Class 3 proximity laser scanner FLSC

proximity laser scanner with 190° scanning angle

status display by signal lamp and 7-segment display

integrated programmable restart interlock and restart interlock delay

configuration memory integrated in connector

reliable personal recognition and protection up to 4 m, option: 7m

Integrated contactor control (EDM)

contour mensuration control

TÜV

ZERT
DIN EN ISO 9001
Reg.Nr. 96007

Typ 3
EN 61496

optional

LISTED

CE

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FIESSLER ELEKTRONIK

Class 3 proximity laser scanner FLSC

Characteristics:

- **safety class 3 SIL 2**
  Performance Level PL d
- integrated contactor control (EDM)
- 190° scanning angle
- status displayed by signal lamp and 7-segment display
- personal recognition up to 4 m, optional 7 m radius
- warning field: 49 m radius, detection is subject to re-emission!
- contour recognition of the protective field
- minimum response time 60 ms
- configuration via PC or Notebook
- configuration memory integrated in system connector
- enhanced indifference to external light sources and resistance to dust

Areas of application:

- **accessible hazardous machine areas**
- **accessible areas inside of machines**
- **moveable ground transportation vehicles**
- **barring from walking behind the hazardous site**
- **barring from entering the hazardous site**

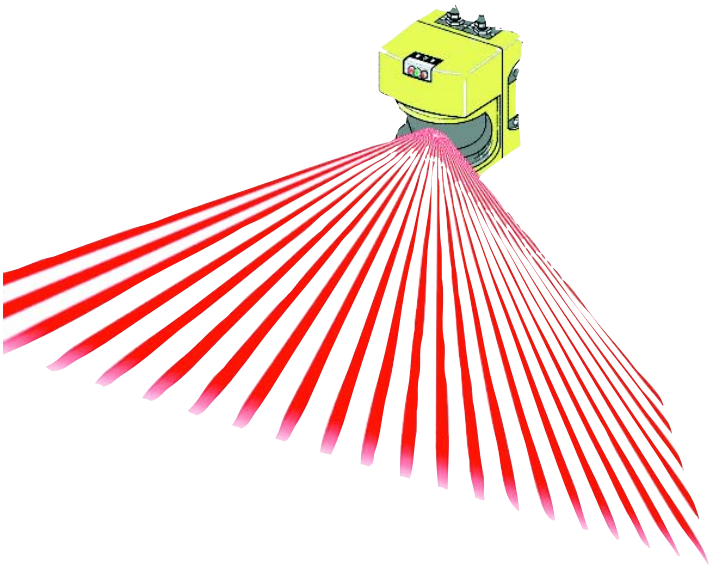
Function principle:

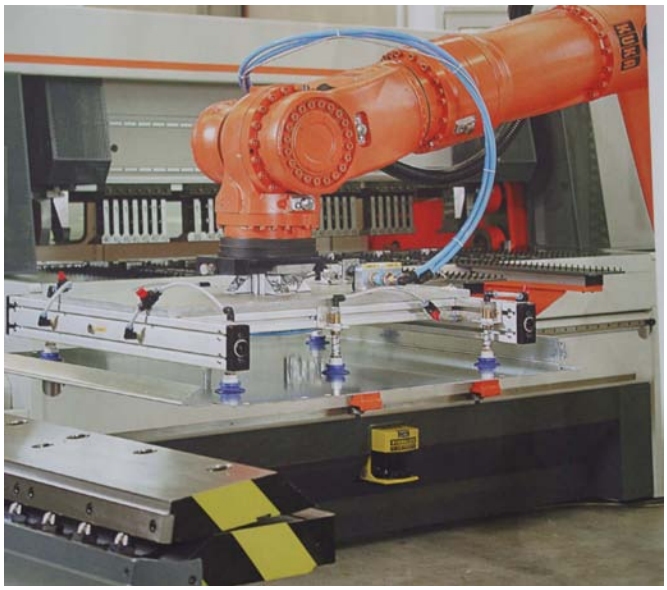
The Proximity Laser Scanner FLSC is a scanning distance sensor.
Persons and objects within a pre-defined protection field are reliably detected.

Via a rotating deflection mirror, the FLSC emits a bundle of Laser beams. By this, a circle-shaped area covering an opening angle of 190 ° and a radious of approx. 49 m is scanned. The semicircular area is divided into two detection sectors: Personal protective field: Range (radius) up to 4 m, optional up to 7 m.

