

UT129521

Ultrasonic sensors • Pushbuttons

Ultrasonic sensor, diffuse reflection sensor, M12x1 84lang, Sn: 0-150, 18-30V DC, 1x PNP/NPN programmable/configurable, IO-Link, M12 plug-in connector 4-pin, IP67, nickel-plated (n-pltd), brass, teach-in, LED, axial sound cone

including Nut



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	10 ms
Number of switching outputs	1
Display	LED display
Resolution	1 mm
Type of switching function	Programmable/configurable
Type of electrical connection	Connector M12
Type of switching output	PNP/NPN
Rated switching current	150 mA
Setting procedure	Teach-In
Short-circuit protection	Yes
No-load current	40 mA
Number of pins	4
Sound outlet	axial
Switching distance	0 - 150 mm
Switching frequency	20 Hz
Protection class	III
Voltage drop	2 V
Temperature drift over entire measuring range	0.2 %
Carrier frequency	400 kHz
Reverse polarity protection	Yes
Absolute repeat accuracy	0.5 mm
Supported communication interface	IO-Link
Operating voltage (DC)	18 - 30 V

Mechanical features

Design	Cylinder, screw-thread
Diameter	14 mm
Thread length	26 mm
Thread pitch	1 mm
Length	84 mm
Mounting distance	60 mm
Surface	nickel-plated
Degree of protection (IP)	IP67
Housing material	Brass
Diameter detection	Yes
Thread dimension	M12
Ambient temperature	-25 - 70 °C

Other features

Operating frequency	400 kHz
Object detection on conveyor systems	Yes
Reference medium / object	Measuring plate 20x20mm
ardTE00_Anwendungen	Niveauabfrage

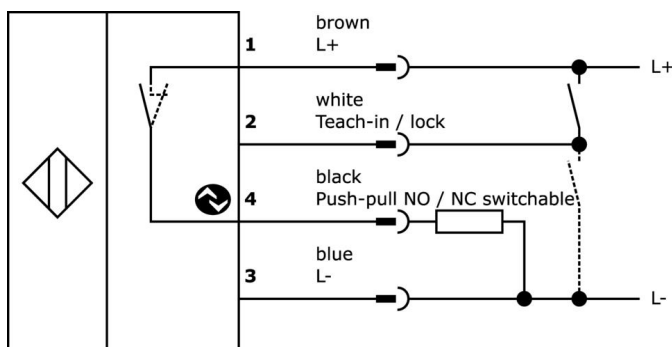
Classification

ETIM 8	EC001849 Ultrasonic probe
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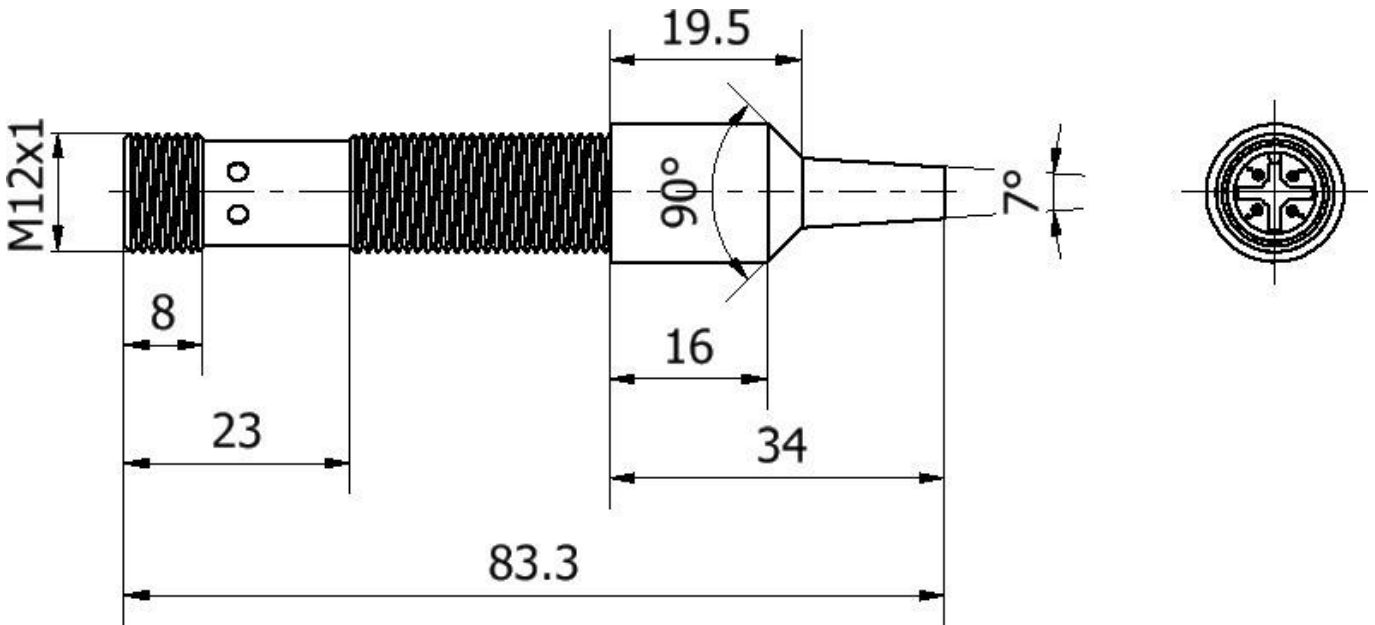
More

IPF Product Group	250 ultrasonic sensors
packaging dimensions	155 x 175 x 12.5 mm
gross weight	43 g
Customs tariff number	85365019
WEEE number	40951076
POP-compliant	Yes
Reach-compliant	Yes
RoHS-compliant	Yes

Connection



Dimensional drawing



Extract accessories program

VK003020



Cable socket, angular, self-assembly, screw connection, Ø3-6.5mm, 4A, 240V, -25-90°C, M12 socket 4-pin, IP67, PBT

VK003024



Cable socket, Straight, Suitable for self-assembly, Screw connection, Ø3-6.5mm, 4A, 240V, -25-90°C, M12 Female (socket) 4pin, IP67, PBT

VK030F21



Connection cable, 0.3m, M12 socket 4-pin angular, M12 connector 4-pin straight, 4x0.34mm², 240V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

VK030F25



Connection cable, 0.3m, M12 socket 4-pin straight, M12 connector 4-pin straight, 4x0.34mm², PUR (polyurethane), 240V, IP67, suitable for trailing chain and torsion resistant, oils and cooling lubricants, welding area, silicone-free

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

VK200621



Connection cable, 2m, M12 Female (socket) 5pin Angular, Free conductor end, 5x0.34mm², PUR (Polyurethane), Ø5.4mm, 60V, -25-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

VK200625



Connection cable, 2m, M12 Female (socket) 5pin Straight, Free conductor end, 5x0.34mm², PUR (Polyurethane), Ø5.4mm, 60V, -25-90°C, IP67, Suitable for trailing chain and torsion resistant, Oil and cooling lubricants, Welding area, Silicone-free

VK205321



Connection cable, 2m, M12 Female (socket) 4pin Angular, Free conductor end, 4x0.34mm², PUR (Polyurethane), Ø5.5mm, 250V, -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.
- /** 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