

CHALLENGER

G12-200 (12V 200AH)

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	200Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 58.0 Kg (Tolerance ± 3.0%)
Internal Resistance	Approx. 5.2 mΩ
Terminal	F10(M8)/F16 (M8)
Max. Discharge Current	2000A (5 sec)
Design Life	15 years (floating charge)
Max. Charging Current	40.0 A
Reference Capacity	C3 136.5AH C5 154.0AH C10 176.0AH C20 200.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.2 V~14.4 V @ 25°C Temperature Compensation: -4mV/°C/Cell
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
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 2% at 20°C. Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.



G (Deep Cycle GEL) series is pure GEL battery with 15 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 G series offers excellent recovery capability after deep discharge under frequent cyclic discharge use, and it can offers 2 times cyclic life than the standard series. It is suitable for solar & wind system, marine, deep discharge UPS etc.

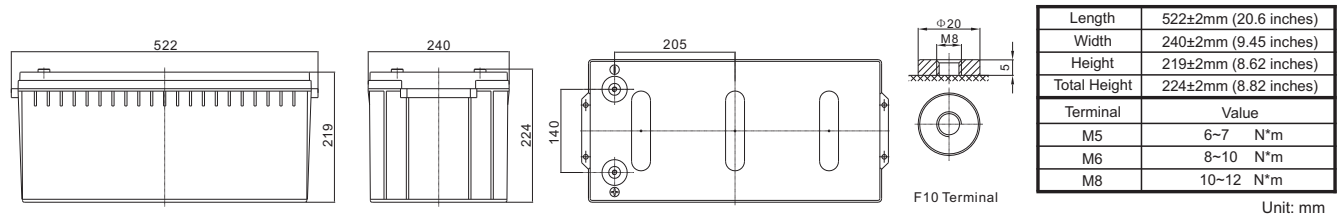


ISO 9001 ISO 14001 OHSAS 18001



MH 28539

Dimensions



Constant Current Discharge Characteristics :A(25°C)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	327.4	265.5	174.2	108.6	66.4	49.7	39.7	33.3	22.5	18.6	10.4
1.65V	309.4	253.9	167.3	104.9	64.2	48.2	38.6	32.4	22.3	18.3	10.2
1.70V	284.9	237.8	159.9	101.5	62.1	46.9	37.6	31.6	21.9	18.1	10.1
1.75V	260.7	221.3	152.8	97.8	60.0	45.5	36.6	30.8	21.6	17.8	10.0
1.80V	236.0	204.3	146.1	94.0	57.8	44.1	35.6	30.0	21.2	17.6	9.90
1.85V	192.9	169.5	125.8	84.3	53.0	40.8	33.0	28.0	19.9	16.6	9.40

Constant Power Discharge Characteristics : WPC(25°C)

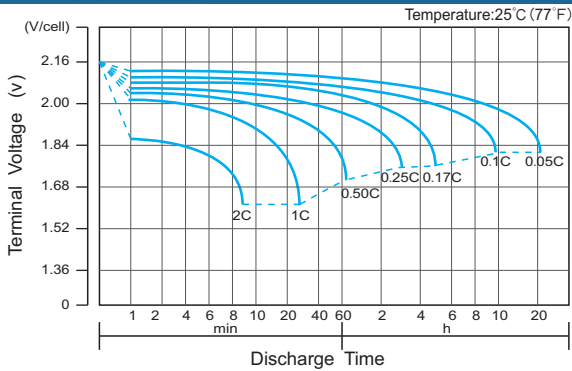
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	632.5	527.5	359.6	231.9	142.9	108.0	86.6	72.9	50.0	41.5	23.3
1.65V	601.8	507.0	348.2	225.6	139.1	105.3	84.6	71.3	49.4	41.0	23.0
1.70V	571.1	486.5	336.8	219.3	135.2	102.7	82.6	69.7	48.8	40.5	22.7
1.75V	532.2	459.3	325.2	212.6	131.1	100.0	80.8	68.2	48.3	40.0	22.5
1.80V	490.2	430.1	314.0	205.6	127.0	97.3	78.7	66.7	47.6	39.5	22.3
1.85V	407.7	362.0	273.1	185.5	117.0	90.4	73.5	62.4	44.7	37.3	21.2

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

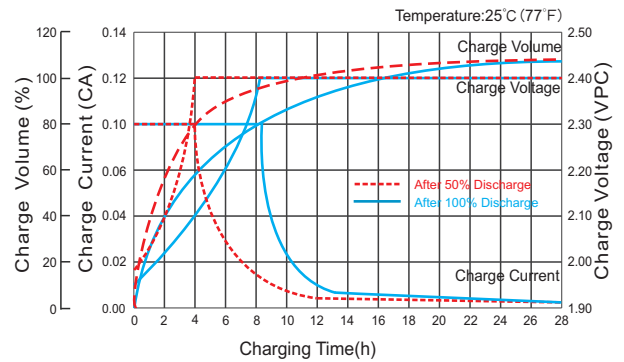
The battery must be fully charged before the capacity test. The C₂₀ should reach 95% after the first cycle and 100% after the third cycle.

