

- 4-layers dual voice coil
- Kapton® voice coil support
- High grade Y30 magnet
- Motor made of very low carbon steel
- Optimized motor design
- Long travel rubber surround
- Steel basket
- Internal stiffening ring
- Treated cellulose pulp cone
- Conex® spider
- CNC plates processing



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 specification

Free air resonance (Fs):	33.9 Hz
Electrical "Q" (Qes):	0.65
Mechanical "Q" (Qms):	3.74
Total speaker "Q" (Qts):	0.56
Equivalent Compliance (Vas):	1.696 ft ³ / 48.03 lit.
Linear Excursion (Xmax):	0.551" / 14 mm
Efficiency (1W/1m):	86.5 dB SPL
Effective piston area (Sd):	0.764 in ³ / 490,87 mm ²
DC resistance* (Re):	3.58 Ohm / 1.79 Ohm
Nominal impedance:	2+2 Ohm
Power handling (continuous):	400 W
Power handling (peak):	800 W

*Series and parallel value

Power Handling Recommended Chart

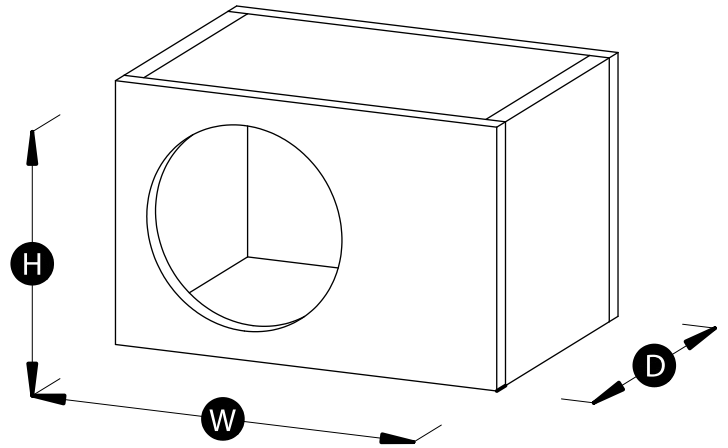
Physical specification

Nominal diameter:	12" / 320 mm
Overall diameter (A)	12.59" / 320 mm
Mounting hole diam. (B)	10.78" / 274 mm
Bolt hole circle (C)	11.73" / 298 mm
Magnet diameter (D)	5.82" / 148 mm
Mounting Depth (E)	5.7" / 145 mm
Driver displacement	0.042 ft ³ / 1.2 l

Recommended Sealed Enclosure

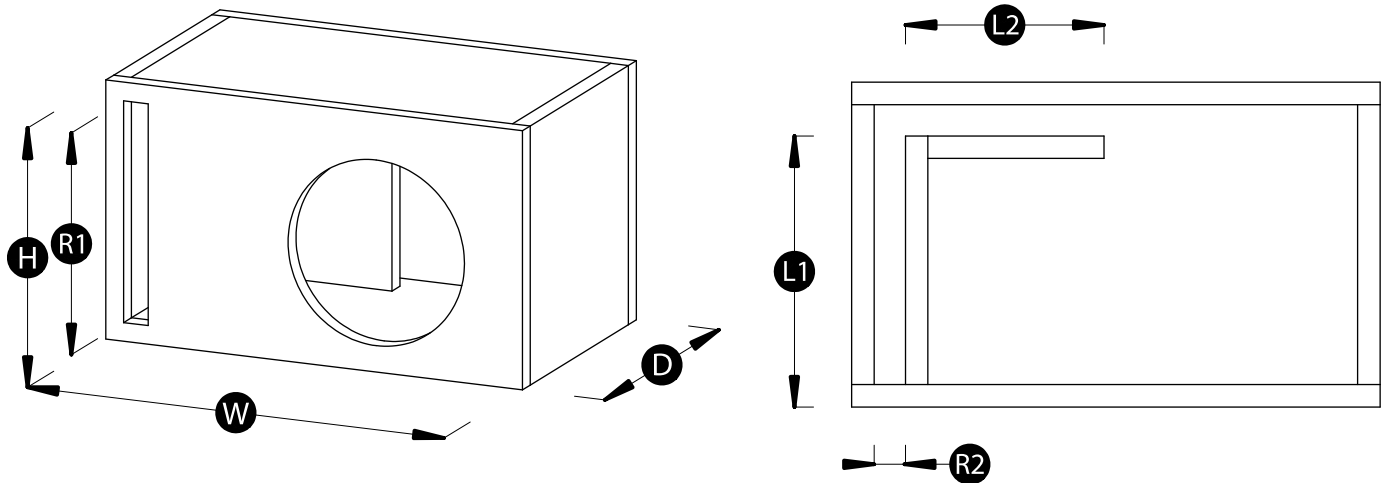
- Volume (include speaker displacement): 0.989 in³ / 28 lit.
- External dimension (W,H,D): 16.92×15.56×10.23" / 430×370×260 mm

Note: Dimension are assume with 3/4" material (19mm). This is the suggested thickness. Less thickness may compromise box rigidity with leak bass response.



Recommended Ported Enclosure (Reflex option A)

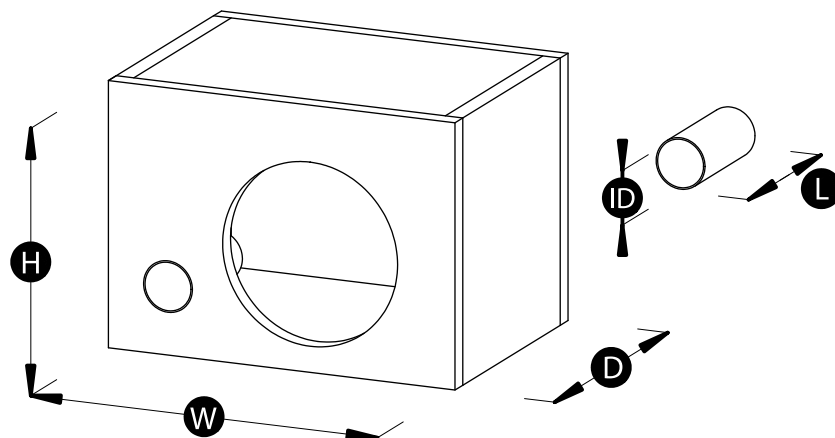
- Volume (include speaker displacement): 1.059 in³ / 30 lit.
- External dimension (W,H,D): 19.68×15.56×10.23" / 500×370×260 mm
- Reflex port dimension (R1,R2): 13.15×0.787" / 334×20 mm • Reflex port length (L1,L2): 8.74+1.57" / 222+40 mm



Note: Dimension are assume with 3/4" material (19mm). This is the suggested thickness. Less thickness may compromise box rigidity with leak bass response.

Recommended Ported Enclosure (Reflex option B)

- Volume (include speaker displacement): 1.059 in³ / 30 lit.
- External dimension (W,H,D): 18.89×12.59×11.41" / 480×320×260 mm
- Reflex tube internal diameter (ID): 3.07" / 78 mm • Reflex tube length (L): 7" / 178 mm



Note: Dimension are assume with 3/4" material (19mm). This is the suggested thickness. Less thickness may compromise box rigidity with leak bass response.