

UT210075

Ultrasonic sensors • Distance measurement

Ultrasonic sensor, diffuse reflection sensor, 42x15x20mm, Sn: 20-200, 15-30V DC, 0-10V, M8 plug-in connector 4-pin, IP67, plastic, teach-in, sound cone lateral



Ultrasonic sensors are contactless and wear-free position switches that 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	30 ms
Display	LED display
Resolution	0.3 mm
Type of analog output	0 - 10V
Type of electrical connection	Connector M8
Setting procedure	Teach-In
No-load current	35 mA
Number of pins	4
Relative repeat accuracy	0.1 %
Residual ripple	10 %
Sound outlet	Lateral
Protection class	III
Temperature drift over entire measuring range	2 %
Carrier frequency	380 kHz
Operating voltage (DC)	15 - 30 V
Measuring range	20 - 200 mm
ardTEEL_Schutzfunktionen	Reverse polarity protection Short circuit protection

Mechanical features

Design	Cuboid
Width	20 mm
Height	42 mm
Length	15 mm
Degree of protection (IP)	IP67
Housing material	Plastic
Ambient temperature	-10 - 60 °C

Optical features

Angle of beam spread	6 °
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Other features

Operating frequency	380 kHz
ardTE00_Anwendungen	Level sensing

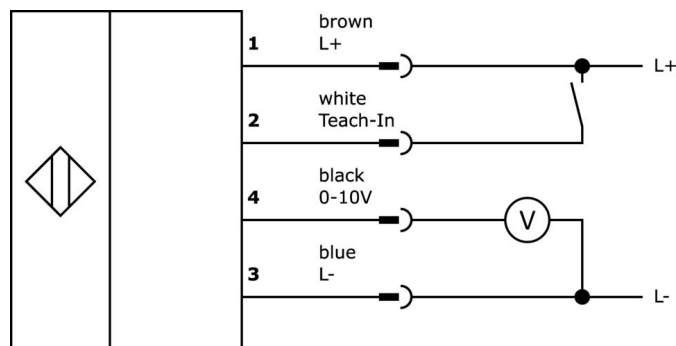
Classification

ETIM 8	EC001846 Ultrasonic distance sensor
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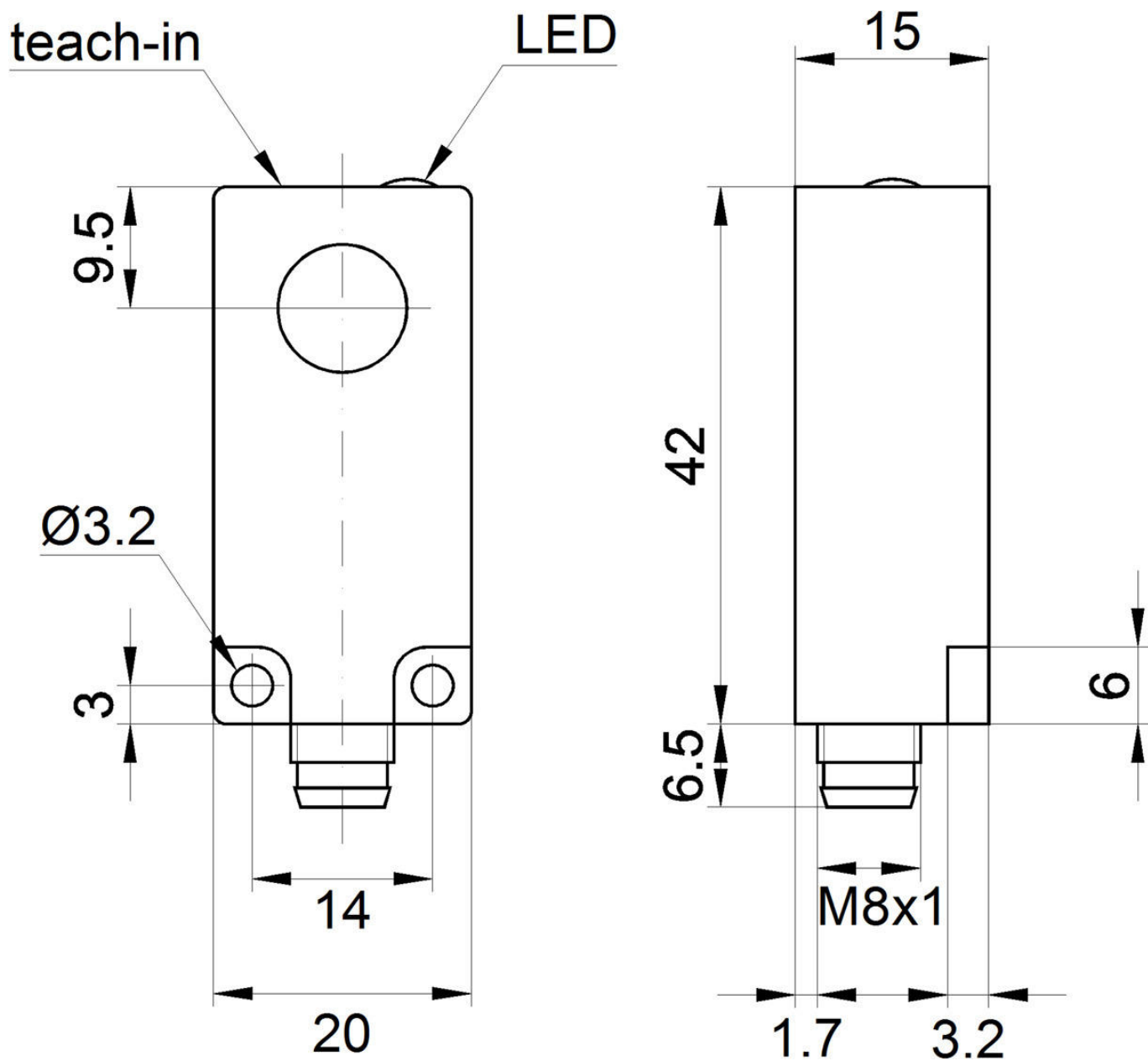
More

IPF Product Group	259 ultrasonic sensors (analog)
packaging dimensions	120 x 100 x 20 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

VK200371



Connection cable, 2m, M8 Female (socket) 4pin Angular, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø4.7mm, 30V, -30-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

VK200375



Connection cable, 2m, M8 Female (socket) 4pin Straight, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø4.7mm, 30V, -30-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

AY000116



accessories sensor, Fixture kit, Metal, ball joint

AY000162



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

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.