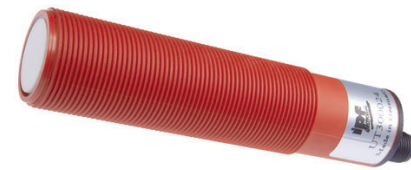


Ultrasonic sensors are non-contact and wear-free position switches which can also be used under rough environmental conditions. A key advantage of these devices lies in the fact that the material and the surface characteristics of the objects to be detected can be almost anything. Solids, liquids, grainy 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)


TECHNICAL DATA

Relative linearity deviation	0.5 %
Ambient temperature (min/max)	-15 °C / 70 °C
Degree of protection (IP)	IP65
Diameter detection	YES
Furcate	NO
Housing design	Cylinder, screw-thread
Housing material	Plastic
Housing material, detail	Plastic
Sensor length	136 mm
Thread length	90 mm
Thread pitch	1.5 mm
Thread size, metric	30
Adjustable measuring range	YES
Carrier frequency	200 kHz
Combined switching and analog outputs	YES
Distance measuring sensors	YES
Filling level measurement	YES
Hysteresis	1 %
Max. output current	100 mA
Measuring range length (min/max)	150 mm / 1500 mm
No-load current	45 mA
Number of pins	5
Relative repeat accuracy	0.4 %
Response time	300 ms
Reverse polarity protection	YES
Sensing range (min/max)	150 mm / 1500 mm
Setting procedure	Teach-In
Setting via teach-in	YES
Short-circuit-proof	YES

TECHNICAL DATA

Sound cone (angle of beam spread)	8 °
Sound outlet	Axial
Supply voltage (min/max)	19 V / 30 V
Switching frequency	2 Hz
Switching output with window function	NO
Synchronization possible	NO
Temperature compensation	50 °C
Temperature compensation	0 °C
Type of analog output	4 mA ... 20 mA
Type of electrical connection	Connector M12
Type of switching function	Programmable/configurable
Type of switching output	PNP
Voltage type	DC
With LED display	YES
With LED display (alignment aid)	YES
With LED display (measuring range)	YES
Level detection	YES
Loop control	YES
Object detection on conveyor systems	NO
With protective coating	NO
High resolution	NO
Resolution	1 mm

DIMENSIONAL DRAWING

