

# HG12-55 (12V55Ah)



## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	55Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 18.0 Kg (Tolerance ±3%)
Internal Resistance	Approx. 6 mΩ
Terminal	F11(M6)/F15(M6)
Max. Discharge Current	550A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	16.5 A
Reference Capacity	C3 43.0AH C5 48.4AH C10 55.0AH C20 57.8AH
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 charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

**HG (Deep Cycle)** series batteries provide superior high integrity and reliability.

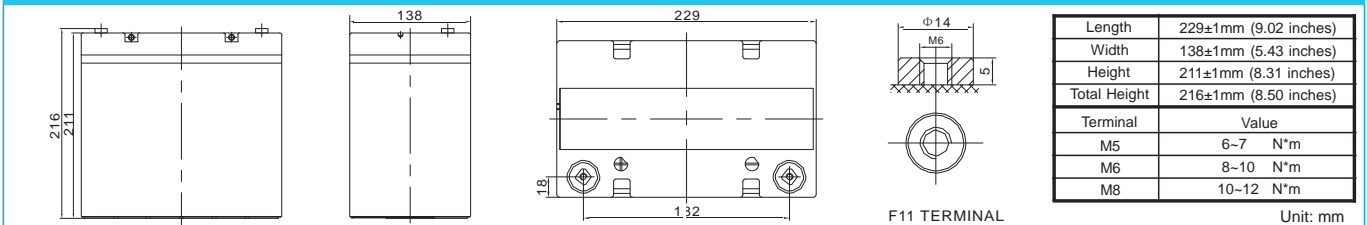
It is specially designed for frequent cyclic charge and discharge.

By using strong grids, thick plate and specially active material are designed for repeated deep-discharge applications.

The HG series batteries offers 30% more cyclic life than the standby series. It is suitable for solar and wind renewable energy storage, mobility and medical equipment, RV, telecom, broadband and cable TV, UPS systems etc.



## Dimensions



### Constant Current Discharge Characteristics : A(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	192.8	141.8	105.9	60.73	35.09	20.55	15.30	12.11	10.21	6.97	5.90	3.01
1.65V	185.7	137.1	102.7	59.46	34.43	20.20	15.06	11.95	10.08	6.89	5.84	2.98
1.70V	176.4	130.9	98.53	57.77	33.55	19.74	14.75	11.73	9.91	6.79	5.76	2.94
1.75V	164.0	122.7	92.94	55.48	32.35	19.10	14.32	11.42	9.68	6.64	5.66	2.89
1.80V	147.6	111.6	85.41	52.33	30.70	18.22	13.73	10.99	9.36	6.44	5.50	2.82
1.85V	125.5	96.58	75.03	47.88	28.35	16.97	12.88	10.38	8.89	6.15	5.28	2.72

### Constant Power Discharge Characteristics : WPC(25°C)

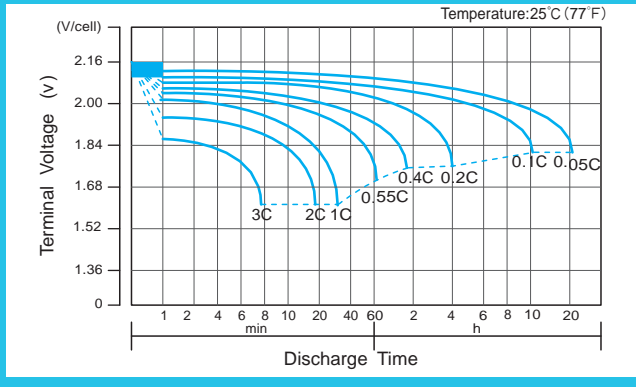
F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	327	241	185	110	65.6	38.9	29.2	23.3	19.7	13.6	11.6	5.92
1.65V	323	239	183	110	65.1	38.6	28.9	23.1	19.5	13.5	11.5	5.88
1.70V	310	231	177	107	63.6	37.8	28.4	22.7	19.2	13.3	11.4	5.81
1.75V	294	220	170	104	61.6	36.7	27.7	22.2	18.9	13.1	11.2	5.72
1.80V	269	204	158	99.0	58.8	35.2	26.7	21.4	18.3	12.7	10.9	5.59
1.85V	233	180	141	91.5	54.7	33.0	25.1	20.3	17.4	12.1	10.4	5.39

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

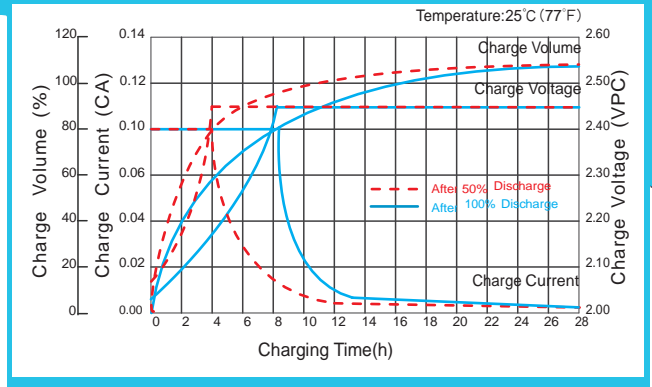
# HG12-55 (12V55Ah)



