

Motorola Technical Note

Motorola has upgraded the MIR 5000 Irrigation Controller. The new designation, MIR 5000F-MW provides even more control functions based on flow. Data Industrial products provide the flow signal input to the Motorola system.

The Data Industrial products consist of an impeller-style sensor mounted on the pipe and a signal converter usually mounted in the controller pedestal.

THE SENSOR

Advantages of Data Industrial over other types of flow meter are:

- 1) Insert Style - Allows easy installation via saddle on any size pipe.
- 2) Non-Magnetic Detector - Prevents fouling by rust and scale. Detects lower flow rates.
- 3) The sensor may be located up to 2000 feet away from the controller.

Although any Data Industrial sensor may be used, the most popular are the 220B standard sensor and 225B Hot Tap style with isolation valve. Both may be used on any pipe size above 2 ½" with a 2" NPT saddle. The 225B offers an isolation valve that allows the sensor to be removed from the pipe for service without draining or depressurizing the pipe.

THE SIGNAL CONDITIONER

The signal conditioner receives a high frequency signal from the sensor and converts it to a scaled pulse. The scaling may be selected in the field, resulting in a number of gallons (or cubic feet or liters) per pulse. Do not scale the pulse rate to exceed 12 pulses per minute.

Example: If the maximum flow rate is 500 GPM, scale the pulse rate at 1 pulse equals 100 gallons. This will produce 5 pulses per minute. Do not scale it at 1 pulse equals 10 gallons, because this would produce 50 pulses per minute. Scaling instructions are provided in the Data Industrial Owner's Manual.

CHOICE OF CONDITIONERS

Two different signal conditioners may be used: The Data Industrial Model 600-10 is the standard interface, or the Data Industrial 1500 with Relay Output option, which provides a pulse output along with a digital display of flow rate and total.

WIRING DIAGRAM

Please wire according to the following instructions. **Note:** Do not connect the bare sensor wire to ground - Damage to the equipment will occur!

PRODUCTS	
200	✓
4000	
310	
320	✓
600	✓
800	
1400	
1500	✓
2100	
2200	
2300	
HTT	
WSS	

