



1 Watt, 100VRMS Speaker

with Conventional Base
(PSSB401)

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ISO 9001: 2008

International Standards
Certifications
QAC/R64/0012

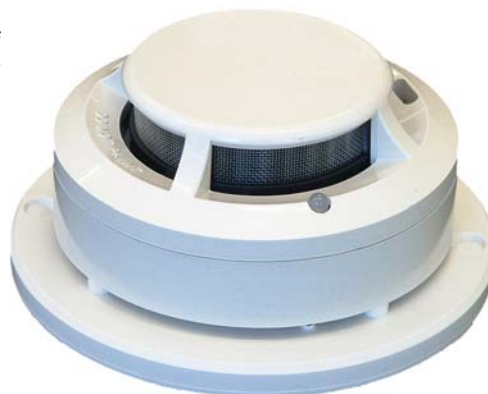
Product Overview:

The **Pertronic PSSB401** 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 **PSSB401** 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 **B401** Analogue Addressable detector base.
- ▶ The **PSSB401** has mini-jumpers for selecting one of 0.2W, 0.7W, or 1.1W power outputs.
- ▶ At 1.1W the **PSSB401** 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 **PSSB401** Speaker as shown in Figure 1.
- ▶ Terminals are provided on the speaker PCB for the 100VRMS line connections.
 - ▶ The amplifier's line terminals '+' and '-' terminals are connected to the corresponding **PSSB401** Line '+' and '-' terminals.
- ▶ Terminals for the circuit connections are on the **B401** base.
 - ▶ The Circuit 'IN+' and 'OUT+' lines are connected to **B401** Base Terminal 4
 - ▶ the 'IN M-' line is connected to **B401** Base Terminal 2
 - ▶ the 'OUT M-' line is connected to **B401** Base Terminal 3..
- ▶ If the amplifier is not active, the 100VRMS line is monitored by the application of an inverted DC voltage to the **PSSB401** Line '+' terminal.
- ▶ The **PSSB401** consumes no power in monitor mode.
- ▶ A 10kΩ, 1W monitor resistor is placed at the last **PSSB401**.
- ▶ When the Amplifier is active, the monitoring DC voltage is removed from the line output and the 100VRMS signal is applied, causing the **PSSB401** to operate.



Specifications:

Dimensions:

| | | | |
|------------------------------------|--|--|----------------------------|
| When recessed: | | | |
| Height below ceiling | | | 31mm (including B401 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

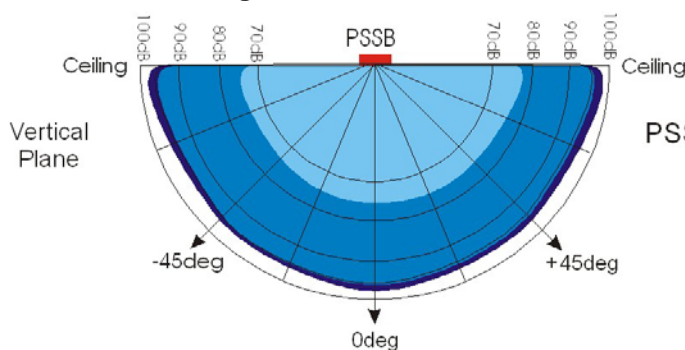
Input Capacitor:

2µF, 100V Bipolar Electrolytic ELCO

Maximum Line Voltage:

100VRMS

Sound Distribution Diagram:



PSSB401 Sound Distribution (EVAC Tone) at 1 metre

Connection Diagram:

