



MHT15-P3347

MH15

CYLINDRICAL PHOTOELECTRIC SENSORS

**SICK**  
Sensor Intelligence.



## Ordering information

Type	Part no.
MHT15-P3347	1026113

Other models and accessories → [www.sick.com/MH15](http://www.sick.com/MH15)

Illustration may differ



## Detailed technical data

### Features

<b>Functional principle</b>	Photoelectric proximity sensor
<b>Functional principle detail</b>	Energetic
<b>Dimensions (W x H x D)</b>	18 mm x 18 mm x 36.8 mm
<b>Housing design (light emission)</b>	Cylindrical
<b>Housing length</b>	36.8 mm
<b>Thread diameter (housing)</b>	M18 x 1
<b>Optical axis</b>	Axial
<b>Sensing range max.</b>	10 mm ... 350 mm <sup>1)</sup>
<b>Sensing range</b>	10 mm ... 250 mm
<b>Focus</b>	Approx. 4.5°
<b>Type of light</b>	Infrared light
<b>Light source</b>	LED <sup>2)</sup>
<b>Light spot size (distance)</b>	Ø 50 mm (350 mm)
<b>Angle of dispersion</b>	Approx. 4.5°
<b>Wave length</b>	950 nm
<b>Adjustment</b>	Potentiometer, 270° (Sensing range)

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

<sup>2)</sup> Average service life: 100,000 h at T<sub>J</sub> = +25 °C.

## Mechanics/electronics

<b>Supply voltage</b>	10 V DC ... 30 V DC <sup>1)</sup>
<b>Ripple</b>	< 5 V <sub>pp</sub> <sup>2)</sup>
<b>Current consumption</b>	30 mA <sup>3)</sup>
<b>Switching output</b>	PNP
<b>Switching mode</b>	Light switching
<b>Signal voltage PNP HIGH/LOW</b>	U <sub>v</sub> - (< 2,9 V) / ca. 0 V
<b>Output current I<sub>max</sub></b>	≤ 100 mA
<b>Response time</b>	≤ 1.25 ms <sup>4)</sup>
<b>Switching frequency</b>	400 Hz <sup>5)</sup>
<b>Connection type</b>	Connector M12, 3-pin
<b>Circuit protection</b>	A <sup>6)</sup> C <sup>7)</sup> D <sup>8)</sup>
<b>Protection class</b>	III
<b>Weight</b>	7 g
<b>Housing material</b>	Plastic, ABS
<b>Optics material</b>	Plastic, PMMA
<b>Enclosure rating</b>	IP67 IP69K
<b>Ambient operating temperature</b>	≤ +55 °C
<b>Ambient temperature, storage</b>	≤ +70 °C
<b>UL File No.</b>	NRKH.E189383 & NRKH7.E189383

1) Limit values.

2) May not exceed or fall below U<sub>v</sub> tolerances.

3) Without load.

4) Signal transit time with resistive load.

5) With light/dark ratio 1:1.

6) A = V<sub>S</sub> connections reverse-polarity protected.

7) C = interference suppression.

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

## Classifications

<b>eCl@ss 5.0</b>	27270903
<b>eCl@ss 5.1.4</b>	27270903
<b>eCl@ss 6.0</b>	27270903
<b>eCl@ss 6.2</b>	27270903
<b>eCl@ss 7.0</b>	27270903
<b>eCl@ss 8.0</b>	27270903
<b>eCl@ss 8.1</b>	27270903
<b>eCl@ss 9.0</b>	27270903
<b>eCl@ss 10.0</b>	27270904
<b>eCl@ss 11.0</b>	27270904
<b>eCl@ss 12.0</b>	27270903

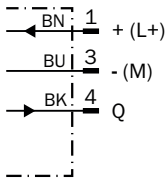
<b>ETIM 5.0</b>	EC001821
<b>ETIM 6.0</b>	EC001821
<b>ETIM 7.0</b>	EC002719
<b>ETIM 8.0</b>	EC002719
<b>UNSPSC 16.0901</b>	39121528

## Connection type



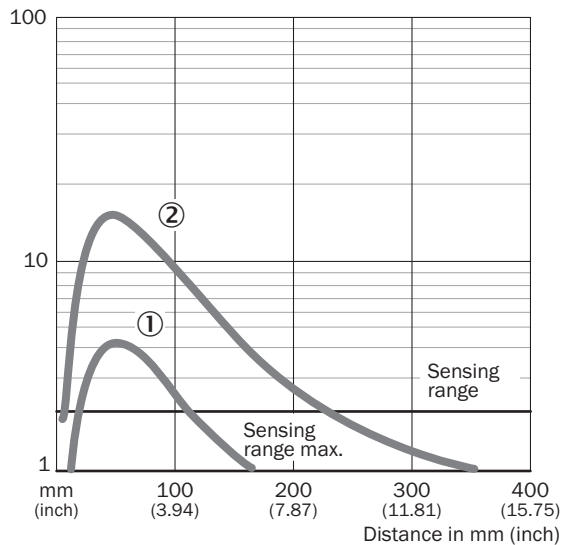
## Connection diagram

Cd-045



## Characteristic curve

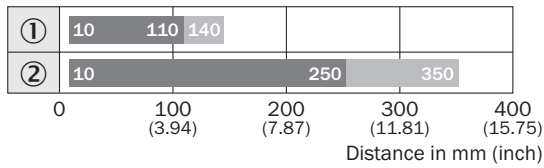
MHT15V, 350 mm



- ① Sensing range on gray, 18 % remission
- ② Sensing range on white, 90% remission

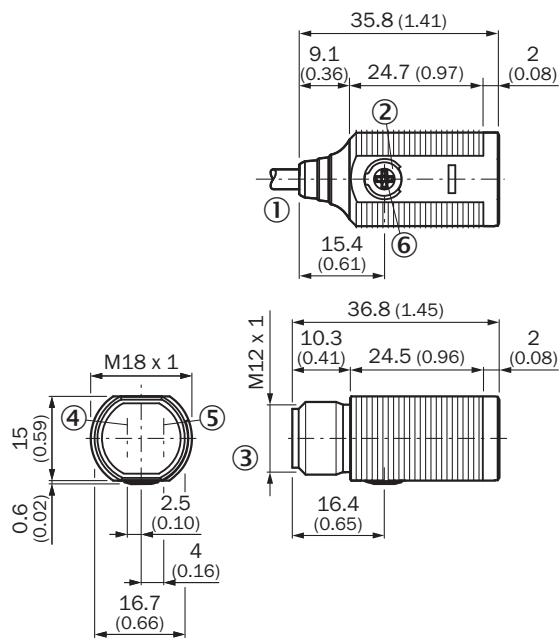
### Sensing range diagram

MHT15V, 350 mm



- Sensing range      ■ Sensing range max.
- ① Sensing range on gray, 18 % remission
- ② Sensing range on white, 90% remission

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



- ① Connection cable 2 m
- ② Sensitivity control 270°
- ③ Yellow LED indicator:- lights continuously:Light reception > reserve factor 1.3- blinks: Light reception < reserve factor 1.3 but > switching threshold 1
- ④ M12 male device connector, 3-pin

## 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](http://www.sick.com)