

FEATURES

- Low gas emissions
99% plus recombination
- Excellent recovery from deep discharge
- Leak proof – Sealed batteries
- ABS resin case to UL94-HB fire resistance (Horizontal Burning Test)
- 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, 18Ah

RS Stock No.: 537-5494



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	18Ah
Nominal Voltage	12V
Terminal Type	T12
Cells Per Unit	6V
Voltage Per Unit	12V
Max. Discharge Current	270A (5 sec)
Max. Charging Current Limit	5.4A
Float charging Voltage	13.5VDC to 13.8VDC/unit Average at 25°C
Internal Resistance	16mOhm
Equalization and Cycle Service	14.4VDC to 15.0VDC/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	181.5 x 77mm x 167.5mm
Height	181.5mm
Length	77mm
Width	167.5mm
Weight	5.4kg

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)

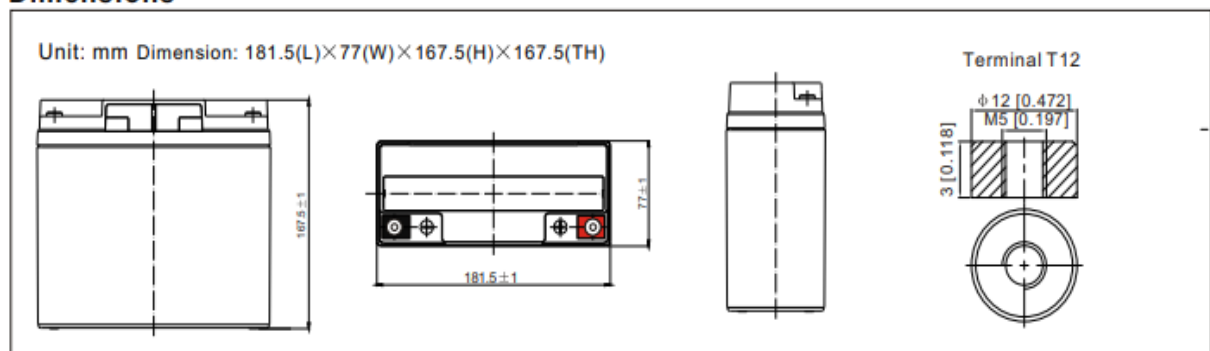
Approvals

Compliance/Certifications	UL94-HB
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Dimensions

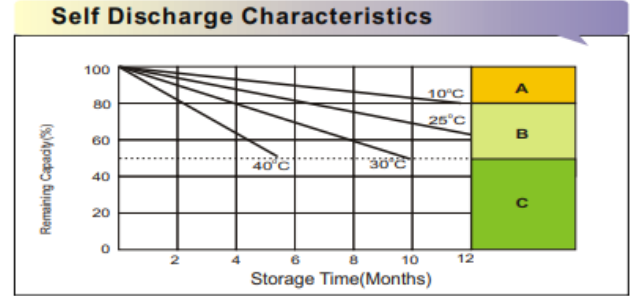
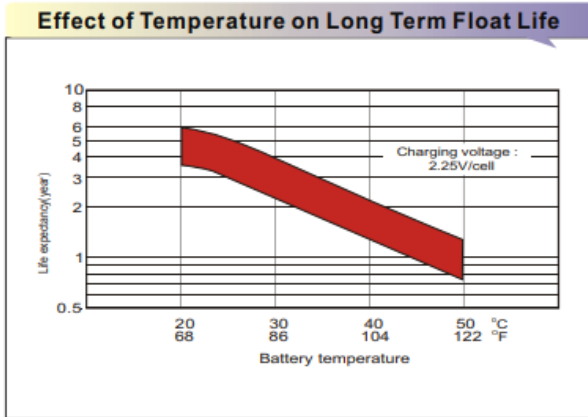


Constant Current Discharge Characteristics : A (25°C) Amps

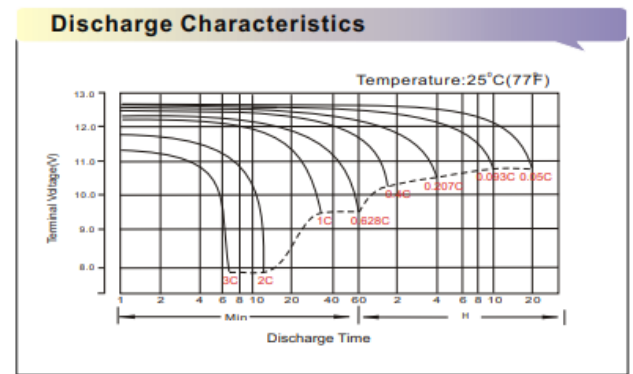
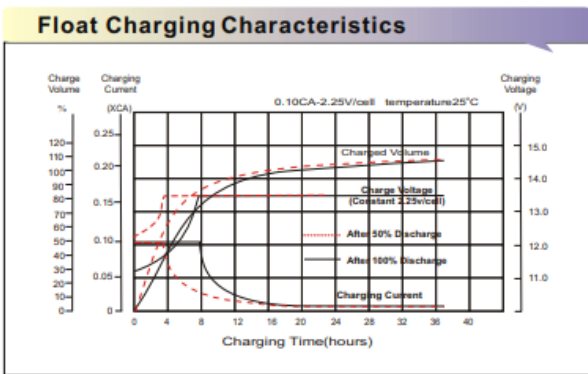
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	33.9	25.6	22.7	19.9	15.3	11.4	9.11	5.51	4.13	3.35	2.84	2.47	1.96	1.63	0.884
1.80V/cell	40.8	30.2	25.9	22.1	16.7	12.2	9.79	5.85	4.34	3.51	2.94	2.55	2.02	1.67	0.900
1.75V/cell	45.8	33.0	27.8	23.4	17.4	12.8	10.2	6.07	4.49	3.60	3.03	2.62	2.06	1.70	0.918
1.70V/cell	49.9	35.4	29.7	24.7	18.1	13.2	10.6	6.27	4.63	3.69	3.09	2.67	2.09	1.72	0.929
1.65V/cell	53.8	37.7	31.1	25.8	18.9	13.8	10.9	6.44	4.73	3.77	3.14	2.71	2.12	1.74	0.938
1.60V/cell	57.9	39.6	31.9	26.4	19.3	14.0	11.1	6.59	4.82	3.84	3.20	2.74	2.15	1.76	0.945

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	64.0	48.8	43.6	38.5	29.8	22.3	17.9	10.9	8.21	6.68	5.68	4.95	3.95	3.29	1.79
1.80V/cell	76.3	57.2	49.5	42.7	32.4	23.9	19.2	11.5	8.59	6.98	5.86	5.09	4.04	3.36	1.81
1.75V/cell	84.8	62.0	52.8	44.8	33.6	24.9	20.0	11.9	8.87	7.14	6.02	5.21	4.11	3.39	1.82
1.70V/cell	91.1	65.6	55.7	46.8	34.7	25.6	20.6	12.2	9.06	7.25	6.08	5.27	4.15	3.42	1.83
1.65V/cell	96.6	68.8	57.5	48.4	35.8	26.3	21.0	12.5	9.19	7.35	6.15	5.32	4.18	3.43	1.84
1.60V/cell	101.5	70.8	58.0	48.7	36.0	26.5	21.3	12.7	9.31	7.45	6.22	5.33	4.21	3.45	1.85



- 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



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%

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