

## FEATURES

- Low gas emissions  
99% plus recombination
- Excellent recovery from deep discharge
- Leak proof – Sealed batteries
- ABS resin case to UL94-HB conform
- Road transport to UN2800 (Batteries, Wet, Non-Spillable)
- Air Transport to Special Provision 'A67' 'IATA' & 'ICAO'. (Batteries, Wet, Non-Spillable)

# RS PRO Lead Acid Battery 12V, 1.2Ah

RS Stock No.: 537-5444



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

RS PRO Lead acid batteries are suitable for use across a number of industries as well as for general purpose. They are sealed and have many uses, and are ideal for standby & float applications. These batteries are long life rechargeable batteries.

## General Specifications

<b>Technology</b>	AGM
<b>Designed for Cyclic Application</b>	No
<b>Eurobat Classification</b>	3 to 5 Years,
<b>Container Material</b>	A.B.S. (UL94-HB) conform
<b>Application</b>	Standby & Float applications

## Electrical Specifications

<b>Capacity</b>	1.2Ah
<b>Nominal Voltage</b>	12V
<b>Terminal Type</b>	T1
<b>Cells Per Unit</b>	6V
<b>Voltage Per Unit</b>	12V
<b>Max. Discharge Current</b>	18A (5 sec)
<b>Max. Charging Current Limit</b>	0.36A
<b>Float charging Voltage</b>	13.5VDC to 13.8VDC/unit Average at 25°C
<b>Internal Resistance</b>	90m Ohm
<b>Equalization and Cycle Service</b>	14.4VDC to 15.0VDC/unit Average at 25°C

<b>Self-Discharge</b>	The batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
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## Mechanical Specifications

<b>Dimensions</b>	97mm x 43mm x 52mm
<b>Height</b>	97mm
<b>Length</b>	43mm
<b>Width</b>	52mm
<b>Weight</b>	570g

## Operation Environment Specifications

<b>Operating Temperature Range</b>	Discharge : -15°C to 50°C Charge : 0°C to 40°C Storage : -15°C to 40°C /-20 → +60°C
<b>Nominal Operating Temperature Range</b>	25 ±3°C (77 ±5°F )

## Approvals

<b>Compliance/Certifications</b>	UL94-HB
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### Available Capacity Subject to Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
AGM Battery	6V&12V	46%	66%	86%	89%	93%	98%	100%	102%	103%	105%

### Constant Current Discharge Characteristics : A (25 °C)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	16.0	11.7	9.97	8.46	6.17	4.52	3.60	2.14	1.60	1.30	1.10	0.95	0.756	0.626	0.343
1.80V/cell	19.2	13.7	11.3	9.20	6.65	4.80	3.83	2.24	1.66	1.35	1.14	0.99	0.783	0.653	0.350
1.75V/cell	21.5	14.9	12.0	9.70	6.92	4.99	3.98	2.31	1.71	1.38	1.16	1.01	0.795	0.663	0.357
1.70V/cell	23.4	15.9	12.8	10.2	7.18	5.12	4.05	2.36	1.75	1.41	1.19	1.03	0.812	0.672	0.361
1.65V/cell	25.5	16.8	13.4	10.6	7.43	5.28	4.17	2.40	1.77	1.43	1.21	1.04	0.823	0.680	0.365
1.60V/cell	26.8	17.6	13.8	10.9	7.64	5.42	4.26	2.46	1.81	1.46	1.23	1.06	0.837	0.690	0.371

