SOUND ATTENUATORS

SILAX & SILAX-P

SERIES SILAX AND SILAX-P cylindrical attenuators have been designed for the purpose of reducing airborne fan noise from the inlet and/or discharge of axial flow fans. They are also suitable for installation on the inlet of centrifugal fans or in sections of ducting remote from the fans, Series SILAX and SILAX-P cylindrical attenuators are available in sizes suitable for fitting directly to all DONKIN axial flow fans.

Series SILAX

Series SILAX attenuators comprise outer casings incorporating acoustic materials retained between the casings and internal wire mesh cylinders. Perforated steel internal cylinders have the same diameters as the nominal attenuator sizes, i.e. the size of the fan or duct to which the attenuator is connected.

Series SILAX attenuators fit directly to the fans or ducts, by bolting to threaded fasteners integral with the attenuator flanges. The positions of these fasteners correspond to the flange drilling of the equivalent size of DONKIN axial flow fans. Series SILAX attenuators cause a negligible resistance to the flow of air.

Series SILAX-P

Series SILAX-P attenuators contain centrally mounted, cylindrical acoustic pods. The outer sections of the attenuators are identical to the Series SILAX attenuators. Removal of the pod from the SILAX-P attenuator converts the attenuator to a SILAX unit.

The incorporation of the central pod considerably improves the acoustic performance of the attenuator, but also creates a resistance to the flow of air. It is normal practice to select SILAX-P attenuators for a pressure loss not exceeding 60Pa.

Sizes

Series SILAX and SILAX-P attenuators are available in a range of standard sizes matching all DONKIN axial flow fans from 315mm to 2000mm nominal diameter. The units are available in lengths of 1, 1.5 and 2.0 diameters. Non standard sizes will be manufactured to customer requirements.

CONSTRUCTION

- Casings are constructed from pre-galvanised steel sheet incorporating lock formed seams. Standard casings are designed to with stand pressures up to 2500Pa.

- Flanges. Sizes up to and including 1000mm in diameter, incorporate spun flanges, manufactured from pre-galvanised steel sheet. Threaded fasteners are projection welded to the inside of the flanges. These flanges are primed and enamel painted prior to assembly.

- Acoustic materials. The acoustic infill in a patented sound absorbing material consisting of glass fibre material selected for the combination of density. Resilience and porosity, that achieves optimum broadband acoustic performance. This patented sound absorbing material satisfies the requirements of BS 476:Part7, class I spread of flame. Standard material limits the attenuator to be used at a maximum temperature of 80°C.
- Inner Cylinder. The casing inner cylinder which retains the acoustic material is constructed from pre-galvanised perforated sheet thickness of 0.7 mm .
- Acoustic Pod (Series SILAX-P only)This pod comprises a cylinder constructed from pre-galvanised sheet with a thickness of 0.7 mm, to which are attached moulded fiberglass, or spun steel, fairings at both ends, designed to minimize the resistance to airflow. The pod is filled internally with patented acoustic material.

PERFORMANCE

- Acoustic Performance. Dynamic Attenuation values are derived from tests conducted in accordance with BS 848. The Dynamic Attenuation values constitute the numerical difference between the sound power level of the fan with the attenuator replaced by a straight duct of equivalent length to the attenuator.

- Aerodynamic Performance. The pressure loss of Series SILAX attenuators can be considered as negligible for the range of velocities normally encountered in ventilation and air-conditioning systems. The pressure loss versus volume for the range of SILAX-P attenuators is illustrated graphically in this brochure. The pressure loss values are derived from tests conducted in accordance with BS 848, and are equal to the difference in fan performance resulting from the attachment of the attenuator.

OPTIONAL FEATURES

Various optional extras are available including;

- Counter flanges.
- Mounting feet.
- Inlet cones & Inlet cone Screens or standard screens
- Special Paint Finishes.
- Heavy Welded Construction for high pressures or rigorous industrial or mining applications.
- High temperature construction i.e.above 80°C.
- Melinex / clean seal available for special / hospital applications.

All technical information contained herein is subject to change without prior notice.

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ACCUSTIC PERFORMANCE - Dynamic attenuation values in dB

FAN SIZE	SILAX (1.0 D) OCTAVE BAND MEAN FREQUENCY								SILAX (1.5 D) OCTAVE BAND MEAN FREQUENCY								SILAX (2 D) OCTAVE BAND MEAN FREQUENCY							
	63	125	250	500	1k	2k	4k	8k	63	125	250	500	1k	2k	4k	8k	63	125	250	500	1k	2k	4k	8k
315	2	4	6	10	14	10	7	8	3	6	9	14	18	14	10	10	4	7	11	17	21	17	13	12
400	2	4	6	10	14	10	7	8	3	6	9	14	18	14	10	10	4	7	11	17	21	17	13	12
500	2	4	6	10	14	10	7	8	3	6	9	14	18	14	10	10	4	7	11	17	21	17	13	12
560	2	4	6	10	14	10	7	8	3	6	9	14	18	14	10	10	4	7	11	17	21	17	13	12
630	3	4	8	14	14	9	8	7	5	6	11	18	18	12	11	8	6	8	13	22	22	14	13	9
710	3	4	8	14	14	9	8	7	5	6	11	18	18	12	11	8	6	8	13	22	22	14	13	9
800	3	4	8	14	14	9	8	7	5	6	11	18	18	12	11	8	6	8	13	22	22	14	13	9
900	3	4	9	14	12	8	7	7	5	6	11	18	15	10	9	9	6	8	13	21	18	12	11	10
1000	3	4	9	14	12	8	7	7	5	6	11	18	15	10	9	9	6	8	13	21	18	12	11	10
1120	3	4	9	14	12	8	7	7	5	6	11	18	15	10	9	9	6	8	13	21	18	12	11	10
1250	3	4	9	14	12	8	7	7	5	6	11	18	15	10	9	9	6	8	13	21	18	12	11	10
1400	4	5	10	14	11	7	6	6	5	6	11	17	15	10	9	8	5	7	12	19	18	13	11	9
1600	4	5	10	14	11	7	6	6	5	6	11	17	15	10	9	8	5	7	12	19	18	13	11	9
1800	4	5	10	14	11	7	6	6	-	-	-	-	-	-	-	-	5	7	12	19	18	13	11	9
2000	4	5	10	14	11	7	6	6	-	-	-	-	-	-	-	-	5	7	12	19	18	13	11	9

FAN SIZE	SILAX - P (1.0 D) OCTAVE BAND MEAN FREQUENCY								SILAX - P (1.5 D) OCTAVE BAND MEAN FREQUENCY								SILAX - P (2 D) OCTAVE BAND MEAN FREQUENCY							
	63	125	250	500	1k	2k	4k	8k	63	125	250	500	1k	2k	4k	8k	63	125	250	500	1k	2k	4k	8k
315	3	5	7	11	17	16	13	12	4	6	9	14	19	16	13	12	4	7	11	17	21	17	13	12
400	3	5	7	11	17	16	13	12	5	7	10	15	20	19	17	15	6	9	14	20	24	23	20	19
500	3	5	7	11	17	16	13	12	5	7	10	15	20	19	17	15	6	9	14	20	24	23	20	19
560	3	5	7	11	17	16	13	12	5	7	10	15	20	19	17	15	6	9	14	20	24	23	20	19
630	4	5	9	16	13	16	15	10	5	8	12	21	21	21	19	13	7	10	15	25	29	26	23	16
710	4	5	9	16	13	16	15	10	5	8	12	21	21	21	19	13	7	10	15	25	29	26	23	16
800	4	5	9	16	13	16	15	10	5	8	12	21	21	21	19	13	7	10	15	25	29	26	23	16
900	4	5	10	18	17	13	11	10	5	8	14	21	20	17	15	12	7	10	17	24	24	21	18	15
1000	4	5	10	18	17	13	11	10	5	8	14	21	20	17	15	12	7	10	17	24	24	21	18	15
1120	4	5	10	18	17	13	11	10	5	8	14	21	20	17	15	12	7	10	17	24	24	21	18	15
1250	4	5	10	18	17	13	11	10	5	8	14	21	20	17	15	12	7	10	17	24	24	21	18	15
1400	5	6	11	17	16	11	9	8	6	9	15	20	20	16	12	10	8	12	19	23	24	21	14	13
1600	5	6	11	17	16	11	9	8	6	9	15	20	20	16	12	10	8	12	19	23	24	21	14	13
1800	5	6	11	17	16	11	9	8	-	-	-	-	-	-	-	-	8	12	19	23	24	21	14	13
2000	5	6	11	17	16	11	9	8	-	-	-	-	-	-	-	-	8	12	19	23	24	21	14	13

