











# SP500

# The evolution of smart valve positioners

The SP500 is a fully featured communicating smart valve positioner for demanding applications that has been designed for easy commissioning with its user-friendly interface and straightforward set-up procedure.

Reliability and accuracy are paramount with all instrumentation and the SP500 takes these aspects to a new level; the use of piezo-electric technology at the heart of the positioner means accurate conversion of signal-to-position and gives it unrivalled reliability when compared to traditional positioner technology.

With increasing pressure on industry to reduce carbon emissions and save energy, a reduction in the running costs of plant comes as a welcome opportunity. Therefore, we have listened to customers' concerns regarding compressed air waste and have designed the SP500 to have negligible running costs; typically consuming less than 1% of the air of a traditional electropneumatic positioner.

The SP500 has an adaptive action that compensates for fluctuations in supply pressure and valve stem friction, thus enabling guaranteed process stability.

Non-contact magnetic feedback eliminates hysteresis and ensures accuracy. Unlike traditional feedback arms, the innovative non-contact feedback system is unaffected by corrosion that can cause positioners to stick or give inaccurate readings. Fewer components in the overall design mean guaranteed long-term reliability and reduced lifecycle running costs saving maintenance time.

# SP500 energy consumption

Type of positioner	Annual energy consumption in kWh at steady state conditions based on 8000 h/year and air at 7 bar g	Annual energy consumption in megajoules at steady state conditions based on 8000 h/year and air at 7 bar g
SP500 smart digital piezo-electric positioner	4.1	14.8
Traditional electropneumatic positioner	498	1 792

# Key features and benefits

	Key feature	Key reason	Key benefit
	Energy efficient	Digital air control, near zero air consumption at controlled position	Low running costs
000	Programmable functions via integral keypad	Easy and quick to commission, easy optimisation of valve performance	Control application optimised to application requirement
- And	Class-leading low impedance design	Facilitates multi-unit installations from a single analogue signal	Saves on controller power and increases compatibility with plant control systems

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