



MAGNA Rechargeable Products Sealed Lead Acid Battery

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.

General purpose application

MAGNA FM series are designed for general purpose applications, such as UPS, telecom, electrical utilities.

With 10 years design life, the batteries comply to the most popular international standards, such as IEC896-2, BS6290-4, Eurobat Guide.

The battery container and cover are available both in V0 class flame retardant ABS or HBO ABS plastics.

has come to obtain wide recognition from customers all over the world. This is not only due to the fact that our products are featured by reliable stability in quality, but also because we attach great importance to our communication with customers and our perfect understanding of customers' requirements as well.

MA200-12 12V 200Ah

General Features

- Positive and negative plates in lead-calcium-tin alloy
- Stable Quality & High Reliability
- Sealed Construction
- Long Service Life
- Maintenance-Free Operation
- Low Pressure Venting System
- Low Self Discharge
- U. L. Component Recognition
- Six months shelf life at 20°C
- Design life 10 years



Dimensions and Weight

	SI Units	English Units
Length	522mm	20.6inch
Width	238mm	9.37inch
Height	218mm	8.58inch
Total Height	223mm	8.78inch
Approx. Weight	65.5 Kg	144.5 lbs

Performance Characteristics

- Nominal Voltage 12V
- Number of cell 6
- Nominal Capacity 77°F(25°C)
 - 10 hour rate (20.0A, 10.8V) 200Ah
 - 5 hour rate (36.0A, 10.5V) 180Ah
 - 1 hour rate (128A, 9.60V) 128Ah
- Internal Resistance
 - Fully Charged battery 77°F(25°C) 3.5mOhms
- Self-Discharge
 - 3% of capacity declined per month at 20°C(average)
- Operating Temperature Range
 - Discharge -20~60°C
 - Charge -10~60°C
 - Storage -20~60°C
- Max. Discharge Current 77°F(25°C) 1000A(5s)
- Short Circuit Current 3300A
- Charge Methods: Constant Voltage Charge 77°F(25°C)
 - Cycle use 14.4-14.7V
 - Maximum charging current 60A
 - Temperature compensation -30mV/°C
- Standby use 13.6-13.8V
 - Temperature compensation -20mV/°C

Battery Construction

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

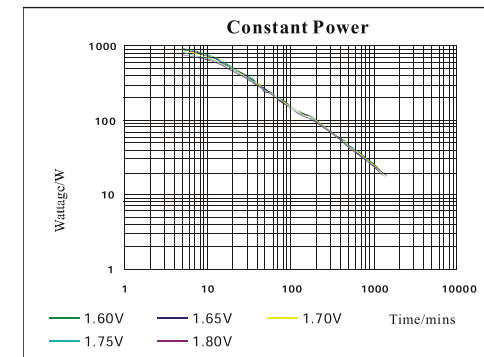
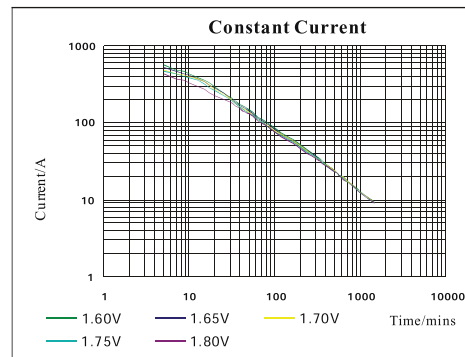
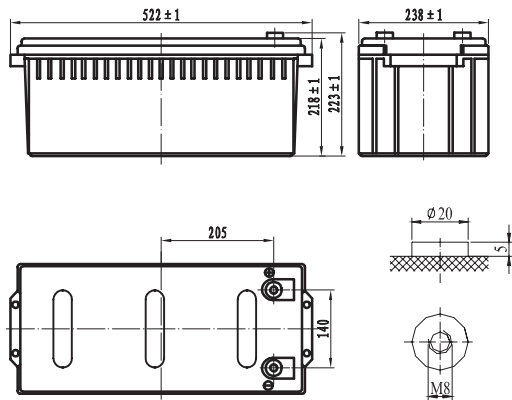


Discharge Data

Constant Current Discharge Data (Amperes at 25°C)																								
End Voltage Per cell / V	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1h	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60	440	360	290	248	220	194	174	159	147	136	128	92.8	75.2	64.6	57.6	45.5	38.2	32.3	28.0	24.9	22.4	20.4	17.5	9.34
1.65	419	350	281	240	212	187	168	153	141	132	124	89.8	72.7	62.4	55.6	44.1	37.2	31.6	27.5	24.5	22.2	20.3	17.3	9.29
1.70	400	337	271	232	206	182	163	149	137	128	120	87.5	71.3	61.5	55.0	43.5	36.6	31.1	27.2	24.3	22.0	20.2	17.2	9.25
1.75	382	319	260	224	200	177	159	145	134	125	117	85.2	69.3	59.8	53.4	42.5	36.0	30.7	26.9	24.1	21.9	20.1	17.1	9.20
1.80	331	269	228	203	187	167	152	140	130	121	114	82.5	66.8	57.3	51.0	41.3	35.4	30.3	26.6	23.9	21.7	20.0	17.0	9.16

Constant Power Discharge Data (Watts per cell at 25°C)																								
End Voltage Per cell / V	10min	15min	20min	25min	30min	35min	40min	45min	50min	55min	1h	1.5h	2h	2.5h	3h	4h	5h	6h	7h	8h	9h	10h	12h	24h
1.60	756	625	514	447	402	356	321	294	268	247	230	170	139	121	109	86.5	73.0	62.1	54.3	48.4	43.8	40.2	34.2	18.4
1.65	729	604	497	433	390	345	312	286	262	242	225	166	137	119	107	85.1	72.0	61.1	53.3	47.4	42.8	39.2	33.3	17.9
1.70	704	586	484	423	382	338	305	279	256	237	221	163	134	117	105	83.9	71.2	60.3	52.5	46.6	42.0	38.4	32.6	17.6
1.75	679	578	475	413	372	330	299	274	251	233	217	159	130	113	101	81.8	70.2	59.3	51.6	45.8	41.2	37.6	31.9	17.2
1.80	644	554	459	402	364	324	294	270	248	230	215	157	127	110	98.0	80.1	69.3	58.4	50.7	44.9	40.3	36.7	31.2	16.8

(Note) The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.





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