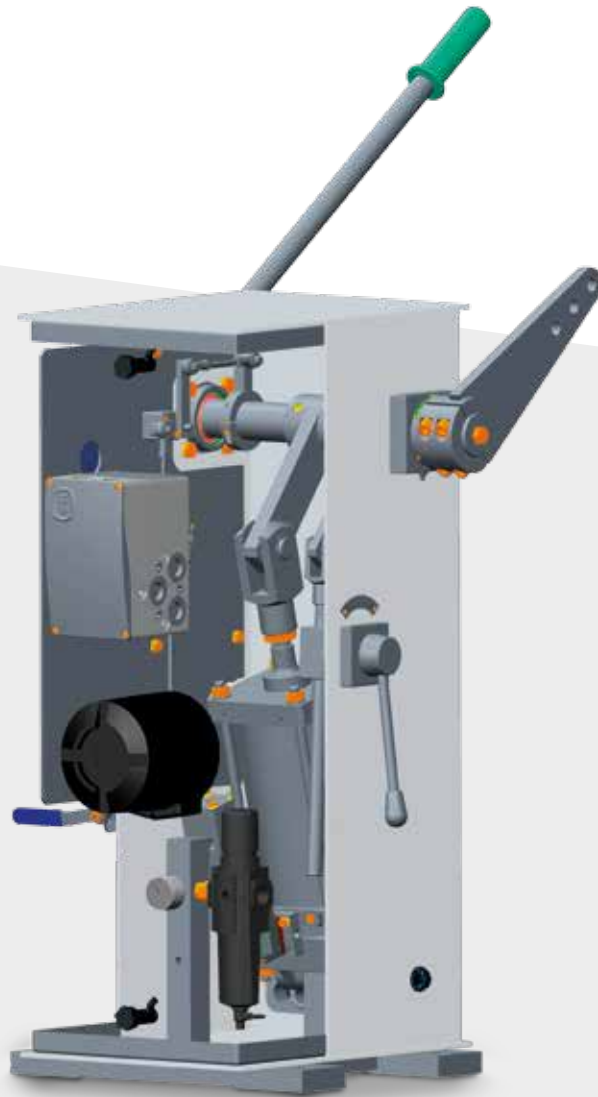



CML




*Engineering
GREAT Solutions*

**Enclosed Control Drive Actuator
with Lever Manual Override**

CML: Enclosed Control Drive Actuator

The CML series pneumatic actuator system is composed of an actuator and a manual override integrated into a steel housing which is portable. This rugged construction guarantees continuous operation in harsh environments, for example in power stations, steel industries, petrochemical plants or desert areas etc. This actuator provides small to medium torque (up to 100 daNm) for angular control of dampers, butterfly valves, speed variators, radial vanes etc. Manual operation is by a clutchable lever, equipped with a mechanical system. This system allows the movement of the actuator through an external lever and locks it in the required position.

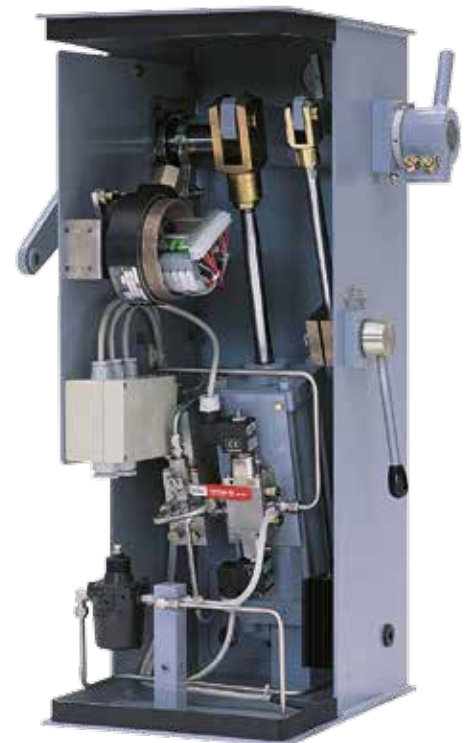
Key features

- > Actuator with manual override and lock
- > Portable within steel housing
- > Up to 100 daNm
- > 20degC to 70degC
- > Lever has 70deg or 90deg operating angle
- > Typical operating pressure 7barg up to 10 barg
- > Front easily removable for access / maintenance

