

AWA14426 1/2" Prepolarized Pressure Field Measurement Microphone



Features

- **Key Parameters**

Sensitivity	12.6 mV/Pa
Frequency range	3.15 Hz~20 kHz
Dynamic Range	25 dBA~161 dB

- **Applications**

Pressure Field Testing
Electroacoustic Testing
Simulated Ear Accessories

- **Standards**

IEC 61094-4:1995 Measurement Microphones Part 4:
Operating Standard Microphone Specification

Brief Description

The AWA14426 prepolarized pressure field measurement microphone is designed for use with coupling cavities such as simulated ears for related electroacoustic testing. It has a frequency range up to 20 kHz, good stability and environmental adaptability, and its performance meets the requirements of IEC 61094 WS2P standard.

Product Highlights

Applications of Prepolarized Pressure Field Measurement Microphones

Prepolarized pressure field microphones have a wide measurement frequency range and are designed specifically for precision cavity measurements, widely used in acoustic research and electroacoustic testing.

Compatibility

The AWA14426 measurement microphone is compatible with IEPE or conventional preamplifiers from various manufacturers. IEPE is a general-purpose constant current source power supply technology used in preamplifiers. Different manufacturers may use different names, such as ICP (Integrated Circuit Constant Current Power Supply), CCP (Constant Current Power Supply), etc.

Calibration

Each measurement microphone is calibrated at the factory using traceable calibration equipment and comes with a calibration certificate. Recalibration is recommended at least annually.

Quality and Warranty

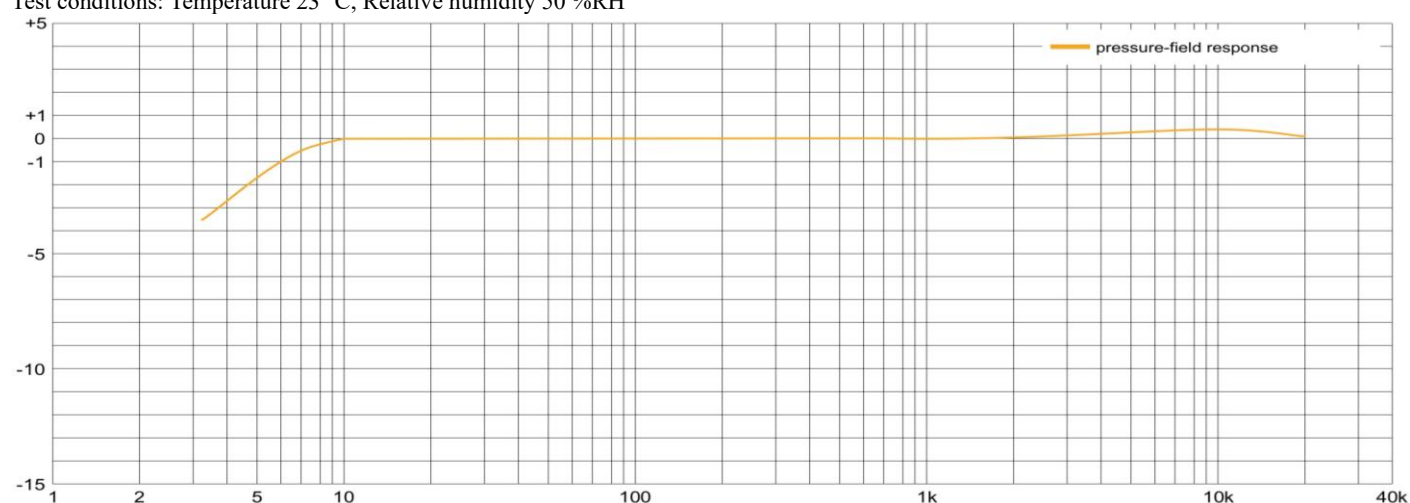
The microphones utilize second-generation alloy diaphragms, high-strength protective grilles, and synthetic corundum insulators, making them stable and reliable measurement microphones on the market. Compared to traditional nickel and stainless steel, alloy diaphragms offer superior corrosion resistance, high-temperature stability, shock resistance, and specific strength. All microphones are assembled and tested in a Class 1000 cleanroom to ensure product consistency and stability. Microphones come with a one-year warranty, and we provide comprehensive after-sales support.

