



## SF SERIES

### COOLING FANS

#### Fan Components and Material Properties

The propeller is manufactured from electrostatic powder coated sheet metal, composite plastic material or aluminum sheet metal material. Protective wire and wire mesh electrostatic powder coated steel wire. The propeller is coupled directly to the motor. Protective and carrier wireframe produced in standard connection dimensions. All motors "F" insulation class and standard protection class is IP 54.

\* Square Plate and Flat Grill and other options are available. Please contact BVN representatives for request and detailed information.

#### Benefits

With its blower and suction types, the SF cooling fans are designed for high performance, low power consumption, low noise level and long-term maintenance-free operation in a variety of applications. Speed can be adjusted with speed control devices. Propellers are manufactured in the most ideal aerodynamic shape according to their size and maximum efficiency is ensured.

#### Speed Control

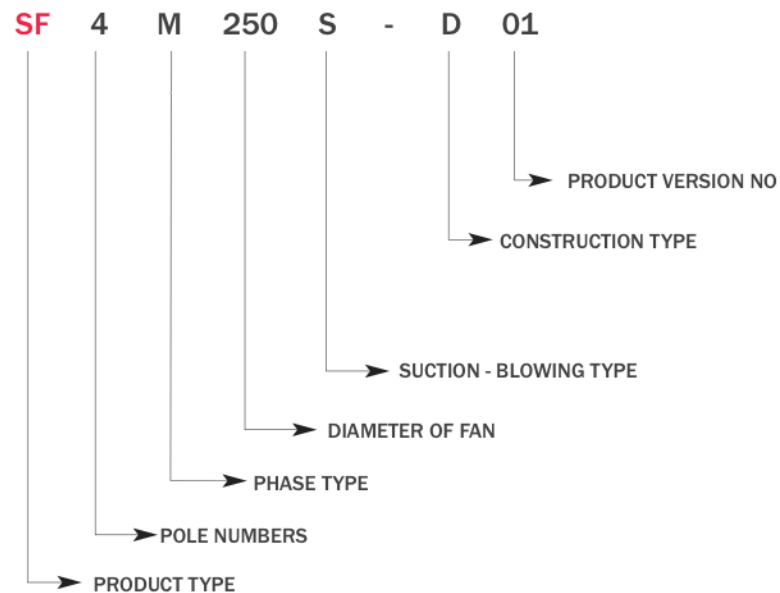
Optional control devices can be provided. 1-Phase products can be controlled with linear voltage regulator (see BSC accessory).

\* For three-phase models information please contact BVN representatives for request and detailed information.

#### Usage Areas

Refrigeration machines, rooftop equipments, air-conditioning outdoor units, evaporator and condensers, laboratories, residences, hot and cold air appliances and industrial chillers etc. used in places.

