General features for MPb Series (AGM) battery

- Stable quality & high reliability.
- Unique contstruction 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.

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

MP12-70B (12V70Ah)

Specifications

Nominal Voltage			12V
Rated capacity (10 hour rate)			70Ah
Dimensions (±2mm)	Total Height	T16	179mm (7.05 inches)
		T9	179 mm (7.05 inches)
	Height		179 mm (7.05 inches)
	Length		350 mm (130.8 inches)
	Width		166 mm (6.54 inches)
Weight Approx (±3%)			21.0 Kg (46.3 lbs)

Battery picture and construction

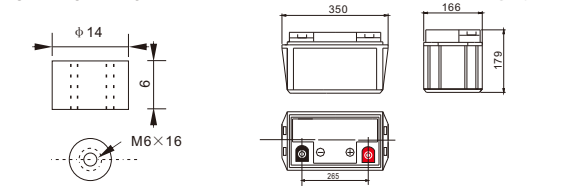
Battery Construction

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

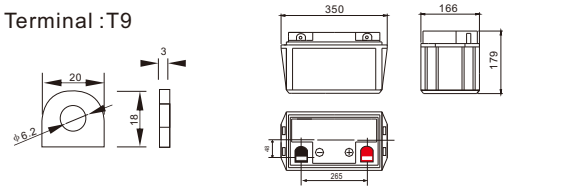
Outer dimension and terminal

Terminal :T16

Outer dimensions(±2mm)
Unit:mm



Terminal :T9



Characteristics

Capacity 25℃(77℉)	10 hour rate(7.0 A,10.8V) 5 hour rate(11.2A,10.5V) 1 hour rate(42 A,9.6V)	70Ah 56Ah 42Ah
Internal Resistance	Full charged battery at 25℃(77℉)	Approx 8.5mΩ
Capacity affected by Temperature (10hour 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		T16 (Option T9)
Max. Discharge current 25℃/(77℉)		700A (5Seconds)
Nominal operating temperature		25℃ ±5℃(77℉ ±9℉)
Operating Temperature Range	Discharge	-15℃～50℃ (5℉～122℉)
	Charge	-10℃～50℃ (14℉～122℉)
	Storage	-20℃～50℃ (-4℉～122℉)
Charge methods (constant Voltage) At 25℃(77℉)	Cycle use	Initial Charging Current less than 17.5A Voltage 14.5-14.9V Temperature compensation:-30mV/℃
	Standby use	Voltage 13.6-13.8V Temperature compensation:-18mV/℃

Constant current discharge (25℃ , 77 ℉)

Unit:A

Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25℃(77℉)

Time		5min	10min	15min	30min	1h	2h	3h	4h	5h	8h	10h	20h
9.60V	A	259	189	133	81	42	25	18.0	14.0	11.6	8.1	7.4	3.97
	W	2750	2007	1412	855	486	284	208	162	134	94	85	46.0
10.20V	A	228	172	119	76.3	39.5	23.4	17.5	13.7	11.3	8.0	7.2	3.87
	W	2533	1911	1321	847	457	271	203	158	131	92	83	44.8
10.50V	A	220	164	112	74	38	22.8	17.1	13.4	11.2	7.9	7.0	3.82
	W	2493	1857	1270	841	443	264	198	156	130	92	82	44.3
10.80V	A	211	155	105	72	37	22.3	16.7	13.2	10.9	7.7	7.0	3.78
	W	2461	1809	1222	839	430	259	194	152	127	90	81	44.0
11.10V	A	203	147	98	70	36	21.7	16.1	12.8	10.6	7.5	6.65	3.59
	W	2416	1749	1166	833	425	258	192	152	127	89	79	42.7

Constant power discharge (25℃ , 77 ℉)

Unit:watts

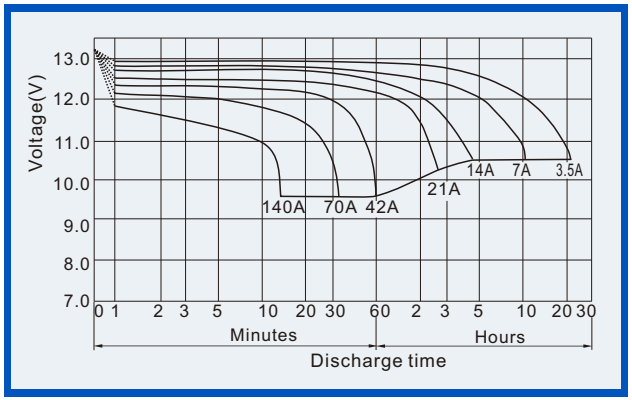
(Above characteristics data are average values obtained within three charge/discharge cycles,not the minimum values.)

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

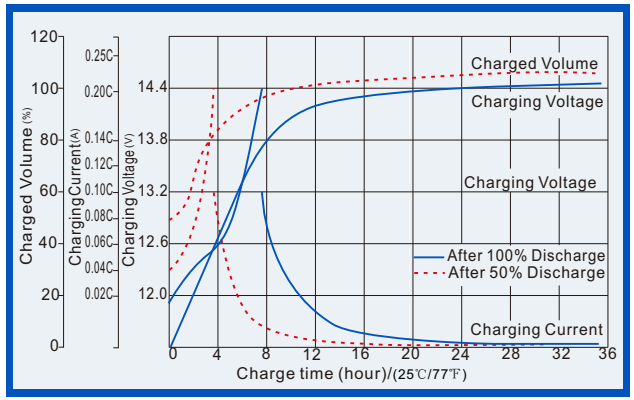
info@maxtonpower.com
www.maxtonpower.com
Maxton Power Tech Co.,Ltd

