

WS/WE18-3P630 W18-3

SMALL PHOTOELECTRIC SENSORS





Ordering information

Туре	Part no.
WS/WE18-3P630	1075293

Other models and accessories → www.sick.com/W18-3

Illustration may differ



Detailed technical data

Features

Functional principle	Through-beam photoelectric sensor
Dimensions (W x H x D)	17.6 mm x 75.5 mm x 33.5 mm
Housing design (light emission)	Rectangular
Sensing range max.	0 m 20 m
Focus	1.5°
Type of light	Visible red light
Light source	LED ¹⁾
Light spot size (distance)	Ø 450 mm (15 m)
Angle of dispersion	1.5°
Wave length	645 nm
Adjustment	Potentiometer, 1 turn

 $^{^{1)}}$ Average service life: 100,000 h at T_U = +25 °C.

Mechanics/electronics

Supply voltage	10 V DC 30 V DC ¹⁾
Ripple	< 5 V _{pp} ²⁾

 $^{^{1)}}$ 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⁾ Signal transit time with resistive load.

⁵⁾ With light/dark ratio 1:1.

 $^{^{6)}}$ A = V_S connections reverse-polarity protected.

⁷⁾ C = interference suppression.

 $^{^{8)}}$ D = outputs overcurrent and short-circuit protected.

 $^{^{1)}\,\}mathrm{Limit}$ values when operated in short-circuit protected network: max. 8 A.

Safety-related parameters

MTTF _D	857 years
DC _{avg}	0 %

Classifications

eCl@ss 5.0	27270901
eCl@ss 5.1.4	27270901
eCl@ss 6.0	27270901
eCl@ss 6.2	27270901
eCl@ss 7.0	27270901
eCl@ss 8.0	27270901
eCl@ss 8.1	27270901
eCl@ss 9.0	27270901
eCl@ss 10.0	27270901

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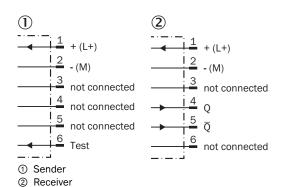
eCl@ss 11.0	27270901
eCl@ss 12.0	27270901
ETIM 5.0	EC002716
ETIM 6.0	EC002716
ETIM 7.0	EC002716
ETIM 8.0	EC002716
UNSPSC 16.0901	39121528

Connection type

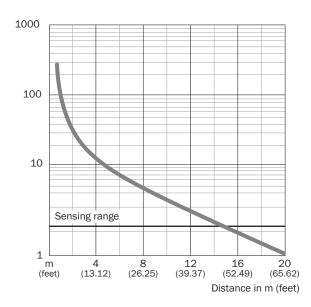


Connection diagram

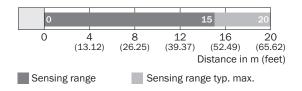
Cd-075



Characteristic curve

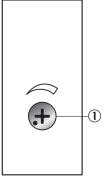


Sensing range diagram



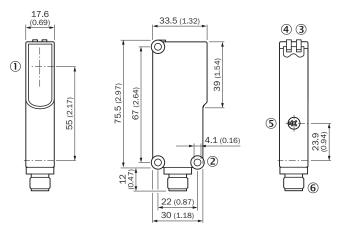
Adjustments

Potentiometer



 $\ensuremath{\textcircled{1}}$ Setting of the sensing range: potentiometer, 4 revolutions

Dimensional drawing (Dimensions in mm (inch))



- ① Center of optical axis
- ② Mounting hole ø 4.1 mm
- 3 LED indicator yellow: Status of received light beam
- ④ LED indicator green: Supply voltage active
- (5) Sensitivity control, potentiometer 270° on WE
- 6 4-pin M12 male connector or 2 m cable or 6-pin cubic connector

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:

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