General features for MPG (GEL) battery

* Nanometer SiO2 and H2SO4 gelled electrolyte technology for gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
* Computer designed lead, calcium tin alloy grid for high power density.
* Not restricted for air transport-complies with IATA/ICAO Special Provision A67.UL-recognized component.
* Long service life, float or cyclic applications.specially suitable for motive power applications,such as golf trailer,sruubber, folklift,etc.
* Maintenance-free operation.Lower self discharge.
* Case and cover available in both standard and flame retardant ABS.
* The design life to 12V GEL battery is 15years ,the deep discharge cycles increased over 50% as compared with the AGM battery.

maxton
Maxton Power Tech Co.,Ltd
www.maxtonpower.com
info@maxtonpower.com

MPG12-200 (12V200Ah)

Specifications

Nominal Voltage			12V
Rated capacity (20 hour rate)			200 Ah
Dimensions (±2mm)	Total Height	T19	221 mm (8.69 inches)
		T12	237 mm (9.29 inches)
	Height		216 mm (8.50 inches)
	Length		522 mm (20.6 inches)
	Width		240 mm (9.45 inches)
Weight Approx (±3%)			64.0Kg (140.9 lbs)

Battery picture and construction

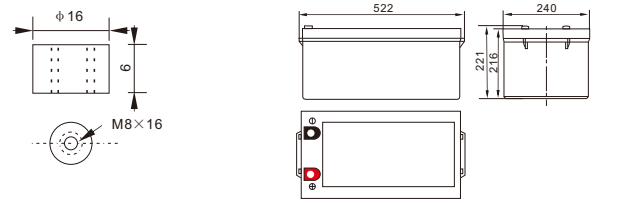
Battery Construction

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

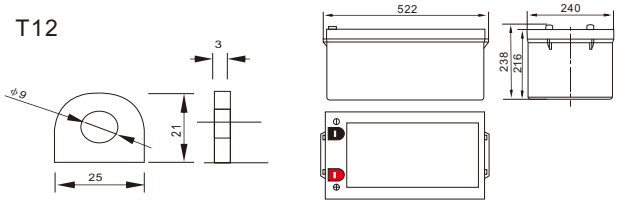
Outer dimension and terminal

T19

Outer dimensions(±2mm) Unit:mm



T12



Characteristics

Capacity 25℃(77℉)	20 hour rate(10 A,10.5V) 10 hour rate(18.6A,10.5V) 5 hour rate(32A,10.5V) 1 hour rate(120 A,9.6V)	200Ah 186Ah 160Ah 120Ah
Internal Resistance	Full charged battery at 25℃(77℉)	Approx 4.5mΩ
Capacity affected by Temperature (20hour rate)	40℃ (104℉) 25℃ (77℉) 0℃ (32℉) -15℃ (5℉)	102% 100% 85% 65%
Remaining capaicty Self-Discharge At 25℃(77℉)	Capacity after 3 month storage Capacity after 6 month storage Capacity after 12 month storage	91% 82% 64%
Terminal type		T19 (Option T12)
Max. Discharge current 25℃/(77℉)		1600A (5Seconds)
Nominal operating temperature		25℃ ±5℃(77℉ ±9℉)
Operating Temperature Range	Discharge Charge Storage	-20℃～55℃ (-4℉～131℉) -10℃～55℃ (14℉～131℉) -20℃～55℃ (-4℉～131℉)
Charge methods (constant Voltage) At 25℃(77℉)	Cycle use	Initial Charging Current less than 50A Voltage 14.50-15.00V Temperature compensation:-20mV/℃
	Standby use	Voltage 13.50-13.80V Temperature compensation:-30mV/℃

Constant current discharge (25℃ , 77 ℉)

Unit:A

Constant power discharge (25℃ , 77 ℉)

