



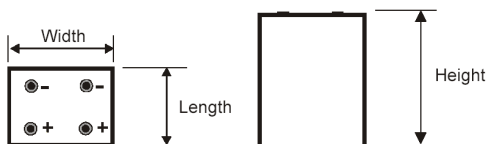
# HIGH PERFORMANCE

## MGR 2-500G

VALVE REGULATED LEAD ACID

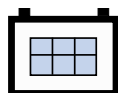
2 VOLT FLAT PASTED PLATE BATTERY  
GELLED ELECTROLYTE TECHNOLOGY

### Cell Dimensions for Rack Layout



L:241/9.50 W:171/6.74 H:336/13.2 (mm / inch)

### Terminal Type



### Innovative Features

- ☑ Valve regulated Lead Acid (V.R.L.A.) design;
- ☑ Sulfuric acid thixotropic gel, electrolyte in solid gel form will not stratify – no equalization charge required; Gel powder from Europe leading supplier to ensure the unique performance of gel battery;
- ☑ Microporous rubber and corrugated PVC SiO<sub>2</sub> separator, the special design increase the high porosity and anti-corrosion and decrease the internal resistance;
- ☑ Virgin Pure Lead Tin and thick positive plate technology design for maximum service float life - 18 years design life @20°C(68°F);
- ☑ Thickness positive plate plus optimized plate alloy to anticorrosion;
- ☑ Unique performance against high temperature;
- ☑ Non-gassing;
- ☑ Never needs addition of water;
- ☑ Spill-proof and leak-proof;
- ☑ Operates at a low internal pressure;
- ☑ For use in vertical or horizontal position;
- ☑ Each cell has a low pressure safety release venting system;
- ☑ Flame Retardant material V-0 optional.

### Performance Specifications

Normal Voltage	2V
Normal Capacity	500 Ah @ 10hr to 1.80V per cell @ 20°C (68°F) 567 Ah @ 20hr to 1.75V per cell @ 20°C (68°F)
Weight	Approx. 33 kg (72.8 lbs)
Internal Resistance	Approx. 0.30 mΩ @ 20°C (68°F)
Maximum Charge Current	100 A
Short Circuit Current	3320 A
Electrolyte	Sulfuric acid thixotropic gel
Separators	Micro-porous duroplastic separator
Applicable Operating Temperature Range	-40°C (-40°F) to +70°C (+158°F)
Ideal Operating Temperature Range	+20°C (+68°F) to +35°C (+95°F)
Maximum Charge Voltage	2.40 VPC at 20°C /25°C
Float Voltage	2.25 VPC +/- 1% at 20°C /25°C
Cycle service	2.35 VPC +/- 1% at 20°C /25°C

**Container & Cover**  
**Standard:** Reinforced ABS (UL 94HB)  
**Optional:** Flame-retardant reinforced ABS compliant with U.L.94 V-0 with an Oxygen limiting Index of greater than 28%.

**Terminal**  
(ST2) Copper Insert type terminal with 18 mm diameter insert.

Cell Type	Discharge Amps Per Cell @ 20°C (68°F)																				
	End VPC	Discharge Time In Minutes						End VPC	Discharge Time In Hours												
		5	10	15	30	45	60		1.5	2	3	4	5	6	8	10	12	20	24	48	100
MGR 2-500G	1.80	798	684	570	439	345	285	1.85	201	163	123	95.6	79.3	70.0	57.2	47.2	40.1	25.8	22.0	11.3	5.81
	1.75	939	757	648	466	366	303	1.80	213	173	130	101	84.0	74.2	60.6	50.0	42.5	27.3	23.3	12.0	6.15
	1.67	1047	878	721	484	376	308	1.75	223	180	136	106	87.7	77.4	63.3	52.2	44.4	28.3	24.2	12.5	6.42

Cell Type	Discharge Watts Per Cell @ 20°C (68°F)																			
	End VPC	Discharge Time In Minutes						End VPC	Discharge Time In Hours											
		5	10	15	30	45	60		1.5	2	3	4	5	6	8	10	12	20	24	
MGR 2-500G	1.80	1436	1245	1046	812	655	547	1.85	387	315	239	188	156	138	114	94.1	80.2	45.1	44	
	1.75	1671	1362	1173	863	681	581	1.80	407	331	252	197	165	146	120	99.2	84.5	47.6	46.4	
	1.67	1801	1536	1290	885	699	588	1.75	420	342	260	204	170	151	124	103	87.5	49.3	48.1	

