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# JDG 100-12 12V100Ah ▶

JDG series is a deep cycle battery technology with AGM hybrid gel. It has a long service life and is suitable for standby and energy storage. Like all batteries, all batteries are rechargeable, efficient, leak proof and maintenance free.



## ► Specification

Cells Per Unit	6
Voltage Per Unit	12V
Capacity	100Ah@10hr-rate to 1.80Vper cell @25°C(77°F)
Weight	Approx. 29.5kg(65.0 lbs)
Maximum Discharge Current	900A(5sec)
Internal Resistance	Approx. 5.5 mΩ
Operating Temperature Range	Discharge: -15°C~50°C ( 5°F~122°F) Charge: -15°C~40°C ( 5°F~104°F) Storage: -15°C~40°C ( 5°F~104°F)
Nominal Operating Temperature Range	25°C±3°C (77°F±5°F)
Float Charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
Recommended Maximum Charging Current Limit	30.0 A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C (77°F)
Self Discharge	This is Batteries can be stored for more than 6 months at 25°C (77°F). Please charge batteries before using . For higher temperatures the time interval will be shorter.
Terminal	Thread lead alloy recessed terminal to accept M8 bolt
Container Material	ABS(UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.



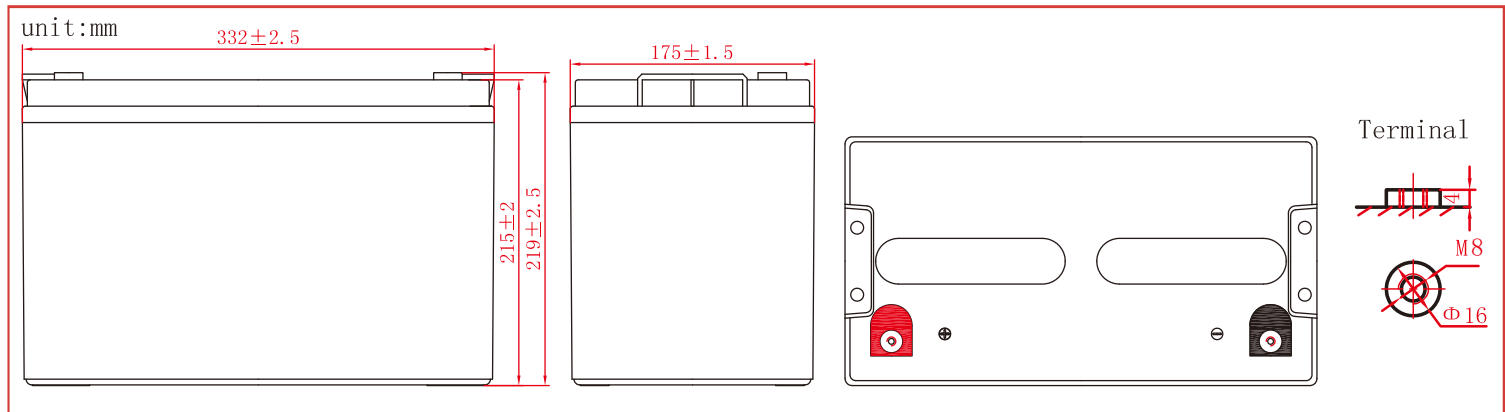
IT1548HL06061801



This is -manufactured VRLA (Absorbent Glass Mat type) batteries are UL-recognized components under UL1989.

This is also certified by ISO 9001 and ISO 14001.

► Dimensions :	Overall Height (H)	Containerheight(h)	Length (L)	Width (W)
	Unit: mm	219±2.5	215±2	332±2.5



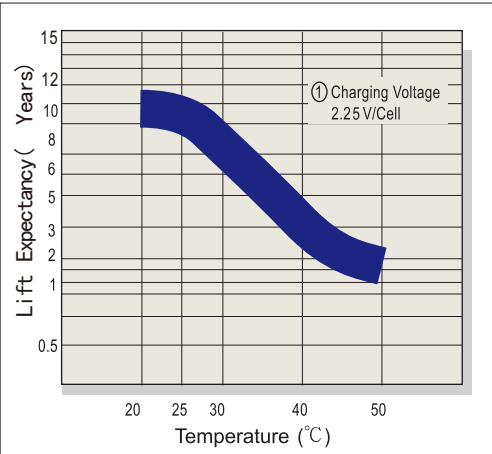
## Constant Current Discharge Characteristics Unit : A(25°C/77° F)

