



## LONG LIFE AGM BATTERIES (ABSORBED GLASS MAT TECHNOLOGY)

Maintenance free, long life 12V batteries

Although a battery is the ultimate energy reservoir, which provides electricity for use in engine starting, general electric and various DC back up functions, DC storage is the most overlooked and underappreciated item of an electrical installation. This will change when the user is confronted with empty batteries or an unexpected replacement. Mastervolt recognized long ago that a sophisticated battery system is the key to any yacht, vessel, vehicle or solar system. Their renowned MVA and MVSV premium gel batteries are used on a broad base. By introducing AGM batteries a new range of cost effective long life batteries has been added.

### VRLA technology

VRLA stands for Valve Regulated Lead Acid, which means that the batteries are sealed while the electrolyte is absorbed in a glass mat separator (AGM). VRLA batteries are absolutely maintenance free whilst the water level of a conventional battery must be checked on a regular base. The sealed casing ensures the prevention of leaks and spills, making the battery easy to install. Gases which occur during charging are recovered by the electrolyte. Should the battery be accidentally overcharged, special one-way safety valves allow the gases to escape and so avoid excessive pressure build-up.

### Technical description

The Mastervolt MVA series uses the Absorbent Glass Mat (AGM) technology for efficient gas recombination. The electrolyte is absorbed into the positive and negative plates and the highly porous microfiber glass mat separators. Unique construction and sealing techniques of the Mastervolt

MVA batteries assure leak proof and absolutely maintenance free operation even when installed on their side. The Mastervolt MVA series are the ideal general purpose batteries: due to small distances between the battery plates these batteries have a low internal resistance providing high discharge currents. A low internal resistance also means that the batteries can be recharged in a short and efficient way. On the other hand, thick battery plates are utilized to increase the battery life and to deliver a higher reserve capacity making this battery ideal in withstanding long deep discharges. It therefore makes the MVA series the perfect battery for cyclic use on mobile applications like boats and vehicles. Each battery undergoes a series of strict manufacturing and quality control processes before shipment. A low calcium lead grid alloy and pure uncontaminated materials are used allowing extended storage with minimal capacity loss.

### Easy installation

The Mastervolt AGM batteries offer a more compact solution compared to conventional flood batteries. AGM design ensures that batteries can withstand vibration and shocks. With all the above mentioned advantages you can be sure to choose the ideal general purpose battery with an excellent price/quality performance ratio.

- IDEAL GENERAL PURPOSE BATTERY
- EXCELLENT HIGH CURRENT DISCHARGE BEHAVIOUR
- 100% MAINTENANCE FREE SEALED BATTERY
- RUGGED AND VIBRATION-RESISTANT
- ATTRACTIVE PRICE/ PERFORMANCE RATIO



# SPECIFICATIONS AGM BATTERIES



MODEL	AGM 12/70	AGM 12/90	AGM 12/160	AGM 12/225
Article no.	62000700	62000900	62001600	62002250
Nominal voltage	12V	12V	12V	12V
Nominal capacity (C20)	70 Ah	90 Ah	160 Ah	225 Ah
Approx. weight	22.2 kg / 49 lbs	30 kg / 66 lbs	43 kg / 95 lbs	64 kg / 141 lbs
Max. installation angle	180°	180°	180°	180°
Terminal type	threaded insert M8 stud; standard supplied with easy to mount adaptive round battery terminals			

## RATED CAPACITY @25°C

• 20h	70Ah	90Ah	160Ah	226Ah
• 10h	65Ah	85Ah	150Ah	210Ah
• 5h	56Ah	72.5Ah	134.0Ah	180.5Ah
• 3h	50.7Ah	66.4Ah	121.8Ah	163.8Ah
• 1h	39Ah	51Ah	92Ah	126Ah

## COLD CRANKING AMPS

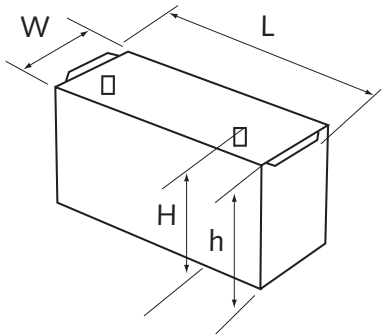
DIN, 30 sec to 9.0V @ -18°C	617A	885A	1518A	1980A
DIN, 150 sec to 6.0V @ -18°C	219A	328A	556A	737A
SAE, 30 sec to 7.2V @ -18°C	705A	1012A	1722A	2261A
SAE, 90 sec to 6.0V @ -18°C	325A	486A	843A	1117A

## GENERAL

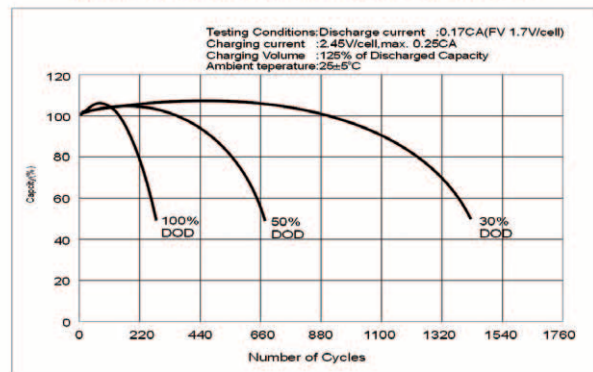
Operating temperature	-20 to 55°C / -4 to 131°F;			
Nominal operating temperature	5 to 35°C / 41 to 95°F, recommended at 25°C/ 77°F			
Storage temperature	-25°C to 85°C			
Guarantee	2 years	2 years	2 years	2 years

## DIMENSIONS

Length (L)	348, ±2mm / 13.70"	330, ±3mm / 12.99"	485, ±3mm / 19.09"	522, ±3mm/20.55"
Width (W)	167, ±2mm / 6.57"	173, ±2mm / 6.81"	170, ±2mm / 6.69"	240, ±2mm/9.45"
Height excl. terminals (h)	178, ±2mm / 7.01"	212, ±2mm / 8.35"	242, ±2mm / 9.53"	218, ±2mm/8.58"
Height incl. adaptive terminals (H)	181, ±2mm / 7.13"	237, ±2mm / 9.33"	242, ±2mm / 9.53"	241, ±2mm/9.49"



## CYCLE SERVICE LIFE IN RELATION TO DEPTH OF DISCHARGE



## CONSTANT CURRENT DISCHARGE RATINGS (AMPS) @ 25°C

Time (minutes)	10	15	20	30	45	60	120	180	240	300	360	480	600	1200
Final voltage (V)	7.8	7.8	7.8	9.6	9.6	10.0	10.2	10.5	10.5	10.5	10.5	10.8	10.8	10.8
AGM 70Ah	162.5	123.5	97.5	78.8	52.0	39.0	22.8	16.9	13.0	11.2	9.9	7.7	6.5	3.5
AGM 90Ah	213.0	162.0	127.5	98.0	68.0	51.0	30.0	21.8	17.1	14.5	12.9	10.1	8.5	4.8
AGM 160Ah	390.0	318.6	245.5	179.0	122.4	92.0	54.2	40.6	30.8	26.8	23.5	18.2	15.0	8.0
AGM 225Ah	--	--	315.0	241.5	168.0	126.0	73.5	54.6	42.0	36.1	31.9	25.0	21.0	11.3

Specifications are subject to change without notice.

See our web page [www.mastervolt.com](http://www.mastervolt.com) or the Mastervolt Powerbook for an extensive overview of all kinds of Mastervolt batteries.