

BRN-1601 (460Ah 6V)



Specification

Cells Per Unit	3
Voltage Per Unit	6
Capacity	400Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 57.0 Kg (Tolerance ±3.0%)
Internal Resistance	Approx. 1.8 mΩ
Terminal	F14(M8)/F22(M8)
Max. Discharge Current	4000A (5 sec)
Cold Cranking Ampere(CCA)	800A
Maxi. Charging Current	120.0A
Reference Capacity	C3 309.9AH
	C5 349.5AH
	C10 400.0AH
	C20 424.0AH
Float Charging Voltage	6.8 V~6.9 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Bulk Charging Voltage	7.3 V~7.4 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	BayWa r.e. 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.

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 EV series battery offers reliable performance in high load situations and could provide competitive cycle performance. It is suitable for Electric Vehicle and Golf cart, Floor Machines, Forklifts, Aerial lifts, Robotics, Marine, RV, Mobility and Medical Equipment, and most outdoor application.

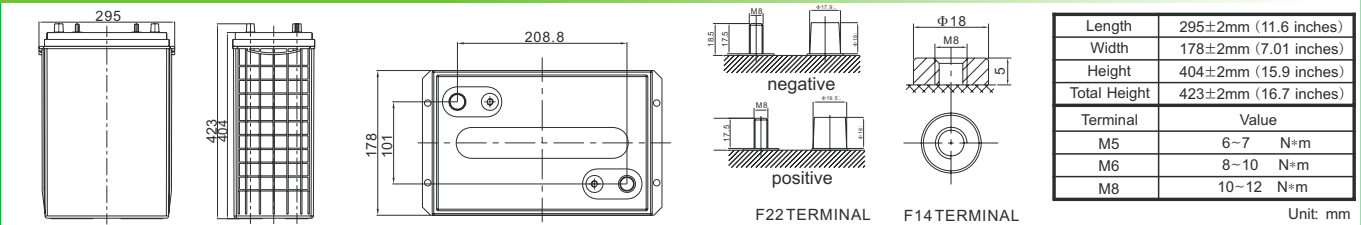


ISO 9001 ISO 14001 OHSAS 18001



MH 28539 G4M20206-0910-E-16

Dimensions



Constant Current Discharge Characteristics : A(25°C)

F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	424.5	246.8	145.8	112.9	88.8	75.5	50.8	42.2	22.1
1.65V	407.5	238.4	141.1	109.4	86.4	73.6	50.2	41.7	21.7
1.70V	389.5	230.6	136.5	106.5	84.0	71.7	49.4	41.1	21.5
1.75V	372.3	222.2	131.7	103.3	81.9	69.9	48.7	40.5	21.2
1.80V	355.8	213.7	127.0	100.1	79.5	68.1	47.9	40.0	21.0
1.85V	306.5	191.7	116.3	92.5	73.9	63.5	45.0	37.7	19.9

Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	770.9	463.9	276.2	215.7	170.4	145.6	99.1	83.0	43.5
1.65V	747.9	450.5	268.7	209.9	166.4	142.4	98.2	82.1	42.8
1.70V	722.0	438.6	261.3	205.1	162.5	139.1	96.9	80.9	42.4
1.75V	697.2	425.1	253.4	199.8	158.9	136.1	95.8	80.0	41.9
1.80V	673.1	411.2	245.5	194.4	154.9	133.1	94.4	79.0	41.5
1.85V	585.5	371.1	226.2	180.5	144.6	124.5	88.8	74.5	39.5

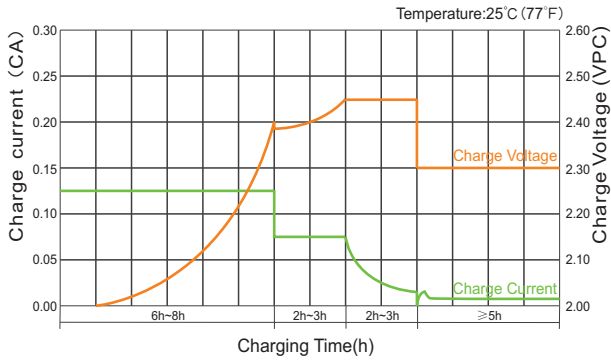
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

The battery must be fully charged before the capacity test. The C10 should reach 95% after the first cycle and 100% after the third cycle.

