

Masoneilan™ SVI™ II AP Positioner With Optional High Flow

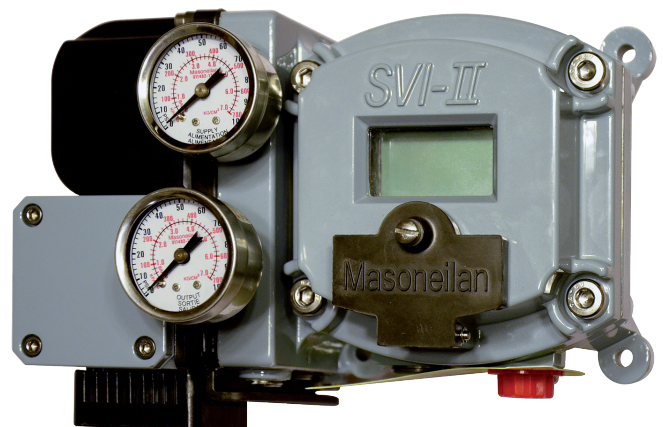
Optimized Performance
Regardless of Actuator Size
Eliminates One Additional Booster

Key Features

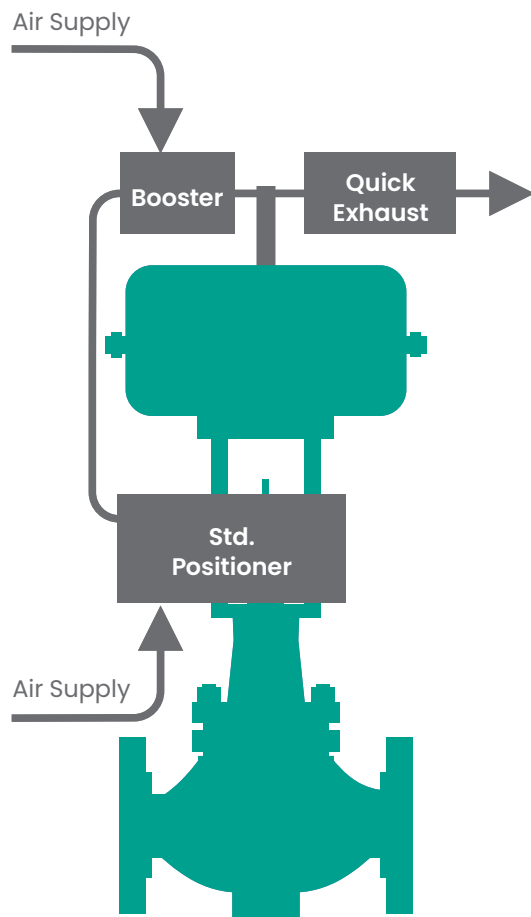
- High Flow
 - For optimized performance regardless of actuator size, eliminating or reducing the need of additional accessories (booster, quick exhaust, etc)
 - Higher capacity than most positioners available in the marketplace
- High-speed response for surge-control applications
- Setup wizard for quick and easy commissioning
- Field proven non-contact position sensor or robust remote-mount position feedback
- Universal design (linear or rotary applications)
- Field upgradable options and firmware
- Explosion proof external LCD & buttons
- Universal label with ATEX, FM, FMc, IEC ... approvals
- ValVue™ communication software
- eDDL and DTM (standard and advanced) support
- Integration flexibility through digital communication interface
- Industrial aluminum housing

Benefits

- Faster commissioning and start-up of control valves
- Optimized performance regardless of actuator size
- Eliminates or reduces the need of additional accessories (booster, quick exhaust, etc)
- Ease of mounting and commissioning
- Accurate and reliable valve positioning
- Bi-directional communication for local or remote setup
- Integration with many DCS and asset management systems



