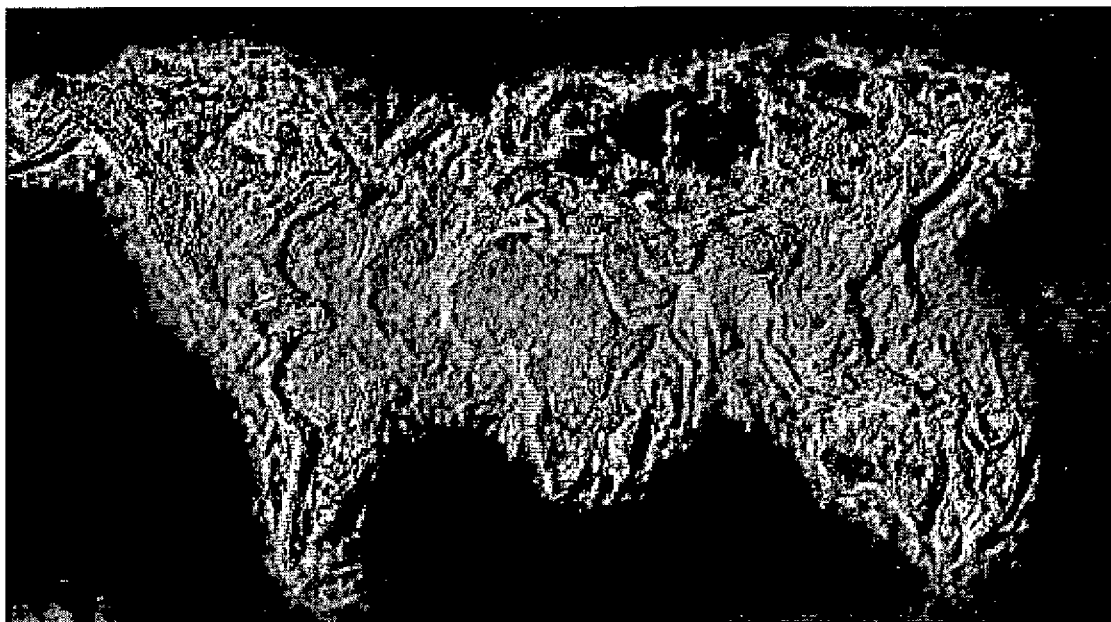


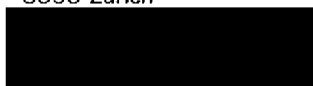
We Bring Air to Life



**Fläkt Woods Group provides a full range of products and solutions
for buildings ventilation, air treatment and industrial air movement**

Head office

Fläkt Woods Group Ltd
Affolternstrasse 40
8050 Zürich



Sales Offices available World Wide - See our website for details

www.flaktwoods.com

Due to a policy of continuous development and improvement the
right is reserved to supply products which may differ from those
illustrated and described in this publication. Certified dimensions
will be supplied on request on receipt of order. PC/Corp July 04

FläktWoods

Splitter Silencers

Dimension & Weights

TYPE WS/WSE/150mm AIRWAY

Number of Modules	Height B mm	Approx. Weight in Kg for length below			
		900 mm	1200 mm	1500 mm	1800 mm
1	300	26	32	39	44
	450	32	39	48	55
	600	37	46	56	64
2	300	44	54	65	75
	450	51	62	79	91
	600	58	73	90	103
	750	70	86	106	120
	900	78	96	118	133
3	1050	92	113	138	154
	450	76	91	117	133
	600	85	106	131	149
	750	102	125	153	172
	900	112	137	168	189
	1050	121	149	184	207
	1200	130	161	199	223
4	1350	156	184	222	253
	1500	170	205	243	282
	600	106	133	166	189
	750	128	157	193	218
	900	140	171	212	239
5	1050	150	185	230	260
	1200	160	199	249	280
	1350	192	235	294	331
	1500	203	247	313	353
	900	168	206	255	288
5	1050	179	223	277	312
	1200	191	239	298	336
	1350	230	281	353	399
	1500	242	296	375	423

Note: A and B are internal casing dimensions.

Dimension 'A' = (Airway width + 200) x No. of modules

Flange widths 'E' are as follows:

Longest side up to 900mm - flange width E = 40mm.

Longest side above 900mm - flange width E = 50mm.

Dimension 'J'

= Dim. 'B' = 50mm when dim. 'E' = 40mm

= Dim. 'B' = 60mm when dim. 'E' = 50mm

Dimension 'K'

= Dim. 'A' = 50mm when dim. 'E' = 40mm

= Dim. 'A' = 50mm when dim. 'E' = 50mm

Fixing hole pitches 'F' are in all cases 150mm, clearance holes for M10 screws. N must not be less than 50mm.

$$\text{Number of Modules} = \frac{\text{width}}{\text{Airway size} + 200\text{mm}}$$

Example: WS/100-900-600-600

$$\text{Number of Modules} = \frac{600}{100 + 200} = 2 \text{ Modules}$$

Other Acoustic Products

Type WSO (splitters only) can be tailored made to fit into builders work ducts and shafts.

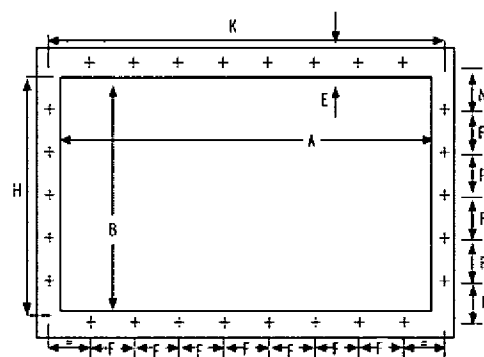
Roof unit silencers (Acoustic curbs)

Acoustic Louvers.

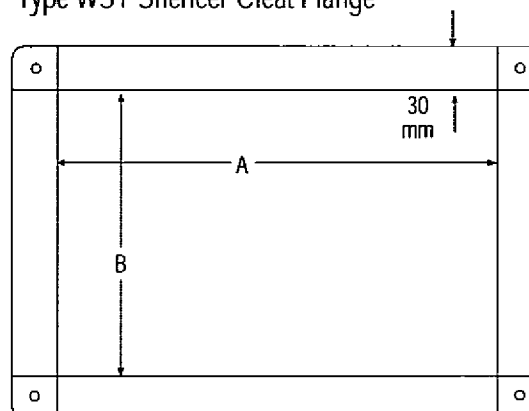
Acoustic Jackets for Fans.

Dimensions

Types WS and WBS silencers



Type WSY Silencer Cleat Flange



Sound data for FISCHBACH-Compact-Fan
Type: D + DS = double inlet

D 240/E 1

Operat. Voltage [V]	* Sound Pressure Level in dB (A)						
	80	100	125	150	170	190	230
Inlet	39	45	49	52	54	56	58
Discharge	41	46	50	54	55	56	59

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000		Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	
80	43	41	39	43	42	37	33	33	Total 45-11200	80	45	40	40	46	43	38	37	33	Total 45-11200
100	49	45	45	50	48	44	42	37	54	100	50	46	47	52	58	45	42	39	53
125	52	50	49	55	51	48	45	40	58	125	53	51	51	55	54	49	48	41	57
150	54	53	53	57	56	51	50	45	62	150	55	54	55	58	55	51	50	45	61
170	55	55	54	59	57	54	51	47	63	170	57	55	55	60	57	53	54	47	62
190	56	55	55	59	58	54	52	47	64	190	60	58	58	62	60	54	54	49	64
230	60	58	58	62	60	55	54	50	66	230	61	59	59	64	61	59	55	51	66

D 270/E 1

Operat. Voltage [V]	* Sound Pressure Level in dB (A)						
	80	100	125	150	170	190	230
Inlet	40	46	49	53	55	56	59
Discharge	42	46	51	53	56	58	61

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000		Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	
80	46	42	40	45	43	38	36	34	Total 45-11200	80	46	41	41	45	43	39	38	35	Total 45-11200
100	50	46	44	50	49	45	42	38	51	100	51	47	48	50	58	46	43	41	52
125	52	51	48	55	51	49	45	40	55	125	53	51	51	53	54	49	47	41	58
150	55	53	53	57	57	52	50	46	61	150	56	55	56	56	55	52	51	46	61
170	55	56	55	59	57	54	51	47	61	170	57	55	54	59	57	53	53	47	62
190	58	56	55	60	59	56	53	48	62	190	60	59	57	60	60	55	55	49	64
230	61	59	57	62	60	56	54	50	66	230	61	59	58	61	61	60	56	52	66

D 340/E 1

Operat. Voltage [V]	* Sound Pressure Level in dB (A)						
	80	100	125	150	170	190	230
Inlet	41	47	51	54	56	58	60
Discharge	43	48	52	56	58	59	61

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000		Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	
80	47	43	43	48	44	40	39	34	Total 45-11200	80	48	44	44	49	46	41	40	35	Total 45-11200
100	51	48	48	53	50	46	44	40	55	100	53	50	50	55	52	47	46	41	56
125	55	52	52	57	54	50	48	43	59	125	56	54	54	58	56	52	50	45	60
150	57	55	55	60	58	54	52	47	62	150	59	57	57	61	59	55	53	49	64
170	59	57	57	62	60	56	54	49	64	170	60	59	59	63	61	57	56	51	66
190	60	59	59	63	61	57	56	51	66	190	62	60	61	65	63	59	57	52	67
230	62	61	61	65	63	59	57	53	68	230	63	62	63	67	65	61	59	54	69

Sound data for FISCHBACH-Compact-Fan
Type: D + DS = double inlet

D 440/E 15

Operat. Voltage [V]	* Sound Pressure Level in dB (A)						
	80	100	125	150	170	190	230
Inlet	37	45	50	55	57	59	61
Discharge	38	46	52	57	59	61	63

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200
80	43	38	38	44	40	35	34	29	45	80	45	40	40	45	41	36	35	30	46
100	50	46	46	51	48	44	42	38	53	100	51	48	48	53	50	45	44	39	54
125	54	52	52	56	54	50	48	43	58	125	56	53	53	58	55	51	50	45	60
150	58	56	56	61	59	55	53	48	63	150	60	58	58	62	60	56	54	50	65
170	60	59	59	63	61	57	55	50	65	170	62	60	61	65	63	59	57	52	67
190	61	60	61	64	63	59	57	52	67	190	63	62	62	66	65	61	59	54	69
230	63	62	62	66	65	61	59	54	69	230	64	64	64	68	66	63	61	56	71

