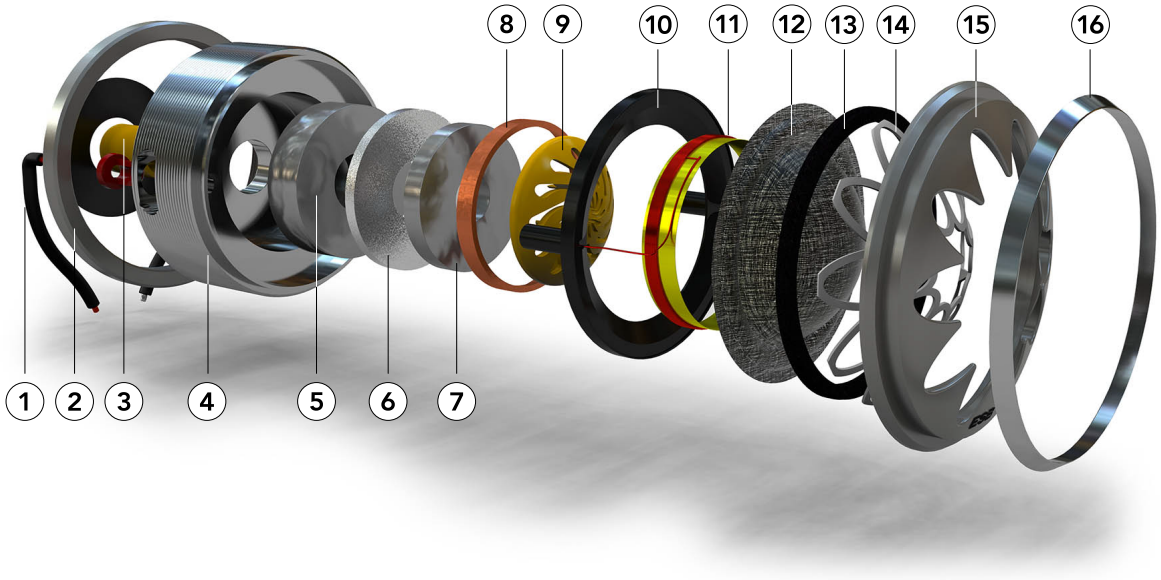
ESB AUDIO

9.1T-28

1.1”/28 MM HIGH-END SILK DOME TWEETER



1 Super flexible cables with high silver content to reduce electrical connection losses.

2 Aluminum thread fixing ring.

3 TCA System for back air flow control: reduces turbulence, noise, and controls the damping of the dome.

4 Pole cup CNC machined from a solid piece of ultra-low-carbon steel.

5 Main magnet in F52H neodymium, the best both for the magnetic force in relation to the mass, and for the high temperatures support (of 120° against the 80° of a "classic" neodymium magnet).

6 Magnet plate in ultra-low-carbon steel.

7 Secondary or superior magnet, used to stabilize and regulate the magnetic flux and concentrate it only in front of the voice coil, increasing efficiency, manageable power, distortion and bandwidth.

8 Pure copper ring helps reducing the inductance of the voice coil, so that it offers minimal resistance in high frequency reproduction. This means better high-frequency response, enabling the speaker to reproduce high-frequency sounds more accurately. Reducing inductance contributes to better handling of rapid transitions of audio signals. This can improve the speaker's ability to more accurately reproduce transient sound pulses.

9 FCA System: a special structure to control the flow of air moved by the dome, this creates a periodic damping resistance and implies that the release of the energy accumulated in the movement of the dome occurs in a controlled and fast manner, without create persistent oscillations. This contributes to a more precise and faithful response to the audio source and accuracy and the overall quality of the audio experience.

10 Butterfly.

11 Super light aluminum voice coil. It uses a high-strength aluminum alloy so as to be able to reduce its thickness and therefore its weight. The winding is also aluminum with the "skin" in pure copper. In this way a perfect combination of resistance and weight of the wire is obtained.

12 Pure Japanese silk dome resin impregnated with integrated suspension. This catenary profile dome is made in a single piece that also includes the suspension, this greatly reduces the weight allowing the tweeter to reach very high frequencies, and the absence of joints prevents break-up and/or vibrations.

13 Felt ring to eliminate any parasitic vibration.

14 Light stainless still grill for dome protection.

15 The faceplate haven’t only an cosmetic function, but, working as an acoustic lens, its shape dramatically reduces side refractions, which is very unpleasant in a car installation where windows create harmful refractions.

