



**● NPL General Series Battery**

NPL General 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. NPL series Batteries are the general purpose batteries with 18 years floating design life at 25°C. Meet with IEC, BS, JIS and Eurobat standard.



**● Application**

- \*Emergency Power System
- \*Communication equipment
- \*Telecommunication systems
- \*Uninterruptible power supplies
- \*Solar power and wind power systems, etc.
- \*Power tools
- \*Power station
- \*Marine equipment
- \*Fire and Security System

**● General Features**

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

**● Construction**

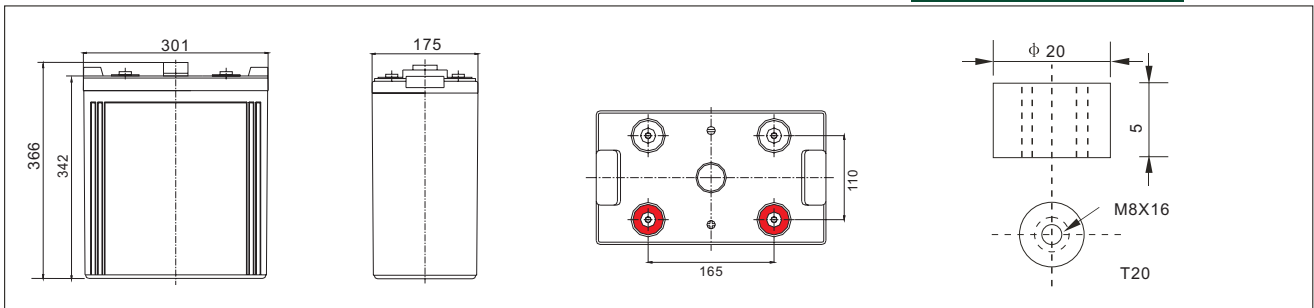
- \*Positive .....Lead dioxide
- \*Electrolyte .....Sulfuric acid
- \*Separator .....Fiber glass
- \*Container .....ABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
- \*Negative .....Lead
- \*Safety Valve .....EPDR
- \*Terminal .....Copper

**● Specification**

Battery Model	Nominal Voltage		2V	
	Rated capacity(10 Hour rate)		600Ah	
Dimensions	Length	Width	Height	Total Height
	301mm (11.85 inches)	175mm(6.89 inches)	342mm(13.46 inches)	366mm (14.41 inches)
Approx Weight	38.00kg(83.77lbs) ±3%			
Capacity 25°C (77°F)	10 Hour rate (60A,1.8V)	5 Hour rate (96A,1.75V)	3 Hour rate (150A,1.7V)	1 Hour rate (360A,1.6V)
	600Ah	480Ah	450Ah	360Ah
Max.discharge current	1800A(5Sec.)			
Internal Resistance	Full charged at 25 °C (77°F): Approx 0.35mΩ			
Capacity affected by Temp. (10 HR)	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 months storage		After 6 months storage	After 12 months storage
	91%		82%	64%
Charge method 25°C (77°F)	Cycle Use		Float Use	
	2.35-2.40V (Initial charging current less than 240A)		2.25-2.30V	

