

General features for MPE Series (Deep-cycle) battery

- * Absorbent Glass Mat (AGM) technology for efficient 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.
- * UL-recognized component.
- * Long service life, float or cyclic applications.
- * Maintenance-free operation.
- * Low self discharge.
- * Case and cover are available in both standard and flame retardant ABS (Standard :UL94V0).



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MPE12-134 (12V134Ah)

Specifications

Nominal Voltage		12V
Rated capacity (10 hour rate)		134 Ah
Dimensions (±2mm)	Total Height	288 mm (11.33 inches)
	Height	283 mm (11.14 inches)
	Length	341 mm (13.42 inches)
	Width	173mm (6.81 inches)
Weight Approx (±3%)		39.0Kg (86 lbs)

Battery picture and construction

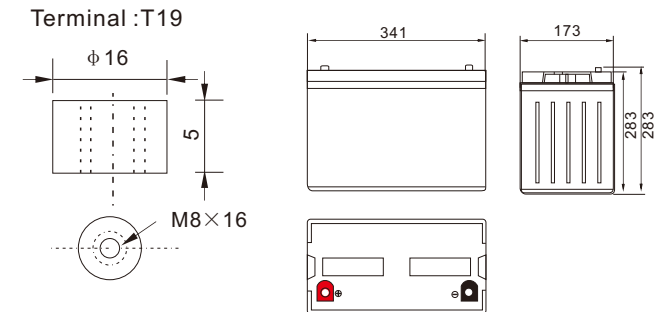


Battery Construction

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

Outer dimension and terminal

Outer dimensions(±2mm)
Unit:mm



Characteristics

Capacity 25°C(77°F)	10 hour rate(13.4 A,10.8V) 5 hour rate(21.4A,10.5V) 1 hour rate(80.4 A,9.6V)	134 Ah 107Ah 80.4 Ah
Internal Resistance	Full charged battery at 25°C(77°F)	Approx 4.0mΩ
Capacity affected by Temperature (10hour rate)	40°C (104°F) 25°C (77°F) 0°C (32°F) -15°C (5°F)	102% 100% 85% 65%
Remaining capacity Self-Discharge At 25°C(77°F)	Capacity after 3 month storage Capacity after 6 month storage Capacity after 12 month storage	91% 82% 64%
Terminal type	T19	
Max. Discharge current 25°C/(77°F)	950A (5Seconds)	
Nominal operating temperature	25°C ±5°C(77°F ±9°F)	
Operating Temperature Range	Discharge Charge Storage	-15°C ~50°C (5°F ~122°F) -10°C ~50°C (14°F ~122°F) -20°C ~50°C (-4°F ~122°F)
Charge methods (constant Voltage) At 25°C(77°F)	Cycle use Standby use	Initial Charging Current less than 33.5 A Voltage 14.5-15.0V Temperature compensation:-30mV/°C Voltage 13.8-13.8V Temperature compensation:-18mV/°C

Constant current discharge (25°C , 77 °F)

Unit:A

Constant power discharge (25°C , 77 °F)

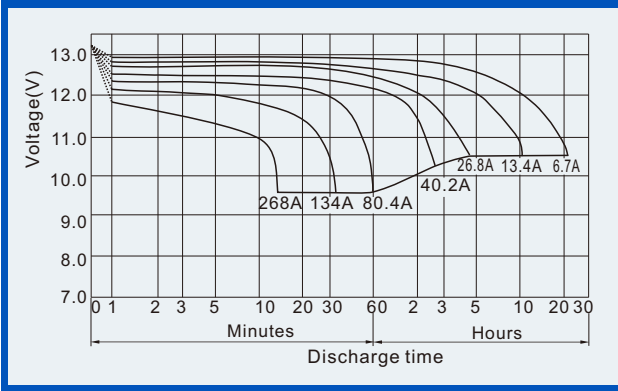
Unit:watts

Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)													
Time		5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
9.60V	A	429	283	228	152.8	80.4	46.9	34.4	26.8	22.1	15.68	14.07	7.60
	W	4429	3020	2444	1642	868	515	383	302	251	180	163	88.3
10.20V	A	416	255	215	146.1	75.6	44.8	33.5	26.1	21.7	15.28	13.80	7.37
	W	4439	2849	2402	1640	855	516	388	304	253	179	162	86.5
10.50V	A	402	228	188	136.7	73.2	43.7	32.7	25.7	21.4	15.14	13.53	7.37
	W	4391	2596	2142	1573	847	507	381	301	251	178	160	87.1
10.80V	A	388	215	174	126.0	70.8	42.6	31.9	25.3	20.9	14.74	13.40	7.24
	W	4348	2480	2010	1459	824	499	376	299	247	175	159	86.2
11.10V	A	375	202	161	112.6	68.3	41.5	30.8	24.7	20.4	14.34	12.73	6.83
	W	4247	2334	1875	1317	804	491	366	294	243	172	153.7	82.8

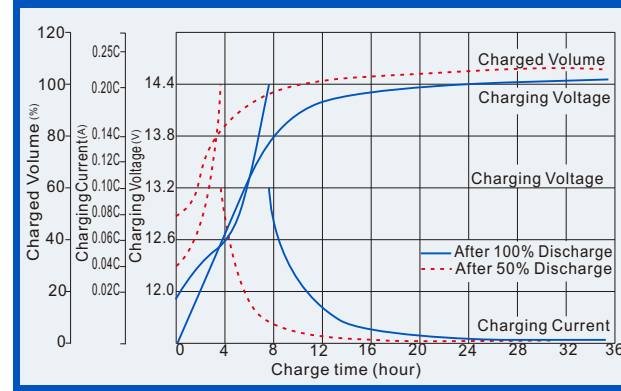
(Above characteristics data are average values obtained within three charge/discharge cycles,not the minimum values.)

