



**Yuasa NPL24-12I Industrial VRLA Battery**

**Specifications**

Nominal voltage (V)	12
20-hr rate Capacity to 10.5V at 20°C (Ah)	24
10-hr rate Capacity to 10.8V at 20°C (Ah)	21.12

**Dimensions**

Length (mm)	166 (±0.5)
Width (mm)	175 (±0.5)
Height (mm)	125 (±0.5)
Mass (kg)	9

**Terminal Type**

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

**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)	6

**Maximum Discharge Current**

1 second (A)	500
1 minute (A)	150

**Short-Circuit Current & Internal Resistance**

Internal resistance - according to EN IEC 60896-21 (mΩ)	22.19
Short-Circuit current - according to EN IEC 60896-21 (A)	656

**Impedance**

Measured at 1 kHz (mΩ)	9.5
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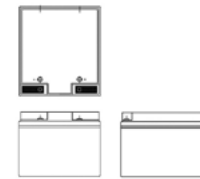
**Design Life & Approvals**

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

Art. no: SAANPL24-12I



**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.

