CSD CENTRAL SECURITY DISTRIBUTION

CSD-12100 (12V100Ah)

AUS CELL No. 1

CSD-12100 is a general purpose 12V 100Ah sealed lead acid (SLA) battery with a 10 year floating design life that meets both IEC and JIS standards. Suitable for a wide range of domestic and commercial applications such as Mobility, UPS, Fire and Security systems.

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	100Ah@10hr-rate to 1.75V per cell @25°C
Weight	Approx.29.0 Kg
Max. Discharge Current	1000A (5 sec)
Internal Resistance	Approx. 5.5mΩ
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°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	30 A
Equalization and Cycle Service	14.6 to 14.8 VDC/unit Average at 25°C
Self Discharge	Valve Regulated Lead Acid(VRLA) 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.

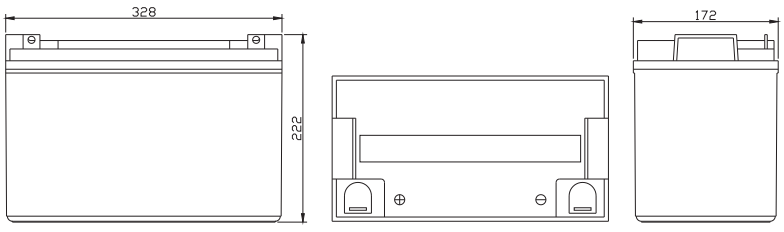
MH28539

G4M20206-0910-E-16

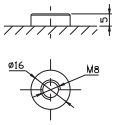
ISO9001:2000 Certificate

Dimensions

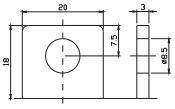
Unit: mm Dimension: 328(L)×172(W)×222(H)



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	299.1	213.7	170.9	106.1	61.85	37.01	25.58	20.96	17.16	11.82	9.99	5.33
10.0V	290.5	203.3	167.4	104.4	61.56	36.73	25.48	20.87	17.06	11.72	9.90	5.23
10.2V	281.9	196.2	164.8	103.5	60.99	36.45	25.28	20.77	16.96	11.63	9.80	5.14
10.5V	253.1	181.0	156.9	100.9	60.42	36.17	25.19	20.57	16.75	11.53	9.71	5.04
10.8V	228.4	165.1	144.6	96.4	58.99	35.52	24.50	20.09	16.45	11.34	9.61	4.94
11.1V	195.1	147.5	129.7	90.4	56.04	33.95	23.42	19.12	15.75	10.86	9.32	4.65

Constant Power Discharge Characteristics: W(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	3094	2276	1880	1210	714.7	436.2	304.4	249.9	204.7	141.1	119.4	63.92
10.0V	3033	2206	1850	1195	713.0	433.9	304.5	249.6	204.2	140.4	118.7	62.81
10.2V	2998	2148	1829	1187	707.4	431.3	303.2	249.0	203.5	139.5	117.6	61.65
10.5V	2730	2000	1745	1159	701.1	428.1	302.0	246.7	201.1	138.4	116.5	60.49
10.8V	2486	1844	1612	1111	688.2	422.7	293.8	241.1	197.4	136.1	115.3	59.32
11.1V	2184	1667	1451	1044	658.7	407.0	281.1	229.4	188.9	130.3	111.8	55.84

All mentioned values are average values.

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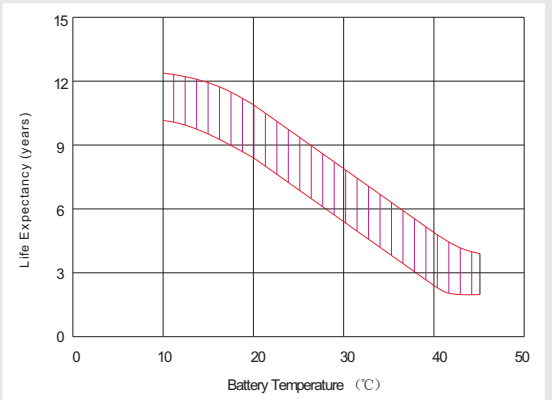
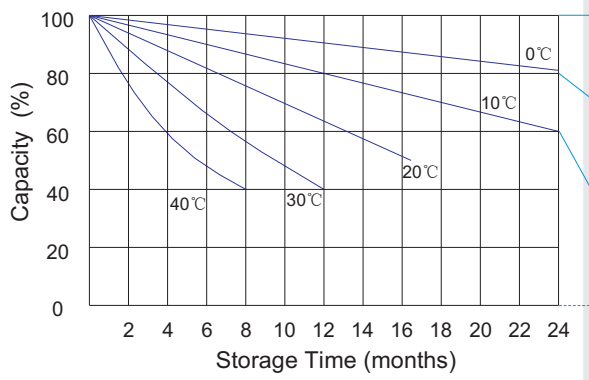
Effect of temperature on long term float life



Storage characteristic



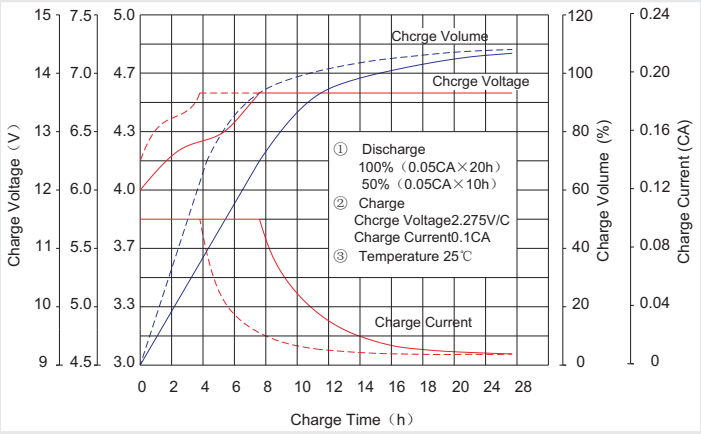
Supplementary charge required (Carry out supplementary charge before use if 100% capacity is requires)

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

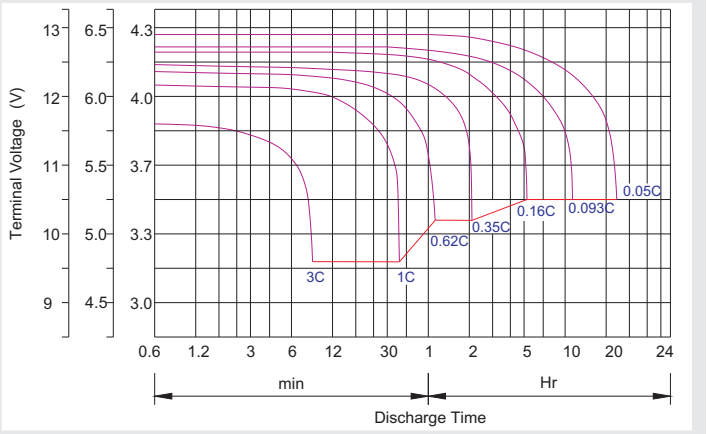
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached

Supplementary charge and storage guidelines

Charge characteristic Curve for standby use



Discharge characteristic Curve



Capacity Factors With Different Temperature

Battery Type		-20℃	-10℃	0℃	5℃	10℃	20℃	25℃	30℃	40℃	45℃
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

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+0.1CAx12h
Fast	-0.2Cx2h+0.3CAx4.0h

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 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h.

※ Effect of temperature on float charge voltage: -3mV/℃/Cell.

※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.