OPzV12-100(12V100Ah)

RITAR®

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 18 years floating design life at 25 ℃ ,and It is the best solution for cyclic use under extreme operating conditions.

Specification

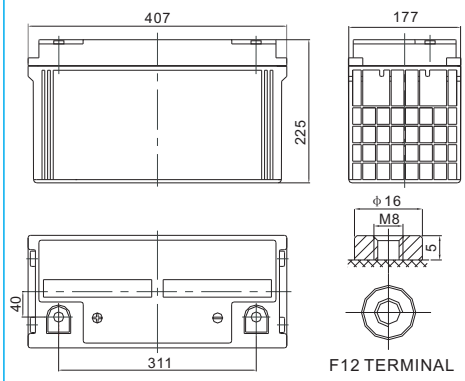
Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	100Ah@10hr-rate to 1.80V per cell @25℃
Weight	Approx. 36.0 Kg (Tolerance±2%)
Internal Resistance	Approx. 8 mΩ
Terminal	F5(M8)/F12(M8)
Max. Discharge Current	1000A (5 sec)
Design Life	18 years (floating charge)
Maximum Charging Current	20.0 A
Reference Capacity	C24 100.7AH C48 106.4AH C72 111.7AH C100 114.0AH C120 116.3AH C240 123.1AH
Float Charging Voltage	13.5 V~13.8 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	14.2 V~14.4 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -40℃~60℃ Charge: -20℃~50℃ Storage: -40℃~60℃
Normal Operating Temperature Range	25℃±5℃
Self Discharge	RITAR Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25℃ and then recharging is recommended. Monthly Self-discharge ratio is less than 2% at 25℃.Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

IQNet CERTIFICATE IQNet CERTIFICATE

MH28539 G4M20206-0910-E-16

Dimensions

Unit: mm



Length	407±1mm (16.0 inches)
Width	177±1mm (6.97 inches)
Height	225±1mm (8.86 inches)
Total Height	225±1mm (8.86 inches)
Torque Value	10~12 N*m

Constant Current Discharge Characteristics :A(25℃)

F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V	49.20	39.00	27.51	20.86	17.10	14.78	13.30	10.38	8.900	4.673
1.87V	55.00	43.00	29.51	22.12	18.05	15.54	14.10	10.86	9.300	4.882
1.83V	63.00	48.00	32.00	23.58	19.00	16.22	14.60	11.35	9.700	5.093
1.80V	70.00	52.00	33.20	24.24	19.38	16.60	15.00	11.64	10.00	5.251
1.75V	78.00	55.71	34.71	25.22	19.70	17.00	15.30	11.83	10.20	5.356
1.70V	86.00	57.51	35.71	25.71	20.04	17.20	15.50	11.93	10.30	5.407
1.65V	88.71	61.11	36.91	26.40	20.33	17.40	15.70	12.03	10.40	5.460
1.60V	92.51	63.20	38.31	27.51	20.90	17.70	15.90	12.12	10.50	5.513

Constant Power Discharge Characteristics : WPC(25℃)

F.V/ Time	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V	94.19	74.89	53.15	40.41	33.48	29.10	26.30	20.76	18.14	9.522
1.87V	103.6	81.30	56.37	42.33	35.26	30.50	27.80	21.63	18.91	9.930
1.83V	116.1	88.63	60.00	44.52	37.00	31.70	28.70	22.41	19.59	10.29
1.80V	126.8	94.56	62.00	45.52	37.70	32.40	29.40	22.89	20.08	10.54
1.75V	137.6	98.78	64.00	46.93	38.19	33.20	29.90	23.18	20.37	10.69
1.70V	147.5	99.81	65.63	47.70	38.78	33.50	30.20	23.38	20.56	10.80
1.65V	150.0	104.2	67.44	48.78	39.30	33.80	30.50	23.57	20.66	10.85
1.60V	151.9	107.4	69.04	50.37	40.30	34.10	30.70	23.67	20.76	10.90