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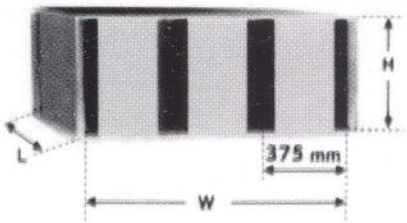
SOUND ATTENUATORS - PGL RECTANGULAR ATTENUATORS



LOW PRESSURE LOSS RECTANGULAR ATTENUATORS
ATTENUATOR PERFORMANCE - AIR WAY CODE E
SPLITTER CONSTRUCTION CODES E (EUROLON) AND D (PERFORATED SHEET)

Length codes **3** and **4** (850 mm and **1150** mm LONG)

STATIC INSERTION LOSS

SPLITTER	LENGTH	OCTAVE		BAND	MEAN		FREQUENCY (Hz)		
CODE	CODE	63	125	250	500	1K	2k	4k	8k
	3	5	7	13	20	26	20	13	9
E and D	4	6	8	17	27	31	25	15	10

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT	WIDTH (mm)					
(mm)	**375**	**750**	**1125**	**1500**	**1875**	**2250**
300	1.01	2.02	3.03			
400	1.38	2.75	4.13	5.50		
500	1.76	3.52	5.28	7.04	8.80	
600	2.17	4.33	6.50	8.66	10.9	13.0
700	2.53	5.06	7.58	10.1	12.7	15.2
800	2.89	5.78	8.66	11.6	14.5	17.4
900	3.25	6.50	9.75	13.0	16.3	19.5
1000	3.61	7.22	10.9	14.5	18.1	21.7
1100	3.97	7.94	11.9	15.9	19.9	23.9
1200	4.33	8.66	13.0	17.4	21.7	26.0
1300	4.69	9.39	14.1	18.8	23.5	28.2
1400	5.06	10.1	15.2	20.2	25.3	30.4
1500	5.42	10.9	16.3	21.7	27.1	32.5
1600		11.6	17.4	23.1	28.9	34.7
1700		12.3	18.4	24.6	30.7	36.8
1800		13.0	19.5	26.0	32.5	39.0
1900		13.8	20.6	27.5	34.3	41.2
2000		14.5	21.7	28.9	36.1	43.3
2100		15.2	22.8	30.4	37.9	45.5
2200		15.9	23.9	31.8	39.7	47.7
2300		16.6	24.9	33.2	41.5	49.8
2400		17.4	26.0	34.7	43.3	52.0*

Length codes **5** and **6** (1450 mm and **1750** mm LONG)

STATIC INSERTION LOSS

SPLITTER	LENGTH	OCTAVE		BAND	MEAN		FREQUENCY (Hz)		
CODE	CODE	63	125	250	500	1K	2k	4k	8k
	5	7	10	20	34	37	29	18	12
E and D	6	7	12	24	39	40	34	22	13

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT	WIDTH (mm)					
(mm)	**375**	**750**	**1125**	**1500**	**1875**	**2250**
300	0.92	1.84	2.75			
400	1.26	2.51	3.76	5.01		
500	1.61	3.22	4.82	6.43	8.03	
600	1.99	3.97	5.95	7.93	9.91	11.9
700	2.32	4.63	6.94	9.25	11.6	13.9
800	2.65	5.29	7.93	10.6	13.2	15.9
900	2.98	5.95	8.92	11.9	14.9	17.9
1000	3.31	6.61	9.91	13.2	16.6	19.9
1100	3.64	7.27	10.9	14.6	18.2	21.8
1200	3.97	7.93	11.9	15.9	19.9	23.8
1300	4.30	8.59	12.9	17.2	21.5	25.8
1400	4.63	9.25	13.9	18.5	23.2	27.8
1500	4.96	9.91	14.9	19.9	24.8	29.8
1600		10.6	15.9	21.2	26.5	31.7*
1700		11.3	16.9	22.5	28.1	33.7*
1800		11.9	17.9	23.8	29.8	35.7*
1900		12.6	18.9	25.1	31.4*	
2000		13.2	19.9	26.5	33.1	
2100		13.9	20.8	27.8	34.7*	
2200		14.6	21.8	29.1	36.4*	
2300		15.2	22.8	30.4		
2400		15.9	23.8	31.7*		*SEE NOTE7

Length codes **7** and **8** (2050 mm and **2350** mm LONG)

STATIC INSERTION LOSS

SPLITTER	LENGTH	OCTAVE		BAND	MEAN		FREQUENCY (Hz)		
CODE	CODE	63	125	250	500	1K	2k	4k	8k
	7	7	15	28	44	45	38	25	14
E and D	8	8	17	32	47	50	42	28	15

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT	WIDTH (mm)					
(mm)	**375**	**750**	**1125**	**1500**	**1875**	**2250**
300	0.84	1.67	2.51			
400	1.15	2.30	3.45	4.59		
500	1.49	2.97	4.45	5.94	7.42	
600	1.85	3.69	5.54	7.38	9.23	11.1
700	2.16	4.31	6.46	8.61	10.8	13.0
800	2.46	4.92	7.38	9.84	12.3	14.8
900	2.77	5.54	8.30	11.1	13.9	16.6
1000	3.08	6.15	9.23	12.3	15.4	18.5
1100	3.3.9	6.77	10.2	13.6	16.9	20.3
1200	3.69	7.38	11.1	14.8	18.5	22.2*
1300	4.00	8.00	12.0	16.0	20.0	24.0*
1400	4.31	8.61	13.0	17.3	21.6*	
1500	4.62	9.23	13.9	18.5	23.1*	
1600		9.84	14.8	19.7		
1700		10.5	15.7	20.9		
1800		11.1	16.6	22.2*		
1900		11.7	17.6	23.4*		
2000		12.3	18.5			
2100		13.0	19.4			
2200		13.6	20.3			
2300		14.2	21.3*			
2400		14.8	22.2*			*SEE NOTE 7

NOTES:

1. Tabulated volume flow rates will result in the following pressure losses for ducted attenuators, at air density of 1.2 kg/m3

Splitter construction code	Pressure loss (Pa)
E	50
D	60

2. Pressure loss varies in proportion to density.
3. Pressure loss varies in proportion to the square of the volume flow rate.
4. Maximum allowable volume flow rate is 1.25 • the values given in the tables, pressure loss varying in proportion to the square of the factor.
5. Approximate regenerated noise levels.

Volume Flow Rate	NC	A-Scale Level
Over 0.63 to 0.8 • Tabulated Values	30	35
Over 0.8 to 1.0 • Tabulated Values	40	45
Over 1.0 to 1.25 • Tabulated Values	45	50

6. Tabulated values apply to attenuators ducted both sides. For plenum entry and/or discharge the pressure loss is to be multiplied by the appropriate factor below.

