# Yuasa Technical Data Sheet

**Yuasa NPC24-12I Industrial VRLA Battery**

## Specifications

| | |
|---|---|
| Nominal voltage (V) | 12 |
| 20-hr rate Capacity to 10.5V at 20°C (Ah) | 24 |
| 10-hr rate Capacity to 10.8V at 20°C (Ah) | 22.2 |

## Dimensions

| | |
|---|---|
| Length (mm) | 166 (±2) |
| Width (mm) | 175 (±1) |
| Height (mm) | 125 (±0.5) |
| Mass (kg) | 9.9 |

## Terminal Type

| | |
|---|---|
| Threaded terminal - (M=Male or F=Female) | M5 (F) |
| Torque (Nm) | 2.5 |

## Operating Temperature Range

| | |
|---|---|
| Storage (in fully charged condition) | -20°C to +60°C |
| Charge | -15°C to +50°C |
| Discharge | -20°C to +60°C |

## Storage

| | |
|---|---|
| Capacity loss per month at 20°C (% approx.) | 3 |

## Case Material

| | |
|---|---|
| Standard | ABS (UL94:HB) |
| FR version available | UL94:V0 |

## Charge Voltage

| | |
|---|---|
| Float charge voltage at 20°C (V)/Block | 13.65 (±1%) |
| Float charge voltage at 20°C (V)/Cell | 2.275 (±1%) |
| Float Chg voltage tmp correction factor from std 20°C (mV) | -3 |
| Cyclic (or Boost) charge Voltage at 20°C (V)/Block | 14.5 (±3%) |
| Cyclic (or Boost) charge Voltage at 20°C (V)/Cell | 2.42 (±3%) |
| Cyclic Chg voltage tmp correction factor from std 20°C (mV) | -4 |

## Charge Current

| | |
|---|---|
| Float charge current limit (A) | No limit |
| Cyclic (or Boost) charge current limit (A) | 6 |

## Maximum Discharge Current

| | |
|---|---|
| 1 second (A) | 500 |
| 1 minute (A) | 240 |

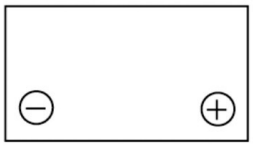
## Cyclic Life Data

| | |
|---|---|
| 100% DOD down to 80% capacity | 300 |
| 75% DOD down to 80% capacity | 500 |
| 50% DOD down to 80% capacity | 600 |
| 25% DOD down to 80% capacity | 1400 |

## Impedance

| | |
|---|---|
| Measured at 1 kHz (mΩ) | 10 |


## Layout



## 3rd Party Certifications

ISO9001 - Quality Management Systems
ISO14001 - Environmental Management Systems
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

bsi. ISO 9001 Quality Management Cert. No.: FM 10626

bsi. ISO 14001 Environmental Management Cert. No.: EMS 55229

## Safety

### Installation

Can be installed and operated in any orientation except permanently inverted.

### Handles

Batteries must not be suspended by their handles (where fitted).

### Vent valves

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

### Gas release

VRLA batteries release hydrogen gas which can form explosive mixtures in the air. Do not place inside a sealed container.

### Recycling

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and regulations.

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