# Yuasa Technical Data Sheet

### Yuasa SWL1800FR Industrial VRLA Battery

Specifications	
Nominal voltage (V) 10m rate Constant Power (Typ) to 9.6V at 20°C	12 1974
(W/Block) 10m rate Constant Power (Typ) to 1.6V/cell at	300
20°C (W/Cell) 20-hr rate Capacity to 10.5V at 20°C (Ah) 10-hr rate Capacity to 10.8V at 20°C (Ah)	57.6 55
Dimensions	55
Length (mm)	216 (±3)
Width (mm)	168 (±2)
Height (mm) Mass (kg)	223 (±1) 23.2
Terminal Type	
Threaded terminal - (M=Male or F=Female) Torque (Nm)	M6 (F) 4.8
Operating Temperature Range	
Storage (in fully charged condition)	-20°C to +50°C
Charge Discharge	-15°C to +50°C -20°C to +60°C
Storage	20 2 10 00 2
Capacity loss per month at 20°C (% approx.)	3
Case Material	
Standard	ABS (UL94:V0)
<b>Charge Voltage</b> 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)	13.75
Maximum Discharge Current 1 second (A)	800
1 minute (A)	500
Short-Circuit Current & Internal Resistance	
Internal resistance - according to EN IEC 60896-21	10.09
(mΩ) Short-Circuit current - according to EN IEC	1437
60896-21 (A)	
Impedance	G
Measured at 1 kHz (m $\Omega$ )	6
Design Life & Approvals EUROBAT Classification: Long life	10 to 12
Yuasa design life at 20°C (yrs)	up to 10





Layout



## **3rd Party Certifications**

ISO9001 - Quality Management Systems ISO14001 - Environmental Management Systems EN 18001 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.



YUAS

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