POWERMAX

Valve Regulated Lead Acid Battery

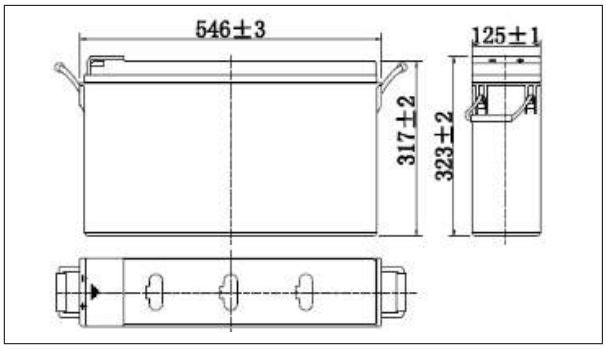
PMF12-200 12V200Ah



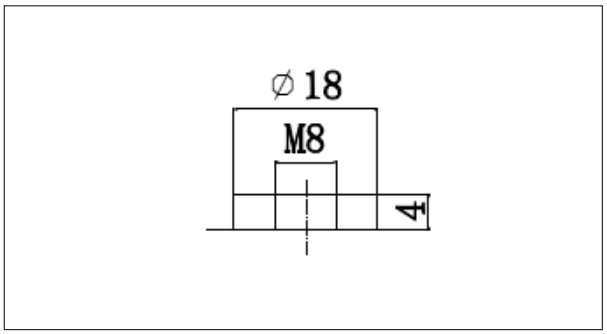
Specifications

Nominal Voltage		12V
Rated capacity (10 hour rate)		200Ah
Dimensions	Length	546±3mm (21.50inch)
	Width	125±1mm (4.92inch)
	Height	317±2mm (12.48inch)
	Total Height	323±2mm (12.72inch)
Approx. Weight		60.5kg (133.4lbs)±3%

Outer dimensions (mm)



Terminal Type (mm)



Characteristics

Capacity (25℃)	10HR(10.8V)	200Ah
	3HR(10.8V)	150Ah
	1HR(10.5V)	110Ah
Terminal type		T18
Internal resistance (Fully charged,25℃)		Approx.3.5m Ω
Capacity affected by temperature (10HR)	40℃	102%
	25℃	100%
	0℃	85%
	-15℃	65%
Self-discharge (25℃)	3month	Remaining Capacity:91%
	6month	Remaining Capacity:82%
	12month	Remaining Capacity:65%
Nominal operating temperature		25℃ ±3℃(77℉ ±5℉)
Operating temperature range	Discharge	-15℃~50℃(5℉~122℉)
	Charge	-10℃~50℃(14℉~122℉)
	Storage	-20℃~50℃(-4℉~122℉)
Float charging voltage(25℃)		13.50 to 13.80V Temperature compensation: -18mV/℃
Cyclic charging voltage(25℃)		14.50 to 15.00V Temperature compensation: -30mV/℃
Maximum charging current		60A
Terminal material		Copper
Maximum discharge current		1300A(5 sec.)
Designed floating life(20℃)		12years

Construction

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

Constant Current Discharge Characteristics Unit:A(25℃/77℉)

F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
9.60V	326	195	120	73.1	52.6	42.0	35.9	31.2	24.7	20.4	10.8
9.90V	318	191	118	72.6	52.3	41.8	35.7	31.0	24.5	20.3	10.8
10.2V	306	185	115	72.0	52.0	41.5	35.4	30.8	24.4	20.3	10.7
10.5V	296	181	111	70.9	51.6	41.2	35.2	30.6	24.2	20.1	10.7
10.8V	280	174	108	69.1	50.1	40.0	34.1	29.7	23.5	20.0	10.6

Constant Power Discharge Characteristics Unit:W(25℃/77℉)

F.V/Time	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
9.60V	3579	2188	1367	846	619	494	424	369	293	243	129
9.90V	3493	2144	1346	841	615	491	422	367	292	243	129
10.2V	3364	2078	1312	834	611	488	419	364	290	242	129
10.5V	3249	2028	1271	821	607	485	416	362	287	240	128
10.8V	3078	1953	1230	800	589	470	404	351	279	239	127

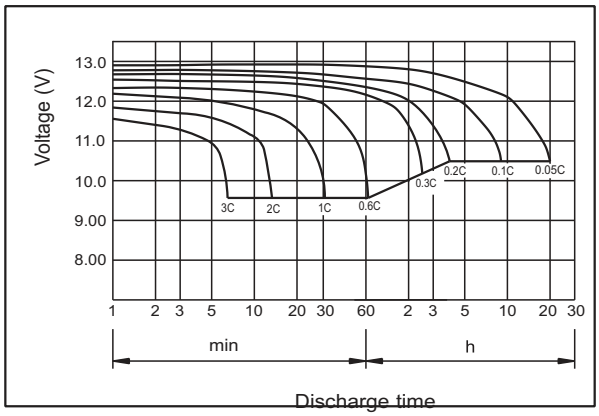
Note: The above characteristics data can be obtained within three charge or discharge cycles.

