

OPzV2-600(2V600Ah)



Ritar OPzV series is Valve Regulated Lead Acid battery that adopts immobilized GEL and Tubular Plate technology to offer high reliability and performance. The Battery is designed and manufactured according to DIN standards and with die-casting positive grid and patented formula of active material OPzV series exceeds DIN standard values with more than 20 years floating design life at 25 °C ,and It is the best solution for cyclic use under extreme operating conditions.

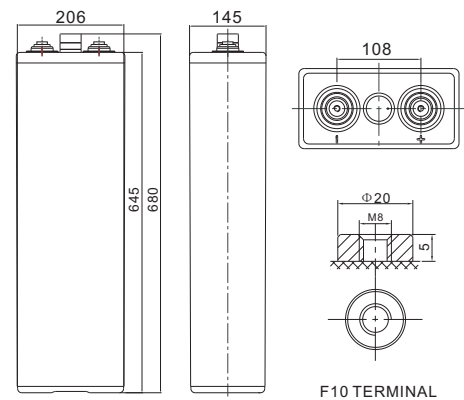


Specification

Cells Per Unit	1
Voltage Per Unit	2
Nominal Capacity	600Ah@10hr-rate to 1.80V per cell @25°C
Weight	Approx. 46.5 Kg (Tolerance± 1.5%)
Internal Resistance	Approx. 0.60 mΩ
Terminal	F10(M8)
Max. Discharge Current	2500A (5 sec)
Design Life	20 years (floating charge)
Maximum Charging Current	120.0 A
Reference Capacity	C24 674AH C48 750AH C72 755AH C100 768AH C120 785AH C240 799AH
Float Charging Voltage	2.25 V~2.30 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	2.35 V~2.40 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -40°C~60°C Charge: -20°C~50°C Storage: -40°C~60°C
Normal Operating Temperature Range	25°C±5°C
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly Self-discharge ratio is less than 2% at 25°C.Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Dimensions

Unit: mm



Length	145±1mm (5.71 inches)
Width	206±1mm (8.11 inches)
Height	645±1mm (25.4 inches)
Total Height	680±1mm (26.8 inches)
Torque Value	10~12 N*m

Constant Current Discharge Characteristics : A(25°C)

F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V	295.2	234.0	165.0	125.2	102.6	88.68	79.80	62.27	53.40	28.04
1.87V	330.0	258.0	177.0	132.7	108.3	93.24	84.60	65.18	55.80	29.30
1.83V	378.0	288.0	192.0	141.4	114.0	97.32	87.60	68.09	58.20	30.56
1.80V	420.0	312.0	199.2	145.5	116.3	99.60	90.00	69.84	60.00	31.50
1.75V	468.0	334.2	208.2	151.3	118.2	102.0	91.80	71.00	61.20	32.13
1.70V	516.0	345.0	214.2	154.3	120.3	103.2	93.00	71.59	61.80	32.45
1.65V	532.2	366.6	221.4	158.4	122.0	104.4	94.20	72.17	62.40	32.76
1.60V	555.0	379.2	229.8	165.0	125.4	106.2	95.40	72.75	63.00	33.08

Constant Power Discharge Characteristics : WPC(25°C)

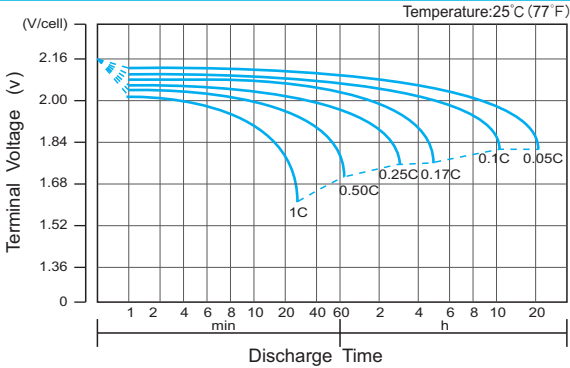
F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V	565.0	449.2	319.0	242.4	200.8	174.6	157.8	124.5	108.8	57.14
1.87V	621.7	487.8	338.3	253.9	211.7	183.0	166.8	129.8	113.5	59.58
1.83V	696.5	531.8	360.0	267.1	221.9	190.2	172.2	134.4	117.6	61.72
1.80V	761.0	567.4	372.1	273.2	226.1	194.4	176.4	137.4	120.5	63.25
1.75V	825.5	592.7	384.1	281.6	229.1	199.2	179.4	139.1	122.2	64.17
1.70V	885.2	598.8	393.8	286.4	232.8	201.0	181.2	140.3	123.4	64.78
1.65V	900.3	625.3	404.6	292.4	235.8	202.8	183.0	141.4	124.0	65.08
1.60V	911.1	644.6	414.3	302.1	241.8	204.6	184.2	142.0	124.5	65.39

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.

