

Pressure-flow characteristics of the Silvento ec

The pressure-volume flow curves shown below represent the volume flow curve over a counterpressure, e.g. in the (exhaust air) line on a Silvento ec ventilation unit. These can be used to roughly determine whether, for example, normative requirements for volume flow rates can be met at certain back pressures.



1





Pressure-flow characteristics of the Silvento ec

Pressure-flow characteristics of the Silvento ec

The characteristic curves shown are an average of the expected, optimally adjusted, pressure-volume flow characteristic curves in a flush-mounted housing with radial air outlet. Measurements were taken in the installed condition according to the manufacturer's specifications with a connected DN-100 aluminum flex pipe with a 90° angle with r=2xD. The volume flow at 0 Pascal (start of the curves at the lower leg of the diagram) can be considered as "free blowing" (almost no back pressure.

The ventilation units are configured at the factory in such a way that the volume flow rate can reach the stated volume flow rate values of the respective switching stage in the installed state. Tolerances of about +-15% around the characteristic curves shown should be taken into account. "Free-blowing volume flows" are higher at the factory than the volume flow stages shown, e.g. in the accompanying documents or device labels.

It is assumed that, in the installed state, an average of between 40 and 60 Pascal backpressure is applied to the ventilation unit. The preset "free-blowing" volume flow rates were configured correspondingly higher so that the volume flow rate is correspondingly high depending on the characteristic curve in the installed state.

Due to different areas of application, ambient and installation conditions as well as air pressures (e.g. geographic installation altitude above sea level), the preset volume flow rates may deviate from the switching stages shown (target volume flow rate).

All pressure-flow characteristics and "free-blowing" flow rates can therefore be adjusted to the respective installation situation and ambient conditions. This means that adjustments can be made to the existing controls in order to adapt the actual volume flow to the ambient conditions, accessories, etc. Appropriate instructions are available for this purpose. We always recommend measuring and documenting the actual volume flow rates before handover to a user and, if necessary, making the necessary adjustment to the planned (target) volume flow rates.

Ask us directly if any questions arise. We will be happy to help.

Your LUNOS Team

E480 09.23