

COMPACT **SCDA**



Duct Mounted **Axial Fans**

Compact SCDA – Duct Mounted Features & Benefits



The Compact SCDA is a duct mounted axial fan with a 10 bladed aluminium impeller, offering improved performance and pressure development, whilst being ideal for speed control.

The fan design, construction and finish provide a strong, durable and weather proofed range. Compact SCDA fans boast highly efficient lightweight, robust motors, with proven reliability ensuring a long life and trouble free operation.

- 7 standard sizes from 315mm to 630mm.
- Air volume flow rates of up to 4.16 m³/sec.
- Static pressures of up to 250 Pa.
- Highly efficient, lightweight induction motors.
- Fully speed controllable.
- Impellers are highly efficient aerofoil bladed section, produced from and retained in an aluminium hub and balanced to Grade G6.3.
- Suitable for operating temperatures up to 70°C (50°C under speed control).
- Extensive stock range available

Features & Benefits

Aluminium blades - With a full solidity 10 bladed aluminium impeller, the SCDA offers improved pressure development, and a cost effective solution for situations that demand a metal impeller.

Slim Casing – The compact design of the induction motors allow a shorter casing length, which means a lightweight unit that is easier to install, especially within restricted ductwork space.

Motors – These are protected to IP55 which means they are highly resistant to dust and water ingress.

Quality impellers - Adjustable pitch aerodynamic impellers allow easy site adjustment of the impeller from factory set maximum pitch angles if required.

Adaptable - Compact SCDA fans operate as Form A running and can be used for supply as well as extract.

Cost effective – Very efficient for moving high volumes of air at relatively low pressures.

Speed controllable – Each fan is fully speed controllable with an electronic or transformer controller, which means airflow can be altered to suit site conditions.

Strong durable casing – The steel fan case has an additional 'return' on the flange for extra strength and rigidity and the powder coated finish (pastel beige, RAL 7032) ensures a long life.

Safety – All motors are fitted with integral 'Thermal overload protection' preventing the motor from overheating.

Ease of installation – Fans are supplied with an integral IP55 terminal box, which allows the fan to be positioned conveniently to incoming electrical inputs.

Efficiency – The advanced engineering and design provides higher efficiency with lower power absorption characteristics, which improves quality and life expectancy.

Extensive stock range available – Selection issues minimized due to the wide range of sizes, motors and controls options.

Mounting - Suitable for duct mounted applications.

Full accessory range – Speed controllers, inverters, mounting feet, anti-vibration mounts, flexible connectors, matching flanges, silencers and impeller guards (recommended for end of duct locations).

Tested to the very latest standards – SCDA units are tested to ISO 5801:1997 (airside performance) and to BS 848 Pt 2:1985 (sound performance) meaning accurate, up to date information on performance and noise data that can be relied upon.

