

Safety devices

Safety against entrapment

Power-operated doors and grilles which can lift persons have to be safeguarded according to EN 12453, section 5.1.2 to avoid crushing, shearing and drawing-in-points. The "Raytector" safety device against entrapment belongs to this category of AOPD¹⁾ with following functions:

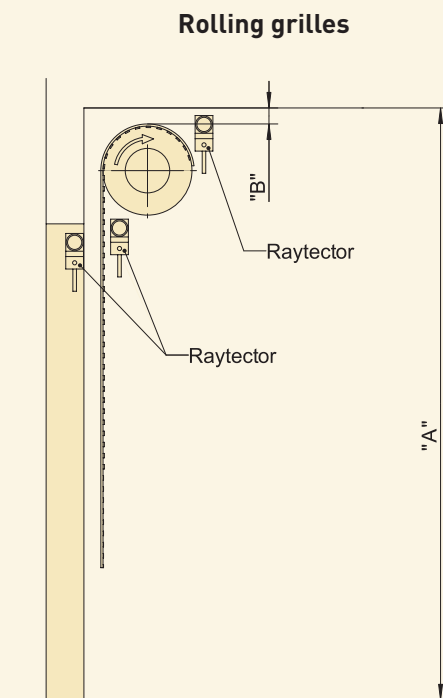
- Detection of presence
(Safety photo cells according to IEC 61496-2)
- Evaluation and monitoring
(Evaluator)
- Output Switching Signal Device OSSD²⁾
(Evaluator)

The system full fills the requirements of safety category 3 according to EN ISO 13849-1

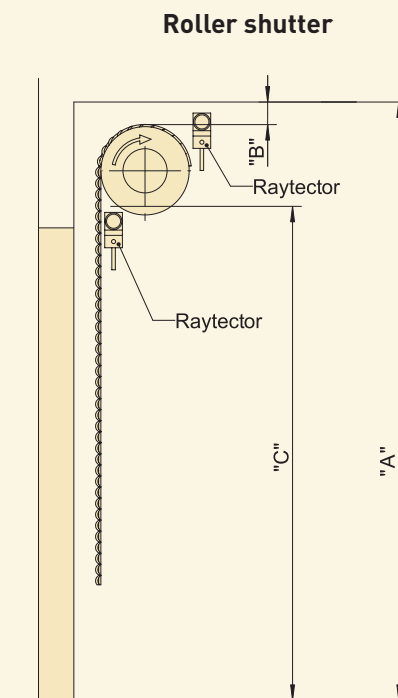
Description of functions:

The photo cell transmitted pulsed infrared light, which is detected by the corresponding receiver. This generates a dynamic signal, which is identified and evaluated by the control unit. If the signal remains off, e.g. due to interruption of the light cell, a stop command is immediately generated. The transmitter/receiver system adjusts itself automatically over a range of up to ten metres.

Examples



- Additional photo cell required if $A < 2,500\text{mm}$ and $B < 80\text{ mm}$ (by open shutter)



- Guarding the point of entrapment with a photo cell, if $C < 2,500\text{mm}$. Additional photo cell is required if $A < 2,500\text{mm}$ and $B < 80\text{ mm}$ (by open shutter)

■ 1) AOPD=active opto-electronic protective device

■ 2) OSSD=output signal switching device

Raytector for protection against drawing-in

Raytector protection against drawing-in



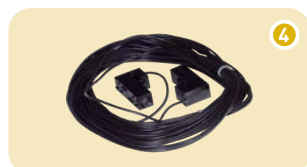
1



2



3



4



5

Designation	Description	Part no.
Complete Raytector system 1	For door controls TS 959 / TS 970 / TS 971	30004528
	Consisting of: Evaluator OSE 2300 supply voltage 230 V AC, IP54 Safety photo cell, 2 pairs (2 transmitters / 2 receivers) self-regulating, each with 10,5 m cable Supply voltage 12 V DC, IP54 with fixing items	
Complete Raytector system 2	For door controls TS 981 evaluation integrated in TS 981	30004628
	Consisting of: Safety photo cell, 2 pairs (2 transmitters / 2 receivers) self-regulating, each with 10,5 m cable Supply voltage 12 V DC, IP54 with fixing items	
Individual parts		
Evaluator OSE 2300 3	Supply voltage 230 V AC, IP54	40015028
Safety photo cell 4	1 pair (1 transmitter / 1 receiver) self-regulating, each with 10,5 m cable Supply voltage 12 V DC, IP54 without fixing items	30004680
Mounting kit 5	For Safety photo cell	40014452