



REVOLUTION SLCX

ATEX Long Cased Axial Flow Fan

REVOLUTION SLCX

Product Overview



- 7 standard sizes from 355mm to 710mm
- Air volume flow rates up to 6.8 m³/s
- Static pressure up to 872 Pa
- Suitable for operating temperatures up to +40°C
- Suitable for extract or supply systems
- Available in **AC**

A range of ATEX rated duct mounted axial fans, manufactured in heavy gauge sheet steel. These units are designed to meet the requirements for Hazardous Areas with carbon filled anti-static impeller blades and protection to Ex h IIC T4 Gb.

Intelligent Design

Classified for constructional safety and the requirements stated in 2014/34/ EU directive, Gas, Zone and ignition temperature protection to Ex h IIC T4 Gb.

Efficient Performance

Adjustable pitch aerofoil section impellers with blades made from high quality carbon filled anti-static material for enhanced performance. Hubs are die cast aluminium.

Warranty

Each SLCX has a 12 month warranty.

Construction

Constructed from a single sheet of steel, with both motors and axial impellers mounted within the length of the unit casing. All casing parts are heavy gauge mild steel sheet, roll formed and welded, then dip galvanised to BS EN ISO 1461:1999 after fabrication.

Impeller

Adjustable pitch aerofoil impellers are provided with blades made from high quality carbon filled anti-static material. Impellers are factory set at an angle to provide maximum performance. Hubs are manufactured from die cast aluminium alloy (LM24). Assembled impellers are dynamically balanced to ISO 14694 Grade G6.3.

Typical Applications

- Chemical Process
- Water and Sewage Treatment
- Material and Gas Waste
- Dust and Paint Extraction
- Battery Room Ventilation and Refrigeration

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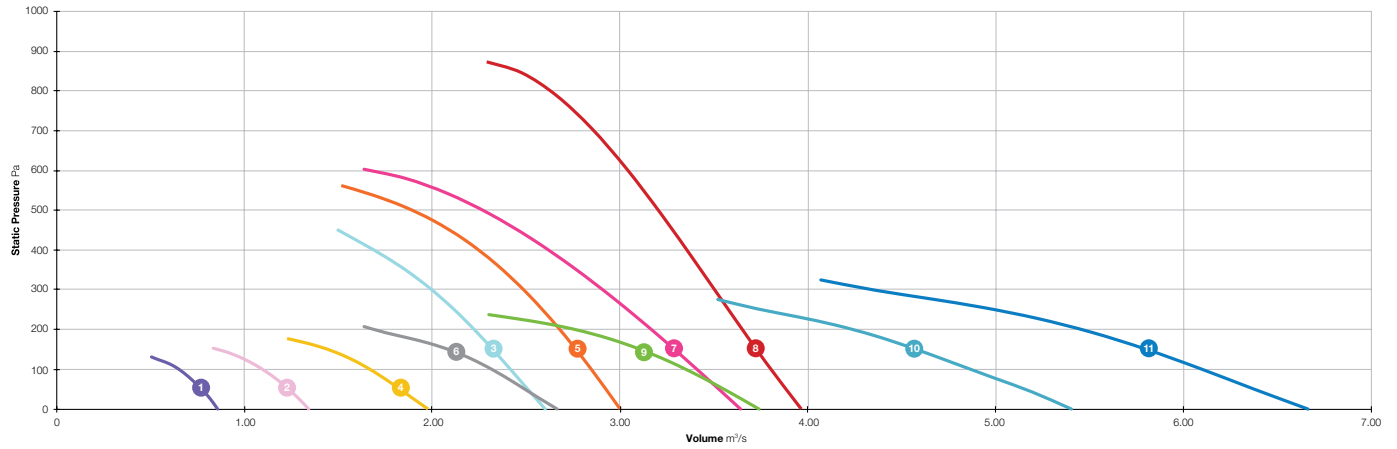


