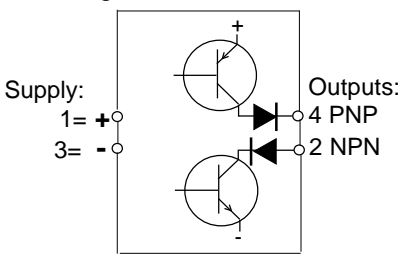
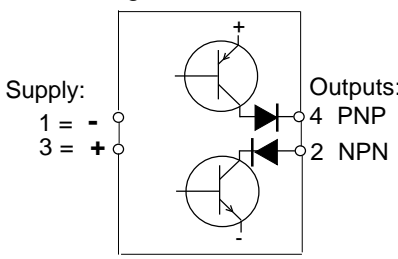
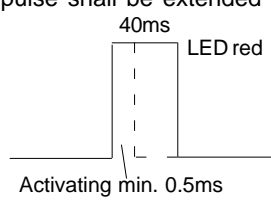
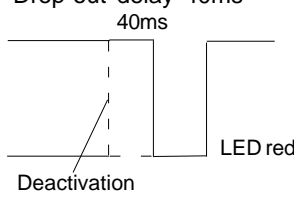
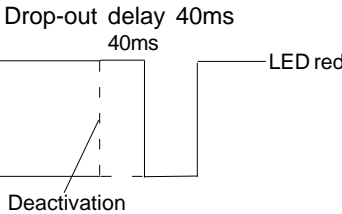
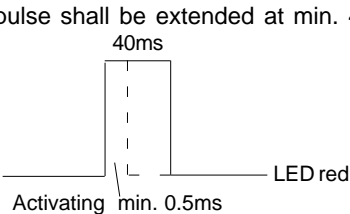


Original operating manual: Photoelectric proximity switch IRG-10I-Z8 / IRG-10I-Z8-S099

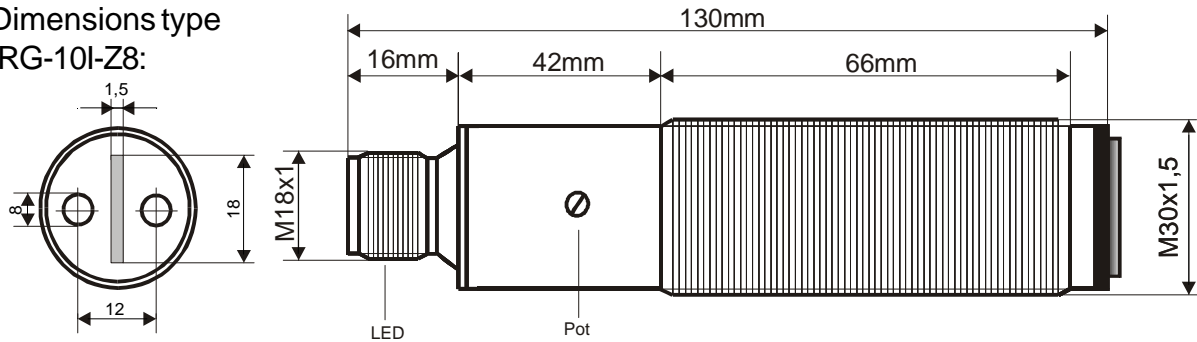
- 1 kHz switching frequency with pulse-stretching at 40ms
- Potentiometer for adjustment



Type	IRG-10I-Z8 / IRG-10I-Z8-S099	
Technical data		
Range (adjustable) on white paper 20x30cm	1000mm	
Supply voltage	24VDC +-15%	
Current consumption	50mA	
Max. power dissipation	1.38W	
Outputs	1 x PNP and 1 x NPN, short circuit protected	
Max. output current	100mA	
Switching frequency	1000Hz	
Time function	Impulse stretching at 40ms	
Hysteresis: axially	appr. 10% from range	
Hysteresis: radial	appr. 2% from range	
Ambient temperature range	-20°C < T _{amb} < +50°C	
Enclosure rating	IP65 EN 60529	
Electrical connection	Socket M18. Type IRG-10I-Z8-S099: Socket M12	
Accessories, included	2 nuts M30, or 1 clamp optional	
Accessories, not included	Connection housing M18, female, straight or angled	
Accessories, not included, only IRG-10I-Z8-S099	Cord-set M12, female, Lumberg straight type: RKTS 5-186/xx, 5-299/..M or right angle type: RKWTH 5-186/xx, 5-299/..M, 5 terminals	
Options	Type IRG-10I-Z8-S099: With socket M12, Lumberg type RSF-5	
Function determined by the wiring of the supply voltage :	Wiring: 1 = +24VDC / 3 = 0V 	Wiring: 1 = 0V / 3 = +24VDC 
Function as proximity switch:	Impulse shall be extended at min. 40ms 	Drop-out delay 40ms 
Function as light barrier:	Drop-out delay 40ms 	Impulse shall be extended at min. 40ms 

