



AGM Batteries

The Sealed Battery Specialists



Advanced American Technology and the use of the most modern computer-aided design and manufacturing techniques combine to make MK Battery's Sealed AGM Batteries the standard by which all other AGM batteries are measured.

## GENERAL APPLICATIONS

Specifications							Minute Discharged at 77°F (25°C)*						Discharge Amps					
Model	Foot Notes	Terminal Standard	Terminal Option	CCA @ 0° F	CA @ 32° F	Res. Capacity @ 77° F	75 Amps	50 Amps	25 Amps	15 Amps	8 Amps	5 Amps	5 Min.	10 Min.	15 Min.	20 Min.	30 Min.	60 Min.
8AU1	H/NS	Y	N/A	200	240	48	10	20.0	54	97	200	340	110	75	60	50	39	23.0
8A22NF	V/NS	G	N/A	350	390	90	22	40.0	102	180	365	620	160	120	95	80	62	38.0
8A24	H/NS	U	G	470	660	140	35	60.0	150	280	550	900	220	165	130	110	85	50.5
8A27	H/NS	U	B	580	810	175	43	75.0	185	330	640	1080	270	200	153	130	98	59.0
8A31DT	H/T	S/X	N/A	650	850	190	53	87.4	200	348	706	1265	305	226	174	147	114	68.2
8A4D	H	S	T	1110	1420	380	106	180	413	745	1512	2507	508	408	318	266	200	115
8A8D	H	S	T	1350	1725	480	138	230	517	953	1874	3040	600	475	386	325	256	151
8AGC2	V	G	N/A	690	915	380	94	171	409	718	1407	2304	361	278	233	200	167	102

## MK Battery Features

- 100% Maintenance-Free
- Proprietary Plate Formation Process
- Exclusive Ultra Premium Sealing Valve
- Dual-Purpose Design Yields Deep Cycle Service and High Rate Performance
- Computer-Cast Power Path Grids
- Exclusive Weld Seals
- Over 250 Quality Checks

### BENEFITS

- Maintenance-free sealed construction eliminates the need to add water.
- Less than 2% per month stand loss means little deterioration during transport and storage.
- Non-spillable batteries transport easily and safely by air.
- Quality construction ensures reliable service and support.

### APPLICATIONS

- Water Pumping
- Residential
- Communications
- Cathodic Protection
- Remote Monitoring
- Refrigeration
- Lighting
- Aids to Navigation
- Wind Generation
- Power Wheelchairs
- RV
- Golf Cart
- Solar

### SPECIFICATIONS

Voltage	6 & 12 volts nominal
Plate Alloy	Lead Calcium
Posts	Forged terminals & bushings
Container/Cover	Polypropylene
Charge Voltage @68°F (20°C)	Cycle 2.40 to 2.43; Float 2.25 to 2.30 v.p.c.
Charge Voltage @77°F (25°C)	Cycle 2.38 to 2.41; Float 2.23 to 2.28 v.p.c.
Vent	Self sealing (2PSI operation)
Operating Temperature	Fully Charged Range: -40°F (-40°C) to +140°F (60°C)

# AGM SPECIFICATIONS

to 1.75VPC at 77°F (25°C)								Ampere Hour Capacity*					Weight	Dimensions – In (mm)			
90 Min.	3 Hr	5 Hr	10 Hr	20 Hr	24 Hr	48 Hr	100 Hr	100 Hr Rate	20 Hr Rate	10 Hr Rate	5 Hr Rate	3 Hr Rate	1 Hr Rate	Approx. Lbs. (Kgs.)	L	W	H <sup>■</sup>
16	8.8	5.5	3.1	1.6	1.3	0.74	0.37	37	32	31	27.5	26.4	23	24 (11)	8 <sup>5</sup> / <sub>16</sub> (211)	5 <sup>1</sup> / <sub>8</sub> (130)	7 <sup>1</sup> / <sub>4</sub> (184)
28	15.0	9.3	5.1	2.7	2.3	1.2	0.63	63	54	51	46.5	45.0	35.5	39 (17)	9 <sup>3</sup> / <sub>8</sub> (238)	5 <sup>1</sup> / <sub>2</sub> (140)	9 <sup>1</sup> / <sub>4</sub> (235)
36	21.6	14.1	7.0	3.9	3.3	1.8	0.91	91	78	70	70.5	64.8	50.5	53 (24)	10 <sup>1</sup> / <sub>4</sub> (260)	6 <sup>3</sup> / <sub>4</sub> (171)	9 <sup>5</sup> / <sub>8</sub> (251)
44	25.0	15.6	8.5	4.6	3.8	2.1	1.0	100	92	85	78.0	75.0	59	63 (29)	12 <sup>3</sup> / <sub>4</sub> (324)	6 <sup>7</sup> / <sub>8</sub> (175)	9 <sup>1</sup> / <sub>4</sub> (235)
49	27.1	17.2	9.5	5.2	4.4	2.3	1.1	110	104	95	86.0	81.3	68.2	69 (31)	12 <sup>15</sup> / <sub>16</sub> (329)	6 <sup>3</sup> / <sub>4</sub> (171)	9 <sup>3</sup> / <sub>8</sub> (238)
85	50.0	32.7	17.8	9.9	8.3	4.4	2.1	210	198	178	164	150	115	129 (59)	20 <sup>3</sup> / <sub>4</sub> (527)	8 <sup>1</sup> / <sub>2</sub> (216)	10 (254)
106	60.7	39.4	22	12.2	10.2	5.2	2.5	250	244	220	197	182	151	158 (72)	20 <sup>3</sup> / <sub>4</sub> (527)	11 (279)	10 (254)
84.3	48.2	32.6	18.6	9.3	8.4	4.3	2.2	220	187	186	163	145	102	68 (31)	10 <sup>1</sup> / <sub>4</sub> (260)	7 <sup>1</sup> / <sub>8</sub> (181)	11 (279)

