EZ-SCREEN® Type 2: A low-cost solution for lower risk applications.

MORE INFO ONLINE *Complete Brochure*

An inexpensive system with 30 mm resolution and 15 m range.

The EZ-SCREEN® Type 2 is the perfect solution for lower risk safety applications where the result of an accident is only a slight injury such as a bump, bruise, knockdown or trapping (but not crushing), minor cuts and abrasions. With its 30 mm resolution, it can detect narrow objects such as a hand or ankle, across long spans up to 15 m, to meet a wide range of application requirements.

0.2 to 15 m | **30 mm resolution**

Type 2, Category 2 design.

The EZ-SCREEN Type 2 meets all requirements for Type 2 applications per IEC61496-1/-2 and Category 2 per EN954-1. It performs continual internal self-tests and has the ability to be tested by the machine control. It is designed for lower risk applications and not intended for hazardous hand-feed operations.
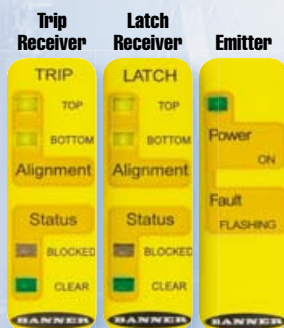
Compact two-piece system with easy setup and no adjustments.

32 mm
25 mm

The EZ-SCREEN Type 2 is a compact, two-piece system that is independently powered and optically synchronized. It does not require a separate control box, only a self-contained emitter and receiver pair. Dedicated models eliminate selectable functions, dip switches and programming—just install and go!
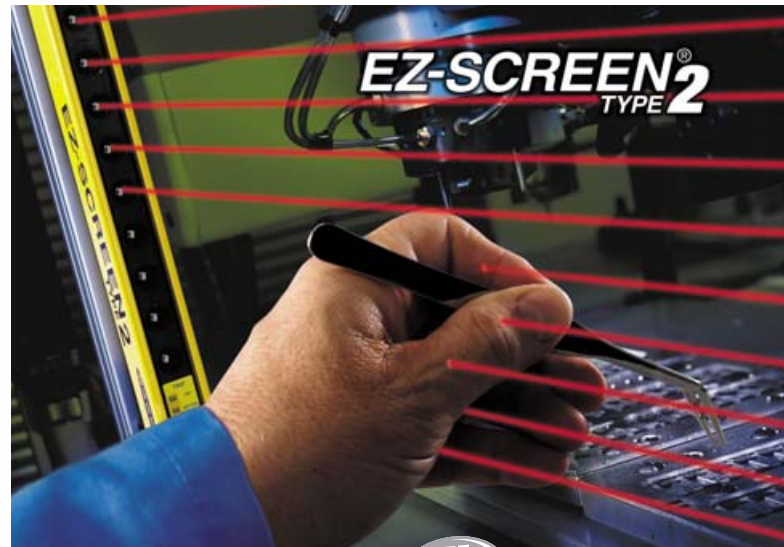
Dedicated trip or latch output; fast response.

With the EZ-SCREEN Type 2, you can choose either a Trip output model that automatically resets when the beam is cleared, or a Latch (typically for pass-through applications) output model requiring a manual reset when the beam is cleared. This advanced Type 2 design also features extremely fast response times from 11 to 25 ms to shut down machinery quickly.

Trip Receiver | **Latch Receiver** | **Emitter**

TRIP | LATCH | Power
TOP | TOP | ON
BOTTOM | BOTTOM | Fault
Alignment | Alignment | FLASHING
Status | Status
BLOCKED | BLOCKED
CLEAR | CLEAR

Effortless diagnostics.

Extremely intuitive EZ-SCREEN Type 2 status LEDs indicate:

- Power on
- Fault (flashing LED)
- Beam alignment, top and bottom
- Beam/output status: blocked or clear

EZ-SCREEN 2 TYPE 2

Choosing Type 2 vs. Type 4

The International standard IEC 61496 specifies requirements for the design, construction and testing for two levels or "types" of light curtains or screens to ensure that the appropriate safety-related performance is achieved.

Light Screen	Type 2	Type 4
Cost/features	• Lower cost • Single microprocessor • Two Safety Outputs	• Two microprocessors • Two safety outputs • Control reliable/Category 4 • More features and range
Functionality	• Faults detected by self-test or periodic external test • Uses **fault exclusion** to ensure the integrity of the safety function	• Faults detected by self-test • Achieves high levels of **fault tolerance** through redundancy and monitoring
Effective Aperture Angle (EAA)	• Larger ±5.0° EAA (field-of-view) • More susceptible to optical short circuits	• Smaller ±2.5° EAA (field-of-view) • Less susceptible to optical short circuits
Applications	• Low to moderate risk applications where injury is slight • Automated production equipment, "table-top" robotic work cells, "pick and place" machines, small packaging machines, equipment protection and supplemental safeguarding	• High risk applications that can result in severe injury or death • Primary safeguard in hazardous situations • Injuries that result in an OSHA recordable incident • Where mandated by a relevant standard
Assessing Risk	Conduct a risk assessment of your machine. Level of risk depends on the severity of harm and probability of occurrence. In the USA, if severity of harm is high, regardless of probability, you must choose a Type 4 safety light screen. See ISO 14121, ANSI B11 TR3, and ANSI/RIA R15.06 for more specific information.	

