

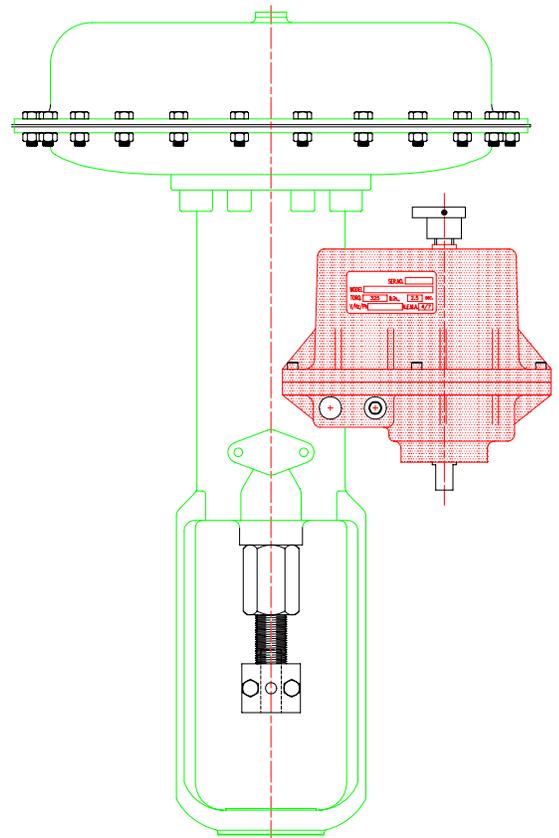


Is Your Choke Automation Up to Date?

Two actuators are shown side by side. The one on the left has been a familiar sight on many offshore platforms. The trend over the years has been to just use larger actuators for higher pressures. We decided that a change was needed.

The base pneumatic actuator shown on the left weighs 125 pounds and requires a lot of space. When adding an electro-pneumatic positioner and side mounted hand wheel, the weight becomes 185 lbs. (plus tubing, fittings, etc.). List price for an actuator, positioner (without feedback), mounting nut, side mounted hand wheel (for manual override), and stainless steel tubing/fittings is more than \$3,300.00. The mounting hardware and air supply are extra. The actuator shown fails downwards (or closed for a flow-to-close stem design) and, depending on stem geometry, seal friction, and travel, it is limited to a P_2 of about 5-6,000 psig. Once the unit is installed, trying to change the choke trim can be very difficult and time consuming. If the actuator is removed, the choke is no longer functional. Some manufacturers usually provide special bonnets and trim components (at special prices) to work with this actuator.

The actuator on the right weighs a mere 17 pounds, 22 pounds with the mounting hardware. It operates on 24vDC and will accept a variety of analog input command signals as well as a digital input. The price of the multi-turn NEMA 4/7 unit with manual override, current sensing limit trip, 4-20mA signals in and out, end of travel limit switches and cams, and mounting hardware is competitive with the pneumatic unit (solar panels are a little extra). It produces enough torque to operate 1 to 2" orifice patented **Lancaster** chokes or retrofit kits at $P_1=P_2=15,000$ psig, and has three different fail options. If the actuator is removed from one of our chokes for any reason, simply replace the operating lever and the choke becomes our standard manual unit, even while the choke is throttling and under pressure. To change our trim: leave the actuator in place, remove the bonnet assembly from the choke body, and service all wetted parts from the lower end of the bonnet without disturbing the position indicator or actuator.



Either actuator will work with standard Lancaster bonnets and trim components. Replacement parts for our manual or automated chokes are identical and thus are priced the same. **The actuator on the right makes sense because of its features, price, compact size, light weight, and rock solid positioning capabilities at any pressure drop.** When considering how your spare trim inventory may be simplified, the savings are even greater. For intelligent control valves, chokes, retrofit kits, and automation solutions, give us a call.