SPLITTER CONSTRUCTION CODE E

Length Code	Plenum to Duct	Duct to Plenum	Plenum to Plenum
3 and 4	1.42	4.83	5.23
5 and 6	1.34	4.21	4.55
7 and 8	1.30	3.78	4.07

SPLITTER CONSTRUCTION CODE D

Length Code	Plenum to Duct	Duct to Plenum	Plenum to Plenum
3 and 4	1.35	4.19	4.53
5 and 6	1.28	3.68	3.96
7 and 8	1.25	3.32	3.56

7. Selection marked • are avilable only with the shorter attenuator

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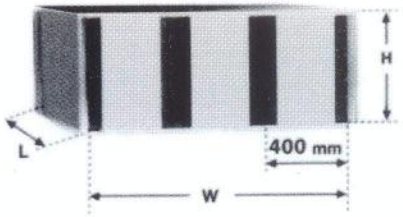
PGL RECTANGULAR ATTENUATORS

SOUND ATTENUATORS



LOW PRESSURE LOSS RECTANGULAR ATTENUATORS
ATTENUATOR PERFORMANCE - AIR WAY CODE F
LITTER CONSTRUCTION CODES E (EUROLON) AND D (PERFORATED SHEET)

Length codes **3** and **4** (850 mm and **1150** mm LONG)

SPLITTER CODE	LENGTH CODE	STATIC INSERTION LOSS OCTAVE 63	125	BAND 250	MEAN 500	1K	FREQUENCY (Hz) 2k	4k	8k
	3	5	6	12	18	21	16	11	7
E and D	4	5	8	16	24	28	21	12	8

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT (mm)	WIDTH (mm) 400	800	1200	1600	2000
300	1.20	2.41	3.61		
400	1.65	3.29	4.93	6.57	
500	2.11	4.21	6.32	8.43	10.6
600	2.60	5.20	7.79	10.4	13.0
700	3.03	6.06	9.09	12.2	15.2
800	3.47	6.93	10.4	13.9	17.3
900	3.90	7.79	11.7	15.6	19.5
1000	4.33	8.66	13.0	17.3	21.7
1100	4.76	9.52	14.3	19.1	23.8
1200	5.20	10.4	15.6	20.8	26.0
1300	5.63	11.3	16.9	22.5	28.2
1400	6.06	12.2	18.2	24.3	30.3
1500	6.50	13.0	19.5	26.0	32.5
1600	6.93	13.9	20.8	27.7	34.7
1700		14.8	22.1	29.5	36.8
1800		15.6	23.4	31.2	39.0
1900		16.5	24.7	32.9	41.2
2000		17.3	26.0	34.7	43.3
2100		18.2	27.3	36.4	45.5
2200		19.1	28.6	38.1	47.6
2300		19.9	29.9	39.9	49.8
2400		20.8	31.2	41.6	52.0*

Length codes **5** and **6** (1450 mm and **1750** mm LONG)

SPLITTER CODE	LENGTH CODE	STATIC INSERTION LOSS OCTAVE 63	125	BAND 250	MEAN 500	1K	FREQUENCY (Hz) 2k	4k	8k
	5	6	10	20	30	35	25	14	9
E and D	6	6	12	23	35	39	28	15	10

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT (mm)	WIDTH (mm) 400	800	1200	1600	2000
300	1.11	2.22	3.32		
400	1.52	3.04	4.56	6.07	
500	1.96	3.91	5.86	7.82	9.77
600	2.42	4.84	7.26	9.68	12.1
700	2.83	5.65	8.47	11.3	14.2
800	3.23	6.46	9.68	12.9	16.2
900	3.63	7.26	10.9	14.6	18.2
1000	4.04	8.07	12.1	16.2	20.2
1100	4.44	8.88	13.3	17.8	22.2
1200	4.84	9.68	14.6	19.4	24.2
1300	5.25	10.5	15.8	21.0	26.3
1400	5.65	11.3	17.0	22.6	28.3
1500	6.05	12.1	18.2	24.2	30.3
1600	6.46	12.9	19.4	25.8	32.3
1700		13.8	20.6	27.5	34.3
1800		14.6	21.8	29.1	36.3*
1900		15.4	23.0	30.7	38.3*
2000		16.2	24.2	32.3	40.4*
2100		17.0	25.4	33.9	
2200		17.8	26.7	35.5*	
2300		18.6	27.9	37.1*	
2400		19.4	29.1	38.8*	

*SEE NOTE7

Length codes **7** and **8** (**2050**mm and **2350** mm LONG)

SPLITTER CODE	LENGTH CODE	STATIC INSERTION LOSS OCTAVE 63	125	BAND 250	MEAN 500	1K	FREQUENCY (Hz) 2k	4k	8k
	7	7	14	27	40	45	32	17	10
E and D	8	8	16	30	45	50	36	18	11

TABLE OF VOLUME FLOW RATES (m3/s)

HEIGHT (mm)	WIDTH (mm) 400	800	1200	1600	2000
300	1.02	2.04	3.06		
400	1.41	2.81	4.22	5.63	
500	1.83	3.66	5.48	7.31	9.13
600	2.29	4.57	6.86	9.14	11.5
700	2.67	5.33	8.00	10.7	13.4
800	3.05	6.10	9.14	12.2	15.3
900	3.43	6.86	10.3	13.7	17.2
1000	3.81	7.62	11.5	15.3	19.1
1100	4.19	8.38	12.6	16.8	21.0
1200	4.57	9.14	13.7	18.3	22.9
1300	4.95	9.90	14.9	19.8	24.8*
1400	5.33	10.7	16.0	21.4	26.7*
1500	5.71	11.5	17.2	22.9	
1600	6.10	12.2	18.3	24.4*	
1700		13.0	19.5	25.9*	
1800		13.7	20.6	27.4	
1900		14.5	21.7		
2000		15.3	22.9		
2100		16.0	24.0		
2200		16.8	25.2*		
2300		17.6	26.3*		
2400		18.3	27.4*		

*SEE NOTE 7

NOTES:

1. Tabulated volume flow rates will result in the following pressure losses for ducted attenuators, at air density of 1.2 kg/m3

Splitter construction code	Pressure loss (Pa)
E	50
D	60

2. Pressure loss varies in proportion to density.
3. Pressure loss varies in proportion to the square of the volume flow rate.
4. Maximum allowable volume flow rate is 1.25 • the values given in the tables, pressure loss varying in proportion to the square of the factor.
5. Approximate regenerated noise levels.

Volume Flow Rate	NC	A-Scale Level
Over 0.63 to 0.8 • Tabulated Values	35	40
Over 0.8 to 1.0 • Tabulated Values	40	45
Over 1.0 to 1.25 • Tabulated Values	45	50

6. Tabulated values apply to attenuators ducted both sides. For plenum entry and/or discharge the pressure loss is to be multiplied by the appropriate factor below.

SPLITTER CONSTRUCTION CODE E

Length Code	Plenum to Duct	Duct to Plenum	Plenum to Plenum
3 and 4	1.48	5.33	5.83
5 and 6	1.41	4.76	5.20
7 and 8	1.37	4.35	4.74

SPLITTER CONSTRUCTION CODE D

Length Code	Plenum to Duct	Duct to Plenum	Plenum to Plenum
3 and 4	1.40	4.61	5.03
5 and 6	1.34	4.13	4.50
7 and 8	1.31	3.79	4.12