Ex h IIC T4 Gb

REVOLUTION SLCX



Performance Range Curves



- 1 SLCX355 / 4-3
- 2 SLCX400 / 4-3
- 3 SLCX400 / 2-3
- 4 SLCX450 / 4-3B

- 5 SLCX450 / 2-3A
- 6 SLCX500 / 4-3
- 7 SLCX500 / 2-3
- 8 SLCX500 / 2-3B

- 9 SLCX560 / 4-3
- 10 SLCX630 / 4-3
- 11 SLCX710 / 4-3

REVOLUTION SLCX



Performance, SFP & Electrical Data

Three Phase 380V to 415V / 50Hz

Product Code	Speed r/min	Airflow SFP	Airflow m ³ /s @ Static Pressure Pa												At Best Efficiency Point		Electrical Data			dBA @ 3m	
			0	25	50	75	100	150	200	250	300	350	400	500	Output kW	Peak Amps	SC	Δ / Y			
SLCX355/4-3	1360	m ³ /s	0.860	0.821	0.773	0.716	0.648	-	-	-	-	-	-	-	0.370	1.10	3.74	Mains	Inlet	50	
		W/(L/s)	0.28	0.32	0.36	0.40	0.45	-	-	-	-	-	-	-					Outlet	49	
SLCX400/4-3	1390	m ³ /s	1.343	1.292	1.235	1.170	1.094	0.849	-	-	-	-	-	-	0.550	1.60	6.56	Mains	Inlet	53	
		W/(L/s)	0.36	0.38	0.41	0.44	0.47	0.60	-	-	-	-	-	-					Outlet	53	
SLCX400/2-3	2820	m ³ /s	2.601	2.554	2.507	2.462	2.416	2.322	2.224	2.117	1.998	1.858	1.690	-	2.200	5.00	28.00	Mains	Inlet	61	
		W/(L/s)	0.79	0.80	0.82	0.83	0.85	0.88	0.92	0.96	1.02	1.08	1.18	-					Outlet	61	
SLCX450/4-3B	1390	m ³ /s	1.979	1.904	1.829	1.753	1.670	1.444	-	-	-	-	-	-	0.750	1.60	7.79	Mains	Inlet	56	
		W/(L/s)	0.32	0.35	0.38	0.41	0.45	0.54	-	-	-	-	-	-					Outlet	56	
SLCX450/2-3A	2820	m ³ /s	2.998	2.961	2.923	2.885	2.845	2.764	2.679	2.587	2.487	2.377	2.250	1.900	2.200	5.00	28.00	Mains	Inlet	68	
		W/(L/s)	0.47	0.49	0.51	0.53	0.55	0.60	0.65	0.69	0.75	0.80	0.87	1.05					Outlet	68	
SLCX500/4-3	1380	m ³ /s	2.668	2.579	2.494	2.409	2.317	2.082	1.680	-	-	-	-	-	1.100	2.70	11.10	Mains	Inlet	62	
		W/(L/s)	0.37	0.40	0.43	0.45	0.47	0.53	0.64	-	-	-	-	-					Outlet	59	
SLCX500/2-3	2820	m ³ /s	3.642	3.584	3.527	3.468	3.410	3.291	3.168	3.042	2.910	2.771	2.622	2.274	2.200	5.00	28.00	Mains	Inlet	73	
		W/(L/s)	0.56	0.57	0.59	0.60	0.62	0.66	0.72	0.78	0.86	0.95	1.05	1.27					Outlet	73	
SLCX500/2-3B	2900	m ³ /s	3.962	3.920	3.879	3.839	3.800	3.723	3.648	3.574	3.501	3.427	3.353	3.201	4.000	8.00	56.00	Mains	Inlet	80	
		W/(L/s)	0.89	0.91	0.93	0.95	0.97	1.00	1.04	1.09	1.13	1.17	1.22	1.32					Outlet	80	
SLCX560/4-3	1380	m ³ /s	3.739	3.646	3.551	3.452	3.347	3.102	2.749	-	-	-	-	-	1.500	3.50	15.40	Mains	Inlet	65	
		W/(L/s)	0.38	0.41	0.43	0.45	0.48	0.53	0.60	-	-	-	-	-					Outlet	62	
SLCX630/4-3	1410	m ³ /s	5.400	5.285	5.150	5.004	4.860	4.570	4.230	3.735	-	-	-	-	3.000	6.50	35.75	Mains	Inlet	66	
		W/(L/s)	0.42	0.44	0.47	0.49	0.51	0.56	0.61	0.69	-	-	-	-					Outlet	65	
SLCX710/4-3	1410	m ³ /s	6.661	6.515	6.376	6.238	6.099	5.805	5.462	5.003	4.355	-	-	-	3.000	6.50	35.75	Mains	Inlet	68	
		W/(L/s)	0.38	0.40	0.43	0.45	0.47	0.52	0.57	0.62	0.71	-	-	-					Outlet	71	

