



Fume handling

Whether in places of education, research establishments or industrial processes, the new Xpelair ranges of purpose designed fume handling unit are now available.

Normally located at the extract point of the duct in order to maintain a negative system pressure there are models are suitable for use in aggressive atmospheres. Can used with airborne chemical contamination from substances in normal laboratory use.

Xpelair Scroll units feature a Polypropylene housing inlet sleeve and turbine. The motor is IP 55 protected with Class F insulation. The unit comes complete with a mounting bracket for simple installation. Smaller stock sizes are single phase and larger units three phase although both single three-phase versions of all models are available to order.

Whatever the fume extract application, Xpelair has fresh product ideas and all the accessories too. Whether it be controllers or ducting accessories, it's all presented for easy selection.

Need something different? If you still can't find your perfect system then contact Xpelair CustomVent Division where we specialise in bespoke solutions. Further details page 288.



**Industrial
Product selector**



Page Number	260
Fan type	Fume extract centrifugal
Models	7
Max diameter (mm)	400
Max extract rate (m ³ /s)	2.82
Phase	Three
No. poles	2, 4

Xpelair Scroll XSFDF

Fume extract unit



Key features

Type:	Medium pressure centrifugal
Application:	Corrosive fume extract
Legislation:	BSI DD80 Parts 1, 2 & 3 BIHS Code of practice



The Range

Xpelair **Scroll** units are medium pressure centrifugal fans designed for use in corrosive atmospheres such as fume cupboards, laboratory cabinets and process extract systems where a negative pressure is required. The fan motor is out of the airstream with the centrifugal fan wheel and

housing manufactured out of anticorrosive polypropylene. The complete unit may be installed externally using the galvanised steel motor pad mount with integral flanged fixings. Spigoted inlets and outlets are provided for ductwork attachment.

Specification

Casings and fans

Anticorrosive UV stabilised polypropylene housing and dynamically balanced centrifugal fan. Suitable for aggressive airflow temperatures up to 60°C. The casing is attached to a steel motor mount and flanged bracket assembly for simple installation. The casing is provided with inlet and outlet spigots for attachment via flexible connectors to ductwork.

Motors

Continuously rated capacitor start and run motors. Class F. Motor protection to IP55 making them suitable for external applications. A connection box is provided on the motor. The motor is pad mounted onto a robust steel frame pad.

Electrical supply is 400-415V three phase 50Hz.

Performance

MODEL	Three phase						
	XSFD125-32	XSFD160-32	XSFD200-34	XSFD250-34	XSFD315-34	XSFD355-34	XSFD400-34
Reference number	91774AA	91775AA	91776AA	91777AA	91779AA	91778AA	91780AA
Inlet spigot diameter (mm)	125	160	200	250	315	355	400
Airflow (m ³ /s)	0Pa	0.26	0.63	1.23			
	250Pa	0.21	0.44	0.99	2.67		
	500Pa	0.02	0.53	0.02	0.64	2.27	1.59
	750Pa		0.39		0.12	1.83	
	1000Pa		0.22				2.82
	1250Pa		0.12				2.54
1500Pa		0.04				1.38	
Nominal fan speed (rpm)	2810	2800	1360	1420	1450	1420	1450
Max electrical power (kW)	0.37	0.75	0.37	1.50	7.50	3.00	7.50
Full load current (A)	1.00	1.73	1.03	3.45	15.10	6.40	15.10
Starting current (A)	4.2	7.8	4.3	19.0	48.0	128.4	128.4
Motor insulation class	F	F	F	F	F	F	F
IP rating	IP55	IP55	IP55	IP55	IP55	IP55	IP55
Max operating temperature (°C)	60	60	60	60	60	60	60
Weight (kg)	14.0	19.5	27.0	34.5	77.0	48.0	102.0

