

# SMOKE VENT



Emergency **Ventilation**

# SmokeVent SLCS - Long Cased

## Features & Benefits



The SmokeVent SLCS range has been specifically developed for emergency smoke spill extract systems to operate as part of the main extract system or as dedicated fans for emergency clearance to overcome hazardous fire, smoke or fume conditions.

- 5 Sizes from 400mm to 710mm.
- Air Volume flow rates of up to 7.85 m<sup>3</sup>/sec.
- Static Pressures of up to 800 Pa.
- Adjustable pitch aerofoil impellers.
- Motors are pad mounted totally enclosed metric type.
- Motors are cast iron construction with windings with Class 'H' insulation.
- Suitable for normal continuous duty and a once only use under smoke operation at 300° C for 2 hours.
- Certified to EN12101-03:2002
- Robust, hot dipped galvanised steel casings

**Remember - SmokeVent SLCS is only a selection from a full range of certified smoke extract fans up to 2m diameter at 300°C for 2 hours and up to 1250mm at 400°C for 2 hours**

### Features & Benefits

**Capability** – SmokeVent can run in either normal extract mode or a once only smoke operation at 300° C for 2 hours which means cost savings as a single fan provides both general and smoke extract requirements.

**Cost effective** – The high efficiency impellers make this a very economical method of moving high volumes of air at low to medium pressures.

**Material strength** – SmokeVent SLCS axial fans are a robust, heavy duty construction for added strength and durability. Fan casings are heavy gauge, sheet steel, roll formed and welded and hot dipped galvanised after fabrication to BS 729.

**Impeller design** – Adjustable pitch aerofoil section impellers with blades made from high quality pressure die cast aluminium. Hubs are pressure die cast aluminium. The assembled impellers have their blades positively locked by pinning, which provides added security for operation in the smoke regime.

**Choice** – A range of 5 sizes from 400mm to 710mm diameter available ex-stock.

**Effective** - Rapid smoke extraction, smoke cooling and better smoke control facilitates escape via evacuation.

**Ease of installation** – The centrally mounted motor is wired via a temperature resistant conduit system to an externally located IP55 terminal box for customer cabling interface.

**Integral Flanges** – Casings have integral spun flanges for a smooth airflow.

**Control** - A mechanical smoke extract system that is independent from external conditions allows emergency control of the situation by the fire services.

**Safety** – The removal of smoke assists the safety of the occupants in the event of a fire.

**Full accessory range** – Mounting feet, anti-vibration mounts, matching flanges, flexible connectors, silencers, bell mouth inlets, non-return dampers and wire guards - All selected in advance to match the fan, which means this avoids any on site installation and fitting problems.

**Tested to the very latest standards** – SLCS units are tested to ISO 5801:1997 (airside performance) and to BS 848 Pt 2:1985 (sound performance).

Units are tested and certified in accordance with EN12101-03:2002, the specification for powered smoke and heat exhaust ventilators.

