2” (50 mm) exit compression driver for high sensitivity, low distortion and smooth medium frequency response applications. That leads the D405 driver to deliver high performance, high quality and high value for the pinnacle in sound reinforcement applications.

Its construction features include:
- ferrofluid (Ferrosound®) loaded gap reducing heat build-up and offering consistent results over long-term demanding concert usage;
- voice coil is made of high temperature wire wound on Kapton® former to withstand high operating temperatures;
- injected plastic housing;
- precisely engineered diaphragm structure and alignment mechanism allows for easy, reliable and cost effective repair in case of diaphragm failure.

**SPECIFICATIONS**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal impedance</td>
<td>8 Ω</td>
</tr>
<tr>
<td>Minimum impedance @ 2.9 kHz</td>
<td>6.8 Ω</td>
</tr>
<tr>
<td>Power handling</td>
<td></td>
</tr>
<tr>
<td>Musical Program (w/ xover 500 Hz 12 dB/oct)</td>
<td>150 W</td>
</tr>
<tr>
<td>Musical Program (w/ xover 1,000 Hz 12 dB/oct)</td>
<td>200 W</td>
</tr>
<tr>
<td>Sensitivity</td>
<td></td>
</tr>
<tr>
<td>On horn, 1W @ 1m, on axis¹</td>
<td>110 dB SPL</td>
</tr>
<tr>
<td>On plane-wave tube, 1mW¹</td>
<td>116 dB SPL</td>
</tr>
<tr>
<td>Frequency response @ -10 dB</td>
<td>300 to 7,000 Hz</td>
</tr>
<tr>
<td>Throat diameter</td>
<td>50 (2) mm (in)</td>
</tr>
<tr>
<td>Diaphragm material</td>
<td>Phenolic</td>
</tr>
<tr>
<td>Voice coil diameter</td>
<td>100 (4) mm (in)</td>
</tr>
<tr>
<td>Re</td>
<td>6.0 Ω</td>
</tr>
<tr>
<td>Flux density</td>
<td>1.60 T</td>
</tr>
<tr>
<td>Minimum recommended crossover (12 dB/oct)</td>
<td>500 Hz</td>
</tr>
</tbody>
</table>

¹ Specifications to handle normal speech and music program material with 5% maximum acceptable distortion on amplifier, with the recommended passive crossover connected.

**ADDITIONAL INFORMATION**

**MOUNTING INFORMATION**

Horn connection: Bolt on
Number of holes: 4 (M6) equally spaced threaded holes
Threaded holes diameter: 102 (4) mm (in)
Connectors: Push terminals
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 driver 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 (Rv) 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:

\[
T_v = T_0 + \left( \frac{R_v - R_{v0}}{\alpha_v} \right) \left( T_0 - 25 + \frac{1}{\alpha_v} \right)
\]

where:
- \( T_v \) = voice coil temperatures in °C
- \( R_v \), \( R_{v0} \) = voice coil resistances at temperatures \( T_v \) and \( T_0 \), respectively.
- \( \alpha_v \) = voice coil wire temperature coefficient at 25 °C.

Specifications subject to change without prior notice.
Page: 2/2 Ed.: 00 - 08/01

Kapton®: Du Pont trademark.
Ferro®: Ferrofluidics Corporation trademark.

EUROPE Address:
SELENIUM EUROPE
St. Elisabethenstrasse 6
65396 Walluf / Ober-Walluf - Germany
Phone: +49 (6123) 601570
Fax: +49 (6123) 601587
E-mail: sales@selenium.eu.com
URL: www.seleniumloudspeakers.com

USA Address:
SELENIUM LOUDSPEAKER USA
1701 South Park Court, Bldg 102
Chesapeake, VA 23320 - USA
Phone: (757) 424-7516 / (800) 562-0510
Fax: (757) 424-5246
E-mail: export@selenium-usa.com
URL: www.seleniumloudspeakers.com

BRAZIL Address:
ELETRÔNICA SELENIUM S.A.
BR 386 Km 435 / 92.480-000
Nova Santa Rita - RS - Brazil
Phone: +55 (51) 479-1120
Fax: +55 (51) 479-1120
URL: www.selenium.com.br