

Rugged Flexboom Dynamic Microphone

Passive Noise Cancellation and Rugged Flexibility

Featuring a ruggedized flexboom, this dynamic microphone provides improved speech intelligibility through the introduction of passive noise-cancelling technology. This microphone was developed as a direct replacement for the M-87/A1C and other Gentex-manufactured 5 ohm microphones.

KEY FEATURES

Maximum Performance

Third-party testing has demonstrated* the Gentex Rugged Flexboom significantly outperforms the legacy M-87/A1C, providing low distortion and excellent passive noise cancellation performance which translates into high speech intelligibility (greater than 80% MRT) in noise environments up to 115 dBA.

Optimal Design

The ruggedized gooseneck tubing with integrated mount ensures proper microphone positioning in high wind, while also providing ease of positional flexibility when the microphone is needed. The mount enables installation on either the left or right hand side of the helmet, no special tools needed.

Seamless Integration

The Gentex rugged dynamic microphone is retrofittable to upgrade legacy 5ohm microphones. Use existing knurled nut hardware or upgrade to the flush mount hardware for weight savings.

COMPATIBILITY

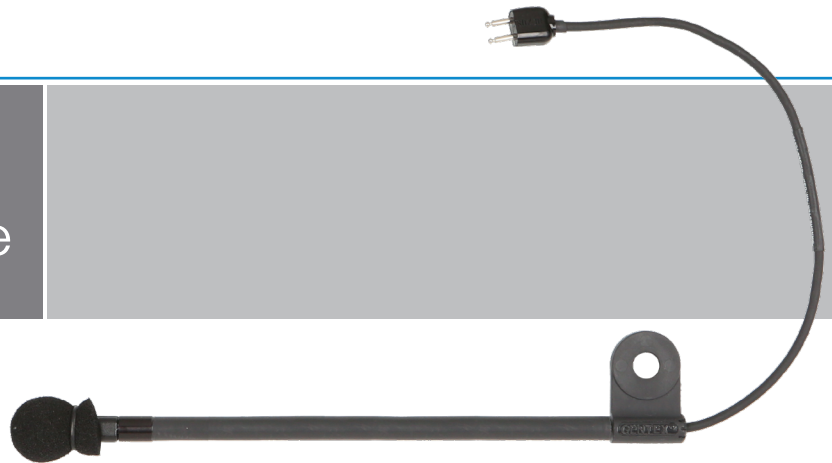
The Gentex Rugged Flexboom Dynamic Microphone is compatible with:

- Gentex Rotary Wing Helmets: HGU-56/P and Alpha
- Gentex Fixed Wing Helmets: HGU-55/P

**Testing was performed by The US Air Force Research Laboratory (AFRL) in representative rotary-wing noise environments.*

Contact Us

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N100593-06 Rugged Flexboom 5 ohm Dynamic Microphone



Knurled nut wire boom mounting hardware



Flush mounting boom hardware

COMPLIANCE

Compliance with parts of the following:

- MIL-STD-810G, with Change 1 Environmental
- MIL-PRF-26542F General Specifications for Dynamic Microphones

GENTEX[®]

Rugged Flexboom Dynamic Microphone

SPECIFICATIONS

Frequency Response: 350 Hz to 6300 Hz

Sensitivity @1 kHz, 94 dB SPL input: -86 dBV +/- 5dB

Distortion: Less than 5 % THD at 114 dB SPL across specified frequency response

Speech Intelligibility:

Greater than 90% MRT tested at 110 dBA SPL

Greater than 80% MRT tested at 120 dBA SPL

Rated Load Resistance: 5 Ω

Electrical Impedance: 5 Ω +/- 20% at 20°C +/- 5°C at 1kHz

Color: Lusterless black

Connector Type: Integrated U-173/U

Operating Altitude Rating: @ 18,000ft

Sensitivity within +/- 6 dB of ground level

Frequency Response within +/- 3 dB of ground level

Boom Mechanical Wind Resistance: Greater than 100 knots

Weight: Less than 50g

Environmental: Tested per MIL-STD-810G

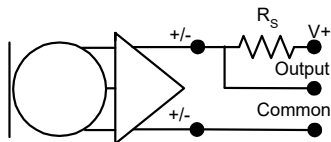
Temperature: -40°C to + 71°C Operating

Background Noise Cancellation: Below 1500 Hz

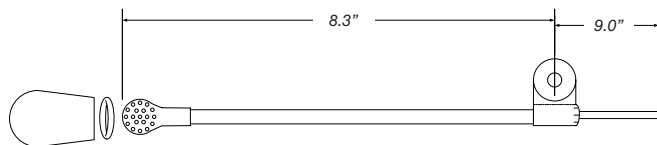


N100593-06 Rugged Flexboom
shown on HGU-56/P

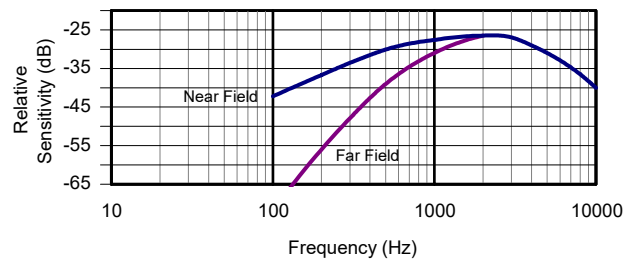
TEST CIRCUIT



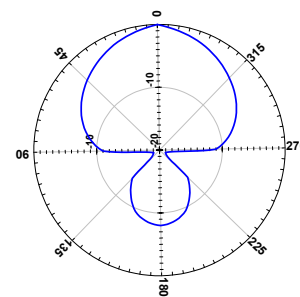
DIMENSIONS



Near Field (Voice)/Far Field (Background Noise) Crossover



Polar Response @ 1KHz



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