

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 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

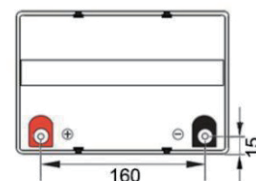
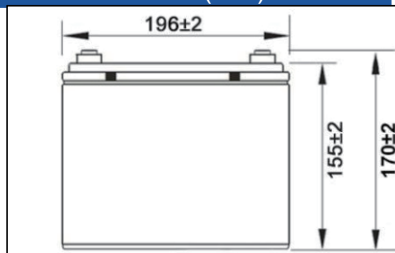
- * Positive Lead dioxide
- * Electrolyte Sulfuric acid
- * Separator Fiber glass
- * Container ABS(UL94-HB)/Flame Retardant ABS (UL94-V0)
- * Negative Lead
- * Safety Valve EPDM
- * Terminal Copper



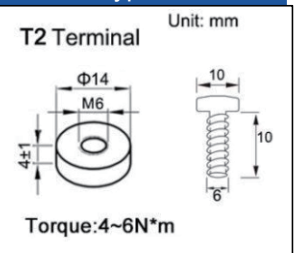
Specification

Battery Model	Nominal Voltage		12V (6 cells per unit)	
	Capacity (15minutes rate to 1.67V/cell)		145W	
	Rated capacity 10 Hour rate		36Ah	
	1,70Vdc 10hr		36.2Ah	
Capacity @ 25°C (77°F)	15min rate(1.67V)	3 hour rate(9.59A, 1.70V)	5 hour rate(6.30A, 175V)	10 hour rate(3.60A, 1.75V)
	145W	28.77Ah	31.50Ah	36.00Ah
Dimension	Length	Width	Height	Total Height
	196mm (7.72 inches)	130mm (5.12 inches)	155mm (6.10 inches)	170mm (6.69 inches)
Approx Weight	10.1kg(22.26 lbs) ± 3%			
Internal Resistance	Full charged at 25°C(77°F):Approx 7.72(mΩ/25°C± 15%)			
Maximum Charge Current	10.8A			
Max.discharge current	430A (5Sec.)			
Short-circuit current	900A			
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 at 25°C(77°F)	Float Charging Voltage	Equalization Charging Voltage	Cycle Use Voltage	
	13.5~13.8 VDC (-3mV/cell/°C)	14.1~14.4 VDC (-4mV/cell/°C)	14.4~15.0 VDC (-5mV/cell/°C)	

Outer dimension (mm)



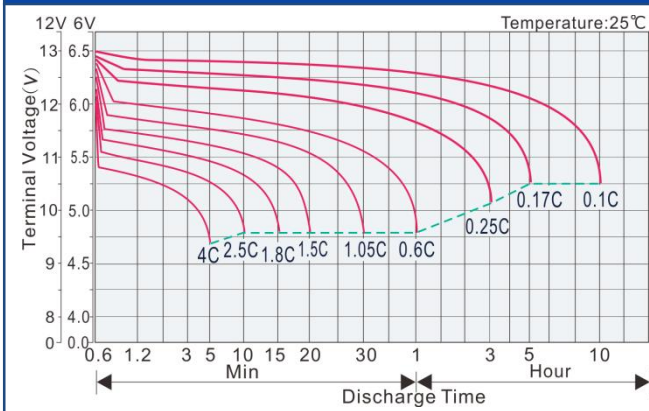
Terminal Type



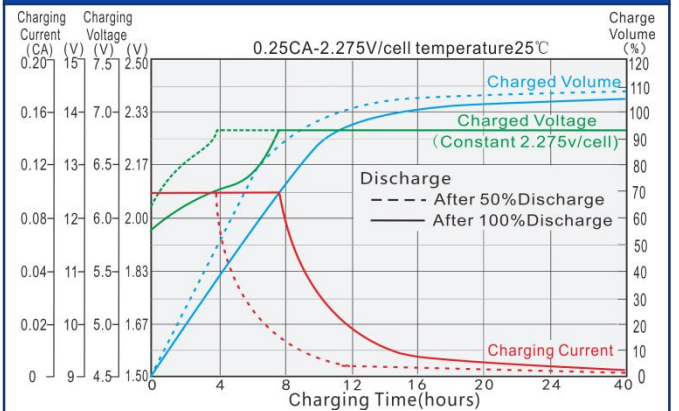
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)

F.V/Time	3min	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	5h	8h	10h	20h
1.85V/cell	A 118	96.0	75.0	61.5	50.0	37.3	27.2	21.8	15.90	12.67	9.17	6.13	4.222	3.520	1.874
	W 223	181	144	119	97.4	73.4	54.0	43.4	31.85	25.47	18.48	12.39	8.547	7.132	3.803
1.80V/cell	A 132	107	80.2	65.6	52.5	38.5	28.0	22.3	16.21	12.91	9.32	6.22	4.280	3.570	1.901
	W 245	199	152	126	101.5	75.3	55.2	44.3	32.38	25.87	18.73	12.54	8.648	7.219	3.852
1.75V/cell	A 146	118	85.3	69.6	54.9	39.6	28.6	22.8	16.50	13.13	9.46	6.30	4.318	3.600	1.917
	W 266	216	160	133	105.5	77.0	56.4	45.1	32.87	26.24	18.97	12.68	8.709	7.267	3.879
1.70V/cell	A 158	128	90.4	73.4	57.2	40.6	29.3	23.2	16.77	13.33	9.59	6.37	4.344	3.620	1.928
	W 285	231	168	139	109.3	78.6	57.4	45.8	33.32	26.58	19.18	12.79	8.747	7.296	3.896
1.67V/cell	A 165	133	93.0	76.6	58.4	41.1	29.6	23.4	16.90	13.42	9.65	6.40	4.358	3.630	1.933
	W 296	240	172	145	111.2	79.4	57.9	46.1	33.53	26.72	19.28	12.84	8.770	7.313	3.905
1.60V/cell	A 176	143	98.0	77.8	60.3	42.0	30.0	23.7	17.10	13.57	9.75	6.45	4.380	3.645	1.941
	W 312	253	179	147	114.5	80.8	58.6	46.6	33.86	26.97	19.45	12.93	8.803	7.333	3.916

