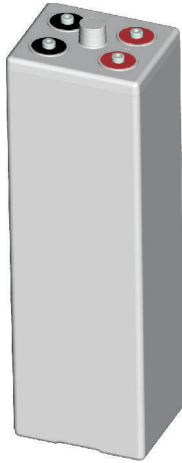




OPzV1800 (2V1800AH) Tubular GEL Battery



Specification

Nominal Voltage	2V	
Capacity	1800.0Ah@10hr to 1.80V/cell	
Dimension	Length	275±3mm (10.8 inches)
	Width	210±3mm (8.27 inches)
	Container Height	796±3mm (31.3 inches)
	Total Height (with Terminal)	831±3mm (32.7 inches)
Approx Weight	Approx 115.0 kg (254 lbs)	
Container Material	ABS	
Rated Capacity	1800 AH/180.0A	(10hr, 1.80V/cell, 20°C/68°F)
	1548 A H/309.6A	(5hr, 1.75V/cell, 20°C/68°F)
	1362AH/454.1A	(3hr, 1.75V/cell, 20°C/68°F)
	1022 AH/1022A	(1hr, 1.60V/cell, 20°C/68°F)
Max. Discharge Current	14400A (5s)	
Internal Resistance	Approx 0.28 mΩ	
Operating Temp. Range	Discharge	-20~55°C (-4~131°F)
	Charge	0~40°C (32~104°F)
	Storage	-20~50°C (-4~122°F)
Cycle Use	Initial Charging Current less than 450.0A.	Voltage 2.40V~2.50V at 20°C(68°F)Temp. Coefficient -5mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 2.25V~2.30V at 20°C(68°F)Temp. Coefficient -3mV/°C
Self-discharge	<2% pre month @ 20°C(68°F)	

Applications

- ◆ Solar energy/wind energy
- ◆ Electric power/nuclear power
- ◆ Communication
- ◆ Ship, maritime affairs
- ◆ UPS, medical facilities and emergency lighting
- ◆ Situation with high environmental protection and energy-saving
- ◆ Better safety performance and reliability
- ◆ Designed service life of 22 years

Main Technical Advantages

- ◆ Plate: positive plate adopts tubular plate which can prevent active material falling, and adopts multi-component alloy frame. have fine corrosion-resisting performance and long service life. Negative plate adopts special radiated structure.
- ◆ Separator: adopt special micro-pore PVC-SiO₂ separator from Europe AMER-SIL Company, separator have big porosity and low resistance.
- ◆ Electrolyte: adopts Germany gas silicon dioxide, electrolyte in gel state in the battery without flowing, leakage and lamination can be avoided.
- ◆ Safety valve: adopt Germany technology, constant opening and closing, accumulator case expansion, damage and electrolyte dry up can be avoided.

Constant Current Discharge (Amperes) at 20 °C (68°F)

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	876	854	781	666	436	339	233	164	140
1.80V/cell	1077	1034	910	750	479	369	252	175	150
1.75V/cell	1274	1157	970	781	492	377	257	178	152
1.70V/cell	1430	1263	1027	811	504	385	261	180	154
1.65V/cell	1535	1333	1068	834	515	392	265	183	156
1.60V/cell	1606	1381	1095	849	522	396	267	184	157

Constant Power Discharge (Watts) at 20 °C (68°F)

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	1629	1605	1492	1288	847	661	459	324	279
1.80V/cell	1968	1916	1722	1442	926	717	493	346	298
1.75V/cell	2288	2114	1817	1491	946	730	501	351	302
1.70V/cell	2522	2274	1903	1538	966	742	507	355	305
1.65V/cell	2660	2365	1960	1572	981	752	513	359	308
1.60V/cell	2730	2414	1989	1588	989	757	517	360	309

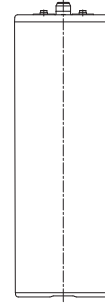
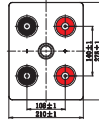
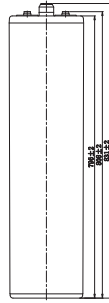
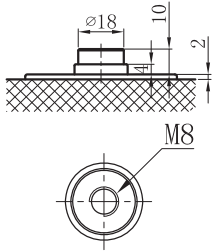
Note The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.



