



MULTIFLOW SEM

Mixed Flow Fan

MULTIFLOW SEM

Product Overview

- 6 sizes from 150mm to 400mm
- Air volume flow rates up to 0.918 m³/s
- Static pressures up to 660 Pa (AC) 772 Pa (EC)
- Suitable for operating temperatures up to +60°C, +45°C (EC)
- Extensive stock range available
- Available in **AC** and **EC**



A compact duct mounted mixed flow fan incorporating state of the art impeller and guide vane design to provide very high performance and efficiency.

Intelligent Design

The use of 3D stator guide vanes to recover dynamic pressure loss which results in turbulent pressure being turned into useful pressure, coupled with optimum tip clearance between impeller and case to maximise flow rate creates an improved efficiency.

Low Noise

The innovative mixed flow impeller provides lower noise levels than can be achieved with comparative centrifugal fans.

Easy Installation

Fans are supplied with an integral IP44 terminal box, the rotatable fan body allows the fan to be positioned conveniently to incoming electrical inputs. Mounting bracket can be installed with fan body removed for quick installation.

Efficient Performance

Impellers deliver maximum efficiency and operational performance offering a significant reduction in the running costs against a comparable centrifugal fan.

Weather Resistance

weatherproofed to IPX4.

Warranty

Each SEM has a 12 month warranty.

Construction

Made from shockproof, heat resistant plastic, ensuring a long lasting, robust, non-corrosive construction.

Motor

Featuring a three speed AC induction motor, weatherproofed to IPX4. Each motor has integral thermal overload protection. High efficiency EC units are suitable for use with 0-10V control signal or separate potentiometer.

Impeller

High efficiency diagonal mixed flow impeller with three dimensional guide vanes.

Typical Applications

- Cafe and Coffee Bars
- Changing Rooms
- Communal Residential Buildings
- Gymnasium
- Launderette
- Public Lavatories
- Restaurants, Pubs and Bars
- Schools, Colleges and Universities
- Shops, Supermarkets and Retail
- Sports Centres
- Squash Courts

Contents

Page	Information	
3	Performance Range Curves	
4	Performance, SFP & Electrical Data	AC
5	Performance, SFP & Electrical Data	EC
6	Sound Data	AC
7	Sound Data	EC
9	Dimensional Data	
10	Accessories	AC
11	Accessories	EC
21	Notes	

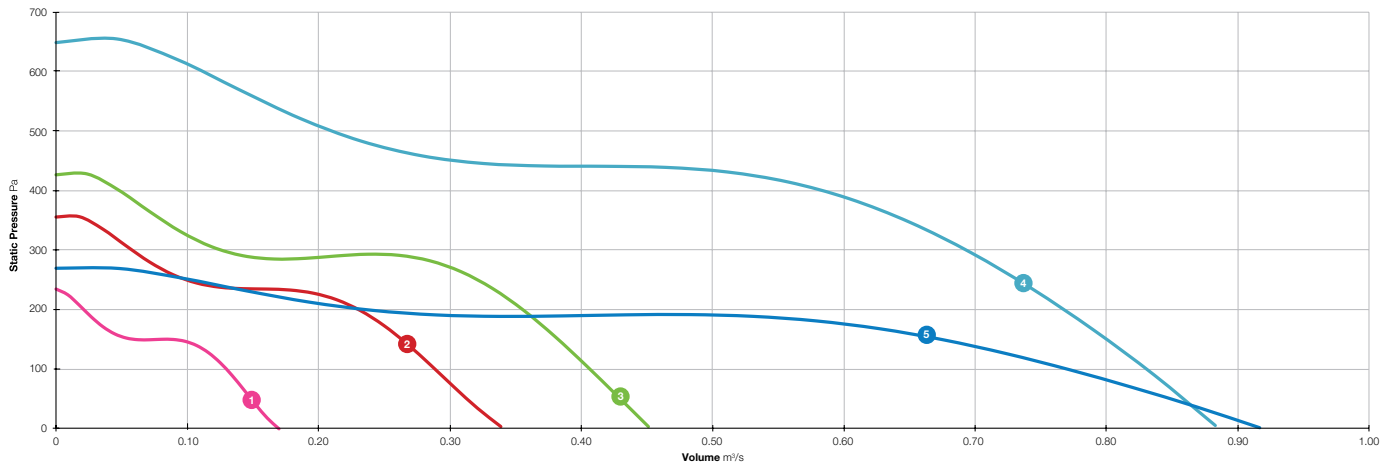
Product Coding

Code	Reference
SEM	Product Range
150	Diameter (150/200/250...)
/	
2	Number of Poles (2/4/6)
-	
1	Voltage Supply (Single Phase / Three Phase)
AC	Motor Type (AC/EC)
A - Z	Additional Coding (A - Z) Product Variants
e.g.	SEM150 / 2 - 1AC

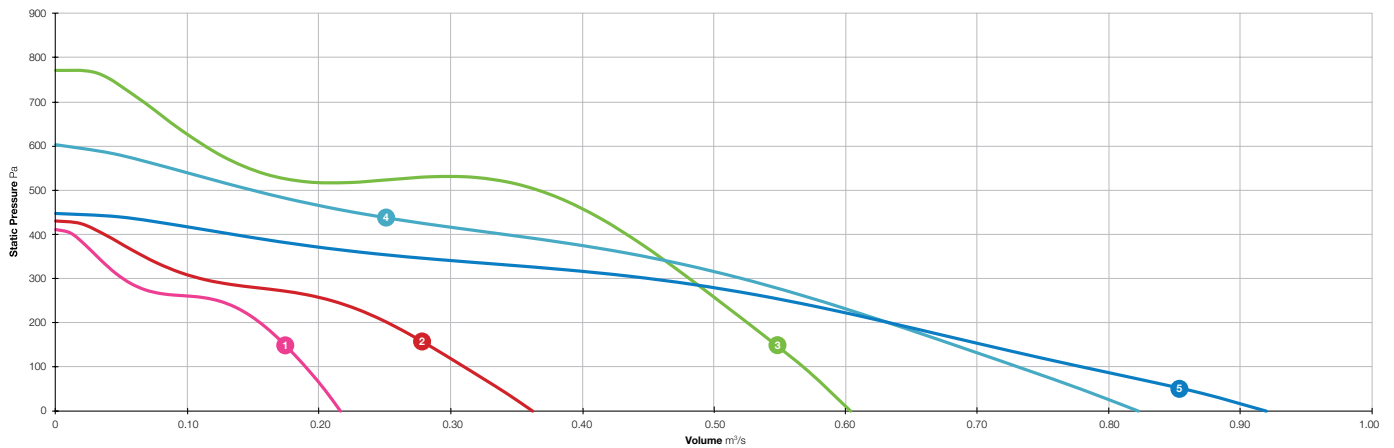
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Performance Range Curves



