

HR12290W

High Rate Series Battery

General Features



HR Series VRLA batteries are designed with AGM (Absorbent Glass Mat) technology, High performance plates and electrolyte to give extra power output for common power backup system.

High rate series Batteries are the special design batteries with 10 years floating design life at 25°C.

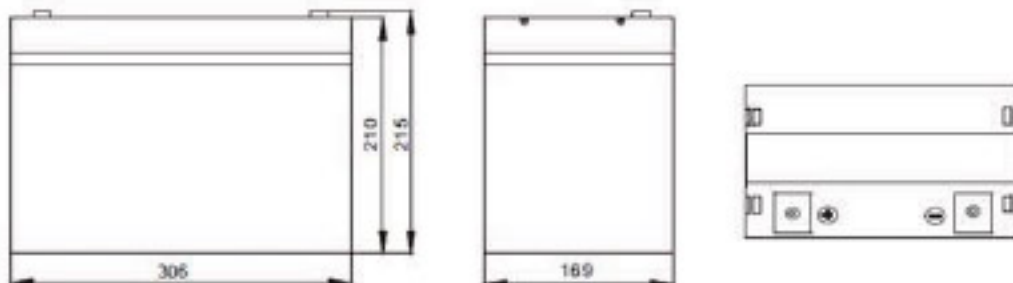
- Safety Sealing
- Non-spillable construction
- High Reliability and Stability
- Sealed and Maintenance-free
- Safety and Quality certification
- Long Life and low self-discharge design

Container: ABS(UL94-HB) & Flame Retardant of UL94-V0 can be available upon request

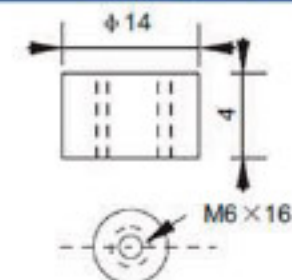
Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (10 Hour rate)		90Ah	
	Capacity(15 minutes rate to 1.67V/Cell)		280w	
Dimensions	Lenght	With	Height	Total Height
	306mm (12.04inches)	169mm (6.65inches)	210mm (8.27inches)	215mm (8.46inches)
Aprox Weight	24.0kg (52.9lbs) ± 3%			
Max. discharge current	800A (5Sec.)			
Internal Resistance	Full charged at 25°C: Approx 5.5mΩ			
Capacity affected by Temp. (10HR)	40°C (104°F)	25°C (77°F)	0°C (32°F)	-15°C (5°F)
	102%	100%	85%	65%
Self Discharge at 25°C (77°F)	After 3 month storage		After 6 month storage	After 12 month storage
	91%		82%	64%
Charge method 25°C (77°F)	Cycle Use		Float Use	
	14.6-14.8V (Initial charging current less than 18.7A)		13.70-13.90V	

Outer Dimensions (mm)



Terminal Type (mm)



T4

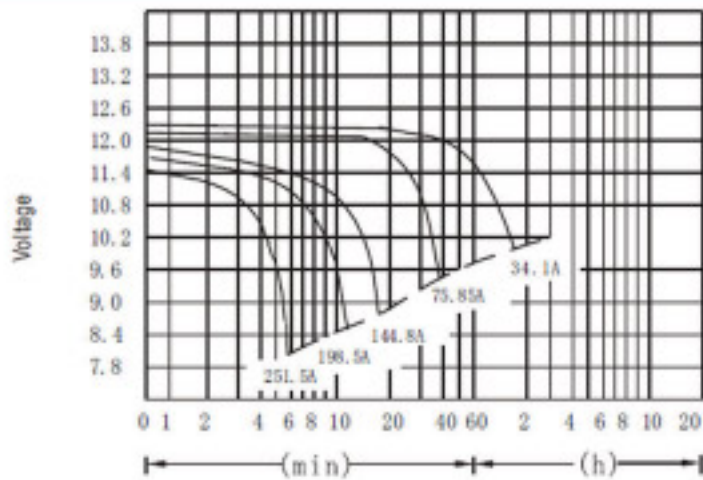
Constant Power(Watt/Cell) Discharge at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	60min	90min
1.60V	461.5	375.2	295.2	242.5	181.1	121.5	100.80	72.99
1.67V	428.3	353.2	290.1	231.6	174.5	118.7	98.65	70.56
1.70V	417.3	343.6	273.6	226.7	183.2	116.3	95.58	69.54
1.75V	392.2	325.1	262.4	218.5	164.3	113.4	93.17	67.67
1.80V	364.1	307.2	250.3	209.6	158.7	109.5	90.33	65.89