■ Height based on standard terminal.  
For terminal option, please call for exact dimensions.

## Charging Information & Chart Footnotes

\*AMPERE HOUR CAPACITY IS A NOMINAL RATING.

**BATTERY VOLTAGE:** All batteries are 12 Volt excluding MODEL 8AGC2, which is 6 Volt.

**IMPORTANT CHARGING INSTRUCTIONS:** WARRANTY VOID IF OPENED OR IMPROPERLY CHARGED. Constant under or overcharging will damage any battery and shorten its life! Use a good constant potential, voltage-regulated charger. For 12-volt batteries, charge to at least 14.4 volts but no more than 14.6 volts at 68°F (20°C). For 6-volt batteries, charge to at least 7.2 volts but no more than 7.3 volts at 68°F (20°C). Do not charge in a sealed container.

**NON-SPILLABLE** by DOT (Department of Transportation), ICAO (International Commercial Airline Organization), and IATA (International Airline Transport Association) definitions.

### FOOTNOTES:

- H - Includes handles
- NS - Non-Spillable Battery
- T - Dual top terminals w/SAE posts & stainless steel 3/8" stud and wing nuts
- V - Combination terminals, offset post with horizontal hole, 5/16" bolt and hex nut



UL Recognized Component

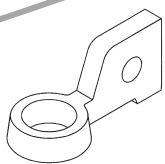
MH17218

The quality system at East Penn Mfg. is certified to

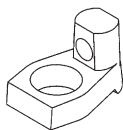
**ISO 9001**



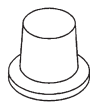
## TERMINAL INFORMATION



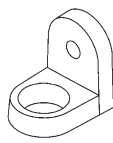
**B**  
Flag terminal with 3/8" diameter hole (T876)



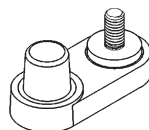
**G**  
Offset post with horizontal hole, stainless steel 5/16" bolt & hex nut (T881)



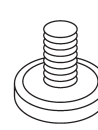
**S**  
SAE "Automotive Post" (TSAE)



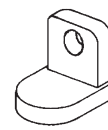
**T**  
Heavy Duty "L" terminal with 3/8" diameter hole (T975)



**U**  
Molded-in offset SAE post & vert 5/16" NEG. & 3/8" POS. stainless steel studs & wing nuts



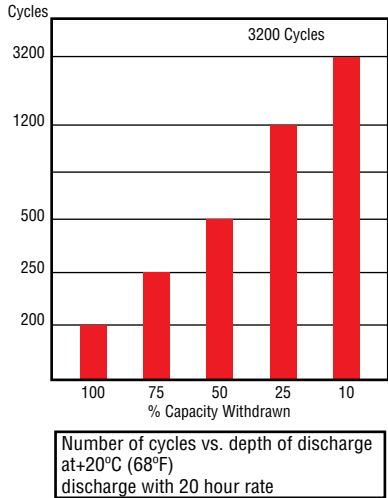
**X**  
3/8" - 16 stainless steel stud posts (STUD)



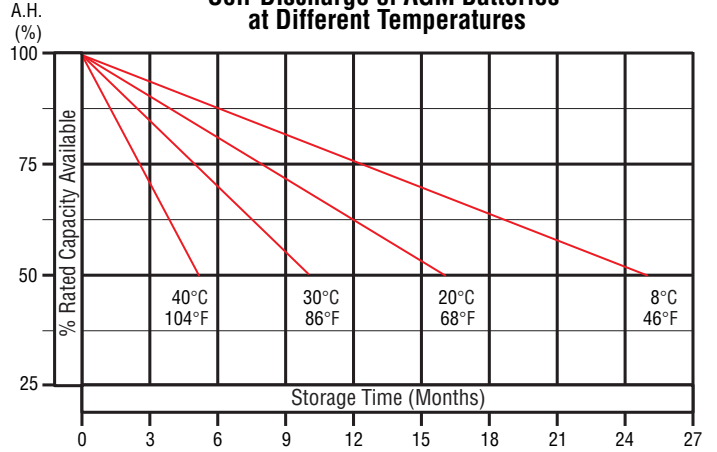
**Y**  
Small "L" terminal with 1/4" - 20 round hole (T873)