- 1 SEM150 / 2-1AC
- 3 SEM250 / 2-1AC
- 5 SEM400 / 4-1AC
- 2 SEM200 / 2-1AC
- 4 SEM315 / 2-1AC



- 1 SEM150 / 1EC
- 3 SEM250 / 1EC
- 5 SEM355 / 1EC
- 2 SEM200 / 1EC
- 4 SEM315 / 1EC

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Performance, SFP & Electrical Data

Single Phase 220V to 240V / 50Hz

Product Code	Speed r/min	Airflow SFP	Airflow m³/s @static Pressure Pa												At Best Efficiency Point			Electrical Data		dBA @ 3m	
			0	25	50	75	100	150	200	250	300	350	400	500	Overall Eff %	FMEG N	Input kW	Peak Amps			
SEM150/2-1AC	2730	m³/s	0.169	0.157	0.148	0.139	0.129	0.091	0.021	-	-	-	-	-	31.0	<125W	0.046	0.30	Inlet	46	
		W/(L/s)	0.26	0.28	0.31	0.33	0.36	0.47	1.86	-	-	-	-	-					Outlet	45	
	2545	m³/s	0.149	0.137	0.126	0.115	0.103	0.037	0.011	-	-	-	-	-	30.3		0.035	0.25	Inlet	43	
		W/(L/s)	0.24	0.27	0.30	0.33	0.37	0.79	2.78	-	-	-	-	-					Outlet	43	
	2375	m³/s	0.131	0.115	0.102	0.090	0.075	0.022	-	-	-	-	-	-	24.7		0.030	0.25	Inlet	40	
		W/(L/s)	0.25	0.30	0.35	0.38	0.42	1.27	-	-	-	-	-	-					Outlet	39	
SEM200/2-1AC	2740	m³/s	0.341	0.325	0.312	0.300	0.288	0.263	0.230	0.098	0.057	-	-	-	40.9	<125W	0.117	0.60	Inlet	50	
		W/(L/s)	0.32	0.34	0.36	0.38	0.40	0.45	0.50	0.91	1.65	-	-	-					Outlet	53	
	2585	m³/s	0.288	0.271	0.252	0.236	0.220	0.189	0.144	0.065	0.024	-	-	-	33.2		0.086	0.52	Inlet	47	
		W/(L/s)	0.36	0.38	0.42	0.46	0.49	0.54	0.60	1.26	3.62	-	-	-					Outlet	49	
	2220	m³/s	0.219	0.195	0.169	0.153	0.139	0.107	0.021	-	-	-	-	-	22.1		0.073	0.44	Inlet	42	
		W/(L/s)	0.38	0.43	0.50	0.55	0.58	0.68	3.65	-	-	-	-	-					Outlet	44	
SEM250/2-1AC	2822	m³/s	0.453	0.441	0.430	0.418	0.406	0.382	0.355	0.321	0.125	0.080	0.048	-	46.0	64.6	0.168	0.80	Inlet	53	
		W/(L/s)	0.34	0.35	0.36	0.38	0.39	0.43	0.48	0.53	1.04	1.68	2.94	-					Outlet	57	
	2540	m³/s	0.408	0.396	0.380	0.361	0.343	0.306	0.267	0.187	0.073	-	-	-	38.5		0.134	0.73	Inlet	51	
		W/(L/s)	0.33	0.34	0.36	0.40	0.44	0.51	0.57	0.66	1.57	-	-	-					Outlet	54	
	2250	m³/s	0.338	0.319	0.270	0.242	0.222	0.186	0.140	0.058	-	-	-	-	25.1		0.112	0.68	Inlet	45	
		W/(L/s)	0.38	0.40	0.51	0.58	0.62	0.69	0.80	1.89	-	-	-	-					Outlet	48	
SEM315/2-1AC	2778	m³/s	0.885	0.872	0.859	0.845	0.830	0.800	0.768	0.732	0.693	0.647	0.584	0.210	52.5	66.9	0.421	2.00	Inlet	60	
		W/(L/s)	0.44	0.45	0.46	0.47	0.49	0.52	0.55	0.59	0.63	0.68	0.73	1.60					Outlet	63	
	2415	m³/s	0.768	0.747	0.725	0.700	0.675	0.625	0.574	0.520	0.451	0.328	0.200	0.075	40.4		0.321	1.60	Inlet	56	
		W/(L/s)	0.43	0.45	0.47	0.49	0.52	0.58	0.64	0.70	0.76	0.90	1.39	3.98					Outlet	59	
	1990	m³/s	0.587	0.561	0.517	0.466	0.426	0.363	0.302	0.221	0.087	0.009	-	-	24.2		0.247	1.30	Inlet	50	
		W/(L/s)	0.46	0.48	0.53	0.61	0.67	0.76	0.85	1.08	2.83	27.00	-	-					Outlet	52	
SEM400/4-1AC	1414	m³/s	0.918	0.884	0.848	0.809	0.769	0.672	0.233	0.101	-	-	-	-	47.5	65.2	0.208	1.00	Inlet	49	
		W/(L/s)	0.21	0.22	0.23	0.25	0.27	0.32	0.74	1.78	-	-	-	-					Outlet	53	
	1255	m³/s	0.823	0.779	0.724	0.664	0.603	0.435	0.127	-	-	-	-	-	43.0		0.152	0.80	Inlet	46	
		W/(L/s)	0.18	0.19	0.22	0.25	0.28	0.35	1.07	-	-	-	-	-					Outlet	48	
	1170	m³/s	0.720	0.617	0.508	0.444	0.383	0.195	-	-	-	-	-	-	30.4		0.127	0.75	Inlet	42	
		W/(L/s)	0.20	0.23	0.30	0.34	0.37	0.62	-	-	-	-	-	-					Outlet	45	
																		Breakout	30		

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

Data in accordance with ErP 327/2011 of the European Parliament. Measurement category used to determine energy efficiency: A.

