

The background of the entire page is a composite image. The top half shows a city skyline at night with several tall buildings and a river. The bottom half shows a highway interchange with light trails from cars. Overlaid on both images are numerous white, glowing arcs that connect various points, suggesting a network or data flow.

CR0 series

DATASHEET

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CR0 series

Retro reflective Polarized Area sensors

features

- Area height controlled 69 mm
- Maximum operative distance up to 4.5m
- Minimum object detection diam. 6mm
- Two teach-in types: fine and standard
- Optical pitch 10mm
- Protection degree IP67
- Blanking function



code description


CR 0 / 0 I - 1 V

series	CR	Retroreflective Polarized Area Sensor with aluminum compact housing
models	0	Model area detection : high 69 mm ; pitch 10 mm
output	0	Outputs select (NO/NC); IO Link mode
	B	Complementary output (NO +NC)
logic output	I	IO Link output
	B	NPN + PNP output
	N	NPN outputs
	P	PNP outputs
	T	Push-Pull output
housing material	1	Metallic housing
connections	V	Output cable length 25 cm with M12 pigtail

available models

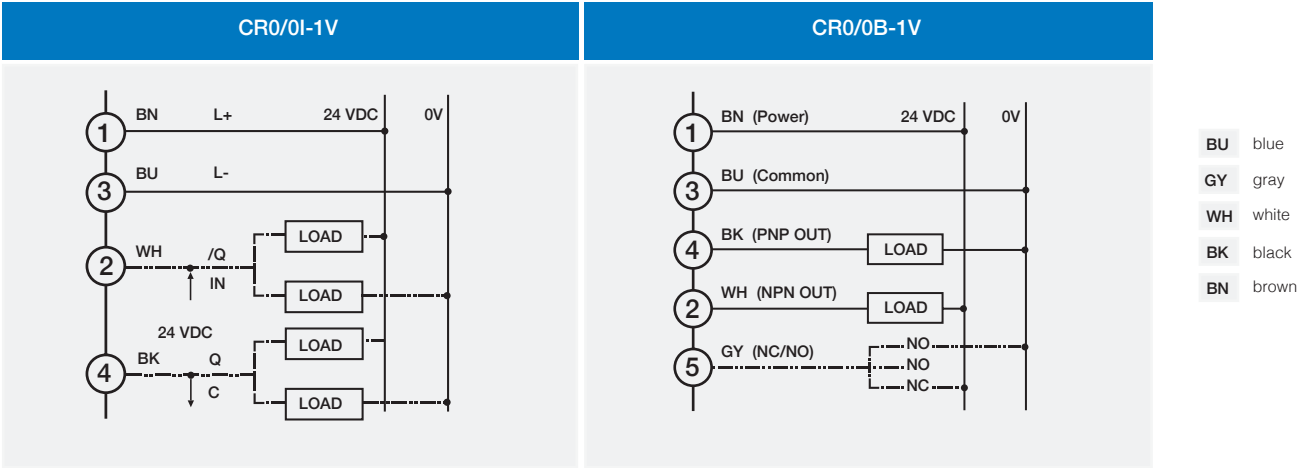
pitch (mm)	detection height (mm)	working range (m)	response time (ms)	plug	poles	logic	output	models
10	69	0.2...4,5	1.2	M12	4	IO Link	IO Link	CR0/0I-1V
					5	PNP+NPN	NC/NO	CR0/0B-1V
						Push Pull		CR0/0T-1V
					4	PNP	NO+NC	CR0/BP-1V
						NPN		CR0/BN-1V

