

## UR991149

### ULTRASONIC SENSORS • RETRO-REFLECTIVE SENSORS

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)

#### MECHANICAL DATA

Ambient temperature	-15 °C ... 70 °C
Degree of protection (IP)	IP67
Diameter detection	Yes
Housing design	Cylinder, screw-thread
Housing material	Plastic
Sensor length	92 mm
Thread length	65 mm
Thread pitch	1 mm
Thread size, metric	18

#### ELECTRICAL DATA

Carrier frequency	180 kHz
Max. output current	500 mA
Measuring range length	400 mm ... 1500 mm
No-load current	35 mA
Reverse polarity protection	Yes
Setting procedure	Manual adjustment
Short-circuit-proof	Yes
Sound cone (angle of beam spread)	8 °
Sound outlet	Axial
Supply voltage	19 V ... 30 V
Switching frequency	10 Hz
Synchronization input	Yes
Synchronization possible	Yes
Type of electrical connection	Connector M12
Type of switching function	Normally open contact (NO)
Type of switching output	PNP
Voltage type	DC

## ELECTRICAL DATA

With LED display Yes

## OTHER DATA

Dead zone 400 mm

Object detection on conveyor systems Yes

## DIMENSIONAL DRAWING

### 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!