

ABT-TNL100

EN 54-24

Highly Directional Tunnel Loudspeaker

- ✓ Full compliance with EN 54-24 Standards
- ✓ Specially designed for tunnel applications
- ✓ Highly directional asymmetric horn
- ✓ Excellent speech intelligibility
- ✓ Stainless steel construction
- ✓ Waterproof housing IP66
- ✓ High power output 100/50 W



In case of an emergency, the Voice Evacuation System needs to guide people in the tunnel to safety so the audio transmission should be as clear as possible. In general, due to high levels of reverberation and noise, a tunnel is not an ideal environment for Voice Evacuation System and therefore speech intelligibility becomes a critical parameter for any voice alarm application. To establish

a sufficient level of speech intelligibility, a highly directional speakers system is required. By reducing the energy emitted to other surfaces, reflective sound energy can be minimized which results in a better direct to reverberant ratio. This will improve the maximum feasible speech intelligibility. To minimize disturbing echo effects, resulting in a loss of speech intelligibility, each horn

speaker is driven by an individual signal channel in a 100 V installation, which is equipped with audio DSP including EQ and delay. Our product S4T (Safety For Tunnel) offers the most effective solution which seamlessly combines a dedicated Voice Evacuation System with tailored Tunnel Loudspeakers.

	ABT-TNL100
Electrical	
Rated power, W	100
Tappings 100V line, W	100 / 50
Transformer impedance, Ω 100V	100 / 200
Driver impedance, Ω	6
Effective frequency range, Hz	250-8000
Sensitivity @ 4 m, 1 W, dB	105
SPL @ 4 m, Rated power, dB	125
SPL @ 1 m, 1 W, dB	117
SPL @ 1 m, Rated power, dB	137
Dispersion, horizontal x vertical, [°]	25 x 35
Environmental	
Environmental type	B
IP Rating	IP66
Min / Max Amb Temp	-25°C / 70°C
Mechanical	
Dimensions, mm	1770 x 1020 x 455
Net Weight, kg	28
Colour	Grey (RAL 7035)
Material	Stainless steel
Mounting	Anchor for concrete
Option	
For DC line monitoring	Capacitor
Colour optional	RAL Palette

Frequency Band:

