

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

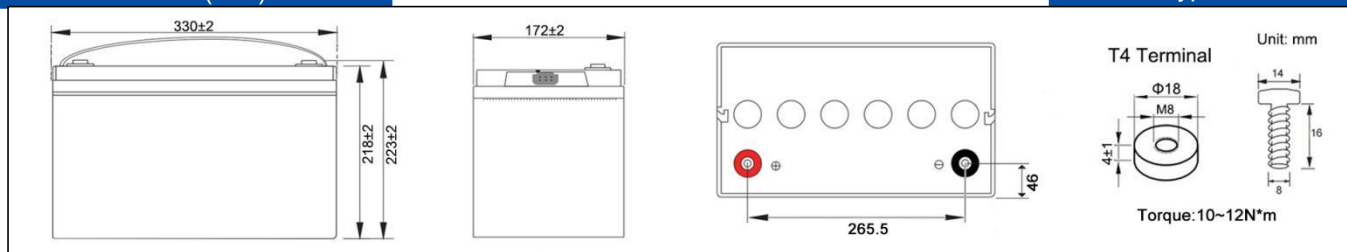
- * Positive Lead dioxide
- * Electrolyte Sulfuric acid
- * Separator Fiber glass
- * Container ABS(UL94-HB)/Flame Retardant ABS (UL94-V0)
- * Negative Lead
- * Safety Valve EPDR
- * Terminal Copper



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(28.86A, 1.75V)	5 hour rate(19.20A, 1.80V)	10 hour rate(10.55A, 1.80V)
	400W	86.58Ah	96.0Ah	105.5Ah
Dimension	Length	Width	Height	Total Height
	330mm (12.99 inches)	172mm (6.77 inches)	218mm (8.58 inches)	223mm (8.78 inches)
Approx Weight	30.3kg(66.80 lbs) ± 3%			
Internal Resistance	Full charged at 25°C(77°F):Approx 3.30mΩ			
Maximum Charge Current	30.0A			
Max.discharge current	1000A (5Sec.)			
Short-circuit current	2150A			
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)

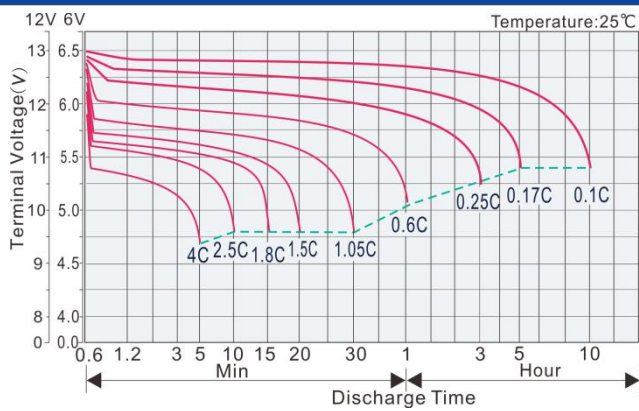


Terminal Type

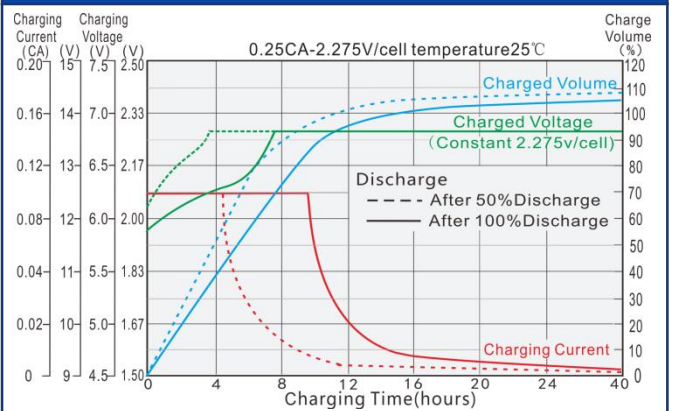
Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)

F.V/Time		5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	8h	10h
1.85V/cell	A	260	207	170	142	106	80.5	65.8	49.0	39.3	27.80	22.10	18.94	12.54	10.45
	W	485	393	327	275	207	159	130	97.7	78.6	55.76	44.43	38.10	25.25	21.12
1.80V/cell	A	291	227	185	152	112	83.5	67.9	50.3	40.3	28.35	22.50	19.20	12.67	10.55
	W	533	425	352	292	218	164	134	99.9	80.3	56.67	45.07	38.49	25.42	21.26
1.75V/cell	A	319	246	198	161	117	86.4	69.9	51.5	41.1	28.86	22.86	19.43	12.79	10.64
	W	574	455	373	307	226	169	137	102.0	81.6	57.51	45.64	38.84	25.59	21.39
1.70V/cell	A	346	264	209	169	121	89.1	71.8	52.6	41.9	29.33	23.18	19.64	12.89	10.72
	W	612	483	390	320	233	173	141	103.9	83.0	58.29	46.15	39.15	25.72	21.50
1.67V/cell	A	364	273	215	173	123	90.5	72.7	53.2	42.2	29.55	23.30	19.72	12.93	10.75
	W	639	496	400	326	236	176	142	104.9	83.5	58.67	46.34	39.27	25.78	21.54
1.60V/cell	A	392	290	222	179	126	92.7	74.3	54.0	42.8	29.90	23.50	19.95	13.00	10.80
	W	677	522	409	335	241	180	145	106.3	84.5	59.26	46.66	39.67	25.88	21.61

