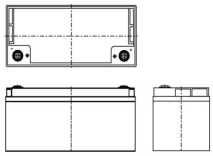
Yuasa Technical Data Sheet

Yuasa NPL78-12IFR 12V 78Ah - Yuasa NPL series general purpose AGM VRLA battery

Specifications	
Nominal Voltage (V)	12 V
10m rate Constant Power (Typ) to 9.6V at 20°C (/Block)	1681.38
10m rate Constant Power (Typ) to 1.6V/cell at 20°C (/Cell)	280.23
20-hr rate Capacity to 1.75V /Cell at 20°C (Ah)	78
10-hr rate Capacity to 1.8V /Cell at 20°C (Ah)	72.1
Dimensions	
Length (mm)	380 (±2)
Width (mm)	166 (±1)
Height (mm)	174 (±0.5)
Weight (kg)	27.5
Terminal Type	
Terminal Type	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
Case Material	
Case Material	ABS (UL94:V0)
Standard or FR Case	FR
Charge Voltage	
Float charge voltage at 20°C /Block (±1%)	13.65
Float charge voltage at 20°C /Cell (±1%)	2.275
Float Chg voltage tmp correction factor from std 20°C (mV)	-3
Cyclic (or Boost) charge Voltage at 20°C (V) /Block (±3%)	14.5
Cyclic (or Boost) charge Voltage at 20°C (V) /Cell (±3%)	2.42
Cyclic Chg voltage tmp correction factor from std 20°C (mV)	-4
Charge Current	
Float charge current limit (A)	19.5
Cyclic (or Boost) charge current limit (A)	19.5
Maximum Discharge Current	
Maximum discharge current 1s (A)	800
Maximum discharge current 1m (A)	500
Short-Circuit Current & Internal Resistance	
Short-Circuit current - according to EN IEC 60896-21 (A)	800
Internal resistance (mΩ) measured at 1 kHz	5
Design Life & Approvals	
EUROBAT Classification	Long life: 10 to 12 years
Yuasa design life at 20°C (yrs)	Up to 10 years



Layout



Certifications

ISO9001 Quality Management Systems
ISO14001 Environmental Management System
ISO45001 OHSAS Management Systems
UNDERWRITERS LABORATORIES Inc.

Cert. No: FM 10626 | Cert. No: EMS 55229 | Certificate No: OHS 532991

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.