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

Exempt from ErP of the European Parliament.

Peak Amps @ 400V / 3PH / 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.

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Sound Data

Three Phase 380V to 415V / 50Hz

Product Code	Speed r/min		Sound Power Level dB @ Octave Band Hz								Total dB
			63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	
SLCX355/4-3	1360	Inlet	64	68	69	62	66	65	59	48	74
		Outlet	67	67	72	64	64	63	60	53	75
SLCX400/4-3	1390	Inlet	69	68	69	68	70	68	62	54	77
		Outlet	70	69	73	70	67	66	63	56	78
SLCX400/2-3	2820	Inlet	83	81	82	79	76	73	71	66	88
		Outlet	80	85	83	77	75	73	69	64	89
SLCX450/4-3B	1390	Inlet	72	71	72	71	73	71	65	57	80
		Outlet	73	72	76	73	70	69	66	59	81
SLCX450/2-3A	2820	Inlet	88	81	84	81	84	82	80	72	92
		Outlet	84	82	86	81	84	82	80	76	92
SLCX500/4-3	1380	Inlet	71	73	74	76	79	76	75	64	84
		Outlet	78	75	78	75	74	73	71	64	84
SLCX500/2-3	2820	Inlet	95	83	88	87	90	85	84	79	98
		Outlet	85	82	89	86	89	87	84	80	95
SLCX500/2-3B	2900	Inlet	91	86	88	95	97	94	92	88	102
		Outlet	92	87	89	95	95	94	92	88	101
SLCX560/4-3	1380	Inlet	77	75	80	80	82	79	78	70	88
		Outlet	80	78	81	79	77	76	74	68	87
SLCX630/4-3	1410	Inlet	80	73	81	80	82	78	79	72	88
		Outlet	81	80	83	81	80	78	77	70	89
SLCX710/4-3	1410	Inlet	83	79	85	86	84	80	80	72	92
		Outlet	87	84	87	87	86	84	84	75	94

