

QTRCO XRCISER™ + Westlock Epic 2

Scrutineer



The Leader in Actuator Technology



FEATURES

- Ready to deploy when received, no consultation or subsequent calibrating required
- Zero false failures
- Zero spurious trips
- Useable diagnostics information
- Actual valve torque at start of close
- Actuator Safety Margin at start of close
- Percentage of valve MAST required
- Memory recall of Safety Margin values for previous 10 PSTs
- Full stroke, bi-directional data also available
- Separately selectable ESD and PST speeds
- SIL 3
- Resin or Explosion proof instrument housings
- Panel mount up to 100 feet from actuator
- HART communications

WHY SCRUTINEER, WHAT DOES IT DO AND WHY IS IT NEEDED?

The Scrutineer by QTRCO monitors the performance of a valve and actuator assembly while in active service, and provides the user with real time information pertaining to the Safety Margin*, the valve torque (or thrust) and the percentage of the valve MAST** that is required for operation.

HOW DOES THE SCRUTINEER COMPARE TO PARTIAL STROKE TESTING DEVICES?

Partial stroke testing is performed by slowly exhausting pressure from a spring return actuator until the actuator causes a pre-defined partially closed valve travel position. Via pre-installation testing, the pressure at which the desired position is reached is programmed into the PSTD. Because any lower pressure will cause excessive valve travel, as well as process interruption, PSTDs are programmed with a minimum pressure parameter that if reached, will initiate aborting the test, after which the user is informed that the valve / actuator assembly is in need of immediate maintenance. While PSTDs provide pressure and time diagnostics, the limited release of pressure limits this data to a very small range and is frankly, of minimal value to the user.

By contrast, the Scrutineer package releases 100% of the actuator pressure, resulting in full actuator output availability to cause valve motion, with a process engaged travel stop to assure that the valve will not travel past a user defined position, thereby eliminating the concern for process interruption.

Full pressure release and assured valve motion without over-travel enable measurement of the pressure at which motion occurs. This data combined with position measurement in turn enables calculation of the Safety Margin, valve torque / thrust required and the percentage of the valve MAST being applied.

* Safety Margin is the ratio of actuator output capacity to the actual required valve torque or thrust

** MAST is the Maximum Allowed Valve Torque or Thrust as defined by the valve manufacturer



13120 Theis Lane
Tomball, TX 77375
(281) 516-0277

 **888.ACTU.8.IT**
888.228.8848

 **www.qtrco.com**
Email: actu8it@qtrco.com