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

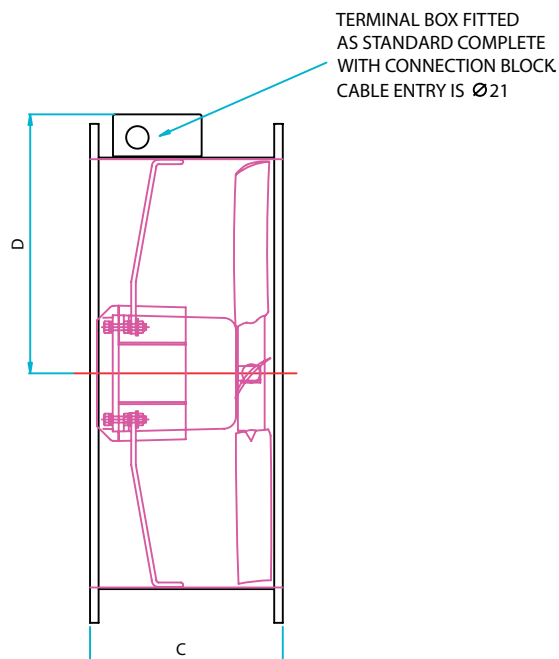
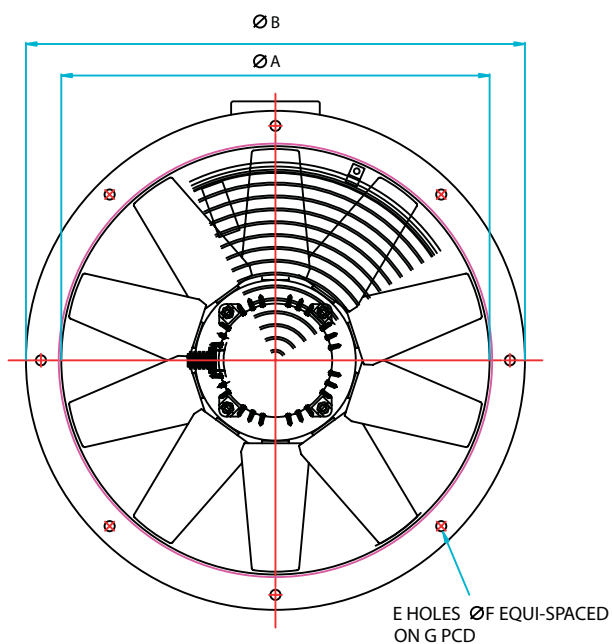
Warranty – Each SCDA has a 12 month warranty.

Applications

Factories, sports halls, shops, industrial units, warehousing, schools, kitchen extract.

Compact SCDA - Duct Mounted

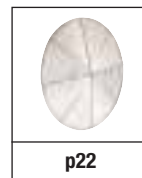
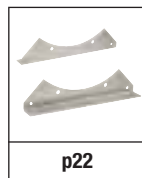
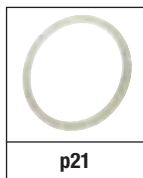
Dimensional Data



AXIAL FLOW

Product Code	A	B	C	D	E	F	G	Weight kg
SCDA315	315	382	180	207	8	9.5	356	10
SCDA350	350	421	180	224	8	9.5	395	10
SCDA400	400	466	190	249	12	9.5	438	14
SCDA450	450	515	190	274	12	9.5	487	16
SCDA500	500	567	250	300	12	9.5	541	23
SCDA560	560	636	250	330	16	11.5	605	26
SCDA630	630	709	250	365	16	11.5	674	28

Accessories



Compact SCDA - Duct Mounted Performance & Electrical Data



AXIAL FLOW

SINGLE Phase - 220V-240V / 50Hz

Product Code	Speed r/min	Airflow m ³ /s @ Static Pressure Pa.										Motor Electrical Data			Speed Control		dBA @ 3m	A.V. Mounts
		0	25	50	75	100	125	150	175	200	250	FLC Amps	SC Amps	Output kW	Electr- onic	Trans- former		
SCDA315/4-1	1370	0.48	0.44	0.40	0.34							0.9	1.45	0.09	EL31TK	TC12	54	S1B
SCDA350/4-1	1290	0.70	0.65	0.60	0.54							0.9	1.45	0.09	EL31TK	TC12	57	S1B
SCDA400/4-1	1385	1.13	1.07	1.00	0.93	0.85						1.8	3.6	0.25	EL31TK	TC14	59	S1B
SCDA450/4-1	1340	1.66	1.59	1.52	1.44	1.34	1.20					3.0	9.0	0.37	EL61TK	TC14	63	S1B
SCDA500/4-1	1375	2.61	2.49	2.36	2.21	2.05	1.87	1.64				4.9	15.0	0.75	EL61TK	TC18	66	S1G
SCDA560/4-1	1340	3.45	3.33	3.21	3.08	2.93	2.78	2.64	2.46			7.9	19.75	1.1	-	TC110	67	S1G
SCDA630/4-1	1310	4.16	4.06	3.95	3.84	3.71	3.57	3.42	3.25	3.04	2.39	7.9	19.75	1.1	-	TC110	68	S1G