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

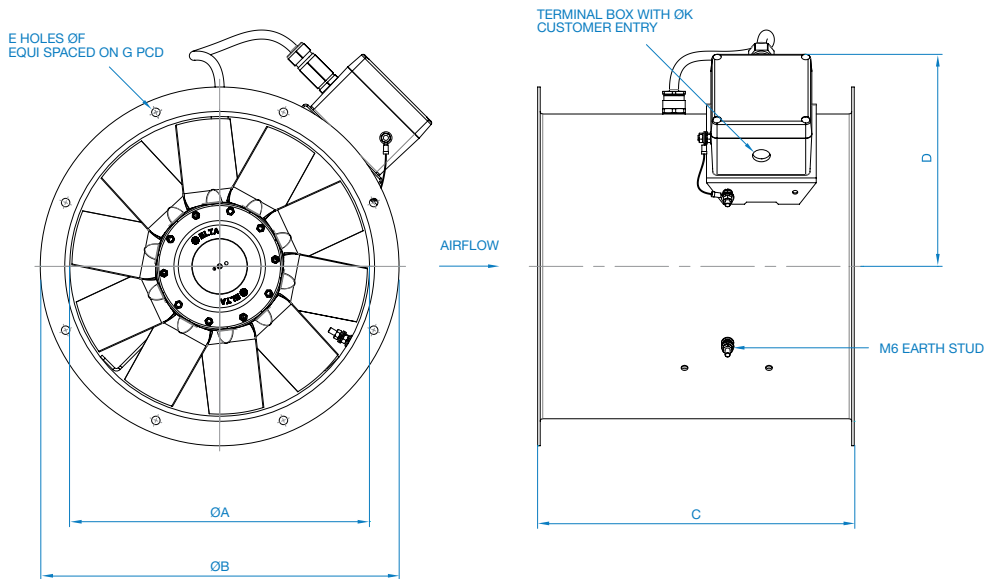
REVOLUTION SLCX



Dimensional Data

Three Phase

Product Code	A	B	C	D	E	F	G	K	Weight kg
SLCX355/4-3	355	425	375	255	8	10	395	M20	29
SLCX400/4-3	400	475	400	270	8	12	450	M20	35
SLCX400/2-3	400	475	400	270	8	12	450	M20	43
SLCX450/4-3B	450	530	450	290	8	12	500	M20	40
SLCX450/2-3A	450	530	450	290	8	12	500	M20	47
SLCX500/4-3	500	585	450	310	12	12	560	M20	47
SLCX500/2-3	500	585	450	310	12	12	560	M20	51
SLCX500/2-3B	500	585	450	310	12	12	560	M20	68
SLCX560/4-3	560	645	450	340	12	12	620	M20	63
SLCX630/4-3	630	715	450	355	12	12	690	M20	64
SLCX710/4-3	710	795	450	385	16	12	770	M20	70



Dimensions are in mm.

REVOLUTION SLCX



Accessories

Three Phase

Product Code	Ancillary Pack*	AV Mounts (set of 4)	Bell Mouth Inlet	Flanged Silencer 1D Podded	Flanged Silencer 1D Unpodded	Flanged Silencer 2D Podded
SLCX355/4-3	APK350/002	062-002	241B-0355	068-0350-1DEP	068-0350-1DENP	068-0350-2DEP
SLCX400/4-3	APK400/003	062-003	241B-0400-BELL	068-0400-1DEP	068-0400-1DENP	068-0400-2DEP
SLCX400/2-3	APK400/003	062-003	241B-0400-BELL	068-0400-1DEP	068-0400-1DENP	068-0400-2DEP
SLCX450/4-3B	APK450/003	062-003	241B-0450-BELL	068-0450-1DEP	068-0450-1DENP	068-0450-2DEP
SLCX450/2-3A	APK450/003	062-003	241B-0450-BELL	068-0450-1DEP	068-0450-1DENP	068-0450-2DEP
SLCX500/4-3	APK500/003	062-003	241B-0500-BELL	068-0500-1DEP	068-0500-1DENP	068-0500-2DEP
SLCX500/2-3	APK500/003	062-003	241B-0500-BELL	068-0500-1DEP	068-0500-1DENP	068-0500-2DEP
SLCX500/2-3B	APK500/003	062-003	241B-0500-BELL	068-0500-1DEP	068-0500-1DENP	068-0500-2DEP
SLCX560/4-3	APK560/003	062-003	241B-0560-BELL	068-0560-1DEP	068-0560-1DENP	068-0560-2DEP
SLCX630/4-3	APK630/003	062-003	241B-0630-BELL	068-0630-1DEP	068-0630-1DENP	068-0630-2DEP
SLCX710/4-3	APK710/004	062-004	241B-0710-BELL	068-0710-1DEP	068-0710-1DENP	068-0710-2DEP

