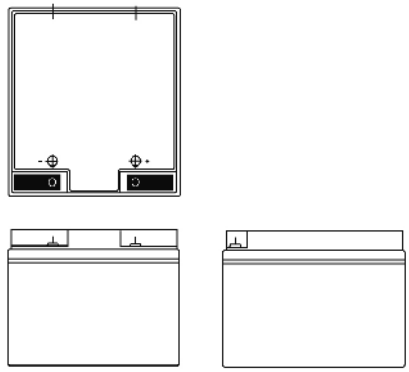
Data Sheet

NPL-Series - Valve Regulated Lead Acid Battery

NPL24-12I (FR)

SPECIFICATIONS		
Nominal voltage	12	V
20-hr rate Capacity to 10.5V at 20°C	24	Ah
10-hr rate Capacity to 10.8V at 20°C	21.12	Ah
DIMENSIONS		
Length	166 (±0.5)	mm
Width	175 (±0.5)	mm
Height	125 (±0.5)	mm
(height over terminals)	N/A	mm
Mass (typical)	9.0	kg
TERMINAL TYPE		
Female threaded terminal	M5	mm
Torque	2.5	Nm
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		
Standard Option	ABS (UL.94:HB)	
Flame retardant option (FR)	ABS (UL94:V0)	
CHARGE VOLTAGE		
Float charge voltage at 20°C	13.65 (±1%) 2.275 (±1%)	V V/cell
Float Charge voltage temperature correction factor (for variations from the standard 20°C)	-3	mV/cell/°C
Cyclic (or Boost) charge at 20°C	14.5 (±3%) 2.42 (±3%)	V V/cell
Cyclic Charge voltage temperature correction factor (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	6.00	A
MAXIMUM DISCHARGE CURRENT		
1 second	22.19	A
1 minute	656	A
SHORT-CIRCUIT CURRENT & INTERNAL RESISTANCE		
(according to EN IEC 60896-21)		
Internal resistance	22.19	mΩ
Short-Circuit current	656	A
IMPEDANCE		
Measured at 1 kHz	9.5	mΩ
PERFORMANCE & CHARACTERISTICS		
Refer to the technical manual	NPL	
DESIGN LIFE		
EUROBAT Classification: High performance	10 to 12	years
Yuasa design life @ 20°C	up to 10	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 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 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		

LAYOUT



3RD PARTY CERTIFICATIONS

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

STANDARDS

IEC61056
IEC60896-21/22

ALL DATA IS SUBJECT TO CHANGE WITHOUT NOTICE

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