

High Rate Series Battery

JYC HR(High Rate)Series VRLA batteries are with a continuous rolling and stamping grid structure, make them more corrosion-resistant, 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 10 years floating design life at 25°C, Meet with IEC,BS,JIS and Eurobat standard,UL(MH62092),CE approved.

Application

- * Data center
- * High power backup supply
- * Telecommunication systems
- * Alarm system
- * UPS /EPS(High rate)
- * Communication equipment
- * Power tools
- * 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

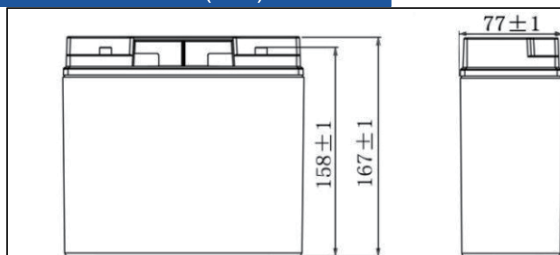
- * Positive Lead dioxide
- * Electrolyte Sulfuric acid
- * Separator Fiber glass
- * Container ABS(UL94-HB)/Flame Retardant ABS (UL94-V0)
- * Negative Lead
- * Safety Valve EPDM
- * Terminal Copper



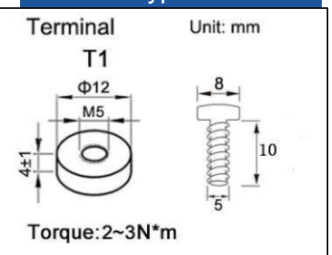
Specification

Battery Model	Nominal Voltage		12V (6 cells per unit)	
	Capacity (15minutes rate to 1.67V/cell)		85W	
	Rated capacity (20 Hour rate)		21Ah	
	1,70Vdc 10hr		19.91Ah	
Capacity @ 25°C (77°F)	15min rate(1.67V) 85.0W	1 hour rate(13.24A,1.60V) 13.24Ah	3 hour rate(5.28A,1.70V) 15.84Ah	20 hour rate(1.05A,1.75V) 21.0Ah
Dimension	Length 182mm (7.17 inches)	Width 77mm (3.03 inches)	Height 167mm (6.57 inches)	Total Height 167mm 6.57 inches
Approx Weight	5.75kg(12.67lbs) ± 3%			
Internal Resistance	Full charged at 25°C(77°F):Approx 9.1mΩ			
Maximum Charge Current	6.0A			
Max.discharge current	300A (5Sec.)			
Short-circuit current	680A			
Operating Temperature Range	Nominal Operating Temperature 25°C(77°F)	Discharge -15°C~ 50°C(5°F~122°F)	Charge -15°C~ 40°C(5°F~104°F)	Storage -15°C~ 40°C(5°F~104°F)
Capacity affected by Temp.(20HR)	40°C (104°F) 102%	25°C (77°F) 100%	0°C (32°F) 85%	-15°C (5°F) 65%
Charge method at 25°C(77°F)	Float Charging Voltage 13.5~13.8 VDC (-3mV/cell/°C)	Equalization Charging Voltage 14.1~14.4 VDC (-4mV/cell/°C)	Cycle Use Voltage 14.4~15.0 VDC (-5mV/cell/°C)	

Outer dimension (mm)



