

FEATURES

- AGM Deep Cycle battery – longer life
- Special grid alloy: less gassing
- Optimised manufacturing process - deep discharge
- Robust ABS material - increases the strength of the battery container

RS PRO Lead Acid Battery 12V, 20Ah

RS Stock No.: 727-0405



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

A series of RS PRO rechargeable lead-acid batteries. These batteries are made from an ABS material which greatly increases the strength of the battery container. Suitable for use across a number of industries as well as for cyclic products. This lead acid rechargeable battery is sealed and has many uses. RS PRO offers a range of lead acid rechargeable batteries with different voltages and chargers to suit all your requirements. All models are highly reliable and offer excellent quality, performance and durability.

- [727-0405](#) - 12V, 20Ah
- [727-0417](#) - 12V, 13Ah
- [727-0420](#) - 12V, 33Ah
- [727-0423](#) - 12V, 38Ah
- [727-0427](#) - 12V, 100Ah
- [727-0433](#) - 12V, 120Ah
- [727-0436](#) - 12V, 55Ah
- [727-0439](#) - 12V, 75Ah

General Specifications

Technology	AGM
Designed for Cyclic Application	Yes
Eurobat Classification	3 to 5 Years
Container Material	A.B.S. (UL94-HB) conform
Application	Cyclic products

Electrical Specifications

Capacity	20Ah
Nominal Voltage	12V
Terminal Type	T12
Cells Per Unit	6V
Voltage Per Unit	12V
Max. Discharge Current	300A (5 sec)
Max. Charging Current Limit	6A
Float charging Voltage	13.5VDC to 13.8VDC/unit Average at 25°C
Internal Resistance	15mOhm
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	181.5mm x 77mm x 166.5mm
Height	181.5mm
Length	77mm
Width	166.5mm
Weight	6.9kg

Operation Environment Specifications

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

Approvals

Compliance/Certifications	UL94-HB
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Constant Current Discharge Characteristics : A (25°C) Amps

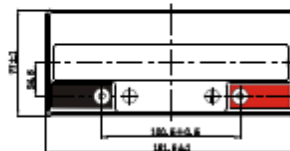
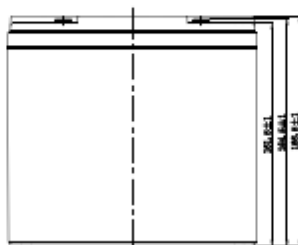
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	29.3	24.6	21.5	15.5	12.3	9.99	6.20	4.84	3.92	3.18	2.78	2.27	1.89	1.06
1.80V/cell	37.4	29.8	25.5	18.3	14.3	11.2	6.77	5.20	4.18	3.42	2.98	2.40	2.00	1.07
1.75V/cell	41.1	32.5	27.4	19.0	14.9	11.7	7.02	5.30	4.28	3.51	3.06	2.45	2.02	1.08
1.70V/cell	44.8	34.7	28.8	19.8	15.4	12.1	7.30	5.45	4.39	3.60	3.12	2.48	2.04	1.10
1.65V/cell	48.4	36.9	30.6	20.8	15.8	12.5	7.50	5.68	4.54	3.70	3.19	2.52	2.08	1.11
1.60V/cell	52.5	39.5	32.6	22.0	16.5	12.9	7.76	5.85	4.68	3.82	3.26	2.54	2.10	1.12

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

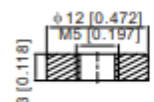
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	54.6	46.5	41.0	29.8	23.8	19.4	12.1	9.45	7.67	6.25	5.49	4.48	3.74	2.13
1.80V/cell	68.9	55.3	47.8	34.7	27.5	21.6	13.1	10.1	8.15	6.69	5.86	4.75	3.96	2.14
1.75V/cell	74.8	59.8	51.0	35.9	28.4	22.5	13.6	10.3	8.32	6.86	6.01	4.83	4.00	2.16
1.70V/cell	80.3	63.4	53.3	37.2	29.4	23.1	14.1	10.5	8.52	7.01	6.13	4.89	4.03	2.20
1.65V/cell	86.1	67.0	56.3	39.0	30.0	23.8	14.4	11.0	8.79	7.20	6.26	4.96	4.11	2.22
1.60V/cell	91.9	70.8	59.4	40.8	31.0	24.5	14.8	11.2	9.03	7.40	6.38	5.00	4.15	2.23

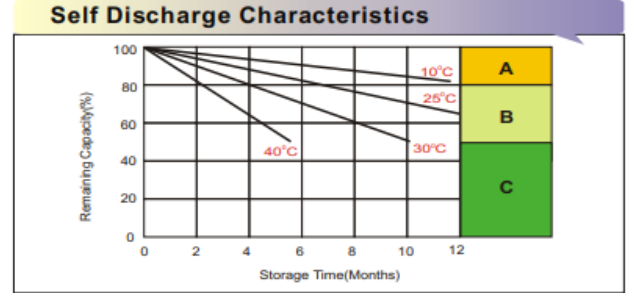
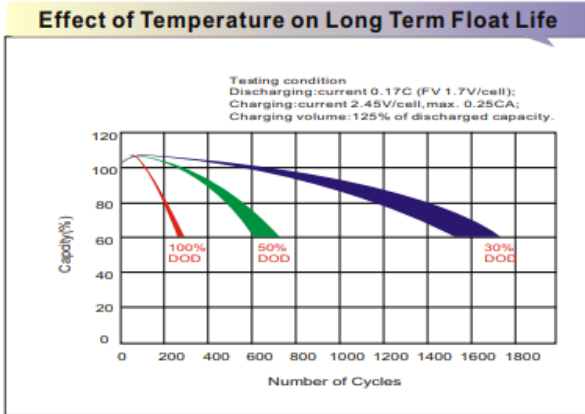
Dimensions

Unit: mm Dimension: 181.5(L) × 77(W) × 166.5(H) × 166.5(TH)

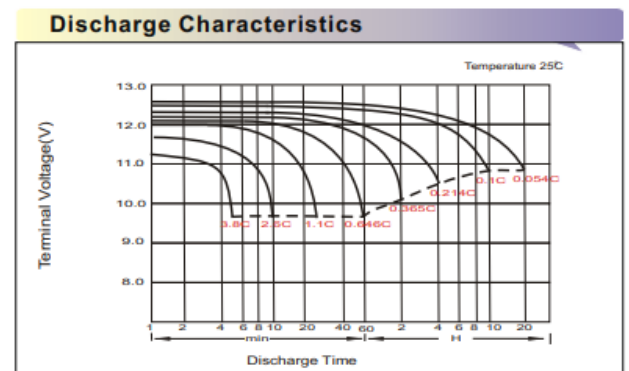
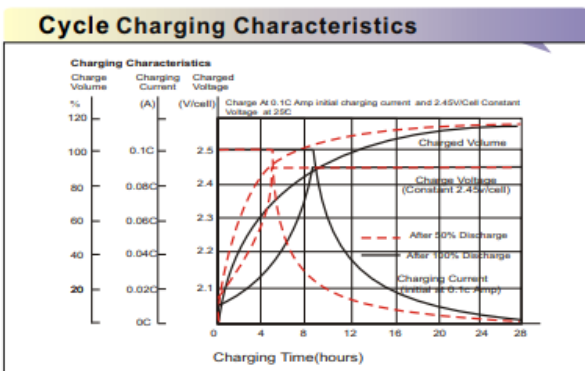


Terminal T12





- 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	-0.2Cx2h+0.1CAx 12h
Fast	-0.2Cx2h+0.3CAx4.0h