Unit:watts

Constant Current(Amp) and Constant Power(Watt) Discharge Table

Time		10min	30min	1h	2h	3h	4h	5h	8h	10h	20h
9.60V	A	400.0	220.0	120.0	70.0	51.6	40.0	33.1	22.8	19.0	10.4
	W	4240	2343	1284	756	562	440	363.9	253.1	210.9	116.5
10.20V	A	380.0	222.0	112.8	66.8	50.0	39.0	32.4	22.6	18.8	10.1
	W	4180	2453	1252	748	565	443	368	257	213	115
10.50V	A	360.0	204.0	110.0	65.2	48.8	38.4	32.0	22.2	18.6	10.0
	W	4032	2295	1243	743	559	442	368	255	214	115
10.80V	A	340.0	188.0	106.0	63.6	47.6	37.8	31.2	21.8	18.4	9.8
	W	3859	2143	1214	735	552	440	363	254	214	114
11.10V	A	320.0	168.0	100.0	62.0	46.0	36.7	30.4	21.2	17.5	9.5
	W	3680	1940	1160	725	541	433	359	250	207	112

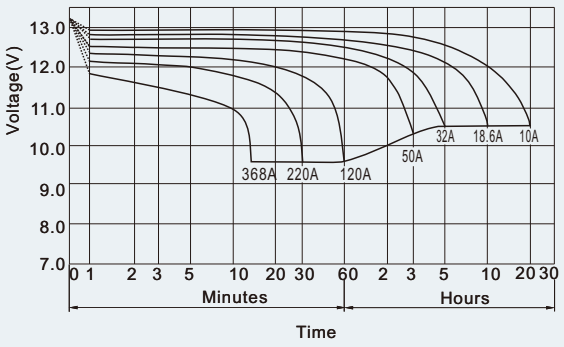
(Above characteristics data are average values obtained within three charge/discharge cycles,not the minimum values.)

GEL Battery (GEL technology)
Maintenance-free Sealed Lead Gel Rechageable Battery

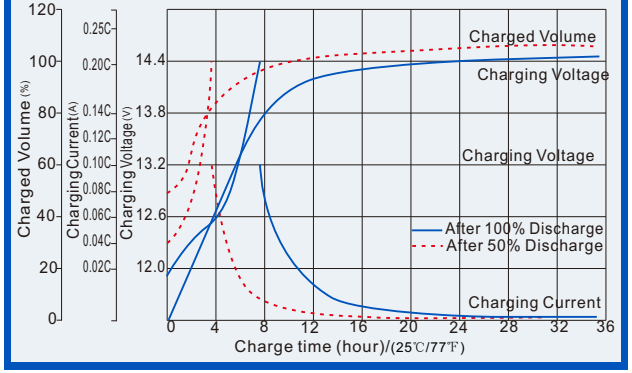
info@maxtonpower.com
www.maxtonpower.com
Maxton Power Tech Co.,Ltd

MPG12-200 (12V200Ah)

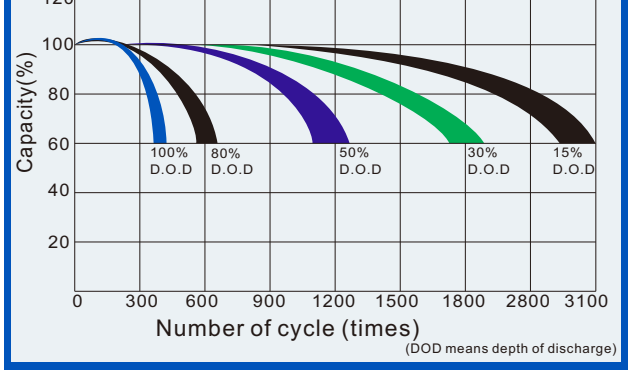
Discharge characteristics (25℃,77°F)



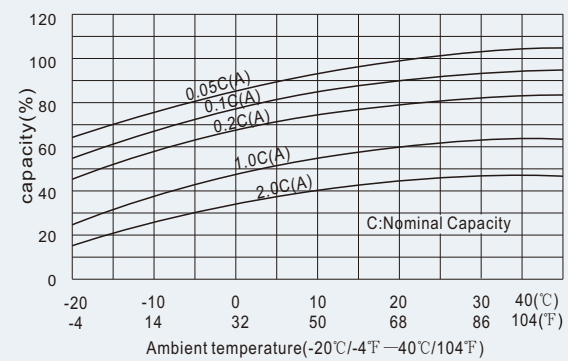
Charge characteristics (25℃,77°F)



