

Technical Data Sheet

Exhaust Silencer

DWKL - 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 for gas fireplaces and solid fuel fires.

Principle of Operation

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



Classifications

Temperature class:	T600	≤ 600°C (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 stainless steel (ASTM 444)
- High-efficient 2.25" thick mineral wool insulation, protected with glass fiber fleece against the perforated liner

Connection / Installation Details

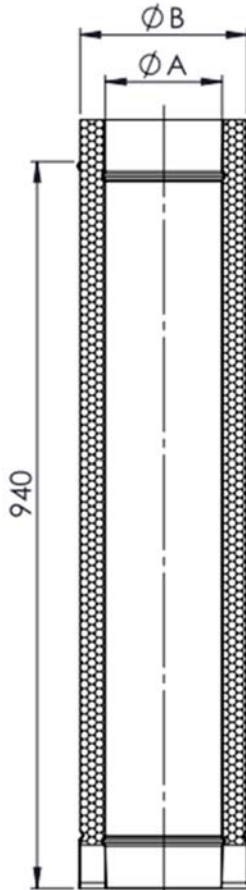
Connection System: DWKL¹

Positioning: horizontally or vertically

¹Standard System (System modifications are possible)

Features

- Modular silencer system with slim dimensions.
- Add lengths together in the field as needed.
- Adapter caps available for different exhaust systems or Jeremias DWKL and SWKL.
- Shorter lengths are available on request.
- Other models have more insulation for additional 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.	☒	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.	☒	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 1000 mm

Nominal I.D.		3	4	5	6	7	8	9	10	11	12	13	14	15
Frequency in Hz		Insertion loss												
31.5	dB	2	1	1	1	1	1	1	1	0	0	0	0	0
63	dB	5	4	3	3	2	2	2	2	2	1	1	1	1
125	dB	14	11	9	8	6	6	5	5	4	4	4	4	3
250	dB	27	21	17	15	13	12	11	10	9	8	8	7	7
500	dB	42	33	27	23	20	18	17	15	14	13	12	11	11
1000	dB	45	45	41	35	31	27	25	23	21	19	18	17	16
2000	dB	45	45	45	40	34	30	26	23	19	16	13	11	10
4000	dB	45	45	30	20	14	10	8	6	5	4	3	2	2
8000	dB													

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

Octave Attenuation Values - DWKL-ASL Length 1000 mm

Nominal I.D.		16	17	18
Frequency in Hz		Insertion loss		
31.5	dB	0	0	0
63	dB	1	1	1
125	dB	3	3	3
250	dB	6	6	6
500	dB	10	10	9
1000	dB	15	14	13
2000	dB	8	7	6
4000	dB	2	1	1
8000	dB			

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

Note: Maximum reachable attenuation with several elements of 45 dB in each octave range!