

AF2000-30 Level Controller

The AF2000-30 water level monitor provides a turn-key solution for measuring liquid levels and controlling small solenoids or small pumps for water depths up to 30-feet



Package includes the following pre-assembled and tested. Factory programming on set points available at no additional cost.

- (1) Fill Controller
- (1) with NEMA 4 enclosure
- (1) Submersible Water Level Transmitter Level Transducer Sensor with 50-ft Cable / 30ft max sensor depth.
- (1) 120VAC to 24VDC Power Supply

Enclosure:

Enclosure: NEMA 4X, UL/C-UL listed thermoset polyester material enclosures feature a hinged door with stainless-steel hinges and clasps.

Overall Outside Dimensions:

- 11.80 H x 7.90 W x 7.01 D inches

Mounting Dimensions: 9.96 x 7.72

Display: Upper display: 0.60" / Lower display: 0.46"

Submersible Sensor:

Solid state semiconductor sensor for accuracy and reliability

Lightweight and compact size

Rugged 316 stainless steel housing with excellent environmental protection

Sensor diameter is 1.17 inches.

50-foot long cable

Panel:

Front Panel: NEMA 4X, IP65

Non-Volatile Memory: All programmed settings are stored in nonvolatile memory for a minimum of ten years if power is lost.

Environmental:

Operating temperature range: -40 to 65°C

Storage temperature range: -40 to 85°C

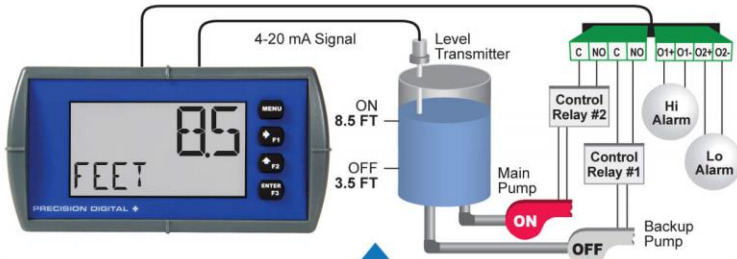
Relative humidity: 0 to 90% non-condensing

UL File Number: UL & C-UL Listed. E160849; 508

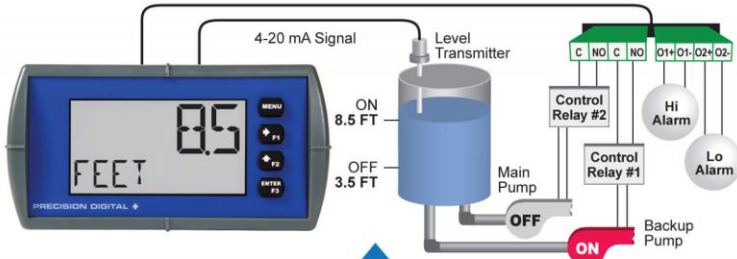
Industrial Control Equipment.

Open Collector Outputs: Two NPN, Isolated open collector, 30 VDC @ 150 mA max for connection to fire alarm panel – high / low alarms

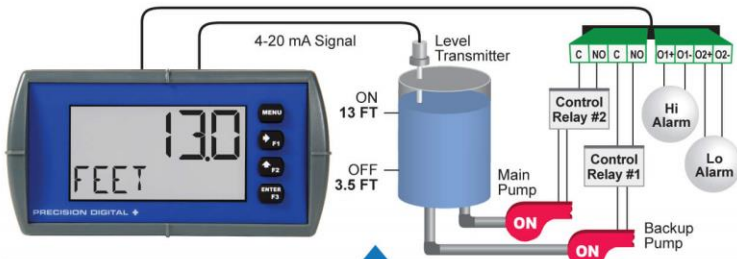
Solid State Relays: Two 250 VAC/VDC @ 1A resistive for control of solenoids or pumps for filling



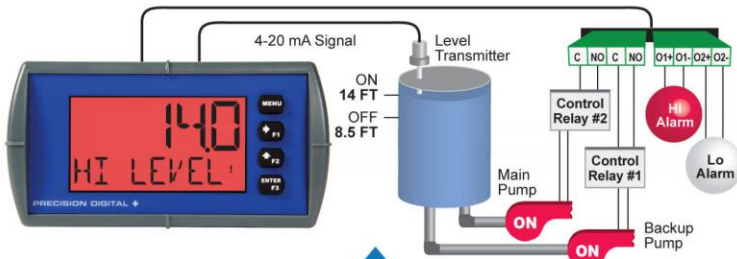
Relay #2 turns the main pump on at 8.5 Feet and turns it off at 3.5 Feet.