Peak Amps @ 230V / 1PH / 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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Performance, SFP & Electrical Data

Single Phase 220V to 240V / 50Hz

Product Code	Control Voltage V	Speed r/min	Airflow SFP	Airflow m³/s @static Pressure Pa												At Best Efficiency Point			Electrical Data		dBA @ 3m	
				0	25	50	75	100	150	200	250	300	350	400	500	Overall Eff %	FMEG N	Input kW	Peak Amps			
SEM150-1EC	10	3630	m³/s	0.216	0.210	0.203	0.196	0.189	0.174	0.155	0.123	0.051	0.031	0.013	-	47.6	<125W	0.067	0.60	Inlet	52	
			W/(L/s)	0.29	0.30	0.31	0.33	0.35	0.39	0.43	0.50	1.03	1.75	4.38	-					Outlet	54	
	8	3080	m³/s	0.184	0.177	0.170	0.161	0.152	0.130	0.043	0.022	-	-	-	-	49.1		0.039	0.40	Inlet	46	
			W/(L/s)	0.22	0.23	0.25	0.26	0.28	0.32	0.72	1.49	-	-	-	-					Outlet	47	
	5	2030	m³/s	0.116	0.106	0.094	0.075	0.020	-	-	-	-	-	-	-	41.1		0.014	0.20	Inlet	33	
			W/(L/s)	0.12	0.13	0.15	0.18	0.56	-	-	-	-	-	-	-					Outlet	35	
	2	965	m³/s	0.050	0.006	-	-	-	-	-	-	-	-	-	-	14.1		0.004	0.20	Inlet	15	
			W/(L/s)	0.08	0.60	-	-	-	-	-	-	-	-	-	-					Outlet	19	
			m³/s	0.050	0.006	-	-	-	-	-	-	-	-	-	-				Inlet	15		
			W/(L/s)	0.08	0.60	-	-	-	-	-	-	-	-	-	-				Outlet	19		
			m³/s	0.050	0.006	-	-	-	-	-	-	-	-	-	-				Breakout	12		
			W/(L/s)	0.08	0.60	-	-	-	-	-	-	-	-	-	-				Breakout	12		
SEM200-1EC	10	2970	m³/s	0.362	0.350	0.337	0.323	0.310	0.282	0.251	0.209	0.109	0.066	0.036	-	42.6	<125W	0.115	1.00	Inlet	56	
			W/(L/s)	0.34	0.34	0.35	0.36	0.38	0.42	0.48	0.55	0.94	1.62	3.08	-					Outlet	58	
	8	2655	m³/s	0.325	0.309	0.295	0.281	0.267	0.238	0.187	0.065	-	-	-	-	46.2		0.081	0.70	Inlet	50	
			W/(L/s)	0.28	0.27	0.28	0.30	0.32	0.37	0.43	1.03	-	-	-	-					Outlet	54	
	5	1780	m³/s	0.216	0.199	0.179	0.152	0.058	-	-	-	-	-	-	-	44.9		0.025	0.30	Inlet	40	
			W/(L/s)	0.13	0.14	0.16	0.18	0.34	-	-	-	-	-	-	-					Outlet	43	
	2	885	m³/s	0.100	0.029	-	-	-	-	-	-	-	-	-	-	26.0		0.005	0.20	Inlet	22	
			W/(L/s)	0.06	0.17	-	-	-	-	-	-	-	-	-	-					Outlet	23	
			m³/s	0.100	0.029	-	-	-	-	-	-	-	-	-	-				Inlet	22		
			W/(L/s)	0.06	0.17	-	-	-	-	-	-	-	-	-	-				Outlet	23		
			m³/s	0.100	0.029	-	-	-	-	-	-	-	-	-	-				Breakout	10		
			W/(L/s)	0.06	0.17	-	-	-	-	-	-	-	-	-	-				Breakout	10		
SEM250-1EC	10	3700	m³/s	0.603	0.595	0.587	0.577	0.567	0.547	0.525	0.503	0.481	0.458	0.434	0.367	65.3	81.3	0.299	2.00	Inlet	60	
			W/(L/s)	0.49	0.49	0.49	0.50	0.51	0.53	0.56	0.60	0.63	0.67	0.71	0.81					Outlet	65	
	8	3085	m³/s	0.487	0.477	0.468	0.458	0.448	0.428	0.406	0.381	0.347	0.129	0.092	-	60.4		0.169	0.70	Inlet	55	
			W/(L/s)	0.31	0.32	0.33	0.35	0.36	0.40	0.43	0.47	0.51	0.94	1.38	-					Outlet	60	
	5	1890	m³/s	0.296	0.281	0.264	0.246	0.224	0.056	-	-	-	-	-	-	54.0		0.043	0.30	Inlet	43	
			W/(L/s)	0.14	0.15	0.16	0.18	0.20	0.60	-	-	-	-	-	-					Outlet	45	
	2	735	m³/s	0.108	0.019	-	-	-	-	-	-	-	-	-	-	22.5		0.005	0.20	Inlet	25	
			W/(L/s)	0.04	0.26	-	-	-	-	-	-	-	-	-	-					Outlet	28	
			m³/s	0.108	0.019	-	-	-	-	-	-	-	-	-	-				Inlet	25		
			W/(L/s)	0.04	0.26	-	-	-	-	-	-	-	-	-	-				Outlet	28		
			m³/s	0.108	0.019	-	-	-	-	-	-	-	-	-	-				Breakout	21		
			W/(L/s)	0.04	0.26	-	-	-	-	-	-	-	-	-	-				Breakout	21		
SEM315-1EC	10	2470	m³/s	0.822	0.801	0.778	0.754	0.730	0.682	0.632	0.579	0.520	0.446	0.339	0.148	60.6	76.9	0.282	1.90	Inlet	56	
			W/(L/s)	0.34	0.35	0.36	0.37	0.39	0.41	0.45	0.49	0.54	0.63	0.83	1.89					Outlet	59	
	8	2340	m³/s	0.735	0.719	0.703	0.685	0.668	0.629	0.584	0.524	0.262	0.158	0.099	-	55.7		0.224	1.60	Inlet	55	
			W/(L/s)	0.28	0.29	0.31	0.33	0.35	0.39	0.43	0.48	0.65	1.11	1.87	-					Outlet	56	
	5	1440	m³/s	0.454	0.429	0.398	0.360	0.302	0.074	-	-	-	-	-	-	55.0		0.053	0.50	Inlet	42	
			W/(L/s)	0.11	0.12	0.14	0.16	0.19	0.60	-	-	-	-	-	-					Outlet	46	
	2	560	m³/s	0.160	0.013	-	-	-	-	-	-	-	-	-	-	27.0		0.006	0.20	Inlet	25	
			W/(L/s)	0.04	0.38	-	-	-	-	-	-	-	-	-	-					Outlet	26	
			m³/s	0.160	0.013	-	-	-	-	-	-	-	-	-	-				Inlet	25		
			W/(L/s)	0.04	0.38	-	-	-	-	-	-	-	-	-	-				Outlet	26		
			m³/s	0.160	0.013	-	-	-	-	-	-	-	-	-	-				Breakout	25		
			W/(L/s)	0.04	0.38	-	-	-	-	-	-	-	-	-	-				Breakout	25		
SEM355-1EC	10	2160	m³/s	0.919	0.891	0.856	0.818	0.779	0.705	0.633	0.555	0.450	0.262	0.133	-	61.1	78	0.247	1.70	Inlet	52	
			W/(L/s)	0.28	0.29	0.30	0.31	0.32	0.35	0.39	0.45	0.56	0.99	1.92	-					Outlet	55	
	8	1800	m³/s	0.800	0.783	0.766	0.747	0.726	0.676	0.605	0.383	0.067	-	-	-	52.3		0.227	1.60	Inlet	51	
			W/(L/s)	0.23	0.24	0.26	0.27	0.29	0.34	0.40	0.49	2.40	-	-	-					Outlet	53	
	5	430	m³/s	0.186	-	-	-	-	-	-	-	-	-	-	-	31.7		0.005	0.20	Inlet	29	
			W/(L/s)	0.03	-	-	-	-	-	-	-	-	-	-	-					Outlet	29	
				m³/s	0.186	-	-	-	-	-	-	-	-	-	-	-					Inlet	29
				W/(L/s)	0.03	-	-	-	-	-	-	-	-	-	-	-					Outlet	29
			m³/s	0.186	-	-	-	-	-	-	-	-	-	-	-				Breakout	32		
			W/(L/s)	0.03	-	-	-	-	-	-	-	-	-	-	-				Breakout	32		

