

Condenser Microphone Cartridge

Model AWA14421, 14422, 14423, 14425

FEATURES

- ☼ Comply with IEC 61672 class 1 or 2
- ☼ Low ambient temperature coefficient
- ☼ High resistance to humidity

USES

- ☼ Precision acoustic measurements
- ☼ Pressure variation measurements



SPECIFICATIONS

Model	14403	14404	14407	14421	14424D	14423L	14425	14435
Diameter	1/2"							1/4"
Open Circuit Sensitivity: mV/Pa	15		25	30		40	40	4
Dynamic Range (dB) *	30~150		25~145	21~142	24~153	18~140	18~140	40~160
Frequency Range (Hz)	20~40,000	20~12,000	10~16,000	20~12,500	10~16,000	10~20,000	10~16,000	20~20,000
Capacitance at 250 Hz (pF)	18	18	18	17	15	18	16	8
Ambient Temperature Coefficient (dB/°C)	0.01	0.01	0.01	0.02	0.015	0.015	0.015	0.02
Polarization Voltage (V)	200			0				
Venting	Rear							
Dimensions	IEC 61094-4 Type WS2							IEC 61094-4 Type WS3
Operating Temperature	-20 °C ~ +70 °C			-20 °C ~ +60 °C				
Humidity	25 % ~ 90 %(RH)							
Atmospheric Pressure	65 kPa ~ 108 kPa							
Frequency Response Characteristic	Free field	Pressure field	Free field	Pressure field	Free field	Pressure field	Free field	Pressure field

* From A-weighting noise floor to 3% distortion (dB re 20 μPa).

Microphone Preamplifier Model AWA14600 ~ 14604

FEATURES

- ☀ 1/2" prepolarized microphone compatible
- ☀ Lemo connector with cable for easy installation and use
- ☀ Low output impedance so that long extension cable can be used

USES

- ☀ Signal analysis measurements setups
- ☀ Sound power measurements
- ☀ Machinery noise measurements



SPECIFICATIONS

Specifications	AWA14600	AWA14601	AWA14604	AWA14614
Frequency Response (re. 250 Hz)	10 Hz ~ 20 kHz, ±0.1 dB 10 Hz ~ 200 kHz, ±0.2 dB	10 Hz ~ 20 kHz, ±0.2 dB 10 Hz ~ 200 kHz, ±0.5 dB	10 Hz ~ 20 kHz, ± 0.1 dB 10 ~ 200 kHz, ± 0.2 dB	
Gain	-0.03 dB	-0.15 dB	-0.1 dB	-0.2 dB
Input Impedance	≥10 GΩ//0.3 pF	≥15 GΩ//0.5 pF	≥15 GΩ//0.3 pF	≥10 GΩ//0.5 pF
Background Noise (20Hz ~ 20kHz)	<3 μV A-weighting <5 μV A-weighting	<3 μV A-weighting <7 μV A-weighting	<5 μV A-weighting <7 μV A-weighting	<5 μV A-weighting <12 μV A-weighting
Distortion(THD) @1kHz 1 V	<0.02%		<0.05%	
Output Impedance	<5Ω		<50Ω	
Max. Output Voltage	10 V _{RMS} @ Power Voltage 60 V >35 V _{RMS} @ Power Voltage 150 V	7 V _{RMS} @ Power Voltage 30 V	5 V _{RMS}	
Power Voltage	28 V ~ 150 V ±14 V ~ ±75 V	9 V ~ 45 V	ICP 2 mA~20 mA	
Operating Current	1 mA		ICP 2 mA~20 mA	
Polarization Voltage (V)	200, 60, 28, 0		0	
Dimensions	Φ12.7mm × 80 mm	Φ12.7mm × 62 mm	Φ12.7mm × 70 mm	Φ6.35mm × 85 mm
Weight	<20 g (not include cable)			
Operating Temperature	-20°C ~ +50°C			
Humidity	25 % ~ 90 %(RH)			
Atmospheric Pressure	65 kPa ~ 108 kPa			
Connector Type	7 pin Lemo connector FGG.1B.307	X9-6T socket	BNC	
Thread for Preamplifier Mounting	11.7 mm-60 UNS			
Available	1/2" Measuring Microphone AWA14423, AWA14425, AWA14421 or AWA14422			1/4" Measuring Microphone AWA14435