

Process Automation

IMI STI

SA/CL

Analog Positioner



Breakthrough engineering for a better world



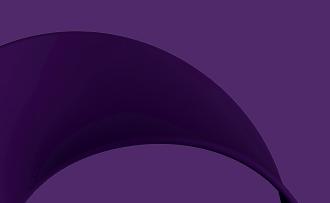
SA/CL

Analog Positioner

The SA/CL is an analog positioner available in a pneumatic and electro-pneumatic version. The positioner has a heavy duty design making it suitable for use in very harsh conditions. It is used as the control part of the pneumatic valve set in oil and gas, refining, chemical, power, metal production and other fields with automated systems. The UP-2 pneumatic version accepts a 3-15 psi (0.2-1 bar) signal and the electro-pneumatic version a 4-20 mA signal.

When using the electro-pneumatic version an I/P converter is installed on the pneumatic positioner which allows an electric—signal to pilot the positioner. It is based on the balanced-forces principle; air distribution to actuator chambers is executed by an internal spool.

The SA/CL is designed to be used for applications on linear actuators with a stroke length of up to 70mm. This positioner is double acting but can also be used as single acting if required.



Product features and benefits

Metallic case.

Heavy duty design.

High reliability.

Intuitive mechanical and pneumatic construction.

Integrated bypass only for ND 1/4" version.

Action inversion without tubing inversion only for ND 1/4" version.

Air purge version.

Sandstorm execution.

Split range signal.

Special characterisation/range.

Suitable for big size/fast stroking actuator.

Available full stainless steel spool

valve for ND 1/4".

Full stainless steel spool valve for ND 1/2".

Suitable for:

Standard, sandstorm, copper free ambient condition.

Single and double acting actuators.

Low and high ambient temperature.



DT Electro-pneumatic version

Technical specifications

Housing materials Aluminum

Operating pressure P min = 2.5 bar P max = 7 bar

Design pressure = 10 bar

Static air consumption

ND 1/4" 1.02 Nm³/h (0.6 SCFM) at

400 kPa (60 psi)

ND 1/2" 1.04 Nm³/h (0.8 SCFM) at 400 kPa (60 psi)

Static air consumption (I/P converter)

+0.09 Nm³/h (0.06 SCFM)

Feeding connection ND 1/4" Model SA/CL-2

ND 1/2" Model SA/CL-1

Output connection ND 1/4" Model SA/CL-2 ND 1/2" Model SA/CL-1

Pilot signal connection

1/4" NPTF

Electrical connection (I/P

converter) ND 1/2" NPTF Exclosure degree of protection

CV max

ND 1/4" Inlet = 0.34 ND 1/4" Outlet = 0.34 ND 1/2" Inlet = 0.637

ND 1/2" Outlet = 0.79

Operating temperature -20°C / +70°C

-40°C / +85°C available on request

Signal 3-15 psi 4-20 mA Sensitivity 0.2% of signal range

Linearity 1% of the full stroke

Hysteresis 0.5% of the full stroke

Weight

SA/CL-2 ND 1/4" = 2.3 kg

SA/CL-1 ND 1/2" = 3 kg SA/CL-2-EP ND 1/4" = 2.8 kg SA/CL-1-EP ND 1/2" = 3.5 kg

Optional Accessories

Air-Lock ND 1/4" integrated.

Electro-pneumatic version available - intrinsically safe and explosion proof.

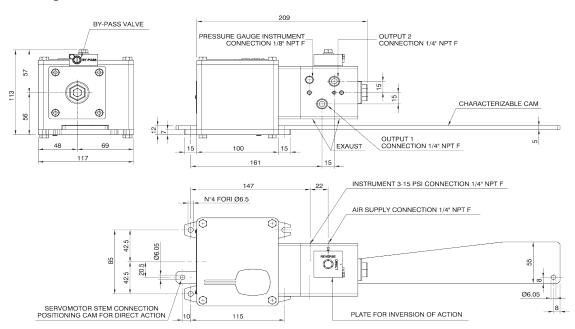
Change-over plate with bypass valve.

Special construction for corrosive environment.

Customized cam.

Pressure gauges.

Dimensional drawing



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07073.02/24en







