

UT210170

Ultrasonic sensors • Pushbuttons

sensor ultrasonic, diffuse-reflection sensor, 42x15x20mm, Sn: 30-200, 12-30V DC, 1x PNP NO (NO), Connector M8 4pin, IP67, Plastic, Teach-In, With LED display, ultrasonic cone Axial



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	10ms
Number of switching outputs	1
Display	LED display
Type of switching function	Normally open contact (NO)
Type of electrical connection	Connector M8
Type of switching output	PNP
Rated switching current	200mA
Setting procedure	Teach-In
Relative hysteresis	4%
Short-circuit protection	Yes
No-load current	35mA
Number of pins	4
Relative repeat accuracy	0.25%
Residual ripple	10%
Sound outlet	axial
Switching distance	10 - 200mm
Voltage drop	2V
Temperature drift over entire measuring range	0.18%
Carrier frequency	380kHz
Reverse polarity protection	Yes
Operating voltage (DC)	12 - 30V

Mechanical features

Design	Cuboid
Width	20mm
Height	42mm
Length	15mm
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

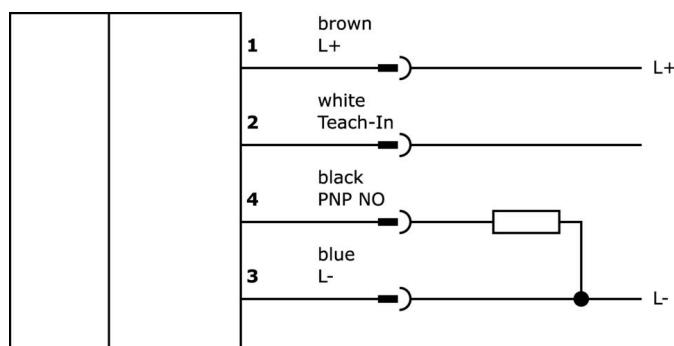
Operating frequency	380kHz
Level detection	Yes
Object detection on conveyor systems	Yes
Ambient temperature	-10 - 60°C

Classification

ETIM 8	EC001849 Ultrasonic probe
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More

IPF Product Group	250 ultrasonic sensors
packaging dimensions	120 x 100 x 17 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

Installation

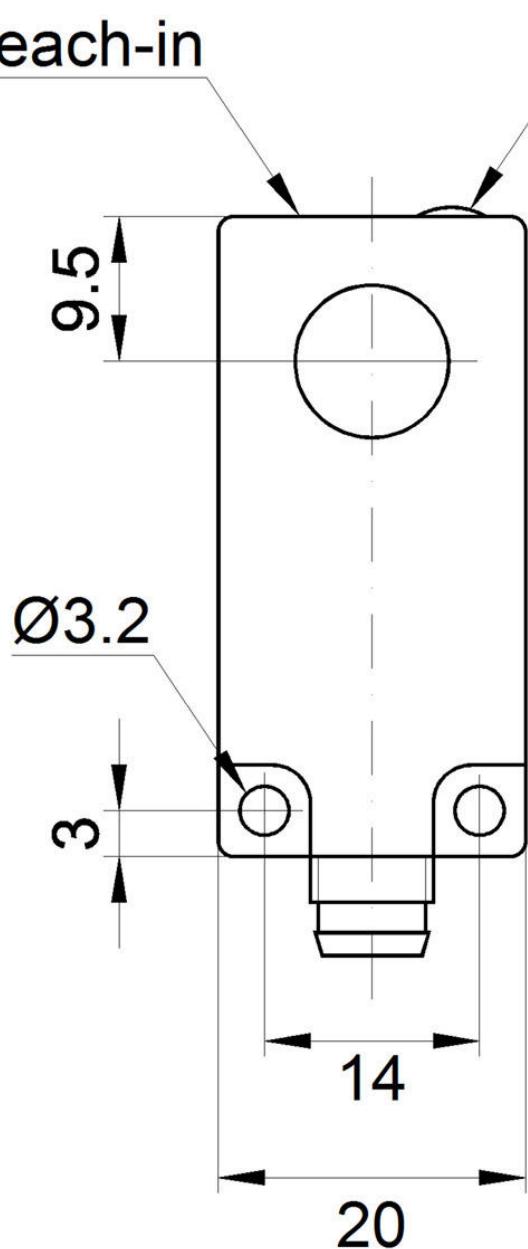
Mounting / installation may only be carried out by a qualified electrician!

Disposal**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.

For suitable connection and mounting accessories, please refer to our website www.ipf-electronic.com.

Dimensional drawing**teach-in****LED**