HGG12-200 (12V200Ah)

HGG (Deep Cycle GEL, 12 Volts) series is pure GEL battery with 12 years floating design life , it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented Gel electrolyte, the HGG series offers excellent recovery after deep discharge under frequent cyclic discharge use, and can deliver 400 cycles at 100% DOD. Suitable for solar, CATV, marine , RV and deep discharge UPS, communication , and telecommunication , etc.

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	200Ah@20hr-rate to 1.75V per cell @25℃
Weight	Approx. 60.0 Kg(Tolerance±1.5%)
Max. Discharge Current	2000 A (5 sec)
Internal Resistance	Approx. 5.2 mΩ
Operating Temperature Range	Discharge: -40℃~60℃ Charge:-20℃~50℃ Storage: -40℃~60℃
Normal Operating Temperature Range	25℃±5℃
Float charging Voltage	13.6 to 13.8 VDC/unit Average at 25℃
Recommended Maximum Charging Current	40A
Equalization and Cycle Service	14.2 to 14.4VDC/unit Average at 25℃
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25℃. Self-discharge ratio less than 3% per month at 25℃. Please charge batteries before using.
Terminal	Terminal F16
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

MH28539

G4M20206-0910-E-16

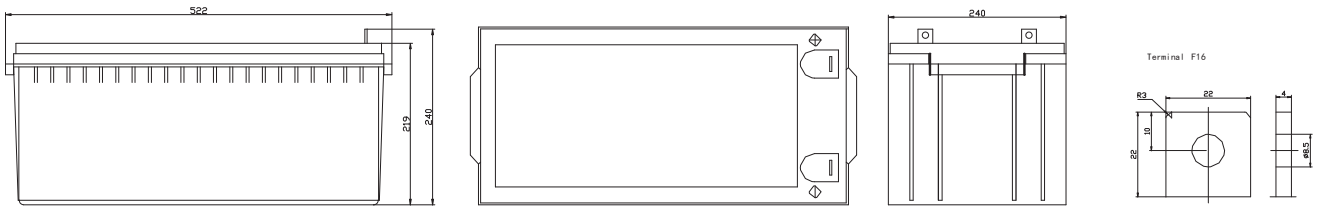
CERTIFICATE

Postcode.:421001
is in conformity with
ISO 14001:2004 Standard

CERTIFICATE

Dimensions

Unit: mm Dimension: 522(L)×240(W)×219(H)



Constant Current Discharge Characteristics: A (25℃)(The capacity reaches the peak value after 5-20 cycles.)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	476.4	340.9	273.6	183.4	116.6	70.20	50.79	40.54	34.42	23.31	19.36	10.61
10.0V	462.6	324.4	268.0	181.8	116.1	69.67	50.59	40.35	34.22	23.12	19.17	10.42
10.2V	448.9	312.9	263.8	180.7	115.0	69.15	50.20	40.16	34.02	22.93	18.98	10.22
10.5V	407.8	292.2	254.1	177.9	113.9	68.62	50.01	39.79	33.61	22.75	18.80	10.00
10.8V	372.4	269.6	237.0	171.7	110.0	67.39	48.65	38.85	32.79	21.84	18.20	9.496
11.1V	321.6	243.7	215.0	162.4	104.5	64.40	46.50	36.97	31.38	20.91	17.66	8.937

Constant Power Discharge Characteristics: W (25℃)(The capacity reaches the peak value after 5-20 cycles.)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	4927	3630	3010	2091	1347	827.4	605.9	483.2	410.6	278.4	231.3	127.2
10.0V	4830	3519	2962	2083	1344	823.1	604.6	482.6	409.6	277.0	229.8	125.0
10.2V	4775	3426	2928	2072	1334	818.1	601.9	481.6	408.2	275.2	227.8	122.7
10.5V	4398	3229	2826	2044	1322	812.2	599.6	477.1	403.3	272.9	225.6	120.4
10.8V	4052	3011	2643	1978	1284	801.8	583.3	466.2	393.4	262.1	218.5	113.9
11.1V	3600	2754	2406	1876	1229	772.0	558.1	443.7	376.5	251.0	211.9	107.2

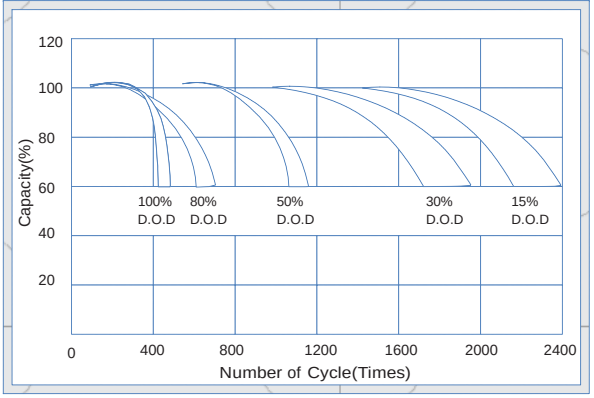
All mentioned values are average values (Tolerance ±2%).

