

## FEATURES

- Sealed with special compound epoxy
- Starved electrolyte design
- Non-spill - can be operated in any position
- No corrosion
- Low gassing (unless overcharged)
- Good cycling and stationary performance
- Good high rate discharges
- Long shelf life

## RS PRO Lead Acid Battery 12V, 12Ah

RS Stock No.: 150-1560



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

These RS PRO lead-acid batteries are suitable for standby and floating load applications. These rechargeable batteries have a long service life.

## 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-V0)
<b>Application</b>	Standby & float applications

## Electrical Specifications

<b>Capacity</b>	12Ah
<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>	180A (5 sec)
<b>Max. Charging Current Limit</b>	3.6A
<b>Float charging Voltage</b>	13.5VDC to 13.8VDC/unit Average at 25°C
<b>Internal Resistance</b>	14mOhm
<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>	151mm x 98mm x 95mm
<b>Height</b>	151mm
<b>Length</b>	98mm
<b>Width</b>	95mm
<b>Weight</b>	3.5kg

## 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-V0
<b>Flame Resistant</b>	Yes



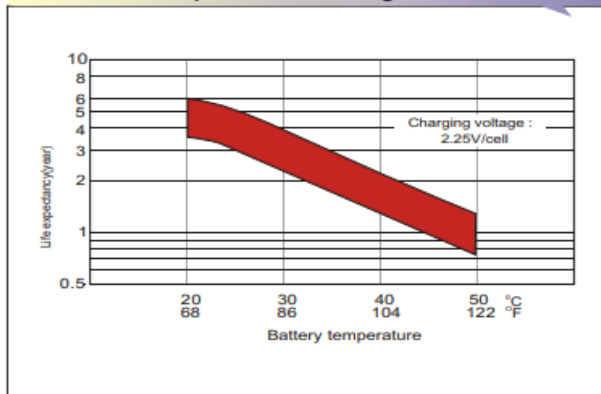
## Constant Current Discharge Characteristics : A (25 °C)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	22.9	15.2	12.5	11.0	9.0	7.04	5.83	3.58	2.70	2.22	1.88	1.63	1.30	1.08	0.594
1.80V/cell	27.4	18.2	14.7	12.6	10.1	7.73	6.31	3.84	2.88	2.36	1.98	1.70	1.34	1.12	0.600
1.75V/cell	32.8	20.9	16.4	13.9	10.8	8.27	6.67	4.00	2.98	2.42	2.03	1.75	1.38	1.14	0.606
1.70V/cell	38.1	23.3	18.0	15.1	11.5	8.67	6.96	4.14	3.05	2.47	2.08	1.79	1.40	1.16	0.617
1.65V/cell	42.0	25.3	19.3	16.2	12.1	9.1	7.20	4.27	3.14	2.54	2.12	1.82	1.42	1.18	0.625
1.60V/cell	46.3	27.4	20.8	17.1	12.8	9.4	7.49	4.38	3.21	2.60	2.17	1.86	1.45	1.20	0.629

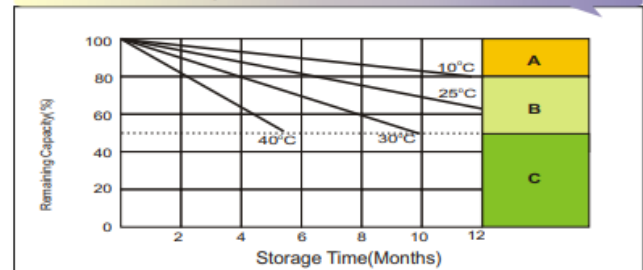
## Constant Power Discharge Characteristics : W (25 °C)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	42.6	28.4	23.6	20.8	17.1	13.5	11.3	6.96	5.26	4.33	3.69	3.20	2.56	2.14	1.18
1.80V/cell	49.5	33.4	27.2	23.6	19.0	14.7	12.1	7.41	5.58	4.59	3.86	3.33	2.65	2.21	1.19
1.75V/cell	58.8	37.9	30.0	25.8	20.2	15.7	12.7	7.69	5.75	4.68	3.95	3.42	2.71	2.26	1.20
1.70V/cell	67.3	41.7	32.7	27.8	21.4	16.3	13.2	7.94	5.88	4.78	4.04	3.48	2.75	2.29	1.22
1.65V/cell	73.1	44.6	34.7	29.5	22.4	16.9	13.6	8.17	6.02	4.88	4.11	3.54	2.79	2.32	1.23
1.60V/cell	79.2	47.5	36.6	30.6	23.3	17.5	14.1	8.33	6.13	4.99	4.18	3.61	2.84	2.35	1.24

