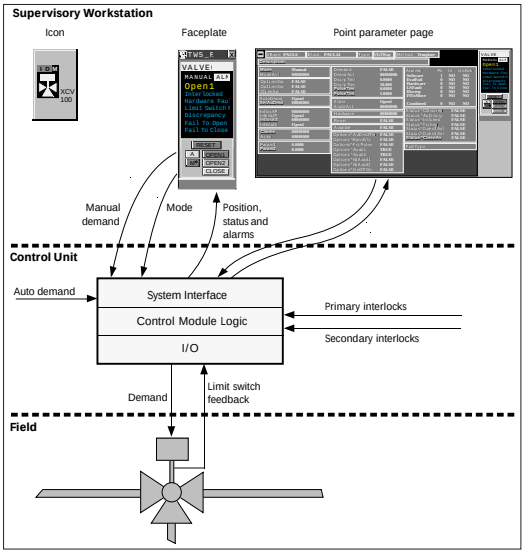
EUROTHERM
PROCESS
AUTOMATION

Vlv3Way: Three way valve, three inputs, maintained or pulsed outputs



The Vlv3Way control module is designed for a three way valve with three limit switch inputs, offers a choice of maintained outputs (Open1 Act, Open2 Act, Close Act) or pulsed outputs (Open1 Pls, Open2 Pls, Open3 Pls), and provides the following functionality:

- **Setting a valve demand**
- **Standard supervisory workstation interface**
- **Standard software block**
- **Status and alarm display**
- **Operator faceplate**
- **Engineer point display**
- **Interlocks**

The Vlv3Way control module forms part of a library of software function blocks designed to aid the implementation of valve control. Associated with each control module is a custom-built point fascia, an engineering point display and a graphical mimic icon for the supervisory workstation.

Applications

The control module offers the functionality required to drive a typical solenoid-operated valve. It can be applied to small bore valves used on pilot plant, to large bore valves on pipelines, etc.

Standard control module library

Vlv3Way

OUTLINE SPECIFICATION

I/O

Limit Switch Input for the first open posistion
Maintained digital (Open/Not open)

Limit Switch Input for the second open position
Maintained digital (Open/Not open)

Closed Limit Switch
Maintained digital (Closed/Not closed)

Maintained Demand Outputs
Maintained digital
Open 1 demand
Open 2 demand
Close demand

Pulsed Demand Outputs
Open 1 output pulse
Open 2 output pulse
Close output pulse

Operating Modes

Manual/Maintenance
Allows manual operation of the valve

Automatic
Allows automatic operation of the valve

Interlocks

Primary Interlocks
Up to eight maintained digital inputs

Secondary Interlocks
Up to eight maintained digital inputs

The interlock demands override the Automatic and Manual demands, and a Primary Interlock overrides a Secondary.

Alarms

Hardware
Failure of associated I/O modules if required

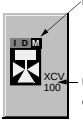
Valve Position Unknown

Valve Limit Switch Fault

Valve Position Discrepancy

Valve Failed to move

Mimic Icon



Notations

A	Automatic mode selected
M	Manual mode selected
M (blue background)	Maintenance
I	Interlock active
D	Valve in discrepancy alarm
Line 1/Line 2	Textual control module tag or description

Colours

Green/Red	Open 1
	Open 2
Yellow	ToOpen1
	ToOpen2
	ToClosed
	Unknown
	LSFault
Grey	Not communicating
Flashing	Flashing Block alarm

Faceplate

Valve Status

Mode
Displays Manual/Auto/Maint

Derived Status
Displays Open1/Open2/Closed/ToOpen1/ ToOpen2/ToClose/Unknown/LSFault

Interlocked
Displayed when valve is in an interlock state

Hardware Fault
Displayed when there is an I/O failure

Limit Switch Fault
Dipayed when limit switches indicate valve is both open and closed or open 1 and open 2

Discrepancy
Displayed when valve has a discrepancy alarm

Fail To Open
Displayed when valve fails to open

Fail To Close
Displayed when valve fails to close

Operator Interaction

Reset Button
Resets the latched alarm mode

A Button
Selects automatic mode

M Button
Selects manual mode

Open1 Button
Moves the valve to position 1 in manual mode

Open2 Button
Moves the valve to position 1 in manual mode

Close Button
Closes the valve in manual mode

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Standard control module library Vlv3Way
HA 083932U 103
Issue 1/A December 1998