

UY210102

ULTRASONIC SENSORS • THROUGH-BEAM 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 FEATURES

Ambient temperature	-15 °C ... 60 °C
Degree of protection (IP)	IP67
Housing design	Cuboid
Housing material	Plastic
Housing material, detail	Plastic
Sensor height	30 mm
Sensor length	12 mm
Sensor width	20 mm

ELECTRICAL FEATURES

Carrier frequency	300 kHz
Max. output current	500 mA
Measuring range length	300 mm ... 300 mm
No-load current	40 mA
Response time	1 ms
Response/decay time	1 ms
Short-circuit protection	+
Sound outlet	Lateral
Supply voltage	18 V ... 30 V
Switching frequency	150 Hz
Synchronization possible	-
Type of electrical connection	Cable
Type of switching function	Normally open contact (NO)
Type of switching output	PNP
Voltage type	DC
With LED display	+

OTHER FEATURES

Object detection on conveyor systems	+
Version	Through-beam sensors

Other

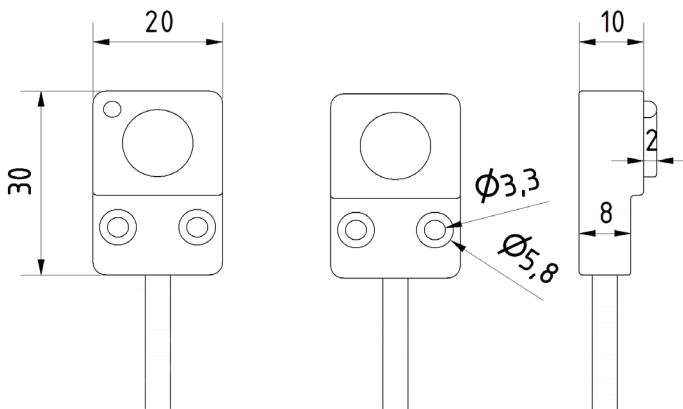
Packaging dimensions	135.0mm x 120mm x 155.0mm
Shipping weight	0.15kg
Tariff code	85365019

Classification

ipf product group	250
eClass 8.0	27272801
eClass 9.0	27272801
eClass 9.1	27272801
ETIM-5.0	EC001847
ETIM-6.0	EC001847
ETIM-7.0	EC001847

Connection

Dimensional drawing



Installation



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

Disposal



Software

Please download the software or driver required for operating your new device on our homepage: www.ipf.de

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. LED lighting systems can generate intensive UV radiation, which can damage your eyes in case of improper use. The manufacturer cannot be held responsible for damages that result from improper use or connection.