Product Code	Flanged Silencer 2D Unpodded	Impeller Side Guard	Matching Flanges (each)	Mounting Feet (each)	Standard Ambient Flexible Connectors (each)	Wiring Diagram
SLCX355/4-3	068-0350-2DENP	078C-0350-C	061B-0350	060B-0355	063-0350-MAN150	152-612
SLCX400/4-3	068-0400-2DENP	078C-0400-C	061B-0400	060B-0400	063-0400-MAN150	152-612
SLCX400/2-3	068-0400-2DENP	078C-0400-C	061B-0400	060B-0400	063-0400-MAN150	152-612
SLCX450/4-3B	068-0450-2DENP	078C-0450-C	061B-0450	060B-0450	063-0450-MAN150	152-612
SLCX450/2-3A	068-0450-2DENP	078C-0450-C	061B-0450	060B-0450	063-0450-MAN150	152-612
SLCX500/4-3	068-0500-2DENP	078C-0500-C	061B-0500	060B-0500	063-0500-MAN150	152-612
SLCX500/2-3	068-0500-2DENP	078C-0500-C	061B-0500	060B-0500	063-0500-MAN150	152-612
SLCX500/2-3B	068-0500-2DENP	078C-0500-C	061B-0500	060B-0500	063-0500-MAN150	152-612
SLCX560/4-3	068-0560-2DENP	078C-0560-C	061B-0560	060B-0560	063-0560-MAN150	152-612
SLCX630/4-3	068-0630-2DENP	078C-0630-C	061B-0630	060B-0630	063-0630-MAN200	152-612
SLCX710/4-3	068-0710-2DENP	078C-0710-C	061B-0710	060B-0710	063-0710-MAN200	152-612

* Controller is not ATEX rated and must be mounted outside the hazardous area.

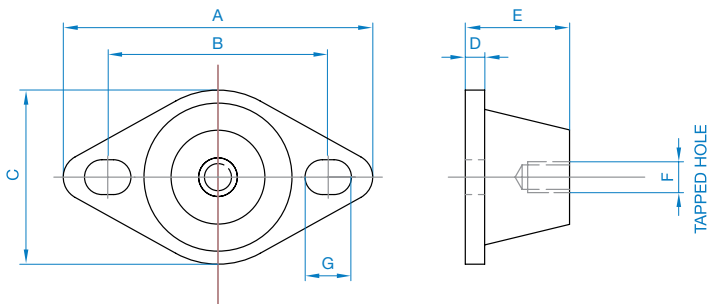
AV MOUNTS

Accessories



- Fits directly to mounting feet
- Rubber with steel insert
- Supplied as set of 4, complete with fixings

Product Code	A	B	C	D	E	F	G	Weight kg
062-002	64	50	43	5.5	20	M6	Ø7	0.040
062-003	80	57	45	5	32	M8	12 x 9	0.102
062-004	80	57	45	5	32	M8	12 x 9	0.102



Dimensions are in mm.

BELL MOUTH INLET

Accessories

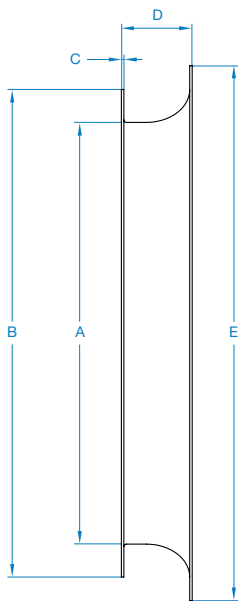
- For improved airflow in end of duct applications
- Fixed directly to fan case flange
- Hot dip galvanised steel



Single Phase 220V to 240V / 50Hz or 60Hz

Product Code	Fan Dia. A	B	C	D	E	Weight kg
241B-0355*	350	425	3	65	450	3.0
241B-0400-BELL	400	485	3	75	515	4.5
241B-0450-BELL	450	535	3	85	570	5.3
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

*Inlet cone



Dimensions are in mm.

FLANGED SILENCERS

Accessories



- Ideal for bolting directly to fan flange
- Ideal for all axial fans
- Ideal for cross talk elimination
- Ideal for flexible or spiral ducting

Overview

Elta Fans are able to provide 2 types of cylindrical silencers as standard; Type DENP (without pod) and DEP (with pod), these are categorised as follows; Compact Silencers (ENP / EP), Standard Silencers (ENP / EP / Melinex).

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 has a series of threaded holes for direct mounting to the fixing flange/flexible collar. The EP (podded versions) will provide an improved level of attenuation. The inner acoustic pod is constructed from perforated steel sheet with a sound absorbent infill.

