



## Photoelectric sensors MH15, Through-beam photoelectric sensor

MHSE15-N3336



**Model Name** > [MHSE15-N3336](#)  
**Part No.** > [1026141](#)



*Illustration may differ*

#### At a glance

- Long sensing distance up to 5 m
- Indicator LED shows active switching output and operating reserve
- Straight or right-angle housing designs available
- Mounting accessories (M18 nuts and snap ring) are included

#### Your benefits

- MHSE15 sender/ receiver photoelectric sensors reduce miscounts and false triggers for increased machine throughput
- Shortest M18 body on the market, saving installation space
- Flush mounting via snap ring reduces setup time and prevents obstructions to material flow on conveyor systems
- MHSE15 is compatible with competitor sensors for easy replacement that saves installation time and costs
- Rugged IP 69K-rated housing offers a long service life that withstands harsh environments, reducing maintenance time and costs



#### Features

|                                  |                                   |
|----------------------------------|-----------------------------------|
| Sensor/detection principle:      | Through-beam photoelectric sensor |
| Housing design (light emission): | Cylindrical, straight             |
| Housing length:                  | 36.8 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 <sup>1)</sup>                 |
| Wave length:                     | 650 nm                            |
| Angle of dispersion:             | Ca. 1.5 °                         |
| Light spot size (distance):      | Ø 65 mm (4 m)                     |

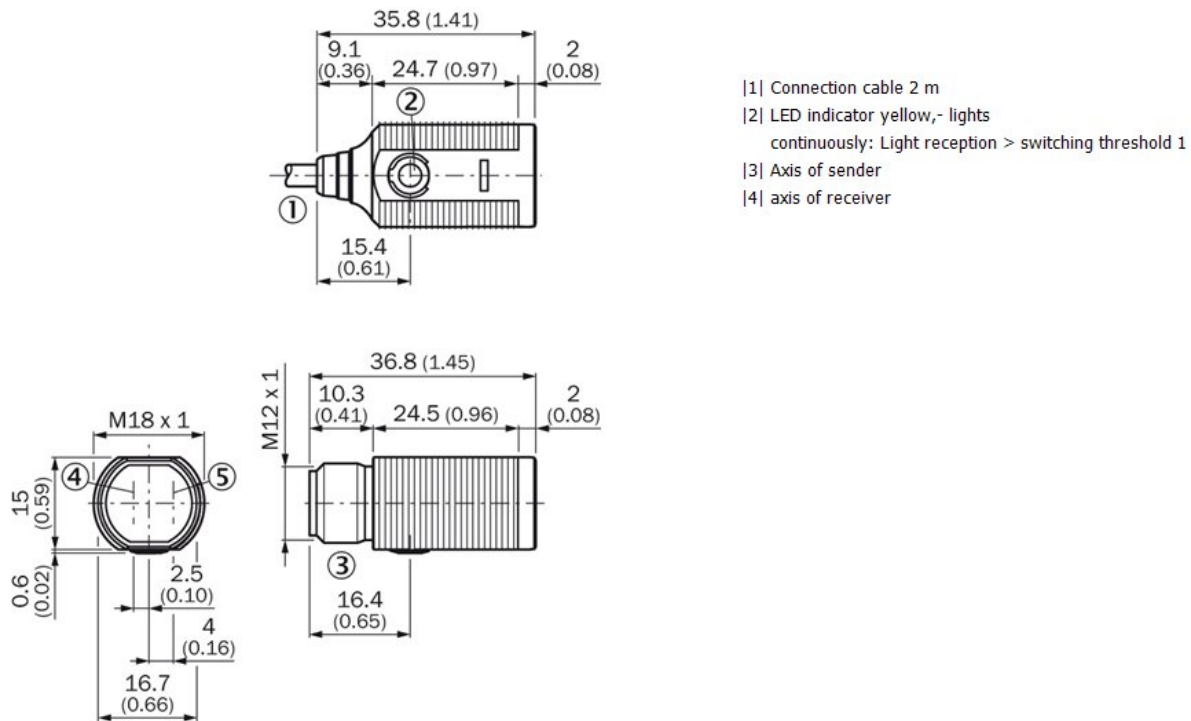
<sup>1)</sup> Average service life of 100,000 h at  $T_A = +25\text{ °C}$

