



# ROOF MOUNTED FANS

## MIXVENT-TH Series, Mixed Flow Fans



### Description-Applications

Range of mixed flow roof fans. The products are supplied as standard for extract operation. However the motor and impeller casing can be removed and turned through 180° to provide supply air ventilation. All models incorporate single phase two speed motors as standard. Designed for direct connection to circular ducting.

### Construction

The Mixvent-TH models 500 and 800 are manufactured from high strength injection moulded plastic, and models 1300 and 2000 from high grade pressed sheet steel. The base and cowl assembly are manufactured from sheet steel. All models incorporate a bird guard and base cable gland entry point as standard.

All metallic parts are protected with a black epoxy-polyester weatherproof paint coating.

#### Motors

All models incorporate single phase external rotor motors with two speeds connections which are also suitable for speed control using

electronic or auto-transformer controllers. The following standard specifications apply:

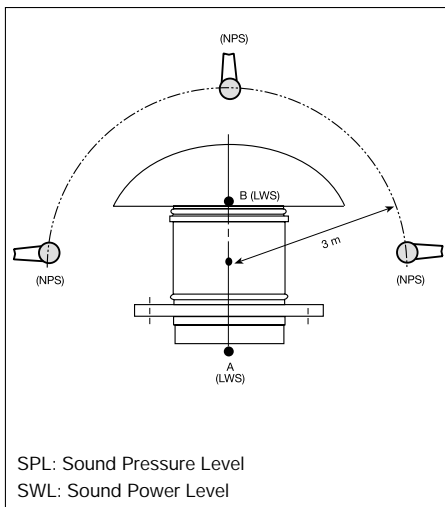
- 230V 50Hz
- Class B insulation
- IP44 protection
- Auto-Reset Thermal Overload Protection
- Sealed for Life, ball bearings.

### Technical characteristics

Model Type		Speed (r.p.m.)		Max. power abs. (W)		Max. current abs. (A)		Max. air volume (m³/h)		Max. temp. (°C)	SPL. (dB(A))	Weight (kg)
		High Speed	Low Speed	High Speed	Low Speed	High Speed	Low Speed	High Speed	Low Speed			
TH-500/150	EXTRACT	2450	1800	68	40	0,26	0,19	470	355	60	49,5	3,8
	SUPPLY	2450	1800	67	40	0,25	0,19	505	380	60	45	3,8
TH-500/160	EXTRACT	2450	1800	68	40	0,26	0,19	470	355	60	49,5	3,8
	SUPPLY	2450	1800	67	40	0,25	0,19	505	380	60	45	3,8
TH-800N	EXTRACT	2500	2100	90	75	0,4	0,31	790	630	60	50	5,6
	SUPPLY	2500	2050	90	75	0,4	0,31	880	695	60	48	5,6
TH-800	EXTRACT	2500	2100	140	118	0,58	0,52	775	620	60	53	5,6
	SUPPLY	2500	2000	140	118	0,58	0,52	860	695	60	52	5,6
TH-1300	EXTRACT	2400	1800	170	120	0,83	0,52	1100	780	60	59,5	11,2
	SUPPLY	2400	1800	172	110	0,76	0,49	1150	845	60	58,5	11,2
TH-2000	EXTRACT	2480	1750	255	160	1,27	0,79	1725	1200	60	67	17,2
	SUPPLY	2480	1800	300	190	1,27	0,79	1650	1245	60	63,5	17,2

\* SPL. Sound Pressure Level

### Acoustic characteristics



The values of the sound levels given in the technical characteristic chart are sound pressure levels measured in dB(A) at a distance of 3m with the maximum airflow.

To obtain the sound power level at A or B, for extract operation, add to the sound pressure level (SPL Extract) given in the Technical Characteristic chart, the correction value shown in the following table.

