



# HIDEAWAY SH

Centrifugal Box Fan

# HIDEAWAY SH

## Product Overview

- 6 standard sizes from 100mm to 315mm
- Air volume flow rates up to 0.37 m<sup>3</sup>/s
- Static pressures up to 1145 Pa
- Suitable for operating temperatures up to +60°C
- Available in **EC**



**The Hideaway SH low profile box fan is perfect for applications where space is a premium. The Hideaway incorporates advanced backward curved impellers, with three dimensional profiled blades.**

### Low Noise

Each unit is acoustically lined internally with Class O rated (BS 476 Parts 6 and 7) fire resistant acoustic foam lining minimising breakout noise levels.

### Easy Commissioning

Integrated commissioning control allowing single speed selection and also limiting maximum speed if used with an external potentiometer.

### Space saving

Ideal for very shallow ceiling voids or where space is at a premium.

### Efficient Performance

High efficiency low tonal noise backward curved centrifugal impellers are directly driven by an EC external rotor motor. They provide low specific fan powers and stepless speed control without tonal noise generation.

### Controllability

EC motors providing precise speed control via potentiometer, BMS or Elta Fans DCV control. Reduced fan speed can provide significant cost-savings through lower energy consumption in both mechanical energy of motors and also on the conditioning of replacement air.

### Warranty

Each SH has a 12 month warranty.

### Construction

A robust 1.2mm galvanised mild steel sheet casing. Each casing provides spigots to suit standard circular ducting. A removable lid is provided as standard to allow easy maintenance and cleaning.

### Motor

An EC external rotor motor is fitted as standard. The motor contains sealed for life bearings. Thermal Class of motors to THCL 130 or 155 dependent on size. All motors are suitable for use in ambient air conditions up to +60°C.

### Impeller

Dynamically balanced to ISO 14694 Grade G6.3 and directly driven by the motor to provide a smooth airflow through the unit.

### Typical Applications

- Bathroom and Kitchen Extract in Apartments
- Hotels
- Residential Properties
- Libraries
- Offices

### Contents

Page	Information
3	Performance Range Curves
4	Performance, SFP & Electrical Data
6	Sound Data
7	Dimensional Data
8	EcoDesign 1253/2014
9	Accessories
19	Notes

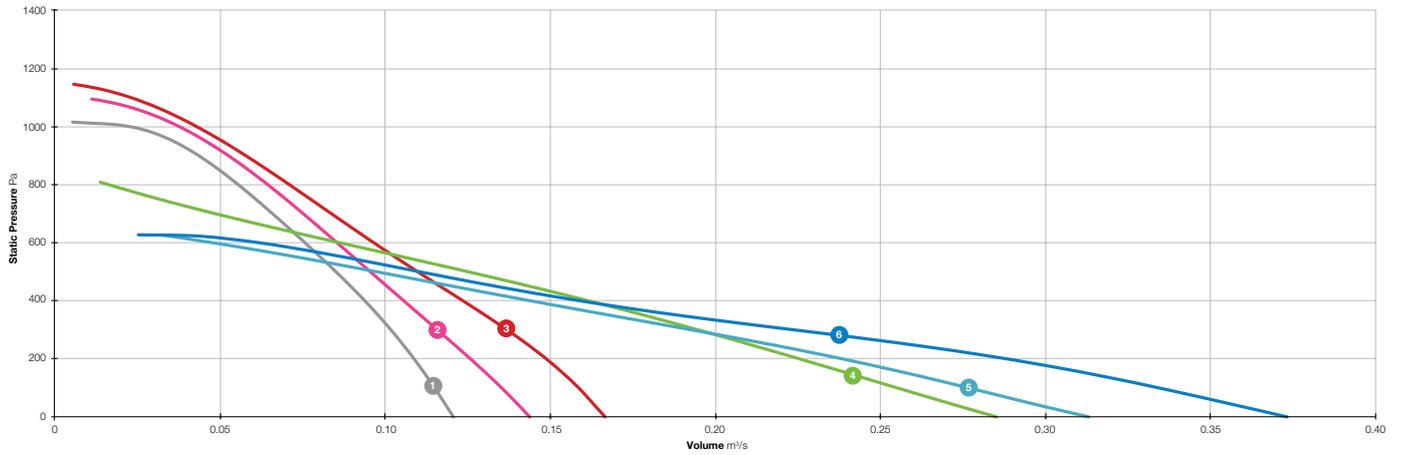
### Product Coding

Code	Reference
<b>SH</b>	Product Range
<b>125</b>	Diameter (125/150/200...)
-	
<b>1</b>	Voltage Supply (Single Phase / Three Phase)
<b>AC</b>	Motor Type (AC/EC)
<b>A - Z</b>	Additional Coding (A - Z) Product Variants
e.g.	<b>SH125 / 1AC L</b>