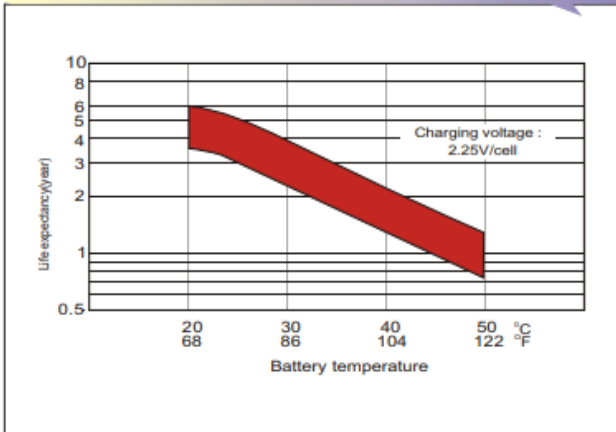
### Constant Power Discharge Characteristics : W (25 °C)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	30.3	22.3	19.2	16.4	12.0	8.86	7.09	4.23	3.17	2.59	2.20	1.91	1.52	1.26	0.694
1.80V/cell	35.9	25.8	21.5	17.7	12.9	9.37	7.52	4.42	3.30	2.69	2.27	1.97	1.57	1.31	0.704
1.75V/cell	39.8	28.0	22.8	18.6	13.4	9.72	7.79	4.55	3.37	2.74	2.31	2.00	1.59	1.33	0.716
1.70V/cell	42.8	29.5	24.0	19.3	13.8	9.89	7.88	4.61	3.42	2.78	2.34	2.03	1.61	1.33	0.718
1.65V/cell	45.7	30.7	24.8	19.8	14.1	10.1	8.02	4.65	3.45	2.80	2.36	2.05	1.62	1.34	0.720
1.60V/cell	47.0	31.5	25.1	20.1	14.3	10.3	8.13	4.73	3.50	2.83	2.39	2.07	1.63	1.35	0.728

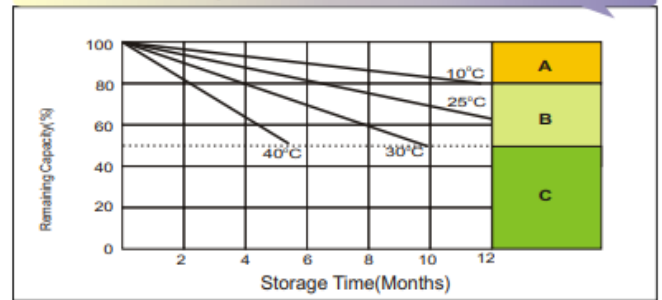
## Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.80V	1.75V	1.60V
Discharge Current (A)	(A) $\leq 0.2C$	$0.2C < (A) < 1.0C$	(A) $\geq 1.0C$

### Effect of Temperature on Long Term Float Life

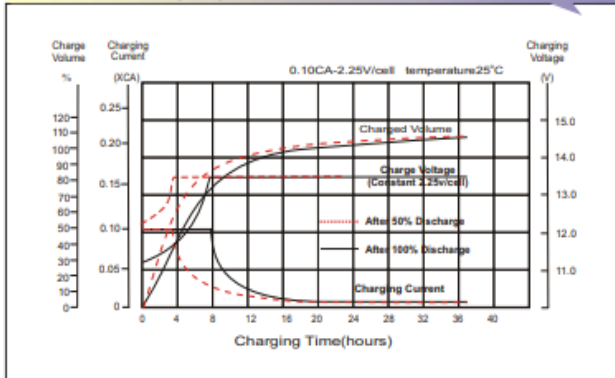


### Self Discharge Characteristics

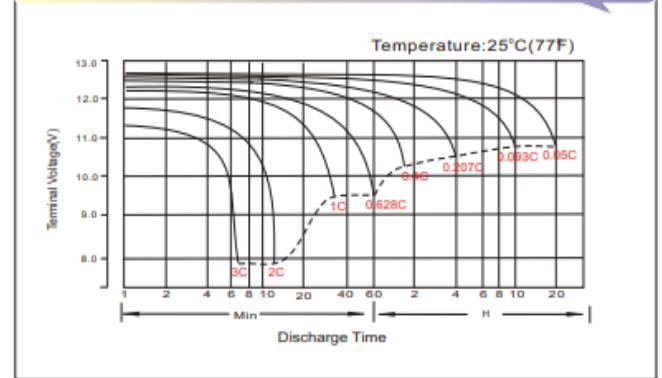


- A** No supplementary charge required  
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:  
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
2. Charged for above 20hours at limited current 0.25CA and constant voltage 2.45V/cell.  
3. Charged for 8-10hours at limited current 0.05CA .
- C** Avoid this storage period unless regular Top charge.  
Supplementary charge may often fall to recover the full capacity

### Float Charging Characteristics



### Discharge Characteristics



## Charging Method:

Constant Voltage	-0.2Cx2h+2.4~2.45V/Cellx24h, Max. Current 0.3CA
Constant Current	0.1C until the voltage reaching 14.4V, then 0.1Cx4h