7. Selection marked • are avilable only with the shorter attenuator

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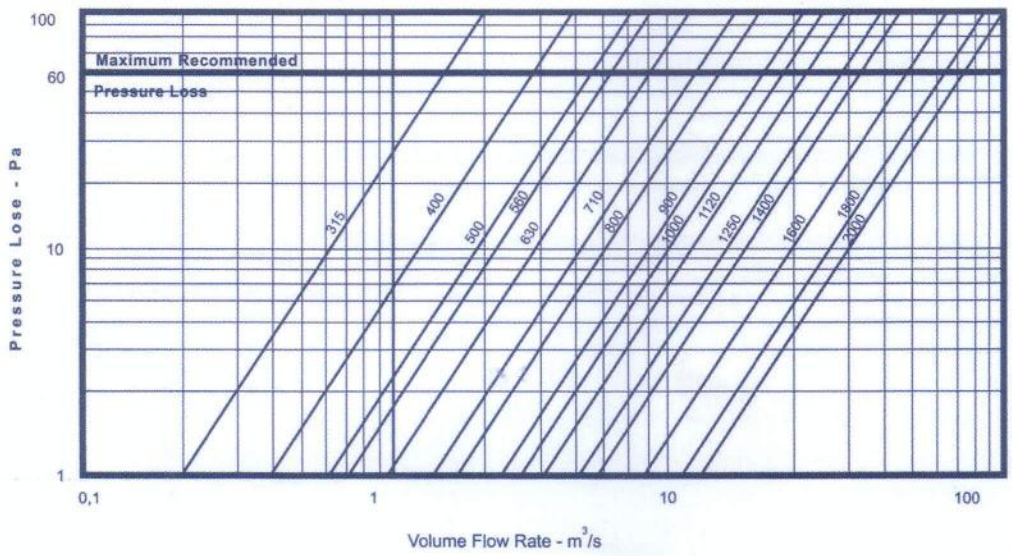
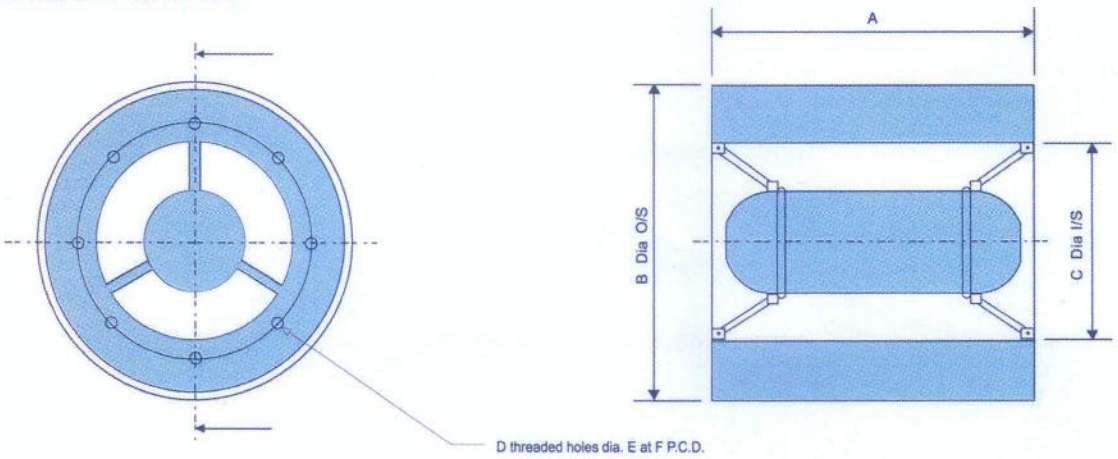
SOUND ATTENUATORS

SILAX & SILAX-P

PRESSURE LOSS CHART - SILAX - P



DIMENSIONS & MASSES



FAN Dia. mm	A 1D mm	A 1.5D mm	A 2D mm	B mm	C mm	D	E mm	F mm	Silax 1D kg	Silax 1.5D kg	Silax 2D kg	Silax-P 1D kg	Silax-P 1.5D kg	Silax-P 2D kg
315	315	475	630	467	315	8	8	355	10	13	20	13	19	26
400	400	600	800	552	400	8	10	450	14	20	28	19	27	38
500	500	750	1000	692	500	12	10	560	23	31	46	31	43	62
560	560	840	1120	752	560	12	10	620	27	38	54	38	54	76
630	630	945	1260	822	630	12	10	690	32	36	64	44	54	88
710	710	1065	1420	902	710	16	10	770	44	62	88	58	84	116
800	800	1200	1600	992	800	16	10	860	54	76	108	73	107	146
900	900	1350	1800	1092	900	16	12	970	68	97	136	91	119	182
1000	1000	1500	2000	1192	1000	16	12	1070	83	119	166	114	167	228
1120	1120	1680	2240	1312	1120	20	12	1190	140	189	280	183	255	366
1250	1250	1875	2500	1442	1250	20	12	1320	162	226	324	211	301	422
1400	1400	2100	2800	1593	1400	20	12	1470	222	313	444	290	418	580
1600	1600	2400	3200	1843	1600	24	16	1680	322	446	644	401	579	802
1800	1800	-	-	2043	1800	24	16	1880	390	-	-	481	-	-
2000	2000	-	-	2243	2000	24	16	2080	470	-	-	598	-	-

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PGL RECTANGULAR SOUND ATTENUATORS

BETA DONKIN RECTANGULAR ATTENUATORS

PGL TYPE

CONSTRUCTION

- CASING : LOCK FORMED, PRE-GALVANISED SHEET. CONSTRUCTED TO THE RELEVANT HVAC DUCT WORK SPECIFICATION. AS A STANDARD, 0.9mm THICKNESS IS USED. ALL FIXINGS ARE BY RIVETS.

- INSULATION : 2 INCH INSULATION KIMMCO TYPE OF 48 KG/M3 DENSITY USED

- SPLITTERS : GALVANISED SHEET. BENDED TO FORM CHANNEL SECTIONS, FIXED WITH RIVETS. PERFORATED SHEET OF 0.7MM THICKNESS. IS USED TO COVER THE SPLITTRS FACE

- FLANGES : ROLL FORMED DUCTO MATE FLANGES ARE USED.

ORDERING SYSTEM

PGL - (AWC) - (SCC) - WXHXL

PGL : RECTANGULAR SOUND ATTENUATOR SERIES.

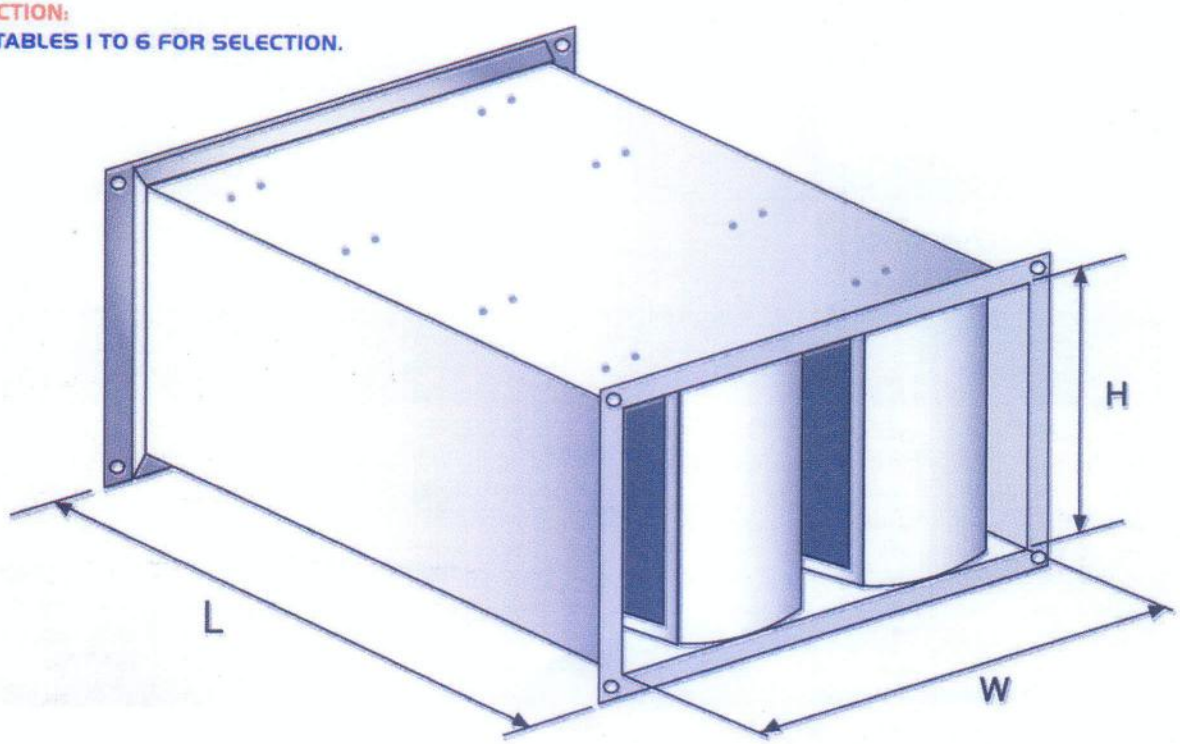
(AWC) : AIR WAY CODE : A,B,C,D,E,F

(SCC) : SPLITTER CONSTRUCTION CODE:
E (EUROLON) - OPTIONAL
D (PERFORATED SHEET) - STANDARD

W,H,L : WIDTH, HEIGHT & LENGTH OF SOUND ATTENUATON IN mm.

