

High Rate Series Battery

JYC HR (High Rate) Series VRLA batteries are designed with low internal resistance AGM (Absorbent Glass Mat) technology, High performance plates and electrolyte to give extra power output for High rate UPS and power backup system. High rate series Batteries are the special design batteries with 6 years floating design life at 25°C, Meet with IEC,BS,JIS and Eurobat standard,UL(MH62092),CE approved.

Application

- * Emergency Power System
- * Communication equipment
- * Telecommunication systems
- * Uninterruptible power supplies
- * Power tools
- * Alarm system
- * Security system
- * Fire and Security System



General Features

- * Safety Sealing
- * Non-spillable construction
- * High Reliability and Stability
- * Sealed and Maintenance-free
- * Long Life and low self-discharge design
- * 30%increased power output at 15M backup time.

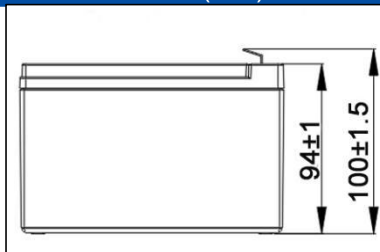
Construction

- * Positive Lead dioxide
- * Electrolyte Sulfuric acid
- * Separator Fiber glass
- * Container ABS(UL94-HB)/Flame Retardant ABS (UL94-V0)
- * Negative Lead
- * Safety Valve EPDR
- * Terminal Copper

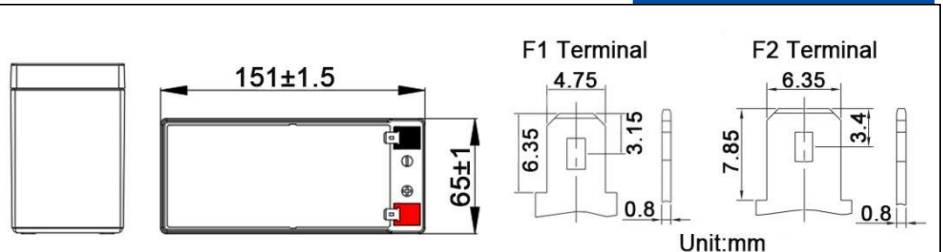
Specification

Battery Model	Nominal Voltage		12V (6 cells per unit)	
	Capacity (15minutes rate to 1.67V/Cell)		35W	
	Rated capacity (20 Hour rate)		9.3Ah	
Capacity @ 25°C (77°F)	15min rate(1.67V)	1 hour rate(5.72A, 1.70V)	3 hour rate(2.41A, 1.75V)	20 hour rate(0.465A, 1.75V)
	35.0W	5.72Ah	7.23Ah	9.30Ah
Dimension	Length	Width	Height	Total Height
	151mm (5.94 inches)	65mm (2.56 inches)	94mm (3.70 inches)	100mm (3.94 inches)
Approx Weight	2.47kg(5.44 lbs) ± 3%			
Internal Resistance	Full charged at 25°C(77°F):Approx 15.5mΩ			
Maximum Charge Current	2.79A			
Max.discharge current	140A (5Sec.)			
Short-circuit current	430A			
Operating Temperature Range	Nominal Operating Temperature	Discharge	Charge	Storage
	25°C(77°F)	-15°C~ 50°C(5°F~122°F)	-15°C~ 40°C(5°F~104°F)	-15°C~ 40°C(5°F~104°F)
Capacity affected by Temp.(20HR)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Charge method	Float Charging Voltage		Equalization Charging Voltage	
	13.5 ~ 13.8 VDC/Unit at 25°C(77°F)		14.4~ 15.0 VDC/Unit at 25°C(77°F)	

Outer dimension (mm)



