INLINE FILTERED SUPPLY UNIT



The Inline Filtered Supply Unit has been designed to provide filtered outside air to a range of applications where direct fresh air intake is not possible or practical.

Typical Applications

Filtered supply air into areas such as switch rooms, data rooms, commercial kitchens, shopping centres, factories and warehouses.

FeaturesC

- Robust, yet lightweight galvanised steel construction
- · Mixed-flow impeller with high performance blade geometry
- Pure-V washable G4 filters on the fan discharge side that can be easily accessed via a removable side panel
- Choice of external rotor motors available in single phase and 3-phase configurations
- · Supplied with TDF flanges as standard for inline mounting or installed with an external grille for flush to wall mounting

Construction

Galvanised steel housing with material filters on the discharge side of the fan.

Industry standard 35mm TDF profile flange for easy connection to ducting.

Motors

Type – external rotor squirrel cage induction motor

Electricity supply - 230V, single-phase and 415, 3 phase, 50Hz

Bearings - sealed-for-life, ball

3-phase motors can be speed controlled using variable speed drives, however sinusoidal filters are required when a variable speed drive is used.

Testina

Air flow tests based on ISO 5801.

Noise tests based on ISO 13347-3.

Performances shown are based on clean filters.

As air flow will be affected by room pressurisation, care should be taken to ensure adequate air relief is provided.

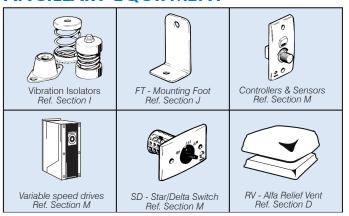
Internal thermal Protection

Auto-reset type fitted as standard

Wiring Diagram

See pages N-8, diagrams ER1, 2, 3, 4, 5

ANCILLARY EQUIPMENT



Special Notes

Pure-V filters

The Inline Filtered Supply Unit incorporates Pure-V filters that are pleated for extra durability and will hold their shape without the need of a wire support metal cage. Pure-V panel filters are washable.

The filters should be checked during cleaning for wear or damage and replaced when necessary. They can be removed via the side access panel on the discharge side of the fan.

Pure-V filters are tested with an efficiency of G4 to standard EN 779:2002.

Differential Pressure Switch

A differential pressure switch can be used to provide indication that the filter needs maintenance.

SUGGESTED SPECIFICATION

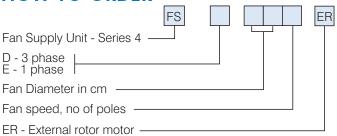
The Inline series of Filtered Supply Units shall be designed and manufactured by Fantech Pty Ltd and be of the model numbers shown on the schedule/ drawings.

The unit will have a galvanised steel housing with 35mm TDF profile flange connections. It will include Pure-V washable G4 filters on the discharge side of the fan.

The unit shall incorporate a Mixed-Flow impeller made from high performance injected moulded composite plastic and driven by an external rotor motor as nominated.

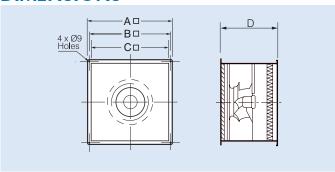
All performance data shall be for a complete assembled unit, and based on ISO 5801 for air flow and ISO 13347-3 for noise.

HOW TO ORDER



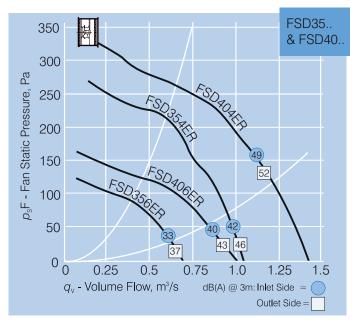
INLINE FILTERED SUPPLY UNIT

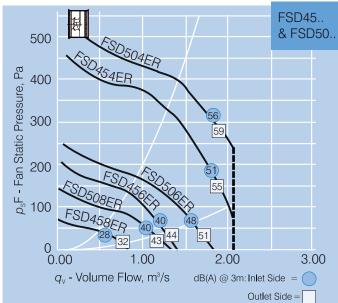
DIMENSIONS



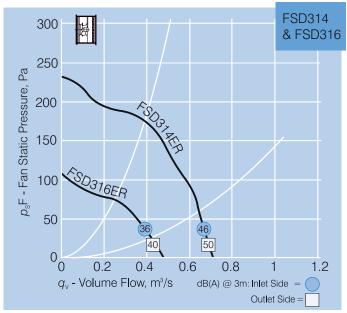
Model FSD	Dimens	ions, mm		Approx. Weight			
FSE	Α	В	С	D	kg.*		
31	720	683	650	570	35		
35	820	783	750	630	43		
40	820	783	750	630	45		
45	970	933	900	700	63		
50	970	933	900	700	69		
56	1120	1083	1050	750	84		
63	1120	1083	1050	750	90		

