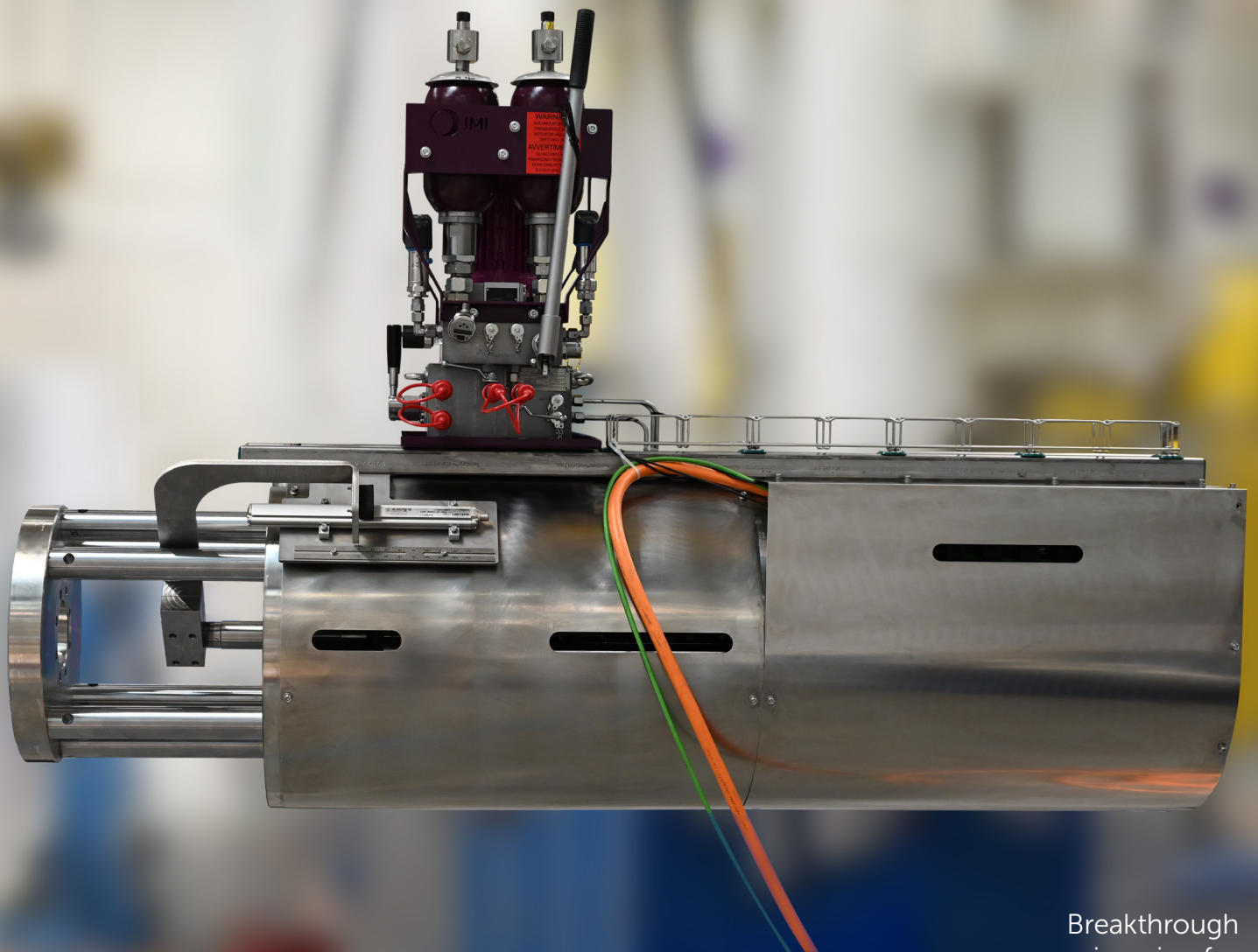




Process Automation

IMI CCI

ELE-TRAK
Electric Actuator



Breakthrough
engineering for
a better world



ELE-TRAK

Electric Actuator

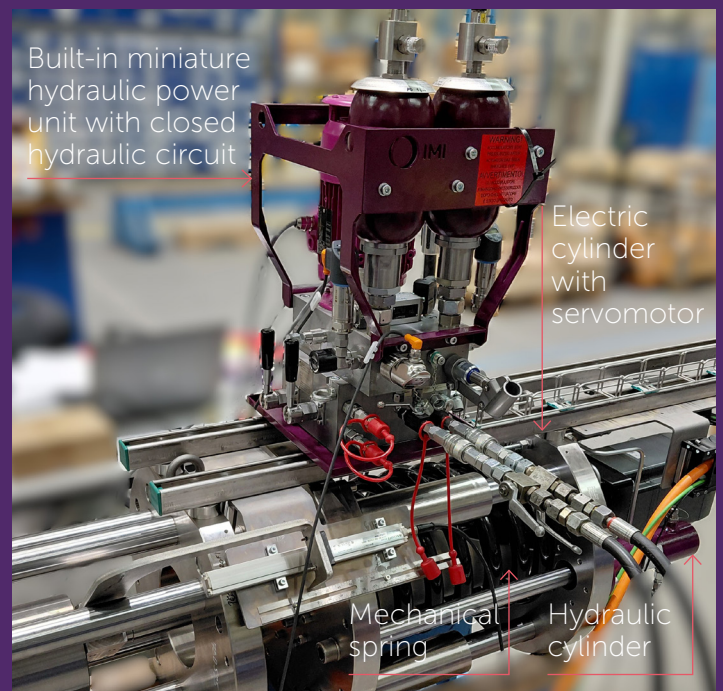
ELE-TRAK is a compact electric actuator with trip function used for position control of steam, water and gas valves typically in Power and Oil & Gas applications.

