

# Process Automation

IMI STI

QT

QuickTrak Intelligent Digital Valve



Breakthrough  
engineering for  
a better world



QT

# QuickTrak Intelligent Digital Valve

The QuickTrak™ system features the latest in pneumatic digital valve control technology that combines a microprocessor-based control system with an integrated valve positioner. This system is specifically designed to answer the challenges faced by todays demanding applications. Capable of providing the control and performance of a hydraulic system, but without the environmental and storage requirements; the QuickTrak™ system is flexible and powerful.

## Product features

Remote mount capability enables an easier, safer means to calibrate and operate the valve. The system has an optional explosion proof arrangement as well.

Local display with push button operation for calibration, manual control, system service and setting of HART™ parameters.

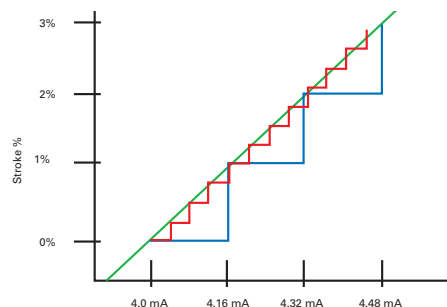
The included SD card provides ease of data transfer for the automatic, time stamped valve parameters that are captured. In the event of an upset condition the system will automatically record the valve trip data, even if not at the pre-configured time stamp intervals.

Communication flexibility with an assortment of interface options, ranging from direct connection with the RS232 or HART™ interfaces, or through the mobile SD card or handheld systems. Text based files are time stamped for historical analysis and retrieval.

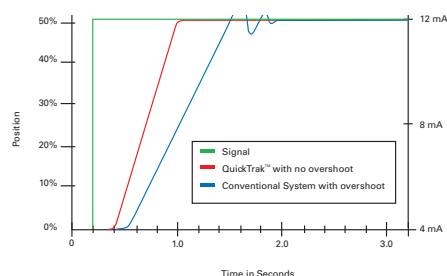
Diagnostic analysis is made easy by utilizing a digital controller which can integrate into the plant's control system for plant wide monitoring and analysis. The controller itself is equipped to store the valve signature information and provide data for valve diagnostics.

Remotely installed software allows users to synchronize the data, either through the SD card or direct connection, and then evaluate the performance with all the functionality of the local controller.

The QuickTrak™ spool piece is capable of delivering a Cv 60 times better than traditional smart positioners. This performance eliminates the need for volume boosters, thus reducing the number of components mounted on the actuator and the probability of failures that impact maintenance budgets.



QuickTrak response to 0.25% resolution



Stroke speed / dead time on seat

## Product breakdown

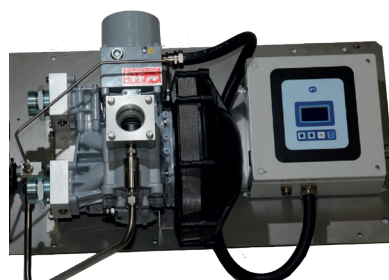
**Probe:** Magnetostrictive linear position transducers located within the actuator stem which provide fast and highly accurate control feedback.

**3-Way valves:** Fail mode is done through (2) 3-way valves (SIL certified) piloted by the solenoid valve, which isolate the servo-valve from the actuator. A 3rd valve removes any bleed when fail mode occurs.

**Solenoid valves:** 24 VDC continuously energized, normally closed, to initiate fail mode upon loss of air supply or signal power.

**Servo-valve:** High-capacity servo-valve for positioning.

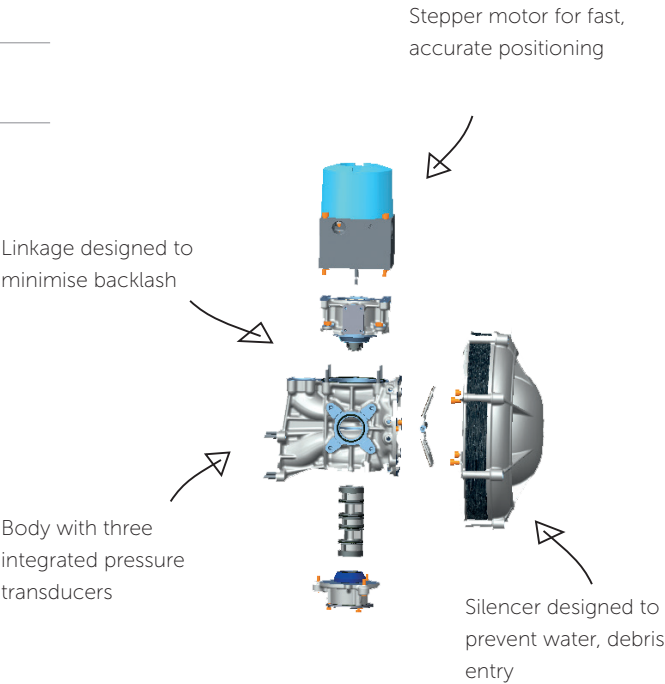
**Digital controller:** Provides a multi-level, closed loop system based on the valve and spool position to control the stepper motor to adjust the actuators chamber pressure to achieve the desired valve position.



Remote mount capability enables an easier, safer means to calibrate and operate the valve.

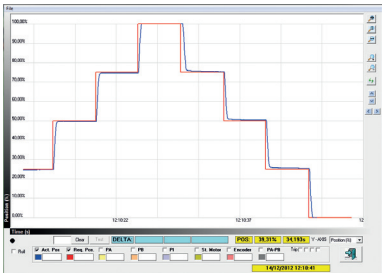
Technical specification

Input signal / position feedback 4-20mA, HART™ protocol	Temperature rating -20°C to 70°C
Power supply 100 to 240 VAC ± 10% 50-60 Hz ± 5% from 24 to 145 VDC ± 10% (4 to 0.3A)	Temperature extreme -40°C to 100°C
Maximum power consumption 95 W	Certifications ATEX IECEX CSA / US UL
Electrical connections 4 holes x M20x1.5 cable glands	
Air supply pressure 4 - 7 bar	
Maximum air consumption QT CV30 2352 Nm <sup>3</sup> /h at 6 bar (CV30) QT CV9 705 Nm <sup>3</sup> /h at 6 bar (CV9)	
Maximum air consumption QT CV30 2.5 Nm <sup>3</sup> /h at 6 bar (CV30) QT CV9 1.5 Nm <sup>3</sup> /h at 6 bar	
Air supply connection ¾" NPTF	

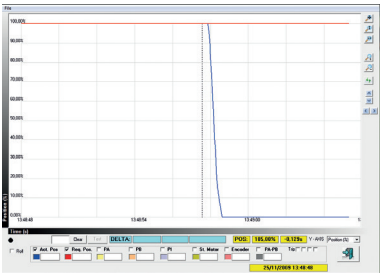


Benefits

- Improved performance.
- Fast stroking / response.
- High reliability.
- Reduced maintenance.
- Precise positioning.
- Quick calibration and tuning.



QuickTrak III has industry leading load step precision.



Best in class load shedding capabilities.



QuickTrak spool piece can deliver Cv 60 times better than alternatives.

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