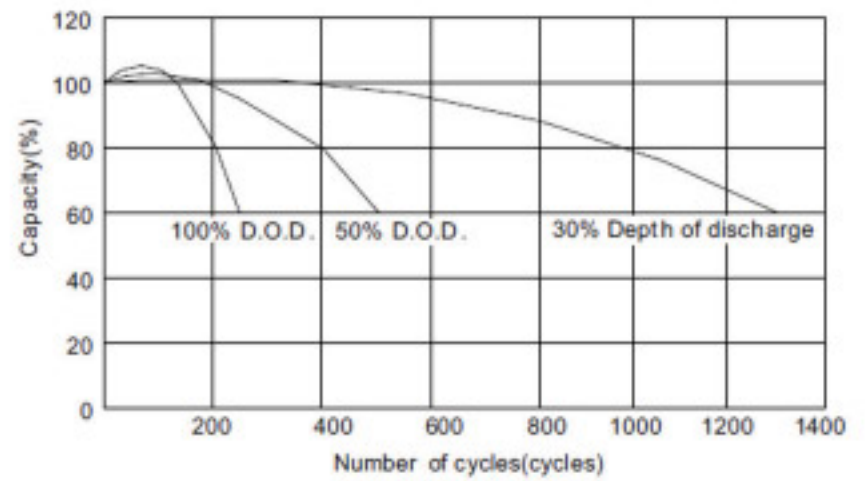
Constant Current(Amp) Discharge at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	60min	90min
1.60V	250.88	199.30	155.70	126.30	93.05	63.35	53.58	38.58
1.67V	227.90	184.10	144.60	119.10	88.12	61.47	51.19	37.15
1.70V	217.98	176.40	141.20	116.20	86.24	60.07	50.27	36.37
1.75V	202.15	167.30	133.60	110.40	83.11	58.69	48.65	35.27
1.80V	186.10	155.40	126.40	105.20	78.55	56.52	46.98	34.09

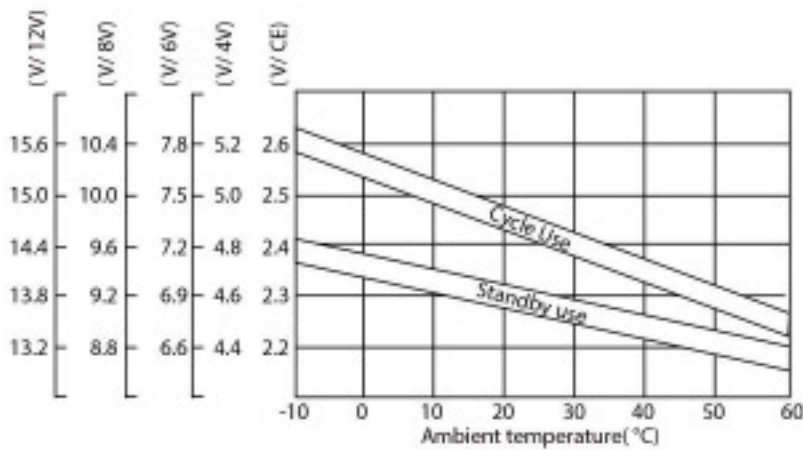
Discharge characteristic Curve



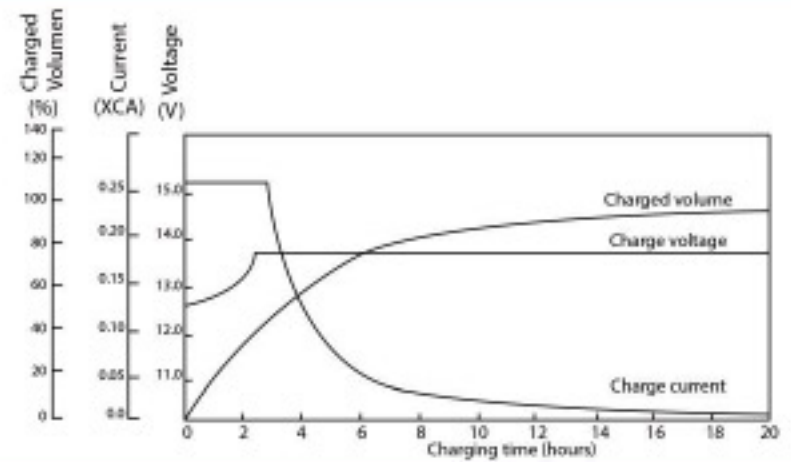
Cycle service life in relation to depth of discharge



