



Actuated Solutions APL2 Series Valve Position Monitor Installation and Maintenance Instructions

Operation and installation instructions for APL210N, APL220N and APL230N valve position monitors with rotary pneumatic actuators.

Installation

- 1. Fit the APL2 switchbox to the top of the actuator using the supplied bracket, 4 x M5 bolts and washers. When mounting the unit, it is essential that the output shaft fully engages with the actuator pinion.
- 2. Loosen the cover bolts on top of the switchbox, the bolts will be held captive in the cover. Remove the top cover complete with the beacon attached.
- 3. Fit cable glands with appropriate IP rating (usually IP67) into the female threaded cable entries. If you are only fitting one cable gland, be sure to seal the second cable entry with a blanking plug (IP67).
- 4. Bring the field wiring into the unit through the cable glands. Wire the field wiring to the terminals in the switchbox in accordance with the wiring diagram supplied (also included later in this document). Wiring should be positioned to ensure there is no interference with rotating shaft.
- 5. Cycle the actuator to the open position. Set the bottom switch by lifting the cam off the spline it is located on and turning the cam until the bottom switch is activated

(for sensors; ensure cam stud is aligned with the sensor target). Lower the cam back onto the spline in this position, the open position switch is now set.

6. Cycle the actuator to the closed position. Set the top switch by pushing the cam down off the spline it is located on and turning the cam until the top switch is



activated (for sensors; ensure cam stud is aligned with the sensor target). Allow the cam to rise back onto the spline in this position, the closed position switch is now set.

7. Now the cover can be replaced, ensure the beacon is correctly aligned and that the sealing 'O' ring is correctly fitted then securely tighten the four cover bolts.

Maintenance

The APL2 Series switchbox is designed to be maintenance free, however it is advisable to periodically check the following:

- Mounting to actuator is secure.
- Cable glands and or blanking plugs are fully tightened and seal properly.
- Top cover bolts are fully tightened.
- Top cover 'O' ring is sealing correctly.