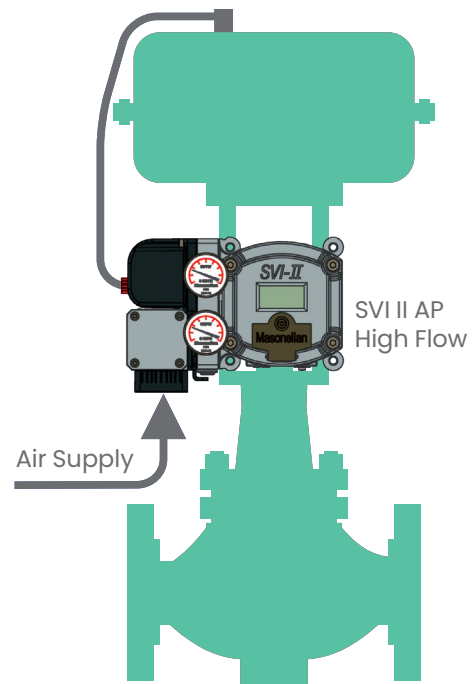
Traditional Solution



New SVI II AP High Flow Solution

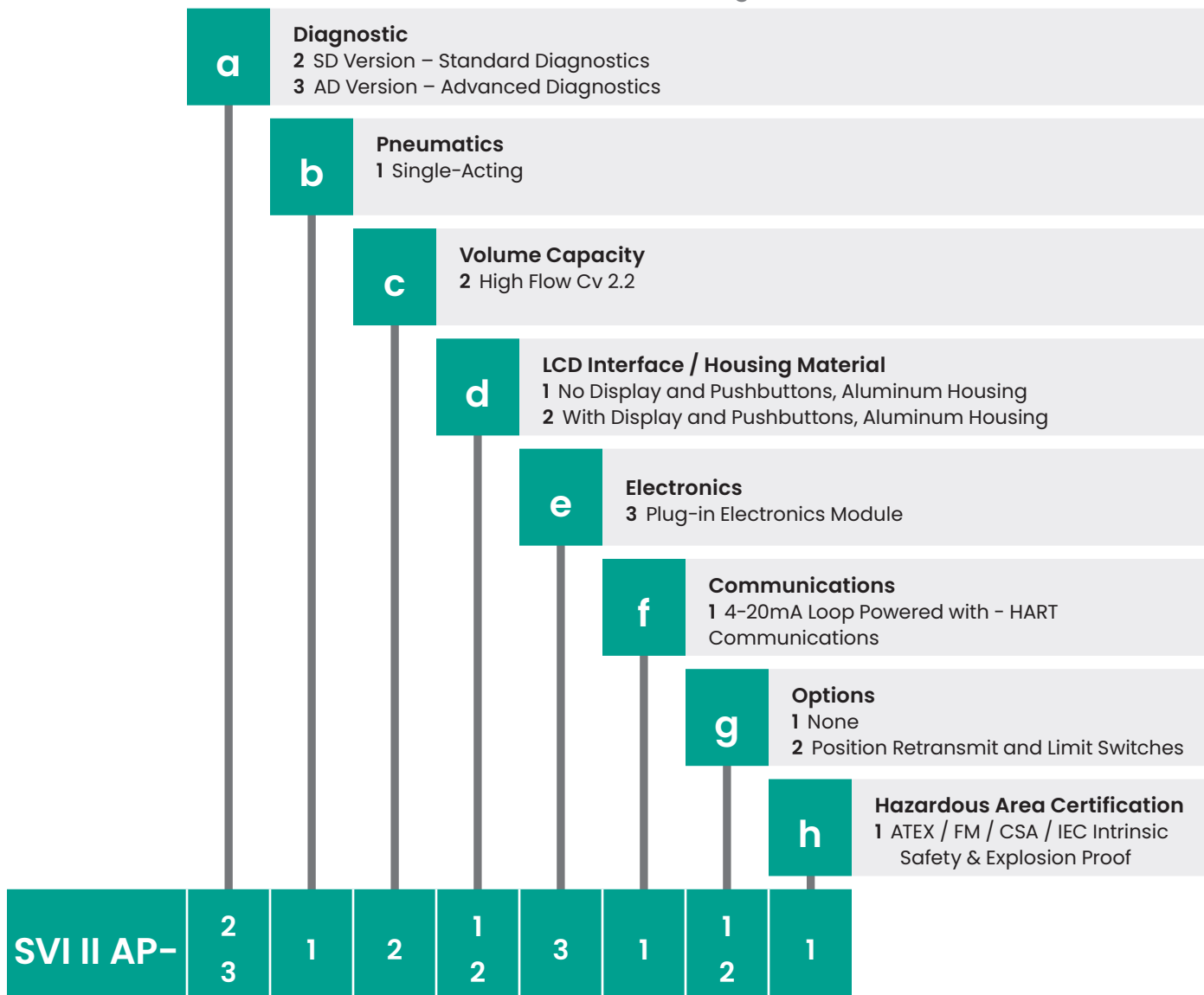
Eliminates the complexity of accessories