### PRODUCT CODE DESCRIPTIONS



Technical Data Tables

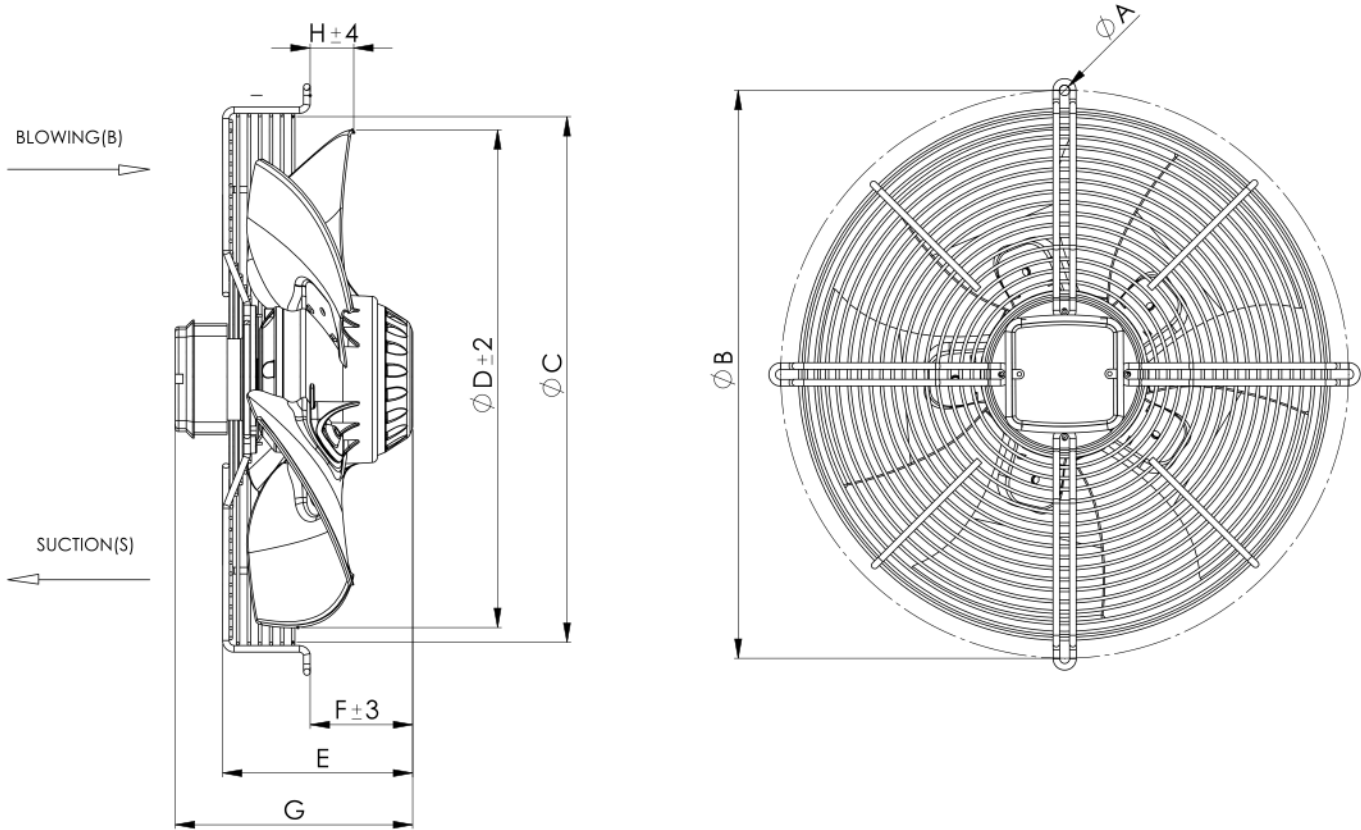
TYPE	MOTOR-FAN CONFIGURATION	VOLTAGE V	FREQUENCY Hz	POWER W	CURRENT (A)	CAPACITOR (uf)	SPEED r.p.m	MAX AIRFLOW m <sup>3</sup> /h	SOUND PRESSURE dB(A)	MAX OPERATIVE RANGE PA	PROTECTION CLASS IP	PERM. AMB. TEMP.	WEIGHT kg	DESIGN			WITHOUT ATTACHMENTS A Type
														WITH GUARD GRILLE D	WITH SQUARE NOZZLE F G		
SF 4M 250	A 01	230	50/60	55	0,26	1,5	1370/1615	1000/1175	44	70/65	54	(-40) (+55)	2,5	D 01	F 01	-	A 01
SF 4M 300	A 01	230	50/60	72 / 87	0,32/0,38	2,5	1300/1450	1700/1900	50	65	54	(-40) (+50)	4	D 01	F 01	-	A 01
SF 2M 300	A 01	230	50/60	150/170	0,66/0,75	4	1450	2160	55/57	60	54	(-40) (+50)	3	D 01	F 01	-	
SFX 4M 300	A 01	230	50/60	100 / 120	0,5/0,54	3,5	1450/1710	1900/2240	50	65	54	(-40) (+55)	4	D 01	-	-	A 01
SF 4M 350	A 01	230	50	115/150	0,5/0,66	4	1225	3100	55	65/75	54	(-40) (+55)	3,3	D 01	F 01	-	A 01
SFX 4M 350	A 01	230	50/60	165 / 195	0,75/0,85	4	1380/1545	3300/3700	55	85	54	(-40) (+55)	4,7	D 01	-	-	A 01
