Type RHD(S) Reflexion/Absorption silencer

Application
The TIO reflexion/absorption silencer type RHD(S) can be installed in the ducting for almost any application and medium. The RHD(S) silencer combines an excellent attenuation over a wide frequency range with a low backpressure.

Design
The acoustical performance of the silencer type RHD(S) is based on both the reflexion and the absorption principal. The main part of the silencer is filled with highly efficient sound absorbing mineral wool. In this mineral wool the noise energy is transmitted into heat. Before reaching the absorption part of the silencer, the medium passes through resonance chambers. These chambers are connected by means of 1/4λ tubes.

Attenuation
The average attenuation is depending on the project data and the dimensioning of the silencer. Maximum app. 45 dB(A)

Gas velocity
The maximum allowable gas velocity is depending a.o. on the noise requirements and allowable backpressure. Recommended 35 – 50 m/s

Pressure loss
Depending on the silencer configuration en project data

Temperature
Maximum : 600 °C.
Special designs are available for higher temperatures.

Material
Depending on the application.
TIO standard stock materials are CS S235JRG2, SS 1.4571 and SS 4301, Other materials are optional.

Insulation
In order to avoid that noise radiation from the body of the silencer influences the required noise level, it is recommended to insulate the silencer acoustically. As the body temperature is more or less the same as the medium temperature, it is also recommended to insulate the silencer thermically.

Paint
Standard one layer of zinc phosphate primer.
Other painting systems are optional

Installation
Silencer type RHD(S) may be installed vertically, horizontally or in any position.

Options
For in- and outlet, special connections are available. Supports are available, etc.

The RHD(S) silencer can be executed with a built-in spark arrester.