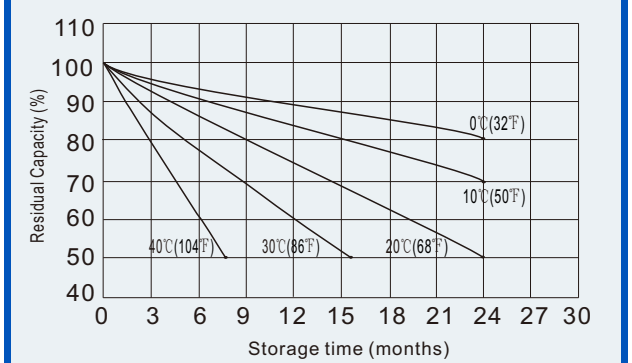
Life characteristics of Cyclic Use (25℃,77°F)



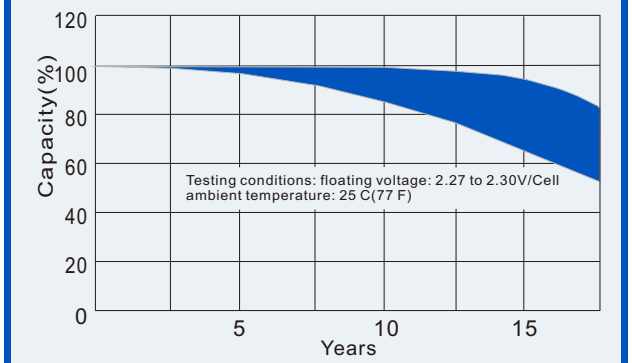
Effect of Temperature on capacity



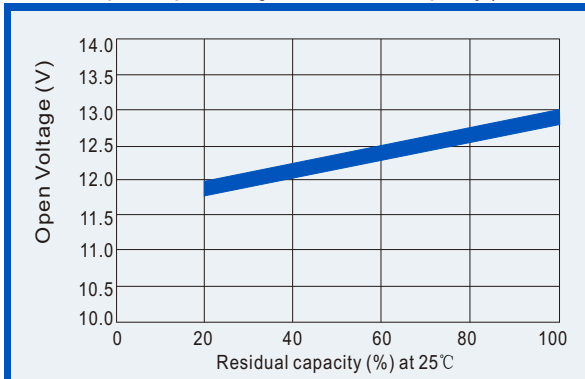
Self-discharge characteristics



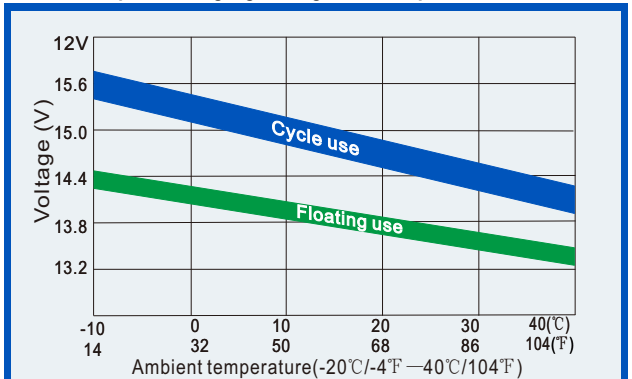
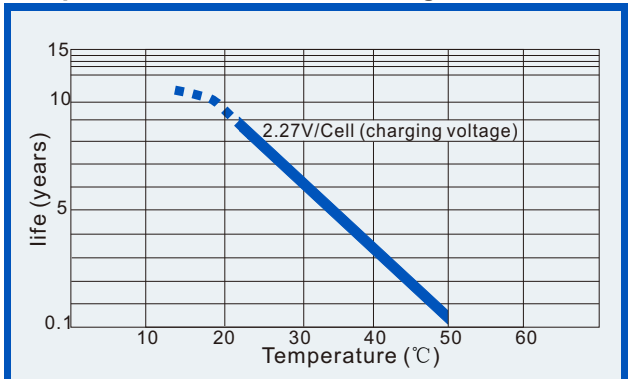
Life Characteristics of float service (25℃,77°F)



Relationships for open voltage and remained capacity (for reference)



Relationship for charging voltage and temperature



Temperature effects on floating life