

FasTrak Compact



Engineering
GREAT Solutions

**Fail safe smart positioner for
double or single acting actuators**

FasTrak Compact® (FTC)

The FasTrak Compact® is a high-precision digital-pneumatic valve controller. It has a very good dynamic performance. Configuration and calibration is carried out with a HART™ device or by self calibration. FTC is compatible with single and double acting actuators (with or without a spring), a piston or a diaphragm.

Key features

> Control Algorithms & Hardware

Self calibration on double acting piston, diaphragm and rotary actuator with or without spring; patented adjustable independent control parameter to open and close stroke

> Environmental Protection

The IP65 protection and unique exhaust protection system makes it suitable to be installed in harsh environments where there is tropical rain, dust, sand, salt.

> Embedded Features

- 4-20 mA position feedback
- Main parameters display

> Communications

- Local interface with display and push buttons
- 4-20 mA control and power with HART™ communication protocol
- High speed serial connection
- Diagnostic options
- USB real-time connection

> Software Interface

Dedicated software (RCFTC) to set, customise, control and monitor high performance

> Certifications & Approvals

- **CE** EUROPEAN DIRECTIVE
- Intrinsically safe (Ex ia) according to:



ATEX (2014/34/EU)



IECEx

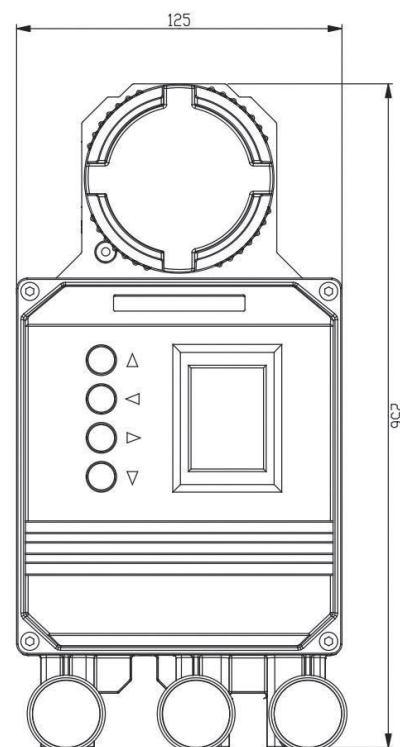
Compatible with a variety of actuators



Customise, control and monitor high performance

Benefits

- > Powerful self calibration software with the ability to totally personalise the parameters
- > Set of configurable embedded features
- > Robust design with metal housing
- > Remote control software downloadable free of charge on our company website: (www.stiactuation.com)



Technical specifications

Connection

Power	2 wire from signal (min 3.5 mA, 10/30 Vdc)
Electrical connections	Input signal 1/2" NPT Auxiliary output position feedback 1/2" NPT
Pneumatic connections	1/4" NPT female

Input

Signal	4-20 mA with HART™ protocol Configurable split range
Communication protocol	HART™ protocol Local display TTL RS232

Output

Position	4-20 mA passive loop
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Stroke Movement

Feedback angle of rotation	30°/90° (<30° with lower resolution)
Adjustable speed	Range 0/300 seconds, individually configurable for each direction
Characteristic curve	Linear Equal percentage Configurable by user
Control parameter	Individually configurable for each direction
Travel control	Minimum and maximum settable stroke limits / cut off
Signal fail	End stroke limits (4 mA position)

Air Supply

Instrument air	Free of oil, water and dust to ISO 8573-1 - Class 3
Supply pressure	2.5÷7 bar
Air consumption	< 0.7 Nm³/h at 4 bar

Performance Data (According to IEC 61514-2)

Hysteresis + deadband	±0.15%
Repeatability	±0.15%
Sensitivity	±0.1%
Linearity	±0.3%
Influence of ambient temperature	0.3% for every 10°C
Air capacity	Up to 23.5 Nm³/h at 6 bar (CV 0.3)

Environmental Capabilities

Ambient	Protection IP65 Operation temperature -40° to +80°C
Humidity	Up to 100%
CE mark	CE conformity and EMC

Materials

	Aluminium
	Stainless steel feedback shaft

Weight

	2.30 kg (with 3 pressure gauges)
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Full model selection
available on our divisional website
www.imi-critical.com

