

# U-GAGE® Chemically Resistant Ultrasonic Sensors



## Datasheet

PTFE -Protected Sensors for Harsh Environments



- Chemical-resistant option available for all Banner QT50U, T30U and T30UX..C models
- Factory-installed PTFE flange and film coating bonded over the transducer provide protection from harsh environments
- The flange is sealed to the sensor face using a Viton® o-ring<sup>1</sup>; other o-ring materials may be specified (contact Banner Engineering)
- Performance specifications for these models are identical to those of corresponding standard models, with the exception of reduced sensing range
- Sensor dimensions and mounting vary somewhat from corresponding standard models (see dimensions)

## Models

Add suffix "-CRFV" to the model number of any standard QT50U, T30U or T30UX..C model sensor for the chemically resistant flange and coating. For example: QT50ULBQ6-CRFV or T30UINB-CRFV.

Model	Sensing Range
T30U..A	150 mm to 500 mm (5.9 inches to 19.6 inches)
T30U..B	300 mm to 1 m (11.8 inches to 39 inches)
T30UX..C	300 mm to 1.5 m (11.8 inches to 59 inches)
QT50U	200 mm to 6 m ( 7.8 inches to 19.6 feet)

## Installing the Chemical-Resistant Models

The sensor may be threaded directly into the side of a tank (see dimensions for hole diameter and thread specifications), or into a non-threaded hole, using the included threaded nut. Recommended through-hole size: 56.5 mm  $\pm$  0.5 mm for QT50U and 36.5 mm  $\pm$  0.5 mm for T30U.

For a non-threaded hole, install an o-ring onto the flange, and insert the flange completely into the hole until the sensor's front surface is against the tank's exterior surface. Place the second o-ring into the groove on the PTFE nut. Thread the nut onto the flange and tighten enough to eliminate gaps between the flange and the tank surface. This ensures that the o-rings are fully compressed.

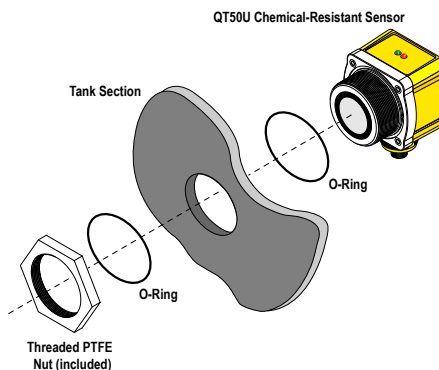
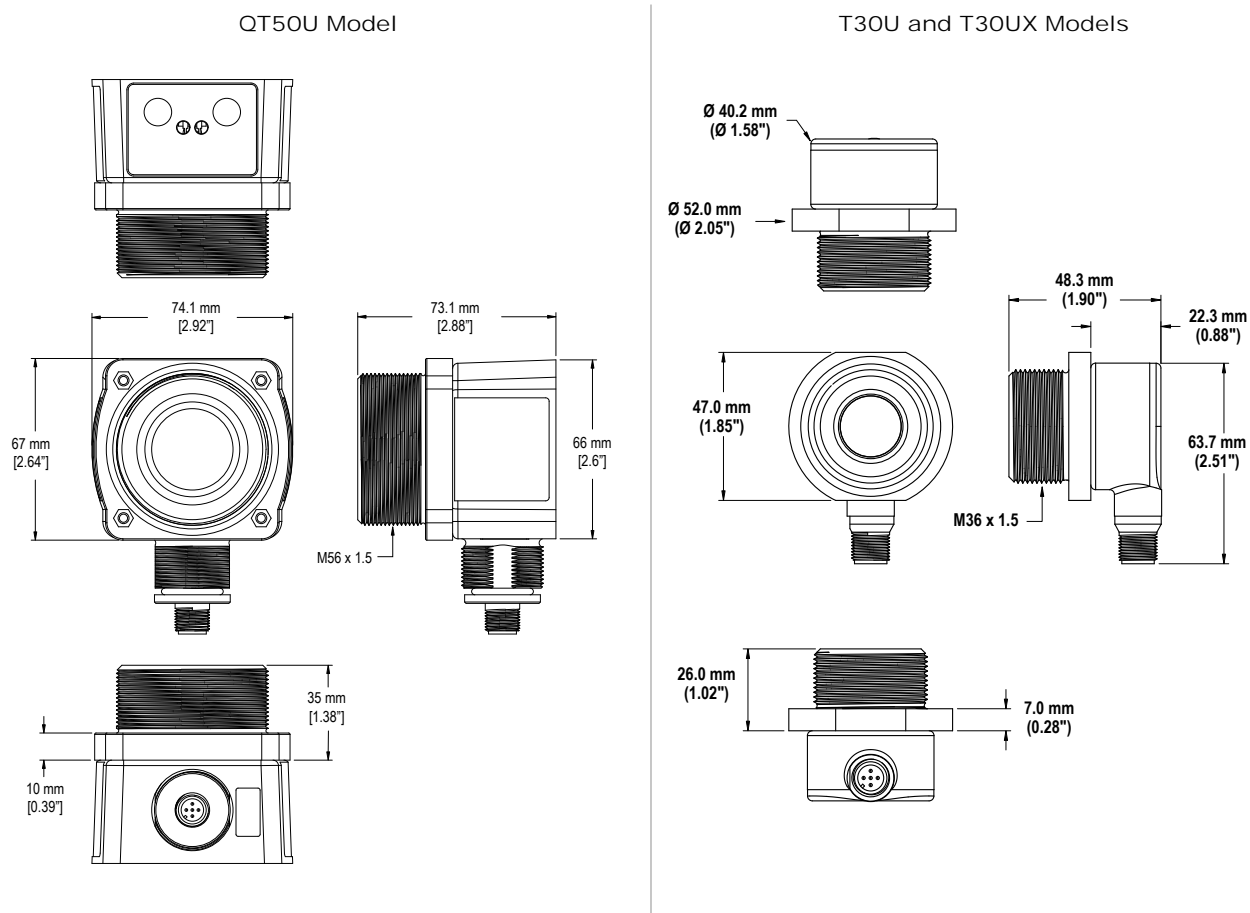


Figure 1. Installing a chemical-resistant sensor model into a non-threaded hole in a tank

<sup>1</sup> Viton® is a registered trademark of Dupont Dow Elastomers



## Dimensions



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