# Yuasa Technical Data Sheet

## Yuasa NP12-12FR Industrial VRLA Battery

**Specifications** 

Nominal voltage (V) 12 20-hr rate capacity to 1.75v per cell at 20°C (Ah) 12 10-hr rate Capacity to 1.75v per cell at 20°C (Ah) 11.1

**Dimensions** 

Length (mm) $151 (\pm 1)$ Width (mm) $98 (\pm 1)$ Height over terminals (mm) $97.5 (\pm 2)$ Mass (kg)4.05

**Terminal Type** 

FASTON - Quickfit / release (IST where stated) 6.35

**Operating Temperature Range** 

Storage (in fully charged condition)  $-20^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$  Charge  $-15^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$  Discharge  $-20^{\circ}\text{C}$  to  $+60^{\circ}\text{C}$ 

**Storage** 

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

**Case Material** 

Standard ABS (UL94:V0)

**Charge Voltage** 

Float charge voltage at 20°C (V)/Block 13.65 ( $\pm$ 1%) Float charge voltage at 20°C (V)/Cell 2.275 ( $\pm$ 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 2.42 (±3%)

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) 3

**Maximum Discharge Current** 

1 second (A) 360 1 minute (A) 75

**Short-Circuit Current & Internal Resistance** 

Internal resistance - according to EN IEC 60896-21 44.39

 $(m\Omega)$ 

Short-Circuit current - according to EN IEC 320

60896-21 (A)

Impedance Measured at 1 kHz (m $\Omega$ ) 16

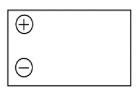
**Design Life & Approvals** 

EUROBAT Classification: Standard Commercial 3 to 5 years Yuasa design life at 20°C (yrs) up to 5





# Layout



## **3rd Party Certifications**

ISO9001 - Quality Management Systems



# 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.