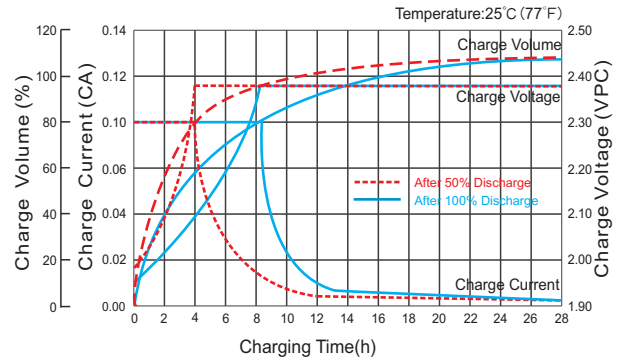
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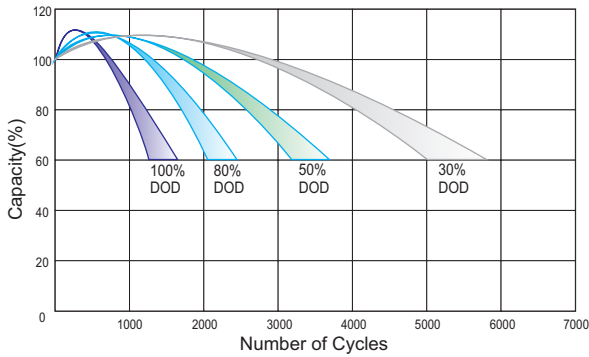
Discharge Characteristics Curve



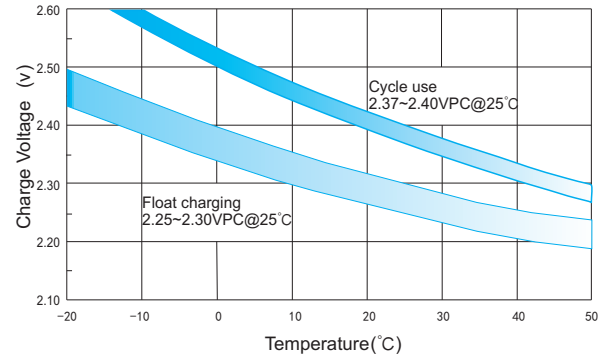
Charge Characteristic Curve for Cycle Use(IU)



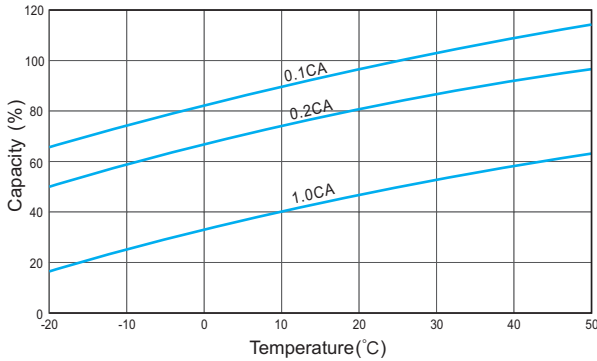
Cycle Life in Relation to Depth of Discharge



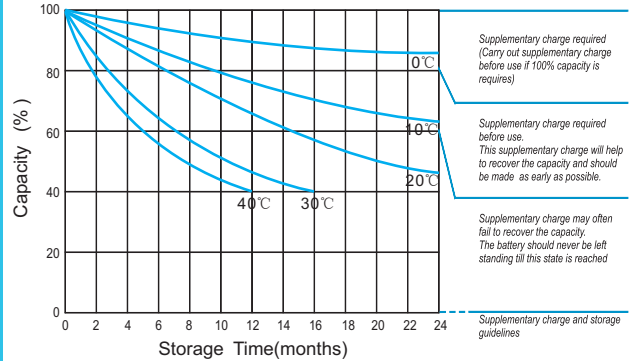
Relationship Between Charging Voltage and Temperature



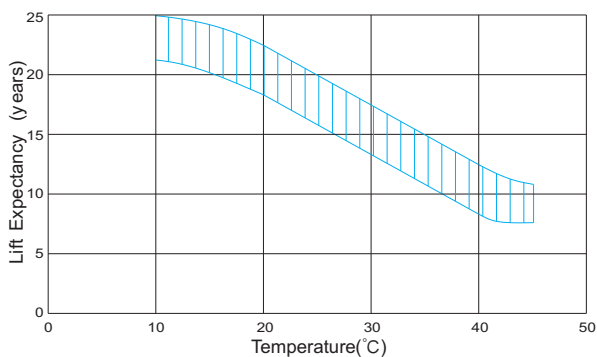
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20°C)