# HIDEAWAY SH



## Performance Range Curves



- 1 SH100 / 1ECL
- 2 SH125 / 1ECL

- 3 SH150 / 1ECL
- 4 SH200 / 1ECL

- 5 SH250 / 1ECL
- 6 SH315 / 1ECL

# HIDEAWAY SH



## Performance, SFP & Electrical Data

Single Phase 200V to 277V / 50Hz or 60Hz

Product Code	Control Voltage V	Speed r/min	Airflow SFP	Airflow m³/s @ Static Pressure Pa												At Best Efficiency Point		Electrical Data		dBA @ 3m	
				0	25	50	75	100	150	200	250	300	350	400	500	Overall Eff %	Input kW	Peak Amps			
SH100-1ECL	10	4595	m³/s	0.120	0.119	0.118	0.116	0.115	0.112	0.108	0.105	0.101	0.098	0.094	0.085	31.5	0.168	1.40	Inlet	58	
			W/(L/s)	1.38	1.40	1.41	1.43	1.45	1.49	1.53	1.58	1.64	1.71	1.78	1.97				Outlet	58	
			Breakout	48																	
	8	4180	m³/s	0.114	0.112	0.111	0.110	0.108	0.105	0.102	0.098	0.093	0.088	0.083	0.070	32.8	0.121	1.15	Inlet	-	
			W/(L/s)	1.22	1.24	1.25	1.27	1.29	1.32	1.36	1.40	1.45	1.51	1.58	1.78				Outlet	-	
			Breakout	-																	
	5	2470	m³/s	0.068	0.065	0.062	0.058	0.055	0.046	0.034	0.010	-	-	-	-	29.5	0.029	0.29	Inlet	-	
			W/(L/s)	0.47	0.49	0.51	0.54	0.57	0.65	0.82	2.01	-	-	-	-				Outlet	-	
			Breakout	-																	
	2	770	m³/s	0.021	-	-	-	-	-	-	-	-	-	-	-	7.9	0.003	0.05	Inlet	-	
			W/(L/s)	0.17	-	-	-	-	-	-	-	-	-	-	-				Outlet	-	
			Breakout	-																	
SH125-1ECL	10	4550	m³/s	0.143	0.141	0.139	0.137	0.135	0.130	0.125	0.120	0.115	0.110	0.105	0.095	35.0	0.171	1.40	Inlet	60	
			W/(L/s)	1.18	1.20	1.21	1.23	1.25	1.30	1.35	1.41	1.48	1.55	1.62	1.80				Outlet	61	
			Breakout	53																	
	8	4160	m³/s	0.137	0.134	0.132	0.129	0.127	0.122	0.116	0.111	0.105	0.099	0.093	0.080	34.2	0.133	1.18	Inlet	-	
			W/(L/s)	1.09	1.11	1.12	1.14	1.16	1.20	1.25	1.31	1.37	1.44	1.52	1.72				Outlet	-	
			Breakout	-																	
	5	2480	m³/s	0.079	0.076	0.072	0.068	0.063	0.053	0.040	0.019	-	-	-	-	31.1	0.031	0.30	Inlet	-	
			W/(L/s)	0.41	0.43	0.46	0.49	0.53	0.62	0.77	1.33	-	-	-	-				Outlet	-	
			Breakout	-																	
	2	770	m³/s	0.025	-	-	-	-	-	-	-	-	-	-	-	9.6	0.003	0.05	Inlet	-	
			W/(L/s)	0.15	-	-	-	-	-	-	-	-	-	-	-				Outlet	-	
			Breakout	-																	
SH150-1ECL	10	4090	m³/s	0.166	0.164	0.162	0.160	0.158	0.154	0.148	0.143	0.137	0.130	0.123	0.109	39.3	0.170	1.28	Inlet	60	
			W/(L/s)	1.02	1.03	1.04	1.05	1.07	1.10	1.14	1.19	1.24	1.31	1.38	1.55				Outlet	60	
			Breakout	54																	
	8	3850	m³/s	0.163	0.161	0.160	0.158	0.156	0.152	0.148	0.142	0.137	0.130	0.123	0.104	38.5	0.150	1.26	Inlet	-	
			W/(L/s)	0.98	1.00	1.01	1.03	1.04	1.08	1.12	1.16	1.21	1.27	1.34	1.52				Outlet	-	
			Breakout	-																	
	5	2290	m³/s	0.099	0.095	0.091	0.086	0.080	0.067	0.051	0.024	-	-	-	-	36.3	0.034	0.28	Inlet	-	
			W/(L/s)	0.38	0.40	0.41	0.44	0.46	0.54	0.66	1.11	-	-	-	-				Outlet	-	
			Breakout	-																	
	2	735	m³/s	0.031	0.008	-	-	-	-	-	-	-	-	-	-	13.3	0.003	0.03	Inlet	-	
			W/(L/s)	0.11	0.37	-	-	-	-	-	-	-	-	-	-				Outlet	-	
			Breakout	-																	
SH200-1ECL	10	3245	m³/s	0.285	0.277	0.269	0.262	0.254	0.240	0.225	0.210	0.194	0.178	0.161	0.124	43.5	0.170	1.58	Inlet	60	
			W/(L/s)	0.60	0.61	0.63	0.65	0.67	0.71	0.76	0.81	0.87	0.95	1.05	1.37				Outlet	63	
			Breakout	58																	
	8	2960	m³/s	0.250	0.243	0.236	0.229	0.222	0.208	0.192	0.176	0.159	0.140	0.117	0.032	42.9	0.131	1.24	Inlet	-	
			W/(L/s)	0.47	0.49	0.51	0.53	0.56	0.61	0.67	0.75	0.83	0.94	1.09	2.74				Outlet	-	
			Breakout	-																	
	5	1765	m³/s	0.144	0.134	0.122	0.110	0.096	0.061	-	-	-	-	-	-	39.1	0.031	0.32	Inlet	-	
			W/(L/s)	0.19	0.22	0.25	0.29	0.33	0.48	-	-	-	-	-	-				Outlet	-	
			Breakout	-																	
	2	960	m³/s	0.077	0.055	0.016	-	-	-	-	-	-	-	-	-	24.2	0.008	0.10	Inlet	-	
			W/(L/s)	0.10	0.14	0.44	-	-	-	-	-	-	-	-	-				Outlet	-	
			Breakout	-																	

