

## UT139570

### Ultrasonic sensors • Pushbuttons

sensor ultrasonic, diffuse-reflection sensor, 84x12x12mm, Sn: 20-200, 18-30V DC, 1x PNP/NPN Programmable/configurable, IO-Link, Connector M8 4pin, IP67, Aluminum Anodised, Teach-In, With LED display, 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	10ms
Number of switching outputs	1
Display	LED display
Resolution	1mm
Type of switching function	Programmable/configurable
Type of electrical connection	Connector M8
Type of switching output	PNP/NPN
Rated switching current	150mA
Readiness delay	300ms
Setting procedure	Teach-In
Short-circuit protection	Yes
No-load current	40mA
Number of pins	4
Sound outlet	Lateral
Switching distance	20 - 200mm
Switching frequency	20Hz
Protection class	III
Voltage drop	2V
Temperature drift over entire measuring range	0.2%
Carrier frequency	400kHz
Reverse polarity protection	Yes
Absolute repeat accuracy	0.5mm
Operating voltage (DC)	18 - 30V

**Mechanical features**

Design	Cuboid
Width	12mm
Height	84mm
Length	12mm
Mounting distance	60mm
Surface	teflon coated
Degree of protection (IP)	IP67
Housing material	Aluminum
Diameter detection	Yes
Ambient temperature	-25 - 70°C

**Other features**

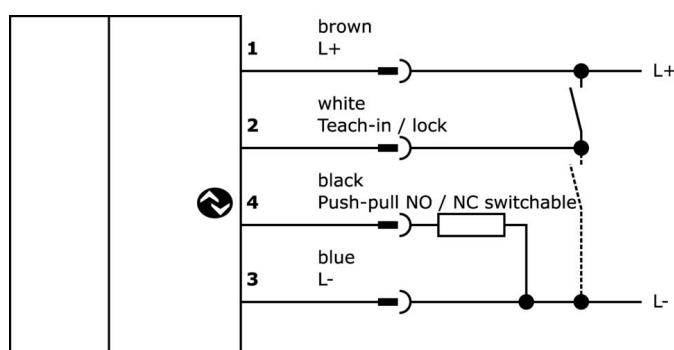
Operating frequency	400kHz
Level detection	Yes
Object detection on conveyor systems	Yes
Reference medium / object	Measuring plate 20x20mm
Ambient temperature	-25 - 70°C

**Classification**

ETIM 8	EC001849 Ultrasonic probe
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**More**

IPF Product Group	250 ultrasonic sensors
packaging dimensions	160 x 150 x 13 mm
gross weight	38 g
Customs tariff number	85365019
WEEE number	40951076
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](http://www.ipf-electronic.com).

Any software, drivers or IODD files that may be required to operate your device can be downloaded free of charge from our homepage: [www.ipf-electronic.com](http://www.ipf-electronic.com)

**Dimensional drawing**