

**Features**

- Advance technology allows solenoid output to operate throughout DeviceNet™ voltage.
- ODVA conformance tested to Composite 15
- Fully encapsulated electronics module
- Bus powered inputs and outputs
- Two built-in sensors for OPEN/CLOSE detection
- Short/Open Circuit protection

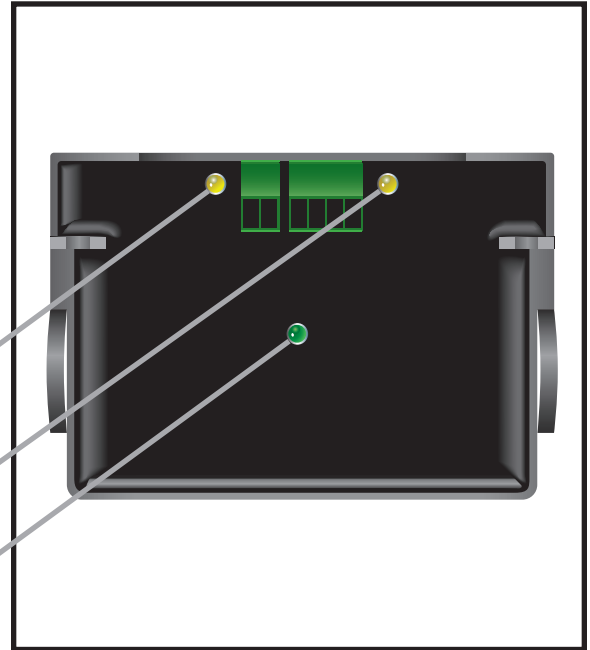
**Visual Diagnostics**

**OPEN POSITION**

**CLOSED POSITION**

**LED FOR BUS LINE STATUS**

- No LED lit: No power
- Flashing Green: Online but no established DeviceNet™ connections.
- Solid Green: Online with established DeviceNet™ connections.
- Flashing Red: Timed out DeviceNet™ I/O connection(s)
- Solid Red: Communication fault  
Duplicate Address, Bus-off, incorrect baud rate



ASCO Valve Monitoring System is an integrated network module and limit switch package that connects automated valves and external devices directly to the control system reducing the I/O interfaces and wiring associated with a typical hardwired solution. The DeviceNet™ Network Card is fully encapsulated for superior environmental protection, and LEDs provide visual status of network connection and valve position. Optional diagnostics provide built-in maintenance tools such as cycle count, travel times, self-calibration, and valve information. Our Network Cards operate with our NR and VR series rotary or HS series linear indicators. Enclosures types range from Nema 4, 4X to Class 1, Division 1, Groups B, C & D. Accessories such as a Network Junction Box are available.

**DeviceNet™ Technical Specifications**

|                     |   |
|---------------------|---|
| Maximum Distance    | 1600 Meters   |
| Physical Media      | Four wire system (two for communication and two for power)                  |
| Available I/O       | 2 inputs, 1 output<br>6 inputs, 2 output (includes 4 general purpose input) |
| Network Topology    | Trunk line/dropline with branching  |
| Supported Baud Rate | 125 Kbps, 250 Kbps, 500 Kbps  |
| Diagnostics         | Yes   |
| Bus Voltage         | 11-30 VDC   |

## Standard

Input status (valve open, valve closed)

Fault status (open and short circuit)

Solenoid voltage status

Bus voltage status

Valve TAG number

Pilot Valve Manufacturer and Serial Number

Actuator Manufacturer and Serial Number

Pilot Valve ID Number

Actuator ID Number

## Extended

Actual number of cycles open to close, close to open of solenoid pilot valve

Actual number of cycles open to close, close to open of the process valve actuator

Actual number of cycles open to close, close to open of process valve

Limit value for number of cycles on solenoid pilot valve

Limit value for number of cycles on process valve

Limit value for number of cycles on Actuator

Actual travel time of Actuator open to close in 10ms increments.  
Time between the change of the state from OPEN to CLOSE.

Actual travel time of Actuator close to open in 10ms increments.  
Time between the change of the state from CLOSE to OPEN.

Break time open to close in 10ms increments.  
Time between the change-in-state command CLOSE and the indication that valve leaves state OPEN.

Break time close to open in 10ms increments.  
Time between the change-in-state command OPEN and the indication that valve leaves state CLOSE.

Tolerance travel time open to close in 10ms increments.  
Maximum allowable difference between ACTUAL value travel time open to close and SETPOINT

Tolerance travel time close to open in 10ms increments.  
Maximum allowable difference between ACTUAL value travel time close to open and SETPOINT

Tolerance break time open to close in 10ms increments.  
Maximum allowable difference between ACTUAL value break time open to close and SETPOINT

Tolerance break time close to open in 10ms increments.  
Maximum allowable difference between ACTUAL value break time close to open and SETPOINT

Setpoint travel time open to close in 10ms increments.  
Calib. Value of the time between the change of state from OPEN to CLOSE.

Setpoint travel time close to open in 10ms increments.  
Calib. Value of the time between the change of state from CLOSE to OPEN.

Setpoint break time open to close in 10ms increments.  
Calib. Value of the time between the change-in-state command CLOSE and the indication that valve leaves state OPEN.

Setpoint break time close to open in 10ms increments.  
Calib. Value of time between the change-in-state command OPEN and the indication that valve leaves state CLOSE.