Valve Regulated Lead Acid Battery

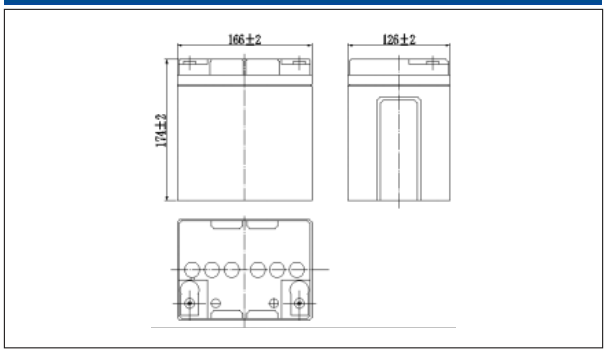
PMA12-30 12V30Ah



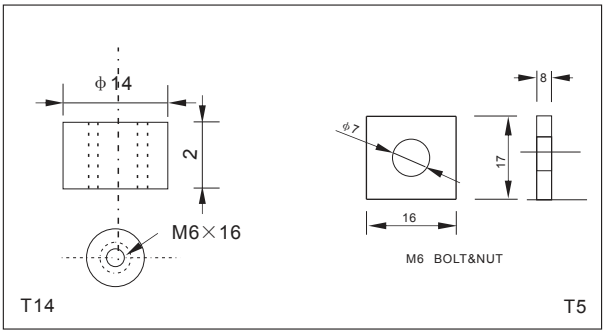
Specifications

Nominal Voltage		12V
Rated capacity (20 hour rate)		30Ah
Dimensions	Length	166±2mm(6.54inch)
	Width	126±2mm(4.96inch)
	Height	174±1mm(6.85inch)
	Total Height	T14:174±2mm(6.85inch) T5:181±2mm(7.13inch)
Approx. Weight		8.8kg(19.4lbs)±4%

Outer dimensions (mm)



Terminal Type (mm)



Characteristics

Capacity (25℃)	20HR(10.5V)	30Ah
	10HR(10.5V)	26Ah
	1HR(9.60V)	17Ah
Terminal type		T14/T5
Internal resistance (Fully charged,25℃)		Approx.10m Ω
Capacity affected by temperature (20HR)	40℃	102%
	25℃	100%
	0℃	85%
	-15℃	65%
Self-discharge (25℃)	3 months	Remaining Capacity:91%
	6 months	Remaining Capacity:82%
	12 months	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		8.4A
Maximum discharge current		360A(5 sec.)
Designed floating life(20℃)		5 years

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 / lead

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

F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	105	66.4	51.9	29.2	18.0	10.0	6.94	5.74	4.88	2.65	1.52
9.90V	102	64.4	51.6	28.6	17.7	9.97	6.90	5.71	4.86	2.64	1.52
10.2V	97.5	61.8	48.7	27.6	17.3	9.88	6.85	5.67	4.82	2.63	1.51
10.5V	93.3	59.1	47.1	27.1	16.9	9.74	6.80	5.63	4.79	2.61	1.50
10.8V	88.0	55.8	44.6	26.1	16.4	9.49	6.60	5.46	4.64	2.56	1.47

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

F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	1170	749	591	335	208	117	82.4	68.4	58.3	31.8	17.1
9.90V	1135	727	577	328	205	117	82.0	68.0	58.0	31.7	17.0
10.2V	1088	697	556	318	200	116	81.4	67.5	57.6	31.5	16.9
10.5V	1041	667	537	310	196	114	80.8	67.0	57.2	31.3	16.8
10.8V	983	629	508	299	190	111	78.4	65.0	55.5	31.7	16.5

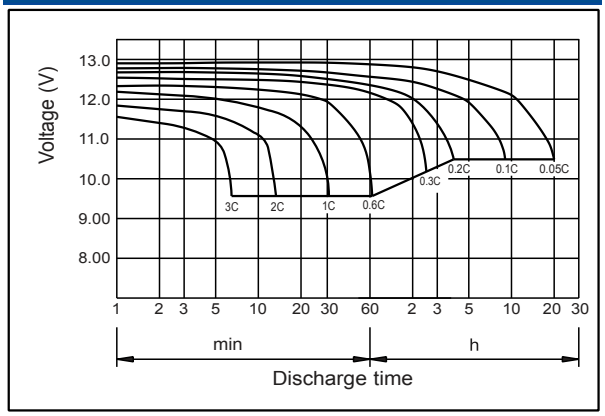
Note: The above characteristics data can be obtained within three charge or discharge cycles.