Data provided is at standard air density of 1.2 kg/m³.

Data in accordance with ErP 1253/2014 of the European Parliament. Product category is NRVU. Measurement category used to determine energy efficiency: D.

A variable speed drive is integrated within the fan.

Peak Amps @ 230V / 1PH / 50Hz.

The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20µPa and is presented for comparative purposes only.

# HIDEAWAY SH



## Performance, SFP & Electrical Data

Single Phase 200V to 277V / 50Hz or 60Hz

Product Code	Control Voltage V	Speed r/min	Airflow SFP	Airflow m³/s @ Static Pressure Pa												At Best Efficiency Point		Electrical Data	dBA @ 3m	
				0	25	50	75	100	150	200	250	300	350	400	500	Overall Eff %	Input kW	Peak Amps		
SH250-1ECL	10	3250	m³/s	0.313	0.303	0.294	0.285	0.276	0.258	0.238	0.216	0.193	0.168	0.144	0.097	39.5	0.170	1.60	Inlet	58
			W/(L/s)	0.54	0.56	0.58	0.59	0.61	0.66	0.71	0.79	0.88	1.01	1.18	1.74				Outlet	60
			Breakout	56																
	8	3250	m³/s	0.306	0.299	0.292	0.284	0.276	0.258	0.237	0.215	0.191	0.167	0.142	0.090	39.3	0.170	1.55	Inlet	-
			W/(L/s)	0.54	0.55	0.57	0.59	0.61	0.66	0.72	0.79	0.89	1.02	1.20	1.90				Outlet	-
			Breakout	-																
	5	2270	m³/s	0.194	0.183	0.173	0.162	0.150	0.125	0.094	0.052	-	-	-	-	36.7	0.062	0.61	Inlet	-
			W/(L/s)	0.25	0.28	0.31	0.34	0.38	0.49	0.66	1.10	-	-	-	-				Outlet	-
			Breakout	-																
	2	1050	m³/s	0.089	0.069	0.034	-	-	-	-	-	-	-	-	-	26.6	0.010	0.11	Inlet	-
			W/(L/s)	0.09	0.13	0.27	-	-	-	-	-	-	-	-	-				Outlet	-
			Breakout	-																
SH315-1ECL	10	2440	m³/s	0.373	0.363	0.353	0.344	0.334	0.312	0.288	0.258	0.223	0.188	0.158	0.110	44.8	0.171	1.47	Inlet	53
			W/(L/s)	0.46	0.47	0.48	0.50	0.51	0.55	0.60	0.67	0.77	0.90	1.08	1.59				Outlet	52
			Breakout	51																
	8	2465	m³/s	0.367	0.357	0.348	0.337	0.326	0.302	0.275	0.246	0.216	0.188	0.160	0.105	38.4	0.171	1.49	Inlet	-
			W/(L/s)	0.44	0.46	0.48	0.50	0.52	0.57	0.63	0.70	0.79	0.91	1.08	1.62				Outlet	-
			Breakout	-																
	5	1545	m³/s	0.219	0.203	0.187	0.169	0.151	0.106	0.032	-	-	-	-	-	36.3	0.045	0.41	Inlet	-
			W/(L/s)	0.16	0.19	0.22	0.26	0.30	0.41	1.06	-	-	-	-	-				Outlet	-
			Breakout	-																
	2	485	m³/s	0.070	-	-	-	-	-	-	-	-	-	-	-	12.8	0.004	0.06	Inlet	-
			W/(L/s)	0.05	-	-	-	-	-	-	-	-	-	-	-				Outlet	-
			Breakout	-																

Data provided is at standard air density of 1.2 kg/m³.

