

## Vacuum Sewer System Roediger® 75mm Hose Valve - US Patent 6575425B1

### Product Report: *Small dimensions at maximum flow rate*

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**Highest efficiency in a smallest place!  
Unsurpassed in the market.**

The vacuum valve combines the gravity system with the vacuum system. Therefore, the demands on this interface are very high.

Independent test laboratories have proven that our valve withstands 250,000 actuations. As we considered the basis of this test as not sufficient, we increased the internal proof test to **1 million cycles** and completed it successfully.

Thanks to the hose principle, the valve opens and has a full, **unbranched passage. Blockages are therefore impossible**, and this with a free ball passage of 75 mm.

The double suspension device of the rubber membrane ensures perfect functionality with **a long service lift**.

**Even under water the valve is fully functional**, due to the encapsulated design.

Our chamber system consists of ideally coordinated components: *Chamber + vacuum valve + controller* = resulting from over 40 years of experience and more than 2000 reference systems installed around the world that are currently in operation.

### Advantages:

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- Fully compatible with all chamber types
- Simple design consisting of only three housing parts
- On the market since 2001 and more than 12,000 in use worldwide
- Free passage = no blockages at maximum flow rate
- Minimum dimensions (length 340mm / min. 204mm / width 160mm)

## Benefits:

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### Compact design

In cooperation with our customers we develop the optimum design for our products in Germany. Their compact design and modular applications made it possible to install them also in limited spaces.

### Tried and tested

Our products have been installed successfully around the world in various countries. The longevity of our products is one of our key priorities.

### Robustness

The vacuum valve is integrated into a capsule to prevent the rubber components from being damaged by exterior forces. The double suspension device of the rubber membrane guarantees a high level of functional safety. The very few components that are actually made of material which is non-corrosive and do not come into contact with sewage.

### Hydraulically optimal – Full opening ensures low streaming losses

No movable mechanical components in the sewage stream. Optimized force effectiveness within the valve paired with the light weight design of the integrated materials assures that the vacuum valve will also open fully even if the vacuum conditions are adverse.

### Low-maintenance – easy membrane replacement

The maintenance work to be performed on the only wear and tear part of the system – the membrane – can be planned ahead and completed in just a few minutes.

### Ready for monitoring with minimum technical time

Thanks to cable connected or wireless monitoring technology, every valve can be constantly observed and it is also possible to count the number of openings. Third party water infiltration is measured precisely and analyzed accordingly.

### More than standard compliance

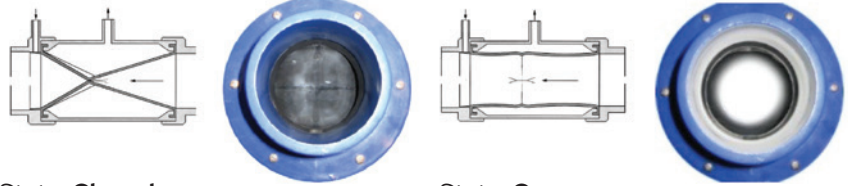
Our products deliver maximum functional safety and energy savings! While they all meet the requirements of DIN EN 16932 and DWA-A 116-1, many of their parameters exceed these standards considerably.

## Comparative overview of Roediger® valves

Characteristics:	75 mm Hose Valve	65 mm Membrane Valve	50 mm Membrane Valve	40 mm Hose Valve	75 mm* Piston Valve	50 mm* Piston Valve
Full opening without vortices	++	+	+	++	+	+
Most compact design	++	+	+	++	-	-
Installation in double collection chamber type G or Z	-	+	+	-	-	-
Can be flooded and is waterproof	+	+	+	+	+	+

\*Product series Airvac®; specified dimensions pertain to the interior diameter

# Top Performance:



State: **Closed**

- Maximum passage
- No blockage risk

State: **Open**

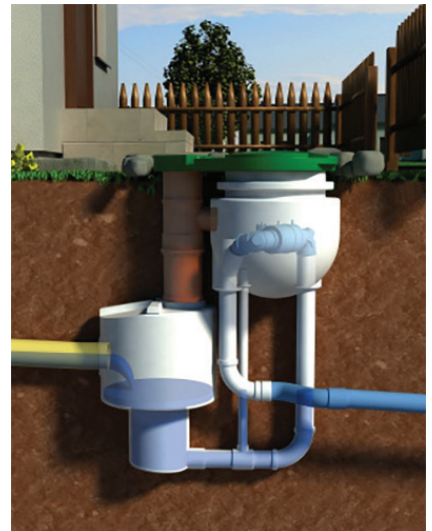
- No swirl effects
- Pressure shock proof



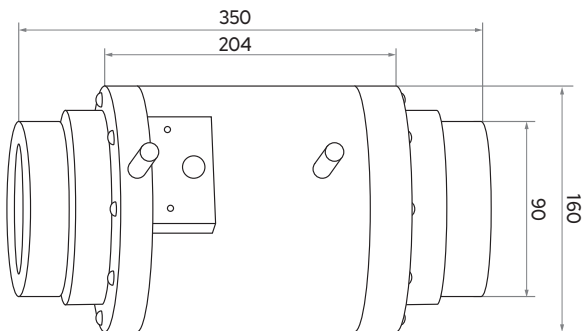
Faster installation and removal of the valve unit



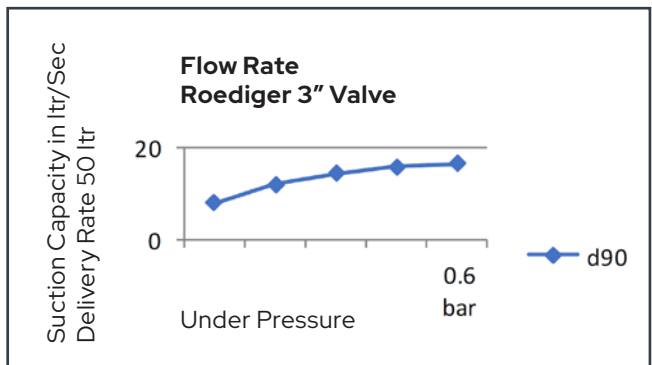
Minimal design with large inside diameter



Suitable for all chamber types / Figure in G-chamber



Housing Dimensions



Performance