HG12-90 EV (12V90Ah)

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	90Ah@10hr-rate to 1.80V per cell @25˚C
Weight	Approx. 30.0 Kg (Tolerance±2%)
Internal Resistance	Approx. 4.8 mΩ
Terminal	F12(M8)/F15(M6)
Max. Discharge Current	900A (5 sec)
Cold Cranking Ampere(CCA)	560A
Maximum Charging Current	27.0 A
Reference Capacity	C3 69.6AH C5 76.5AH C10 90.0AH C20 96.4AH
Float Charging Voltage	13.6 V~13.8 V @ 25˚C Temperature Compensation: -3mV/˚C/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25˚C Temperature Compensation: -4mV/˚C/Cell
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
Self Discharge	Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25˚C and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25˚C.Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

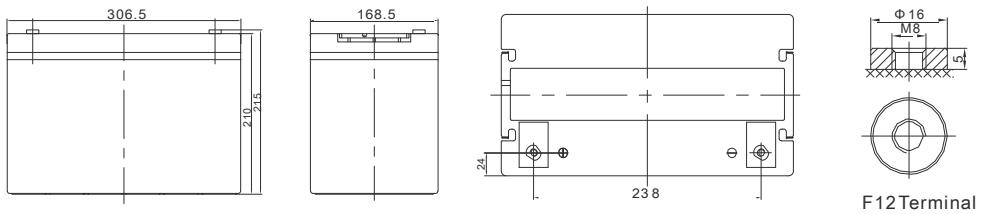
HG-EV (Electric Vehicle) series is specially designed for frequent discharge deep cycle application. By using the specially designed active material , strong grids and thick plate construction, the **HG-EV** series battery offers reliable performance in high load situations and could provide competitive cycle performance.

Suitable for Electric Vehicle and Golf cart; Industrial equipment, Floor Machines, Forklifts, Aerial lifts, and Robotics; Marine, RV, and no-idle solutions; Mobility and Medical Equipment; and most outdoor application.

CERTIFICATE CERTIFICATE

MH28539 G4M20206-0910-E-16

Dimensions



Length	306.5±1mm (12.1 inches)
Width	168.5±1mm (6.63 inches)
Height	210±1mm (8.27 inches)
Total Height	215±1mm (8.46 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

Constant Current Discharge Characteristics : A(25˚C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	236.8	176.4	101.4	58.6	34.7	24.7	19.3	16.1	11.4	9.66	5.01
1.65V	228.9	171.1	99.3	57.5	34.1	24.4	19.1	15.9	11.3	9.56	4.96
1.70V	218.6	164.2	96.5	56.0	33.3	23.9	18.7	15.7	11.1	9.43	4.90
1.75V	204.9	154.9	92.6	54.0	32.2	23.2	18.2	15.3	10.9	9.25	4.82
1.80V	186.4	142.3	87.4	51.3	30.7	22.2	17.6	14.8	10.5	9.00	4.70
1.85V	161.3	125.0	79.9	47.3	28.6	20.8	16.6	14.1	10.1	8.64	4.53

Constant Power Discharge Characteristics : WPC(25˚C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	403	308	184	110	65.7	47.2	37.1	31.1	22.3	19.0	9.86
1.65V	399	305	183	109	65.1	46.8	36.8	30.9	22.1	18.8	9.79
1.70V	386	296	179	106	63.8	46.0	36.2	30.4	21.8	18.6	9.68
1.75V	368	283	173	103	62.0	44.8	35.4	29.8	21.4	18.3	9.52
1.80V	341	264	165	98.2	59.4	43.1	34.2	28.9	20.8	17.8	9.30
1.85V	300	235	153	91.3	55.7	40.6	32.4	27.6	19.9	17.1	8.98

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

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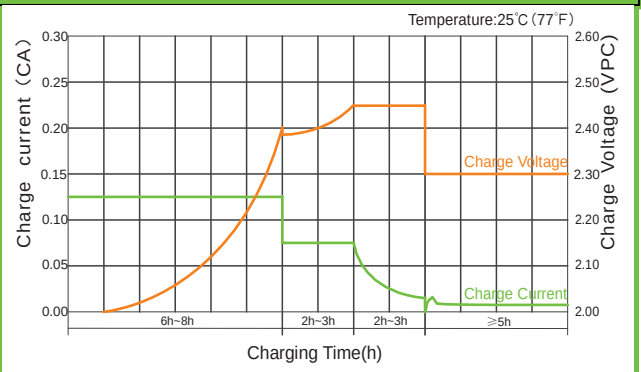
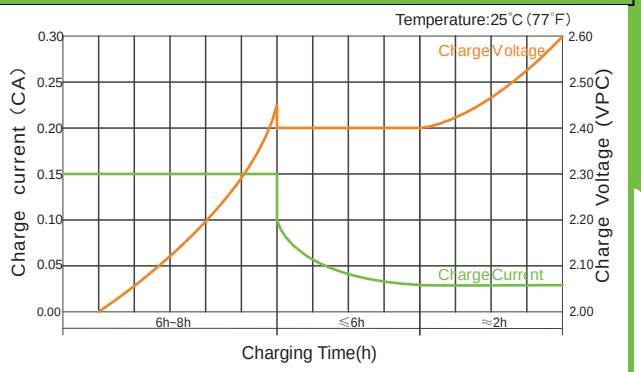
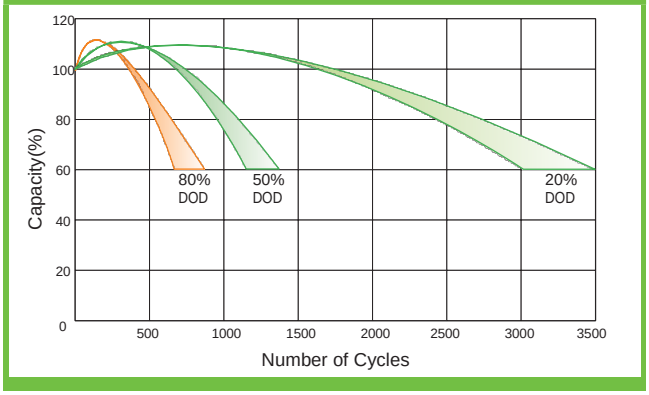
Charge Characteristic Curve for Cycle Use(IIUU)