POWERMAX

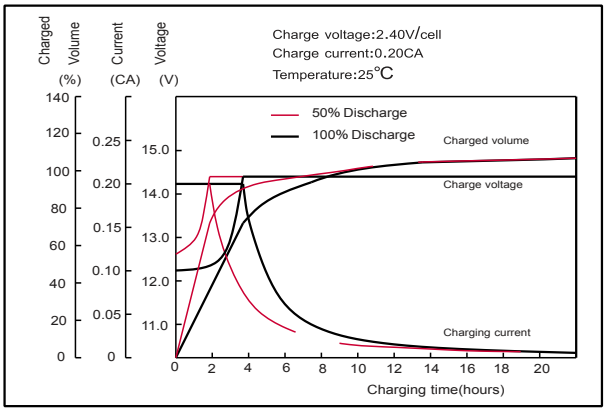
Valve Regulated Lead Acid Battery

PMA12-30 12V30Ah

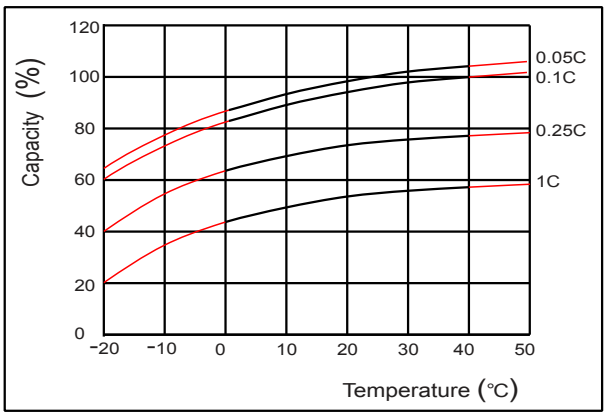
Discharge Characteristics 25℃



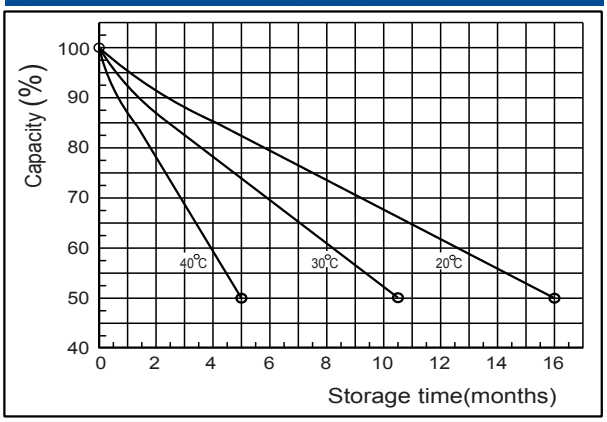
Charging Characteristics 25℃



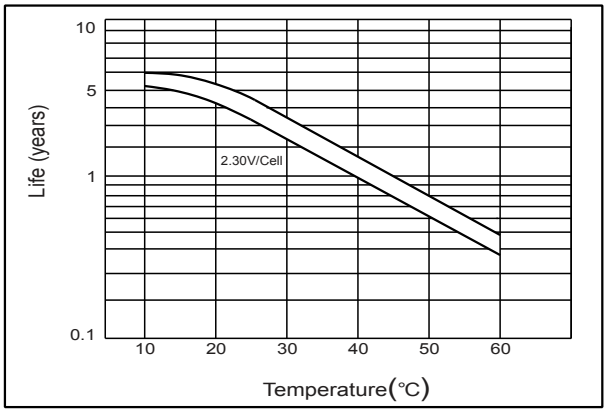
Temperature Effects on Capacity



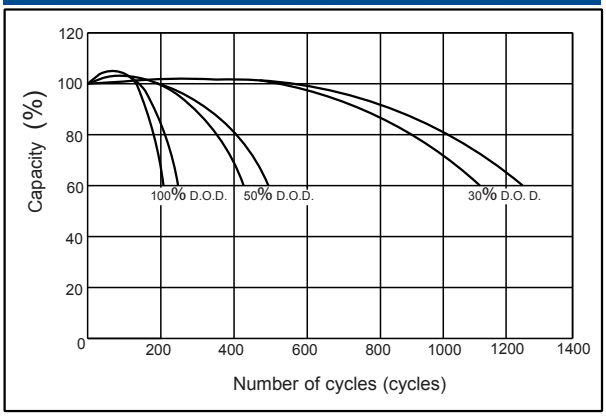
Self-discharge characteristics



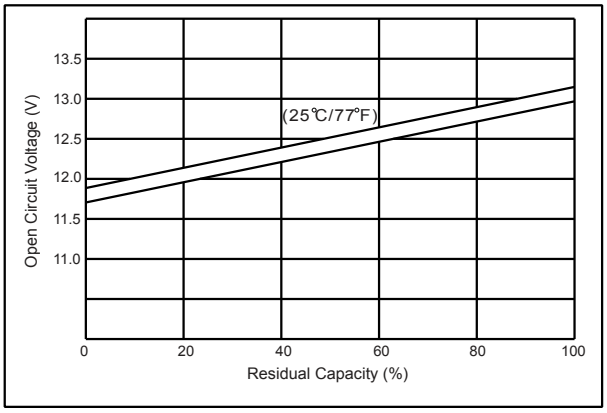
Temperature effects on float life



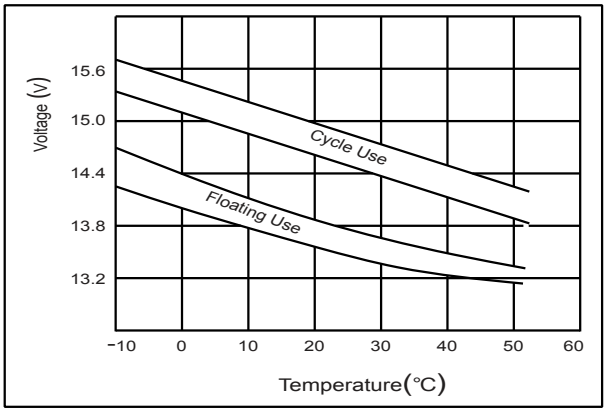
Cycle service life in relation to depth of discharge



The relationship for OCV and Capacity (25℃)



The relationship for Charging voltage and Temperature



MH47211

MADE IN VIETNAM