



smart solutions
for monitoring flow



FlowVis[®]

Flow Meter

A revolution in reliable flow measurement

www.h2flow.net

MEET THE 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

Complete 2 x 2.5" unit with GPM scale. NSF 50 certified.



FV-C-15

Complete 1.5" unit with GPM scale.



FV-C-S

Complete 2 x 2.5" unit for safety applications with GPM scale. NSF 50 certified.



FV-C-Saline

Complete 2 x 2.5" unit for float tank applications with GPM scale. NSF 50 certified.



FV-C-L

Complete 2 x 2.5" unit with LPM scale. NSF 50 certified.



FV-C-15-L

Complete 1.5" unit with LPM scale.



FV-C-L-40MM

Complete 40mm unit with LPM scale.



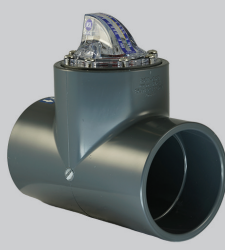
FV-C-L-50MM

Complete 50mm unit with LPM scale.



FV-3

Complete 3" unit with GPM scale. NSF 50 certified.



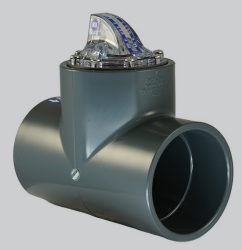
FV-4

Complete 4" unit with GPM scale. NSF 50 certified.



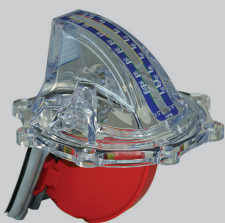
FV-3-L

Complete 3" unit with LPM scale. NSF 50 certified.



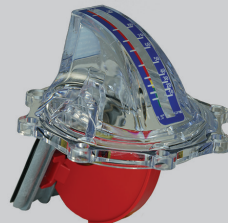
FV-4-L

Complete 4" unit with LPM scale. NSF 50 certified.



FV-J-R

Retrofit for existing 2 x 2.5" Jandy® 2-way valve with GPM scale.



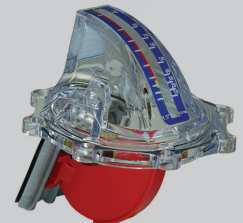
FV-J-R-15

Retrofit for existing 1.5" Jandy® 2-way valve with GPM scale.



FV-P-R

Retrofit for existing 2" x 2.5" Praher® 2-way valve with GPM scale.



FV-P-R-15

Retrofit for existing 1.5" Praher® 2-way valve with GPM scale.

A swimmer in a white cap is swimming in a pool, viewed from behind. The water is bright blue and splashing around the swimmer's head and arms.

≥97.9% Accuracy

across the entire FlowVis® model range!

FlowVis® flow meters:



A REVOLUTION IN RELIABLE FLOW MEASUREMENT

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

FlowVis® is the most accurate, reliable, NSF-certified flow meter ever developed for pools, spas, fountains, and water features.

The patented FlowVis® flow meter is now available

in 1.5", 2", 2.5", 3", and 4" configurations, with additional models designed specifically for retrofit, safety, and saline applications.

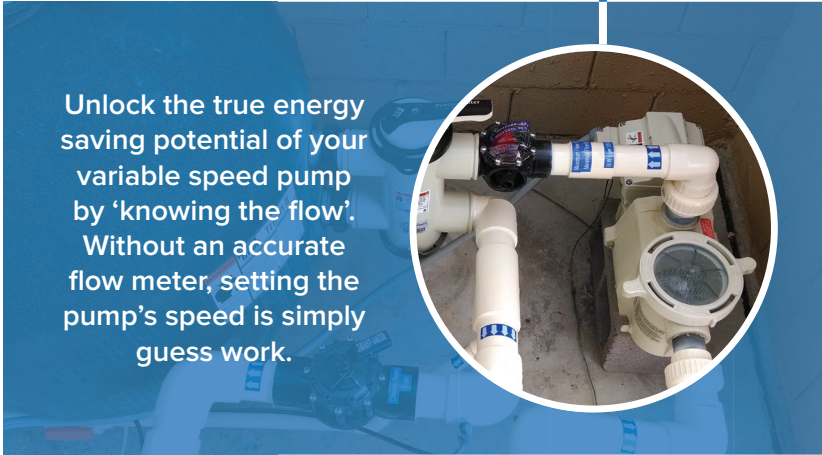
The patented concept allows all FlowVis® models to be installed next to other plumbing fittings without consideration for straight-pipe runs. FlowVis® can also be installed horizontally, vertically, or even upside-down.