Benefits

- > Ideal for use in harsh environments maintaining excellent performance
- > No competitors have such a wide range of products
- > Manual override built-in as standard
- > Easy installation of a wide range of accessories on a separate internal panel
- > Easy maintenance
- > Designed for a long operating life
- > Internal linear (SC) actuator with built-in permanent lubrication system (see SC brochure for more information)
- > Balancing Security Sensor device (BSS) to switches automatically from manual function to modulating with signal (after request to come in service) only when the signal matches position where actuator is mechanically locked from manual override. (BSS is available as an option).

Total capability in valve actuation



A typical CML actuator in on-off execution for open and close damper on power station cooler equipment.



FasTrak is a smart positioner which has a high-capacity and high-precision digital-pneumatic valve controller that replaces a conventional positioner.

Actuator with piston built-in permanent lubrication system

The CML utilises an IMI STI linear actuator from the SC series of actuators with a built-in permanent lubrication system, which has been patented by IMI STI. This ensures an extremely smooth valve operation even if dry instrument air is used. Thanks to this lubrication system, which is common to all IMI STI actuators, no maintenance of the moving parts is required, even after many years of continuous service.

The patented lubrication system consists mainly of a grease lubricant filled annular cavity placed inside the cylinder piston, between a sealing ring and a sliding ring to avoid direct contact between the metal surfaces of the piston and the cylinder, even in case of lateral forces acting on the actuator stem; the annular cavity is filled with grease which, during the piston movement, keeps the metal parts lubricated allowing very smooth sliding and a long seal life.



Linear SC actuators are suitable for service in harsh environments such as desert areas.

Technical specifications

Housing

Carbon steel

Lever shaft

Alloy steel 38 NiCrMo4 heat treated

Shaft support

Bronze bushing on bearing

External lever

Carbon steel

Manual override

Manual by-pass function for manual override using an external lever

Tubing & fittings

Brass fittings and copper tubing (stainless steel 316 available on option)

Standard painting

RAL 7030 grey

Air supply

Dry instrument air according to ISO 8573-1

Operating pressure

Pneumatic version from 7 barg up to 10 barg (special version available on request)

Standard operating temperature

-20°C to 70°C (lower or higher temperature on request)

Available with a wide range of positioners, in particular we suggest FT positioners (see FT brochure for more information)

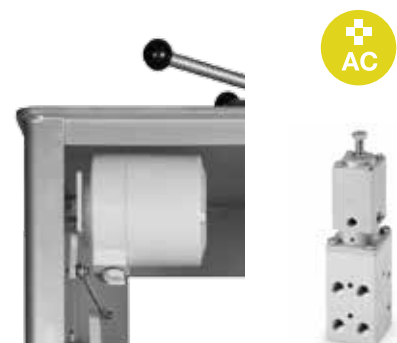
Working lever operating angle

- 63/125 and 100/100 → 90°
- 100/200 and 125/200 → 70°

Actuator Type	Size stroke mm	Torque* available (daNm)			
		Min		Max	
		70°	90°	70°	90°
CML-1	63/125	12	8	14	12
	100/100	26	18	32	26
CML-2	100/200	52	36	63	51
	125/200	82	57	100	81

* Torque referred at 0,50 Mpa supply pressure and 70° or 90° operating angle of final element (damper).

** Max operating air supply pressure 0,44 Mpa.



The enclosure for electronic position transmitter house a wide range of either mechanical or inductive limit switches (up to 4).

The air-lock device is mounted on pneumatic actuators when they need to be isolated from control devices (positioners, electro-pneumatic distributors etc) in the event air pressure falls below the pre-determined operating safety point.

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