SF 4M 400	A 01	230	50/60	160 / 220	0,75/1,1	5	1400/1650	4000/4700	58	140/65	54	(-40) (+40)	6,1	D 01	F 01	-	A 01
SF 4M 450	A 01	230	50/60	245 / 355	1,2/1,6	7	1400/1600	5700/6500	63	85/35	54	(-40) (+40)	6,9	D 01	F 01	-	A 01
SFX 6M 450	A 01	230	50/60	165 / 220	0,75/0,95	4	910/1025	4575/5225	55	60/40	54	(-40) (+80)	6,9	D 01	F 01	-	A 01
SFG 4M 450	A 01	230	50/60	500/720	2,35/3,7	8	1350/1440	7000/7460	60	120/120	55	(-40) (+60)	10	D 01	-	-	A 01
SF 4M 500	A 01	230	50	420	2	8	1300	6900	65	100	55	(-40) (+40)	9,5	D 01	F 01	-	A 01
SFX 4M 500	A 01	230	50	750	3,28	16	1260	9250	66	130	55	(-40) (+60)	10,5	D 01	F 01	-	A 01
SFX 6M 500	A 01	230	50	245	1,1	6	850	6240	58	70	55	(-40) (+65)	10,5	D 01	F 01	-	A 01
SFX 4M 560	A 01	230	50	1000	4,8	12,5	1250	11000	68	100	55	(-40) (+60)	15	D 01	F 01	-	A 01
SFX 6M 560	A 01	230	50/60	425/585	2,15/2,58	12,5	900/1050	8000/9330	62/63	85	55	(-40) (+60)	15	D 01	F 01	-	A 01
SFX 6M 630	A 01	230	50/60	630/750	2,9	12,5	850	11000	60/58	90	55	(-40) (+40)	18	D 01	F 01	G 01	A 01

