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 (W/Block)	256
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	42.8
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah) 20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	6.6 7.5
Dimensions	
Length (mm) Width (mm)	151 (±1) 65 (±1)
Height (mm)	94 (±1)
Height over terminals (mm) Mass (kg)	97.5 (±2) 2.7
Terminal Type	
FASTON - Quickfit / release (JST where stated)	6.35
Operating Temperature Range Storage (in fully charged condition)	-15°C to +40°C
Charge	-0°C to +40°C
Discharge	-15°C to +50°C
Storage Capacity loss per month at 20°C (% approx.)	3
Case Material	
Standard FR version available	ABS (UL94:HB) UL94:V0
Charge Voltage	
Float charge voltage at 20°C (V)/Block	13.65 (±1%) 2 275 (+1%)
Float charge voltage at 20°C (V)/Block Float charge voltage at 20°C (V)/Cell Float Chg voltage tmp correction factor from std	13.65 (±1%) 2.275 (±1%) -3
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)	2.275 (±1%) -3
Float charge voltage at 20°C (V)/Block Float charge voltage at 20°C (V)/Cell Float Chg voltage tmp correction factor from std	2.275 (±1%) -3
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) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%)
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) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std 20°C (mV)	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%)
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) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std 20°C (mV) Charge Current Float charge current limit (A)	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%) -4
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) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std 20°C (mV) Charge Current Float charge current limit (A) Cyclic (or Boost) charge current limit (A)	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%) -4
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) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std 20°C (mV) Charge Current Float charge current limit (A) Cyclic (or Boost) charge current limit (A) Maximum Discharge Current	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%) -4 1.9 1.9
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) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std 20°C (mV) Charge Current Float charge current limit (A) Cyclic (or Boost) charge current limit (A)	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%) -4
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) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std 20°C (mV) Charge Current Float charge current limit (A) Cyclic (or Boost) charge current limit (A) Maximum Discharge Current 1 second (A) 1 minute (A) Impedance	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%) -4 1.9 1.9 105 42
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) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std 20°C (mV) Charge Current Float charge current limit (A) Cyclic (or Boost) charge current limit (A) Maximum Discharge Current 1 second (A) 1 minute (A) Impedance Measured at 1 kHz (mΩ)	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%) -4 1.9 1.9
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) Cyclic (or Boost) charge Voltage at 20°C (V)/Block Cyclic (or Boost) charge Voltage at 20°C (V)/Cell Cyclic Chg voltage tmp correction factor from std 20°C (mV) Charge Current Float charge current limit (A) Cyclic (or Boost) charge current limit (A) Maximum Discharge Current 1 second (A) 1 minute (A) Impedance	2.275 (±1%) -3 14.5 (±3%) 2.42 (±3%) -4 1.9 1.9 105 42





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3rd Party Certifications

ISO9001 - Quality Management Systems



Safety

Installation

Can be installed and operated in orientations up to 90° from the upright position.

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.



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