# **Data Sheet**

## NPW-Series - Valve Regulated Lead Acid Battery NPW45-12 (FR)

| SPECIFICATIONS   |                          |             |  |  |  |  |
|--|--------------------------|-------------|--|--|--|--|
| Nominal voltage  | 12                       | V           |  |  |  |  |
| 20-hr rate Capacity to 1.75VPC at 20°C   | 8.5                      | Ah          |  |  |  |  |
| 10-hr rate Capacity to 1.75VPC at 20°C   | 7.42                     | Ah          |  |  |  |  |
| DIMENSIONS   |                          |             |  |  |  |  |
| Length   | 151 (±1)                 | mm          |  |  |  |  |
| Width  | 65 (±1)                  | mm          |  |  |  |  |
| Height   | 94 (±1)                  | mm          |  |  |  |  |
| (height over terminals)  | 97.5 (±2)                | mm          |  |  |  |  |
| Mass (typical)   | 2.7                      | kg          |  |  |  |  |
| TERMINAL TYPE  |                          |             |  |  |  |  |
| FASTON (Quickfit / release)  | 6.35                     | mm          |  |  |  |  |
| OPERATING TEMPERATURE RANGE  |                          |             |  |  |  |  |
| Storage  | -15°C to +40°C           |             |  |  |  |  |
| Charge   | -0°C to +40°C            |             |  |  |  |  |
| Discharge  | -15°C to +50°C           |             |  |  |  |  |
| STORAGE  |                          |             |  |  |  |  |
| Capacity loss per month at 20°C (approx)   | 3                        | %           |  |  |  |  |
| CASE MATERIAL  |                          |             |  |  |  |  |
| Standard Option  |                          |             |  |  |  |  |
| Flame retardant option (FR)  | ABS (UL94:V0)            |             |  |  |  |  |
| CHARGE VOLTAGE   |                          | , ,         |  |  |  |  |
| Float charge voltage at 20°C   | 13.65 (±1%)              | V           |  |  |  |  |
| Float charge voltage at 20 C   | 2.275 (±1%)              | V/cell      |  |  |  |  |
| Float Charge voltage temperature correction factor<br>(for variations from the standard 20°C)  | -3                       | mV/cell/°C  |  |  |  |  |
| Cyclic (or Boost) charge at 20°C   | 14.5 (±3%)<br>2.42 (±3%) | V<br>V/cell |  |  |  |  |
| Cyclic Charge voltage temperature correction factor<br>(for variations from the standard 20°C) | -4                       | mV/cell/°C  |  |  |  |  |
| CHARGE CURRENT   |                          |             |  |  |  |  |
| Float charge current limit   | No limit                 | A           |  |  |  |  |
| Cyclic (or Boost) charge current limit   | 2.125                    | A           |  |  |  |  |
| MAXIMUM DISCHARGE CURRENT  |                          |             |  |  |  |  |
| 1 second   | 105                      | A           |  |  |  |  |
| 1 minute   | 42                       | A           |  |  |  |  |
| SHORT-CIRCUIT CURRENT & INTERNAL RESISTANCE  |                          |             |  |  |  |  |
| (according to EN IEC 60896-21)   |                          |             |  |  |  |  |
| Internal resistance  | N/A                      | mΩ          |  |  |  |  |
| Short-Circuit current  | N/A                      | A           |  |  |  |  |
| IMPEDANCE  |                          |             |  |  |  |  |
| Measured at 1 kHz  | 24                       | mΩ          |  |  |  |  |
| PERFORMANCE & CHARACTERISTICS  |                          |             |  |  |  |  |
| Refer to the technical manual  | NPW                      |             |  |  |  |  |
| DESIGN LIFE  |                          |             |  |  |  |  |
| EUROBAT Classification: Standard Commercial  | 3 to 5                   | years       |  |  |  |  |
|  |                          | -           |  |  |  |  |
| Yuasa design life @ 20°C   | up to 5                  | years       |  |  |  |  |
| 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  |                          |             |  |  |  |  |



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#### **3RD PARTY CERTIFICATIONS**

ISO 9001 - Quality Management Systems ISO 14001 - Environmental Management Systems EN 18001 - OHSAS Management Systems UNDERWRITERS LABORATORIES Inc.



### STANDARDS

IEC61056







ALL DATA IS SUBJECT TO CHANGE WITHOUT NOTICE Issue No.: V.1 / Issue Date: July 2010



NP

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Gas Release

container

Recycling

regulations

Each cell is fitted with a low pressure release valve to allow gasses to escape and then reseal.

VRLA Batteries release hydrogen gas which can form explosive mixtures in air. Do not place inside a sealed

YUASA's VRLA batteries must be recycled at the end of life in accordance with local and national laws and