



JSB-G12-100 (12V100Ah)

JSB-G12-100 is GEL Standby battery with 10 + years floating design life time .The solid Gel protects no way to suffer electrolyte stratification and ensure mild corrosion, **its** special separator eradicates infection between plates to prevent short circuit. it offers extra-durable performance under extreme temperature.



Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	100Ah@20hr-rate to 1.75V per cell @25 °C
Weight	Approx. 30.0 Kg
Max. Discharge Current	1000 A (5 sec)
Internal Resistance	Approx. 7.5 mΩ
Operating Temperature Range	Discharge: -40°C~60°C Charge: -20°C~50°C Storage: -40°C~60°C
Normal Operating Temperature Range	25°C±5°C
Float charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	20 A
Equalization and Cycle Service	14.2 to 14.4 VDC/unit Average at 25°C
Self Discharge	JALpower 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.
Terminal	Terminal F5/F12
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.



MH28539



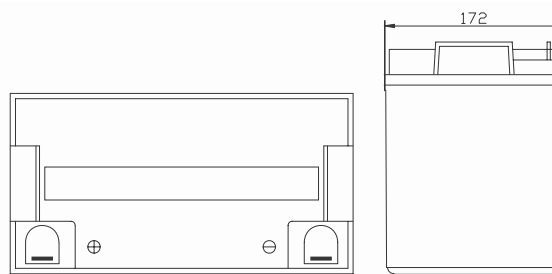
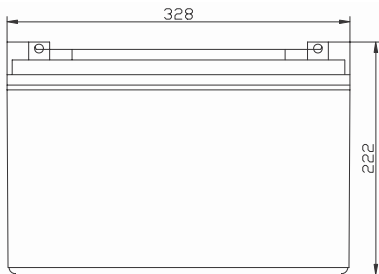
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ISO9001:2000 Certificate

Dimensions

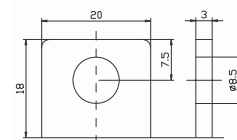
Unit: mm Dimension: 328(L)×172(W)×222(H)



Terminal F12



Terminal F5



Constant Current Discharge Characteristics: A (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	328.52	235.41	171.29	107.53	60.775	34.024	24.404	20.196	15.895	11.739	9.9253	5.2490
10.0V	319.74	223.99	167.77	105.75	60.495	33.768	24.310	20.103	15.802	11.643	9.8299	5.1535
10.2V	301.29	216.09	165.14	104.81	59.934	33.512	24.123	20.009	15.708	11.548	9.7344	5.0581
10.5V	270.55	199.40	157.23	102.20	59.373	33.256	24.030	19.822	15.521	11.452	9.6390	4.9627
10.8V	244.20	181.83	144.94	97.708	57.970	32.659	23.375	19.355	15.241	11.261	9.5436	4.8672
11.1V	212.57	162.50	130.00	91.537	55.072	31.210	22.347	18.420	14.586	10.784	9.2573	4.5809

Constant Power Discharge Characteristics: W (25°C)

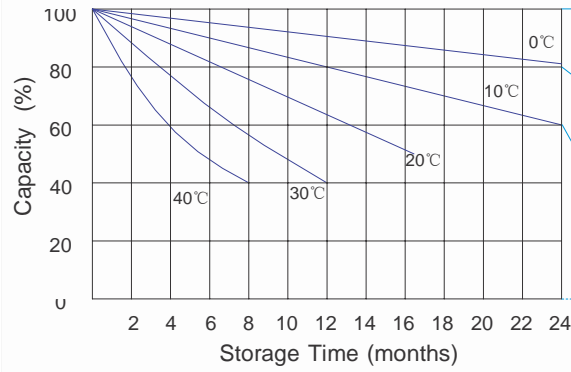
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.6V	3423.4	2503.3	1843.2	1213.4	695.08	391.40	281.62	233.38	184.01	136.21	111.60	58.950
10.0V	3353.4	2391.0	1804.9	1198.3	691.71	389.86	281.06	232.82	182.89	135.64	110.46	58.378
10.2V	3165.5	2311.4	1780.4	1184.3	686.66	386.28	279.38	231.69	182.33	134.50	109.89	57.805
10.5V	2850.5	2135.7	1697.6	1157.3	679.93	382.70	277.70	230.01	180.64	133.35	108.74	57.233
10.8V	2564.1	1939.1	1559.8	1104.6	663.10	377.07	270.96	223.84	177.84	130.49	107.60	56.661
11.1V	2213.3	1722.2	1392.8	1035.0	628.32	359.68	257.50	213.18	168.86	125.91	104.16	54.371

All mentioned values are average values.

Effect of temperature on long term float life



Storage characteristic



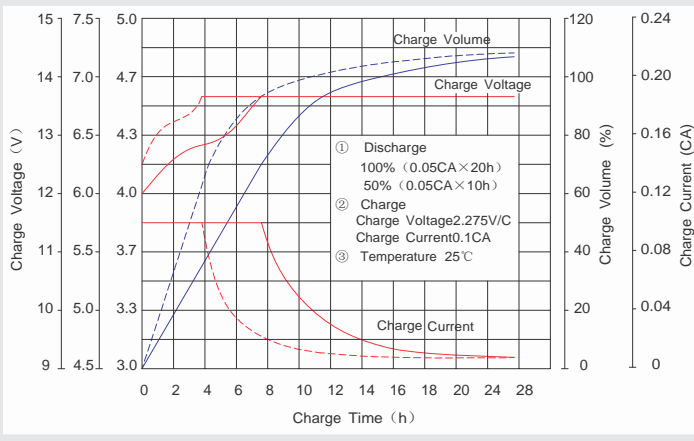
Supplementary charge required (Carry out supplementary charge before use if 100% capacity is required)

Supplementary charge required before use. This supplementary charge will help to recover the capacity and should be made as early as possible.

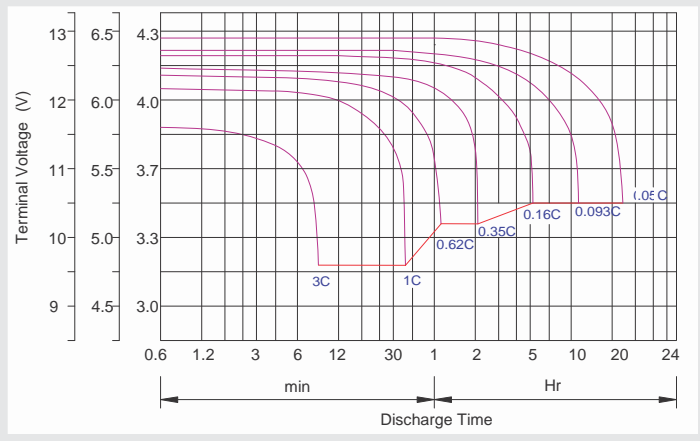
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached

Supplementary charge and storage guidelines

Charge characteristic Curve for standby use



Discharge characteristic Curve



Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL Battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

Maintenance & Cautions

Float Service:
※ Every month, recommend inspection every battery voltage.
※ Every three months, recommend equalization charge for one time.
Equalization charge method:
Discharge: 100% rate capacity discharge.
Charge: Max. current 0.2CA, constant voltage 2.35-2.4V/Cell charge 24h.
※ Effect of temperature on float charge voltage: -3mV/°C/Cell.
※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.

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

Charging Method:

Constant Voltage	-0.2Cx2h+2.35-2.4V/cellx24h, Max. Current 0.2CA
Constant Current	-0.2Cx2h+0.1CAx12h
Fast	-0.2Cx2h+0.3CAx4.0h