



UM12-1192271

UM12

ULTRASONIC SENSORS

SICK
Sensor Intelligence.



Ordering information

Type	Part no.
UM12-1192271	6053549

Other models and accessories → www.sick.com/UM12



Detailed technical data

Performance

Working range, limiting range	40 mm ... 240 mm, 350 mm
Resolution	≥ 0.069 mm
Repeatability	± 0.15 % ¹⁾
Accuracy	± 1 % ¹⁾
Temperature compensation	✓
Response time	30 ms ²⁾
Output time	10 ms
Ultrasonic frequency (typical)	500 kHz
Additional function	Teach-in of analog output, Invertable analog output, temperature compensation, reset to factory default ³⁾

¹⁾ Referring to current measurement value.

²⁾ Subsequent smoothing of the analog output, depending on the application, may increase the response time by up to 200 %.

³⁾ Functions may vary depending on sensor type.

Interfaces

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

Mechanics/electronics

Supply voltage V_s	DC 15 V ... 30 V ¹⁾
Power consumption	≤ 1.2 W ²⁾
Initialization time	< 300 ms
Design	Cylindrical
Housing material	Nickel-plated brass PBT Ultrasonic transducer: polyurethane foam, glass epoxy resin
Connection type	Male connector, M12, 4-pin
Indication	2 x LED
Weight	15 g

¹⁾ Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.

²⁾ Without load.

Sending axis	Straight
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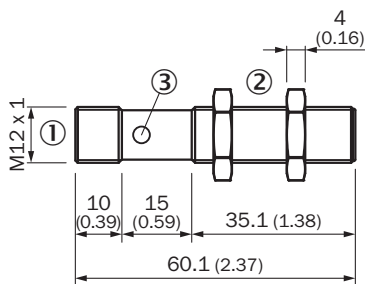
- 1) Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.
- 2) Without load.

Ambient data

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

Dimensional drawing (Dimensions in mm (inch))

UM12-11x2261, UM12-11x2271



- ① Connection
- ② Mounting nuts, SW 17 mm
- ③ Status display supply voltage active (green), switching and analog output (orange)

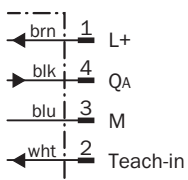
Connection type

UM1x-x17 connector M12, 5-pin



Connection diagram

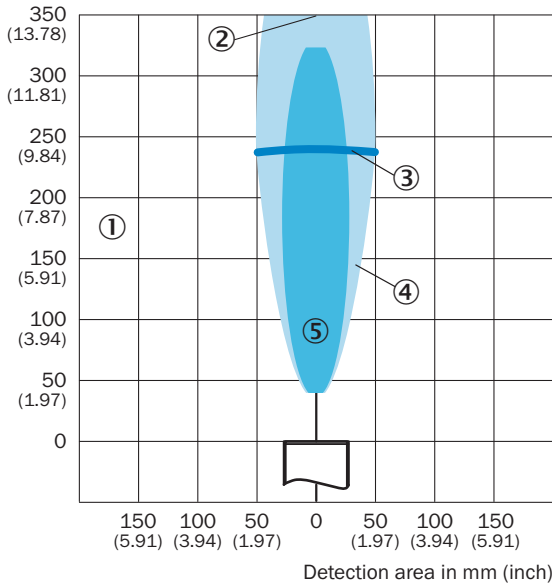
UM12-11x2261, UM12-11x2271



Detection area

UM12-119





Detection area in mm (inch)





- ① Sensing range dependent on reflection properties, size and orientation of the object
- ② Limiting range
- ③ Working range
- ④ Example object: aligned plate 500 mm x 500 mm
- ⑤ Example object: pipe with 10 mm diameter

Recommended accessories

Other models and accessories → www.sick.com/UM12

	Brief description	Type	Part no.
Universal bar clamp systems			
	Plate N05 for universal clamp bracket, M12, Zinc plated steel (sheet), Zinc die cast (clamping bracket), Universal clamp (5322626), mounting hardware	BEF-KHS-N05	2051611
Mounting brackets and mounting plates			
	Mounting plate for M12 sensors, steel, zinc coated, without mounting hardware	BEF-WG-M12	5321869
	Mounting bracket, M12 thread, steel, zinc coated, without mounting hardware	BEF-WN-M12	5308447
Terminal and alignment brackets			
	Clamping block for round sensors M12, without fixed stop, plastic (PA12), glass-fiber reinforced, mounting hardware included	BEF-KH-M12	2051479
Plug connectors and cables			

	Brief description	Type	Part no.
	Head A: female connector, M12, 4-pin, straight Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-G02M	6009382
	Head A: female connector, M12, 4-pin, angled Head B: cable Cable: PVC, unshielded, 2 m	DOL-1204-W02M	6009383

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:

Contacts and other locations –www.sick.com