



Pathway PWY-400-S01 Wire Sharing System

Model PWY-400-S01

Pathway is a communications system that allows a CST flow sensor and solenoid actuated master valve to be retrofit to an irrigation system utilizing existing zone valve wires to carry data and valve control signals to the irrigation controller.

The Pathway provides a cost effective method to add flow monitoring and control to installed systems where existing pavement, hardscape or other landscape features make conventional wiring prohibitively expensive.

Description of operation

An existing zone valve near the location where the new flow sensor and master valve will be installed is selected as the “host” valve.

The zone valve power wire and common wires of the “host” valve are disconnected and used as the network connecting the two Pathway modules.

The Pathway Field module, at the “host” valve location is reconnected to the “host” valve solenoid, to the new master valve and flow sensor.

The Pathway Controller module, mounted at the irrigation controller connects to the flow sensor input, the master valve output and the output used for the “host” zone valve.

When the Controller module is powered, the Pathway system allows the irrigation controller to operate the master valve, either normally open or normally closed style and zone valve and receive data from the flow sensor as if they were wired conventionally.



No programming or set-up of the Pathway System is required. The irrigation controller must be equipped with flow monitoring and control capabilities. Set up the controller for the CST flow sensor calibration constants, master valve operation and other flow activated parameters.

LEDs on both modules indicate operating status:

Control Module:

- Red POWER LED glows continuously.
- Green NETWORK LED blinks to signify two way communications with the Field Module.
- Red FLOW LED glows when flow sensor is operating.
- Red MV LED glows when power to the master valve is on.
- Red ZV LED glows when power to the host zone valve is on.

Field Module

- Green NETWORK LED blinks to indicate communication with the Controller Module is active.



- Red FLOW LED glows continuously to indicate flow sensor is active.
- Red MV LED glows when power to the master valve is on.
- Red ZV LED glows when power to the host zone valve is on.

LED status changes to indicate trouble.

SPECIFICATIONS

Power Requirements:

Power supply — 24 VAC
 Power consumption — 75 mA for Pathway modules plus operation of the host zone valve and master valve.
 Nominally 600 mA.

Operating Temperature:

+32°F to +130°F (0°C to 55°C)

Storage Temperature:

-40°F to +167°F (-40°C to 75°C)

Enclosures:

Controller module — ABS housing rated NEMA 1 for indoor use, with exposed screw type terminals and operating status “day-light” bright LEDs

Field module — ABS shell with epoxy encapsulation for NEMA 6p outdoor service. Operating status “day-light” bright LEDs are embedded in epoxy. Color coded 8” X #18 wire leads with UF insulation.

DIMENSIONS

Controller Module

Height: 5.37” (136.4 mm)*
 Width: 2.63” (66.8 mm)
 Depth: 1.27” (32.3 mm)



Field Module

Height: 1.5” (38 mm)
 Width: 4.0” (101.6mm)*
 Depth: 2.0” (51 mm)



* Includes mounting tabs

ORDERING INFORMATION

Pathway System – Complete with both modules	PWY-400-S01
Pathway Controller Module only	PWY-400-C01
Pathway Field Module only	PWY-400-F01
Enclosure for Controller Module NEMA4 for outdoor use	PWY-400-ENC
24 VAC Power supply Plug-in style 20 VA	PWY-400-PS

Pathway wire sharing systems are available in other configurations for data collection and control of additional types of digital or analog sensors. Also, Pathway systems may also use power lines, telephone cable pairs or other network cables for adding sensors or control devices. Consult CST if you have special requirements.