



Quarter- Turn Hydraulic Actuator

The Gevalco "Quarter-Turn Hydraulic Actuator" is ideal for operating valves where utilizing hi-pressure natural gas as a power media presents a safety concern, for instance in a closed environment. The Gevalco "Quarter-Turn Hydraulic Actuator" is designed to operate with pressures up to 1500 psi, providing torque outputs over 1 million inch-pounds. This hydraulic actuator provides the optimum size to output torque for operating pipeline ball valves.

Canted Scotch Yoke Design

The canted scotch yoke mechanism provides high breakaway torque at the beginning of the stroke, resulting in smaller cylinders, which reduces cost. All Gevalco hydraulic actuators utilize teflon impregnated, sintered bronze bushings on a heavily chrome-plated guide bar to absorb any side loads, guaranteeing smooth operation and longer cycle life.

Linear Travel Stops

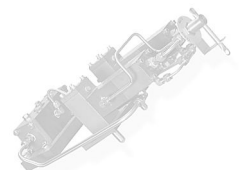
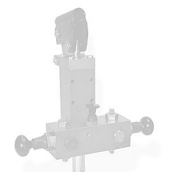
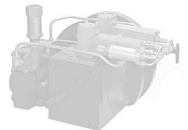
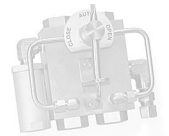
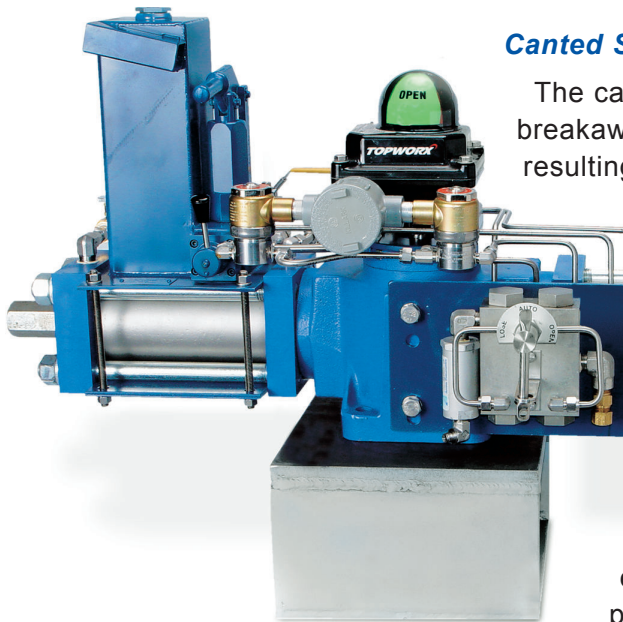
The externally adjustable travel stops are on center with the piston rod, eliminating side loading on the scotch yoke. Located at either end of the actuator, these travel stops provide precise adjustment. Both the 'open' and 'close' travel stops are independently adjustable.

