

# MK12-75W 12V20Ah



MK-manufactured VRLA (Absorbent Glass Mat type) batteries are UL-recognized components under UL2000.

## introduce

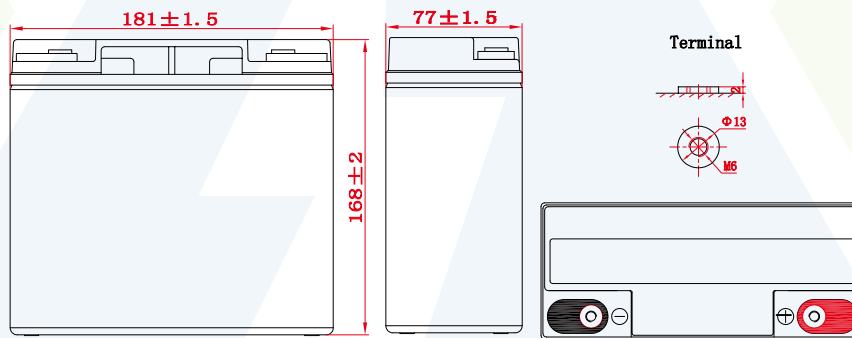
MK12-75W is a high power valve-regulated sealed lead-acid battery. The most suitable for high-rate discharge requirements of the UPS, EPS and other emergency backup power equipment and uninterruptible power supply equipment. As with all Baace batteries, all are rechargeable, highly efficient, leak proof and maintenance free.

## Specification

<b>CellsPerUnit</b>	6
<b>Voltage PerUnit</b>	12
<b>Capacity</b>	75W@15min-rate to 1.67V per cell @25°C (77°F)
<b>Weight</b>	Approx. 5.45 kg( 12.02 lbs)
<b>Maximum Discharge Current</b>	270A(5sec)
<b>Internal Resistance</b>	Approx. 11 mΩ
<b>Operating Temperature Range</b>	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)
<b>NominalOperatingTemperatureRange</b>	25°C±3°C (77°F±5°F)
<b>FloatCharging Voltage</b>	13.5 to 13.8 VDC/unit Average at 25°C (77°F)
<b>Recommended Maximum Charging Current Limit</b>	6A
<b>Equalization andCycleService</b>	14.4 to 14.8 VDC/unit Average at 25°C (77°F)
<b>SelfDischarge</b>	Baace 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.
<b>Terminal</b>	Thread lead alloy recessed terminal to accept M5 bolt
<b>Container Material</b>	ABS(UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.

Dimensions :	<b>Overall Height (H)</b>	<b>Containerheight (h)</b>	<b>Length(L)</b>	<b>Width (W)</b>
Unit: mm	168±2	168±2	181±1.5	77±1.5

Unit: mm



## ConstantCurrentDischargeCharacteristics Unit: A(25°C/77°F)

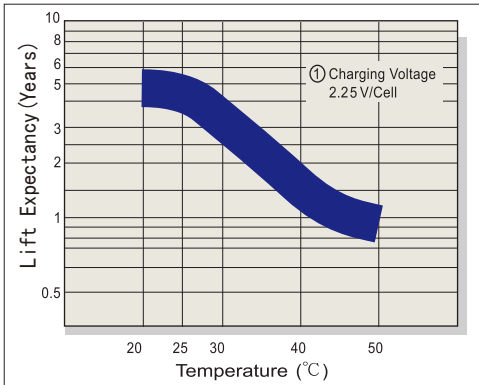
F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN	120min
1.85V	50.6	43.9	37.6	31.4	26.4	20.0	12.4	8.95	7.69
1.80V	54.9	47.4	41.1	33.6	27.8	21.1	12.8	9.28	8.13
1.75V	59.0	50.5	44.3	35.6	29.0	22.0	13.1	9.53	8.41
1.70V	62.9	53.4	47.3	37.4	29.9	22.7	13.4	9.73	8.49
1.67V	65.8	55.5	49.2	38.7	31.1	23.4	13.7	10.01	8.66
1.60V	71.4	59.2	52.4	40.8	33.1	24.4	14.3	10.43	8.79