Sound Level Measured from 3m distance in room condition.

TYPE	MOTOR-FAN CONFIGURATION	VOLTAGE V	FREQUENCY Hz	POWER W	CURRENT (A)	SPEED r.p.m	MAX AIRFLOW m <sup>3</sup> /h	SOUND PRESSURE dB(A)	MAX OPERATIVE RANGE PA	PROTECTION CLASS IP	PERM. AMB. TEMP.	WEIGHT kg	DESIGN			WITHOUT ATTACHMENTS A Type
													WITH GUARD GRILLE D	WITH SQUARE NOZZLE F G		
SF 2T 250	A 01	380Y	50/60	125/155	0,21/0,24	2250	1800	60	110	54	(-40) (+55)	3	D01	F01	-	A01
SFX 4T 300	A 01	Y380/Δ220	50/60	90/108	0,29/0,52	1450/1710	1900/2240	50	65/75	54	(-40) (+55)	4	D01	-	-	A01
SFX 4T 350	A 01	Y380/Δ220	50/60	160/170	0,33/0,58	1316/1545	3300/3700	55	85/90	54	(-40) (+55)	4,7	D01	-	-	A01
SF 4T 400	A 01	Y380/Δ220	50/60	140/190	0,47/0,8	1400/1650	4000/4700	58	140/110	54	(-40) (+40)	6,1	D01	F01	-	A01
SFX 4T 400	A 06	400 Δ/Y	50/60	295/205	0,81/0,38	1360/1175	4900/4000	60/55	115/45	55	(-40) (+65)	9	D06	-	-	A06
SF 4T 450	A 01	Y380/Δ220	50/60	200/285	0,5/0,55	1400/1600	5700/6500	63	110/60	54	(-40) (+40)	6,9	D01	F01	-	A01
SFG 4T 450	A 01	400 Δ/Y	50/60	450/345	0,85/0,50	1350/1100	7000/5750	60/55	95/60	55	(-40) (+40)	10	D01	-	-	A01
SF 4T 500	A 01	400 Δ/Y	50	650/390	1,1/0,70	1500/1100	7775/5750	62/56	100	55	(-40) (+80)	9,5	D01	F01	-	A01
SFX 4T 500	A 01	400 Δ/Y	50	425	0,75	1300	6900	65	100	55	(-40) (+80)	9,5	D01	F01	-	A01
SFX 6T 500	A 01	400 Δ/Y	50/60	800/550	1,6/0,95	1260/1000	9250/7340	66	150/80	55	(-40) (+80)	10,5	D01	F01	-	A01
SFX 8T 500	A 01	400 Δ/Y	50/60	270/145	0,65/0,3	875/600	6250/4410	58	55/30	55	(-40) (+70)	10,5	D01	F01	-	A01
SFX 4T 560	A 01	400 Δ/Y	50/60	145/80	0,65/0,20	700/600	5140/4400	52	40	55	(-40) (+80)	10,5	D01	F01	-	A01
SFX 6T 560	A 01	400 Δ/Y	50/60	900/650	2,45/1,15	1350/1050	11500/9300	68	175/120	55	(-40) (+60)	15	D01	F01	-	A01
SFX 6T 630	A 01	400 Δ/Y	50/60	330/230	0,84/0,42	900/700	8000/6220	60/58	85 / 45	55	(-40) (+40)	15	D01	F01	-	A01
SFX 6T 630	A 01	400 Δ/Y	50/60	380/265	1,04/0,48	970/600	8620/5330	62	85 / 45	55	(-40) (+40)	15	D01	F01	-	A01
SFG 4T 630	A 01	400 Δ/Y	50	600/400	1,25/0,70	850/650	11000/8400	60/58	95/60	55	(-40) (+40)	18	D01	F01	G01	A01
SFG 4T 630	A 01	400 Δ/Y	50	720/475	1,37/0,73	900/695	11650/9000	60/58	95/60	55	(-40) (+40)	18	D01	F01	G01	A01
SFG 4T 630	A 02	400 Δ/Y	50	2500/1700	4,45/2,75	1320/1025	19850/16500	68/63	220/140	54	(-40) (+60)	-	D01	-	G01	A01
SFG 4T 630	A 04	400 Δ/Y	50	1865/1250	3,3/2,1	1310/1030	17000/14300	68/62	200/120	54	(-40) (+60)	-	D01	-	G02	A02
SFG 6T 800	A 01	400 Δ/Y	50	1600/1100	2,9/1,85	1350/1100	14800/10000	68/60	215/135	54	(-40) (+65)	-	D01	-	G04	A04
SFG 6T 800	A 01	400 Δ/Y	50	1999/1150	4,1/2,2	875/640	24100/20420	70/62	160/90	54	(-40) (+60)	-	D01	-	G01	A01
SFG 6T 800	A 02	400 Δ/Y	50	2300/1300	5,3/2,6	900/680	27500/22250	72/68	120/75	54	(-40) (+50)	-	D01	-	G02	A02
SFG 6T 800	A 03	400 Δ/Y	50	1500/850	3,10/1,63	860/600	21000/15500	69/61	150/75	54	(-40) (+60)	-	D01	-	G03	A03
SFG 6T 800	A 21	400 Δ/Y	50	1425/800	2,8/1,55	850/640	23000/19000	69/61	155/80	54	(-40) (+60)	-	D21	-	G21	A21

Sound Level Measured from 3m distance in room condition.