MP12-70B (12V70Ah)

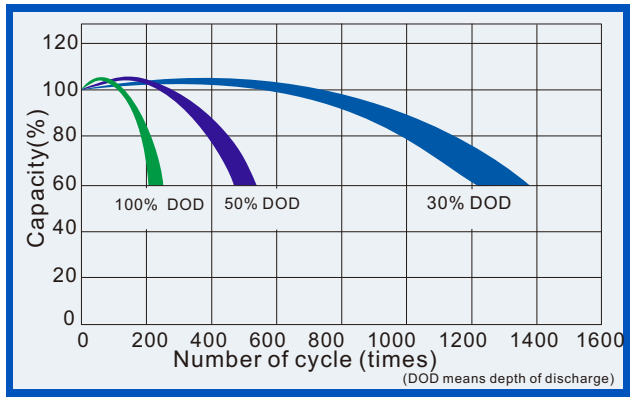
Discharge characteristics (25℃,77℉)



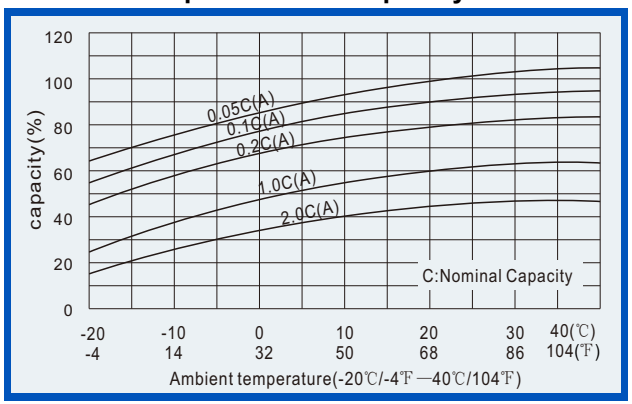
Charge characteristics (25℃,77℉)



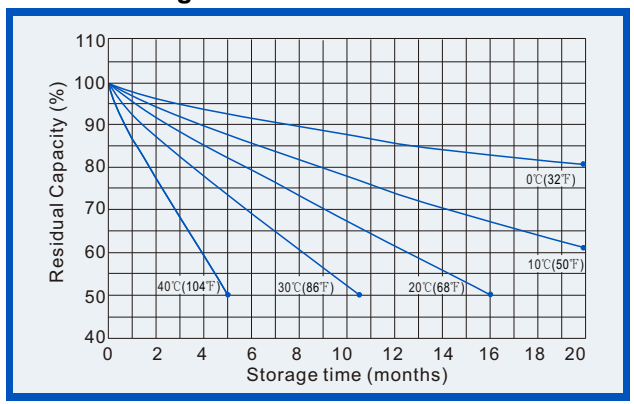
Life characteristics of Cyclic Use (25℃,77℉)



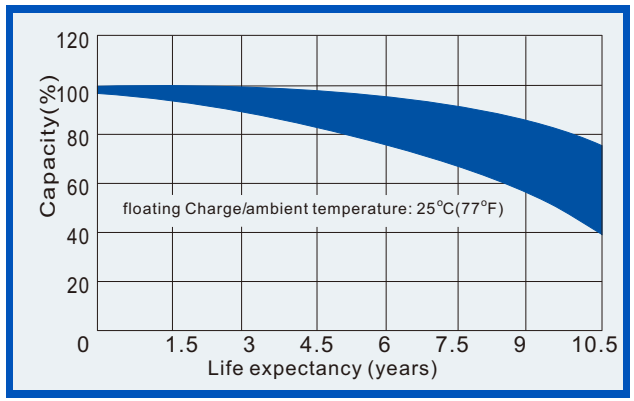
Effect of Temperature on capacity



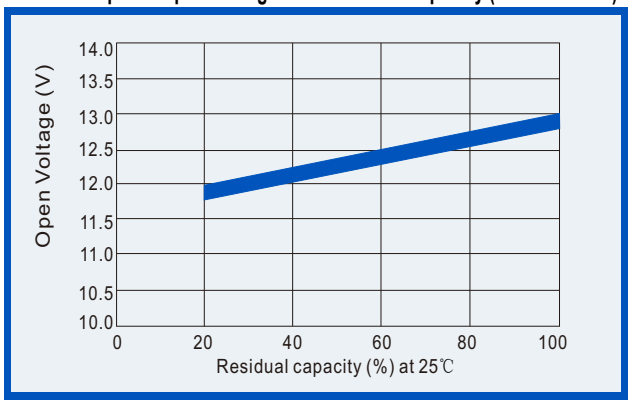
Self-discharge characteristics



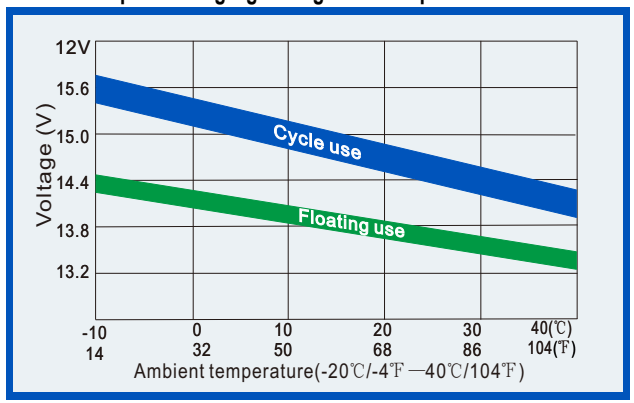
Life Characteristics of float service (25℃,77℉)



Relationships for open voltage and remained capacity (for reference)



Relationship for charging voltage and temperature



Temperature effects on floating life