
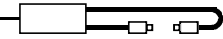

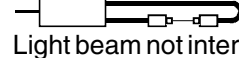
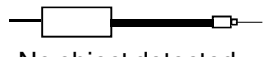


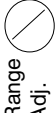
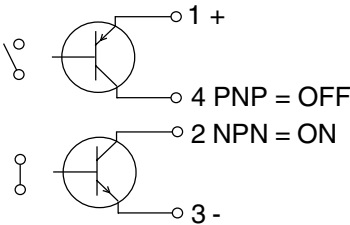
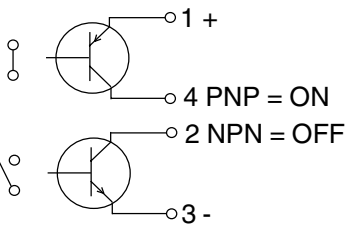
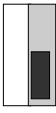

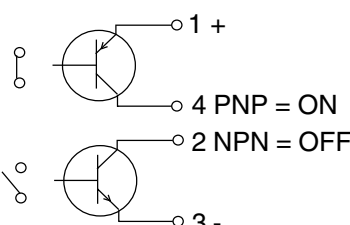
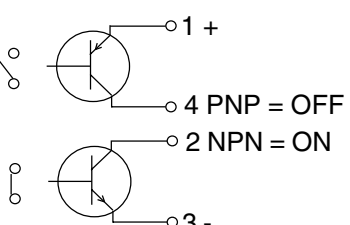


Photoelectronic Proximity Switch IRG-10

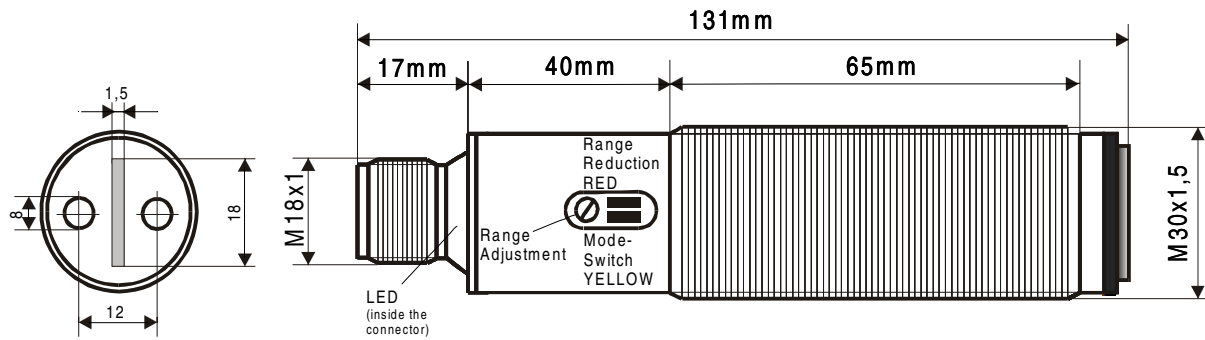


- fine adjustable by potentiometer from 10mm to 1000mm
- Mode selector for different sink and source switching modes
- Plug available in version straight or right angle

ISO 9001

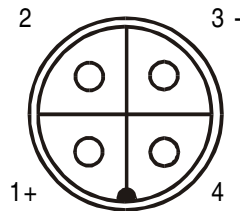
Type	IRG-10	
Technical Data		
Range (adjustable) (on a white surface 20x30cm)	1000mm (reduced to 50% by the red switch)	
Supply Voltage	12-28 VDC / Ripple max. 10% Vpp	
Current Consumption	50mA	
max. Power Dissipation	1.4W	
Outputs / Load	1 x PNP and 1 x NPN, maximum 100 mA, short circuit protected	
Housing	M30, yellow brass, nickel plated	
Operating Frequency	100Hz (optional up to 1kHz)	
Delay Functions	On request: Drop-in or Drop-out time delay	
Hysteresis: Axial Direction	approximative 10%	
Hysteresis: Radial Direction	approximative 2%	
Ambient Temperature	-20°C < TA < +50°C	
Enclosure Rating	IP65 according to EN 60529	
Accessories	1 Clamp (or 2 nuts M30) Coupler plug straight or right angle 90°	
Connection	Connector "Binder type" M18	
Fibre optics connection	 proximity switch or  light barrier	
Function Mode	 Object detected or  Light beam not interrupted LED shows RED	 No object detected or  Light beam interrupted LED extinguished
Mode (Factory Setting)  Mode Selector (yellow switch)  Range Adj.	 1 + 4 PNP = OFF 2 NPN = ON 3 -	 1 + 4 PNP = ON 2 NPN = OFF 3 -
Mode  Mode Selector (yellow switch)  Range Adj.	 1 + 4 PNP = ON 2 NPN = OFF 3 -	 1 + 4 PNP = OFF 2 NPN = ON 3 -

