

# SPECIFICATIONS

## SW070WA01/02 2¾" neodymium, alu-cone subwoofers, 4/8 ohm

The 2¾" transducers SW070WA01 (4 ohm) and SW070WA02 (8 ohm) were designed especially for high quality multimedia and lifestyle speakers, where space otherwise usually does not allow for "real bass". Ideal for combining with the Wavecor FR070WA 2¾" fullranges.

### FEATURES

- True subwoofer design for vented or sealed enclosures
- Dual neodymium magnet structure for high efficiency and almost ideal magnetically shielding
- Black anodized alu cone for better heat transfer
- Vented polymer chassis for lower air flow speed reducing audible distortion
- Vented voice coil former for reduced distortion and compression
- Heavy-duty black fiber glass voice coil bobbin to reduce mechanical losses resulting in better dynamic performance and low-level details
- Large motor with 26 mm voice coil diameter for better control and power handling
- Low-loss suspension (high Qm) for better reproduction of details and dynamics
- Black motor parts for better heat transfer to the surrounding air
- Conex spider for better durability under extreme conditions
- Gold plated terminals to ensure long-term trouble free connection



### PRELIMINARY NOMINAL SPECIFICATIONS

| Notes | Parameter  | SW070WA01      |               | SW070WA02      |               | Unit               |
|-------|--|----------------|---------------|----------------|---------------|--------------------|
|       |  | Before burn-in | After burn-in | Before burn-in | After burn-in |                    |
|       | Nominal size   | 2¾             |               | 2¾             |               | [inch.]            |
|       | Nominal impedance  | 4              |               | 8              |               | [ohm]              |
|       | Recommended max. upper frequency limit                         | 4              |               | 4              |               | [kHz]              |
| 1     | Sensitivity, 2.83V/1m (average SPL in range 400 - 1,000 Hz)    | 82             |               | 79.5           |               | [dB]               |
| 2     | Power handling, short term, IEC 268-5, no additional filtering |                |               |                |               | [W]                |
| 2     | Power handling, long term, IEC 268-5, no additional filtering  |                |               |                |               | [W]                |
| 2     | Power handling, continuous, IEC 268-5, no additional filtering | 10             |               | 10             |               | [W]                |
|       | Effective radiating area, S <sub>d</sub>                       | 22             |               | 22             |               | [cm <sup>2</sup> ] |
| 3     | Resonance frequency (free air, no baffle), F <sub>s</sub>      | 108            |               | 112            |               | [Hz]               |
|       | Moving mass, incl. air (free air, no baffle), M <sub>ms</sub>  | 4.0            |               | 3.7            |               | [g]                |
| 3     | Force factor, B <sub>xl</sub>                                  | 3.8            |               | 4.7            |               | [N/A]              |
| 3     | Suspension compliance, C <sub>ms</sub>                         | 0.55           |               | 0.55           |               | [mm/N]             |
| 3     | Equivalent air volume, V <sub>as</sub>                         | 0.38           |               | 0.38           |               | [lit.]             |
| 3     | Mechanical Q, Q <sub>ms</sub>                                  | 7              |               | 7              |               | [-]                |
| 3     | Electrical Q, Q <sub>es</sub>                                  | 0.60           |               | 0.72           |               | [-]                |
| 3     | Total Q, Q <sub>ts</sub>                                       | 0.55           |               | 0.66           |               | [-]                |
| 4     | Voice coil resistance, R <sub>DC</sub>                         | 3.2            |               | 6.3            |               | [ohm]              |
| 5     | Voice coil inductance, L <sub>e</sub> (measured at 10 kHz)     | 0.18           |               | 0.30           |               | [mH]               |
|       | Voice coil inside diameter                                     | 26             |               | 26             |               | [mm]               |
|       | Voice coil winding height                                      | 10             |               | 10             |               | [mm]               |
|       | Air gap height   | 4              |               | 4              |               | [mm]               |
|       | Magnet weight (dual neodymium)                                 | 33 + 8         |               | 33 + 8         |               | [g]                |
|       | Total unit net weight excl. packaging                          | 0.16           |               | 0.16           |               | [kg]               |
| 3, 5  | K <sub>rm</sub>  | 0.091          |               | 0.047          |               | [mohm]             |
| 3, 5  | E <sub>rm</sub>  | 1.0            |               | 1.1            |               | [-]                |
| 3, 5  | K <sub>xm</sub>  | 4.2            |               | 6.7            |               | [mH]               |
| 3, 5  | E <sub>xm</sub>  | 0.68           |               | 0.68           |               | [-]                |

