

# Reflectors

## % reflector

model <sup>(1)</sup>	RL098	RL100	RL100D (50x50mm)	RL100 DA4	RL100 DC4	RL100 DQ1	RL102	RL103	RL104	RL105G	RL106G	RL107	RL110
DMP	-	-	40	55	50	50	25	50	50	50	80	125	100
FAIC_axial	20	10	20	40	25	30	35	50	50	40	80	105	100
FAIM_axial	20	10	20	40	25	30	35	50	50	40	80	105	100
FAIC_90°	20	10	20	40	25	30	35	50	50	40	80	105	100
FAIM_90°	20	10	20	40	25	30	35	50	50	40	80	105	100
FARN_axial	-	-	25	40	30	35	40	45	50	40	80	110	100
FARP_axial	-	-	25	40	30	35	40	45	50	40	80	110	100
FARN_90°	-	-	20	35	25	30	30	25	35	40	110	130	100
FARP_90°	-	-	20	35	25	30	30	25	35	40	110	130	100
FARL_axial	-	-	-	-	-	-	-	-	-	-	-	-	100
FARL_90°	-	-	-	-	-	-	-	-	-	-	-	-	100
FALN	-	-	20	20	15	20	30	40	45	70	90	85	100
SSC	20	10	15	35	30	30	30	40	50	40	80	110	100
SPC	20	10	15	35	30	30	30	40	50	40	80	110	100
SSP	-	-	-	-	-	-	5	40	50	30	70	110	100
SPP	-	-	-	-	-	-	5	40	50	30	70	110	100
MSC	20	10	25	45	35	40	35	50	60	45	100	115	100
MPC	20	10	25	45	35	40	35	50	60	45	100	115	100
MSP	-	-	35	35	35	35	25	50	70	50	110	115	100
MPP	-	-	35	35	35	35	25	50	70	50	110	115	100
SAC	30	15	25	40	40	40	25	40	45	45	100	115	100
SAP	-	-	25	35	35	35	25	40	50	40	90	120	100
MVC	20	10	25	45	35	45	30	50	60	40	90	110	100
MVP	-	-	20	25	30	30	25	20	35	35	60	105	100
FQIC_axial	30	15	30	75	40	45	40	50	50	50	95	105	100
FQIC_90°	15	20	30	75	40	50	25	40	55	40	90	105	100
FQRN_axial	-	-	30	30	30	30	40	50	50	45	90	110	100
FQRN_90°	-	-	30	35	30	30	40	50	50	40	90	110	100
FQRL_axial	-	-	-	-	-	-	-	-	-	-	-	-	100
FQRL_90°	-	-	-	-	-	-	-	-	-	-	-	-	100
FFRN	-	-	25	30	30	30	35	45	50	45	90	110	100
FFRP	-	-	25	30	30	30	35	45	50	45	90	110	100
FFRL	-	-	-	-	-	-	-	-	-	-	-	-	100
QXP	-	-	30	35	35	35	25	30	40	40	80	110	100
QXC	-	-	-	40	30	15	20	25	35	40	90	100	100
BVC	40	20	35	85	50	55	40	50	55	50	95	110	100
BSC	40	20	35	85	50	55	40	50	55	50	95	110	100
PSC	-	-	-	30	25	25	20	20	10	40	30	115	100
RXC	25	20	25	50	30	40	30	30	20	35	80	95	100
RXP	-	-	30	50	35	40	10	10	40	45	60	110	100
QMIC	40	20	30	40	20	35	30	40	40	40	90	100	100
QMIG	-	-	-	-	-	-	-	-	-	-	-	-	100
QMRG_LP	-	-	-	-	-	-	-	-	-	-	-	-	100
QMRG	-	-	-	-	-	-	-	-	-	-	-	-	100
Q50RN	-	-	25	35	25	30	35	45	50	40	80	105	100
FGRN	5	-	15	30	30	30	35	50	55	45	75	105	100
QMRN	-	-	15	35	30	35	15	30	40	50	90	120	100
QMRL	-	-	-	-	-	-	-	-	-	-	-	-	100
protection degree <sup>(2)</sup>	IP67												
material	acrylic /polycarbonate												

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

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

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 condition 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 %.