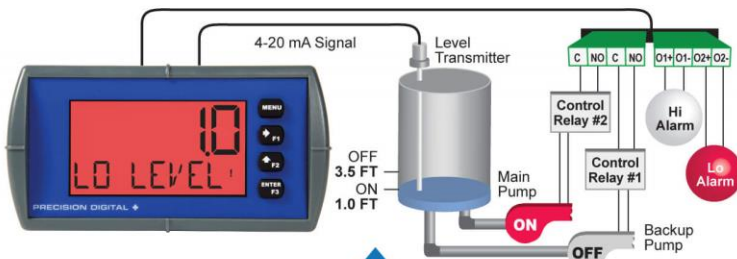
With the Pump Alternation feature activated, the next time the level reaches 8.5 Feet, relay #1 transfers and starts the backup pump.



If the backup pump is not able to keep up, and the level reaches 13.0 Feet, relay #2 transfers and starts the main pump as well.



Open Collector #1 trips the High Level Alarm at 14.0 Feet and causes the display to turn red and flash a HI LEVEL alarm message. The HI alarm resets at 8.5 Feet



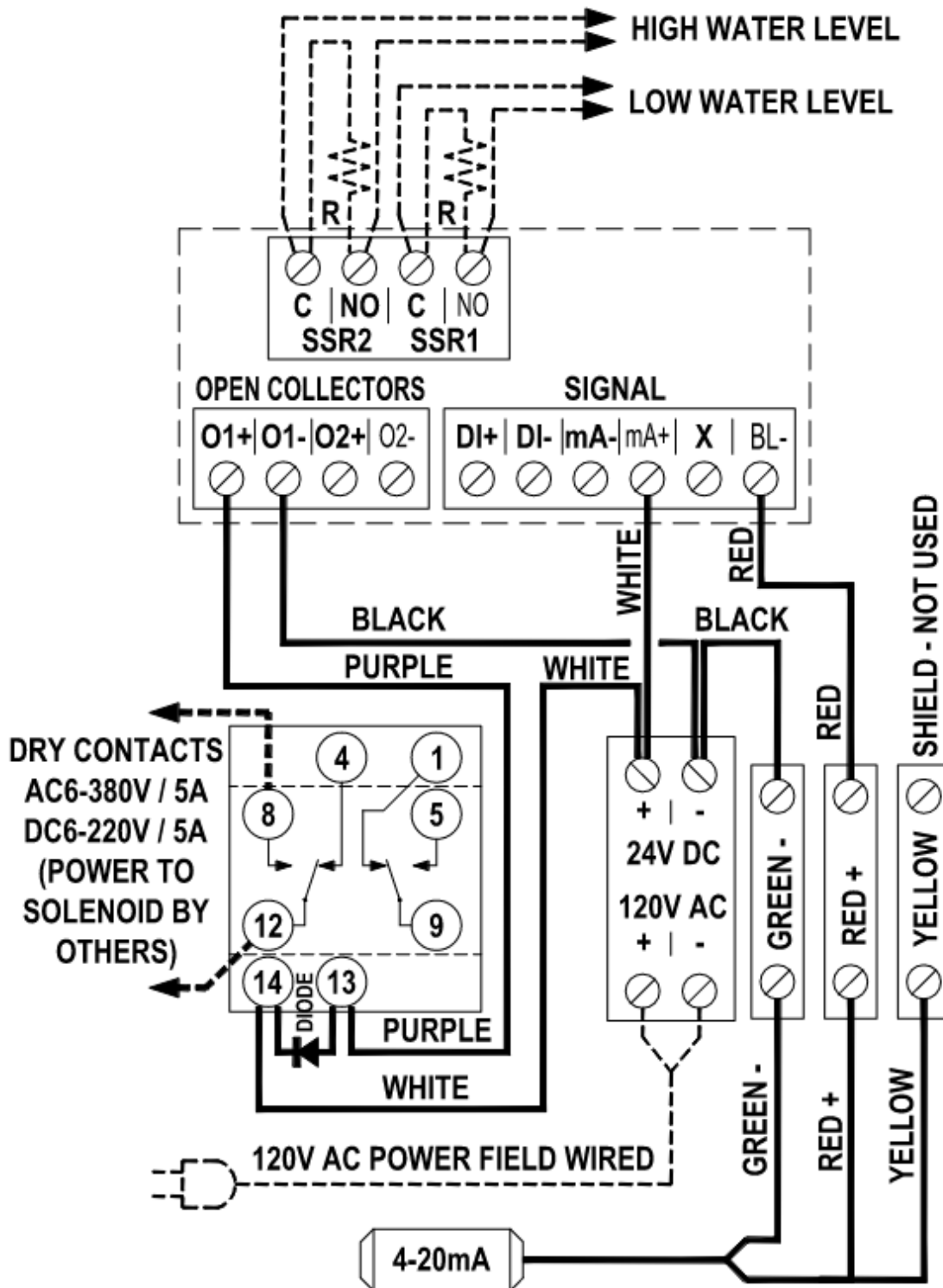
Open Collector #2 trips the Low Level Alarm at 1.0 Foot and causes the display to turn red and flash a LO LEVEL alarm message. The LO alarm resets at 3.5 Feet



