Batteries for Fire Prevention Systems

Applications: smoke detectors, fire door systems, emergency alarm systems, and gas motion sensors

As the failure risk of fire prevention systems is not negligible, an extremely robust and reliable battery is required. This battery needs to withstand high temperatures, deliver high pulse currents and offer a long service life with low discharge rates.

KEY BENEFITS:
- No passivation
- Stable internal resistance
- No capacitor required
- Low self-discharge
- Large temperature range

Panasonic is the battery manufacturer with the most diverse product spectrum worldwide and more than 85 years of experience in the production of high-quality industrial batteries.

Our Lithium batteries are ideal for long-term use in safety-related applications. Due to our time-proven CR technology, which is not affected by passivation, the voltage is retained over a period of many years. As a result of long-term stable internal resistance, the cells always deliver reliable power and high pulse currents for more than 10 years.
**LITHIUM CYLINDRICAL TYPE BATTERIES**

**CR SERIES**

Panasonic CR SERIES
- Stable internal resistance
- Excellent pulse discharging characteristics
- Wide temperature range (-40°C to 70°C)
- Low self-discharge (<1% per year at 20°C)

**EXCELLENT PULSE DISCHARGING CHARACTERISTICS OF CR-2/3AZ**

**FEATURES OF CR-2/3AZ**
- Charge: Wide temperature range (-40°C to 70°C)
- Self-discharge: Under 1% per year (at 20°C)
- Life: 10 years durable cell**
- Safety: IEC60086 and UL1642 compliant

**SUITABLE BATTERIES**

<table>
<thead>
<tr>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Diameter (mm)</td>
<td>15.6</td>
<td>17.0</td>
<td>17.0</td>
<td>14.5</td>
</tr>
<tr>
<td>Height (mm)</td>
<td>27.0</td>
<td>33.5</td>
<td>45.5</td>
<td>50.5</td>
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<tr>
<td>Approximate weight (g)</td>
<td>11.0</td>
<td>17.0</td>
<td>24.0</td>
<td>18.0</td>
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<tr>
<td>Nominal voltage (V)</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
<td>3.0</td>
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<tr>
<td>Nominal capacity (mAh)</td>
<td>1,000</td>
<td>1,600</td>
<td>2,400</td>
<td>1,800</td>
</tr>
<tr>
<td>Ambient temperature (°C)</td>
<td>-40 to 75</td>
<td>-40 to 70</td>
<td>-40 to 70</td>
<td>-40 to 85</td>
</tr>
</tbody>
</table>

**Applications**
- Smoke detectors
- Fire door systems
- Emergency alarm systems
- Gas motion sensors

*Values for expected battery life are reference values only. The expected life varies depending on the conditions in which the battery is used. The battery performance is strongly affected by how the batteries are used. The data in this document are for descriptive purposes only and are not intended to make or imply any guarantee or warranty.*