Note 1 U

Note 2 u

Note 3 U

Note 4 U

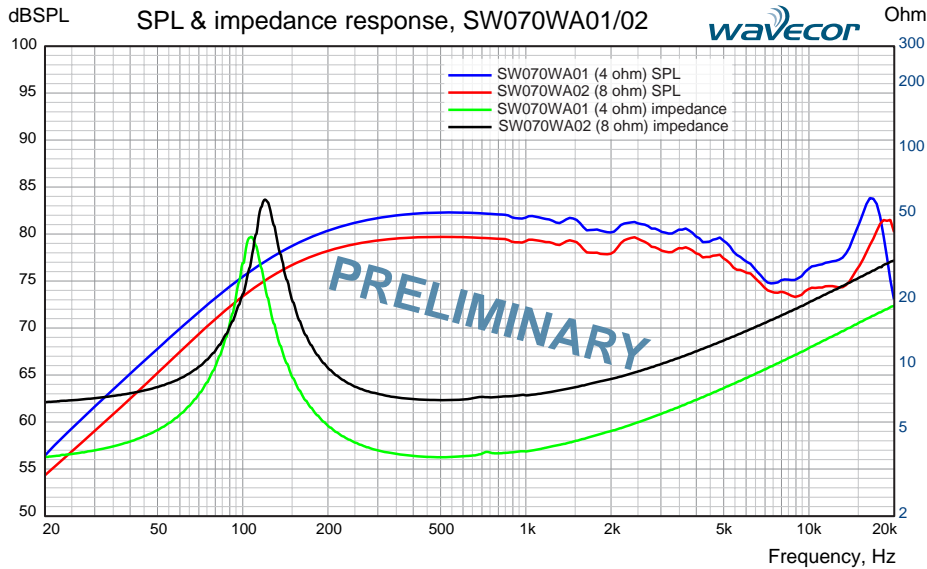
Note 5 @

technical paper [here at our web site.](#)

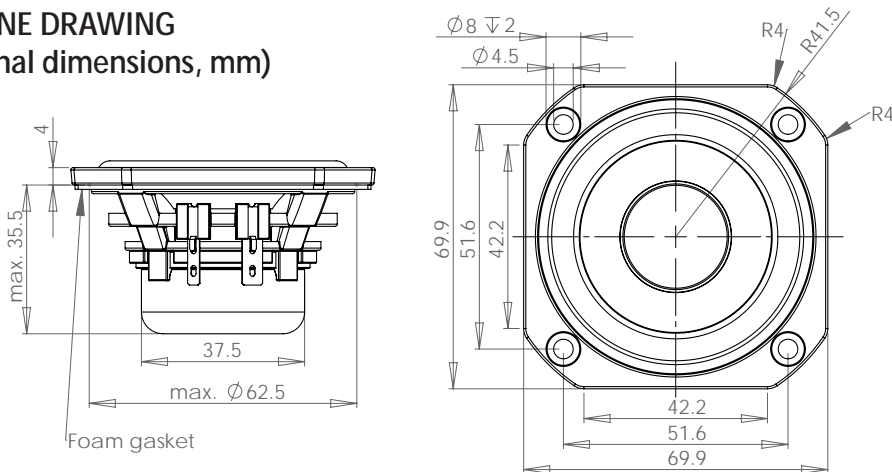
Note 6 After burn-in specifications are measured 12 hours after exiting the transducer by a 20 Hz sine wave for 2 hours at level 6.3/8.9 VRMS (4/8 ohm version). The unit is not burned in before shipping.

# SPECIFICATIONS

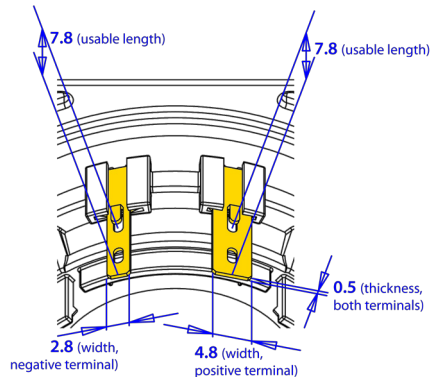
## SW070WA01/02 2 3/4" neodymium, alu-cone subwoofers, 4/8 ohm



### OUTLINE DRAWING (nominal dimensions, mm)



### CONNECTIONS (both terminals gold plated)



### PACKAGING AND ORDERING INFORMATION

|                       |   |
|-----------------------|---|
| Part no. SW070WA01-01 | 4 ohm version, packaged in pairs (two pieces per box) |
| Part no. SW070WA01-02 | 4 ohm version, bulk packaging                         |
| Part no. SW070WA02-01 | 8 ohm version, packaged in pairs (two pieces per box) |
| Part no. SW070WA02-02 | 8 ohm version, bulk packaging                         |