



RA12-75DG (12V75Ah)

RA12-75DG is GEL Deep cycle battery, with 12 years floating design life, superiorly designed for frequent cyclic discharge applications under extreme temperature. By using strong grid to insure reliable performance under frequent cyclic discharge use. 400 cycles could be available at 100% DOD. Offering extra-durable cyclic performance, high efficiency of recovery, that is more suitable for solar, mobility, E-toll, marine, deep discharge UPS etc..



Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	75Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 23.5 Kg
Max. Discharge Current	750 A (5 sec)
Internal Resistance	Approx. 7.0 mΩ
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
Float charging Voltage	13.6to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	15A
Equalization and Cycle Service	14.2 to 14.4VDC/unit Average at 25°C
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Terminal F15/F11
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.



MH28539



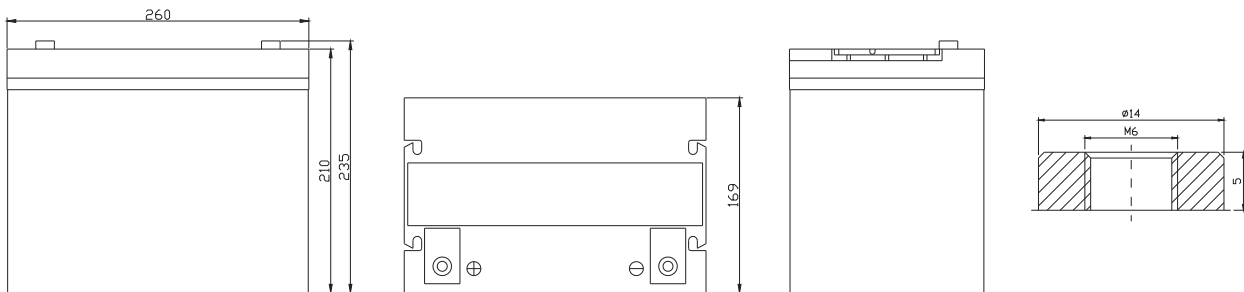
G4M20206-0910-E-16



ISO9001:2000 Certificate

Dimensions

Unit: mm Dimension: 260(L)×169(W)×210(H)



Constant Current Discharge Characteristics: A (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	196.48	146.33	114.51	75.296	44.130	26.392	18.225	15.097	12.710	8.6820	7.2011	3.8424
10.0V	190.80	139.23	112.16	74.052	43.927	26.193	18.155	15.027	12.635	8.6114	7.1319	3.7725
10.2V	185.15	134.32	110.40	73.397	43.519	25.995	18.015	14.957	12.561	8.5408	7.0627	3.7027
10.5V	168.21	125.42	106.35	73.554	43.112	25.796	17.945	14.817	12.411	8.4703	6.9934	3.6328
10.8V	153.59	115.71	99.170	72.994	42.093	25.333	17.456	14.468	12.187	8.3291	6.9242	3.5630
11.1V	132.65	104.62	89.975	68.993	39.989	24.209	16.688	13.769	11.663	7.9762	6.7164	3.3534

Constant Power Discharge Characteristics: W (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	2072.9	1558.4	1248.3	844.90	509.95	311.07	216.87	179.95	151.63	103.66	86.054	46.070
10.0V	2032.0	1510.7	1228.3	835.23	508.73	309.42	216.95	179.72	151.24	103.16	85.511	45.271
10.2V	2008.8	1470.8	1214.4	837.45	504.80	307.55	216.00	179.33	150.73	102.49	84.752	44.432
10.5V	1850.3	1385.9	1172.0	839.77	500.26	305.32	215.16	177.66	148.93	101.64	83.921	43.594
10.8V	1704.9	1292.5	1095.9	834.31	491.03	301.43	209.30	173.61	146.24	99.949	83.090	42.756
11.1V	1514.7	1182.2	997.8	793.28	470.01	290.23	200.26	165.22	139.96	95.714	80.597	40.241

