Microflown Technologies
Charting sound fields

Datasheet

MID-HIGH FREQUENCY

VOLUME VELOCITY SOURCE

MHVVS

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MID-HIGH FREQUENCY VOLUME VELOCITY SOURCE

Extended frequency range and performance

Direct volume velocity measurement

The Mid-High Frequency Volume Velocity Source has been designed to perform highly accurate NVH measurements based on a well-defined excitation. This omni-directional noise source is equipped with a Microflown particle velocity sensor on the tip of its nozzle in order to directly measure the radiated volume velocity for a broad frequency range with unparalleled accuracy.
The source is capable of generating high excitation levels in order to properly excite the sound field under study.

The Mid-High Frequency Volume Velocity Source is supplied with an integrated amplifier and filters eliminating the need for oversized external hardware. Owing to its higher technical specifications, the new Mid-High Frequency Volume Velocity Source delivers best-in-class performance and usability.

This Mid-High Frequency Volume Velocity Source can be used for a wide range of applications like transfer path analysis, airborne source quantification, component vibroacoustic behavior characterization, airborne source quantification and pass by noise simulation.

SPECIFICATIONS

Parameter	Value	Unit/ note
Performance		
Frequency range	300 -12000 (+/-2dB)	Hz
Omni-directionality	300 - 6000 (+/-2dB) 300 - 12000 (+/-4dB)	Hz Hz
Sound power level	107	dB re 1 pW
Sound pressure level @1 m	96	dB re 20 μPa
Input signal nominal	0	dBV (1 Vrms)
Physical description of the Setup		
Sound source (Ø ; length)	200 ; 95	mm
Hose (Ø ; length)	44 ; 3000	mm
Nozzle (Ø ; length)	14 ; 90,2	mm
Material	Black anodized aluminum	
Power supply		
Idle Power consumption (mute mode)	3,5	W
Power consumption at full load	50	W
Nominal Power supply voltage	30	VDC
Physical description of the Case		
Case dimensions	631 x 500 x 302	mm
Weight	18	Kg

MAXIMUM SOUND POWER

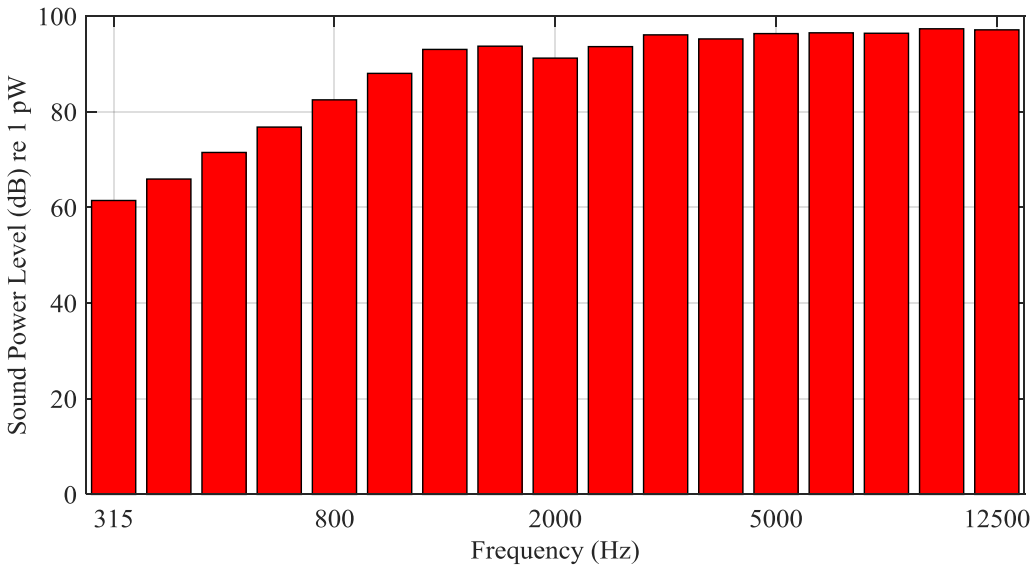

Figure 1. Maximum sound power levels represented in third octave band

VERTICAL PLANE DIRECTIVITY

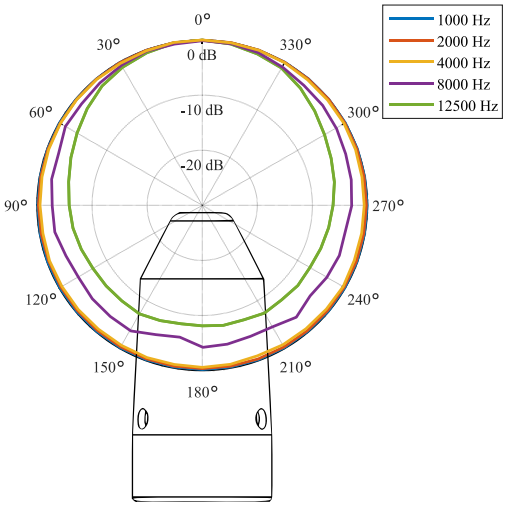

Figure 2. Directional response in the vertical axis

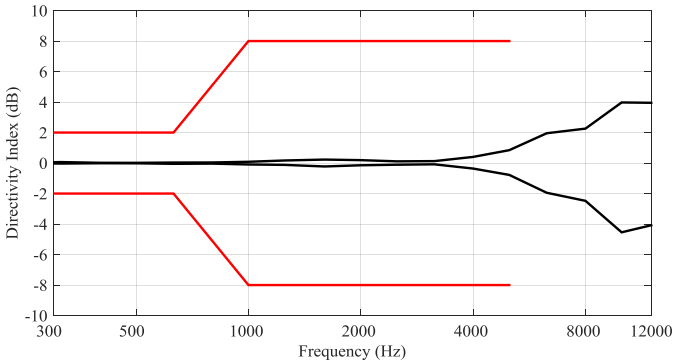

Figure 3. (Red) ISO 140 tolerances; (black) DI measured

NOTES

RECALIBRATION

The particle velocity sensor of the Mid High Frequency Volume Velocity Source requires a qualified calibration every 2 years.

MORE INFORMATION

Please read the Mid High Frequency Volume Velocity Source user manual for more detailed information on:

- The setup components
- Connections
- Safety
- Maintenance
- Access to Support
- Warranty information