

Datasheet

Sealed Lead-Acid Battery Deep Cycle Specification

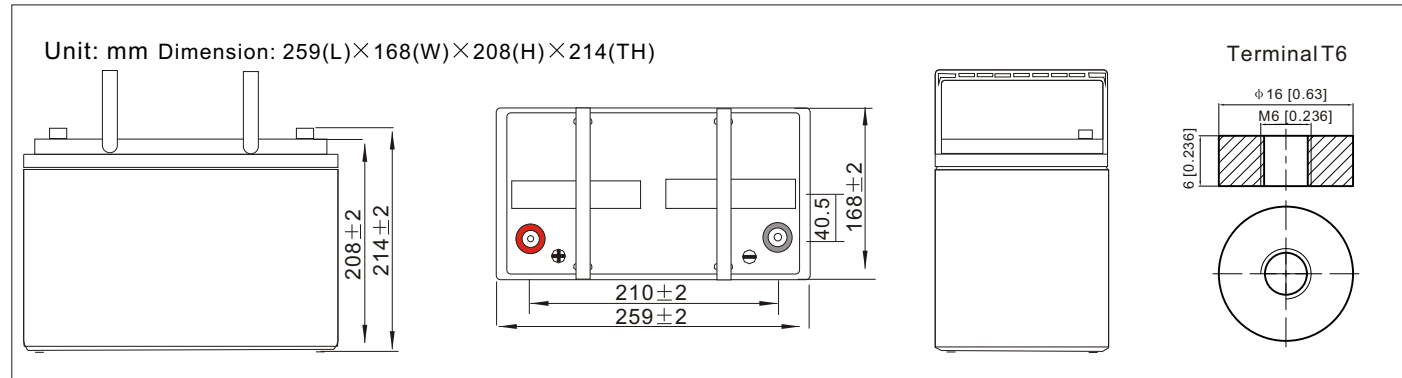
727-0439(12V75Ah)

Cells Per Unit	6
Voltage Per Unit	12
Capacity	75.0Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx 22.3kg
Max. Discharge Current	900 A(5 sec)
Internal Resistance	Approx 6.6mΩ
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)
Float charging Voltage	13.5 to 13.8 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	22.5A
Equalization and Cycle Service	14.4 to 15.0 VDC/unit Average at 25°C
Self Discharge	The batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	T6
Container Material	A.B.S. (UL94-HB) , Flammability resistance of UL94-V0 can be available upon request.

Applications

- ◆ Electric tools
- ◆ Mobility
- ◆ Lawn mowers
- ◆ Golf trolleys and golfcart
- ◆ Portable apparatus, lights and instruments;
- ◆ Electric toys
- ◆ Emergency lighting
- ◆ Fire and security alarms
- ◆ Portable power
- ◆ Wheelchairs
- ◆ Medical equipments.
- ◆ Solar energy

Dimensions



Constant Current Discharge Characteristics : A (25 °C)

Amps

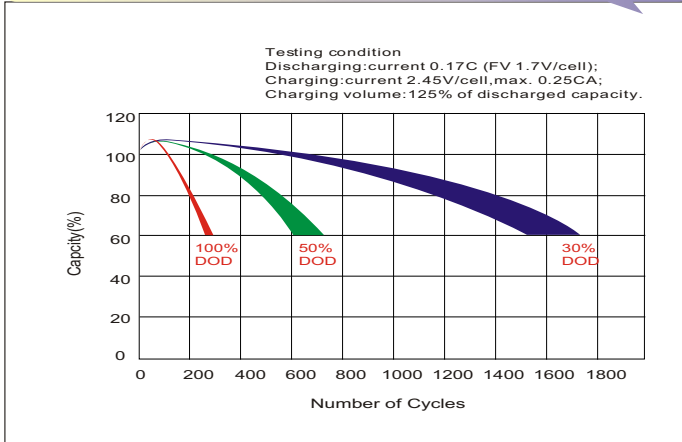
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	109.8	92.4	80.7	58.1	46.1	37.4	23.3	18.1	14.7	11.9	10.4	8.50	7.08	3.98
1.80V/cell	140.3	111.6	95.4	68.6	53.7	41.9	25.4	19.5	15.7	12.8	11.2	9.02	7.50	4.02
1.75V/cell	154.2	121.9	102.7	71.2	55.7	43.9	26.3	19.9	16.0	13.2	11.5	9.17	7.58	4.06
1.70V/cell	168.0	130.2	107.9	74.1	57.9	45.3	27.4	20.4	16.5	13.5	11.7	9.30	7.65	4.13
1.65V/cell	181.4	138.4	114.6	78.1	59.4	46.8	28.1	21.3	17.0	13.9	12.0	9.45	7.81	4.19
1.60V/cell	196.9	148.1	122.1	82.5	61.9	48.5	29.1	22.0	17.6	14.3	12.2	9.54	7.89	4.21

