

A brand of Aqseptence Group

Vacuum Sewer System Roediger® Collection Chamber Type "Z"

Product Description



Usually, there are conventional sewage systems inside the buildings of residential areas.

Wastewater flows through **gravity house lines** into the **collection chamber** located at the end of the gravity line coming out of a building. From this point on, wastewater is admitted into the vacuum system by means of a pneumatic vacuum valve.

The collection chamber does not need to have any vacuum technology inside the building, and it requires no electrical energy supply.

Wastewater retained in the collection sump generates pressure in a sensor pipe - this activates a compact pneumatic controller, which in turn opens the vacuum valve. The pressure difference causes the sewage to be evacuated from the chamber and to pass into the vacuum network.

In this Type "Z" chamber, the valve chamber is located above the collection sump. The watertight chamber body, made of polyethylene, comprises the compact controller, the vacuum valve and the vacuum interruption plug. The sewage collection sump is sep-arated from this dry, clean and frost-resistant valve chamber. A highly flexible joining ring buffers any possible tensional forces within the plastic and facilitates a quick adjustment in height, but always retaining the high degree of tight sealing that is required.

Our chamber system consists of components which are perfectly harmonized: Chamber + Vacuum Valve + Controller = the result of over 40 years of experience, and of more than 2,000 reference systems installed all around the world, that are being operated on a daily basis

Advantages

Cost Saving - due to reduced excavation

Versatile – the optimum solution for every situation

The collection chamber consists of the valve chamber (upper part) and the collection sump (lower part). Both parts are assembled as a single unit, using a joining ring, and are customized on site, for the required installation depth.

Roediger collection chambers are available in **pedestrian**, **flood-proof and traffic-load designs**. Every collection chamber contains **a vacuum valve in one of two sizes**, resulting in the perfect collection chamber for every application.

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Completely water- and sewageproof, with a separate valve chamber The absolute separation between the vacuum valve system and the sump containing the sewage provides for a perfectly clean and dry zone for key components, as well as a safe and hygienic working environment.

Self-cleaning sump and pressure sensor pipe

The horizontal positioning of the vacuum pipe, and the incline at the bottom of the sump with respect to the vacuum pipe, guarantees that the **sump is completely drained** during every sump evacuation operation. Consequently, no residual sewage remains in the sump and there is therefore **no resulting sediment** and **no** development of any **foul odours** within the collection chamber.

No clogging, thanks to an integrated "bottleneck"

Should a larger solid substance enter the collection chamber sump, an integrated "bottleneck" will stop it and block its further movement, thereby protecting the rest of the system from any clogging. A simple suction lance can be used to **quickly and easily remove such solids** from the sump, through an opening in the intermediate floor.

Better than standard compliance

Our products deliver maximum **functional safety** and **energy savings!** Whilst all meet the minimum requirements of DIN EN1091 and ATV 116-1, many parameters exceed them, due to our own high performance standards.

Characteristics	Collection chamber Type G Roediger®	Collection chamber Type Z Roediger®	Standard concrete chamber	Plastic chamber with single compartment
NO third-party water infiltration	+	+	-	+
NO sewage exfiltration into the soil	+	+	-	+
Sewage-water-free valve zone – "dry and hygienic"	+	+	-	-
Self-cleaning sensor pressure pipe	+	+	-	-
Self-cleaning sump	++	++	-	-
Installation is quick and easy—no lifting crane required	+	+	-	+
Swiftly assembled, due to pre-assembled parts	+	++	-	-
Bottleneck at the sump	+	+	-	-
Flexible installation/customization of feed depth	++	++	+	-
Complete sump drainage	+	+	-	-
Resistant to hydrostatic uplift	+	++	++	-
Optimized air inflow, due to the Roediger® Controller	++	++	-	-
Available in pedestrian, traffic-load and floodable versions	+	+	-	-
Double valve chamber with separate wastewater inflows	+	-	-	-
User-friendly - valve is close to the surface and readily accessible	+	+	-	-
Highly flexible joining ring minimizes internal tensions, lends stability and ensures for long life	-	+	_	

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