

TOPWORX™ BUS NETWORKS

Connectivity to Every Fieldbus Network

SENSOR-COMMUNICATION MODULES

TopWorx™ Sensor-Communication Modules are microprocessor based 'brains' that mount inside TopWorx™ enclosures to deliver position sensing and bus networking functionality to on/off valves. They combine position sensors, bus communications, solenoid outputs, and wiring terminals into a compact, sealed module that drops into various TopWorx™ enclosures.

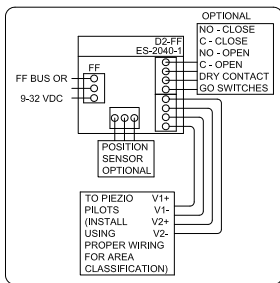
SCM Features:

- Short-circuit protection
- Resistant to impact, moisture, shock, vibration, contamination
- LEDs indicate valve position and facilitate sensor set-up

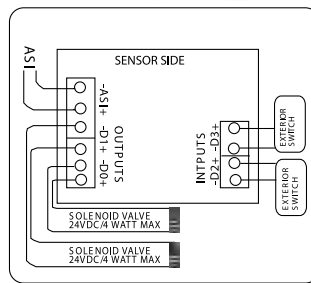


BUS NETWORKS

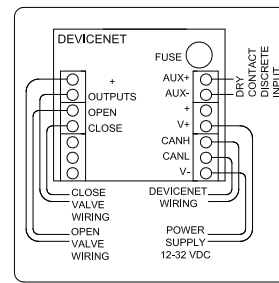
TopWorx™ Sensor-Communication Modules make it easy to connect automated on/off valves to modern bus networking protocols such as FOUNDATION Fieldbus, DeviceNet, AS-interface, Profibus, and HART.



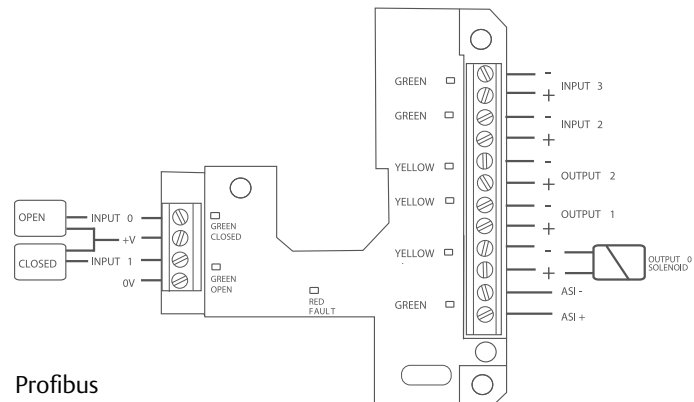
FOUNDATION Fieldbus



ASi



DeviceNet



Profibus



FOUNDATION FIELDBUS

- Factory programmed with: (2) DI, (1) DO, (1) AI, (1) PID, with the ability to add any additional 10 function blocks.
- Emerson DeltaV, Honeywell, Yokogawa, ABB, Invensys approved
- Pre-defined templates, on-board diagnostics, and EDDL-enhanced on-board diagnostics.
- Consumes only 17mA to operate, reduces VCRs and DSTs required
- Local calibration button for factory setting of GO switches.
- Position feedback via DO read back reduces number of function blocks.

BEST-IN-CLASS CAPABILITIES

- Reduced macrocycle times with 15 to 20ms block execution times
- Reduced VCR Links (Publisher/Subscriber)
- ITK 6.0 registered guaranteeing the latest advancements in field diagnostics per NAMUR NE 107, with 17 diagnostics and alerts.
- Live updates without process interruptions - Device Descriptions (DD's) can be updated without taking the device offline.
- Link Active Scheduler (LAS) capable, allowing for communication backup.

MONITORING FEATURES

- The two built in cycle counters, a life cycle counter and adjustable counter, with high limit alarm that gives the user needed information to implement a preventative maintenance strategy.
- With built in timers that record valve time in open position, open travel time, and close travel time allowed for failure prediction by trending opening and closing times.

CALIBRATION SWITCH

The D2-FF is equipped with a local calibration button for pre-installation function testing of the valve actuator package. This ensures that all valve automators can function test packages before installation without having to purchase expensive test equipment. LEDs indicate correct position setting of the switches.

ASCO® PIEZO TECHNOLOGY

TopWorx™ discrete valve controllers incorporate the best piezo technology available on the market today. With a response time of under 50mS and a high flow rate, we ensure the spool valve reacts immediately to a change in signal.

DeviceNet

- 3 Discrete Inputs, 2 Discrete Outputs, 1 Analog Input
- Rockwell, Emerson DeltaV approved
- On-board diagnostics and early warning LEDs



- ASi 2.1 with up to 4 Discrete Inputs and 3 Discrete Outputs
- Early warning LEDs



- Profibus DP V0
- 4 Discrete Inputs 2 Discrete Outputs
- Early warning LEDs



- Digital confirmation of analog signal
- Auto-calibration via handheld

