

## DATASENSING UK6 SHORT ULTRASONIC SENSORS

UK6A/HP-0EUL  
M18 PNP NO/NC 40-300 mm plug M12

- Sensing range from 300mm to 1200mm
- Plastic or stainless steel versions available
- PNP, NPN, Current or voltage analogue output
- IP67 protection
- M12 connector or 2m embedded cable models



### PRODUCT DESCRIPTION

The **UK6 series of short-body ultrasonic sensors** from Datasensing offers a compact yet powerful solution for applications requiring precise distance measurement and object detection in tight spaces. These M18 barrel sensors are designed for versatility, making them ideal for a wide range of industries such as robotics, automotive systems, industrial automation, and healthcare. With a short body design, the UK6 series is perfect for installations where space is limited but high-performance sensing is still required.

Available with both digital and analogue outputs, the UK6 ultrasonic sensors provide flexible integration options into existing systems. Choose from an M12 connection for quick installation or an embedded 2-meter cable for direct wiring, depending on your setup requirements. Additionally, these sensors come in two housing options—durable metal or lightweight plastic—allowing you to select the ideal material for your environment and application. This flexibility ensures that the UK6 series meets your specific needs without compromising on performance.

The UK6 sensors operate using ultrasonic technology, emitting high-frequency sound waves (above 20 kHz) to measure distance or detect the presence of objects. The sensor calculates the time it takes for the waves to reflect off an object and return, providing accurate and reliable measurements. This principle of sound wave reflection ensures that the UK6 series can detect objects in challenging environments, even in dusty or dirty conditions, where traditional sensors might not perform as well.

#### Technical features:

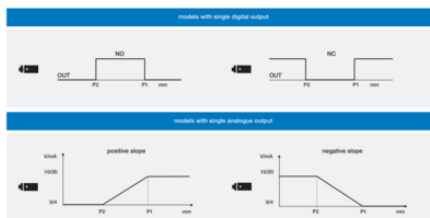
- Compact Short-Body Design: M18 barrel sensor with a short housing
- Digital and Analog Outputs: Available with both digital and analogue outputs M12 Connector or Embedded 2m Cable: Offers easy integration options
- Choice of Metal or Plastic Housing: Available in durable metal or lightweight plastic
- Ultrasonic Technology: Utilizes high-frequency ultrasonic waves (above 20 kHz) for precise distance measurement and object detection.
- Distance Measurement via Sound Wave Reflection: Operates by emitting ultrasonic waves and measuring the time taken for the waves to reflect off an object
- Wide Operating Range: Capable of detecting objects over a broad range of distances
- Fast Response Time: Provides quick measurements for real-time detection and dynamic operational needs.
- Temperature Compensation: Ensures reliable performance across a wide range of temperatures
- IP67 Protection Rating: High ingress protection rating
- Versatile Application Use: Well-suited for industries such as robotics, industrial automation, material handling, and automotive systems.
- Flexible Mounting Options: The compact M18 design allows for easy integration and mounting in tight spaces or various configurations.

### TECHNICAL DATA

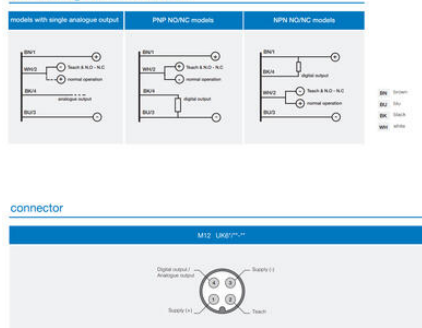
Connector	M12
Distance max	300 mm
Distance min	40 mm

<b>Housing</b>	M18 Short Housing
<b>IP class</b>	IP67
<b>LED indication</b>	YES
<b>Material of body</b>	Plastic
<b>Output</b>	PNP NO+NC
<b>Photocell technology</b>	Direct Diffuse
<b>Supply voltage dc max</b>	30 V DC
<b>Supply voltage dc min</b>	10 V DC
<b>Temperature operational max</b>	70 °C
<b>Temperature operational min</b>	-20 °C

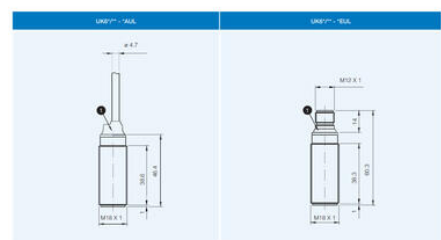
#### available outputs



#### electrical diagrams of connections



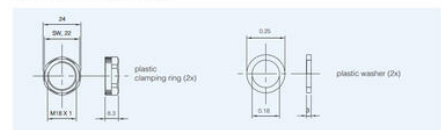
#### dimensions (mm)



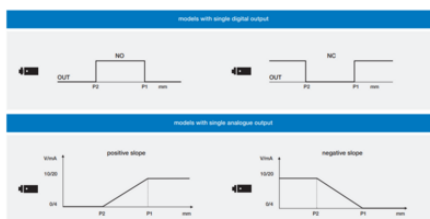
#### LED

#### dimensions (mm)

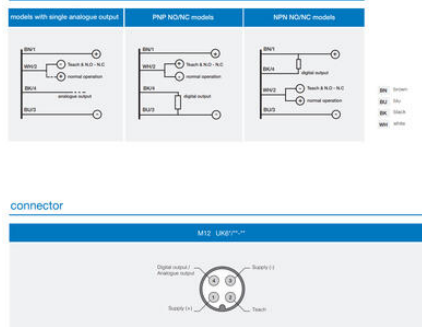
accessories included in all plastic models



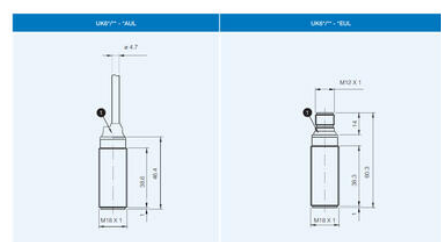
#### available outputs



#### electrical diagrams of connections



#### dimensions (mm)



#### LED

#### dimensions (mm)

accessories included in all plastic models