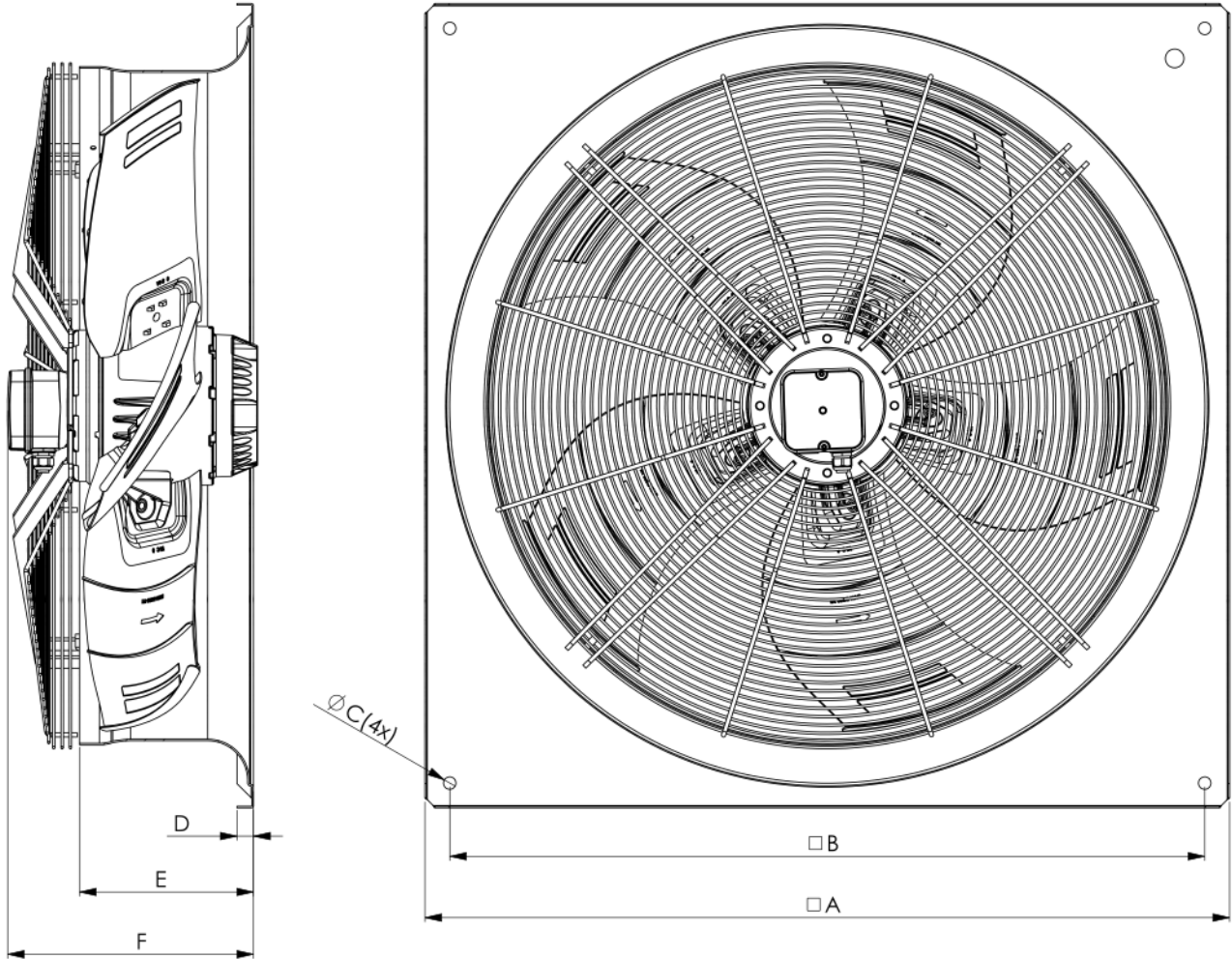
## Technical Drawing and Tables



Design D With guard grille for short nozzle

TYPE	A	B	C	D	E	F	G	H (S*)	H (B*)	Design
SF 2T 250 - D 01	6,5	321	271	250	84	26,4	128	14	23	D
SF 4M/T 250 - D 01	6,5	321	271	250	84	26,4	128	14	23	D
SF 2M 300 - D 01	6,5	360	330	300	97,5	40	139,5	20,5	29	D
SF 4M 300 - D 01	6,5	360	330	300	104,5	47	146,5	20,5	29	D
SFX 4M/T 300 - D 01	6,5	360	330	300	138	57	166,5	25	30,3	D
SF 4M/T 350 - D 01	6,5	422	374	350	104,2	46,8	145,6	40,8	32,3	D
SFX 4M/T 350 - D 01	6,5	422	375	352	131,5	29,3	168	30,3	26,2	D
SF 4M/T 400 - D 01	9	470	421	396	146,5	53	180	20	20	D
SFX 4T 400 - D 06	9	470	419	392	144	72	182	41	88	D
SF 4M/T 450 - D 01	9	522	472	444	158	65	190	25	17	D
SFX 6M 450 - D 01	9	522	472	444	158	65	190	25	17	D
SFG 4M/T 450 - D 01	9	515	476,6	446	172	93	215	39,5	71,6	D
SF 4M/T 500 - D 01	9	565	525	498	155	48	183	41	24	D
SFX 4M/T 500 - D 01	9	565	525	498	190	80	215	39	62	D
SFX 6M/T 500 - D 01	9	565	525	498	155	48	183	39	62	D
SFX 8T 500 - D 01	9	565	525	498	170	64	198	39	62	D
SFX 4M/T 560 - D 01	9	700	654	552	226	90	234	30	61	D
SFX 6M/T 560 - D 01	9	700	654	552	206	70	214	30	61	D
SFX 6M/T 630 - D 01	9	750	701,6	627	230	76	236	27	45	D

\*S: Suction ; B : Blowing Dimensions are in (mm)

