# Yuasa Technical Data Sheet

## Yuasa NP38-12I Industrial VRLA Battery

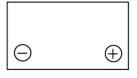
Specifications
----------------

DimensionsLength (mm)197 (±1)Width (mm)165 (±1)Height (mm)170 (±2)Mass (kg)14.2Terminal TypeM5 (F)Threaded terminal - (M=Male or F=Female)M5 (F)Torque (Nm)2.45Operating Temperature RangeStorage (in fully charged condition)Storage (in fully charged condition)-20°C to +60°CCharge-15°C to +50°CDischarge-20°C to +60°CCharge-20°C to +60°CBacity loss per month at 20°C (% approx.)3StandardABS (UL94:HB)FR version availableUL94:V0Float charge voltage at 20°C (V/Block13.65 (±1%)Float charge voltage at 20°C (V/Cell2.275 (±1%)Float charge voltage at 20°C (V/Cell-320°C (mV)-3Cyclic (or Boost) charge Voltage at 20°C (V/Cell2.42 (±3%)Cyclic Chg voltage tmp correction factor from std-3Cyclic Chg voltage tmp correction factor from std-320°C (mV)-3Cyclic (or Boost) charge Voltage at 20°C (V/Cell2.42 (±3%)Cyclic Chg voltage tmp correction factor from std-3Cyclic Chg voltage t
Threaded terminal - (M=Male or F=Female) Torque (Nm)M5 (F) 2.45Operating Temperature Range2.45Storage (in fully charged condition) Charge-20°C to +60°C -15°C to +50°C 20°C to +60°CDischarge-20°C to +60°CDischarge-20°C to +60°CStorage Capacity loss per month at 20°C (% approx.)3Case Material Standard FR version availableUL94:W0Charge Voltage Float charge voltage at 20°C (V)/Block Float charge voltage at 20°C (V)/Cell Float Chg voltage tmp correction factor from std 20°C (mV)3.65 (±1%) 2.275 (±1%)Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell4.5 (±3%) 2.42 (±3%)Cyclic Chg voltage tmp correction factor from std Cyclic Chg voltage tmp correction factor from std14.5 (±3%) 2.42 (±3%)
Storage (in fully charged condition)-20°C to +60°CCharge-15°C to +50°CDischarge-20°C to +60°CStorage-20°C to +60°CStorage-20°C to +60°CStandardAStandardABS (UL94:HB)FR version availableUL94:V0Charge Voltage-20°C (V)/BlockFloat charge voltage at 20°C (V)/Cell2.275 (±1%)Float Charge voltage at 20°C (V)/Cell-320°C (mV)-3Cyclic (or Boost) charge Voltage at 20°C (V)/Block14.5 (±3%)Cyclic Chg voltage tmp correction factor from std-4
Capacity loss per month at 20°C (% approx.)3Case MaterialXBS (UL94:HB)StandardABS (UL94:HB)FR version availableUL94:V0Charge VoltageFloat charge voltage at 20°C (V)/Block13.65 (±1%)Float charge voltage at 20°C (V)/Cell2.275 (±1%)Float Chg voltage tmp correction factor from std-320°C (mV)VCyclic (or Boost) charge Voltage at 20°C (V)/Block14.5 (±3%)Cyclic Chg voltage tmp correction factor from std-4
StandardABS (UL94:HB)FR version availableUL94:V0Charge VoltageUL94:V0Float charge voltage at 20°C (V)/Block13.65 (±1%)Float charge voltage at 20°C (V)/Cell2.275 (±1%)Float Chg voltage tmp correction factor from std-320°C (mV)VCyclic (or Boost) charge Voltage at 20°C (V)/Block14.5 (±3%)Cyclic Chg voltage tmp correction factor from std2.42 (±3%)
Float charge voltage at 20°C (V)/Block13.65 (±1%)Float charge voltage at 20°C (V)/Cell2.275 (±1%)Float Chg voltage tmp correction factor from std-320°C (mV)Cyclic (or Boost) charge Voltage at 20°C (V)/Block14.5 (±3%)Cyclic (or Boost) charge Voltage at 20°C (V)/Cell2.42 (±3%)Cyclic Chg voltage tmp correction factor from std-4
Cyclic (or Boost) charge Voltage at 20°C (V)/Block14.5 (±3%)Cyclic (or Boost) charge Voltage at 20°C (V)/Cell2.42 (±3%)Cyclic Chg voltage tmp correction factor from std-4
Charge CurrentNo limitFloat charge current limit (A)No limitCyclic (or Boost) charge current limit (A)9.5
Maximum Discharge Current1 second (A)5001 minute (A)200
<b>Short-Circuit Current &amp; Internal Resistance</b> Internal resistance - according to EN IEC 60896-21 18.22 (mΩ)
Short-Circuit current - according to EN IEC 804 60896-21 (A)
<b>Impedance</b> Measured at 1 kHz (mΩ) 9
Design Life & ApprovalsEUROBAT Classification: Standard Commercial3 to 5 yearsYuasa design life at 20°C (yrs)up to 5VdS (Germany)VdS No: G 182024





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.





Data Sheet generated on 19/11/2021 - E&OE

The world's leading battery manufacturer

www.yuasaeurope.com