

SVI®

Digital Positioner & Controller



New and existing pneumatically actuated valves can be modernized with advanced control technology using Masoneilan's Smart Valve Interface (SVI). In addition to being a smart positioner, the SVI can also perform PID loop control. HART™ communication capability enables use of SVI with existing 4-20 mA wires.

Additional devices, such as a hand-held communicator or laptop computer, are NOT required to set up and configure the SVI. Local configuration, calibration, and operation can be manually achieved using the push buttons and LCD readout, which are explosionproof and fully integrated within the SVI assembly. Although not required, remote communication and control can also be accomplished using HART hand-helds or with personal computers using Masoneilan's ValVue®2 software.

Pressure sensors integrated within all SVI's offer valve diagnostic functions that others provide only in their advanced diagnostic models.

Highlights

- Auto-Calibrate & Auto-Tune
- Precision Valve Positioning
- Software CAMs for Flow Characterization
- Easy Mounting & Set-up on Any Valve
- Advanced Diagnostics Standard
- Remote Mount Option
- Valve Position Transmitter
- Valve Friction Test
- Valve Travel Odometer
- Stroking Speed
- Step Response
- Valve Signature History Stored at the Valve
- Integrated Process Controller
- ValVue 2 Companion Software
- AMS SNAP-ON™ Application
- Very Low Compliance Voltage (9.5 VDC)

Masoneilan®

Smart Valve Interface®

Technical Specifications

SVI[®]

Performance

Accuracy	0.5% of span (0.25% typical)
Hysteresis plus deadband	0.2% of span
Repeatability	0.2% of span
Sensitivity	0.2% of span
Operating ambient temperature range	-40° to +80° C (-40° to +176° F)
Operating temperature of remote mount module	-50° to +119° C (-58° to +247° F)

Input Power and Signal

Supply power	Taken from the 4-20 mA control signal; no external power required
Minimum terminal voltage	9.5 volts
Minimum signal	3.4 mA

Pneumatics

Supply pressure	1.4 - 7 bar (20 - 100 psi)
Supply pressure effect	0.05% of span
Air delivery	6.8 Nm ³ /h at 1.4 bar (4 scfm at 20 psi)
Air consumption	0.51 Nm ³ /h at 1.4 bar (0.3 scfm at 20 psi)

Hazardous Areas Approvals*

FM and CSA Approvals

Explosionproof	Class I; Div 1; Groups B, C, D
Dust-ignitionproof	Class II, III; Div 1; Groups E, F, G
Intrinsically Safe	Class I, II, III; Div 1; Groups A, B, C, D, E, F, G
Non-incendive	Class I; Div 2; Groups A, B, C, D

CENELEC Approvals

Flameproof	EEx d IIB + H ₂ T5 per EN 50014 and EN 50018
Intrinsic Safety	EEx ia IIC T4 per EN 50014 and EN 50020
Electro-magnetic Compatibility	EN 50018-2 and EN 50082-2
Enclosure Rating	NEMA 4X / IP 65 per EN 60529
CE mark	Yes

*Note: The SVI unit is designed to meet electrical safety specifications listed. Consult factory for current status of agency approvals.

For more information, call your local Masoneilan Representative or:

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