



H2FLOW CONTROLS



PROGRESS THROUGH INNOVATION™



FLOWVIS® FLOW METER

A revolution in reliable flow measurement



UNRIVALED ACCURACY

STAY AHEAD OF THE COMPETITION!

Ingenious in concept and flawless in operation, FlowVis® is revolutionizing the way pool owners and operators measure flow.

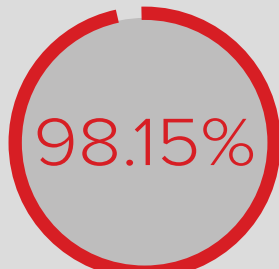
With more NSF-certified flow meters than any other brand, it's easy to see why FlowVis® is the pool & spa industry's flow meter of choice. Indeed, FlowVis® is the most accurate and reliable flow meter ever developed for pools, spas, fountains, and water features.

The patented FlowVis® flow meter is available in 1.5", 2", 2.5", 3", and 4" configurations, with additional models designed specifically for retrofit, safety, saline, and metric pipe applications.

The patented concept allows all FlowVis® models to be installed next to other plumbing fittings without consideration for straight-pipe runs or orientation.



FV-C, FV-C-15



FV-3



FV-4

MEET THE FLOWVIS FAMILY

Say 'hello' to the complete family of FlowVis® flow meters. With more NSF 50 certified models and a higher average accuracy than any other brand of flow meter, you'll be glad we made the introduction!



FV-C (2")
COMPLETE
2" UNIT



FV-C (2.5")
COMPLETE
2.5" UNIT



FV-C-S
COMPLETE 2
X 2.5" UNIT
FOR SAFETY
APPLICATIONS



FV-C-Saline
COMPLETE 2
X 2.5" UNIT
FOR FLOAT
TANKS



FV-3
COMPLETE
3" UNIT



FV-4
COMPLETE
4" UNIT

NSF 50 CERTIFIED CONFIGURATIONS & CERTIFICATION LEVELS

PIPE SIZE	PIPE SCHEDULE	MODEL	NSF 50 CERTIFIED	HORIZONTAL STRAIGHT PIPE	HORIZONTAL BETWEEN 90's	VERTICAL UP STRAIGHT PIPE	VERTICAL UP BETWEEN 90's	VERTICAL DOWN STRAIGHT PIPE	VERTICAL DOWN BETWEEN 90's
1.5"	40	FV-C-15	-	-	-	-	-	-	-
2"	40	FV-C	●	L1	L1	L1	L1	L1	L1
2.5"	40	FV-C	●	L1	L1	L1	L1	L1	L1
1.5"	80	FV-C-15	-	-	-	-	-	-	-
2"	80	FV-C	-	-	-	-	-	-	-
2.5"	80	FV-C	-	-	-	-	-	-	-
2"	40	FV-C-S	●	L1	L1	-	-	-	-
2"	40	FV-C-Saline	●	L1	L1	-	-	-	-
3"	80	FV-3	●	L1	-	-	-	-	-
4"	80	FV-4	●	L1	L3	L1	L3	L1	L2

NOTE: For additional information on NSF 50 accuracy levels, please refer to the section titled 'NSF 50 Accuracy Levels' on page 7 of this document. Additional models for retrofit applications and metric pipe sizes not shown. Please contact H2flow or visit www.h2flow.net for information on all models.



KEY FEATURES	1.5", 2", 2.5" MODELS	3", 4" MODELS
Installation flexibility; installs horizontally, vertically, or even upside-down. No requirement for 15x straight pipe diameters	YES	YES
Includes check valve functionality	YES	NO
NSF 50 certified	FV-C, FV-C-S, FV-C-Saline	YES
Clear, easy-to-read scale in GPM or optional LPM with key velocity points (FPS)	YES	YES
Typical installation time	10-minutes	20-minutes
Calibration required?	NO	NO
Breakage warranty	5-years	5-years
Manufactured in USA	YES	YES
Design Life	15-years	15-years
Spring Replacement	7-years	7-years
Unique design results in maintained accuracy even with entrained air caused by suction leaks	YES	YES
Saddle-clamp required?	NO	NO



VARIABLE SPEED - KNOW THE FLOW™



Installing a variable speed pump for energy savings makes complete sense, but the only way to know how to set the pump's speed is by knowing the flow rate. FlowVis® allows you to:

- Maximize the energy-saving potential
- Achieve efficient skimming
- Reduce chemical costs
- Maintain a clean pool
- Ensure heater efficiency
- Achieve precise and repeatable valve positioning for perfect water feature operation

It is essential to establish the required flow rate in order 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. As seen in table 1.1 to the right, using FlowVis® to accurately set the required pump speed will typically result in a payback of just one year.

