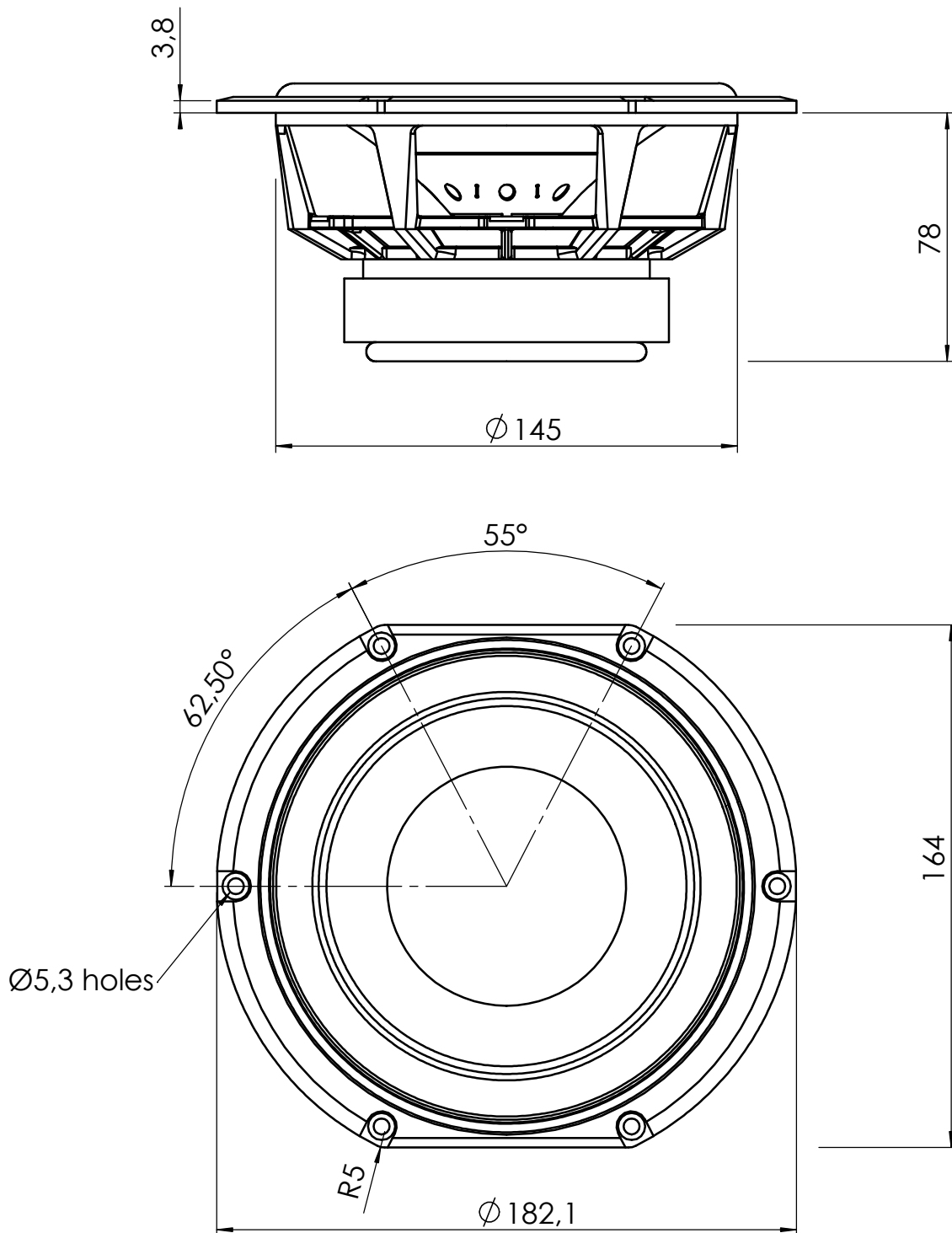


Mechanical Dimensions



* Dimensions listed are maximum production line values !

