rotork®

**Keeping the World Flowing
for Future Generations**

IQ3 Pro Range

Intelligent Electric Actuators

The introduction of the IQ3 Pro 'connected platform' enables the development of new features to drive digitalisation and future-proofing of electric actuation.

The IQ3 Pro actuator can be operated and configured via the Rotork app on a smartphone, providing intelligent control and communication capabilities.

The app includes a virtual Rotork Bluetooth® Setting Tool *Pro* (BTST), as well as a new configuration wizard which enables the commissioning of valves to be easier and more convenient. A secure connection is established between the app and the actuator utilising 'PIN pairing' to gain access.

All IQ3 Pro actuators have in-built data loggers so you can extract the data logs via the app, and export them to Rotork Insight 2 software or send to Rotork's cloud-based intelligent asset management (iAM) system.

The data log files include; torque and operation, temperature, vibration, and event log information. Other metrics such as partial stroke profile, maximum starts per hour and motor run time are also available.

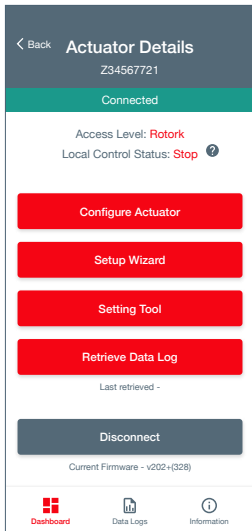**The new Rotork app introduces smart features including:**

❯ **Dashboard** with detailed status information always on display and easy navigation to all app functions

❯ **Valve Configuration Wizard** enables easier and more convenient valve commissioning

❯ **Manual Configuration** function allows experienced engineers to set all main commissioning settings

❯ **Setting Tool** function provides full access to the actuator on-screen setup menus

❯ **Data Logs** function allows the app to download data logs from multiple IQ3 Pro actuators

❯ **Secure Connection** created by 'PIN pairing' between the actuator and the app to gain secure access

The most **robust and intelligent actuator** in the industry providing **exceptional reliability and performance**

❯ Continuous position tracking at all times, even without power

❯ On power loss, graphical interface, remote indication and data logger are maintained and accessible

❯ Oil bath lubrication provides extended life and the ability to mount in any orientation

❯ Water ingress protection, not reliant on terminal cover or cable gland sealing – double-sealed to IP66/68 7 m for 72 hours

❯ Increased protection by using independent torque and position sensing

❯ Remote operation, configuration and commissioning up to 100 m from actuator, with Remote Hand Station

❯ Real-time valve and actuator performance information viewable on the dual-stacked screen

❯ Closed-loop control available for IQ3M Pro modulating and IQT3 Pro part-turn actuators

❯ High and normal speed option with adjustable clockwise and anti-clockwise speeds for IQT3 Pro

❯ Explosionproof to international standards

❯ Easy installation and maintenance using detachable thrust bases

❯ Safe, motor-independent, handwheel operation available at all times

❯ Control and commissioning via Rotork app, Bluetooth® Setting Tool *Pro* (BTST) or local control knobs

❯ Field upgradeable and configurable control and indication options

❯ Rapid and secure commissioning and configuration even without power

❯ Detailed trend analysis and diagnostic data available via intelligent asset management

❯ Backwards compatibility and upgrade services available
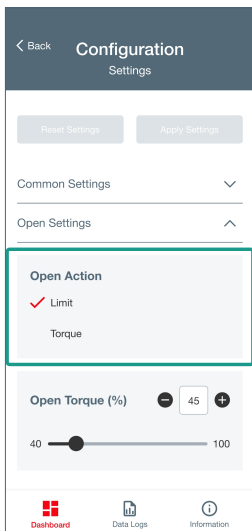
The Rotork App

Dashboard

When connected to an actuator, the dashboard screen allows access to the app's functions. From here, users can retrieve data logs, manually configure the actuator, complete a valve setup using a guided wizard or even emulate the Bluetooth setting tool. Detailed status information is displayed in a prominent position for easy access.

Actuator Details
Z34567721

Connected

Access Level: Rotork
Local Control Status: Stop ?

Configure Actuator

Setup Wizard

Setting Tool

Retrieve Data Log

Last retrieved -

Disconnect

Current Firmware - v202+(328)

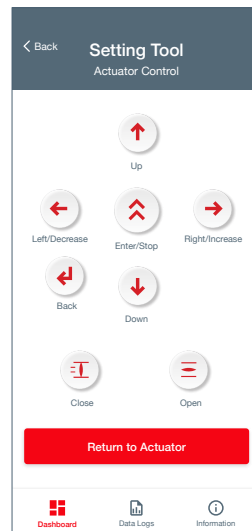Dashboard | Data Logs | Information

Valve Configuration Wizard

For those unfamiliar with the actuator settings or where the valve type is known and fitted, users can follow a pre-determined wizard to help guide setup. The wizard is available for all valve types and allows for an easy, guided setup. This feature will help the user confidently set up an actuator in a predictable manner.

