

TECHNICAL DATA SHEET

Exhaust Silencer

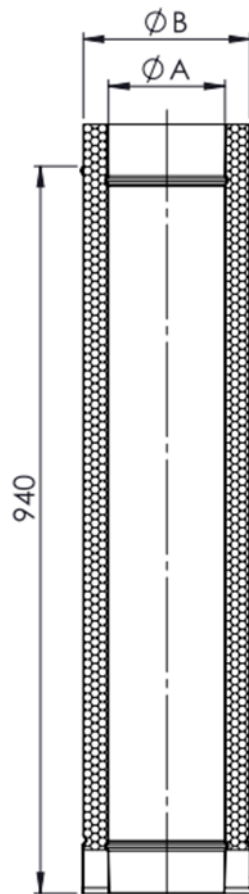
ASL - 1M

PRODUCT LINE

ASL - 1M - Acoustical Silencing Length - Standard Length 1000mm

APPLICATIONS

- Gas and Oil heating appliances with dry or wet exhaust conditions
- Also intended for use with gas fireplaces and solid fuel fires



PRINCIPLE OF OPERATION

Attenuation by transforming sound energy to heat through friction activities in the mineral wool structure.

CLASSIFICATIONS

Temperature Class: **T600** $\leq 600^{\circ}\text{C}$ or 1112°F
Pressure Class: **H1** 5000 Pa (20" WC)
Condensate Durability: **W** Dry/Wet

MATERIALS

- Inner perforated liner and outer jacket made of special ferritic, high-grade 444 stainless-steel
- Highly efficient 2.25" thick mineral wool insulation, protected with glass fiber fleece against the perforated liner

CONNECTION/INSTALLATION DETAILS

- Connection System: KL, FL, GV, or custom flanges¹
- Positioning: Horizontally or Vertically

¹Standard System (System Modifications are available)

FEATURES

- Modular silencer system with slim dimensions
- Add lengths together in the field as needed
- Adapter Caps are available for different exhaust systems, including Jeremias models KL, FL, and GV
- Shorter lengths are available upon request
- Added models are available with more insulation for an improved silencing effect



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PRODUCT SPECIFICATIONS

ASL - 1M - Acoustical Silencing Length

		3	4	5	6	7	8	9	10
Nominal Pipe (inch)	ØA	3"	4"	5"	6"	7"	8"	9"	10"
Outer Diameter (inch)	ØB	7.5"	8.5"	9.5"	10.5"	11.5"	12.5"	13.5"	14.5"
Total Length (mm)	C	1000	1000	1000	1000	1000	1000	1000	1000
Total Weight Lbs. (kg)		29 (13)	31 (14)	35 (16)	40 (18)	42 (19)	46 (21)	51 (23)	53 (24)
Flow-Resistance Coeff.	ζ	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1

		11	12	13	14	15	16	17	18
Nominal Pipe (inch)	ØA	11"	12"	13"	14"	15"	16"	17"	18"
Outer Diameter (inch)	ØB	15.5"	16.5"	17.5"	18.5"	19.5"	20.5"	21.5"	22.5"
Total Length (mm)	C	1000	1000	1000	1000	1000	1000	1000	1000
Total Weight Lbs. (kg)		57 (26)	62 (28)	64 (29)	68 (31)	73 (33)	75 (34)	79 (36)	84 (38)
Flow-Resistance Coeff.	ζ	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

ATTENUATION VALUES ACC. DIN EN ISO 7235 / CALCULATION WITH FORMULA

Octave Attenuation Values - DWKL-ASL Length 1000mm

Nominal I.D.		3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Frequency in Hz		Insertion loss															
31.5	dB	2	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0
63	dB	5	4	3	3	2	2	2	2	1	1	1	1	1	1	1	1
125	dB	14	11	9	8	6	6	5	5	4	4	4	4	3	3	3	3
250	dB	27	21	17	15	13	12	11	10	9	8	8	7	7	6	6	6
500	dB	42	33	27	23	20	18	17	15	14	13	12	11	11	10	10	9
1000	dB	45	45	41	35	31	27	25	23	21	19	18	17	16	15	14	13
2000	dB	45	45	45	40	34	30	26	23	19	16	13	11	10	8	7	6
4000	dB	45	45	30	20	14	10	8	6	5	4	3	2	2	2	1	1

Values are valid at environmental temperature of 68°F (20°C) and without gas flow. Attenuation could be 25% lower at operation conditions.

Please note: For several elements listed, the maximum reachable attenuation is 45 dB in each octave range.