**Quality assurance** – All units are designed and manufactured with procedures as defined in BS EN ISO 9001: 2000.

**Warranty** – Each SLCS has a 12 month warranty (excluding emergency smoke operation).

### Applications

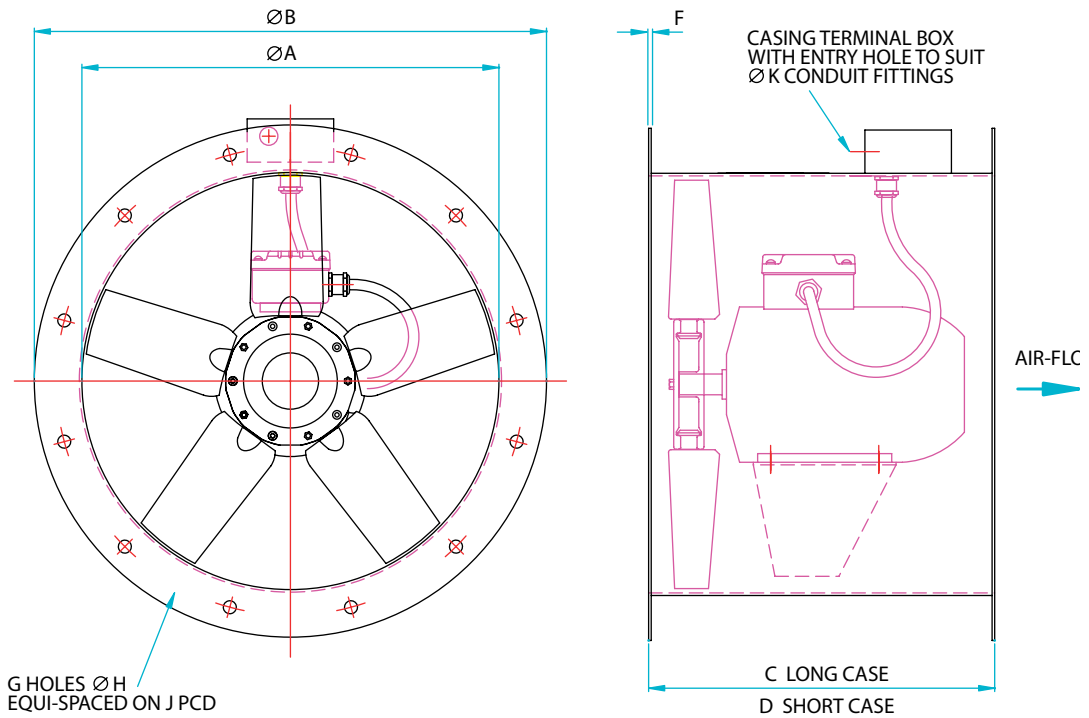
Shopping malls, stairwell pressurization, enclosed car parks, residential and public buildings, underground stations and theatres.

# SmokeVent SLCS - Long Cased

## Dimensional Data

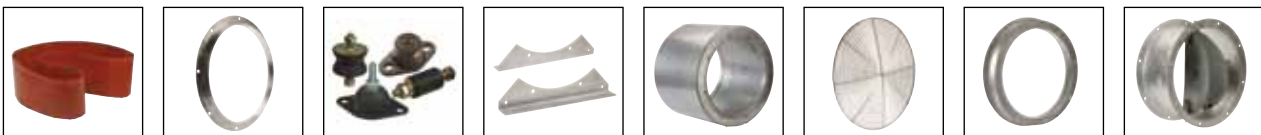


AXIAL FLOW



Product Code	Fan Dia A	B	C	D	E	F	G	K	Weight kg
SLCS400/4-3	400	475	400	260	8	12	450	20	35
SLCS400/2-3A	400	475	400	260	8	12	450	20	37
SLCS400/2-3B	400	475	400	260	8	12	450	20	42
SLCS500/4-3A	500	585	400	310	12	12	560	20	41
SLCS500/4-3B	500	585	400	310	12	12	560	20	45
SLCS500/2-3A	500	585	400	310	12	12	560	20	47
SLCS500/2-3B	500	585	450	310	12	12	560	25	68
SLCS560/4-3A	560	645	400	340	12	12	620	20	43
SLCS560/4-3B	560	645	400	340	12	12	620	20	49
SLCS630/4-3A	630	715	400	375	12	12	690	20	52
SLCS630/4-3B	630	715	450	375	12	12	690	20	64
SLCS710/4-3A	710	795	450	425	16	12	770	20	67
SLCS710/4-3B	710	795	470	425	16	12	770	25	111