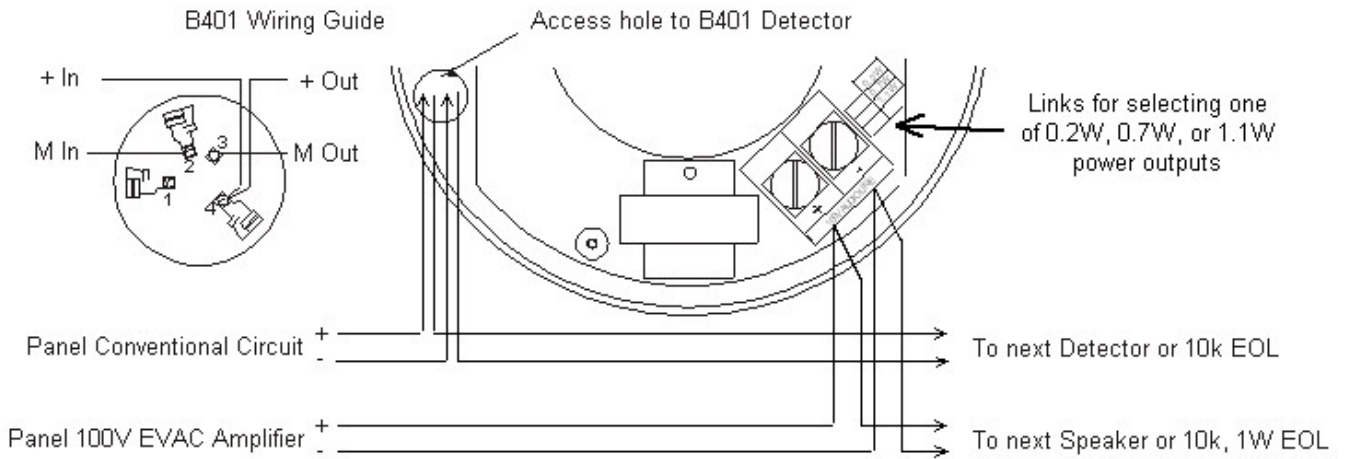


Figure 1

PSSB Drilling Template:

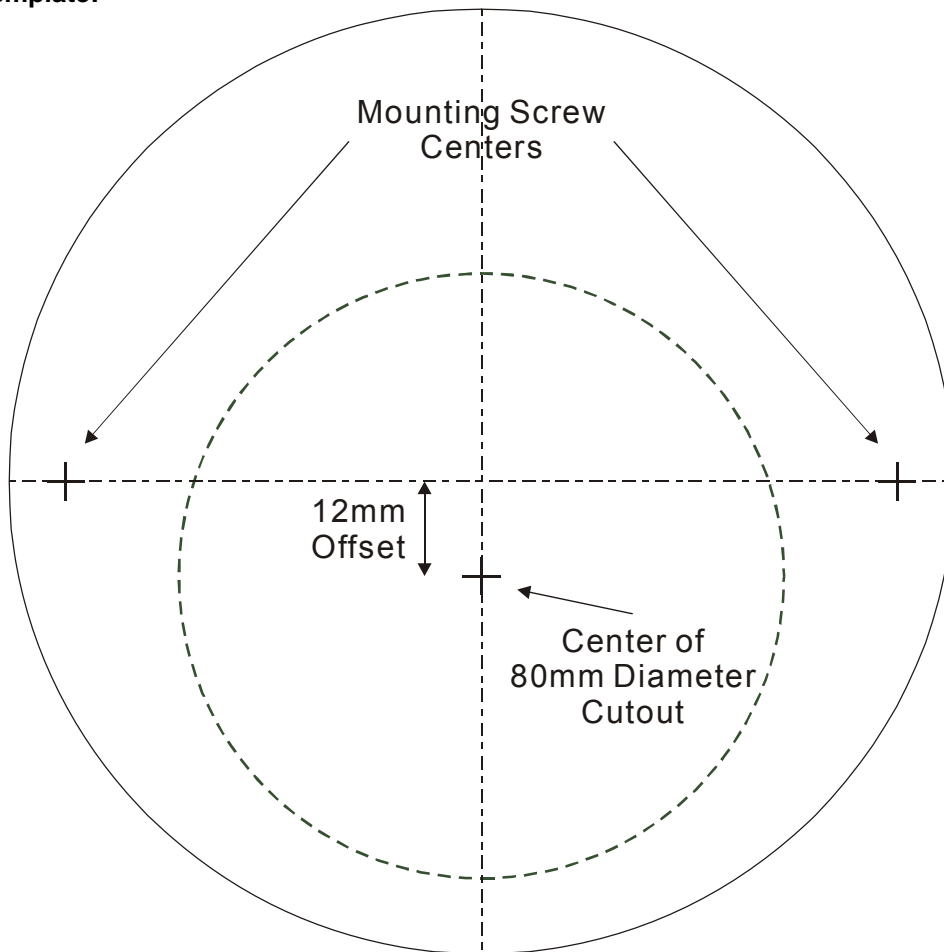


Figure 2

Product Codes:

| NZS Code | Description | NZFPA Listing No |
|----------|---|------------------|
| PSSB401 | Pertronic Speaker with B401 Conventional Base | PI/642 |
| PSS1-R | Pertronic Sounder Speaker: 1W Flush - Red | PI/641 |
| PSS1-W | Pertronic Sounder Speaker: 1W Flush - White | PI/641 |

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