D 540/E 25

Operat. Voltage [V]	* Sound Pressure Level in dB (A)						
	80	100	125	150	170	190	230
Inlet	40	46	53	58	61	63	66
Discharge	41	48	54	60	63	65	68

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200
80	46	41	41	46	43	38	37	32	48	80	47	43	43	48	44	40	38	33	49
100	51	47	48	52	49	45	43	39	54	100	52	49	49	54	51	46	45	40	56
125	56	54	54	59	56	52	50	46	61	125	58	56	56	60	58	54	52	47	62
150	60	59	59	63	61	58	56	51	66	150	62	61	61	65	63	59	57	53	68
170	63	62	62	66	65	61	59	54	69	170	64	64	64	68	66	63	61	56	71
190	64	64	64	68	67	63	61	56	71	190	66	66	66	70	69	65	63	58	73
230	67	67	67	71	70	66	64	59	74	230	69	69	69	73	72	68	66	61	76

DS 5-640/E 35

Operat. Voltage [V]	* Sound Pressure Level in dB (A)						
	80	100	125	150	170	190	230
Inlet	40	45	54	59	60	66	
Discharge	41	47	55	59	64	68	

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200
80	45	41	41	46	44	37	37	32	48	80	46	43	43	48	44	40	39	33	49
100	51	46	47	52	49	46	44	38	55	100	51	48	49	53	50	45	44	39	55
125	55	55	54	58	55	52	49	47	62	125	58	55	55	60	59	54	52	44	61
150	60	58	58	62	61	57	55	52	65	150	63	60	60	64	62	58	56	51	68
170	62	62	63	66	65	62	58	53	68	170	63	64	63	67	65	62	61	57	71
190	63	64	64	68	67	63	61	55	70	190	65	65	65	69	68	65	64	57	72
230	66	67	67	70	70	66	64	59	73	230	68	68	68	73	71	67	65	60	75

Sound data for FISCHBACH-Compact-Fan
Type: D + DS = double inlet

D 570/E 25

Operat. Voltage [V]	* Sound Pressure Level in dB (A)						
	80	100	125	150	170	190	230
Inlet	36	43	50	55	59	61	65
Discharge	37	44	52	57	60	63	67

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200
80	43	38	38	43	39	34	33	28	44	80	44	39	39	44	40	36	34	30	45
100	48	44	44	49	46	41	40	35	51	100	50	46	46	51	47	43	41	37	52
125	54	51	52	56	53	49	48	43	58	125	56	53	53	58	55	51	49	44	60
150	58	56	56	61	59	55	53	48	63	150	60	58	58	62	60	56	55	50	65
170	61	60	60	64	62	58	56	52	67	170	62	61	62	66	64	60	58	53	68
190	63	62	63	66	65	61	59	55	69	190	65	64	64	68	67	63	61	56	71
230	66	66	67	70	69	66	64	59	73	230	68	68	68	72	71	67	65	61	75

D 640/E 35

Operat. Voltage [V]	* Sound Pressure Level in dB (A)						
	80	100	125	150	170	190	230
Inlet	40	48	56	61	64	66	68
Discharge	42	49	57	63	66	68	70

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200
80	46	42	42	47	43	39	37	33	48	80	48	43	43	48	45	40	39	34	50
100	52	49	49	54	51	47	45	40	56	100	54	50	51	55	52	48	47	42	57
125	58	57	57	61	59	55	53	49	64	125	60	58	59	63	61	57	55	50	65
150	63	62	62	66	65	61	59	54	69	150	64	64	64	68	66	63	61	56	71
170	65	65	65	69	68	64	62	57	72	170	67	67	67	71	70	66	64	59	74
190	67	67	67	71	70	67	65	60	74	190	69	69	69	73	72	68	66	62	76
230	69	69	69	73	72	69	67	62	76	230	70	71	71	75	74	71	69	64	78

D 670/E 35

Operat. Voltage [V]	* Sound Pressure Level in dB (A)						
	80	100	125	150	170	190	230
Inlet	43	49	56	60	63	65	68
Discharge	44	51	57	62	65	67	70

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200
80	48	44	44	49	46	42	40	35	51	80	50	46	46	51	47	43	42	37	52
100	54	51	51	56	53	49	47	42	57	100	55	52	53	57	54	50	49	44	59
125	58	57	57	61	59	55	53	48	64	125	60	58	59	63	61	57	55	50	65
150	62	61	62	66	64	60	58	54	68	150	64	63	63	67	66	62	60	55	70
170	64	64	64	68	67	63	61	56	71	170	66	66	66	70	69	65	63	58	73
190	66	66	66	70	69	65	63	58	73	190	68	68	68	72	71	67	65	60	75
230	68	69	69	72	72	68	66	61	76	230	70	71	71	74	74	70	68	63	78

Sound data for FISCHBACH-Compact-Fan
Type: D + DS = double inlet

D 730/E 35

Operat. Voltage [V]	* Sound Pressure Level in dB (A)							
	80	100	125	150	170	190	230	
Inlet	41	47	54	59	63	66	70	
Discharge	27	34	40	46	50	54	57	

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200
80	49	51	49	47	47	34	30	27	51	80	47	44	45	46	44	34	30	27	50
100	52	55	53	52	52	45	39	33	55	100	53	49	49	53	50	45	40	36	54
125	59	59	58	59	58	53	51	46	61	125	60	56	53	59	56	51	50	46	60
150	63	64	63	62	62	59	57	54	66	150	63	64	59	62	60	57	56	54	64
170	67	69	68	66	66	64	63	61	70	170	69	68	64	67	65	63	63	61	69
190	69	72	70	67	69	66	66	64	73	190	71	72	67	68	68	66	66	65	73
230	74	75	74	70	73	71	70	69	76	230	75	74	71	70	72	69	69	69	75

DS 6-740/E 35

Operat. Voltage [V]	* Sound Pressure Level in dB (A)							
	80	100	125	150	170	190	230	
Inlet	40	47	55	60	64	66	68	
Discharge	42	49	57	63	65	68	70	

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200
80	45	42	42	47	42	38	37	33	47	80	48	42	43	48	44	39	39	35	49
100	52	48	49	54	50	48	45	40	55	100	54	49	52	55	51	49	46	41	56
125	58	57	56	60	59	55	52	48	63	125	59	57	59	62	61	57	55	50	66
150	62	61	62	65	66	61	58	55	69	150	64	64	64	67	66	64	61	55	72
170	66	65	66	69	68	64	61	57	71	170	67	67	66	70	71	66	64	59	74
190	67	67	66	71	71	68	65	60	74	190	68	69	69	72	71	69	65	61	77
230	69	68	69	73	71	69	68	63	76	230	70	71	72	74	73	71	69	64	79

DS 6-740/E 65

Operat. Voltage [V]	* Sound Pressure Level in dB (A)							
	80	100	125	150	170	190	230	
Inlet	41	47	55	61	65	67	69	
Discharge	42	49	57	63	65	69	71	

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200
80	46	43	42	48	43	39	38	33	48	80	47	42	44	48	45	39	39	35	50
100	53	48	50	54	51	49	46	40	55	100	54	49	52	55	52	49	46	41	56
125	59	58	56	61	59	56	53	49	64	125	59	57	59	62	61	57	55	50	67
150	62	61	62	65	66	61	58	55	69	150	64	65	64	67	67	64	61	55	72
170	66	64	65	68	68	64	61	57	72	170	67	67	67	70	71	66	64	59	75
190	67	67	66	71	71	68	65	60	74	190	68	69	69	72	72	69	65	61	78
230	70	68	70	73	71	70	68	63	77	230	70	71	72	74	73	71	69	64	79

Sound data for FISCHBACH-Compact-Fan
Type: D + DS = double inlet

DS 6-770/E 65

Operat. Voltage [V]	* Sound Pressure Level in dB (A)							
	80	100	125	150	170	190	230	
Inlet	42	48	54	59	61	64	67	
Discharge	43	50	55	60	63	66	69	

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200
80	47	43	43	48	45	40	39	34	50	80	49	44	45	50	46	42	40	35	51
100	52	49	50	54	51	47	46	41	56	100	54	51	51	56	53	49	47	42	58
125	57	55	55	60	57	53	52	47	62	125	59	57	57	61	59	55	53	48	63
150	61	60	60	64	62	58	56	52	67	150	62	61	62	66	64	60	58	53	68
170	63	62	63	66	65	61	59	54	69	170	65	64	64	68	67	63	61	56	71
190	65	65	65	69	67	64	62	57	72	190	67	66	67	70	69	66	64	59	74
230	68	68	68	72	71	68	65	61	75	230	70	70	70	74	73	70	67	62	77

D 770/E 65

Operat. Voltage [V]	* Sound Pressure Level in dB (A)							
	80	100	125	150	170	190	230	
Inlet	46	51	57	62	64	67	70	
Discharge	47	53	59	63	66	69	72	

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200
80	50	47	47	52	49	45	43	38	54	80	52	48	49	53	50	46	44	40	55
100	55	52	53	57	55	50	49	44	59	100	56	54	54	59	56	52	50	46	61
125	60	58	58	63	61	57	55	50	65	125	61	60	60	64	62	58	57	52	67
150	63	63	63	67	65	62	60	55	70	150	65	64	65	68	67	63	61	57	71
170	65	65	65	69	68	64	62	58	72	170	67	67	67	71	70	66	64	59	74
190	67	67	68	71	70	67	65	60	75	190	69	69	70	73	72	69	67	62	77
230	70	71	71	74	74	70	68	63	78	230	72	73	73	76	76	72	70	65	80

D 770/E 80

Operat. Voltage [V]	* Sound Pressure Level in dB (A)							
	80	100	125	150	170	190	230	
Inlet	45	53	61	66	68	70	72	
Discharge	46	55	62	68	70	72	75	

