

## DATASENSING UFT1 ULTRASONIC SENSOR

UFT1B/H1-1E  
 M30 Full faced stainless, Analogue, 2500mm range,  
 M12 connector

- 250-2500mm sensing range
- Stainless Steel AISI 316L full face housing
- Outputs 0...10V, 4...20 mA, PNP, IO-Link
- IP68, IP69K mechanical protection degree
- ECOLAB certification



### PRODUCT DESCRIPTION

The **UFT1 series of ultrasonic sensors** from Datasensing (formerly known as Micro Detectors) sets a new standard for reliability and durability in industrial applications. Engineered with a full-faced stainless steel M30 housing, these sensors are built to withstand even the harshest environments, making them ideal for demanding tasks in sectors such as automotive, robotics, and industrial automation. The robust construction ensures long-lasting performance and resistance to mechanical wear, corrosion, and other environmental challenges, offering superior reliability in a wide range of tough applications.

These versatile sensors are available with either digital or analogue outputs, providing flexibility to meet various system requirements. In addition, the UFT1 series is IO-Link ready, enabling seamless integration into advanced industrial automation networks for real-time data monitoring and enhanced communication capabilities. Whether you're optimizing production lines, ensuring the smooth operation of robotic systems, or tracking inventory, these sensors provide the precision and functionality you need.

Operating based on the principle of sound wave reflection, the UFT1 ultrasonic sensors emit high-frequency sound waves (typically above 20 kHz) to measure distance or detect the presence of objects. The sensor calculates the time it takes for the sound waves to reflect off a target and return to the sensor, providing accurate and reliable distance measurements even in challenging conditions. These sensors are particularly valuable in environments where traditional sensors may struggle, such as in dusty, dirty, or noisy settings.

#### Technical features:







- **Full-Faced Stainless Steel M30 Housing:** Designed for durability and resistance
- **Digital and Analog Outputs:** Available with both digital and analogue output options, **IO-Link Ready:** The sensor is compatible with IO-Link technology
- **High-Precision Distance Measurement:** Utilizes high-frequency ultrasonic sound waves (above 20 kHz) to accurately measure distance and detect objects
- **Reliable Object Detection:** Works based on the principle of sound wave reflection
- **Wide Measurement Range:** The UFT1 sensors offer a wide measurement range
- **High Resolution:** Capable of providing high-resolution measurements,
- **Temperature Compensation:** Incorporates temperature compensation features to ensure reliable measurements across a wide range of temperatures
- **Versatile Mounting Options:** The M30 threaded housing design allows for easy installation in a variety of configurations
- **Protection Rating:** High ingress protection (IP) rating for dust and water resistance
- **Wide Operating Voltage Range:** Supports a wide range of input voltages

### TECHNICAL DATA

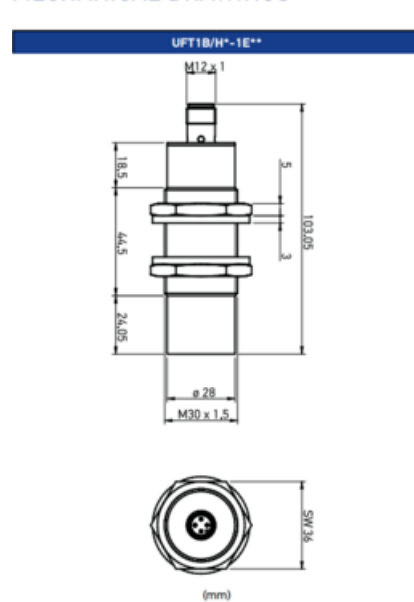
Distance max	2500 mm
Distance min	250 mm
Electrical connection	M12 4-pin connector
Housing	M30

<b>Housing diameter</b>	30 mm
<b>IP class</b>	IP67, IP68, IP69K
<b>LED indication</b>	No
<b>Material</b>	Stainless steel 316L
<b>Output</b>	0-10V, IO-Link
<b>Photocell technology</b>	Diffuse Reflection
<b>Sensor type</b>	Ultrasonic
<b>Size</b>	M30
<b>Supply voltage</b>	10-30 V DC
<b>Supply voltage dc max</b>	30 V DC
<b>Supply voltage dc min</b>	10 V DC
<b>Temperature operational max</b>	60 °C
<b>Temperature operational min</b>	-10 °C







PLUGS

 <p><b>UFT18/N1-1E</b></p> <p>Brown 1 10...30Vdc White 2 Teach Blue 3 DVC Black 4 0...10V</p>	 <p><b>UFT18/N2-1E</b></p> <p>Brown 1 10...30Vdc White 2 Teach Blue 3 DVC Black 4 4...20mA</p>
 <p><b>UFT18/NP-1E</b></p> <p>Brown 1 10...30Vdc White 2 Teach Blue 3 DVC Black 4 NONC</p>	 <p><b>UFT18/N4-1E0</b></p> <p>Brown 1 10...30Vdc White 2 4...20mA Blue 3 VDC Black 4 IO-Link</p>
 <p><b>UFT18/N7-1E0</b></p> <p>Brown 1 10...30Vdc White 2 0...10V Blue 3 DVC Black 4 IO-Link</p>	 <p><b>UFT18/N9-1E0</b></p> <p>Brown 1 10...30Vdc White 2 PNP Blue 3 DVC Black 4 IO-Link</p>

MECHANICAL DRAWINGS



PLUGS

 <p><b>UFT18/N1-1E</b></p> <p>Brown 1 10...30Vdc White 2 Teach Blue 3 DVC Black 4 0...10V</p>	 <p><b>UFT18/N2-1E</b></p> <p>Brown 1 10...30Vdc White 2 Teach Blue 3 DVC Black 4 4...20mA</p>
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# MECHANICAL DRAWINGS

UFT1B/H\*-1E\*\*

