



COMPARISON

K-TORK vs. Electric Actuators

FEATURE	K-TORK ACTUATORS	ELECTRIC ACTUATORS	COMMENT
FAIL-SAFE	YES, user selectable to fail-closed, fail-open or fail-in-last position	NO, fail-last-position only at loss of power	During power outage, K-TORK actuators can fail-closed, avoiding filter drain down during backwash or eliminate filter gallery flooding
INITIAL COST	Approximately 60% of electric actuators	Expensive	K-TORK is easy on the construction budget
SAFETY	No high voltages required	Generally 230 or 460 VAC / 3 Phase	Electrical shock hazard in very wet environment. K-TORK is IMMUNE TO FILTER GALLERY FLOODING
MAINTENANCE	Simple, one moving part, easy to troubleshoot	Complex, many moving parts, gears, circuit cards	K-TORK can be repaired by plant personnel with basic skills and standard hand tools
CALIBRATION	Simple	Complex	Electric actuators have multiple torque switches, limit switches; difficult to set and re-set, usually requiring factory technicians
CONTROLS	Modular, Add-on input and outputs as needed	Difficult to change in the field	K-TORK actuators will NEVER BE OBSOLETE, complete range of 2-position, modulating or digital controls available
PERFORMANCE	Suitable for High-Cycle operation, 100% duty cycle	Limited to motor duty cycle and maximum number of starts per hour	K-TORK provides a long-lifecycle, guaranteed for 2 Million strokes. K-TORK offers precise, repeatable modulating control to 0.25% resolution
CORROSION RESISTANCE	Epoxy-coated inside and out, SST fasteners	Standard paint finish outside	Electric actuators, subject to moisture, internal condensation and water ingress through conduit will damage many electric actuator components
SPEED OF OPERATION	Adjustable	Fixed	Valve OPEN & CLOSE speeds can be independently set to 'tune the loop' or provide proper 'ramp-up' speed during backwash or to prevent water hammer
WARRANTY	3-YEAR Performance Guarantee	1-YEAR Parts and Workmanship	K-TORK will repair or replace, at no charge, any actuator which does not perform as expected
HOUSEKEEPING	No grease- or hydraulic oil-filled enclosures	Contains large quantities of grease or oil	Electric actuators leak while in operation and grease re-packing during rebuilds are difficult to clean
MANUAL OVERRIDE	YES	YES	Easy to operate during power outages manually