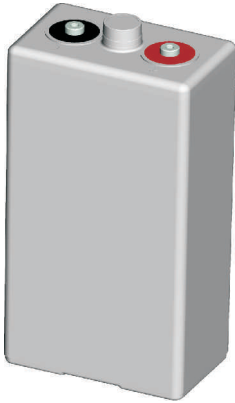




OPzV100 (2V100AH) Tubular GEL Battery



Specification

Nominal Voltage	2V	
Capacity	100.0Ah@10hr to 1.80V/cell	
Dimension	Length	103±2mm (4.06 inches)
	Width	206±3mm (8.11 inches)
	Container Height	355±3mm (14.0 inches)
	Total Height (with Terminal)	390±3mm (15.3 inches)
Approx Weight	Approx 13.2 kg (29.1 lbs)	
Container Material	ABS	
Rated Capacity	100 AH/10.0A	(10hr, 1.80V/cell, 20°C/68°F)
	87.7 A H/17.5A	(5hr, 1.75V/cell, 20°C/68°F)
	77.7 AH/25.9A	(3hr, 1.75V/cell, 20°C/68°F)
	56.8 AH/56.8A	(1hr, 1.60V/cell, 20°C/68°F)
Max. Discharge Current	800A (5s)	
Internal Resistance	Approx 1.8 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 25.0A. Voltage 2.40V~2.50V at 20°C(68°F)Temp. Coefficient -5mV/°C	
	Standby Use	
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	171.0	155.0	122.0	89.7	60.8	46.7	31.9	22.2	18.7
1.80V/cell	210.0	188.0	142.0	101.0	66.8	50.8	34.4	23.8	20.0
1.75V/cell	248.0	210.0	152.0	105.0	68.6	51.9	35.1	24.2	20.3
1.70V/cell	279.0	230.0	161.0	109.0	70.4	53.0	35.6	24.5	20.5
1.65V/cell	299.0	242.0	167.0	112.0	71.9	54.0	36.2	24.8	20.8
1.60V/cell	313.0	251.0	171.0	114.0	72.8	54.6	36.5	25.0	20.9

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

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	318	292	233	174	118	91.2	62.7	44.1	37.3
1.80V/cell	384	348	269	194	129	98.8	67.4	47.1	39.7
1.75V/cell	446	384	284	201	132	101	68.5	47.8	40.3
1.70V/cell	492	413	298	207	135	102	69.3	48.3	40.7
1.65V/cell	519	430	307	212	137	104	70.1	48.7	41.0
1.60V/cell	532	439	311	214	138	104	70.6	49.0	41.3

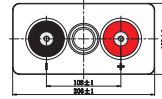
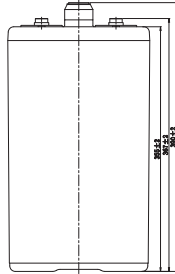
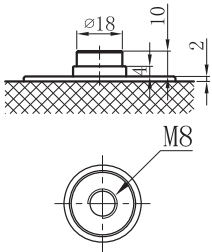
Note The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.