SELECTION:

USE TABLES I TO 6 FOR SELECTION.



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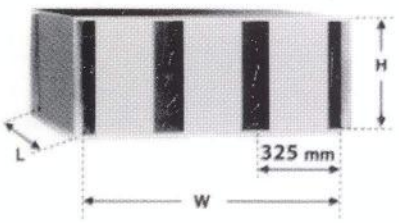
SOUND ATTENUATORS - PGL RECTANGULAR ATTENUATORS



LOW PRESSURE LOSS RECTANGULAR ATTENUATORS
ATTENUATOR PERFORMANCE - AIR WAY CODE C
SPLITTER CONSTRUCTION CODES E (EUROLON) AND D (PERFORATED SHEET)

Length codes **3** and **4** (850 mm and **1150** mm LONG)

STATIC INSERTION LOSS

SPLITTER CODE	LENGTH CODE	OCTAVE 63	125	BAND 250	MEAN 500	1K	FREQUENCY (Hz) 2k	4k	8k
	3	6	9	15	26	32	27	18	15
E and D	4	7	10	19	35	37	32	24	16

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT (mm) \ WIDTH (mm)	325	650	975	1300	1625	1950	2275
300	0.67	1.33	2.00				
400	0.91	1.81	2.72	3.62			
500	1.16	2.31	3.46	4.61	5.77	6.92	
600	1.42	2.83	4.24	5.65	7.07	8.48	9.89
700	1.65	3.30	4.95	6.59	8.24	9.89	11.6
800	1.89	3.77	5.65	7.54	9.42	11.3	13.2
900	2.12	4.24	6.36	8.48	10.6	12.8	14.9
1000	2.36	4.71	7.07	9.42	11.8	14.2	16.5
1100	2.59	5.18	7.77	10.4	13.0	15.6	18.2
1200	2.83	5.65	8.48	11.3	14.2	17.0	19.8
1300	3.06	6.12	9.18	12.3	15.3	18.4	21.5
1400		6.59	9.89	13.2	16.5	19.8	23.1
1500		7.07	10.6	14.2	17.7	21.2	24.8
1600		7.54	11.3	15.1	18.9	22.6	26.4
1700		8.01	12.0	16.0	20.0	24.0	28.1
1800		8.48	12.8	17.0	21.2	25.5	29.7
1900		8.95	13.5	17.9	22.4	26.9	31.3
2000		9.42	14.2	18.9	23.6	28.3	33.0
2100		9.89	14.9	19.8	24.8	29.7	34.6
2200		10.4	15.6	20.8	25.9	31.1	36.3
2300		10.9	16.3	21.7	27.1	32.5	37.9*
2400		11.3	17.0	22.6	28.3	33.9	39.6*

Length codes **5** and **6** (**1450** mm and **1750**mm LONG)

STATIC INSERTION LOSS

SPLITTER CODE	LENGTH CODE	OCTAVE 63	125	BAND 250	MEAN 500	1K	FREQUENCY (Hz) 2k	4k	8k
	5	7	12	23	42	41	37	28	19
E and D	6	8	15	28	46	43	41	33	21

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT (mm) \ WIDTH (mm)	325	650	975	1300	1625	1950	2275
300	0.60	1.20	1.79				
400	0.82	1.63	2.44	3.25			
500	1.04	2.08	3.11	4.15	5.18	6.22	
600	1.28	2.55	3.82	5.09	6.36	7.63	8.90
700	1.49	2.97	4.45	5.94	7.42	8.90	10.4
800	1.70	3.39	5.09	6.78	8.48	10.2	11.9
900	1.91	3.82	5.73	7.63	9.54	11.5	13.4
1000	1.12	4.24	6.36	8.48	10.6	12.8	14.9
1100	2.33	4.67	7.00	9.33	11.7	14.0	16.4
1200	2.55	5.09	7.63	10.2	12.8	15.3	17.8
1300	2.76	5.51	8.27	11.1	13.8	10.6	19.3
1400		5.94	8.90	11.9	14.9	17.8	20.8
1500		6.36	9.54	12.8	15.9	19.1	22.3
1600		6.78	10.2	13.6	17.0	20.4	23.8*
1700		7.21	10.8	14.4	18.1	21.7	25.3*
1800		7.63	11.5	15.3	19.1	22.9*	26.7*
1900		8.06	12.1	16.1	20.2	24.2*	
2000		8.48	12.8	17.0	21.2	25.5	
2100		8.90	13.4	17.8	22.3	26.7*	
2200		9.33	14.0	18.7	23.3		
2300		9.75	14.7	19.5	24.4*		
2400		10.2	15.3	20.4	25.5*		

* SEE NOTE 7

Length codes **7** and **8** (**2050** mm and **2350**mm LONG)

STATIC INSERTION LOSS

SPLITTER CODE	LENGTH CODE	OCTAVE 63	125	BAND 250	MEAN 500	1K	FREQUENCY (Hz) 2k	4k	8k
	7	9	17	32	50	47	44	38	24
E and D	8	10	20	37	50	50	47	44	28

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT (mm) \ WIDTH (mm)	325	650	975	1300	1625	1950	2275
300	0.54	1.08	1.62				
400	0.54	1.48	2.2	2.95			
500	0.95	1.89	2.84	3.78	4.73	5.67	
600	1.17	2.34	3.50	4.67	5.83	7.00	8.16
700	1.36	2.72	4.08	5.44	6.80	8.16	9.52
800	1.56	3.11	4.67	6.22	7.77	9.33	10.9
900	1.75	3.50	5.25	7.00	8.75	10.5	12.3
1000	1.95	3.89	5.83	7.77	9.72	11.7	13.6
1100	2.14	4.28	6.41	8.55	10.7	12.9	15.0
1200	2.34	4.67	7.00	9.33	11.7	14.0	16.4*
1300	2.53	5.06	7.58	10.1	12.7	15.2	
1400		5.44	8.16	10.9	13.6	16.4*	
1500		5.83	8.75	11.7	14.6	17.5*	
1600		6.22	9.33	12.5	15.6*		
1700		6.61	9.91	13.3	16.6*		
1800		7.00	10.5	14.0	17.5*		
1900		7.39	11.1	14.8			
2000		7.77	11.7	15.6*			
2100		8.16	12.3	16.4*			
2200		8.55	12.9	17.1*			
2300		8.94	13.4				
2400		9.33	14.0				

*SEE NOTE 7

NOTES:

1. Tabulated volume flow rates will result in the following pressure losses for ducted attenuators, at air density of 1.2 kg/m3

Splitter construction code	Pressure loss (Pa)
E	50
D	60

2. Pressure loss varies in proportion to density.
3. Pressure loss varies in proportion to the square of the volume flow rate.
4. Maximum allowable volume flow rate is 1.25 • the values given in the tables, pressure loss varying in proportion to the square of the factor.
5. Approximate regenerated noise levels.

Volume Flow Rate	NC	A-Scale Level
Over 0.63 to 0.8 • Tabulated Values	30	35
Over 0.8 to 1.0 • Tabulated Values	35	40
Over 1.0 to 1.25 • Tabulated Values	40	45

6. Tabulated values apply to attenuators ducted both sides. For plenum entry and/or discharge the pressure loss is to be multiplied by the appropriate factor below.

