



GS PE12V18

Rechargeable Sealed Lead - Acid (VRLA) Battery

PORTALAC

PE Series



Nominal Voltage **12** Volt

20 Hour Rate Capacity **18** Ah

Dimensions	mm	Inches	Tolerance
Length	181	7.13	+/- 1mm (0.04In)
Width	76	2.99	+/- 1mm (0.04In)
Case Height	167	6.57	+/- 1mm (0.04In)
Terminal Height	167	6.57	+/- 2mm (0.08In)

Weight

	Kg.	Lbs.	(approx.)
	6.45	14.22	

Case Material Synthetic Resin (ABS)

Terminal B1: M5 Bolt & Nut type

Maximum Short Duration Discharge Current
 (Maximum Duration: 1 Minute) 108 Amperes
 (Maximum Duration: 5 Seconds) 270 Amperes

Internal Resistance (Fully Charged Battery)
 8.1 mOhm (approx.)

Energy Density (@ 20 Hour Rate)
 94.03 Watt-Hours / Litre (1.54 Watt-Hours / Cubic Inch)

Specific Energy (@ 20 Hour Rate)
 33.49 Watt-Hours / Kg (15.19 Watt-Hours / Pound)

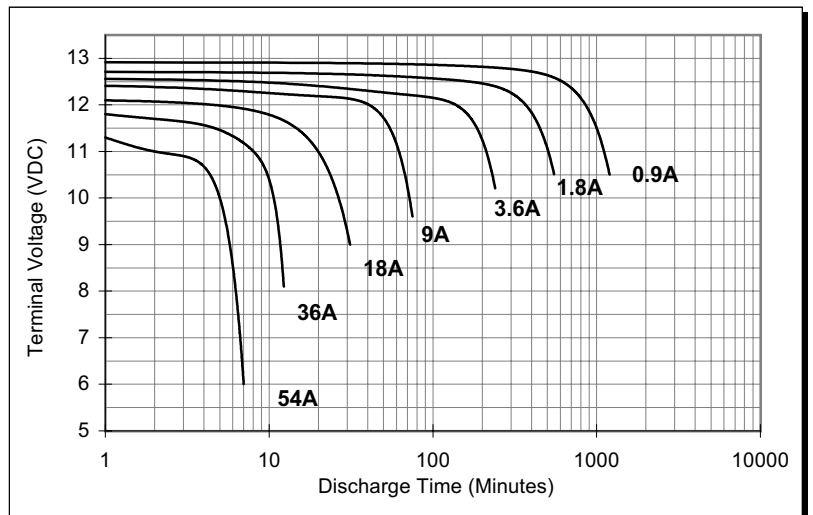
Operating Temperature Range
Discharge -20°C (-4°F) ~ 50°C (122°F)
Recharge 0°C (32°F) ~ 40°C (104°F)
Storage -20°C (-4°F) ~ 40°C (104°F)

Self Discharge Rate
 3% Per Month at 25°C (77°F)

Vibration Test No Loss in Capacity or Performance
 2000 Cycles Per Minute, 2.5 mm (0.10 Inch) Excursion, 2 Hours

Constant Current Discharge Characteristics (25°C / 77°F)

Discharge Time	Capacity in Ah's	Discharge Amperes	Final Voltage	Discharge C-Rate
20 Hrs	18.00	0.90	10.50	0.05
9 Hrs	16.50	1.80	10.50	0.10
4 Hrs	14.40	3.60	10.20	0.20
75 Min	11.25	9.00	9.60	0.50
31 Min	9.36	18.00	9.00	1.00
12 Min	7.38	36.00	8.10	2.00
7 Min	6.30	54.00	6.00	3.00



Constant Voltage Recharge Methods and Notes

Cyclic Application Recharge

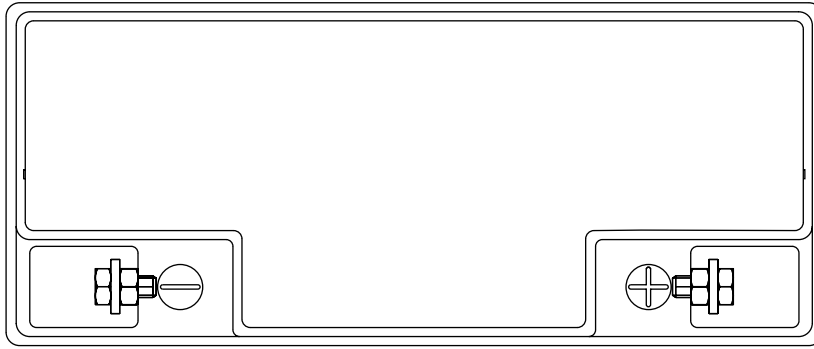
- Charge between 14.4 to 14.7 Volts DC. (2.4 to 2.45 Volts Per Cell.)
- Limit Initial Recharge Current to 4.5 Amperes or less. (Minimum Recommended is 1.8 Amperes.)
 (Higher charge currents may be used for Rapid recharge, provided a Heat Protection and/or Safety System is used - Consult with us.)
- Remove from Charge or switch to Standby Charge when Current draw falls to about 180 mA.
- When Recharge Voltage requires Temperature Compensation, use the coefficient of - 5mV / °C / Cell. Derate from 25°C and 2.45 VPC.