HGG12-200

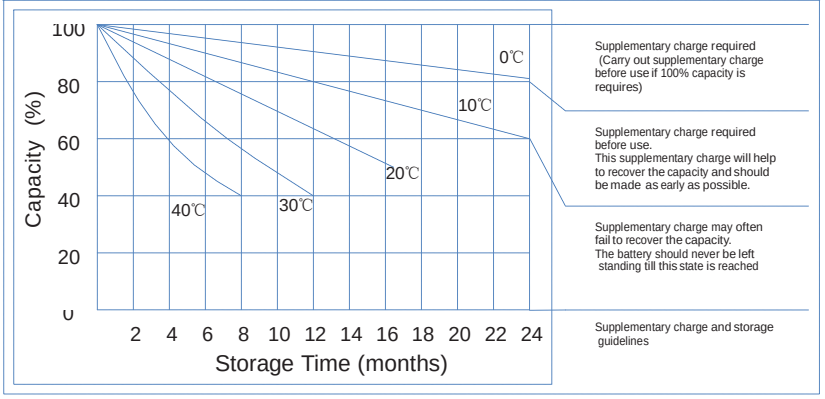
12V200Ah

HEYCAR

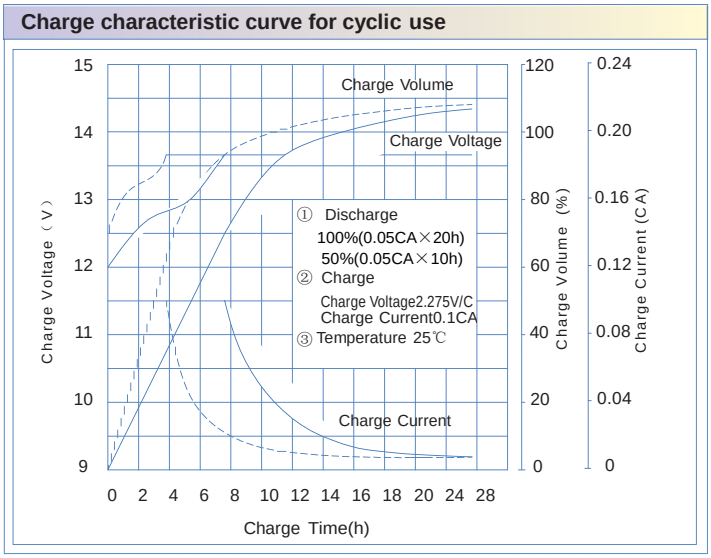
Life characteristics of cyclic use



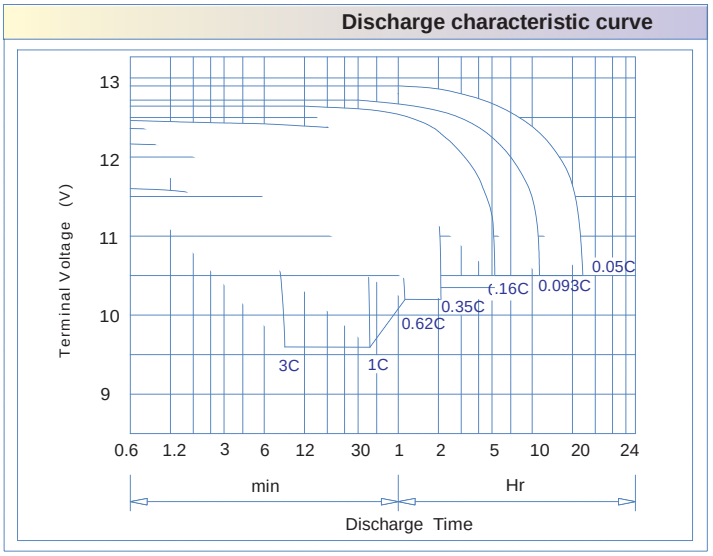
Storage characteristic



Charge characteristic curve for cyclic 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℃.

Charging Method:

Constant Voltage	-0.2Cx2h+14.4-14.7Vx24h,Max. Current 0.2C
Constant Current	-0.2Cx2h+0.1Cx12h
Fast	-0.2Cx2h+0.2Cx6h

Bolt	M5	M6	M8
Terminal	F3 F4 F13 F18 T25 T26	F8 F11 F12-1 F15	F5 F9 F10 F12 F14 F16
Torque	6~7N-m	8~10N-m	10~12N-m

Maintenance & Cautions

Cycle service

※ Avoid battery over discharge, especially battery sereis connection use.

※ Charged with recommend voltage, ensure battery can be full recharged.

In general, recharge capacity should be 1.1-1.15 times discharge capacity.

※ Effect of temperature on cycle charge voltage: -4mV/℃/Cell.

※ There are a number of factors that will affect the length of cyclic service.

The most significant are depth of discharge, ambient temperature, discharge rate, and the manner in which the battery is recharged. Generally specking, the most important factors is depth of discharge.

gdp

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