



# 1 Watt, 100VRMS Speaker

## with Analogue Addressable Base (PSSB501)

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### Product Overview:

The **Pertronic PSSB501** Speaker is one of a range of 100VRMS Line speakers (1.1W max) manufactured by Pertronic Industries Ltd:

- ▶ Used in conjunction with Pertronic 20W and 50W, 100VRMS Line Amplifiers, the **PSSB501** provides a cost effective solution for speaker-based building evacuation systems that must comply with the NZS4512:2010/NZS4512:2003 and AS2220 Standards.
- ▶ Integrates a 1W speaker; tapped line transformer and DC blocking capacitor mounted in an aesthetically pleasing acoustic enclosure, which includes a System Sensor B501 Analogue Addressable detector base.
- ▶ The **PSSB501** has mini-jumpers for selecting one of 0.2W, 0.7W, or 1.1W power outputs.
- ▶ At 1.1W the **PSSB501** can reproduce the 'Evacuation' tone at a sound pressure level of 98dBA at 1 metre, when used with Pertronic 100VRMS amplifiers

### Operation:

- ▶ The panel loop output and amplifier line output are connected to the **PSSB501** Speaker as shown in Figure 1.
- ▶ Terminals are provided for both analogue loop and 100VRMS line connections.
- ▶ The Loop '+' and '-' terminals are connected to the corresponding **PSSB501** Loop '+' and '-' terminals.
- ▶ Similarly, the amplifier's line terminals '+' and '-' are connected to the corresponding **PSSB501** Line '+' and '-' terminals.
- ▶ If the amplifier is not active, the 100VRMS line is monitored by the application of an inverted DC voltage to the **PSSB501** Line '+' terminal.
- ▶ The **PSSB501** consumes no power in monitor mode.
- ▶ A 10kΩ, 1W monitor resistor is placed at the last **PSSB501**.
- ▶ When the Amplifier is active, the monitoring DC voltage is removed from the line output and the 100VRMS signal is applied, causing the **PSSB501** to operate.

### Specifications:

#### Dimensions:

When recessed:			
Height below ceiling			31mm (including B501 base)
Height above ceiling			35mm
With Surface Mount Extension Cover			66mm
Diameter of Mounting Flange			122mm.

#### Colour Options:

White.

#### Sound Level Output:

Sound pressure level at 1.1W, 1m (peak ± 3dB)			
Power Tap selected:	0.2W	0.7W	1.1W
Evacuation:	77.8dBA	98.7dBA	98.9dBA
Alert:	64dBA	83.5dBA	85.3dBA

