



EV12-90(12V90Ah)



Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	90Ah@20hr-rate to 1.75V 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 70.5AH
	C5 79.0AH
	C10 85.5AH
	C20 90.0AH
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

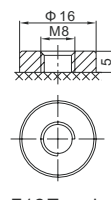
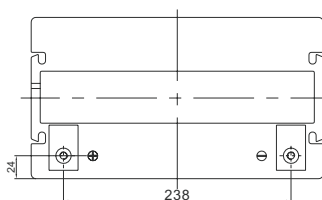
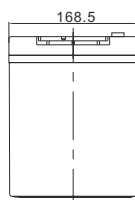
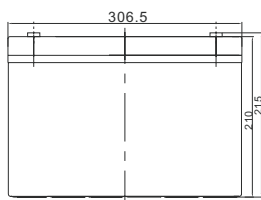


MH 28539



G4M20206-0910-E-16

Dimensions



F12 Terminal

Length	306.5±2mm (12.1 inches)
Width	168.5±2mm (6.63 inches)
Height	210±2mm (8.27 inches)
Total Height	215±2mm (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	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	96.3	55.7	32.9	25.1	19.7	16.7	11.1	9.18	4.68
1.65V	94.3	54.6	32.4	24.7	19.5	16.5	10.9	9.08	4.63
1.70V	91.6	53.2	31.6	24.2	19.1	16.2	10.8	8.96	4.58
1.75V	88.0	51.3	30.6	23.5	18.6	15.8	10.5	8.79	4.50
1.80V	83.0	48.7	29.2	22.5	17.9	15.3	10.2	8.55	4.39
1.85V	76.0	45.0	27.2	21.1	16.9	14.5	9.8	8.21	4.23

Constant Power Discharge Characteristics : WPC(25°C)

F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	175	104	62.4	47.9	37.9	32.2	21.6	18.0	9.21
1.65V	174	103	61.8	47.4	37.5	31.9	21.4	17.9	9.14
1.70V	170	101	60.6	46.6	36.9	31.5	21.1	17.7	9.04
1.75V	165	98	58.9	45.4	36.1	30.8	20.7	17.3	8.90
1.80V	157	93.2	56.5	43.7	34.9	29.9	20.1	16.9	8.69
1.85V	145	86.7	52.9	41.2	33.1	28.5	19.3	16.2	8.38

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



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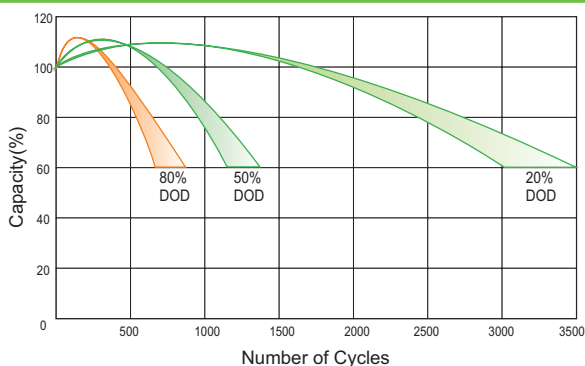
Charge Characteristic Curve for Cycle Use(IUUU)



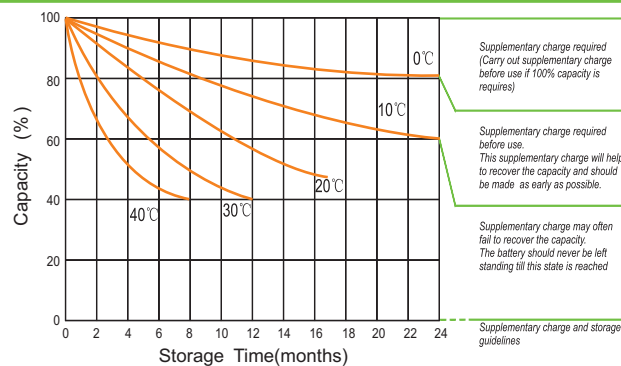
Charge Characteristic Curve For Cycle Use(III)



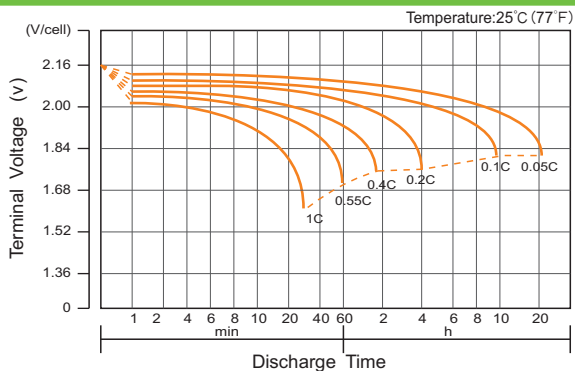
Cycle Life in Relation to Depth of Discharge



Storage Characteristics



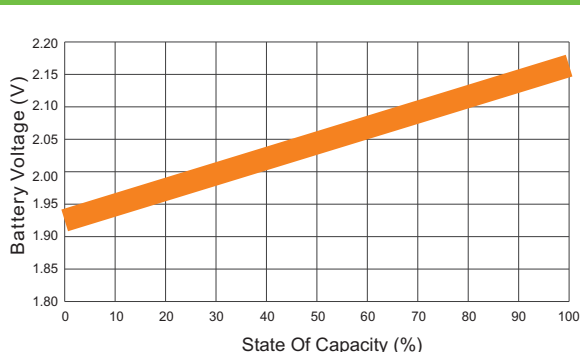
Discharge Characteristics Curve



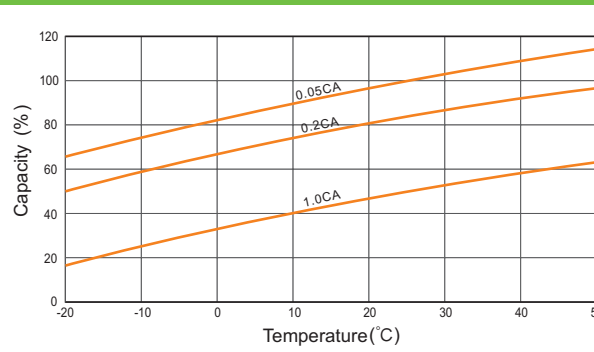
Relationship Between Charging Voltage and Temperature



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.