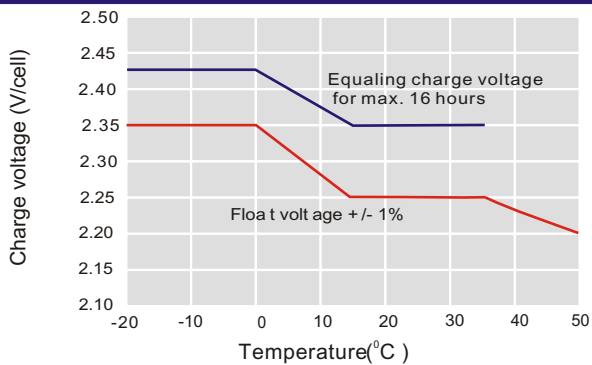
OPzV100 (2V100AH) Tubular GEL Battery

Dimensions

T11 Terminal

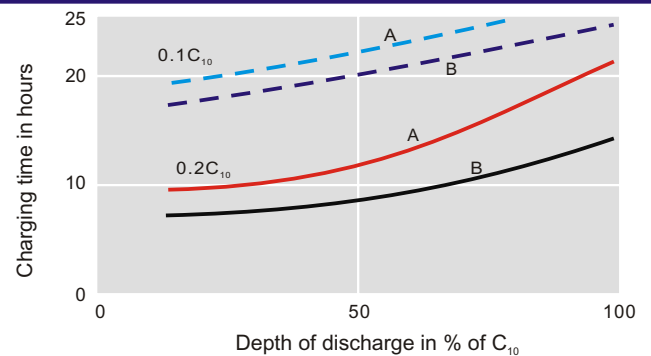


Discharge Characteristics



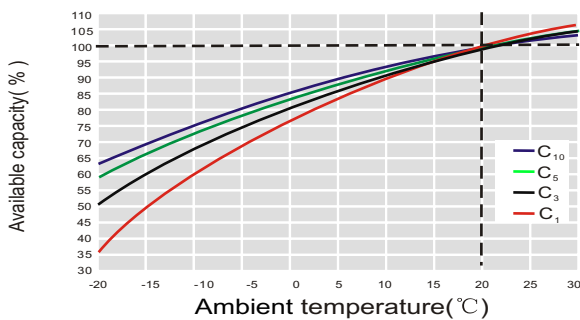
For continuous charging we recommend a voltage of 2.25 V. The charging voltage must be compensated to the curve for continuously different battery ambient temperature.

Charging Characteristics

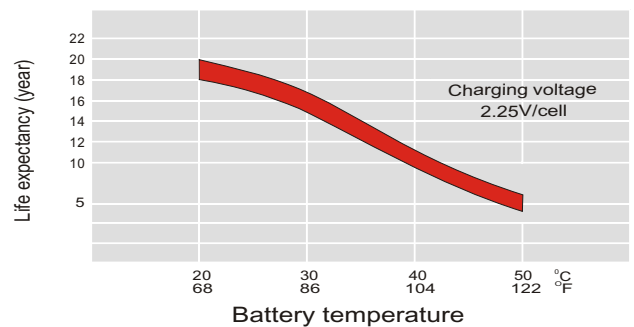


Charge voltage:
 A—2.25 V/cell B—2.40 V/cell
 - - - State of charge 100 % — State of charge 90 %

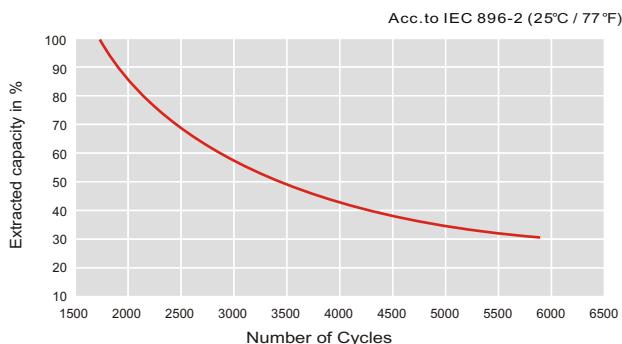
Temperature Effects in Relation to Battery Capacity



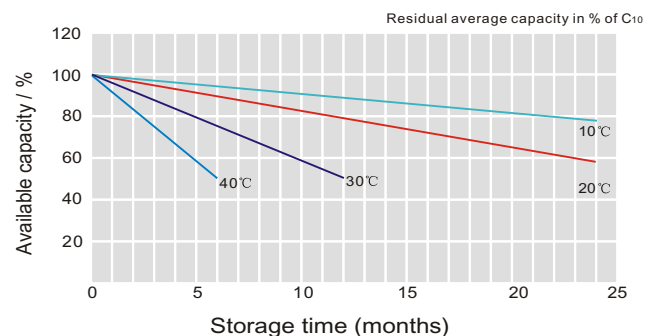
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time



JYC OPzV BATTERIES

This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/ specification are subject to modification without notice. Contact JYC for the latest information.