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: 1D = 1 times diameter, 2D = 2 times diameter. The Velocity through podded silencer should not exceed 15m/s.

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 can design and build optional splitter silencers for greater effect.

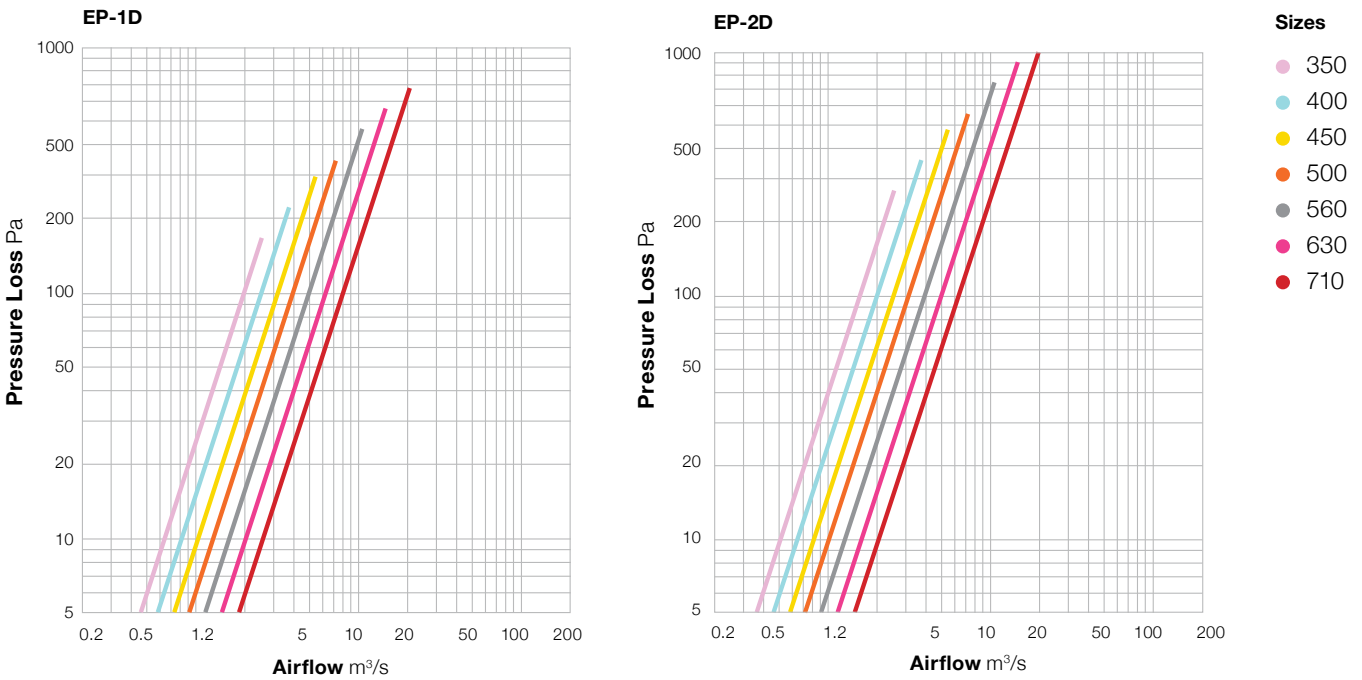
FLANGED SILENCERS

Dynamic Insertion Loss & Pressure Graphs

Dynamic Insertion Loss

Fan Size	Silencer Length	Silencer Type	Insertion Loss @ Octave Band (Hz)							
			63	125	250	500	1k	2k	4k	8k
0350-0560	1D	ENP	-2	-5	-6	-9	-13	-11	-6	-6
		EP	-4	-6	-8	-11	-18	-19	-17	-14
	2D	ENP	-4	-8	-12	-17	-23	-17	-12	-10
		EP	-7	-10	-12	-21	-26	-26	-24	-22
0630-0710	1D	ENP	-3	-4	-9	-15	-15	-8	-7	-6
		EP	-4	-6	-8	-17	-23	-20	-18	-10
	2D	ENP	-6	-8	-13	-22	-22	-13	-12	-9
		EP	-8	-11	-16	-27	-32	-31	-29	-19

Podded Silencers Pressure Graphs



For Ø250 podded pressure losses, please contact Elta Fans.

