

UT300027

Ultrasonic sensors • Distance measurement

sensor ultrasonic, diffuse-reflection sensor, M30x1.5 136long, Sn: 150-1500, 19-30V DC, PNP Programmable/configurable, 0-10V, Connector M12 5pin, IP65, 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	300 ms
Display	LED display
Resolution	1 mm
Type of switching function	Programmable/configurable
Type of analog output	0 - 10V
Type of electrical connection	Connector M12
Type of switching output	PNP
Rated switching current	100 mA
Setting procedure	Teach-In
Relative hysteresis	1 %
Short-circuit protection	Yes
No-load current	45 mA
Number of pins	5
Relative linearity deviation	0.5 %
Relative repeat accuracy	0.4 %
Sound outlet	axial
Switching frequency	2 Hz
Protection class	III
Temperature compensation	50 °C
Carrier frequency	200 kHz
Reverse polarity protection	Yes
Operating voltage (DC)	19 - 30 V
Measuring range	150 - 1500 mm

Mechanical features

Design	Cylinder, screw-thread
Thread length	90 mm
Thread pitch	1.5 mm
Length	136 mm
Degree of protection (IP)	IP65
Housing material	Plastic
Diameter detection	Yes
Thread dimension	M30
Ambient temperature	-15 - 70 °C

Optical features

Angle of beam spread	8 °
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Other features

Operating frequency	200 kHz
ardTE00_Anwendungen	Niveauabfrage

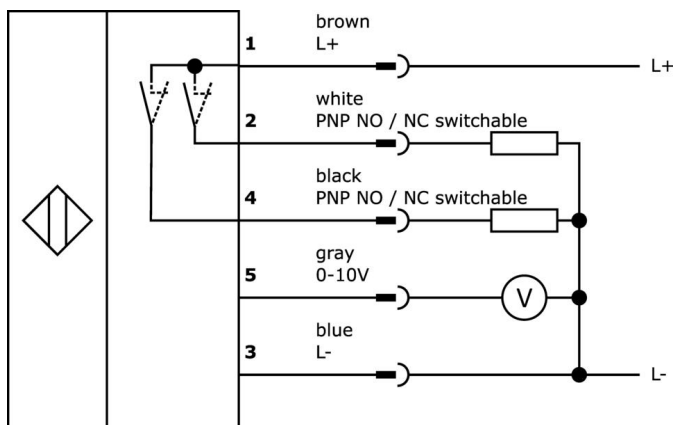
Classification

ETIM 8	EC001846 Ultrasonic distance sensor
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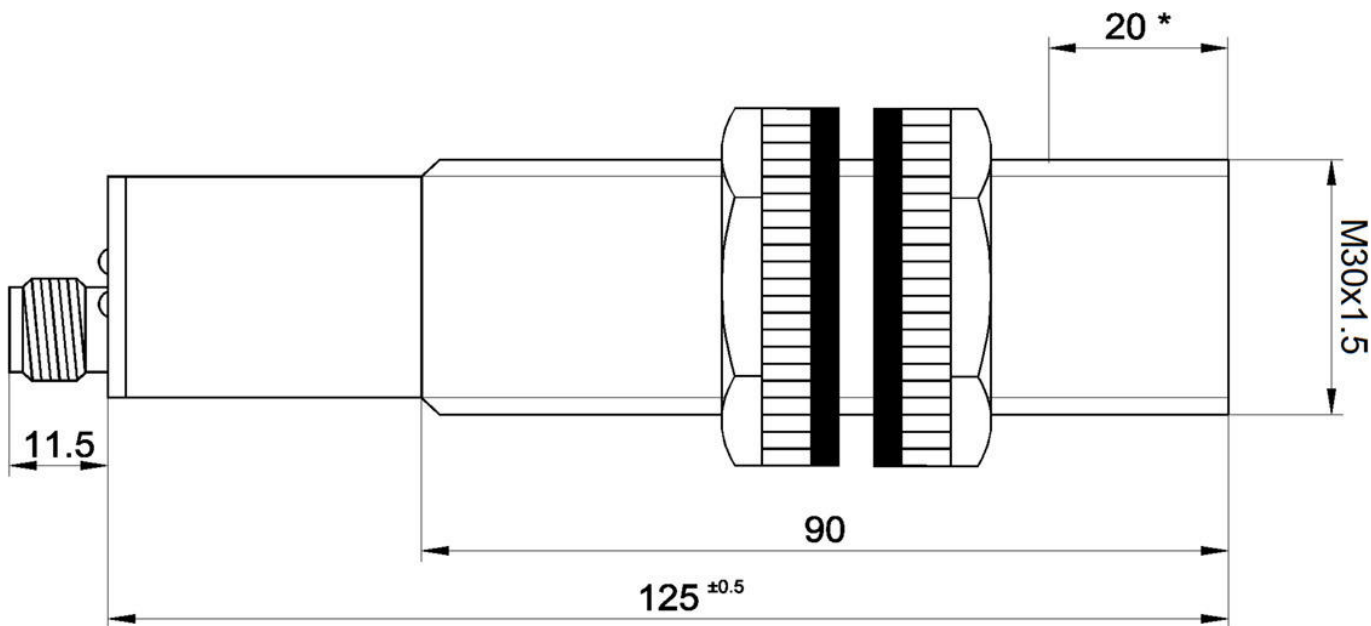
More

IPF Product Group	259 ultrasonic sensors (analog)
packaging dimensions	170 x 105 x 55 mm
gross weight	170 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

AY000027



accessories, Hexagon nut, M30x1.5, Wrench size 36mm, Brass Nickel-plated

AY000061



accessories sensor, Ø30mm, Plastic, For sensor 30mm, for Wall mounting, Screw mounting

VK003021



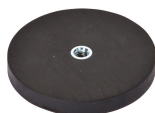
Cable socket, Angular, Suitable for self-assembly, Screw connection, Ø3-6.5mm, 4A, 60V, -25-90°C, M12 Female (socket) 5pin, IP67, PBT

VK003025



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

AY000129



Accessories, magnetic, Ø66mm, neodymium-iron-boron, inside thread M6, rubber

AY000144



accessories sensor, Adapter plate, 3x30x85mm, Stainless steel 1.4305

AU000003



accessories ultrasonic, Deflection bracket, 50x105mm, Deflection bracket, Steel, 90°

AU000004



accessories ultrasonic, Deflection bracket, 50x105mm, 90°

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

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.