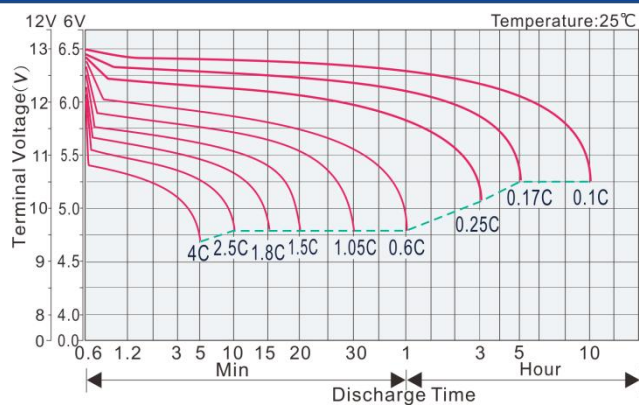
Terminal Type



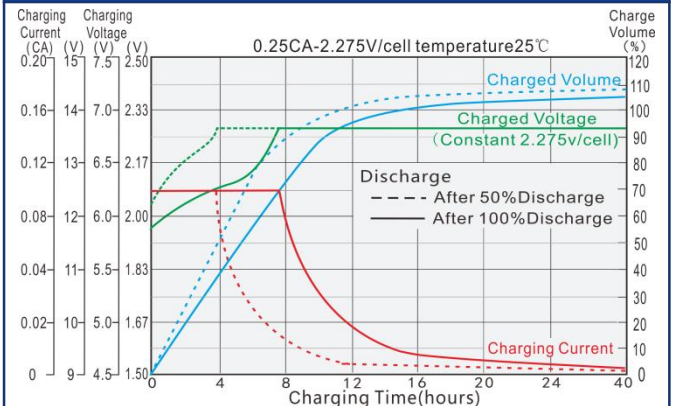
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)

F.V/Time	3min	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	5h	8h	10h	20h
1.85V/cell	A 82.9	62.8	43.9	34.9	28.4	20.5	14.67	11.54	8.27	6.60	4.86	3.280	2.294	1.902	1.015
	W 155.7	117.9	83.9	67.5	55.5	40.4	29.08	22.95	16.49	13.19	9.73	6.580	4.611	3.827	2.048
1.80V/cell	A 90.7	68.7	48.0	37.7	30.2	21.5	15.22	11.97	8.54	6.82	5.01	3.366	2.335	1.935	1.033
	W 169.2	128.1	91.2	72.6	58.8	42.2	30.07	23.73	16.98	13.59	10.00	6.734	4.682	3.884	2.078
1.75V/cell	A 98.7	74.7	52.0	40.6	31.9	22.5	15.76	12.38	8.80	7.03	5.15	3.444	2.374	1.965	1.050
	W 182.7	138.3	98.1	77.7	61.8	44.0	31.06	24.48	17.46	13.97	10.25	6.875	4.750	3.936	2.108
1.70V/cell	A 106.7	80.8	56.0	43.5	33.6	23.4	16.28	12.76	9.06	7.23	5.28	3.515	2.410	1.991	1.062
	W 196.0	148.4	105.0	82.8	64.9	45.7	32.00	25.17	17.93	14.33	10.49	7.002	4.813	3.980	2.128
1.67V/cell	A 110.7	83.8	58.0	44.8	34.4	23.8	16.54	12.94	9.19	7.32	5.34	3.545	2.425	2.001	1.068
	W 202.5	153.3	108.4	85.0	66.3	46.4	32.47	25.50	18.17	14.50	10.60	7.056	4.839	3.997	2.138
1.60V/cell	A 118.9	90.0	62.0	47.0	35.9	24.5	17.02	13.24	9.42	7.48	5.44	3.600	2.450	2.018	1.075
	W 216.1	163.6	115.4	89.0	69.0	47.6	33.32	26.02	18.58	14.78	10.77	7.148	4.877	4.022	2.147

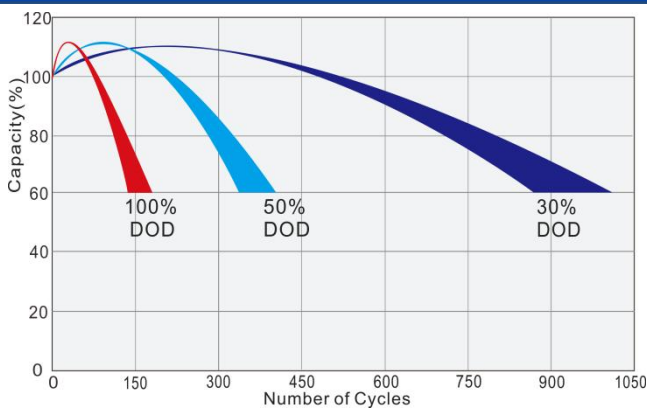
Discharge characteristic curve (25°C/77°F)



