

Yuasa Technical Data Sheet

Yuasa SWL+4000-12FR Industrial VRLA Battery



Specifications

Nominal voltage (V)	12
10m rate Constant Power (Typ) to 9.6V at 20°C (W/Block)	4000
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (W/Cell)	667
10-hr rate Capacity to 1.8V/Cell at 20°C (Ah)	124
20-hr rate Capacity to 1.75V/Cell at 20°C (Ah)	135

Dimensions

Length (mm)	350 (±3)
Width (mm)	173 (±2)
Height (mm)	272 (±2)
Mass (kg)	49.2

Terminal Type

Threaded terminal - (M=Male or F=Female)	M8 (F)
Torque (Nm)	6

Operating Temperature Range

Storage (in fully charged condition)	-20°C to +60°C
Charge	-15°C to +50°C
Discharge	-20°C to +60°C

Storage

Capacity loss per month at 20°C (% approx.)	3
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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)	31

Maximum Discharge Current

1 second (A)	1200
1 minute (A)	600

Short-Circuit Current & Internal Resistance

Short-Circuit current - according to EN IEC 60896-21 (A)	3000
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Impedance

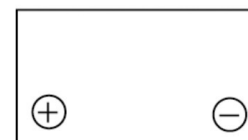
Measured at 1 kHz (mΩ)	3
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Design Life & Approvals

EUROBAT Classification: Very Long Life	12+ years
Yuasa design life at 20°C (yrs)	up to 15 years



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 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.

