

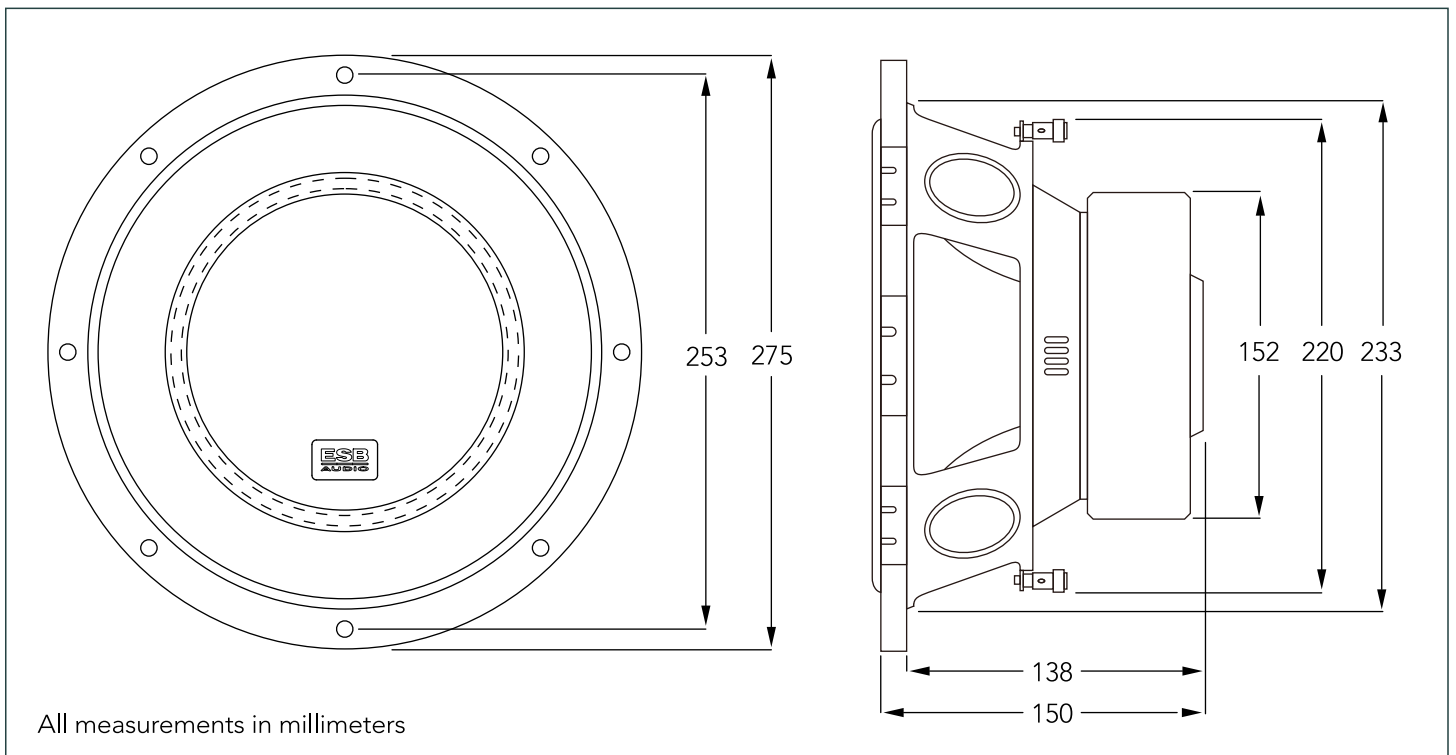
Non-pressed paper cone
 Long travel foam surround
 2"/50 mm voice coil
 Dual 44.7 Oz ferrite magnet
 Steel basket with anti-resonant painting
 Nominal power handling: 300 W
 Transient power: 600 Watt
 Impedance: 4+4Ω (3.10D4)
 2+2Ω (3.10D2)
 Sensitivity: 91dB (3.10D4), 92dB (3.10D2)
 Frequency Response: 33-1500 (3.10D4)
 29-1500 (3.10D2)



Your ESB subwoofer is a precision loudspeaker which has been designed to produce very high-quality sub-bass frequency performance in your car. For maximize the performance of your speaker we highly recommend to use a dedicated enclosure. Inside this manual you will find specifications and two recommended enclosures for your speaker: one is a sealed enclosure, the other is a ported design. Both types of enclosures will give you excellent sound quality and low-frequency extension. The sealed enclosure is a better choice if space is extremely tight, but the ported enclosure will produce 3dB more output at the same power if you have the extra space to work with.

T&S Parameters

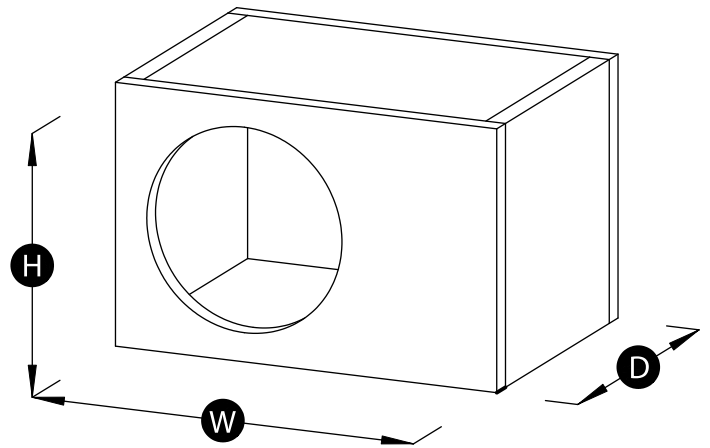
	3.10D4	3.10D2
Free air resonance (Fs):	33.5 Hz	29.4 Hz
Electrical "Q" (Qes):	0.57	0.51
Mechanical "Q" (Qms):	6.08	5.62
Total speaker "Q" (Qts):	0.52	0.47
Equivalent Compliance (Vas):	27.6 L	29.4 L
Effective piston area (Sd):	320 mm ²	320 mm ²
Mechanical resistance (Kg/s):	4.1	5
DC resistance* (Re, Ohm):	3.6 + 3.6	2.4 + 2.4
Suspension compliance (Cms):	0.19 mm/N	0.19 mm/N
Moving mass (Mms):	119.9 gr	152.2 gr
Voice coil inductance (@1KHz):	0.8 mH	0.7 mH