Data in accordance with ErP 1253/2014 of the European Parliament. Product category is NRVU. Measurement category used to determine energy efficiency: D.

A variable speed drive is integrated within the fan.

Peak Amps @ 230V / 1PH / 50Hz.

The overall A-weighted sound pressure level is at a distance of 3m with spherical free-field propagation. It is expressed in dB re-20µPa and is presented for comparative purposes only.

# HIDEAWAY SH



## Sound Data

Single Phase 200V to 277V / 50Hz or 60Hz

Product Code	Control Voltage V		Sound Power Level dBW @ Octave Band Hz								Total dB
			63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
SH100-1ECL	10	Inlet	76	79	85	78	56	52	44	43	87
		Outlet	81	81	84	79	65	56	48	43	88
		Breakout	58	62	72	69	57	53	47	45	74
SH125-1ECL	10	Inlet	84	81	86	81	58	55	48	51	90
		Outlet	86	79	87	81	67	59	51	50	90
		Breakout	57	61	76	75	62	57	50	50	79
SH150-1ECL	10	Inlet	86	79	85	81	58	56	49	46	90
		Outlet	85	81	86	80	66	60	55	53	90
		Breakout	59	61	78	75	61	56	50	49	80
SH200-1ECL	10	Inlet	87	80	86	80	63	58	53	52	90
		Outlet	90	84	90	82	69	65	58	57	94
		Breakout	64	70	83	79	65	61	56	57	85
SH250-1ECL	10	Inlet	79	77	85	78	63	59	56	55	87
		Outlet	89	84	86	78	69	65	60	59	92
		Breakout	63	67	79	77	66	60	53	53	82
SH315-1ECL	10	Inlet	77	75	82	63	57	51	52	52	84
		Outlet	78	75	79	68	63	59	54	55	83
		Breakout	64	64	78	69	63	56	49	49	79

Data provided at standard air density of 1.2 kg/m<sup>3</sup>.  
 Tests and preparation of the sound data have been carried out in accordance with BS 848 Part 2:1985 at 50% peak pressure.  
 The Sound Power Level Spectra are in dB re-1pW.

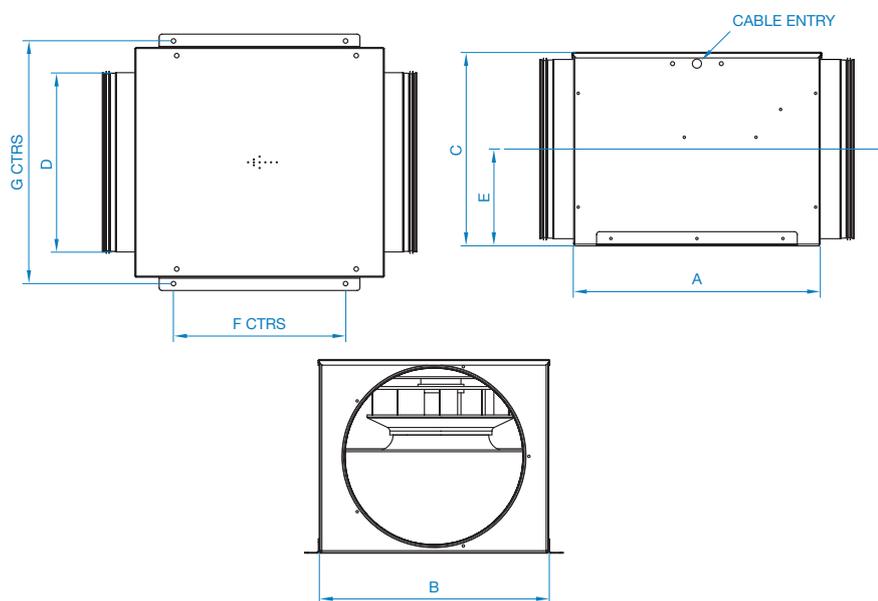
# HIDEAWAY SH



## Dimensional Data

### Single Phase

Product Code	A	B	C	D	E	F	G	Weight kg
SH100-1ECL	400	300	166	100	83	300	325	10
SH125-1ECL	400	300	166	125	83	300	325	10
SH150-1ECL	400	300	182	150	91	300	325	10
SH200-1ECL	424	350	231	200	116	300	375	12
SH250-1ECL	452	350	281	250	140	300	375	14
SH315-1ECL	430	400	340	315	170	300	426	16



Dimensions are in mm.

