mm (1-3/8")
Weight	200 g (7 oz) per 100 mm
Wavelength	880 nm

Radiation Intensity Class 1 LED product per (IEC 60825-1)

Explanation of Terminology

EN 61496 Type 4 Design
 This is an international safety standard with particular requirements for equipment using active opto-electronic protective devices. It is the highest level of the most stringent standard in the world, acceptable and suitable for the most dangerous machines.

CE Certification
 The CE mark is a European marking that indicates conformity with specific safety requirements of the European Union. CE certification means that a product has met these requirements.

Beam Blanking
 Beam blanking allows selected areas of the sensing field to be disabled. This is useful in applications where fixed objects such as workpiece supports protrude through the light curtain and interrupt one or more beams.

Fixed Blanking
 Specific beams are programmed to be obstructed and, consequently, disabled.

Floating blanking
 An obstruction can move or 'float' within the detection zone without generating a stop signal.

B-Series Safety Light Curtain Models

30 mm Resolution				14 mm Resolution		70 mm Resolution	
Length	P/N	Length	P/N	Length	P/N	Length	P/N
200 mm (8")	0901	1400 mm (56")	0909	200 mm (8")	0912	600 mm (24")	0921
300 mm (12")	0902	1600 mm (64")	0910	300 mm (12")	0913	800 mm (32")	0922
400 mm (16")	0903	1800 mm (72")	0911	400mm (16")	0914	1000 mm (40")	0923
600 mm (24")	0904			600 mm (24")	0915	1200 mm (48")	0924
800 mm (32")	0905			800 mm (32")	0916	1400 mm (56")	0925
900 mm (36")	0906			900 mm (36")	0917	1600 mm (64")	0926
1000 mm (40")	0907			1000 mm (40")	0918	1800 mm (72")	0927
1200 mm (48")	0908			1200 mm (48")	0919		

For technical assistance on safety light curtain products, contact John Berruti at **1-800-234-8273 x662** or by [email](#).