technical specifications

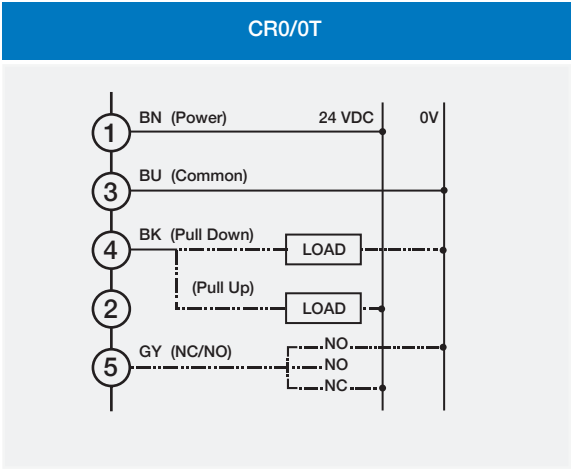
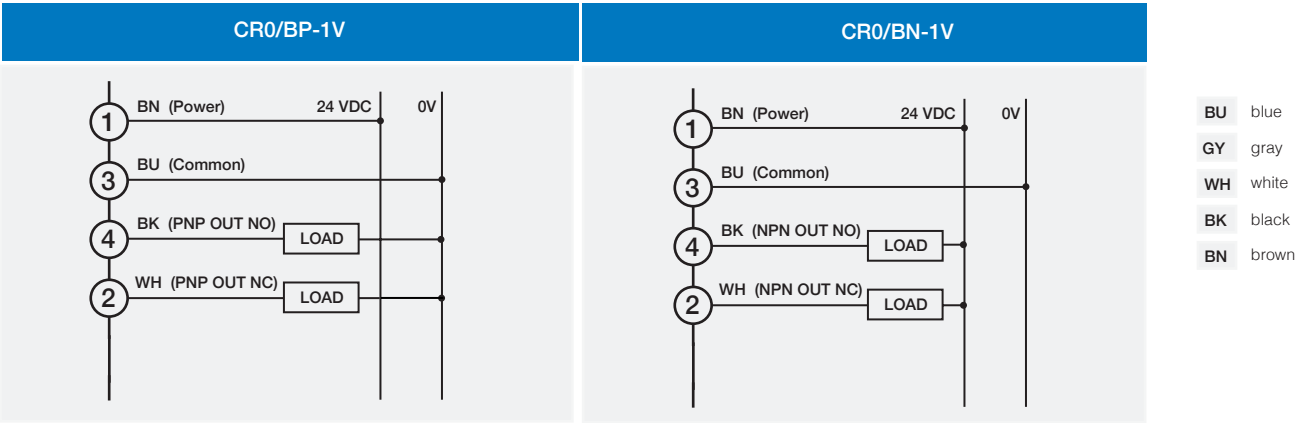
	CR0
	
nominal sensing distance (Sn)	0.2...4.5 m (RL106G - ExG 2)
emission	red (617nm)
operating voltage	16...30 Vdc
no load supply current	≤ 10%
no load supply current	100mA
load current	100mA
leakage current	≤ 100 µA (Vdc max)
output voltage drop	3 V max (100mA)
adjustment	Teach-in: fine < 3 sec; > 6 sec
output type	PNP; NPN ; Push-pull ; (NO+NC) compl. output (NO+NC)
switching frequency	600 Hz
time delay before available	300 ms
minimum object detection	3...6mm @2m RL106G ⁽¹⁾ 3...10mm@4,5m RL106G ⁽¹⁾
power supply protections	polarity reversal, transient
output protection	short circuit (autoreset)
interference external light	5000 lux (fluorescent lamp); 50000 lux (sunlight)
operative temperature range	-10°C.....+55°C (without freeze)
temperature drift	10% Sr
LED indicators	green: power supply red: dark/light status
protection degree	IP67 (EN60529)
housing material	aluminium
optical material	PMMA

⁽¹⁾ 106G reflector 20 x 80mm (concealment)