CHALLENGER

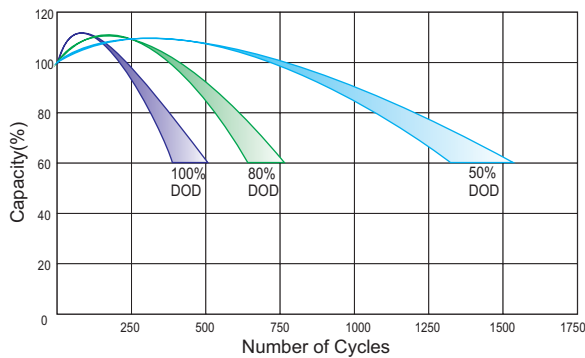
Discharge Characteristics Curve



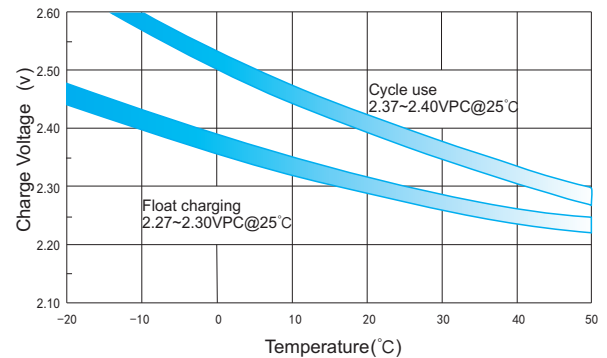
Charge Characteristic Curve for Cycle Use(IU)



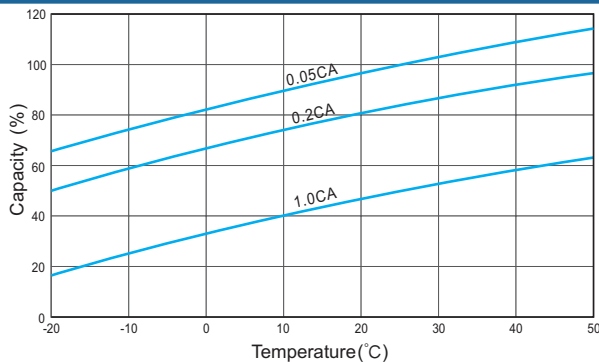
Cycle Life in Relation to Depth of Discharge



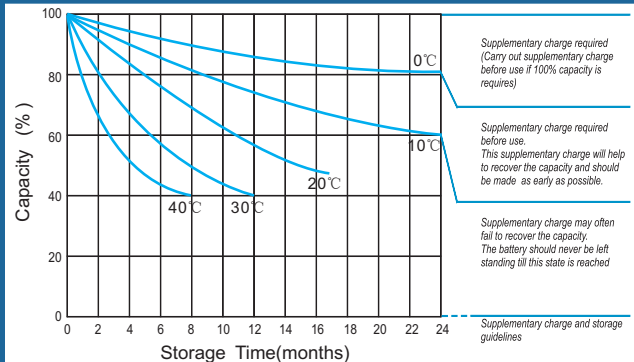
Relationship Between Charging Voltage and Temperature



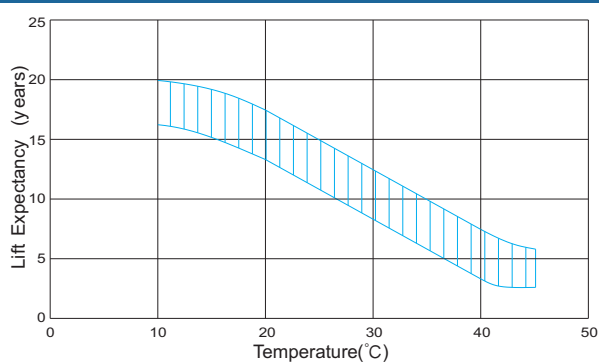
Temperature Effects on Capacity



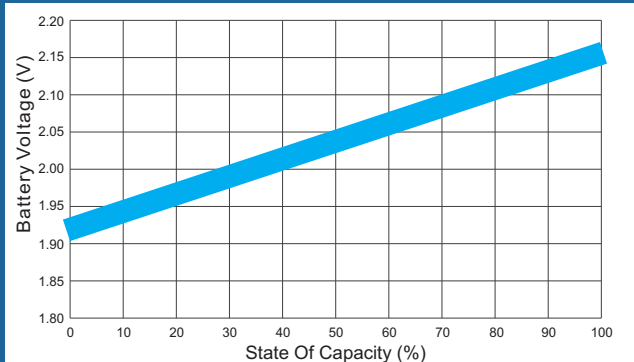
Storage Characteristics



Effect of Temperature on Long Term Life



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



(Note) All above information shall be changed without prior notice, Producer reserves the right to explain and update the latest information