- Ease of commissioning due to quicker mounting, setup and reduced tubing
- Increased performance with improved auto-tuning and single instrument setting
- Reduced costs due to reduced need of accessories and quicker commissioning



How To Specify the SVI II AP High Flow

Series Identification SVI II AP – abcdefgh



Specifications

Diagnostics:

- 5 pressure sensors
- Total travel & number of cycles
- Valve operations (time open/time close/time near closed)
- Offline control valves signatures with ValVue Suite or Advanced DTM
- Online Diagnostics with Valve Aware
- Field upgradable diagnostic levels

Materials:

- Case/Cover:
 - Aluminum ASTM 360
 - Paint: grey polyurethane (category C4 per ISO 12944-2)
- I/P Transducer and Relay are constructed of composite polymers and stainless steel (300 and 400 Series)

Input Power and Signal:

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

Optional Output Signals:

- Valve position: 4-20mA - two wire loop powered with 10-24Vdc compliance voltage
- Two configurable and built-in isolated solid-state switches
 - 1A, 30Vdc

Input Signals:

- Valve setpoint: 4-20mA, 450 Ohms input resistance
- Remote position sensor: 1 kOhms

Communication:

- HART® Revision 6 Protocol
- Open technologies: eDDL, DTM, Plug-in and Snap-on applications, wireless
- Field or remote communication with True Control System Integration

Ambient Temperature Limits:

- -50°C to 85°C (-58°F to 185°F)

Ambient Humidity Limits:

- 10 to 95 percent RH non-condensing

EMC Conformity Standards:

- EN 61000-4-2, 3, 5, 6, 8, IEC 1000-4-2 and EN 50140
- EMC 89/336/EEC Directive

Actuator Travel Range:

- Linear Motion: 0.25" to 4" (6.4 to 100mm) - standard mounting
>4" (100mm) - extended mounting
- Rotary Motion: 18 to 140 deg
- Travel Sensor Resolution: 0.0015 percent

Control Valve Mounting System:

Material: 300 Series St. St. standard

- Valve Type:
- Linear or rotary motion control valve
 - Single-acting actuator

Optional Remote – Mount Position Sensor kit:

- Remote Position Sensor (RPS) assembly
- Cabling for up to 30 meters (100 feet)
- Two inch pipe mount bracket

Pneumatics:

- Air or Sweet Natural Gas - regulated and filtered
- Connections (supply and actuator): 1/2" NPT

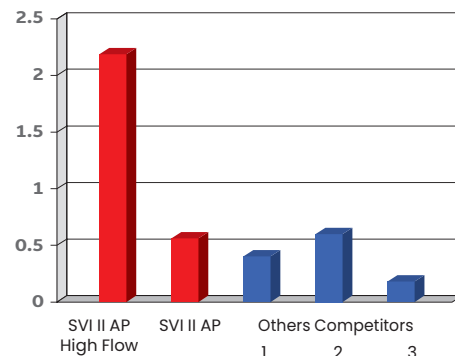
Air supply pressure:

- Single-acting: 20 to 100 psi max (1.4 to 6.9 bar)

Air Delivery and Air Consumption:

Output Delivery	
Air Supply	Single Acting
30 psi (2.1 bar) supply	39 scfm (1104 l/m)
60 psi (4.2 bar) supply	70.6 scfm (2000 l/m)
90 psi (6.3 bar) supply	102 scfm (2888 l/m)
Air Consumption	
Air Supply	Single Acting
30 psi (2.1 bar) supply	0.28 scfm (8 l/m)
45 psi (3.1 bar) supply	0.35 scfm (10.5 l/m)

Air Delivery Comparison (Cv):



Certifications:

- FM, CSA, ATEX, IEC
- Other local approvals are pending
- Explosion Proof, Intrinsically Safe, Flame Proof, nL
- Enclosure Protection: NEMA 4X / IP66
- CE MARK

Performance¹ per ISA S75.13 – 1996:

- Accuracy ± 0.5 percent Full Span
- Linearity ± 1.0 percent Full Span
- Hysteresis + deadband ± 0.3 percent Full Span
- Repeatability ± 0.3 percent Full Span
- Power-up with position control <150ms
- Power interruption without causing reset <100ms

1. For linear characteristics.

Baker Hughes 