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

Data in accordance with ErP 327/2011 of the European Parliament. Measurement category used to determine energy efficiency: A.

A variable speed drive is integrated within the fan.

Peak Amps @ 230V / 1PH / 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.

MULTIFLOW SEM



Sound Data

Single Phase 220V to 240V / 50Hz

Product Code	Speed r/min		Sound Power Level dBW @ Octave Band Hz								Total dB
			63 Hz	125 Hz	250 Hz	500 Hz	1k Hz	2k Hz	4k Hz	8k Hz	
SEM150/2-1AC	2730	Inlet	28	36	55	67	59	58	54	48	68
		Outlet	31	35	56	63	62	57	57	51	67
		Breakout	36	30	41	55	49	48	39	28	57
	2545	Inlet	26	34	54	64	55	55	51	45	66
		Outlet	30	34	55	59	59	55	55	48	64
		Breakout	32	30	39	51	46	45	38	26	53
	2375	Inlet	22	34	50	62	52	52	47	40	63
		Outlet	30	34	51	54	56	51	51	43	60
		Breakout	32	30	37	56	43	43	36	26	57
SEM200/2-1AC	2740	Inlet	36	46	62	68	65	64	60	53	72
		Outlet	39	47	65	67	70	66	64	56	74
		Breakout	41	42	54	51	53	53	44	34	59
	2585	Inlet	29	44	60	65	62	61	57	50	69
		Outlet	34	43	62	62	66	62	61	52	70
		Breakout	34	40	48	48	49	50	40	29	55
	2220	Inlet	31	41	54	61	57	57	51	43	64
		Outlet	37	44	57	59	62	58	54	43	66
		Breakout	29	40	44	46	45	45	33	20	51
SEM250/2-1AC	2822	Inlet	50	60	64	70	70	67	62	53	75
		Outlet	49	60	66	71	75	72	63	54	78
		Breakout	50	49	57	52	55	54	44	33	62
	2540	Inlet	38	52	60	68	67	65	61	53	72
		Outlet	38	52	61	68	71	69	62	53	75
		Breakout	40	44	49	48	51	49	41	31	56
	2250	Inlet	28	44	53	63	61	59	57	48	67
		Outlet	31	46	55	62	65	63	57	48	69
		Breakout	37	39	39	45	44	42	34	26	50
SEM315/2-1AC	2778	Inlet	54	67	71	77	77	74	69	59	82
		Outlet	54	67	73	79	80	76	70	60	84
		Breakout	51	53	65	59	63	55	46	38	68
	2415	Inlet	44	60	67	73	72	70	67	58	78
		Outlet	44	61	69	75	76	73	68	58	80
		Breakout	42	46	54	54	59	51	44	34	62
	1990	Inlet	33	50	58	65	65	64	62	52	71
		Outlet	34	52	60	67	68	66	62	51	73
		Breakout	33	40	45	49	52	44	36	26	55
SEM400/2-1AC	1414	Inlet	52	58	64	67	66	62	54	48	72
		Outlet	50	59	66	71	71	63	56	50	75
		Breakout	51	44	44	51	52	47	32	26	57
	1255	Inlet	33	49	57	61	61	61	56	47	67
		Outlet	32	52	58	64	65	61	56	45	69
		Breakout	46	43	43	49	48	38	30	24	54
	1170	Inlet	29	43	50	57	57	57	52	40	63
		Outlet	32	47	55	61	62	58	52	39	66
		Breakout	31	37	33	51	46	37	25	13	53

