



Standards and Certifications

SIGUARD Light Curtains meet the highest requirements of machine safety standards and regulations.

According to EN61496 (IEC1496) Parts 1 and 2, "Safety of machinery—Electro-sensitive protective equipment", SIGUARD Light Curtains and Light Grids 3RG7842 are certified as Type 4 devices.

- Part 1 of the EN61496 describes general demands and checks relating to electrosensitive protection devices.

- Part 2 of this standard is about the special demands made on active opto-electronic protective devices (AOPD), e.g. safety light barriers, light grids or light curtains

According to EN60954 Part 1, "Safety of Machinery—Safety related parts of control systems", SIGUARD Light Curtains and Light Grids meet the requirements to be used within Category 4 safety circuits.

According to recent US regulations ANSI B11.19-1990, OSHA 1910.217 and UL 1998.

Type 4 AOPDs are self monitoring devices according to the demands of Category 4. A failure in AOPD Type 4 must not lead to the loss of safety function. If several failures occur, these must be detected; several failures must not lead to the loss of the safety function. A machine cycle which has already started must be stopped, and a new cycle must not be able to start.

During normal operation, at least two control unit outputs of an AOPD Type 4 must go into OFF-mode, if the sensor function is activated or if voltage supply to the AOPD is interrupted.

12 Machine Safety Components

Order Data



Note: Refer to SIGUARD Catalog SFPC-02000 for Light Grids and additional Light Curtains.

Protected Height [mm]		Catalog No		Price \$		Catalog No		Price \$	
		SIGUARD Light Curtain ^① —Type 4 Acc. to EN 61496-1,-2							
				Resolution 14mm		Resolution 30mm		Resolution 50mm	
300 (11.81")	Transmitter	3RG7842-4BD00	863.	3RG7842-4DD00	679.	—	—	—	—
	Receiver	3RG7842-4BD01	1384.	3RG7842-4DD01	1133.	—	—	—	—
600 (23.62")	Transmitter	3RG7842-4BF00	1295.	3RG7842-4DF00	987.	3RG7842-4EF00	865.	3RG7842-4EF01	1357.
	Receiver	3RG7842-4BF01	1911.	3RG7842-4DF01	1509.	3RG7842-4EF01	1357.	3RG7842-4EF01	1357.
900 (35.43")	Transmitter	3RG7842-4BH00	1779.	3RG7842-4DH00	1248.	3RG7842-4EH00	1101.	3RG7842-4EH01	1631.
	Receiver	3RG7842-4BH01	2508.	3RG7842-4DH01	1807.	3RG7842-4EH01	1631.	3RG7842-4EH01	1631.
1200 (47.24")	Transmitter	3RG7842-4BK00	2291.	3RG7842-4DK00	1523.	3RG7842-4EK00	1314.	3RG7842-4EK01	1870.
	Receiver	3RG7842-4BK01	3143.	3RG7842-4DK01	2130.	3RG7842-4EK01	1870.	3RG7842-4EK01	1870.
1650 (64.96")	Transmitter	3RG7842-4BN00	3071.	3RG7842-4DN00	2206.	3RG7842-4EN00	1634.	3RG7842-4EN01	2227.
	Receiver	3RG7842-4BN01	4104.	3RG7842-4DN01	2978.	3RG7842-4EN01	2227.	3RG7842-4EN01	2227.

Width [mm]	Enabling Contacts ^②	Signaling Contacts	Obtainable Category ^③ Acc. to EN60954-1	Operating Voltage	Catalog No	Price \$
Safety Relays for SIGUARD Light Curtains 3RG78 42						
Automatic Start or Monitored Start						
22.5	2 NO	1 NC	B, 1, 2, 3, 4	24 V AC/DC	3RG78 47-4BB	251.
For Muting Applications						
53	2 NO	Multiple	B, 1, 2, 3, 4	24 VAC/DC	3RG78 47-4BF	991.

Connection Cable (with Brad Harrison [male] Connector)				
	Transmitter	Price \$	Receiver	Price \$
6-Foot Length	3RG7848-0CB00	34.	3RG7848-0CB01	68.
12-Foot Length	3RG7848-0DB00	45.	3RG7848-0DB01	94.
20-Foot Length	3RG7848-0EB00	64.	3RG7848-0EB01	131.

①Prewired with Brad Harrison connector.
②The enabling contacts can be used for signaling purposes.

③The highest achievable category depends on the external connection of the sensors (Light Curtain, Limit switch, E-stop, etc.) and on the physical arrangement of the machine. The relevant machine safety requirements must be observed.