# Yuasa Technical Data Sheet

## Yuasa SWL1100FR Industrial VRLA Battery

**Specifications** 

Nominal voltage (V) 10m rate Constant Power (Typ) to 9.6V at 20°C 1202 (W/Block)

10m rate Constant Power (Typ) to 1.6V/cell at 200

20°C (W/Cell)

20-hr rate Capacity to 10.5V at 20°C (Ah) 40.6 10-hr rate Capacity to 10.8V at 20°C (Ah) 39.6

**Dimensions** 

Length (mm) 197 (±2) Width (mm) 165 (±1) 170 (±2) Height (mm) Mass (kg) 14.5

**Terminal Type** 

Threaded terminal - (M=Male or F=Female) M5 (F) Torque (Nm) 2.5

**Operating Temperature Range** 

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

**Storage** 

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

**Case Material** 

Standard ABS (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)

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 -4

20°C (mV)

**Charge Current** 

Float charge current limit (A) No limit Cyclic (or Boost) charge current limit (A) 9.9

**Maximum Discharge Current** 

1 second (A) 500 200 1 minute (A)

**Short-Circuit Current & Internal Resistance** 

Internal resistance - according to EN IEC 60896-21 14.4

Short-Circuit current - according to EN IEC 1005

60896-21 (A)

**Impedance** 

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

**Design Life & Approvals** 

EUROBAT Classification: Long life 10 to 12 years Yuasa design life at 20°C (yrs) up to 10 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 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.











