









Model Number

ML6-8-H-150-IR/59/65a/115/136

Background suppression sensor with 2 m fixed cable

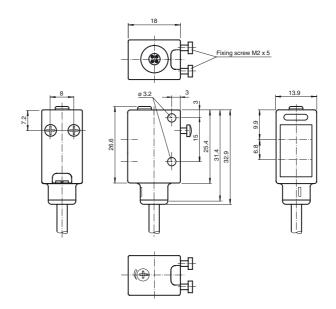
Features

- Precise background suppression
- Adjustable background suppression
- Small, sharp light spot
- Very small black-white difference
- Highly visible LEDs for Power-On, switching status, short-circuit, and undervoltage
- Metal-reinforced fastening holes
- Push-pull output

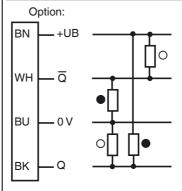
Product information

The ML6 series is characterized by a robust, powerful and standard design in a miniature housing. The housing offers IP67/IP69K degree of protection, a food-grade lens, highly visible LEDs and robust all-metal bushings for mounting. Adjustable and tamper-proof sensors with a double push-pull output are available. The sensors have a high ambient light limit. Reflections from the background are suppressed. The unusually small, sharp light spot and the quick response time offer maximum switching precision on object edges. Clearly visible red light sources facilitates alignment. A high-performance fixed focus background suppressor is a useful feature. The sensors are suitable for precise object detection and open up a wide range of application fields.

Dimensions

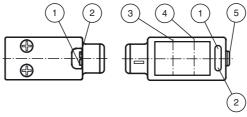


Electrical connection



- O = Light on
- = Dark on

Indicators/operating means



1	operating display	green
2	indication of the switching state	yellow
3	receiver axis	
4	emitter axis	
5	detection range adjuster	

Technical data General specifications Detection range 15 ... 150 mm 10 ... 30 mm Detection range min. Detection range max 18 ... 150 mm Adjustment range 30 ... 150 mm standard white, 100 mm x 100 mm Reference target Light source IRED Light type modulated infrared light, 880 nm Black/White difference (6 %/90 %) < 15 % Diameter of the light spot approx. 6 mm at detection range 150 mm Ambient light limit Continuous light 40000 Lux Modulated light 5000 Lux Functional safety related parameters $MTTF_d$ 1940 a Mission Time (T_M) 20 a Diagnostic Coverage (DC) 0 % Indicators/operating means LED green, statically lit Power on , Undervoltage indicator: Operating display Green LED, pulsing (approx. 0.8 Hz) , short-circuit : LED green flashing (approx. 4 Hz) Function display LED yellow: lights when object is detected Controls Detection range adjuster **Electrical specifications** Operating voltage U_{B} 10 ... 30 V DC, class 2 Ripple max. 10 % No-load supply current < 25 mA I_0 Output Switching type light/dark on, programmable 2 push-pull (4 in 1) outputs, complementary, short-circuit proof, Signal output reverse polarity protected Switching voltage max. 30 V DC Switching current max. 100 mA Voltage drop U_{d} \leq 2.5 V DC Switching frequency 1000 Hz Response time 500 μs **Ambient conditions** -20 ... 60 °C (-4 ... 140 °F) Ambient temperature -40 ... 75 °C (-40 ... 167 °F) Storage temperature Mechanical specifications Protection degree IP67 / IP69K Connection 2 m fixed cable Material Housing ABS Optical face **PMMA** Cable PUR Mass approx. 50 g Compliance with standards and directives Standard conformity Product standard EN 60947-5-2:2007 IEC 60947-5-2:2007 Shock and impact resistance IEC / EN 60068. half-sine, 40 g in each X, Y and Z directions Vibration resistance IEC / EN 60068-2-6. Sinus. 10 -150 Hz, 5 g in each X, Y and Z directions Approvals and certificates **UL** approval cULus Listed

Accessories

OMH-4.1

Mounting Clamp

OMH-ML6

Mounting bracket

OMH-ML6-U

Mounting bracket

OMH-ML6-Z

Mounting bracket

Other suitable accessories can be found at www.pepperl-fuchs.com



PEPPERL+FUCHS

CCC approval

CCC approval / marking not required for products rated ≤36 V

Curves/Diagrams