Data provided at standard air density of 1.2 kg/m³.
 Tests and preparation of the sound data have been carried out at operating point with the highest static efficiency.
 The Sound Power Level Spectra are in dB re-1pW.

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Sound Data

Single Phase 220V to 240V / 50Hz

Product Code	Control Voltage V		Sound Power Level dBW @ Octave Band Hz								Total dB
			63 Hz	125 Hz	250 Hz	500 Hz	1k Hz	2k Hz	4k Hz	8k Hz	
SEM150-1EC	10	Inlet	40	53	62	71	68	66	60	52	74
		Outlet	42	51	62	68	71	68	65	57	75
		Breakout	40	39	44	47	50	53	46	36	56
	8	Inlet	36	50	58	65	62	60	54	45	68
		Outlet	37	52	59	64	64	61	57	48	69
		Breakout	44	37	38	44	45	49	42	30	53
	5	Inlet	35	42	47	52	49	47	37	26	56
		Outlet	33	43	49	52	52	48	42	29	57
		Breakout	39	33	31	30	34	36	27	-	43
	2	Inlet	27	30	31	36	31	21	17	-	39
		Outlet	27	30	36	36	37	27	10	-	42
		Breakout	39	28	29	28	29	23	20	7	40
SEM200-1EC	10	Inlet	41	58	67	73	72	70	64	57	77
		Outlet	41	59	69	73	75	71	68	59	79
		Breakout	40	42	51	54	58	57	48	40	62
	8	Inlet	44	59	62	69	66	62	56	47	72
		Outlet	43	55	66	70	72	67	63	53	76
		Breakout	42	46	48	52	54	52	42	32	58
	5	Inlet	40	46	53	60	56	52	44	32	63
		Outlet	41	47	56	60	61	55	50	37	65
		Breakout	40	34	39	46	43	42	30	-	50
	2	Inlet	29	33	37	43	37	31	23	13	45
		Outlet	40	37	41	42	41	32	18	8	48
		Breakout	40	32	31	29	26	19	17	-	42
SEM250-1EC	10	Inlet	57	71	71	75	77	75	71	61	82
		Outlet	55	69	72	77	83	80	72	65	86
		Breakout	54	58	55	59	62	62	52	41	67
	8	Inlet	52	63	64	69	72	69	64	55	76
		Outlet	56	66	68	72	78	74	65	56	81
		Breakout	52	55	50	53	65	56	46	35	66
	5	Inlet	38	47	52	58	60	57	52	41	64
		Outlet	44	51	54	60	63	60	49	37	67
		Breakout	45	41	38	55	48	43	31	19	57
	2	Inlet	22	31	32	47	40	28	24	13	48
		Outlet	24	29	33	49	44	29	24	16	50
		Breakout	22	19	33	40	40	24	17	-	44
SEM315-1EC	10	Inlet	36	53	66	69	72	70	70	61	77
		Outlet	39	54	69	74	76	73	69	60	80
		Breakout	39	39	49	57	68	54	44	34	69
	8	Inlet	38	53	65	70	70	70	68	60	76
		Outlet	53	63	66	73	74	69	63	52	78
		Breakout	55	51	51	65	63	53	39	28	68
	5	Inlet	43	50	53	60	60	54	48	35	64
		Outlet	42	52	57	63	64	56	47	34	68
		Breakout	44	40	40	51	60	40	23	-	61
	2	Inlet	31	30	32	40	44	31	28	18	46
		Outlet	16	34	37	45	45	30	27	18	49
		Breakout	27	31	31	39	45	26	-	-	46

Data provided at standard air density of 1.2 kg/m³.
 Tests and preparation of the sound data have been carried out at operating point with the highest static efficiency.
 The Sound Power Level Spectra are in dB re-1pW.

MULTIFLOW SEM



Sound Data

Single Phase 220V to 240V / 50Hz

Product Code	Control Voltage V		Sound Power Level dBW @ Octave Band Hz								Total dB
			63 Hz	125 Hz	250 Hz	500 Hz	1k Hz	2k Hz	4k Hz	8k Hz	
SEM355-1EC	10	Inlet	32	50	59	68	67	66	65	55	73
		Outlet	34	50	63	71	72	68	66	57	76
		Breakout	31	35	47	59	60	46	40	31	63
	8	Inlet	41	53	60	67	67	65	62	52	72
		Outlet	40	53	62	69	71	66	62	52	74
		Breakout	33	36	45	62	58	45	37	28	64
	5	Inlet	19	23	28	46	48	30	35	29	50
		Outlet	17	25	32	47	47	29	35	27	50
		Breakout	24	21	28	41	52	27	26	14	52

Data provided at standard air density of 1.2 kg/m³.
 Tests and preparation of the sound data have been carried out at operating point with the highest static efficiency.
 The Sound Power Level Spectra are in dB re-1pW.