	RL110	RL111G	RL112G	RL113G	RL116	RL130	RL131	RL133	RL201	RL202	RL203	RL204	model <sup>(1)</sup>
	100	30	35	75	50	55	30	25	-	-	-	-	DMP
	100	40	50	80	80	80	30	25	-	-	-	-	FAIC_axial
	100	40	50	80	80	80	30	25	-	-	-	-	FAIM_axial
	100	40	50	80	80	80	30	25	-	-	-	-	FAIC_90°
	100	40	50	80	80	80	30	25	-	-	-	-	FAIM_90°
	100	35	45	70	75	75	35	10	-	-	-	-	FARN_axial
	100	35	45	70	75	75	35	10	-	-	-	-	FARP_axial
	100	15	15	60	20	45	25	7	-	-	-	-	FARN_90°
	100	15	15	60	20	45	25	7	-	-	-	-	FARP_90°
	100	-	-	70	70	-	-	-	-	-	-	-	FARL_axial
	100	-	-	55	70	-	-	-	-	-	-	-	FARL_90°
	100	60	70	85	85	90	15	15	130	120	90	90	FALN
	100	45	50	75	85	85	40	25	-	-	-	-	SSC
	100	45	50	75	85	85	40	25	-	-	-	-	SPC
	100	40	45	70	110	80	25	-	-	-	-	-	SSP
	100	40	45	70	110	80	25	-	-	-	-	-	SPP
	100	35	50	80	80	100	40	35	-	-	-	-	MSC
	100	35	50	80	80	100	40	35	-	-	-	-	MPC
	100	50	40	60	90	60	30	25	-	-	-	-	MSP
	100	50	40	60	90	60	30	25	-	-	-	-	MPP
	100	20	55	80	90	80	35	10	-	-	-	-	SAC
	100	30	30	80	50	40	20	20	-	-	-	-	SAP
	100	50	40	70	70	75	30	25	-	-	-	-	MVC
	100	25	30	60	55	55	30	7	-	-	-	-	MVP
	100	40	55	75	90	70	30	25	-	-	-	-	FQIC_axial
	100	40	55	80	90	70	30	25	-	-	-	-	FQIC_90°
	100	35	50	75	80	70	30	25	-	-	-	-	FQRN_axial
	100	20	30	70	40	65	35	20	-	-	-	-	FQRN_90°
	100	-	-	55	60	-	-	-	-	-	-	-	FQRL_axial
	100	-	-	55	60	-	-	-	-	-	-	-	FQRL_90°
	100	35	45	75	80	70	35	25	-	-	-	-	FFRN
	100	35	45	75	80	70	35	25	-	-	-	-	FFRP
	100	-	-	55	45	-	-	-	-	-	-	-	FFRL
	100	55	40	50	70	70	20	25	-	-	-	-	QXP
	100	25	30	35	40	45	-	-	-	-	-	-	QXC
	100	35	55	85	95	95	35	30	-	-	-	-	BVC
	100	35	55	85	95	95	35	30	-	-	-	-	BSC
	100	30	30	45	45	60	10	-	-	-	-	-	PSC
	100	30	40	60	60	65	-	-	-	-	-	-	RXC
	100	25	35	45	25	60	-	-	-	-	-	-	RXP
	100	35	50	80	80	85	30	20	-	-	-	-	QMIC
	100	-	-	50	60	-	-	-	-	-	-	-	QMIG
	100	-	-	65	70	-	-	-	-	-	-	-	QMRG_LP
	100	-	-	65	70	-	-	-	-	-	-	-	QMRG
	100	40	35	60	80	80	25	20	-	-	-	-	Q50RN
	100	40	45	70	80	80	25	30	-	-	-	-	FGRN
	100	35	45	70	80	80	30	15	-	-	-	-	QMRN
	100	-	-	70	80	-	-	-	-	-	-	-	QMRL
	IP67												protection degree <sup>(2)</sup>
	acrylic /polycarbonate												material

The range is calculate as follow:

**range = max. sensing distance x reflector % x ambient condition%**


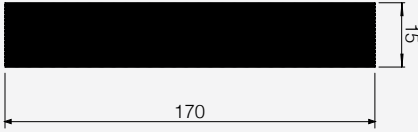
The ambient condition % is an arbitrary value that can be determined only by experimentation.


