

MK12-400W 12V100Ah



MK-manufactured **VRLA** (Absorbent **G**lass **M**at type) batteries are UL-recognized components under UL2000.

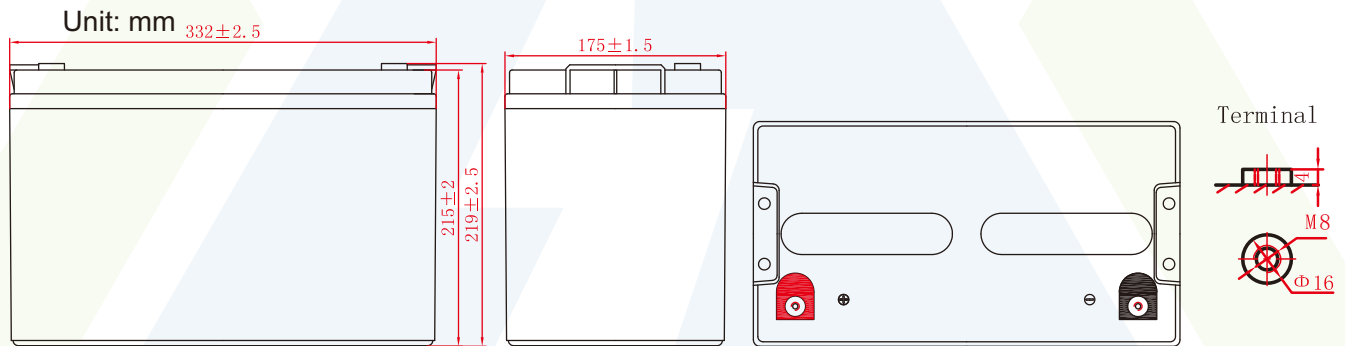
introduce

MK12-400W 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

Cells Per Unit	6
Voltage Per Unit	12
Capacity	400W@15min-rate to 1.67V per cell @25°C (77°F)
Weight	Approx. 32 kg(70.55lbs)
Maximum Discharge Current	1000A (5sec)
Internal Resistance	Approx. 5.2mΩ
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	30A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C (77°F)
Self Discharge	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.
Terminal	Thread lead alloy recessed terminal to accept M8 bolt ABS(UL 94-HB) & Flammability resistance of (UL 94-V0) can be available upon request.
Container Material	

Dimensions :	Overall Height (H)	Container height (h)	Length (L)	Width (W)
Unit: mm	219±2.5	215±2	332±2.5	175±1.5



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

F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN	120min
1.85V	259	231	201	171	144	109	66.7	48.9	46.7
1.80V	282	249	220	184	151	115	69.0	50.8	49.3
1.75V	303	266	237	195	158	120	70.9	52.2	51.0
1.70V	324	282	253	205	163	124	72.2	53.2	51.5
1.67V	339	293	263	212	170	128	74.2	54.7	52.5
1.60V	368	312	281	223	180	133	77.3	57.0	53.3

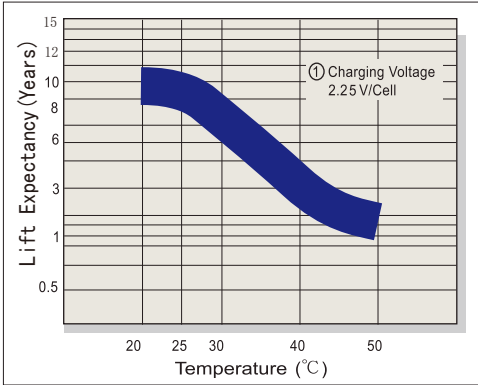
Constant Power Discharge Characteristics Unit:: W/cell(25°C/77°F)

F.V/Time	5MIN	8MIN	10MIN	15MIN	20MIN	30MIN	60MIN	90MIN	120min
1.85V	490	440	389	304	277	215	130	95.4	86.3
1.80V	524	467	416	337	288	222	133	97.5	89.0
1.75V	556	490	441	368	300	228	135	99.1	90.6
1.70V	586	513	465	390	309	233	137	101	91.8
1.67V	604	527	477	400	315	235	139	102	92.2
1.60V	645	554	501	413	325	241	140	104	93.2

