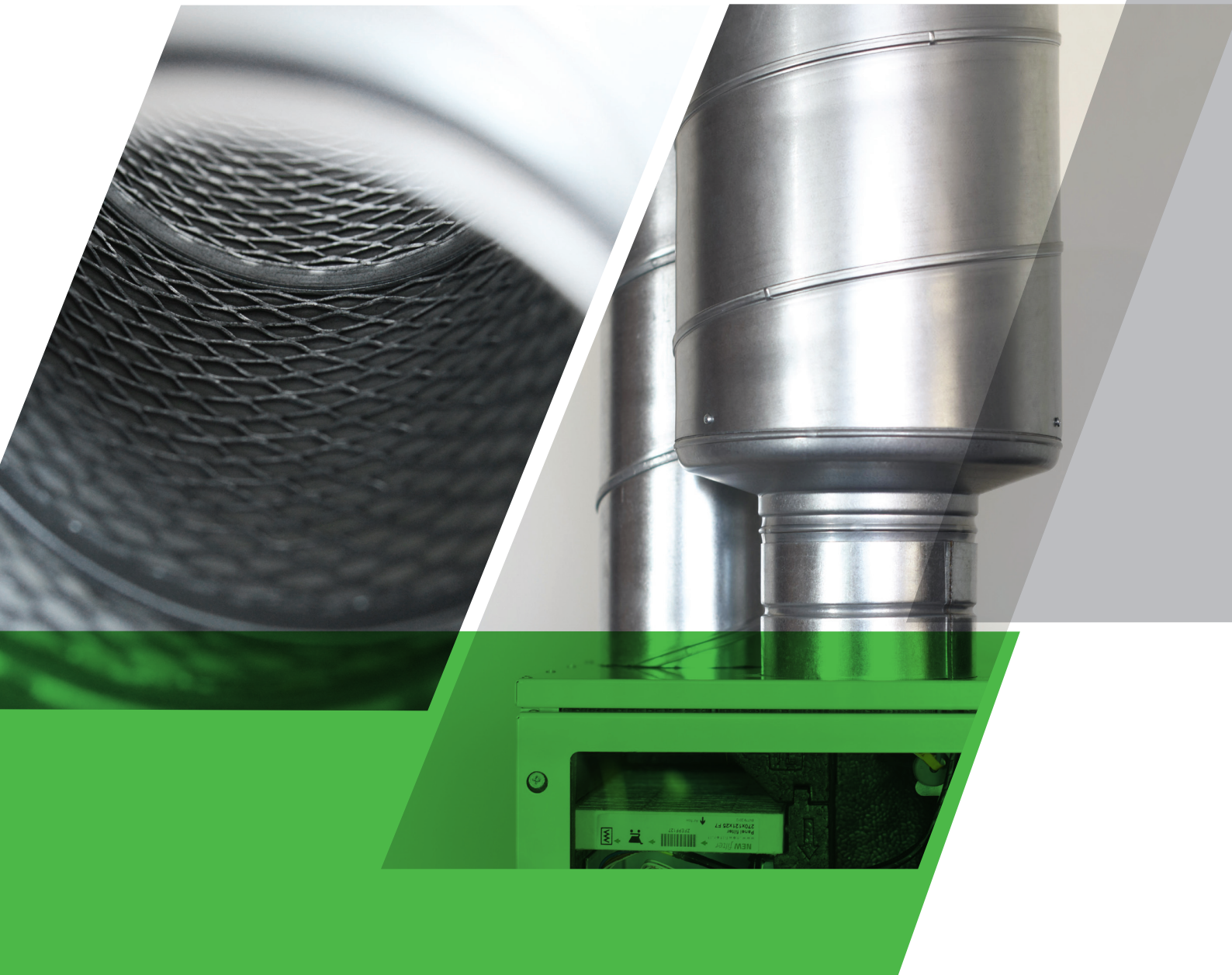


MUTE

KOUDHÈ

Airconditioning
Wärmepumpen
Ventilatie

EFFICIENT AND AIRTIGHT SILENCERS
FOR CIRCULAR DUCTS



SILENCERS MUTE FOR CIRCULAR DUCTS

are manufactured by a unique method that leads to:

- High sound attenuation values – **up to 64 dB** for d125 silencers¹.
- Top airtightness – **class D** (EN 15727:2010).

Sound attenuation is tested according to EN ISO 7235 at independent laboratory.

APPLICATION



- Reduction of noise in the circular ducts of low to medium pressure air handling systems.
- Reduction of noise generated by air handling units to any airflow direction.
- Optionally can be used in the duct systems to reduce the external noise between different premises.

Connection diameters (d), mm: **100, 125, 160, 200, 250, 315**. MUTE silencers easily fit on all types of air handling units with round duct connection.

¹ - At 2000 Hz, length – 1200 mm, go to the page 5 for full attenuation values.

