

VRLA AGM Front Terminal Battery

ATPG-FT12-100AH

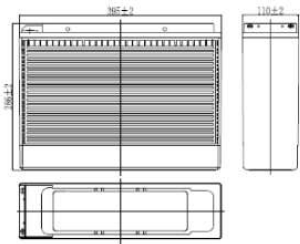


The Atlantic Power Front Terminal Series batteries, with their innovative design featuring a new AGM separator and a centralized venting system, provide numerous advantages when it comes to installation. Their front terminal design allows for easy and convenient installation, especially in confined spaces or rack-mounted configurations. This design also facilitates quick and hassle-free maintenance procedures. Furthermore, the versatility of these batteries ensures that they can be installed in various positions without sacrificing reliability. Additionally, customers have the option to choose gel technology variants, further enhancing the suitability of these batteries for a wide range of applications.

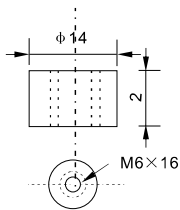
Specifications

Nominal Voltage	12V	
Rated capacity (20 hour rate)	100Ah	
Dimensions	Length	395±2mm(15.55inch)
	Width	110±2mm(4.33inch)
	Height	286±2mm(11.26inch)
	Total Height	286±2mm(11.26inch)
Approx. Weight	32.8kg(72.31lbs)±3%	

Outer dimensions (mm)



Terminal Type (mm)



Characteristics

Capacity (25°C)	10HR(10.8V)	100Ah
	3HR(10.8V)	75Ah
	1HR(10.5V)	55Ah
Terminal type		T14
Internal resistance (Fully charged,25°C)		Approx.5.5m Ω
Capacity affected by temperature (10HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 months	Remaining Capacity:91 %
	6 months	Remaining Capacity:82%
	12 months	Remaining Capacity:65%
Nominal operating temperature		25°C ±3°C(77°F ±5°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)
Float charging voltage(25°C)		13.50 to 13.80V Temperature compensation: -18mV/ °C
Cyclic charging voltage(25°C)		14.50 to 15.00V Temperature compensation: -30mV/°C
Maximum charging current		30A
Maximum discharge current		800A(5 sec.)
Designed floating life(20°C)		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°C,77°F)

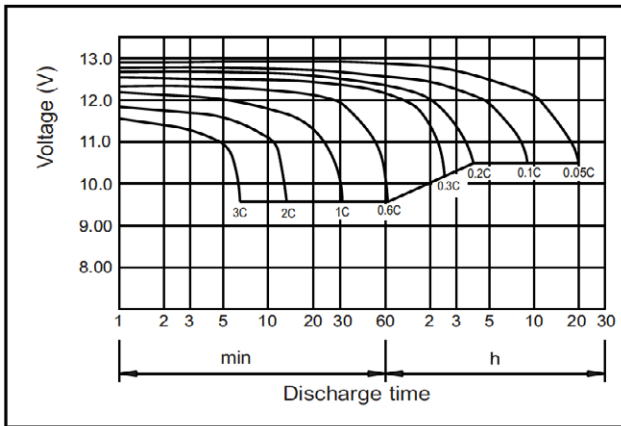
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	Bh	10h	20h
9.60V	214	165	98.5	60.6	36.5	26.3	21.0	18.0	12.3	10.2	5.40
9.90V	207	161	96.5	59.7	36.3	26.2	20.9	17.8	12.3	10.2	5.38
10.2V	199	155	93.6	58.1	36.0	26.0	20.7	17.7	12.2	10.1	5.37
10.5V	190	149	91.3	56.3	35.5	25.8	20.6	17.6	12.1	10.1	5.34
10.8V	179	142	88.0	54.5	34.6	25.0	20.0	17.1	11.7	10.0	5.30

Constant Power Discharge Characteristics Unit:W(25°C,77°F)

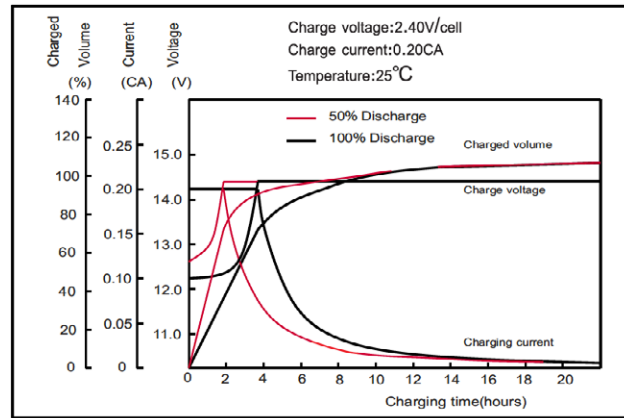
F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	Bh	10h	20h
9.60V	2307	1808	1105	690	423	309	247	212	147	122	64.7
9.90V	2238	1764	1083	680	421	308	246	211	146	121	64.6
10.2V	2146	1699	1050	663	417	306	244	209	145	121	64.4
10.5V	2054	1641	1024	642	411	303	242	208	144	120	64.0
10.8V	1938	1555	987	621	400	294	235	202	139	119	63.6

