

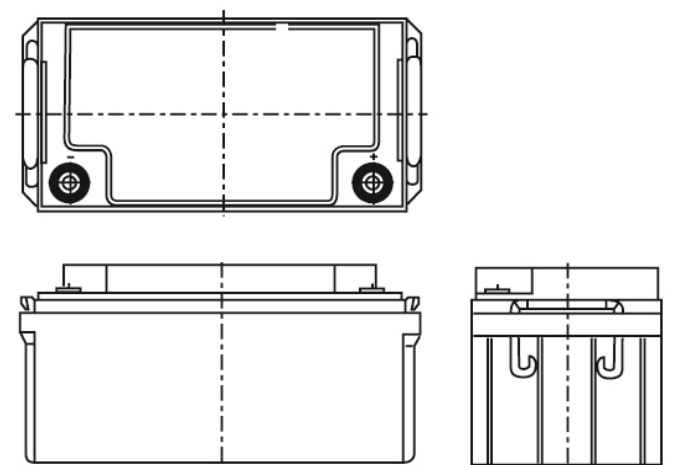
## NPL-Series - Valve Regulated Lead Acid Battery

### NPL65-12I (FR)

SPECIFICATIONS		
Nominal voltage	12	V
20-hr rate Capacity to 10.5V at 20°C	65	Ah
10-hr rate Capacity to 10.8V at 20°C	57.2	Ah
DIMENSIONS		
Length	350 (±0.7)	mm
Width	166 (±0.5)	mm
Height	174 (±0.5)	mm
(height over terminals)	N/A	mm
Mass (typical)	23.0	kg
TERMINAL TYPE		
Female threaded terminal	M6	mm
Torque	4.8	Nm
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 Option	ABS (UL.94:HB)	
Flame retardant option (FR)	ABS (UL94:V0)	
CHARGE VOLTAGE		
Float charge voltage at 20°C	13.65 (±1%)	V
	2.275 (±1%)	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%)	V
	2.42 (±3%)	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	16.25	A
MAXIMUM DISCHARGE CURRENT		
1 second	800	A
1 minute	500	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	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



This battery type must never be installed permanently suspended by their handles

#### 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

Issue No.: V.1 / Issue Date: July 2010



YUASA BATTERY SALES UK LTD.  
 Unit 22  
 Rassau Industrial Estate  
 Ebbw Vale, Gwent  
 NP23 5SD  
 UK