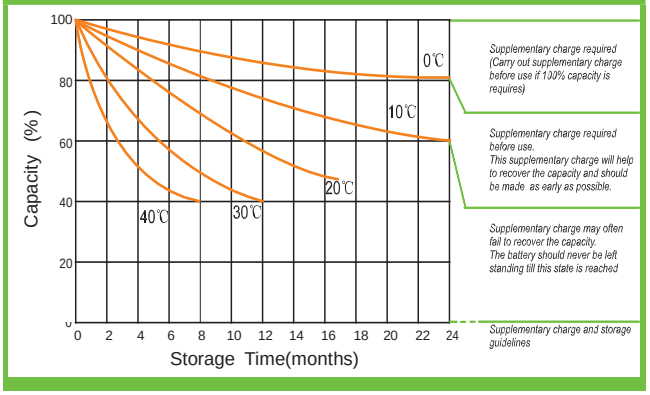
Charge Characteristic Curve For Cycle Use(IUI)



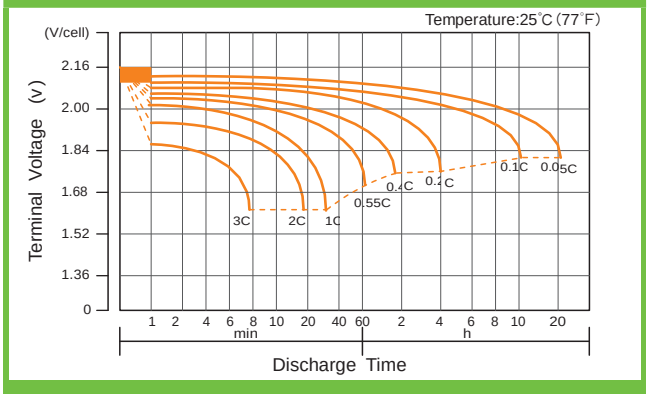
Cycle Life in Relation to Depth of Discharge



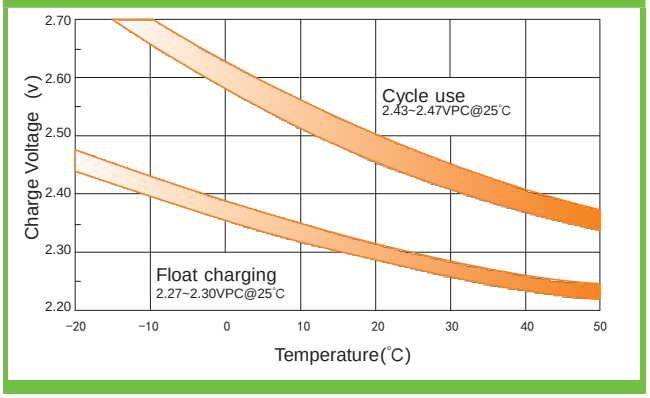
Storage Characteristics



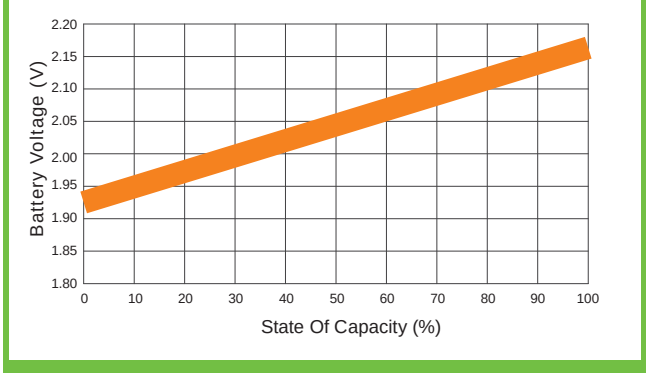
Discharge Characteristics Curve



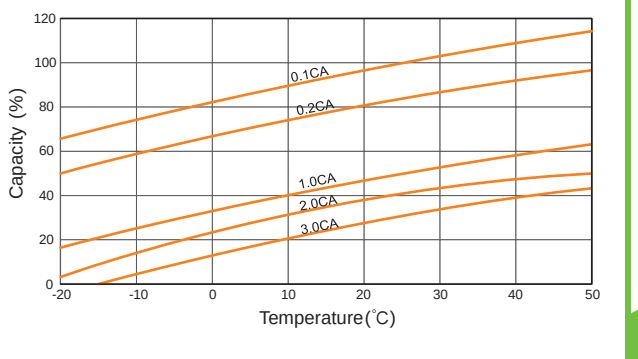
Relationship Between Charging Voltage and Temperature



Relationship of OCV And State of Charge(20℃)



Temperature Effects on Capacity



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