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, 24Ah

RS Stock No.: 537-5501

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

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

Electrical Specifications

Capacity	24Ah
Nominal Voltage	12V
Terminal Type	T12
Cells Per Unit	6V
Voltage Per Unit	12V
Max. Discharge Current	360A (5 sec)
Max. Charging Current Limit	7.2A
Float charging Voltage	13.5VDC to 13.8VDC/unit Average at 25°C
Internal Resistance	14mOhm
Equalization and Cycle Service	14.4VDC to15.0VDC/unit Average at 25°C
Self-Discharge	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

Dimensions	166mm x 175mm x 125mm
Height	166mm
Length	175mm
Width	125mm
Weight	7.2kg

Operation Environment Specifications

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

Approvals

Compliance/Certifications	UL94-HB

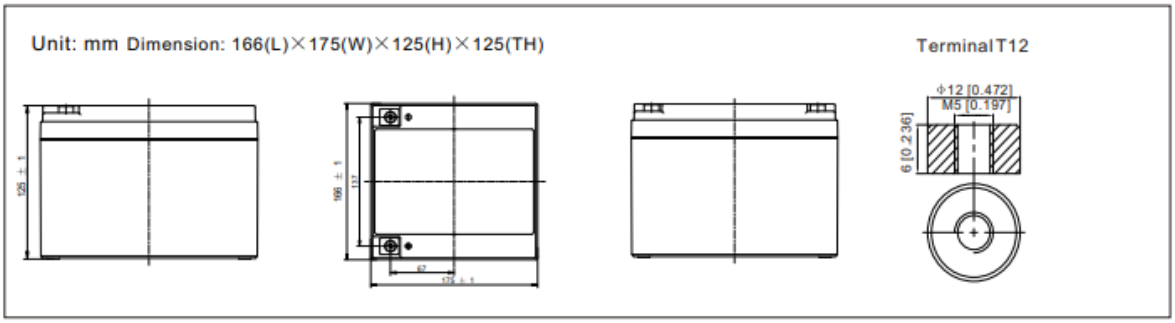
Constant Current Discharge Characteristics : A (25°C) — **Amps**

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	45.7	35.1	29.1	25.1	19.4	14.32	12.07	7.14	5.58	4.54	3.70	3.21	2.59	2.16	1.19
1.80V/cell	61.3	44.8	35.1	29.7	22.9	16.7	13.52	7.79	6.01	4.85	3.97	3.45	2.75	2.23	1.20
1.75V/cell	69.2	49.3	38.4	32.0	23.8	17.3	14.14	8.08	6.12	4.96	4.08	3.54	2.80	2.29	1.21
1.70V/cell	76.2	53.7	41.0	33.6	24.8	18.0	14.59	8.28	6.29	5.09	4.18	3.61	2.84	2.34	1.23
1.65V/cell	84.0	58.0	43.6	35.7	26.1	18.4	14.93	8.40	6.56	5.26	4.30	3.69	2.88	2.39	1.25
1.60V/cell	92.6	62.9	46.6	38.0	27.6	19.2	15.07	8.76	6.76	5.43	4.44	3.77	2.91	2.41	1.26

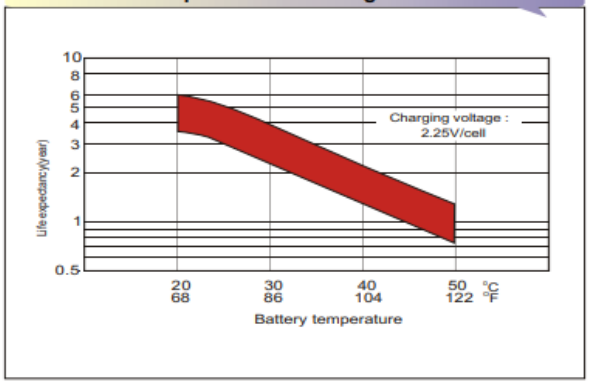
Constant Power Discharge Characteristics : W (25°C) — **Watts**

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	83.6	64.8	54.3	47.4	37.0	27.5	23.3	13.9	10.9	8.88	7.26	6.32	5.12	4.28	2.35
1.80V/cell	111.0	81.9	64.7	55.2	43.0	31.8	25.9	15.0	11.6	9.43	7.76	6.75	5.41	4.41	2.37
1.75V/cell	122.5	88.5	69.8	58.8	44.3	32.6	27.0	15.5	11.8	9.60	7.93	6.91	5.49	4.52	2.39
1.70V/cell	131.1	94.3	73.4	61.3	45.9	33.8	27.8	15.9	12.1	9.84	8.12	7.04	5.56	4.61	2.44
1.65V/cell	142.5	100.8	77.5	64.7	48.0	34.4	28.2	16.0	12.6	10.1	8.32	7.18	5.64	4.70	2.47
1.60V/cell	153.6	107.0	81.5	68.1	50.3	35.6	28.3	16.6	12.9	10.4	8.56	7.31	5.68	4.74	2.48

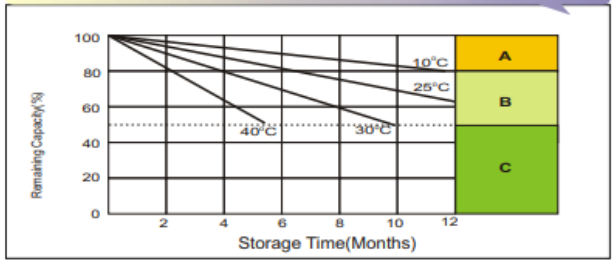
Dimensions



Effect of Temperature on Long Term Float Life



Self Discharge Characteristics

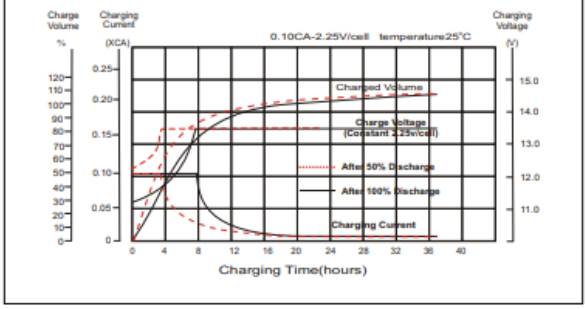


A No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)

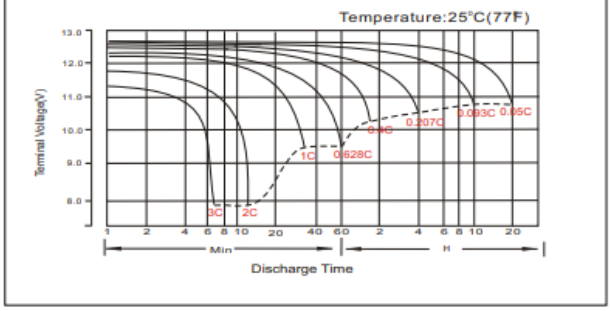
B Supplementary charge required before use.Optional charging way as below:
1.Charged for above 3 days at limted current 0.25CA and constant volatge 2.25V/cell.
2.Charged for above 20hours at limted current 0.25CA and constant volatge 2.45V/cell.
3.Charged for 8~10hours at limted current 0.05CA .

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℃	-10℃	0℃	5℃	10℃	20℃	25℃	30℃	40℃	45℃
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%

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