

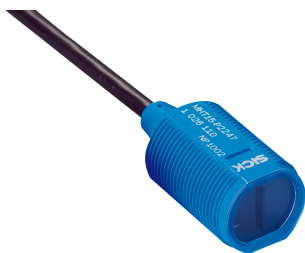


MHT15-P2347

MH15

CYLINDRICAL PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
MHT15-P2347	1026112

Other models and accessories → www.sick.com/MH15

Illustration may differ



Detailed technical data

Features

Functional principle	Photoelectric proximity sensor
Functional principle detail	Energetic
Dimensions (W x H x D)	18 mm x 18 mm x 35.8 mm
Housing design (light emission)	Cylindrical
Housing length	35.8 mm
Thread diameter (housing)	M18 x 1
Optical axis	Axial
Sensing range max.	10 mm ... 350 mm ¹⁾
Sensing range	10 mm ... 250 mm
Focus	Approx. 4.5°
Type of light	Infrared light
Light source	LED ²⁾
Light spot size (distance)	Ø 50 mm (350 mm)
Angle of dispersion	Approx. 4.5°
Wave length	950 nm
Adjustment	Potentiometer, 270° (Sensing range)

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

²⁾ Average service life: 100,000 h at T_U = +25 °C.

Mechanics/electronics

Supply voltage	10 V DC ... 30 V DC ¹⁾
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¹⁾ Limit values.

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⁾ Do not bend below 0 °C.

⁷⁾ A = V_S connections reverse-polarity protected.

⁸⁾ C = interference suppression.

⁹⁾ D = outputs overcurrent and short-circuit protected.

Ripple	< 5 V _{pp} ²⁾
Current consumption	30 mA ³⁾
Switching output	PNP
Switching mode	Light switching
Signal voltage PNP HIGH/LOW	U _v - (< 2,9 V) / ca. 0 V
Output current I_{max.}	≤ 100 mA
Response time	≤ 1.25 ms ⁴⁾
Switching frequency	400 Hz ⁵⁾
Connection type	Cable, 3-wire, 2 m ⁶⁾
Cable material	PVC
Conductor cross section	0.14 mm ²
Cable diameter	Ø 3.7 mm
Circuit protection	A ⁷⁾ C ⁸⁾ D ⁹⁾
Protection class	III
Weight	90 g
Housing material	Plastic, ABS
Optics material	Plastic, PMMA
Enclosure rating	IP67 IP69K
Ambient operating temperature	≤ +55 °C
Ambient temperature, storage	≤ +70 °C
UL File No.	NRKH.E189383 & NRKH7.E189383

1) Limit values.

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) Do not bend below 0 °C.

7) A = V_S connections reverse-polarity protected.

8) C = interference suppression.

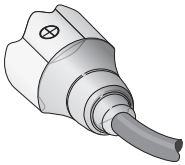
9) D = outputs overcurrent and short-circuit protected.

Classifications

eCl@ss 5.0	27270903
eCl@ss 5.1.4	27270903
eCl@ss 6.0	27270903
eCl@ss 6.2	27270903
eCl@ss 7.0	27270903
eCl@ss 8.0	27270903
eCl@ss 8.1	27270903
eCl@ss 9.0	27270903
eCl@ss 10.0	27270904

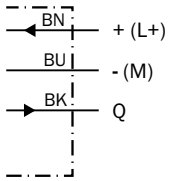
eCl@ss 11.0	27270904
eCl@ss 12.0	27270903
ETIM 5.0	EC001821
ETIM 6.0	EC001821
ETIM 7.0	EC002719
ETIM 8.0	EC002719
UNSPSC 16.0901	39121528

Connection type



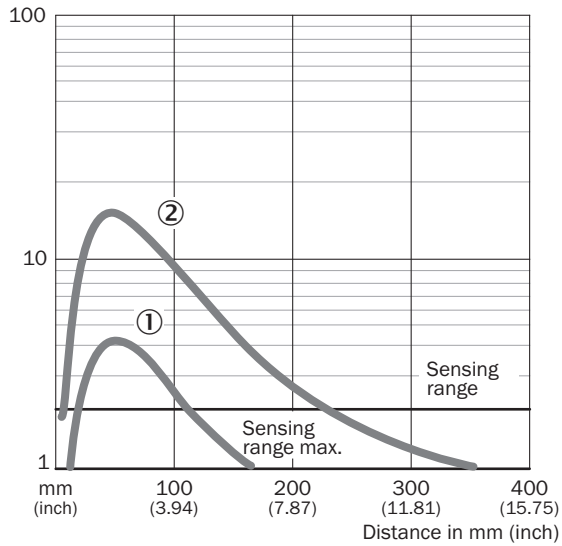
Connection diagram

Cd-043



Characteristic curve

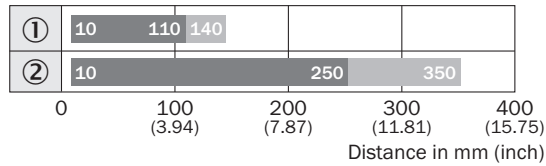
MHT15V, 350 mm



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

Sensing range diagram

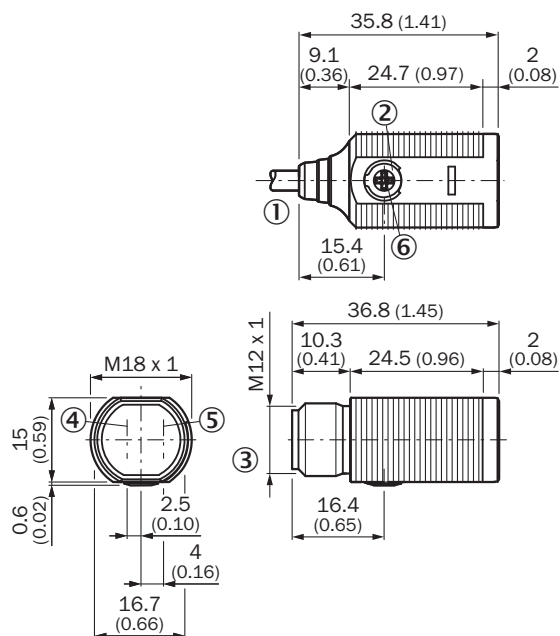
MHT15V, 350 mm



■ 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

Recommended accessories

Other models and accessories → www.sick.com/MH15

	Brief description	Type	Part no.
Plug connectors and cables			
	Head A: male connector, M8, 3-pin, straight Cable: unshielded	STE-0803-G	6037322

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