

XR1064

Constant Coverage HF Horn

KeyFeatures

- 1 inch throat entry
- Aluminum construction for excellent heat transfer
- Uniform on-axis and off-axis frequency response
- 60° x 40° horizontal and vertical constant coverage
- Very low distortion at high sound pressure
- Rotatable structure

Description

The XR1064 is a constant directivity horn with a throat entry of 1 inch. The XR1064 has been developed to reach the optimum performance when it will coupled with one inch exit Eighteen Sound high frequency compression drivers.

All XR horn series have been designed in order to reach smooth driver frequency response, while maintaining constant coverage and directivity and eliminating the midrange narrowing and high frequency beaming problems common of many similar horns on the market.

XR1064 has been made in die-cast aluminum in order to obtain the best performance under many point of view:

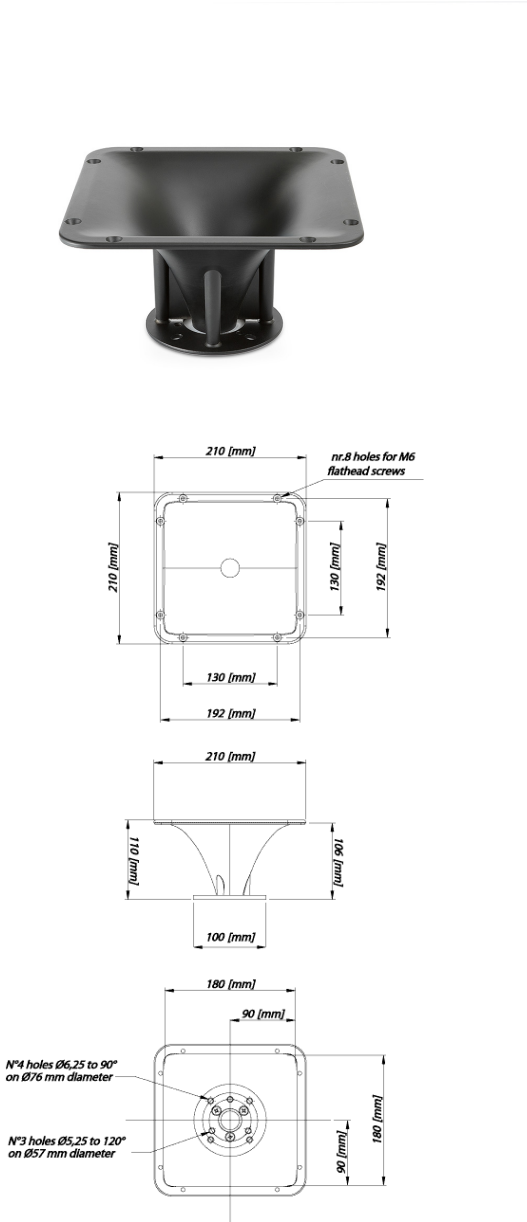
- thermal: aluminum horns are capable to reduce up to 30°C the steady state compression driver working temperature at full power, when compared to equivalent size plastic horn. This gives lower power compression ratio (down to 1 dB) and higher driver power handling (up to 30% higher);
- mechanical: no need for compression driver support (like brackets), and at the same time eliminate the problem of horn resonance with optimum waterfall and impulse system behavior.

The XR1064 shows nominal 60° Horizontal x 40° Vertical pattern control, providing consistent on-axis and off-axis frequency response from 1.6kHz to 16kHz in both horizontal and vertical planes.

Horn directivity is constant down to 1.6kHz.