Standby Application Recharge

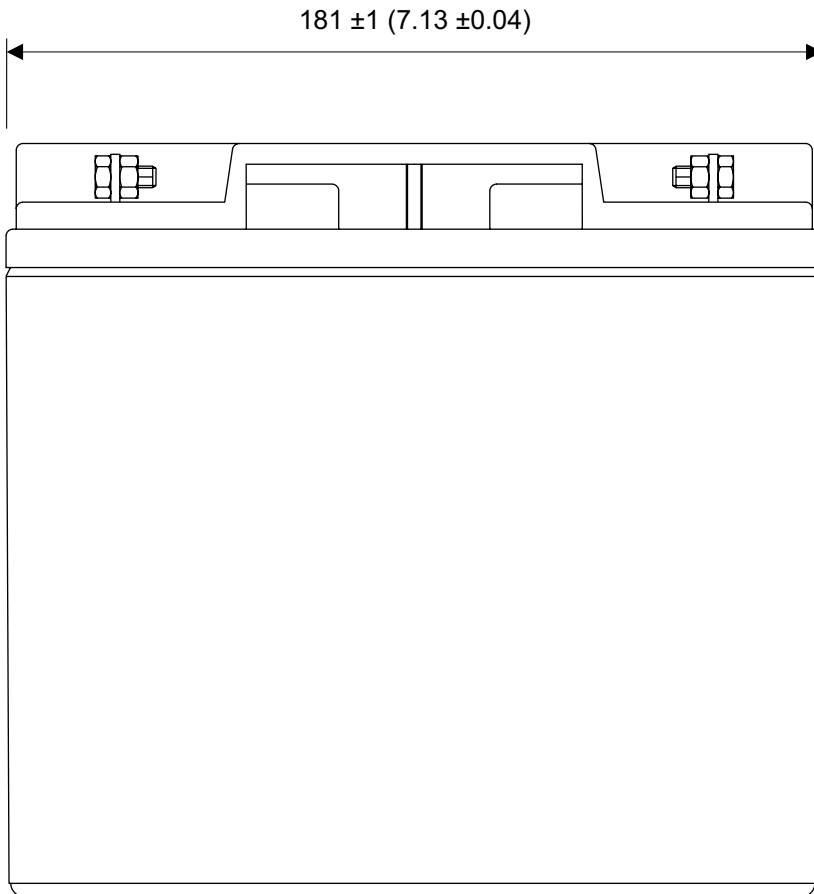
- Charge between 13.5 to 13.8 Volts DC. (2.25 to 2.3 Volts Per Cell.) 13.65 Volts DC or 2.275 VPC is recommended for maximum life.
- When Recharge Voltage requires Temperature Compensation, use the coefficient of - 3mV / °C / Cell. Derate from 25°C and 2.275 VPC.

Temperature Compensation

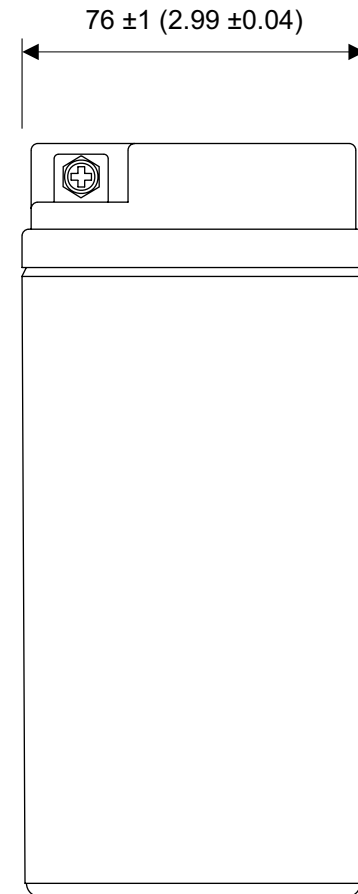
- Employ Charge Voltage Temperature Compensation when the battery temperature is less than 5°C or greater than 35°C.



GS Portalac PE Series		
Rechargeable Sealed Lead-Acid (VRLA) Battery		
Model:	PE12V18	
Voltage:	12	Capacity: 18 Ah (20 Hr)
Terminal:	Bolt and Nut Type (M5)	
Dimensions:	mm (Inch)	
Drawing:	PE12V18T-0111CE	
Date:	2001.11.06	
© Japan Storage Battery Co., Ltd.		
DO NOT SCALE DRAWING		



167 ±1 (6.57 ±0.04)



76 ±1 (2.99 ±0.04)