# Yuasa Technical Data Sheet

## Yuasa REC50-12I Industrial VRLA Battery

Specifications	
Nominal voltage (V)	12
20-hr rate Capacity to 10.5V at 20°C (Ah)	50
10-hr rate Capacity to 10.8V at 20°C (Ah)	40

**Dimensions** 

 Length (mm)
 197 (±2)

 Width (mm)
 165 (±2)

 Height (mm)
 175 (±2)

 Mass (kg)
 15.3

**Terminal Type** 

Threaded terminal - (M=Male or F=Female) M5 (F)
Torque (Nm) 2-3Nm

**Operating Temperature Range** 

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

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°C (V)/Block 14.52 ( $\pm$ 3%) Cyclic (or Boost) charge Voltage at 20°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) 12.5 Cyclic (or Boost) charge current limit (A) 12.5

**Maximum Discharge Current** 

1 second (A) 400 1 minute (A) 185

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

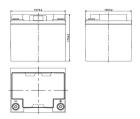
Impedance

Measured at 1 kHz (m $\Omega$ ) 5.7





# 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.









