

SLC – safety light curtain



Applications

- Access protection (finger, hand and arm protection)
- Access security (personal protection)
- Horizontal zone protection

Features

- Safety light curtain AOPD type 4 or type 2
- Beam resolution 14, 20, 30, 40 and 90 mm
- Protection field heights 150 – 1800 mm
- Extensive accessories



With 3-Zone alignment indication

Functions suitable for every protection task

All important contactless safety functions on machines and equipment can be realized by means of the two function versions, Standard and Select, of the SLC series.

Advantages

Higher equipment availability

- Stable, trouble-free operation with the slender and torsion-resistant housing
- Parameterization without PC or DIP switch through simple wiring in the control cabinet
- The integrated Double-Scan technology avoids unwanted shutdown even in harsh operating conditions
- Clear diagnostic and status messages in the 7-segment display ensure shorter downtimes
- Cable lengths up to 100 m with unshielded connection cables ensure greater operational flexibility and reduce costs even under difficult EMC conditions

Faster during commissioning, operation and service

- The 3-zone alignment indicator reduces assembly time and justage
- The wide range of SLC products permits optimal and cost-effective design of protective devices
- Easy to connect via standard M12 connection technology
- Fast installation and removal on the machine through a system configuration in the control cabinet
- Selectable transmission channels and range reduction prevent mutual interference
- Simplified planning of safeguards and less type diversity because very SLC safety light curtain from 0 m to the maximum range can be implemented

Function overview	SLC Standard	SLC Select
LED display	√	√
Double-scan technology	√	√
Range reduction	√	√
Selectable transmission channels	√	√
7-segment display		√
Automatic start	√	√
Manual start / restart interlock		√
External device monitoring (EDM)		√

SLC – safety light curtain

Technical data

Function		safety light curtain
Function display		LED
Power supply circuit		
Rated voltage U_N		24 V DC
Current consumption (transmitter)		50 mA
Current consumption, no load (receiver/transceiver)		150 mA
Operating voltage range U_B		0.8 - 1.2 x U_N
Electrical isolation supply circuit - control circuit		no
Protection field data		
	Resolution	Range / protective field height
	14 mm (nur SLC-4)	0 - 6 m / 150 - 1800 mm
	20 mm	0 - 15 m / 150 - 1800 mm
	30 mm	0 - 10 m / 150 - 1800 mm
	40 mm	0 - 20 m / 150 - 1800 mm
	90 mm	0 - 20 m / 600 - 1800 mm
Output circuit OSSD		
Number		2
Type		Transistor outputs PNP
Short-circuit monitoring		yes
Switching current (max., per output)		380 mA
Leakage current (max.)		200 μ A
Switching voltage, high active ($U_B - 1V$)		18.0 - 27.0 V
Switching voltage, low		0 - 2,5 V
Line resistance / line length		< 200 Ω / \leq 100 m
Response time		device-dependent
General data		
Creepage distances and clearances between the circuits		EN 60664-1
Protection degree according to EN 60529		IP65
Ambient temperature / storage temperature		0 °C - +55 °C / -25 °C - + 70 °C
Connection		M12 (5 pole / 8 pole) device-dependent
Weight		0.3 - 1.95 kg, device-dependent
Standards		EN 61496, EN ISO 13849-1, EN 62061
Approvals		TÜV, c-CSA-us

Finger, hand and arm protection on machines with the safety light curtain SLC



SLC 2 – safety light curtain

Device overview | order numbers Transmitter

Protective field height hhhh [mm]	Resolution	20 mm	30 mm	40 mm	90 mm
	Type	SLC-2TR20-hhhh	SLC-2TR30-hhhh	SLC-2TR40-hhhh	SLC-2TR90-hhhh
0150		R1.512.0150.0	R1.513.0150.0	R1.514.0150.0	-
0225		R1.512.0225.0	R1.513.0225.0	R1.514.0225.0	-
0300		R1.512.0300.0	R1.513.0300.0	R1.514.0300.0	-
0450		R1.512.0450.0	R1.513.0450.0	R1.514.0450.0	-
0600		R1.512.0600.0	R1.513.0600.0	R1.514.0600.0	R1.515.0600.0
0750		R1.512.0750.0	R1.513.0750.0	R1.514.0750.0	R1.515.0750.0
0900		R1.512.0900.0	R1.513.0900.0	R1.514.0900.0	R1.515.0900.0
1050		R1.512.1050.0	R1.513.1050.0	R1.514.1050.0	R1.515.1050.0
1200		R1.512.1200.0	R1.513.1200.0	R1.514.1200.0	R1.515.1200.0
1350		R1.512.1350.0	R1.513.1350.0	R1.514.1350.0	R1.515.1350.0
1500		R1.512.1500.0	R1.513.1500.0	R1.514.1500.0	R1.515.1500.0
1650		R1.512.1650.0	R1.513.1650.0	R1.514.1650.0	R1.515.1650.0
1800		R1.512.1800.0	R1.513.1800.0	R1.514.1800.0	R1.515.1800.0

