GTE6-F4411V

G6 Inox

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

GTE6-F4411V | G6 Inox

PHOTOELECTRIC SENSORS

Ordering information

Type	Part no.
GTE6-F4411V	1084099

Other models and accessories ➜ www.sick.com/G6_Inox

Detailed technical data

Features

Sensor/ detection principle	Photoelectric proximity sensor, energetic
Dimensions (W x H x D)	15 mm x 44 mm x 22 mm
Housing design (light emission)	Rectangular
Sensing range max.	10 mm ... 300 mm [1]
Sensing range	15 mm ... 250 mm
Type of light	Visible red light
Light source	PinPoint LED [2]
Light spot size (distance)	Ø 6 mm (100 mm)
Wave length	650 nm
Adjustment	Mechanical spindle, 5 turns

[1] Object with 90 % reflectance (referred to standard white, DIN 5033).

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

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC [1]
Ripple	± 10 % [2]
Power consumption	≤ 30 mA [3]

[1] Limit values when operated in short-circuit protected network: max. 8 A.

[2] May not exceed or fall below U_v tolerances.

[3] Without load.

[4] At Uv > 24 V, IA max. = 50 mA.

[5] Signal transit time with resistive load.

[6] With light/dark ratio 1:1.

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

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

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

[10] According to ISO 20653:2013-03.

[11] Temperature stability following adjustment +/-10 °C.

Switching output	PNP
Output function	Complementary switching output
Switching mode	Light/dark switching
Signal voltage PNP HIGH/LOW	V_S - (≤ 3 V) / approx. 0 V
Output current I$_{max.}$	≤ 100 mA [4]
Response time	< 1.25 ms [5]
Switching frequency	± 500 Hz [6]
Connection type	Connector M8, 4-pin
Circuit protection	A [7] B [8] D [9]
Protection class	III
Weight	40 g
Housing material	Stainless steel, Stainless steel V4A (1.4404, 316L)
Optics material	Plastic, PMMA
Enclosure rating	IP67 IP69K [10]
Ambient operating temperature	–25 °C ... +55 °C [11]
Ambient storage temperature	–30 °C ... +75 °C
UL File No.	NRKH.E348498 & NRKH7.E348498

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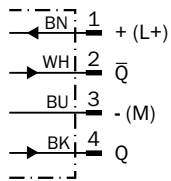
[10] According to ISO 20653:2013-03.

[11] Temperature stability following adjustment +/-10 °C.

Classifications

ECl@ss 5.0	27270903
ECl@ss 5.1.4	27270903
ECl@ss 6.0	27270903
ECl@ss 6.2	27270903
ECl@ss 7.0	27270903
ECl@ss 8.0	27270903
ECl@ss 8.1	27270903
ECl@ss 9.0	27270903
ETIM 5.0	EC001821
ETIM 6.0	EC001821
UNSPSC 16.0901	39121528

Connection diagram

Cd-084

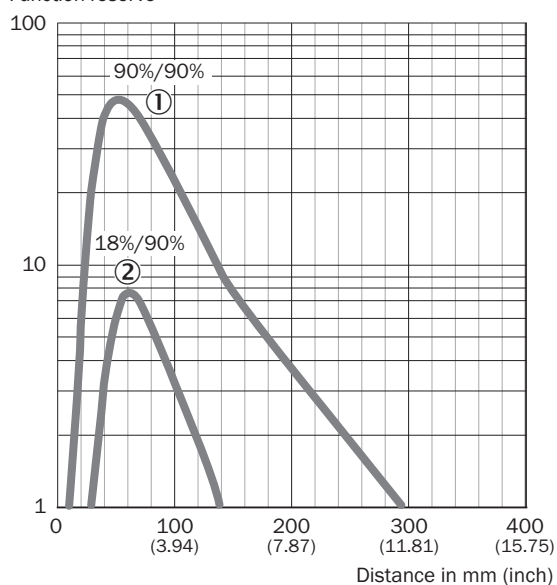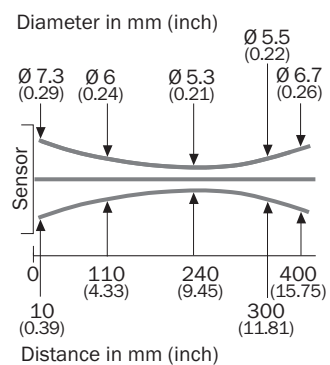|		
BN	1	+ (L+)
WH	2	$\overline{Q}$
BU	3	- (M)
BK	4	Q

