

# Focus II Safety Light Curtains and Grids

## Inspired by industry

If your company is concentrating on machine safety to protect your employees and manufacturing operations, then you need the new Focus II Safety Light Curtains and Light Grids. The latest in a long list of machine safety innovations from ABB JOKAB SAFETY, the Focus product line is designed to be the most control reliable and dependable presence sensing devices on the market today.

## Unparalleled value

- Offers unsurpassed ease of installation with quick connects and custom adjustable brackets.
- Both Focus II Light Curtains and Grids meet the highest level<sup>®</sup> of safety and have received all necessary national and international approvals.
- Focus II Safety Light Curtains offer all available features in a single unit reducing inventory costs.
- Built-in muting capabilities provides muting flexibility with inputs for partial or complete muting.

## Unique design

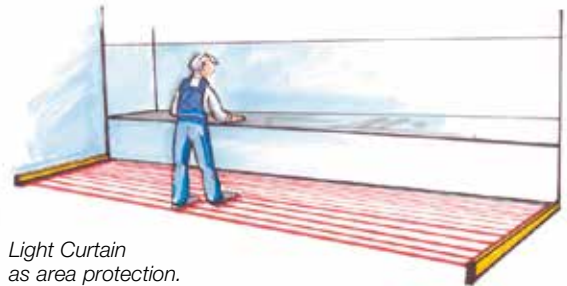
- Every Focus comes standard with LEDs for easy alignment and indication of pollution and power supply.
- Standard with bypass lamp supervision, automatic or manual supervised reset, two supervised PNP safety outputs with cross-circuit monitoring, single/double break function, and M12 connections.
- Focus offers standard features such as muting and override — as well as blanking and break functions.
- External Device Monitoring (EDM) function available which allows Focus to test if the external control element responds correctly.
- Focus comes standard with a pre-reset function for increased operator safety for applications where the operator can physically pass through the light curtain field, preventing the inadvertent reset of a cell or machine.

## Increase profits by reducing downtime

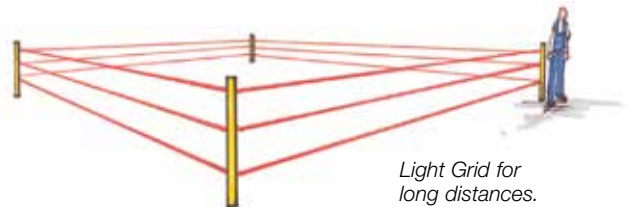
Focus consists of two units, a transmitter unit and a receiver unit. All the optical units are scanned regularly so that all objects that are placed between the transmitter and the receiver will be detected.

If any light beam is interrupted, the dangerous machine movement will be stopped by the outputs from the light curtain. The reaction time for the Focus varies from 14ms to 45ms, depending on the number of beams in the light curtain.

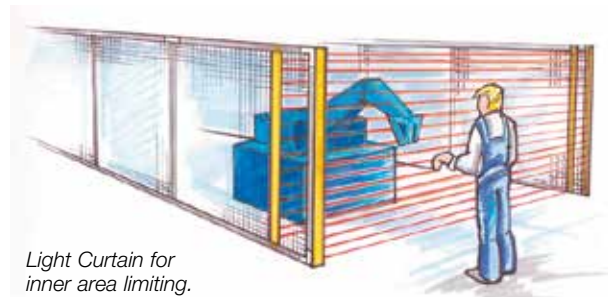
The five LEDs in the receiver and the two in the transmitter show the status of the light curtain/grid.



*Light Curtain as area protection.*



*Light Grid for long distances.*



*Light Curtain for inner area limiting.*

# Muting with FMC and FMI units

The FMC Focus Muting Connector is a small, optional unit which is used when the Focus II Light Curtain or Light Grid is required to be muted for in and out passage to and from a dangerous area. The FMC unit is easily connected to Focus with an M12 connector. The FMI Focus Muting Indicator is a small unit with built-in muting lamp, reset button, "power off" (for alignment and override). The FMI unit is connected to the FMC unit with M12 connectors to facilitate the muting function connection.

## Focus modular muting capabilities

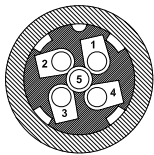
The Focus Safety Light Curtain offers the selection of complete muting of the protective field during the in and out passage of material. Through dipswitch settings, it is also capable of muting only specific modules within the protective field.

The Focus is capable of muting independent beam module packets or a combination of them (up to 4). For example, a box travels down a conveyor and instead of muting the entire light curtain you can mute only modules 1 and 2 – which equates to the height of the box – allowing continual protection on the remaining Safety Light Curtain modules.

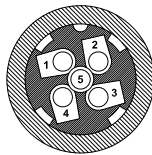
The module size is directly dependent on the Focus II Light Curtain resolution and length.



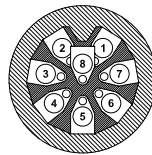
## M12 Connection device with screw connectors



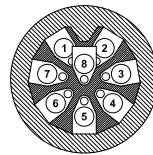
M12-C01 (Female)



M12-C02 (Male)



M12-C03 (Female)



M12-C04 (Male)



NOTE: Connector drawings are shown from cable side

## Accessories



Bjorn protective enclosures



WET Washdown food grade enclosures



Spot safety single beams



Muting T and L sensor bars

## Designed for universal applications

- Mechanical/hydraulic power presses
- Molding presses
- Stamping, riveting and eyelet operations
- Automated machinery
- Packaging machinery
- Material handling equipment
- Robotic cells
- Conveyors
- Printing presses
- Welding equipment
- Machining centers

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