Dimensions:

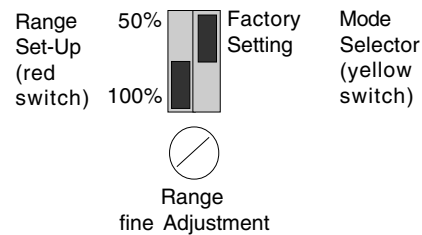


Pinout:

- 1 + 24VDC
- 2 NPN Output
- 3 -
- 4 PNP Output



Switch Settings



Operating Manual:

Mounting Prescriptions

If it is practicable, protect the lenses or fibre optics from contamination. Do not exceed the maximum ratings. The electrical connections must exactly as shown in the connection layout. The cable shield must be connected short. The cable shield should be connected to the protection earth or minus, large surfaced. Connection cables must not be installed parallel to high voltage cables.

Function

For reaching a Push-Pull-Output, connect the NPN and the PNP output. The range can be preselected in 2 steps, 50% or 100% by the red switch. For fine adjustment use the potentiometer. The output function can be selected by the mode switch (yellow).

Maintenance

The sensor Irg-10 does not require any special maintenance. Contaminated lenses or fibre optics are to clean with a non aggressive medium. Equipment must be repaired only by the manufacturer.

General Safety Informations

If the sensor breaks down, the outputs can switch to any state. For installing and using the sensor it is necessary to take into consideration the relevant international and other national regulations:

Standards met:

- EN 50081-1/-2, EN 50082-1/-2
- Machine Directive: 89/392/EWG, 91/368/EWG, 93/44/EWG, 93/68/EWG
- Low Voltage Directive: 73/23/EWG, 93/68/EWG
- EMC: 89/336/EWG, 91/263/EWG, 92/31/EWG, 93/68/EWG

General Notes

We reserve the right to modify our equipment. Our equipment is designed such way, that it has the latest 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 in accordance with local waste disposal regulations.

Irg10_e1, NOV.15,00/HB

Group

Tippkemper - Matrix GmbH

Meegener Str. 43 D-51491 Overath
Tel.: +49 (0) 2206/9566-0 Fax -19

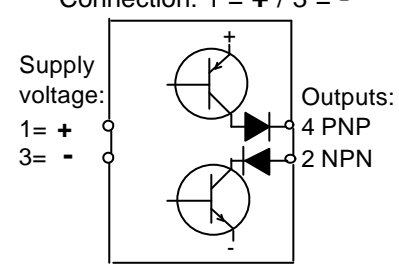
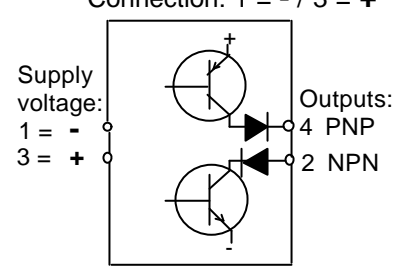
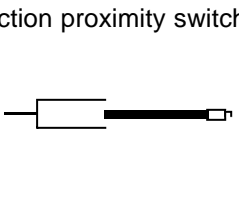
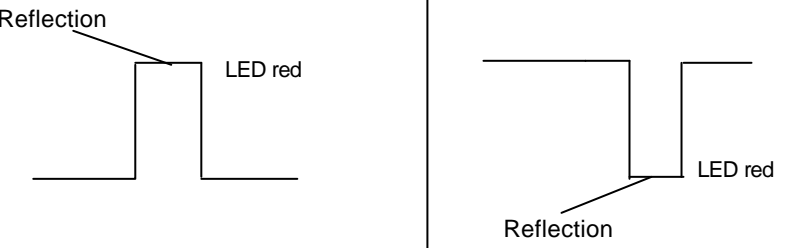
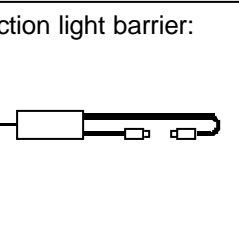
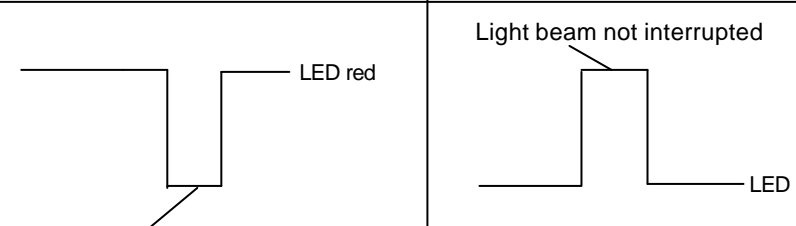
Matrix Elektronik AG

