

SD-21 Low Frequency Transducer

SD-Series

Heavy Duty

This 21" high acoustic output transducer is packed with high technology with regards to materials, engineering, and manufacturing processes. Only the finest materials were utilized throughout this design. The acoustic package was totally analyzed and designed using the Finite Element Model. The result is an audio transducer that is second to none in performance, quality, and industrial desing.



SPECIFICATIONS

GENERAL

Nominal O.D: 21 in, 530 mm.
 Nominal Impedance: 8 Ω
 Operating Bandwidth: 30 Hz - 1.5k Hz ± 5%
 Power Handling (IEC): 1000 (R.M.S.)
 Sensitivity @ 1m, 2.83V: 99 dB
 Transducer Mass: 30.8 kg
 Terminals: Gold Plated Push

PARAMETER

fs = 34.8 Hz ± 15%
 Re = 5.3 Ω ± 5%
 Sd = 0.166 m²
 Bl = 35.8 Tm ± 10%
 β = (Bl)²/Re = 242 N²/W ± 15%
 η 0 = 5.14 %
 SPL0 = 99.13 dB ± 1 dB
 Qms = 5.07 ± 20%
 Qes = 0.24 ± 10%
 Qts = 0.23 ± 10%
 Vas = 305.4 L ± 20%
 Cms = 78.05 mm/N ± 20%
 Mmd = 229 g ± 10%

TYPICAL LINEAR X PARAMETERS

Levc @ 1 kHz = 2.06 mH
 Levc @ 20 kHz = 0.74 mH
 Krm = 53.86 mΩ
 Kxm = 40.88 mH
 Rem @ 1 kHz = 10.74 Ω
 Rem @ 20 kHz = 66.0 Ω
 Erm = 0.60
 Exm = 0.65
 HVC = 30 mm
 Hag = 20 mm
 Xmx = 5 mm

RECOMMENDED ENCLOSURE

Enclosure Type: 4th Order High Pass
 Net Enclosure Volume: 54.4 L (QB3 Alignment)
 Number of Ports: 1
 Port Inside Diameter (min): 150 mm
 Port Inside Diameter (max): 186 mm
 Port Length: 229 mm
 Tuning Frequency (fb): 56 Hz

MATERIALS

Basket : Blue Die Cast Aluminium
 Cone and Dust Cap: Paper
 Front and Back Plates: 1008 Cold Roll Steel
 Gaskets: Foam
 Magnet: Ferrite
 Surround: SrO · 6Fe2O3; 8.76 kg
 Voice Coil Diameter: Treated Cloth
 Voice Coil Bobbin: 6" (152.4mm) Fiber Glass (Folymide)
 Voice Coil Wire: High Temp. 400°C
 High Temp. 300°C
 Aluminium Ribbon Wire
 Dimension (H x W x D): 650 x 660 x 320 (mm)
 (26 in) x (26 in) x (13 in)
 4.9 Cu.Ft
 Net Weight: 30.8 kg (67.76 lb)
 Gross Weight: 33.4 kg (73.48 lb)