D CLASS AIRTIGHTNESS

FOR THE HIGHEST VENTILATION SYSTEM REQUIREMENTS



Air leakages cause negative effects on the performance of the entire air handling system:

- It significantly reduces the amount of supplied and exhaust air and thus reduce the desired air circulation in the premises;
- It determines the heating and cooling losses, which often does not allow to maintain the desired temperature;
- Systems, in which air supply is adjusted with temperature and air flow parameters, never guarantee user's needs;
- Unsteady pressure occurs in air supply and exhaust systems;
- Leaky components of the ventilation system do not prevent contaminated air or odors from entering the premises.

DUCT TIGHTNESS IS CLASSIFIED

ACCORDING TO STANDARD EN 15727:2010:

Tightness class	The static pressure limit values (P _s), Pa		Leak index boundary value (f _{max})m ³ s ⁻¹ 2/m ²	Leak index boundary value 400Pa, (m ³ xh)/m ²	Typical use
	Overpressure	Negative pressure			
A	500	500	0,027xp _t ^{0,65} x10 ⁻³	<4,8	The maximum permissible limit
B	1000	750	0,009xp _t ^{0,65} x10 ⁻³	<1,6	Low pressure residential systems
C	2000	750	0,003xp _t ^{0,65} x10 ⁻³	<0,5	Industrial and public buildings ducts
D	2000	750	0,001xp _t ^{0,65} x10 ⁻³	<0,2	Ducts that require the highest standards of hygiene

* - Special purpose ducts.

Silencers MUTE comply to D class requirements and prove to be the most airtight silencers in the market! Airtightness has been tested at the independent laboratory.

CONSTRUCTION

FEATURES AND MATERIALS:



- Casing made of galvanized steel (DX51D+Z275). Corrosion class – C2 (ISO 12944).

- Attenuation material – mineral wool. Fire rating class **A1** (EN 13501) – non-combustible.

OPERATING CONDITIONS:

- Maximum operating pressure – 1000 Pa.
- Maximum operating temperature – 100 °C (Mute 100-315 silencers.)
- Outdoor applications only if covered from precipitation.

PRODUCTCODE:

MUTE 250 x 600

1

2

3

1

Trade mark

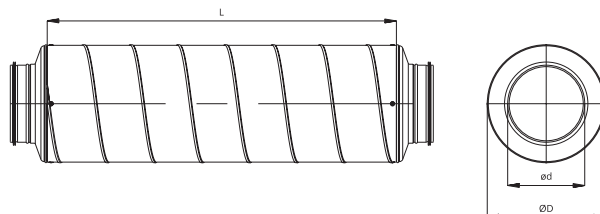
2

Connection diameter

3

Nominal length

DIMENSIONS AND WEIGHT



Model	DN, mm	L mm	D, mm	Weight, kg	Ordering code
MUTE 100x300	100	300	204	2.90	GSOMUTE001
MUTE 100x600	100	600	204	4.70	GSOMUTE002
MUTE 100x900	100	900	204	6.50	GSOMUTE003
MUTE 100x1200	100	1200	204	8.30	GSOMUTE004
MUTE 125x300	125	300	228	3.30	GSOMUTE005
MUTE 125x600	125	600	228	5.40	GSOMUTE006
MUTE 125x900	125	900	228	7.20	GSOMUTE007
MUTE 125x1200	125	1200	228	9.20	GSOMUTE008
MUTE 160x300	160	300	264	3.90	GSOMUTE009
MUTE 160x600	160	600	264	6.30	GSOMUTE010
MUTE 160x900	160	900	264	8.80	GSOMUTE012
MUTE 160x1200	160	1200	264	11.10	GSOMUTE013
MUTE 200x300	200	300	304	4.90	GSOMUTE014
MUTE 200x600	200	600	304	7.50	GSOMUTE015
MUTE 200x900	200	900	304	10.50	GSOMUTE016
MUTE 200x1200	200	1200	304	13.60	GSOMUTE017
MUTE 250x300	250	300	355	6.90	GSOMUTE018
MUTE 250x600	250	600	355	9.80	GSOMUTE019
MUTE 250x900	250	900	355	13.60	GSOMUTE020
MUTE 250x1200	250	1200	355	17.30	GSOMUTE021
MUTE 315x300	315	300	419	7.20	GSOMUTE022
MUTE 315x600	315	600	419	11.60	GSOMUTE023
MUTE 315x900	315	900	419	16.00	GSOMUTE024
MUTE 315x1200	315	1200	419	20.20	GSOMUTE025