Recommended Sealed Enclosure

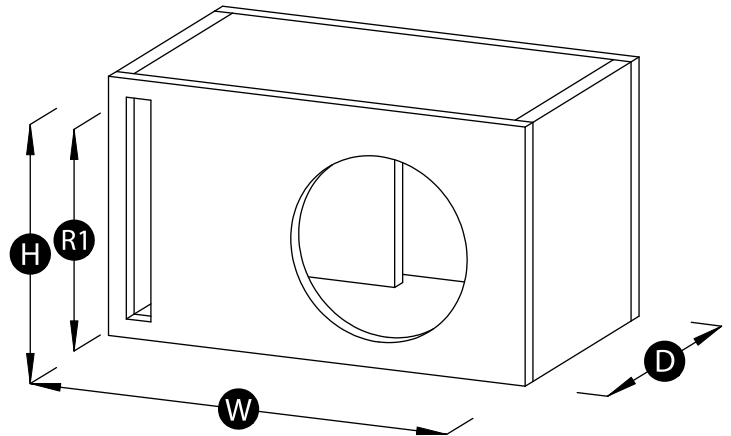
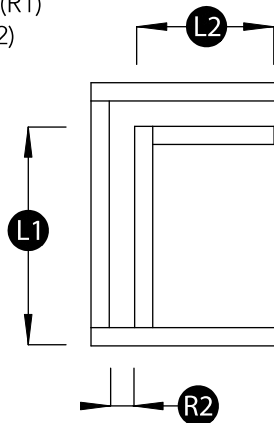
- Volume (Net int.):
3.10D4: 0.77 ft³ / 22 lit.
3.10D2: 0.70 ft³ / 20 lit.
- External dimension (W,H,D):
3.10D4: 16.73 × 12.60 × 9.25" / 425 × 320 × 235 mm
3.10D2: 15.55 × 12.60 × 9.25" / 395 × 320 × 235 mm

Note: Dimension are assume with 3/4" material (19 mm). This is the suggested thickness. Less thickness may compromise box rigidity with leak bass response. Add inside the damping material for about 75% of the volume.



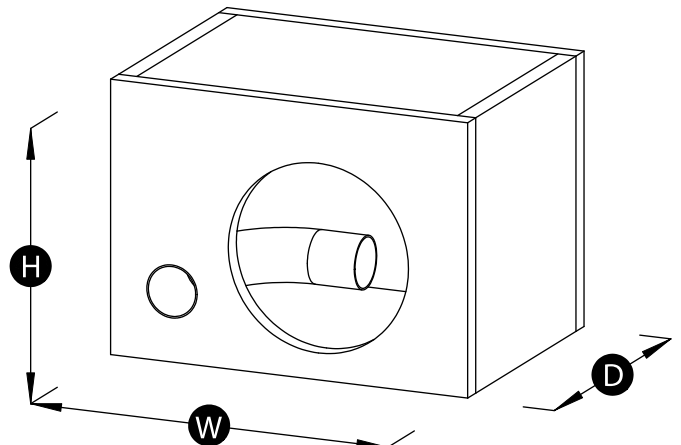
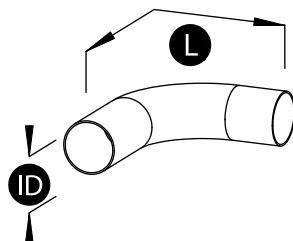
Recommended Ported Enclosure (Reflex option A)

- Volume (Net int.):
3.10D4/3.10D2: 1.37 ft³ / 39 lit.
- External dimension (W,H,D):
3.10D4/3.10D2: 19.88 × 11.81 × 13.78" / 505 × 300 × 350 mm
- Reflex Port Dimension:
3.10D4/3.10D2: 10.39" / 264 mm (R1)
3.10D4/3.10D2: 0.78" / 20 mm (R2)
3.10D4: 12.25" / 312 mm (L1)
3.10D2: 12.36" / 314 mm (L1)
3.10D4: 0 (L2)
3.10D2: 3" / 76 mm (L2)



Recommended Ported Enclosure (Reflex option B)

- Volume (Net int.):
3.10D4/3.10D2: 1.37 ft³ / 39 lit.
- External dimension (W,H,D):
3.10D4/3.10D2: 19.88 × 11.81 × 13.78" / 505 × 300 × 350 mm
- Reflex Port Dimension:
3.10D4/3.10D2: 3" / 76 mm (ID)
3.10D4: 11.61" / 295 mm (L)
3.10D2: 13.03" / 331 mm (L)



Note: Dimension are assume with 3/4" material (19mm). This is the suggested thickness. Less thickness may compromise box rigidity with leak bass response. Add inside the damping material for about 35% of the volume.