SPLITTER CONSTRUCTION CODE E

Length Code	Plenum to Duct	Duct to Plenum	Plenum to Plenum
3 and 4	1.30	3.98	4.28
5 and 6	1.24	3.41	3.66
7 and 8	1.20	3.03	3.23

SPLITTER CONSTRUCTION CODE D

Length Code	Plenum to Duct	Duct to Plenum	Plenum to Plenum
3 and 4	1.25	3.48	3.73
5 and 6	1.20	3.01	3.22
7 and 8	1.17	2.69	2.86

7. Selection marked • are avilable only with the shorter attenuator

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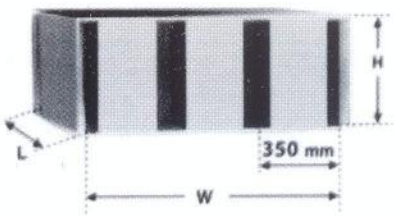
PGL RECTANGULAR ATTENUATORS

SOUND ATTENUATORS



LOW PRESSURE LOSS RECTANGULAR ATTENUATORS
ATTENUATOR PERFORMANCE - AIR WAY CODE D

SPLITTER CONSTRUCTION CODES E (EUROLON) AND D (PERFORATED SHEET)

Length codes **3** and **4** (850 mm and **1150** mm LONG)

STATIC INSERTION LOSS

SPLITTER CODE	LENGTH CODE	OCTAVE 63	125	BAND 250	MEAN 500	1K	FREQUENCY (Hz) 2k	4k	8k
	3	6	7	14	22	30	23	15	12
E and D	4	6	9	18	31	34	28	19	13

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT (mm)	WIDTH (mm) 350	700	1050	1400	1750	2100
300	0.83	1.66	2.49			
400	1.13	2.26	3.39	4.52		
500	1.45	2.89	4.33	5.78	7.22	
600	1.78	3.55	5.32	7.09	8.86	10.7
700	2.07	4.14	6.21	8.27	10.4	12.4
800	2.37	4.73	7.09	9.45	11.9	14.2
900	2.66	5.32	7.98	10.7	13.3	16.0
1000	2.96	5.91	8.86	11.9	14.8	17.8
1100	3.25	6.50	9.75	13.0	16.3	19.5
1200	3.55	7.09	10.7	14.2	17.8	21.3
1300	3.84	7.68	11.6	15.4	19.2	23.1
1400	4.14	8.27	12.4	16.6	20.7	24.8
1500		8.86	13.3	17.8	22.2	26.6
1600		9.45	14.2	18.9	23.7	28.4
1700		10.1	15.1	20.1	25.1	30.2
1800		10.7	16.0	21.3	26.6	31.9
1900		11.3	16.9	22.5	28.1	33.7
2000		11.9	17.8	23.7	29.6	35.5
2100		12.4	18.6	24.8	31.0	37.2
2200		13.0	19.5	26.0	32.5	39.0
2300		13.6	20.4	27.2	34.0	40.8
2400		14.2	21.3	28.4	35.5	42.6

Length codes **5** and **6** (1450 mm and **1750** mm LONG)

STATIC INSERTION LOSS

SPLITTER CODE	LENGTH CODE	OCTAVE 63	125	BAND 250	MEAN 500	1K	FREQUENCY (Hz) 2k	4k	8k
	5	7	11	21	39	39	34	24	15
E and D	6	7	14	25	44	43	38	29	17

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT (mm)	WIDTH (mm) 350	700	1050	1400	1750	2100
300	0.74	1.47	2.21			
400	1.01	2.02	3.03	4.04		
500	1.30	2.60	3.89	5.19	6.49	
600	1.61	3.21	4.82	6.42	8.03	9.63
700	1.88	3.75	5.62	7.49	9.37	11.3
800	2.14	4.28	6.42	8.56	10.7	12.9
900	2.41	4.82	7.23	9.63	12.1	14.5
1000	2.68	5.35	8.03	10.7	13.4	16.1
1100	2.95	5.89	8.83	11.8	14.8	17.7
1200	3.21	6.42	9.63	12.9	16.1	19.3
1300	3.48	6.96	10.5	14.0	17.4	20.9
1400	3.75	7.49	11.3	15.0	18.8	22.5
1500		8.03	12.1	16.1	20.1	24.1
1600		8.56	12.9	17.2	21.4	25.7
1700		9.10	13.7	18.2	22.8	27.3*
1800		9.63	14.5	19.3	24.1	28.9*
1900		10.2	15.3	20.4	25.5	30.5*
2000		10.7	16.1	21.4	26.8*	
2100		11.3	16.9	22.5	28.1*	
2200		11.8	17.7	23.6	29.5*	
2300		12.5	18.5	24.7	30.8*	
2400		12.9	19.3	25.7		*SEE NOTE 7

Length codes **7** and **8** (2050 mm and **2350** mm LONG)

STATIC INSERTION LOSS

SPLITTER CODE	LENGTH CODE	OCTAVE 63	125	BAND 250	MEAN 500	1K	FREQUENCY (Hz) 2k	4k	8k
	7	8	16	30	48	46	42	34	20
E and D	8	9	19	34	50	48	46	39	22

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT (mm)	WIDTH (mm) 350	700	1050	1400	1750	2100
300	0.68	1.35	2.03			
400	0.93	1.86	2.78	3.71		
500	1.20	2.39	3.58	4.77	5.96	
600	1.48	2.96	4.43	5.91	7.38	8.86
700	1.73	3.45	5.17	6.89	8.61	10.4
800	1.97	3.94	5.91	7.87	9.84	11.8
900	2.22	4.43	6.64	8.86	11.1	13.3
1000	2.46	4.92	7.38	9.84	12.3	14.8
1100	2.71	5.41	8.12	10.9	13.6	16.3
1200	2.96	5.91	8.86	11.8	14.8	17.7
1300	3.20	6.40	9.60	12.8	16.0	19.2*
1400	3.45	6.89	10.4	13.8	17.3	
1500		7.38	11.1	14.8	18.5*	
1600		7.87	11.8	15.8	19.7*	
1700		8.37	12.6	16.8		
1800		8.86	13.3	17.7		
1900		9.35	14.1	28.7*		
2000		9.84	14.8	19.7*		
2100		10.4	15.5			
2200		10.9	16.3			
2300		11.4	17.0			
2400		11.8	17.7			*SEE NOTE 7

NOTES:

1. Tabulated volume flow rates will result in the following pressure losses for ducted attenuators, at air density of 1.2 kg/m3

Splitter construction code	Pressure loss (Pa)
E	50
D	60

2. Pressure loss varies in proportion to density.
3. Pressure loss varies in proportion to the square of the volume flow rate.
4. Maximum allowable volume flow rate is 1.25 • the values given in the tables, pressure loss varying in proportion to the square of the factor.
5. Approximate regenerated noise levels.

Volume Flow Rate	NC	A-Scale Level
Over 0.63 to 0.8 • Tabulated Values	30	35
Over 0.8 to 1.0 • Tabulated Values	35	40
Over 1.0 to 1.25 • Tabulated Values	40	45

6. Tabulated values applu to attenuators ducted both sides. For plenum entry and/or discharge the pressure loss is to be multiplied by the appropriate factor below

SPLITTER CONSTRUCTION CODE E

Length Code	Plenum to Duct	Duct to Plenum	Plenum to Plenum
3 and 4	1.35	4.40	4.72
5 and 6	1.29	3.79	4.05
7 and 8	1.24	3.35	3.58

SPLITTER CONSTRUCTION CODE D

Length Code	Plenum to Duct	Duct to Plenum	Plenum to Plenum
3 and 4	1.29	3.83	4.10
5 and 6	1.24	3.33	3.54
7 and 8	1.20	2.96	3.15

7. Selection marked • are avilable only with the shorter attenuator

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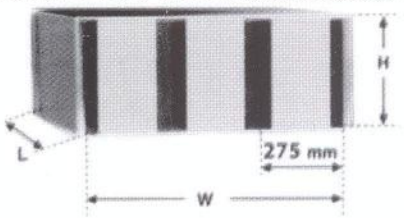
SOUND ATTENUATORS