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

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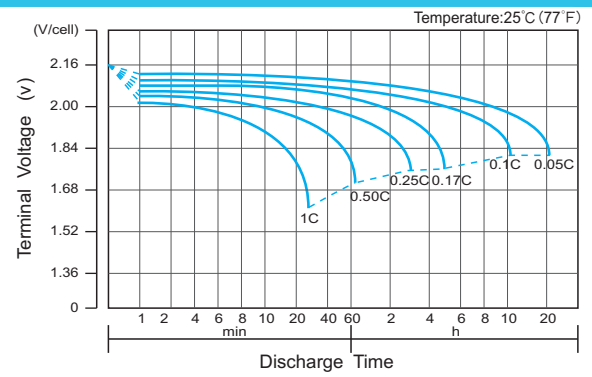
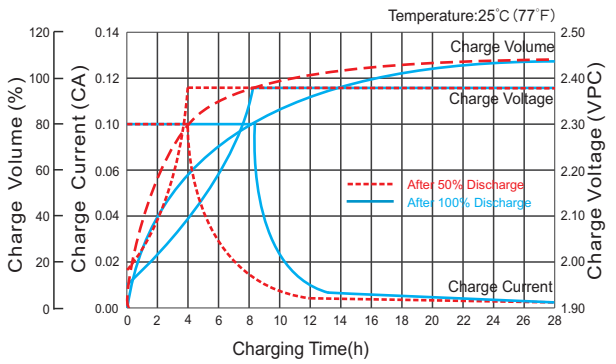
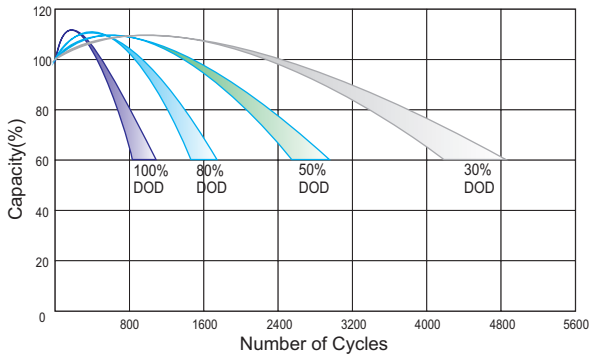
Discharge Characteristics Curve



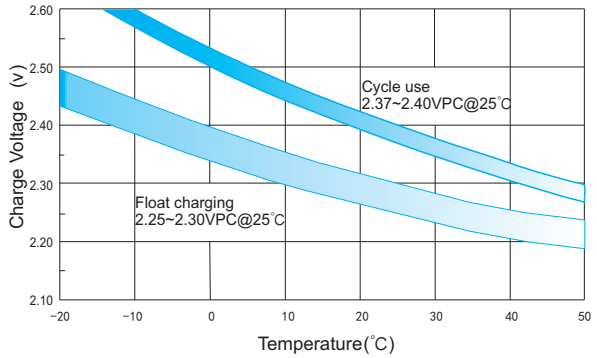
Charge Characteristic Curve for Cycle Use(IU)



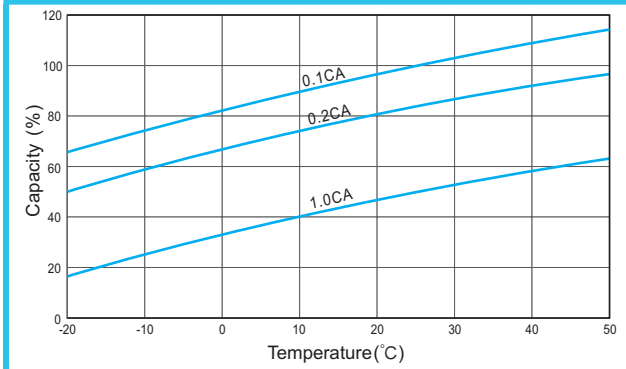
Cycle Life in Relation to Depth of Discharge



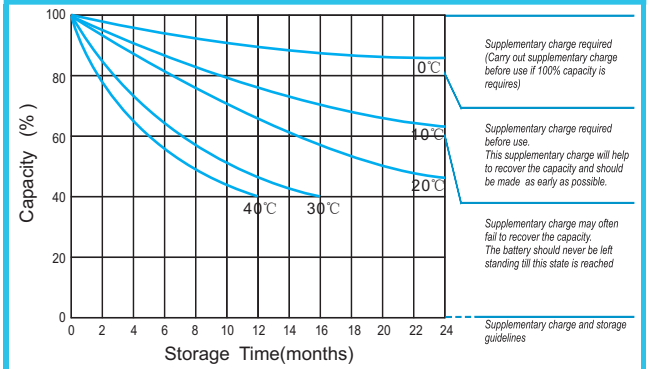
Relationship Between Charging Voltage and Temperature



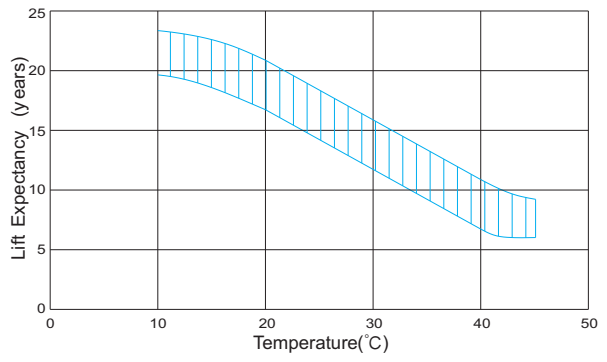
Temperature Effects on Capacity



Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20℃)