

## 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, 5Ah

RS Stock No.: 686-7253



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. A.B.S. (UL94-HB) conform
<b>Application</b>	Standby & Float applications

## Electrical Specifications

<b>Capacity</b>	5Ah
<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>	75A (5 sec)
<b>Max. Charging Current Limit</b>	1.5A
<b>Float charging Voltage</b>	13.5VDC to 13.8VDC/unit Average at 25°C
<b>Internal Resistance</b>	45mOhm
<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.

## Mechanical Specifications

<b>Dimensions</b>	90mm x 70mm x 101mm
<b>Height</b>	90mm
<b>Length</b>	70mm
<b>Width</b>	101mm
<b>Weight</b>	1.8kg

## 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
<b>Nominal Operating Temperature Range</b>	25 ±3°C (77 ±5°F )

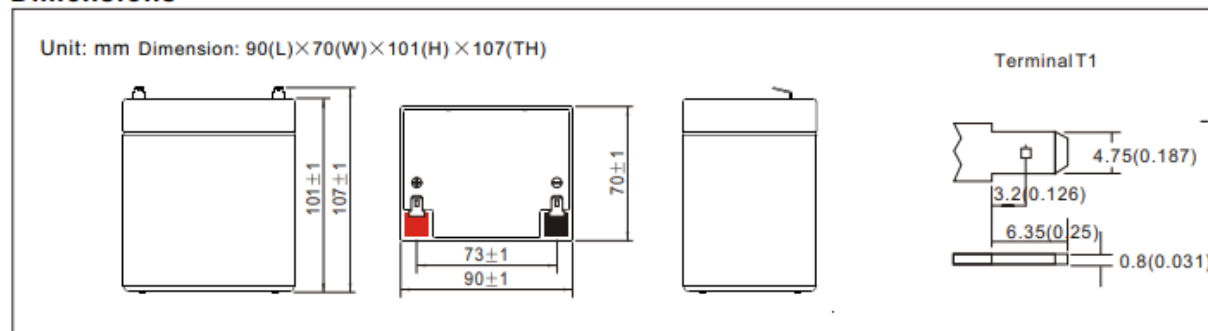
## Approvals

<b>Compliance/Certifications</b>	UL94-HB
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**Dimensions**



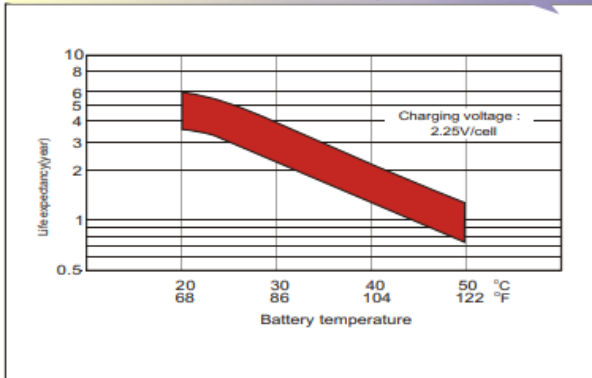
## Constant Current Discharge Characteristics : A (25 °C)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
11.1V	9.52	6.33	5.22	4.59	3.76	2.93	2.43	1.49	1.12	0.924	0.784	0.679	0.540	0.451	0.248
10.8V	11.4	7.59	6.14	5.25	4.20	3.22	2.63	1.60	1.20	0.98	0.824	0.709	0.560	0.465	0.250
10.5V	13.7	8.70	6.82	5.81	4.50	3.45	2.78	1.67	1.24	1.01	0.847	0.729	0.575	0.477	0.253
10.2V	15.9	9.72	7.52	6.29	4.80	3.61	2.90	1.73	1.27	1.03	0.866	0.745	0.584	0.484	0.257
9.9V	17.5	10.5	8.06	6.74	5.05	3.77	3.00	1.78	1.31	1.06	0.885	0.759	0.593	0.490	0.261
9.6V	19.3	11.4	8.66	7.11	5.32	3.93	3.12	1.83	1.34	1.08	0.904	0.777	0.606	0.499	0.262

