

Technical Bulletin

Bulletin No. 014 Rev D
Subject: Utilizing Hydro-Flow Vortex Flow Meters with Rain Master Controllers

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Product Applicability: RME Hawk and Evolution DX2 Controllers
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PRODUCT DESCRIPTION

Fluidyne Hydro-Flow vortex flowmeters measure water flow by utilizing a microprocessor based piezo-resistive sensor. This sensor detects vortex signals at flow rates from 0.30 ft./sec. to 15 ft./sec. (0.09 to 4.5 m/sec.). Flowmeter models are available to accommodate pipe sizes from one to twenty inches in diameter. There are no moving parts and accuracy is stated at +/- 0.5 %.

Proper sizing and placement of flowmeters is critical. Sizing of flowmeters is based on system flow rates, not necessarily pipe diameter sizes. Flowmeters must be installed in locations that are free from internal water turbulence. Contact Fluidyne at (303) 651-0352 for an installation manual.

CONTROLLER COMPATIBILITY

The Fluidyne flow meter may be used with Rain Master's RME Hawk and Evolution DX2 controllers. The RME Hawk controller can accommodate one flowmeter. The Evolution DX2 controller can accommodate one or two flowmeters. If an ET Tracker is connected to the controller, then only one flow meter can be accommodated.

RME Hawk Controllers in the field that are to use Fluidyne flowmeters may have to be factory modified. This will require that the RME Hawk control panel be sent to the factory for FVF-KIT installation. Contact your distributor for assistance.

NOTE: RME Hawk control panels, starting with artwork revision H, DO NOT require modifications to work with Fluidyne flow meters. Artwork revision G and earlier WILL require factory modifications. The artwork revision is etched into the solder side of the board.



CONTROLLER CALIBRATION

Each type and size of Fluidyne flowmeter has a K and OFFSET value. These values must be entered into each controller that has a connected flowmeter. The values are entered into either the RME Hawk or the Evolution DX2 controllers utilizing their respective setup functions. For the RME Hawk controller, select "OTHR" in setup menu, and then enter the values. Following are the K and OFFSET values to be used with Rain Master controllers:

HYDRO-FLOW Flow Meter K and OFFSET Values

MODEL	METER SIZE	K	OFFSET	MIN. GPM	MAX. GPM
1100	1.0 " PVC	41	0	0.5	25
1100	1.5 " PVC	66	0	1.5	75
1100	2.0 " PVC	205	0	2.5	125
1100	2.5 " PVC	328	0	4.0	200
1100	3.0 " PVC	655	0	6.0	300
1200	1.0 " BRASS	66	0	0.8	40
1200	1.5 " BRASS	164	0	1.6	80
1200	2.0 " BRASS	328	0	3.2	160
1200	2.5 " BRASS	328	0	4.2	210
1200	3.0 " BRASS	655	0	7.0	350
2100	3 " INSERT	655	0	8.0	300
2100	4 " INSERT	1092	0	12	600
2100	6 " INSERT	2730	0	30	1500
2100	8 " INSERT	4095	0	50	2500
2100	10 " INSERT	8190	0	80	4000
2100	12 " INSERT	8190	0	110	5500

End of Bulletin