

FEATURES

- Using oxygen recombination technology
- PbCaSn alloy for plate grids-less gassing, less self-discharging
- High-quality AGM separator
- High purity raw material
- Silver-coated copper terminals (T1, T2 terminal)
- ABS material

RS PRO Lead Acid Battery 12V, 120Ah

RS Stock No.: 727-0401



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.

[727-0382](#) - 6V, 7Ah

[727-0385](#) - 6V, 3.2Ah

[727-0388](#) - 6V, 1.2Ah

[727-0391](#) - 12V, 20Ah

[727-0394](#) - 12V, 35Ah

[727-0398](#) - 12V, 100Ah

[727-0401](#) - 12V, 120Ah

[727-0408](#) - 12V, 55Ah

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	120Ah
Nominal Voltage	12V
Terminal Type	T11
Cells Per Unit	6V
Voltage Per Unit	12V
Max. Discharge Current	1440A (5 sec)
Max. Charging Current Limit	36A
Float charging Voltage	13.5VDC to 13.8VDC/unit Average at 25°C
Internal Resistance	4mOhm
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	408mm x 177mm x 225mm
Height	408mm
Length	177mm
Width	225mm
Weight	34kg

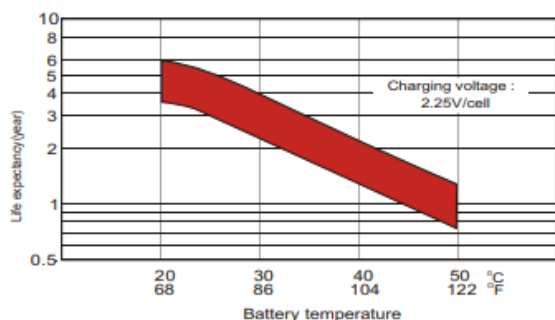
Operation Environment Specifications

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)

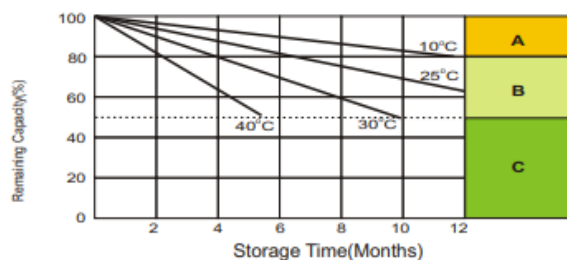
Approvals

Compliance/Certifications	UL94-HB
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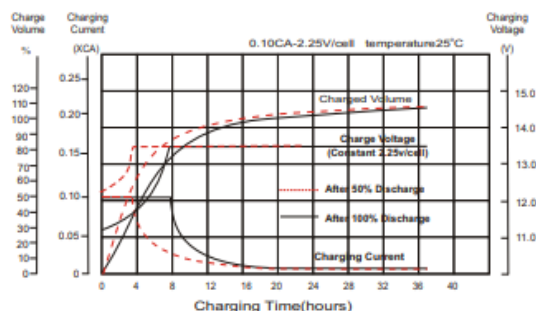
Effect of Temperature on Long Term Float Life



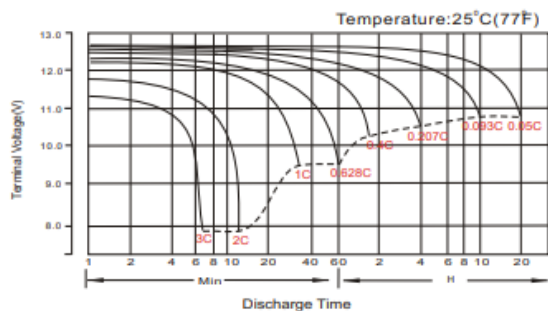
Self Discharge Characteristics



Float Charging Characteristics

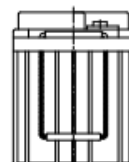
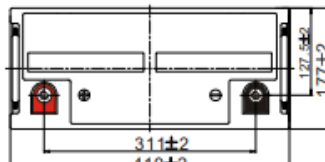
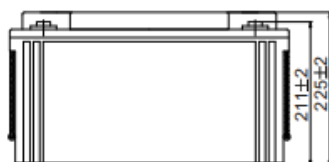


Discharge Characteristics

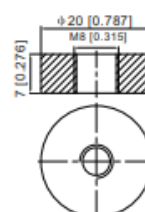


Dimensions

Unit: mm Dimension: 410(L)×177(W)×211(H)×225(TH)



Terminal T11



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%

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	205.4	161.5	137.3	114.9	91.3	69.1	56.6	36.0	28.5	23.3	18.8	16.3	13.3	11.3	6.18
1.80V/cell	275.7	206.3	165.9	135.8	107.7	80.4	63.4	39.3	30.7	24.8	20.1	17.5	14.1	12.0	6.24
1.75V/cell	310.8	226.7	181.2	146.1	111.8	83.4	66.3	40.8	31.2	25.4	20.6	18.0	14.3	12.1	6.30
1.70V/cell	342.3	247.1	193.5	153.5	116.4	86.7	68.4	42.4	32.1	26.1	21.2	18.4	14.5	12.2	6.42
1.65V/cell	377.4	266.7	205.7	163.1	122.8	88.9	70.7	43.6	33.5	27.0	21.8	18.8	14.7	12.5	6.50
1.60V/cell	416.3	289.5	220.0	173.7	129.6	92.6	73.2	45.1	34.5	27.8	22.5	19.2	14.9	12.6	6.54

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	375.5	298.3	256.2	216.5	174.0	132.8	109.1	70.0	55.5	45.5	36.8	32.1	26.2	22.4	12.2
1.80V/cell	498.7	376.6	305.4	252.2	202.2	153.2	121.6	75.9	59.4	48.3	39.3	34.3	27.7	23.7	12.3
1.75V/cell	550.3	407.2	329.5	268.7	208.1	157.5	126.6	78.4	60.3	49.2	40.2	35.1	28.1	23.9	12.4
1.70V/cell	589.2	433.8	346.9	280.2	215.4	163.2	130.2	81.3	61.9	50.4	41.1	35.8	28.5	24.1	12.7
1.65V/cell	640.5	463.8	366.0	295.5	225.4	165.8	133.6	83.1	64.2	52.0	42.1	36.5	28.8	24.6	12.8
1.60V/cell	690.1	492.1	385.0	311.3	236.3	171.8	137.6	85.5	65.9	53.4	43.4	37.2	29.1	24.8	12.9

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) $\geq 1.0C$

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