

Conoflow's GC33 Commandaire Positioner

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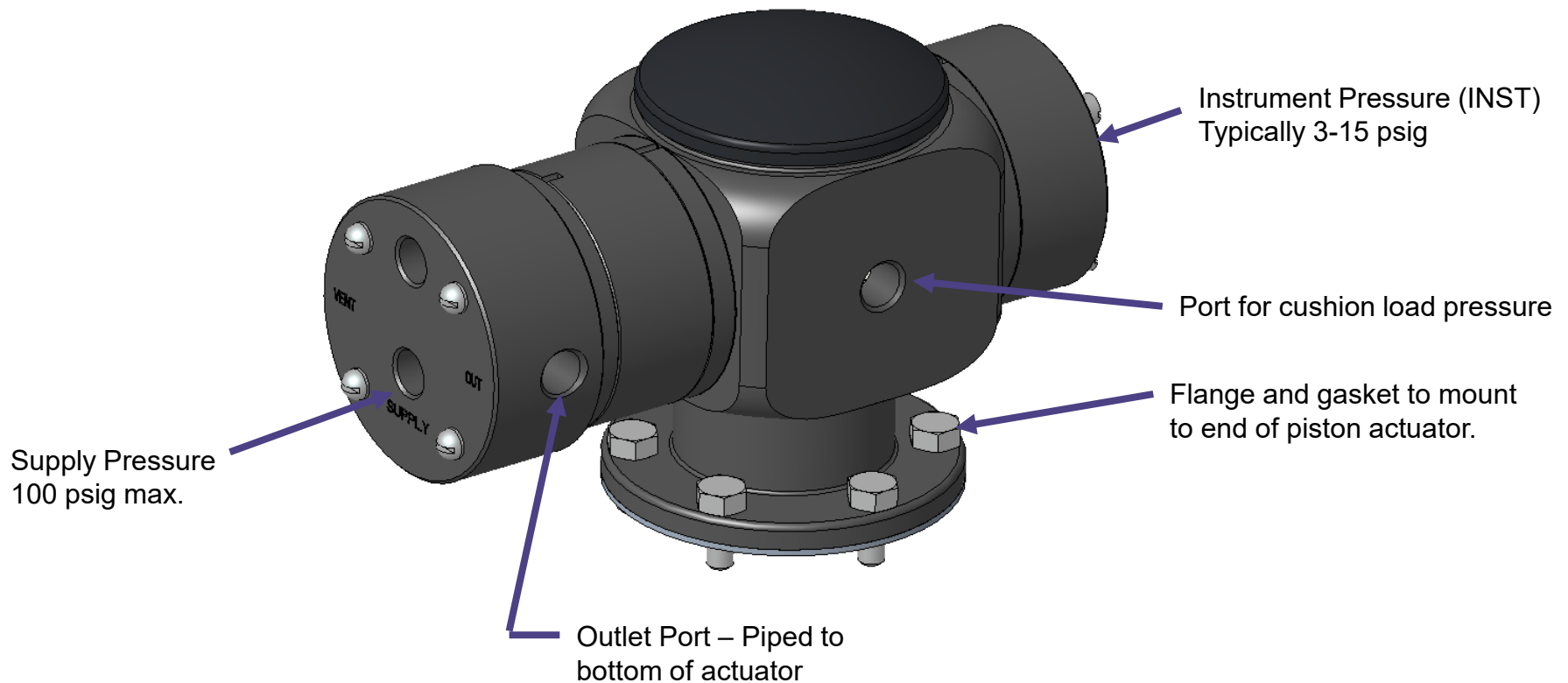


Conoflow®

GC33 Commandaire Positioner Description

- The Conoflow GC33 Commandaire Positioner is a single acting air pressure and movement control for piston or diaphragm actuators.
- This positioner uses an air signal to proportionately move an actuator's piston or diaphragm position.
- This positioner mounts on the end of the actuator, with the output piped to the opposite end actuator to retract the actuator stem inward with an increasing instrument control signal.
 - A cushion load regulator or reversing relay output pressure is required to drive the piston or diaphragm down, away from the positioner, to extend the stem of the actuator.
- A range spring beneath the positioner, inside the actuator cylinder, connects to the actuator piston or diaphragm to provide the position feedback for the positioner's internal controls.
 - This range spring is required for the positioner to control actuator position.