electric diagrams of the connections



electric diagrams of the connections

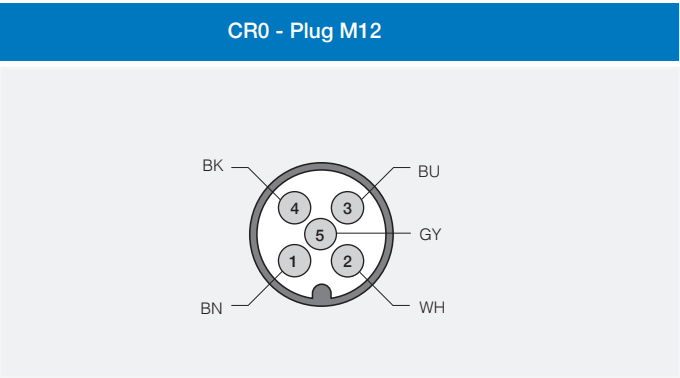


response diagrams

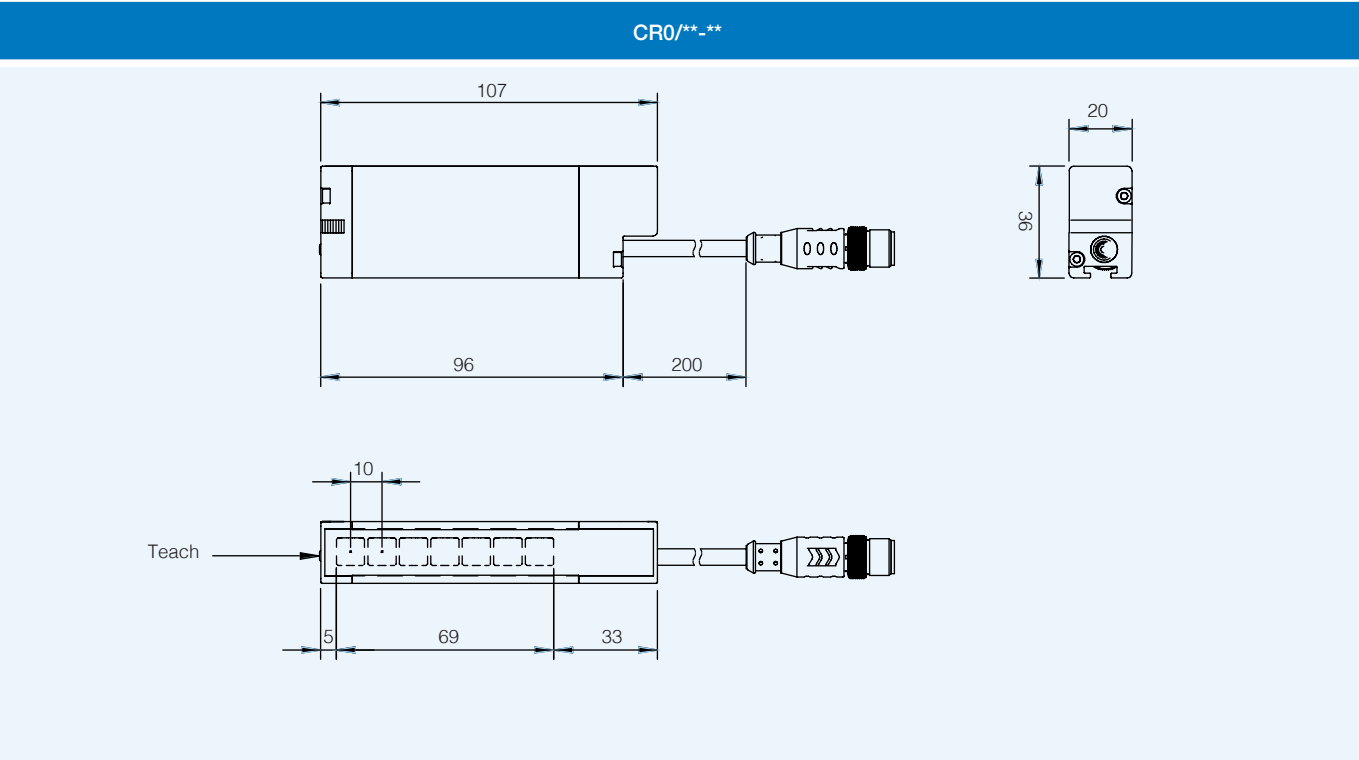
Distance from sensor to reflector

Reflector	Min (m)	Max (m)
RL 106G	0,2	5,5
RL 135	0,3	3,5
RL100D (150 x 40mm)	0,3	2,5

plugs

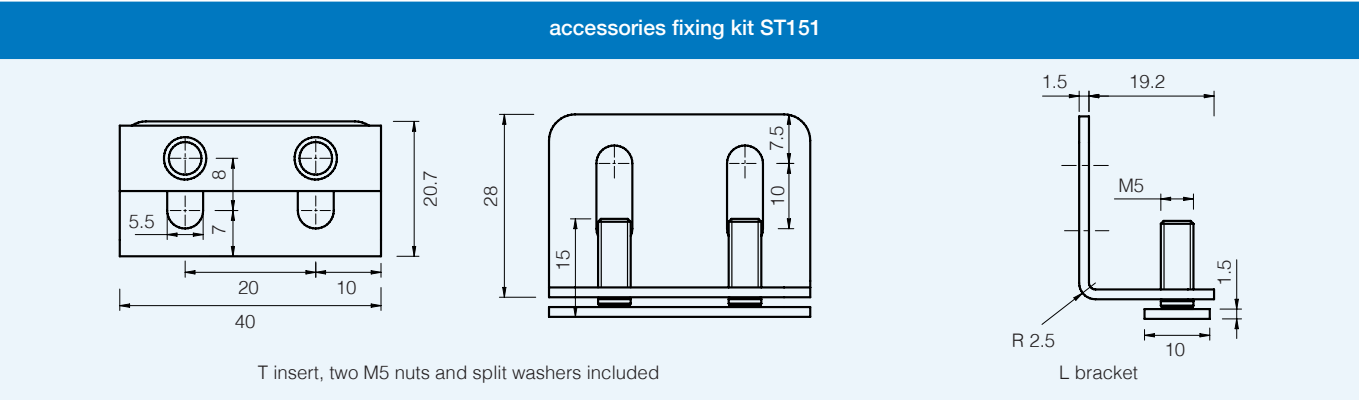


dimensions (mm)



dimensions (mm)

accessories included with all models



RL 106G	
product	dimensions (mm)
