# Flow Meters





### THE BRAND MORE POOL OWNERS & OPERATORS TRUST

Ingenious in concept and flawless in operation, FlowVis® has been revolutionizing the way pool owners and operators measure flow since its inception in 2012.

With unrivaled average accuracy, greater installation flexibility, and more NSF 50 certified models than any other brand, it's easy to see why FlowVis® is the pool & spa industry's flow meter of choice.

### **KEY FEATURES & BENEFITS**

- Functions as a flow meter, check valve and velocity meter (select models)
- Installation flexibility; installs horizontally, vertically, or even upside-down
- 1.5" 2.5" models can be installed with zero straight pipe requirements
- ≥98.1% accuracy across the entire model range
- Upgrade to FlowVis Digital to allow for remote monitoring and unlock advanced functionality

- More NSF 50 certified models than any other brand of flow meter
- The only NSF 50, Level 1 certified flow meter
- Pool Turnover Rate functionality (FlowVis Digital)
- Interfaces with other equipment (FlowVis Digital)
- Ability to set flow rate alarms (FlowVis Digital)
- Manufactured in the USA
- 3-year warranty



### » Skim efficiently

Balance the filtration system by knowing the flow.

usage.

### » Maintain a cleaner pool

Optimize the filter efficiency by operating at its most effective flow rate.

### » Optimize water feature operation

Achieve precise and repeatable valve positioning for perfect water feature appearance.

## **EVERY GREAT PUMP DESERVES A GREAT FLOW METER**

Installing a variable speed pump for energy savings makes complete sense, but the only way to know where to set the pump's speed is by knowing the flow rate. Establishing the required flow rate also allows the user to achieve turnover requirements; setting the flow rate too high will use more energy than required and setting it too low will result in a dirty pool.

typical savings of

Energy savings when using a FlowVis® flow meter in combination with a variable speed pump are typically 20% greater than those seen when using a variable speed pump alone.



### **CALCULATE THE SAVINGS**

Use the H2flow calculator tool to determine how much your customer could be saving by adding FlowVis® to their variable speed pump installation.

Simply visit h2flow.net/flowvis-calculator to learn more!

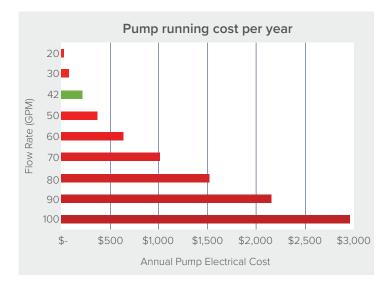


Illustration based on: 30,000 gallon pool, 3 kW pump, energy cost of \$0.15 per kWh. pump full speed = 100 GPM. A 12-hour turnover requires 42 GPM and a pool that is open for 9 months per year.

# WHEN ACCURACY IS CRITICAL, DON'T JUST TAKE OUR WORD FOR IT!



FlowVis® was the first - and is now the most - NSF 50 certified flow meter in the world! Because when accuracy matters, you should put your trust in the experts.

### FLOWVIS® MODELS

Feature	FV-15	FV-15-U	FV-2	FV-2-U	FV-25	FV-3	FV-3-40	FV-4	FV-6	FV-8
NSF 50 Certified	<b>✓</b>	✓	✓	<b>√</b>	<b>✓</b>	✓	<b>√</b>	<b>√</b>	<b>√</b>	-
Pipe Size	1.5"	1.5"	2"	2"	2.5"	3"	3"	4"	6"	8"
Operating Range (GPM)	10-80	10-90	10-110	10-110	10-110	70-240	70-240	150-460	300-1000	600-1800
Average Accuracy	98.7%	98.7%	99.4%	99.0%	99.2%	98.9%	99.2%	99.6%	98.1%	N/A*
NSF 50 Level	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1

<sup>\*</sup>FlowVis® model FV-8 includes FlowVis® Digital upgrade as standard. For accuracy of this model, please refer to the FV-8 information in the FlowVis Digital table below.

### FLOWVIS® DIGITAL MODELS

Feature	FV-15	FV-15-U	FV-2	FV-2-U	FV-25	FV-3	FV-3-40	FV-4	FV-6	FV-8
NSF 50 Certified	✓	✓	✓	✓	<b>√</b>	✓	✓	<b>√</b>	<b>√</b>	✓
Pipe Size	1.5"	1.5"	2"	2"	2.5"	3"	3"	4"	6"	8"
Operating Range (GPM)	10-80	10-90	10-110	10-110	10-110	70-240	70-240	150-460	300-1000	600-1800
Average Accuracy	98.6%	99.0%	98.8%	98.5%	98.3%	98.4%	98.0%	98.3%	98.9%	98.9%
NSF 50 Level	L1	L1	L1	L1	L1	L1	L1	L2	L1	L1

**NOTE:** FlowVis is the only NSF 50 certified Level 1 flow meter in the world today.

### **Guide for NSF 50 Accuracy Levels**

**Level 1 (L1):** Average of absolute values of all single point deviations must be ≤2%. Single point deviations shall not exceed ±4%.

Level 2 (L2): Average of absolute values of all single point deviations must be ≤5%. Single point deviations shall not exceed ±7.5%.

Level 3 (L3): Average of absolute values of all single point deviations must be ≤10%. Single point deviations shall not exceed ±12.5%.

Level 4 (L4): Average of absolute values of all single point deviations must be ≤12.5%. Single point deviations shall not exceed ±15%.

Level 5 (L5): Average of absolute values of all single point deviations must be ≤15%. Single point deviations shall not exceed ±20%.



