

Measurement Microphone Cartridges

ZT measurement microphone cartridges feature an exceptional titanium film structure, renowned for its unwavering stability and precision even amidst challenging environmental conditions. The assembly of these microphones is meticulously executed within a controlled clean-room environment. Each individual microphone cartridge undergoes rigorous aging tests as an integral part of the manufacturing process prior to departing the factory.

ZT's measurement microphone cartridges are offered in two sizes, namely 1/2 inch and 1/4 inch, catering to both free-field and pressure-field applications. These cartridges embrace a pre-polarized configuration, enhancing user convenience and rendering them particularly suitable for 'hand-held' applications such as sound level meters.

It's noteworthy that all ZT microphones adhere rigorously to the IEC 61672 Class 1 standard, assuring unparalleled quality and reliability.

Measurement Microphone Cartridges - 1/2 inch-Free Field & Pressure Field

	ZT-331	ZT-332	ZT-333	ZT-334	ZT-371	ZT-372
Picture						
Sound field type	Free field type	Pressure field type	Free field type	Pressure field type	Free field type	Pressure field type
Sensitivity (@ 250 Hz ± 2 dB)	40 mV/Pa	31.6 mV/Pa	50 mV/Pa	50 mV/Pa	12.5 mV/Pa	12.5 mV/Pa
Sensitivity (@ 250 Hz ± 2 dB)	-28 dB re 1V/Pa	-30 dB re 1V/Pa	-26 dB re 1V/Pa	-26 dB re 1V/Pa	-38 dB re 1V/Pa	-38 dB re 1V/Pa
Frequency response (±2 dB)	3.15Hz-16kHz	3.15Hz-10kHz	3.15Hz-20kHz	3.15Hz-10kHz	3.15Hz-40kHz	3.15Hz-20kHz
Polarization voltage	0V(pre-polarization)	0V(pre-polarization)	0V(pre-polarization)	0V(pre-polarization)	0V(pre-polarization)	0V(pre-polarization)
Typical capacitance	18pF	17pF	15pF	17pF	13pF	13pF
Upper limit of dynamic range (re. 20 uPa)	≥140dB(distortion < 3%)	≥140dB(distortion < 3%)	≥146dB(distortion < 3%)	≥146dB(distortion < 3%)	≥160dB(distortion < 3%)	≥160dB(distortion < 3%)
Lower limit of dynamic range (re. 20 uPa)	≤16dB(A)	≤16dB(A)	≤15dB(A)	≤15dB(A)	≤20dB(A)	≤20dB(A)
Range of operating temperature	-20°C -60°C	-20°C -60°C	-30°C -80°C	-30°C -80°C	-30°C -80°C	-30°C -80°C
Temperature coefficient (-10 °C to 50 °C)	0.012dB/°C	0.012dB/°C	0.012dB/°C	0.012dB/°C	0.005dB/°C	0.005dB/°C
Static pressure coefficient	-0.01dB/kPa	-0.01dB/kPa	-0.01dB/kPa	-0.01dB/kPa	-0.01dB/kPa	-0.01dB/kPa
Relative humidity range (without condensation)	0-90%RH	0-90%RH	0-90%RH	0-90%RH	0-90%RH	0-90%RH
Relative humidity coefficient	<0.1dB(0 - 90% RH without condensation)	<0.1dB(0 - 90% RH without condensation)	<0.1dB(0 - 90% RH without condensation)	<0.1dB(0 - 90% RH without condensation)	<0.1dB(0 - 90% RH without condensation)	<0.1dB(0 - 90% RH without condensation)
Pressure equalization method	Post-pressure equalization	Post-pressure equalization	Post-pressure equalization	Post-pressure equalization	Post-pressure equalization	Post-pressure equalization
IEC 61094-4 Designation	WS2F	WS2F	WS2F	WS2F	WS2F	WS2P
Height (with protective grid)	16.3mm	16.2mm	16.3mm	16.2mm	12.6mm	12.6mm
Diameter (including protective grid)	13.2mm	13.2mm	13.2mm	13.2mm	13.2mm	13.2mm
Height (without protective grid)	15.2mm	15mm	15.2mm	15mm	11.5mm	11.5mm
Diameter (without protective grid)	12.7mm	12.7mm	12.7mm	12.7mm	12.7mm	12.7mm
Preamplifier with thread	11.7mm-60UNS	11.7mm-60UNS	11.7mm-60UNS	11.7mm-60UNS	11.7mm-60UNS	11.7mm-60UNS
Protective grid thread	12.7mm-60UNS	12.7mm-60UNS	12.7mm-60UNS	12.7mm-60UNS	12.7mm-60UNS	12.7mm-60UNS