



RF12-100A (12V100Ah)

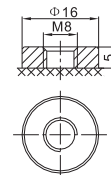
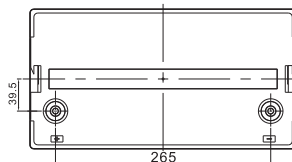
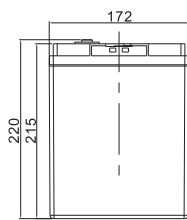
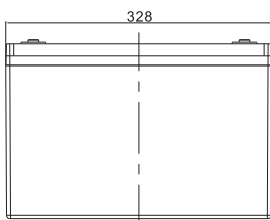


- Non-spillable sealed construction
- Long service life, float or cyclic applications
- High strength ABS battery container
- Maintenance-free operation
- Excellent charge acceptance
- Low self-discharge rate
- Gas recombination efficiency over 99%
- Wide operating temperature range
- Excellent recovery capability after deep and cyclic discharge

SPECIFICATION

Cells Per Unit	6
Voltage Per Unit	12
Nominal Capacity	100Ah@10hour-rate to 1.8V per cell @25°C
Internal Resistance	Approx. 7.5 mΩ
Terminal	F12(M8)/F5(M8)
Max. Discharge Current	950A (5 sec)
Design Life	15 years (Float charging)
Max. Charging Current	25.0 A
Reference Capacity	C3 78.9AH C5 87.0AH C10 100.0AH C20 106.4AH
Standby Use Voltage	13.5 V~13.8 V @ 25°C Temperature Compensation: -3mV/°C/Cell
Cycle Use Voltage	14.4 V~15.0 V @ 25°C Temperature Compensation: -4mV/°C/Cell
Operating Temperature Range	Discharge: -40°C~60°C Charge: -20°C~50°C Storage: -20°C~50°C
Normal Operating Temperature Range	25°C ±5°C
Self Discharge	RESTAR 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 20°C. Please charge batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

DIMENSIONS



F12 Terminal

Length	328±2mm (12.9 inches)
Width	172±2mm (6.77 inches)
Height	215±2mm (8.46 inches)
Total Height	220±2mm (8.66 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

Constant Current Discharge Characteristics : A (25°C)

FV/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.60V	184	112	66.0	37.8	27.5	18.4	12.1	10.3	5.43
1.65V	178	110	65.6	37.6	27.2	18.2	12.0	10.2	5.40
1.70V	174	108	65.1	37.4	26.8	18.1	11.9	10.1	5.37
1.75V	169	107	64.2	36.8	26.5	17.9	11.8	10.0	5.35
1.80V	157	102	62.5	36.1	26.3	17.4	11.7	10.0	5.32
1.85V	140	93.3	57.9	34.3	24.8	16.5	11.2	9.65	5.23

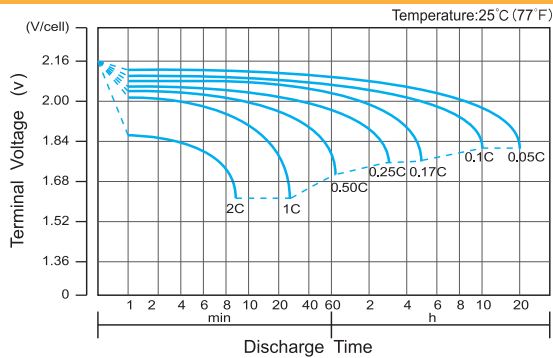
Constant Power Discharge Characteristics : WPC (25°C)

FV/Time	15min	30min	1h	2h	3h	5h	8h	10h	20h
1.52V	307	192	119	67.9	49.6	33.3	22.3	18.9	10.2
1.57V	302	190	118	67.8	49.0	33.1	22.1	18.7	10.2
1.62V	298	190	117	67.5	48.7	32.8	22.0	18.5	10.1
1.66V	296	189	116	67.2	48.5	32.6	21.9	18.3	10.1
1.71V	280	184	115	67.0	48.3	32.2	21.8	18.1	10.0
1.76V	251	169	106	63.9	45.9	30.8	21.0	17.9	9.9

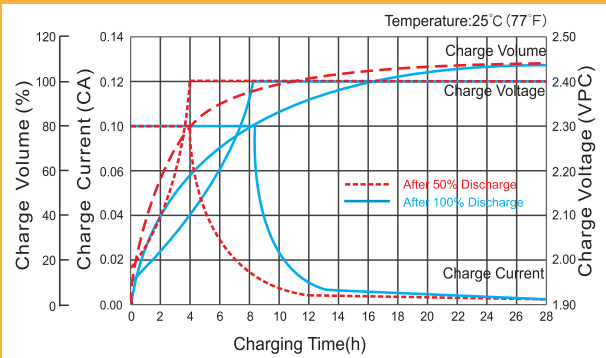
(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values. The battery must be fully charged before the capacity test. The C₁₀ should reach 95% after the first cycle and 100% after the third cycle.