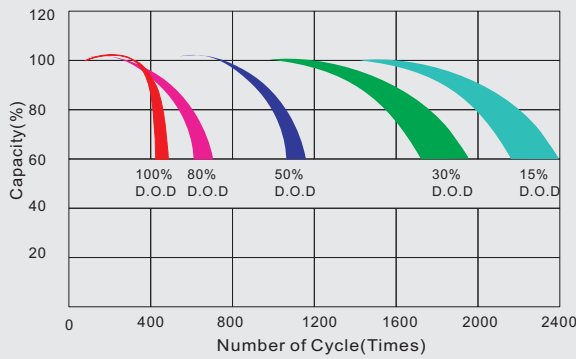
All mentioned values are average values.

RA12-75DG

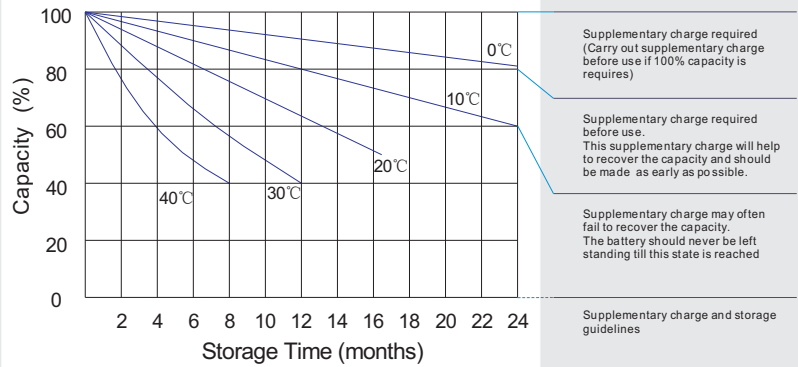
12V75Ah



Life characteristics of cyclic use



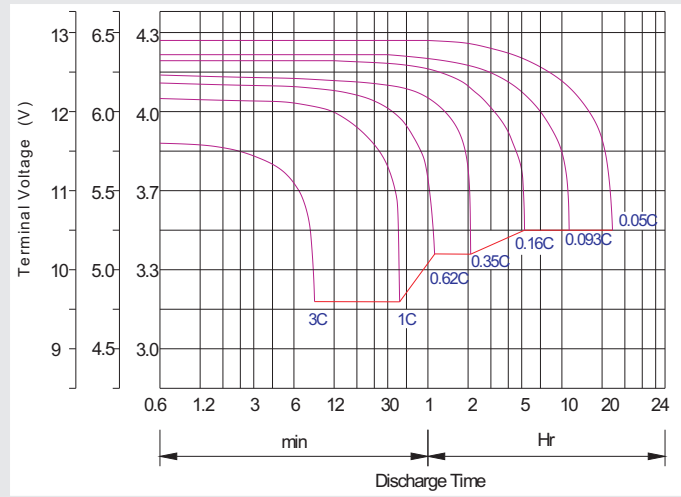
Storage characteristic



Charge characteristic curve for cyclic use



Discharge characteristic curve



Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL Battery	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM Battery	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

Maintenance & Cautions

Cycle service
※ Avoid battery over discharge, especially battery series connection use.
※ Charged with recommend voltage, ensure battery can be full recharged.
In general, recharge capacity should be 1.1-1.15 times discharge capacity.
※ Effect of temperature on cycle charge voltage: -4mV/°C/Cell.
※ There are a number of factors that will affect the length of cyclic service.
The most significant are depth of discharge, ambient temperature, discharge rate, and the manner in which the battery is recharged.
Generally speaking, the most important factors is depth of discharge.

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

Constant Voltage	-0.2Cx2h+2.4~2.45V/Cellx24h, Max. Current 0.3CA
Constant Current	-0.2Cx2h+0.1CAx12h
Fast	-0.2Cx2h+0.3CAx4.0h