



AC SERIES - Deep Cycle

AC12-200 (12V200AH)

Specification

Nominal Voltage	12V
Nominal Capacity(10HR)	200.0AH
Dimension	Length 522±3mm (20.55 inches)
	Width 240±2mm (9.45 inches)
	Container Height 218±2mm (8.58 inches)
	Total Height (with Terminal) 224±2mm (8.81 inches)
Approx Weight	Approx 62.5 Kg(137.8 lbs)
Terminal	T 11
Container Material	ABS
Rated Capacity	214.4AH/10.7A (20hr ,1.80V/cell,25°C/77°F)
	200.0AH/20.0A (10hr,1.80V/cell,25°C/77°F)
	175.4AH/35.1A (5hr,1.75V/cell,25°C/77°F)
	159.0AH/53.0A (3hr,1.75V/cell,25°C/77°F)
	129.2AH/129.2A (1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	2000A (5s)
Internal Resistance	Approx 2.7mΩ
Operating Temp. Range	Discharge : -15~50°C (5~122°F)
	Charge : 0~40°C (32~104°F)
	Storage : -15~40°C (5~104°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)
Cycle Use	Initial Charging Current less than 60.0A.Voltage 14.4V-15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C
	Standby Use No limit on Initial Charging Current Voltage 13.5V-13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C
Capacity affected by Temperature	40°C (104°F) 103%
	25°C (77°F) 100%
	0°C (32°F) 86%
Self Discharge	Synergy AC series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.



Applications

- ♦ Electric tools
- ♦ Vehicle in place of walking
- ♦ Lawn mowers
- ♦ Golf trolleys and golf cart
- ♦ Portable apparatus, lights and instruments;
- ♦ Electric toys
- ♦ Illumination light
- ♦ Fire alarms
- ♦ Portable power
- ♦ Wheelchairs
- ♦ Medical equipments.



Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	292.8	246.4	215.3	154.9	123.0	99.9	62.0	48.4	39.2	31.8	27.8	22.7	18.9	10.62
1.80V/cell	374.2	297.7	254.5	182.8	143.1	111.9	67.7	52.0	41.8	34.2	29.8	24.0	20.0	10.72
1.75V/cell	411.1	325.2	273.8	189.8	148.5	117.0	70.2	53.0	42.8	35.1	30.6	24.5	20.2	10.82
1.70V/cell	448.1	347.2	287.7	197.5	154.4	120.7	73.0	54.5	43.9	36.0	31.2	24.8	20.4	11.02
1.65V/cell	483.6	369.2	305.7	208.4	158.3	124.8	75.0	56.8	45.4	37.0	31.9	25.2	20.8	11.16
1.60V/cell	\	394.8	325.6	220.0	165.0	129.2	77.6	58.5	46.8	38.2	32.6	25.4	21.0	11.22

Constant Power Discharge (Watts) at 25 °C (77°F)

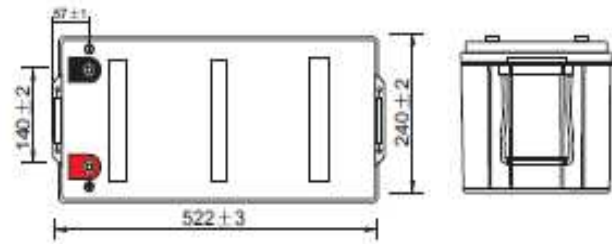
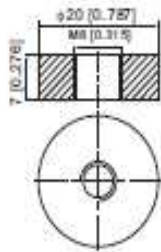
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	546.3	464.5	410.3	297.7	238.1	193.8	120.9	94.5	76.7	62.5	54.9	44.8	37.4	21.3
1.80V/cell	688.8	552.9	477.6	347.1	274.6	215.8	131.1	101.2	81.5	66.9	58.6	47.5	39.6	21.4
1.75V/cell	747.5	598.1	509.6	358.5	283.6	224.9	135.6	102.8	83.2	68.6	60.1	48.3	40.0	21.6
1.70V/cell	803.4	633.9	532.5	371.7	294.1	231.5	140.7	105.4	85.2	70.1	61.3	48.9	40.3	22.0
1.65V/cell	860.8	669.7	563.0	390.3	300.3	238.5	144.2	109.6	87.9	72.0	62.6	49.6	41.1	22.2
1.60V/cell	\	707.6	593.6	408.1	310.2	244.9	148.1	112.4	90.3	74.0	63.8	50.0	41.5	22.3