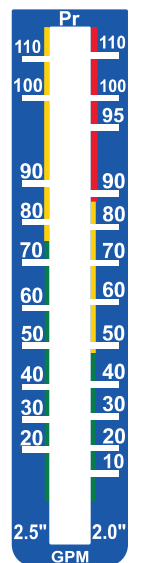
VELOCITY INDICATION / FPS



All FlowVis® models feature an indication on the GPM/LPM scale. This indication of velocity appears in red, yellow, and green bars along-side the GPM and LPM readings, and displays flow in feet per second (FPS).

FPS INDICATED IN GREEN	FPS INDICATED IN YELLOW	FPS INDICATED IN RED
≤5 FPS	5-9 FPS	≥9 FPS

Table 1.0 (left): The color bands that appear next to the flow rate on the GPM/LPM scale of FlowVis provide the user with information on Feet Per Second (FPS) of head.



POOL GALLONS	REQUIRED PUMP SPEED (RPM) ¹	HIGH SPEED, EXAMPLE 1	ADDITIONAL COST / YEAR	HIGHER SPEED, EXAMPLE 2	ADDITIONAL COST / YEAR
20,000	1463	1700	+\$103	2000	+\$284
25,000	1829	2000	+\$110	2400	+\$462
30,000	2195	2400	+\$198	2800	+\$706

Table 1.1 (above): The information in the table above correlates with the information provided on page 4 of this brochure, and demonstrates the importance of having an accurate flow reading when using a variable speed pump.

(1): Optimum pump speed required to achieve effective filtration and maximum energy savings. Data based on typical CA energy costs, typical run times and variable speed pump versus single speed pump.



MINIMAL EFFECT ON HEAD

Head Loss Data

FlowVis® has a small to moderate impact on the head, depending on the model:

SPECIFICATIONS

HEAD LOSS (ft H₂O)

MODEL	MIN. FLOW	MID-POINT	MAX. FLOW	HEAD LOSS (ft H ₂ O)	
				90° SWEEP ELBOW	45° ELBOW
FV-C	1.76	3.4	4.75	5.7	2.6
FV-C-S	1.29	3.07	4.1	5.7	2.6
FV-C-Saline	1.34	2.99	4.45	6.27	2.86
FV-3	0.51	0.43	0.43	7.9	4.0
FV-4	0.43	0.45	0.15	12.0	5.1

As seen in the data above, FlowVis® creates far less Head than a typical 90° sweep elbow.

Example:

At 60 GPM, Head Loss for FlowVis® model FV-C is 3.1 feet.

For Head Loss data on all FlowVis® models, please review the FlowVis® product manual.

1.5", 2" / 2.5"

3"

4"

	1.5", 2" / 2.5"	3"	4"
FLOW RANGE GPM	10-90 (1.5") / 10-110 (2" / 2.5")	90-220	160-300
FLOW RANGE LPM	38-341 (1.5") / 38-416 (2" / 2.5")	341-833	606-1136
VELOCITY INDICATION	5, 7, 9 FPS	5, 7, 9 FPS	5, 7, 9 FPS
WORKING PRESSURE	50 PSI	50 PSI	50 PSI
HEAD LOSS	Refer to Head Loss chart on page 6 of this brochure		
STRAIGHT PIPE BEFORE	0"	0" (L3) / 60" (L1)	0" (L3) / 80" (L1)
STRAIGHT PIPE AFTER	0"	0" (L3) / 60" (L1)	0" (L3) / 80" (L1)
AVERAGE ACCURACY	97.9%	98.15%	98.7%

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%.



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For more information about our products and services, or to find authorized local representatives, please visit www.h2flow.net

AQUATIC AC DRIVES • FLOW METERS • ANTI ENTRAPMENT DEVICES



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