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

Silencer Data - SINGLE Phase

Product Code	dBA Attenuation		ΔP (Pa) 1DEP	dBA Attenuation		ΔP (Pa) 2DEP
	1DENP	1DEP		2DENP	2DEP	
SCDA315	-7	-10	7	-13	-14	12
SCDA350	-7	-10	10	-13	-15	16
SCDA400	-8	-11	15	-14	-16	24
SCDA450	-8	-10	21	-14	-15	33
SCDA500	-8	-11	32	-14	-17	51
SCDA560	-8	-11	35	-15	-18	56
SCDA630	-11	-17	27	-17	-26	43

For explanation of silencer data see below.

Silencer data (flanged circular fans)

Select silencers for flanged axial flow fans are available in two lengths denoted by either 1D (length = diameter) or 2D (length = 2 x diameter) in the product code.

Each length is then available with and without cylindrical centrebody or 'pod' which provides additional attenuation. These are identified by the inclusion in the product code of 'P' for podded or 'NP' for unpodded versions.

When selecting the appropriate silencer, account needs to be taken of both the level of sound reduction achieved and, in the case of a podded silencer, the additional pressure drop in the system which needs to be overcome by the fan.

The silencer data tables in this catalogue provide information required:

- For sound, deducting the appropriate 'dBA Attenuation' figure from the 'dBA @ 3m' figure in the relevant fan performance table gives a combined 'dBA @ 3m' figure for the fan and silencer combination.
- For pressure, the ' ΔP ' figure should be added to the pre-attenuation pressure requirement before selecting the appropriate fan. This may well result in a need to select a different fan!

Why not use the facility in the 'Fans by Elta' interactive CD Rom to do the work for you?

