

WLL160-F420





### Ordering information

| Туре        | Part no. |
|-------------|----------|
| WLL160-F420 | 6009990  |

Other models and accessories → www.sick.com/

Illustration may differ



#### 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 <sup>1)</sup> |
| Sensing range                   | 0 mm 400 mm <sup>1)</sup>   |
| Type of light                   | Visible red light           |
| Light source                    | LED                         |
| Wave length                     | 660 nm                      |

 $<sup>^{1)}</sup>$  Object with 90% remission (based on standard white, DIN 5033).

### Mechanics/electronics

| Supply voltage                | 10 V DC 30 V DC               |
|-------------------------------|-------------------------------|
| Ripple                        | ± 10 %                        |
| Current consumption           | 30 mA <sup>1)</sup>           |
| Switching output              | PNP                           |
| Switching mode                | Light/dark switching          |
| Response time                 | $\leq$ 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 temperature, storage  | -40 °C +70 °C                 |
| UL File No.                   | NRNT2.E128350 & NRNT8.E128350 |

 $<sup>^{1)}</sup>$  Without load.

 $<sup>^{2)}</sup>$  Signal transit time with resistive load.

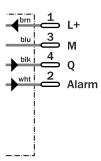
### Classifications

| 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 |
| eCl@ss 10.0    | 27270905 |
| eCl@ss 11.0    | 27270905 |
| ETIM 5.0       | EC002651 |
| ETIM 6.0       | EC002651 |
| ETIM 7.0       | EC002651 |
| ETIM 8.0       | EC002651 |
| UNSPSC 16.0901 | 39121528 |

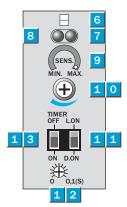
# Connection type



## Connection diagram

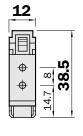


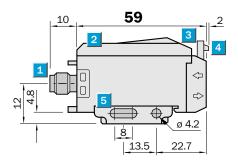
### Adjustments



- ⑦ Red LED (lights up when switching threshold is exceeded)
- $\hbox{ @ Green LED indicator (lights up when operating reserve is exceeded $>$ 1.3$) } \\$
- Sensitivity scale 270°
- Sensitivity adjustment (4 turns)
- 1 Light/dark selector
- ② Switch-off delay 0...100ms

### Dimensional drawing (Dimensions in mm (inch))





- ① Connection
- ② Protection Hood
- 3 Locking the fiber-optic cables (press down)
- 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