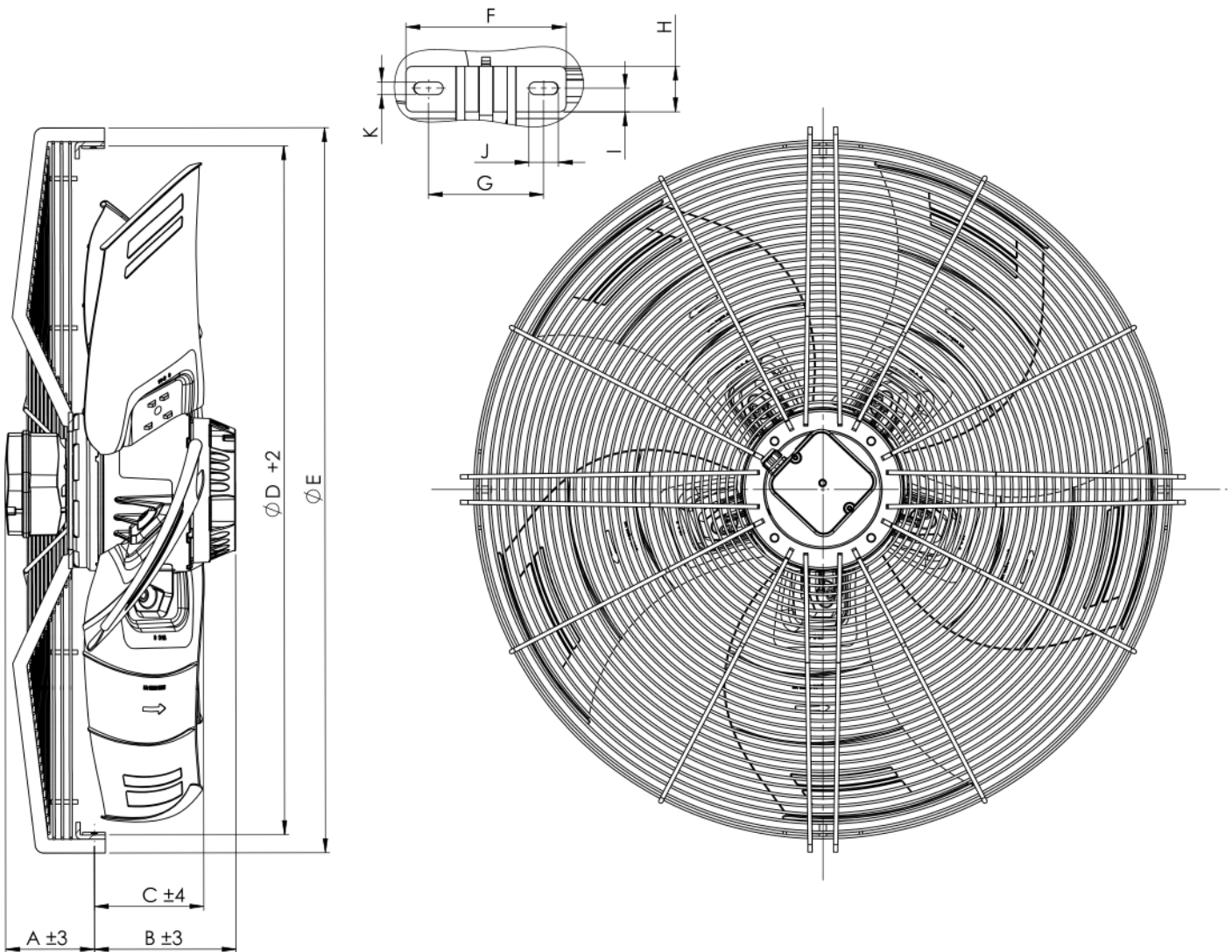


**Design G** With full square nozzle, Suction Design

TYPE	A	B	C	D	E	F	Design
SFX 6T 630 S - G 01	805	750	11	20	150	255	G
SFG 4T 630 S - G 01	805	750	11	20	150	255	G
SFG 4T 630 S - G 02	805	750	11	20	150	255	G
SFG 4T 630 S - G 04	805	750	11	20	150	255	G