FLANGED SILENCERS

Dimensional Data

Silencer 1DEP Podded

Product Code	Fan Dia	A	B	C	D	E	Weight kg
068-0350-1DEP	350	350	452	8	M8	395	13
068-0400-1DEP	400	400	503	8	M10	450	16
068-0450-1DEP	450	450	604	8	M10	500	18
068-0500-1DEP	500	500	657	12	M10	560	22
068-0560-1DEP	560	560	714	12	M10	620	26
068-0630-1DEP	630	630	784	12	M10	690	31
068-0710-1DEP	710	710	864	16	M10	770	39

Silencer 1DENP Unpodded

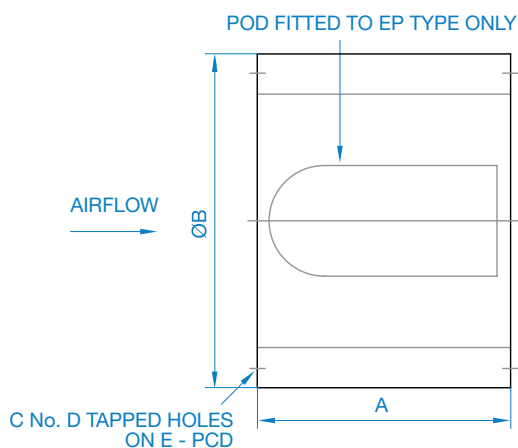
Product Code	Fan Dia	A	B	C	D	E	Weight kg
068-0350-1DENP	350	350	452	8	M8	395	11
068-0400-1DENP	400	400	503	8	M10	450	13
068-0450-1DENP	450	450	604	8	M10	500	15
068-0500-1DENP	500	500	657	12	M10	560	18
068-0560-1DENP	560	560	714	12	M10	620	22
068-0630-1DENP	630	630	784	12	M10	690	26
068-0710-1DENP	710	710	864	16	M10	770	32

Silencer 2DEP Podded

Product Code	Fan Dia	A	B	C	D	E	Weight kg
068-0350-2DEP	350	700	452	8	M8	395	21
068-0400-2DEP	400	800	503	8	M10	450	26
068-0450-2DEP	450	900	604	8	M10	500	31
068-0500-2DEP	500	1000	657	12	M10	560	37
068-0560-2DEP	560	1120	714	12	M10	620	46
068-0630-2DEP	630	1260	784	12	M10	690	57
068-0710-2DEP	710	1420	864	16	M10	770	71

Silencer 2DENP Unpodded

Product Code	Fan Dia	A	B	C	D	E	Weight kg
068-0350-2DENP	350	700	452	8	M8	395	18
068-0400-2DENP	400	800	503	8	M10	450	22
068-0450-2DENP	450	900	604	8	M10	500	27
068-0500-2DENP	500	1000	657	12	M10	560	32
068-0560-2DENP	560	1120	714	12	M10	620	39
068-0630-2DENP	630	1260	784	12	M10	690	48
068-0710-2DENP	710	1420	864	16	M10	770	59



Dimensions are in mm.

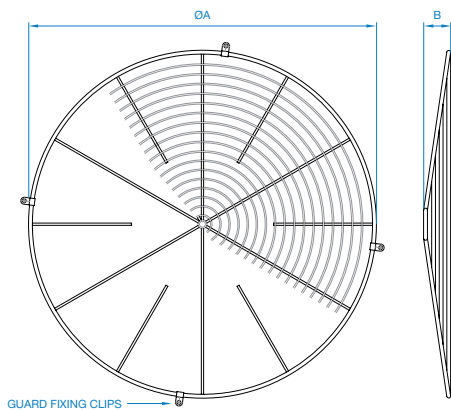
IMPELLER SIDE GUARD

Accessories

- Powder coated polyester epoxy paint finish in RAL 7040 (Window Grey)
- Fix with clips & screw provided



Product Code	Fan Dia.	A	B	Weight kg
078C-0350-C	350	370	23	1.4
078C-0400-C	400	420	26	1.6
078C-0450-C	450	470	29	1.8
078C-0500-C	500	520	32	2.2
078C-0560-C	560	585	32	2.5
078C-0710-C	710	730	50	3.2



Dimensions are in mm.

