

Model Number: XT25SC90-04
Product Line: Peerless Gold

Revision: Rev 1_0
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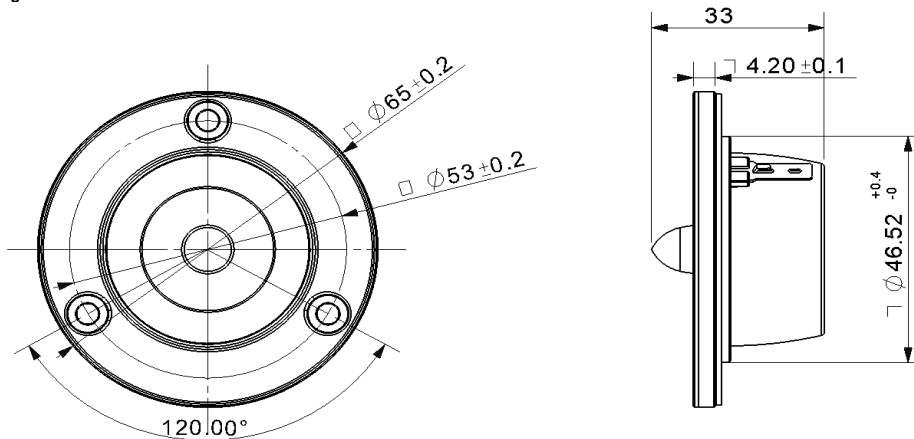


Product Description:

This member of the XT tweeter family utilizes two Tymphany technologies to deliver exceptional sound quality: the ring radiator patent, and the central waveguide patent. This model features a 4 ohm 25 mm voice coil, mounted in a neodymium magnet motor. The tweeter also features a rear chamber to create extended low frequency response. The faceplate features recessed mounting holes which minimizes reflections off of mounting screws.



Mechanical 2D Drawing:



Specifications:

| | | | | | | | | |
|-----------------------------------|---------------|----------------|-----------|---------------------|----------------------------|-----------------|--------------------------|-------|
| DC Resistance | R_{evc} | Ω | 3.2 | 5.0% | Energy Bandwidth Product | EBP | $(1/Q_{es})f_s$ | 773 |
| Minimum Impedance | Z_{min} | Ω | 3.61 | 7.5% | Moving Mass | M_{ms} | g | 0.31 |
| Voice Coil Inductance | L_e | mH | 0.01 | | Suspension Compliance | C_{ms} | um/N | 118.5 |
| Resonant Frequency | f_s | Hz | 825 | 15.0% | Effective Cone Diameter | D | cm | 3.3 |
| Mechanical Q Factor | Q_{ms} | - | 7.2 | | Effective Piston Area | S_D | cm ² | 8.6 |
| Electrical Q Factor | Q_{es} | - | 1.07 | | Equivalent Volume | V_{as} | L | 0.01 |
| Total Q Factor | Q_{ts} | - | 0.93 | | Motor Force Factor | BL | T·m | 2.18 |
| Ratio f_s / Q_{ts} | F | f_s / Q_{ts} | 888 | | Motor Efficiency Factor | β | $(T \cdot m^2) / \Omega$ | 1.49 |
| Half Space Sensitivity @ 2.83V | dB@2.83V/1m | dB | 90.1 | +/-1.0 ¹ | Voice Coil Former Material | VC _m | - | ALU |
| Sensitivity @ 1W/1m | 1W/1m | dB | 89.9 | +/-1.0 ¹ | Voice Coil Inner Diameter | VC _d | mm | 25.8 |
| | | | | | Gap Height | Gh | mm | 2.0 |
| Rated Noise Power (IEC 2685 18.1) | P | W | 100 | | Maximum Linear Excursion | X_{max} | mm | 0.05 |
| Test Spectrum Bandwidth | 800Hz - 20kHz | | 12 dB/Oct | | Ferrofluid Type | FF | | N/A |
| | | | | | Transducer Size | - | inch | 1 |
| | | | | | Transducer Mass | - | kg | 0.074 |

1 - Piston Band Sensitivity Tolerance

Frequency and Impedance Response:

