

[](http://qtrco.com/) QTRCO's, Objective is to build actuators that last forever. It's that simple. Our patented or patent-pending actuator designs feature the most innovative developments since actuators were invented, resulting in superior performance.

F-Series

F-Series Flat Yoke ♦ Actuators

F-Series Flat Yoke ♦ Actuators are direct replacements for traditional scotch yoke actuators. Like our Q Series actuators, the design incorporates numerous considerations that simplify user installation, improve performance, and extend actuator life. Cylinders are weight-and-dimensionally balanced, eliminating a host of problems including the need for disassembly to change action from fail open to fail closed: fail action is changed simply by installing the actuator upside down. Failure-prone seals are designed out, replaced with readily available industry-standard O-rings. And bidirectional travel stops actually stop the piston motion, eliminating the considerable side loading that Yoke-located stops create.

MAIN FEATURES

- Available in Ductile Iron (FD Series) or 316 Stainless Steel (FS Series) Construction
- 2,000 to 2,000,000 pound-inches
- Turn top side downward to reverse action
- No side loading of shaft bushings, or of piston or piston rod
- Center of gravity on shaft axis
- COG does not change with shaft rotation
- Bi-Directional Travel Stops, stop the pistons, not the yoke
- Double or single acting
- Optional cylinder materials
- NQA1, Safety-Related

Design Features

[](images/stories/Fseriesplan.jpg)

- Twin FLAT yoke arms eliminate shaft bushing loads and accompanying friction/wear
- No seals except piston o-rings ♦ which mean fewer failure points
- Fully captured springs for safety
- Remove end cap and cylinder on-site to replace piston o-ring should it ever wear, so no need to fuss with accessories as they remain mounted and untouched
- Travel stops stop the piston ♦ not the yoke ♦ thereby eliminating excessive end of travel stresses
- Body slots absorb all side loading ♦ pistons are not pushed against cylinder walls and rod bushings are eliminated