



Moniteur ASi Valve Position Controllers

ASi makes it simple. Moniteur's VPCs with encapsulated ASi interface cards adapt your on/off automated valves to an advanced 2-wire ASi valve network. Money and time will be saved as installation and maintenance are streamlined with reduced wiring and improved system diagnostics.

An ASi network can interface directly with your plant's PLCs or through other protocols such as DeviceNet, Foundation Fieldbus, Profibus or Modbus with a gateway. Moniteur supplies total ASi packages including power supplies, gateways, hand-held programmers, cable and quick disconnect connectors.

Now with ASi Version 3.0!

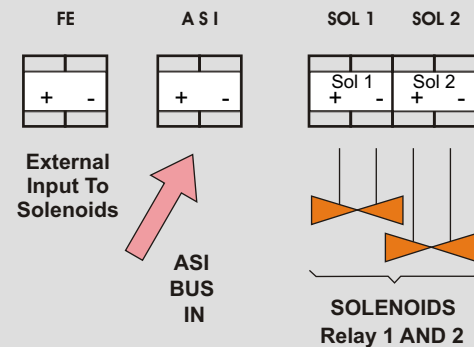
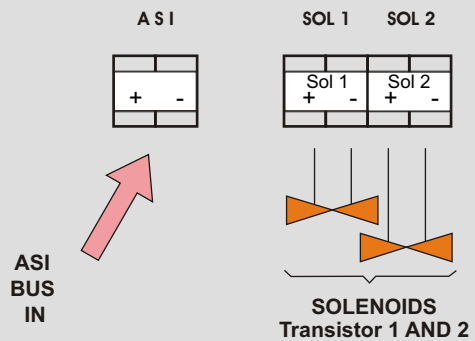
Moniteur's Advanced ASi Platform Improves Reliability

- 1) The Network Card.** A full function encapsulated network card for the ASi protocol - now to ASi v3.0 - includes the following benefits:
 - A) Encapsulated electronics and position sensors ensures reliability in corrosive, humid and dirty environments.
 - B) Hall effect position sensors designed for the card and provide optimum stability in areas of high vibration.
 - C) Two transistor outputs with a combined output of 4.8w @ 24VDC are available for your solenoid valves
 - E) Separate addressing plug is located on board, allowing addressing with an ASi hand-held programmer in the field.
 - F) High visibility LEDs are located on-board for local indication of on-board sensors, auxiliary inputs, outputs and network state.
 - G) Two additional inputs are available for local pressure or temperature switches.
- 2) The Enclosure.** Moniteur's platform is available in many configurations:
 - A) Housings in Aluminum, Hard Anodized Aluminum or SuperTough Zytel for General Purpose or Hazardous Areas
 - B) Moniteur's Engineered Loc-Ring Cam and Shaft Retention System assures stable output signals in difficult environments and a multi-million cycle life.
 - C) Optional DIN 4-pin Female Micro plug connectors can be fitted to the conduit entries of the enclosures to speed installation.
- 3) The Visual Indicator.** Moniteur's High Visibility Valve Position Indication preferred by users worldwide, available in a wide variety of colors and flow patterns.
- 4) The Solenoid Valve.** Low power solenoid valves optimized for the network card output, available pre-wired with the VPC or with direct NAMUR actuator mounting.

ASi v3.0 Technical Information

- Supports up to 62 nodes or addresses (1-31 A + B)
- Baud rate at 167Kbit (No termination required)
- Scan time < 10ms for a fully loaded system
- Deterministic - each slave adds 150 μ s to the scan time
- Can be installed in any topology
- Bus power and communications share the same 2 wire cable
- Standard 16AWG or special ASi-interface flat cable can be used
- 990 ft. total bus length (with maximum 2 repeaters)
- High level of noise and temperature immunity make ASi an excellent choice for the process plant environment.
- Each ASi-interface node requires its own unique address (master/slave)
- No configuration software required
- Nodes can be addressed using buttons on master, hand-held programmer, or through serial communications

Wiring Diagram



Standard ASi Network Card Specifications

Power

voltage	30Vdc (ASi standard)
current	<30mA
local indication	green LEDs

Communication

type	slave
addressing	1 to 31 A/B (total=62)
cycle time	less than 5ms

ASi configuration

Bit D0	proximity switch #2
Bit D1	proximity switch #1
Bit D2	ready signal
Bit D3	output relay
Bits P0, P1 P2, P3	not used
IO code	IO = 1H
ID code	ID = FH

On Board Sensor Inputs

type	(2) Hall effect solid-state sensors, (1) for each valve position
local indication	red LEDs (each input)

Auxiliary Inputs (Optional)

type	(2) Namur (DIN 19234) or mechanical switch
voltage	8Vdc \pm 5% - ripple 5%
current	active <1mA, inactive >3mA
local indication	red led (each input)
protection	reverse polarized

Output

type	(2) transistor or relay
transistor rating	200 mA @ 24 VDC total
relay contact	programmable NO or NC
relay voltage	120VAC, 220 VAC, 24 VDC
current	0.30 A
local indication	red LEDs

Intelligent Part Number System

F	M	Y	B	-	5	S	2	0	-	A	S	7
Series	Cover	Moniteur	Bearing		Shaft	Switch	Quantity	Conduit		Network Card		

Base unit includes: Encapsulated ASi Network Module (2) ½" F NPT conduit entries
 2 Onboard Sensors ('S'), 2 Outputs Low profile NAMUR shaft
 Moniteur Visual Indicator

<u>Description</u>	<u>Code</u>	<u>Description</u>	<u>Code</u>
Series		Switch - On Board Sensors	S
Sentinel	A		
Survivor	P	Network Card - ASI	
Watchman	F	2 onboard sensors, 2 solenoid outputs	AS7
Conduit (Sentinel 'A')		Network Card - DeviceNet	
(2) ¾" F NPT	0	2 onboard sensors, 2 solenoid outputs	DN7
(2) ¾" F+ 1 ½" F NPT	6	Network Card - Profibus DP	
(Survivor/ Watchman 'F/P')		2 onboard sensors, 2 solenoid outputs	DP7
(2) ½: F NPT	0		
(3) ½" F NPT	6		