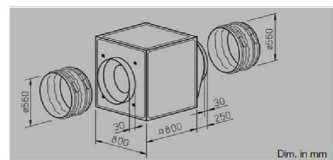
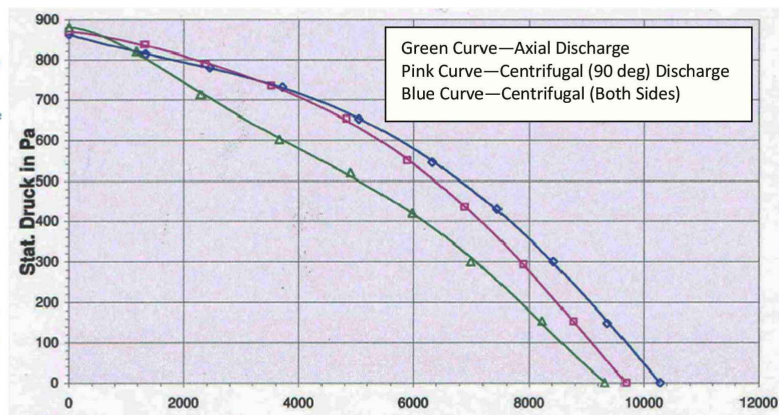


GBW 560/4



Self supporting frame construction from aluminium hollow profiles. Double-walled side panels from galvanised sheet steel. Intake cone for ideal airflow, spigot and flexible connector for duct connection. With discharge adapter (square to circular) on the pressure side for low-loss discharge and flexible sleeve to reduce vibration transmission. Simple positioning by standard crane hooks. Installation must be carried out with condensation discharge showing downward. Flexible assembly by three possible centrifugal discharge directions via discharge adapter. Outdoor installation is possible using outdoor cover hood and external weather louvers (accessories).

Impeller:
Smooth running backward curved aluminium centrifugal impeller highly efficient and direct driven. Energy efficient with a low noise development. Dynamically balanced together with the motor to DIN ISO 1940 Pt.1 - class 6.3

Motor:
Maintenance free external rotor motor or IEC standard motor protected to IP 44 and 54. With ball bearings and radio suppressed as standard.

Electrical Connection:
Standard terminal box (IP54) fitted on the motor support plate.

Motor Protection:
Motors have thermal contacts wired to the terminal block and must be connected to a motor protection unit.

Speed Control:
Speed controllable by voltage reduction using transformer controller.

Type	Ref. No.	R.P.M.	Sound Level	Motor power (nominal)	Current Full Load	Maximum air flow temp.	Nom. weight (net)	5 step trans. controller
		min ⁻¹	dB(A) at 4 m	kW	Amps	+°C	kg	Type Ref.
GBW 560/4	5508	1370	44	2.0	8.7	60	90	TSW 10 1498

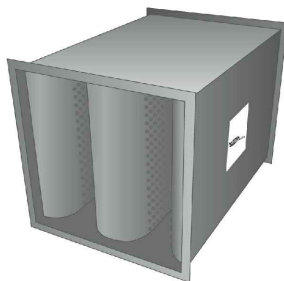
Volume Flow m3/s against static pressure										
0	50	100	150	200	250	300	400	500	600	700
2.77	2.72	2.55	2.48	2.41	2.31	2.22	2.0	1.72	1.44	1.00



HELIOS FAN - GBW 560 / 4
SIZE : W.800 X D.800
X H.800 mm

Quiet-Duct® Silencer Type: LFS

Superior Low Frequency Silencers with Forward and Reverse Flow Ratings



LFS silencers are advantageous where low frequency DIL requirements are high in HVAC systems. In some systems high frequency attenuation may be provided by the system components or may not be needed.

Supplied as Standard

- Aerodynamic inlet and discharge to splitter elements to reduce pressure drop and conserve energy
- Perforated galvanised steel facings to all splitter elements to protect acoustic media from damage and erosion

Designating Silencers (Example)

Model: 5LFS-600-600

Length	Type	Width	Height
1500mm	LFS	600mm	600mm

Weight

Average weight 85kg/m³

Self-Noise Power Levels dB re: 10⁻¹² Watts (for a 0.37m² face area silencer)

IAC LFS Model	Octave Band	1	2	3	4	5	6	7	8
	Hz	63	125	250	500	1K	2K	4K	8K
LFS All Lengths	Silencer Face Velocity, m/s								
	-10	58	54	58	61	62	63	65	63
	-7.5	51	49	53	56	56	59	60	53
	-5	45	42	45	43	45	49	44	37
	+5	46	42	45	43	45	49	44	37
	+7.5	56	54	57	56	52	56	57	51
	+10	68	64	65	66	61	61	64	61

Face Area Adjustment Factors (add or subtract from Lw values above)

