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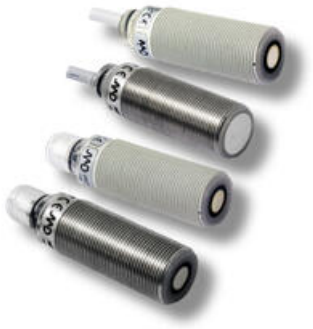
DATASENSING UK1 ULTRASONIC SENSORS

UK1A/G2-1ASY
M18 analogue 4-20 mA 50-400mm cable 2m AISI316L

- Sensing distance up to 2200mm
- Plastic or metallic (AISI 316L) housing
- Models with current or voltage analogue outputs
- IP67 protection
- Single point teach



PRODUCT DESCRIPTION

The **UK1 series of ultrasonic sensors** from Datasensing offers a wide range of M18 barrel sensors designed for high-performance applications in diverse industries. These sensors are available in a variety of configurations, including digital and analogue outputs, making them a flexible choice for any setup. The sensors come with either an M12 connector or an embedded 2-meter cable, offering ease of integration into existing systems. Furthermore, you can choose between a durable metal housing or a lightweight plastic housing depending on your environmental needs and budget considerations.
Utilizing high-frequency sound waves (typically above 20 kHz), the UK1 ultrasonic sensors work on the principle of sound wave reflection to accurately measure distance and detect the presence of objects. The sensor emits ultrasonic waves and measures the time it takes for the waves to reflect off an object and return to the sensor, providing precise and reliable data. This makes the UK1 series perfect for applications that require non-contact distance measurement, such as material handling, robotics, automotive systems, and even healthcare applications where precise object detection is crucial.
Built with versatility in mind, the UK1 sensors excel in industrial automation, manufacturing, and logistics environments, where reliable object detection and distance measurement are essential. Whether it's for detecting objects in motion, measuring liquid levels, or monitoring material flow, the UK1 provides a high-performance solution. The rugged construction ensures reliable operation in challenging environments, and the choice between metal or plastic housings allows the sensor to withstand various conditions like vibrations, dust, and exposure to chemicals.

Technical features:

- M18 Barrel Design: Compact and versatile M18 barrel housing suitable for various mounting configurations and applications.
- Digital and Analog Outputs: Available with both digital and analogue outputs
- M12 Connector or 2m Embedded Cable: Offers easy integration
- Choice of Metal or Plastic Housing: Available in either a rugged metal housing or a lightweight plastic housing
- High-Frequency Ultrasonic Waves: Uses ultrasonic waves (above 20 kHz) to measure distance and detect objects with high accuracy and precision.
- Distance Measurement via Sound Wave Reflection: Operates by emitting high-frequency sound waves and measuring the time taken for the waves to reflect off objects, providing accurate distance measurement.
- Wide Operating Range: Offers a broad sensing range
- Fast Response Time: Designed to provide quick measurements
- Temperature Compensation: Features temperature compensation
- High Protection Rating (IP67): Provides excellent protection against dust, moisture, and environmental conditions
- Versatile Application Use: Ideal for applications in robotics, industrial automation, material handling, and more
- Mounting Flexibility: The M18 barrel form allows for flexible mounting options in different configurations

TECHNICAL DATA

Distance max	400 mm
Distance min	50 mm
Electrical connection	Embedded 2m cable

Housing	M18
IP class	IP67
LED indication	YES
Material of body	Stainless steel 316L
Output	4-20 mA
Photocell technology	Direct Diffuse
Supply voltage dc max	30 V DC
Supply voltage dc min	10 V DC
Temperature operational max	70 °C
Temperature operational min	-20 °C