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

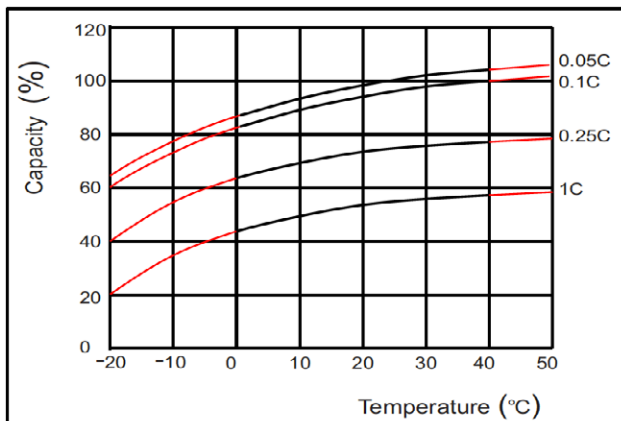
Discharge characteristics(25°C)



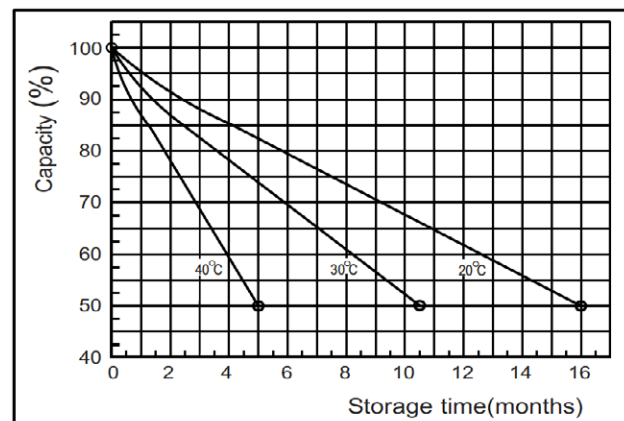
Charging characteristics



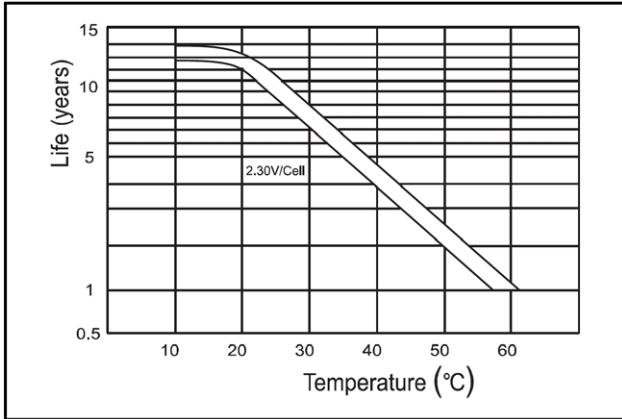
Effect of Temperature on Capacity



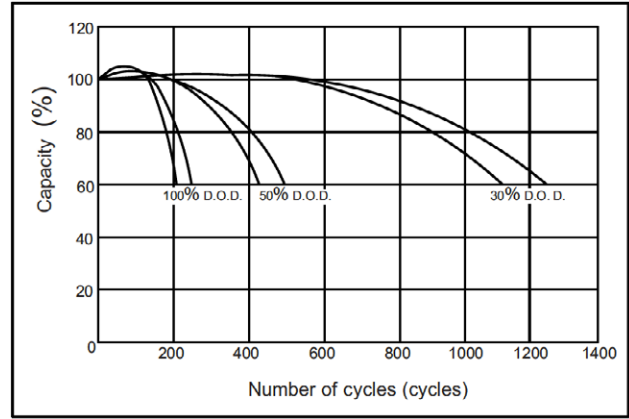
Self-discharge characteristics



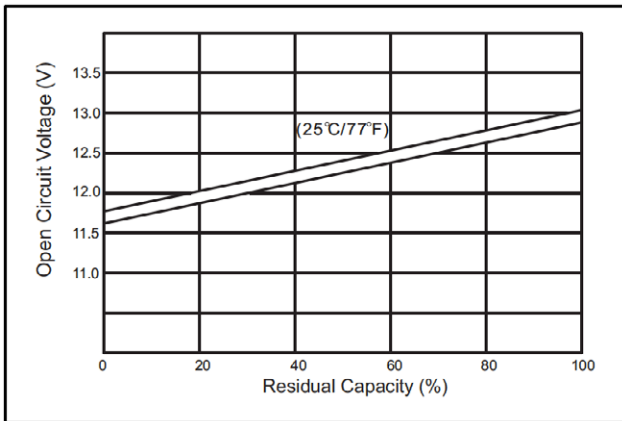
Temperature effects on float life



Cycle service life in relation to depth of discharge



The relationship for OCV and Capacity (25't)



The relationship for Charging voltage and Temperature