Compact SCDA - Duct Mounted

Sound Data



SCDA - SINGLE Phase

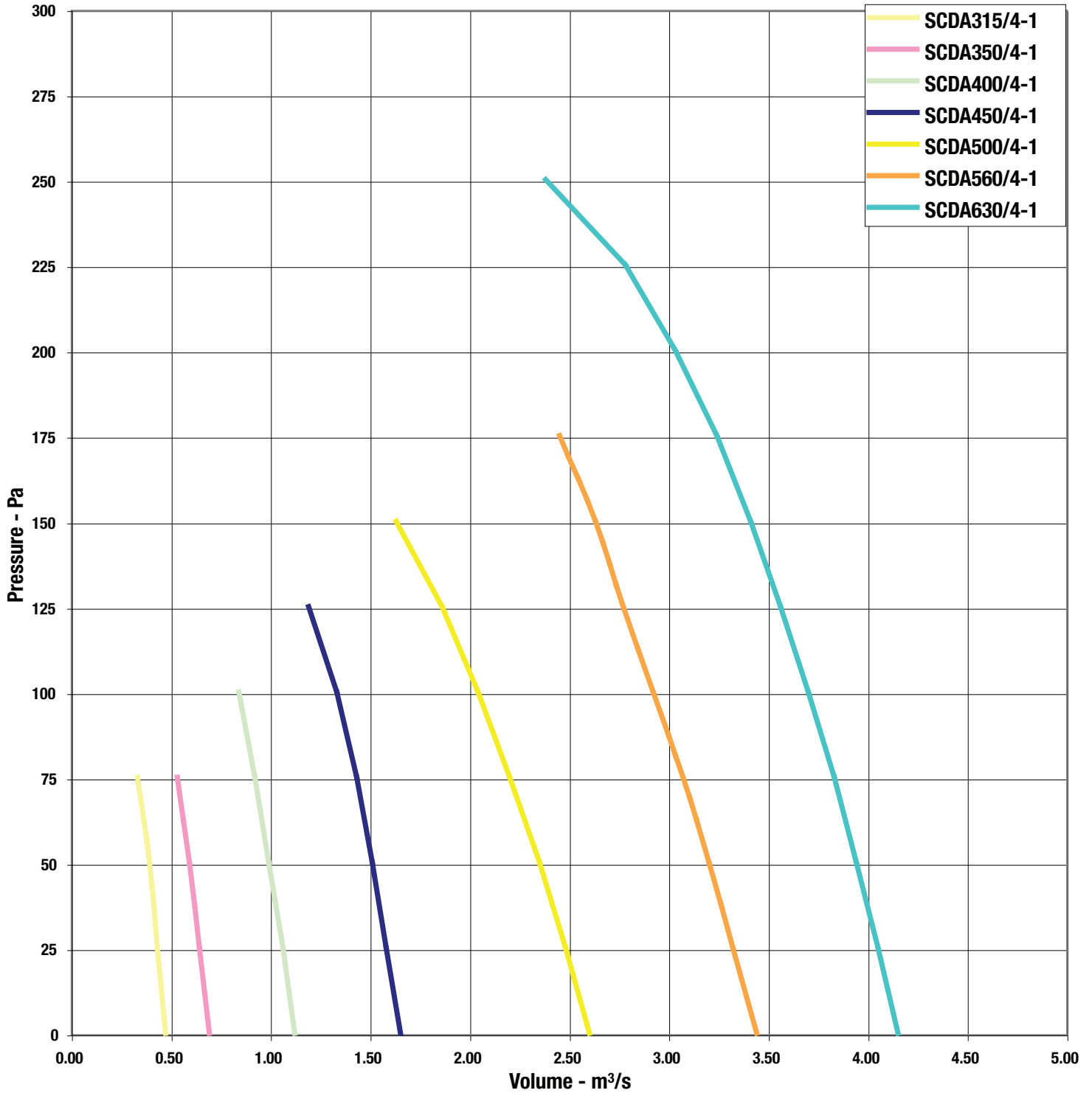
Product Code	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	dBA @ 3m
SCDA315/4-1	69	79	80	70	66	65	63	56	54
SCDA350/4-1	70	80	83	73	69	68	65	57	57
SCDA400/4-1	72	81	83	77	72	71	69	63	59
SCDA450/4-1	84	85	88	81	73	74	71	61	63
SCDA500/4-1	82	82	89	85	79	78	77	70	66
SCDA560/4-1	78	82	88	89	76	77	73	70	67
SCDA630/4-1	83	79	84	87	84	80	76	70	68

Compact SCDA - Duct Mounted

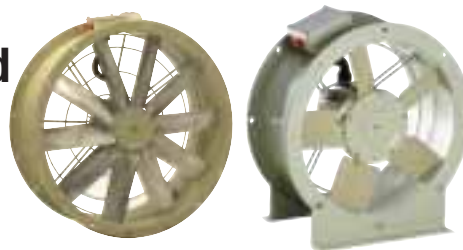


Performance Curves

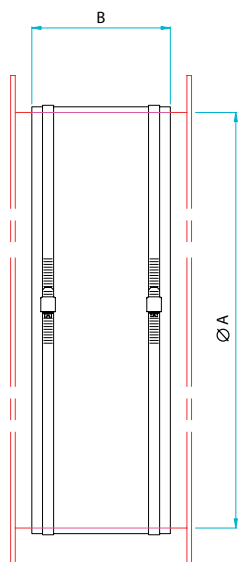
4 Pole 1Ph Range



Compact SCD/A - Duct Mounted Accessories

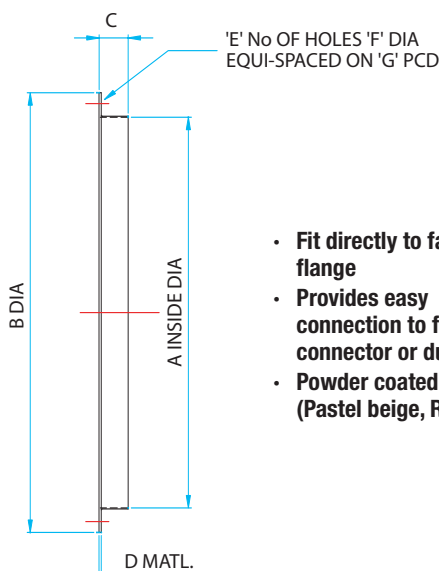


Flexible Connectors



- Fit to matching flanges to provide flexible connection
- PVC coated polyester
- Supplied with plated steel band fixings
- Alternative materials available to order