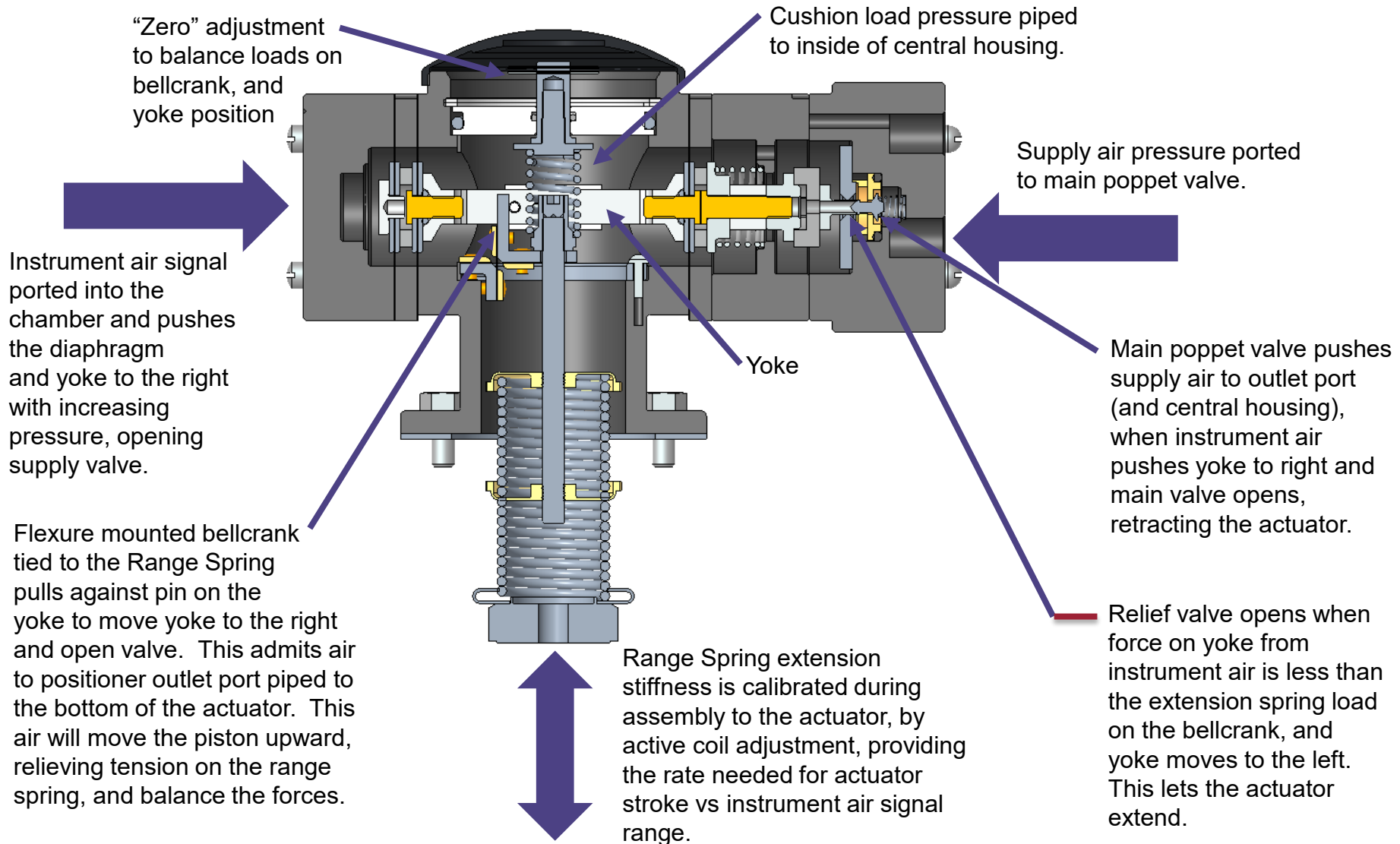
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