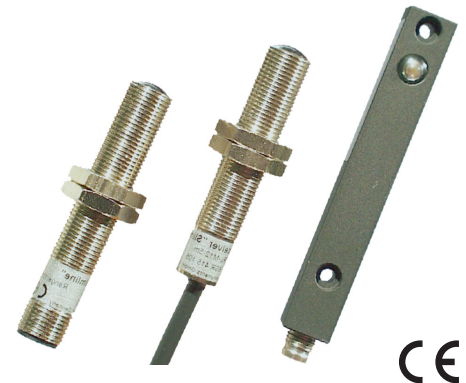


SlimLine

May 2007

- Photo electric system with modulated infrared light
- Self-contained amplifier
- Range up to 40 m (131 ft)
- Transistor output npn/pnp
- Switching frequency max. 500 Hz
- Metal housing, IP 67
- Outputs are short circuit proof
- Reverse polarity protection



Short description

The infrared photo electric systems SlimLine are powerful through-beam light barrier which are characterized by their very small and robust type.

The sensor heads are filled with resin to guarantee the high degree of protection, IP 67. This allows for applications in extreme areas with moisture, dust and dirt.

The system, consisting of one transmitter (ST...) and one receiver (SR...), can be easily aligned even at distances of 40m (131 ft) by a large field of view. The transmitter has an input, which can be adjusted, depending upon the application or switched off, testing the transmit power for failure-free operation. The receiver has an NPN/PNP transistor output and a yellow status LED.

Ordering table

Transmitter ST...

Model	M12x1 - nickel plated brass		M12x1 - stainless steel		12x12x82mm - aluminium	
	cable 5m	plug M12	cable 5m	plug M12	cable 5m	plug M8
Emission angle						
20°	STA-CLN-5	STA-CLN-C4	STA-CLV-5	STA-CLV-C4	STA-LLA-5	STA-LLA-B3
6°	STB-CLN-5	STB-CLN-C4	STB-CLV-5	STB-CLV-C4	STB-LLA-5	STB-LLA-B3

Receiver SR...

Range STA... (STB...)	Model	M12x1 - nickel plated brass		M12x1 - stainless steel		12x12x82mm - aluminium	
		cable 5m	plug M12	cable 5m	plug M12	cable 5m	plug M8
1 m (5 m)	Switching mode						
	light	SRSL-CLN-5	SRSL-CLN-C4	SRSL-CLV-5	SRSL-CLV-C4	SRSL-LLA-5	SRSL-LLA-B3
6 m (20 m)	dark	SRSD-CLN-5	SRSD-CLN-C4	SRSD-CLV-5	SRSD-CLV-C4	SRSD-LLA-5	SRSD-LLA-B3
	light	SRHL-CLN-5	SRHL-CLN-C4	SRHL-CLV-5	SRHL-CLV-C4	SRHL-LLA-5	SRHL-LLA-B3
15 m (40 m)	dark	SRHD-CLN-5	SRHD-CLN-C4	SRHD-CLV-5	SRHD-CLV-C4	SRHD-LLA-5	SRHD-LLA-B3
	light	SRLN-CLN-5	SRLN-CLN-C4	SRLN-CLV-5	SRLN-CLV-C4	SRLN-LLA-5	SRLN-LLA-B3
	dark	SRLD-CLN-5	SRLD-CLN-C4	SRLD-CLV-5	SRLD-CLV-C4	SRLD-LLA-5	SRLD-LLA-B3

Safety instructions



Warning!

The operation of infrared photo electric system SlimLine is not authorized for applications where safety of the person depends on the device function.

Do not look into the transmitter! It's possible, that highly concentrated non visible infrared light is emitting out of the transmitter STB..., which can be hazardous to the human eye. So you have to follow the safety precautions given in IEC 60825-1.

SlimLine

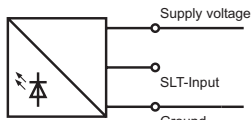
Technical data

Transmitter	STA...	STB...
Operating basis	modulated infrared light	
Supply voltage	13 V DC - 30 V DC	
Current consumption	30 mA	
Emission angle	20°	6°
Transmit frequency	11,7 kHz	
Transmit power	external adjustable	
Sealing	IP 67	
Housing material: CLN	Nickel plated brass	
CLV	Stainless steel	
LLA	Aluminium anodized	
Power on display	LED green	
Connection: cable	3x0,14 mm ² , PVC	
plug -B3 / -C4	M8, 3-pole / M12, 4-pole	
Operation temperature	-20 °C ... +60 °C	
Storage temperature	-40 °C ... +80 °C	

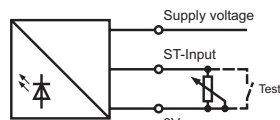
Receiver	SRS...	SRH...	SRL...
Range: Transmitter STA...	1 m (3 ft)	6 m (20 ft)	15 m (49 ft)
Transmitter STB...	5 m (16 ft)	20 m (66 ft)	40 m (131ft)
Ambient light immunity	> 60000 LUX		
Supply voltage	13 V DC - 30 V DC		
Current consumption	max. 35 mA		
Operating angle	12,5 °		
Switching mode	light or dark		
Transistor output	npn/npn		
Output current	100 mA, short circuit proof		
Switching frequency (max.)	500 Hz	150 Hz	20 Hz
Sealing	IP 67		
Housing material: CLN	Nickel plated brass		
CLV	Stainless steel		
LLA	Aluminium anodized		
Output status display	LED yellow		
Connection: cable	3x0,14 mm ² , PVC		
plug -B3 / -C4	M8, 3-pole / M12, 4-pole		
Operation temperature	-20 °C ... +60 °C		
Storage temperature	-40 °C ... +80 °C		

Wiring diagram

Transmitter ST...

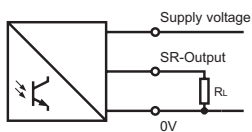


100 % transmit power

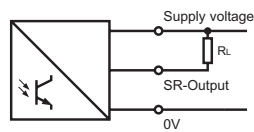


transmit power adjustment
resp. transmit power off

Receiver SR...



npn transistor output



npn transistor output

	Cable	Plug M12x1	Plug M8x1
Supply voltage	brown	Pin 1	Pin 1
Ground (0V)	blue	Pin 3	Pin 3
ST- Input	black	Pin 4	Pin 4
SR-Output	black	Pin 4	Pin 4

The overall length of the power supply cable may not exceed 10 m (33 ft).
Otherwise the supply power must be made with a DC power supply, meet the EMC-directions.

Dimensions

CLN / CLV with cable	LLA with cable	LLA with plug

dimensions in millimeter