## Accessories



# SmokeVent SLCS - Long Cased

## Performance & Electrical Data



### THREE Phase - 380V-415V / 50Hz

Product Code	Speed r/min	Airflow m <sup>3</sup> /s @ Static Pressure Pa.												Motor Electrical Data				A.V. Mounts	dBA @ 3m
		0	50	100	150	200	250	300	400	500	600	700	800	IE1 FLC Amps	IE2 FLC Amps	SC Amps	Output kW		
SLCS400/4-3	1430	1.40	1.26	1.03										1.36	N/A	8.16	0.55	ES20/20	56
SLCS400/2-3A	2760	1.69	1.65	1.59	1.54	1.47	1.40	1.31	1.08	0.74				2.78	2.79	13.9	1.32	ES20/20	71
SLCS400/2-3B	2810	2.89	2.82	2.75	2.67	2.58	2.48	2.37	2.08					7.27	7.00	42.0	3.30	ES20/20	69
SLCS500/4-3A	1410	2.30	2.11	1.89	1.56									1.56	N/A	8.16	0.66	ES20/20	63
SLCS500/4-3B	1440	2.93	2.71	2.46	2.09									2.53	2.84	16.4	1.10	ES20/20	62
SLCS500/2-3A	2800	2.99	2.93	2.85	2.78	2.70	2.62	2.53	2.33	2.09	1.80	1.40	0.79	5.36	5.36	29.6	2.64	ES20/40	82
SLCS500/2-3B	2845	5.05	4.96	4.86	4.76	4.66	4.55	4.44	4.19	3.90	3.53			11.7	11.6	77.8	6.33	ES20/40	80
SLCS560/4-3A	1410	2.50	2.32	2.10	1.79	1.24								1.56	N/A	8.16	0.66	ES20/40	64
SLCS560/4-3B	1420	3.90	3.68	3.41	3.05	2.41								3.19	3.76	19.8	1.50	ES20/40	64
SLCS630/4-3A	1390	4.15	3.92	3.63	3.27	2.72								2.92	2.84	16.4	1.32	ES20/40	68
SLCS630/4-3B	1410	5.71	5.40	5.04	4.60	3.99								5.94	7.29	38.6	3.00	ES20/40	67
SLCS710/4-3A	1390	5.38	5.16	4.92	4.63	4.29	3.85							5.80	5.23	30.1	2.53	ES20/40	74
SLCS710/4-3B	1410	7.85	7.54	7.21	6.84	6.42	5.92	5.25						9.18	9.69	57.1	4.80	ES20/70	77

Sound levels are average spherical free field values at 50% peak pressure for comparative purposes only.

## Silencer Data

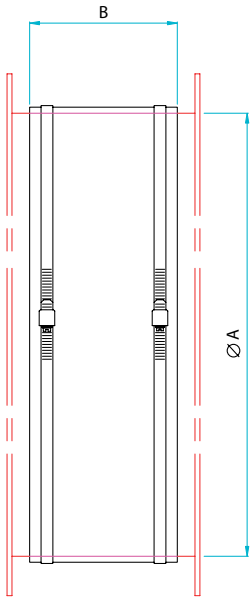
Product Code	dBA Attenuation		ΔP (Pa) 1DEP	dBA Attenuation		ΔP (Pa) 2DEP
	1DENP	1DEP		2DENP	2DEP	
SLCS400/4-3	-9	-12	-21	-14	-16	32
SLCS400/2-3A	-9	-12	-28	-14	-15	43
SLCS400/2-3B	-9	-12	-88	-14	-15	130
SLCS500/4-3A	-10	-14	-23	-17	-22	34
SLCS500/4-3B	-9	-14	-36	-15	-20	52
SLCS500/2-3A	-10	-15	-32	-17	-23	50
SLCS500/2-3B	-9	-15	-109	-16	-23	162
SLCS560/4-3A	-10	-15	-16	-16	-21	25
SLCS560/4-3B	-9	-13	-40	-15	-20	57
SLCS630/4-3A	-10	-17	-29	-15	-25	44
SLCS630/4-3B	-10	-16	-52	-15	-24	75
SLCS710/4-3A	-9	-17	-32	-14	-26	50
SLCS710/4-3B	-10	-16	-62	-15	-24	90