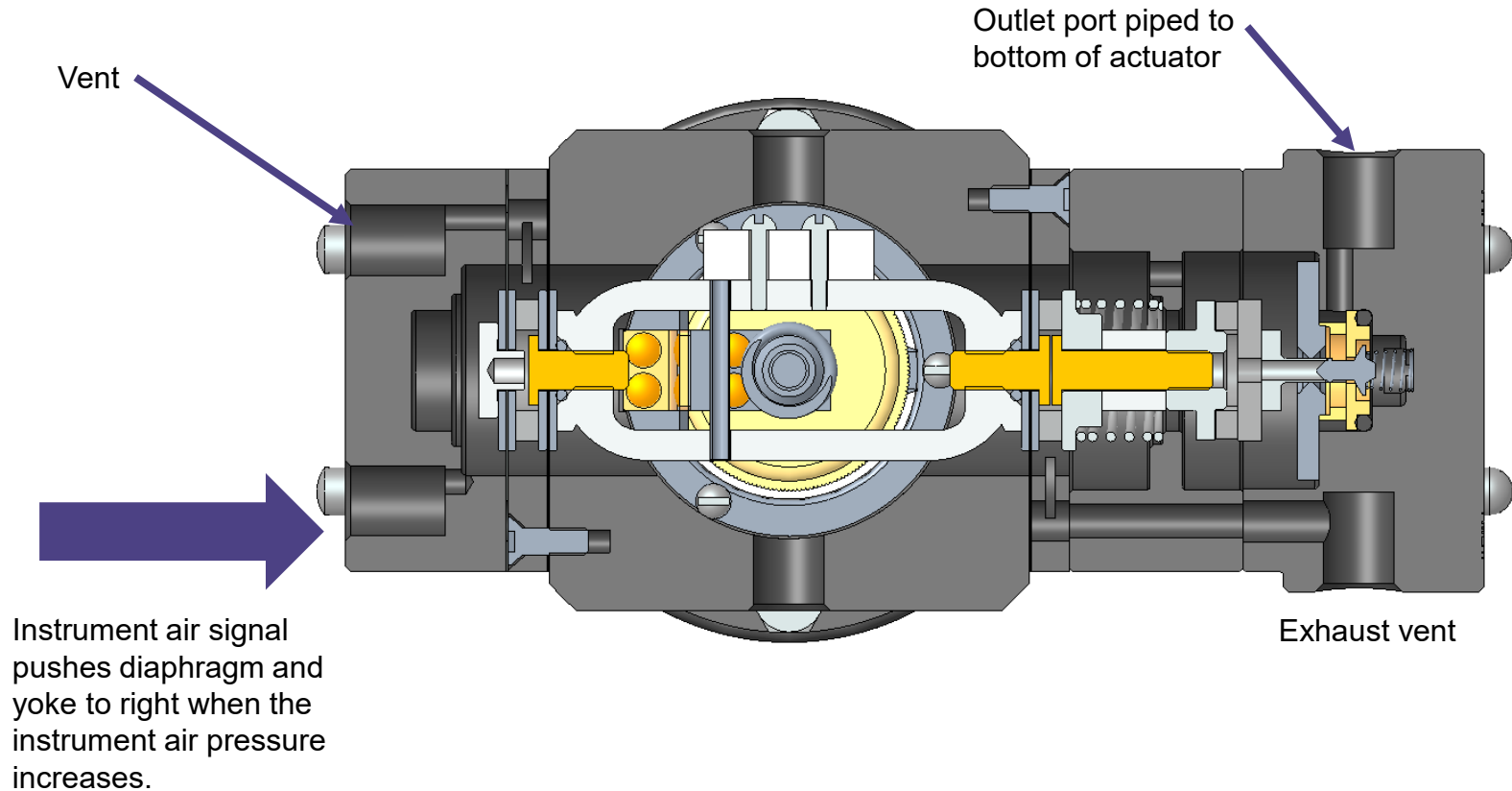
The Supply (Supply) and Instrument (INST) pressure port are on opposite ends.