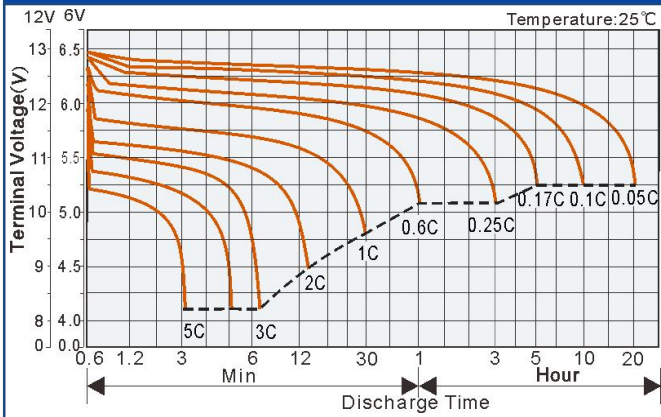
Terminal Type



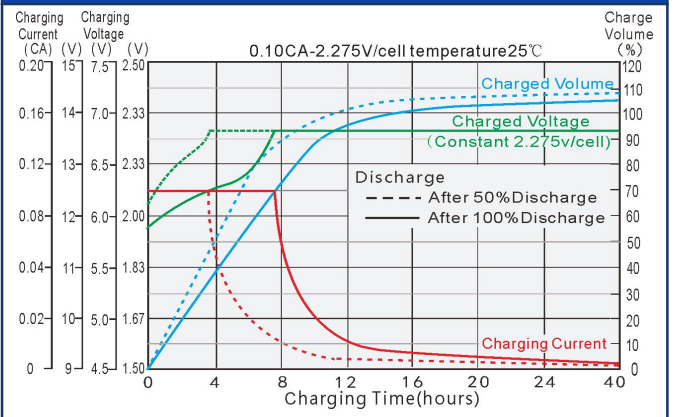
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)

F.V/Time		3min	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h
1.85V/cell	A	38.1	30.1	18.9	15.3	12.7	8.85	6.92	5.35	4.02	3.11	2.31	1.75	1.53
	W	73.3	58.0	38.3	30.8	25.2	17.90	14.06	10.76	8.19	6.24	4.68	3.58	3.11
1.80V/cell	A	42.0	32.4	20.3	16.1	13.1	9.12	7.06	5.47	4.10	3.18	2.36	1.78	1.58
	W	78.8	62.1	40.7	32.1	26.0	18.38	14.28	10.99	8.33	6.35	4.76	3.64	3.16
1.75V/cell	A	44.8	34.6	21.9	16.6	13.5	9.42	7.18	5.61	4.19	3.25	2.41	1.81	1.60
	W	83.8	65.7	43.2	33.1	26.7	18.85	14.51	11.23	8.49	6.48	4.83	3.69	3.20
1.70V/cell	A	47.4	36.3	23.2	17.3	13.9	9.63	7.31	5.72	4.28	3.31	2.45	1.84	1.63
	W	88.9	68.7	45.2	34.3	27.3	19.21	14.74	11.43	8.64	6.59	4.89	3.74	3.23
1.67V/cell	A	48.9	37.5	24.1	17.8	14.2	9.76	7.44	5.79	4.35	3.38	2.49	1.87	1.65
	W	91.2	70.5	46.4	35.0	27.7	19.45	14.93	11.53	8.75	6.68	4.95	3.79	3.26
1.60V/cell	A	51.5	39.3	25.3	18.3	14.5	10.05	7.61	5.93	4.45	3.46	2.55	1.91	1.67
	W	96.2	73.6	48.3	36.1	28.4	20.03	15.15	11.77	8.91	6.81	5.04	3.87	3.29

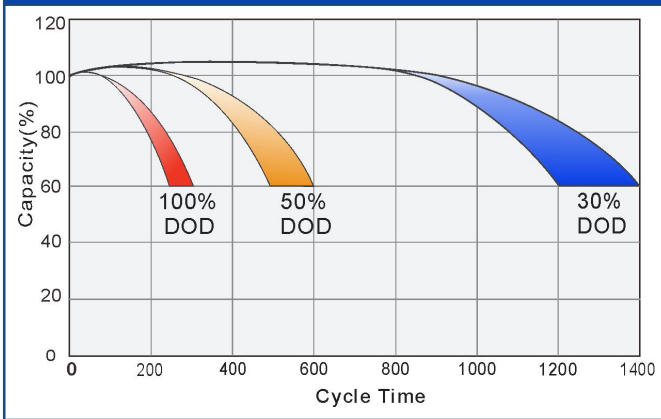
Discharge characteristic curve (25°C/77°F)



