



MHT15-P3317V

MH15V

CYLINDRICAL PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.



Illustration may differ



Ordering information

Type	Part no.
MHT15-P3317V	1043806

Other models and accessories → www.sick.com/MH15V

Detailed technical data

Features

Sensor/ detection principle	Photoelectric proximity sensor, Energetic
Housing design (light emission)	Cylindrical
Housing length	52.9 mm
Thread diameter (housing)	M18 x 1
Optical axis	Axial
Sensing range max.	10 mm ... 100 mm ¹⁾
Sensing range	10 mm ... 90 mm
Type of light	Infrared light
Light source	LED ²⁾
Light spot size (distance)	Ø 20 mm (100 mm)
Angle of dispersion	Approx. 4.5°
Wave length	950 nm
Adjustment	Potentiometer, 270° (Sensing range)
Special applications	Hygienic and washdown zones

¹⁾ Object with 90 % reflectance (referred to 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⁾
Ripple	$\leq 5 \text{ V}_{\text{pp}}$ ²⁾
Power consumption	30 mA ³⁾
Switching output	PNP
Switching mode	Light switching
Signal voltage PNP HIGH/LOW	$U_v - (< 2,9 \text{ V}) / \text{ca. } 0 \text{ V}$
Output current I_{max}	$\leq 100 \text{ mA}$
Response time	$\leq 1.25 \text{ ms}$ ⁴⁾
Switching frequency	400 Hz ⁵⁾
Connection type	Male connector M12, 4-pin
Circuit protection	A ⁶⁾ C ⁷⁾ D ⁸⁾
Protection class	III
Weight	50 g
Housing material	Stainless steel, Stainless steel V4A (1.4404, 316L)
Optics material	Plastic, PMMA
Enclosure rating	IP67 IP68 IP69K
Ambient operating temperature	$-25 \text{ }^{\circ}\text{C} \dots +55 \text{ }^{\circ}\text{C}$ ⁹⁾
Ambient storage temperature	$-25 \text{ }^{\circ}\text{C} \dots +70 \text{ }^{\circ}\text{C}$
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⁾ A = V_S connections reverse-polarity protected.

⁷⁾ C = interference suppression.

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

⁹⁾ Use at higher ambient temperatures reduce the sender LED lifetime .

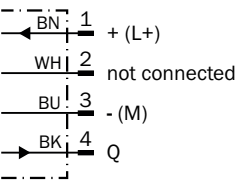
Classifications

ECI@ss 5.0	27270904
ECI@ss 5.1.4	27270904
ECI@ss 6.0	27270904
ECI@ss 6.2	27270904
ECI@ss 7.0	27270904
ECI@ss 8.0	27270904
ECI@ss 8.1	27270904
ECI@ss 9.0	27270904
ETIM 5.0	EC002719
ETIM 6.0	EC002719

UNSPSC 16.0901	39121528
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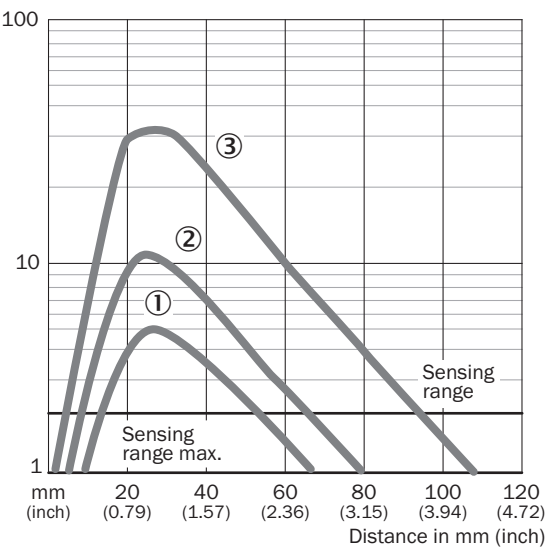
Connection diagram

Cd-066



Characteristic curve

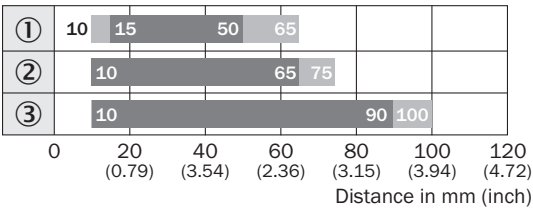
MHT15V, 100 mm



- ① Sensing range on black, 6% remission
- ② Sensing range on gray, 18 % remission
- ③ Sensing range on white, 90% remission

Sensing range diagram

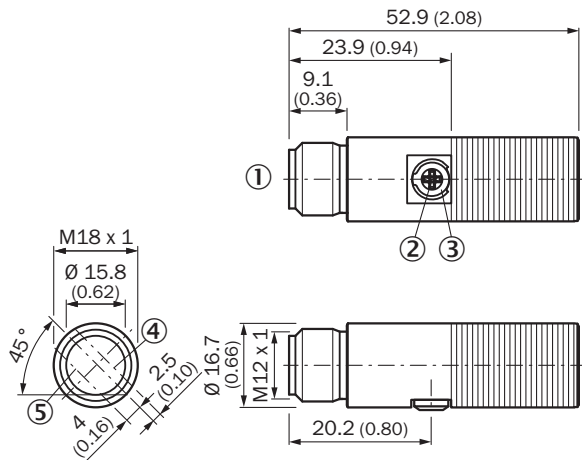
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Dimensional drawing (Dimensions in mm (inch))

MHT15V



- ① M12 male device connector, 4-pin
- ② Sensitivity control 270°
- ③ Yellow LED indicator, lights continuously: Light reception > reserve factor 1.3-blinks: Light reception, reserve factor > 1.0 ... < 1.3
- ④ Optical axis, sender
- ⑤ Optical axis, receiver

Recommended accessories

Other models and accessories → www.sick.com/MH15V

	Brief description	Type	Part no.
Plug connectors and cables			
	Head A: female connector, M12, 4-pin, straight Head B: Flying leads Cable: PVC, unshielded, 5 m This product is generally resistant to chemical cleaning agents (see ECOLAB). Please do not use cleaning agents of any other Kind., Not resistant against lactic acid & hydrogen peroxide (H2O2)	DOL-1204-G05MNI	6052615

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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