Warning field: Range (radius) up to 49 m. In every detection sector, a protective field can be programmed.
The shape of this protective field may be chosen or programmed at random.
The FLSC scanner comes with a communication software which enables the programming of the contour of the protective field by a PC.

The coordinates of the protective fields are stored in the built-in memory of the connector of the FLSC proximity Laser scanner.
The FLSC Scanner evaluates the obtained measurement data with those of the already stored protective fields and verifies the presence of an object in the protective field.
If the scanner beam detects the presence of an obstacle (an object or a person) within the work zone, the beam will be reflected by this obstacle. Part of the reflected, diffuse beam bundle is recognized and evaluated by the FLSC receiver eye.





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FIESSLER ELEKTRONIK

Class 3 proximity laser scanner FLSC

Characteristics	FLSC
safety class type	class 3 (cat. 3) according to IEC/EN 61496, PL d according to (ISO 13849-1), SIL 2 (IEC/EN 61 508)
number of fielt sets: (protection & warning)	1
resolution	30, 40, 50, 700, and 150mm
detection range	personal protection: max.: 4m (optional 7 m), warning field max. 49 m
response time	minimum 60 ms
Mechanical data	
mounting kits	- With the **mounting kit # 1 ,** you can mount the FLSC indirectly on the mounting surface of the location where the scanner is to be installed. This is necessary if you cannot drill through the mounting surface from the rear. - With the **mounting kit # 2** (add-on kit, only in connection with mounting kit no. 1) the FLSC can be adjusted in 2 plane surfaces. Maximum adjustment angle here wil be ±11° for both planes. - With the **mounting kit # 3** (add-on kit, only in connection with mounting kits no. 1 and no. 2) the FLSC can be mounted in a way that the scan plane is parallel to the mounting surface. By this, a stable floor installation of the item is realised, or, e.g. in the case of uneven wall surfaces, the lateral axis of the mounting kit no. 2 will remain randomly adjustable.
connection	screwed system connector, cable glands by PG- screw fitting.
front window	- material: poly carbonate - outside: : scratch-resitant coating
housing	- material: die-cast aluminium - color: RAL 1021 (rape yellow)
weight	3300g
Operational Data	
enclosure rating	IP 65
Laser protection class	Laser class 1 (21 CFR 1040.10 and 1040.11, DIN EN 60 825:2001)
ambient temperature	-10 to 50 °C
protection class	II
Scanning angle	190°
Electrical Data	
power supply	16.8-28.8 V DC
Inputs	1x Reset // 1x EDM contactor control
outputs	1x object within the warning field // 1x reset rquired // 1x error/soiling
safe outputs	2 self-monitoring OSSDs

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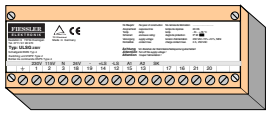
Accessories and Spare Parts	order code
Proximity area Scanner FLSC-S3S, software included, safety category 3 according to EN 954 detecting range 4 m, 1 protective field, including system connector and 2m programming cable 	FLSC-S3S/4m/Kab
Proximity area Scanner FLSC-S3S, software included, safety category 3 according to EN 954 detecting range 4 m, 1 protective field, system connector and 2m progr. cable not included 	FLSC-S3S/4M
Proximity area Scanner FLSC-S3S, software included, safety category 3 according to EN 954 detecting range 7 m, 4 protective fields, including system connector and 2m programming cable 	FLSC-S3S/7M/KAB
Proximity area Scanner FLSC-S3S, software included, safety category 3 according to EN 954 detecting range 7 m, 4 protective fields, system connector and 2m progr. cable not included 	FLSC-S3S/7m
Mounting kit # 1 for proximity area scanner FLSC-S3S2 	FLSC-BS1
Mounting kit # 2 for proximity area scanner FLSC-S3S2 	FLSC-BS2
Mounting kit # 3 for proximity area scanner FLSC-S3S2 	FLSC-BS3
Programming cable for FLSC-S3S2S, SUB-D on round plug, 2m 	FLSC-3S/KAB
Power supply ULSG for ULVT/TLVT, FLSC for voltages 115/230V AC, & 24 V DC, potential-free outputs 	ULSG
Modification of Proximity area Scanner FLSC-S3S for operation in EX-zones (EEx-p)	EEXVOR/FLSC
System connector for FLSC-S3S2 	FLSC-S3/ST
Spare front pane for Scanner FLSC-S3S2	FLSC-ES
Covering hood for Scanner FLSC-S3S2	FLSC-AH

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