

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 12 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.

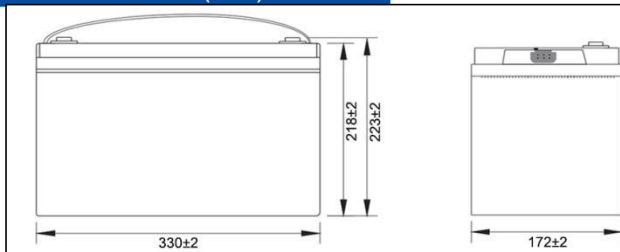
Construction

- * 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

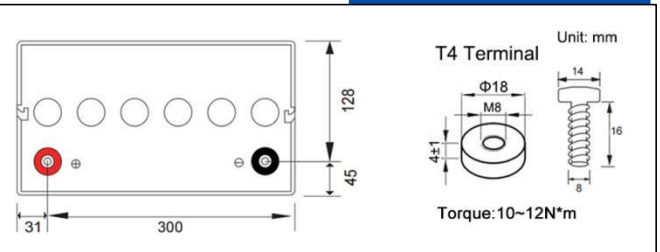
Specification

Battery Model	Nominal Voltage		12V (6 cells per unit)	
	Capacity (15minutes rate to 1.67V/Cell)		400W	
	Rated capacity 10 Hour rate)		100Ah	
Capacity @ 25°C (77°F)	15min rate(1.67V)	3 hour rate(26.0A, 1.80V)	5 hour rate(17.4A, 1.80V)	10 hour rate(10.1A, 1.80V)
	400W	78.0Ah	87.0Ah	101.0Ah
Dimension	Length	Width	Height	Total Height
	330mm (12.99 inches)	172mm (6.77 inches)	218mm (8.58 inches)	223mm (8.78 inches)
Approx Weight	31.0kg(68.34 lbs) ± 3%			
Internal Resistance	Full charged at 25°C(77°F):Approx 3.45mΩ			
Maximum Charge Current	30.0A			
Max.discharge current	1000A (5Sec.)			
Short-circuit current	1900A			
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)



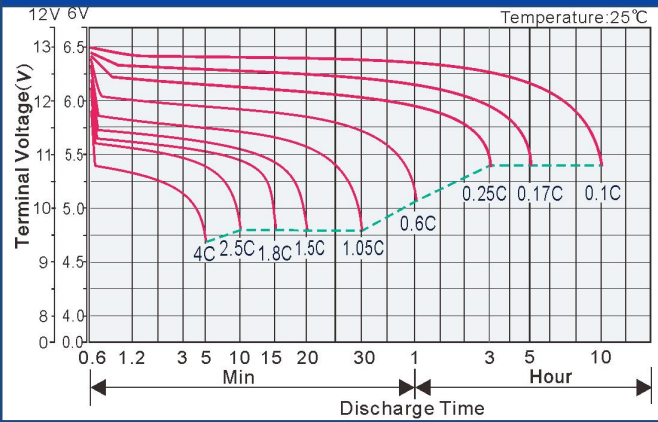
Terminal Type



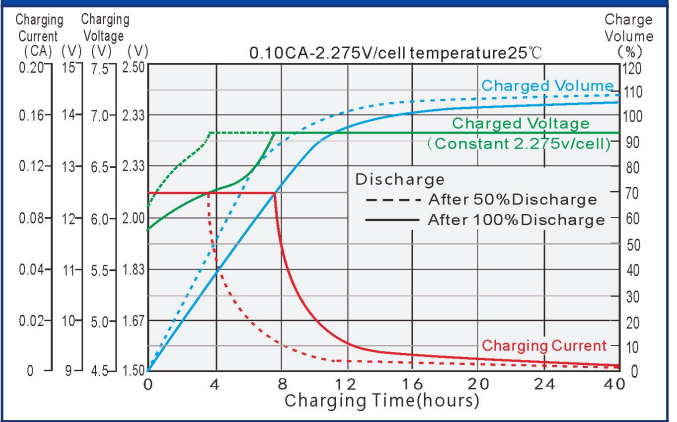
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)

F.V/Time		5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	A	280	232	185	142.0	101.0	72.4	54.4	40.5	32.3	23.8	19.40	16.50	11.78	9.90
	W	506	420	330	274.0	199.0	141.0	108.0	81.0	65.0	48.0	39.50	33.10	23.80	20.00
1.80V/cell	A	313	255	199	152.0	106.6	76.9	58.4	44.4	35.6	26.0	20.60	17.40	12.06	10.10
	W	565	450	355	295.0	210.0	150.0	115.0	86.0	71.9	51.6	41.50	34.70	24.40	20.40
1.75V/cell	A	347	270	211	161.5	113.4	81.4	61.5	46.4	37.4	27.2	21.55	18.10	12.33	10.30
	W	615	475	376	312.0	220.0	158.0	121.0	90.5	74.1	54.2	43.20	36.10	24.90	20.80
1.70V/cell	A	366	281	219	171.0	118.9	85.1	63.9	48.1	38.5	28.0	22.15	18.60	12.60	10.49
	W	652	495	393	325.0	228.0	165.0	125.0	94.5	75.9	55.7	44.50	37.30	25.40	21.10
1.67V/cell	A	378	286	223	175.0	122.4	87.2	65.4	49.1	39.2	28.4	22.45	18.80	12.70	10.58
	W	665	504	400	331.0	231.0	168.0	127.0	96.0	76.9	56.2	44.90	37.60	25.50	21.20
1.60V/cell	A	394	294	232	182.0	126.0	89.8	67.2	50.3	40.0	29.1	22.95	19.20	12.88	10.70
	W	690	515	409	339.0	237.0	173.0	130.0	98.3	78.2	57.0	45.50	38.10	25.70	21.30

