Reg-U-Flo® *Vortex Flow Control*

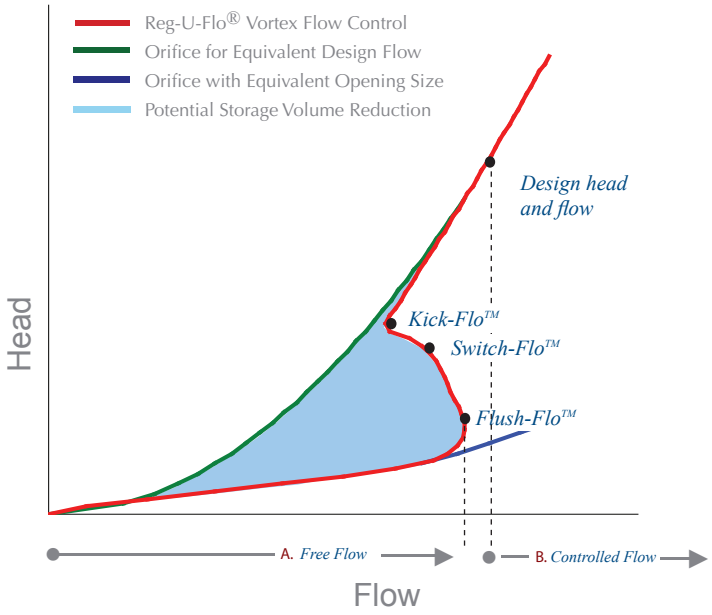
Optimize flow control for up to 40% reduction in required storage volume

APPLICATIONS

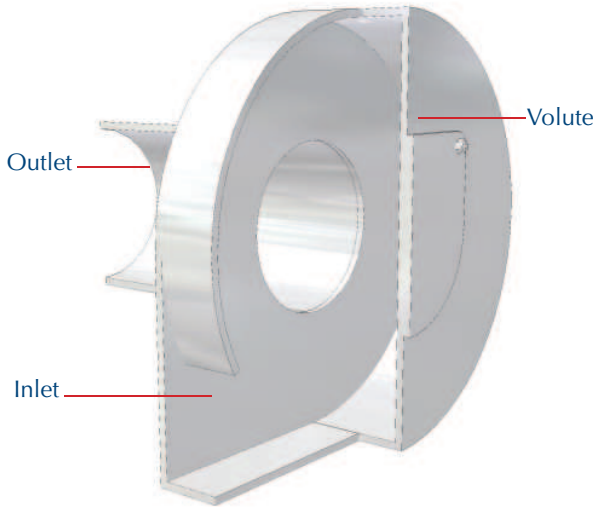
- Flow control for stormwater detention
- Outlet flow control for dams and reservoirs
- Aeration of stormwater storage discharges
- Catch basin inlet flow control
- Capture and control of floatable trash
- Erosion control and energy dissipation

ADVANTAGES

- Reduces stormwater storage requirements by up to 40%
- Up to 50% savings in project costs
- Self-activating with no moving parts or power requirements
- Area of opening is 3-6 times larger than the equivalent orifice
- Virtually maintenance free
- Performance proven with 17,000 installations worldwide



The **Reg-U-Flo Vortex Flow Control** provides superior hydraulic performance over conventional flow controls. Its unique features reduce the chance of blockages and reduce runoff detention volumes by up to 30%.

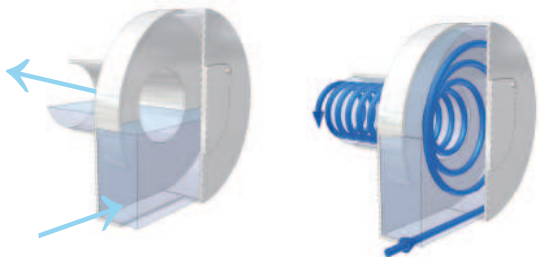


HOW IT WORKS

The **Reg-U-Flo Vortex Flow Control** optimizes flow control by allowing higher discharge rates at lower heads than conventional flow control options. The head/discharge curves shown below illustrate the potential storage volume savings offered by a **Reg-U-Flo** compared to an orifice.

The **Reg-U-Flo** operates on simple fluid hydraulics. Flow enters the volute tangentially through the inlet. Under low flow conditions, the **Reg-U-Flo** acts as a large orifice and water passes directly from the inlet to the outlet as shown in Figure A.

As flow increases and reaches the ***Flush-Flo™*** point, high peripheral velocities initiate the throttling action. As head increases, the valve approaches the ***Switch-Flo™*** and ***Kick-Flo™*** points and an air-filled core starts to form in the volute. As head continues to increase, the air core fully stabilizes and the valve discharge is throttled to that of a smaller orifice (see Figure B).



A. *Free Flow* B. *Controlled Flow*

Hydro International stormwater

Ph: 207.756.6200 • Fax: 207.756.6212 • Email: stormwaterinquiry@hil-tech.com
www.hydro-international.biz

SIZING AND DESIGN

Reg-U-Flo Vortex Flow Control Design Chart

Three series of **Reg-U-Flo Vortex Flow Controls** are available to suit various applications and design constraints.

Refer to the **Reg-U-Flo** Design Chart for typical sizing guidelines.

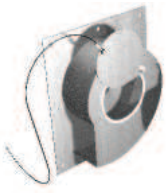
** **Reg-U-Flo Vortex Flow Controls** can be manufactured to any specified diameter. Listed diameter ranges are typical guidelines only.*

*** Flow ranges listed are for 4′ - 6′ of head.*

Series		Model	Typical Diameter Range* (inches)	Typical Flow Range ** (cfs)	Mount Style
	S	SH SXH SMXH	2″ - 16″	0.05 - 6.5	Wall Mount
	V	SV SXV	2″ - 16″	0.05 - 7.5	Downspout/Roof Mount Floor Mount Pipe Mount
	C	C CX CH	2″ - 20″	0.10 - 15	Floor Mount

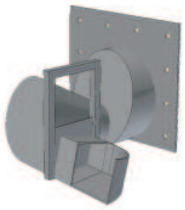
Optional Design Accessories

Pivoting Bypass Door



For maintenance access to the outlet pipe.

Adjustable Inlet

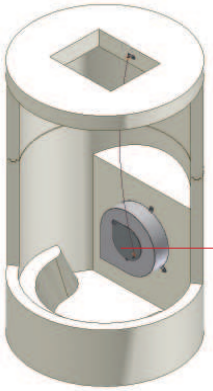


To adjust design flow post installation.

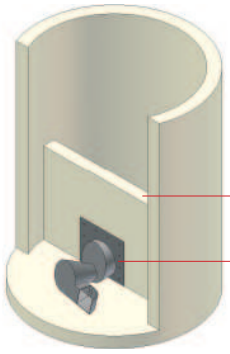
Vortex Suppressor Pipe

To eliminate air core for emergency bypass.

Typical Chamber Configurations

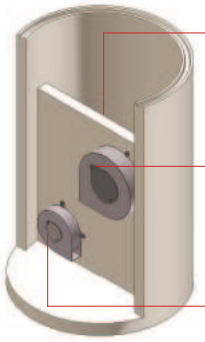


Wall Mounted SXH Model for Catch Basin Inlet Control



Bypass Weir

Floor Mounted CH Model for Small Storm Flow Control



Bypass Weir

Pipe Mounted SXH Valve for Large Storm Flow Control

Wall Mounted SXH Model for Small Storm Flow Control

For more information please call our office toll free at 800-848-2706 or inquire at www.hydro-international.biz.

This information is subject to change without notice.

Certificate No. 961366