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200
80	52	46	46	51	48	44	42	37	53	80	51	48	48	53	49	45	44	39	54
100	57	55	55	59	57	53	51	46	61	100	58	56	56	61	58	54	53	48	63
125	62	62	62	66	64	61	59	54	69	125	64	63	64	68	66	62	60	55	70
150	67	67	67	71	70	66	64	59	74	150	69	69	69	73	72	68	66	61	76
170	69	69	69	73	72	69	67	62	76	170	70	71	71	75	74	71	69	64	78
190	69	70	70	74	73	70	68	63	78	190	71	72	72	76	75	72	70	65	80
230	72	73	73	76	76	73	71	66	80	230	74	75	75	79	78	75	73	68	83

Sound data for FISCHBACH-Compact-Fan
Type: D + DS = double inlet

D 640/D 500

Operat. Voltage [V]	* Sound Pressure Level in dB (A)							
	120	180	230	280	400			
Inlet	53	60	63	66	68			
Discharge	54	61	65	68	70			

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200		Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	
120	56	55	55	58	55	53	50	44	62		120	56	55	55	60	58	52	52	48	62	
180	63	62	63	65	65	60	58	55	67		180	62	64	63	67	65	63	60	54	69	
230	65	66	65	68	68	65	63	58	71		230	65	65	66	70	69	65	64	58	75	
280	67	68	68	71	70	67	64	60	74		280	68	69	71	72	72	68	66	62	76	
400	69	70	70	72	72	69	66	62	77		400	70	71	72	75	75	71	68	64	78	

DS 6-740/D 500

Operat. Voltage [V]	* Sound Pressure Level in dB (A)							
	120	180	230	280	400			
Inlet	52	60	64	66	67			
Discharge	54	62	65	68	71			

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200		Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	
120	55	55	56	58	55	52	50	44	61		120	55	56	57	60	58	52	52	48	62	
180	63	62	64	65	65	60	58	55	67		180	62	64	63	67	65	63	60	54	69	
230	66	66	66	68	67	65	63	58	40		230	65	65	67	70	69	65	64	58	74	
280	67	68	68	71	70	66	64	60	74		280	68	68	71	72	72	68	66	62	75	
400	68	69	70	72	71	69	66	62	78		400	71	71	72	75	74	71	67	64	76	

D 730/D 500

Operat. Voltage [V]	* Sound Pressure Level in dB (A)							
	120	180	230	280	400			
Inlet	54	61	63	66	67			
Discharge	53	62	65	68	70			

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200		Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	
120	56	54	55	57	55	52	50	43	62		120	55	55	56	60	58	52	51	48	62	
180	62	62	62	65	64	60	59	54	67		180	61	64	63	67	65	63	60	54	69	
230	66	66	65	68	68	65	63	58	71		230	65	65	67	69	69	66	64	58	75	
280	67	68	68	71	69	67	64	60	74		280	68	69	71	72	72	68	66	62	76	
400	68	70	69	72	71	69	67	62	77		400	70	71	72	74	75	72	68	64	78	

Sound data for FISCHBACH-Compact-Fan

Type: D + DS = double inlet

D 670/D 500

Operat. Voltage [V]	* Sound Pressure Level in dB (A)							
	120	180	230	280	400			
Inlet	54	61	63	67	69			
Discharge	55	62	65	69	72			

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200		Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	
120	57	56	56	59	56	54	51	45	63		120	58	56	55	61	59	53	52	50	63	
180	64	63	63	65	65	60	58	55	67		180	62	64	64	68	65	64	60	55	69	
230	65	66	66	67	68	65	64	59	71		230	66	66	66	70	69	65	65	58	76	
280	68	69	68	71	71	68	64	60	75		280	68	69	71	72	73	68	66	63	77	
400	69	70	71	72	72	69	67	63	77		400	71	71	73	75	75	72	69	65	78	

DS 6-770/D 1

Operat. Voltage [V]	* Sound Pressure Level in dB (A)							
	120	180	230	280	400			
Inlet	56	63	67	70	72			
Discharge	57	65	69	72	74			

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200		Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	
120	58	57	57	61	59	55	53	49	64		120	60	58	59	63	61	57	55	50	65	
180	65	64	65	68	67	63	61	57	71		180	66	66	66	70	69	65	63	58	73	
230	67	68	68	71	71	67	65	60	75		230	69	69	70	73	72	69	67	62	77	
280	69	70	71	74	73	70	68	63	78		280	71	72	73	76	75	72	70	65	80	
400	71	72	73	76	76	72	70	65	80		400	73	74	75	78	78	74	72	67	82	

D 770/D 1

Operat. Voltage [V]	* Sound Pressure Level in dB (A)							
	120	180	230	280	400			
Inlet	58	65	69	72	74			
Discharge	59	67	71	74	77			

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200		Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	
120	60	59	59	63	61	57	56	51	66		120	62	61	61	65	63	59	57	52	67	
180	66	66	66	70	69	65	63	58	73		180	68	68	68	72	71	67	65	60	75	
230	69	69	70	73	73	69	67	62	77		230	71	71	72	75	74	71	69	64	79	
280	71	72	72	76	75	72	70	65	80		280	73	74	75	78	77	74	72	67	82	
400	73	75	75	78	78	75	73	68	82		400	75	77	77	80	80	77	75	70	85	

Sound data for FISCHBACH-Compact-Fan
Type: D + DS = double inlet

D 970/D 2

Operat. Voltage [V]	* Sound Pressure Level in dB (A)							
	120	180	230	280	400			
Inlet	55	61	66	69	74			
Discharge	57	63	68	71	76			

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200		Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	
120	58	56	57	61	59	55	53	48	63		120	60	58	58	62	60	56	55	50	65	
180	63	62	62	66	65	61	59	54	69		180	65	64	64	68	67	63	61	56	71	
230	67	67	67	71	70	66	64	59	74		230	69	69	69	73	72	68	66	61	76	
280	69	70	70	74	73	70	68	63	77		280	71	72	72	76	75	72	70	65	79	
400	73	75	75	78	78	75	73	67	82		400	75	77	77	80	80	77	75	70	84	

DS 9-070/D 2.5

Operat. Voltage [V]	* Sound Pressure Level in dB (A)							
	120	180	230	280	400			
Inlet	56	65	70	72	77			
Discharge	58	67	72	75	79			

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200		Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	
120	59	57	57	62	60	56	54	49	64		120	60	59	59	63	61	57	56	51	66	
180	66	66	66	70	69	65	63	58	73		180	68	68	68	72	71	67	65	60	75	
230	69	70	70	74	73	70	68	63	78		230	71	72	72	76	75	72	70	65	80	
280	72	73	73	76	76	73	71	66	80		280	74	75	75	79	78	75	73	68	83	
400	75	77	78	81	81	78	75	70	85		400	77	80	80	83	83	80	78	73	87	

DS 9-070/D 5

Operat. Voltage [V]	* Sound Pressure Level in dB (A)							
	120	180	230	280	400			
Inlet	60	70	75	78	81			
Discharge	63	73	78	81	84			

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)										A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200		Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	
120	62	61	62	65	64	60	58	53	68		120	64	64	64	68	66	62	61	56	71	
180	70	71	71	74	74	71	68	63	78		180	72	73	74	77	77	73	71	66	81	
230	74	75	76	79	79	76	73	68	83		230	76	78	78	81	82	78	76	71	86	
280	76	78	79	81	82	79	76	71	86		280	78	81	81	84	85	81	79	74	89	
400	78	81	81	84	85	82	79	74	89		400	81	84	84	87	88	85	82	77	92	

Sound data for FISCHBACH-Compact-Fan
Type: D + DS = double inlet

DS 8-980/D 2.5

Operat. Voltage [V]	* Sound Pressure Level in dB (A)						
	120	180	230	280	400		
Inlet	55	64	69	72	76		
Discharge	57	66	70	74	78		

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200
120	58	56	57	61	59	55	53	48	63	120	60	58	58	63	60	57	55	50	65
180	65	65	65	69	68	64	62	57	72	180	67	67	67	71	69	66	64	59	74
230	69	69	70	73	72	69	67	62	77	230	71	71	71	75	74	71	69	64	78
280	71	73	73	76	76	72	70	65	80	280	73	75	75	78	78	75	72	67	82
400	75	77	77	80	80	77	75	70	84	400	77	79	79	82	82	79	77	72	86

DS 9-001/D 5

Operat. Voltage [V]	* Sound Pressure Level in dB (A)						
	120	180	230	280	400		
Inlet	60	70	75	78	81		
Discharge	62	72	77	80	84		

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200
120	62	61	61	65	63	60	58	53	68	120	63	63	63	67	65	61	59	55	70
180	70	71	71	74	74	71	68	63	78	180	72	73	73	76	76	73	70	65	80
230	74	75	76	79	79	76	73	68	83	230	76	78	78	81	81	78	76	70	85
280	76	78	79	81	82	79	76	71	86	280	78	80	81	84	84	81	79	73	88
400	78	81	82	84	85	82	80	75	89	400	81	84	84	87	88	85	82	77	92

DS 0-101/TD 10

Operat. Pressure Level in dB (A)							
Voltage [V]	120	180	230	280	400		
Inlet	66	74	79	81	84		
Discharge	68	76	81	84	87		

* related to room absorption of 8 dB (25m² Sabine), at free air!
measured in distance of 3 m

Inlet side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]	Discharge side: Sound Power Level Lw in dB (linear) at mid frequency in Hz (at free air!)									A-weighted [dB (A)]
Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200	Oper. Volts [V]	63	125	250	500	1000	2000	4000	8000	Total 45-11200
120	67	67	67	71	70	66	64	59	74	120	68	69	69	72	72	68	66	61	76
180	73	75	75	75	78	75	73	68	82	180	75	77	77	80	80	77	75	70	84
230	77	79	79	79	83	80	77	72	87	230	79	81	82	84	85	82	79	74	89
280	79	82	82	82	85	82	80	75	89	280	81	84	84	87	88	85	82	77	92
400	81	85	85	85	88	86	83	78	92	400	83	87	87	90	91	88	85	80	95

