

# CHALLENGER

## EVG 12-75 (12V 75AH)

### Specification

<b>Cells Per Unit</b>	6
<b>Voltage Per Unit</b>	12
<b>Capacity</b>	75Ah@ 20hr-rate to 1.75V per cell @25°C
<b>Weight</b>	Approx. 22.5 Kg (Tolerance ±3.0%)
<b>Internal Resistance</b>	Approx. 8.3 mΩ
<b>Terminal</b>	F15(M6)/F11(M6)
<b>Max. Discharge Current</b>	750A (5 sec)
<b>Cold Cranking Ampere(CCA)</b>	470A
<b>Maxi. Charging Current</b>	22.5A
<b>Reference Capacity</b>	C3 54.9AH C5 61.9AH C10 70.8AH C20 75.0AH
<b>Float Charging Voltage</b>	13.6 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
<b>Cycle Use Voltage</b>	14.6 V~14.8 V @ 25°C Temperature Compensation: -4mV/°C/Cell
<b>Operating Temperature Range</b>	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
<b>Normal Operating Temperature Range</b>	25°C ±5°C
<b>Self Discharge</b>	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.
<b>Container Material</b>	A.B.S. UL94-HB, UL94-V0 Optional.



EVG ( Electric Vehicle ) series is specially designed for frequent discharge deep cycle application. By using the specially designed active material, strong grids, thick plate construction and hybrid GEL electrolyte, the EVG 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

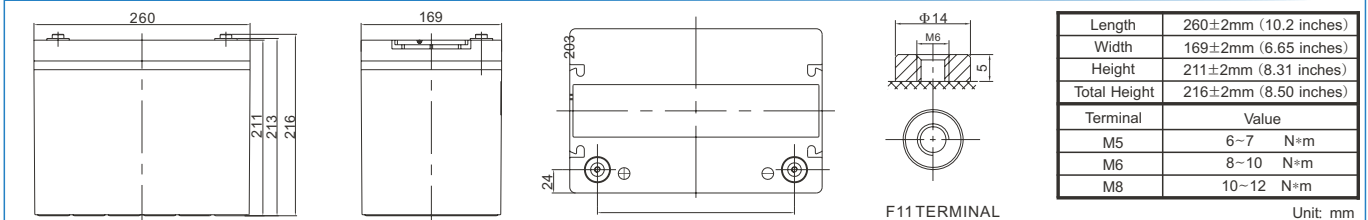
ISO 14001

OHSAS 18001



MH 28539

### Dimensions



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

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	179.8	135.3	79.13	43.72	25.81	20.00	15.72	13.38	8.99	7.47	3.91
1.65V	169.9	129.3	75.97	42.22	24.99	19.38	15.29	13.03	8.89	7.38	3.85
1.70V	156.4	121.1	72.61	40.85	24.17	18.86	14.88	12.69	8.75	7.27	3.80
1.75V	143.2	112.7	69.40	39.35	23.32	18.29	14.50	12.37	8.63	7.18	3.75
1.80V	129.6	104.1	66.33	37.85	22.49	17.73	14.08	12.05	8.48	7.08	3.72
1.85V	105.9	86.38	57.13	33.95	20.60	16.39	13.09	11.24	7.97	6.67	3.53

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

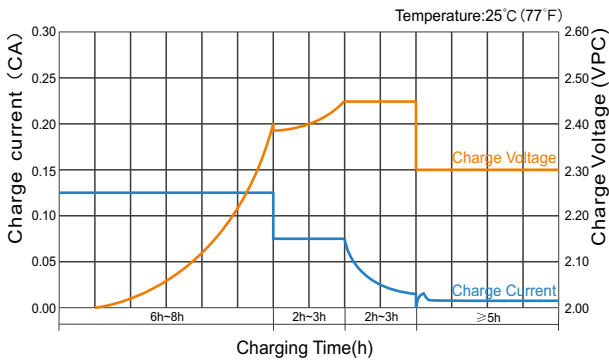
F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	305.7	236.5	143.7	82.15	48.93	38.20	30.18	25.79	17.56	14.69	7.70
1.65V	294.4	229.5	139.4	79.79	47.59	37.18	29.47	25.21	17.40	14.53	7.59
1.70V	276.0	218.1	134.6	77.68	46.28	36.33	28.78	24.64	17.17	14.33	7.50
1.75V	257.2	205.9	130.0	75.29	44.87	35.39	28.15	24.11	16.96	14.16	7.42
1.80V	236.9	192.8	125.5	72.83	43.48	34.43	27.44	23.57	16.71	14.00	7.36
1.85V	197.0	162.3	109.2	65.73	40.06	31.98	25.60	22.05	15.73	13.20	7.00

(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 C<sub>20</sub> should reach 95% after the first cycle and 100% after the third cycle.

