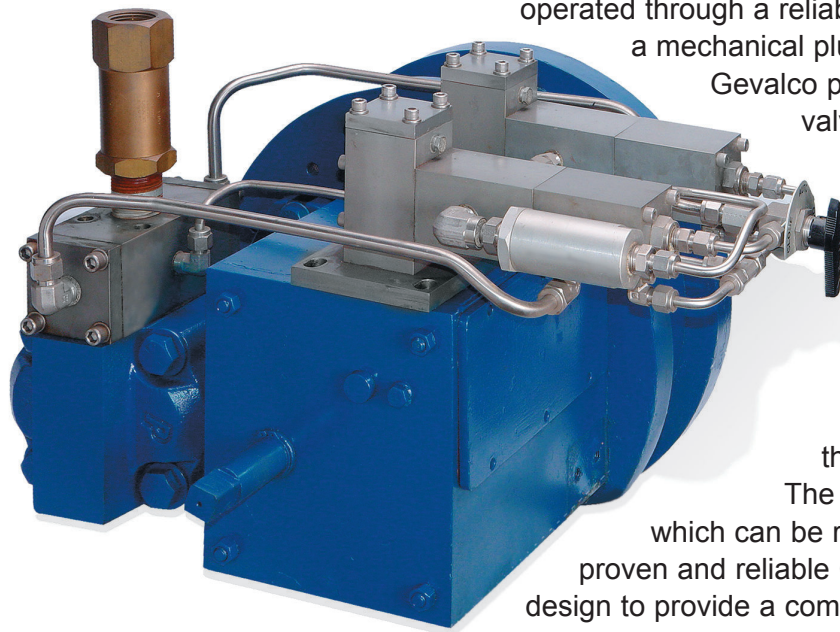




## Gas Motor Actuator Control

The Gevalco "Gas Motor Actuator Control" package utilizes hi-pressure poppet valve technology to provide reliable, maintenance-free control of gas motor actuators. The standard local "auto-manual" control consists of a poppet selector valve and two limit valves. The patented Gevalco "Limit Valves", operated through a reliable cam mechanism, utilize



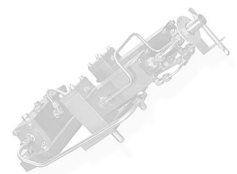
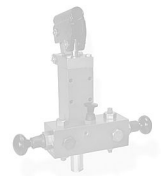
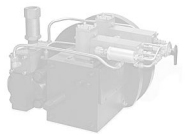
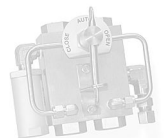
a mechanical plunger integral to the proven Gevalco poppet valve. The poppet valve directly stops gas flow through the motor as

opposed to operating a spool-type selector valve. This design provides quick, positive shut-off of the actuator to eliminate excessive torque on the valve and the waste of valuable gas.

The "auto-manual" station, which can be remotely located, utilizes the proven and reliable Gevalco poppet valve design to provide a compact, easy to use, local control of the valve. In addition, all of the proven Gevalco control packages, such as, Remote Electric, Automatic Station Bypass, and Line Break control modules can be provided for operation with the Gevalco "Gas Motor Actuator Control" module.

### The Gevalco Advantage

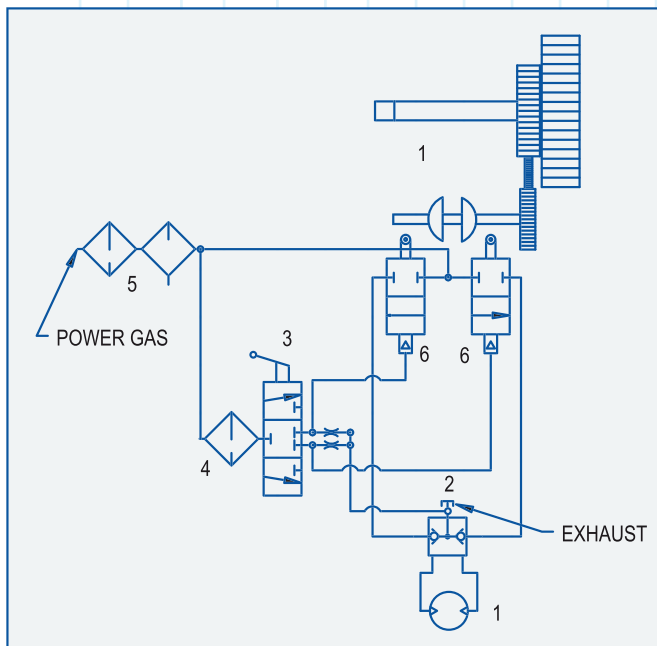
- Components are constructed of marine-grade, hard-anodized aluminum and stainless steel for maximum corrosion resistance and longer cycle life.
- Built-in pilot pistons provide signal inputs for solenoids or pneumatic devices.
- High-flow exhaust valve improves motor efficiency while reducing gas consumption.
- Commercially available 3-way SS valve, with SS lockable handle, for local auto/manual selector.
- Optional limit switches with (2) explosion-proof SPDT hermetically sealed proximity switches for position feedback.
- Controls can be valve or remote mounted.



# Sequence of Operation



*The Gevalco "Gas Motor Actuator Control" package utilizes hi-pressure poppet valve technology to provide reliable, maintenance-free control of gas motor actuators.*



- 1 Power gas direct from the pipeline enters the system through a filter/lubricator (5) and is directed to two normally closed limit valves (6), as well as, the common port of the normally closed local auto/manual selector valve (3) through an additional low-micron filter (4)
- 2 When the local "open/auto/close" selector valve (3) is shifted to the "open" or "close" position, pilot gas pressurizes the control piston in the poppet-type limit valve (6). The limit valve then opens, allowing the high-pressure power gas to flow thru the high flow selector/exhaust valve (2) and into the gas motor (1). The high flow selector/exhaust valve (2) also vents the proper exhaust port, which ensures rotation in the desired direction.
- 3 As the gears rotate, two pre-set cams travel along a threaded shaft. At the end of the valve stroke, a cam will trip the limit valve (6) plunger to shut off the supply of power gas to the motor, stopping all valve movement.
- 4 The selector valve (3) must be returned to the "auto" position, which allows the pilot gas pressure to bleed off thru the restrictors, resetting the system to prepare for moving the valve in the opposite direction.

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