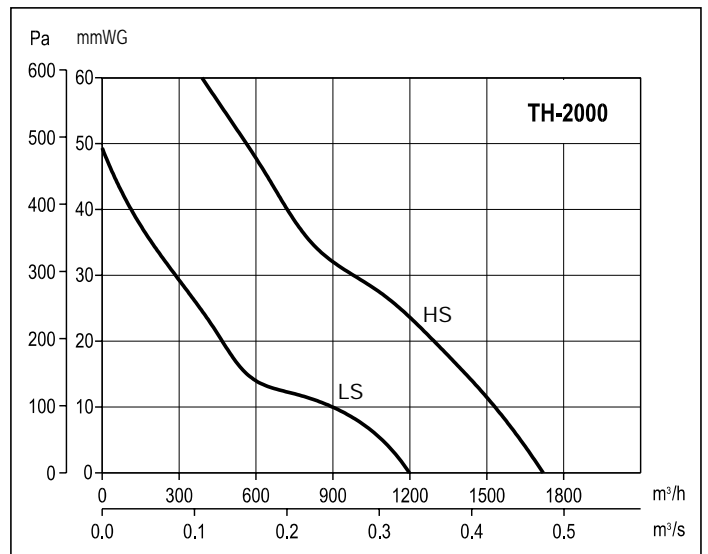
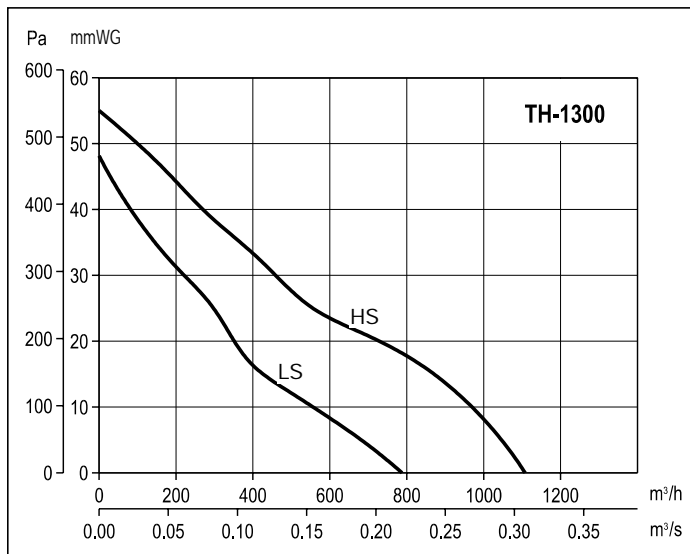
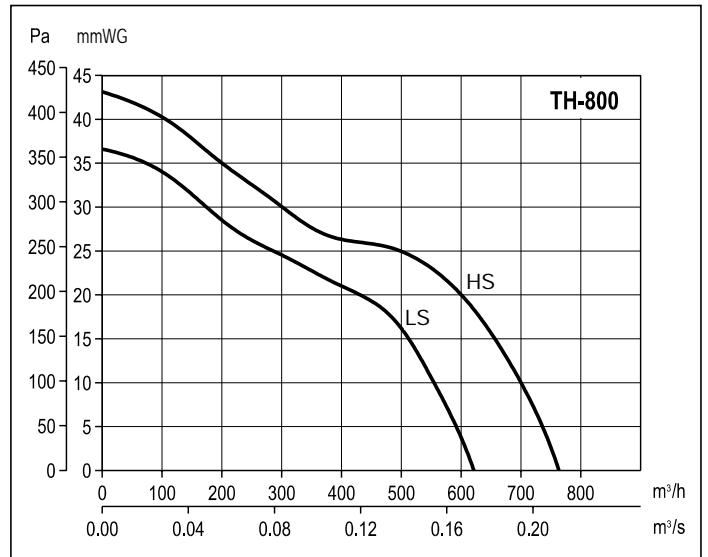
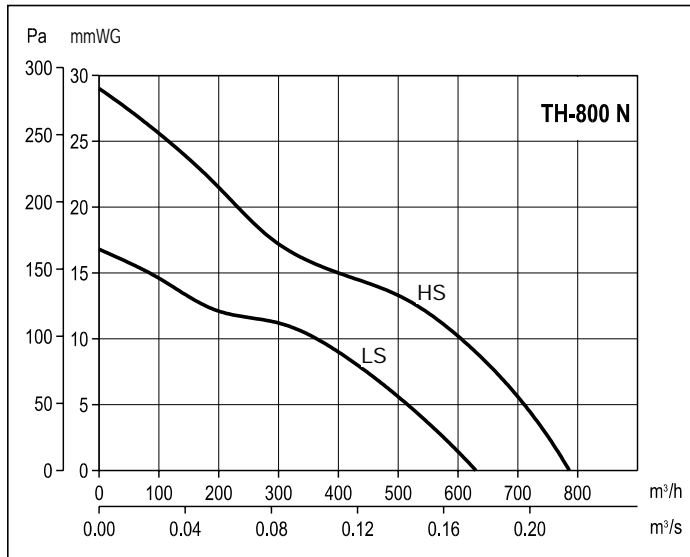
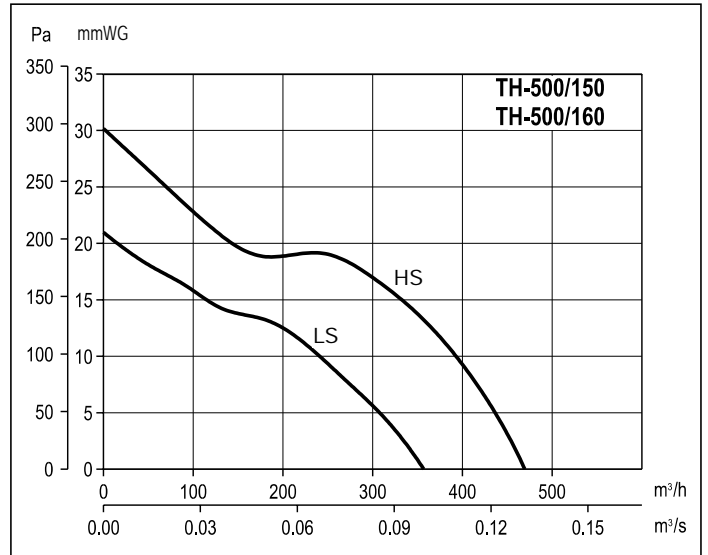
Type		Sound power level for extract operation						
		Frequency bands Hz						
		125	250	500	1000	2000	4000	8000
TH-500	A	-7,5	-3	9	6	11	4	-2
	B	-7,5	6	13,5	17,5	14,5	4,5	-3
TH-800N	A	-7,5	3,5	8	9,5	14	9	0
	B	-4	7,5	15	16	14,5	9	1,5
TH-800	A	-7,5	3,5	8	9,5	14	9	0
	B	-4	7,5	15	16	14,5	9	1,5
TH-1300	A	-13,5	0	1	12	9	4	0
	B	-11	5,5	11,5	17,5	15	7	-0,5
TH-2000	A	-21,5	-7	-3	7	5,5	-2	-8,5
	B	-16,5	2,5	7	20	7,5	1	-8



