# Yuasa Technical Data Sheet

# Yuasa NPL24-12I Industrial VRLA Battery

**Specifications** 

Nominal voltage (V) 12 10-hr rate Capacity to 1.8V/Cell at 20°C (Ah) 22.2 20-hr rate Capacity to 1.75V/Cell at 20°C (Ah) 24

**Dimensions** 

Length (mm) 166 (±2) Width (mm) 175 (±1) 125 (±0.5) Height (mm) Mass (kg) 9.8

**Terminal Type** 

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

**Operating Temperature Range** 

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

Storage

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

**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 -3

20°C (mV)

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

20°C (mV)

**Charge Current** 

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

**Maximum Discharge Current** 

500 1 second (A) 1 minute (A) 150

**Short-Circuit Current & Internal Resistance** 

Internal resistance - according to EN IEC 60896-21 22.19

 $(m\Omega)$ 

Short-Circuit current - according to EN IEC 656 60896-21 (A)

**Impedance** 

9.5 Measured at 1 kHz (m $\Omega$ )

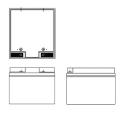
**Design Life & Approvals** 

**EUROBAT Classification: Long life** 10 to 12 years Yuasa design life at 20°C (yrs) up to 10 years





# Layout



## **3rd Party Certifications**

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







# 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.