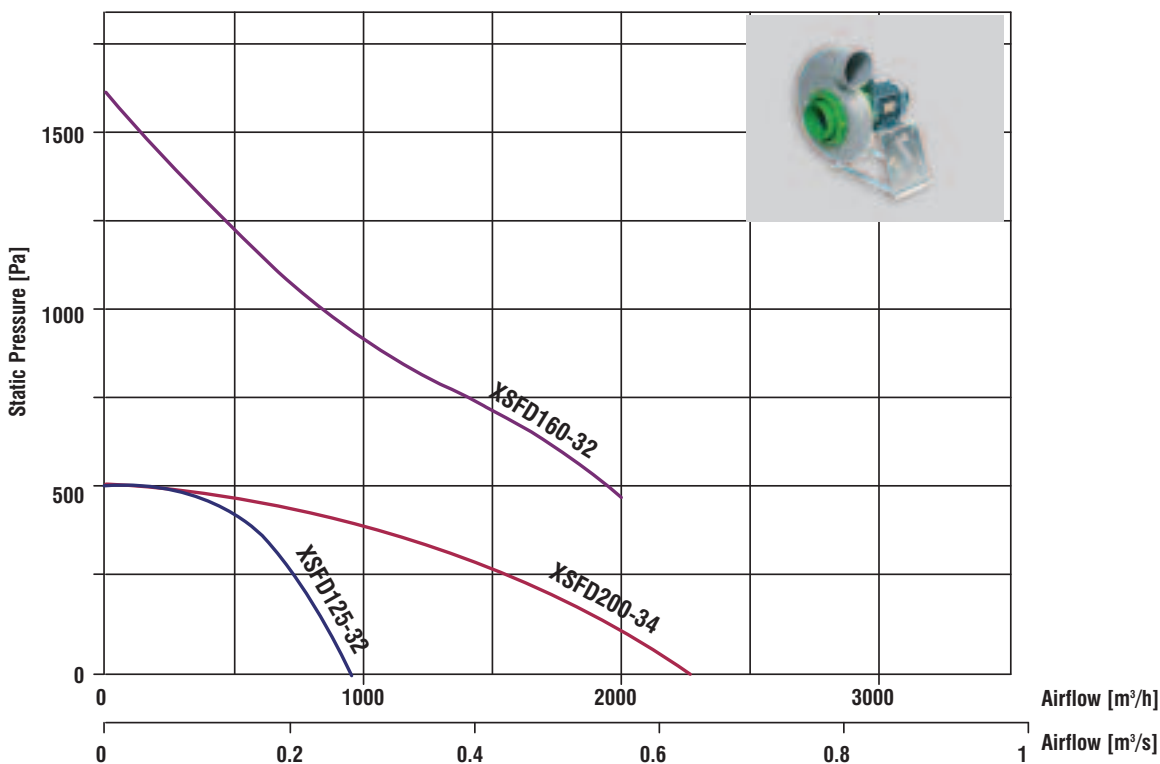
Sound Power Data

Sound power level spectra dB and free field sound levels dB(A) measured at a distance equivalent to twice the fan span plus the impeller diameter, minimum 1.5m, at maximum airflow.

MODEL	63Hz	125Hz	250Hz	500Hz	1kHz	2kHz	4kHz	8kHz	dB(A)@3m
XSFD125-32	56	69	77	81	81	77	73	65	71
XSFD160-32	62	75	83	87	87	83	79	71	77
XSFD200-34	52	65	73	77	78	74	70	61	65
XSFD250-34	60	73	81	85	86	82	78	69	71
XSFD315-34	80	90	92	95	94	94	92	83	80
XSFD355-34	55	68	76	80	81	77	73	64	66
XSFD400-34	63	76	84	88	89	85	81	72	74