REV2 01/05/2018

A	B	C*			D	E	F	G	H	I	J	K	L	N	O	P	Q	R	S
		C.1	C.2	C.3															
Elta Fans Ltd	<a href="#">SH100-1ECL</a>	NRVU	UVU	2018	Variable-Speed	None	n/a	0.07	0.168	n/a	8.91	681	n/a	31.5	<1.5	n/a	n/a	58	www.eltafans.com
Elta Fans Ltd	<a href="#">SH125-1ECL</a>	NRVU	UVU	2018	Variable-Speed	None	n/a	0.07	0.171	n/a	5.7	703	n/a	35	<1.5	n/a	n/a	60	www.eltafans.com
Elta Fans Ltd	<a href="#">SH150-1ECL</a>	NRVU	UVU	2018	Variable-Speed	None	n/a	0.09	0.17	n/a	5.09	673	n/a	39.3	<1.5	n/a	n/a	60	www.eltafans.com
Elta Fans Ltd	<a href="#">SH200-1ECL</a>	NRVU	UVU	2018	Variable-Speed	None	n/a	0.15	0.17	n/a	4.77	424	n/a	43.5	<1.5	n/a	n/a	60	www.eltafans.com
Elta Fans Ltd	<a href="#">SH250-1ECL</a>	NRVU	UVU	2018	Variable-Speed	None	n/a	0.17	0.17	n/a	3.46	346	n/a	39.5	<1.5	n/a	n/a	58	www.eltafans.com
Elta Fans Ltd	<a href="#">SH315-1ECL</a>	NRVU	UVU	2018	Variable-Speed	None	n/a	0.22	0.171	n/a	2.82	310	n/a	44.8	<1.5	n/a	n/a	53	www.eltafans.com

- A** Manufacturer's Name
- B** Model Identifier
- C.1** RVU or NRVU
- C.2** UVU or BVU
- C.3** ErP Compliance
- D** Type of Drive (MSD or VSD)
- E** Type of HRS (Run Around or Other or None)
- F** Thermal Efficiency (% or N/A)
- G** Nominal Flow Rate (m<sup>3</sup>/s)
- H** Effective electrical power input (kW)
- I** SFP int (W/m<sup>3</sup>/s)
- J** Face Velocity (m/s)
- K** Nominal External Pressure (Pa)
- L** Internal pressure drop of ventilation components (Pa)
- N** Static efficiency of fan used 327/2011
- O** Maximum external leakage rate (%)
- P** Energy Classification of filters
- Q** Description of visual filter warning
- R** Casing sound power level (LWA)
- S** Website for disassembly instructions

\* Declared Typology C

# HIDEAWAY SH



## Accessories

### Single Phase

Product Code	Box Fan Flexible Connector (each)	Damper	EC Electronic Controller	Electric Heater Battery	Fast Clamps (each)	Panel Filter
<a href="#">SH100-1ECL</a>	018-0100-FLEX	018-100-DAMPER	149-POT-10	018-CV10-06-1M	018-100-CLAMP	018-0100-FILT-P
<a href="#">SH125-1ECL</a>	018-0125-FLEX	018-125-DAMPER	149-POT-10	018-CV12-12-1M	018-125-CLAMP	018-0125-FILT-P
<a href="#">SH150-1ECL</a>	018-0150-FLEX	018-150-DAMPER	149-POT-10	018-CV15-27-1M	018-150-CLAMP	018-0150-FILT-P
<a href="#">SH200-1ECL</a>	018-0200-FLEX	018-200-DAMPER	149-POT-10	018-CV20-30-1M	018-200-CLAMP	018-0200-FILT-P
<a href="#">SH250-1ECL</a>	018-0250-FLEX	018-250-DAMPER	149-POT-10	018-CV25-30-1M	018-250-CLAMP	018-0250-FILT-P
<a href="#">SH315-1ECL</a>	018-0315-FLEX	018-315-DAMPER	149-POT-10	018-CV31-30-1M	018-315-CLAMP	018-0315-FILT-P
				018-CV31-45-1M		
				018-CV31-90-3M		

Product Code	Spigot Silencer 300mm Long	Spigot Silencer 600mm Long	Spigot Silencer 900mm Long	Spigot Silencer 1200mm Long	Wiring Diagram
<a href="#">SH100-1ECL</a>	068-0100-JF1	068-0100-JF2	068-0100-JF3	068-0100-JF4	152-00036
<a href="#">SH125-1ECL</a>	068-0125-JF1	068-0125-JF2	068-0125-JF3	068-0125-JF4	152-00036
<a href="#">SH150-1ECL</a>	068-0150-JF1	068-0150-JF2	068-0150-JF3	068-0150-JF4	152-00036
<a href="#">SH200-1ECL</a>	068-0200-JF1	068-0200-JF2	068-0200-JF3	068-0200-JF4	152-00036
<a href="#">SH250-1ECL</a>	068-0250-JF1	068-0250-JF2	068-0250-JF3	068-0250-JF4	152-00036
<a href="#">SH315-1ECL</a>	068-0315-JF1	068-0315-JF2	068-0315-JF3	068-0315-JF4	152-00036