FlowVis® FV-15 for 1.5" pipe

FlowVis® FV-15-U for 1.5" pipe (Unions)

FlowVis® FV-25 for 2.5" pipe



for 2" pipe

FlowVis® FV-3-40 for 3" pipe (SCH40)



for 2" pipe (Unions)

FlowVis® FV-3 for 3" pipe



FlowVis® FV-C-S

for 2" pipe (no check valve)

FlowVis® FV-4 for 4" pipe



FlowVis® FV-6 for 6" pipe



FlowVis® FV-8 for 8" pipe



FlowVis® Digital FV-D

### KEY CHARACTERISTICS OF THE FLOWVIS® PRODUCT LINE

Model	Pipe Size	Pipe Schedule	Fitting Type	Check Valve Functionality	Velocity Scale	Working Pressure	Calibration Required	Warranty	Manufactured in USA	*Flow Rate Alarm Feature	*Turnover Rate Functionality
FV-15	1.5" pipe	SCH40	Valve Body	<b>√</b>	✓	50 psi	No	3-Years	✓		
FV-15-U	1.5" pipe	SCH40	Union	✓	✓	50 psi	No	3-Years	✓		
FV-2	2" pipe	SCH40	Valve Body	<b>√</b>	✓	50 psi	No	3-Years	✓		
FV-2-U	2" pipe	SCH40	Union	<b>√</b>	✓	50 psi	No	3-Years	✓		
FV-C-S	2" pipe	SCH40	Valve Body			50 psi	No	3-Years	✓		
FV-C-Saline	2" pipe	SCH40	Valve Body	✓		50 psi	No	3-Years	✓		
FV-25	2.5" pipe	SCH40	Valve Body	<b>√</b>	✓	50 psi	No	3-Years	✓		
FV-3	3" pipe	SCH80	Tee		✓	50 psi	No	3-Years	<b>√</b>		
FV-3-40	3" pipe	SCH40	Tee		<b>√</b>	50 psi	No	3-Years	✓		
FV-4	4" pipe	SCH80	Tee		✓	50 psi	No	3-Years	<b>√</b>		
FV-6	6" pipe	SCH80	Saddle Clamp		<b>√</b>	50 psi	No	3-Years	<b>√</b>		
FV-8	8" pipe	SCH80	Saddle Clamp		✓	50 psi	No	3-Years	✓		
FV-D	1.5" - 8" FlowVis	N/A	N/A			50 psi	No	3-Years	✓	✓	<b>√</b>

<sup>\*</sup>Advanced features and functionality can be gained by combining FlowVis Digital (model FV-D) with a standard analog FlowVis. Note that a standard FlowVis® model is required for each FlowVis® Digital installation.

### **VELOCITY SCALE**

While flow and velocity are related, very few people appreciate just how fast water travels through a suction fitting and a filtration system. Safety advocates are now placing an even greater emphasis on this, and FlowVis® is the first flow meter to display the velocity reading as a standard feature.

The velocity scale - which provides a readout of velocity in feet-per-second for both the suction and discharge side of the pump - is featured on ten different FlowVis® models.

**RIGHT:** The FlowVis velocity scale offers an accurate readout of velocity in ft/s for both the suction and discharge sides of the pump. As seen here, the right-hand side of the scale is split into two halves; 'S' on the left for when FlowVis is installed to the suction side of the pump, and 'D' on the right for when FlowVis is installed to the discharge side of the pump.



### FLOWVIS® DIGITAL... THIS MEANS MORE!

### Upgrade to FlowVis® Digital to enjoy more flexibility, more functionality, and more user-friendly features.

The wall-mountable FlowVis® Digital can be retrofitted to any new or existing FlowVis® installation to provide easy access to an accurate flow reading. FlowVis® Digital also offers an array of valuable features and functionality including flow rate alarms, turnover rate functionality, and the ability to interface with other external equipment.

Taking the FlowVis Digital's 4-20mA output to a Variable Frequency Drive, such as the H2flow Controls' Eco-Flow, enables the customer to achieve constant flow. This ensures that State mandated turnover rates are maintained - even as the filter becomes dirty.

Scan the QR Code to learn more about pairing FlowVis Digital with the Eco-Flow VFD





#### » NSF 50 Certified

FlowVis Digital is NSF 50 certified for all compatible FlowVis models.

### » Level 1 Accuracy

FlowVis Digital is certified to NSF 50 Level 1 accuracy for nine different FlowVis models.

### FLOWVIS® DIGITAL ALLOWS YOU TO:

### » Know the turnover rate

All but two U.S. States have a mandated turnover rate for commercial pools and spas. FlowVis Digital is the first and only flow meter that displays the current turnover rate.

### » Retrofit to existing FlowVis units

FlowVis Digital is available for both new and existing FlowVis installations and is compatible with most models 1.5" - 8" units. Retrofit models can be installed quickly and easily.

### » Interface with other equipment

FlowVis Digital has the ability to interface with other systems such as heaters, chemical feeders and UV units, so they will only operate above a user-defined flow rate.

#### » Set flow rate alarms

Set minimum and maximum flow rate alarms to ensure your system is operating as desired.

### » Know the precise flow rate

FlowVis Digital is factory calibrated to mirror a Mag flow meter that has a NIST traceable accuracy of 0.02%. Unlike other digital flow meters, FlowVis Digital is programmed with a simple selection of four DIP switches.

#### » Receive remote indication

FlowVis Digital eliminates problems with gaining access to the flow reading, such as in tight spaces, or issues with parallax

### Progress through Innovation™

Our innovative solutions are developed with a focus on controlling, monitoring and measuring flow.

Contact your authorized H2flow Controls solutions provider to find out how our products can help you and your customers.

Find an authorized partner at www.h2flow.net/locate-a-partner

AC DRIVES | ANTI ENTRAPMENT DEVICES | FLOW METERS

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