Type: D = Double Inlet

Performance / Dimensions

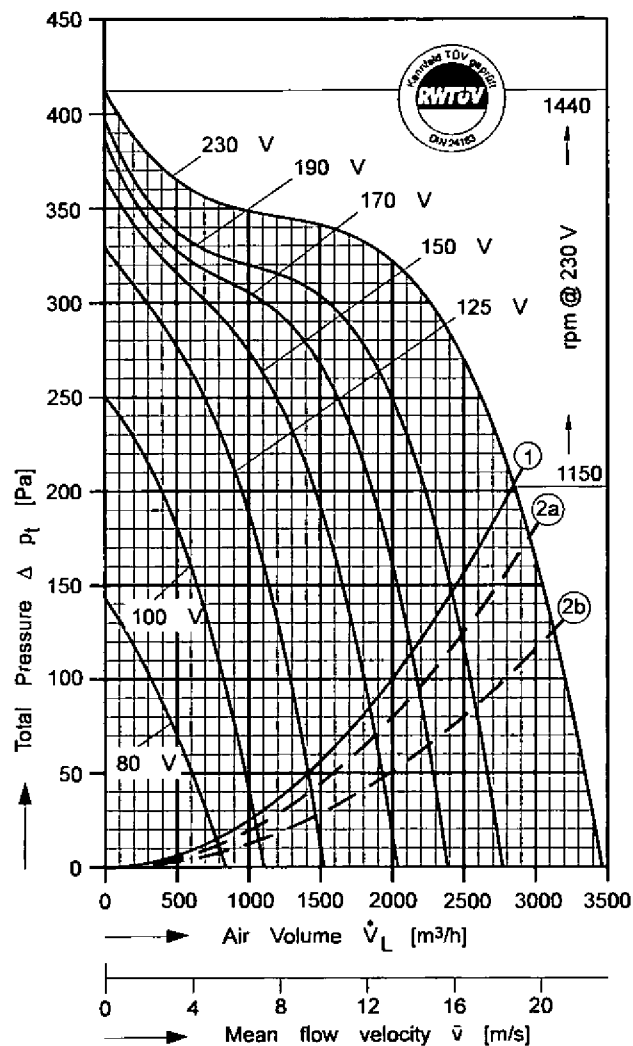
FISCHBACH
COMPACT
FAN

Type: D 540/E 25 [230V 1N~ 50 Hz]

MP Capacitor 20 μ F - 400 VDB

Protection type: IP 65

For sound data please see extra pages.



$P_{max} = 0,77 \text{ kW}$ $I_A / I_N = 1,7$ $I_{max} = 3,71 \text{ A}$

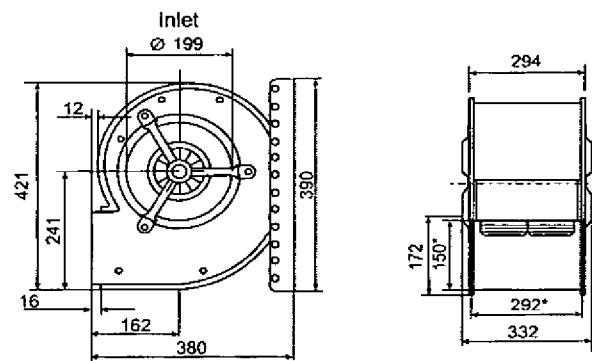
- ① System curve for dynamical pressure part related to fan discharge surface of 0,0422 m². For operating points above that curve a max. air temperature of 60° C is allowed (Curve for free blowing fan).
- ②a System curve incl. pressure regain by means of TRANSITION PIECE (square to round, FISCHBACH accessory) with connected duct. Duct length: 0,4 m.
- ②b System curve incl. pressure regain by means of DIFFUSER ANGLE FRAME (FISCHBACH accessory) with connected duct. Duct length: 2,9 m.

Voltage [V]	Air Volume $\dot{V}_L$ [m³/h] @ $\rho = 1,2 \text{ kg/m}^3$ and Current [A] (bold figures, 2nd. line)							
	Free Air	Total Current Δp_t [Pa]						
		50	100	150	200	250	300	350
80	775 1,73	605 1,66	320 1,58					
100	1020 2,15	975 2,10	825 1,95	640 1,80	395 1,66			
125	1400 2,63		1290 2,47	1140 2,27	950 2,03	695 1,77	295 1,51	
150	1810 3,05		1805 3,00	1655 2,76	1465 2,49	1195 2,16	715 1,74	130 1,49
170	2125 3,29			2035 3,13	1865 2,87	1620 2,54	1115 2,03	245 1,57
190	2395 3,41				2230 3,18	1995 2,89	1555 2,43	345 1,68
230	2840 3,71					2620 3,44	2265 3,10	920 2,27

Save power and even more silent with
FISCHBACH SPEED CONTROLLERS
FISCHBACH AUTOMATIC CONTROLLERS

Voltage Control	Type*	Order-No.*
Stepless, 0 - 100% and 100% - 0	FDR 55	6163
Stepwise, 7 Steps	FDR 420	6201
FISCHBACH AUTOMATIC CONTROL**	FRA 55	6252

* For further details see resp. catalogue pages
** For details of sensors etc., on request



* External dimension of discharge



The Silent One

In the above diagram the **TOTAL** pressure (the sum of the dynamic and static pressures) is shown in relation to the air volume, dynamic pressure is shown below system line No.1. Static pressure is shown above that line.

To regain static pressure and reduce dynamic pressure connect a suitable transition piece on the fan outlet.

Cylindrical & Splitter Silencers For Fan Systems



FläktWoods

Cylindrical Silencers

Type B & C Silencers

Construction

Casings are of rolled, pre-galvanised sheet steel with spun end rings incorporating tapped inserts for fixing. Suitable fixing screws are provided with all steel silencers.

The absorbent material is acoustic grade mineral fibre with an erosion resistant facing. It is protected and contained by a pre-galvanised perforated steel sheet formed to match the fan diameter.

Cylindrical silencers shall be suitable for air pressures up to a maximum of 1000 Pa. For duct pressures in excess of 1000 Pa please enquire.

A Melinex Lining (variant code M) can be supplied for critically clean applications such as hospitals to ensure no fibre migration. The lining may also be used in moisture or grease laden conditions, such as kitchen extract systems where the material is used to stop the ingress of grease etc. into the acoustic media. The use of the lining also allows the silencers to be low pressure steam cleaned. Some reduction of attenuation due to the lining will be experienced.

Performances

Are derived from tests to BS848. Measurements of fan noise are made with and without the silencer in position. The difference between recorded levels is the dynamic (with airflow) attenuation or insertion loss of the silencer. Type B silencers may be directly coupled to both inlet and outlet flanges of the fan. When type C silencers are directly coupled to the fan flanges they are most effective on the outlet. A spacer duct of 1D length between the fan inlet flange and a type C silencer is necessary to ensure maximum performance. Note: C type silencers mounted close to a fan may effect the aerodynamic performance.

Size Range

Type B silencer bore diameters range from 280 mm to 2000 mm metric range, 6" to 75" imperial range in lengths equal to or twice the bore diameter (1D or 2D) 6" to 9.5" are available in 1.5 D lengths only. Pressure loss for type B silencers is the same as a plain duct.

Type C silencers have a centrally mounted absorbent pod in the airway

for increased attenuation. The pressure loss due to the pod is shown on the chart below.

The diameter range is 315 mm to 2000 mm metric range or 12" to 75" imperial range.

Fume Handling

Stainless Steel, PVC or Polypropylene construction is also available for corrosive atmospheres. Please send details of the application with the enquiry.

Marine Use

The construction of standard silencers has been proved satisfactory for use below decks on ships and oil rigs and a specially strengthened design is available for other locations, please enquire.

Temperature Range

Standard silencers are suitable for temperatures from -40°C to 200°C. When moisture resistant lining is used the continuous air handling temperature is limited to 80°C. Special treatments enable silencers to operate at temperatures up to 600°C. For smoke applications, please enquire.

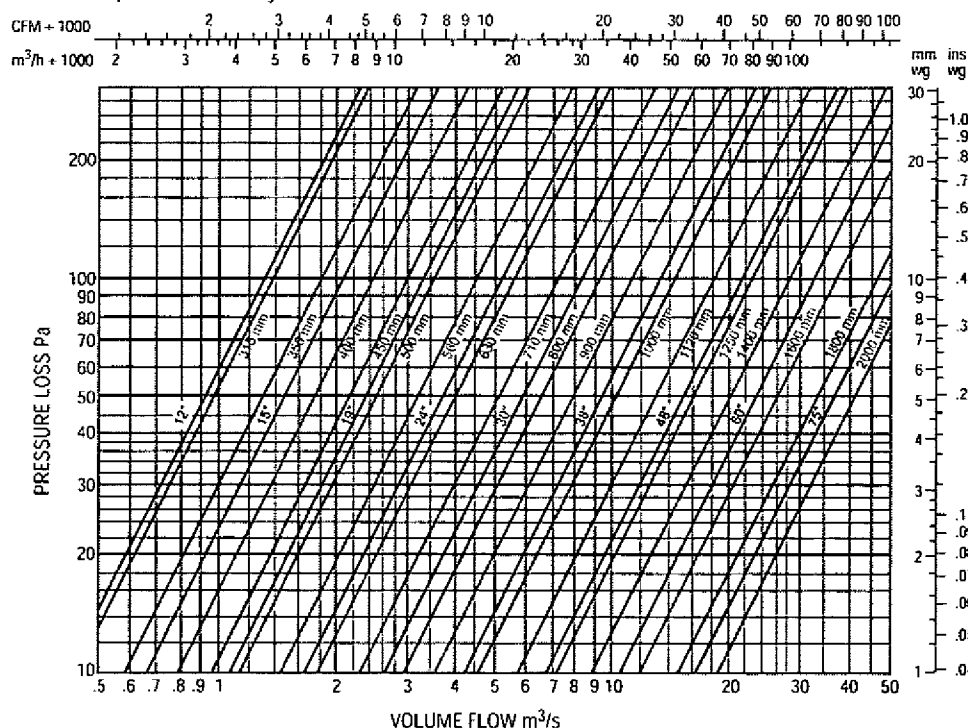
Finishes

Standard finish is galvanised zinc coating to BS2989 Z2. Other finishes including epoxy paint are available to special order.

Mounting

Galvanised steel mounting feet and matching flanges corresponding to those supplied for Aerofoil fans are available.

