



WLL160-F420

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
WLL160-F420	6009990

Other models and accessories → www.sick.com/

Detailed technical data

Features

Dimensions (W x H x D)	12 mm x 38.5 mm x 59 mm
Housing design (light emission)	Rectangular
Sensing range max.	0 mm ... 2,000 mm ¹⁾
Sensing range	0 mm ... 400 mm ¹⁾
Type of light	Visible red light
Light source	LED
Wave length	660 nm

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

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC
Ripple	± 10 %
Power consumption	30 mA ¹⁾
Switching output	PNP
Switching mode	Light/dark switching
Response time	≤ 0.35 ms ²⁾
Connection type	Male connector M8, 4-pin
Housing material	Plastic, ABS
Optics material	Plastic, PMMA
Enclosure rating	IP67
Ambient operating temperature	-25 °C ... +55 °C
Ambient storage temperature	-40 °C ... +70 °C

¹⁾ Without load.

²⁾ Signal transit time with resistive load.

UL File No.	NRNT2.E128350 & NRNT8.E128350
--------------------	-------------------------------

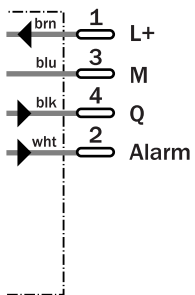
1) Without load.

2) Signal transit time with resistive load.

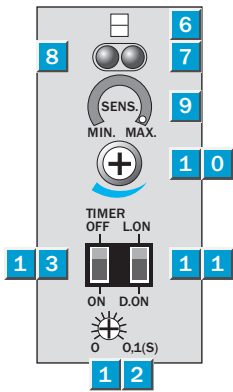
Classifications

ECl@ss 5.0	27270905
ECl@ss 5.1.4	27270905
ECl@ss 6.0	27270905
ECl@ss 6.2	27270905
ECl@ss 7.0	27270905
ECl@ss 8.0	27270905
ECl@ss 8.1	27270905
ECl@ss 9.0	27270905
ETIM 5.0	EC002651
ETIM 6.0	EC002651
UNSPSC 16.0901	39121528

Connection diagram

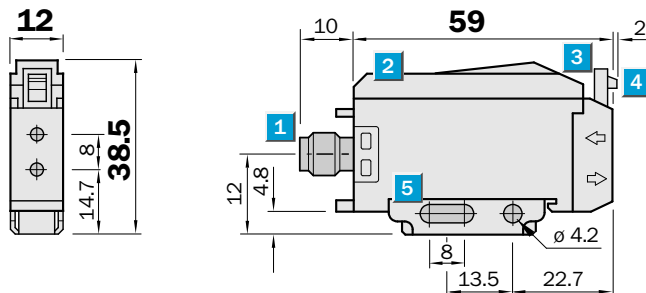


Adjustments possible



- ⑦ Red LED (lights up when switching threshold is exceeded)
- ⑧ Green LED indicator (lights up when operating reserve is exceeded >1.3)
- ⑨ Sensitivity scale 270°
- ⑩ Sensitivity adjustment (4 turns)
- ⑪ Light/dark selector
- ⑫ Switch-off delay 0...100ms

Dimensional drawing (Dimensions in mm (inch))



- ① Connection
- ② Protection Hood
- ③ Locking the fiber-optic cables (press down)
- ④ Releasing the fiber-optic cables (press lug)
- ⑤ Mounting bracket (included in delivery)

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.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com