16 Finishing stainless steel ring.

9.1T-28

1.1”/28 MM HIGH-END SILK DOME TWEETER

GENERAL DATA

Overall dimension: 49 × 15 mm
Nominal power handling (AES)*: 100 W
Transient power*: 220 W
Sensitivity 1W/1m: 90 dB SPL
Frequency response: 1400 - 25.000 Hz

*Nominal and transient power
@ High Pass 2000Hz – 12db/Oct

ELECTRICAL DATA

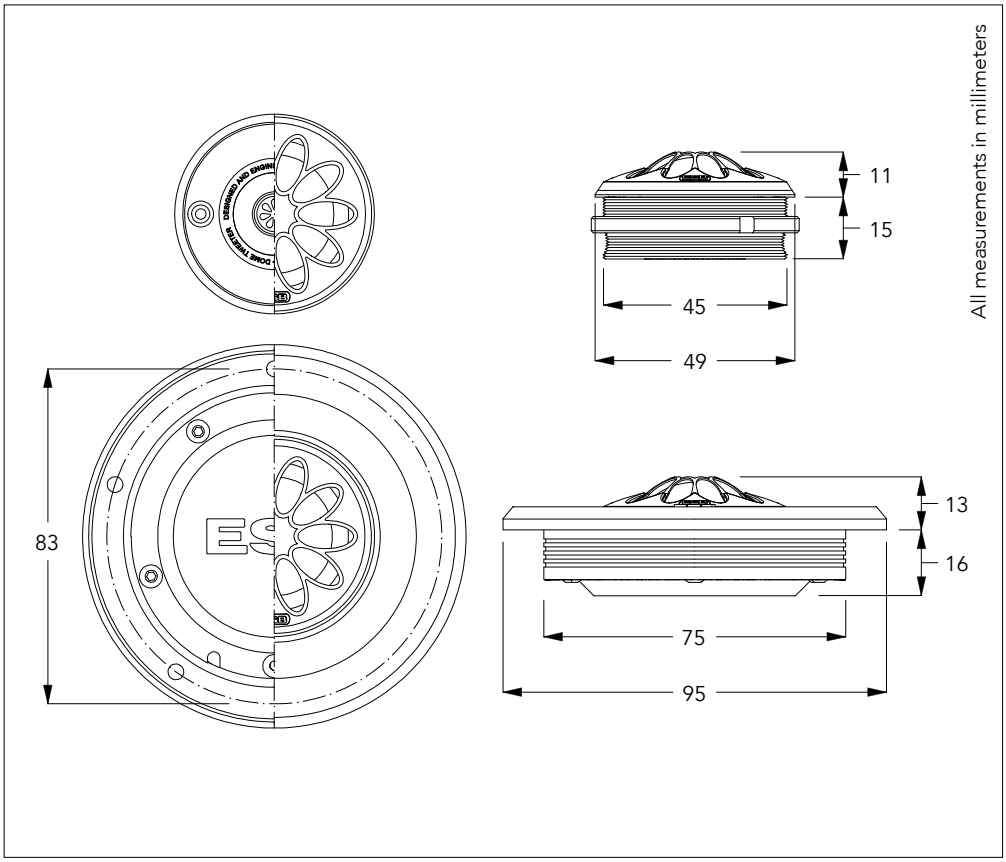
Nominal impedance: 4Ω
DC Resistance: 3.5Ω
Voice coil inductance (Lbm): 2.55 µH

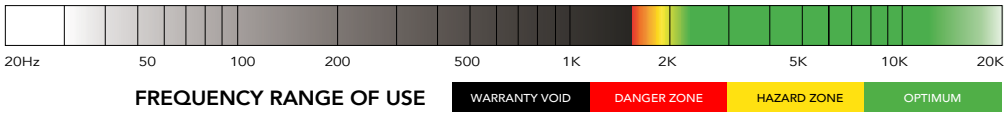
VC AND MAGNET PARAMETERS

Voice coil diameter: 28 mm
VC former material: 7000 Aluminum Alloy
Number of layers: 2
Magnet system: Neodymium N52-H

T&S PARAMETERS

Mechanical Q factor (Qms): 1.903
Electrical Q factor (Qes): 1.217
Total Q factor (Qts): 0.742
Resonance frequency (Fs): 690 Hz





FREQUENCY RANGE OF USE

WARRANTY VOID | DANGER ZONE | HAZARD ZONE | OPTIMUM

FREQUENCY RESPONSE vs IMPEDANCE