Resistance to Air Flow Type C Silencer



Splitter Silencers

Chart 3 - Resistance to Air Flow Type WS/100

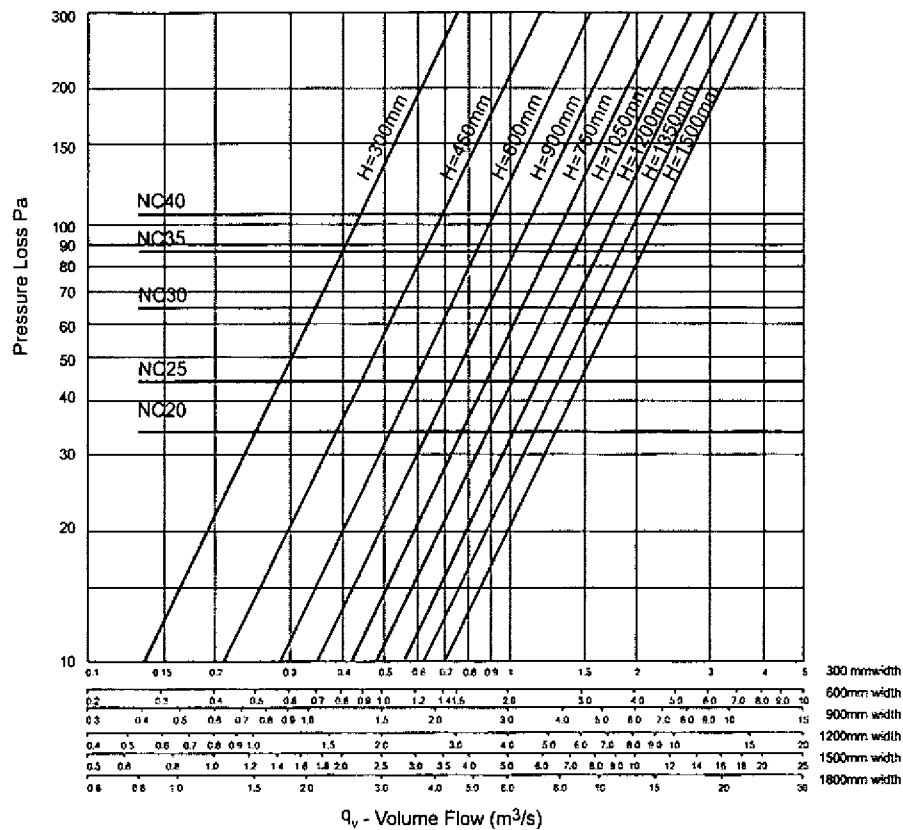
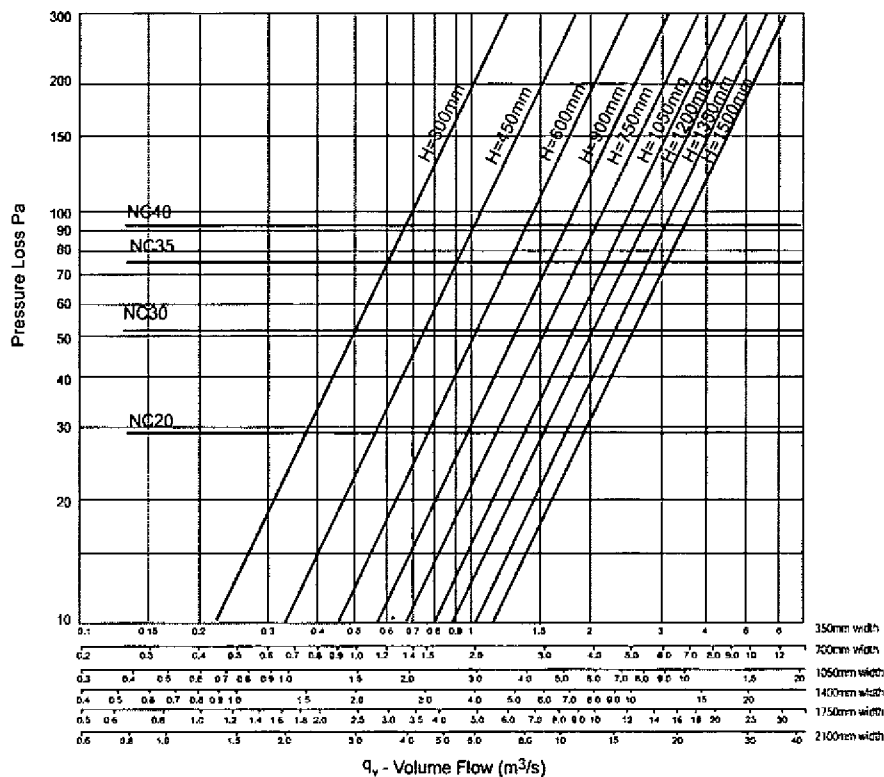


Chart 4 - Resistance to Air Flow Type WS/150



Note: Type WBS pressure loss is 30% higher. Type Variant - L pressure loss is 25% lower.

Splitter Silencers

To aid selection, the charts 1-4 show the maximum pressure drop allowable to maintain the NC/NR levels required.

Chart 1 - Resistance to Air Flow Type WS/50

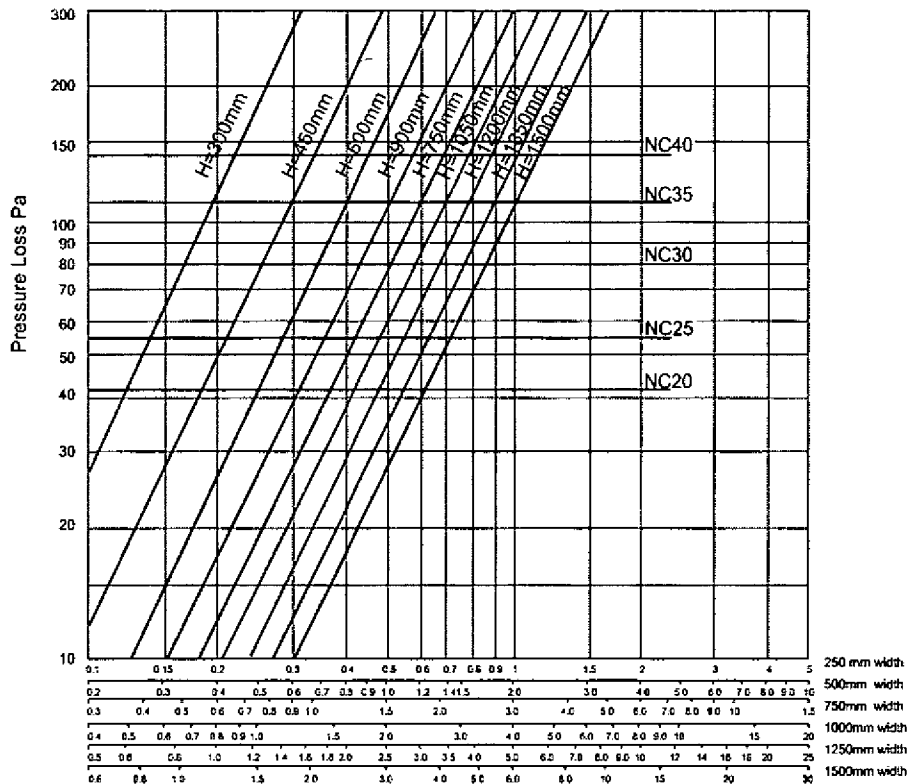
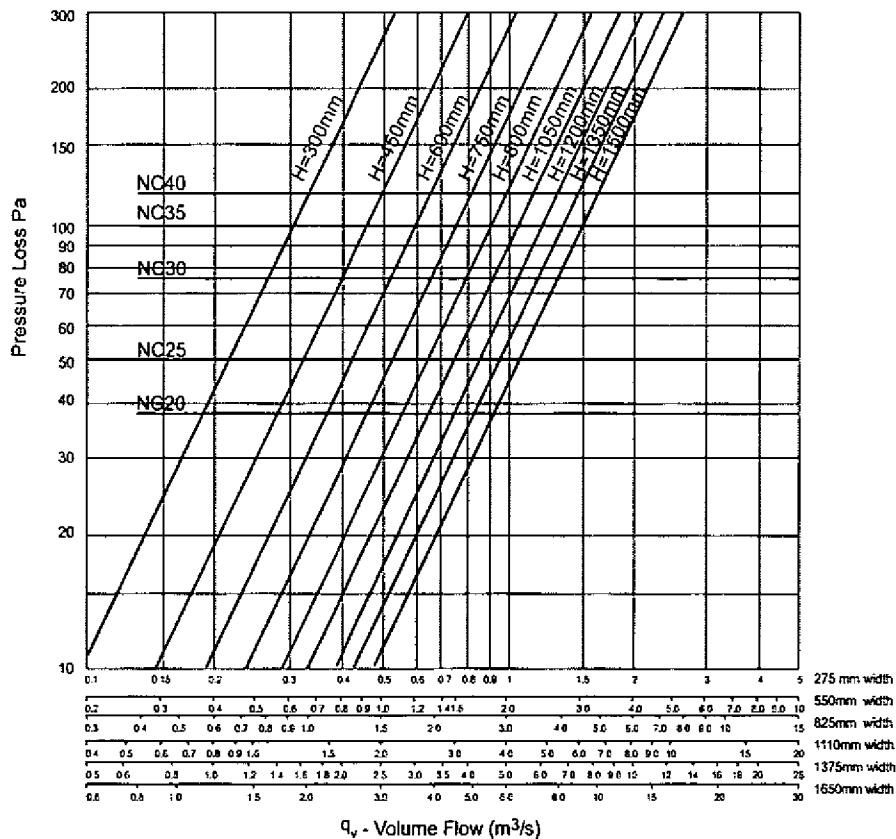


Chart 2 - Resistance to Air Flow Type WS/75



Note: Type WBS pressure loss is 30% higher. Type variant L pressure loss is 25% lower.

Splitter Silencers

Performance

Type WS/WSY

Intermediate airway widths can be provided to suit individual requirements. Please enquire.

Care should be taken in use of 50mm

Airway Silencer. Perforated Linings are required on airways of 75mm or less. Please enquire.

The following airway velocities should not be exceeded for the ventilation space noise levels tabulated, in order to avoid possible noise regeneration in the silencer.