FILL CONTROLLER QUICK START GUIDE

1. REMOVE PRESSURE TRANSDUCER AND 50-FT CABLE FROM ENCLOSURE AND LOWER INTO TANK. SHOULD SIT ON BOTTOM OF TANK (TRANSDUCER MEASURES PSI/FEET OF WATER ABOVE)
2. MOUNT TO WALL AS DESIRED – OFFSET MOUNTING CLIPS ARE TAPED INSIDE ENCLOSURE
3. DETERMINE HOLE LOCATIONS FOR:
 - a. 120V AC POWER AND
 - b. THE BLACK TRANSDUCER CABLE - A GROMMET IS PRE-INSTALLED ON THE 50-FT CABLE
4. CONNECT THE GREEN PLUG TERMINALS TO FRONT DISPLAY
5. CONNECT THE PRESSURE TRANSDUCER (THREE WIRES / COLOR CODED)
6. CONNECT THE SOLENOID OR PUMP TO THE RELAY. NOTE THAT THE RELAY CONTACTS ARE NOT POWERED AND ARE ONLY DRY CONTACTS. YOU NEED TO PROVIDE YOUR OWN POWER TO THE SOLENOID/PUMP BASED UPON SITE SPECIFIC CONFIGURATION.
7. CONNECT 120V AC POWER (NON-ENERGIZED) TO INTERNAL 24VDC POWER SUPPLY.
8. TURN ON 120V BREAKER
9. ASSUMING TANK NOT FULL, CONTROLLER SCREEN SHOULD HAVE ORANGE BACK-LIGHT AND FLASH “FILL ON” AND “LOW LVL” UNTIL THE SET POINT HAVE BEEN REACHED. DO NOT LEAVE UNATTENDED DURING INITIAL FILLING AS SOME FIELD CALIBRATION MAYBE REQUIRED.
10. LOW WATER-LEVEL CAN BE SIMULATED BY JUST PULLING THE TRANSDUCER UP IN THE WATER COLUMN/LEVEL.
11. FACTORY PRE-SET LEVELS CAN BE EASILY FIELD ADJUSTED BY USING THE USB SUPPLIED CABLE AND DOWNLOADING SOFTWARE FROM: <https://anvil-fire.com/fill>
12. SUPPORT: support@anvil-fire.com or 406-624-9408

WIRING DIAGRAM



SUBMERSIBLE SENSOR TO LAY FLAT AT
 BOTTOM OF TANK (SOME SLACK IS OK)
 SENSOR IS PROVIDED WITH 50-FT OF CABLE