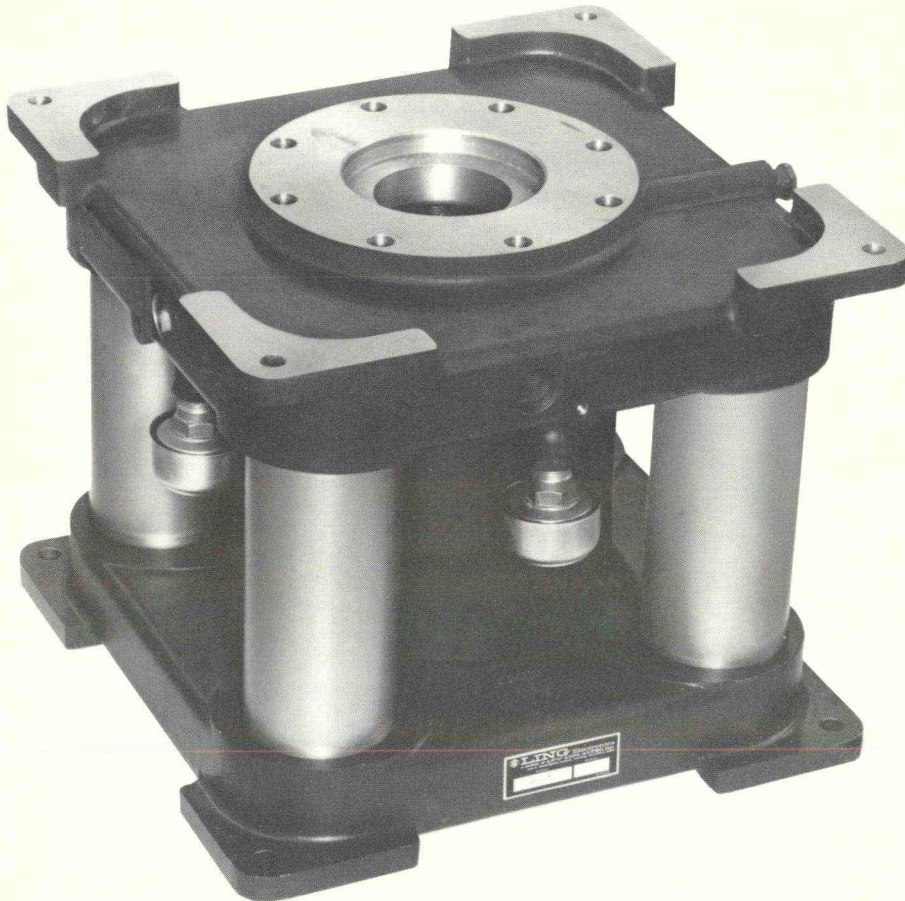


LING ELECTRONICS INC.

Model EPT-200 Electro-Pneumatic Transducer



Wide Band 10,000 Acoustic Watt Transducer

Sine, random and/or complex signals—Ling's series of electro-pneumatic transducers provide a controllable method of generating high acoustic power levels by modulating a high volume, low pressure air flow. This method of high-intensity-sound generation offers the user a choice of any input desired; it reproduces sine, random, speech or a combination of any or all.

Integral air filters—The EPT-200 has four self-contained air filters that may be easily removed for cleaning or replacement.

Cooling—The transducer uses a unique, high efficiency cooling system which is a key factor in its ability to generate high frequencies. The reciprocating valve assembly is cooled by a water spray. Water droplets and vapor are picked up, using a high velocity vacuum system, carried to a separator/heat exchanger and recirculated through the system. The driver coils are edge-wound conductors that are cooled directly by the same water spray. The field coil is made from hollow

conductor that uses circulating water in a closed-loop cooling system.

