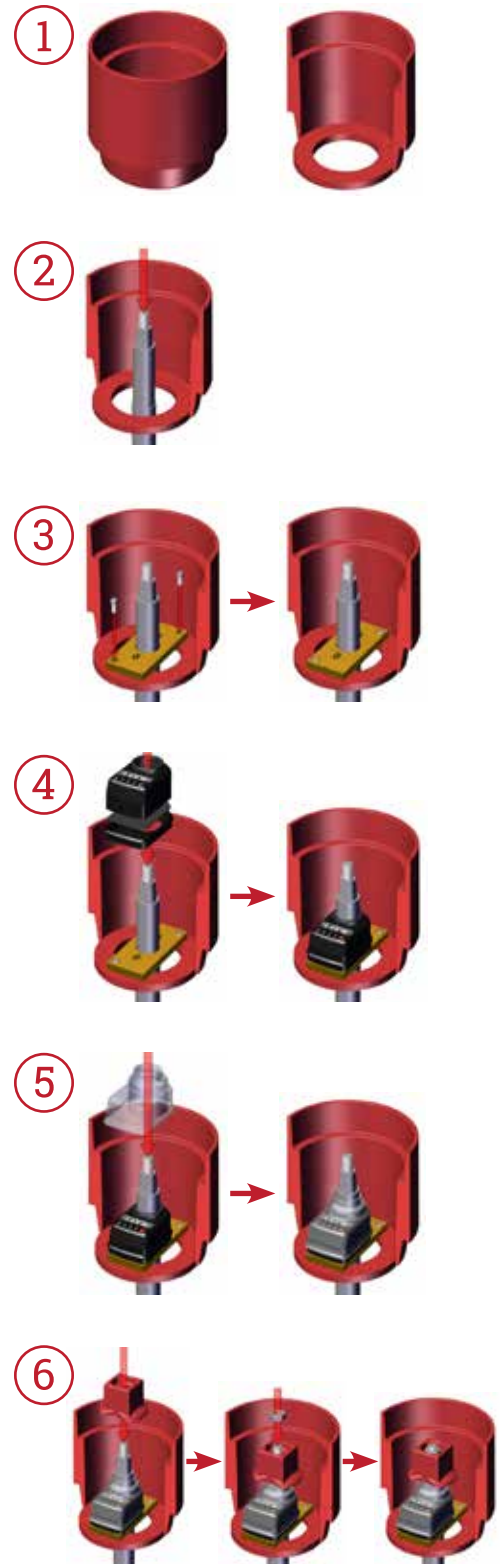


Valve Position Indicator Installation, Operation & Maintenance

Installation

- 1 Install the valve box adapter.**
 - a. Remove the existing valve box lid.
 - b. Place the valve box adapter onto the 5 1/4" valve box opening.
- 2 Install the included stem.**
 - a. Attach the stem to the internal valve box stem.
- 3 Install the stem bushing.**
 - a. Slide the bushing down over the stem.
 - b. Secure the bushing in place with two, 1/4"-20 socket head cap screws.
- 4 Install the indicator with base and gasket.**
 - a. Slide the components down over the stem.
 - b. Align the plastic pin on the base with the slot in the bushing.
 - c. Be sure that the indicator is facing the direction from which you intend to view it.
 - i. It may be necessary to turn the valve box adapter to achieve the proper orientation.
 - d. Be sure the valve is in the closed position and the indicator reads 0000.0.
 - e. Tighten the setscrews on the indicator collar against the stem.
- 5 Install the silicone enclosure sleeve.**
 - a. Make sure the stem above the indicator is well greased.
 - b. Slide the silicone sleeve down over the stem and indicator.
 - c. Work the silicone sleeve down over the lip, around the perimeter of the indicator enclosure base to seal the unit.
- 6 Install the 2" operating nut.**
 - a. Align the tapered flats of the stem with the same feature in the nut.
 - b. Secure the 2" operating nut with a 5/8-11 jam nut.
 - i. If necessary, secure the operating nut while tightening the jam nut so that you do not turn the stem.



- 7 Turn the stem to verify proper actuation of the indicator unit.
- 8 Replace the valve box lid and fill/grade to the desired height.
 - a. This typically is flush with the top of the valve box adapter.



Operation

- 1 Turn the 2" operating nut in the direction indicated on the base to open your valve.
- 2 Turn the 2" operating nut in the direction opposite that indicated on the base to close your valve.
- 3 As you open and close the valve, the mechanical position indicator automatically will display the number of turns at which your valve is currently set.
 - a. Whole turns are read on the four digits furthest to the left in the image above.
 - b. The digit on the red wheel, furthest to the right, reads in tenths (1/10) of a turn.
 - c. In this way, the digital position indicator will read very fine adjustments of the stem, while maintaining the ability to indicate up to 9,999 whole turns.
- 4 If you have followed the installation instructions properly, a closed valve should always read 0000.0 turns.
 - a. If you are unable to reach a displayed value of 0000.0 turns:
 - i. Check to make sure that the valve is able to be actuated freely.
 - ii. Remove any obstructions that may be present in the valve.
 - iii. If you are sure that the valve is closed, you may repeat the installation instructions from the appropriate step to reset the indicator to the proper zero position.
- 5 The sticker under the silicone enclosure sleeve will indicate how many turns are required to open the valve.
 - a. When the digital indicator reads the same value as that on the sticker, the valve is considered to be fully open.



Maintenance

- 1** Routinely lubricate the stem that passes through the indicator and enclosure with dielectric, food-grade, clear grease to avoid sticking or ripping of the silicone sleeve during actuation.
- 2** Periodically check the bronze bushing and stainless stem for excessive wear.
 - a. If excessive wear is observed where these two components have contact, check to ensure that the stem is installed plumb with the valve stem, and correct any improper alignment before replacing the two components.
- 3** After many years of being installed, the silicone enclosure sleeve may begin to take on a yellowish tint. This can be accelerated if the silicone sleeve is regularly exposed to sunlight. A yellowish tint should not have any effect on the integrity of the silicone material. If a yellowish tint develops and impairs the clarity of the sleeve, a replacement sleeve or indicator unit can be purchased separately.