SAFETY LIGHT CURTAINS

SLCS AND SLCT SERIES

PEPPERL+FUCHS

SENSING YOUR NEEDS

High resolution, ultra-slim safety light curtains are the ideal solution for the most challenging machine safety applications. Higher resolution (smaller beam spacing) reduces the safety mounting distance with respect to the point-of-operation hazard, while the extremely small footprint (only 20 mm wide by 30 mm deep!) offers unsurpassed mounting flexibility.

The SLCS and SLCT series safety light curtains feature completely integrated control electronics and solid-state OSSDs – no separate control module is needed, simplifying wiring and setup! With a maximum range of 8 m (26 feet), SLCS and SLCT safety light curtains are available with beam spacings of 14, 30, 60, and 90 mm.
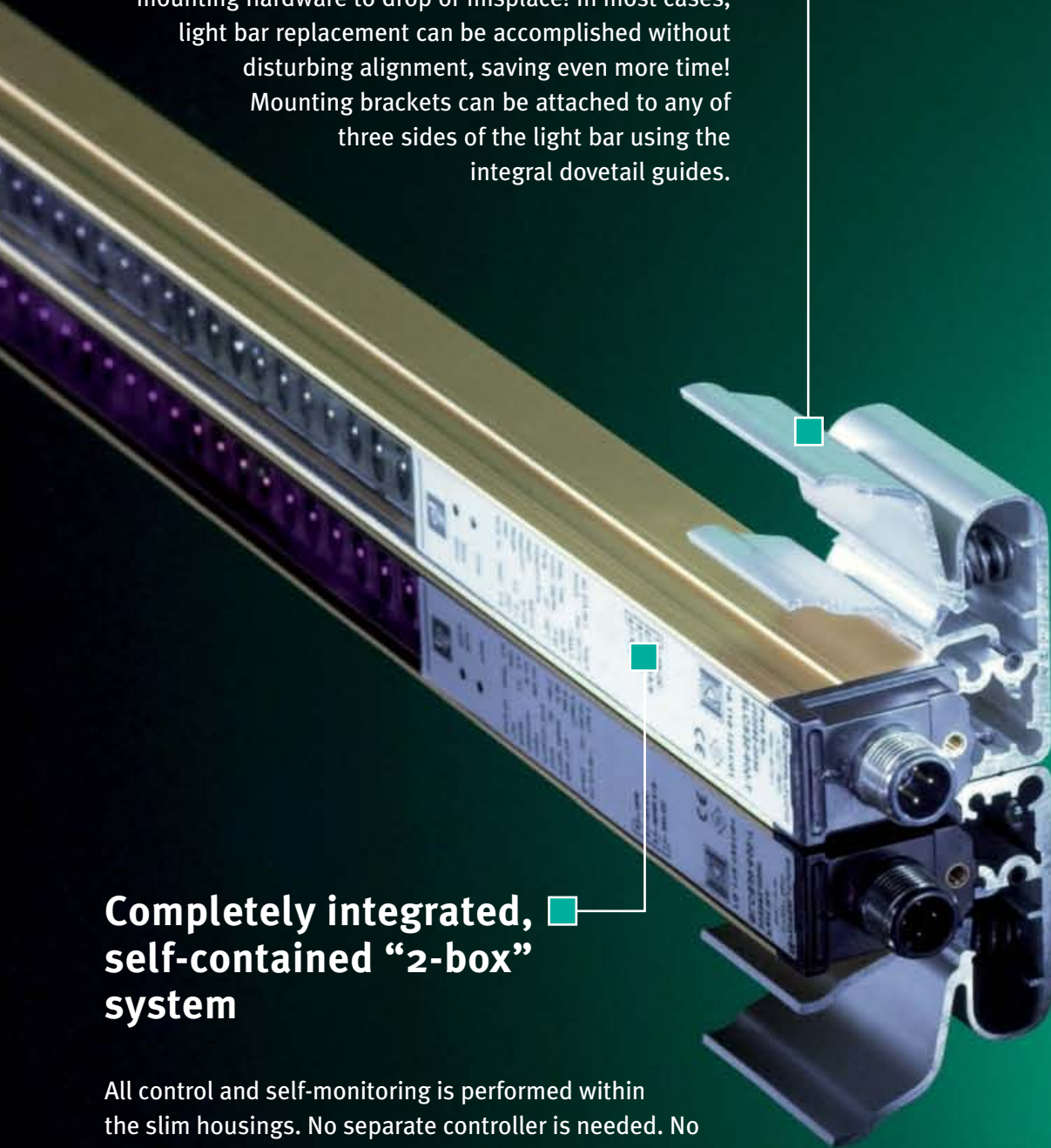
HIGHLIGHTS

- Available in Type 4 or Type 2 versions (per IEC 61496)
- Ultra-slim housing design (just 20 mm wide by 30 mm deep)
- Fully self-contained "2-box" system; no separate control box needed
- Easy to install and mount
- Uses standard M12 micro connector cordsets
- Optional top-to-top mounting with no dead zone
- Flexible 3-sided mounting
- Innovative mounting accessories
- Extended operating temperature range from −22 °F to +140 °F (−30 °C to +60 °C)!

Easy installation with innovative mounting bracket! □

Installing, removing, or replacing a light bar is fast and easy using the quick-release clamp bracket – no tools or mounting hardware to drop or misplace! In most cases, light bar replacement can be accomplished without disturbing alignment, saving even more time! Mounting brackets can be attached to any of three sides of the light bar using the integral dovetail guides.