SFG 6T 800 S - G 01	970	910	15	20	210	298	G
SFG 6T 800 S - G 02	970	910	15	20	210	298	G
SFG 6T 800 S - G 03	970	910	15	20	210	298	G
SFG 6T 800 S - G 21	970	910	15	20	210	324	G

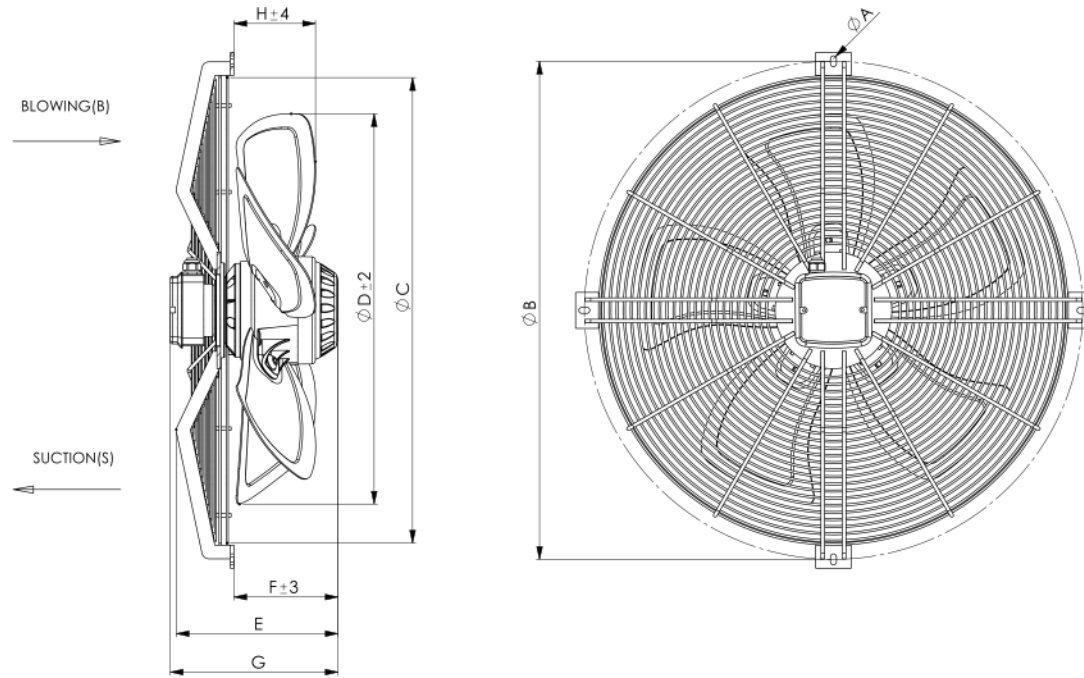
\*S: Suction ; B : Blowing      Dimensions are in (mm)