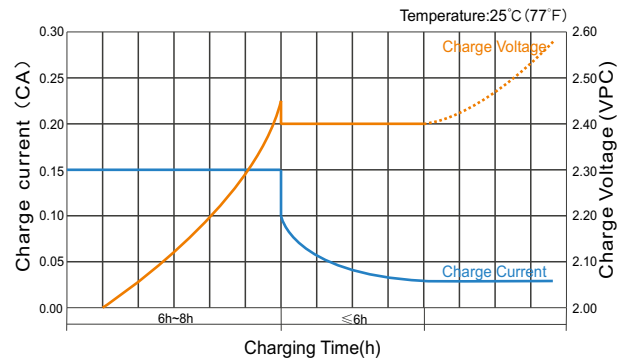
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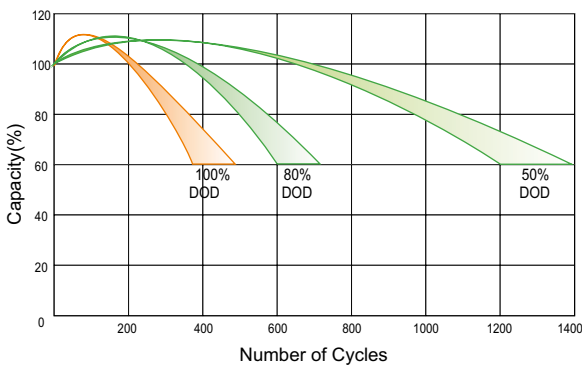
Charge Characteristic Curve for Cycle Use(IIUU)



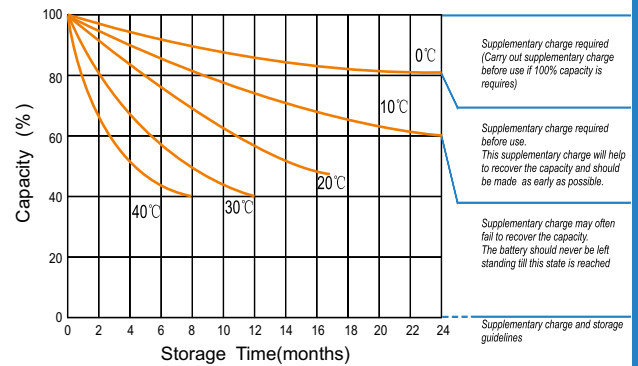
Charge Characteristic Curve For Cycle Use(IUI)



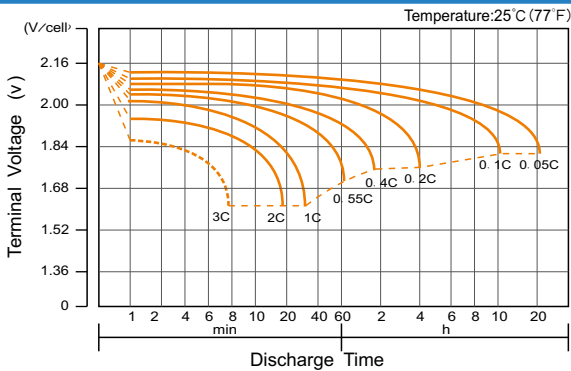
Cycle Life in Relation to Depth of Discharge



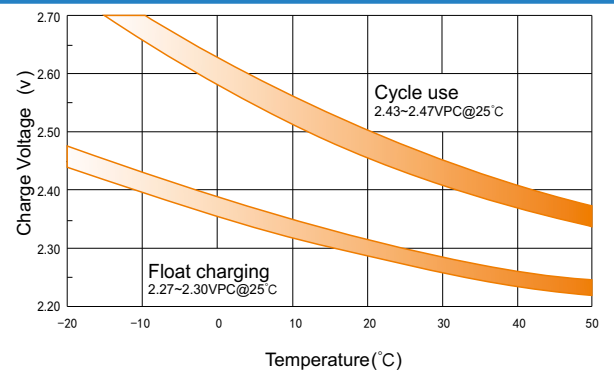
Storage Characteristics



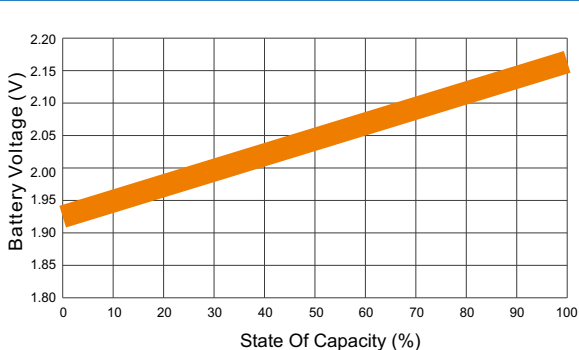
Discharge Characteristics Curve



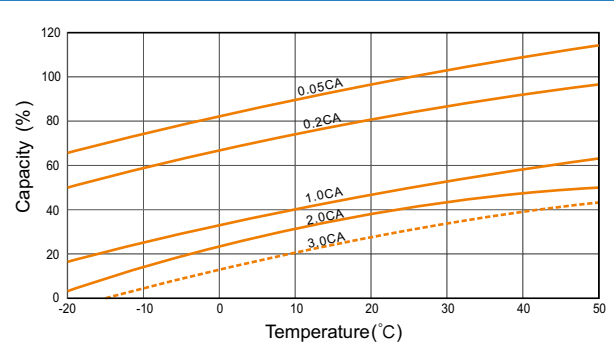
Relationship Between Charging Voltage and Temperature



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



Temperature Effects on Capacity



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