Models

Model	Code	Information
XR1064	0421064010	



General Specifications

Throat Diameter	25,4 mm (1 in)
Horizontal Coverage (-6dB)	60° (20 ÷ -10) average range (1,6kHz - 12,5kHz)
Vertical Coverage (-6 dB)	40° (40 ÷ 0) average range (1,6kHz - 12,5kHz)
Directivity Index	11dB (1.8 ÷ -2,6) average range (1,6kHz - 12,5kHz)
Usable Frequency Range	Above 800 Hz
Recomm. Cross.Frequency	1200 Hz or more
Sensitivity	110 dB
Frequency Range	800 Hz - 18KHz
Material	Low pressure injected aluminum

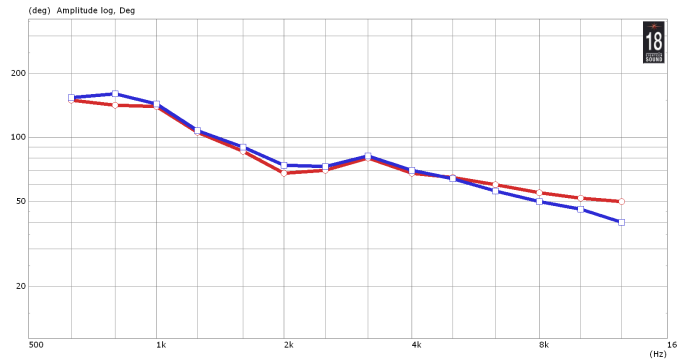
Thiele Small Parameters

Mounting information

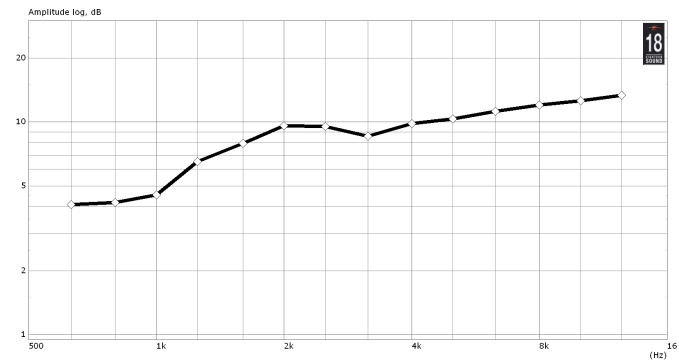
Mouth Height	210 mm (8,3 in)
Mouth Width	210 mm (8,3 in)
Depth	110 mm (4,3 in)
Mouth Mounting Dimensions	8 ø 6 holes
Driver mounting specs	3 M5 holes on ø 57mm (2.24in) - 4 M6 holes on ø 76mm (3in)
Net weight	0,75 Kg (1 lb)

Notes

1) Sensitivity is measured at 1W input on ND1090 rated impedance at 1m on axis from the mouth of the horn, averaged between 1kHz and 4 kHz.

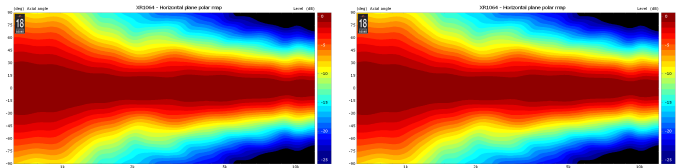


HORIZONTAL BEAMWIDTH - RED PLOT - VERTICAL BEAMWIDTH - BLUE PLOT - A

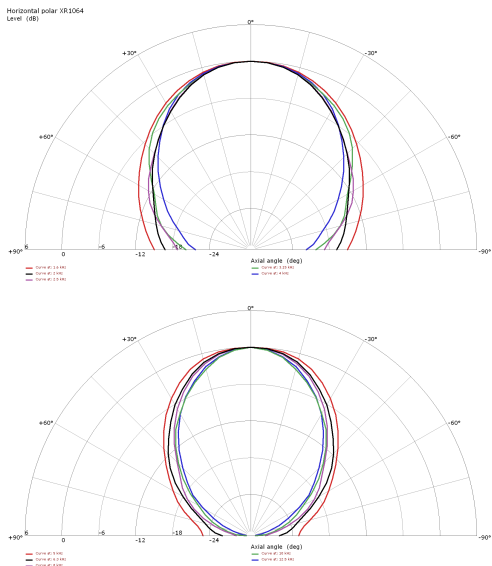


DIRECTIVITY INDEX - B

Horizontal and Vertical Polar Directivity Map



HORIZONTAL 1/3 OCTAVE POLAR PLOTS



VERTICAL 1/3 OCTAVE POLAR PLOTS

