MHSE15-P3336V

MH15V

CYLINDRICAL PHOTOELECTRIC SENSORS

SICK
Sensor Intelligence.

MHSE15-P3336V | MH15V
CYLINDRICAL PHOTOELECTRIC SENSORS

Ordering information

Type	Part no.
MHSE15-P3336V	1043819

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

Illustration may differ

CE

ECOLAB

Detailed technical data

Features

Sensor/ detection principle	Through-beam photoelectric sensor
Housing design (light emission)	Cylindrical
Housing length	52.9 mm
Thread diameter (housing)	M18 x 1
Optical axis	Axial
Sensing range max.	0 m ... 5 m
Sensing range	0 m ... 3.8 m
Type of light	Visible red light
Light source	LED [1]
Light spot size (distance)	Ø 65 mm (4 m)
Angle of dispersion	Approx. 1.5 °
Wave length	650 nm
Adjustment	None
Special applications	Hygienic and washdown zones

[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]
Power consumption	30 mA [3]

[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 .

Switching output	PNP
Switching mode	Light switching
Signal voltage PNP HIGH/LOW	Uv - (< 2,9 V) / ca. 0 V
Output current I$_{max.}$	≤ 100 mA
Response time	≤ 1.4 ms [4]
Switching frequency	350 Hz [5]
Connection type	Male connector M12, 4-pin
Circuit protection	A [6] C [7] D [8]
Protection class	III
Weight	100 g
Housing material	Stainless steel, Stainless steel V4A (1.4404, 316L)
Optics material	Plastic, PMMA
Enclosure rating	IP67 IP68 IP69K
Ambient operating temperature	–25 °C … +55 °C [9]
Ambient storage temperature	–25 °C … +70 °C
UL File No.	NRKH.E189383 & NRKH7.E189383
Part number of individual components	2045305 MHE15-P3336V 2045306 MHS15-D3036V

[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 .
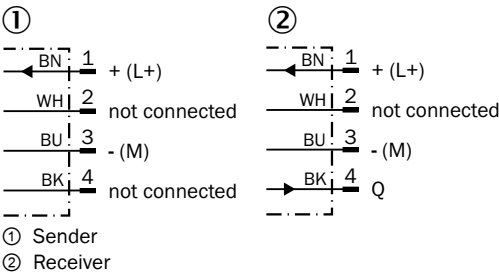
Safety-related parameters

MTTF$_D$	1,493 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
ETIM 5.0	EC002716
ETIM 6.0	EC002716

UNSPSC 16.0901	39121528

Connection diagram

Connection diagram

①
BN	1	+ (L+)
WH	2	not connected
BU	3	- (M)
BK	4	not connected

②
BN	1	+ (L+)
WH	2	not connected
BU	3	- (M)
BK	4	Q

① Sender
② Receiver

Characteristic curve

MHSE15V
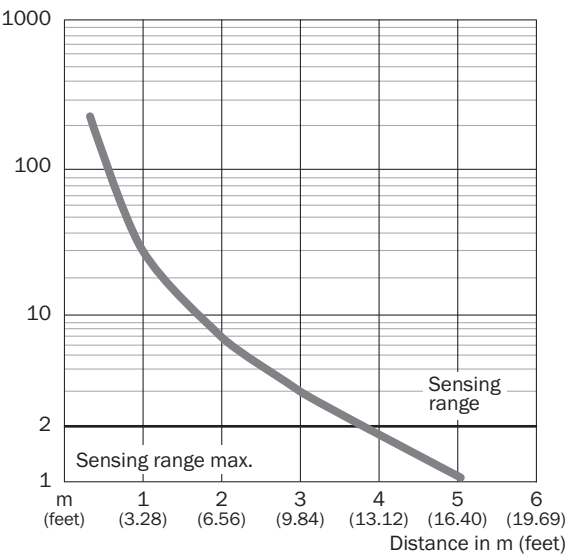
Sensing range diagram

MHSE15V

■ Sensing range   ■ Sensing range max.
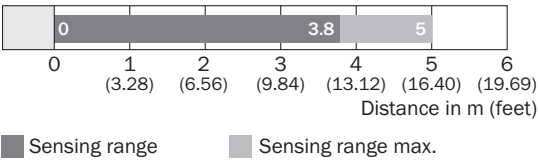
Dimensional drawing (Dimensions in mm (inch))

MHSE15V

52.9 (2.08)
23.9 (0.94)
9.1 (0.36)

① ②

M18 x 1
Ø 15.8 (0.62)
45°
2.5 (0.10)
4 (0.16)
③ ④

Ø 16.7 (0.66)
M12 x 1
20.2 (0.80)
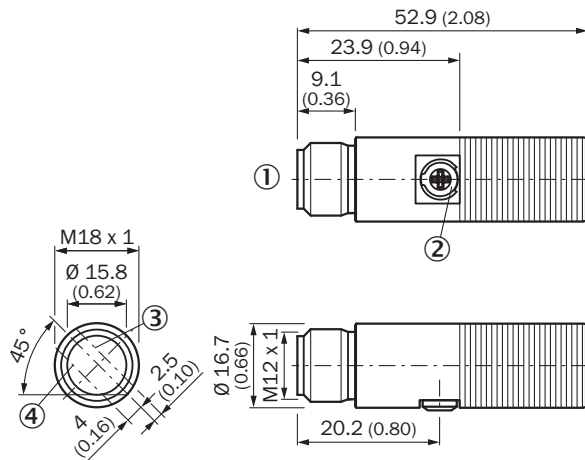
① M12 male device connector, 4-pin
② Yellow LED indicator– lights continuously:Light reception, Reserve factor > 1
③ Optical axis, sender
④ Optical axis, receiver

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

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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."

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