High quality compression driver with dome diaphragm in pure titanium, offers high efficiency and low distortion over the medium and high frequencies band.

It can be successfully used in studio monitors, stage boxes and sound reinforcement in small rooms, where a high performance is requested.

This performance results from the proper combination of the components.

Diaphragm type dome in pure, rigid, light and extremely thin titanium (0.025 mm). To avoid stress and distortion, the suspension has a special design.

Injected phase plug in engineering plastic, optimized to eliminate undesirable phase cancellations.

Magnetic assembly that concentrates flux in the gap, optimized using FEA (Finite Element Analysis).

Voice coil manufactured in CCAW (Copper Clad Aluminium Wire), Kapton® former, assures great stability and thermal resistance.

The moving assembly has a perfect auto-centering characteristic that turns replacement in an easy task.

Model D220Ti uses standard 1¼” screw - 18 threads per inches, for better fitting with Selenium horns.

SPECIFICATIONS

Nominal impedance .............................................. 8 Ω
Minimum impedance @ 4.806 Hz ............................... 6.9 Ω
Power handling
   Musical Program (w/ xover 1,500 Hz 12 dB / oct) ....... 120 W
   Musical Program (w/ xover 2,000 Hz 12 dB / oct) ........ 160 W
Sensitivity
   On horn, 2.83V@1m, on axis .................................. 1.09 dB SPL
   On plane-wave tube, 0.0894V .................................. 1.16 dB SPL
Frequency response @ -6 dB .................................. 1,000 to 21,000 Hz
Throat diameter ................................................. 25 (1) mm (in)
Diaphragm material ............................................. Titanium
Voice coil diameter ............................................. 44 (1.7) mm (in)
Re ................................................................. 6.0 Ω
Flux density ..................................................... 1.60 T
Minimum recommended crossover (12 dB / oct) ............. 1,500 Hz

ADDITIONAL INFORMATION

Magnet material .................................................. Barium ferrite
Magnet weight ................................................... 675 (24) g (oz)
Magnet diameter x depth ........................................ 115 x 15 (4.52 x 0.59) mm (in)
Magnetic assembly weight ....................................... 1,700 (7.5) g (lb)
Housing material ................................................ Plastic
Housing finish .................................................... Black
Voice coil material ............................................... CCAW
Voice coil former material ....................................... Polyimide (Kapton®)
Voice coil winding length ...................................... 2.6 (8.53) m (ft)
Voice coil winding depth ....................................... 2.7 (0.11) mm (in)
Wire temperature coefficient of resistance (α25) .............. 0.00435 1°C
Volume displaced by driver ..................................... 0.5 (0.018) ft³
Net weight ....................................................... 1,730 (3.81) g (lb)
Gross weight ..................................................... 1,810 (3.99) g (lb)
Carton dimensions (W x D x H) .................................. 12 x 13.6 x 10 (4.7 x 5.6 x 3.9) cm (in)

MOUNTING INFORMATION

Horn connection ................................................. Screw-on 1¼” - 18 TPI
Connectors ....................................................... Faston
Polarity .......................................................... Positive voltage applied to the positive terminal (red) gives diaphragm motion toward the throat.
**How to Choose the Right Amplifier**

The power amplifier must be able to supply twice the RMS drive power. This 3 dB headroom is necessary to handle the peaks that are common to musical programs. When the amplifier clips those peaks, high distortion arises and this may damage the transducer due to excessive heat. The use of compressors is a good practice to reduce music dynamics to safe levels.

**Finding Voice Coil Temperature**

It is very important to avoid maximum voice coil temperature. Since moving coil resistance ($R_v$) varies with temperature according to a well-known law, we can calculate the temperature inside the voice coil by measuring the voice coil DC resistance:

$$T_v = T_v^* + \left( \frac{R_v}{R_v^*} - 1 \right) \left( T_v^* - 25 + \frac{1}{\alpha_v} \right)$$

$T_v$, $T_v^*$: voice coil temperatures in °C.

$R_v$, $R_v^*$: voice coil resistances at temperatures $T_v$ and $T_v^*$, respectively.

$\alpha_v$: voice coil wire temperature coefficient at 25 °C.

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Specifications subject to change without prior notice.

**Driver Titanium**

D220Ti

Kapton®: Du Pont trademark.

Ferrosound®: Ferrofluidics Corporation trademark.