### Effect of Temperature on Long Term Float Life

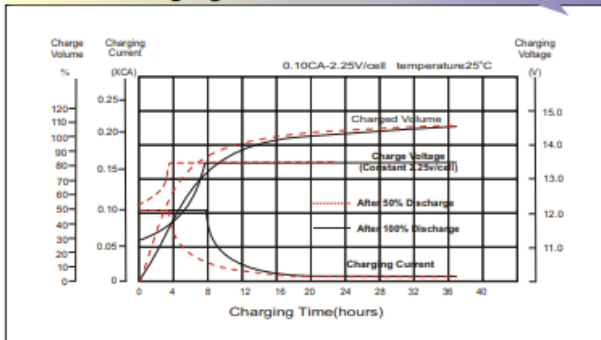


### Self Discharge Characteristics

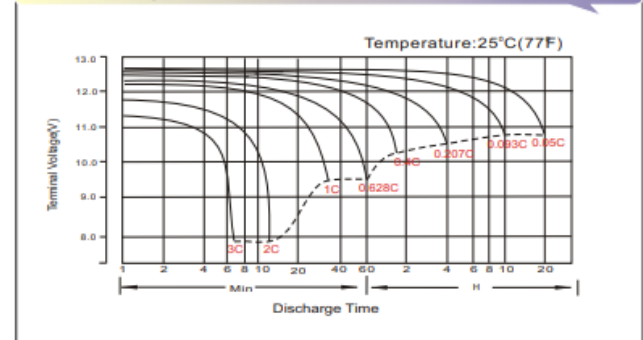


- A** No supplementary charge required  
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:  
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
2. Charged for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

### Float Charging Characteristics



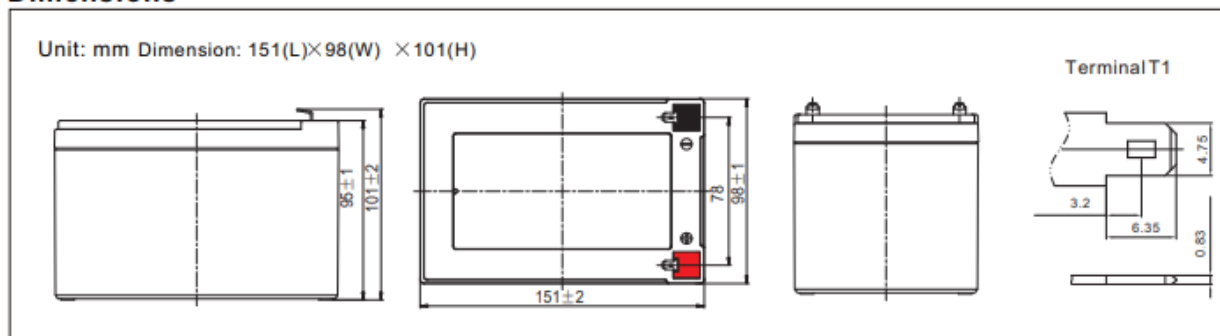
### Discharge Characteristics



## 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%	76%	83%	90%	98%	100%	103%	107%	109%

## Dimensions



## Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.80V	1.75V	1.60V
Discharge Current (A)	(A) ≤0.2C	0.2C < (A) < 1.0C	(A) ≥1.0C

**Charge the batteries at least once every six months, if they are stored at 25°C.**

## 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