JYC BATTERY MANUFACTURER CO.,LTD.

DC12-12(12V12AH)

Deep Cycle Series Battery

DC series VRLA batteries are superior deep cycle design with thick plates, high-density active materials And Slightly stronger electrolyte, Which can withstand repeated deep cyclic applications.
Deep cycle series Batteries are the special design batteries with 5 years floating design life at 25℃.
Meet with IEC, BS,JIS and Eurobat standard.UL(MH62092),CE approved.

Application

* Emergency Power System
* Communication equipment
* Telecommunication systems
* Uninterruptible power supplies
* Electric toy car and wheelchairs, etc.
* Power tools
* Golf cars and buggies
* Marine equipment
* Medical equipment
* Solar and wind power system

General Features

* Safety Sealing
* Non-spillable construction
* High power density
* Excellent recovery from Deep discharge
* Thick plates and high active materials
* Longer Life and low self-discharge design

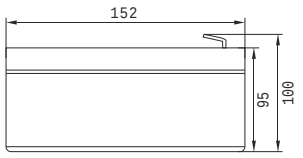
Construction

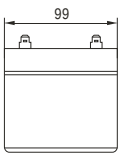
* Positive …… Lead dioxide
* Electrolyte ….. Sulfuric acid
* Separator …… Fiber glass
* Container …… ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
* Negative …… Lead
* Safety Valve …… EPDR
* Terminal …… Copper

Specification

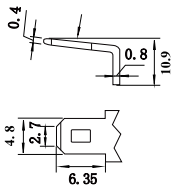
Battery Model	Nominal Voltage		12V	
	Rated capacity (20 Hour rate)		12Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	152mm (5.98 inches)	99mm (3.89 inches)	95mm (3.74 inches)	100mm (3.94 inches)
Approx Weight	3.5kg (7.71lbs) ± 3%			
Capacity @ 25˚C (77 ˚F)	20 hour rate(0.6A,10.5V)	10 hour rate(1.1A,10.5V)	5 hour rate(2.04A,10.5V)	1 hour rate(7.2A,9.6V)
	12Ah	11Ah	10.2Ah	7.2Ah
Max.discharge current	180A (5 Sec.)			
Internal Resistance	Full charged at 25˚C: Approx 16mΩ			
Capacity affected by Temp.(20 HR)	40˚C (104˚F)	25˚C (77˚F)	0˚C (32˚F)	-15˚C (5˚F)
	102%	100%	85%	65%
Self Discharge @25˚C (77 ˚F)	After 3 months storage		After 6 months storage	After 12 months storage
	91%		82%	64%
Charge method @25˚C (77 ˚F)	Cycle Use		Float Use	
	14.4-14.7V (Initial charging current less than 3.6A)		13.50-13.80V	

Outer dimension (mm)





Terminal Type (mm)



Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25℃ (77 ˚F)

F.V\TIME		5min	10min	15min	30min	1 hr	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	20 hr
9.60V	A	43.20	28.30	21.00	13.80	7.20	4.20	3.09	2.48	2.11	1.39	1.13	0.62
	W	509.50	320.00	242.00	146.50	83.00	48.60	35.75	28.70	24.35	16.05	13.15	7.20
10.20V	A	39.60	27.00	19.30	13.10	6.76	4.03	3.00	2.40	2.06	1.37	1.12	0.61
	W	479.50	303.00	227.50	145.50	78.00	46.70	34.75	27.80	23.90	15.80	12.90	7.00
10.50V	A	36.10	25.30	18.00	12.70	6.54	3.95	2.95	2.28	2.04	1.35	1.10	0.60
	W	463.00	294.00	217.50	144.00	75.70	45.80	34.15	26.40	23.75	15.65	12.80	6.95
10.80V	A	34.60	24.20	16.80	12.40	6.32	3.85	2.90	2.24	1.95	1.31	1.07	0.59
	W	406.00	285.00	209.50	143.50	73.50	44.80	33.75	26.08	22.70	15.00	12.50	6.80
11.10V	A	32.00	22.80	15.60	12.00	6.10	3.75	2.75	2.20	1.87	1.28	1.05	0.57
	W	392.50	275.50	199.50	142.50	72.50	44.50	32.75	26.00	22.20	14.50	12.25	6.75

Note: The above datas are average values. (Edition 2020-05)

