



# EV12-55(12V55Ah)



## Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	55Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 18.0 Kg (Tolerance ±3%)
Internal Resistance	Approx. 7 mΩ
Terminal	F11 (M6)/F15 (M6)
Max. Discharge Current	550A (5 sec)
Cold Cranking Ampere(CCA)	360A
Maximum Charging Current	16.5 A
Reference Capacity	C3 40.0AH
	C5 48.4AH
	C10 52.3AH
	C20 55.0AH
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	RITAR 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.



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. 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.



ISO 9001



ISO 14001



OHSAS 18001

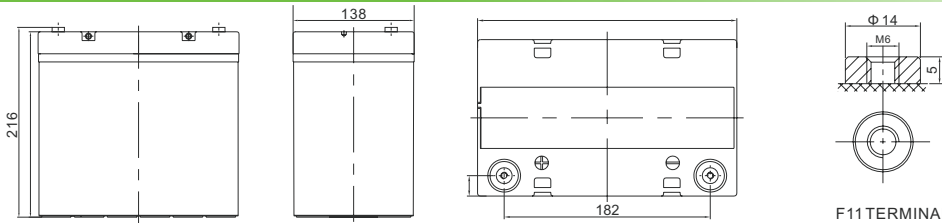


MH 28539



G4M20206-0910-E-16

## Dimensions



Length	229±2mm (9.02 inches)
Width	138±2mm (5.43 inches)
Height	211±2mm (8.31 inches)
Total Height	216±2mm (8.50 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	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	58.87	34.02	20.13	15.32	12.05	10.20	6.76	5.61	2.86
1.65V	57.64	33.37	19.78	15.08	11.89	10.07	6.68	5.55	2.83
1.70V	56.00	32.52	19.33	14.77	11.67	9.90	6.58	5.48	2.80
1.75V	53.78	31.36	18.71	14.34	11.36	9.67	6.44	5.37	2.75
1.80V	50.73	29.76	17.85	13.75	10.94	9.35	6.25	5.23	2.68
1.85V	46.41	27.48	16.62	12.90	10.33	8.88	5.97	5.01	2.58

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

F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	107	63.6	38.1	29.3	23.1	19.7	13.2	11.0	5.63
1.65V	106	63.1	37.8	29.0	22.9	19.5	13.1	10.9	5.59
1.70V	104	61.7	37.0	28.5	22.6	19.2	12.9	10.8	5.52
1.75V	101	59.8	36.0	27.7	22.1	18.8	12.7	10.6	5.44
1.80V	96.0	57.0	34.5	26.7	21.3	18.3	12.3	10.3	5.31
1.85V	88.7	53.0	32.3	25.2	20.2	17.4	11.8	9.92	5.12

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



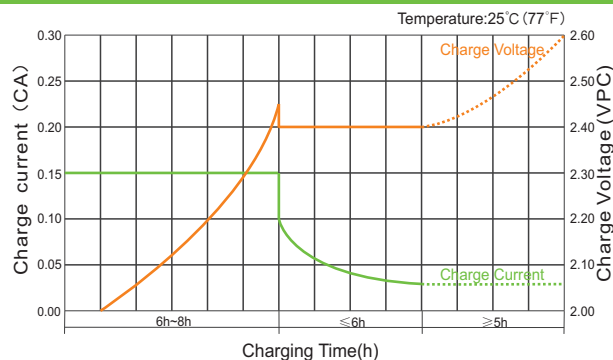
# EV12-55(12V55Ah)



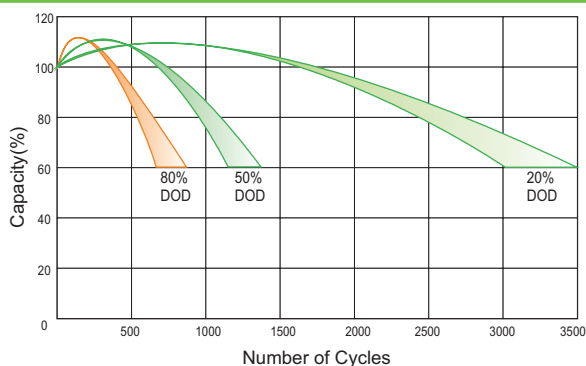
## Charge Characteristic Curve for Cycle Use(IUUU)