* Recommended build in clearance : 0,5% of above values !

Drawing Scale **1:2** All dimensions are in millimeters !

The rights to make changes
are reserved by DST A/S



Danish Sound Technology A/S
Motorgangen 2-4, 2690 Karlslunde
Tlf.: +045 7028 1700 Fax.: +45 4615 1171
Website: www.d-s-t.com

6" HDS 164 (Die Cast Aluminium)

Order ID. **830875**



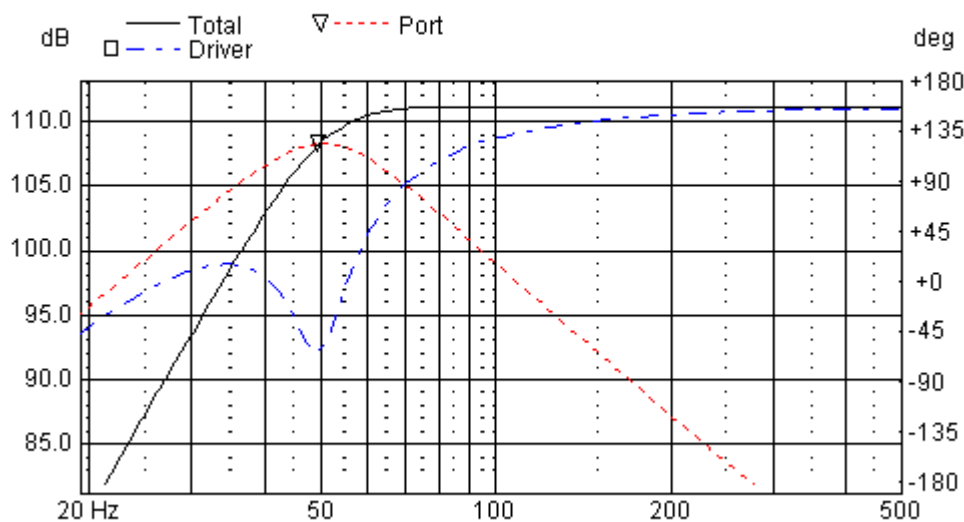
Peerless Application

This drive unit is optimised for tuning in a vented box.

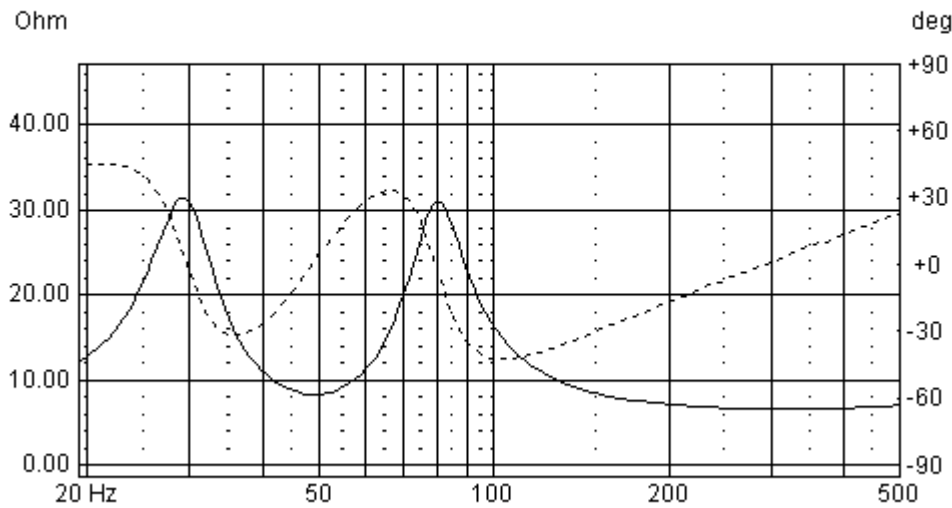
Tuning a Vented Box

| BOX PROPERTIES | | |
|------------------------------|------------|------|
| Alignment | Bassreflex | |
| DRIVE UNIT | 830875 | |
| Box Volume | 15.3 | Ltr. |
| Port Length | 22.3 | Cm |
| Port Diameter | 7 | Cm |
| Fill | 26 | % |
| f_{-3dB} | 49.4 | Hz |