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 the table below, using FlowVis® to accurately set the required pump speed will typically result in a payback of just one year.

POOL GALLONS	REQUIRED PUMP SPEED RPM (#)	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

(#) 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:

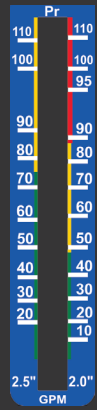
Model	HEAD LOSS (ft H ₂ O)				
	Min. Flow	Mid-Point	Max. Flow	90° Sweep Elbow	45° Elbow
FV-C	1.76	3.4	4.75	5.7	2.6
FV-C-S	1.29	3.07	4.1	5.7	2.6
FV-C-Saline	1.34	2.99	4.45	6.27	2.86
FV-3	0.51	0.43	0.43	7.9	4.0
FV-4	0.43	0.45	0.15	12.0	5.1

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

VELOCITY INDICATION / FPS

All FlowVis® models feature an indication of velocity 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



Key Features

- Installation flexibility; no requirement for 15x straight pipe
- Six different NSF 50 certified models
- Manufactured in the USA
- 5-year breakage warranty
- Clear, easy-to-read scale in GPM or LPM with key velocity points (FPS)
- Mass flow meter concept results in amazing accuracy
- No sticking of float or paddle wheel



FlowVis® is easy to install and requires no calibration, making it extremely user-friendly.



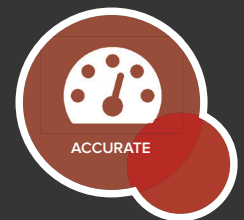
FlowVis® is available as a complete pre-assembled unit, and also as a retrofit kit.



Operating the pool pump at too high of a flow rate will use excessive chemicals and increase costs.



FlowVis® can be installed in any orientation and in any proximity to other plumbing fittings.



FlowVis® boasts greater than 95% accuracy across the entire model range.

Pipe Size, Flow Range, and Model Options

Model Options

MODEL	PIPE DIAM.	PIPE SCHED.	SCALE	DESCRIPTION
FV-C	2" or 2.5"	40	GPM	FV including valve body
FV-C-15	1.5"	40	GPM	FV including valve body
FV-C-S	2" or 2.5"	40	GPM	FV including valve body, no check valve
FV-C-Saline	2" or 2.5"	40	GPM	FV including valve body, no check valve
FV-C-L	2" or 2.5"	40	LPM	FV including valve body
FV-C-15-L	1.5"	40	LPM	FV including valve body
FV-C-L-40MM	40mm	40	LPM	FV including valve body
FV-C-L-50MM	50mm or 65mm	40	LPM	FV including valve body
FV-3	3"	80	GPM	Complete FV including Tee
FV-4	4"	80	GPM	Complete FV including Tee
FVJ-R	2" or 2.5"	40	GPM	Retrofit for existing Jandy® check valve body
FVJ-R-15	1.5"	40	GPM	Retrofit for existing Jandy® check valve body

FlowVis®

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	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

SPECIFICATIONS	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 in 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%

The following models are certified to NSF 50:

MODEL	STRAIGHT PIPE	IN BETWEEN 90's
FV-C	L1	L1
FV-S	L1	L1
FV-Saline	L1	L1
FV-C-L	L1	L1
FV-3	L1	L3
FV-4	L1	L3

NSF 50 Accuracy Levels:

Level 1 (L1) - Average of absolute values of all single point deviations must be $\leq 2\%$. Single point deviations shall not exceed $\pm 4\%$.

Level 2 (L2) - Average of absolute values of all single point deviations must be $\leq 5\%$. Single point deviations shall not exceed $\pm 7.5\%$.

Level 3 (L3) - Average of absolute values of all single point deviations must be $\leq 10\%$. Single point deviations shall not exceed $\pm 12.5\%$.

Level 4 (L4) - Average of absolute values of all single point deviations must be $\leq 12.5\%$. Single point deviations shall not exceed $\pm 15\%$.

Level 5 (L5) - Average of absolute values of all single point deviations must be $\leq 15\%$. Single point deviations shall not exceed $\pm 20\%$.

FlowVis® is protected by U.S. Patent No. 8,800,473

AVAILABLE FROM:

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Flow Meters • Variable Frequency Drives • Anti-Entrapment Devices



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