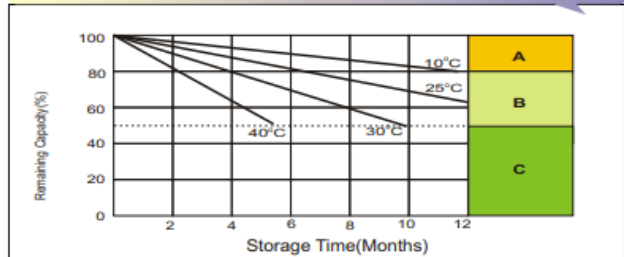
## Constant Power Discharge Characteristics : W (25 °C)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
11.1V	106.6	71.1	58.9	51.9	42.9	33.8	28.2	17.4	13.1	10.8	9.22	8.01	6.39	5.36	2.94
10.8V	123.7	83.4	68.1	58.9	47.6	36.8	30.3	18.5	14.0	11.5	9.65	8.33	6.61	5.51	2.97
10.5V	147.0	94.7	75.0	64.6	50.5	39.2	31.9	19.2	14.4	11.7	9.88	8.54	6.78	5.64	2.99
10.2V	168.2	104.3	81.9	69.4	53.6	40.8	33.1	19.8	14.7	12.0	10.1	8.71	6.87	5.73	3.04
9.9V	182.8	111.4	86.7	73.6	56.0	42.4	34.1	20.4	15.0	12.2	10.3	8.85	6.96	5.79	3.08
9.6V	197.9	118.8	91.5	76.5	58.2	43.7	35.2	20.8	15.3	12.5	10.5	9.03	7.10	5.88	3.10

### Effect of Temperature on Long Term Float Life

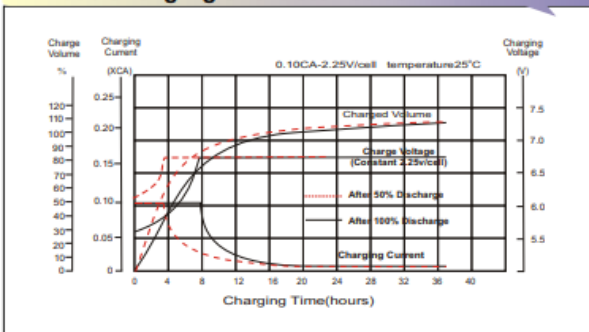


### Self Discharge Characteristics

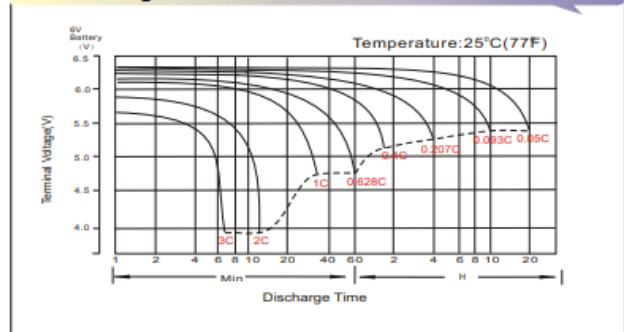


- A** No supplementary charge required (Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:  
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.  
 3. Charged for 8-10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this is reached.

### Float Charging Characteristics



### Discharge Characteristics



## Capacity Factors With Different 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%	76%	83%	90%	98%	100%	103%	107%	109%

## Charging Method:

Constant Voltage	$-0.2Cx2h+2.4-2.45V/Cellx24h, \text{Max. Current } 0.3CA$
Constant Current	$-0.2Cx2h+0.1CAx 12h$
Fast	$-0.2Cx2h+0.3CAx4.0h$

## Discharge Current VS. Discharge Voltage

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