



Tender specification

TH-100-EN54

High performance boundary horn speaker, 100 watts, 100 volt, certified according EN 54-24

UV-resistant 100W horn speaker for Voice Alarm applications with very high ambient noise, providing a maximum average SPL of at least 135 dB Pmax/1m which enables intelligible voice announcements using a minimum number of loudspeakers. To make voice alarm announcements over distances of 90 to 300 meters, the TH-100-EN54 has an asymmetric hyperbolic horn geometry. This results in an extended frequency spectrum. When used in tunnels, the level drop is only 1 to 3 dB instead of 6 dB when the distance is doubled by using Wave Guide. The robust 100W horn driver is equipped with a CCAR upright wound flat wire voice coil. The transducer consists of a hermetically sealed titanium membrane. A waterproof encapsulation between the acoustically emitting and electrical side ensures optimum protection against environmental influences. The DHPF protection circuitry allows the driver to be protected without losing volume. A high-pass filter sets the cut-off frequency somewhat higher under extreme overload and thus dynamically improves the STI value. The construction withstands corrosive, atmospheric impurities, high moisture contents and extreme temperatures. The cable entries on the driver housing are sealed watertight by two PG13.5 glands. Equipped with ceramic block and thermal fuse, the housing is made of impact-resistant and fire-resistant plastic (UL 94 V-0). Stable mounting with stainless steel V5A brackets and screws. There are two mounting solutions to choose from: the standard TH-100-WH bracket with 4 individual mounting brackets and the premium TH-100-PH bracket, which enables ceiling mounting and chain suspended mounting. Housing protection class IP65, weatherproof, BS5839 compliant, RoHS-compliant.

Technical specifications:

Rated voice/noise power 100 V (Watt):	100/50/25
Impedance 100V (ohms):	100/200/400
Low impedance connection (ohms):	-
Dimensions (mm):	1228 x 413 x 832
Weight (kg):	16,0
Colour:	RAL 7023 (betongrau)
Frequency range (-10dB) IEC268-5 (Hz):	280 - 9.000
Frequency response (Hz):	250 - 10.000
SPL IEC268-5, 1W/1m, peak (dB):	119,0
SPL IEC268-5, 1W/4m, peak (dB):	107,0
SPL IEC268-5, Pmax./4m, peak (dB):	127,0
Sensitivity EN54-24, 1W/4m (dB):	101,9
Sensitivity IEC 268-5, 1W/1m (dB):	113,9
Dispersion -6 dB, 500 Hz:	h=58° v=35°
Dispersion -6 dB, 1 kHz:	h=35° v=25°
Dispersion -6 dB, 2 kHz:	h=40° v=20°
Dispersion -6 dB, 4 kHz:	h=54° v=15°
Certificate number:	1438-CPR-0481