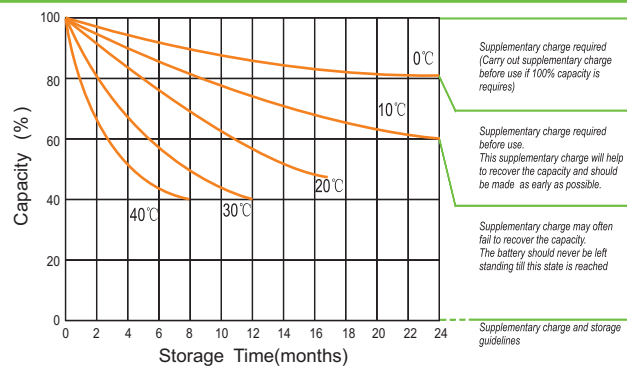
## Charge Characteristic Curve For Cycle Use(III)



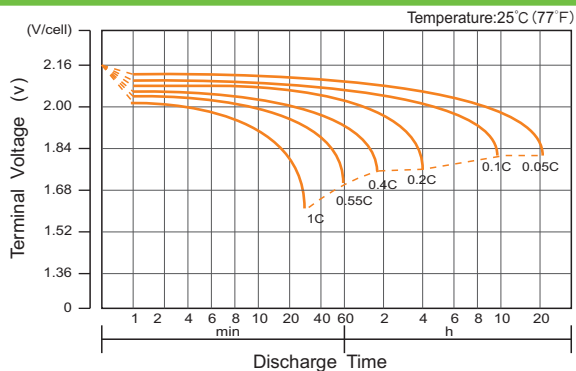
## Cycle Life in Relation to Depth of Discharge



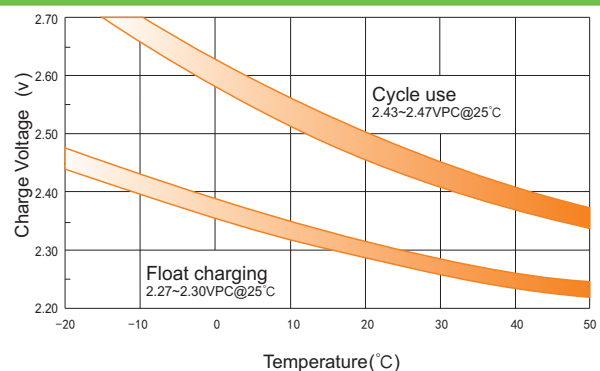
## Storage Characteristics



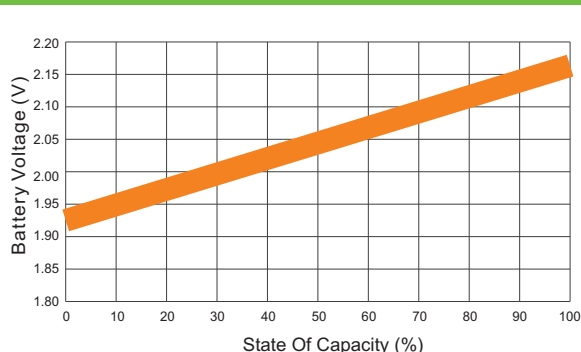
## Discharge Characteristics Curve



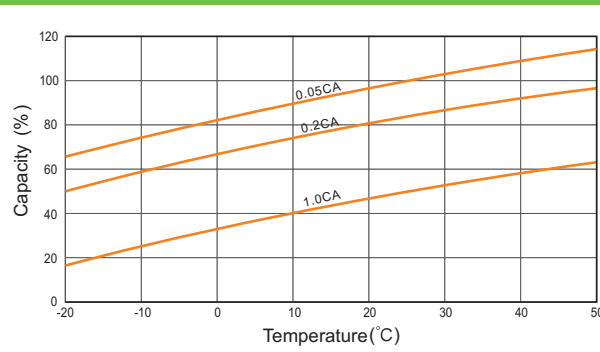
## Relationship Between Charging Voltage and Temperature



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



## Temperature Effects on Capacity



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