Constant Power Discharge Characteristics : W (25 °C)

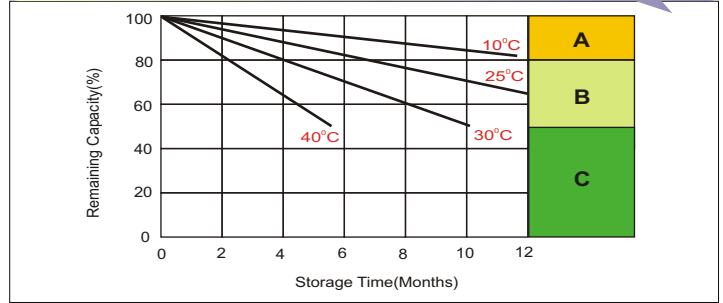
Watts

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	204.9	174.2	153.9	111.6	89.3	72.7	45.3	35.4	28.8	23.4	20.6	16.8	14.0	7.97
1.80V/cell	258.3	207.3	179.1	130.1	103.0	80.9	49.2	37.9	30.6	25.1	22.0	17.8	14.8	8.03
1.75V/cell	280.3	224.3	191.1	134.4	106.3	84.4	50.9	38.5	31.2	25.7	22.6	18.1	15.0	8.10
1.70V/cell	301.3	237.7	199.7	139.4	110.3	86.8	52.7	39.5	31.9	26.3	23.0	18.3	15.1	8.24
1.65V/cell	322.8	251.1	211.1	146.4	112.6	89.4	54.1	41.1	33.0	27.0	23.5	18.6	15.4	8.34
1.60V/cell	344.5	265.4	222.6	153.0	116.3	91.8	55.5	42.1	33.9	27.7	23.9	18.8	15.6	8.37

Effect of Temperature on Long Term Float Life

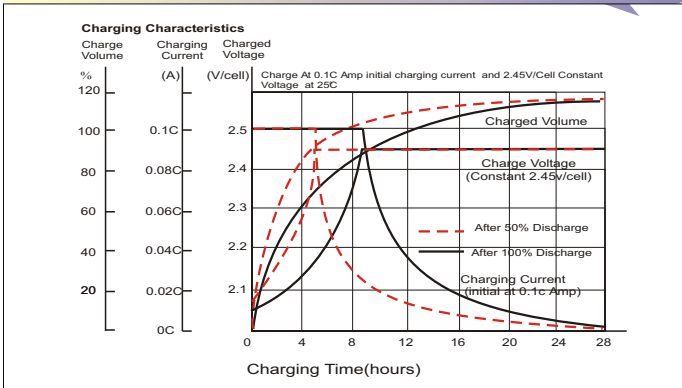


Self Discharge Characteristics

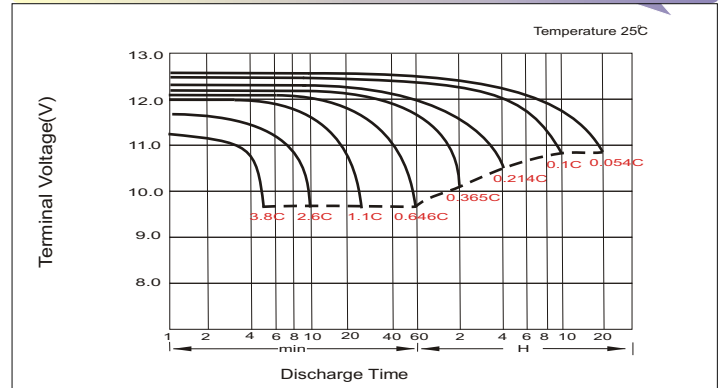


- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
2. Charged for above 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** Avoid this storage period unless regular Top charge.
Supplementary charge may often fail to recover the full capacity

Cycle Charging Characteristics



Discharge Characteristics



Available Capacity Subject to Temperature

Battery Type	-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
AGM Battery 6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%

Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.80V	1.75V	1.60V
Discharge Current (A)	(A) ≤ 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method:

Constant Voltage	-0.2Cx2h+2.4~2.45V/Cellx24h, Max. Current 0.3CA
Constant Current	-0.2Cx2h+0.1CAx 12h
Fast	-0.2Cx2h+0.3CAx4.0h

Maintenance & Cautions

Float Service:
◆ It is recommended to check battery/Float voltage each month.
Equalisation charge:
◆ Equalisation charging is recommended once every 3 to 6 months using.
◆ Discharge 100% rated capacity.
◆ Charge 2.35v/cell constant voltage, maximum 0.3CA 24hrs.
Cyclic Service:
◆ Temperature compensation for varying temperatures:
- Charge voltage -5mV/Cell/degC from 25degC norm.
◆ The service life of your battery will be affected by:
- The number of discharge cycles, depth of discharge, ambient temperature and charging voltage.