PGL RECTANGULAR ATTENUATORS

LOW PRESSURE LOSS RECTANGULAR ATTENUATORS
ATTENUATOR PERFORMANCE - AIR WAY CODE A
SPLITTER CONSTRUCTION CODES E (EUROLON) AND D (PERFORATED SHEET)

Length codes **3** and **4** (850 mm and **1150** mm LONG)

STATIC INSERTION LOSS

SPLITTER	LENGTH	OCTAVE		BAND	MEAN	FREQUENCY (Hz)		
CODE	CODE	63	125	250	500 1K	2k	4k	8k
	3	7	11	19	33 38	35	27	23
E and D	4	8	14	24	41 41	39	33	27

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT	WIDTH (mm)							
(mm)	**275**	**550**	**825**	**1100**	**1375**	**1650**	**1925**	**2200**
300	0.38	0.76	1.14	1.52				
400	0.51	1.02	1.53	2.04	2.55			
500	0.65	1.29	1.94	2.58	3.23	3.87	4.52	
600	0.79	1.57	2.35	3.14	3.92	4.70	5.49	6.27
700	0.92	1.83	2.75	3.66	4.57	5.49	6.40	7.32
800	1.05	2.09	3.14	4.18	5.23	6.27	7.32	8.36
900	1.18	2.35	3.53	4.70	5.88	7.05	8.23	9.40
1000	1.31	2.62	3.92	5.23	6.53	7.84	9.14	10.5
1100	1.44	2.88	4.31	5.75	7.18	8.62	10.1	11.5
1200		3.14	4.70	6.27	7.84	9.40	11.0	12.6
1300		3.40	5.10	6.79	8.49	10.2	11.9	13.6
1400		3.66	5.49	7.32	9.14	11.0	12.8	14.7
1500		3.92	5.88	7.84	9.80	11.8	13.7	15.7
1600		4.18	6.27	8.36	10.5	12.6	14.7	16.8
1700		4.44	6.66	8.88	11.1	13.4	15.6	17.8
1800		4.70	7.05	9.40	11.8	14.1	16.5	18.8
1900		4.97	7.45	9.93	12.4	14.9	17.4	19.9
2000		5.23	7.84	10.5	13.1	15.7	18.3	20.9
2100		5.49	8.23	11.0	13.7	16.5	19.2	22.0
2200		5.75	8.62	11.5	14.4	17.3	20.1	23.0
2300			9.01	12.1	15.1	18.1	21.1	24.1
2400			9.40	12.6	15.7	18.8	22.0	25.1*

Length codes **5** and **6** (**1450** mm and **1750**mm LONG)

STATIC INSERTION LOSS

SPLITTER	LENGTH	OCTAVE		BAND	MEAN	FREQUENCY (Hz)		
CODE	CODE	63	125	250	500 1K	2k	4k	8k
	5	9	17	29	46 44	42	37	31
E and D	6	10	20	35	50 46	44	39	35

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT	WIDTH (mm)							
(mm)	**275**	**550**	**825**	**1100**	**1375**	**1650**	**1925**	**2200**
300	0.34	0.68	1.01	1.35				
400	0.46	0.91	1.37	1.82	2.28			
500	0.58	1.16	1.73	2.31	2.89	3.47	4.04	
600	0.71	1.41	2.11	2.81	3.52	4.22	4.92	5.62
700	0.82	1.64	2.46	3.28	4.10	4.92	5.74	6.56
800	0.94	1.88	2.81	3.75	4.69	5.62	6.56	7.50
900	1.06	2.11	3.16	4.22	5.27	6.33	7.38	8.43
1000	1.17	2.35	3.52	4.69	5.86	7.03	8.20	9.37
1100	1.29	2.58	3.87	5.16	6.44	7.73	9.02	10.3
1200		2.81	4.22	5.62	7.03	8.43	9.84	11.3
1300		3.05	4.57	6.09	7.61	9.14	10.7	12.2
1400		3.28	4.92	6.56	8.20	9.84	11.5	13.2
1500		3.52	5.27	7.03	8.78	10.6	12.3	14.1
1600		3.75	5.62	7.50	9.37	11.3	13.2	15.0*
1700		3.98	5.97	7.96	9.96	12.0	14.0	16.0*
1800		4.22	6.33	8.43	10.6	12.7	14.8*	16.9*
1900		4.45	6.68	8.90	11.2	13.4	15.6*	
2000		4.69	7.03	9.37	11.7	14.1	16.4*	
2100		4.92	7.38	9.84	12.3	14.8*	17.2*	
2200		5.16	7.73	10.3	12.9	15.5*		
2300			8.08	10.8	13.5	16.2*		
2400			8.43	11.3	14.1	16.9*		* SEE NOTE 7

Length codes **7** and **8** (**2050** mm and **2350**mm LONG)

STATIC INSERTION LOSS

SPLITTER	LENGTH	OCTAVE		BAND	MEAN	FREQUENCY (Hz)		
CODE	CODE	63	125	250	500 1K	2k	4k	8k
	7	12	23	40	50 50	45	43	41
E and D	8	13	26	44	50 50	46	46	43

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT	WIDTH (mm)							
(mm)	**275**	**550**	**825**	**1100**	**1375**	**1650**	**1925**	**2200**
300	0.31	0.62	0.92	1.23				
400	0.42	0.83	1.25	1.66	2.08			
500	0.53	1.06	1.58	2.11	2.63	3.16	3.69	
600	0.65	1.29	1.93	2.57	3.21	3.85	4.49	5.14
700	0.75	1.50	2.25	3.00	3.75	4.49	5.24	5.99
800	0.86	1.71	2.57	3.43	4.28	5.14	5.99	6.85
900	0.97	1.93	2.89	3.58	4.82	5.78	6.74	7.70
1000	1.07	2.14	3.21	4.28	5.35	6.42	7.49	8.56
1100	1.18	2.36	3.53	4.71	5.88	7.06	8.24	9.41
1200		2.57	3.85	5.14	6.42	7.70	8.99	10.3*
1300		2.78	4.17	5.56	6.95	8.34	9.73	11.2*
1400		3.00	4.49	5.99	7.49	8.99	10.5*	
1500		3.21	4.82	6.42	8.02	9.63	11.3*	
1600		3.43	5.14	6.85	8.56	10.3*		
1700		3.64	5.46	7.27	9.09	10.9*		
1800		3.85	5.78	7.70	9.63*			
1900		4.07	6.10	8.13	10.2*			
2000		4.28	6.42	8.56	10.7*			
2100		4.49	6.74	8.99	11.3*			
2200		4.71	7.06	9.41				
2300			7.38	9.84				
2400			7.70	10.3*				*SEE NOTE 7

NOTES:

1. Tabulated volume flow rates will result in the following pressure losses for ducted attenuators, at air density of 1.2 kg/m3

Splitter construction code	Pressure loss (Pa)
E	50
D	60

2. Pressure loss varies in proportion to density.
3. Pressure loss varies in proportion to the square of the volume flow rate.
4. Maximum allowable volume flow rate is 1.25 * the values given in the tables, pressure loss varying in proportion to the square of the factor.
5. Approximate regenerated noise levels.

Volume Flow Rate	NC	A-Scale Level
Over 0.63 to 0.8 * Tabulated Values	30	35
Over 0.8 to 1.0 * Tabulated Values	35	40
Over 1.0 to 1.25 * Tabulated Values	40	45

6. Tabulated values apply to attenuators ducted both sides. For plenum entry and/or discharge the pressure loss is to be multiplied by the appropriate factor below.

