

## 943 Series (943-K4U-2G-001/002/1CO-400E) Ultrasonic Distance Sensors



### DESCRIPTION

The new 943-K4U series industrial sensors are the latest addition to our range of ultrasonic distance sensors. They offer improved scanning ranges and remote Teach-In of the switching or analogue outputs, in addition to new, advanced features, such as Window and Hysteresis modes. The devices are Teach-In compatible and have a plastic housing.

### FEATURES

- Non contact distance sensing for use in non invasive measurement
- Reduced sensitivity to light intensity/reflectivity/opacity of target for enhanced flexibility and certainty of measurement
- Detects over much longer distance than other detection methods reducing the need for close proximity to the target
- Presence absence, tank fill level and diameter measurement provide an extremely robust and flexible measurement method
- Miniature form factor device fits into the smallest mounting positions
- Two mounting methods provide flexibility of mounting options to suit the application

### POTENTIAL APPLICATIONS

- Level measurement in small containers/test tubes
- Small object detection in narrow environments
- Presence detection
- Winding/unwinding control
- Height/thickness measurement
- Parts counting

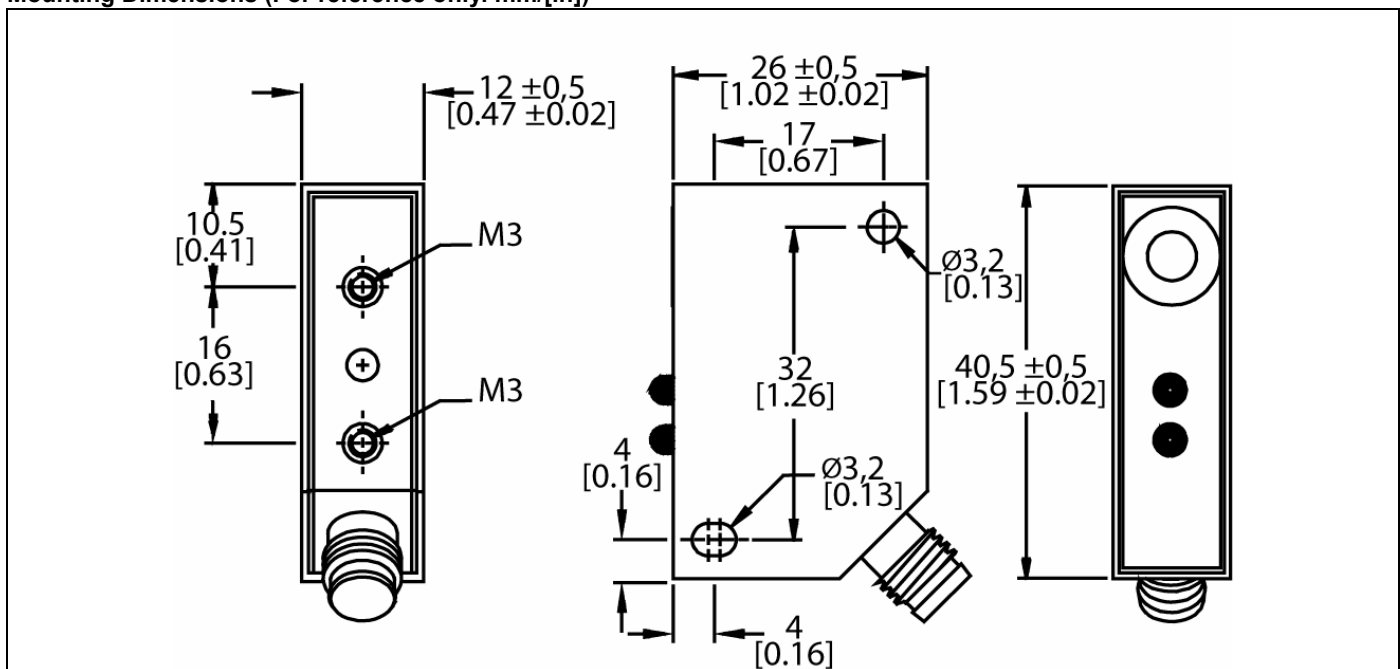
# 943 Series (943-K4U-2G-001/002/1C0-400E)

## Specifications

Parameter	943-K4U-2G-001-400E	943-K4U-2G-002-400E	943-K4U-2G-1C0-400E
Max. sensing distance	250 mm [9.84 in]		
Min. sensing distance	25 mm [0.98 in]		
Switching frequency	25 Hz		-
Linearity error	-		<0.3%
Hysteresis	2%		-
Repeatability of measured distance	-		±0.2 mm [0.008 in] ±0.2%
Beam angle	8°		
Temperature range	-25 °C to 70 °C [-13 °F to 158 °F]		
Temperature compensation	yes		
Operating voltage	10 Vdc to 30 Vdc		12 Vdc to 30 Vdc
Expected current consumption	<100 mA		
Output	PNP NO/NC	NPN NO/NC	0 V to 10 V
Expected output current	100 mA max.		-
Adjustment set point	Teach-In		-
Adjustment	-		Teach-In
Housing material	plastic		
Sealing*	IP67		
Connector	M8		