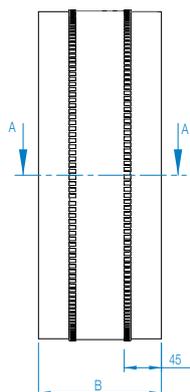
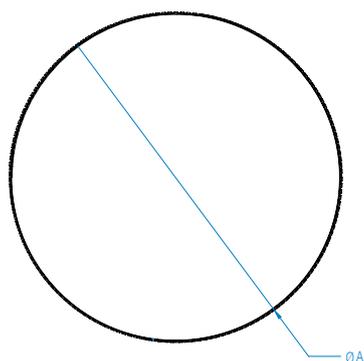
# BOX FAN FLEXIBLE CONNECTOR

## Accessories

- Fix directly on to spigot
- Provides flexible connection between fan and accessory or duct
- PVC coated polyester with galvanised sheet steel



Product Code	Fan Dia. A	B	Weight kg
<a href="#">018-0100-FLEX</a>	100	150	0.2
<a href="#">018-0125-FLEX</a>	125	150	0.2
<a href="#">018-0150-FLEX</a>	150	150	0.2
<a href="#">018-0200-FLEX</a>	200	150	0.3
<a href="#">018-0250-FLEX</a>	250	150	0.4
<a href="#">018-0315-FLEX</a>	315	150	0.5



Dimensions are in mm.

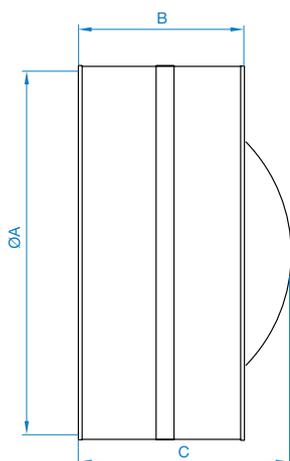
# DAMPER

## Accessories

- Prevents reverse flow of air when fan is not operating
- Galvanised sheet steel case
- Spring operated aluminium sheet blades



Product Code	Fan Dia. A	B	C	Weight kg
<a href="#">018-100-DAMPER</a>	100	90	100	0.2
<a href="#">018-125-DAMPER</a>	125	90	100	0.3
<a href="#">018-150-DAMPER</a>	150	90	110	0.3
<a href="#">018-200-DAMPER</a>	200	125	150	0.6
<a href="#">018-250-DAMPER</a>	250	125	190	0.6
<a href="#">018-315-DAMPER</a>	315	125	210	1.3



Dimensions are in mm.

# EC ELECTRONIC CONTROLLER

## Accessories

- EC Type fans
- Variable Speed Drives (Inverters)



Product Code
149-POT-10

# ELECTRIC HEATER BATTERY

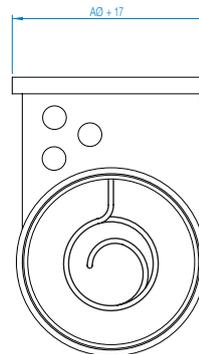
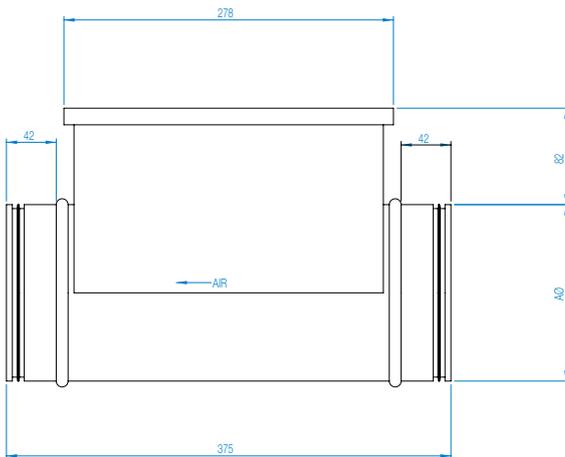
## Accessories



### Type

CV – (E/M) duct heater with casing of Aluzinc-coated sheet steel and stainless steel heater element to EN 1.4301. The duct heaters conform to air tightness class C to EN 15727. Control takes place by an external regulator and sensor that must be ordered separately.

Product Code	kW	Phase	Airflow @ m <sup>3</sup> /s		A	Weight kg
			Min	Max		
018-CV10-06-1M	0.6	1	0.012	0.046	100	2.3
018-CV12-12-1M	1.2	1	0.019	0.093	125	3.0
018-CV15-27-1M	2.7	1	0.031	0.208	150	4.2
018-CV20-30-1M	3.0	1	0.047	0.231	200	5.9
018-CV25-30-1M	3.0	1	0.075	0.231	250	7.8
018-CV31-30-1M	3.0	1	0.115	0.231	315	8.3
018-CV31-45-1M	4.5	1	0.115	0.347	315	8.3
018-CV31-90-3M	9.0	3	0.115	0.694	315	8.3



Dimensions are in mm.

