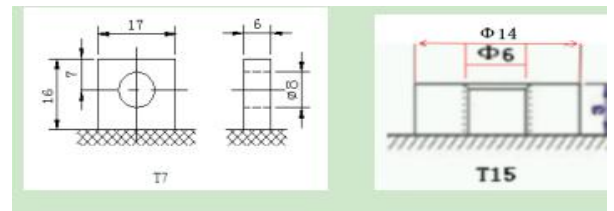


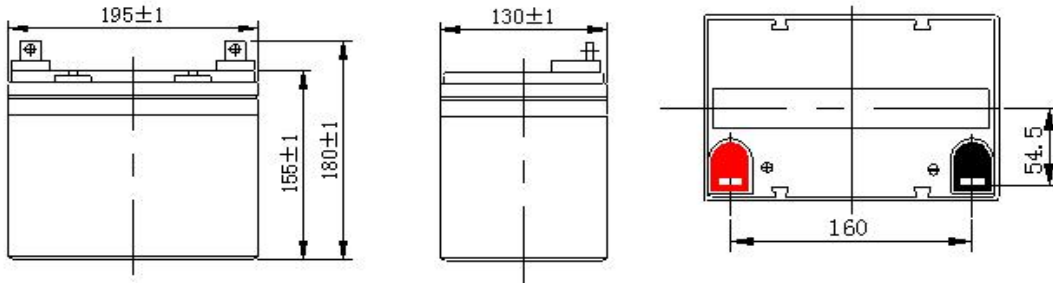
VRLA Battery

- completely sealed and maintenance-free, low self-discharge
- 100% precise quality testing, stable quality and high reliable performance
- Unique grid alloy formula and updated manufacturing technique
- Floating & standby use: up to 8 years
- Cycle use 1: More than 350 cycles at 100% DOD
- Cycle use 2: More than 2200 cycles at 30% DOD



Construction:

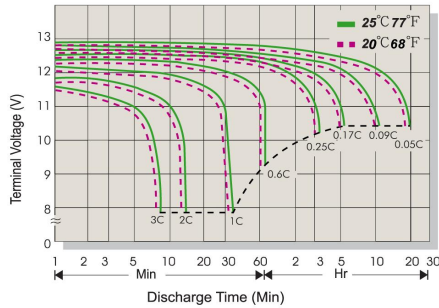
- ComponentRaw material
- PositiveLead dioxide
- NegativeLead
- ContainerABS
- CoverABS
- SealantEpoxy
- Safety valveRubber
- TerminalPb
- SeparatorFiber glass
- ElectrolyteSulfuric acid



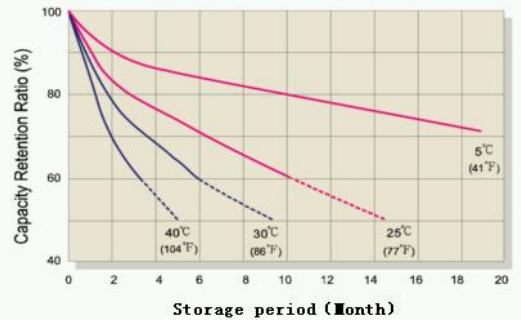
Specification:

Battery Model	NP 33-12 12V33AH			
Designer Floating Life	Up to 8 Years			
Capacity (25°C)	20HR(1.65A,10.5V)	10HR(3.14A,10.5V)	1HR(18.15A,9.6V)	27min(33A,9.6V)
	33.0AH	31.35AH	18.15AH	14.85AH
Dimensions	Length	Width	Height	Total Height
	196mm (7.72inch)	130mm (5.1inch)	155mm (6.10inch)	180mm (6.69inch)
Approx. Weight	10.4Kg (22.92lbs)±5%			
Internal Resistance	Full charged at 25°C: ≤9.0mΩ			
Self Discharge	2% of capacity declined per month at (25°C)			
Capacity Affected by Temp.(20HR)	40°C	25°C	0°C	-15°C
	102%	100%	85%	65%
Charge Voltage(25°C)	Cycle use		Float use	
	14.40-15.00V(-18mV/°C), max. Current:9.9A		13.50-13.80V (-18mV/°C)	