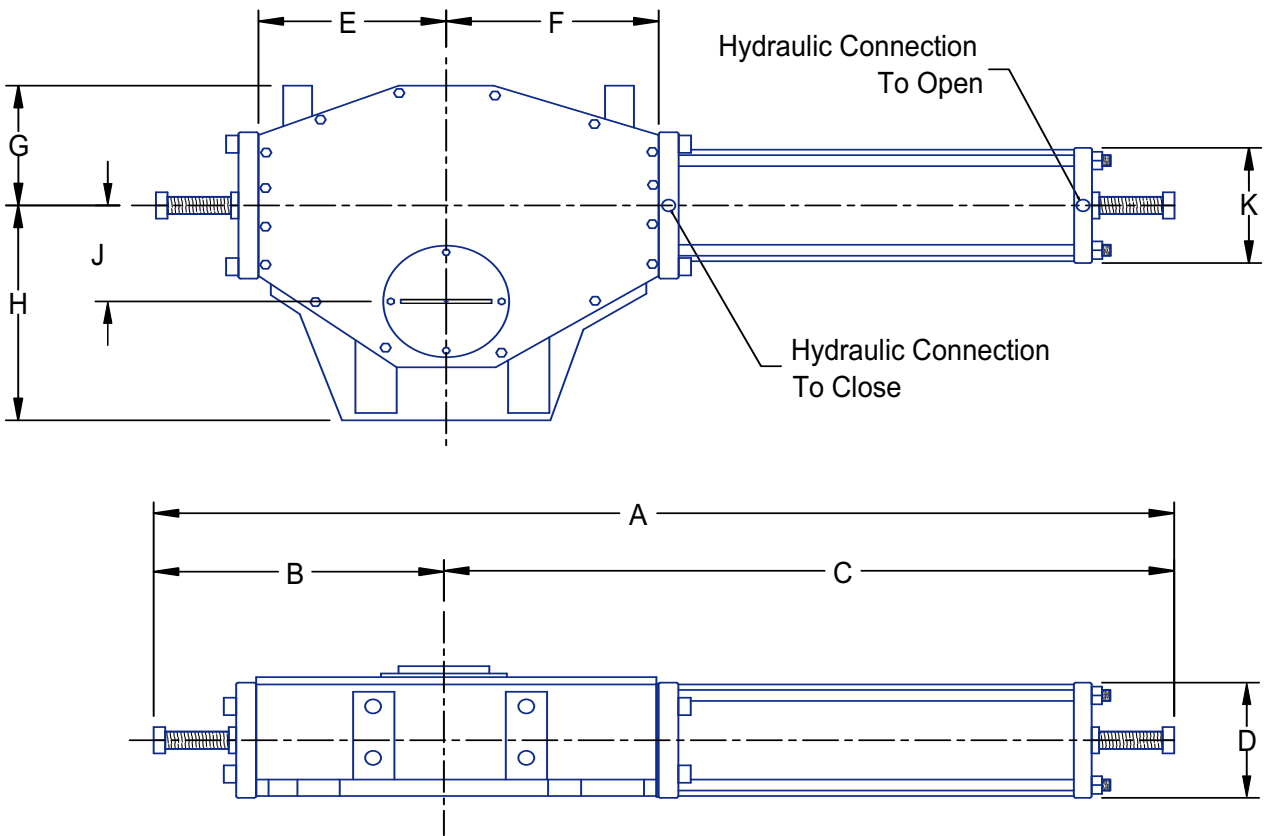
Electroless Nickel Plated Cylinders

The cylinder walls are electroless nickel plated and precision honed to ensure long lasting, trouble free service. The piston is furnished with a teflon impregnated graphite guide ring (wear band) that eliminates any possible metal to metal contact. The piston and rod seals are made of teflon rings preloaded by an "O" ring suitable for the most severe working conditions.

Manual Hand Pump

Each Gevalco hydraulic actuator is equipped with a hydraulic hand pump and oil reservoir. When pipeline pressure is not available, the manual hand pump can be used to safely and reliably open and close the valve at its maximum torque requirement.





Dimensions (inches)

Actuator Model	A	B	C	D	E	F	G	H	J	K	Pneumatic Conn, (NPT)	Weight (lbs)
1.5-5.5	54.4	15.1	39.3	6.5	7.4	8.5	7.3	7.3	3.94	8.75	1/2	255
1.5-7.0	56.0	15.1	40.9	8	7.4	8.5	7.3	7.3	3.94	9.75	1/2	298
3.0-5.5	62.2	18.8	43.4	6.5	11.2	12.6	8.3	8.5	6.3	8.75	1/2	420
3.0-7.0	63.8	18.8	45.0	8	11.2	12.6	8.3	8.5	6.3	9.75	1/2	485
6.0-7.0	67.3	20.5	46.8	8	12.9	14.4	11.7	10.2	7.28	9.75	1/2	794
6.0-8.0	68.2	20.5	47.7	9	12.9	14.4	11.7	10.2	7.28	12	3/4	878
14-8.0	72.3	22.4	49.9	9	14.8	16.6	13.5	11.6	7.87	12	3/4	1323
14-9.0	72.3	22.4	49.9	10	14.8	16.6	13.5	11.6	7.87	15	3/4	1433
14-11.0	72.3	22.4	49.9	12	14.8	16.6	13.5	11.6	7.87	15	3/4	1543

Mechanical Data (maximum Allowable Pressure 1500psig)*

Actuator Model	Max. Operating Torque (lb. In.)	Max. Operating Pressure (psig)**	Oil Content (cu. In.)
1.5-5.5	130500	514	430
1.5-7.0	130500	320	755
3.0-5.5	261000	663	430
3.0-7.0	261000	407	755
6.0-7.0	522000	688	755
6.0-8.0	522000	533	1030
14-8.0	1044000	959	1030
14-9.0	1044000	740	1305
14-11.0	1044000	492	1950

*Maximum allowable pressure is the maximum static pressure that may be applied cylinder with the piston against travel stops.

**Maximum operating pressure is the pressure required to produce the maximum operating torque of the actuator.