Kirchweg 24 CH-5422 Oberehrendingen
Tel.: +41 (0) 56/2220-757 Fax -563

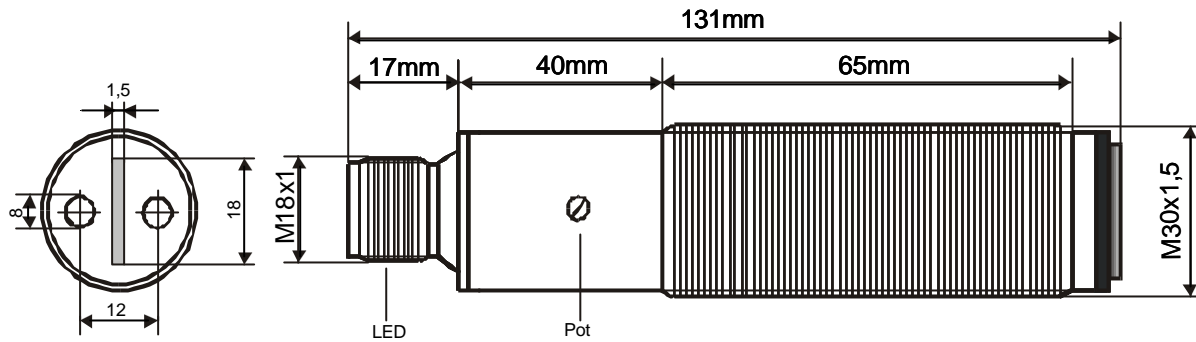
Optoelectrical Proximity Switch IRG-10I



- Connector version with visible LED inside
- Adjustable by potentiometer
- Coupler plug available in version straight or right angled

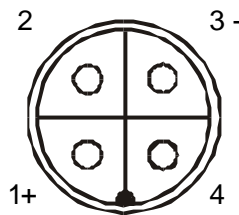
Type	IRG-10I	
Technical Data		
Operating distance (adjustable) on a white surface 20x30cm	1000mm	
Supply Voltage	12-28 VDC / Ripple max. 10% Vs	
Current Consumption	50mA	
Max. Power Dissipation	1.4W	
Outputs / Max. Load	1 x PNP and 1 x NPN, short circuit resistant / 100 mA	
Housing	M30, Yellow brass, nickel plated	
Operating Frequency	100Hz (optional up to 1kHz)	
Time Function	On request: Drop-in or Drop-out time delay	
Hysteresis: Axial Direction	approx. 10% of operating distance	
Hysteresis: Radial Direction	approx. 2% of operating distance	
Ambient Temperature	-20°C < TA < +50°C	
Enclosure Rating	IP65 according to EN 60529	
Accessories	1 Clamp (or 2 nuts M30) Coupler plug straight or right angled 90°	
Connection	Connector "Binder" M18	
Function and outputs:	Connection: 1 = + / 3 = - 	Connection: 1 = - / 3 = + 
Function proximity switch:	Reflection 	
Function light barrier:		Light beam not interrupted 

Dimension:



Connection at the sensor:

- 1 + or -
- 2 output NPN
- 3 - or +
- 4 output PNP



Operating Manual

Mounting prescriptions

We recommended that the sensor is installed insulated from the earth. The electrical connections must be exactly as shown above. The sensor must only be used with the voltage shown on the identification label. The connection cable must not be installed parallel to high voltage cables.

Function

If an object is detected by the sensor this is followed by switching of the output. If the output is active, the LED is on. The sensor has an PNP and a NPN output. Both outputs together can be used as an antivalent output. The operating distance can be adjusted by the potentiometer. The stated upper and lower limit values must not be exceeded. Should the sensor cable be broken, the output may show any mode.

Maintenance

The sensor does not require any special maintenance. Should the sensor becomes dirty, it should be cleaned with a non-aggressive medium. Equipment must only be repaired or serviced by the manufacturer.

General notes

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

Safety informations

When installing and operating with the sensor, it is necessary to take into consideration with the relevant EU and national regulations

Standards met

Machine directive: 89/392/EWG, 93/68/EWG
Low voltage directive: 73/23/EWG, 93/68/EWG
EMC: 89/336/EWG, 91/263/EWG, 92/31/EWG,
93/68/EWG, EN 50081-1/-2, EN 50082-1/-2

lrg10L_e1, SEP12,00/HW

Group

Tippkemper - Matrix GmbH

Meegener Str. 43 D-51491 Overath
Tel.: +49 (0) 2206/9566-0 Fax -19

Matrix Elektronik AG

Kirchweg 24 CH-5422 Oberehrendingen
Tel.: +41 (0) 56/2220-757 Fax -563