F.V/Time	30min	45min	1h	3h	5h	8h	10h	20h
1.60V	105	77.4	63.7	26.8	18.0	12.4	10.3	5.47
1.67V	103	76.0	62.8	26.6	17.8	12.3	10.2	5.45
1.70V	102	75.1	62.1	26.4	17.7	12.3	10.2	5.44
1.75V	98.3	73.1	60.1	25.9	17.5	12.2	10.2	5.39
1.80V	93.7	70.5	57.5	25.0	17.0	12.0	10.0	5.31
1.85V	87.7	67.0	53.4	22.9	15.8	11.4	9.61	5.13

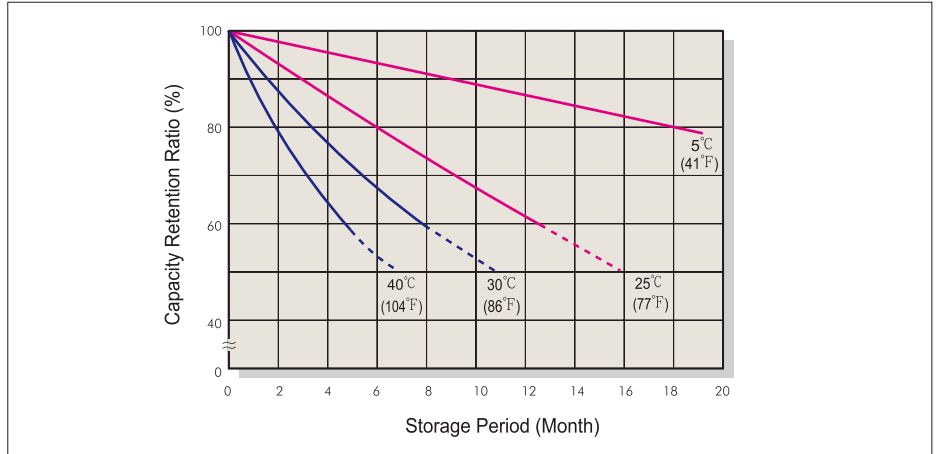
## Constant Power Discharge Characteristics Unit : : W/cell (25°C/77° F)

F.V/Time	30min	45min	1h	3h	5h	8h	10h	20h
1.60V	174	130	108	50.2	35.0	24.1	20.2	10.8
1.67V	169	126	107	49.7	34.9	24.0	20.1	10.7
1.70V	164	124	106	49.4	34.8	24.0	20.1	10.7
1.75V	155	117	103	48.4	34.4	23.8	19.9	10.6
1.80V	143	109	101	46.7	33.4	23.4	19.6	10.4
1.85V	128	98.6	94.9	43.4	31.4	22.6	19.0	10.1