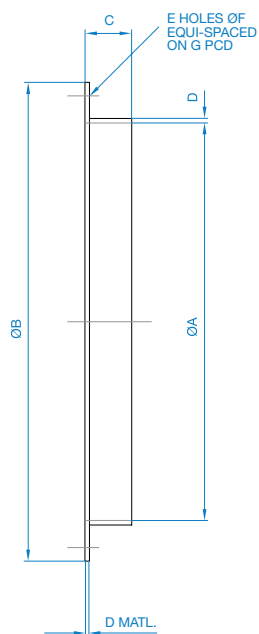
MATCHING FLANGES

Accessories

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



Product Code	Fan Dia. A	B	C	D	E	F	G	Weight kg
061B-0350	355	425	40	1.5	8	10	395	1.2
061B-0400	400	475	40	1.5	8	12	450	1.2
061B-0450	450	530	40	1.5	8	12	500	2.2
061B-0500	500	585	45	2.0	12	12	560	2.6
061B-0560	560	645	45	2.0	12	12	620	3.0
061B-0630	630	715	45	2.0	12	12	690	3.5
061B-0710	710	795	45	2.0	16	12	770	3.7



Dimensions are in mm.

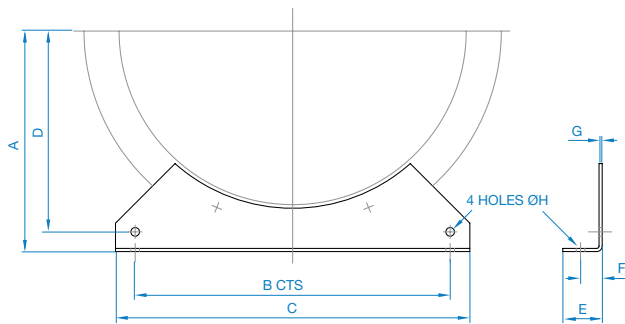
MOUNTING FEET

Accessories



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

Product Code	Fan Dia.	A	B	C	D	E	F	G	H	Weight kg
060B-0355	355	230	300	350	210	40	23	3	9	1.3
060B-0400	400	250	350	400	230	50	27.5	4	9	1.5
060B-0450	450	280	400	450	255	50	27.5	4	11	2.0
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



Dimensions are in mm.

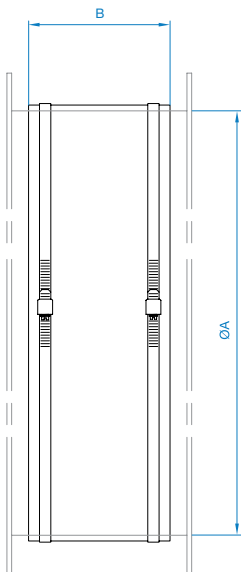
STANDARD AMBIENT FLEXIBLE CONNECTOR

Accessories

- Fit to matching flanges to provide flexible connection
- PVC coating polyester
- Supplied with plated steel band fixings
- Alternative material available to order
- Suitable for temperature between -30°C and +70°C



Product Code	Fan Dia. A	B	Weight kg
063-0350-MAN150	350	150	0.7
063-0400-MAN150	400	150	0.9
063-0450-MAN150	450	150	1.1
063-0500-MAN150	500	150	1.2
063-0560-MAN150	560	150	1.3
063-0630-MAN200	630	200	1.4
063-0710-MAN200	710	200	2.0



Dimensions are in mm.

Building Services

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