



Photoelectric sensors
G10, Photoelectric proximity sensor, energetic

GTE10-N1212



Model Name > **GTE10-N1212**
Part No. > **1065869**



Illustration may differ

At a glance

- Long sensing ranges: up to 2,000 mm
- PinPoint LED with bright and precise light spot
- Immunity to ambient light
- 10 V DC ... 30 V DC or 24 V AC/DC ... 240 V AC/DC power supply with PNP/NPN or relay output
- Small housing design
- Rugged sensor housing with metal-reinforced holes for assembly
- Q-Lock assembly system for mounting and aligning the sensor within a few seconds

Your benefits

- Long sensing ranges for maximum operating reserves
- Efficient installation: the GTE10 and the Q-Lock assembly system save valuable hours when mounting and commissioning multiple sensors
- Universal DC or AC/DC power supply for even greater application flexibility
- Highly reliable and durable despite optical interference or mechanical loads
- Wide range of accessories simplifies sensor integration: aids for assembly and connectors



Features

Sensor/detection principle:	Photoelectric proximity sensor, energetic
Dimensions (W x H x D):	20 mm x 50 mm x 39 mm
Housing design (light emission):	Rectangular
Sensing range max.:	20 mm ... 1,300 mm ¹⁾
Sensing range:	40 mm ... 950 mm ²⁾
Type of light:	Visible red light
Light source:	PinPoint LED ³⁾
Wave length:	625 nm
Adjustment:	Potentiometer, 270 °
Light spot size (distance):	Ø 28 mm (1,400 mm)

^{1) 2)} Object with 90 % reflectance (referred to standard white, DIN 5033) ³⁾ Average service life: 100,000 h at T_U = +25 °C

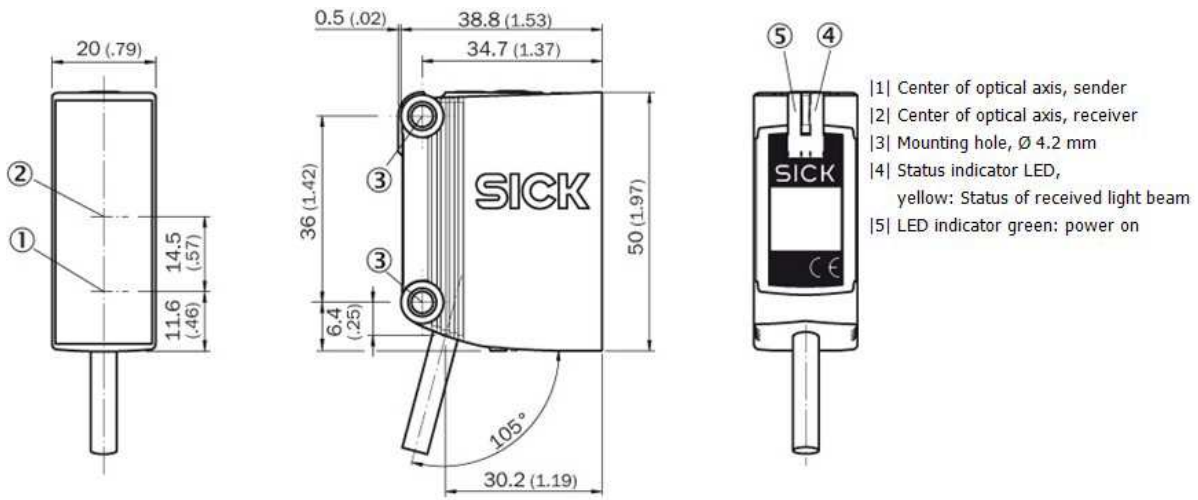
Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC ¹⁾
Ripple:	± 5 Vpp ²⁾
Power consumption:	≤ 20 mA