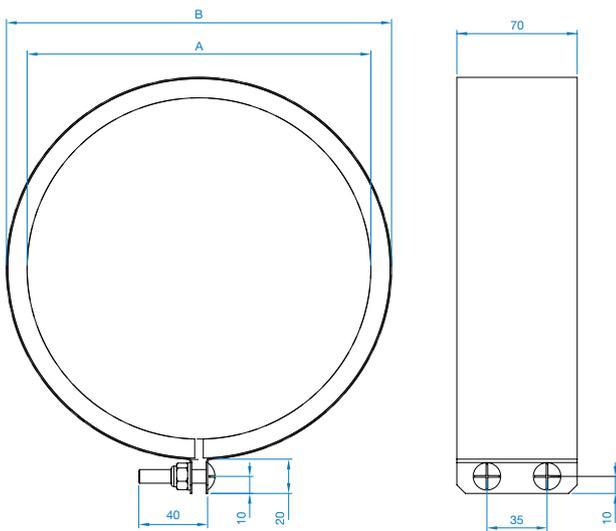
# FAST CLAMPS

## Accessories

- For quick connection of spigotted fans to circular duct or accessories
- Galvanised steel circular duct clamp with foam lining



Product Code	Fan Size	A Dia.	B Dia.	Weight kg
<a href="#">018-100-CLAMP</a>	100	100	124	0.25
<a href="#">018-125-CLAMP</a>	125	125	149	0.29
<a href="#">018-150-CLAMP</a>	150	150	174	0.33
<a href="#">018-200-CLAMP</a>	200	200	224	0.42
<a href="#">018-250-CLAMP</a>	250	250	274	0.49
<a href="#">018-315-CLAMP</a>	315	315	339	0.59

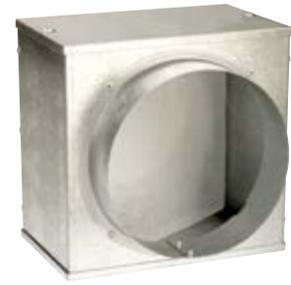


Dimensions are in mm.

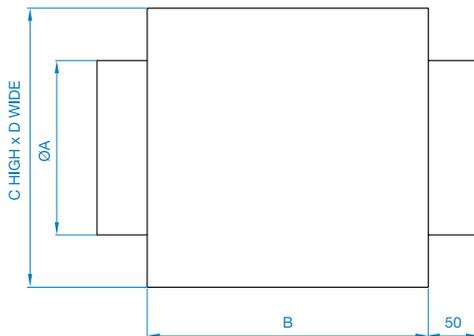
# PANEL FILTER

## Accessories

- Galvanised steel casing
- Filter media to BS EN 779 rating G2 with 85% arrestance
- Filter access with removable panel



Product Code	Fan Dia. A	B	C	D	Weight kg
<a href="#">018-0100-FILT-P</a>	100	155	200	200	2
<a href="#">018-0125-FILT-P</a>	125	155	200	200	2
<a href="#">018-0150-FILT-P</a>	150	155	250	250	2
<a href="#">018-0200-FILT-P</a>	200	155	250	250	2
<a href="#">018-0250-FILT-P</a>	250	200	300	300	3
<a href="#">018-0315-FILT-P</a>	315	300	440	440	8



Dimensions are in mm.

# SPIGOT SILENCER

## Accessories

- Small metric range of attenuators with spigot connection
- Ideal for small fans
- Ideal for cross talk elimination
- Ideal for flexible or spiral ducting



### Construction

Both types are rigidly constructed in galvanised sheet steel, with a highly absorbent sound attenuating lining between the outer casing and the inner perforated steel lining. The end faces of the silencer do not have threaded holes for fixings, but has a steel spigot for ease of mounting.

Melinex lined silencers must be used to prevent grease impregnation into the acoustic media for kitchen extract applications as prescribed in DW/172 HVAC Specification For Kitchen Ventilation Systems. For Melinex insertion losses, please contact Elta Fans. Silencers can be provided with differing lengths: 300, 600, 900 and 1200mm.

### Silencer Attenuation

To determine the sound level of a fan fitted with a silencer, the dynamic insertion loss should be subtracted from the sound power level spectrum (dBW) of the fan. This should be done for the entire octave band mid-frequency spectrum. The fan dBW ratings and silencer attenuation apply equally to in duct applications, with a silencer connected between the fan and the duct system.

### Dynamic Insertion Loss

The silencer attenuation is defined as the “dynamic insertion loss”. The values quoted in the tables represent the difference between the sound power level of a fan and silencer combination (dBW) and that of the fan alone (dBW). The dynamic insertion losses shown are the attenuations recorded under ideal working conditions. The achieved attenuation will vary according to the air velocity and flow pattern in the airways. Noise regeneration can occur at higher velocities, especially in EP silencers.

