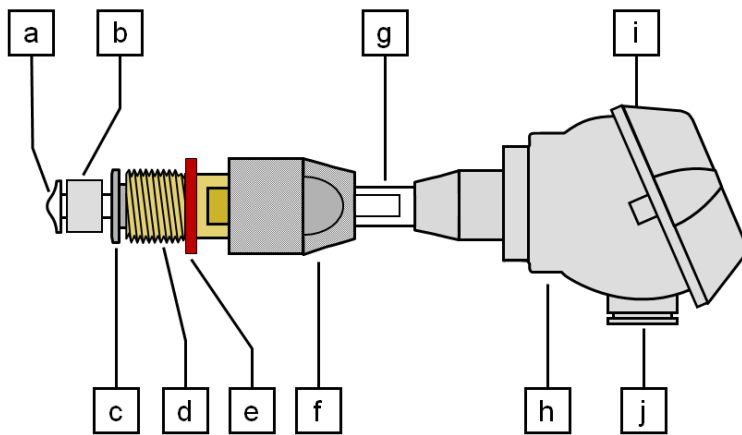




Keyhole Sanitary Sensors – “MIDI” Keyhole Series INSTALLATION INSTRUCTIONS

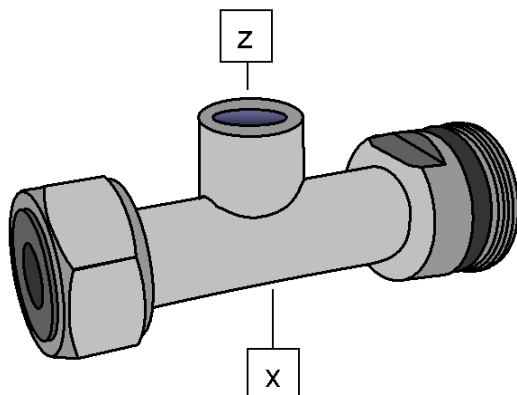
A. DESCRIPTION OF PARTS

1. Keyhole Sensor



- a. **Sensor Tip** – shape may vary according to model
- b. **Keyhole Seal**
- c. **Seal Compression Stop**
- d. Sensor **Attachment Bushing** (*fits 5/8" wrench*)
- e. External **Compression Washer**
- f. **Compression Actuator** (*fits 5/8" wrench*)
- g. **Wrench flats** on Sensor Body
- h. Wiring **Connection Head** – shape, size and material may vary according to model
- i. Connection head **removable cap**
- j. Opening for wiring to Process Control System

2. Keyhole Fitting



- x. **Process Pipe with couplings** – may vary according to customer
- z. **Sensor Mounting Hole**

Keyhole Installation Instructions

B. INSTALLING THE KEYHOLE FITTING

Attach the Keyhole Fitting to the process using the pipe seals and clamps appropriate for the coupling type on the fitting (*not provided*). The Keyhole Fitting can be attached in any orientation without impacting the hygienic performance.

C. INSERTING THE KEYHOLE SENSOR

- i. Loosen the Actuator (f) on the Sensor Body, revealing the Attachment Bushing (d).



Inserting the Probe into the Keyhole fitting with the seal compressed can result in damaging the seal.

- ii. Insert the Sensor Tip (a) into the Mounting Hole (z) on the Fitting and tighten the Attachment Bushing (d) until completely installed in the hole. The Fitting is designed such that the Bushing and Compression Stop (c) will “bottom out” in the fitting.
- iii. Tighten the Compression Actuator (f) over the top of the Attachment Bushing (d) until fully tight. Use a 5/16” wrench on the Wrench Flats (g) to prevent the sensor body from turning in the Fitting. This will pre-compress the Seal (b) and External Compression Washer (e). An end-stop is built in to the sensor body to prevent over-tightening.



Allowing the sensor body to turn when the Actuator is being tightened can result in damaging the seal.

D. CONNECTING TO THE PROCESS CONTROL SYSTEM

- i. Remove the Cap (i) from the wiring Connection Head (h)
- ii. Pass the wires (*not supplied*) from your Process Control System through the opening (j) in the Connection Head, and attach any protective wiring conduit (*not supplied*) to the opening.
- iii. Connect the wires to the in-head terminal block or optional transmitter according to the directions supplied for that device.
- iv. Verify correct operation of the wiring and any optional transmitter according to the directions supplied for that device.
- v. Replace the Removable Cap.

E. REMOVING THE SENSOR FOR MAINTENANCE OR CALIBRATION

- i. Shut off and drain the process
- ii. Loosen the Actuator (f) on the Sensor Body, revealing the Attachment Bushing (d). Use a 5/16” wrench to prevent the sensor body from turning in the Fitting using the Wrench Flats (g). This will decompress the Seal (b).



Allowing the sensor body to turn when the Actuator is being loosened can result in damaging the seal.

- iii. Unscrew the Attachment Bushing (d) from the Mounting Hole (z).
- iv. Once maintenance is complete, re-insert the sensor according to Section C above.

F. PROBLEMS REQUIRING ASSISTANCE

Keyhole Sensors and Fittings are designed to be simple to install and resilient to day-day operation. However, if you encounter any problem with the products that require manufacturer assistance, please contact us via email at: support@windridgesensors.com, or see our web site www.windridgesensors.com for other contact alternatives.