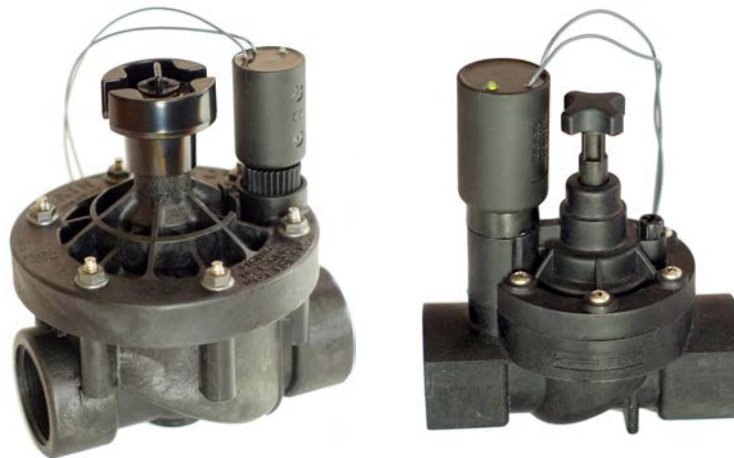# Underhill®

FUSION™

2Wire Decoder-in-Solenoid

Advanced Technology

Now for the first time…..
2Wire Decoder built-into a valve solenoid

Special Features

- ✓ **Combines a 2Wire Decoder and Solenoid into one product**

- ✓ **Reduces number of field wire connections by 50%**

- ✓ **Multi-colored LED provides feedback – reduces troubleshooting time**

- ✓ **Fits most valves w/ threaded adapter**

- ✓ **Compatible w/ all Underhill 2Wire Controllers or 2Wire Converters**

- ✓ **Superior distance and simultaneous valve operation**

- ✓ **Built-in powerful lighting surge protection**

Once in a while, a product comes along that changes everything….

Electrical Specifications

- 19-32 VAC 60 Hz
- In-Rush Current – 300-350mA
- Holding Current-30mA (2-way solenoid) 60mA (3-way solenoid
- Idle Current – 4.5mA
- Maximum Number of Simultaneous Valve Operation
  - 2-way   16 (spread relatively equally along the 2Wire path)
  - 3-Way   10 (spread relatively equally along the 2Wire path)
- Maximum Operating Distance (single valve actuation)*
  - 10 AWG – 71,500Ft.
  - 12 AWG – 35,750 Ft.
  - 14 AWG – 32,500 Ft.
  * the more simultaneous operating valves, the shorter the wire length

Advanced Features

- Program the corresponding station number as part of initial controller setup and installation 1-63
- The FUSION can be programmed from an Underhill Portable Programmer with updated software.
- Connects to a 2Wire path with a single pair of wires directly to the solenoid
- Ultra-low holding current allows more stations to be operated at one time if control system can be support this with programming capability
- The FUSION 2Wire Decoder-in-Solenoid comes standard with co-molded LED providing visual feedback as follows:
  - Green Color – Voltage is being sent down the 2Wire path
  - Red Color – No decoder station address or solenoid is "On" for multi-wire applications
  - Orange – Decoder has been signaled "On" as is receiving a decoded message
  - No Color – No power, broken wire or solenoid is drawing excessive current

2-Way FUSION

3-Way FUSION

Ordering Information

TW-FC3-DBI-24   Fusion 2Wire Decoder-in-Solenoid, 3-way commercial model fits Bermad, Dorot & Irririch valves

TW- FC2-24   Fusion 2Wire Decoder-in-Solenoid, 2-way Commercial model fits, Bermad, Rain Bird, Toro/Irritrol and Hunter series valves

TW-FC2-RBA   Solenoid adapter for Rain Bird valves

TW-FC2-HA   Solenoid adapter for Hunter valves

TW-FC2-TIA   Solenoid adapter for Toro / Irritrol Valves

Products that work……smart.™