#### Frequency Response:

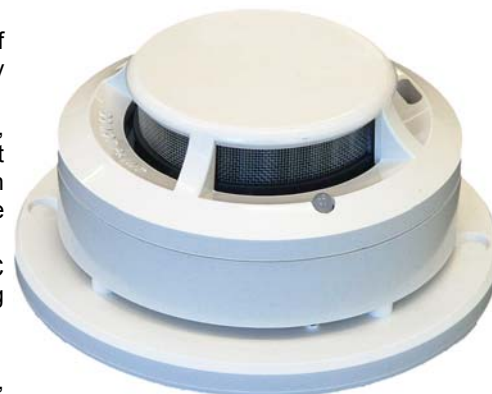
400Hz – 10kHz

#### Input Capacitor:

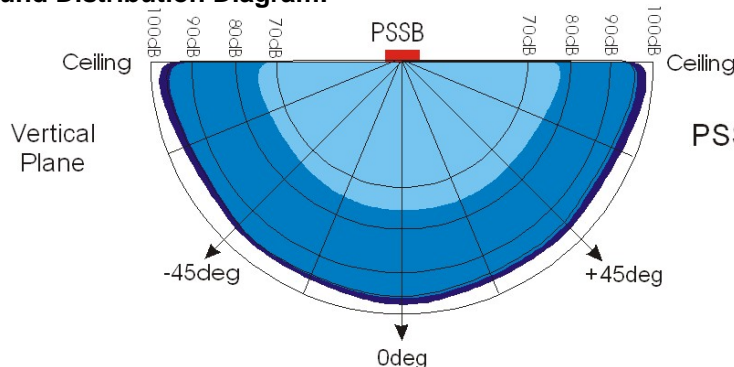
2µF, 100V Bipolar Electrolytic ELCO

#### Maximum Line Voltage:

100VRMS



### Sound Distribution Diagram:



### PSSB501 Mounted in Ceiling

#### Key

	0.2W
	0.7W
	1.1W

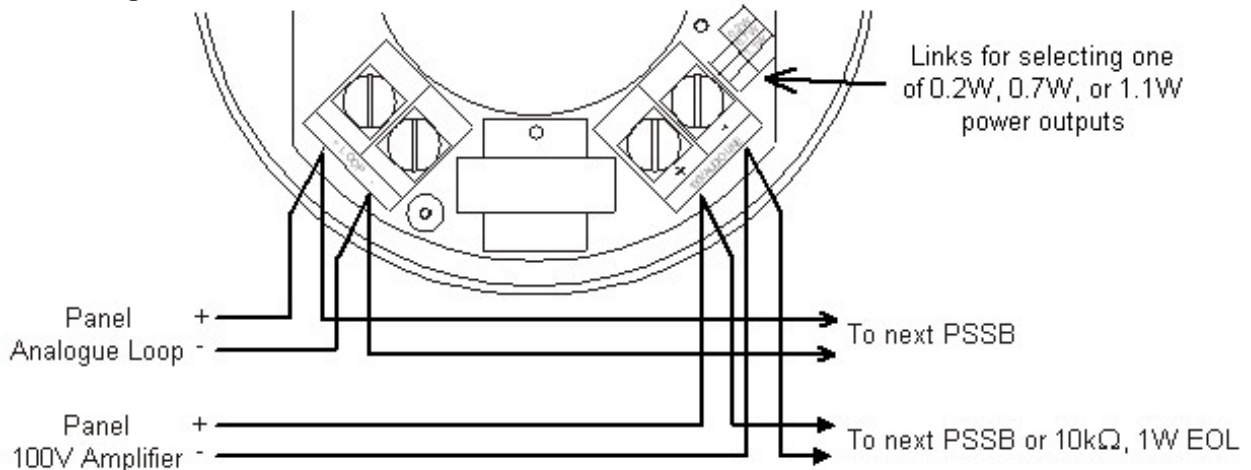
PSSB501 Sound Distribution (EVAC Tone) at 1 metre



ISO 9001: 2008

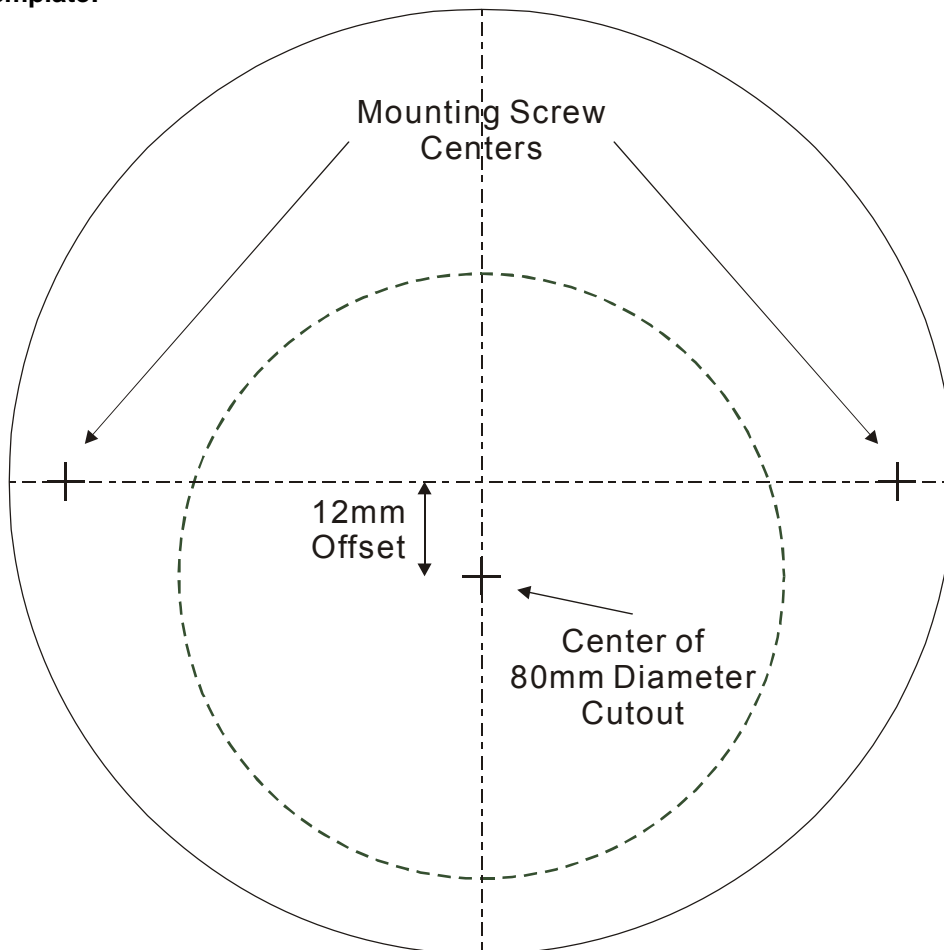
International Standards  
Certifications  
QAC/R64/0012

**Connection Diagram:**



**Figure 1**

**PSSB Drilling Template:**



**Figure 2**

**Product Codes:**

NZS Code	Description	NZFPA Listing No
PSSB501	Pertronic Speaker with B501 Analogue Base	PI/641
PSSB524IEFT	Pertronic Speaker with B524IEFT Isolator Base	PI/641
PSS1-R	Pertronic Sounder Speaker: 1W Flush - Red	PI/641
PSS1-W	Pertronic Sounder Speaker: 1W Flush - White	PI/641

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