

TSQ1845

18-inch cast aluminium chassis neodymium magnet
low frequency loudspeaker



- Advanced temperature control using 3-channel tuned venting system provides highly efficient cooling across the frequency band
- Voice coil typically operates at 30°C lower temperature than other leading drivers in this class
- Polysiloxane laminated double suspension provides much greater stability and improved cone displacement symmetry
- Lead-out wires precision woven into suspension minimises excess motion and reduces fatigue
- Double-sided, weatherproof cone coating enhances durability

Features

<https://celestion.com/ten-key-features>

- See Ten Squared Technologies

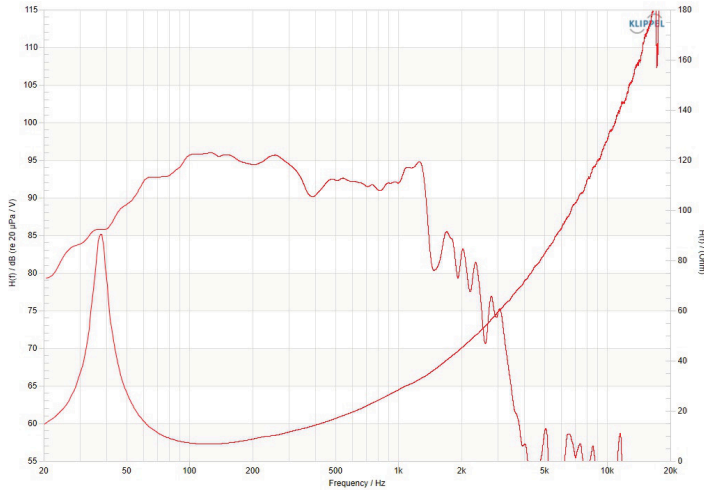
General Specifications

Nominal Diameter	457mm / 18in
Power Rating	1800W
Continuous power rating	3600W
Rated impedance	8 Ω
Sensitivity	96.5dB
Frequency range	30-1,000Hz
Chassis type	Cast aluminium
Magnet type	Neodymium
Voice coil diameter	115mm / 4.5in
Voice coil material	Round copper
Former material	Glass Fibre
Cone material	Glass loaded cellulose, water-resistant coating front & back
Surround material	Triple roll, cloth sealed
Suspension	Dual, polysiloxane-laminated
Gap height (Hg)	12mm / 0.46in
VC winding height (Hvc)	36mm / 1.42in

Mounting Information

Overall diameter	460mm / 18.1in
Overall depth	235mm / 9.5in
Cut-out diameter	414mm / 16.29in
Mounting hole dimensions	7x11mm / 0.28x0.43in
Number of mounting holes	8
Mounting hole PCD	432-441mm / 17.04-17.36in
Flange & gasket thickness	17mm / 0.67in
Unit weight	11.8kg / 26lb

Frequency response and impedance

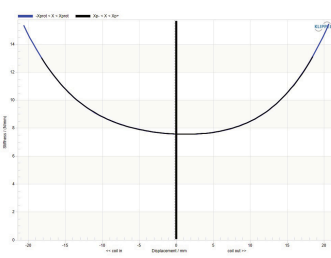
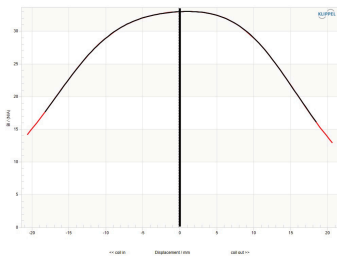


Parameters

Sd	1134cm ² / 175.8in ²
Fs	35Hz
Mms	316g / 11.18oz
Qms	8.712
Qes	0.300
Qts	0.290
Re	50 Ω
Vas	119.3l / 4.21ft ³
Bi	33.8Tm
Cms	0.065mm/N
Rms	7.99kg/s
Le (at 1kHz)	3.06mH
Xmax	15mm / 0.47in
Xmech	40mm / 1.57in
Efficiency	1.8%

Force factor (BI) symmetry

Stiffness (K) symmetry



Packed Dimensions & Weight

Single pack size W x D x H	500mm x 500mm x 280mm / 19in x 19in x 11in
Single pack weight	12.3kg / 27.1lb

Power rating: Tested for two hours using a continuous, band-limited pink noise signal as per AES standard. Power calculated on minimum impedance. Loudspeaker tested in free air.

Continuous power rating: Defined as 3dB greater than the AES rating.

Sensitivity: Measured on axis at 1W, 1m in 2 anechoic environment.

Parameters: Measured after unit subjected to pre-conditioning signal.

Xmax: $0.5 \cdot (H_{vc} - H_g) + 0.25 \cdot H_g$

Xmech: Maximum peak-to-peak excursion before damage.

