

Install an SVRS in your pool or spa for safety.



When a swimmer becomes stuck to a drain or suction outlet in a swimming pool, spa, wading pool, or hot tub, the force of the circulation system can be tremendous. This suction force will not allow a person to free themselves, no matter how strong a swimmer they may be. It is extremely difficult for onlookers to break this suction by lifting the person off the drain — to do so, you would have to be able to lift more than 500 pounds. Even several people working together may not be able to accomplish this. This “suction entrapment” will hold the bather in its grip until the vacuum is broken. A person held underwater in this manner can suffer severe body or limb injury, or even death.

What is an SVRS?

A **Safety Vacuum Release System** — or SVRS for short — is an automatic suction force release system. When a drain becomes blocked, the SVRS provides a rapid vacuum release. This quickly frees anyone whose body or limb is trapped on the drain.

An SVRS works whether or not there is a cover on the drain, and does not interfere with the pump function. Once installed, an SVRS requires little or no maintenance.

How does a mechanical SVRS prevent entrapment?

A spring loaded piston located in the SVRS unit forms a seal to prevent air entering the suction system during normal operation. Should a sudden rise in vacuum occur due to an entrapment event, the piston is forced open and the air seal is broken. Under this condition, outside air is allowed to enter the suction side of the pump causing the pump to lose prime, thereby releasing the vacuum.

How is an SVRS installed?

A mechanical SVRS unit is easily installed, adjusted and tested with standard tools and supplies. The SVRS unit is mounted vertically, above or off a tee installed in the main drain suction line close to the circulation pump. Since the SVRS is an air passageway only, the unit does not convey water, and therefore can be installed on small or large pipe sizes. Most installations can be completed in less than 30 minutes. An electrical SVRS unit may also be used and is installed by a licensed electrician.

I have multiple drains in my pool — do I still need an SVRS?

Having multiple drains is no assurance that someone will not become entrapped by the suction force on one of the drains. One or more of the drain lines can become clogged or completely obstructed by leaves, debris, towels, toys, etc. However, the pool/spa system will appear to be functioning normally, as there is still one functioning drain. An SVRS provides a quick release of a person’s body or limb trapped on a drain.

What features should I look for in an SVRS?

- Easy to install (within 30 minutes). It is recommended to have a pool professional install the SVRS.
- Self-monitoring, and low maintenance.
- Covered by a warranty of more than one year.
- Won’t damage your pump when activated.
- Meets all requirements of the International Code Council — both the International Building Code (IBC) and the International Residential Code (IRC).
- Meets or exceeds all the ANSI/ASME performance standards for safety vacuum release systems.
- Constructed of non-corroding parts to ensure long life and superior performance.



Vac-Alert™ Model VA-2000 SVRS, with cutaway showing the interior.



The SVRS is mounted in the main drain suction line, close to the circulation pump.

How can I learn more?

Contact **Vac-Alert Industries** at 800-374-7405, or www.vac-alert.com.