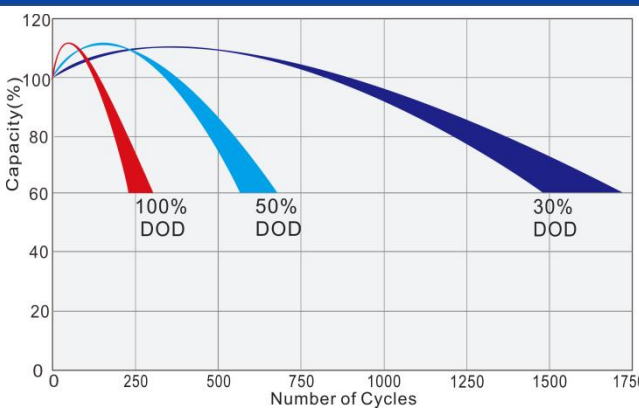
Discharge characteristic curve (25°C/77°F)



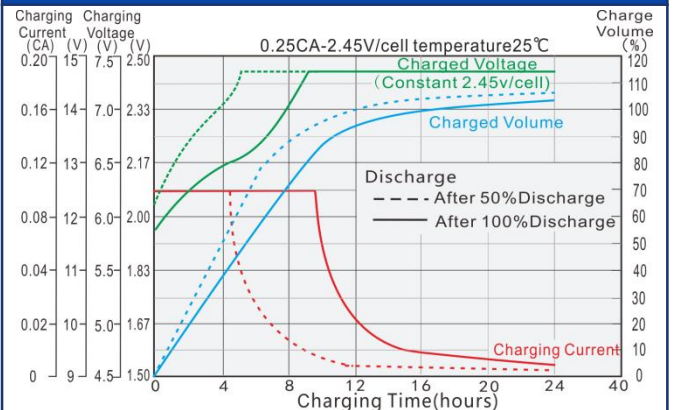
Charging characteristic curve of floating charge (25°C/77°F)



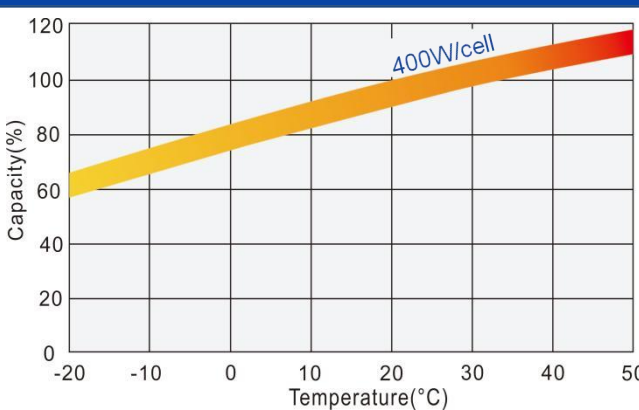
Cycle service life in relation to depth of discharge



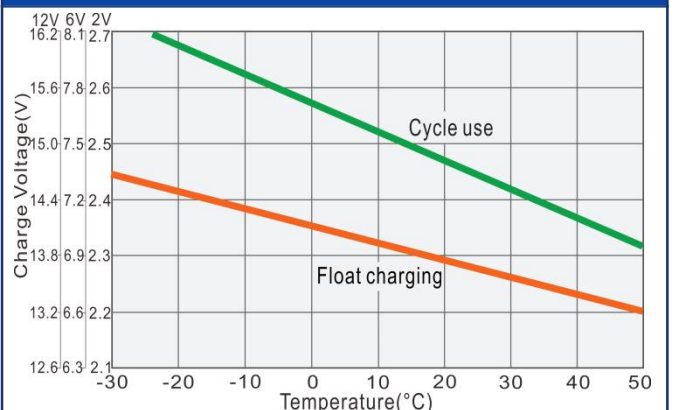
Cyclic charging characteristic curve (25°C/77°F)



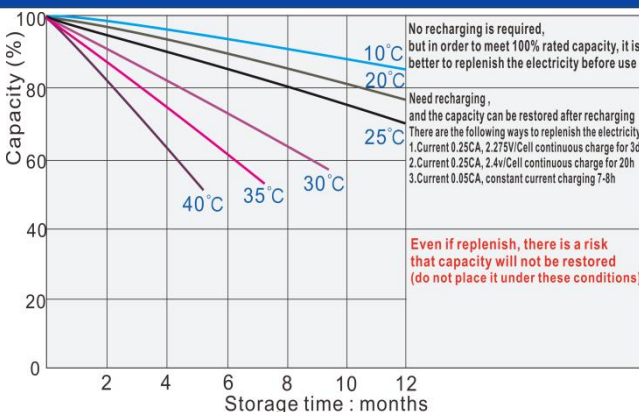
Relationship between temperature and capacity



Relationship between charging voltage and temperature



Self discharge characteristics



Temperature vs Float Life