Setup Wizard
Valve Selection

Wedge Gate

Next

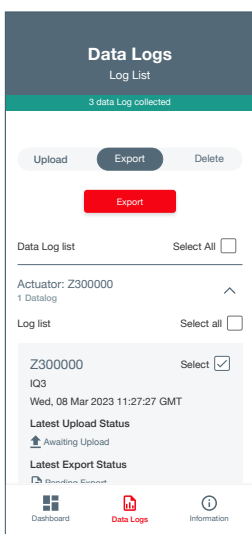Dashboard | Data Logs | Information

Manual Configuration

Users can view and change all main actuator commissioning settings including; direction of travel, open and close limit action, open and close torque levels, and breakout torque.
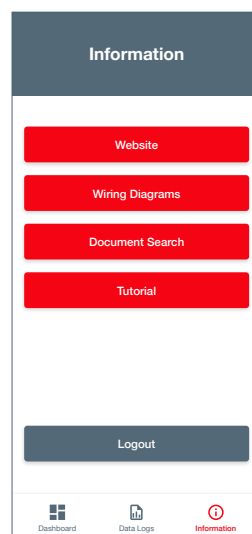
Configuration
Settings

Reset Settings | Apply Settings

Common Settings

Open Settings

Open Action
✓ Limit
Torque

Open Torque (%)   − 45 +
40 ———————— 100

Dashboard | Data Logs | Information

Setting Tool

The setting tool via the app emulates the Rotork Bluetooth Setting Tool *Pro* (BTST). The setting tool screen enables full interaction with the actuator as if you had the physical tool in your hand. With the app setting tool, you have full access to all setting screens, status screens, assets, and on-screen data logs.

Setting Tool
Actuator Control

↑ Up
← Left/Decrease | ⌃ Enter/Stop | → Right/Increase
↵ Back | ↓ Down
Close | Open

Return to Actuator

Dashboard | Data Logs | Information

Data Logs

The actuator data logger is capable of storing up to 3,000 events. Via the app users can retrieve data logs from the actuator and export to Insight 2 or Rotork's cloud-based intelligent Asset Management (iAM) system.

Data Logs
Log List

3 data Log collected

Upload | Export | Delete

Export

Data Log list   Select All ☐

Actuator: Z300000
1 Datalog

Log list   Select all ☐

Z300000   Select ☑
IQ3
Wed, 08 Mar 2023 11:27:27 GMT

Latest Upload Status
⬆ Awaiting Upload

Latest Export Status
Pending Export

Dashboard | Data Logs | Information

Information

A resources area provides quick access to a document search, wiring diagrams, and Rotork Site Services support.

Information

Website

Wiring Diagrams

Document Search

Tutorial

Logout

Dashboard | Data Logs | Information

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Intelligent Asset Management (iAM)

Rotork's intelligent Asset Management (iAM) is a cloud-based asset management system for intelligent actuators and the flow control equipment they operate.
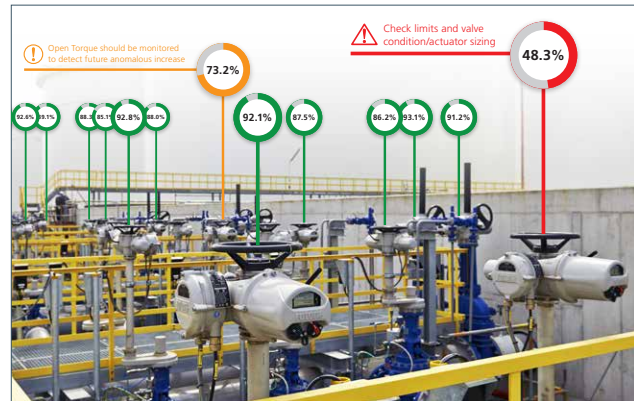
The system helps customers reduce unplanned downtime (and the poor performance, reduced output yields and reputational damage that can accompany downtime) by using analytics based on data taken from the data logs within intelligent actuators to create a maintenance plan.

It provides advanced condition monitoring for easy and accurate reporting of the condition of valves/flow control assets and anomaly detection, enabling proactive maintenance. It can improve long-term operational stability of all assets.

iAM is a robust, safe and secure online platform with a simple to use intuitive interface. Summary views and colour coded maps simplify complex analytics into easy to understand visuals. The customer can see a full picture of the status of valves and associated flow control equipment at a glance.

Smart maintenance enabled by iAM's advanced analytics is based on data from the field, rather than periodic or limited maintenance based on guesswork. iAM removes the need to manually review data, saving time and reducing asset failures.

For full details see PUB056-025

Rotork Insight 2 Software

Insight 2 facilitates the review, configuration and analysis of setup configuration and data logger information for *Bluetooth*® wireless enabled Rotork actuators.

All Bluetooth wireless enabled Rotork actuators include an onboard data logger which captures and stores valve, actuator, control signal operation and status data. This can be viewed locally on the display or on a PC using Insight 2.

Log data is time and date stamped and can be viewed on an event by event basis. Insight 2 enables the user to pre-configure actuator missions on a PC, transfer them to a Rotork Bluetooth® Setting Tool *Pro* and transmit them to the actuator on-site. The missions can be dedicated to specific actuators by type or serial number and are password protected for extra security.

Standard missions include: extraction of actuator configuration and data logger, modification of actuator parameters and option configuration.

For full details see PUB095-002

A full listing of the Rotork sales and service network is available on our website.

www.rotork.com

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Fluid Power Actuators and Control Systems

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