Performance Graphs

XSFD125 to 200

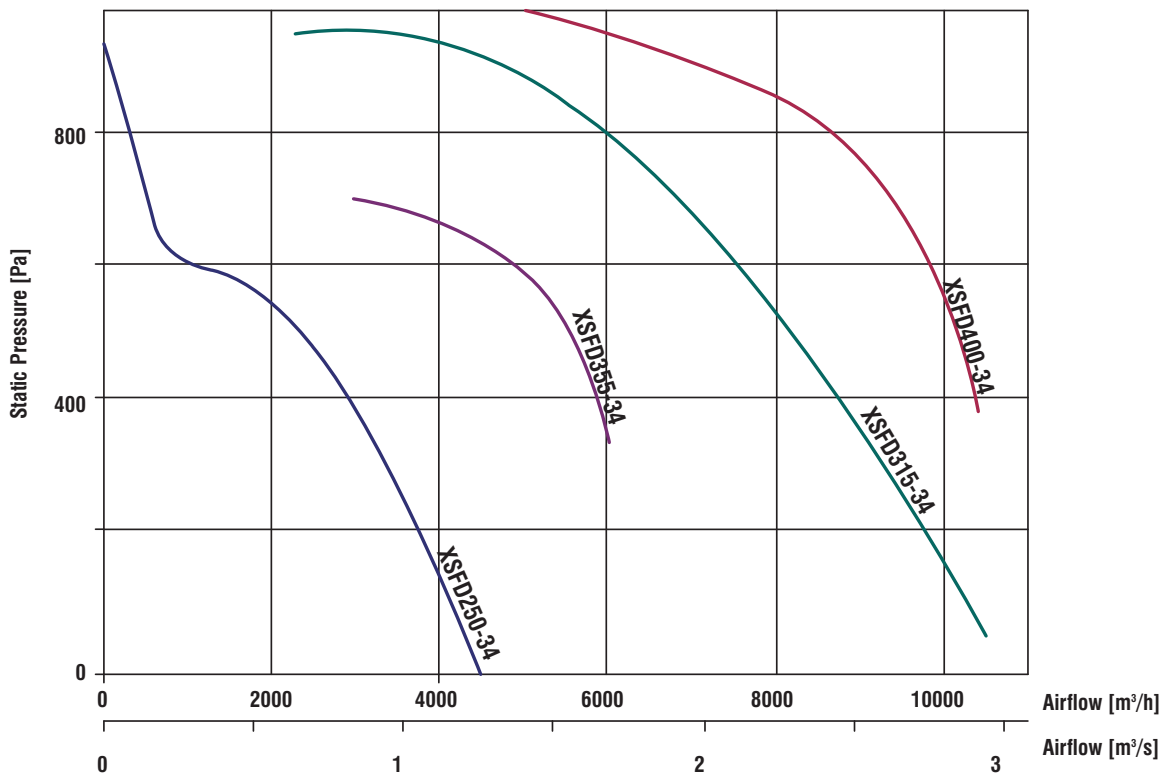


Xpelair Scroll XSFD

Fume extract unit

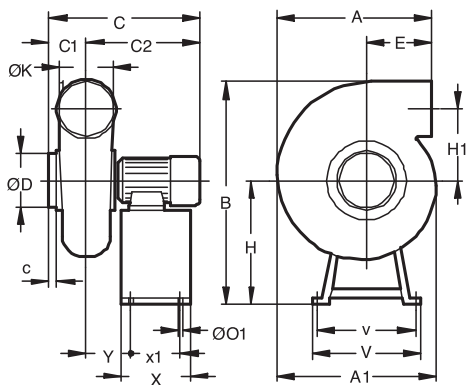
Performance Graphs

XSFD250 to 400

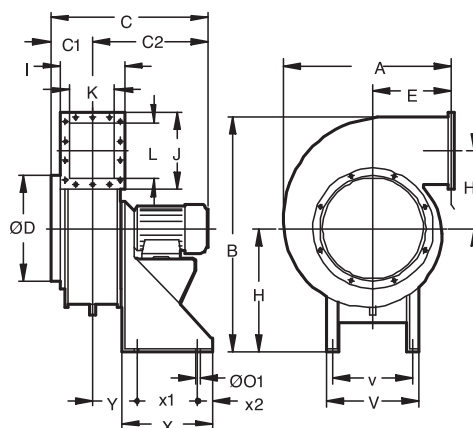


Dimensions

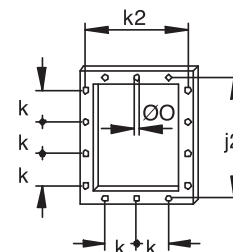
XSFD125 to 315



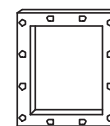
XSFD355 & 400



XSFD400-34



XSFD355-34



MODEL	A	A1	B	C	C1	C2	c	ØD	E	H	H1	K	Ø01	V	v	X	x1	Y
XSFD125-32	303	335	521	371	100	271	30	125	100	281	177.5	125	8	355	335	180	160	90
XSFD160-32	340	397	584	440	116	324	32	160	100	281	225	160	8	355	335	180	160	121
XSFD200-34	413	505	716	438	130	308	35	200	103	351	265	200	8	400	380	180	160	127
XSFD250-34	490	602	888	529	145	384	35	250	117	440	323	250	8	450	430	240	220	143
XSFD315-34	580	750	1170	792	210	642	60	315	130	600	412.5	315	8	600	564	350	314	188
XSFD355-34	631		819	660	210	450		355	275	420	259	225	12	320	285	300	200	170
XSFD400-34	736		1020	810	245	565		400	310	542	310	270	12	350	315	350	350	195

MODEL	I	J	J2	k	k2	L	Ø0	x2	No. fixing holes
XSFD355-34	305	356	326	100	275	280	9	50	12
XSFD400-34	362	421	381	100	322	335	9	50	14

Controllers



Starter with Current Sensing Overload Protection SCP

XSFD125-32	92198AA
XSFD160-32	92198AA
XSFD200-34	92198AA
XSFD250-34	92200AA
XSFD315-34	92204AA
XSFD355-34	92202AA
XSFD400-34	92204AA

Wiring Diagrams

XSFD with three phase starter SCP