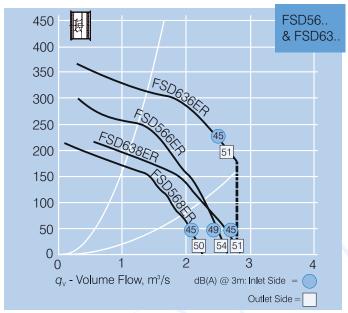
^{*} Unit weights depend on the make of motor used. If critical this should be referred to our sales department at time of order.





PERFORMANCE CURVE





** Filter Air Velocity Limit - Where the perfomance curve drops vertically (indicated with a dashed line) the fan must be speed controlled.

*** Performance curves include a 30Pa pressure loss allowance for clean filters.

INLINE FILTERED SUPPLY UNIT

TECHNICAL DATA

Nom. Model Speed		Max Operating		dB(A) FSEER 1 ph.			ESD I	ER 3 ph.	In-Duct Sound Power Levels, Lw dB re 1pW							
FSE	sec	Temp (°C)		@ 3m	kW	Amps	kW	Amps	63	125	250	500	1k	2k	4k	8k
314 23		60	Inlet	46	0.22	1.10	0.21	0.50	74	70	64	62	60	60	59	53
	23		Outlet	50					74	71	64	65	64	66	61	56
316 15		60	Inlet	36	0.09	0.48	0.09		61	60	54	52	50	50	49	43
	15		Outlet	40				0.26	64	61	54	55	54	56	51	46
354 23			Inlet	42	0.37	1.85	0.33	0.68	65	68	61	58	54	56	55	49
	23	60	Outlet	46					66	67	61	60	62	60	58	52
356 16			Inlet	33		0.56	0.13	0.36	56	59	52	49	45	47	46	40
	16	60	Outlet	37	- 0.12				57	58	52	51	53	51	49	43
404 22		60	Inlet	49	0.58	2.60	0.54	1.20	69	73	66	66	60	63	62	56
	22		Outlet	52					71	71	66	67	68	67	64	58
			Inlet	40					60	64	57	57	51	54	53	47
406 15	15	60	Outlet	43	- 0.28	1.35	0.22	0.56	62	62	57	58	59	58	55	49
		60			_	5.20	1.00	1.95								
454	23		Inlet	51	- 1.10				73	75	70	67 71	64	65	63	58
456	15	60	Outlet Inlet	55 40	0.37	1.75	0.32	0.70	78 62	74 64	72 59	56	71 53	68 54	65 52	59 47
			Outlet	44					67	63	61	60	60	57	54	48
		60	Inlet	28		-	0.19	0.39	50	52	47	44	41	42	40	35
458	9		Outlet	32					55	51	49	48	48	45	42	36
504	21	60	Inlet	56		1.65 7.40	1.45	2.80	77	81	76	71	70	69	66	61
			Outlet	59	- 1.65				85	81	82	73	76	72	67	60
	1.4	60	Inlet	48	0.54	2.50	0.48	0.88	69	73	68	63	62	61	58	53
506	14		Outlet	51					77	73	74	65	68	64	59	52
508	11	60	Inlet	40		-	0.31	0.50	61	65	60	55	54	53	50	45
			Outlet	43					69	65	66	57	60	56	51	44
564 22	22	45	Inlet	57		-	2.50	4.60	79	81	77	72	71	71	69	64
		. =	Outlet	63					82	84	80	79	78	77	75	69
566	15	60	Inlet	49	- 0.84	4.20	0.86	2.20	73	73	69	64	63	64	59	52
			Outlet	54					75	76	71	70	70	69	64	57
568	13	60	Inlet	45		-	0.62	1.10	69	73	67	61	59	57	53	46
			Outlet	50					72	73	68	67	66	63	58	50
636	15	60	Inlet	51		-	1.35	3.40	65	73	69	67	66	65	61	57
			Outlet Inlet	56 45					68 65	76 67	72 65	74 61	72 61	70 59	66 55	58 49
638	12		Outlet	51		-	0.86	1.85	69	71	68	70	67	64	59	50

^{*} Electrical data in bold type refers to fans that are fitted with 2-speed star/delta motors as standard.