The controlled outlet pressure is piped to the bottom of the actuator, where it pressurizes the bottom of the piston to retract the actuator with increasing instrument pressure.

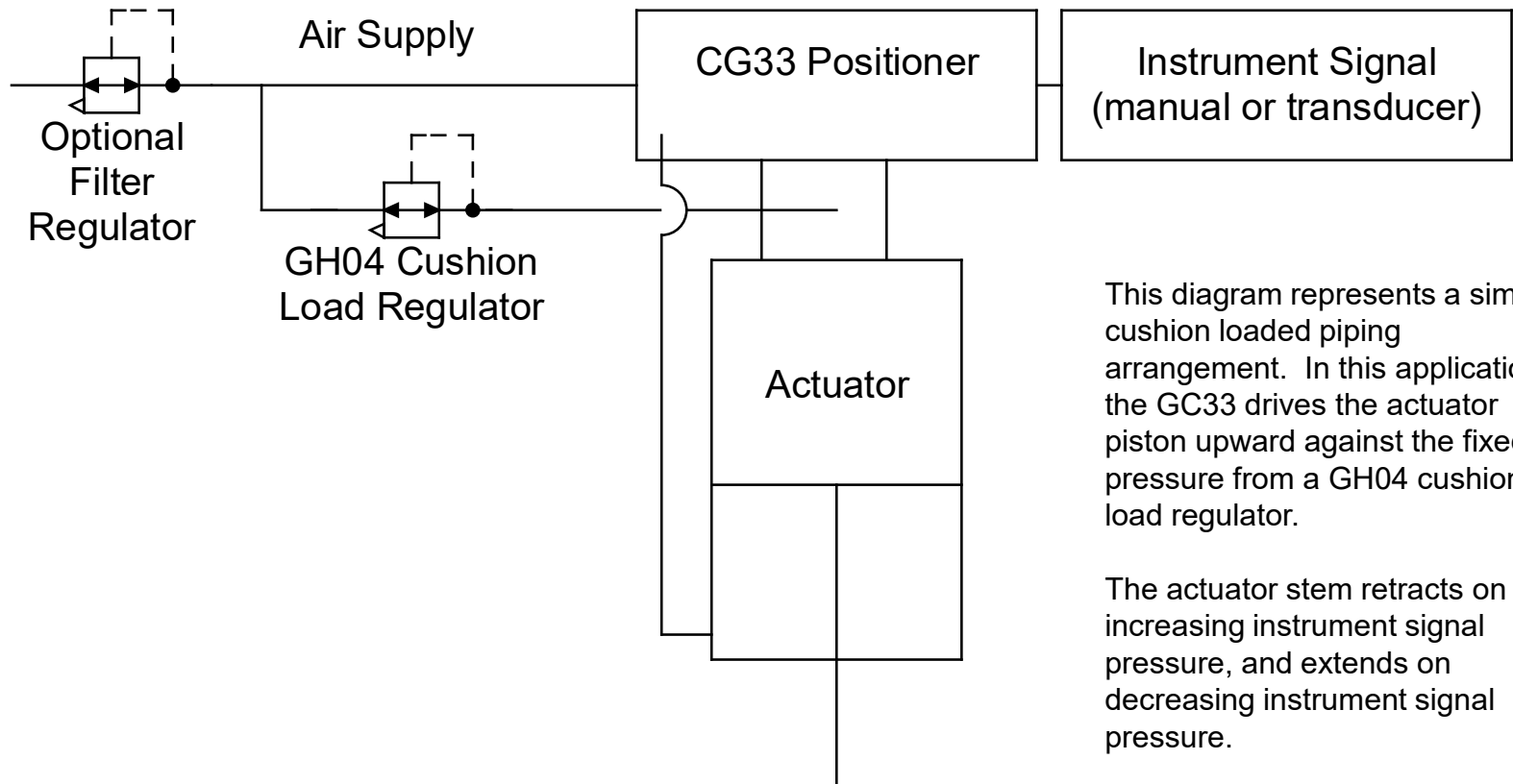
GC33 Commandaire Positioner – Internal Operation



