

General features for MPb Series (AGM) battery

- * Stable quality & high reliability.
- * Unique construction and sealing technique guarantees.
- * Design life 10years in float service;the battery comply to the most popular international standards,like IEC60896-21/22,etc
- * Maintenance-free operation.
- * UL-recognized component.
- * Heavy duty grids:
The heavy-duty lead calcium-alloy grids ,provide an extra margin of performance and service life in float & cyclic.
- * Case and cover are available in both standard and flame retardant ABS.
- * Low self discharge;low pressure venting system.



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MP12-75 (12V75Ah)

Specifications

Nominal Voltage		12V	
Rated capacity (10 hour rate)		75Ah	
Dimensions (±2mm)	Total Height	T16	216 mm (8.50 inches)
		T33	228 mm (8.98 inches)
	Height	208 mm (8.19 inches)	
	Length	260 mm (10.2 inches)	
Width		169 mm (6.65 inches)	
Weight Approx (±3%)		22.0 Kg (48.5 lbs)	

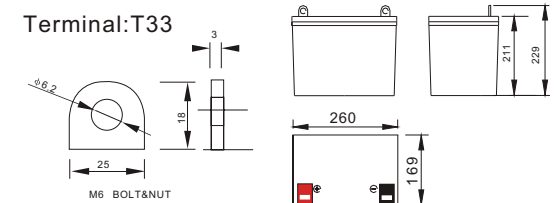
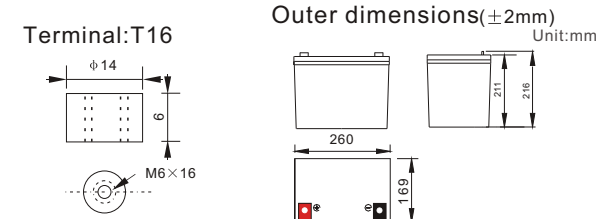
Battery picture and construction



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



Characteristics

Capacity 25°C(77°F)	10 hour rate(7.0A,10.8V) 5 hour rate(11.2A,10.5V) 1 hour rate(42A,9.6V)	75Ah 56Ah 42Ah
Internal Resistance	Full charged battery at 25°C(77°F)	Approx 6.5 mΩ
Capacity affected by Temperature (10hour rate)	40°C (104°F)	102%
	25°C (77°F)	100%
	0°C (32°F)	85%
Remaining capacity Self-Discharge At 25°C(77°F)	-15°C (5°F)	65%
	Capacity after 3 month storage	91%
	Capacity after 6 month storage	82%
Capacity after 12 month storage		64%
Terminal type		T16 (Option T33)
Max. Discharge current 25°C/(77°F)		700A (5Seconds)
Nominal operating temperature		25°C ±5°C(77°F ±9°F)
Operating Temperature Range	Discharge	-15°C ~50°C (5°F ~122°F)
	Charge	-10°C ~50°C (14°F ~122°F)
	Storage	-20°C ~50°C (-4°F ~122°F)
Charge methods (constant Voltage) At 25°C(77°F)	Cycle use	Initial Charging Current less than 21A Voltage 14.5-14.9V Temperature compensation:-30mV/°C
	Standby use	Voltage 13.6-13.8V Temperature compensation:-18mV/°C

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

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

Unit:A

Unit:watts

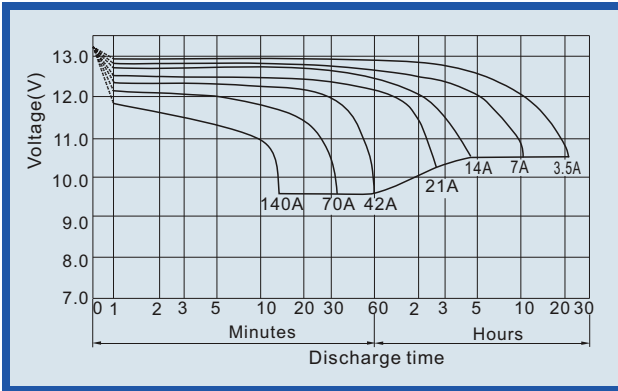
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)

Time		5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
9.60V	A	224	148	119	79.8	42.0	24.5	18.0	14.0	11.6	8.19	7.35	3.97
	W	2314	1577	1277	858	454	269	200	158	131	94	85	46.2
10.20V	A	217	133	112	76.3	39.5	23.4	17.5	13.7	11.3	7.98	7.21	3.85
	W	2319	1488	1255	857	447	269	203	159	132	93	85	45.2
10.50V	A	210	119	98	71.4	38.2	22.8	17.1	13.4	11.2	7.91	7.07	3.85
	W	2294	1356	1119	822	443	265	199	157	131	93	84	45.5
10.80V	A	202	112	91	65.8	37.0	22.3	16.7	13.2	10.9	7.70	7.00	3.78
	W	2271	1296	1050	762	430	261	196	156	129	91	83	45.0
11.10V	A	196	105	84	58.8	35.7	21.7	16.1	12.9	10.6	7.49	6.65	3.57
	W	2219	1219	979	688	420	256	191	153	127	90	80.3	43.3

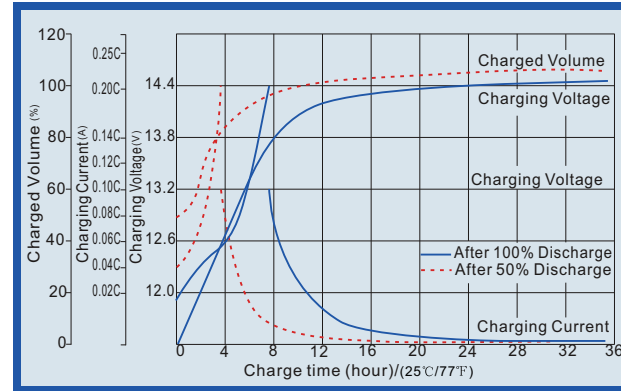
(Above characteristics data are average values obtained within three charge/discharge cycles,not the minimum values.)