Airway Velocity=

$$\frac{\text{Volume Flow Rate m}^3/\text{s}}{\text{Number of Airways} \times \text{Airway Width} \times \text{Height (metres)}}$$

TABLE C

Velocity m/s	NC/NR Level
15	45-50
13	35-40
10	30

For special applications please enquire.

Table A

Airways mm	Length mm	Octave Band Mid Frequencies							
		Frequency Hz							
		63	125	250	500	1K	2K	4K	8K
50	600	6	12	22	31	40	40	40	30
	900	8	16	27	45	55	55	55	50
	1200	10	20	36	55	55	55	55	55
	1500	13	24	42	55	55	55	55	55
	1800	15	30	51	55	55	55	55	55
	2100	17	34	55	55	55	55	55	55
	2400	19	38	55	55	55	55	55	55
75	600	5	8	11	24	31	32	24	20
	900	6	11	19	34	45	45	39	28
	1200	7	14	26	46	55	55	52	38
	1500	9	17	30	48	55	55	55	42
	1800	10	20	34	50	55	55	55	46
	2100	12	23	40	55	55	55	55	55
	2400	13	24	45	55	55	55	55	55
100	600	4	7	11	21	31	29	21	20
	900	5	9	16	30	39	39	31	26
	1200	6	12	23	40	51	51	41	29
	1500	8	15	26	43	53	53	45	32
	1800	9	17	30	47	55	55	49	36
	2100	11	20	35	55	55	55	55	43
	2400	12	23	40	55	55	55	55	47
150	600	2	5	8	12	15	15	11	7
	900	3	6	11	20	25	25	15	8
	1200	4	7	15	26	33	33	19	11
	1500	5	9	18	33	41	41	24	13
	1800	6	11	22	39	49	49	29	16
	2100	7	13	26	45	55	55	34	19
	2400	8	15	30	52	55	55	39	21

Type WBS

The value of additional attenuation due to the mitred bend should be deducted from the attenuation required.

To obtain the attenuation, dimensions $L_2 + I_2$ must be equal or greater than 2.5 x height for Type WBSV or 2.5 width for Type WBSH.

Table B

Silencer Height for WBSV or width for WBSH	Additional Attenuation in Octave Bands Hz							
	63	125	250	500	1K	2K	4K	8K
300	0	0	2	8	6	3	3	3
450	0	1	5	7	4	3	3	3
600	0	2	8	6	0	3	3	3
750	0	3	8	5	0	3	3	3
900	0	5	7	4	0	3	3	3
1050	0	7	7	4	0	3	3	3
1200	1	8	6	4	0	3	3	3
1350	2	8	6	3	0	3	3	3
1500	3	8	5	3	0	3	3	3

Splitter Silencers

Coding: Type WS/WSE Silencers

Code

WS Drilled Flanges (with Side Liners)
 WSY Cleat Flanges (with Side Liners)
 M Moisture Resistant Lining
 L Low Pressure Loss
 P High System Pressure
 K Fume Resistant
 C Perforated Linings
 CC Stainless Perforated Linings

Variant

Example

WSY LM/75-X-X-X
 Type _____
 Variants _____
 Airway _____
 Width mm _____
 Silencer _____
 Length mm _____
 Width mm _____
 Height mm _____

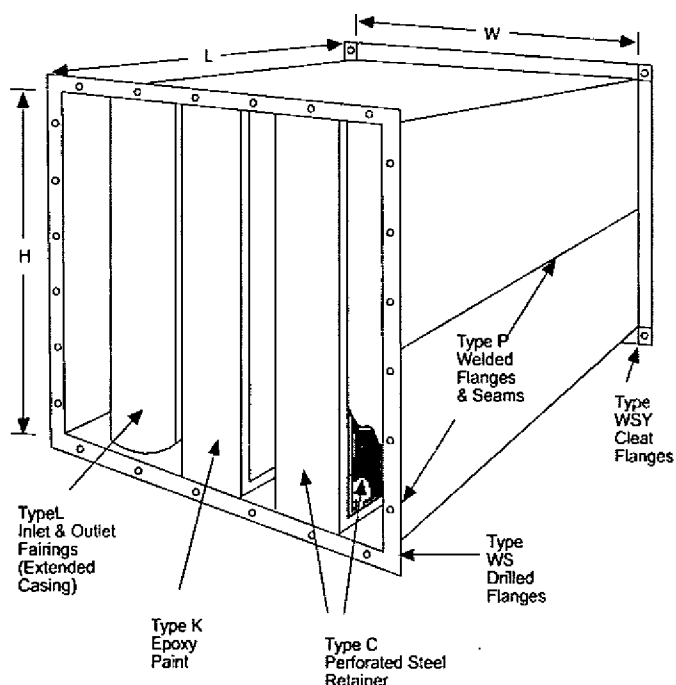


Figure 1

Coding: Type WBS Silencers

CODE WBS (H or V)
 Plus Variants
 as for type WS

H or V = Bend in Horizontal or Vertical Plane

Example

WBS (H) or (V) M/75-X-X-X-X
 Type _____
 Variants _____
 Airways _____
 Width mm _____
 Air Entry leg _____
 Dimension L_1 mm _____
 Air exit leg _____
 Dimension L_2 mm _____
 Silencer _____
 Width mm _____
 Height mm _____

Type WBSV

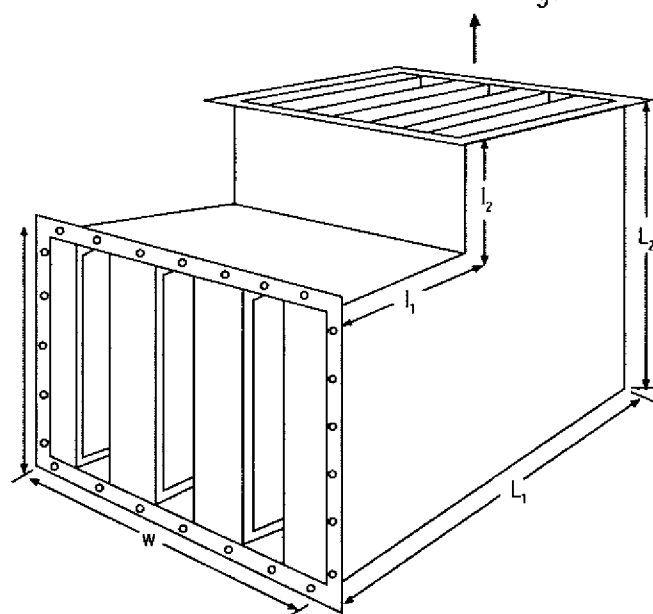
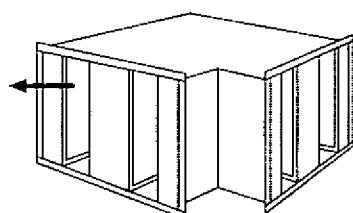


Figure 2

Type WBSH



$L_1 + L_2$ Minimum Dimension 100mm
 (300mm fairings Type WBSHL)

Splitter Silencers

Selection of Type WS/WSY Silencers

Step No.

- 1) Calculate attenuation required preferably using the method detailed in Woods electronic selection programme 'Design for Sound' (See Woods Acoustic Group).
- 2) Use Table A to select the airway width and length of silencer.
- 3) Select width, height and pressure loss from the appropriate pressure loss chart Nos 1-4.
- 4) Check that the silencer airway velocity is low enough for required NC level

Example 1.

● Air volume flow rate = 1.42m ³ /s	Octave band mid freq. Hz:	63	125	250	500	1K	2K	4K	8K
● Required attenuation from calculation:		6	14	26	42	48	46	40	28
Select from table A-WS/100-1500		8	15	26	43	53	53	45	32

- The fan has 100 Pa static pressure available for silencer pressure loss.
- The NC level required is NC35 from which Table C limits the silencer airway velocity to 13m/s.
- From standard widths and heights a suitable WS/100 silencer would be 600 mm wide x 600 mm high.
- Pressure loss from chart 3 = 65Pa
- Silencer airway velocity = $\frac{\text{Volume Flow (m}^3\text{/s)}}{\text{No of A/W x AW width x Height (metres)}}$

$$= \frac{1.42 \text{ (m}^3\text{/s)}}{2 \times 0.1\text{m} \times 0.6\text{m}}$$

$$= 11.83 \text{ m/s}$$

- Silencer coding would be:-

	WS	100-1500-600-600
Type	_____	_____
Airway width	_____	_____
Silencer Length	_____	_____
Width	_____	_____
Height	_____	_____

For Bend Silencer selections please refer to Woods Acoustic Department

Splitter Silencers

Types WS-WSY-WBS

- Choice of drilled RSA or cleat type flanges
- Higher attenuation patented bend type
- Galvanised steel construction
- Mineral fibre splitter infill
- Erosion resistant to airflow

- Optional moisture resistant lining
- Low resistance to airflow
- Various materials and constructions available
- Fully tested high temperature models available
- Fully metric range

Casing

Lock formed pre-galvanised steel sheet. Flanges of rolled steel angle hot dip galvanised drilled for duct connection or, formed flanges of pre-galvanised steel strip suitable for cleat fixing (Code WSY). Alternatively spigot ends can be provided, please enquire. All welded cases are available for duct pressures between 1000 and 3000 Pa (Variant code P).

Splitters

Frames are formed from pre-galvanised sheet steel. Absorbent material is resin bonded mineral fibre, in slab form with erosion resistant facing. A melinex lining (Variant Code M) can be supplied for critically clean applications, such as hospitals to ensure no fibre migration. The lining may also be used in moisture or grease laden conditions, such as kitchen extract systems where the material is used to stop the ingress of grease etc. into the acoustic media. The use of the lining also allows the silencer to be low pressure steam-cleaned. Some reduction in attenuation due to the lining will be experienced. Splitters are normally mounted vertically in casing. For horizontal splitters please enquire.

Performances

Data is derived from tests to BS4718 1971. Measurements of a noise source are made with and without the silencer in position. The difference between the recorded levels is the static (without airflow) attenuation or insertion loss of the silencer.

Standard widths (inside duct)					
Airway Width mm	No Modules				
	1	2	3	4	5
50	250	500	750	1000	1250
75	275	550	825	1100	1375
100	300	600	900	1200	1500
150	350	700	1050	1400	1750

Size Range

Standard heights (inside duct): 300-1500mm in 150mm increments. Standard lengths: 600-2400mm in 300mm increments. Larger silencers are supplied in sections to be fixed together on site. Silencers can be manufactured in dimensions to suit any applications, please discuss with acoustic department.