It is designed to provide fast and precise positioning during normal operation and pre-defined trip function on demand or in case of failure. ELE-TRAK features multiple versions to fit application demands. Positioning is done either by an electro cylinder driven by servo motor or an hydraulic cylinder controlled by proportional solenoid valve.

Continuous tight shut-off is realised by mechanical or hydro-pneumatic spring. All versions require only electrical connection for power supply and communications. Connection to external pneumatic or hydraulic system is not applicable.

Key features

- Design variability to suite application needs; version with electric cylinder only, version with electric cylinder and mechanical spring, hydraulic version.
- Customisable hardware size and operation parameters to fit application needs.
- Smooth, fast and precise positioning by servo motor driven electric cylinder.
- Tight valve shut-off using mechanical or hydro-pneumatic spring.
- Available trip functions: Stay-in-Place, Trip open, Trip close.
- SIL2 certified trip functions on request.
- Quick stroke functions.
- Remote diagnostics and evaluation by controller.
- Communication using PROFIBUS, PROFINET or other protocol on request.
- High anti-corrosion protection in the standard version with optional very high (marine) anti-corrosion protection on request.
- Fire resistant hydraulic fluid as standard.
- ATEX version on request.



Benefits

- Compact design.
- Actuator supplied as single assembly + Control cabinet.
- Control cabinet includes prefabricated cables for quick installation.
- Actuator & Control cabinet are factory preset and tested for quick commissioning.
- Electrical connection only, without connection to external pneumatic or hydraulic system.
- Design optimised for high efficiency and minimal electricity consumption.
- Remotely operated fully automated actuator not requiring operator's presence.
- Low maintenance requirements and long maintenance-free cycle.
- Low operation induced noise & vibrations.
- SIL2 and ATEX executions available on demand.

Product specification (standard)

Thrust Up to 114 kN (electric cylinder) Up to 760 kN (hydraulic cylinder)	Positioning precision Better than 0,25 mm	Relative humidity up to 100% Not explosive atmosphere (safe zone)	Materials & Coatings For high corrosivity category C4 according to ISO 12944-2
Stroke length Up to 500 mm	Ambient conditions Indoor/outdoor (weather protected)	Ingress protection ≥ IP65	Compliance Directive 2006/42/EC (MD) Directive 2011/65/EU (RoHS II) Directive 2014/68/EU (PED) Directive 2014/30/EU (EMC)
Velocity Stroke speed up to 250 mm/s	Inlands/coastal areas with low to moderate salinity Temperature range -10°C ... +50°C	Hydraulic system pressure Max working pressure 200 bar Design pressure 250 bar	

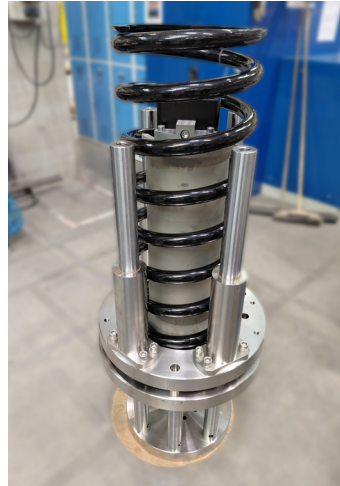
Design features

Precise valve positioning



Fast and precise positioning by servomotor driven electric cylinder controlled by motor driver. Alternatively, in hydraulic version, by proportional valve controlled hydraulic cylinder.

Valve tight shut-off



Reliable valve tight shut-off provided by preloaded mechanical coil spring or hydro-pneumatic accumulator.

Miniature hydraulic power unit



Self-contained miniature hydraulic power unit with closed hydraulic circuit filled with low amount of hydraulic fluid optimised for high efficiency and minimal electrical consumption. Actuator does not need connection to external hydraulic supply.

Positioning cabinet



Wall mounted cabinet containing servomotor driver, programmable logic computer, positioning cards and communication modules; supplied with prefabricated cables for plug-and-play installation. Cabinet is adaptable for demanding ambient conditions by increased IP, higher material resistance and air conditioning.

Electric cylinder lifetime

Electric cylinder composed of minimum parts designed for millions of cycles and thousands of driven kilometres contributes to the robustness of the entire actuator.

Quick and trip stroke

Multiple available versions and modular design offer selection of quick & trip stroke functions selectable to satisfy application demands.

Key components

Electric cylinder with servomotor & drive



Mechanical spring



Hydraulic cylinder



1-out-of-2 manifold



Proportional manifold



Quick stroke manifold with accumulator



Miniature hydraulic power unit with accumulators



Versions

ELE-TRAK-FiP (Stay-in-Place)



ELE-TRAK-FO/FC (Trip Open or Trip Close)



ELE-TRAK-HYD-FiP (Stay-in-Place)



ELE-TRAK-HYD-FO/FC (Trip Open or Trip Close)



Process Automation

The information in this brochure is provided for general informational purposes only. Specifications for products and services are subject to change without prior notice. IMI plc and its subsidiaries own all product brands mentioned herein.

IMI makes no warranties or representations about the accuracy or completeness of the content in this brochure and assumes no liability for any errors or omissions it may contain. We reserve the right to modify, enhance, or discontinue any product or service described herein without prior notification.

IMI CCI
CCI Czech Republic s.r.o.
K Letišti 1804/3
Šlapanice
627 00
Czech Republic

www.imiplc.com/process-automation

01126.01/26en

