

# Powerflow In-Line Duct Fans (ACP)

- Tough plastic in-line range in seven models
- 50-80mm long ribbed spigots
- Flame retardant casing
- All models speed controllable
- Fitted with Standard Thermal Overload Protection (S.T.O.P.)
- Manufacture controlled to BS EN ISO 9001
- Performance tested to BS 848 Part1 & 2
- 2 Year Guarantee



## Ducted Ventilation

Powerflow models provide a compact yet versatile range designed with the installer in mind, combining the acoustic benefits of a tough plastic casing with the pressure characteristics of a centrifugal fan.

A range of seven models from 100 to 315mm dia. duct sizes. The 315mm dia. model has been specifically developed for use with rigid ductwork. Air volumes from 0.059m<sup>3</sup>/s to 0.42m<sup>3</sup>/s in free air and capable of pressure development up to 550 Pa.

Powerflow has 50-80mm long inlet and discharge spigots allowing easy installation and fixing. The adjustable mounting foot allows the terminal box to be rotated to any angle and allows plenty of space and adjustment for screw fixing. The robust fire-retardant polymeric casing combined with internal guide vanes ensures optimum airflow management through the unit.

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## Electrical

Motors are 220-240V single phase 50Hz. Capacitor start and run. The terminal box is integral with the case moulding. All motors are fitted with Standard Thermal Overload Protection (S.T.O.P.).

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## Motor/Impellers

All models are fitted with an external rotor motor and backward curved impeller assembly for long life and reliability.

All sizes are IP44 according to BS EN 60529. Ball bearings are greased for life and designed to run at any angle. Insulation is Class 'B' (from -30 °C to +40 °C). Manufacture is controlled to BS EN ISO 9001.

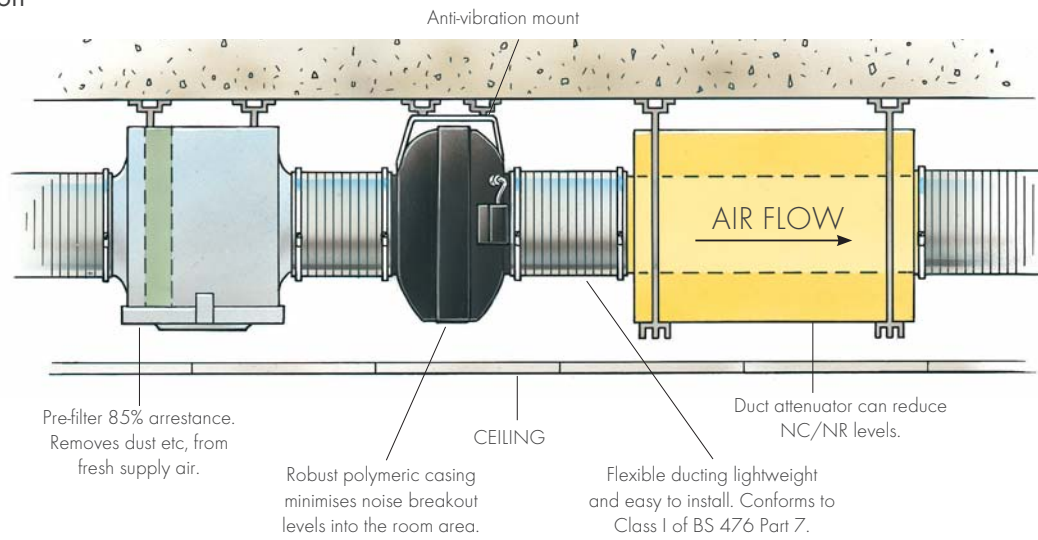
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## Accessories

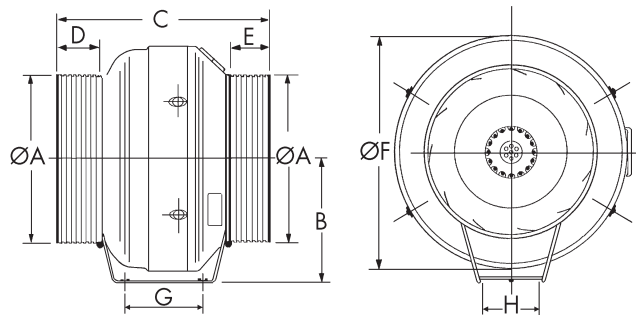
A full range of accessories are available with the Powerflow in-line centrifugal duct fans such as:

- Electronic Speed Controllers
- Auto Transformer Speed Controllers
- D.O.L. Starters
- Pre & Secondary Filter Cassettes
- Electric Heater Batteries
- In-Line Attenuators
- Backdraught Shutters
- Fast Clamps

## Typical Installation



## Fan Dimensions (mm)

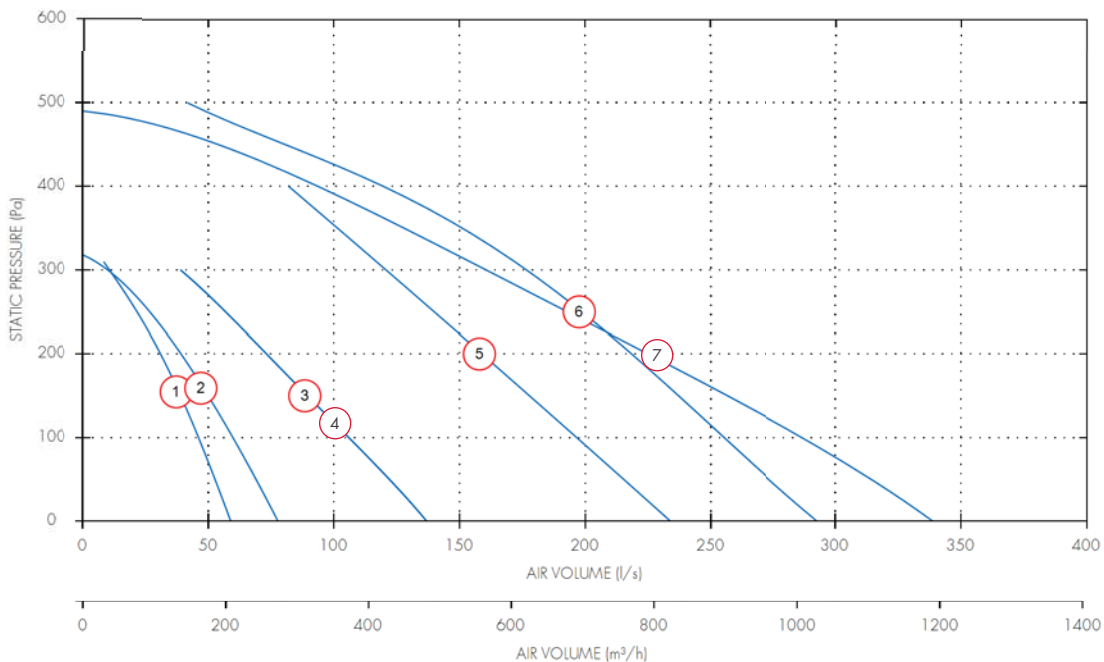


Dia	Øa	b	c	d	e	Øf	g	h	Weight kg
100*	100	146	287	52	52	254	110	270*	2.2
125*	125	146	287	60	60	254	110	270*	2.2
150*	149	175	287	52	52	301	110	270*	3.1
160*	160	175	287	52	52	301	110	270*	3.1
200	200	193	290	47	47	344	92	130	4.3
250	250	218	312	65	65	367	92	130	4.6
315	315	250	366	76	76	405	92	130	5.9

\*Sizes 100, 125, 150 & 160 have a flat mounting foot

# Performance Guide

100 to 315 dia. - 1 Phase - 2 Pole











Dia.	Motor Phase	Stock Ref	r.p.m	IP Rating	Curve Ref.	l/s at Pa					Motor kW	S.C. Amps	F.L.C Amps	dBA @ 3m
						0	100	200	300	400				
100	1	ACP10012	2740	IP44	1	60	50	30	10		0.08	0.85	0.34	35
125	1	ACP12512	2410	IP44	2	80	60	40	10		0.08	0.85	0.34	35
150	1	ACP15012	2520	IP44	3	140	110	70	40		0.1	1.1	0.43	45
150	1	ACP16012	2520	IP44	4	140	110	70	40		0.1	1.1	0.43	45
200	1	ACP20012	2620	IP44	5	230	200	160	120		0.15	1.52	0.68	47
250	1	ACP25012	2720	IP44	6	290	260	220	180	120	0.19	1.6	0.77	48
315	1	ACP31512	2720	IP44	7	340	290	220	160	90	0.18	1.57	0.75	51

