

S Series General Purpose Battery

S-12V120 (12V107AH) AGM Sealed Lead Acid

Specifications	
Nominal Voltage	12V
Nominal Capacity	107 AH/5.35A (20 hr. to 1.80V/cell @ 77°F/25°C) 100 AH/10.0A (10 hr. to 1.80V/cell @ 77°F/25°C) 100 AH/12.5A (8 hr. to 1.75V/cell @ 77°F/25°C)
Length	12.99 in. (330±3mm)
Width	6.81 in. (173±2mm)
Total Height (with Terminal)	8.66 in. (220±3mm)
Approx. Weight	Approx. 69.5 lb. (31.5kg)
Hardware / Torque Rating	M8 / 98-130 in. lb.
Container Material	ABS
Max. Discharge Current	1200A (5s)
Internal Resistance	Approx. 4.9mΩ
Operating Temp. Range	Discharge: 5° to 130°F (-15° to 55°C) Charge: 32° to 104°F (0° to 40°C) Storage: 5° to 104°F (-15° to 40°C)
Nominal Operating Temp.	77±5°F (25±3°C)
Cycle Use	Initial Charging Current less than 30.0A Voltage 14.4V to 15.0V at 77°F (25°C) Temp. Coefficient -30mV/°C
Stand by Use	Float Voltage: 13.5V at 77°F (25°C) Equalize Voltage: 14.1V at 77°F (25°C)
Capacity Affected by Temperature	104°F (40°C) 103% 77°F (25°C) 100% 32°F (0°C) 86%
Self Discharge	SBS S Series batteries may be stored for up to 6 months at 77°F (25°C) and then a freshening charge is required. For higher temperatures the time interval will be shorter.



Applications

- Telecommunications
- Utility
- Industrial
- Deep cycle
- All purpose



S-12V120 (12V107AH)

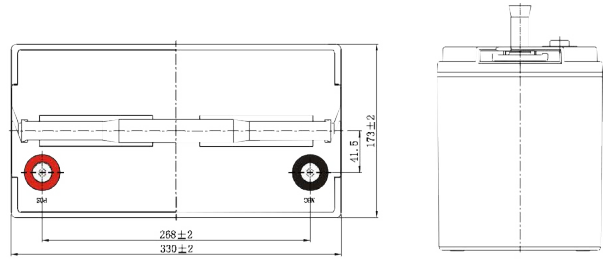
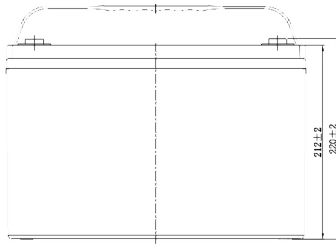
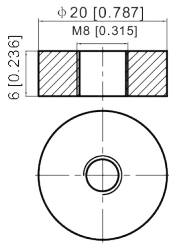
Constant Current Discharge (Amperes) at 77°F (25°C)														
F.V/Time	10 min	15 min	20 min	30 min	45 min	1 hr	2 hr	3 hr	4 hr	5 hr	6 hr	8 hr	10 hr	20 hr
1.85V/cell	117.0	98.4	87.3	72.4	55.9	47.8	31.0	23.3	19.1	16.0	14.1	11.3	9.69	5.17
1.80V/cell	133.9	110.5	96.5	78.6	60.3	50.5	33.3	25.0	20.3	17.0	14.9	11.9	10.0	5.35
1.75V/cell	152.1	124.5	106.7	85.5	65.7	55.0	34.6	26.0	21.0	17.4	15.4	12.5	10.3	5.49
1.70V/cell	171.7	138.2	117.7	93.3	70.8	58.2	36.5	27.4	21.9	18.4	16.1	12.8	10.7	5.63
1.65V/cell	184.4	147.9	125.3	98.5	74.9	60.2	37.8	28.5	22.8	19.0	16.7	13.2	11.0	5.80
1.60V/cell	202.9	162.0	136.1	105.1	77.9	62.0	38.8	29.2	23.3	19.4	17.0	13.4	11.2	5.89