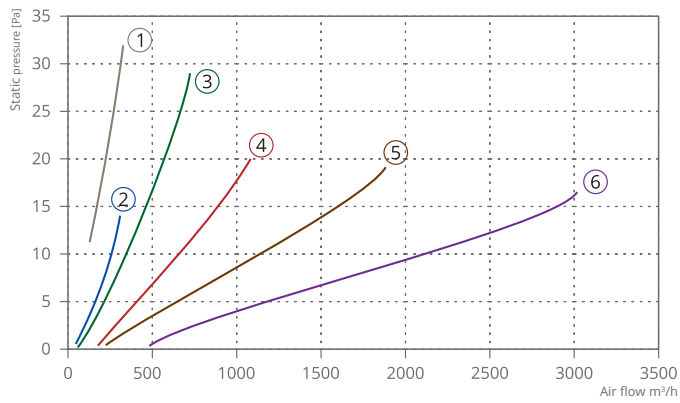
ATTENUATION VALUES, dBA

Model	Frequency fm, Hz							
	63	125	250	500	1000	2000	4000	8000
MUTE 100x300	8.30	6.60	8.30	10.60	20.40	19.10	19.00	14.50
MUTE 100x600	11.70	8.70	11.90	17.40	34.10	34.60	34.40	21.20
MUTE 100x900	16.28	12.51	17.16	24.06	44.47	48.65	44.93	24.95
MUTE 100x1200	17.90	12.60	19.50	30.10	50.40	63.40	51.70	25.30
MUTE 125x300	7.10	5.40	7.20	9.10	19.70	19.40	16.50	10.60
MUTE 125x600	10.20	7.10	10.40	15.00	32.80	35.20	30.00	15.50
MUTE 125x900	14.20	10.30	14.90	20.80	42.90	49.60	39.00	18.30
MUTE 125x1200	15.50	10.40	17.00	26.00	48.60	64.60	44.90	18.50
MUTE 160x300	6.40	5.10	6.30	7.62	18.20	17.10	11.70	6.70
MUTE 160x600	9.20	6.70	9.00	12.50	30.40	31.00	21.30	9.80

Model	Frequency fm, Hz							
	12.80	9.70	13.00	17.30	39.70	43.60	27.80	11.60
MUTE 160x900	12.80	9.70	13.00	17.30	39.70	43.60	27.80	11.60
MUTE 160x1200	14.00	9.80	14.70	21.70	44.90	56.80	32.00	11.70
MUTE 200x300	4.60	3.20	4.50	6.20	16.70	13.10	8.40	7.20
MUTE 200x600	6.50	4.20	6.50	10.10	27.80	23.70	15.30	10.50
MUTE 200x900	9.00	6.00	9.40	14.00	36.30	33.40	20.00	12.40
MUTE 200x1200	9.90	6.10	10.70	17.50	41.20	43.50	23.00	12.50
MUTE 250x300	3.90	2.60	3.70	5.00	15.10	9.20	4.70	3.70
MUTE 250x600	5.50	3.50	5.30	8.20	25.20	16.60	8.50	5.30
MUTE 250x900	7.60	5.10	7.70	11.40	32.90	23.40	11.10	6.30
MUTE 250x1200	8.40	5.10	8.70	14.20	37.30	30.50	12.80	6.40
MUTE 315x300	3.40	2.50	3.10	4.00	12.80	6.50	4.60	4.30
MUTE 315x600	4.80	3.30	4.50	6.60	21.30	11.70	8.30	6.30
MUTE 315x900	6.70	4.70	6.50	9.20	27.80	16.50	10.80	7.40
MUTE 315x1200	7.30	4.80	7.40	11.50	31.50	21.50	12.40	7.50

PRESSURE LOSS

Connection diameter, mm	Airflow, m ³ /h	Airflow, l/s	Nominal length, mm			
			300	600	900	1200
Δp_r , Pa						
100	158	44	4	7	11	14
	224	62	7	14	21	28
	278	77	11	21	32	43
	331	92	15	30	45	61
125	70	19	<1	<1	1	2
	141	39	1	2	4	5
	211	59	3	5	8	10
	282	78	5	9	14	18
160	103	28	<1	<1	<1	1
	200	56	<1	2	3	3
	302	84	2	4	6	8
	500	139	3	7	10	14
	601	167	7	14	22	29
	704	196	10	19	29	39
200	200	56	<1	<1	<1	1
	402	112	<1	2	3	4
	599	166	2	4	6	8
	799	222	3	7	10	13
	1008	280	5	10	15	20
	1197	333	7	13	20	27
250	299	83	<1	<1	<1	1
	600	167	<1	2	3	3
	896	249	2	4	5	7
	1203	334	3	6	9	12
	1502	417	5	9	14	19
	1804	501	6	13	19	25
315	499	139	<1	<1	<1	1
	1006	279	<1	2	2	3
	1503	417	2	3	5	6
	1999	555	3	5	8	10
	2506	696	4	8	12	16
	3013	837	5	11	16	22



- ① Mute 100x900
- ② Mute 125x900
- ③ Mute 160x900
- ④ Mute 200x900
- ⑤ Mute 250x900
- ⑥ Mute 315x900

TESTING STANDARDS



- Attenuation values are tested according to ISO 7235.
- Air leakages are tested according to EN 15727:2010

