## Yuasa Technical Data Sheet

#### Yuasa NPW45-12 Industrial VRLA Battery

Specifications	
Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C	252
(W/Block)	
10m rate Constant Power (Typ) to 1.6V/cell at	42
20°C (W/Cell)	
20-hr rate Capacity to 10.5V at 20°C (Ah)	8.5
10-hr rate Capacity to 10.8V at 20°C (Ah)	7.42



Length (mm)	151 (±1)
Width (mm)	65 (±1)
Height (mm)	94 (±1)
Height over terminals (mm)	97.5 (±2)
Mass (kg)	2.7

**Terminal Type** 

FASTON - Quickfit / release (JST where stated) 6.35

**Operating Temperature Range** 

Storage (in fully charged condition)  $-15^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$  Charge  $-0^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$  Discharge  $-15^{\circ}\text{C}$  to  $+50^{\circ}\text{C}$ 

**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 ( $\pm$ 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  $20^{\circ}$ C (V)/Block 14.5 ( $\pm 3\%$ ) Cyclic (or Boost) charge Voltage at  $20^{\circ}$ C (V)/Cell 2.42 ( $\pm 3\%$ ) 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) 2.125

**Maximum Discharge Current** 

1 second (A) 105 1 minute (A) 42

**Impedance** 

Measured at 1 kHz (m $\Omega$ ) 24

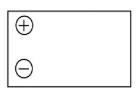
**Design Life & Approvals** 

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





#### Layout



### **3rd Party Certifications**

ISO9001 - Quality 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.