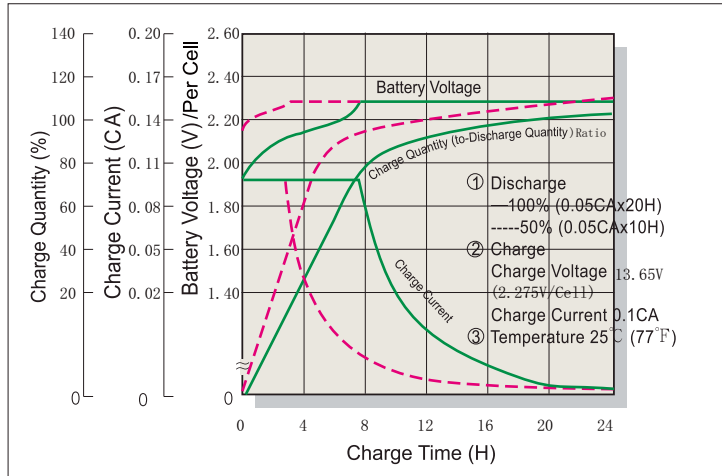
### Trickle(or Float)Design Life



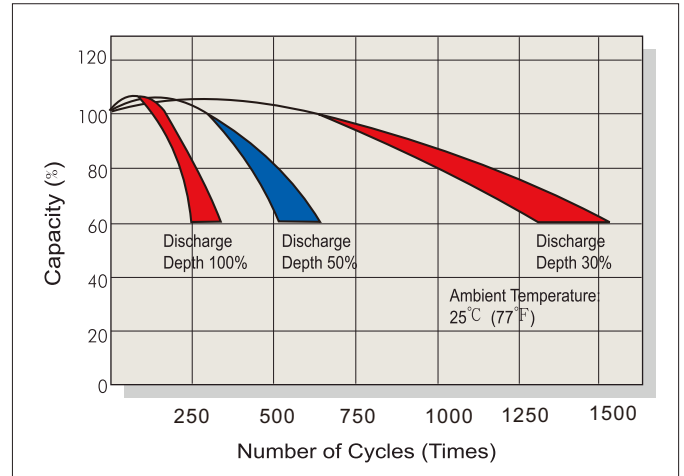
### Capacity Retention Characteristic



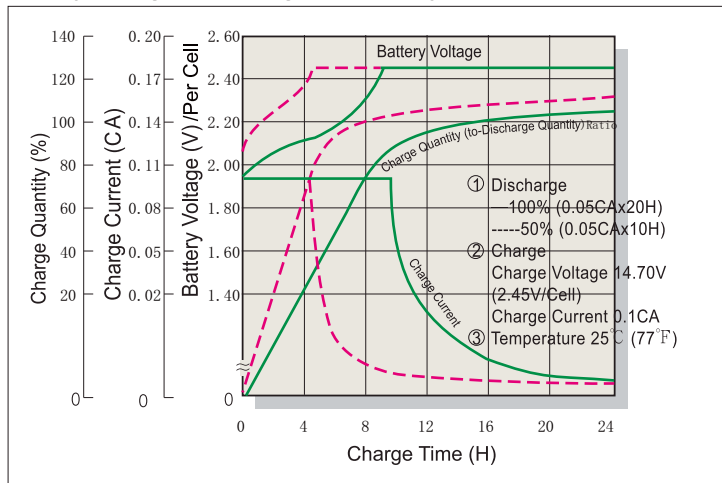
### Battery Voltage and Charge Time for Standby Use



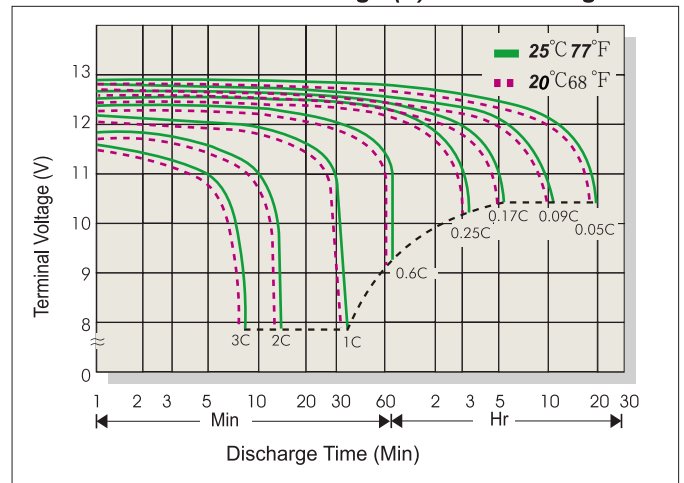
### Cycle Service Life



### Battery Voltage and Charge Time for Cycle Use



### Terminal Voltage (V) and Discharge Time



### Charging Procedures

Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C (77°F)	2.45	2.40~2.50	0.30C
Standby	25°C (77°F)	2.275	2.25~2.30	

### Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/Cell	1.75	1.70	1.65	1.60
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

### Effect of temperature on capacity (10HR)

Temperature	Dependency of Capacity (10HR)
40 °C	102%
25 °C	100%
0 °C	85%
-15 °C	65%

### Self-discharge Characteristics

Storage time	Preservation rate
3 Months	91%
6 Months	82%
12 Months	64%