Typical values are: **clean = 100%; low levels of dust or humidity = 50%; moderate levels = 25%; high levels = 10%**


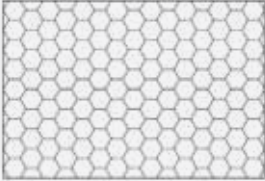
The reflectors should be positioned at 90° to the optical axis with a tolerance of ± 15°


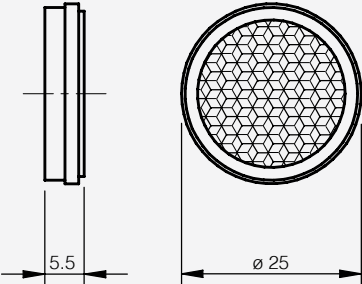
Please Note: Mechanical dimensions can vary without any advice




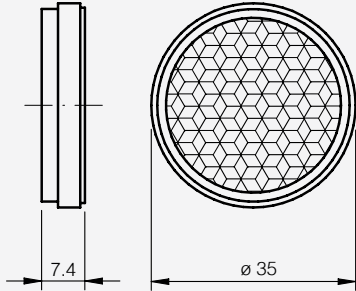

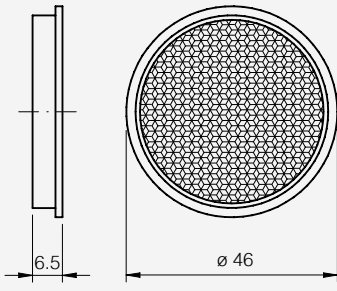

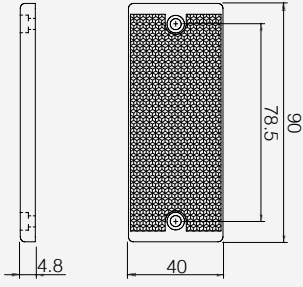

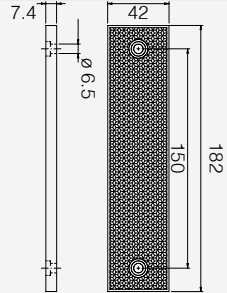
RL 098			
product	suitable for	dimensions (mm)	descriptions / installation
	polarized and retroreflective sensors		-

RL 100			
product	suitable for	dimensions (mm)	descriptions / installation
	retroreflective sensors	dimensions defined by user	RL 100: Dimensions defined by user

RL 100D / RL AGV / RL 100DA4 / RL 100DC4 / RL 100DQ1			
product	suitable for	dimensions (mm)	descriptions / installation
	polarized sensors		RL 100D: Dimensions defined by user RL AGV: Fixed height 92 cm - minimum length 50 cm RL 100DC4: Fixed height 50 cm - fixed length 30 cm RL 100DA4: Fixed height 30 cm - fixed length 20 cm RL 100DQ1: Fixed height 10 cm - fixed length 10 cm


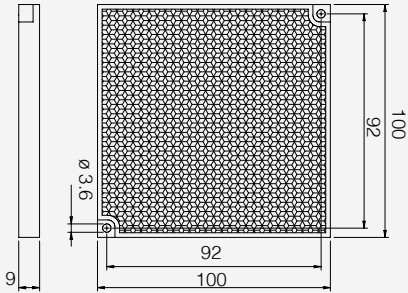
RL 102			
product	suitable for	dimensions (mm)	descriptions / installation
	polarized and retroreflective sensors		-



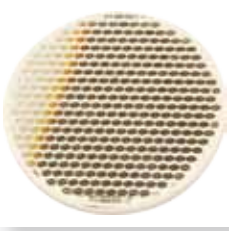
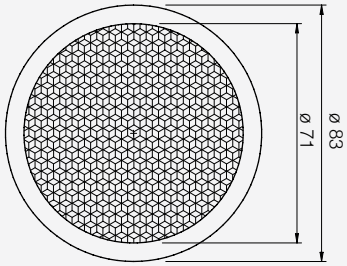
RL 103			
product	suitable for	dimensions (mm)	descriptions / installation
	polarized and retroreflective sensors		-
RL 104			
product	suitable for	dimensions (mm)	descriptions / installation
	polarized and retroreflective sensors		-
RL 105G			
product	suitable for	dimensions (mm)	descriptions / installation
	polarized and retroreflective sensors		-
RL 106G			
product	suitable for	dimensions (mm)	descriptions / installation
	polarized and retroreflective sensors		-