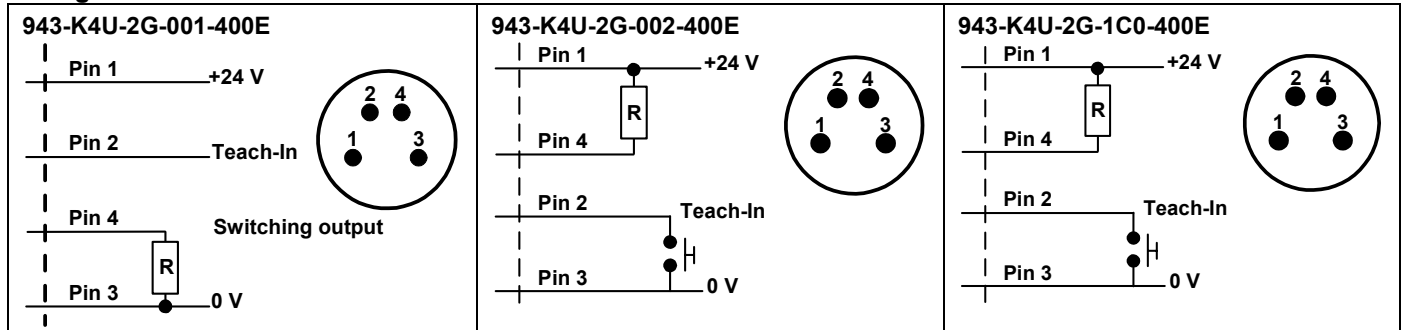
\*Attention! Do not expose sensor head to hot water >50 °C or steam vapour.

## Mounting Dimensions (For reference only. mm/[in])

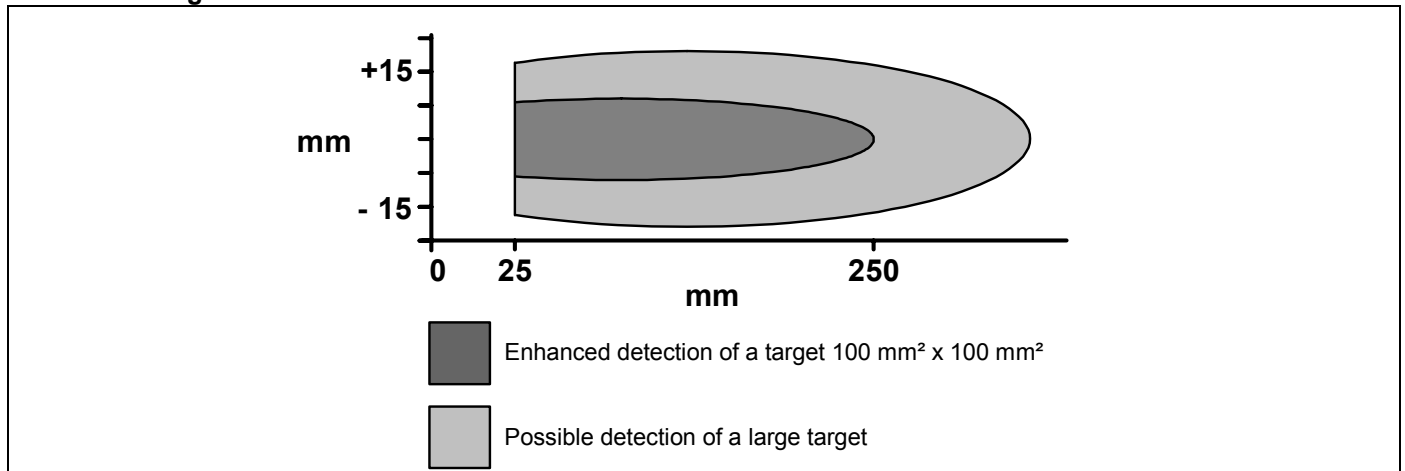


# Ultrasonic Distance Sensors

## Wiring



## Detection Range



## **WARNING**

### **PERSONAL INJURY**

DO NOT USE these products as safety or emergency stop devices or in any other application where failure of the product could result in personal injury.

**Failure to comply with these instructions could result in death or serious injury.**

### **WARRANTY/REMEDY**

Honeywell warrants goods of its manufacture as being free of defective materials and faulty workmanship. Honeywell's standard product warranty applies unless agreed to otherwise by Honeywell in writing; please refer to your order acknowledgement or consult your local sales office for specific warranty details. If warranted goods are returned to Honeywell during the period of coverage, Honeywell will repair or replace, at its option, without charge those items it finds defective. **The foregoing is buyer's sole remedy and is in lieu of all other warranties, expressed or implied, including those of merchantability and fitness for a particular purpose. In no event shall Honeywell be liable for consequential, special, or indirect damages.**

While we provide application assistance personally, through our literature and the Honeywell web site, it is up to the customer to determine the suitability of the product in the application.

Specifications may change without notice. The information we supply is believed to be accurate and reliable as of this printing. However, we assume no responsibility for its use.

## **WARNING**

### **MISUSE OF DOCUMENTATION**

- The information presented in this product sheet is for reference only. Do not use this document as a product installation guide.
- Complete installation, operation, and maintenance information is provided in the instructions supplied with each product.

**Failure to comply with these instructions could result in death or serious injury.**

### **SALES AND SERVICE**

Honeywell serves its customers through a worldwide network of sales offices, representatives and distributors. For application assistance, current specifications, pricing or name of the nearest Authorized Distributor, contact your local sales office or:

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