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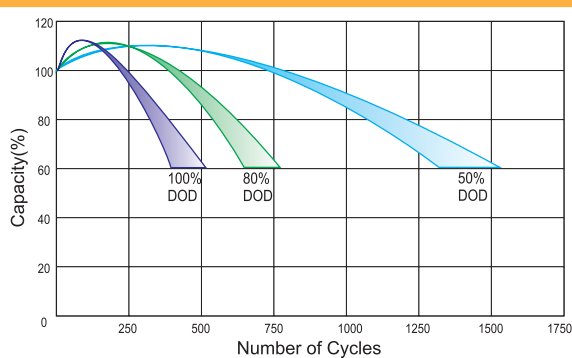
Discharge Characteristics Curve



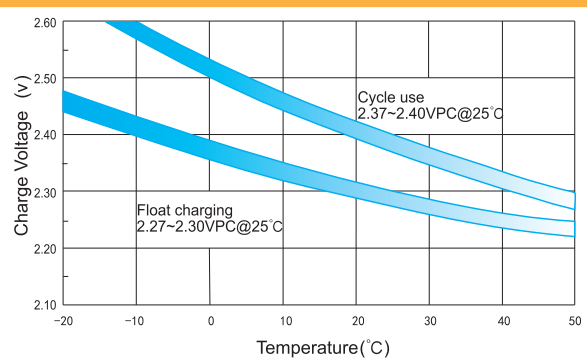
Charge Characteristic Curve For Standby Use



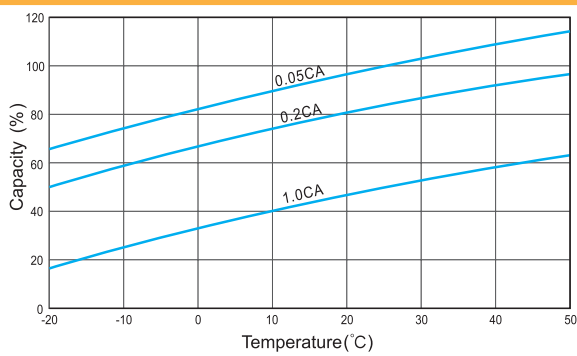
Cycle Life In Relation To Depth Of Discharge



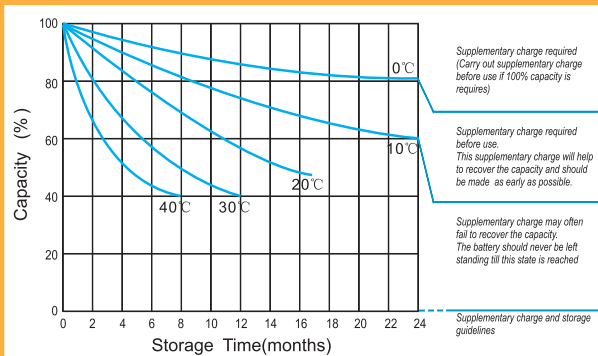
Relationship Between Charging Voltage And Temperature



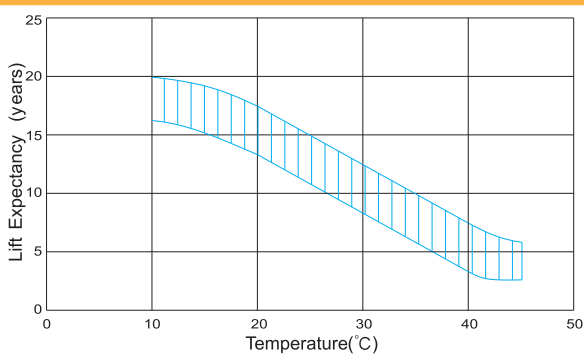
Temperature Effects On Capacity



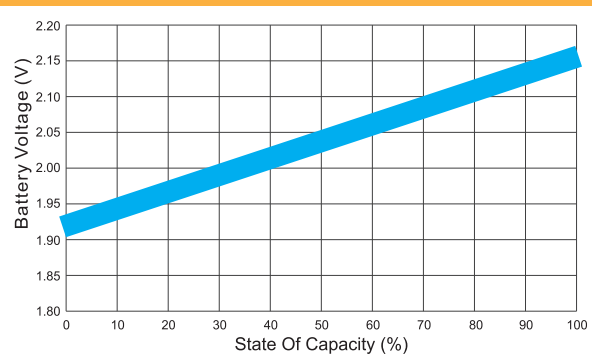
Storage Characteristics



Effect Of Temperature On Long Term Life



Life Characteristics Of Standby Use



(Note) All above information shall be changed without prior notice, RESTAR reserves the right to explain and update the latest information

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