Smart Valve Positioner

SS2 Linear / Rotary

Smart performance with innovative and ever-strong coil drive even under harsh working environments









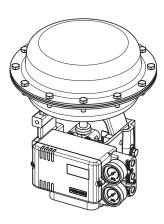


Features

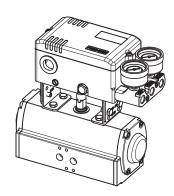
- ► Easy and quick auto-calibration
- ▶ Detecting RA (reverse acting) or DA (direct acting) automatically regardless of wrong air connections
- ▶ Available to use for single or double acting without any special adjustments
- Compact design allowing to be installed on small actuators
- ▶ Providing error messages against performance failures
- ▶ Possible to test the actuator with any fixed signal under a test mode
- ▶ Programmable characteristic curve with 17 points
- ▶ Wide operating temperature range -30 ~ +80 °C
- ▶ Improved control of high-friction globe and ball valves by eliminating an overshoot and a hunting
- ▶ Low air consumption
- ▶ Providing a mounting bracket to meet IEC 60534-6-1 for linear valves
- ▶ Supporting a NAMUR mounting pattern VDI/VDE 3845 (IEC 60534-6-2) and providing a multi-size mounting bracket for rotary valves

Options

- ➤ Output position transmitter (4 20 mA)
- ▶ 2 x alarm limit or micro switch (SPDT)
- Explosion proof type (IECEx / ATEX / KC Ex ia IIC T5)
- ▶ HART communication
- Profibus communication (in progress)
- ► Fieldbus Foundation communication (in progress)



- SS2L (Linear Type)



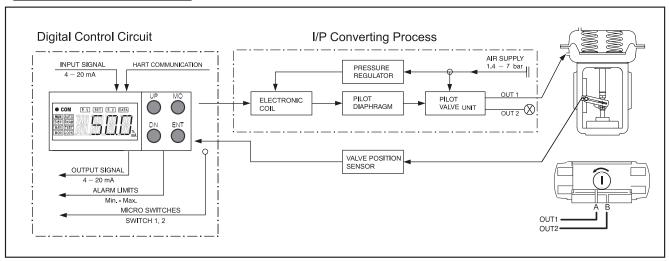
- SS2R (Rotary Type)

Specifications

Input Signal	4 - 20 mA @ 24 VDC
Min. / Max. Current	3.6 mA / 50 mA
Voltage Drop (Resistance)	Without Hart :8.7 VDC (435Ω @ 20 mA) With Hart :9.4 VDC (470Ω @ 20 mA)
Stroke / Angle	Linear type : 5 - 130 mm * Rotary type : 25 - 120°
Air Supply Pressure	1.4 - 7.0 bar (20 - 100 psi), filtered, compressed dry and non-oiled to meet Class 3 of ISO 8573-1
Output Pressure Range	0 - 100% of supply air pressure
Air Capacity	80 ℓ/min = 4.8 N m³ /h = 2.8 scfm (Sup = 1.4 bar) 233 ℓ/min = 14 N m³ /h = 8.2 scfm (Sup = 6 bar)
Air Consumption	2 ℓ/min = 0.12 N m³/h = 0.07 scfm (Sup = 1.4 ~ 6 bar)
Characteristic	Linearity < ±0.3% F.S Sensitivity < 0.2% F.S Hysteresis < 0.2% F.S Repeatability < 0.2% F.S
Performance Characteristic	Linear, EQ %, Quick open, User set (17 points)
LCD Indication	4-digit LCD indicator
Adjustable Speed	1 - 1000 (lowest 1, highest 1000)
Scan Time	2ms
Shut-off Value	Range 0 - 10% of position signal
Valve Action	direct action (DA) / reverse action (RA)
Operating Temperature	- 30 ~ +80 °C (- 22 ~ +176 °F) **
Pneumatic Connections	PT(Rc) 1/4 or NPT 1/4
Electrical Connections	2 x PF(G) 1/2 or NPT 1/2
Protection Class	IP66, intrinsically safe (IECEx / ATEX / KC Exia IIC T5)
Body Material	Aluminum die-cast / powder-painted
Weight	1.6 kg

^{*}Up to 200mm on request ** -40 °C on request

Principle of Operation



If 4-20 mA input signal is supplied, the micro processor compares input signal with position feedback and sends control signal to the I/P converting module. Pneumatic signal from the I/P converting module operates the valve and the valve stays at the desired position.