

UT210070

Ultrasonic sensors • Distance measurement

sensor ultrasonic, diffuse-reflection sensor, 42x15x20mm, Sn: 20-200, 15-30V DC, 4-20mA, Connector M8 4pin, IP67, Plastic, Teach-In, ultrasonic cone Lateral



Ultrasonic sensors are non-contact and wear-free position switches which can also be used under rough environmental conditions. A key advantage of these devices lies in the fact that the material and the surface characteristics of the objects to be detected can be almost anything. Solids, liquids, grainy materials and powdery materials can be identified without the shape or the color of the object having any influence to the measured result. In addition, the ability to detect transparent materials such as films and fluids is of particular importance. The shape and color of the objects do not influence the result of the detection. The capability to detect transparent films or liquids is also of special importance. Ultrasonic sensors are used for distance measurement (e.g. detection of diameters, loop control), for fill level detection (e.g. silo detection), for positioning and presence detection (e.g. glass pane positioning, film tear check, glass bottle detection)

Electrical features

Response/decay time	30 ms
Display	LED display
Resolution	0.3 mm
Type of analog output	4 - 20mA
Type of electrical connection	Connector M8
Setting procedure	Teach-In
Short-circuit protection	Yes
Load resistance (current output)	1.1 kOhm
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
Reverse polarity protection	Yes
Operating voltage (DC)	15 - 30 V
Measuring range	20 - 200 mm

Mechanical features

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

Optical features

Angle of beam spread	6 °
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Other features

Operating frequency	380 kHz
ardTE00_Anwendungen	Niveauabfrage

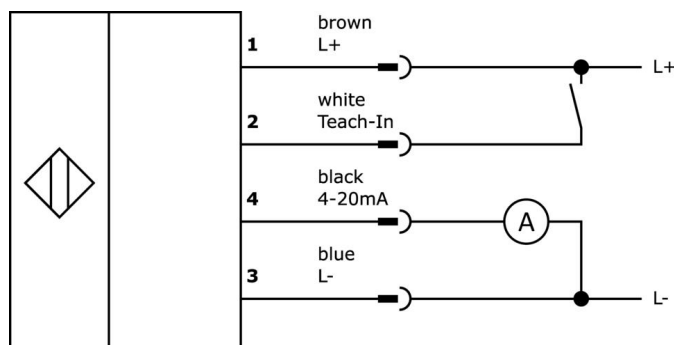
Classification

ETIM 8	EC001846 Ultrasonic distance sensor
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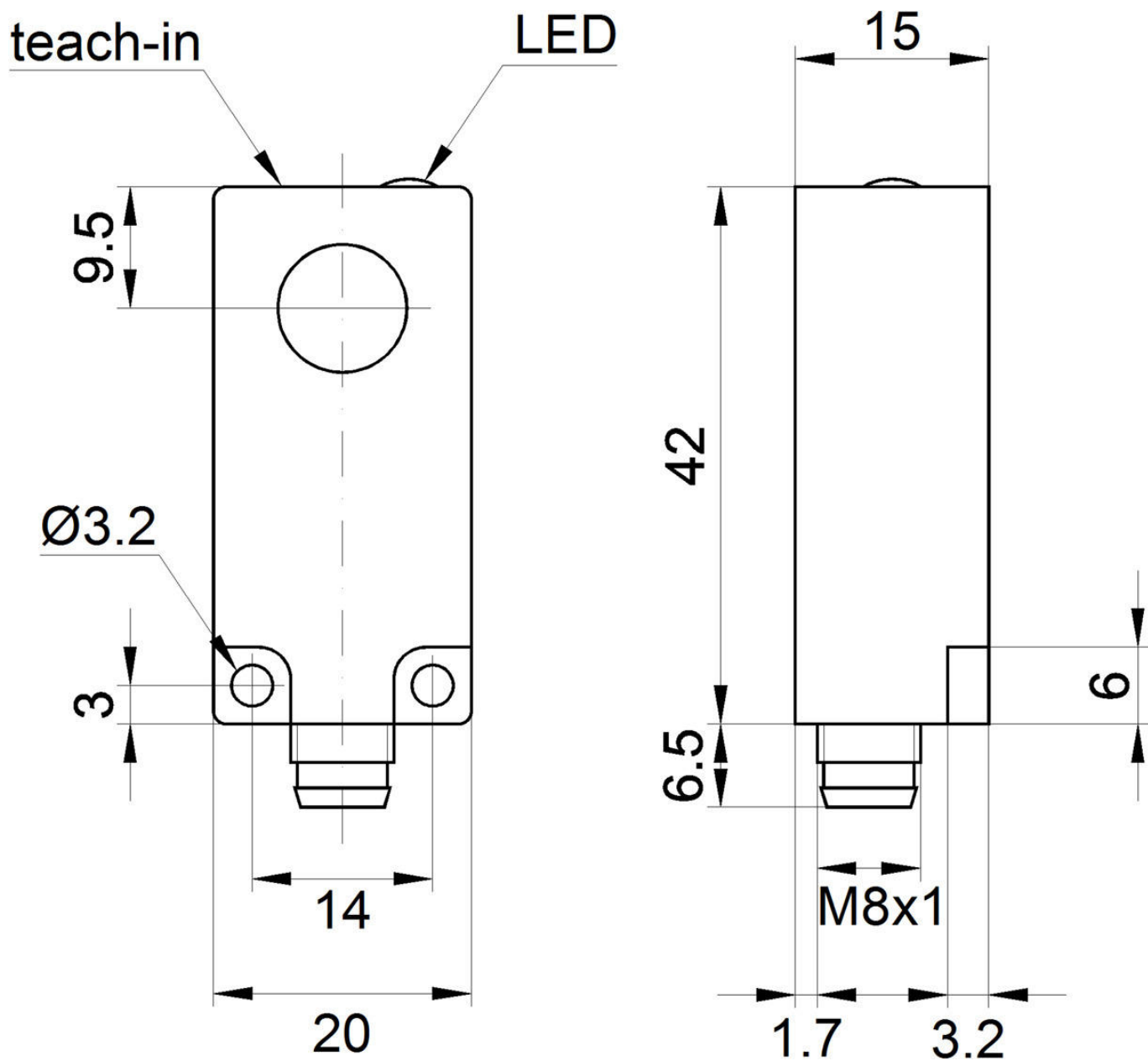
More

IPF Product Group	259 ultrasonic sensors (analog)
packaging dimensions	120 x 100 x 10 mm
gross weight	20 g
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 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

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.