

DATASENSING UT2F ULTRASONIC SENSOR

UT2F/G6-0ESY

M30 with large shape transducer ϕ 38,8mm, analog. 4-20 mA+ PNP NO/NC, 350-6000mm

- Long distance sensing range from 250mm to 8000mm
- PNP, NPN, Voltage or current analogue and IO-Link output versions available
- Remote Teach-In or Teach-In button



PRODUCT DESCRIPTION

The **UT2F series of ultrasonic sensors** from Datasensing (formerly Micro Detectors) offers a versatile and robust solution for a variety of sensing applications. Featuring a large range of M30 barrel sensors, the UT2F series is designed to meet the demands of industries such as robotics, automotive systems, industrial automation, and healthcare. With both metal and plastic housing options, these sensors provide flexibility for different environments, ensuring you can select the right material based on your application's requirements and environmental conditions.

The UT2F ultrasonic sensors are equipped with both digital and analogue outputs, allowing for seamless integration into different control systems and automation setups. You can choose between an M12 connector for easy and reliable connection or an embedded 2-meter cable for direct wiring, offering additional installation flexibility. This versatility makes the UT2F sensors an excellent choice for a range of applications, whether you're looking to measure distances, detect objects, or monitor fluid levels.

Operating on the principle of ultrasonic sound waves (above 20 kHz), the UT2F sensors emit high-frequency waves and measure the time it takes for these waves to reflect off an object and return to the sensor. This enables the UT2F series to deliver accurate, real-time distance measurements and precise object detection, even in environments where dust, dirt, and other contaminants may be present. The ability to operate in challenging conditions makes these sensors ideal for both industrial environments and more delicate applications like healthcare and laboratory settings.

Technical features:

- **M30 Barrel Design:** Features a robust M30 barrel sensor design
- **Digital and Analog Outputs:** Available with both digital and analogue output options
- **M12 Connector or Embedded 2m Cable:** Provides installation flexibility with an M12 connector for quick and easy setup, or an embedded 2-meter cable for direct wiring.
- **Choice of Metal or Plastic Housing:** Available in either a durable metal housing for rugged environments or a lightweight plastic housing for more cost-effective applications.
- **Ultrasonic Technology:** Utilizes high-frequency sound waves (typically above 20 kHz) to detect objects and measure distances accurately.
- **Distance Measurement via Sound Wave Reflection:** Operates by emitting ultrasonic waves and measuring the time it takes for the waves to reflect off an object and return
- **Wide Sensing Range:** Capable of detecting objects over a broad range of distances
- **Fast Response Time:** Provides quick measurements
- **Temperature Compensation:** Ensures reliable performance across a wide range of environmental temperatures
- **IP67 Protection Rating:** Features a high level of protection against dust, dirt, and water, ensuring durability in harsh and challenging environments.
- **Versatile Application Use:** Ideal for a variety of applications, including robotics, industrial automation, material handling, automotive systems, and healthcare.
- **Flexible Mounting Options:** The M30 barrel design allows for various mounting configurations

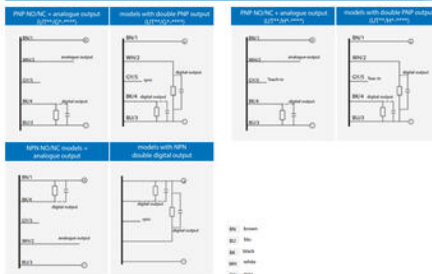
TECHNICAL DATA

Distance max

6000 mm

Distance min	350 mm
Electrical connection	M12 plug cable exit
Housing	M30
IP class	IP67
LED indication	Yes
Material of body	PBT
Output	4-20 mA, PNP NO+NC
Supply voltage dc max	30 V DC
Supply voltage dc min	10 V DC
Temperature operational max	70 °C
Temperature operational min	-20 °C

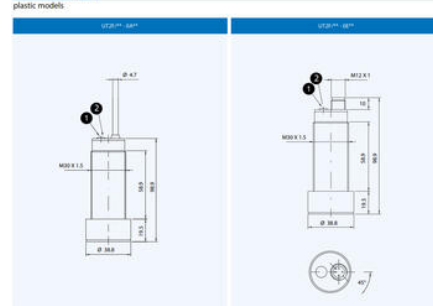
electrical diagrams of connections



plugs



dimensions (mm)

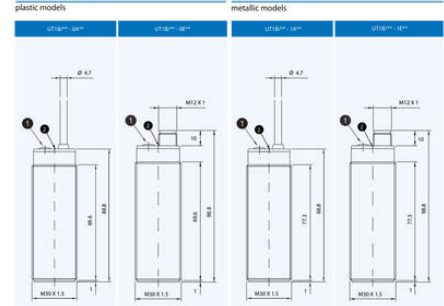


dimensions (mm)

accessories included in all plastic models

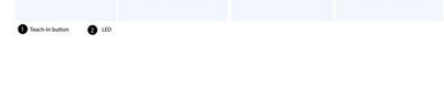


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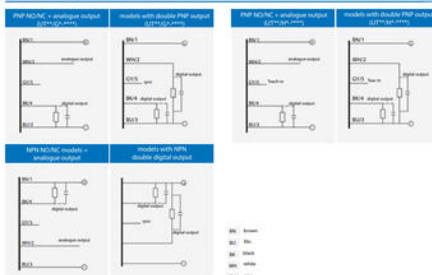


dimensions (mm)

accessories included in all plastic models



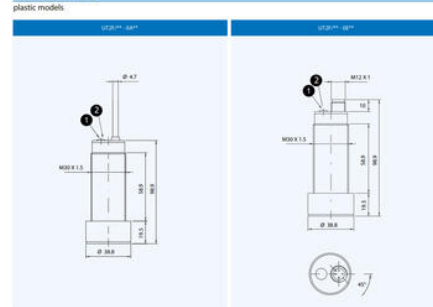
electrical diagrams of connections



plugs



dimensions (mm)

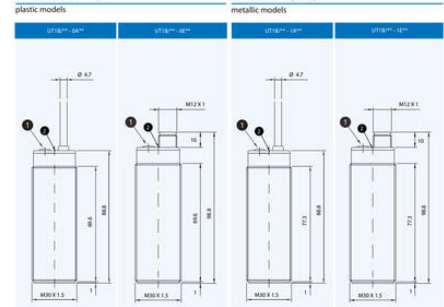


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