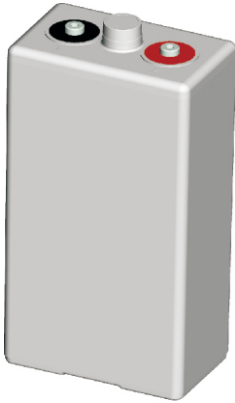




OPzV300 (2V300AH) Tubular GEL Battery



Specification

Nominal Voltage	2V	
Capacity	300.0Ah@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 24.0 kg (52.91 lbs)	
Container Material	ABS	
Rated Capacity	300 AH/30.0A	(10hr, 1.80V/cell, 20°C/68°F)
	263 A H/52.6A	(5hr, 1.75V/cell, 20°C/68°F)
	233.7 AH/77.9A	(3hr, 1.75V/cell, 20°C/68°F)
	171 AH/171A	(1hr, 1.60V/cell, 20°C/68°F)
Max. Discharge Current	2400A (5s)	
Internal Resistance	Approx 1.0 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 75.0A. 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	256	233	183	135	91.2	70.0	47.8	33.3	28.1
1.80V/cell	315	282	214	152	100	76.2	51.6	35.7	30.0
1.75V/cell	373	316	228	158	103	77.9	52.6	36.3	30.5
1.70V/cell	418	344	241	164	106	79.5	53.4	36.8	30.8
1.65V/cell	449	364	251	168	108	81.0	54.2	37.2	31.1
1.60V/cell	470	377	257	171	109	81.9	54.8	37.5	31.4

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

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	476	438	350	260	177	137	94.1	66.1	55.9
1.80V/cell	576	522	404	291	194	148	101	70.6	59.6
1.75V/cell	669	577	426	301	198	151	103	71.7	60.4
1.70V/cell	738	620	447	311	202	153	104	72.4	61.0
1.65V/cell	778	645	460	317	205	155	105	73.1	61.5
1.60V/cell	799	658	467	321	207	157	106	73.5	61.9

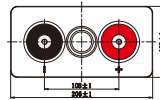
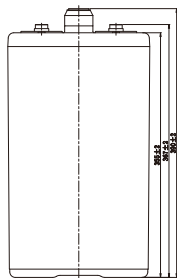
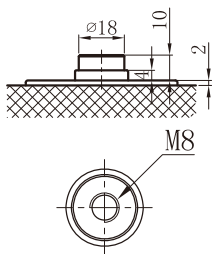
Note The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.



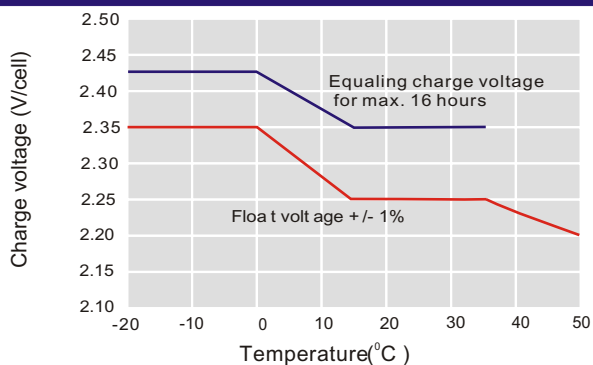
OPzV300 (2V300AH) Tubular GEL Battery

Dimensions

T11 Terminal

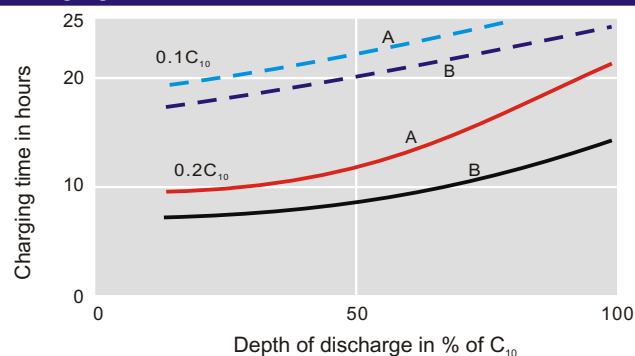


Discharge Characteristics



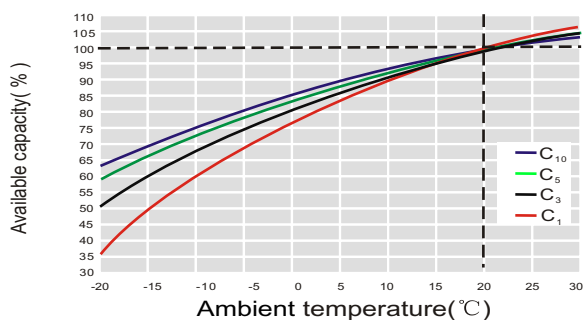
For continuous charging we recommend a voltage of 2.25 V. The charging voltage must be compensated to the curve for continuously different battery ambient temperature.

Charging Characteristics

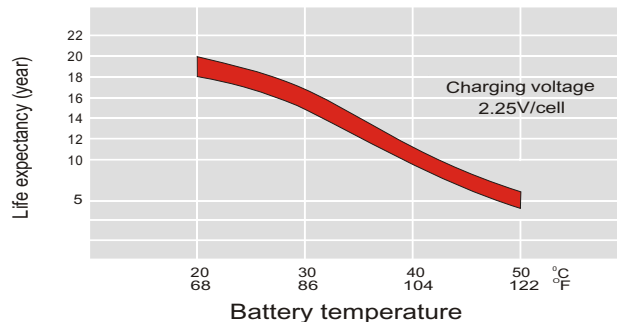


Charge voltage:
 A—2.25 V/cell B—2.40 V/cell
 - - - State of charge 100 % — State of charge 90 %

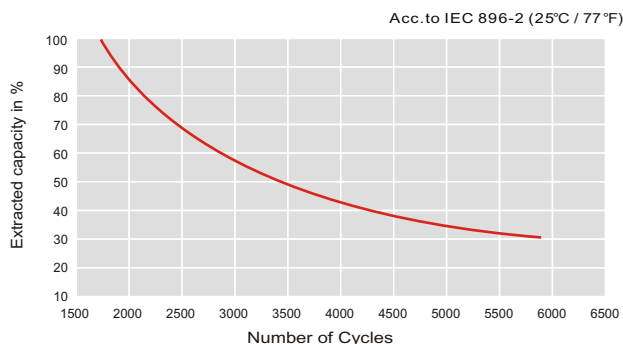
Temperature Effects in Relation to Battery Capacity



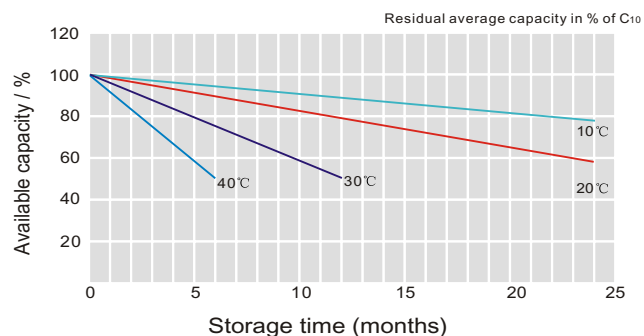
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time



JYC OPzV BATTERIES

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