# SmokeVent SLCS - Long Cased Accessories



AXIAL FLOW

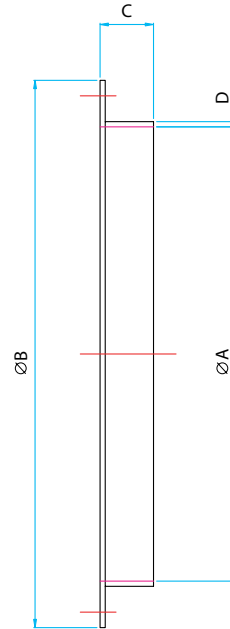
## Flexible Connectors



- Fit to matching flanges to provide flexible connection
- Silicone coated glass fibre
- Supplied with plated steel band fixings
- Alternative materials available to order

Product Code	Fan Dia. A	B	Weight kg
063-0315-SC250	315	150	0.6
063-0400-SC250	400	150	0.9
063-0500-SC250	500	150	1.2
063-0560-SC250	560	150	1.3
063-0630-SC250	630	200	1.4
063-0710-SC250	710	200	2.0

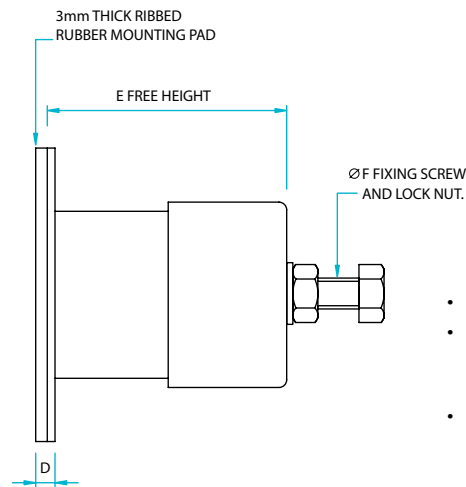
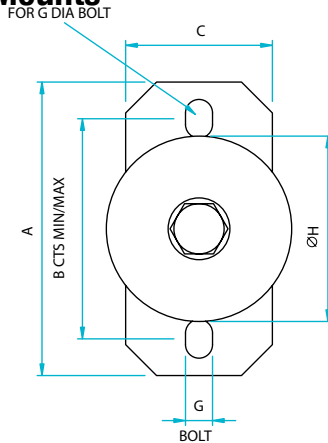
## Matching Flanges



- Fit directly to fan case flange
- Provides easy connection to flexible connector or ducting
- Hot dipped galvanised steel

Product Code	Fan Dia. A	B	C	D	Weight kg
061B-0400	400	475	40	1.5	1.2
061B-0500	500	585	45	2.0	2.6
061B-0560	560	645	45	2.0	3.0
061B-0630	630	715	45	2.0	3.5
061B-0710	710	795	45	2.0	3.7

## Anti-Vibration Mounts



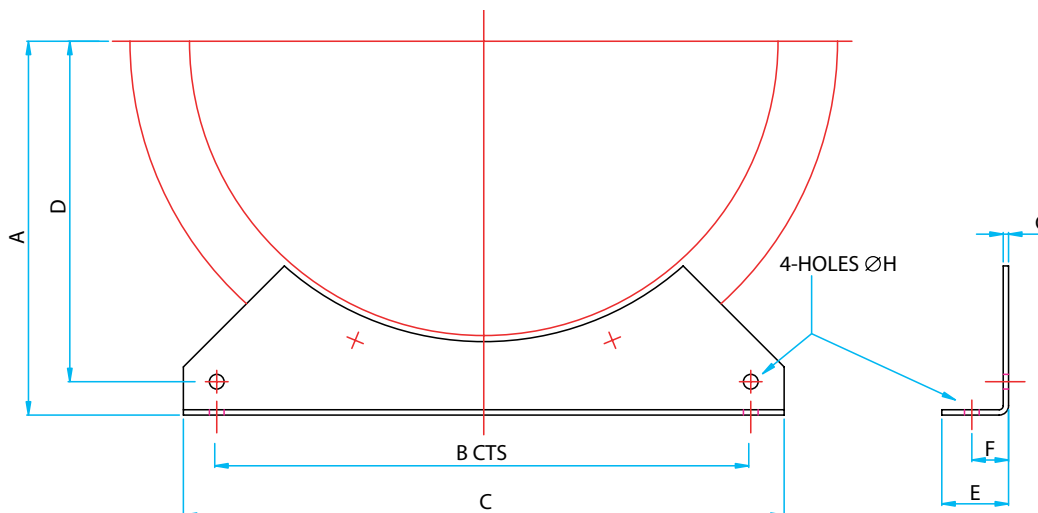
- Fit directly to mounting feet
- Spring AV mounts - zinc plated steel, rubber insert and foot pad
- Supplied as set of 4, complete with fixings

