

UV540000

ULTRASONIC SENSORS • SWITCHING AMPLIFIERS

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

Degree of protection (IP)	IP43
Depth	110 mm
Device design	Field device
Height	75 mm
Housing design	Cuboid
Housing material	Plastic
Length	110 mm
Mounting method	Snap mounting mounting rail
Width	100 mm

ELECTRICAL DATA

Amplifier for ultrasonic sensors	Yes
Galvanic isolation between input and output	No
Galvanic isolation between inputs	No
Galvanic isolation between supply voltage and all other current circuits	No
Inherently safe according to EN 60947-5-6 NAMUR	No
Malfunction message output	Yes
No-load current	110 mA
Number of channels	1
Number of output circuits, transistor pnp	2
Power consumption	3.3 W
Rated supply voltage at DC (MAX)	30 V
Rated supply voltage at DC (MIN)	19 V
Reverse polarity protection	Yes
Short-circuit-proof	Yes
Suitable for safety functions	No
Switching current	0.1 A

ELECTRICAL DATA

Switching frequency	8 Hz
Switching voltage	2.4 V
Switching voltage DC	30 V
Type of analog output	0 V ... 10 V / 4 mA ... 20 mA
Type of electrical connection	Clamp
Type of switching function	Normally open/normally closed
Type of voltage supply	Active
With LED display	Yes

OTHER DATA

Operating temperature (MAX)	50 °C
Operating temperature (MIN)	0 °C

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!

Never use these devices in applications where the safety of a person depends on their functionality.