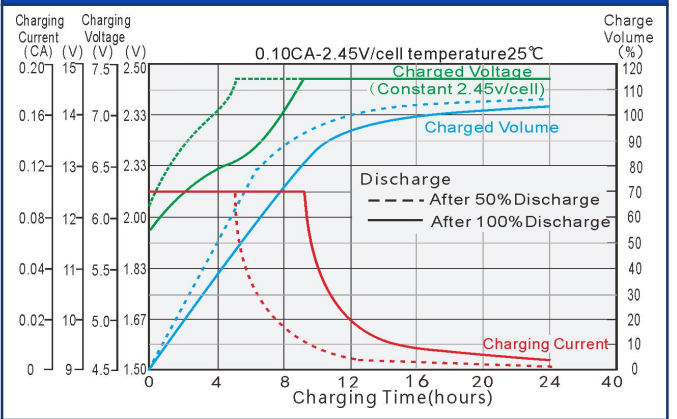
Charging characteristic curve of floating charge(25°C/77°F)



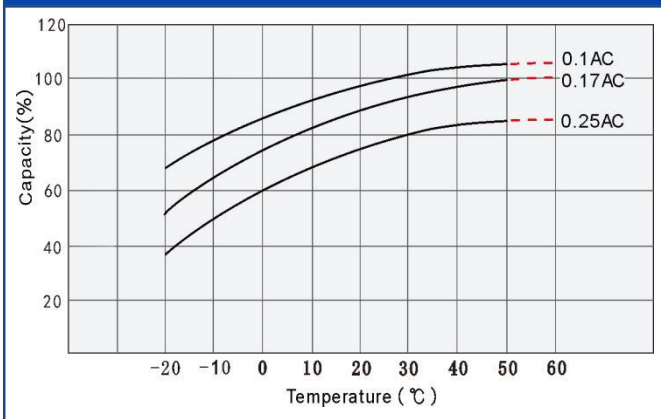
Cycle service life in relation to depth of discharge



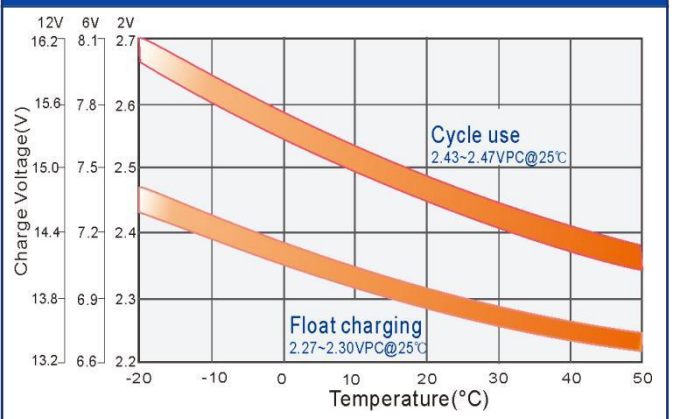
Cyclic charging characteristic curve (25°C/77°F)



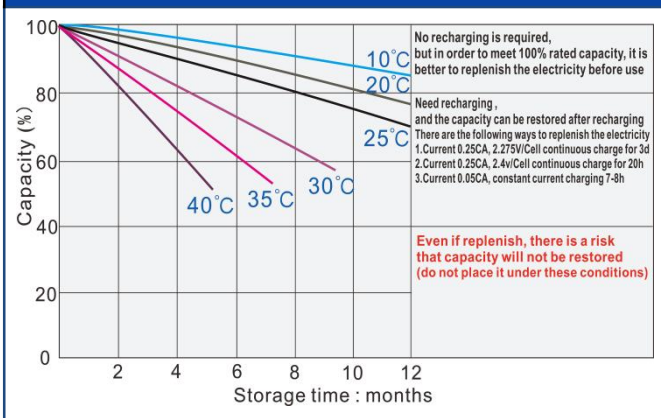
Relationship between temperature and capacity



Relationship between charging voltage and temperature



Self discharge characteristics



Temperature vs Float Life