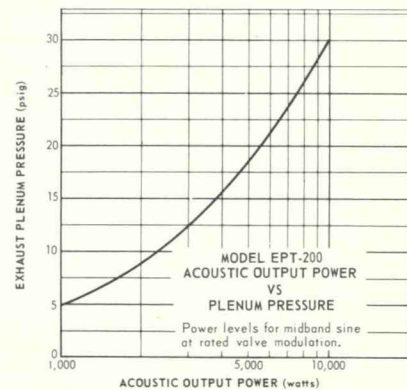
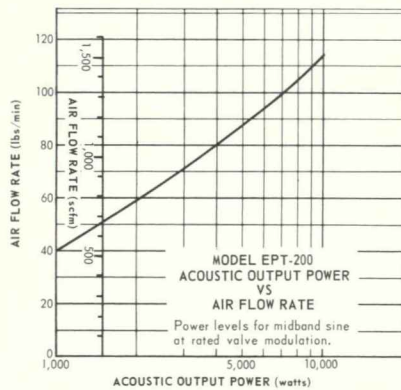
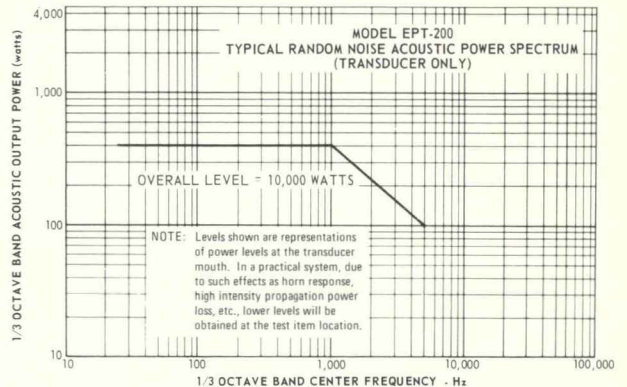
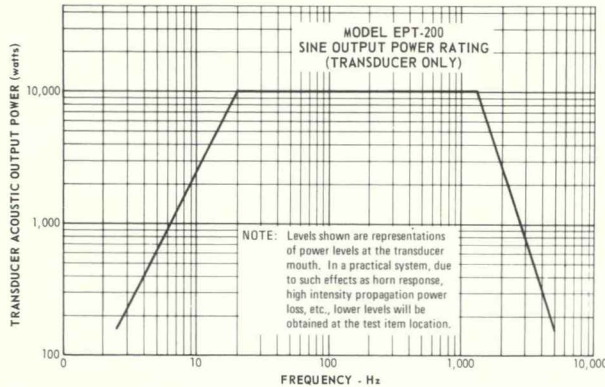
Wide band coverage—The EPT-200 uses a unique inductive drive system in the reciprocating valve assembly to achieve outstanding performance to frequencies considerably higher than previously attainable. The inductive drive requires no flexible leads or moving coil and offers maximum reliability and minimum moving mass through the use of a one-piece valve and single shorted turn. This design allows the valve to attain the extremely high acceleration levels necessary for operation at high frequencies. The reciprocating assembly is supported by rubber flexures which act as diaphragm seals between the pneumatic pressure in the plenum housing and transducer cooling chamber.

Ease of access—The exhaust plenum, held on with eight cap screws, is easily removed to expose the electro-magnet structure and valve assembly for ease of maintenance or inspection.

Model EPT-200 Electro-Pneumatic Transducer

SPECIFICATIONS

SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE. WHEN INCLUDED AS A PART OF A QUOTATION, SPECIFICATIONS ARE FIRM FOR PERIOD OF QUOTATION.



ACOUSTIC/PNEUMATIC

- Pneumatic Input:** 1500 scfm @ 36 psig
- Acoustic Power Output:** 10 kilowatts
- Air Pressure Required at Exhaust Plenum Housing:** 30 psig (refer to graph)
- Output Port Diameter:** 3.57 inches
- Air Input Port:** 4 inch quick disconnect fitting
- Frequency Range:** 20 to 5,000 Hz
- Maximum Allowable Plenum Pressure:** 60 psig
- Pressure Gauging Port:** 1/4 inch Female NPT on exhaust plenum housing
- Air Filtration:** Internal filters provide 40 micron filtration

ELECTRICAL

- Field Requirements:** 1.4 kW
- Driver Coil Requirements (Maximum Drive Frequency):** 3.5 kVA

GENERAL

- Cooling System:** External water and air system independent of primary air supply. Internal water filter provides 40 micron filtration. Internal cooling air filters provide 40 micron filtration.
- Position:** May be operated in any position
- Dimensions:** 20" x 21" x 17 1/2"
- Weight (less cables and hoses):** 190 pounds

OPTIONAL ACCESSORIES

- 35711 Transducer Mounting Plate
- 50, 100 and 200 Hz Exponential Horns
- Single and Multiple Transducer Cooling Units
- Four-inch Air Hoses with Couplers
- Single and Multiple Transducer Field Supplies
- Model AP-3/5 Power Amplifier
- Automatic Valve Bias Control Systems
- Motorized Valve Bias Control

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