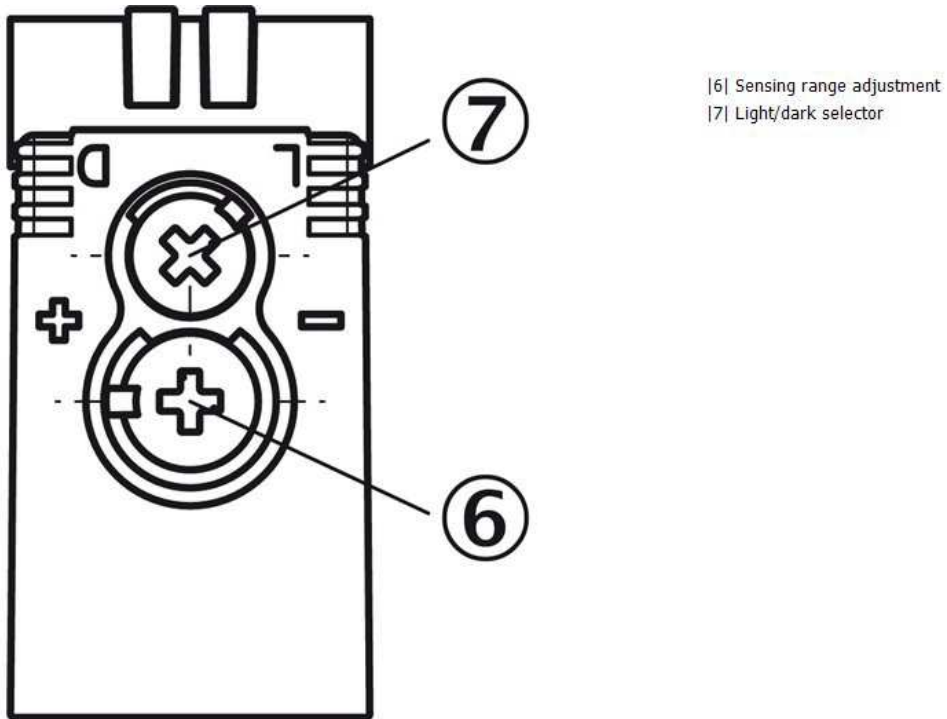
Output type:	NPN, open collector
Switching mode:	Light/dark switching
Switching mode selector:	Selectable via light/dark selector
Output current I _{max} :	≤ 100 mA
Response time:	≤ 500 μs ³⁾
Connection type:	Cable, 3-wire, 2 m ⁴⁾
Cable material:	PVC
Conductor cross-section:	0.14 mm ²
Circuit protection:::	A, B, C, D ^{5) 6) 7) 8)}
Protection class:	III
Weight:	90 g
Polarisation filter:	-
Special device:	-
Enclosure rating:	IP 67
Items supplied:	Mounting bracket BEF-G10DC01
EMC:	EN 60947-5-2
Ambient temperature operation:	-30 °C ... +60 °C
Ambient storage temperature:	-40 °C ... +70 °C
UL File No.:	NRKH.E348498 & NRKH7.E348498
Further standards:	UL325 ⁹⁾
Switching frequency max.:	1,000 Hz ¹⁰⁾
Housing material:	PVC/PMMA, Plastic

1) Limit values: operation in short-circuit protected network max. 8 A 2) May not exceed or fall below U_v tolerances 3) Signal transit time with resistive load 4) Do not bend below 0 °C 5) A = V_S connections reverse-polarity protected 6) B = inputs and output reverse-polarity protected 7) C = interference suppression 8) D = outputs overcurrent and short-circuit protected 9) Complies with the UL325 standard when used with sturdy protection hood (e.g. BEF-G10WSG, 2071960). 10) With light/dark ratio 1:1

