

SOLID-2

Safety light curtains, type 2
with integrated cyclical testing



reliable

economical

SIL 2 (IEC 61508)



Modern safety technology you can rely on – SOLID-2

The increasing cost pressure of global competition calls for lean and economical safety technology. Reliable and trouble-free safety sensors are indispensable for achieving high system availability and achieving production goals. These two core requirements have been the watchwords in developing our new family of safety light curtains SOLID-2. Different versions with various resolutions and functions mean there is a cost-optimized solution for every application. The SOLID-2's sturdy housing system and its great resistance to interference ensure a high level of system availability under everyday harsh industrial conditions.

Advantages of SOLID-2 at a glance

- Safety light curtain type 2 with integrated cyclical testing in accordance with IEC 61496 and first SIL 2 light curtain in accordance with IEC 61508
- Slim yet rugged aluminum housing (cross-section 30 x 34 mm)
- Integrated evaluation unit – no external test monitoring devices required
- New signal processor technology ensures optimal availability
- Option of selecting different transmission channels ensures trouble-free operation of adjacent devices
- Selectable start/restart interlock and contactor monitoring function
- Simple installation and adjustment with functional fastening system
- Maintenance-free due to fault-safe OSSD transistor outputs
- Large selection of protective heights and resolutions. This ensures the best possible solution for your application

SOLID-2 functionality – just to the customer needs

Integrated test function during ongoing operation

The integrated cyclical test function eliminates the need for external test monitoring and evaluation units. SOLID-2 tests itself continuously, including its transistor outputs and connection wires without interrupting the downstream switching elements during the test procedure.

No mutual effect between adjacent devices!

Two distinct adjustable beam codings (transmission channels) prevent optical interference of neighboring devices.

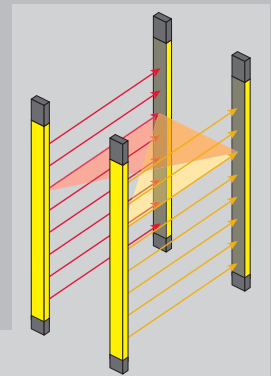
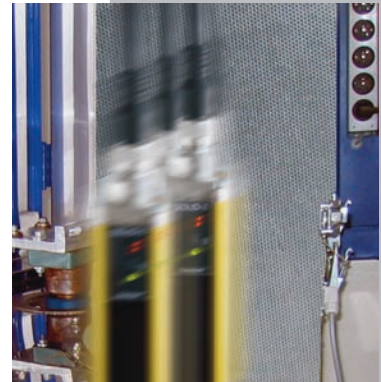
Self-diagnostics system with 7-segment display for fast commissioning

Various LEDs and a 7-segment display indicate the OSSD status, report weak reception signal and help you to make adjustments or quickly perform error diagnostics on site.

Sturdy housing system – carefully designed installation elements

Thanks to its extruded torque-resistant aluminium housing, SOLID-2 is ideally equipped for harsh everyday industrial conditions. Rotating supports which makes adjustments fast and easy come with delivery. Mounting brackets with additional shock absorbers are available as accessories.

Photo: vibration test in test lab



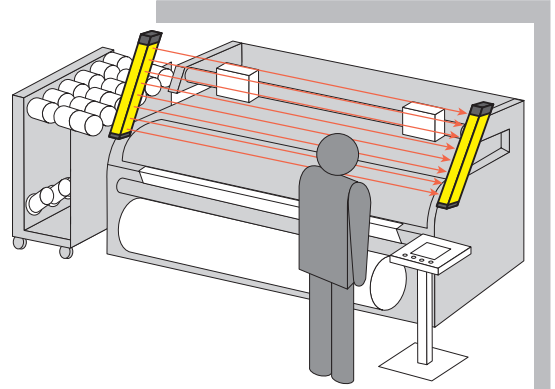


The SOLID-2 safety light curtain series

The right solution for every application

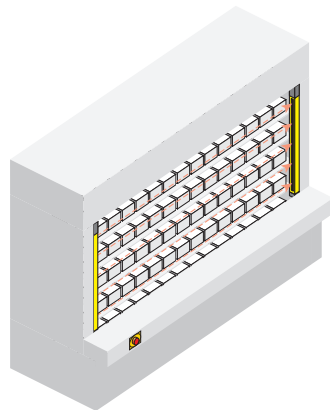
The different SOLID-2 series with resolutions of 20, 30, 40 and 90 mm in the two operating versions SOLID-2 and SOLID-2 Extended will provide the fully functional yet economical solution for your application. You should only buy as many light axes and functions as you actually need. Your Leuze lumiflex sales team will be happy to assist you in making a selection.

- Series SD2-20, SD2-30, SD2-40: Hand/arm protection at danger points
- Series SD2-40: Securing of horizontal areas close to the floor
- Series SD2-90: Securing of hazardous areas at a height of 600 to 1000 mm



Typical areas of application

Hand protection or securing of hazardous areas on and around textile machines, packaging and woodworking machines, printing and paper processing machines, automatic loading systems and machines used for storage and conveyor systems.



Technical Data

Safety type in accordance with IEC 61496:	Type 2 (with internal cyclical testing)
Safety classification IEC 61508	SIL 2
Detection capacity / resolution	20 mm (SD2-20), 30 mm (SD2-30), 40 mm (SD2-40), 90 mm (SD2-90)
Protective height	150 ... 1800 mm, series SD2-20 and SD2-30 150 ... 1800 mm, series SD2-40 450 ... 1800 mm, series SD2-90 Protective height up to 3000 mm available on request
Operating range	0.5 – 15 m SD2-20 0 – 8 m SD2-30 0.8 – 20 m SD2-40 and SD2-90
Response time	5 – 59 ms
Functions	Integrated cyclical testing, 2 selectable transmission channels, alignment aid and self-diagnostics system SOLID-2: Automatic restart SOLID-2E: Selectable manual restart, contactor monitoring (EDM) Muting with Safety Interface MSI-m, -mx
Connection method	M12 5-pin or M12 8-pin with SOLID-2E receiver
IP protection type	IP 65
Ambient operating temperature	0 ... 50 °C
Power supply voltage	24 V DC +/- 20 %
Dimensions	Cross section of housing 30 x 34 mm Length, depending on protective height 226 ... 1876 mm