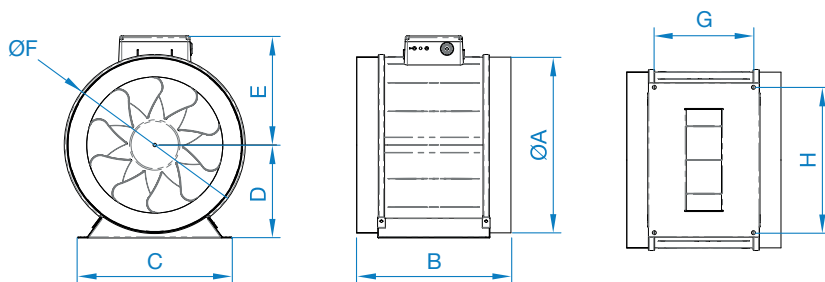
MULTIFLOW SEM



Dimensional Data

Single Phase & Three Phase

Product Code	A	B	C	D	E	F	G	H	Weight kg
SEM150/2-1AC	150	309	138	108	130	204	94	100	2
SEM150-1EC	150	309	138	108	130	204	94	100	2
SEM200/2-1AC	200	325	163	129	151	246	120	125	4
SEM200-1EC	200	325	163	129	151	246	120	125	3
SEM250/2-1AC	250	215	169	136	163	263	80	125	6
SEM250-1EC	250	215	169	136	163	263	80	125	4
SEM315/2-1AC	315	300	284	167	200	327	210	264	12
SEM315-1EC	315	300	284	167	200	327	210	264	7
SEM355-1EC	354	325	316	187	220	367	220	295	9
SEM400/4-1AC	400	350	350	211	247	411	225	330	16



Dimensions are in mm.

MULTIFLOW SEM



Accessories

Single Phase

Product Code	3 Speed Switch	Damper	Electric Heater Battery	Fast Clamps (each)	Panel Filter
SEM150/2-1AC	149-MTS10	018-150-DAMPER	018-CV15-27-1M	018-150-CLAMP	018-0150-FILT-P
SEM200/2-1AC	149-MTS10	018-200-DAMPER	018-CV20-30-1M	018-200-CLAMP	018-0200-FILT-P
SEM250/2-1AC	149-MTS10	018-250-DAMPER	018-CV25-30-1M	018-250-CLAMP	018-0250-FILT-P
SEM315/2-1AC	149-MTS10	018-315-DAMPER	018-CV31-30-1M	018-315-CLAMP	018-0315-FILT-P
			018-CV31-45-1M		
			018-CV31-90-3M		
SEM400/4-1AC	149-MTS10	018-400-DAMPER	018-CV40-90-3M	018-400-CLAMP	018-0400-FILT-P
			018-CV40-120-3E		

Product Code	Silencer 300mm Long	Silencer 600mm Long	Silencer 900mm Long	Silencer 1200mm Long	Wiring Diagram
SEM150/2-1AC	068-0150-JF1	068-0150-JF2	068-0150-JF3	068-0150-JF4	152-543
SEM200/2-1AC	068-0200-JF1	068-0200-JF2	068-0200-JF3	068-0200-JF4	152-543
SEM250/2-1AC	068-0250-JF1	068-0250-JF2	068-0250-JF3	068-0250-JF4	152-543
SEM315/2-1AC	068-0315-JF1	068-0315-JF2	068-0315-JF3	068-0315-JF4	152-543
SEM400/4-1AC	068-0400-JF1	068-0400-JF2	068-0400-JF3	068-0400-JF4	152-543

MULTIFLOW SEM



Accessories

Single Phase

Product Code	Damper	EC Electronic Controller	Electric Heater Battery	Fast Clamps (each)	Panel Filter
SEM150-1EC	018-150-DAMPER	149-POT-10	018-CV15-27-1M	018-150-CLAMP	018-0150-FILT-P
SEM200-1EC	018-200-DAMPER	149-POT-10	018-CV20-30-1M	018-200-CLAMP	018-0200-FILT-P
SEM250-1EC	018-250-DAMPER	149-POT-10	018-CV25-30-1M	018-250-CLAMP	018-0250-FILT-P
SEM315-1EC	018-315-DAMPER	149-POT-10	018-CV40-90-3M	018-315-CLAMP	018-0315-FILT-P
			018-CV40-120-3E		
SEM355-1EC	018-355-DAMPER	149-POT-10	018-CV35-90-3M	018-355-CLAMP	018-0355-FILT-P

Product Code	Spigot Silencer 300mm Long	Spigot Silencer 600mm Long	Spigot Silencer 900mm Long	Spigot Silencer 1200mm Long	Wiring Diagram
SEM150-1EC	068-0150-JF1	068-0150-JF2	068-0150-JF3	068-0150-JF4	152-545
SEM200-1EC	068-0200-JF1	068-0200-JF2	068-0200-JF3	068-0200-JF4	152-545
SEM250-1EC	068-0250-JF1	068-0250-JF2	068-0250-JF3	068-0250-JF4	152-545
SEM315-1EC	068-0315-JF1	068-0315-JF2	068-0315-JF3	068-0315-JF4	152-545
SEM355-1EC	068-0355-JF1	068-0355-JF2	068-0355-JF3	068-0355-JF4	152-545

3 SPEED SWITCH

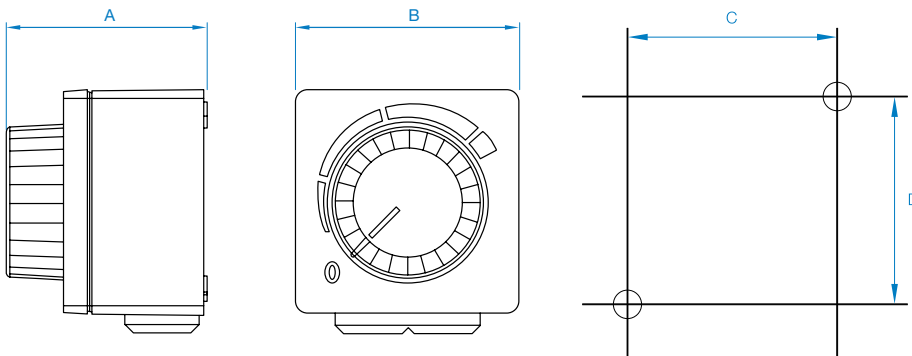
Accessories

- 3 step switch MTS
- Surface and flush mounting
- Maximum ambient temperature 50°C
- VDE
- Protection class IP44



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

Product Code	ID	A	B	C	D	Weight kg
MTS10	128145	74	83	66.5	66.5	0.2



	U_{max}	Hz	I_{max}	P_{max}
CE	250V~	50Hz	4A	-
RU	120V~ 240V	60Hz 60Hz	-	1hp 2hp

Legend

- I_{max} Maximum operating current
 U_{max} Maximum Voltage
 P_{max} Maximum power

Dimensions are in mm.