Options & accessories

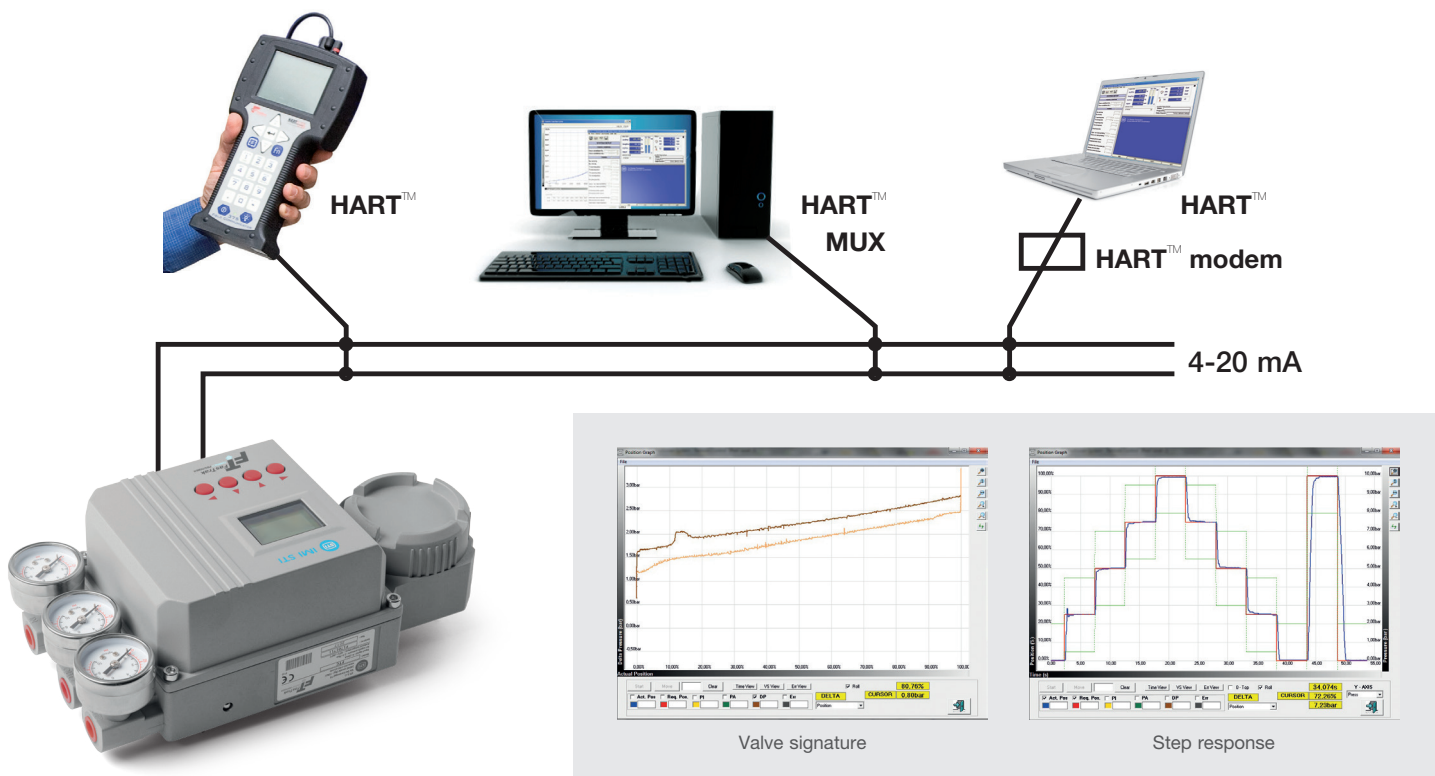
- > Remote feedback sensor
- > Universal linkage for:
 - linear long stroke actuator
(70÷1000 mm)
 - VDI/VDE 3845 for rotary applications
 - lever for side yoke or top mounting
application
 - customised application
- > Directly mounted pneumatic gauges
- > Collected or high silenced exhaust
- > Direct interface mounting for single action
spring close actuator
- > High speed communication kit
- > Advanced diagnostic with option pack



Opened FTC complete with pressure gauges

Remote control software interface

- > User friendly interface with all key parameters shown on one screen
- > Tool for easy mechanical feedback alignment
- > Self calibration wizard
- > All parameters with full control via an interactive start up page
- > Real-time graph tool for performance monitoring with configurable parameters
- > Events and errors report
- > Certified HART™ protocol communication 375/475 handheld compliant
- > Option Pack: Advanced diagnostic: Valve signature - Step response - Pressure fall back and other features



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