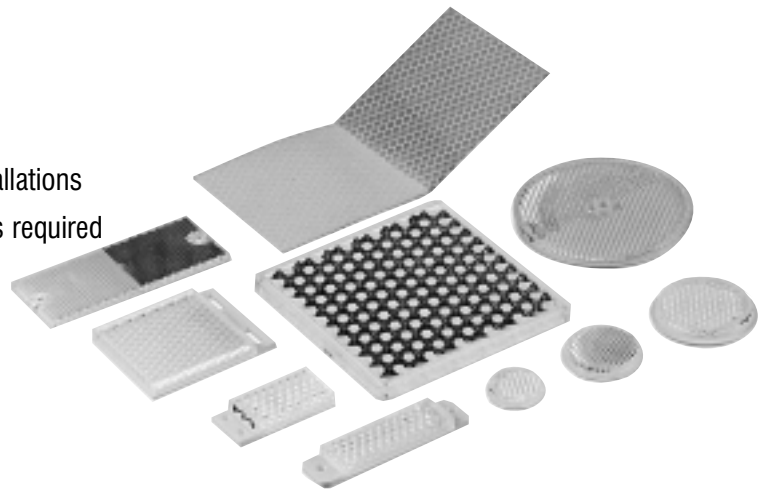


# Reflectors RL



Reflectors to suit all retro-reflective photoelectric switches

- Suitable for use with polarised light photoelectric switches
- A variety of sizes and shapes to suit all applications
- Miniature types for close mounting in multiple sensor installations
- Low efficiency models for use where reduced sensitivity is required
- Self-adhesive paper type available, can be cut to size
- Single hole, dual hole and stud mounting options



## Specification and ordering codes

Type	RL100D		RL102	RL103	RL104	RL105	RL106G	RL107	RL109	RL110	RL111G	RL112G	RL113G
% sensing range using MMC <sup>(1)</sup>	50	60	25	35	45	65	40	85	60	100	50	60	90
% sensing range using SSC <sup>(1)</sup>	55	65	43	38	56	57	68	40	78	100	65	45	90
% sensing range using SSP <sup>(1)</sup>	50	60	50	40	50	50	50	60	50	100	50	60	90
% sensing range using MSC <sup>(1)</sup>	55	65	40	45	55	65	45	85	60	100	45	50	90
% sensing range using MSP <sup>(1)</sup>	–	–	25	30	40	50	25	65	45	100	35	30	90
% sensing range using MVC <sup>(1)</sup>	55	65	40	45	55	65	45	85	60	100	45	50	90
% sensing range using MVP <sup>(1)</sup>	–	–	25	30	40	50	25	65	45	100	35	30	90
% sensing range using SAC <sup>(1)</sup>	50	60	40	45	40	60	35	70	50	100	40	40	90
% sensing range using SAP <sup>(1)</sup>	23	28	37	50	60	53	46	60	37	100	32	32	90
% sensing range using QXC <sup>(1)</sup>	50	60	43	38	56	57	68	40	78	100	70	45	90
% sensing range using QXP <sup>(1)</sup>	36	43	–	36	60	52	44	40	32	100	56	56	92
% sensing range using RXC <sup>(1)</sup>	50	60	15	25	45	55	55	60	50	100	50	45	90
% sensing range using RXP <sup>(1)</sup>	46	56	15	25	42	58	53	65	58	100	39	32	90
% sensing range using PSC <sup>(1)</sup>	25	30	35	50	60	70	40	80	60	100	45	55	90
% sensing range using BSC <sup>(1)</sup>	50	60	40	55	60	65	40	70	50	100	40	40	80
% sensing range using BSP <sup>(1)</sup>	20	25	20	35	45	45	30	65	35	100	40	50	90
% sensing range using BVC <sup>(1)</sup>	50	60	40	55	60	65	40	70	50	100	40	40	80
% sensing range using BVP <sup>(1)</sup>	20	25	20	35	45	45	30	65	35	100	40	50	90
% sensing range using GSC <sup>(1)</sup>	50	65	35	50	55	60	40	75	55	100	35	45	75
% sensing range using GVC <sup>(1)</sup>	50	65	35	50	55	60	40	75	55	100	35	45	75
% sensing range using KVC <sup>(1)</sup>	50	65	20	35	55	65	45	80	55	100	35	60	80
% sensing range using RVC <sup>(1)</sup>	50	60	30	45	60	70	45	80	55	100	35	50	80
% sensing range using RVP <sup>(1)</sup>	45	60	25	45	60	75	50	90	60	100	40	60	75
Dimensions(mm)	50mm x 50mm <sup>(3)</sup>	75mm x 75mm <sup>(3)</sup>	ø26	ø36	ø47	90 x 40	182 x 42	105 x 100	ø83	ø84	47 x 23	73 x 19	61 x 51
Protection rating <sup>(2)</sup>	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67
Mounting	Self-adhesive		–	–	–	2 x 4.3mm holes	2 x 6mm holes	–	1 x M5 stud	1 x 5mm hole	2 x 3.5mm holes	2 x 3.5mm holes	2 x slotted holes 13.5 x 3.7mm
Materials	Acrylic/polycarbonate												

<sup>(1)</sup> Refer to individual data sheets for detailed specifications of the photoelectric switches.

