



GTE2F-F1111

G2

PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

Mechanics/electronics

Supply voltage U_B	10 V DC ... 30 V DC
Ripple	$< 5 V_{pp}^{1)}$
Current consumption	20 mA ²⁾
Switching output	PNP
Switching mode	Dark switching
Output current I_{max}	≤ 50 mA
Response time	< 0.625 ms ³⁾
Switching frequency	800 Hz ⁴⁾
Connection type	Cable, 3-wire, 2 m ⁵⁾
Cable material	Plastic, PVC
Cable diameter	$\varnothing$ 2.3 mm
Circuit protection	A ⁶⁾ C ⁷⁾ D ⁸⁾
Weight	22 g
Housing material	Plastic, VISTAL®
Optics material	Plastic, MABS
Enclosure rating	IP67
Shock resistance	294 m/s ² (approx. 30 g, 6 shocks in x-, y-, z-axis)
Vibration resistance	10 Hz ... 55 Hz (amplitude 0.5 mm, x-, y-, z-axis 0.5 hours (each direction)) 138 m/s ² 10 Hz ... 2,000 Hz (approx. 14 g, x-, y-, z-axis 2 hours)
Ambient operating temperature	-20 °C ... +50 °C
Ambient temperature, storage	-40 °C ... +70 °C
UL File No.	NRKH.E348498 & NRKH7.E348498
Repeatability (T_a not constant)	0.1 mm
Hysteresis	< 2.25 mm

1) May not fall below or exceed U_y tolerances.

2) Without load.

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) C = interference suppression.

8) D = outputs overcurrent and short-circuit protected.

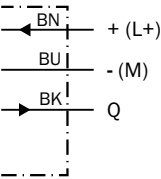
Certificates

EU declaration of conformity	✓
UK declaration of conformity	✓
ACMA declaration of conformity	✓
Moroccan declaration of conformity	✓
China-RoHS	✓
cRUus certificate	✓

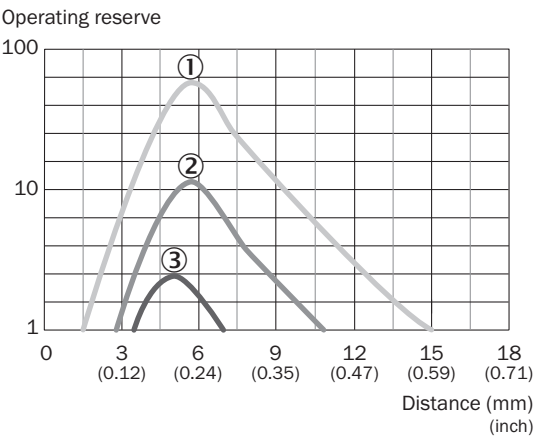
Classifications

ECLASS 5.0	27270903
ECLASS 5.1.4	27270903
ECLASS 6.0	27270903
ECLASS 6.2	27270903
ECLASS 7.0	27270903
ECLASS 8.0	27270903
ECLASS 8.1	27270903
ECLASS 9.0	27270903
ECLASS 10.0	27270904
ECLASS 11.0	27270904
ECLASS 12.0	27270903
ETIM 5.0	EC001821
ETIM 6.0	EC001821
ETIM 7.0	EC002719
ETIM 8.0	EC002719
UNSPSC 16.0901	39121528

Connection diagram Cd-043

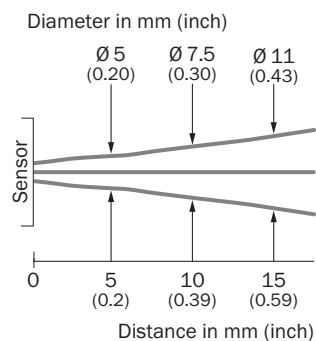


Characteristic curve

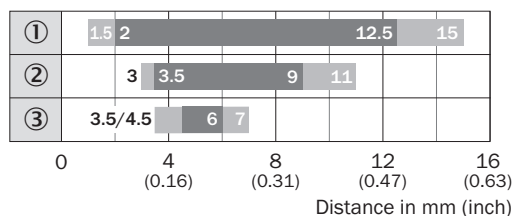


- ① Sensing range on white, 90% remission factor
- ② Sensing range on gray, 18% remission factor
- ③ Sensing range on black, 6% remission factor

Light spot size

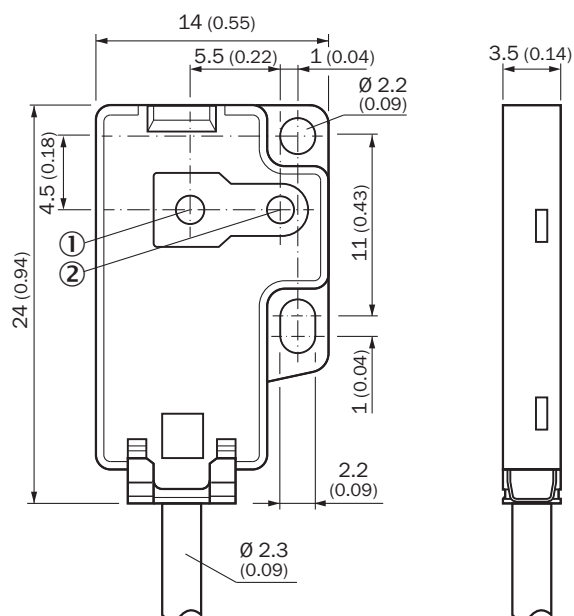


Sensing range diagram



- Sensing range
- Sensing range typ. max.
- ① Sensing range on white, 90% remission factor
- ② Sensing range on gray, 18% remission factor
- ③ Sensing range on black, 6% remission factor

Dimensional drawing



- ① optical axis, receiver
- ② optical axis, sender

Recommended accessories

Other models and accessories → www.sick.com/G2

	Brief description	Type	part no.
Mounting systems			
	• Description: Mounting plate for direct mounting, from the rear, on wall or machine, not adjustable. 10 Piece ,Black ,Plastic, VISTAL®. Suitable for GTB2F and GSE2F • Packing unit: 10 pieces	BEF-G2F-FLAT-SPACER-M2	2107263