Deep Cycle Battery (VRLA Battery, AGM technology) Maintenance-free Sealed Lead Acid Rechargeable Battery

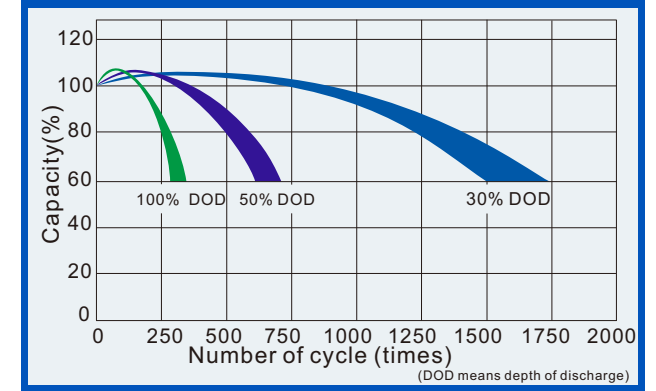
Discharge characteristics (25°C, 77°F)



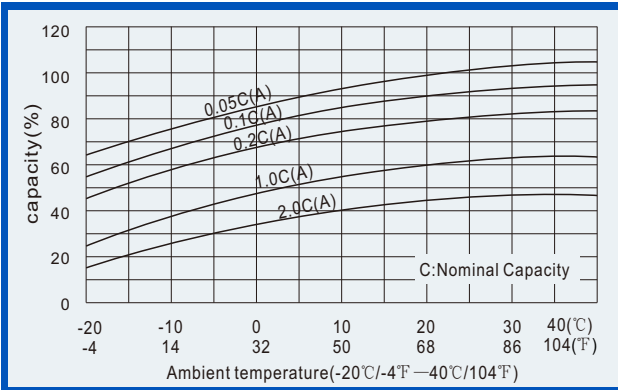
Charge characteristics (25°C, 77°F)



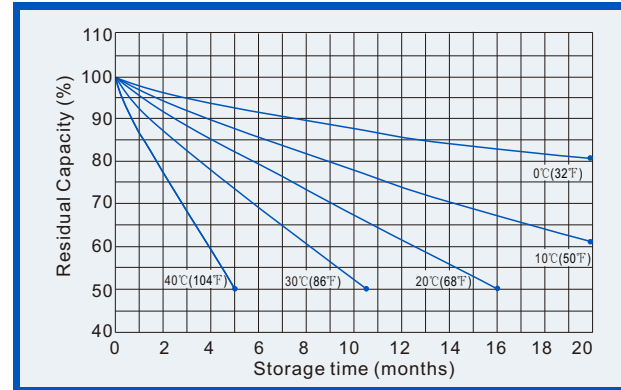
Life characteristics of Cyclic Use (25°C, 77°F)



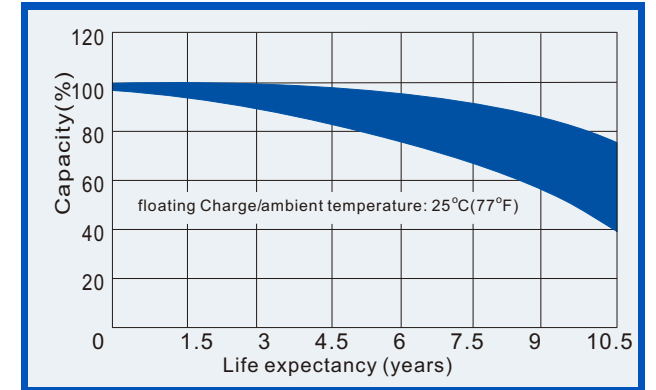
Effect of Temperature on capacity



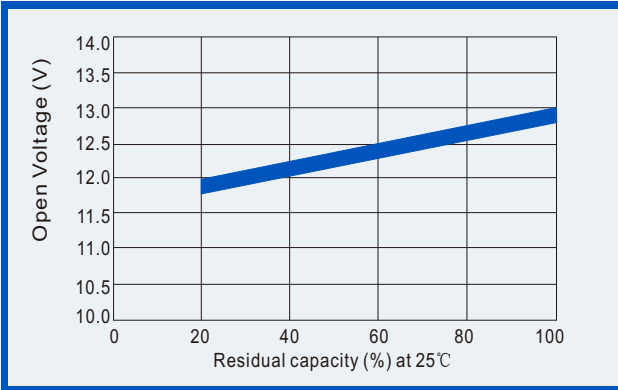
Self-discharge characteristics



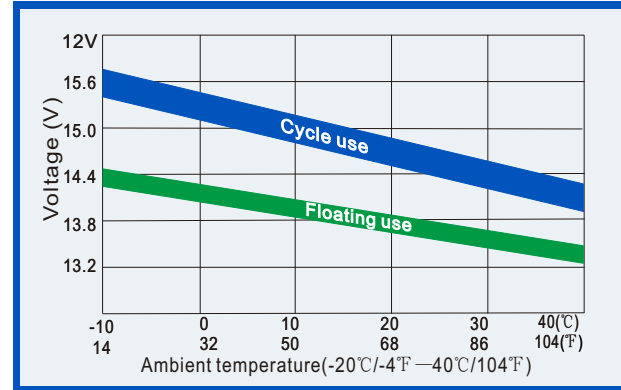
Life Characteristics of standby use (25°C, 77°F)



Relationships for open voltage and remained capacity (for reference)



Relationship for charging voltage and temperature



Temperature effects on floating life