Frequency response : Half Space (2 π) 1m distance



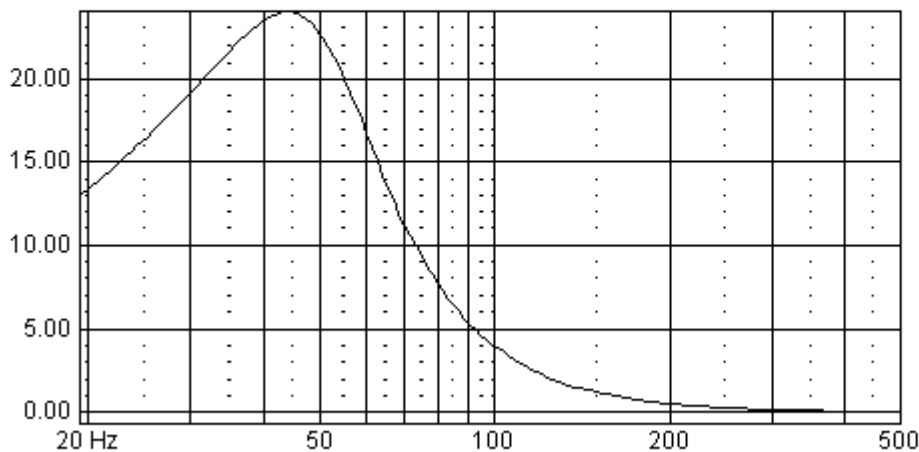
Impedance



Air velocity in port

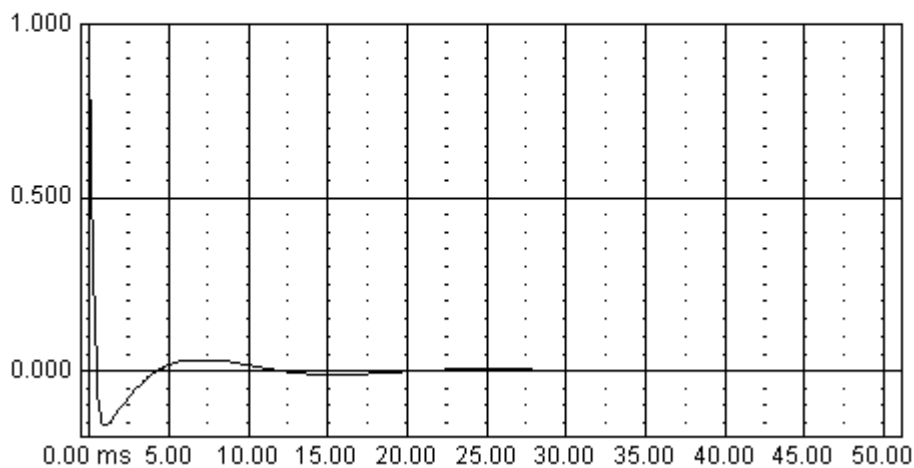
The dimensions of the duct take the air velocity into consideration and emphasis is put into keeping the Velocity (Duct noise) very low and below the limit of 35 m/s.

m/s



Source level : 36.0 V_{rms}

Transient Response: Impulse





Peerless Data Sheet

Type: HDS NOMEX 164 WR 33 102 NWP AL LS 8 OHM - 830875



Electrical data

| | | |
|-----------------------|------|------------------|
| Nominal impedance | Zn | 8 (ohm) |
| Minimum imp./at freq. | Zmin | 7.1/290 (ohm/Hz) |
| Maximum impedance | Zo | 44.0 (ohm) |
| Dc resistance | Re | 6.4 (ohm) |
| Voice coil inductance | Le | 1.3 (mH) |

