

SVI I AP Advanced Performance

An Extremely Reliable Digital Positioner with True System Interoperability

Key Features:

- Extreme Accuracy
- Universal design (linear or rotary applications)
- Selectable position feedback (non-contact sensor or Remote-mount position feedback)
- AO: Position transmitter 4-20mA Output
- DO: Two Discrete Outputs
- Explosion proof external LCD & buttons
- Valve position Autotune (self calibration) with user selectable valve response
- Upgradeable Flash firmware
- Split-Range
- High-speed response for Surge-Control applications
- Upgradeable options

ValVue® Communication software: Serial Port or USB Modem MTL Multiplexor Control System Integration:

Digital Communication Interface Solutions:

- Sortifor System integral
 - Emerson®
 AMS™ / AMS™ ValVue SNAP-ON™
 - FDT-DTM
 - Any FDT-DTM compatible Host
 - Honeywell®
 - FDM / ValVue For Experion™ / Asset Manager PKS™
 - Yokogawa®
 - PRM® / ValVue PRM Plug-In
- HART® Configuration Tools:

- Compatible with any certified configurator using DDL technology such as Handheld 375





SVI II AP

Specifications

Safety Compliance:

• SIL2 Per IEC61508 section 2-3

Diagnostics:

- 5 Pressure Sensors
- Total Travel
- Number of Cycles
- Time Open/Time Close/Time Near Close
- Online Diagnostics
- · Upgradeable diagnostic levels

Housing Material:

- Case/Cover: Low copper aluminum (standard), 316L (optional)
- · Paint: Grey Polyurethane

Input Power and Signal:

Power supply (taken from 4-20mA) Required terminal voltage: 9Vdc at 20mA Minimum current signal: 3.2mA

Output Signals:

- AO (Valve Position): 4-20mA 2 wire loop powered with 10-24Vdc compliance voltage
- DO (1 & 2): Configurable solid state switch
 - 1A 30Vdc

Input Signals:

- · Valve Setpoint: 4-20mA
- DI (discrete input): Un-powered contact closure
- · Remote position sensor

Communication:

HART® Protocol

Ambient Temperature Limits:

• -58 to 185 °F (-50 to 85 °C)

Ambient Humidity Limits:

• 10 to 95% RH non-condensing

EMC Conformity Standards:

- EN 61000-4-2, 3, 5, 6, 8
- IEC 801-2,-3,-4
- CE MARK

Actuator Travel Range:

- Linear Motion: 0.25" to 4" (standard mounting)
 > 4" (extended mounting)
- Rotary Motion: 18 to 140 deg
- Travel sensor resolution: 0.0015%

Pneumatics:

Air or sweet natural gas - regulated and filtered

Air supply pressure:

- Single-Acting: 20 to 100 psi max (1.4 to 6.9 bar)
- Double-Acting: 20 to 150 psi max (1.4 to 10.3 bar)

Air Delivery

Single Acting Pneumatics:

- 10.0 scfm (280 l/m) at 30 psi (2.1 bar) supply
- 16.6 scfm (470 l/m) at 60 psi (4.2 bar) supply
- 23.3 scfm (660 l/m) at 90 psi (6.3 bar) supply

Double Acting Pneumatics:

- 7.2 scfm (200 l/m) at 30 psi (2.1 bar) supply
- 12.8 scfm (360 l/m) at 60 psi (4.2 bar) supply
- 18.3 scfm (520 l/m) at 90 psi (6.3 bar) supply
- 23.8 scfm (675 l/m) at 120 psi (8.4 bar) supply

Materials:

 I/P Motor and Relay are constructed of composite polymers and stainless steel (300 and 400 series)

Control Valve Mounting System:

- · Material:
 - 300 Series SST standard
- · Valve Type:
 - Linear or Rotary Motion Control Valve
 - Single or Double-Acting Actuator
- Remote-Mount System Kit:
 - Remote position sensor assembly
 - Cabling for up to 30 meters (100')
 - 2" Pipe mount bracket

Hazardous Area Certifications:

- FM, CSA, ATEX, JIS and Others Available
- Explosion Proof, Intrinsically Safe, FlameProof
- NEMA 4X / IP66

Performance per ISA S75.13 - 1996:

Power Interruption without causing reset

Accuracy +/- 0.5% Full span (typical +/- 0.10% or better Full span)

Conformity +/- 0.5% Full span +/- 0.5% Full span

Hysteresis + DeadBand +/- 0.3% Full span

Repeatability +/- 0.3% Full span

Power-Up with position control <150ms

<100ms