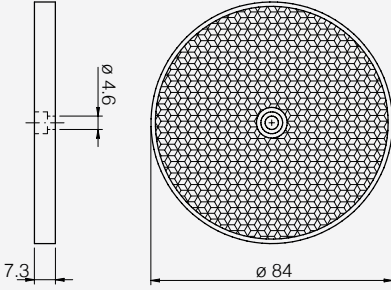
### RL 107

product	suitable for	dimensions (mm)	descriptions / installation
	polarized and retroreflective sensors		-


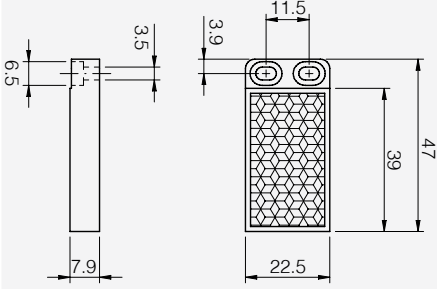
### RL 109

product	suitable for	dimensions (mm)	descriptions / installation
	polarized and retroreflective sensors		-

### RL 110

product	suitable for	dimensions (mm)	descriptions / installation
	polarized and retroreflective sensors		-

### RL 111G

product	suitable for	dimensions (mm)	descriptions / installation
	polarized and retroreflective sensors		-



RL 112G			
product	suitable for	dimensions (mm)	descriptions / installation
	polarized and retroreflective sensors		-


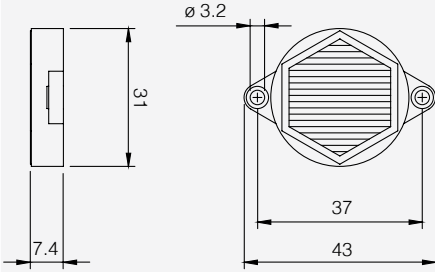
RL 113G			
product	suitable for	dimensions (mm)	descriptions / installation
	polarized and retroreflective sensors		-

RL 116			
product	suitable for	dimensions (mm)	descriptions / installation
	polarized and retroreflective sensors		-


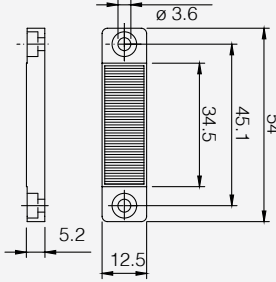
RL 130			
product	suitable for	dimensions (mm)	descriptions / installation
	polarized and retroreflective sensors		-




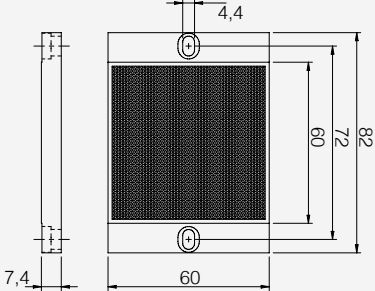
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product	suitable for	dimensions (mm)	descriptions / installation
	polarized and retroreflective sensors		


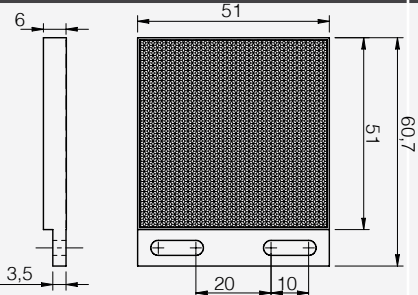
### RL 133

product	suitable for	dimensions (mm)	descriptions / installation
	polarized and retroreflective sensors		

### RL 201


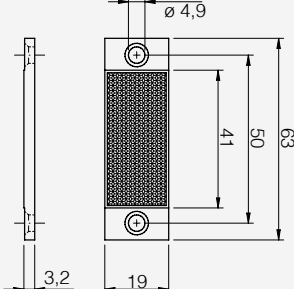
product	suitable for	dimensions (mm)	descriptions / installation
	LASER sensors		

### RL 202


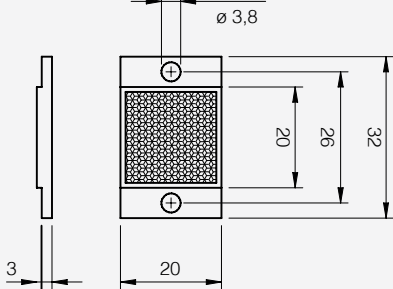
product	suitable for	dimensions (mm)	descriptions / installation
	LASER sensors		



RL 203

product	suitable for	dimensions (mm)	descriptions / installation
	LASER sensors		-

RL 204

product	suitable for	dimensions (mm)	descriptions / installation
	LASER sensors		-