Product Code	A	B	C	D	E	F	G	H	Weight kg
062-ES20/20									0.24
062-ES20/40	76	57	38	6	63	M8	10	48	0.25
062-ES20/70									0.25

# SmokeVent SLCS - Long Cased Accessories



## Mounting Feet

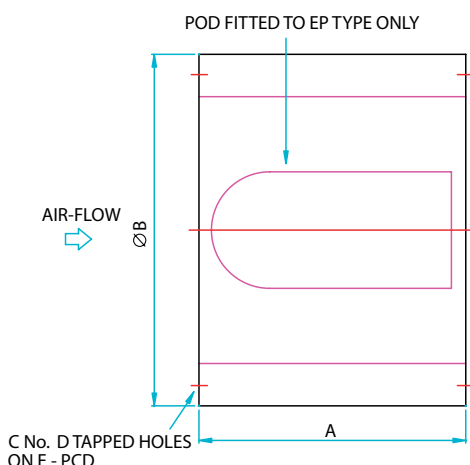


AXIAL FLOW

Product Code	Fan Dia.	A	B	C	D	E	F	G	H	Weight kg
060B-0400	400	250	350	400	230	50	27.5	4	9	1.5
060B-0500	500	315	450	500	290	50	27.5	4	11	2.5
060B-0560	560	355	510	560	330	60	32	5	11	4.0
060B-0630	630	400	580	630	375	60	32	5	11	5.0
060B-0710	710	450	660	710	425	60	32	5	11	5.5

- For free standing mounting of ducted fans
- Fixes directly to fan case flange
- Hot dipped galvanised steel

## Silencers



- Pre-galvanised sheet steel with perforated steel lining
- Infill of glass tissue faced high density mineral wool
- For saturated or other special applications please refer to Elta

Product Code	Fan Dia.	A 1D	A 2D	B	C	D	E	Weight kg			
								1DENP	1DEP	2DENP	2DEP
068-0400-*D**P	400	400	800	500	8	M10	450	13	16	22	26
068-0500-*D**P	500	500	1000	652	12	M10	560	18	22	32	37
068-0560-*D**P	560	560	1120	712	12	M10	620	22	26	39	46
068-0630-*D**P	630	630	1260	782	12	M10	690	26	32	48	57
068-0710-*D**P	710	710	1420	862	16	M10	770	32	39	59	71

