



## Ultrasonic Sensor

**UM30-211113** part no.

**6036916,30-250MM,SYMBOL:**

**0-991473,ANALOGUE**

**OUTPUT:0-10V/10-20mA**

URL:<https://www.sxplc.com/ultrasonic-sensor-um30-211113-part-no-6036916-30-250mm-symbol-0-991473-analogue-output-0-10v-10-20ma>

## Product data sheet

### Mechanics/electronics

Supply voltage Vs DC 9 V ... 30 V 1) 2)

Power consumption  $\leq 2.4$  W 3)

Initialization time < 300 ms

Design Cylindrical

Housing material Metal (nickel-plated brass, PBT, ultrasonic transducer: polyurethane foam, glass epoxy resin)

Thread size M30 x 1.5

Connection type Male connector, M12, 5-pin

Indication LED display, 2 x LED

Weight 150 g

Sending axis Straight

Dimensions (W x H x D) 30 mm x 30 mm x 84 mm

Enclosure rating IP65 / IP67

Protection class III

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

2.

2) 15 V ... 30 V when using the analog voltage output.

3) Without load.

### **Safety-related parameters**

MTTFD 101 years

DCavg 0%

## **Performance**

Operating range, limiting range 30 mm ... 250 mm, 350 mm

Target Natural objects

1) In relation to the current measured value, minimum value  $\geq$  resolution.

2) Referring to current measurement value.

3) Temperature compensation can be switched off, without temperature compensation: 0.17 % / K.

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

Resolution  $\geq$  0.18 mm

Repeatability  $\pm$  0.15 %

Accuracy  $\pm$  1 %

Temperature compensation ✓

Response time 32 ms 4) Output time 8 ms

Ultrasonic frequency (typical) 320 kHz

Detection area (typical) See diagrams

Additional function Teach-in of analog output Scaling of analog outputs Invertable analog output Synchronization of up to 50 sensors Multiplexing: no cross talk of up to 50 sensors Adjustable measurement filters: Measured value filters/Filter strength/Foreground suppression/Detection area/Sensitivity and sound beam Display (can be deactivated) Reset to factory default

1) In relation to the current measured value, minimum value  $\geq$  resolution.

2) Referring to current measurement value.

3) Temperature compensation can be switched off, without temperature compensation: 0.17 % / K.

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

## **Interfaces**

Analog output Number 1 Type Current output / voltage output Function Automatic selection of analog current or voltage output dependent on load Current 4 mA ... 20 mA,  $\leq 500 \Omega$  1) Voltage 0 V ... 10 V,  $\geq 100,000 \Omega$  Resolution 12 bit Multifunctional input (MF) 1 x MF

1) For 4 mA ... 20 mA and  $V_s \leq 20$  V max. load  $\leq 100 \Omega$ .

## **Ambient data**

Ambient temperature, operation  $-25 \text{ }^\circ\text{C}$  ...  $+70 \text{ }^\circ\text{C}$

Ambient temperature, storage  $-40 \text{ }^\circ\text{C}$  ...  $+85 \text{ }^\circ\text{C}$