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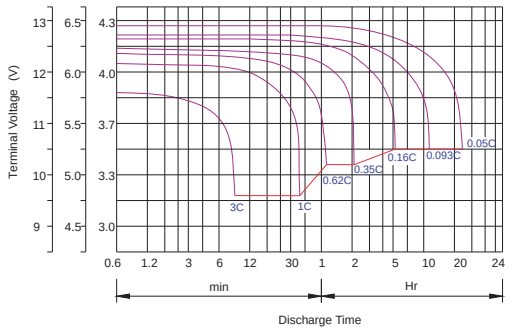
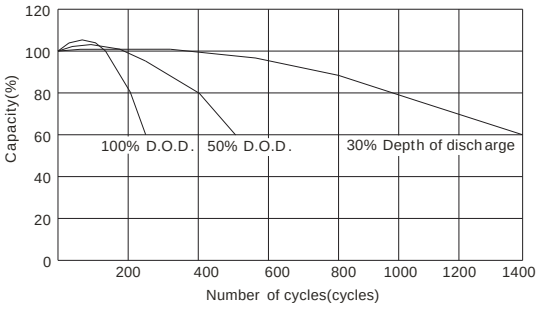
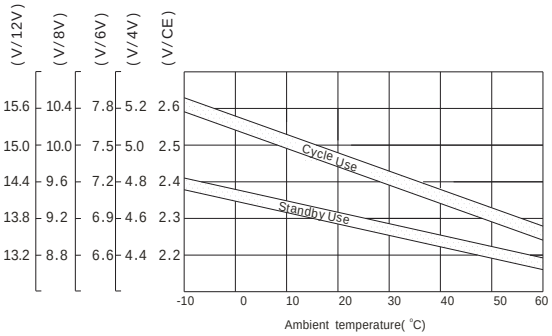
Discharge characteristic Curve



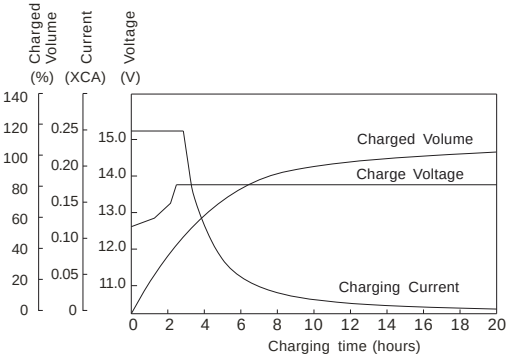
Cycle service life in relation to depth of discharge



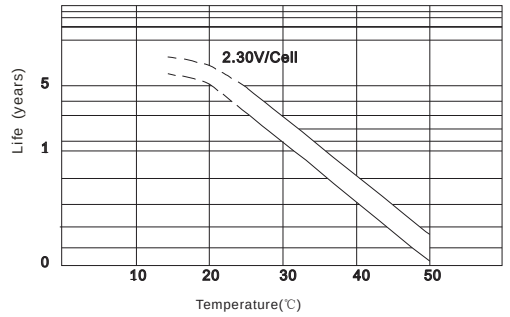
Relationship between charging voltage and temperature



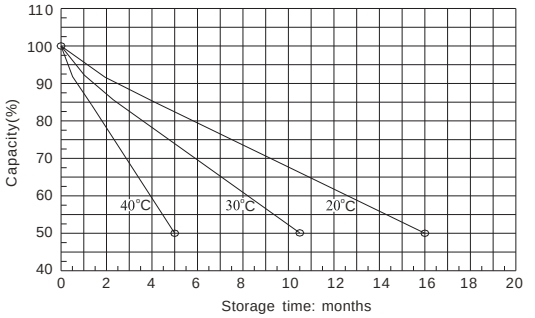
Constant voltage charging characteristic (0.25CA, at 25℃)



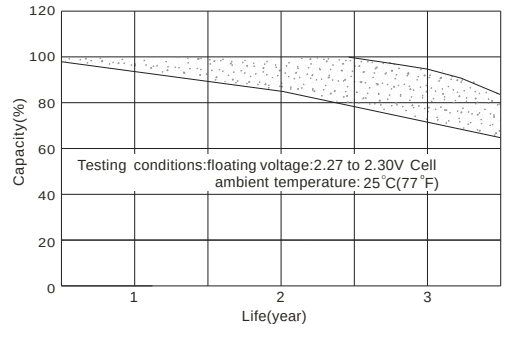
Temperature effects on float life



Self-discharge characteristic



Life characteristics of standby use



Charge characteristic Curve for standby use