**Design D** Radial bolted mounting with guard grille for square full nozzle

TYPE	A	B	C	D	E	F	G	H	I	Design
SFG 4T 630 S - D 01	113	144	110	657	705	95	68	27	14	D
SFG 4T 630 S - D 02	113	129	106	657	705	95	68	27	14	D
SFG 4T 630 S - D 04	113	129	102	657	705	95	68	27	14	D
SFG 6T 800 S - D 01	105	168	130	816	859	95	68	27	14	D
SFG 6T 800 S - D 02	105	198	134	816	859	95	68	27	14	D
SFG 6T 800 S - D 03	105	153	126	816	859	95	68	27	14	D
SFG 6T 800 S - D 21	131	150	132	820	868	95	68	27	14	D

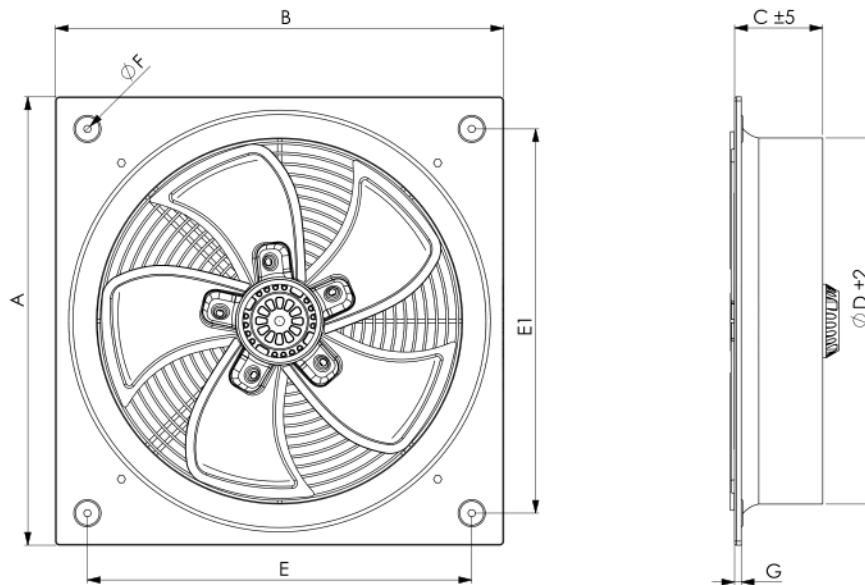
\*S: Suction ; B : Blowing      Dimensions are in (mm)



**Design C** Axial bolted mounting with guard grille for square full nozzle

TYPE	A	B	C	D	E	F	G	H (S*)	H (B*)	Design
SFX 4T 560 - C 04	8,5	700	654	552	227,5	146,5	236,5	-	114	C
SFG 4T 630 - C 04	8,5	750	659	627	261	146,5	255	-	133,4	C

\*S: Suction ; B : Blowing Dimensions are in (mm)



**Design F** Square wall mouth, with mesh grille, Blowing Design

TYPE	A	B	C	D	E	E1	ØF	G	Design
SF 2T 250 B - F 01	333	333	71	258	275	275	9	10	F
SF 4M 250 B - F 01	333	333	71	258	275	275	9	10	F
SF 2M 300 B - F 01	410	410	93	303	335	335	9	10	F
SF 4M 300 B - F 01	410	410	93	303	335	335	9	10	F
SF 4M 350 B - F 01	465	465	105	357	390	390	9	10	F
SF 4M/T 400 B - F 01	500	500	105	400	420	420	9	10	F
SF 4/6 M/T 450 B - F 01	560	560	110	457	480	480	9	10	F
SF 4 M/T 500 B - F 01	630	630	145	507	560	560	9	10	F
SF 4/6 M/T 500 B - F 01	630	630	145	507	560	560	9	10	F
SFX 6 M/T 630 B - F 01	805	805	250	653	750	750	10	20	F
SFG 4/6 T 630 B - F 01	805	805	250	653	750	750	10	20	F

\*S: Suction ; B : Blowing Dimensions are in (mm)

