RA12-80 (12V80Ah)

RA12-80 is a general purpose battery with 10 years floating design life, meet with IEC, JIS .BS and Eurobat standard. With heavy duty grid, thickness plates, special additives, RA series battery have long and reliable standby service life. Our RA Series batteries keep high consistent for better performance in series usage.

RITAR®

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	80Ah@10hr-rate to 1.75V per cell @25°C
Weight	Approx. 24.0 Kg
Max. Discharge Current	800A (5 sec)
Internal Resistance	Approx. 5.5 mΩ
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
Float charging Voltage	13.6 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	24 A
Equalization and Cycle Service	14.6 to 14.8 VDC/unit Average at 25°C
Self Discharge	RITAR 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 F5/F11
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.

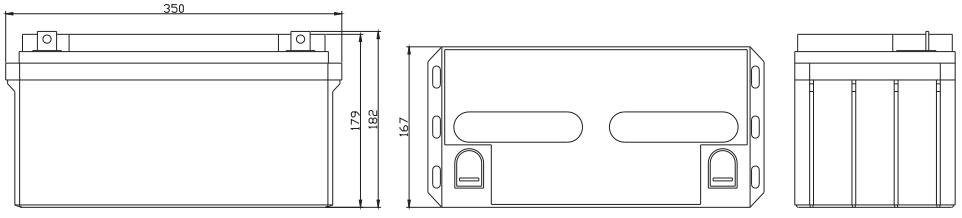
MH28539

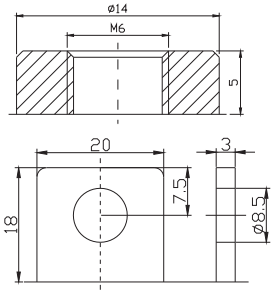
G4M20206-0910-E-16

ISO9001:2000 Certificate

Dimensions

Unit: mm Dimension: 350(L)×167(W)×182(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	279.55	205.82	149.76	92.000	52.000	29.047	20.880	17.280	14.144	9.9374	8.4024	4.4436
10.0V	271.47	195.84	146.69	90.480	51.760	28.829	20.800	17.200	14.061	9.8566	8.3216	4.3628
10.2V	263.42	188.93	144.38	89.680	51.280	28.610	20.640	17.120	13.978	9.7758	8.2408	4.2820
10.5V	236.54	174.34	137.47	87.440	50.800	28.392	20.560	16.960	13.811	9.6950	8.1600	4.2012
10.8V	213.50	158.98	126.72	83.600	49.600	27.882	20.000	16.560	13.562	9.5335	8.0792	4.1204
11.1V	185.86	142.08	113.66	78.320	47.120	26.645	19.120	15.760	12.979	9.1295	7.8368	3.8780

Constant Power Discharge Characteristics: W(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	2932.0	2188.7	1611.5	986.3	594.72	334.15	240.96	199.68	163.74	115.31	94.480	49.905
10.0V	2853.6	2090.5	1578.0	974.0	591.84	332.84	240.48	199.20	162.74	114.83	93.511	49.420
10.2V	2767.7	2020.9	1556.6	962.6	587.52	329.78	239.04	198.24	162.24	113.86	93.026	48.936
10.5V	2492.3	1867.3	1484.3	940.73	581.76	326.73	237.60	196.80	160.74	112.89	92.057	48.451
10.8V	2241.8	1695.4	1363.8	897.86	567.36	321.92	231.84	191.52	158.25	110.47	91.088	47.967
11.1V	1935.1	1505.7	1217.8	841.32	537.60	307.07	220.32	182.40	150.26	106.59	88.181	46.029

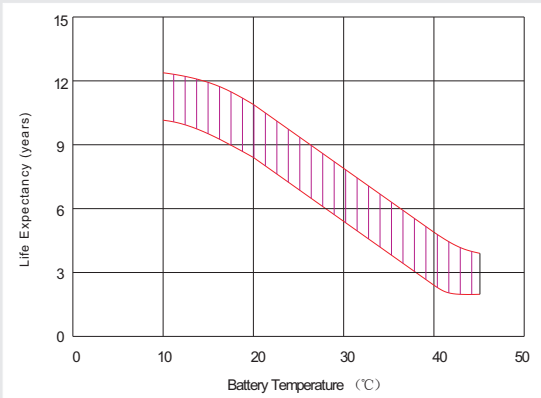
All mentioned values are average values.