Characteristic curve

GTE6 Inox, Red, Standard

Function reserve

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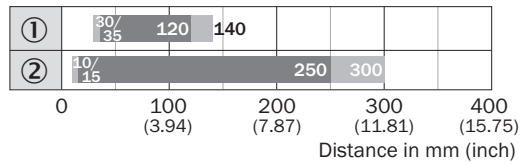③ Sensing range on white, 90% remission

Light spot size

GTE6 Inox, Red, Standard
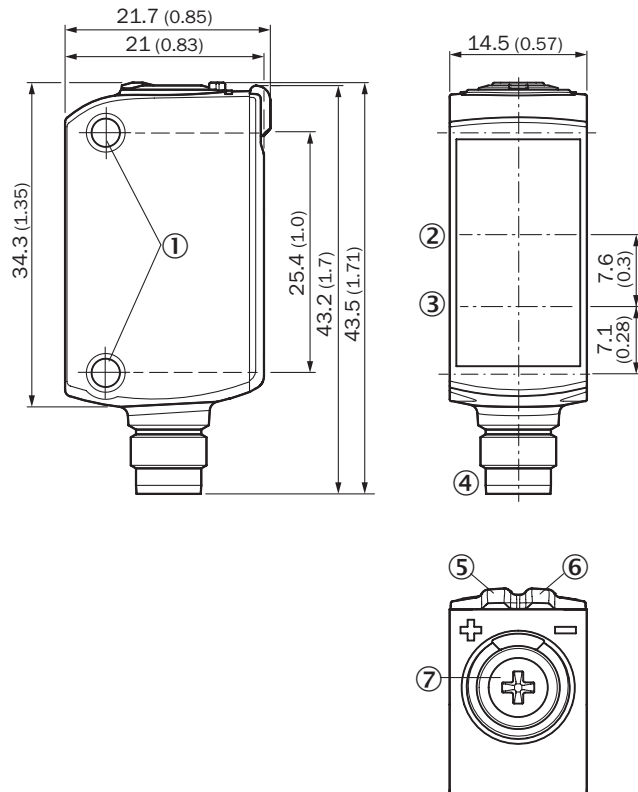
Sensing range diagram

GTE6 Inox, Red, Standard

①		30/35	120	140		
②		10/15		250	300	

0   100 (3.94)   200 (7.87)   300 (11.81)   400 (15.75)

Distance in mm (inch)

■ Sensing range   ■ Sensing range max.

① Sensing range on gray, 18 % remission
② Sensing range on white, 90% remission

Dimensional drawing (Dimensions in mm (inch))

GTB6, GTE6, GL6, GSE6 Inox, male connector

21.7 (0.85)
21 (0.83)
14.5 (0.57)
34.3 (1.35)
25.4 (1.0)
43.2 (1.7)
43.5 (1.71)
7.6 (0.3)
7.1 (0.28)

① M3 mounting hole
② Optical axis, receiver
③ Optical axis, sender
④ Connection
⑤ LED indicator yellow: Status of received light beam
⑥ LED indicator green: Supply voltage active
⑦ Potentiometer

Recommended accessories

Other models and accessories ➜ www.sick.com/G6_Inox

	Brief description	Type	Part no.
Universal bar clamp systems			
	Clamp bar to fix G6 sensors on rods of 10 mm, clamp-on design up to 4 mm wall thickness, aluminum (clamp bar), stainless steel (bracket), clamp bar for 10 mm rod mounting and clamp function, mounting bracket, mounting hardware	BEF-KHS-ISG6	2075080
Mounting brackets and plates			
		BEF-WN-G6	2062909

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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