UM12-1172211

UM12

ULTRASONIC SENSORS

SICK
Sensor Intelligence.

UM12-1172211 | UM12

ULTRASONIC SENSORS

Ordering information

Type	Part no.
UM12-1172211	6053542

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

CE

Detailed technical data

Performance

Working range, limiting range	20 mm ... 150 mm, 250 mm
Resolution	≥ 0.069 mm
Repeatability	± 0.15 % [1]
Accuracy	± 1 % [1]
Temperature compensation	✓
Response time	24 ms
Switching frequency	30 Hz
Output time	8 ms
Ultrasonic frequency (typical)	380 kHz
Additional function	Set switching mode: Distance to object (DtO) / switching window (Wnd) / Object Between Sensor and Background (ObSB), teach-in of switching output, invertible switching output, temperature compensation, reset to factory default [2]

[1] Referring to current measurement value.
[2] Functions may vary depending on sensor type.

Interfaces

Switching output	1 x PNP
Hysteresis	2 mm

Mechanics/electronics

Supply voltage V_s	DC 10 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

[1] Limit values, reverse-polarity protected, operation in short-circuit protected network: max. 8 A.
[2] Without load.

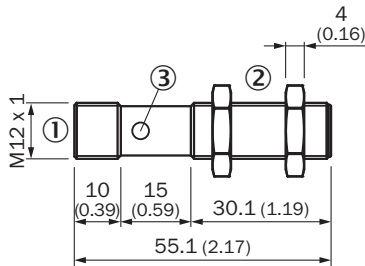| Weight	15 g
Sending axis	Straight

[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))

UM12-11x2211, UM12-11x2251

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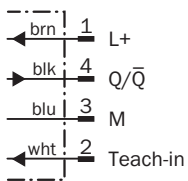③ Status display supply voltage active (green), switching and analog output (orange)

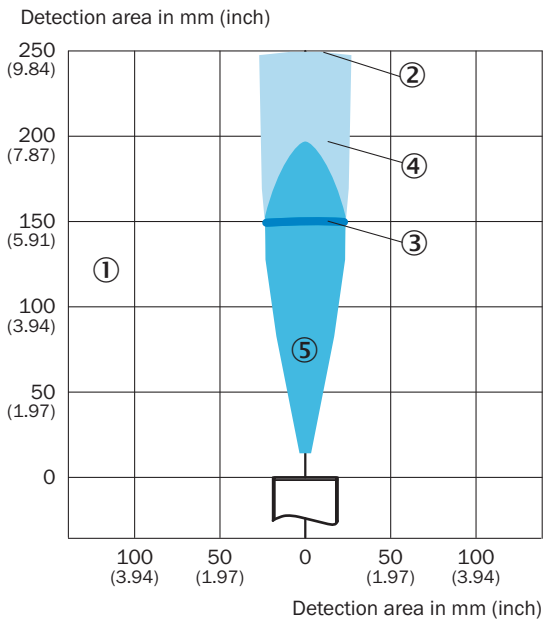## Connection type

UM1x-x17 connector M12, 5-pin

Connection diagram

UM12-11x2211, UM12-11x2251

brn	1	L+
blk	4	Q/Q̄
blu	3	M
wht	2	Teach-in

Detection area

UM1x-x17

Detection area in mm (inch)

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:

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