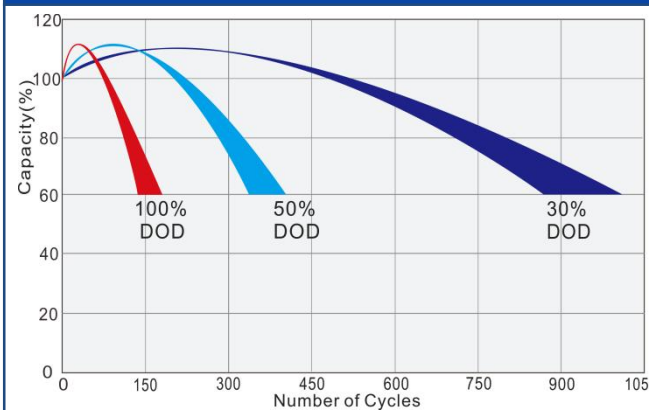
Discharge characteristic curve (25°C/77°F)



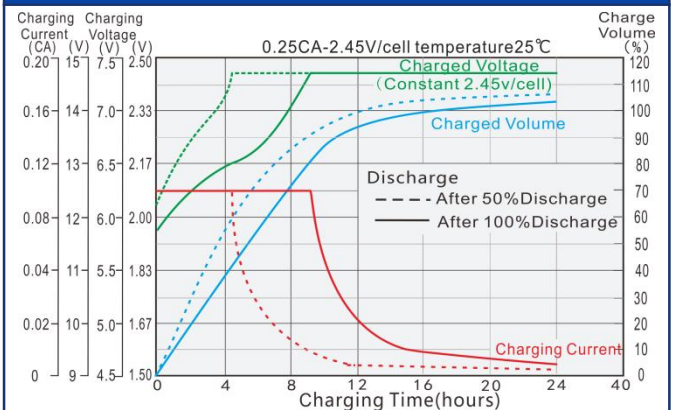
Charging characteristic curve of floating charge (25°C/77°F)



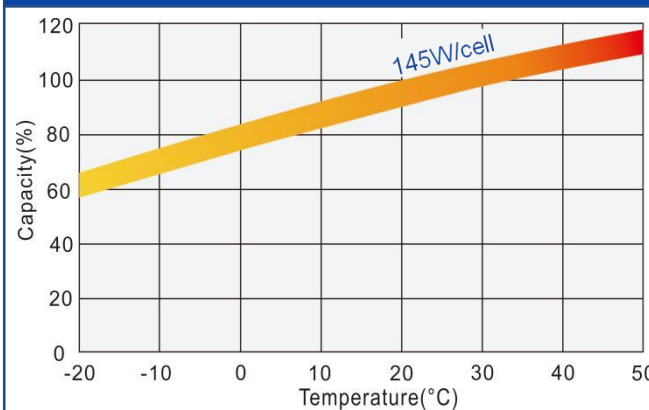
Cycle service life in relation to depth of discharge



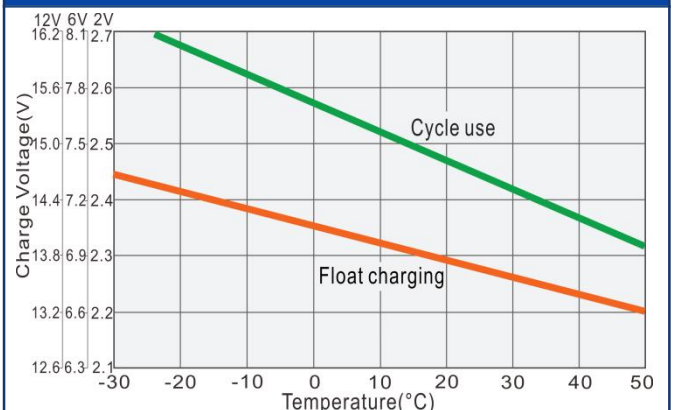
Cyclic charging characteristic curve (25°C/77°F)



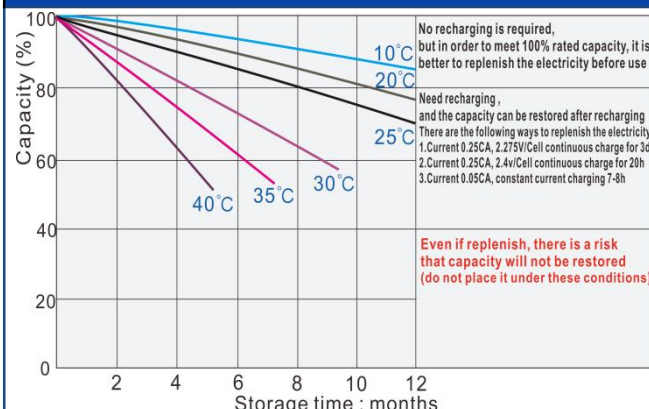
Relationship between temperature and capacity



Relationship between charging voltage and temperature



Self discharge characteristics



Temperature vs Float Life

