

Masoneilan® FVP

Specification Data
FVP
09/01





Fieldbus Valve Positioner (FVP) Product Specification

Item	FVP Specification	
Communication Signal	Foundation FieldBus	
Action	Single acting: Direct, increasing signal increases output. Software Reverse (by AO Function Block)	
Connections	Pneumatic	Rc1/4, 1/4 NPT Female
	Electrical	G1/2, 1/2NPT, Pg13.5, M20 Female
External Auto/Manual switch	Included	
Pressure Gauge	Output, Supply	
Position Travel Limits	Rotary travel 20-100 deg. Linear travel 10-100mm	
Operating Temperature Limits	-40 deg C to 85 deg C	
Enclosure Rating	IP65, NEMA 4X	
Linearity	+/-0.5%	
Hysteresis	0.3%	
Deadband	0.1%	
Supply Pressure	20-100psi	
Air Consumption	0.32 m ³ /h at 140kPa (20PSI)	
Air Delivery	6.6 m ³ /h at 140kPa (20PSI)	
Operating Temperature Limits	-40degC to 85degC	
Temperature Effect	+/-0.04% of F.S./deg C (Typical) +/-0.08% of F.S./deg C	
Insulation Resistance	100MOHM	
Withstand Voltage	500VAC	
Flow Characterization	Linear, Equal percentage (50:1 or 30:1) Quick opening User configuration for 10 segments Tight Shut-off & Full open	
Positioner Auto Tune	Y/FVP performs an automatic determination of the optimal valve position control parameters.	
Containing Blocks	PID Block: 2 DI Blocks AO Block Transducer Block Resource Block	
Positioner Alarms	Block Alarm, Process Alarm, and Update Event Each Alarm has detail information Block Alarm: Condition of the Function Block, Self Diagnostics, Condition of the Device	
Fail safe action	In case of "position sensor failure", current of I/P will be zero.	
Continuous Diagnostics	Total travel, Total cycle, Time open, Time close, Time near close	
Factory Mutual Approvals	Explosion proof Intrinsically Safe	Class I, Division 1, Groups B, C, and D Class I, II, III Division 1, Groups A, B, C, D, E, F, and G
CSA Approvals	Explosion proof Intrinsically Safe	Class I, Division 1, Groups B, C, and D Class I, II, III Division 1, Groups A, B, C, D, E, F, and G
CENELEC Approvals	Flame proof Intrinsic Safety	EEx d IIB+H2 T5 (ambient temp. not to exceed 80degC) Per EN 50014 and EN 50018 EEx ia II C T4 (ambient temperature not to exceed 80degC) Per EN 50014 and EN 50020
JIS Approvals	Explosion proof	Ex ds II C T5
CE Conformity	Yes	

Most Effective Technology



- **FVP - FieldBus Valve Positioner**
- **Foundation FieldBus Tested and Certified**
- **Foundation FieldBus Function Blocks**
 - AO Block , DI Block (2), PID Block
 - TB Block with advanced diagnostics
 - RB Block with enhanced reporting
- **Superior valve positioning control**
- **Easy to mount on a variety of valves**
- **Local Pneumatic Auto/Man**
- **Advanced configuration tools available**
- **Agency Approvals CENELEC/FM/CSA/JIS/SAA**

Nomenclature		Descriptions
FVP110		
Input Signal	-F	Foundation Fieldbus
Applicable Actuator	1	Single Acting Actuator
	2	Double Acting Actuator
	A	
Connections	3	Electrical Connection:1/2NPT, Pneumatic Connection:1/4NPT
	N	
Option Codes	G	Supply and Output Gauges
	LC1	PID Function Block
	AP	Built-in Pressure Sensor
	L	Lighting Protection
Agency Certification	FF1	FM Explosionproof Approval
	FS15	FM Intrinsic Safety Approval
	CF1	CSA Explosionproof Approval
	KS15	CENELEC Intrinsic Safety Approval
	KF1	CENELEC Flameproof Approval
	JS3	JIS Intrinsic Safety
	JF3	JIS Flameproof
	SU1	SAA I/S and ExplosionProof

Currently Available Combinations

FVP110-F1A3N-G/LC1/FF1
 FVP110-F1A3N-G/LC1/FS15
 FVP110-F1A3N-G/LC1/CF1
 FVP110-F1A3N-G/LC1/KS15
 FVP110-F1A3N-G/LC1/KF1
 FVP110-F1A3N-G/LC1/AP/FF1
 FVP110-F1A3N-G/LC1/AP/FS15
 FVP110-F1A3N-G/LC1/AP/CF1
 FVP110-F1A3N-G/LC1/AP/KS15
 FVP110-F1A3N-G/LC1/AP/KF1

