

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)	273
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	42
20-hr rate Capacity to 10.5V at 20°C (Ah)	7.5
10-hr rate Capacity to 10.8V at 20°C (Ah)	6.6

Dimensions

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°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	ABS (UL94:HB)
FR version available	UL94:V0

Charge Voltage

Float charge voltage at 20°C (V)/Block	13.65 (±1%)
Float charge voltage at 20°C (V)/Cell	2.275 (±1%)
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
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 20°C (mV)	-4

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 (mΩ)	24
------------------------	----

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.

Data Sheet generated on 29/01/2023 - E&OE