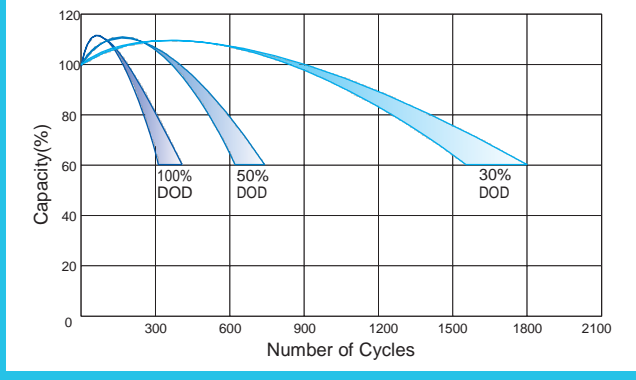
Discharge Characteristics Curve



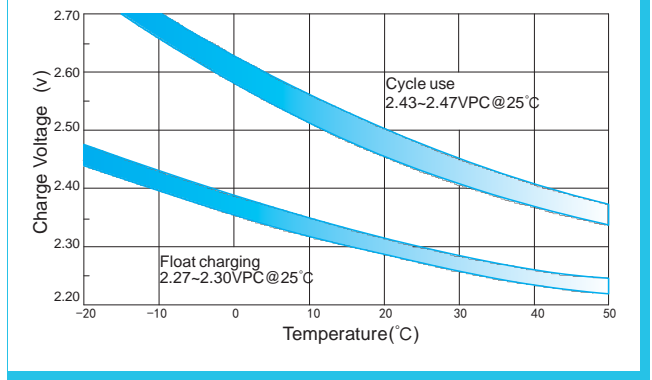
Charge Characteristic Curve for Cycle Use(IU)



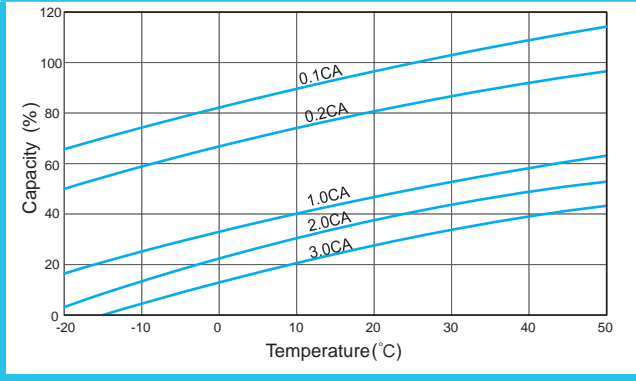
Cycle Life in Relation to Depth of Discharge



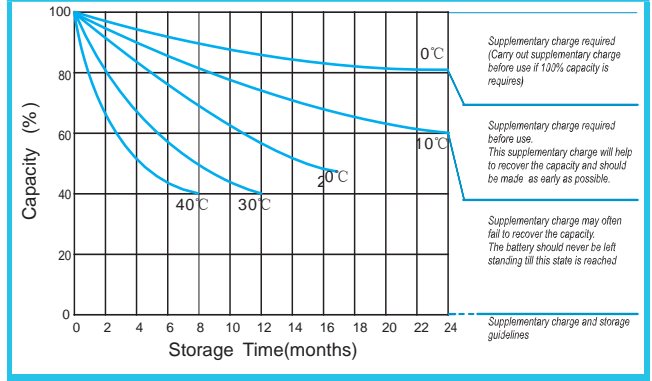
Relationship Between Charging Voltage and Temperature



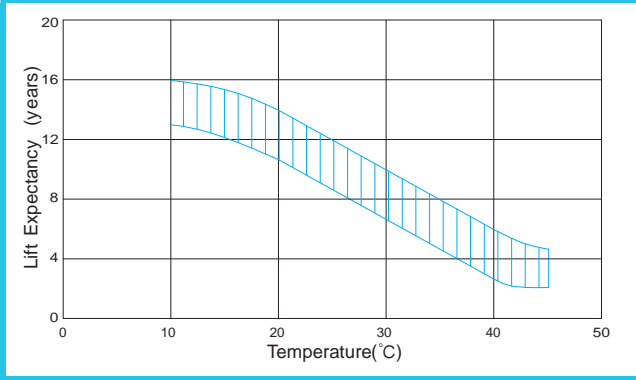
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20°C)