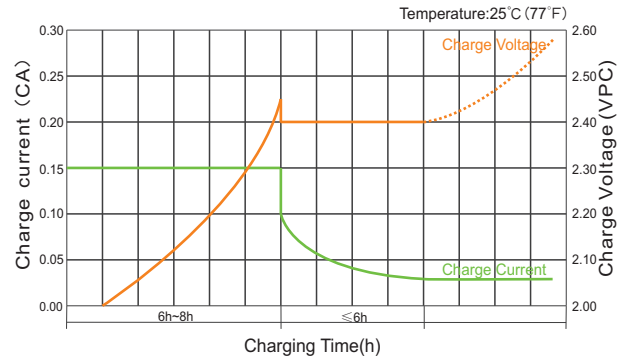
If F22 terminal is selected and the discharge current is more than 0.25C, the threaded terminal of terminal F22 shall not be used in connection, but the lead pole shall be connected.

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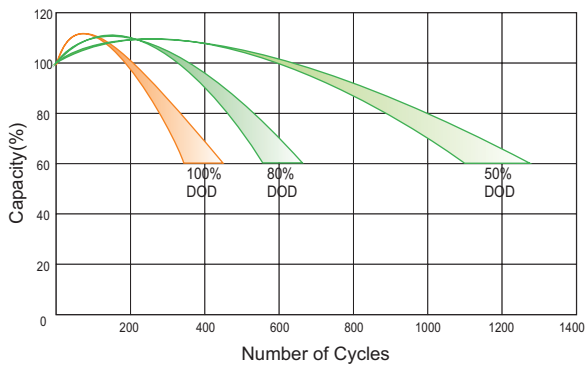
Charge Characteristic Curve for Cycle Use(IUUU)



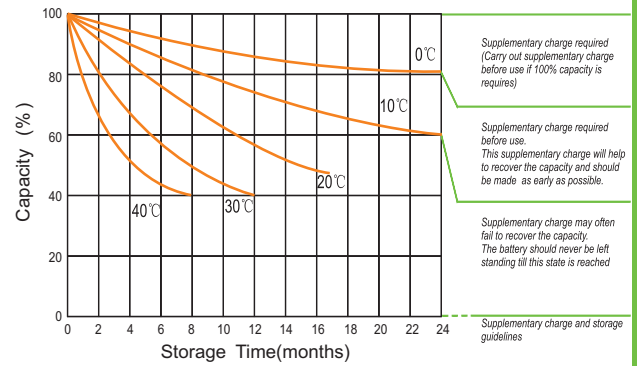
Charge Characteristic Curve For Cycle Use(IUI)



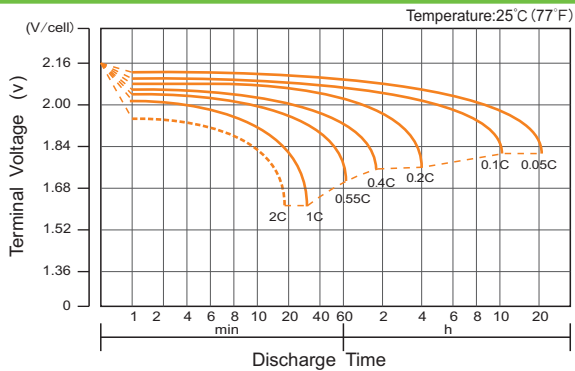
Cycle Life in Relation to Depth of Discharge



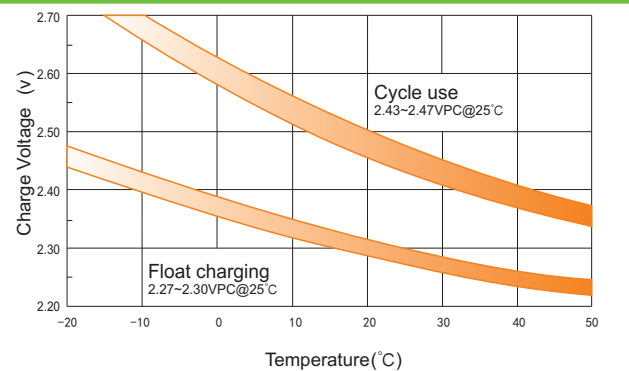
Storage Characteristics



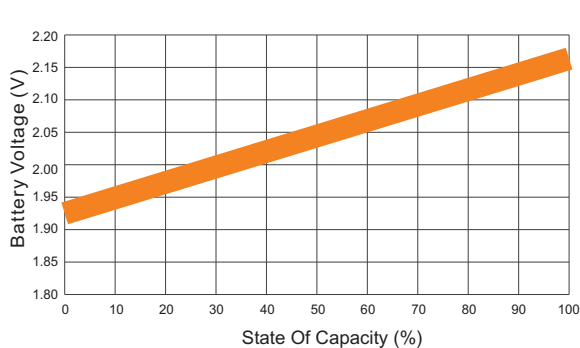
Discharge Characteristics Curve



Relationship Between Charging Voltage and Temperature



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



Temperature Effects on Capacity