Matching Flanges

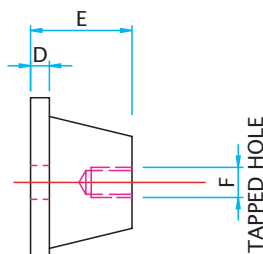
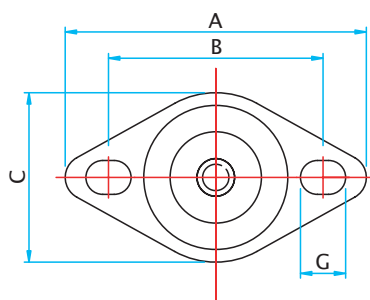


- Fit directly to fan case flange
- Provides easy connection to flexible connector or ducting
- Powder coated steel (Pastel beige, RAL 7032)

Product Code	Fan Dia. A	B	Weight kg
063-0250-MAN150	250	150	0.5
063-0315-MAN150	315	150	0.6
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

Product Code	Fan Dia. A	B	C	D	E	F	G	Weight kg
061A-250-C	250	306	30	1.6	8	7.5	286	0.5
061A-315-C	315	382	30	1.6	8	9.5	356	0.7
061A-350-C	350	421	30	1.6	8	9.5	395	1.0
061A-400-C	400	466	40	1.6	12	9.5	438	1.2
061A-450-C	450	515	40	1.6	12	9.5	487	2.2
061A-500-C	500	567	45	1.6	12	9.5	541	2.6
061A-560-C	560	636	45	1.6	16	11.5	605	3.0
061A-630-C	630	709	45	1.6	16	11.5	674	3.5

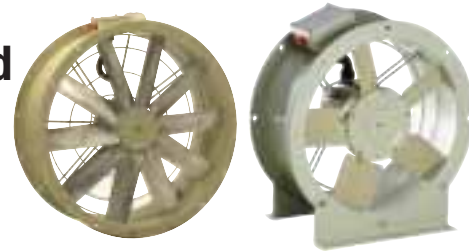
Anti-Vibration Mounts



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

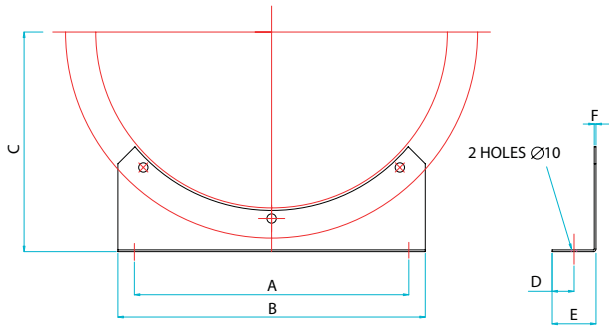
Product Code	A	B	C	D	E	F	G	Weight kg
062-S1B	64	50	43	5.5	20	M6	∅ 7	0.040
062-S1G								