### Square / Rectangular Silencers

In highly noise sensitive areas, where the circular silencers cannot achieve the necessary attenuation levels, Elta Fans can design and build optional splitter silencers for greater effect.

# SPIGOT SILENCER

## Dynamic Insertion Loss

Product Code	Length	Insertion Loss @ Octave band (Hz)							
		63	125	250	500	1K	2K	4K	8K
068-0100-JF1	300mm	-3	-4	-9	-17	-23	-26	-25	-14
068-0100-JF2	600mm	-5	-8	-15	-33	-39	-40	-36	-20
068-0100-JF3	900mm	-10	-13	-21	-40	-45	-40	-36	-24
068-0100-JF4	1200mm	-12	-15	-23	-42	-47	-42	-38	-26
068-0125-JF1	300mm	-3	-3	-8	-16	-21	-24	-22	-12
068-0125-JF2	600mm	-4	-8	-13	-30	-35	-35	-31	-15
068-0125-JF3	900mm	-9	-12	-18	-37	-41	-38	-34	-20
068-0125-JF4	1200mm	-11	-15	-21	-40	-46	-41	-36	-23
068-0150-JF1	300mm	-3	-3	-6	-14	-19	-23	-22	-11
068-0150-JF2	600mm	-4	-7	-12	-23	-30	-36	-31	-15
068-0150-JF3	900mm	-8	-9	-15	-31	-37	-37	-34	-18
068-0150-JF4	1200mm	-10	-14	-17	-34	-41	-40	-36	-20
068-0200-JF1	300mm	-2	-3	-6	-13	-17	-20	-18	-9
068-0200-JF2	600mm	-4	-6	-10	-20	-27	-32	-20	-11
068-0200-JF3	900mm	-7	-9	-14	-32	-39	-36	-26	-15
068-0200-JF4	1200mm	-10	-12	-17	-35	-41	-44	-28	-16
068-0250-JF1	300mm	-2	-3	-6	-12	-16	-19	-17	-8
068-0250-JF2	600mm	-3	-6	-10	-19	-25	-29	-18	-10
068-0250-JF3	900mm	-5	-8	-12	-24	-30	-30	-22	-14
068-0250-JF4	1200mm	-7	-10	-15	-31	-37	-38	-26	-15
068-0315-JF1	300mm	-1	-3	-6	-12	-15	-18	-16	-8
068-0315-JF2	600mm	-3	-5	-8	-16	-21	-22	-16	-14
068-0315-JF3	900mm	-4	-7	-10	-20	-31	-28	-17	-14
068-0315-JF4	1200mm	-6	-9	-14	-23	-32	-32	-18	-15

# SPIGOT SILENCER

## Dimensional Data

Product Code	Fan Dia.	A	B	C	D	Weight kg
068-0100-JF1	100	98	204	300	40	2.5
068-0100-JF2	100	98	204	600	40	4.6
068-0100-JF3	100	98	204	900	40	6.7
068-0100-JF4	100	98	204	1200	40	8.7
068-0125-JF1	125	123	230	300	40	2.9
068-0125-JF2	125	123	230	600	40	5.4
068-0125-JF3	125	123	230	900	40	7.8
068-0125-JF4	125	123	230	900	40	10.2
068-0150-JF1	150	148	255	300	40	3.4
068-0150-JF2	150	148	255	600	40	6.1
068-0150-JF3	150	148	255	900	40	8.9
068-0150-JF4	150	148	255	1200	40	11.6
068-0200-JF1	200	198	305	300	40	4.2
068-0200-JF2	200	198	305	600	40	7.6
068-0200-JF3	200	198	305	900	40	11.0
068-0200-JF4	200	198	305	1200	40	14.5
068-0250-JF1	250	248	355	300	40	5.0
068-0250-JF2	250	248	355	600	40	9.1
068-0250-JF3	250	248	355	900	40	13.2
068-0250-JF4	250	248	355	1200	40	17.3
068-0315-JF1	315	313	420	300	40	6.1
068-0315-JF2	315	313	420	600	40	11.1
068-0315-JF3	315	313	420	900	40	16.1
068-0315-JF4	315	313	420	1200	40	21.0



Dimensions are in mm.



## Building Services

Tel **+44 (0) 1384 275800**  
Fax **+44 (0) 1384 275810**  
Email **info@eltafans.co.uk**

46 Third Avenue, Pensnett Trading Estate, Kingswinford,  
West Midlands, DY6 7US United Kingdom

## Applied Technology & Building Services Export

Tel **+44 (0) 1489 566500**  
Fax **+44 (0) 1489 566555**  
Email **at@eltafans.co.uk / export@eltafans.co.uk**

17 Barnes Wallis Road, Segensworth East Industrial Estate,  
Fareham, Hampshire, PO15 5ST United Kingdom

**eltafans.com**

SH-03-2018 Issue A



BS EN ISO 9001:2015 FM 556465