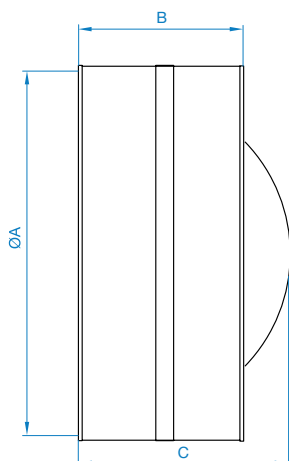
DAMPER

Accessories

- Prevents reverse flow of air when fan is not operating
- Galvanised sheet steel case
- Spring operated aluminium sheet blades



Product Code	Fan Dia. A	B	C	Weight kg
018-150-DAMPER	150	90	110	0.3
018-200-DAMPER	200	125	150	0.6
018-250-DAMPER	250	125	190	0.6
018-315-DAMPER	315	125	210	1.3
018-355-DAMPER	355	195	280	1.3
018-400-DAMPER	400	200	300	2.1



Dimensions are in mm.

EC ELECTRONIC CONTROLLER

Accessories

- EC Type fans
- Variable Speed Drives (Inverters)



Product Code
149-POT-10

ELECTRIC HEATER BATTERY

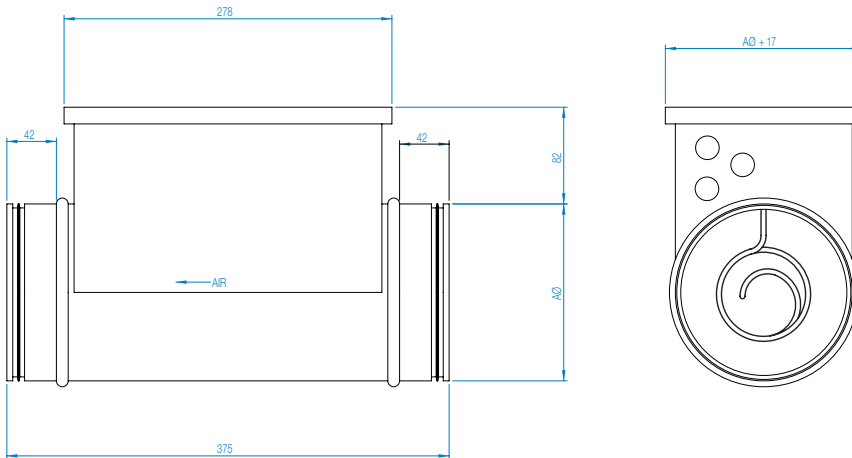
Accessories



Type

CV – (E/M) duct heater with casing of Aluzinc-coated sheet steel and stainless steel heater element to EN 1.4301. The duct heaters conform to air tightness class C to EN 15727. Control takes place by an external regulator and sensor that must be ordered separately.

Product Code	kW	Phase	Airflow @ m ³ /s		A	Weight kg
			Min	Max		
018-CV15-27-1M	2.7	1	0.031	0.208	150	4.2
018-CV20-30-1M	3.0	1	0.047	0.231	200	5.9
018-CV25-30-1M	3.0	1	0.075	0.231	250	7.8
018-CV31-30-1M	3.0	1	0.115	0.231	315	8.3
018-CV31-45-1M	4.5	1	0.115	0.347	315	8.3
018-CV31-90-3M	9.0	3	0.115	0.694	315	8.3
018-CV35-90-3M	9.0	3	0.192	0.694	355	9.1
018-CV40-90-3M	9.0	3	0.192	0.694	400	9.7
018-CV40-120-3E	12.0	3	0.192	0.926	400	9.7



Dimensions are in mm.

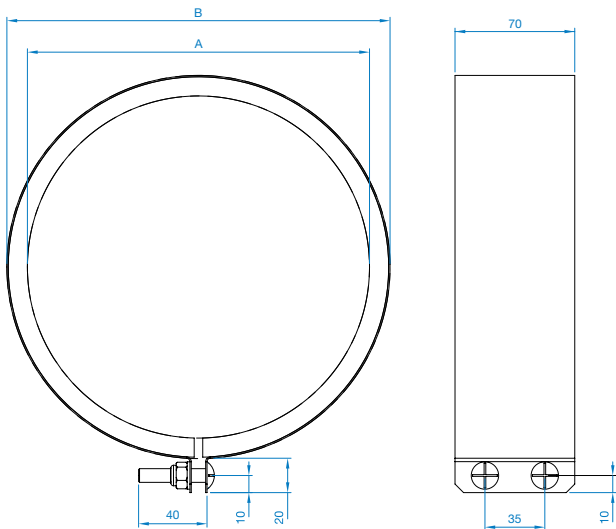
FAST CLAMPS

Accessories

- For quick connection of spigotted fans to circular duct or accessories
- Galvanised steel circular duct clamp with foam lining



Product Code	Fan Size	A Dia.	B Dia.	Weight kg
018-150-CLAMP	150	150	174	0.33
018-200-CLAMP	200	200	224	0.42
018-250-CLAMP	250	250	274	0.49
018-315-CLAMP	315	315	339	0.59
018-355-CLAMP	355	355	379	0.67
018-400-CLAMP	400	400	424	0.74

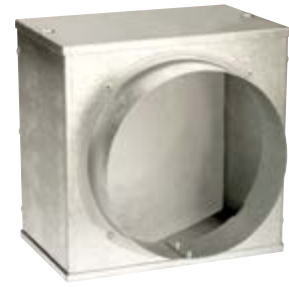


Dimensions are in mm.

