

MODEL #QTA143

Mounting Guide

Flatness of Mating Faces

- Mounting faces for Calibration fixtures were machined to have a max perpendicularity error of 0.001", relative to the axis of torque. For our fixtures, we used the locating bores that mate to the sensors pilot bore as our axis of torque.

Torque Specs for M2x0.4 Screws

Active End

- The 4 screws the thread through the sensor must be tightened first.
 1. Have Sensor connected to monitor the sensors zero reading.
 2. Thread all 4 screws just until the head of screws contacts with sensor.
 3. Use the pattern shown in Figure 1 to begin tightening the screws:

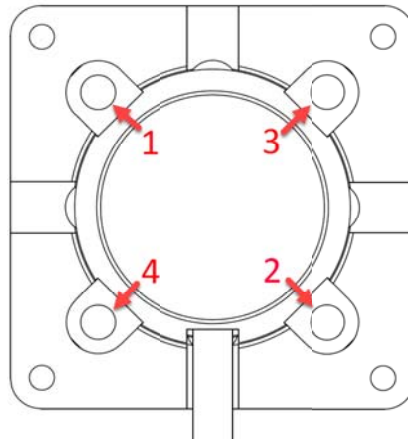


Figure 1

4. Use a torque wrench, or tool of choice that applies precise torque, and apply 0.10 N*m to the screws in the pattern above.
5. Repeat the pattern to apply between 0.20 – 0.25 N*m to each screw.
6. Ensure the zero balance of the sensor has changed minimally. If adjustments are necessary, choose any of the 4 screws and begin to loosen the screw and observe if the zero balance moves in the correct direction. Rule of thumb at FUTEK is to keep the change of zero below +/- 0.0300 mV/V after installation.

Fixed End

- Move to the fixed end of the sensor to work on those screws.
 1. Keep sensor connected to monitor the sensors zero reading.
 2. Thread all 4 screws just until head of screws contacts with the sensor.
 3. Use the pattern shown in Figure 2 to begin tightening the screws:

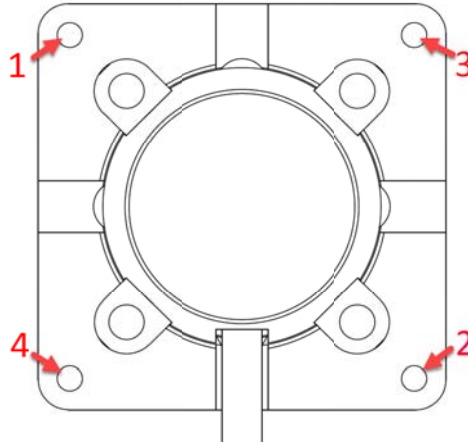


Figure 2

4. Use a torque wrench, or tool of choice that applies precise torque, and apply 0.10 N*m to the screws in the pattern above.
5. Repeat the pattern to apply between 0.20 – 0.25 N*m to each screw.
6. Ensure the zero balance of the sensor has changed minimally. If adjustments are necessary, choose any of the 4 screws and begin to loosen the screw and observe if the zero balance moves in the correct direction. Rule of thumb at FUTEK is to keep the change of zero below +/- 0.0300 mV/V after installation.