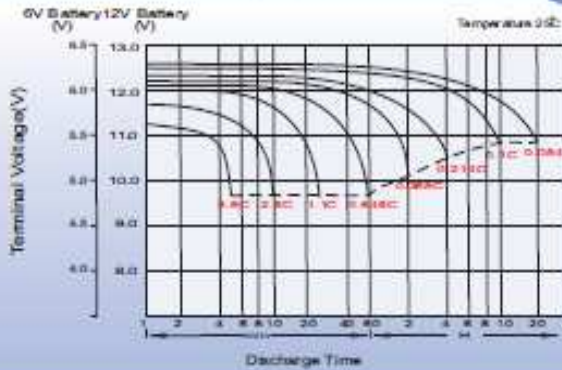
Dimensions

T11 Terminal

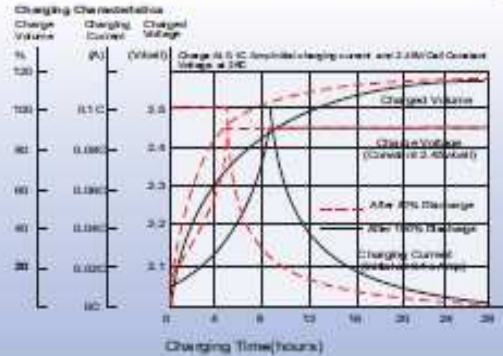
Unit: mm [Inches]



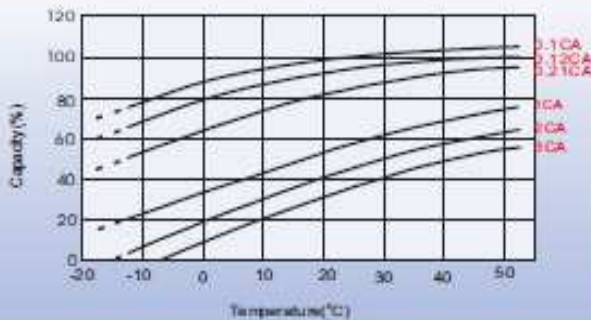
Discharge Characteristics



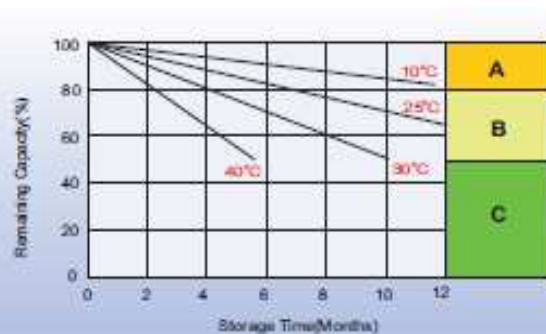
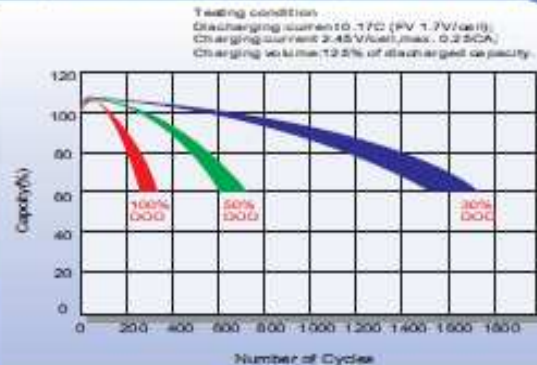
Charging Characteristics (cycle use)



Temperature Effects in Relation to Battery Capacity



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics

- A** No supplementary charge required.
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8-10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing if this is reached.

Sales Office



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