

UT210071

Ultrasonic sensors • Distance measurement

Ultrasonic sensor, diffuse reflection sensor, 50x15x21mm, Sn: 10-250, 12-30V DC, 4-20mA, M8 plug-in connector 4-pin, IP67, plastic, teach-in, sound cone lateral

- / Plastic housing
- / Analog output 4-20mA
- / M8 plug connection



Setting via teach-in small blind range

Ultrasonic sensors are contactless and wear-free. Depending on the version, they have one or more switching outputs, but there are also versions that output a distance-proportional current or voltage signal. They can also be used in harsh environmental conditions. A major advantage of these devices is that the material and surface properties of the objects to be detected can be almost any. Solid, liquid, granular and powdery materials can be recognized. The shape and color of the objects have no influence on the detection result. The ability to detect transparent materials such as foils or liquids is also of particular importance. Ultrasonic sensors are used for distance measurement (e.g. diameter detection, loop control), level or filling height control (e.g. silo detection), positioning and presence detection (e.g. glass pane positioning, film tear control, glass bottle detection).

Electrical features

| | |
|---|--|
| Response/decay time | 25 ms |
| Display | LED display |
| Resolution | 0.3 mm |
| Type of analog output | 4 - 20mA |
| Type of electrical connection | Connector M8 |
| Setting procedure | Teach-In |
| Relative hysteresis | 4 % |
| Load resistance (current output) | 0.1 kOhm |
| No-load current | 11 mA |
| Number of pins | 4 |
| Residual ripple | 10 % |
| Sound outlet | Lateral |
| Temperature drift over entire measuring range | 2 % |
| Carrier frequency | 370 kHz |
| Absolute repeat accuracy | 0.5 mm |
| Operating voltage (DC) | 12 - 30 V |
| Measuring range | 10 - 250 mm |
| ardSOCA_ElektrischerAnschluss | |
| ardSOCA_Betriebsspannung | |
| ardTEEL_Schutzfunktionen | Reverse polarity protection Short circuit protection |

Mechanical features

| | |
|---------------------------|-------------|
| Design | Cuboid |
| Width | 20.5 mm |
| Height | 50.2 mm |
| Storage temperature | -25 - 75 °C |
| Length | 15 mm |
| Degree of protection (IP) | IP67 |
| Housing material | Plastic |
| Ambient temperature | -25 - 65 °C |
| ardSOCA_Abmessungen | |

Other features

| | |
|---------------------|---------------|
| ardTE00_Anwendungen | Level sensing |
|---------------------|---------------|