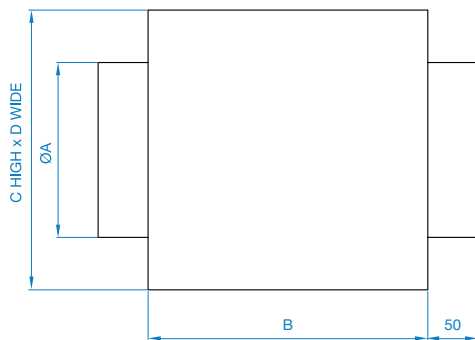
PANEL FILTER

Accessories

- Galvanised steel casing
- Filter media to BS EN 779 rating G2 with 85% arrestance
- Filter access with removable panel



Product Code	Fan Dia. A	B	C	D	Weight kg
018-0150-FILT-P	150	155	250	250	2
018-0200-FILT-P	200	155	250	250	2
018-0250-FILT-P	250	200	300	300	3
018-0315-FILT-P	315	300	440	440	8
018-0355-FILT-P	355	400	440	440	8
018-0400-FILT-P	400	400	440	440	8



Dimensions are in mm.

SPIGOT SILENCER

Accessories

- Small metric range of attenuators with spigot connection
- Ideal for small fans
- Ideal for cross talk elimination
- Ideal for flexible or spiral ducting



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 do not have threaded holes for fixings, but has a steel spigot for ease of mounting.

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: 300, 600, 900 and 1200mm.

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 Fans can design and build optional splitter silencers for greater effect.

SPIGOT SILENCER

Dynamic Insertion Loss

Spigot Ø100-500

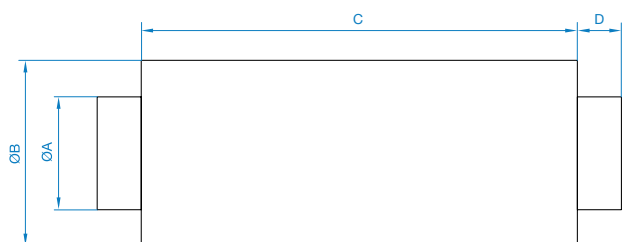
Product Code	Length	Insertion Loss @ Octave band (Hz)							
		63	125	250	500	1K	2K	4K	8K
068-0150-JF1	300mm	-3	-3	-6	-14	-19	-23	-22	-11
068-0150-JF2	600mm	-4	-7	-12	-23	-30	-36	-31	-15
068-0150-JF3	900mm	-8	-9	-15	-31	-37	-37	-34	-18
068-0150-JF4	1200mm	-10	-14	-17	-34	-41	-40	-36	-20
068-0200-JF1	300mm	-2	-3	-6	-13	-17	-20	-18	-9
068-0200-JF2	600mm	-4	-6	-10	-20	-27	-32	-20	-11
068-0200-JF3	900mm	-7	-9	-14	-32	-39	-36	-26	-15
068-0200-JF4	1200mm	-10	-12	-17	-35	-41	-44	-28	-16
068-0250-JF1	300mm	-2	-3	-6	-12	-16	-19	-17	-8
068-0250-JF2	600mm	-3	-6	-10	-19	-25	-29	-18	-10
068-0250-JF3	900mm	-5	-8	-12	-24	-30	-30	-22	-14
068-0250-JF4	1200mm	-7	-10	-15	-31	-37	-38	-26	-15
068-0315-JF1	300mm	-1	-3	-6	-12	-15	-18	-16	-8
068-0315-JF2	600mm	-3	-5	-8	-16	-21	-22	-16	-14
068-0315-JF3	900mm	-4	-7	-10	-20	-31	-28	-17	-14
068-0315-JF4	1200mm	-6	-9	-14	-23	-32	-32	-18	-15
068-0355-JF1	300mm	-1	-3	-6	-12	-15	-18	-16	-8
068-0355-JF2	600mm	-3	-4	-7	-15	-19	-20	-15	-13
068-0355-JF3	900mm	-4	-7	-9	-19	-28	-25	-16	-13
068-0355-JF4	1200mm	-5	-8	-13	-22	-31	-29	-17	-14
068-0400-JF1	300mm	-1	-2	-4	-11	-15	-15	-12	-8
068-0400-JF2	600mm	-2	-4	-7	-14	-17	-18	-14	-11
068-0400-JF3	900mm	-3	-6	-9	-18	-26	-23	-15	-12
068-0400-JF4	1200mm	-5	-8	-13	-22	-30	-27	-17	-12

For sizes 560-710, please contact Elta Fans.

SPIGOT SILENCER

Dimensional Data

Product Code	Fan Dia.	A	B	C	D	Weight kg
068-0150-JF1	150	148	255	300	40	3.4
068-0150-JF2	150	148	255	600	40	6.1
068-0150-JF3	150	148	255	900	40	8.9
068-0150-JF4	150	148	255	1200	40	11.6
068-0200-JF1	200	198	305	300	40	4.2
068-0200-JF2	200	198	305	600	40	7.6
068-0200-JF3	200	198	305	900	40	11.0
068-0200-JF4	200	198	305	1200	40	14.5
068-0250-JF1	250	248	355	300	40	5.0
068-0250-JF2	250	248	355	600	40	9.1
068-0250-JF3	250	248	355	900	40	13.2
068-0250-JF4	250	248	355	1200	40	17.3
068-0315-JF1	315	313	420	300	40	6.1
068-0315-JF2	315	313	420	600	40	11.1
068-0315-JF3	315	313	420	900	40	16.1
068-0315-JF4	315	313	420	1200	40	21.0
068-0355-JF1	355	353	460	300	40	6.8
068-0355-JF2	355	353	460	600	40	12.3
068-0355-JF3	355	353	460	900	40	17.8
068-0355-JF4	355	353	460	1200	40	23.3
068-0400-JF1	400	398	505	300	40	7.5
068-0400-JF2	400	398	505	600	40	13.6
068-0400-JF3	400	398	505	900	40	19.8
068-0400-JF4	400	398	505	1200	40	25.9



Dimensions are in mm.

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