Compact SCD/A - Duct Mounted Accessories



AXIAL FLOW

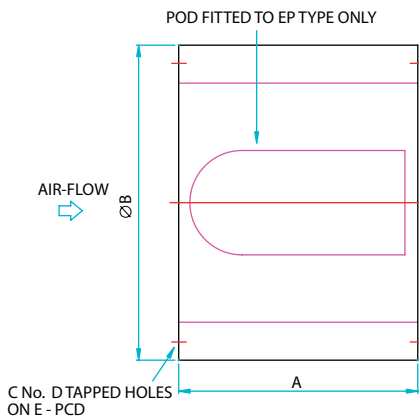
Mounting Feet



Product Code	Fan Dia.	A	B	C	D	E	F	Weight kg
060A-0250-C	250	200	230	170	20	40	1.6	0.9
060A-0315-C	315	250	280	200	20	40	2.0	1.0
060A-0350-C	350	280	310	225	20	40	2.0	1.3
060A-0400-C	400	220	250	250	20	40	2.0	1.5
060A-0450-C	450	240	275	275	20	40	2.0	2.0
060A-0500-C	500	280	315	315	25	50	2.5	2.5
060A-0560-C	560	320	355	355	25	50	2.5	4.0
060A-0630-C	630	360	400	400	25	50	2.5	5.0

- For free standing mounting of ducted fans
- Fixes directly to fan case flange
- Powder coated steel (pastel beige, RAL 7032)
- Supplied individually, less fixings

Silencers

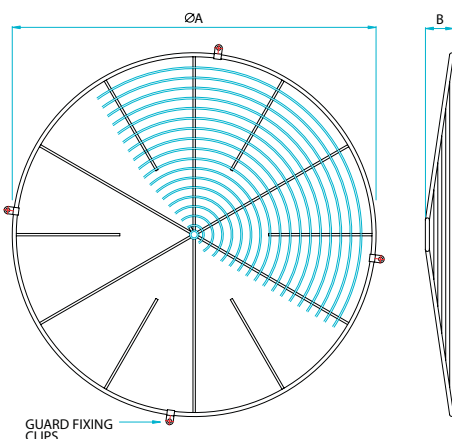


Product Code	Fan Dia.	A 1D	A 2D	B	C	D	E	Weight kg			
								1DENP	1DEP	2DENP	2DEP
068-0250-*D**P	250	250	500	350	8	M6	286	7	9	11	13
068-0315-*D**P	315	315	630	417	8	M8	356	9	11	15	17
068-0350-*D**P	350	350	700	452	8	M8	395	11	13	18	21
068-0400-*D**PC	400	400	800	500	12	M8	438	13	16	22	26
068-0450-*D**PC	450	450	900	602	12	M8	487	15	18	27	31
068-0500-*D**PC	500	500	1000	652	12	M8	541	18	22	32	37
068-0560-*D**PC	560	560	1120	712	16	M10	605	22	26	39	46
068-0630-*D**PC	630	630	1260	782	16	M10	674	26	32	48	57

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

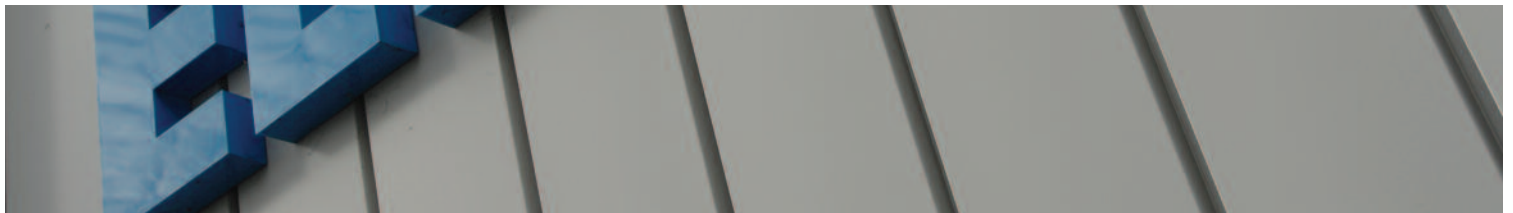
- For information on silencers and an explanation of the data, see p20
- Pre-galvanised sheet steel with perforated steel lining
- Infill of glass tissue faced high density mineral wool
- For saturated or other special applications please refer to Elta

Impeller Guards



Product Code	Fan Dia.	A	B	Weight kg
078C-0250-C	250	270	18	0.9
078C-0315-C	315	335	21	1.1
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-0630-C	630	655	40	2.6

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



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