

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 $1/4\lambda$ 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 $35-50\ \text{m/s}$

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 $\mathsf{RHD}(\mathsf{S})$ may be installed vertically, horizontally or in any position .

Options

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

The $\mbox{RHD}(\mbox{S})$ silencer can be executed with a built- in spark arrester.







Parallelweg 9 2921 LE • Postbus 701 2920 CA • Krimpen aan den IJssel Nederland T 0180 514 055 • F 0180 517 264 • E info@tiobv.nl • www.tiobv.nl