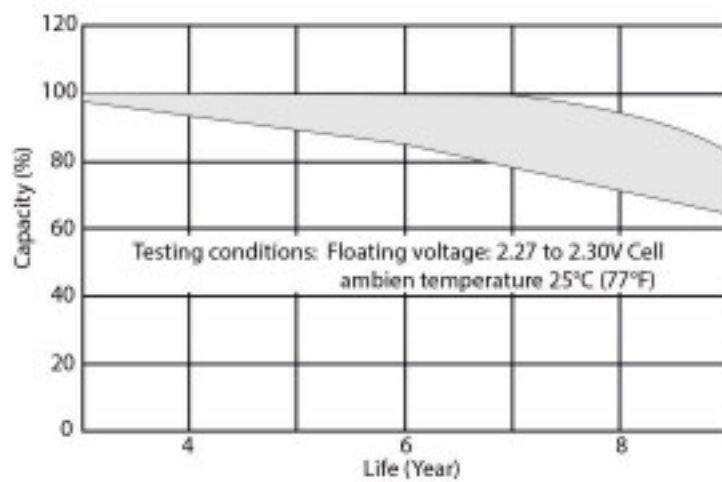
Relationship between charging voltage and temperature



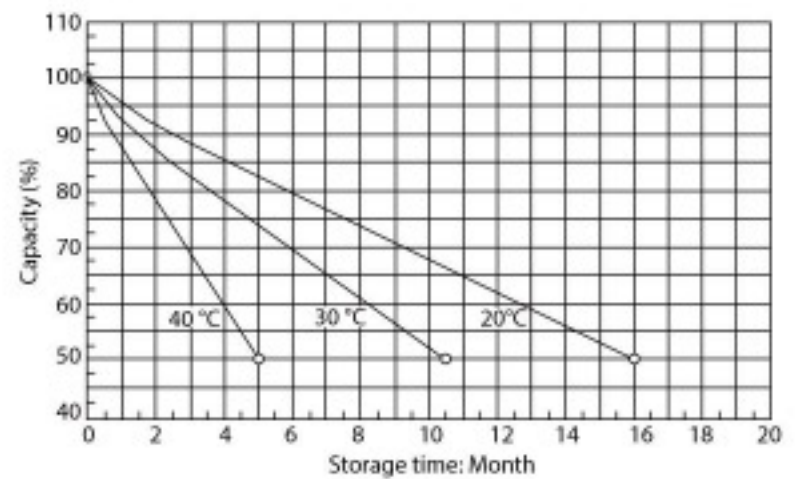
Constant voltage charging characteristic (0.25CA, at 25°C)



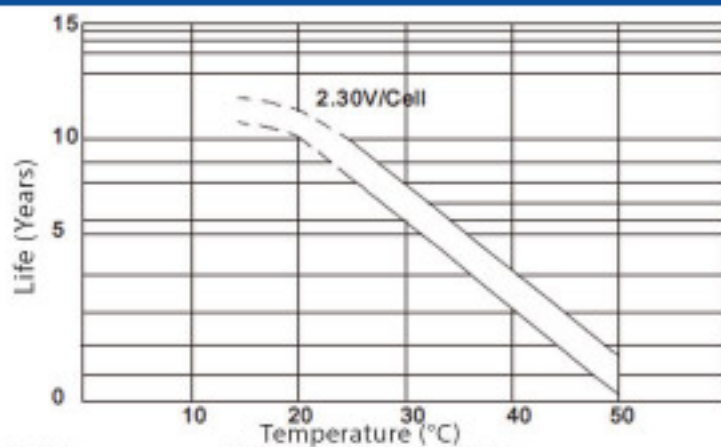
Life characteristics of standby use



Self-discharge characteristic



Temperature effects on float life



Charge characteristic Curve for standby use

