

UT180320

Ultrasonic sensors • Pushbuttons

Ultrasonic sensor, diffuse reflection sensor, M18x1 104lang, Sn: 60-500, 12-30V DC, 2x PNP programmable/configurable, M12 plug-in connector 5-pin, IP67, plastic, teach-in, LED, axial sound cone



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

Number of switching outputs	2
Display	LED display
Resolution	0.25 mm
Type of switching function	Programmable/configurable
Type of electrical connection	Connector M12
Type of switching output	PNP
Rated switching current	500 mA
Setting procedure	Teach-In
Relative hysteresis	1 %
Short-circuit protection	Yes
No-load current	60 mA
Number of pins	5
Relative repeat accuracy	0.2 %
Sound outlet	axial
Switching distance	60 - 500 mm
Switching frequency	10 Hz
Carrier frequency	330 kHz
Reverse polarity protection	Yes
Operating voltage (DC)	12 - 30 V

Mechanical features

Design	Cylinder, screw-thread
Thread length	65 mm
Thread pitch	1 mm
Length	104 mm
Degree of protection (IP)	IP67
Housing material	Plastic
Diameter detection	Yes
Thread dimension	M18
Ambient temperature	-20 - 70 °C

Optical features

Angle of beam spread	8 °
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Other features

Operating frequency	330 kHz
Object detection on conveyor systems	Yes
ardTE00_Anwendungen	Niveauabfrage

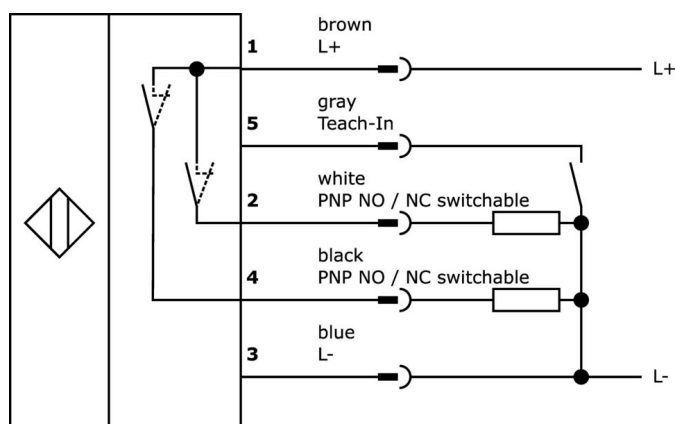
Classification

ETIM 8	EC001849 Ultrasonic probe
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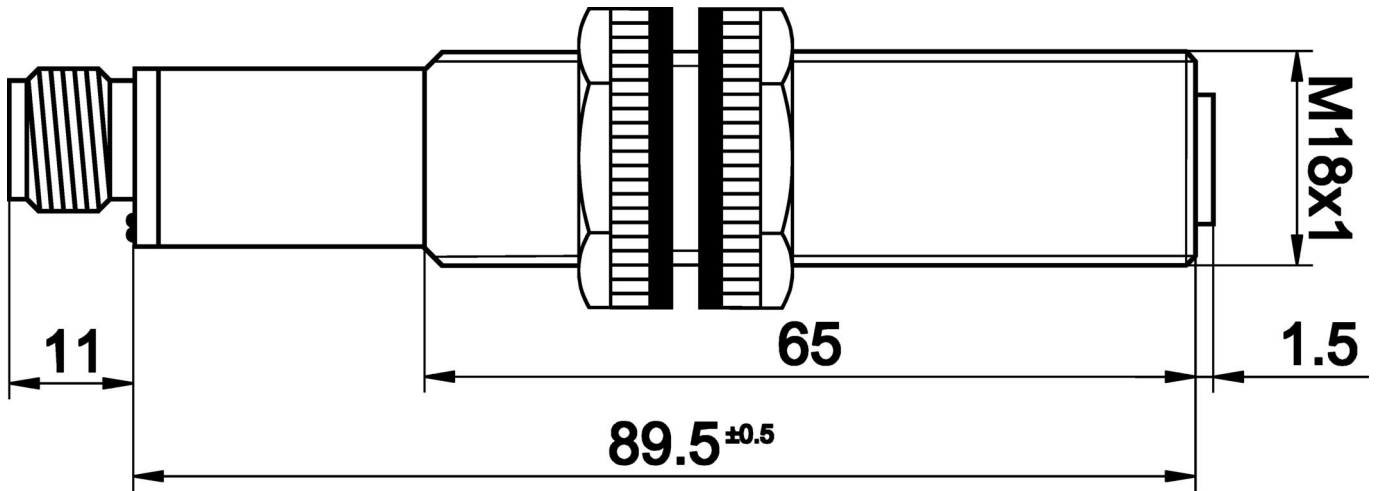
More

IPF Product Group	250 ultrasonic sensors
packaging dimensions	165 x 110 x 55 mm
gross weight	95 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

AY000117



accessories sensor, Fixture kit,
Metal, ball joint

AY000162



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

VK003021



Cable socket, Angular, Suitable for
self-assembly, Screw connection,
Ø3-6.5mm, 4A, 60V, -25-90°C,
M12 Female (socket) 5pin, IP67,
PBT

VK003025



Cable socket, Straight, Suitable for
self-assembly, Screw connection,
Ø3-6.5mm, 4A, 60V, -25-90°C,
M12 Female (socket) 5pin, IP67,
PBT

VK200821



Connection cable, 2m, M12
Female (socket) 5pin Angular, Free
conductor end, 5x0.34mm², PUR
(Polyurethane), Ø5.2mm, 30V, -
30-90°C, IP67, TPU, 4A, With LED
display, Suitable for trailing chain
and torsion resistant, Oil and
cooling lubricants, Weldi...

VK200825



Connection cable, 2m, M12
Female (socket) 5pin Straight, Free
conductor end, 5x0.34mm², PUR
(Polyurethane), Ø5.2mm, 30V, -
30-90°C, IP67, TPU, 4A, With LED
display, Suitable for trailing chain
and torsion resistant, Oil and
cooling lubricants, Weld...

AU000013



accessories, ultrasonic, cable, 0.
3m, M12 socket 5p pole straight,
M12-connector 5 pole straight,
PUR (Polyurethane)

VK205621



Connection cable, 2m, M12
Female (socket) 5pin Angular, Free
conductor end, 5x0.34mm², PUR
(Polyurethane), Ø6mm, 60V, -25-
90°C, IP67, Shielded, Suitable for
trailing chain and torsion resistant,
Oil and cooling lubricants, Welding
area, Silicone-free

VK205625



Connection cable, 2m, M12
Female (socket) 5pin Straight, Free
conductor end, 5x0.34mm², PUR
(Polyurethane), Ø6mm, 60V, -25-
90°C, IP67, Shielded, 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.