



Yuasa NPL78-12IFR Industrial VRLA Battery

Specifications

| | |
|---|-------|
| Nominal voltage (V) | 12 |
| 20-hr rate Capacity to 10.5V at 20°C (Ah) | 78 |
| 10-hr rate Capacity to 10.8V at 20°C (Ah) | 68.64 |

Dimensions

| | |
|-------------|------------|
| Length (mm) | 380 (±0.7) |
| Width (mm) | 166 (±0.5) |
| Height (mm) | 174 (±0.5) |
| Mass (kg) | 27.5 |

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 +50°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

| | |
|----------|---------------|
| 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) | -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) | 19.5 |

Maximum Discharge Current

| | |
|--------------|-----|
| 1 second (A) | 800 |
| 1 minute (A) | 500 |

Impedance

| | |
|------------------------|----|
| Measured at 1 kHz (mΩ) | <5 |
|------------------------|----|

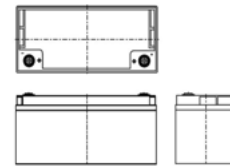
Design Life & Approvals

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

Art. no: SAANPL78-12IFR



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.

