

GN/DN miniature photoelectric sensor



- Miniature version with long distances
- Red visible light
- Cable or connector
- IP67

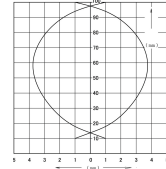
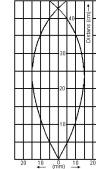
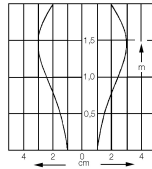
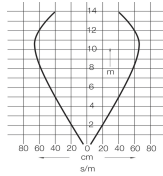
Area of application

The GN/DN series is a series of miniature photoelectric sensors with long distances. Modern technology has allowed for the successful manufacture of a range of low-price photoelectric sensors offering high technical performance. The compact housings, together with long distances, make this series appropriate for most applications.

Technical data

Order number	GNT10CR	GNM2CR	GNR40CR	DNS10R
Function	Through-beam	Polarised Retro Reflector	Diffuse Reflection	Background Suppression
Detection distance	10 m	0.03 to 1.3 m*	400 mm	25-100 mm (adjustable 30-100 mm)
Smallest detectable objects	Ø6 mm	-	-	-
Power consumption	Transmitter: <22 mA Receiver: <15 mA	<25 mA	<25 mA	<27 mA
Light source (type of LED)	Red visible (700 nm)	Red visible (639 nm)	Red visible (644 nm)	Red visible (700 nm)

Scatter beams



* To bi-pack reflector K71 (0.01-2 m to reflector K7)

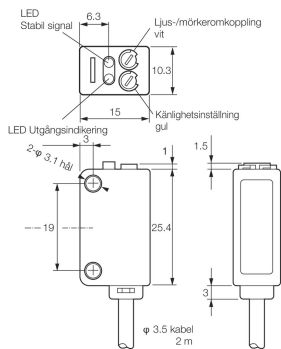
General technical data

Supply voltage	12-24 VDC ±10 % max. 10 % ripple	Temperature range	-25 °C to +55 °C.
Output data	PNP 100 mA max	Protection class	IP67
LED indication	Red LED indicates output Green LED comes on when detection is satisfactory	Enclosure material	Carbonate
Light/dark on	Switch	Connection	2 m cable or M8 4-pin contact (-J)
Sensitivity setting	Potentiometer	Reaction time	0.5 ms (max.)
Max. interfering light	5000 lux	Electromagnetic compatibility	EN50081-1
Approvals		EMC 89/336/EEC	EN50082-2

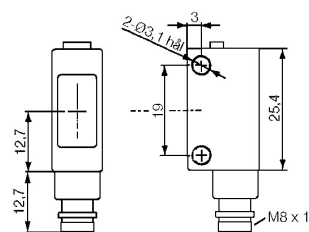


Dimensions

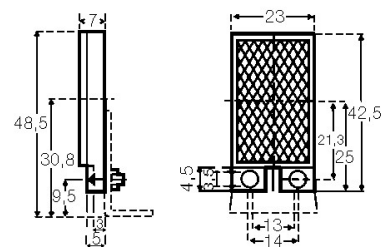
Embedded cable



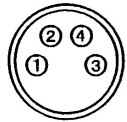
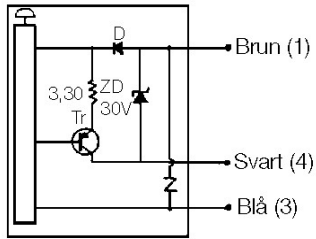
M8 connector



Reflector K71



Connection



① Brun ② Vit ③ Blå ④ Svart

Accessories

Accessories

Shielding mask

GNP1

GNP2

GNP3

GNP5-1



Hole size –

smallest detectable objects

1 mm

2 mm

3 mm

1x5 mm

Detection distance

400 mm

1 m

3 m

2 m

Shielding masks are used together with a transmitter/receiver to be able to detect extremely small objects or to reduce the detection distance. These masks are fitted to the lenses of both the transmitter and the receiver to give the best results.

Brackets

GNB1

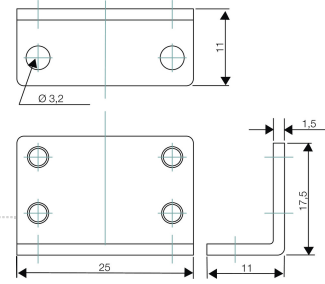


Bracket, vertical.

GNB2



Wall bracket, rear.

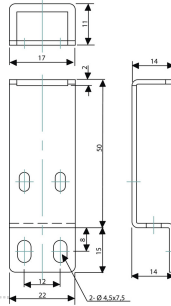


GNB3



Wall bracket, side.

Suitable for models with embedded cable.



Order number

Order no.	Version	Distance	Output
GNT10CR-PNP	Through-beam	10 m	PNP
GNT10CR-PNP-J	Through-beam, M8 Connector	10 m	PNP
GNM2CR-PNP	Polarised Retro Reflector	0.03 to 1.3 m	PNP
GNM2CR-PNP-J	Polarised Retro Reflector, M8 Connector	0.03 to 1.3 m	PNP
GNR40CR-PNP	Diffuse Reflection	400 mm	PNP
GNR40CR-PNP-J	Diffuse Reflection, M8 Connector	400 mm	PNP
DNS10R-PNP	Background Suppression	100 mm	PNP
DNS10R-PNP-J	Background Suppression, M8 Connector	100 mm	PNP
GNB1	Bracket, vertical.		
GNB2	Bracket, front/wall		
GNB3	Bracket, side/wall		
GNP1	Shielding mask, hole Ø1 mm, to fit GNT10CR		
GNP2	Shielding mask, hole Ø2 mm, to fit GNT10CR		
GNP3	Shielding mask, hole Ø3 mm, to fit GNT10CR		
GNP5-1	Shielding mask, hole 5x1 mm, to fit GNT10CR		

NPN output on request.

NOTE: Brackets are not supplied with photoelectric sensors. Ordered separately.