Fume Handling

For mildly corrosive atmosphere epoxy paint is available (Variant code K). Where this finish is not sufficiently corrosion resistant many sizes can be supplied constructed in PVC or polypropylene. Please enquire giving details of the application.

Temperature Range

WS, WSY, WBS	-40° to + 200° C
Melinex Lining (M)	-40° to + 80° C
High Temperature (T)	-40° to + 400° C
PVC	-40° max.
Polypropylene	-60° max.

Low Pressure Loss

Inlet and outlet fairings (Variant code L) fitted to the splitters reduce pressure losses by 25%. The silencer casing length is increased by 300mm to accommodate the fairings.

90° Bend Type Silencers

Type WBS is a modified splitter silencer with integral air turning vanes to keep pressure losses to a minimum.

Additional attenuation can be obtained (see table B) together with compactness in plant room layout.

Cylindrical Silencers

Dimensions & Weights

Imperial

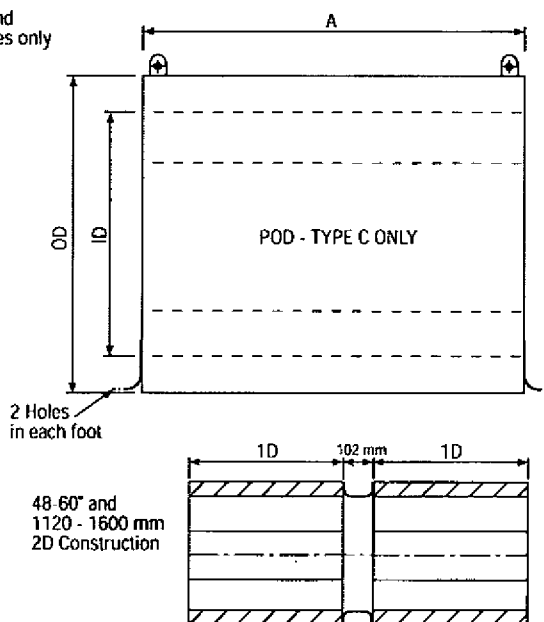
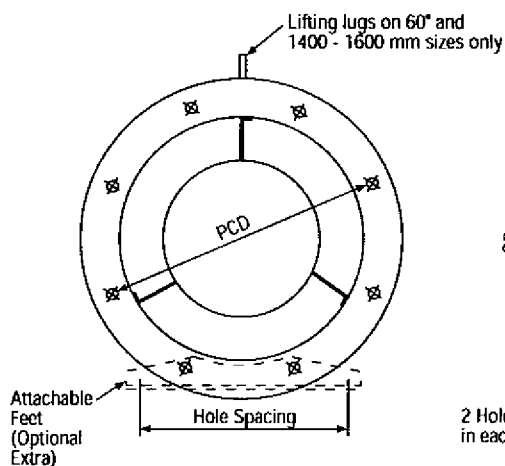
Ins. Size (D)	Imperial - Dimensions (mm)								Weight kg			
	OD	No of Holes	PCD	Thread	Mounting Foot Holes		A Length		B		C	
					Dia	Spacing	1D	2D	1D	2D	1D	2D
6	210	4	184	M6	7	130	229*		2.7*		-	
7.5	248	4	216	M6	7	152	286*		3.6*		-	
9.5	298	4	273	M8	9	194	362*		5.0*		-	
12	416	8	349	M8	11	273	305	610	10	16	12	18
15	492	8	425	M10	11	343	381	762	13	22	16	26
19	645	8	541	M12	11	438	483	965	24	39	28	46
24	773	12	668	M12	11	559	610	1219	34	57	39	67
30	926	12	821	M12	14	711	762	1524	51	87	60	102
38	1181	16	1035	M16	14	914	965	1930	79	149	94	172
48	1450	20	1289	M16	14	1143	1219	2540	114	239	133	278
60	1749	24	1626	M16	14	1422	1524	3150	250	529	282	563

Metric

mm Size (D)	Metric (mm)								Weight kg			
	OD	No of Holes	PCD	Thread	Mounting Foot Holes		A Length		B		C	
					Dia	Spacing	1D	2D	1D	2D	1D	2D
280	385	4	320	M8	10	230	280	560	9	14	-	-
315	415	8	355	M8	10	265	315	630	10	17	13	19
355	455	8	395	M8	10	305	355	710	12	20	15	24
400	500	8	450	M10	10	350	400	800	15	25	18	30
450	600	8	500	M10	10	400	450	900	20	33	24	39
500	650	12	560	M10	10	450	500	1000	25	41	29	48
560	710	12	620	M10	10	510	560	1120	30	50	35	58
630	780	12	690	M10	12	580	630	1260	35	61	42	72
710	860	16	770	M10	10	660	710	1420	44	76	53	90
800	1000	16	860	M10	12	750	800	1600	55	96	66	116
900	1100	16	970	M12	12	850	900	1800	70	129	84	150
1000	1200	16	1070	M12	12	950	1000	2000	82	157	100	182
1120	1320	20	1190	M12	16	1070	1120	2342	100	211	118	247
1250	1450	20	1320	M12	16	1150	1250	2602	127	266	147	306
1400	1600	20	1470	M12	16	1300	1400	2902	199	399	220	453
1600	1800	24	1680	M16	16	1500	1600	3302	311	637	362	739

Notes:

- 6" - 9.5" are 1.5D long
- For larger sizes please enquire



Packing Specification

Protective Boards screwed to ends.
Packed length is Silencer length plus 50 mm.
Packed width and height = Silencer O.D.

Alternative crated packing

(at extra cost)
Typically:
Packed length is Silencer length plus 150 mm.
Packed section is square.
Side dimension is Silencer O.D. plus 200 mm.

Cylindrical Silencers

Acoustic Performance

Type B Dynamic Attenuation

Imperial

		Octave-Band Mid Frequencies Hz							
Bore Dia. Ins (D)	Length	63	125	250	500	1K	2K	4K	8K
6	1.5D	0	0	1	6	12	9	10	7
7.5	1.5D	0	0	1	7	11	8	9	6
9.5	1.5D	0	0	2	7	11	7	7	6
12	1D	1	2	4	9	11	10	9	7
	2D	1	2	5	11	16	12	11	10
15	1D	2	3	5	10	13	11	9	8
	2D	3	4	7	14	18	15	11	12
19	1D	2	3	6	13	14	10	10	5
	2D	3	4	8	19	18	14	11	10
24	1D	3	5	7	15	13	8	9	8
	2D	4	6	9	19	19	14	13	12
30	1D	3	5	8	16	12	9	9	8
	2D	4	6	10	19	15	12	11	10
38	1D	4	5	11	16	11	10	8	9
	2D	4	6	13	19	13	12	11	11
48	1D	4	6	12	17	10	9	8	7
	2D	5	7	14	19	14	11	11	9
60	1D	5	7	13	16	10	8	7	6
	2D	6	8	15	18	12	10	9	7

Metric

		Octave-Band Mid Frequencies Hz							
Bore Dia. mm (D)	Length	63	125	250	500	1K	2K	4K	8K
280	1D	1	1	2	8	11	8	8	7
	2D	1	2	4	10	13	10	10	9
315	1D	1	2	4	9	11	10	9	7
	2D	1	2	5	11	16	12	11	10
355	1D	1	2	4	10	12	10	9	7
	2D	2	3	6	13	17	14	11	11
400	1D	2	3	5	10	13	11	9	8
	2D	3	4	7	14	18	15	11	12
450	1D	2	3	6	12	13	11	10	6
	2D	3	4	8	17	18	15	11	11
500	1D	2	3	6	13	14	10	10	5
	2D	3	4	8	19	18	14	11	10
560	1D	2	4	7	14	14	9	10	7
	2D	3	5	9	19	18	14	12	11
630	1D	2	5	7	15	13	8	9	8
	2D	4	6	9	19	19	14	13	12
710	1D	3	5	7	15	13	9	9	8
	2D	4	6	9	19	17	13	12	11
800	1D	3	5	8	16	12	9	9	8
	2D	4	6	10	19	15	12	11	10
900	1D	3	5	10	17	13	11	10	8
	2D	4	6	12	19	15	12	11	10
1000	1D	4	5	11	16	11	10	8	9
	2D	4	6	13	19	14	12	11	11
1120	1D	4	5	11	17	11	9	8	8
	2D	4	6	13	19	14	12	11	8
1250	1D	4	6	12	17	10	9	8	7
	2D	4	6	14	19	14	11	11	9
1400	1D	4	6	12	16	10	8	7	6
	2D	4	7	14	18	13	10	10	8
1600	1D	4	7	12	16	10	8	7	6
	2D	4	8	15	18	12	10	9	7

Type C Dynamic Attenuation

Imperial

		Octave-Band Mid Frequencies Hz							
Bore Dia. Ins (D)	Length	63	125	250	500	1K	2K	4K	8K
12	1D	2	5	5	9	18	20	18	15
	2D	2	6	6	12	20	25	20	17
15	1D	2	6	6	10	19	24	20	17
	2D	3	7	8	14	29	29	23	18
19	1D	2	3	8	16	21	22	21	17
	2D	2	4	10	20	29	30	26	20
24	1D	3	5	8	16	19	14	16	12
	2D	5	6	10	19	29	25	21	20
30	1D	4	5	8	16	19	15	14	13
	2D	5	7	10	20	23	21	17	14
38	1D	5	5	11	18	19	14	14	14
	2D	5	6	13	26	24	20	18	16
48	1D	5	8	12	19	17	14	12	10
	2D	5	8	14	25	23	17	17	12
60	1D	5	8	13	17	16	13	11	8
	2D	6	10	17	21	20	17	14	9

Metric

		Octave-Band Mid Frequencies Hz							
Bore Dia. mm (D)	Length	63	125	250	500	1K	2K	4K	8K
315	1D	2	5	5	9	18	20	18	15
	2D	2	6	6	12	20	25	20	17
355	1D	2	5	6	9	18	22	19	16
	2D	2	6	7	13	25	27	21	17
400	1D	2	6	6	10	19	24	20	17
	2D	3	7	8	14	29	29	23	18
450	1D	2	4	7	13	20	23	22	17
	2D	2	5	9	16	29	29	21	20
500	1D	2	3	8	16	21	22	21	17
	2D	2	4	10	20	29	30	20	26
560	1D	3	5	8	16	20	18	19	15
	2D	4	5	10	20	29	28	21	23
630	1D	3	5	8	15	19	16	14	12
	2D	5	6	10	19	29	25	21	20
710	1D	3	5	8	15	19	15	14	12
	2D	5	6	10	20	26	23	18	17
800	1D	4	5	8	16	19	15	14	13
	2D	5	7	11	22	23	21	16	14
900	1D	4	5	9	17	19	15	14	13
	2D	5	7	12	24	23	21	16	15
1000	1D	5	5	11	18	19	15	14	13
	2D	5	7	13	26	24	20	16	16
1120	1D	5	7	11	19	18	14	13	12
	2D	5	8	13	25	23	18	16	13
1250	1D	5	8	12	19	17	14	12	10
	2D	5	8	14	25	17	17	17	12
1400	1D	5	8	12	18	16	13	11	9
	2D	5	9	15	23	22	17	15	10
1600	1D	5	8	13	17	16	13	11	8
	2D	6	10	17	21	20	17	14	9

For sizes above 60" or 1600 mm please enquire.