Completely integrated, self-contained "2-box" system

All control and self-monitoring is performed within the slim housings. No separate controller is needed. No "synchronization cable" connections are required between the transmitter and receiver. Installation and wiring is simple and easy!

Smart and slim! □

Designed for the most challenging and space-restrictive installations, the small profile SLCS and SLCT fit easily where other safety light curtains can't. Despite their extremely slim design, they offer IEC 61496-compliant Type 4 or Type 2 protection with full SIL3 / PL e or SIL2 / PL d ratings.

Option of top-to-top mounting □ with no dead zone

Two independent light bars can be attached top-to-top to provide 2400 mm of continuous protection with 30 mm, 60 mm, or 90 mm resolution with each light bar having up to 1200 mm protection height.

This new family of safety light curtains from Pepperl+Fuchs is available in two series:

SLCS Series = Type 4 Safety Light Curtain (according to IEC 61496),
SIL3 (according to IEC 61508), performance level PL e (according to EN ISO 13849-1)

SLCT Series = Type 2 Safety Light Curtain (according to IEC 61496),
SIL2 (according to IEC 61508), performance level PL d
(according to EN ISO 13849-1)

■ TECHNICAL DATA

Type 2	SLCT14	SLCT30	SLCT60	SLCT90
Type 4	SLCS14	SLCS30	SLCS60	SLCS90
Resolution	14 mm	30 mm	60 mm	90 mm
Beam angle	< 5°			
Range	SLCT: 0.2 m … 8 m / SLCS: 0. 4 m … 8 m			
Protection height	100 mm … 1200 mm	100 mm … 2400 mm	300 mm … 2400 mm	
Output (OSSDs)	2 independent, fail safe semiconductor PNP outputs			
Response time	Max. 54 ms	Max. 38 ms	Max. 23 ms	Max. 17 ms
Protection class	IP65			
Start/restart interlock	Selectable			
Operating voltage	24 V DC			
Housing	Aluminum extrusion profile, anodized			
Optical face	Clear polycarbonate			
Operating temperature range	−22 °F to +140 °F (−30 °C to +60 °C)			
Connection	M12 connectors (transmitter: 4-pin, receiver: 8-pin)			

SIL
IEC61508

SLCS and SLCT Safety Light Curtains are available in the following sizes:

Application	Resolution	Protected Height
Finger Detection	14 mm	100 mm – 1200 mm in 100 mm increments
Hand Detection	30 mm	100 mm – 2400 mm in 100 mm increments
Body Detection	60 mm	300 mm – 2400 mm in 300 mm increments
Body Detection	90 mm	300 mm – 2400 mm in 300 mm increments

TYPECODE

SLC **x** **yy** **–** **zzzz** **–** **x**

T = Transmitter unit
R = Receiver unit

Protected Height (mm)
14 mm resolution: 100 to 1200 mm in 100 mm increments

30 mm resolution: 100 to 2400 mm in 100 mm increments

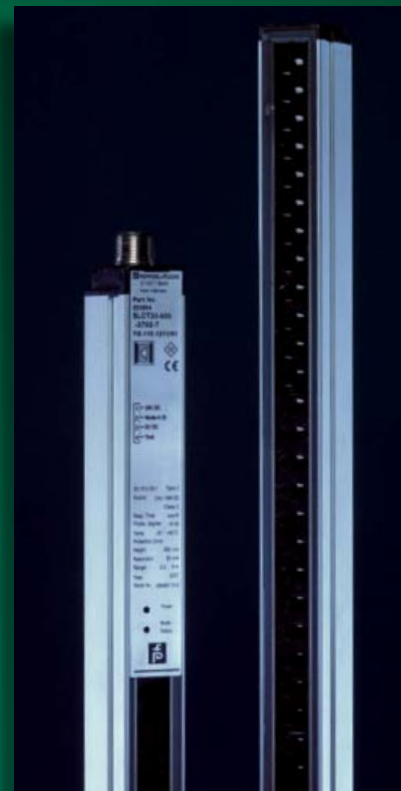60 mm and 90 mm resolution: 300 to 2400 mm in 300 mm increments

Resolution (mm)
14/30/60/90

Type Safety Light Curtain
S = Type 4 (Gold-anodized housing)
T = Type 2 (Silver-anodized housing)

FACTORY AUTOMATION – SENSING YOUR NEEDS

Pepperl+Fuchs sets the standard in quality and innovative technology for the world of automation. Our expertise, dedication, and heritage of innovation have driven us to develop the largest and most versatile line of industrial sensor technologies and interface components in the world. With our global presence, reliable service, and flexible production facilities, Pepperl+Fuchs delivers complete solutions for your automation requirements—wherever you need us.

Contact
Pepperl+Fuchs Inc.
1600 Enterprise Parkway
Twinsburg, Ohio 44087 · USA
Tel. +1 330 486-0001 · Fax +1 330 405-4710
E-mail: fa-info@us.pepperl-fuchs.com

Worldwide Headquarters
Pepperl+Fuchs GmbH · Mannheim · Germany
E-mail: fa-info@de.pepperl-fuchs.com

USA Headquarters
Pepperl+Fuchs Inc. · Twinsburg · USA
E-mail: fa-info@us.pepperl-fuchs.com

Asia Pacific Headquarters
Pepperl+Fuchs Pte Ltd · Singapore
Company Registration no. 199003130E
E-mail: fa-info@sg.pepperl-fuchs.com

www.pepperl-fuchs.com

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