# CHARACTERISTICS OF MK AGM BATTERIES

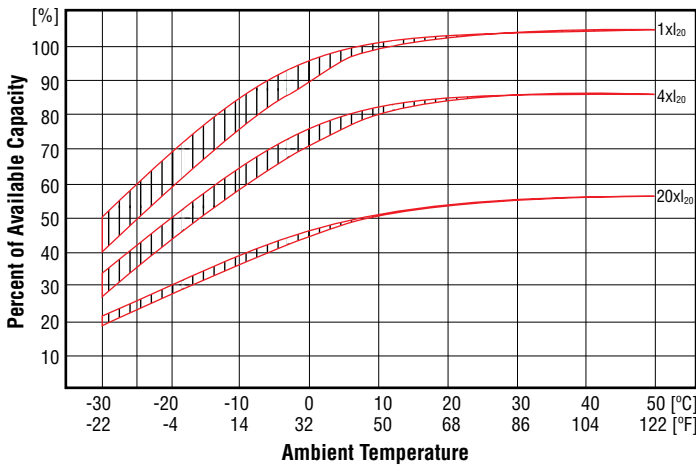
## Cycling Ability



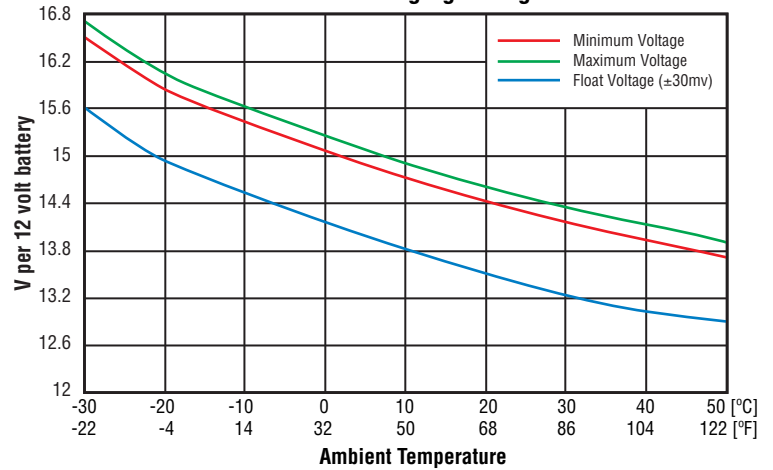
## Self-Discharge of AGM Batteries at Different Temperatures



## Capacity vs Operating Temperature



## Constant Charging Voltage



### Capacity vs Operating Temperatures

Shown are the changes in capacity for wider ambient temperature range, giving the available capacity, as a percentage of the rated capacity, at different ambient temperatures, for 3 different load examples, with uninterrupted discharge to the appropriate discharge cut-off voltage. The values for the upper edge of the curve were obtained from charging at an ambient temperature of  $\pm 20^{\circ}\text{C}$  with a voltage limit of 2.4V/cell. For the lower edge, charging was carried out at the respective ambient temperature. The curves show the behavior of the battery after a number of cycles.

### Constant Charging Voltage

Shown is the constant charging voltage in relation to the ambient temperature. The bandwidth shows a tolerance of  $\pm 30\text{mV/cell}$ . This constant voltage is suitable for continuous charging and cyclic operation. In a parallel stand-by mode it always keeps the battery in a fully charged state; in a cyclic mode, it provides for rapid recharging and high cyclic performance.

## YOUR PARTNER IN POWER

Products  
Service  
Customer Care

MK Battery is one of the largest sealed lead acid battery distributors worldwide due to our total commitment to the following core principles:

MK Battery manufactures and distributes only the highest quality batteries (gel, AGM and flooded deep cycle) that are specifically designed for our customers' many, varied applications including broadband communications, UPS (uninterruptible power supplies), power wheelchairs, telephony (valve-regulated stationary), solar, marine and electronics.

MK Battery ships fresh inventory fast, often within 24 hours, from a stock of more than 100,000 batteries in multiple key distribution centers throughout North America and assures our customers proper spent battery disposal through EPA permitted smelters. (Please note that violation of hazardous waste disposal laws place heavy penalties on offenders).

MK Battery is genuinely concerned for our customers' well-being as a long-term partner... not just a supplier. MK Battery listens to our customers and delivers what you want, when you need it.



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