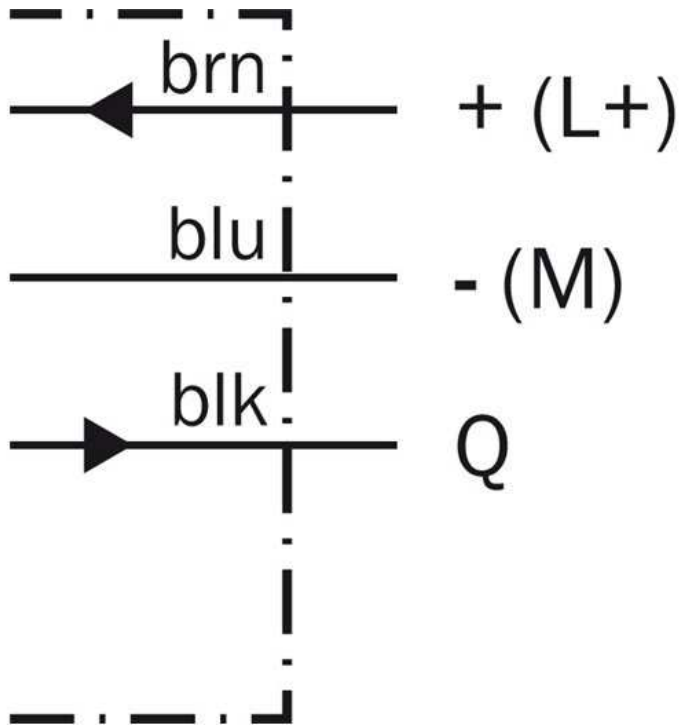
Dimensional drawing



Adjustments possible

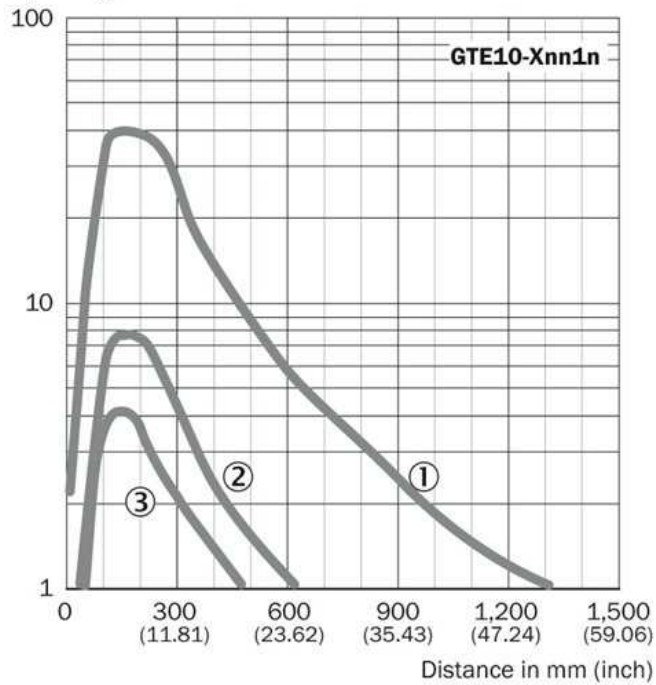


Connection diagram



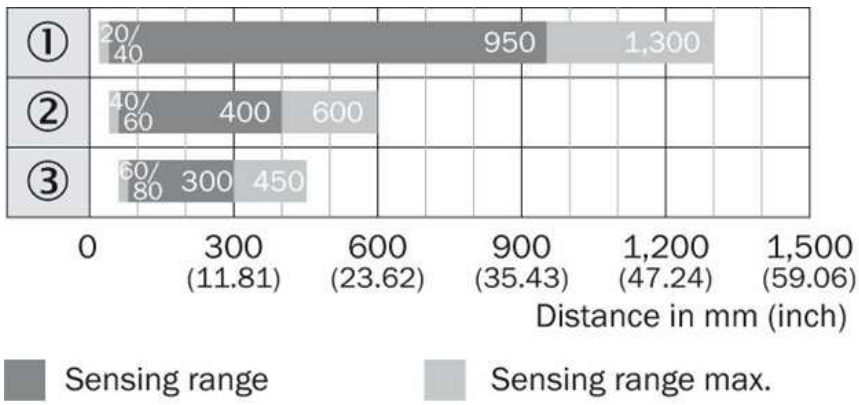
Operating reserve

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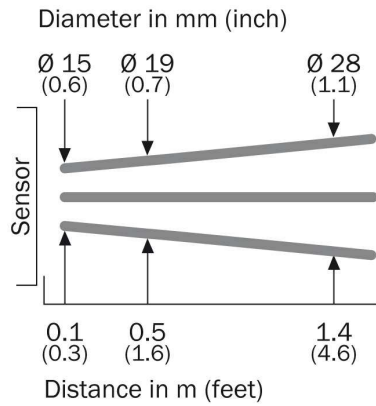


- |1| Sensing range on white, 90 % remission
- |2| Sensing range on gray, 18 % remission
- |3| Sensing range on black, 6 % remission

Scanning range



Light spot size



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