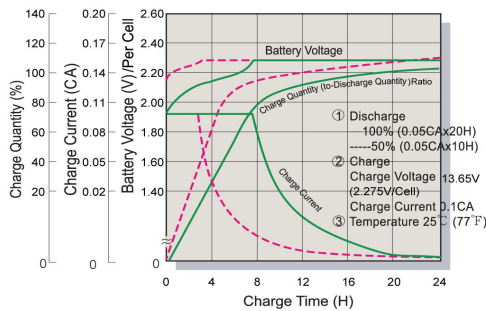
Terminal Voltage (V) and Discharge Time



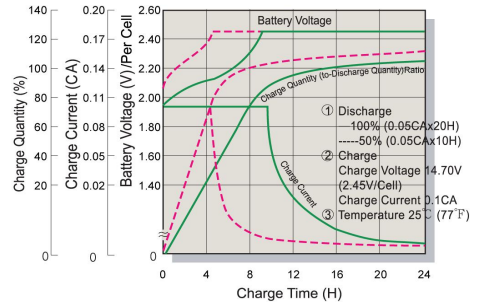
Capacity Retention Characteristic



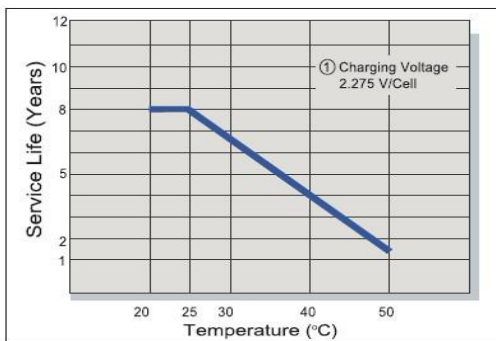
Battery Voltage and Charge Time for Standby Use



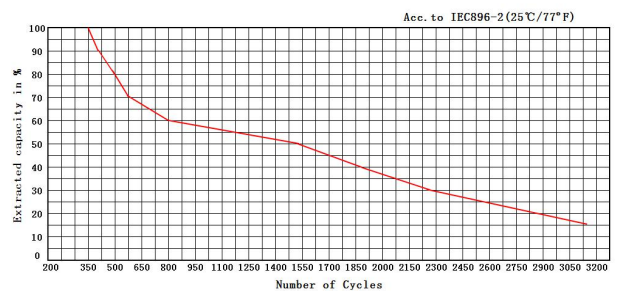
Battery Voltage and Charge Time for Cycle Use



Tickle(or Float) Service Life



Cycle Service Life



F.V/Time	5Min	10Min	15Min	27Min	1Hr	2Hr	3Hr	4Hr	5Hr	10Hr	20Hr
9.6V	90	65	56	33	18.2	11.5	8.27	6.8	5.63	3.17	1.67
10.2V	85	63	54	31	18.0	11.3	8.25	6.6	5.61	3.16	1.66
10.5V	80	60	52	29	17.8	11.1	8.23	6.4	5.59	3.15	1.65
10.8V	75	58	50	27	17.6	10.9	8.20	6.2	5.57	3.14	1.64

Constant Power Discharge (CP,Unit:W) at 25°C(77°F)

F.V/Time	5Min	10Min	15Min	27Min	1Hr	2Hr	3Hr	4Hr	5Hr	10Hr	20Hr
9.6V	900	650	560	330	182	115	82.7	68	56.3	31.7	16.7
10.2V	850	630	540	310	180	113	82.5	66	56.1	31.6	16.6
10.5V	800	600	520	290	178	111	82.3	64	55.9	31.5	16.5
10.8V	750	580	500	270	176	109	82.0	62	55.7	31.4	16.4