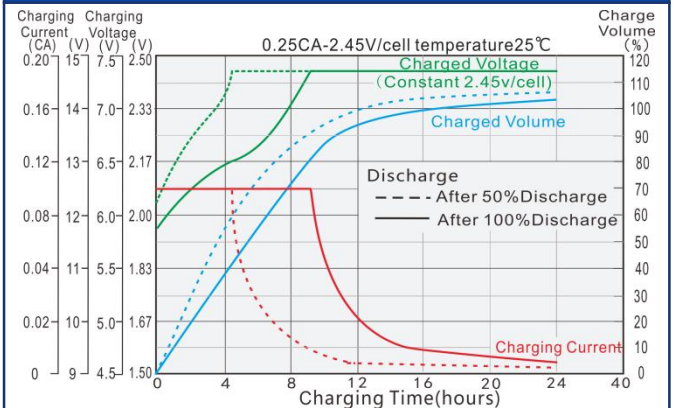
Charging characteristic curve of floating charge (25°C/77°F)



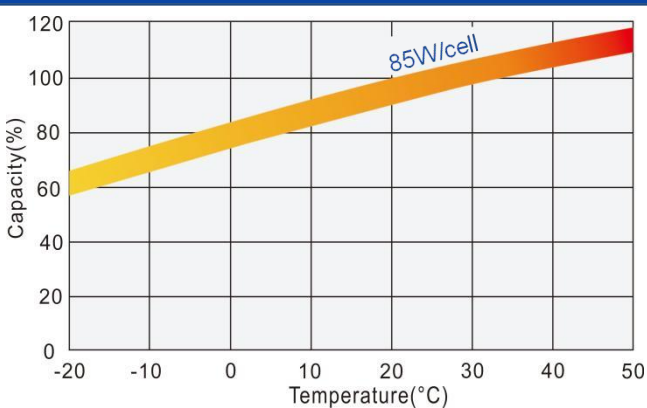
Cycle service life in relation to depth of discharge



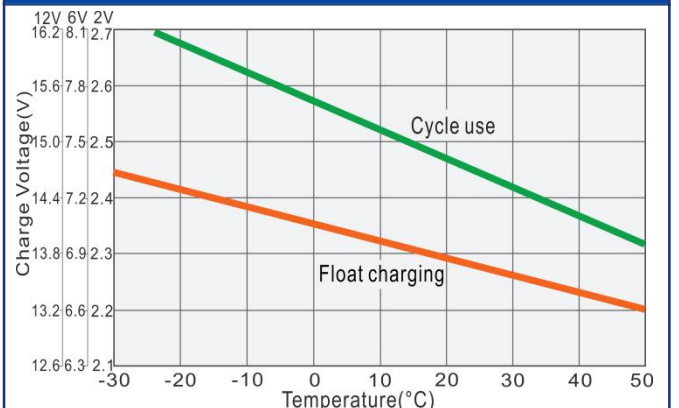
Cyclic charging characteristic curve (25°C/77°F)



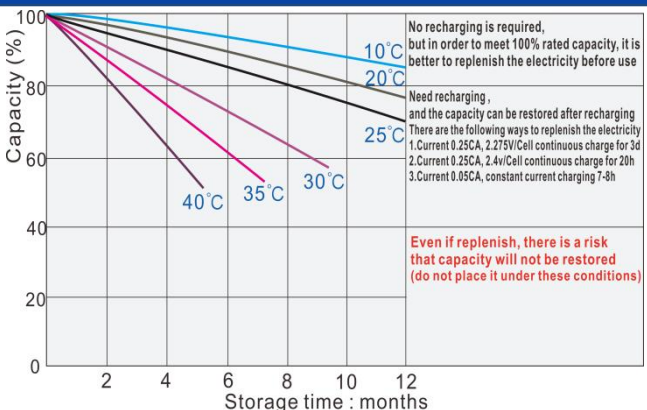
Relationship between temperature and capacity



Relationship between charging voltage and temperature



Self discharge characteristics



Temperature vs Float Life

