YUASA

NP SERIES
GENERAL PURPOSE BATTERIES

NP38-12B

RELIABILITY IS YOUR SECURITY
Utilizing the latest advance design Oxygen Recombination Technology, Yuasa have applied their 80 years experience in the lead acid battery field to produce the optimum design of Sealed Lead Acid batteries.

FEATURES
- Superb recovery from deep discharge
- Electrolyte suspension system
- Gas Recombination
- Multipurpose: Float or Cyclic use
- Usable in any orientation
- Superior energy density
- Lead calcium grids for extended life
- Manufactured World wide
- Application specific designs

TECHNICAL FEATURES

Sealed Construction
Yuasa's unique construction and sealing technique ensures no electrolyte leakage from case or terminals.

Electrolyte Suspension System
All NP batteries utilize Yuasa's unique electrolyte suspension system incorporating a microfine glass mat to retain the maximum amount of electrolyte in the cells. The electrolyte is retained in the separator material and there is no free electrolyte to escape from the cells. No gels or other contaminants are added.

Control of Gas Generation
The design of Yuasa's NP batteries incorporates the very latest oxygen recombination technology to effectively control the generation of gas during normal use.

Low Maintenance Operation
Due to the perfectly sealed construction and the recombination of gasses within the cell, the battery is almost maintenance free.

Terminals
NP batteries are manufactured using a range of terminals which vary in size and type. Please refer to details as shown.

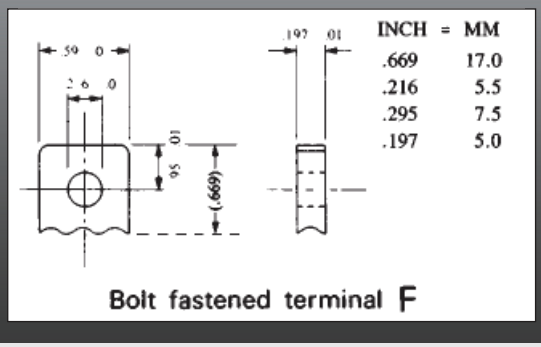
Operation in any Orientation
The combination of sealed construction and Yuasa's unique electrolyte suspension system allows operation in any orientation, with no loss of performance or fear of electrolyte leakage.

Valve Regulated Design
The batteries are equipped with a simple, safe, low pressure venting system which releases excess gas and automatically reseals should there be a build up of gas within the battery due to severe overcharge.
Note: Under no circumstances should the battery be charged in a sealed container.

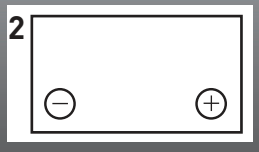
GENERAL SPECIFICATIONS

Nominal Capacity (Ah)	NP38-12B
20hr to 1.75vpc 30˚C	38
10hr to 1.75vpc 20˚C	35.3
5hr to 1.70vpc 20˚C	32.3
1hr to 1.60vpc 20˚C	22.8
Voltage	12
Energy Density (Wh.L.20hr)	83
Specific Energy (Wh.kg.20hr)	32
Int. Resistance (m.Ohms)	7.5
Maximum discharge (A)	300
Short Circuit current (A)	500
Dimensions (mm)	
Length	197
Width	165
Height overall	170
Weight (Kg)	14.2
Terminal	F
Layout	2
Terminal Torque Nm	2.45

TERMINALS



LAYOUT



Pb

GS YUASA
Creating the Future of Energy

NP SERIES – NP38-12B

GENERAL PURPOSE BATTERIES

LEAD CALCIUM GRIDS
The heavy duty lead calcium alloy grids provide an extra margin of performance and life in both cyclic and float applications and give unparalleled recovery from deep discharge.

LONG CYCLE SERVICE LIFE
Depending upon the average depth of discharge, over a thousand discharge/charge cycles can be expected.

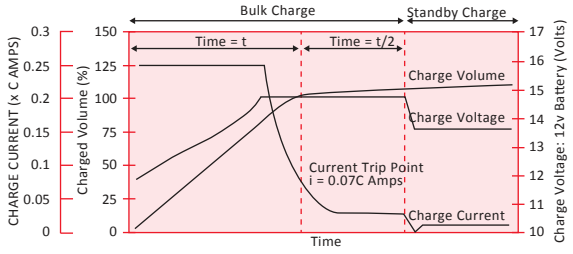
FLOAT SERVICE LIFE
The expected service life is five years in float standby applications.

