Flexible silencers with aluminium-polyester cladding

SLESD

Description

The SLESD flexible silencer is made of the ALUDUCT perforated duct. The sound-insulating material is 25 mm thick and lined with the 45-micron thick ALUDUCT AD-L cladding. The silencer is connected to the ductwork with male flanges made of metal. The product is available in two length sizes, 500 mm and 1000 mm.

Other silencer versions are available on request:
with EPDM gaskets, female flanges, or in other length sizes.

Insulation:
Insulation material: glass wool.
Insulation type: trimmed from reel, flexible.

Temperature range: -20°C to +140°C

Thermal insulation performance of mineral wool:
= 0.034 W/mK at 24°C

Sound insulation:
See the enclosed diagram.

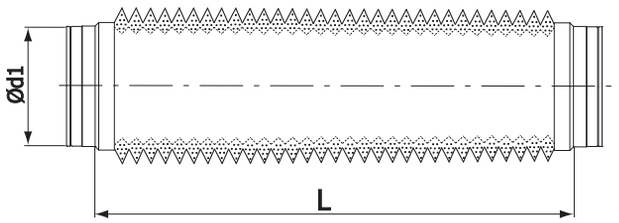
Fire resistance:
The silencers are made from fire-proof materials.

Production version — Product code example:
SLESD — with male connections (standard)
SLESDL — with male connections and EPDM gaskets
SLESDF — with female connections

Product code examples
Product code: **SLESD - 25 - 100 - 1000**

type
Insulation thickness
Silencer diameter
Silencer length

Dimensions



$Ød_{nom}$ (mm)	L (mm)
80	500, 1000
100	500, 1000
125	500, 1000
160	500, 1000
200	500, 1000
250	500, 1000
315	500, 1000

50 mm thick insulation and
L = 600 mm and 1200 mm are available on request.

Technical specifications

Chart 1: Sound insulation
Sound insulation thickness: 25 mm, duct length: 1000 mm

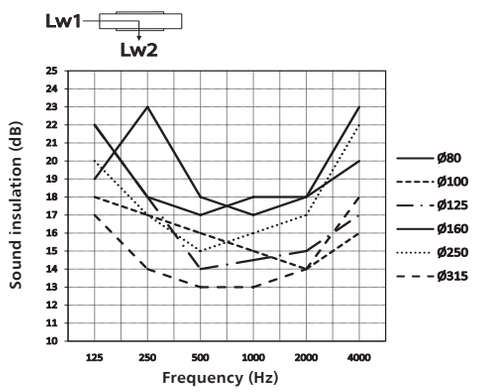
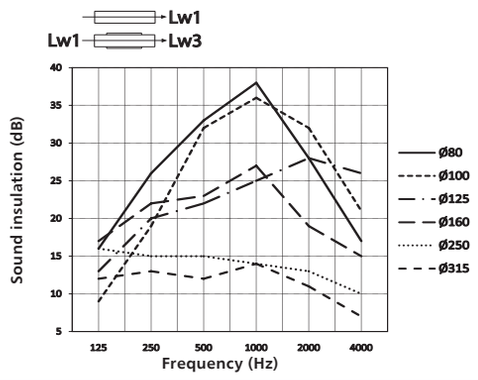


Chart 2: Sound insulation
Sound insulation thickness: 25 mm, duct length: 1000 mm



