

Audio Precision 378M32 Measurement Microphone System

Complete Specifications

	ENGLISH	SI	Notes
Performance			
Nominal Microphone Diameter	1/2"	1/2"	
Frequency Response Characteristic (at 0° incidence)	Free-Field	Free-Field	
Sensitivity	12.6 mV/Pa	12.6 mV/Pa	[3]
Sensitivity (± 1.5 dB)	-38 dB re 1 V/Pa	-38 dB re 1 V/Pa	[3]
Frequency Range (± 1 dB)	5 Hz to 16 kHz	5 Hz to 16 kHz	
Frequency Range (± 2 dB)	3.15 Hz to 31.5 kHz	3.15 Hz to 31.5 kHz	
Frequency Range (± 3 dB)	3.15 Hz to 40 kHz	3.15 Hz to 40 kHz	
Lower Limiting Frequency (-3 dB)	1.0 to 2.4 Hz	1.0 to 2.4 Hz	
Inherent Noise	22 dBA re 20 µPa	22 dBA re 20 µPa	[2]
Dynamic Range (3% Distortion Limit)	150 dB re 20 µPa	150 dB re 20 µPa	[2]
TEDS Compliant	Yes	Yes	[4]
Environmental			
Temperature Range (Operating)	-40 to +176 °F	-40 to +80 °C	
Temperature Coefficient of Sensitivity (+14 to +158°F (-10 to +70°C))	0.003 dB/°F	0.006 dB/°C	[2][3]
Static Pressure Coefficient	-0.007 dB/kPa	-0.007 dB/kPa	[2][3]
Humidity Coefficient of Sensitivity (0 to 100%, non-condensing)	± 0.002 dB/%RH	± 0.002 dB/%RH	[3][2]
Influence of Axial Vibration (0.1g (1 m/s ²))	66 dB re 20 µPa	66 dB re 20 µPa	[2]
Electrical			
Polarization Voltage	0 V	0 V	[1]
Excitation Voltage	20 to 30 VDC	20 to 30 VDC	
Constant Current Excitation	2 to 20 mA	2 to 20 mA	
Output Bias Voltage	10 to 14 VDC	10 to 14 VDC	
Maximum Output Voltage	± 7 Vpk	± 7 Vpk	
Output Impedance	<50 Ohm	<50 Ohm	
Physical			
Housing Material	Stainless Steel	Stainless Steel	
Venting	Rear	Rear	[5]
Electrical Connector	BNC Jack	BNC Jack	
Mounting Thread (Grid)	0.5 - 60 UNS	0.5 - 60 UNS	
Size (Diameter x Length) (with grid)	0.52 in x 3.47 in	13.2 mm x 88.3 mm	
Size (Diameter x Length) (without grid)	0.50 in x 3.46 in	12.7 mm x 87.8 mm	
Weight	1.59 oz.	45 gm	[2]
Notes			
[1] Prepolarized			
[2] Typical			
[3] re 250 Hz			
[4] TEDS Capable Digital Memory and Communication, compliant with IEEE 1451.4			
[5] Venting through Preamp			

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