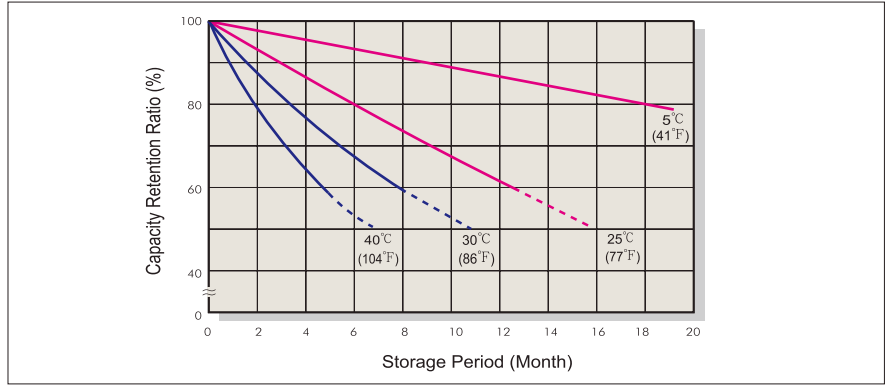
MK Lead acid high power battery series

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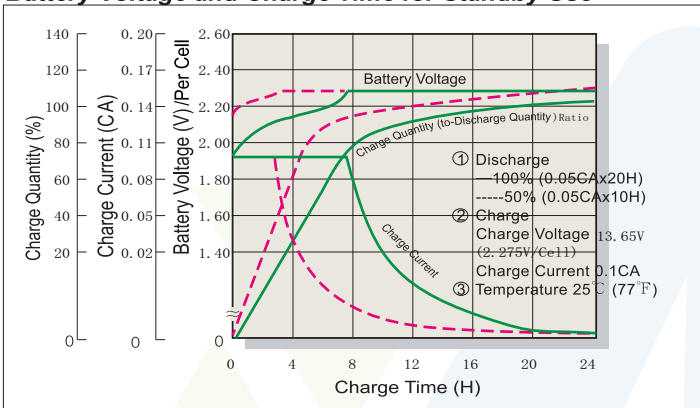
Trickle(or Float)Design Life



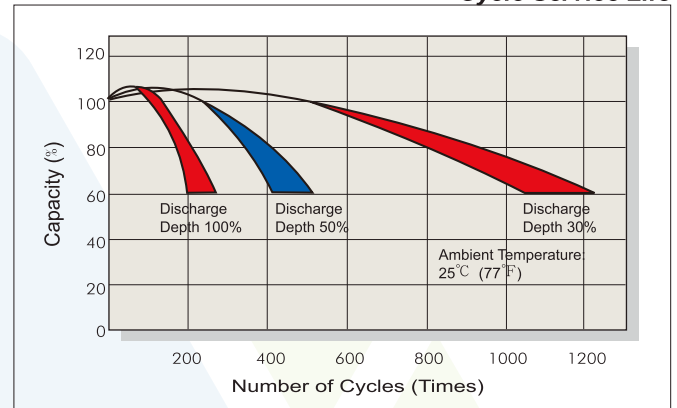
Capacity Retention Characteristic



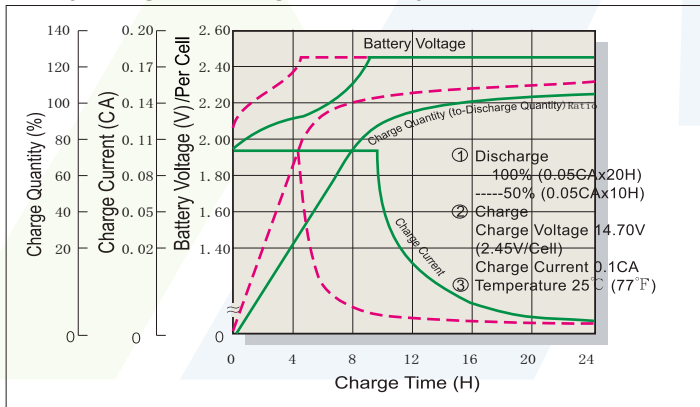
Battery Voltage and Charge Time for Standby Use



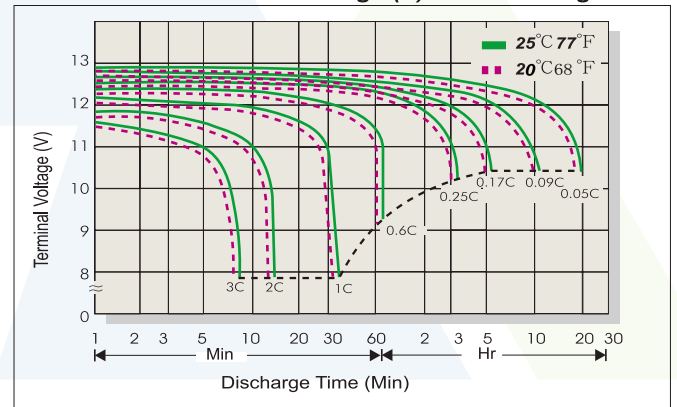
Cycle Service Life



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 (10HR)

Temperature	Dependency of Capacity (10HR)
40°C	103%
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%