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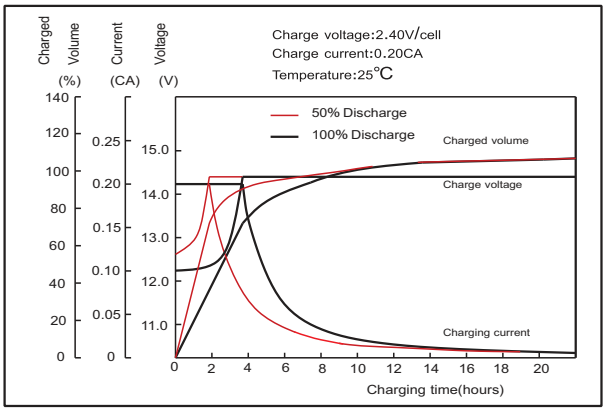
Valve Regulated Lead Acid Battery

PMF12-200 12V200Ah

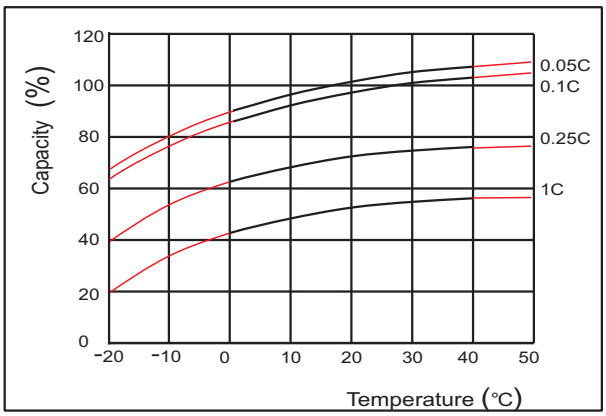
Discharge Characteristics 25℃



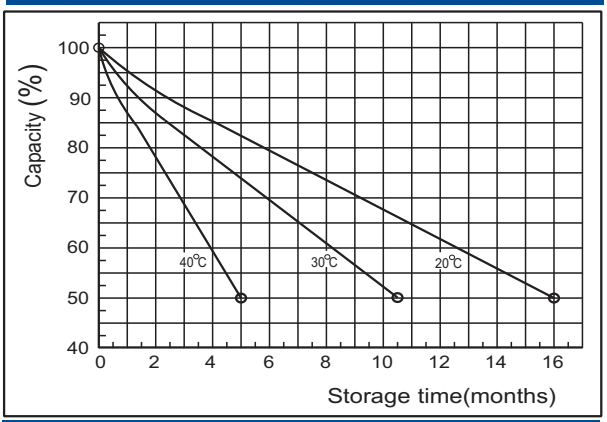
Charging Characteristics 25℃



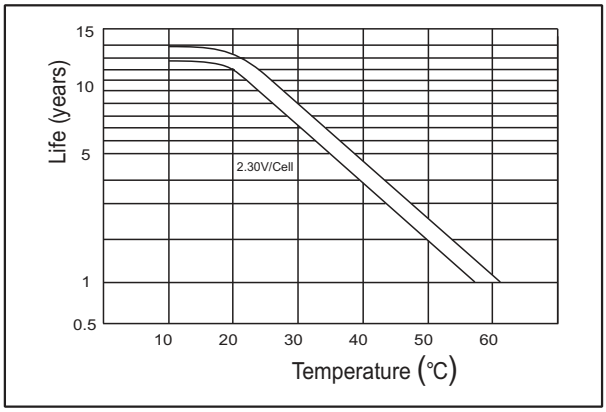
Temperature Effects on Capacity



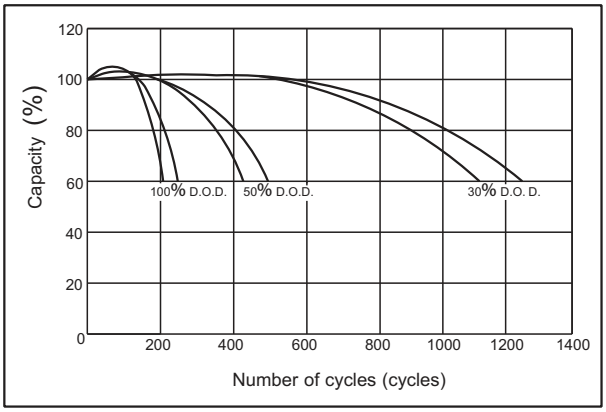
Self-discharge characteristics



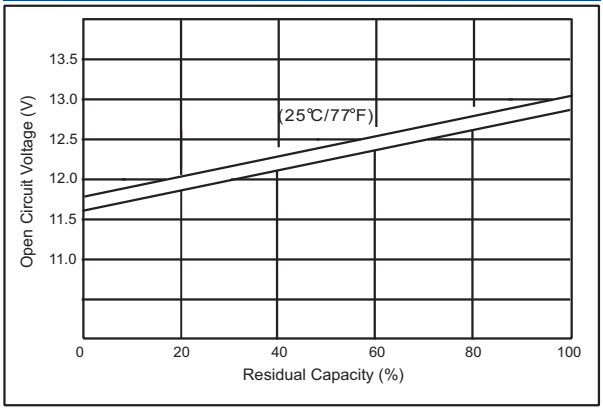
Temperature effects on float life



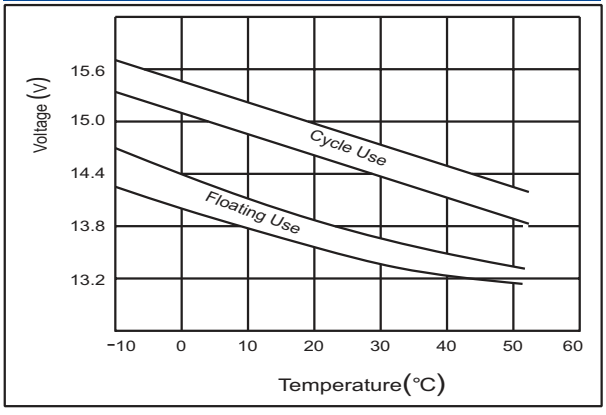
Cycle service life in relation to depth of discharge



The relationship for OCV and Capacity (25℃)



The relationship for Charging voltage and Temperature



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