Device overview | order numbers Receiver Standard

Protective field height hhhh [mm]	Resolution	20 mm	30 mm	40 mm	90 mm
	Type	SLC-2ST20-hhhh	SLC-2ST30-hhhh	SLC-2ST40-hhhh	SLC-2ST90-hhhh
0150		R1.522.0150.0	R1.523.0150.0	R1.524.0150.0	-
0225		R1.522.0225.0	R1.523.0225.0	R1.524.0225.0	-
0300		R1.522.0300.0	R1.523.0300.0	R1.524.0300.0	-
0450		R1.522.0450.0	R1.523.0450.0	R1.524.0450.0	-
0600		R1.522.0600.0	R1.523.0600.0	R1.524.0600.0	R1.525.0600.0
0750		R1.522.0750.0	R1.523.0750.0	R1.524.0750.0	R1.525.0750.0
0900		R1.522.0900.0	R1.523.0900.0	R1.524.0900.0	R1.525.0900.0
1050		R1.522.1050.0	R1.523.1050.0	R1.524.1050.0	R1.525.1050.0
1200		R1.522.1200.0	R1.523.1200.0	R1.524.1200.0	R1.525.1200.0
1350		R1.522.1350.0	R1.523.1350.0	R1.524.1350.0	R1.525.1350.0
1500		R1.522.1500.0	R1.523.1500.0	R1.524.1500.0	R1.525.1500.0
1650		R1.522.1650.0	R1.523.1650.0	R1.524.1650.0	R1.525.1650.0
1800		R1.522.1800.0	R1.523.1800.0	R1.524.1800.0	R1.525.1800.0

Device overview | order numbers Receiver Select

Protective field height hhhh [mm]	Resolution	20 mm	30 mm	40 mm	90 mm
	Type	SLC-2SL20-hhhh	SLC-2SL30-hhhh	SLC-2SL40-hhhh	SLC-2SL90-hhhh
0150		R1.532.0150.0	R1.533.0150.0	R1.534.0150.0	-
0225		R1.532.0225.0	R1.533.0225.0	R1.534.0225.0	-
0300		R1.532.0300.0	R1.533.0300.0	R1.534.0300.0	-
0450		R1.532.0450.0	R1.533.0450.0	R1.534.0450.0	-
0600		R1.532.0600.0	R1.533.0600.0	R1.534.0600.0	R1.535.0600.0
0750		R1.532.0750.0	R1.533.0750.0	R1.534.0750.0	R1.535.0750.0
0900		R1.532.0900.0	R1.533.0900.0	R1.534.0900.0	R1.535.0900.0
1050		R1.532.1050.0	R1.533.1050.0	R1.534.1050.0	R1.535.1050.0
1200		R1.532.1200.0	R1.533.1200.0	R1.534.1200.0	R1.535.1200.0
1350		R1.532.1350.0	R1.533.1350.0	R1.534.1350.0	R1.535.1350.0
1500		R1.532.1500.0	R1.533.1500.0	R1.534.1500.0	R1.535.1500.0
1650		R1.532.1650.0	R1.533.1650.0	R1.534.1650.0	R1.535.1650.0
1800		R1.532.1800.0	R1.533.1800.0	R1.534.1800.0	R1.535.1800.0

SLC 4 – safety light curtain

Device overview | order numbers Transmitter

Protective field height hhhh [mm]	Resolution	14 mm	20 mm	30 mm	40 mm	90 mm
	Type	SLC-4TR14-hhhh	SLC-4TR20-hhhh	SLC-4TR30-hhhh	SLC-4TR40-hhhh	SLC-4TR90-hhhh
0150		R1.541.0150.0	R1.542.0150.0	R1.543.0150.0	R1.544.0150.0	-
0225	-		R1.542.0225.0	R1.543.0225.0	R1.544.0225.0	-
0300		R1.541.0300.0	R1.542.0300.0	R1.543.0300.0	R1.544.0300.0	-
0450		R1.541.0450.0	R1.542.0450.0	R1.543.0450.0	R1.544.0450.0	-
0600		R1.541.0600.0	R1.542.0600.0	R1.543.0600.0	R1.544.0600.0	R1.545.0600.0
0750		R1.541.0750.0	R1.542.0750.0	R1.543.0750.0	R1.544.0750.0	R1.545.0750.0
0900		R1.541.0900.0	R1.542.0900.0	R1.543.0900.0	R1.544.0900.0	R1.545.0900.0
1050		R1.541.1050.0	R1.542.1050.0	R1.543.1050.0	R1.544.1050.0	R1.545.1050.0
1200		R1.541.1200.0	R1.542.1200.0	R1.543.1200.0	R1.544.1200.0	R1.545.1200.0
1350		R1.541.1350.0	R1.542.1350.0	R1.543.1350.0	R1.544.1350.0	R1.545.1350.0
1500		R1.541.1500.0	R1.542.1500.0	R1.543.1500.0	R1.544.1500.0	R1.545.1500.0
1650		R1.541.1650.0	R1.542.1650.0	R1.543.1650.0	R1.544.1650.0	R1.545.1650.0
1800		R1.541.1800.0	R1.542.1800.0	R1.543.1800.0	R1.544.1800.0	R1.545.1800.0

