

UT180024

Ultrasonic sensors • Distance measurement

Ultrasonic sensor, diffuse reflection sensor, M18x1 104lang, Sn: 200-1500, 18-30V DC, 4-20mA, M12 plug-in connector 4-pin, IP67, plastic, axial sound cone, synchronization possible

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	120 ms
Type of analog output	4 - 20mA
Type of electrical connection	Connector M12
Short-circuit protection	Yes
No-load current	35 mA
Number of pins	4
Relative linearity deviation	0.3 %
Relative repeat accuracy	0.2 %
Sound outlet	axial
Protection class	III
Carrier frequency	180 kHz
Reverse polarity protection	Yes
Operating voltage (DC)	18 - 30 V
Measuring range	200 - 1500 mm
Input function	Synchronization

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	-15 - 70 °C

Optical features

Angle of beam spread	8 °
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Other features

Operating frequency	180 kHz
ardTE00_Anwendungen	Niveauabfrage

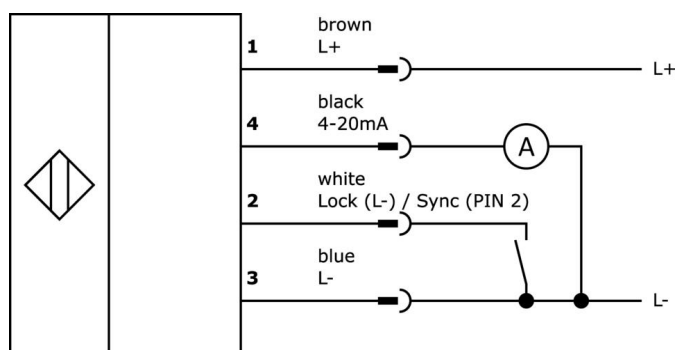
Classification

ETIM 8	EC001846 Ultrasonic distance sensor
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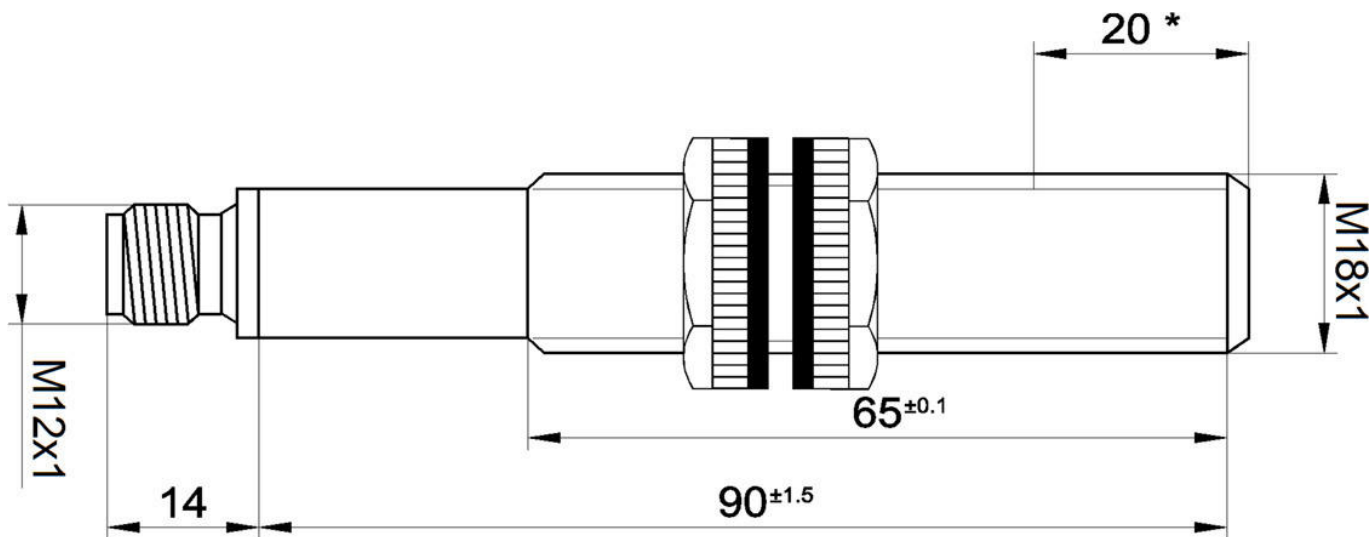
More

IPF Product Group	259 ultrasonic sensors (analog)
packaging dimensions	165 x 105 x 55 mm
gross weight	93 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

AY000026



accessories, Hexagon nut, M18x1,
Wrench size 24mm, Brass Nickel-
plated

AY000038



accessories, Hexagon nut, M18x1,
Wrench size 24mm, Stainless steel

VK000041



Adaption, M12 Female (socket)
4pin Straight, M8 Male
(connector) 4pin Straight, 24V, -
25-85°C, IP67, Oil and cooling
lubricants, Welding area

AY000014



accessories sensor, Reduction
sleeve, M18, Plastic

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

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, Silicon...

VK205325



Connection cable, 2m, M12
Female (socket) 4pin Straight, 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, Silico...

AU000001



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

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.