GTB10-P0421S07

G10

SMALL PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

GTB10-P0421S07 | G10
SMALL PHOTOELECTRIC SENSORS

Ordering information

Type	Part no.
GTB10-P0421S07	1083158

Other models and accessories → www.sick.com/G10

Illustration may differ

Detailed technical data

Features

Functional principle	Photoelectric proximity sensor
Functional principle detail	Background suppression
Dimensions (W x H x D)	20 mm x 50 mm x 39 mm
Housing design (light emission)	Rectangular
Sensing range	≤ 400 mm [1]
Type of light	Infrared light
Light source	LED [2]
Light spot size (distance)	Ø 22 mm (700 mm)
Wave length	850 nm
Adjustment	Fix

[1] Fixed sensing range.

[2] Average service life: 100,000 h at T_U = +25 °C.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC [1]

[1] Limit values when operated 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] With light/dark ratio 1:1.

[5] Do not bend below 0 °C.

[6] A = V_S connections reverse-polarity protected.

[7] B = inputs and output reverse-polarity protected.

[8] C = interference suppression.

[9] D = outputs overcurrent and short-circuit protected.

Ripple	< 5 V_{pp} [2]
Current consumption	20 mA
Switching output	PNP
Switching mode	Light switching
Output current I$_{max.}$	≤ 100 mA
Response time	≤ 500 µs [3]
Switching frequency	1,000 Hz [4]
Connection type	Cable with connector, JST EHR-6, 6-pin, 350 mm [5]
Cable material	PVC
Circuit protection	A [6] B [7] C [8] D [9]
Protection class	III
Weight	70 g
Housing material	Plastic, ABS/PMMA
Enclosure rating	IP67
Electromagnetic compatibility (EMC)	EN 60947-5-2
Ambient operating temperature	–30 °C ... +60 °C
Ambient temperature, storage	–40 °C ... +70 °C

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[3] Signal transit time with resistive load.

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[5] Do not bend below 0 °C.

[6] A = V_S connections reverse-polarity protected.

[7] B = inputs and output reverse-polarity protected.

[8] C = interference suppression.

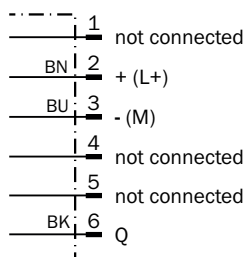[9] D = outputs overcurrent and short-circuit protected.

Classifications

eCl@ss 5.0	27270904
eCl@ss 5.1.4	27270904
eCl@ss 6.0	27270904
eCl@ss 6.2	27270904
eCl@ss 7.0	27270904
eCl@ss 8.0	27270904
eCl@ss 8.1	27270904
eCl@ss 9.0	27270904
eCl@ss 10.0	27270904
eCl@ss 11.0	27270904
eCl@ss 12.0	27270903
ETIM 5.0	EC002719
ETIM 6.0	EC002719

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ETIM 7.0	EC002719
ETIM 8.0	EC002719
UNSPSC 16.0901	39121528

Connection diagram

Cd-361

	1	not connected
BN	2	+ (L+)
BU	3	- (M)
	4	not connected
	5	not connected
BK	6	Q

Light spot size

Light spot size

Diameter in mm (inch)

Ø 16 (0.6)   Ø 22 (0.9)   Ø 25 (1.0)

Sensor

100 (3.9)   700 (27.6)   1,000 (39.4)

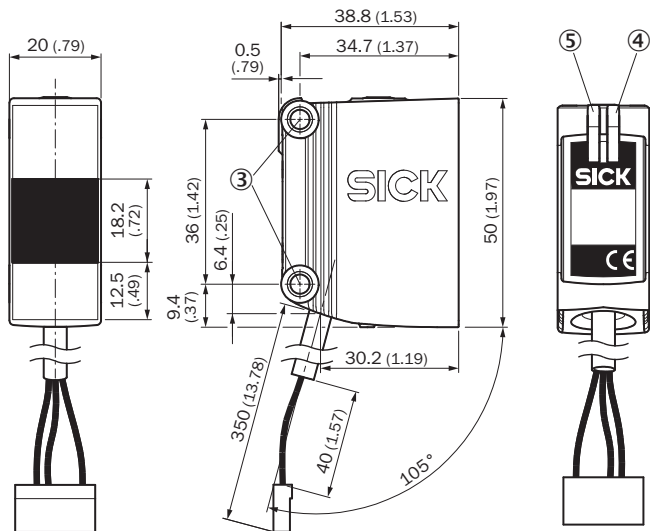Distance in mm (inch)

Adjustments

⑥
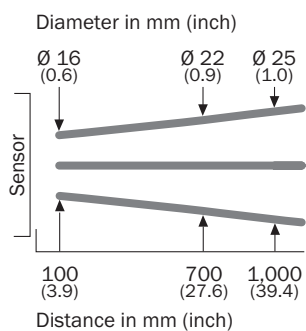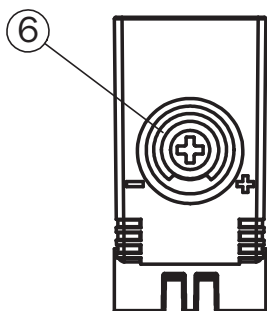
⑥ Potentiometer (sealed)

Dimensional drawing (Dimensions in mm (inch))

③ Mounting hole M4 (Ø 4.1 mm)
④ LED indicator yellow: Status of received light beam
⑤ LED indicator green: power on

Recommended accessories

Other models and accessories ➜ www.sick.com/G10

	Brief description	Type	Part no.
Universal bar clamp systems			
	Q-Lock, bar clamp system for G10 and reflector P250, Die-cast zinc, steel, zinc coated	BEF-KHSQ12R01	2071260

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is "Sensor Intelligence."

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