SPLITTER CONSTRUCTION CODE E

Length Code	Plenum to Duct	Duct to Plenum	Plenum to Plenum
3 and 4	1.18	3.14	3.43
5 and 6	1.15	3.81	2.96
7 and 8	1.12	2.51	2.63

SPLITTER CONSTRUCTION CODE D

Length Code	Plenum to Duct	Duct to Plenum	Plenum to Plenum
3 and 4	1.15	2.78	3.03
5 and 6	1.13	2.51	2.83
7 and 8	1.10	2.26	2.60

7. Selection marked * are avilable only with the shorter attenuator

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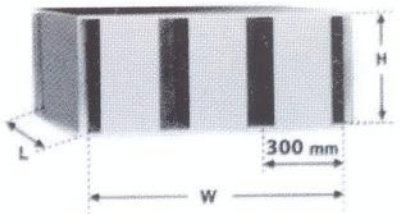
PGL RECTANGULAR ATTENUATORS

SOUND ATTENUATORS



LOW PRESSURE LOSS RECTANGULAR ATTENUATORS
ATTENUATOR PERFORMANCE - AIR WAY CODE B

SPLITTER CONSTRUCTION CODES E (EUROLON) AND D (PERFORATED SHEET)

Length codes **3** and **4** (850 mm and **1150** mm LONG)

STATIC INSERTION LOSS

SPLITTER CODE	LENGTH CODE	OCTAVE BAND 63	125	250	MEAN 500	1K	FREQUENCY (Hz) 2k	4k	8k
	3	7	10	16	31	37	31	22	18
E and D	4	8	12	21	40	40	36	28	21

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT (mm) \ WIDTH (mm)	300	600	900	1200	1500	1800	2100
300	0.53	1.05	1.57	2.09			
400	0.71	1.41	2.12	2.82	3.53		
500	0.90	1.79	2.68	3.57	4.47	5.36	
600	1.09	2.17	3.26	4.34	5.43	6.51	7.60
700	1.27	2.53	3.80	5.07	6.33	7.60	8.86
800	1.45	2.90	4.34	5.79	7.24	8.68	10.2
900	1.63	3.26	4.88	6.51	8.14	9.77	11.4
1000	1.81	3.62	5.43	7.24	9.04	10.9	12.7
1100	1.99	3.98	5.97	7.96	9.95	12.0	14.0
1200	2.17	4.34	6.51	8.68	10.9	13.1	15.2
1300		4.70	7.05	9.40	11.8	14.1	16.5
1400		5.07	7.60	10.2	12.7	15.2	17.8
1500		5.43	8.14	10.9	13.6	16.3	19.0
1600		5.79	8.68	11.6	14.5	17.4	20.3
1700		6.15	9.22	12.3	15.4	18.5	21.6
1800		6.51	9.77	13.1	16.3	19.6	22.8
1900		6.87	10.3	13.8	17.2	20.6	24.1
2000		7.24	10.9	14.5	18.1	21.7	25.3
2100		7.60	11.4	15.2	19.0	22.8	26.6
2200		7.96	12.0	15.9	19.9	23.9	27.9
2300		8.32	12.5	16.7	20.8	25.0	29.1
2400		8.68	13.1	17.4	21.7	26.1	30.4

Length codes **5** and **6** (**1450** mm and **1750**mm LONG)

STATIC INSERTION LOSS

SPLITTER CODE	LENGTH CODE	OCTAVE BAND 63	125	250	MEAN 500	1K	FREQUENCY (Hz) 2k	4k	8k
	5	8	14	25	46	43	41	34	24
E and D	6	9	16	30	50	45	43	38	27

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT (mm) \ WIDTH (mm)	300	600	900	1200	1500	1800	2100
300	0.46	0.92	1.38	1.83			
400	0.63	1.25	1.87	2.49	3.11		
500	0.80	1.59	2.38	3.18	3.97	4.76	
600	0.98	1.95	2.92	3.89	4.86	5.83	6.80
700	1.14	2.27	3.40	4.54	5.67	6.80	7.94
800	1.30	2.59	3.89	5.18	6.48	7.77	9.07
900	1.46	2.92	4.37	5.83	7.29	8.75	10.2
1000	1.62	3.24	4.86	6.48	8.10	9.72	11.4
1100	1.78	3.57	5.35	7.13	8.91	10.7	12.5
1200	1.95	3.89	5.83	7.77	9.72	11.7	13.6
1300		4.21	6.32	8.42	10.6	12.7	14.8
1400		4.54	6.80	9.07	11.4	13.6	15.9
1500		4.86	7.29	9.72	12.2	14.6	17.0
1600		5.18	7.77	10.4	13.0	15.6	18.2
1700		5.51	8.26	11.0	13.8	16.6	19.3*
1800		5.83	8.75	11.7	14.6	17.5	20.4*
1900		6.16	9.23	12.3	15.4	18.5	21.6*
2000		6.48	9.72	13.0	16.2	19.5*	
2100		6.80	10.2	13.6	17.0	20.4*	
2200		7.13	10.7	14.3	17.8	21.4*	
2300		7.45	11.2	14.9	18.7*		
2400		7.77	11.7	15.6	19.5*		* SEE NOTE 7

Length codes **7** and **8** (**2050** mm and **2350**mm LONG)

STATIC INSERTION LOSS

SPLITTER CODE	LENGTH CODE	OCTAVE BAND 63	125	250	MEAN 500	1K	FREQUENCY (Hz) 2k	4k	8k
	7	10	19	35	50	48	46	43	31
E and D	8	11	22	40	50	50	48	47	34

TABLE OF VOLUME FLOW RATES (m³/s)

HEIGHT (mm) \ WIDTH (mm)	300	600	900	1200	1500	1800	2100
300	0.42	0.84	1.26	1.67			
400	0.57	1.14	1.71	2.28	2.84		
500	0.73	1.45	2.18	2.90	3.63	4.35	
600	0.89	1.78	2.67	3.56	4.45	5.34	6.22
700	1.04	2.08	3.11	4.15	5.19	6.22	7.26
800	1.19	2.37	3.56	4.74	5.93	7.11	8.30
900	1.34	2.67	4.00	5.34	6.67	8.00	9.33
1000	1.48	2.97	4.45	5.93	7.41	8.89	10.4
1100	1.63	3.26	4.89	6.52	8.15	9.78	11.4
1200	1.78	3.56	5.34	7.11	8.89	10.7	12.5
1300		3.85	5.78	7.70	9.63	11.6	13.5*
1400		4.15	6.22	8.30	10.4	12.5	
1500		4.45	6.67	8.89	11.1	13.4*	
1600		4.74	7.11	9.48	11.9	14.3*	
1700		5.04	7.56	10.1	12.6		
1800		5.34	8.00	10.7	13.4*		
1900		5.63	8.44	11.3	14.1*		
2000		5.93	8.89	11.9			
2100		6.22	9.33	12.5			
2200		6.52	9.78	13.1*			
2300		6.82	10.3	13.7*			
2400		7.11	10.7	14.3*			*SEE NOTE 7

NOTES:

1. Tabulated volume flow rates will result in the following pressure losses for ducted attenuators, at air density of 1.2 kg/m3

Splitter construction code	Pressure loss (Pa)
E	50
D	60

2. Pressure loss varies in proportion to density.
3. Pressure loss varies in proportion to the square of the volume flow rate.
4. Maximum allowable volume flow rate is 1.25 • the values given in the tables, pressure loss varying in proportion to the square of the factor.
5. Approximate regenerated noise levels.

Volume Flow Rate	NC	A-Scale Level
Over 0.63 to 0.8 • Tabulated Values	30	35
Over 0.8 to 1.0 • Tabulated Values	35	40
Over 1.0 to 1.25 • Tabulated Values	40	45

6. Tabulated values apply to attenuators ducted both sides. For plenum entry and/or discharge the pressure loss is to be multiplied by the appropriate factor below.

SPLITTER CONSTRUCTION CODE E

Length Code	Plenum to Duct	Duct to Plenum	Plenum to Plenum
3 and 4	1.24	3.63	3.86
5 and 6	1.19	3.11	3.30
7 and 8	1.16	2.76	2.92

SPLITTER CONSTRUCTION CODE D

Length Code	Plenum to Duct	Duct to Plenum	Plenum to Plenum
3 and 4	1.20	3.19	3.38
5 and 6	1.16	2.76	2.92
7 and 8	1.13	2.47	2.60

7. Selection marked • are avilable only with the shorter attenuator

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