SEPARATORS
The use of the special separator material provides a very efficient insulation between plates preventing inter-plate short circuits and prohibiting the shedding of active materials.

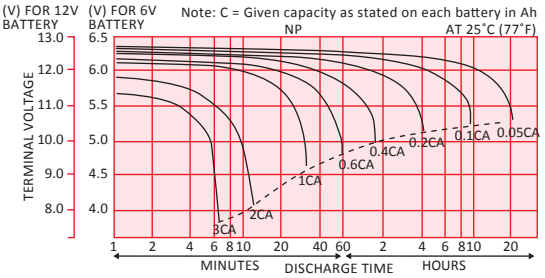
LONG SHELF LIFE
The extremely low self discharge rate allows the battery to be stored for extended periods up to one year at normal ambient temperatures with no permanent loss of capacity.

OPERATING TEMPERATURE RANGE
The batteries can be used over a broad temperature range permitting considerable flexibility in system design and location.
Charge – 15°C to 50°C
Discharge – 20°C to 60°C
Storage – 20°C to 50°C (fully charged battery)

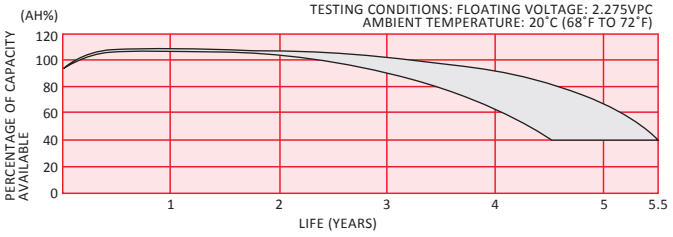
CYCLIC RECHARGE REGIME



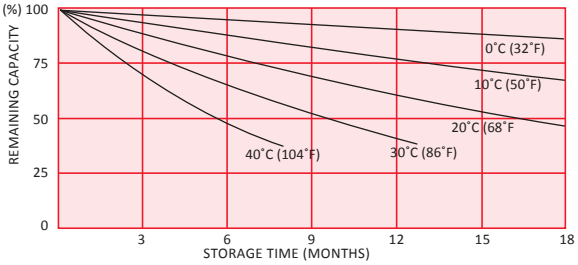
NP DISCHARGE CHARACTERISTICS CURVES AT 25°C (77°F)



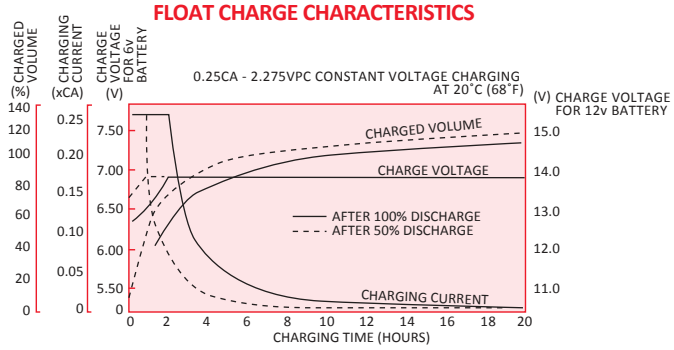
FLOAT SERVICE LIFE NP RANGE



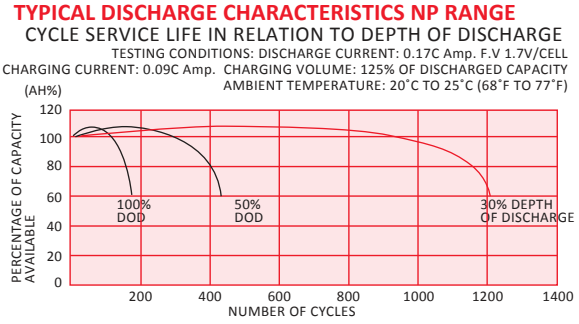
SELF DISCHARGE CHARACTERISTICS



FLOAT CHARGE CHARACTERISTICS



TYPICAL DISCHARGE CHARACTERISTICS NP RANGE
CYCLE SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE



ABOUT GS YUASA ENERGY SOLUTIONS, INC.
GS Yuasa Energy Solutions, Inc. is an American subsidiary of GS Yuasa Corporation, the world's second largest battery company and a 100+ year old Japanese corporation. GS Yuasa Energy Solutions (GYES) was formed in 2019 to address the growing energy storage and reserve power markets. GYES brings together and leverages GS Yuasa Group's advanced technologies with proven American market successes in lithium, telecom, UPS, alarm & security, and energy storage into a single business unit.

Creating the Future of Energy

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