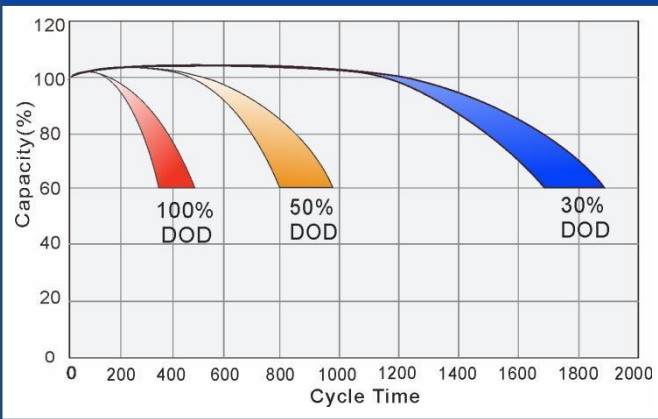
Discharge characteristic curve (25°C/77°F)



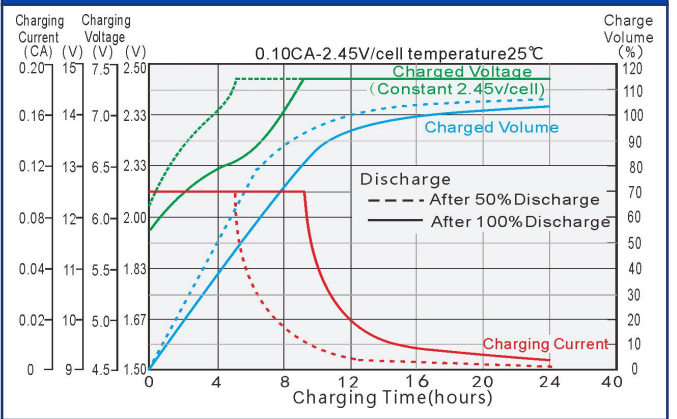
Charging characteristic curve of floating charge (25°C/77°F)



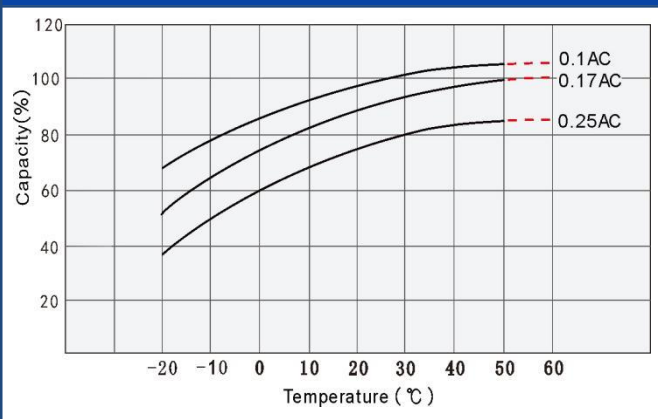
Cycle service life in relation to depth of discharge



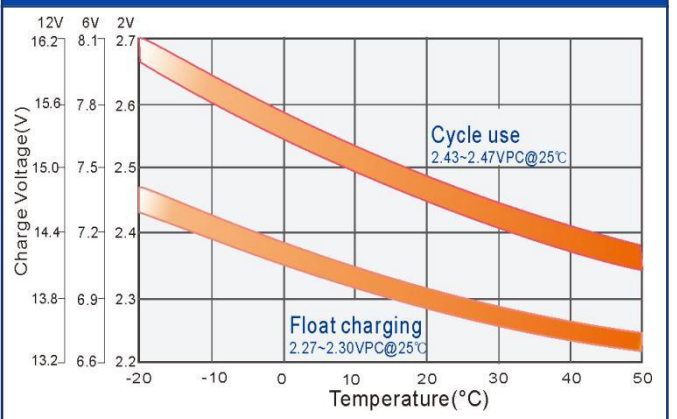
Cyclic charging characteristic curve (25°C/77°F)



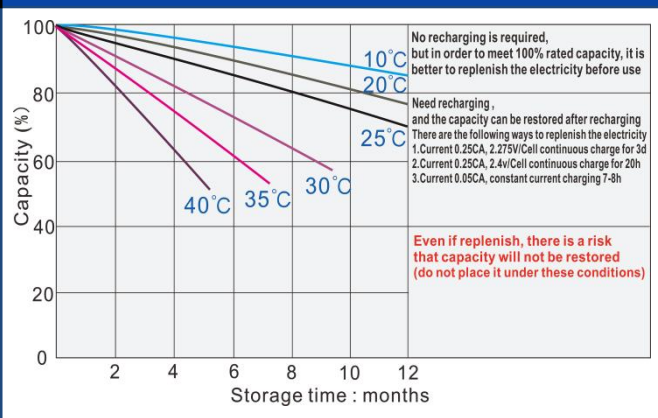
Relationship between temperature and capacity



Relationship between charging voltage and temperature



Self discharge characteristics



Temperature vs Float Life