EZ-SCREEN Systems

Components may be purchased individually or in pairs. EZ-SCREEN Type 2, 30 mm Systems with 8-pin M12 (Euro-style) QD connectors are listed below.
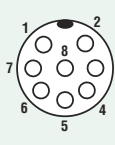
Defined Area Height	30 mm Resolution Models 0.2 m to 15 m (8" to 50') range				Number of Beams	Response Time
	Model with Trip Output		Model with Latch Output			
150 mm (5.9")	LS2E30-150Q8	Emitter	LS2E30-150Q8	Emitter	8	11 ms
	LS2TR30-150Q8	Receiver	LS2LR30-150Q8	Receiver		
	LS2TP30-150Q88	Pair	LS2LP30-150Q88	Pair		
300 mm (11.8")	LS2E30-300Q8	Emitter	LS2E30-300Q8	Emitter	16	13 ms
	LS2TR30-300Q8	Receiver	LS2LR30-300Q8	Receiver		
	LS2TP30-300Q88	Pair	LS2LP30-300Q88	Pair		
450 mm (17.7")	LS2E30-450Q8	Emitter	LS2E30-450Q8	Emitter	24	14 ms
	LS2TR30-450Q8	Receiver	LS2LR30-450Q8	Receiver		
	LS2TP30-450Q88	Pair	LS2LP30-450Q88	Pair		
600 mm (23.6")	LS2E30-600Q8	Emitter	LS2E30-600Q8	Emitter	32	16 ms
	LS2TR30-600Q8	Receiver	LS2LR30-600Q8	Receiver		
	LS2TP30-600Q88	Pair	LS2LP30-600Q88	Pair		
750 mm (29.5")	LS2E30-750Q8	Emitter	LS2E30-750Q8	Emitter	40	17 ms
	LS2TR30-750Q8	Receiver	LS2LR30-750Q8	Receiver		
	LS2TP30-750Q88	Pair	LS2LP30-750Q88	Pair		
900 mm (35.4")	LS2E30-900Q8	Emitter	LS2E30-900Q8	Emitter	48	19 ms
	LS2TR30-900Q8	Receiver	LS2LR30-900Q8	Receiver		
	LS2TP30-900Q88	Pair	LS2LP30-900Q88	Pair		
1050 mm (41.3")	LS2E30-1050Q8	Emitter	LS2E30-1050Q8	Emitter	56	21 ms
	LS2TR30-1050Q8	Receiver	LS2LR30-1050Q8	Receiver		
	LS2TP30-1050Q88	Pair	LS2LP30-1050Q88	Pair		
1200 mm (47.2")	LS2E30-1200Q8	Emitter	LS2E30-1200Q8	Emitter	64	22 ms
	LS2TR30-1200Q8	Receiver	LS2LR30-1200Q8	Receiver		
	LS2TP30-1200Q88	Pair	LS2LP30-1200Q88	Pair		
1350 mm (53.1")	LS2E30-1350Q8	Emitter	LS2E30-1350Q8	Emitter	72	24 ms
	LS2TR30-1350Q8	Receiver	LS2LR30-1350Q8	Receiver		
	LS2TP30-1350Q88	Pair	LS2LP30-1350Q88	Pair		
1500 mm (59")	LS2E30-1500Q8	Emitter	LS2E30-1500Q8	Emitter	80	25 ms
	LS2TR30-1500Q8	Receiver	LS2LR30-1500Q8	Receiver		
	LS2TP30-1500Q88	Pair	LS2LP30-1500Q88	Pair		

EZ-SCREEN Type 2 Cables

Two 8-pin M12 Euro-style cables are required. Models listed on page 10, brochure P/N 73111. User supplied cables can be used.

EZ-SCREEN Splitter Cables for Type 4 and Type 2

CSB Series splitter cables for EZ-SCREEN and EZ-SCREEN Type 2 Systems allow easy emitter and receiver hookup, provide a single "home run" cable, and allow "swapability" of emitter and receiver. Also requires DEE2R double-ended cable; models listed on page 11, brochure P/N 73111.

Models	Length	Wire	Termination	Banner Cable Pinout/ Color Code			European M12 Specification*			Connector
CSB-M1281M1281 CSB-M1288M1281 CSB-M12815M1281 CSB-M12825M1281 CSB-UNT825M1281	300 mm (1') Trunk 2.5 m (8') Trunk 4.5 m (15') Trunk 8 m (25') Trunk 8 m (25') Trunk (unterminated)	22 gauge	8-pin splitter cables: M12/Euro-style connectors, 300 mm female branches, male (rotatable) or unterminated trunk	1 2 3 4 5 6 7 8	Bn Or/Bk Or Wh Bk Bu Gn/Ye Vi	+24V dc EDM #2 EDM #1 OSSD #2 OSSD #1 0V dc Gnd/Chassis Reset	1 2 3 4 5 6 7 8	Wh Bn Gn Ye Gy Pk Bu Rd	+24V dc EDM #2 EDM #1 OSSD #2 OSSD #1 0V dc Gnd/Chassis Reset	(female face view)

* The European M12 specification pin assignment and color codes are listed as a customer courtesy. The user must verify suitability of these cables for each application.