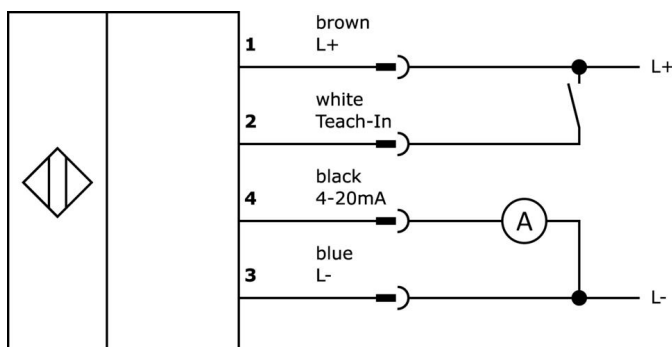
Classification

| | |
|--------|--|
| ETIM 8 | |
|--------|--|

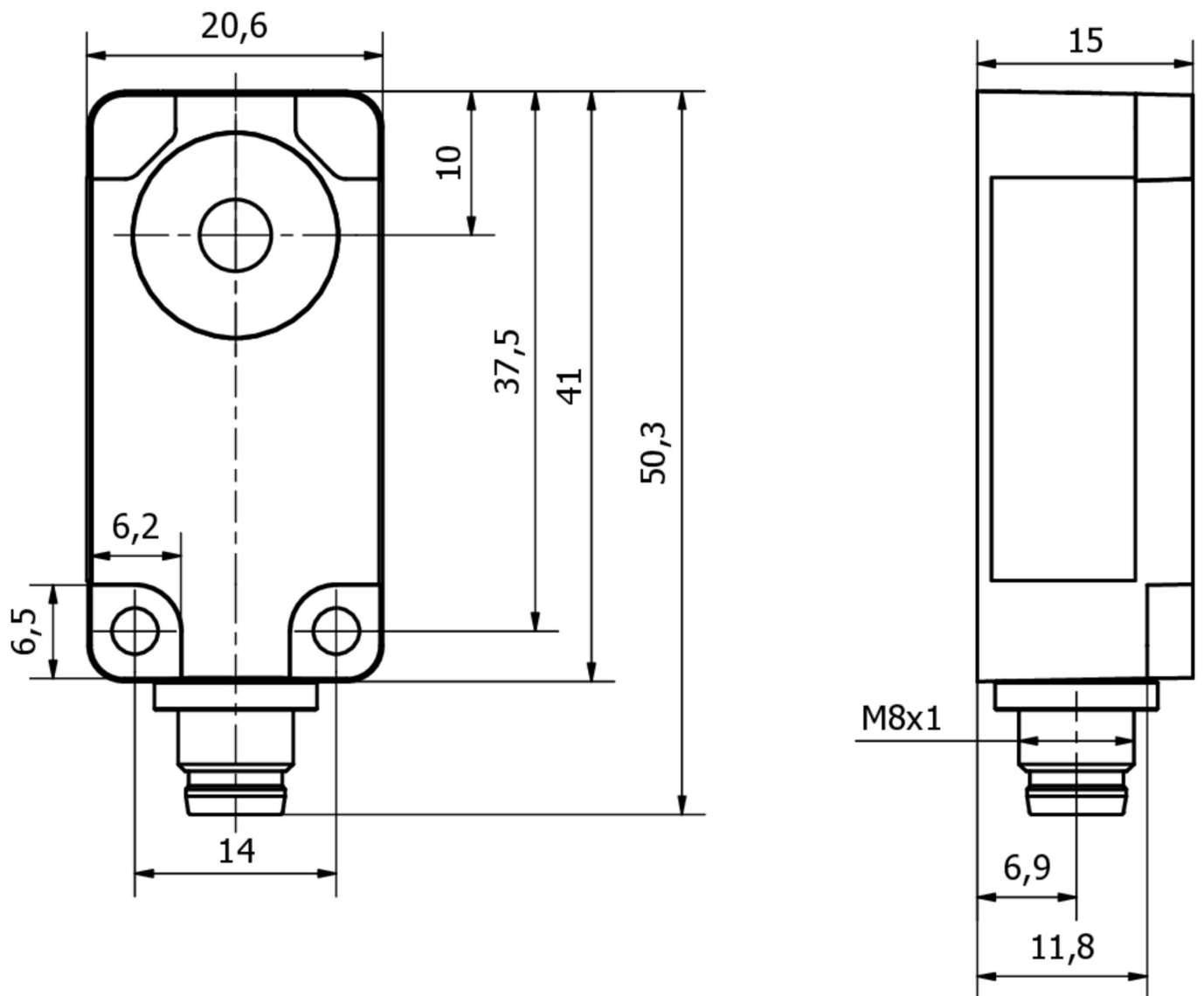
More

| | |
|-----------------------|---------------------------------|
| IPF Product Group | 259 ultrasonic sensors (analog) |
| packaging dimensions | 123 x 77 x 25 mm |
| gross weight | |
| Customs tariff number | 85365019 |
| WEEE number | 40951076 |
| OzDS-compliant | Yes |
| POP-compliant | Yes |
| Reach-compliant | Yes |
| RoHS-compliant | Yes |

Connection



Dimensional drawing



Extract accessories program**AY000116**

accessories sensor, Fixture kit,
Metal, ball joint

AY000162

Accessories, magnetic, Ø43mm,
neodymium-iron-boron, inside
thread M5, rubber

VK200371

Connection cable, 2m, M8 socket
4-pin angular, free cable end, 4x0.
34mm², PUR (polyurethane), Ø4.
7mm, 30V, -30-90°C, IP67, suitable
for trailing chain and torsion
resistant, oils and cooling
lubricants, welding area, silicone-
free

VK200375

Connection cable, 2m, M8 socket
4-pin straight, free cable end, 4x0.
34mm², PUR (polyurethane), Ø4.
7mm, 30V, -30-90°C, IP67, suitable
for trailing chain and torsion
resistant, oils and cooling
lubricants, welding area, silicone-
free

You can find further accessories on our homepage

**Installation**

Mounting / installation may only be carried
out by a qualified electrician!

**Disposal**

WEEE number according to § 6 para. 3
ElektroG: 40951076

Safety warnings

/ Before initial operation, please make sure to follow all safety instructions that may be provided in the product information.

/ Never use these devices in applications where the safety of a person depends on their functionality.