TS Parameters

| | | |
|---------------------|-----|-----------|
| Resonance Frequency | fs | 48.1 (Hz) |
| Mechanical Q factor | Qms | 2.67 |
| Electrical Q factor | Qes | 0.45 |
| Total Q factor | Qts | 0.39 |

| | | |
|-----------------------|-----|------------------------|
| Force factor | Bl | 8.4 (Tm) |
| Mechanical resistance | Rms | 1.88 (Kg/s) |
| Moving mass | Mms | 16.6 (g) |
| Suspens. compliance | Cms | 0.66 (mm/N) |
| Effective cone diam. | D | 13.3 (cm) |
| Effective piston area | Sd | 139 (cm ²) |
| Equivalent volume | Vas | 17.6 (ltrs) |
| SPL 2.83V/1m at fmin | | 88.6 (dB) |

Power handling

| | |
|--|-------|
| 100h RMS noise test (IEC) | - (W) |
| Longterm Max System Power (IEC) | - (W) |
| IEC268-5 noise signal is used for the powertest. | |

Voice coil and magnet parameters

| | |
|-------------------------|-----------|
| Voice coil diameter | 33.0 (mm) |
| Voice coil length | 17.0 (mm) |
| Voice coil layers | 2 |
| Height of the gap | 6.0 (mm) |
| Linear excursion +/- | 5.5 (mm) |
| Max mech. excursion +/- | - (mm) |
| Total useful flux | 1.1 (mWb) |
| Diameter of magnet | 102 (mm) |
| Height of magnet | 20 (mm) |
| Weight of magnet | 0.68 (kg) |

Factors

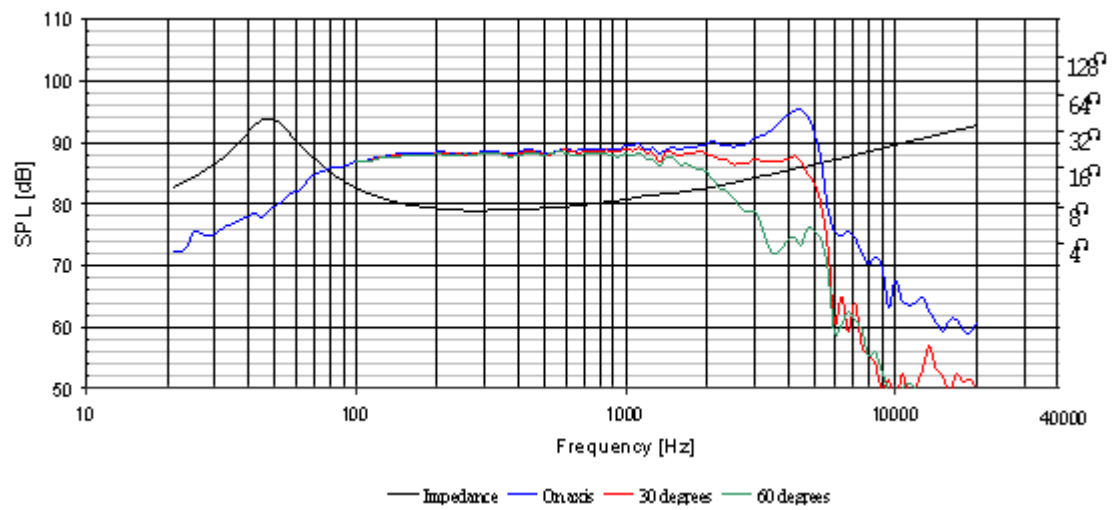
| | |
|-------------------|-----|
| Ratio fs/Qts | 124 |
| Ratio BL/sqrt(Re) | 3.3 |

Special remarks

-

Remarks on powertest

-



Measuring methods and conditions are stated in Peerless Standard for Acoustic Measurements (PSAM)