#### Mechanics/electronics

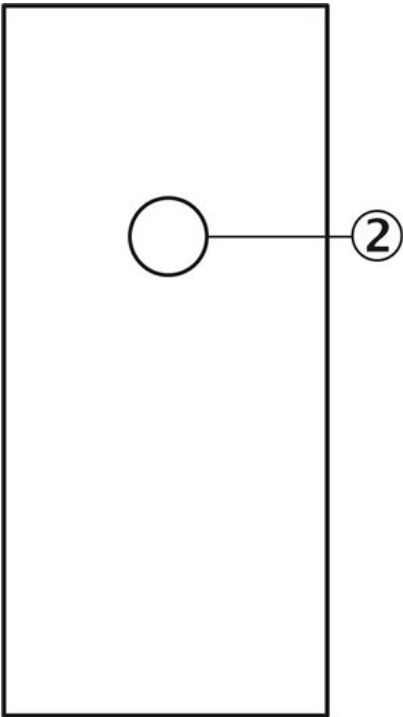
|                    |                                |
|--------------------|--------------------------------|
| Supply voltage:    | 10 V DC ... 30 V <sup>1)</sup> |
| Power consumption: | 30 W <sup>2)</sup>             |
| Output type:       | NPN                            |
| Switching mode:    | Light switching                |

|                                                                                                                                                                                                                                                                                                                                          |                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|
| Signal voltage NPN HIGH/LOW:                                                                                                                                                                                                                                                                                                             | Uv / < 2,9 V                                                 |
| Output current I <sub>max</sub> :                                                                                                                                                                                                                                                                                                        | 100                                                          |
| Response time:                                                                                                                                                                                                                                                                                                                           | ≤ 1.4 ms <sup>3)</sup>                                       |
| Switching frequency:                                                                                                                                                                                                                                                                                                                     | 350 <sup>4)</sup>                                            |
| Connection type:                                                                                                                                                                                                                                                                                                                         | Connector M12, 3-pin                                         |
| Circuit protection:::                                                                                                                                                                                                                                                                                                                    | A, C, D <sup>5)</sup> 6) 7)                                  |
| Protection class:                                                                                                                                                                                                                                                                                                                        | III                                                          |
| Weight:                                                                                                                                                                                                                                                                                                                                  | 7 g                                                          |
| Polarisation filter:                                                                                                                                                                                                                                                                                                                     | -                                                            |
| Front screen heating:                                                                                                                                                                                                                                                                                                                    | -                                                            |
| Housing material:                                                                                                                                                                                                                                                                                                                        | ABS, Plastic                                                 |
| Optics material:                                                                                                                                                                                                                                                                                                                         | PMMA                                                         |
| Enclosure rating:                                                                                                                                                                                                                                                                                                                        | IP 67<br>IP 69K                                              |
| Ambient operating temperature:                                                                                                                                                                                                                                                                                                           | -25 ... 55 °C                                                |
| Ambient storage temperature:                                                                                                                                                                                                                                                                                                             | -25 ... 70 °C                                                |
| Part number of individual components:                                                                                                                                                                                                                                                                                                    | Receiver, MHE15-N3336, 2031150, Sender, MHS15-D3036, 2031164 |
| UL File No.:                                                                                                                                                                                                                                                                                                                             | NRKH.E189383 & NRKH7.E189383                                 |
| <sup>1)</sup> Limit values <sup>2)</sup> Without load <sup>3)</sup> Signal transit time with resistive load <sup>4)</sup> With light/dark ratio 1:1 <sup>5)</sup> A = V <sub>S</sub> connections reverse-polarity protected <sup>6)</sup> C = interference suppression <sup>7)</sup> D = outputs overcurrent and short-circuit protected |                                                              |

