RL2750D (2V750Ah)

RITAR®

RL2750D is AGM Deep cycle battery with 18 years floating design life, specially designed for frequent cyclic discharge usage. By using strong grid and specific paste plate, it makes battery have 30% more cyclic life time than standby series. It is applicable for solar energy system, golf cart, electric wheelchair, etc..

Specification

Cells Per Unit	1
Voltage Per Unit	2
Capacity	750Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 46.0Kg
Max. Discharge Current	3000 A (5 sec)
Internal Resistance	Approx. 0.6 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	2.27 to 2.3 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	150 A
Equalization and Cycle Service	2.43 to 2.47 VDC/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	Thread insert & Bolt (F10)
Container Material	A.B.S. (UL94-HB), Flammability resistance of UL94-V1 can be available upon request.

MH28539

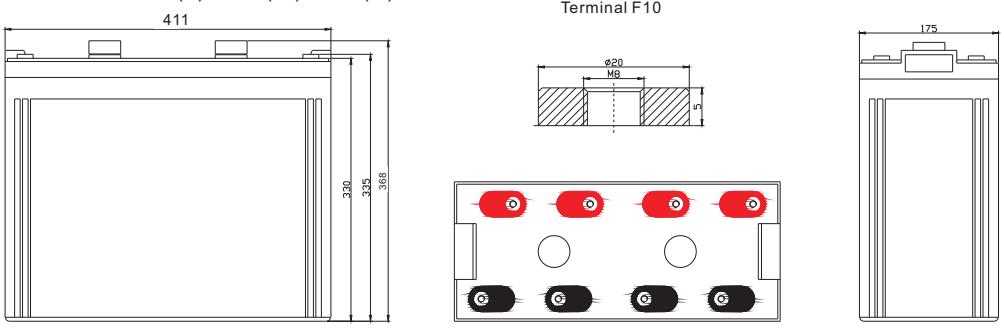
G4M20206-0910-E-16

ISO9001:2000 Certificate

Dimensions

Unit: mm

Dimension: 411(L)×175(W)×327(H)



Constant Current Discharge Characteristics : A(25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR
1.60V	1018	751.0	483.3	287.3	214.0	170.6	143.6	120.6	97.38	81.40
1.65V	968.3	721.1	462.3	276.8	205.0	164.6	137.7	117.7	93.02	79.99
1.70V	902.9	679.7	453.4	272.3	200.5	163.1	136.2	114.8	91.57	78.54
1.75V	801.6	611.7	417.5	257.4	190.0	154.1	130.2	109.0	88.66	77.08
1.80V	690.0	557.2	393.5	245.4	182.5	152.6	125.7	107.6	87.21	75.63
1.85V	583.5	501.6	363.6	231.9	173.6	140.6	119.7	101.7	82.85	70.52

Constant Power Discharge Characteristics : W(25°C)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR
1.60V	1783	1369	884.9	532.2	398.8	320.5	271.5	232.8	185.3	157.2
1.65V	1736	1361	881.9	524.5	390.9	315.8	268.4	229.8	183.7	155.7
1.70V	1640	1288	865.8	516.8	384.9	314.5	266.0	224.5	180.9	153.2
1.75V	1461	1161	797.5	489.2	371.1	298.8	254.9	213.4	175.2	150.8
1.80V	1264	1059	752.1	467.2	355.8	297.4	246.6	210.9	172.4	145.4
1.85V	1078	955.1	695.1	442.3	338.9	275.5	235.3	199.8	163.8	140.0

All mentioned values are average values.

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2V750Ah

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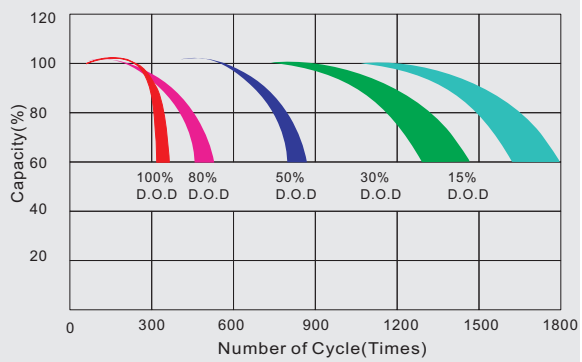
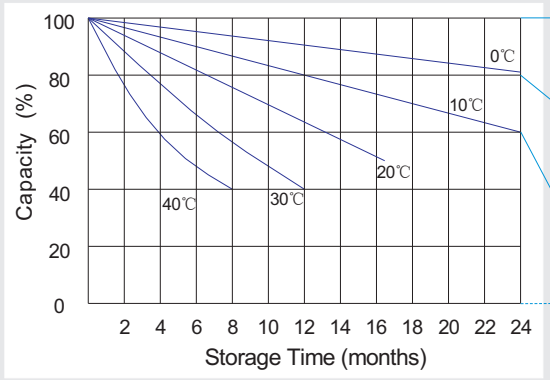
Life characteristics of cyclic use



Storage characteristic



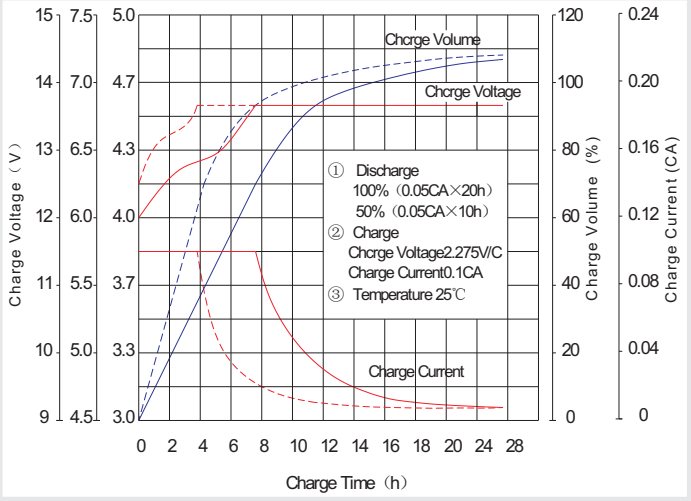
Supplementary charge required (Carry out supplementary charge before use if 100% capacity is requires)

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

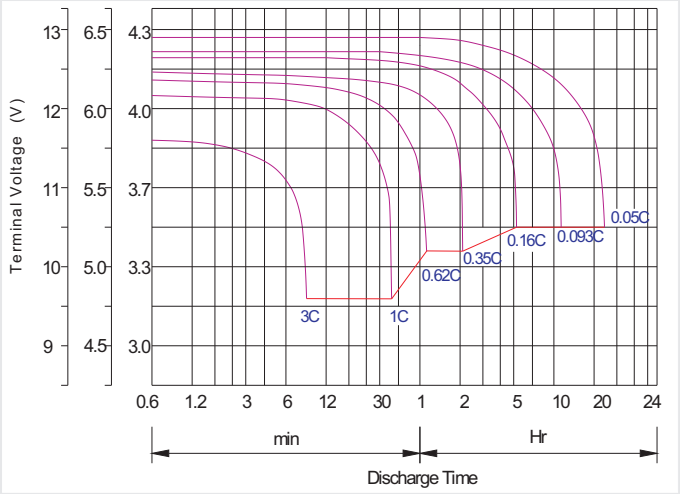
Supplementary charge may often fail to recover the capacity. The battery should never be left standing till this state is reached

Supplementary charge and storage guidelines

Charge characteristic curve for cyclic 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

Cycle service

※ Avoid battery over discharge, especially battery sereis 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/℃/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 specking, the most important factors is depth of discharge.

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