Quiet-Duct® Face Area, m ² *	0.05	0.09	0.19	0.37	0.74	1.5	3.0	6.0	12.0
Lw Adjustment Factor, dB	-9	-6	-3	0	+3	+6	+9	+12	+15

* For intermediate face areas, interpolate to the nearest whole number

Aerodynamic Performance

IAC Model	Length (mm)	Static Pressure Drop N/m ²							
LFS	900	10	12	17	22	27	35	42	50
	1500	10	15	20	25	32	40	47	55
	2100	10	15	20	25	33	40	50	57
	3000	10	15	22	27	35	45	52	65
Silencer Face Velocity, m/s		1.27	1.52	1.78	2.03	2.29	2.54	2.79	3.05



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Certified Performance Data

Dynamic Insertion Loss (DIL) Ratings: Forward (+) / Reverse (-) Flow

IAC LFS Model (length in mm)	Octave Band	1	2	3	4	5	6	7	8
	Hz	63	125	250	500	1K	2K	4K	8K
3LFS (900)	Silencer Face Velocity, m/s								
	-10	8	14	25	29	27	20	16	12
	-5	7	13	23	28	26	20	16	14
	0	8	13	23	28	27	21	17	14
	+5	9	12	22	28	27	21	18	14
4LFS (1200)	-10	7	11	21	25	25	21	17	14
	-5	11	19	31	36	35	24	18	13
	0	10	17	29	35	34	24	19	15
	+5	11	17	28	34	34	25	20	15
	+10	9	16	27	32	34	24	20	15
5LFS (1500)	-10	9	14	25	29	31	25	19	15
	-5	13	23	36	42	42	28	19	14
	0	13	21	35	41	41	28	21	15
	+5	13	20	33	39	41	28	22	16
	+10	12	19	31	36	40	27	22	16
6LFS (1800)	-10	10	17	28	33	37	29	20	16
	-5	14	24	38	46	47	32	21	15
	0	14	23	39	45	45	32	23	16
	+5	13	22	37	43	44	31	24	16
	+10	12	21	34	40	43	30	24	17
7LFS (2100)	-10	10	20	33	39	41	32	22	17
	-5	14	25	40	50	51	35	22	16
	0	14	24	42	49	49	35	24	17
	+5	13	24	40	47	47	34	25	17
	+10	12	23	37	44	45	33	25	17
8LFS (2400)	-10	10	22	37	44	45	34	24	17
	-5	16	27	42	51	52	38	23	16
	0	15	27	45	50	50	38	26	18
	+5	15	26	43	49	49	38	27	18
	+10	14	25	40	47	48	38	28	19
9LFS (2700)	-10	12	23	40	47	48	39	28	19
	-5	17	28	44	51	52	40	24	17
	0	16	28	46	51	52	42	27	18
	+5	15	26	44	49	50	42	32	21
	+10	14	24	43	50	50	43	32	22
10LFS (3000)	-10	19	30	46	52	53	43	25	17
	-5	18	32	50	52	53	45	29	19
	0	18	30	49	52	53	46	32	21
	+5	17	28	47	52	53	47	35	23
	+10	16	25	46	53	53	48	36	24

Note

- The tabulated airflow in m/s is based upon tests conducted in the IAC Acoustics R&D Laboratory, in accordance with applicable sections of internationally recognised airflow test codes. These codes require specific lengths of straight duct both upstream and downstream of the test specimen. Non-compliance with these codes can add from 1/2 to several velocity heads depending on specific conditions. The downstream measurements are made far enough downstream to include static regain. Therefore, if silencers are installed immediately before or after elbows, transitions or at the intake or discharge of a system, sufficient allowance to compensate for these factors must be included when calculating the operating static pressure loss through the silencer. See pages 10 & 11 for further details.
- Silencer Face Area is the cross-sectional area at the silencer entrance or exit
- Face velocity (FV) in m/s is the airflow in m³/s divided by the silencer face area in m²
- Pressure drop (PD) for any face velocity can be calculated from the equation: PD = (Actual FV / Catalogue FV)² x (Catalogue PD)



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SCALE BAR



PROJECT TITLE	BAKE AND CAKE
LOCATION	178 KILBURN HIGH ROAD - LONDON NW6 4JD
CLIENT	Mr. MOHAMMED TARHINI
SHEET TITLE	PROPOSED FAN SPECS
BUILD AREA	103 Sqm - 1107 SQFT
INTERIOR ARCHITECTURE	F Z
DRAWINGS	F Z

DATE	30 DECEMBER	2016
SCALE	AS SHOWN - A3	
JOB N	FZ.BB-103	20-09-16
REVISED	PAGE	FLOOR
A	A-106	GROUND FLOOR

APPROVED - BY CLIENT

PROPOSED
FAN AND SPECS