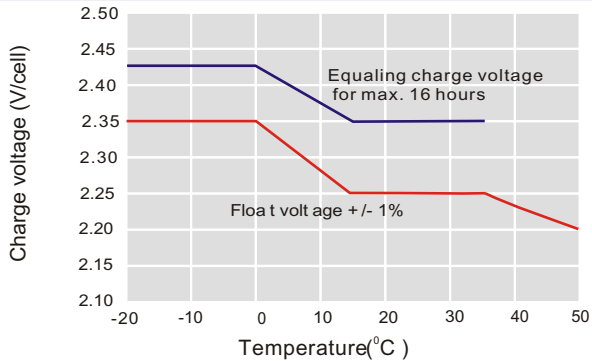
OPzV1800 (2V1800AH) Tubular GEL Battery

Dimensions

T11 Terminal

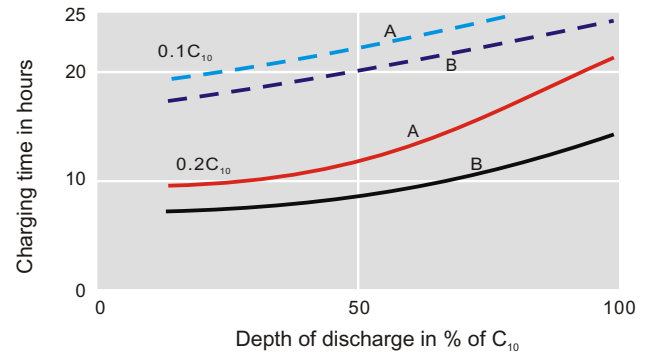


Discharge Characteristics



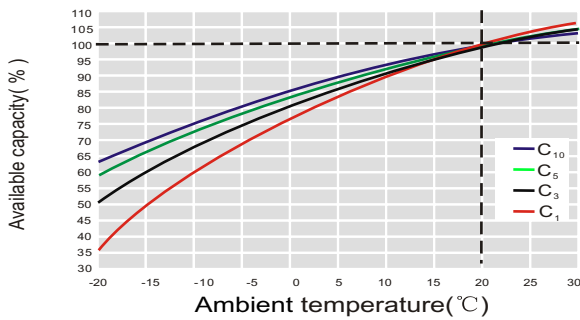
For continuous charging we recommend a voltage of 2.25 V. The charging voltage must be compensated to the curve for continuously different battery ambient temperature.

Charging Characteristics

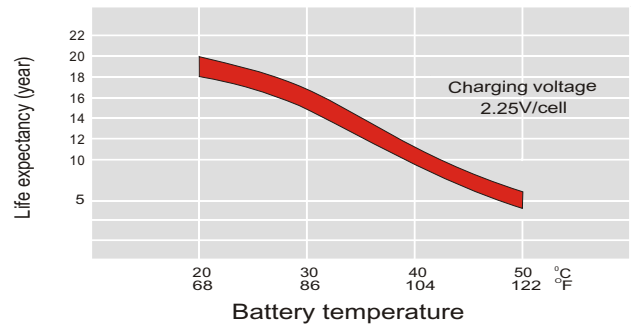


Charge voltage:
 A—2.25 V/cell B—2.40 V/cell
 - - - State of charge 100 % — State of charge 90 %

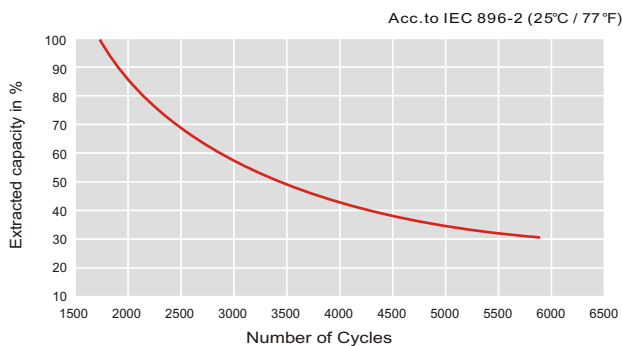
Temperature Effects in Relation to Battery Capacity



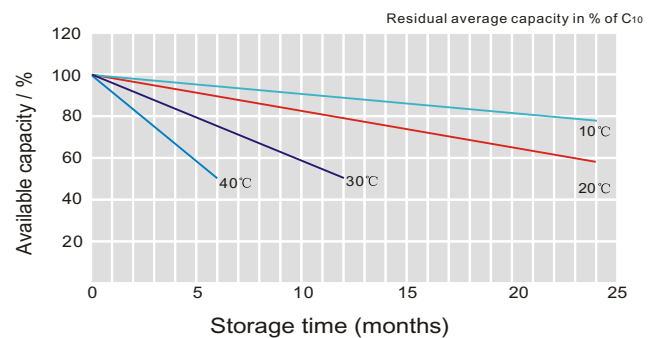
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time



JYC OPzV BATTERIES

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