



## Photoelectric sensors

VL18-2P4470S02



**Model Name** > VL18-2P4470S02  
**Part No.** > 6011640



Illustration may differ

### At a glance

- Standard photoelectric sensor family in M18 cylindrical housing
- Scanning distance up to 5 m
- Voltage supply of 20 to 253 V AC with TRIAC output.

### Your benefits

- Simple, standardized design ensures easy mounting, alignment and replacement
- For connection to alternating voltage
- Polarizing filter prevents false readings on reflective surfaces, reducing downtime



### Features

Sensor/detection principle:	Photoelectric retro-reflective sensor
Housing design (light emission):	angled 90°
Housing length:	86 mm
Thread diameter (housing):	M18 x 1
Optical axis:	radial
Sensing range max.:	0.03 m ... 2.5 m <sup>1)</sup>
Sensing range:	0.05 m ... 2 m <sup>2)</sup>
Type of light:	Visible red light
Light source:	LED <sup>3)</sup>
Wave length:	660 nm
Adjustment:	no/fix

<sup>1) 2)</sup> C110A <sup>3)</sup> Average service life of 100,000 h at T<sub>A</sub> = +25 °C

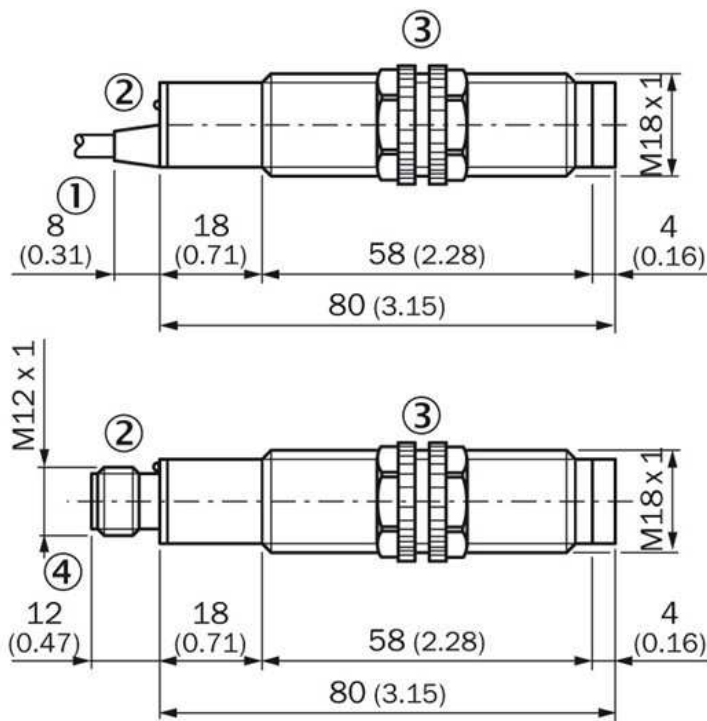
### Mechanics/electronics

Supply voltage:	10 V DC ... 30 V DC <sup>1)</sup>
Residual ripple:	≤ 10 % <sup>2)</sup>
Power consumption:	≤ 30 mA <sup>3)</sup>
Output type:	PNP, light/dark-switching
Signal voltage PNP HIGH/LOW:	Approx. VS - 1.0 V/0 V
Output current I <sub>max.</sub> :	100 mA
Response time:	≤ 5 ms <sup>4)</sup>
Switching frequency:	100 Hz with light/dark ratio 1:1 <sup>5)</sup>
Electrical connection:	Connector M12, 4-pin
Circuit protection::	B D <sup>6) 7)</sup>

Protection class: III  
 Weight: 120 g  
 Special device: ✓  
 Housing material: Nickel-plated brass  
 Optics material: PMMA  
 Enclosure rating: IP 67  
 Ambient temperature operation: -25 °C ... 60 °C

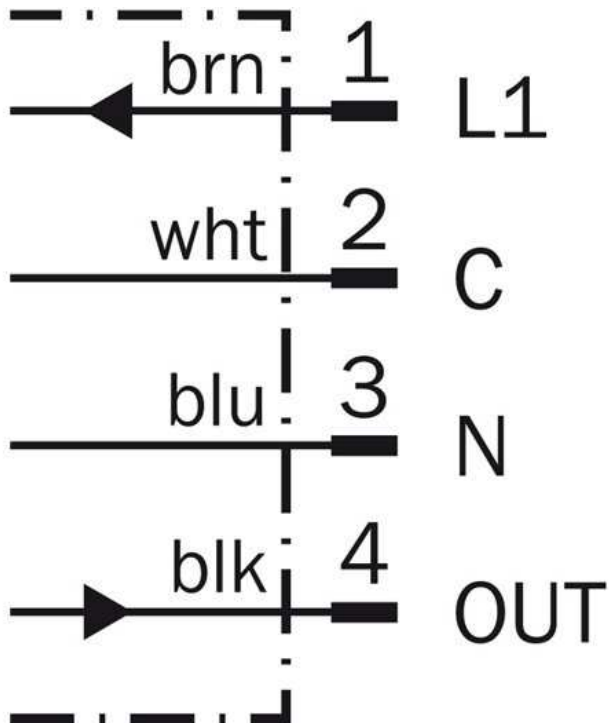
1) Limit values 2) May not exceed or fall short of  $V_S$  tolerances 3) Without load 4) Signal transit time with resistive load 5) With light/dark ratio 1:1 6) B = inputs and output reverse-polarity protected 7) D = outputs overcurrent and short-circuit protected

### Dimensional drawing

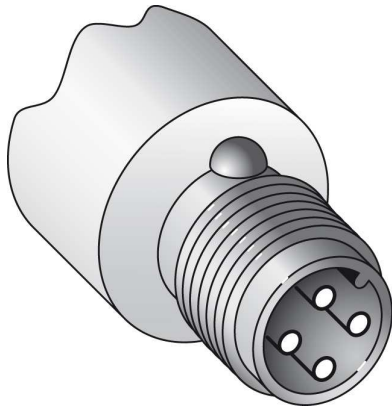


- |1| Connection cable
- |2| LED signal strength indicator
- |3| Fastening nuts, 22 mm hex (included)
- |4| Connector M12, 4- pin

Connection diagram



Connection type



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