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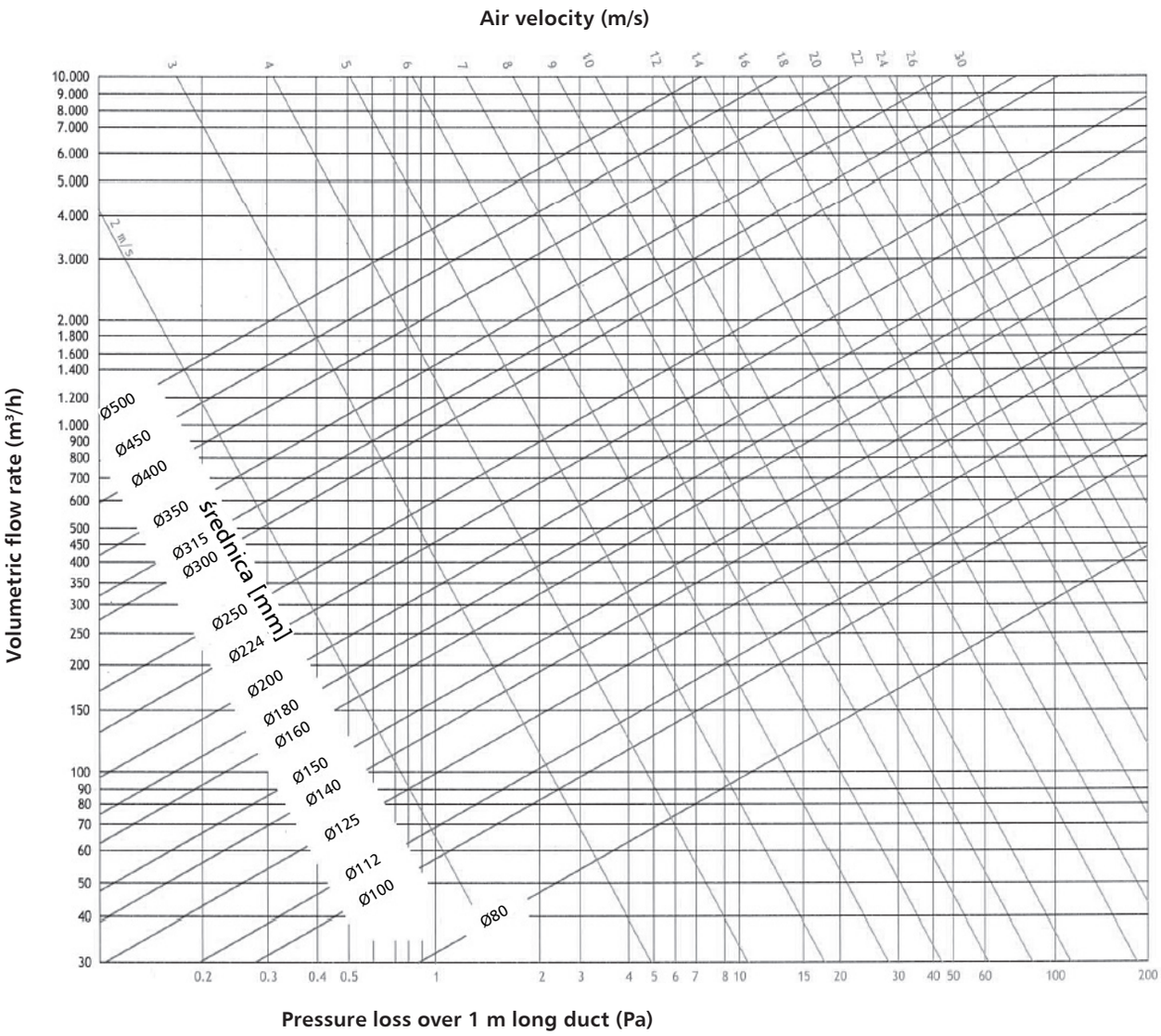
Technical specifications

Chart 1: Pressure loss characteristics



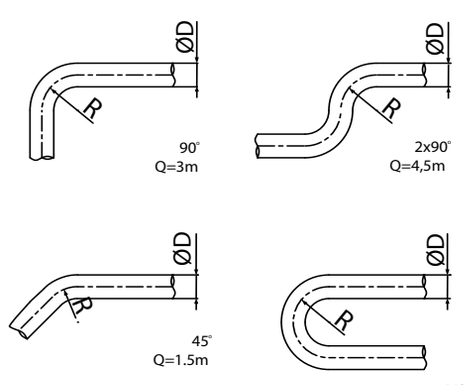


Fig. 1

Temperature	-20°C	-0°C	+20°C	+40°C	+60°C	+80°C	+100°C
Correction factor	1.158	1.073	1.000	0.936	0.880	0.830	0.785

Example

Z=Q x (D/300)

Z — duct length equivalent (m)
Q — length (m) (see Fig. 1)
D — duct diameter (mm)

Inputs:
Air velocity = 5m/s
Duct diameter = 200 mm
90° bend
Duct length = 1 m

To be calculated:
Pressure loss = ?

Calculation:
Pressure loss over 1 m of length = 3 Pa (see Chart 1)
Q = 3m (see Fig. 1)
Z = 3 x (200/300) = 1.99 m
Pressure loss = (1.99+1) x 3 Pa/m = 8.97 Pa