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

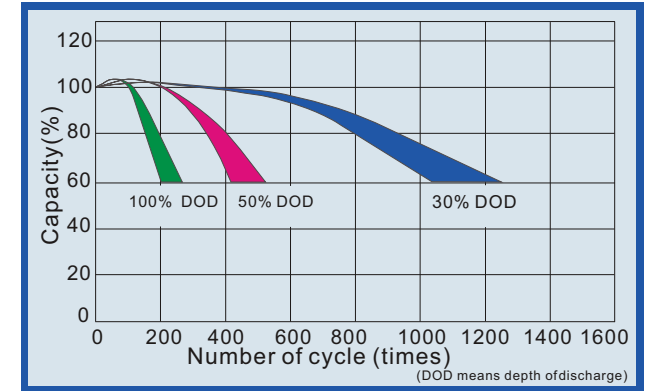
Discharge characteristics (25°C, 77°F)



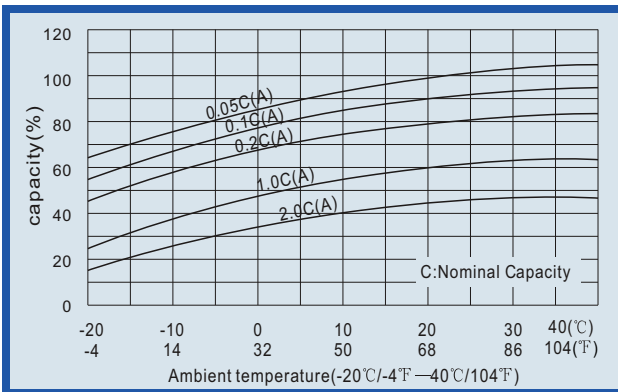
Charge characteristics (25°C, 77°F)



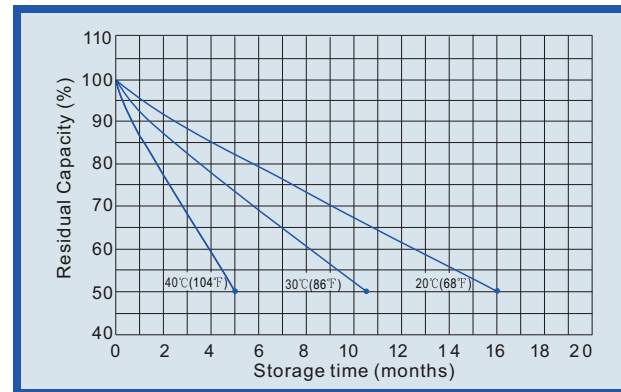
Life characteristics of Cyclic Use (25°C, 77°F)



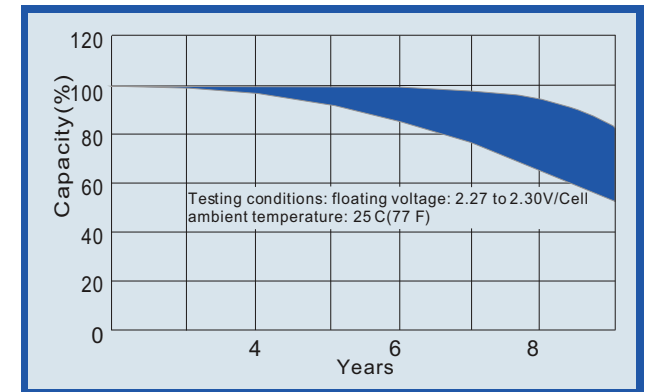
Effect of Temperature on capacity



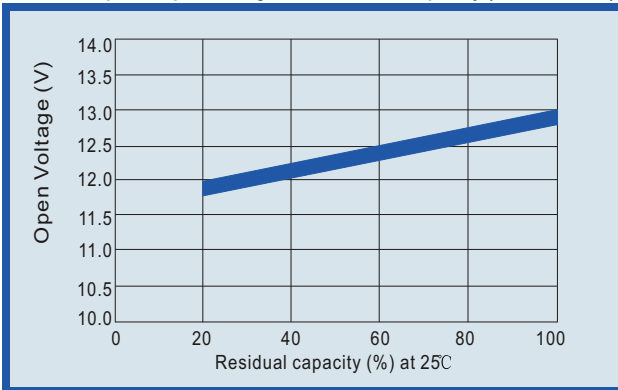
Self-discharge characteristics



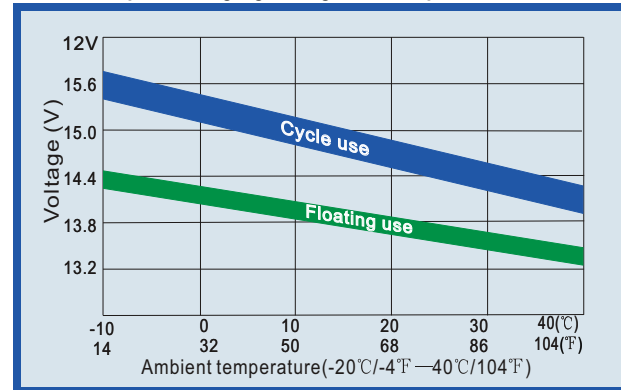
Life Characteristics of float service (25°C, 77°F)



Relationships for open voltage and remained capacity (for reference)



Relationship for charging voltage and temperature



Temperature effects on floating life

