Surface Microphones

GRAS 40LS

CCP Precision Surface Microphone

40LS is a high-precision microphone for measurements on airplane surfaces, vehicle surfaces, critical measurements in wind-tunnel as well as general measurements on planar and curved surfaces. It has a wide frequency range reaching up to 70 kHz and a large dynamic range topping at around 167 dB.

40LS is based on high performance measuring microphone technique, which makes the microphone very precise, robust and reliable. The microphone is an integrated unit consisting of the microphone capsule itself and a CCP preamplifier including TEDS for easy access of identification data and calibration data.

GRAS 40LA

CCP Precision Surface Microphone, High Pressure

40LA is a high-precision surface microphone with a very low sensitivity 0.5 mV/Pa (178 dB).

GRAS 40PS-1

CCP Surface Microphone

40PS-1 Surface Microphone is a low-profile, light surface microphone for general-purpose measurements on planar and curved surfaces exposed to slipstreams.

Specifications	40LA	40LS	40PS-1
Nominal Sensitivity	0.5 mv/Pa	1.8 mv/Pa at 250 Hz	15 mv/Pa at 250 Hz
Frequency Range	10 Hz – 20 kHz (± 1 dB) 5 Hz – 70 kHz (± 3 dB)	10 Hz – 20 kHz (± 1 dB) 5 Hz – 70 kHz (± 3 dB)	10 Hz – 12 kHz (+1, -2 dB) 10 Hz – 20 kHz (+1, -6 dB)
Upper Limit of Dynamic Range	178 dB re. 20 µPa	167 dB re. 20 µPa	145 dB re. 20 µPa
Output connector	Microdot 10/32	Microdot 10/32	Microdot 10/32
Lower Limit of Dynamic Range	< 56 dB(A) re. 20 µPa (thermal noise)	< 46 dB(A) re. 20 µPa (thermal noise)	< 27 dB(A) re. 20 µPa (thermal noise)
Temperature Range	-55°C to +100°C	-50°C to +100°C	-0°C to +50°C
Output Impedance	< 50 Ω	< 50 Ω	< 50 Ω
Diameter (with fairing) (without fairing)	42 mm 16.2 mm	42 mm 16.2 mm	40 mm 12.5 mm
Thickness	2.5 mm	2.5 mm	2.8 mm
Weight	3 g	3 g	1.5 g
Cable Length	1.5 m	1.5 m	2 m
Cable Diameter	1.1 mm	1.1 mm	1.1 mm

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