**Dimensional drawing**



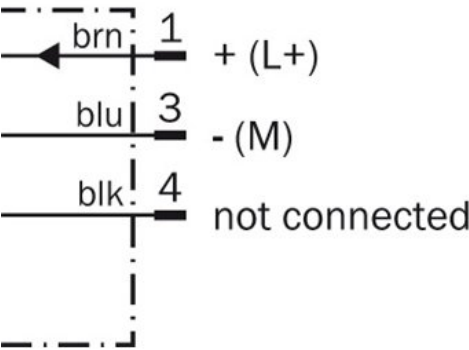
Adjustments possible



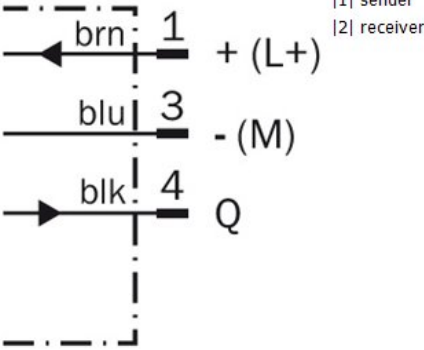
[2] Yellow LED indicator,-lights continously: Light reception> reserve factor 1,5-blinks: Light reception >reserve factor 1,5but light reception>switching threshold

Connection diagram

①

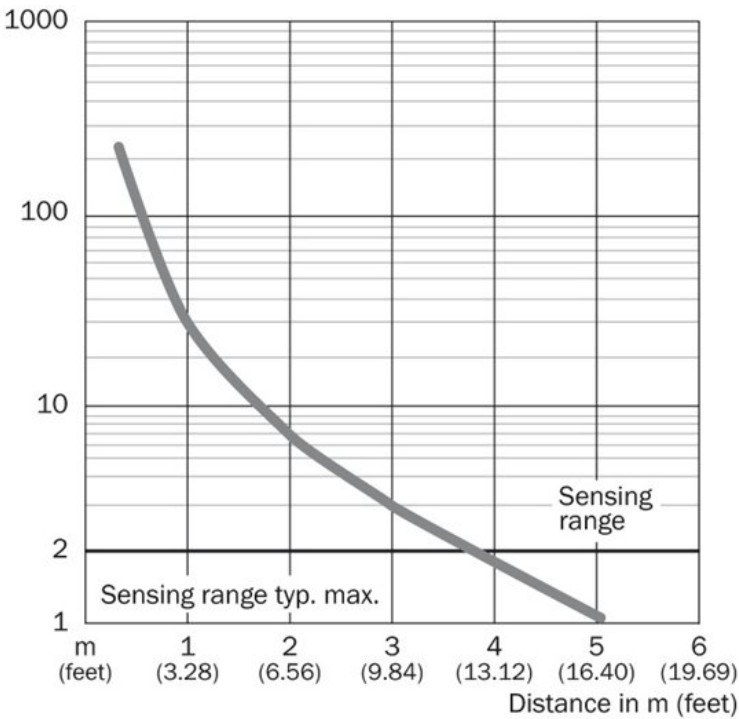


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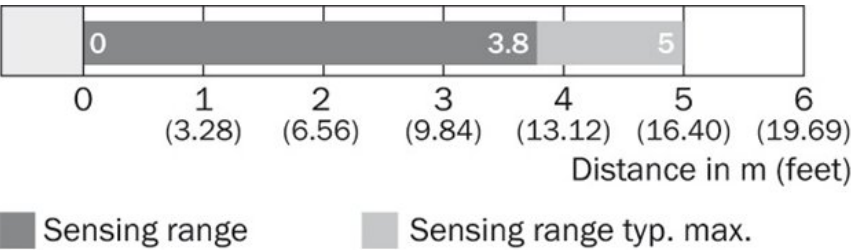


[1] sender  
[2] receiver

Characteristic curve



Sensing range diagram



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