Technical Specifications

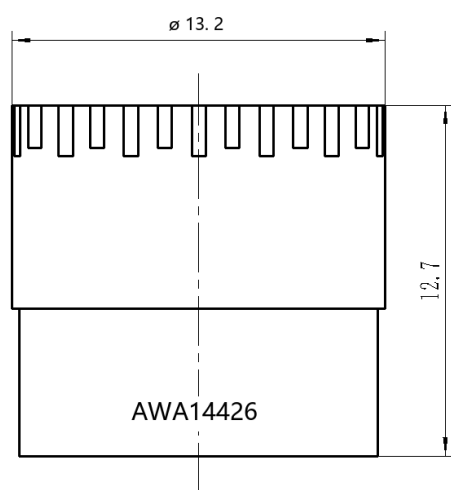
AWA14426 Prepolarized Pressure Field Measurement Microphone			
Field Type	Pressure Field	Lower limit frequency (-3dB) (Hz)	3.15
Diameter	1/2 inches	Operating Temperature (°C)	-30~+80
IEC 61094	WS2P	Temperature coefficient (dB/°C) (@250 Hz)	-0.01
Polarization Voltage (V)	0	Static pressure coefficient (dB/kPa)	-0.01
Sensitivity (mV/Pa) (@250 Hz ± 2.0 dB)	12.6	Operating humidity range (%RH)	0~100
Frequency range (Hz)	3.15-20k	Height with grid (mm)	13.3
Capacitance (pF) (@250 Hz)	11 (@250 Hz)	Diameter with grid (mm)	13.2
Dynamic Range	25 dBA-161 dB	Height without grid (mm)	12.5
Noise floor (dBA)	≤25	Diameter without grid (mm)	12.7
Voltage Equalization Method	Side Equalization	Preamplifier Fitting Thread	11.7 mm-60 UNS

Frequency Response

Test conditions: Temperature 23 °C, Relative humidity 50 %RH



Dimensions



Ordering

Optional Accessories

Preamplifier	AWA14604E 1/2" BNC interface
	AWA14600E 1/2" LEMO interface
Microphone Test Clip	1/2" Microphone Test Clip
Sound Calibrator	AWA6021A

Related Products

AWA14403 1/2" Free field standard microphone	14.1 mV/Pa, 3.15 Hz~40 kHz, 22 dBA~159 dB
AWA14404 1/2" Pressure field standard microphone	12.6 mV/Pa, 3.15 Hz~20 kHz, 22 dBA~160 dB
AWA14423 1/2" Prepolarized Free-Field Measurement Microphone	50 mV/Pa, 3.15 Hz~20 kHz, 16 dBA~146 dB
AWA14423C 1/2" Prepolarized Free-Field Infrasound Sensor	50 mV/Pa, 0.1 Hz~20 kHz, 16 dBA~146 dB
AWA14523 1/2" Prepolarized Free-Field Infrasound Wideband Sensor	31.6 mV/Pa, 0.1 Hz~40 kHz, 20 dBA~153 dB
AWA14431 1/4" Prepolarized Free-Field Wideband Measurement Microphone	4.0 mV/Pa, 3.15 Hz~80 kHz, 40 dBA~165 dB
AWA14436 1/4" Prepolarized Pressure Field Wideband High Sound Pressure Measurement Microphone	1.0 mV/Pa, 3.15 Hz~70 kHz, 53 dBA~176 dB
AWA14411 1" Prepolarized Free-Field Low-Noise Measurement Microphone	100 mV/Pa, 10 Hz~16 kHz, 6.5 dBA~137 dB
AWA14412 1" Prepolarized Pressure Field Measurement Microphone	50 mV/Pa, 10 Hz~8 kHz, 14.5 dBA~146 dB