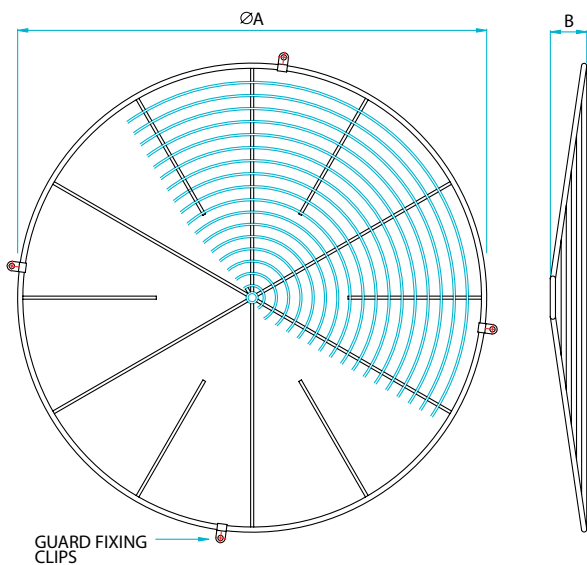
1 or 2 SEE DIM 'A' → E = WITH POD or EN = WITHOUT POD

# SmokeVent SLCS - Long Cased Accessories



AXIAL FLOW

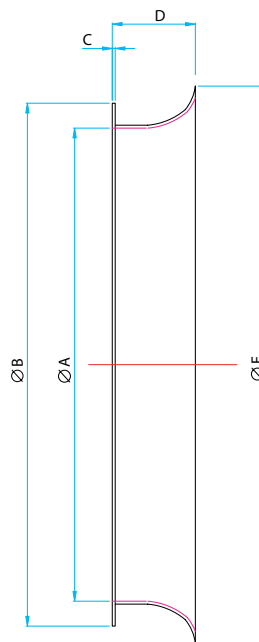
## Wire Guards



Product Code	Fan Dia.	A	B	Weight kg
078C-0400-C	400	420	26	1.6
078C-0500-C	500	520	32	2.2
078C-0560-C	560	585	32	2.5
078C-0630-C	630	655	40	2.6
078C-0710-C	710	730	50	3.2

- Bright zinc plated steel
- Fix with clips & screws provided

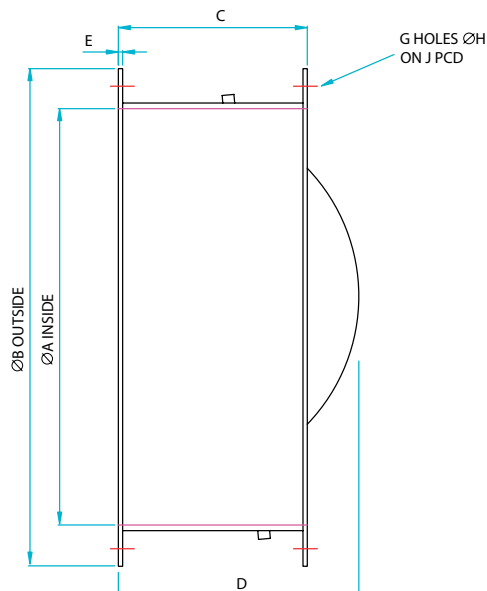
## Bell Mouth Inlets



- For improved airflow in end of duct applications
- Fixed directly to fan case flange
- Hot dipped galvanised steel
- Available to order

Product Code	Fan Dia. A	B	C	D	E	Weight kg
241B-0400-BELL	400	485	3	75	515	4.5
241B-0500-BELL	500	585	3	93	630	6.2
241B-0560-BELL	560	645	3	105	700	7.5
241B-0630-BELL	630	715	3	105	780	9.0
241B-0710-BELL	710	795	3	120	870	11.1

## Non Return Dampers



- Prevents reverse flow of air when fan not operating
- Fixed directly to fan case flange
- Hot dipped galvanised steel
- Galvanised steel butterfly type blades
- Suitable for horizontal or vertical (upward airflow) mounting
- Available to order

Product Code	A	B	C	D	E	G	H	J	Weight kg
019-0400-STD	400	475	220	270	3.0	8	12	450	9.0
019-0500-STD	500	585	220	315	3.0	12	12	560	18.0
019-0560-STD	560	645	220	375	3.0	12	12	620	21.0
019-0630-STD	630	715	250	420	3.0	12	12	690	25.0
019-0710-STD	710	795	250	470	3.0	16	12	770	29.0