



Ultrasonic sensors  
UM18, UM18-1

UM18-11117

**Model Name** > [UM18-11117](#)  
**Part No.** > [6029508](#)

#### At a glance

- Object detection independent of material color and ambient lighting even transparent foils, glass, liquids and bottles are detected
- Immune to dirt, dust, and fog
- Available with one or two PNP/NPN switching outputs or an analog output (voltage or current)
- Teach-in via Multi-Function input

#### Your benefits

- Easy machine integration with standard M18 housing
- Reliable operation in rough conditions ensures high machine availability
- Synchronization mode enables area detection, which improves application flexibility and increases productivity
- Unintentional adjustments to sensor settings are eliminated since teach-in process is done with an external wire
- Integrated temperature compensation ensures high measurement accuracy



#### Performance

Resolution:	≥ 0.08 mm
Working range, limiting range:	30 mm ... 250 mm, 350 mm
Repeatability <sup>1)</sup> :	± 0.15 %
Accuracy <sup>2)</sup> :	≤ 2 %
Response time:	32 ms
Output rate:	8 ms
Ultrasonic frequency (typical):	320 kHz
Detection area (typical):	See diagrams
Additional function:	Teach-in of analog output Temperature compensation Reset to factory default Multi functional input: external teach/synchronization of up to 10 sensors Invertible analog output

1) 2) Referring to current measurement value

#### Interfaces

Analog output:	1 x 0 V ... 10 V (≥ 100 kΩ)
Resolution analog output:	12 bit
Multifunctional input (MF):	1 x

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30 mm 250 mm 350 mm

### Mechanics/electronics

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Supply voltage $V_s$ <sup>1)</sup> :	DC 15 V ... 30 V
Power consumption <sup>2)</sup> :	$\leq 1.2$ W
Initialization time:	< 300 ms
Housing material:	Nickel-plated brass, PBT ultrasonic transducer: polyurethane foam, glass epoxy resin
Connection type:	Connector, M12, 5-pin
Indication:	2 x LED
Weight:	55 g

<sup>1)</sup> Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A <sup>2)</sup> Without load

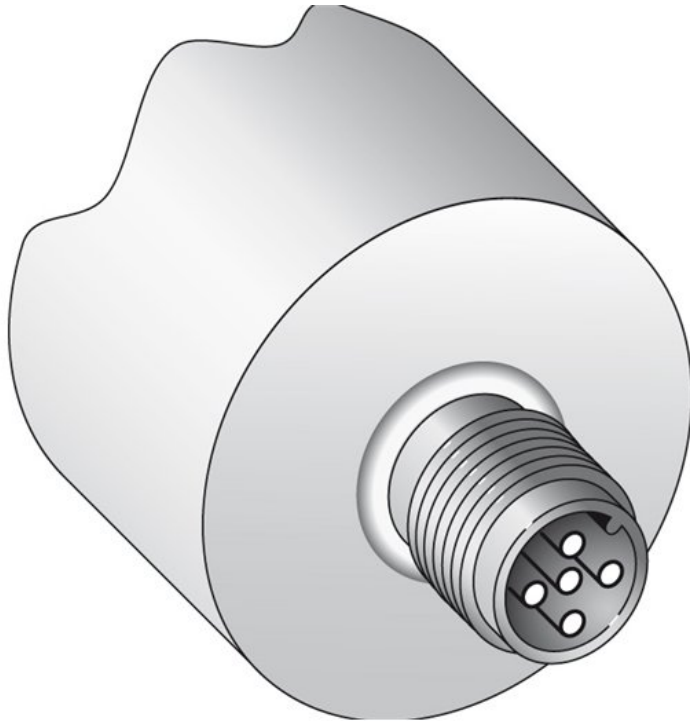
### Ambient data

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Enclosure rating:	IP 67
Ambient temperature:	Operation: -25 ... 70 °C Storage: -40 ... 85 °C

### Connection type

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