Constant Power Discharge (Watts/cell) at 77°F (25°C)														
F.V/Time	10 min	15 min	20 min	30 min	45 min	1 hr	2 hr	3 hr	4 hr	5 hr	6 hr	8 hr	10 hr	20 hr
1.85V/cell	218.5	185.6	166.3	139.4	108.5	93.2	60.7	45.8	37.7	31.8	27.9	22.5	19.4	10.3
1.80V/cell	247.1	205.6	181.2	149.2	116.1	97.8	64.8	49.0	39.8	33.5	29.4	23.6	20.0	10.7
1.75V/cell	276.2	228.9	198.3	160.8	125.5	106.1	67.2	50.7	41.0	34.2	30.3	24.7	20.5	10.9
1.70V/cell	304.9	250.5	217.3	174.6	134.7	112.0	70.6	53.3	42.8	36.1	31.7	25.3	21.2	11.2
1.65V/cell	324.5	266.2	229.5	182.7	141.2	115.0	72.8	55.2	44.3	37.1	32.7	26.1	21.8	11.6
1.60V/cell	348.9	286.8	246.6	193.6	146.0	117.8	74.3	56.4	45.2	37.9	33.3	26.5	22.2	11.7

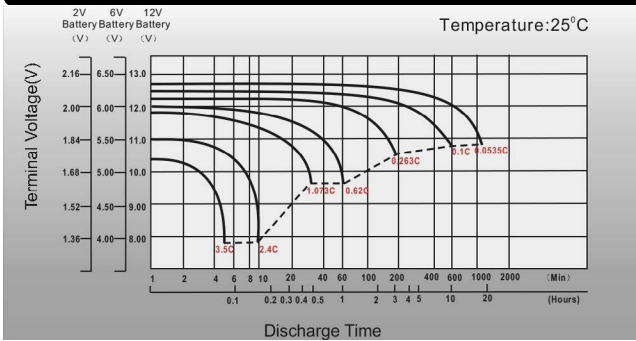
Dimensions

T11 Terminal

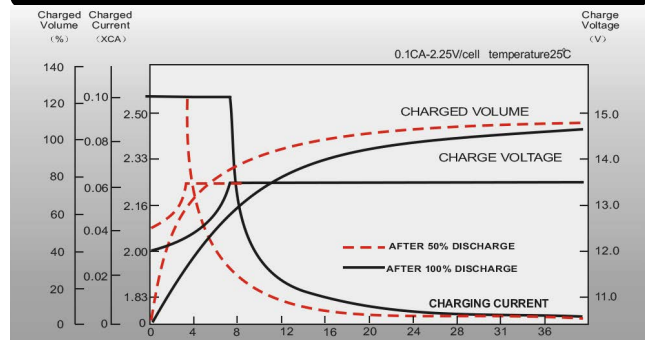
Unit: mm [inches]



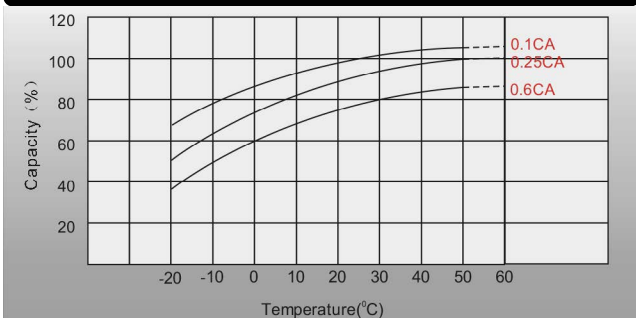
Discharge Characteristics



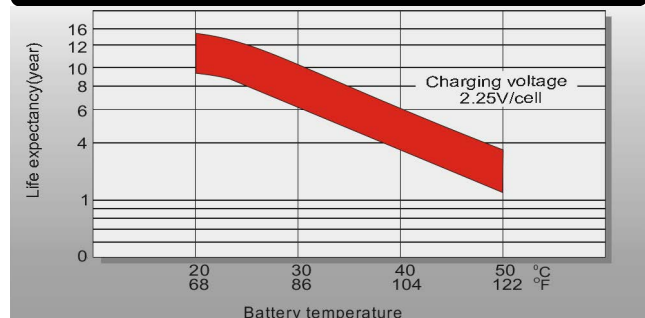
Float Charging Characteristics



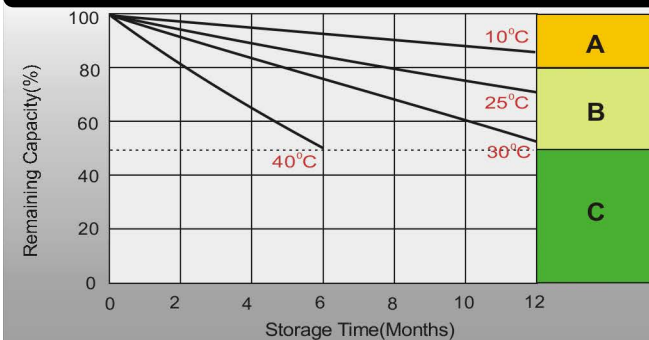
Temperature Effects in Relation to Battery Capacity



Effect of Temperature on Long Term Float Life



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 till this is reached.