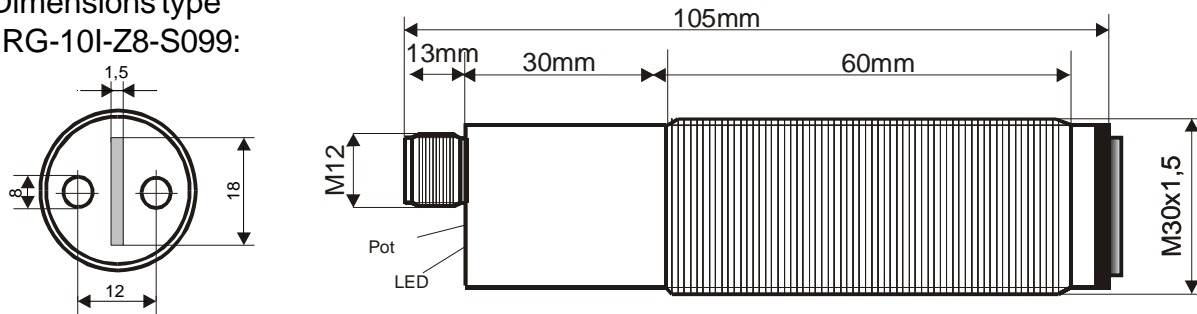
Dimensions type

IRG-10I-Z8:



Dimensions type

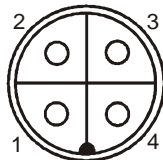
IRG-10I-Z8-S099:



Wiring socket M18:

(Viewing on the socket at the sensor)

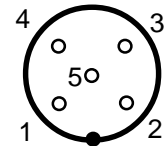
- 1: +24VDC or 0V(-)
- 2: Output NPN
- 3: 0V(-) or +24VDC
- 4: Output PNP



Wiring socket M12:

(Viewing on the socket at the sensor)

- 1, brown: +24VDC or 0V(-)
- 2, white: Output NPN
- 3, blue: 0V(-) or +24VDC
- 4, black: Output PNP
- 5, grey: PE



Operating manual / EC-declaration of conformity:

General mounting prescriptions

Do not exceed the maximum ratings. The electrical connections must be exactly as shown in the connection diagram. The cable shield must be connected short. The cable shield should be connected to the protection earth, large-surfaced. Connection cables must not be installed parallel to high voltage cables.

Function

The photoelectric sensors type IRG-10I-Z8 / IRG-10I-Z8-S099 are well applicable for the detections of small or very fast moved objects. The internal response time is 0.5ms. For an optimal data processing pulses shorter than 40ms will be stretched to 40ms. Please note, that the delay function is different as the polarity of the supply voltage and the using as proximity switch or as light barrier. (See page 1). The status indication LED always light on, when the sensor detects light, independently of the polarity of the supply voltage.

The optimal range can be adjusted by the potentiometer. The load must be connected to 0V(-).

The PNP and the NPN output can be directly wired to a push-pull output.

Maintenance

Protect the sensor and the optional fibre optics against pollution. If the fibre optics or the sensor lenses are contaminated, clean with alcohol. Do not use aggressive solvents. Optical fibres can be de-

stroyed by strong solvents. Equipment must only be repaired or serviced by the manufacturer.

General safety instructions

The sensors must not be used for Accident-Prevention! In worst case the output can change to any state! When installing and operating with the sensor, it is necessary to take into consideration the relevant international and other national regulations. The sensors are conform to the following directives and standards:

EN 61000-6-1/-2, EN 61000-6-3/4; EN 60529

- Machine directive: 2006/42/EC

- EMC directive: 2004/108/EC

- RoHS directive: 2011/65/EU

General Notes, disposal

We reserve the right to modify our equipment. Our equipment is designed such way, that it has the least possible adverse effect on the environment. It neither emit or contain any damaging or siliconized substances and use a minimum of energy and resources. No longer usable or irreparable units must be disposed of in accordance with local waste disposal regulations.

EC-Declaration of conformity

The conformity of the devices with the EC standards and directives and the observation of the Quality Safety System ISO 9001:2008, declares:

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