GC33 Commandaire Positioner – Internal Operation



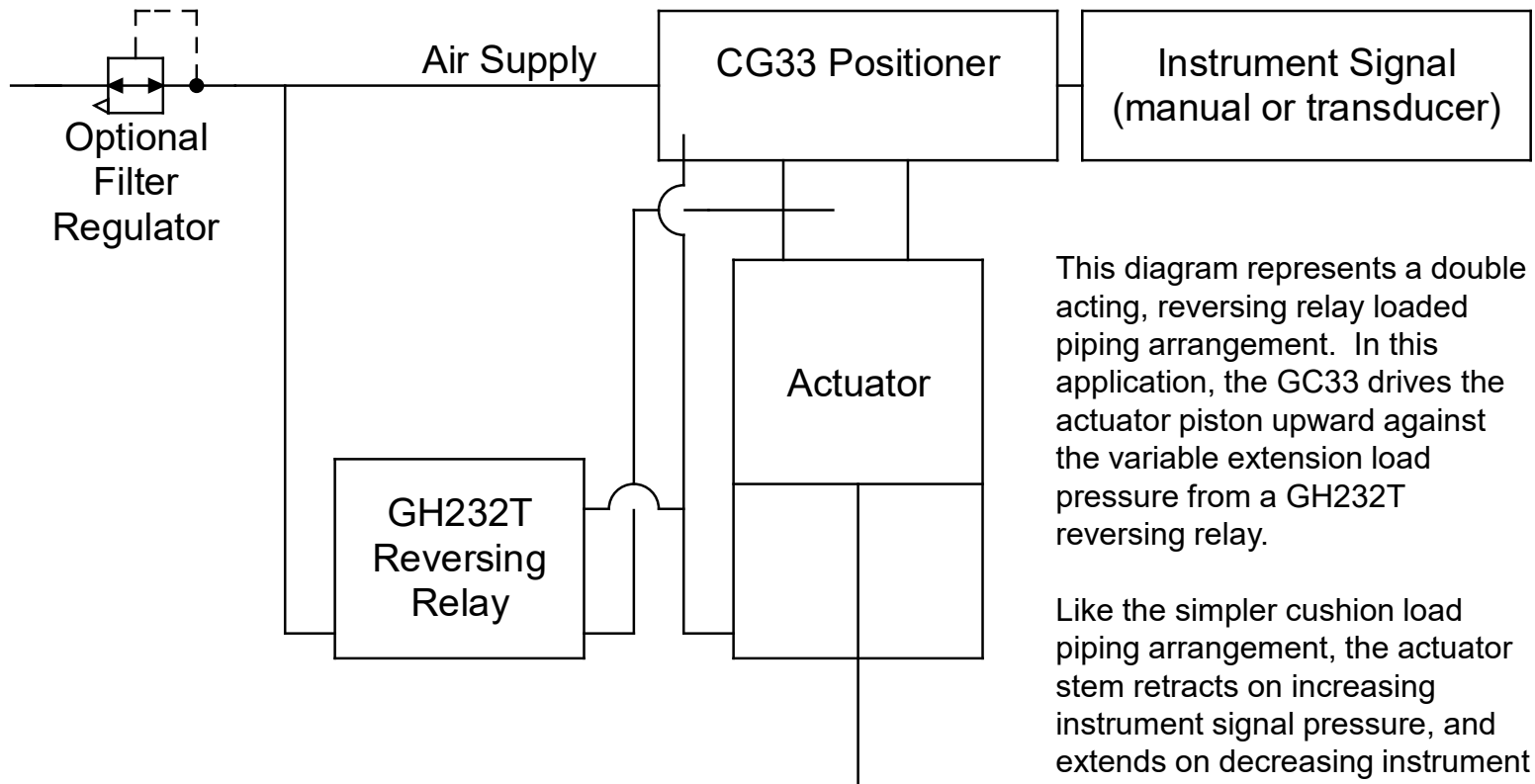
GC33 Commandaire Positioner – Piping / Hook Up



This diagram represents a simple, cushion loaded piping arrangement. In this application, the GC33 drives the actuator piston upward against the fixed pressure from a GH04 cushion load regulator.

The actuator stem retracts on increasing instrument signal pressure, and extends on decreasing instrument signal pressure.