## ■ Performance curves – Extract operation

- Q = Air volume in, m<sup>3</sup>/hr and m<sup>3</sup>/s
- Pe = Static pressure in mmWG and Pa.
- Dry air at 20 °C and 760 mmHg.
- Air flow data in accordance with the following standards: UNE 100-212-89, BS 848, Part 1, AMCA 210-85 and ASHRAE 51-1985.

HS: High Speed  
LS: Low Speed



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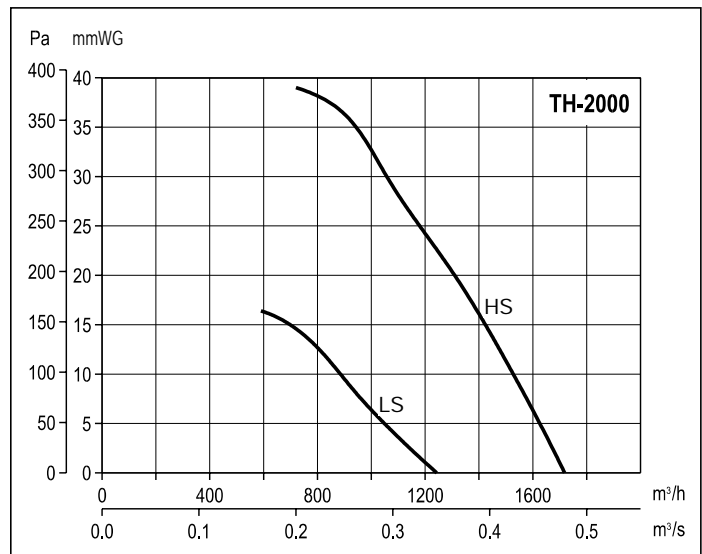
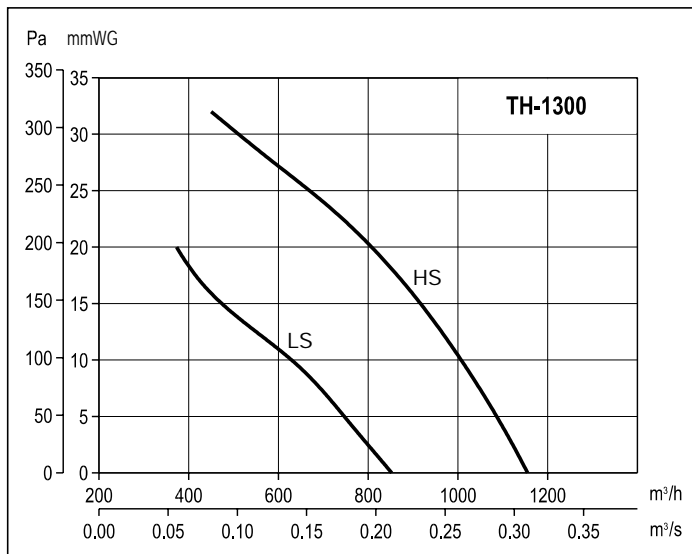
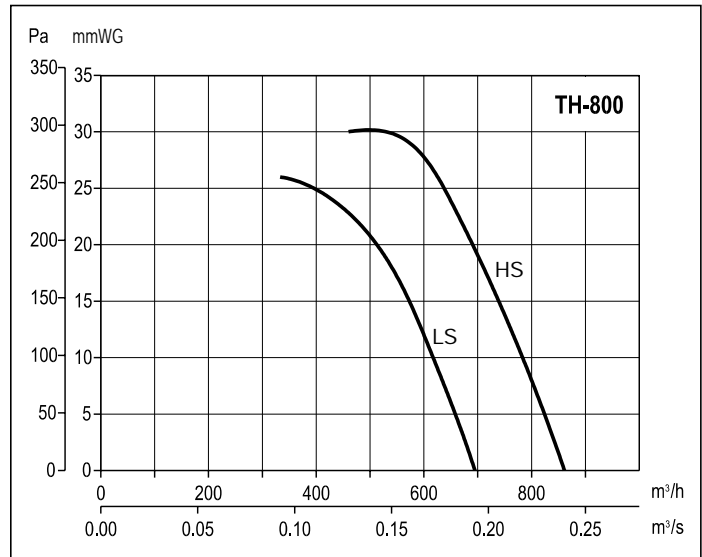
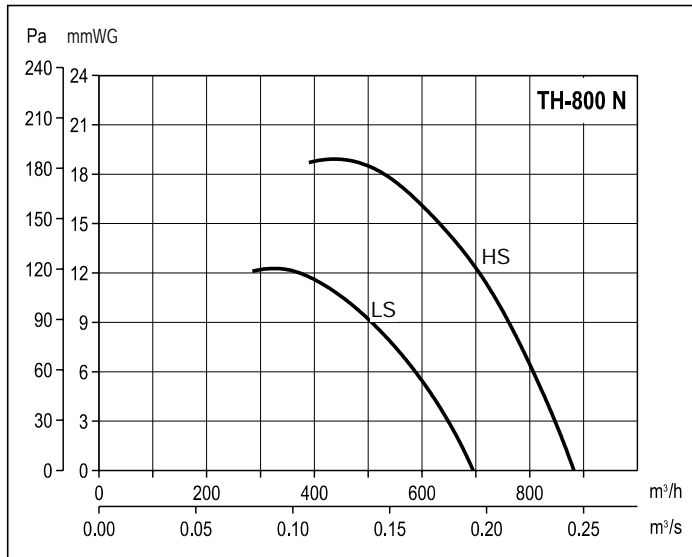
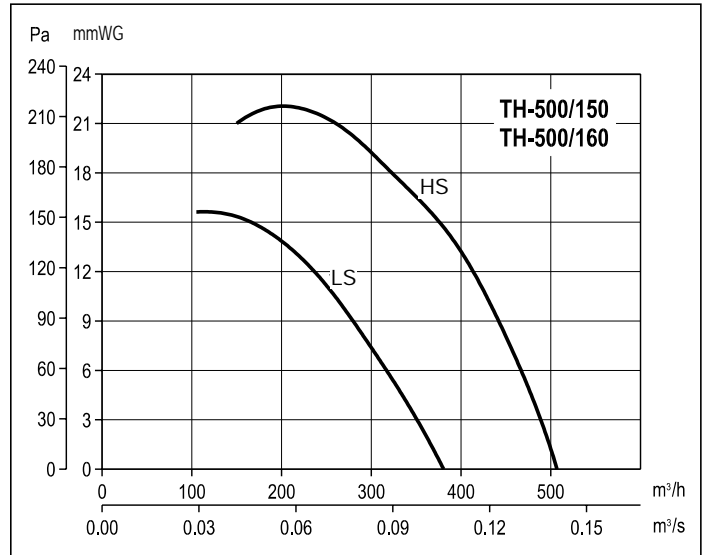
Roof Mounted Fans



