IPF ELECTRONIC

UR18A595

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 (a.g. sile detection)

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)	IP65
Housing material	Nickel-plated brass
Sensor diameter	18 mm
Thread pitch	1 mm
Thread size, metric	18
ELECTRICAL DATA	
Carrier frequency	400 kHz
Max. output current	150 mA
Measuring range length	0 mm 200 mm
No-load current	20 mA
Residual ripple	10 %
Response time	50 ms
Response/decay time	20 ms
Reverse polarity protection	Yes
Short-circuit-proof	Yes
Supply voltage	20 V 30 V
Switching frequency	10 Hz
Temperature drift	0.17 %
Type of electrical connection	Connector M12
Type of switching function	Normally open contact (NO)
Type of switching output	PNP
Voltage type	DC

DIMENSIONAL DRAWING



INSTALLATION



Mounting / Installation may only be carried out by a qualified electrician!





SAFETY WARNINGS

Before initial operation, please make sure to follow all safety instructions that may be provided in the product information!