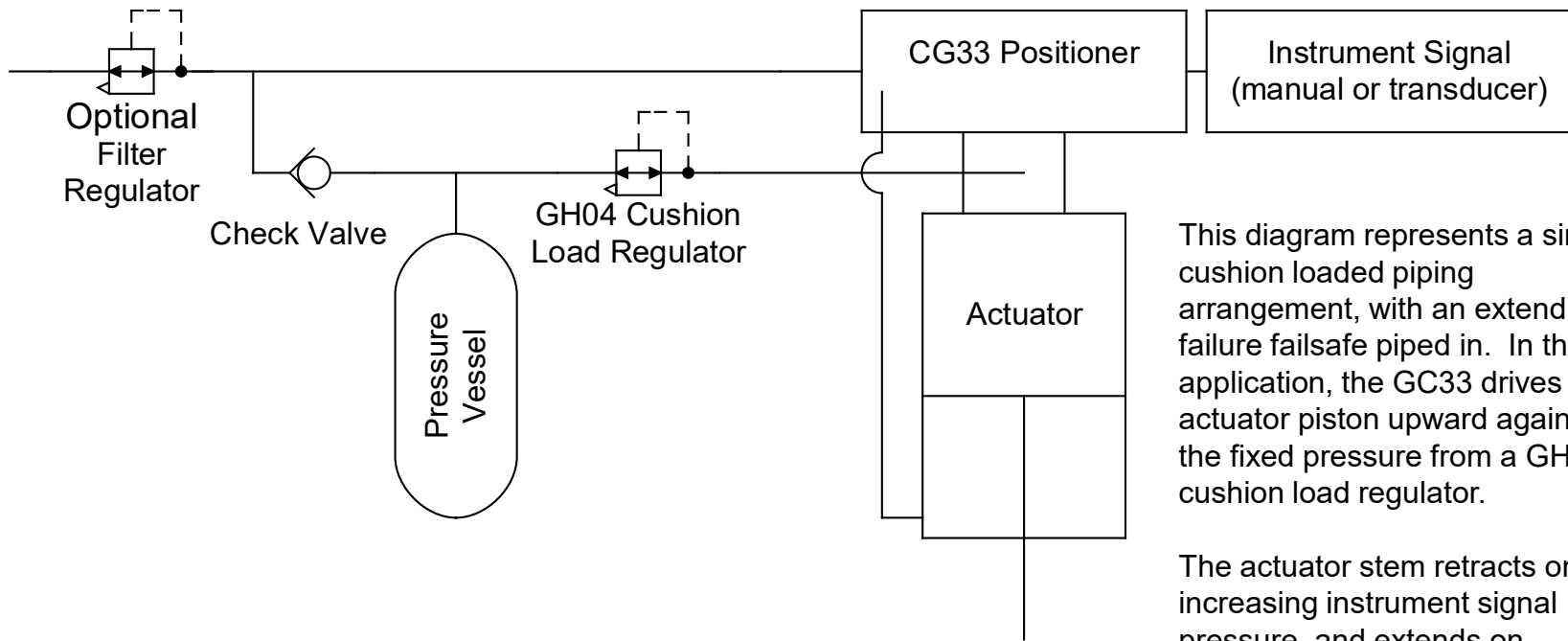
GC33 Commandaire Positioner – Piping / Hook Up



This diagram represents a double acting, reversing relay loaded piping arrangement. In this application, the GC33 drives the actuator piston upward against the variable extension load pressure from a GH232T reversing relay.

Like the simpler cushion load piping arrangement, the actuator stem retracts on increasing instrument signal pressure, and extends on decreasing instrument signal pressure.

GC33 Commandaire Positioner – Piping / Hook Up



This diagram represents a simple, cushion loaded piping arrangement, with an extend on failure failsafe piped in. In this application, the GC33 drives the actuator piston upward against the fixed pressure from a GH04 cushion load regulator.

The actuator stem retracts on increasing instrument signal pressure, and extends on decreasing instrument signal pressure.

If air pressure is disrupted, the air in the pressure vessel will continue to supply the cushion load regulator to extend the stem.