RA12-80

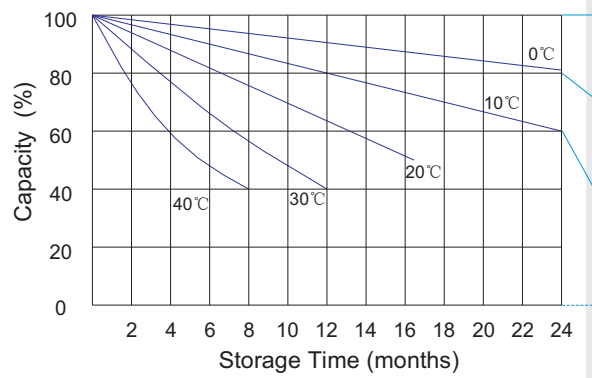
12V80Ah

RITAR®

Effect of temperature on long term float life



Storage characteristic



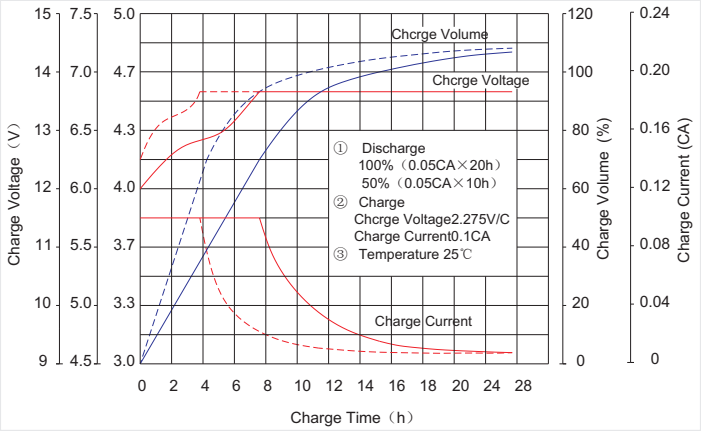
Supplementary charge required (Carry out supplementary charge before use if 100% capacity is requires)

Supplementary charge required before use. This supplementary charge will help to recover the capacity and should be made as early as possible.

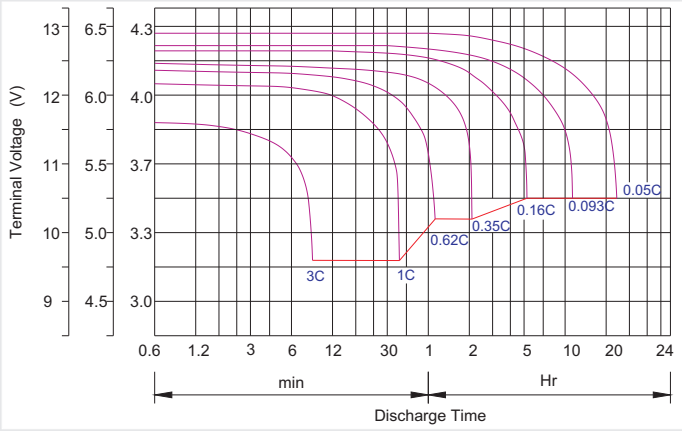
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached

Supplementary charge and storage guidelines

Charge characteristic Curve for standby use



Discharge characteristic Curve



Capacity Factors With Different Temperature

Battery Type		-20℃	-10℃	0℃	5℃	10℃	20℃	25℃	30℃	40℃	45℃
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

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

Maintenance & Cautions

Float Service:

※ Every month, recommend inspection every battery voltage.

※ Every three months, recommend equalization charge for one time.

Equalization charge method:

Discharge: 100% rate capacity discharge.

Charge: Max. current 0.3CA, constant voltage 2.4-2.45V/Cell charge 24h.

※ Effect of temperature on float charge voltage: -3mV/℃/Cell.

※ Length of service life will be directly affected by the number of discharge cycles, depth of discharge, ambient temperature and charging voltage.

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