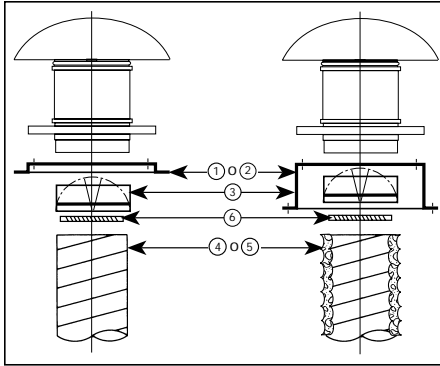
## ■ Performance curves – Supply operation

- Q = Air volume in, m<sup>3</sup>/hr and m<sup>3</sup>/s
- Pe = Static pressure in mmWG and Pa.
- Dry air at 20 °C and 760 mmHg.
- Air flow data in accordance with the following standards: UNE 100-212-89, BS 848, Part 1, AMCA 210-85 and ASHRAE 51-1985.

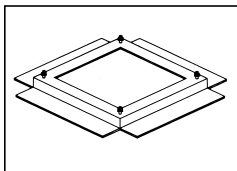
HS: High Speed  
LS: Low Speed



## ■ Mounting accessories

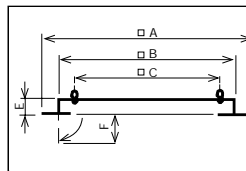


Type	① Sealing frame	② Flat roof Upstand	③ Back draft shutter	④ Flexible ducting	⑤ Fl. acoustic ducting	⑥ Worm drive clips
TH-500/150	JMS-300	JBS-300	CAR-150	GSA-150	GSI-160	CX-215
TH-500/160	JMS-300	JBS-300	CAR-160	GSA-160	GSI-160	CX-215
TH-800 N	JMS-300	JBS-300	CAR-200	GSA-200	GSI-200	CX-250
TH-800	JMS-300	JBS-300	CAR-200	GSA-200	GSI-200	CX-250
TH-1300	JMS-435	JBS-435	CAR-250	GSA-250	GSI-250	CX-315
TH-2000	JMS-560	JBS-560	CAR-315	GSA-315	GSI-315	CX-315

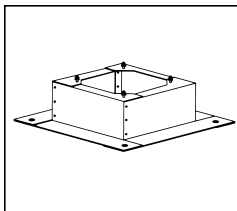


### Sealing Frame JMS:

- For mounting the roof fans on an upstand or base
- Provided with screws and a gasket for a complete weather seal.

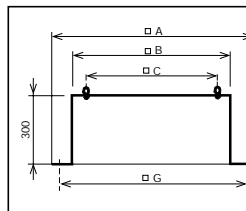


Type	A	B	C	E	F
JMS-300	470	290	245	50	70
JMS-435	600	420	330	50	70
JMS-560	725	545	450	50	70



### Flat Roof Upstands JBS:

- For mounting fans on flat roofs with no upstands
- Internal insulation to avoid condensation.
- Provided with screws and a gasket for a complete seal.



Type	A	B	C	E	G
JBS-300	470	289	245	300	380
JBS-435	600	419	330	300	510
JBS-560	725	544	450	300	635



**MCA**  
Back draft Shutter



**GSA**  
Flexible aluminium ducting



**CX**  
Worm drive clips



**REGUL-2 and COM-2**  
Two speed switches

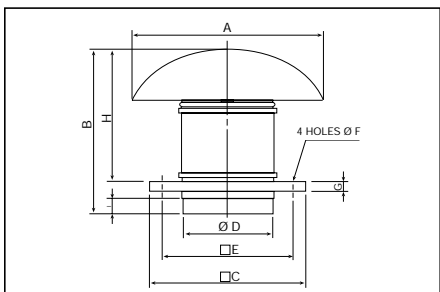


**REB**  
Electronic, single phase speed controller



**SIL**  
Sound Attenuator

## ■ Dimensions (mm)



Type	A	B	C	D	E	F	G	H	I
TH-500/150	400	349	300	150	245	10	20	274	33
TH-500/160	400	339	300	160	245	10	20	274	33
TH-800 N	400	371	300	198	245	10	20	306	36
TH-800	400	371	300	198	245	10	20	306	36
TH-1300	546	457	435	248	330	12	20	372	42
TH-2000	735	544	560	312	450	12	20	450	50