## Sound Data

Dia.	Motor Phase	Stock Ref.	Spectrum	l/s at Pa								dBA @ 3m
				63	125	250	500	1k	2k	4k	8k	
100	1	ACP10012	Inlet	81	84	75	68	61	52	46	40	51
100	1	ACP10012	Outlet	82	84	77	68	61	52	49	43	52
100	1	ACP10012	Breakout	52	48	57	53	53	48	40	38	36
125	1	ACP12512	Inlet	80	79	76	70	61	57	51	45	51
125	1	ACP12512	Outlet	82	80	76	71	61	54	51	43	52
125	1	ACP12512	Breakout	52	48	57	53	53	48	40	38	36
150	1	ACP15012	Inlet	79	84	84	76	69	65	61	52	58
150	1	ACP15012	Outlet	78	84	83	74	69	65	60	50	57
150	1	ACP15012	Breakout	59	62	66	62	62	58	51	43	45
150	1	ACP16012	Inlet	81	81	79	76	66	61	58	49	55
150	1	ACP16012	Outlet	80	82	81	73	67	62	57	49	55
150	1	ACP16012	Breakout	59	62	66	62	62	58	51	43	45
200	1	ACP20012	Inlet	80	79	74	76	67	65	66	60	55
200	1	ACP20012	Outlet	79	79	74	71	69	69	65	59	55
200	1	ACP20012	Breakout	54	70	67	66	62	59	53	43	47
250	1	ACP25012	Inlet	84	80	74	74	69	69	67	63	56
250	1	ACP25012	Outlet	75	79	73	72	72	73	68	64	58
250	1	ACP25012	Breakout	60	71	70	66	65	62	55	44	49
315	1	ACP31512	Inlet	84	80	74	74	69	69	67	63	56
315	1	ACP31512	Outlet	75	79	73	72	72	73	68	64	58
315	1	ACP31512	Breakout	72	71	73	71	66	63	55	45	52

## Accessories

										
	Electronic Controller	Auto Transformer	D.O.L. Starter & Coil	*eDemand Controller			† Duct Air Heater	Filter Cassette	Bag Filter Cassette	
Stock Ref	Stock Ref	Stock Ref	Stock Ref	Voltage Control	1/3 Phase Inverter	3 Phase Inverter	Stock Ref	Stock Ref	Stock Ref	
ACP10012	W10303102M	10314103	444744 + 444697	444164	-	-	10531100T1	10532100	10533100	
ACP12512	W10303102M	10314103	444744 + 444697	444164	-	-	10531125T1	10532125	10533125	
ACP15012	W10303102M	10314103	444744 + 444698	444164	-	-	10531150T1	10532150	10533150	
ACP16012	W10303102M	10314103	444744 + 444698	444164	-	-	-	-	-	
ACP20012	W10303102M	10314103	444744 + 444699	444164	-	-	10531200T1	10532200	10533200	
ACP25012	W10303102M	10314103	444744 + 444699	444164	-	-	10531250T1	10532250	10533250	
ACP31512	W10303102M	10314103	444744 + 444699	444164	-	-	10531315T1	10532315	10533315	

\*For full range of speed controller options, see Accessories & Controllers section

						
		300mm	600mm	900mm	1200mm	Heat Exchange Unit
Stock Ref	Stock Ref	Stock Ref	Stock Ref	Stock Ref	Stock Ref	Stock Ref
ACP10012	10534100	10535100	10536100	-	-	-
ACP12512	10534125	10535125	10536125	-	-	-
ACP15012	10534150	10535150	10536150	-	-	-
ACP16012	-	-	-	-	-	-
ACP20012	-	10535200	10536200	10537200	10538290	
ACP25012	-	10535250	10536250	10537250	10538290	
ACP31512	-	10535315	10536315	10537315	10538290	