

SF2-N SERIES

New

Small Light Curtain Type 2



Delivering global standard safety
Type 2
Series connection type



Application of IEC 61496 (Type 2) industrial standard

The SF2-N series have the same level of safety built into the sensor body as conventional fail-safe type area sensors, and conform European and North American safety standards. So, they can be used in workplaces throughout the world.

Europe

CE marking based on Machine Directive and EMC Directive has been obtained, so that the sensors can be used in Control Category 2 equipment.

[Type 2 based on IEC 61496-1/2, EN 61496-1 and Control Category 2 based on EN 954-1]

North America

C-UL US listings (UL 61496-1/2) which are required for use in the United States and Canada have been obtained.

Wire-saving by series connection

Using the optional serial connection cable, a maximum of 3 sets of sensors with a total of 128 beam channels (for 20 mm 0.787 in beam pitch type) or 64 beam channels (for 40 mm 1.575 in beam pitch type) can be connected in series. Hence, even L-shaped and U-shaped areas can be easily covered. Previously, separate wiring was required for 3 sets of sensors. But now, wiring equivalent to that for only one set is required, thus saving troublesome wiring and costs.



High level of safety achieved

The sensor carries out self-diagnosis when it is turned ON. The monitoring section (CPU) which is inside the emitter constantly checks the emitting circuit and the control circuit. Furthermore, the receiver also has a monitoring section (CPU) which constantly checks the receiving circuit, control circuit and output circuit, so that a high level of safety is maintained at all times.

Safety design of the SF2-N series

- The sensor switches to the lockout mode when an error occurs, so that the OSSD (control output) and alarm output turn OFF.
- Two output transistors are connected in series to provide duality, so that the sensor also locks out if one of the transistors is short-circuited.
- Self-diagnosis using test input allows extensive detailed checking such as overlapping emission (overcurrent error), light emission strength, etc.