Device overview | order numbers Receiver Standard

Protective field height hhhh [mm]	Resolution	14 mm	20 mm	30 mm	40 mm	90 mm
	Type	SLC-4ST14-hhhh	SLC-4ST20-hhhh	SLC-4ST30-hhhh	SLC-4ST40-hhhh	SLC-4ST90-hhhh
0150		R1.551.0150.0	R1.552.0150.0	R1.553.0150.0	R1.554.0150.0	-
0225	-		R1.552.0225.0	R1.553.0225.0	R1.554.0225.0	-
0300		R1.551.0300.0	R1.552.0300.0	R1.553.0300.0	R1.554.0300.0	-
0450		R1.551.0450.0	R1.552.0450.0	R1.553.0450.0	R1.554.0450.0	-
0600		R1.551.0600.0	R1.552.0600.0	R1.553.0600.0	R1.554.0600.0	R1.555.0600.0
0750		R1.551.0750.0	R1.552.0750.0	R1.553.0750.0	R1.554.0750.0	R1.555.0750.0
0900		R1.551.0900.0	R1.552.0900.0	R1.553.0900.0	R1.554.0900.0	R1.555.0900.0
1050		R1.551.1050.0	R1.552.1050.0	R1.553.1050.0	R1.554.1050.0	R1.555.1050.0
1200		R1.551.1200.0	R1.552.1200.0	R1.553.1200.0	R1.554.1200.0	R1.555.1200.0
1350		R1.551.1350.0	R1.552.1350.0	R1.553.1350.0	R1.554.1350.0	R1.555.1350.0
1500		R1.551.1500.0	R1.552.1500.0	R1.553.1500.0	R1.554.1500.0	R1.555.1500.0
1650		R1.551.1650.0	R1.552.1650.0	R1.553.1650.0	R1.554.1650.0	R1.555.1650.0
1800		R1.551.1800.0	R1.552.1800.0	R1.553.1800.0	R1.554.1800.0	R1.555.1800.0

Device overview | order numbers Receiver Select

Protective field height hhhh [mm]	Resolution	14 mm	20 mm	30 mm	40 mm	90 mm
	Type	SLC-4SL14-hhhh	SLC-4SL20-hhhh	SLC-4SL30-hhhh	SLC-4SL40-hhhh	SLC-4SL90-hhhh
0150		R1.561.0150.0	R1.562.0150.0	R1.563.0150.0	R1.564.0150.0	-
0225	-		R1.562.0225.0	R1.563.0225.0	R1.564.0225.0	-
0300		R1.561.0300.0	R1.562.0300.0	R1.563.0300.0	R1.564.0300.0	-
0450		R1.561.0450.0	R1.562.0450.0	R1.563.0450.0	R1.564.0450.0	-
0600		R1.561.0600.0	R1.562.0600.0	R1.563.0600.0	R1.564.0600.0	R1.565.0600.0
0750		R1.561.0750.0	R1.562.0750.0	R1.563.0750.0	R1.564.0750.0	R1.565.0750.0
0900		R1.561.0900.0	R1.562.0900.0	R1.563.0900.0	R1.564.0900.0	R1.565.0900.0
1050		R1.561.1050.0	R1.562.1050.0	R1.563.1050.0	R1.564.1050.0	R1.565.1050.0
1200		R1.561.1200.0	R1.562.1200.0	R1.563.1200.0	R1.564.1200.0	R1.565.1200.0
1350		R1.561.1350.0	R1.562.1350.0	R1.563.1350.0	R1.564.1350.0	R1.565.1350.0
1500		R1.561.1500.0	R1.562.1500.0	R1.563.1500.0	R1.564.1500.0	R1.565.1500.0
1650		R1.561.1650.0	R1.562.1650.0	R1.563.1650.0	R1.564.1650.0	R1.565.1650.0
1800		R1.561.1800.0	R1.562.1800.0	R1.563.1800.0	R1.564.1800.0	R1.565.1800.0