## ConstantPowerDischargeCharacteristics Unit:W/cell(25°C/77°F)

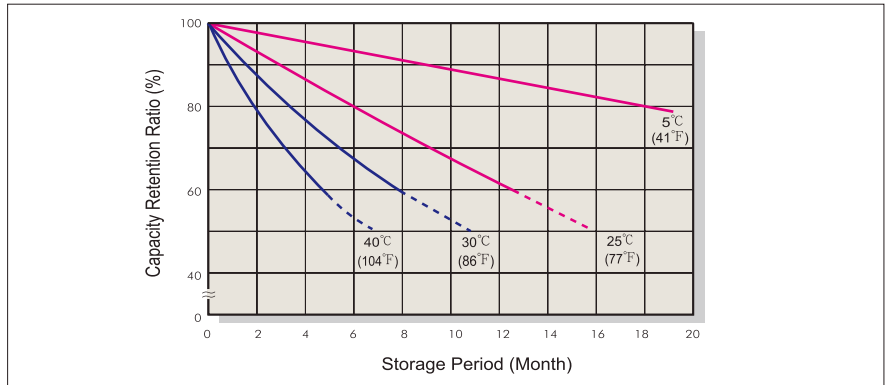
F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN	120min
1.85V	98.2	86.2	75.2	57.0	51.1	41.1	24.9	18.20	16.17
1.80V	105.3	91.5	80.6	63.2	53.7	42.9	26.0	18.92	16.70
1.75V	112.1	96.3	85.5	69.0	56.7	44.0	26.7	19.40	17.00
1.70V	118.2	101.0	90.2	73.1	58.1	45.0	27.2	19.80	17.20
1.67V	121.9	103.8	92.6	75.0	59.8	45.6	27.4	19.98	17.29
1.60V	129.9	109.1	97.2	77.4	62.5	46.7	27.8	20.38	17.47

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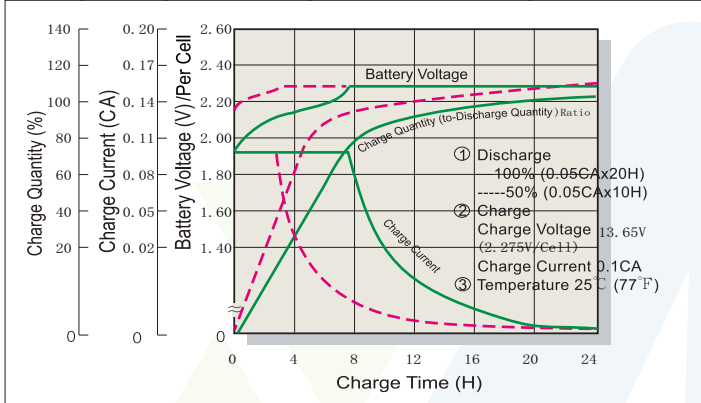
**Trickle(or Float)Design Life**



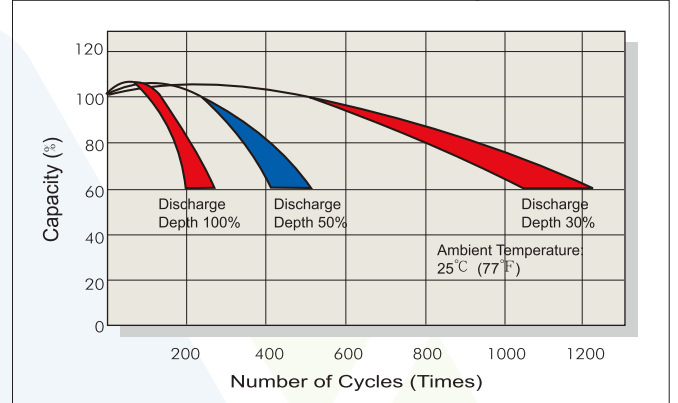
**Capacity Retention Characteristic**



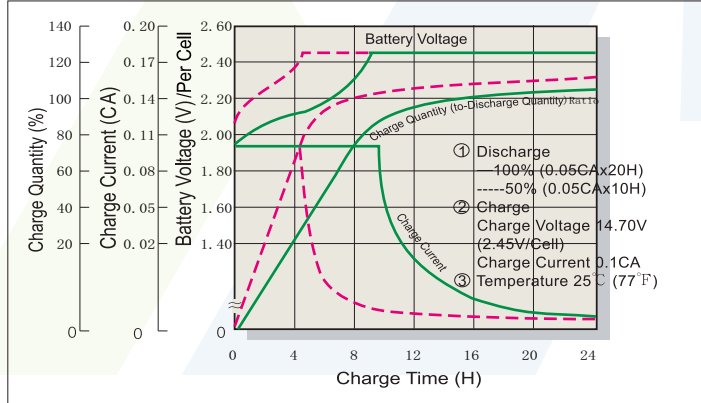
**Battery Voltage and Charge Time for Standby Use**



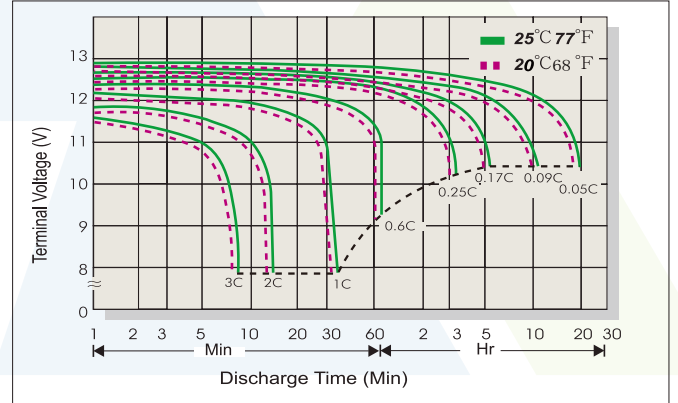
**Cycle Service Life**



**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 (20HR)**

Temperature	Dependency of Capacity (20HR)
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%