All performances are derived from tests to BS848.

For increased attenuation use Woods splitter silencers. Attenuation figures shown are typical in-situ Dynamic Performances. For critical applications, particularly high performance fan systems please consult Woods Acoustic Department.

Multicarb Activated Carbon Discarb Units



General Description

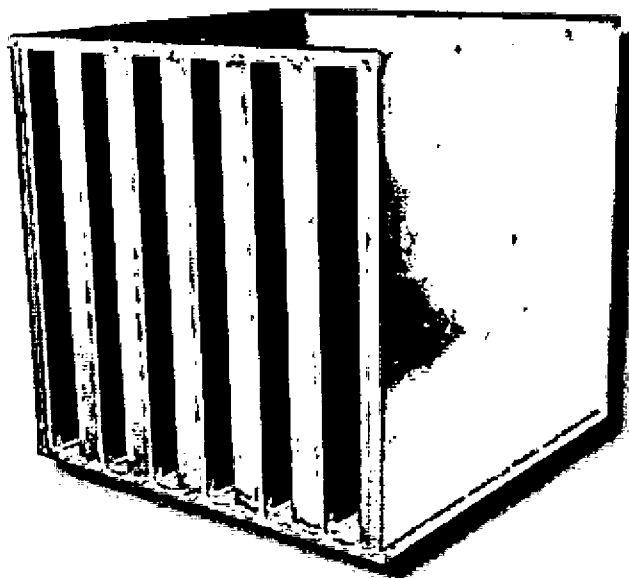
These filters are manufactured for ease of installation and incorporation into ducted air systems. They can be used on both supply for purifying incoming air, and can be used on the extract to remove toxic gasses and odours generated within a process.

Construction

These modules are manufactured by mounting a series of carbon panel filters with a sealed case. The airflow is epitomized by presenting the filtering surfaces in a "V" formation.

Each carbon panel is sealed into the filter case so as to ensure no air can bypass the carbon granules.

The panels are manufactured using long established bonding techniques which hold the activated carbon granules in a rigid biscuit. The biscuit is encapsulated in a carbon impregnated cloth which prevents any leakage of granules or powder.



The unique bonding method used by Jasun Envirocare ensures that, unlike our competitors filters, that the panels will remain intact and rigid even if wet.

Typical Applications

- Reduction of Cooking Odours
- Removal of Kerosene Exhaust Fumes
- General Odour Reduction
- Neutralisation of Ammonia and its Derivatives
- Removal of Formaldehyde
- Removal of Airborne Pollutants and Contaminants
- Removal of Acid Gases (H_2S , SO_2 , NOX , HCl)

Please check with our sales department when specifying carbon filters as most applications require a bespoke solution specifically tailored for the job in hand.



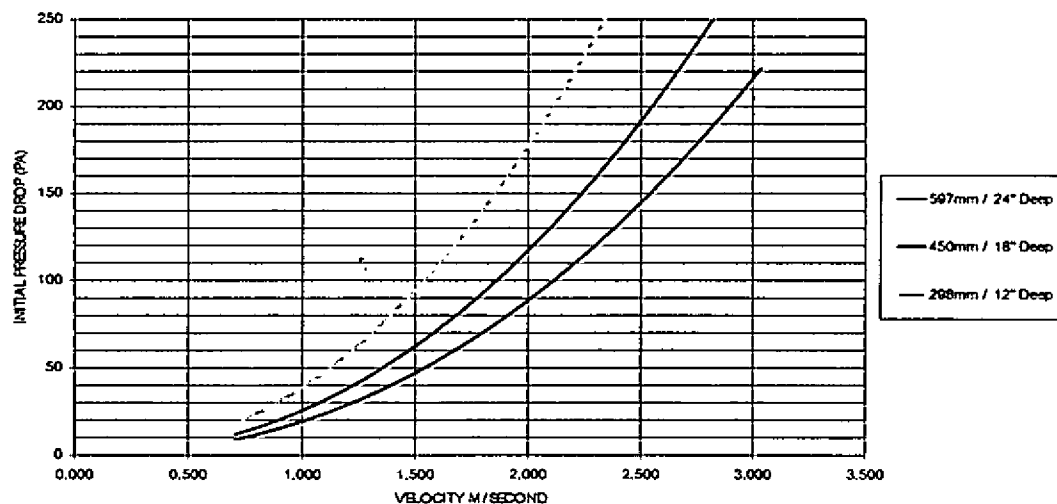
Multicarb Cells STANDARD SIZES



No.	Nominal Size (Inches)	Height (mm)	Width (mm)	Depth (mm)	Weight of Carbon (Kg)	Cell Weight	Capacity @ 0.1 Second Dwell Time
DC-CF1	24 x 24 x 8	594	594	197	10	22	800
DC-CF1-HALF	24 x 12 x 8	594	291	197	5	11	400
DC242412/8	24 x 24 x 12	594	594	292	13	24	990
DC121212	12 x 12 x 12	297	297	297	6	12	450
DC181812	18 x 18 x 12	445	445	297	13	25	990
DC241212	24 x 12 x 12	594	297	297	13	25	990
DC242412	24 x 24 x 12	594	594	297	25	36	1900
DC-CF2	24 x 24 x 16	594	594	397	18	34	1370
DC-CF2-HALF	24 x 12 x 16	594	291	397	9	18	685
DC-WA15-208	24 x 6 x 18	144	600	440	7	13	533
DC121218	12 x 12 x 18	292	292	451	10	15	761
DC181818	18 x 18 x 18	445	445	451	19	26	1445
DC241218	24 x 12 x 18	594	297	451	18	26	1369
DC242418	24 x 24 x 18	594	594	451	36	52	2740
DC121224	12 x 12 x 24	292	292	597	13	19	990
DC181824	18 x 18 x 24	445	445	597	25	36	1900
DC241224	24 x 12 x 24	594	297	597	25	36	1900
DC242424	24 x 24 x 24	594	594	597	50	61	3800

Copyright © Jasun Envirocare Plc 2007-2012

LINEAR VELOCITY M/SECOND VS PRESSURE DROP
MULTICARB ACTIVATED CARBON CELLS





Details of the ventilation system

Date: 18/11/2012

Customer: Paul Young, Cardamom Bay - Queens Way Bognor Regis

Details of the ventilation system:

Extract:

- 1.1 Canopy (hood) - Stainless Steel construction with all visible joints to be welded, ground and polished and incorporates a gutter around all edges. To include baffle type grease filters a 445 x 445mm. Canopy length 3800mm
- 1.2 Extract fan - fan to be mounted on AV mounts and separated from the ducting by using of flexible connectors to eliminate transferring of vibrations. Centrifugal silent fan Fischbach D540/E25 , single phase, fitted with autotransformer speed controller to eliminate motor hum noise. Technical data on separate sheet.
- 1.3 Noise control - silencer to be fitted just after extractor fan. Silencer model Flaktwoods 450 1D. Technical data on separate sheet.
- 1.4 Odour control - carbon filters are required on this site. Double carbon filter in housing fitted within the premises. Carbon filter model Jasun DC242424. Technical data on separate sheet.
- 1.5 Ductwork design - the height and velocity of the final discharge are the two important factors. Generally, the greater the flue height, the better the dispersion and dilution of odours. The discharge of air will be at a minimum height of 1m above the roof eaves, especially if there are buildings nearby that may affect odour dispersion and dilution. The final discharge will be vertically upwards, unimpeded by flue terminals. The number of bends in the ducting should be minimised and the ducting should have a smooth internal surface. Size of the ductwork to be 450mm diameter.

Air intake:

- 1.6 Sufficient air must be permitted into the premises to replace air extracted.

Air intake will provide around 80% of extracted air. Fresh air grille to be mounted on side elevation of building thorough existing window.

The air inlets must not permit pests to enter the kitchen.
There will be two 4-way diffusers fitted in the ceiling.

Gas Interlock: Gas interlock system will be fitted to meet BS 6173:2009.

Notes:

1. Ventilation/extraction is to ensure that no nuisance, disturbance or loss of amenity is caused by odour, fumes, food droplets or noise, to nearby properties.
2. All plant, ducts, pipe cables etc. shall be adequately protected against accidental damage corrosion and external environment and shall be capable of safe decontamination and removal in the future without disturbing other services. Pipes and ducts shall be adequately sized, kept as short as practicable, leak-proof with a minimum number of joints and have provision for routine maintenance. All facilities shall be designed to prevent the ingress or egress of rodents, vermin, and insects.
3. Fire/smoke dampers shall be installed in all fire compartment walls to Building Control requirements.
4. The HVAC contractor shall ensure that externally the ductwork conforms to the supplied drawings in terms of its route, height and termination.
5. Gas interlock system to be supplied and fitted by qualified person.
6. Upon completion of the installation, all shall be fully tested and proved including airflows. The contractor shall produce an Operating and Maintenance Manual which shall contain details of all equipment supplied

Any questions, please do not hesitate to contact us.



07723032044



08006124998



ventex@hotmail.co.uk