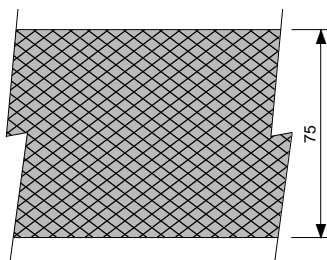
<sup>(2)</sup> Applications involving water immersion or atmospheres with steam or water vapour clouds are not advised.

<sup>(3)</sup> These sizes give the % sensing ranges specified. Supplied as 1m x 75mm – can be cut to size.

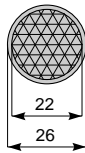
- Notes
- to ensure constant detection performance, especially when used at the maximum sensing range, it is important to keep the reflector surface clean by wiping with a damp cloth.
  - when selecting a reflector, the ambient conditions in which it is to be used, should be taken into account, as dusty or high humidity atmospheres may cause the range to be limited to as low as 10%. The range is calculated as:  

$$\text{range} = \text{maximum sensing distance} \times \text{reflector \%} \times \text{ambient conditions \%}$$
 The ambient conditions % is an arbitrary value that can be determined only by experimentation. Typical values are:  
 Clean = 100%, low levels of dust or humidity = 50%, moderate levels = 25%, high levels = 10%.
  - the reflector should be positioned at 90° to the optical axis with a tolerance of ±15°.

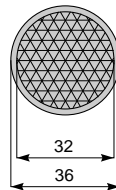
## Dimensions (mm)



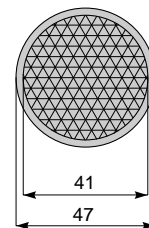
**RL 100D**  
1m length



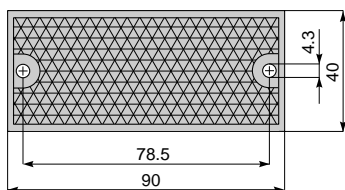
**RL 102**  
5mm thickness



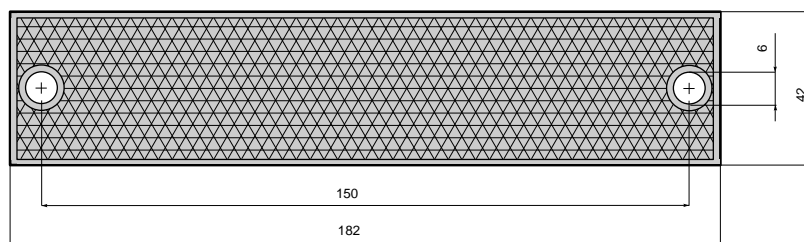
**RL 103**  
5.5mm thickness



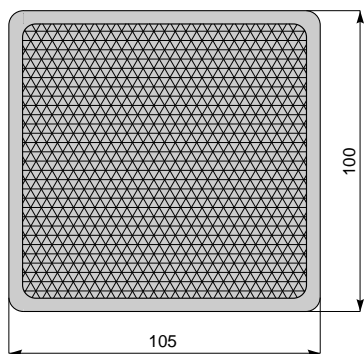
**RL 104**  
8mm thickness



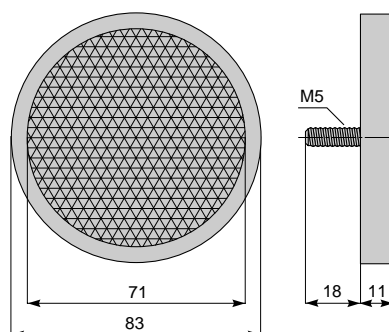
**RL 105**  
5mm thickness



**RL 106G**  
6.5mm thickness

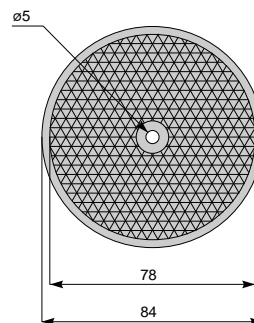


**RL 107**  
9.5mm thickness

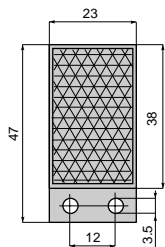


Nut and shakeproof washer supplied.

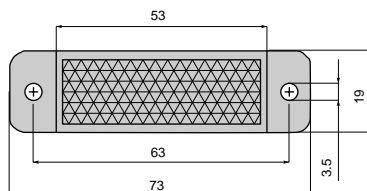
**RL 109**



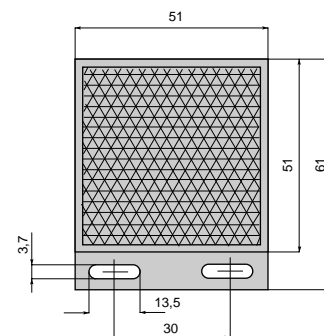
**RL 110**  
9mm thickness



**RL 111G**  
8mm thickness



**RL 112G**  
8mm thickness



**RL 113G**  
8mm thickness