**● Outer dimensions (mm)**

**● Terminal Type (mm)**

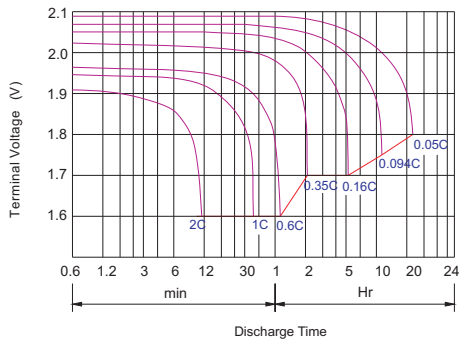


**Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)**

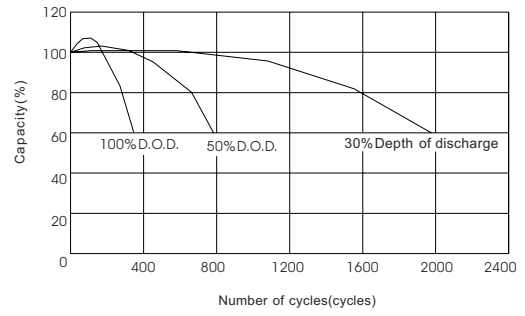
Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
1.60V	A	1922	1266	1021	684	360.0	210.0	154.2	120.0	99.0	70.2	63.0	34.0
	W	3305	2253	1824	1226	648.0	384.3	286.0	225.0	187.6	134.1	121.3	65.9
1.70V	A	1861	1142	961	654	338.4	200.4	150.0	117.0	97.2	68.4	61.8	33.0
	W	3313	2126	1793	1224	637.9	385.0	289.5	226.7	188.9	133.4	121.0	64.5
1.75V	A	1801	1022	841	612	327.6	195.6	146.4	115.2	96.0	67.8	60.6	33.0
	W	3277	1937	1599	1174	632.3	378.1	284.3	224.6	187.6	132.9	119.5	65.0
1.80V	A	1735	963	781	564	316.8	190.8	142.8	113.4	93.6	66.0	60.0	32.4
	W	3245	1851	1500	1089	614.6	372.4	280.6	223.2	184.4	130.4	118.9	64.3
1.85V	A	1677	902	721	504	306.0	186.0	138.0	110.4	91.2	64.2	57.0	30.6
	W	3170	1742	1399	983	599.8	366.4	273.2	219.1	181.4	128.1	114.7	61.8



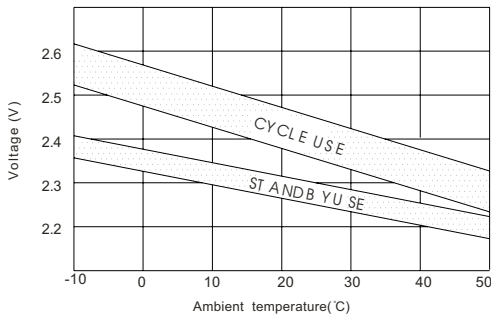
**Discharge characteristic Curve**



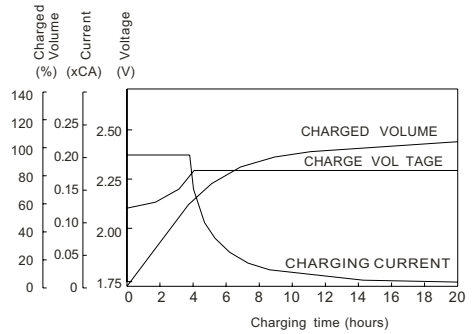
**Cycle service life in relation to depth of discharge**



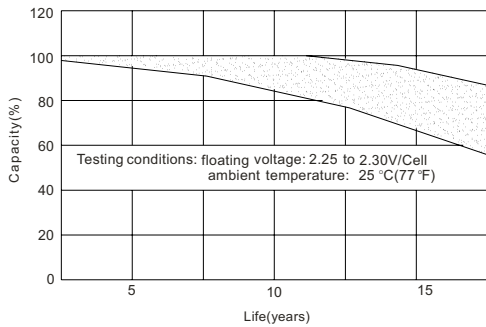
**Relationship between charging voltage and temperature**



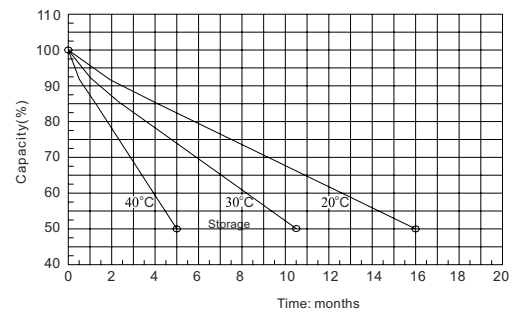
**Constant voltage charging characteristic (0.25CA, at 25 °C)**



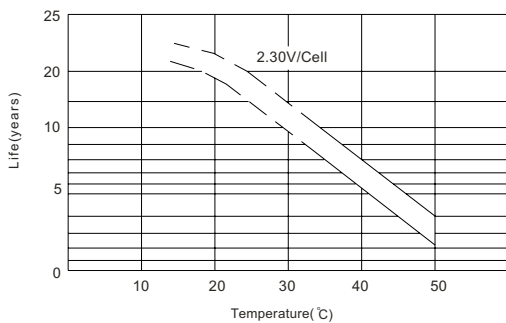
**Life characteristics of standby use**



**Self-discharge characteristic**



**Temperature effects on float life**



**Charge characteristic Curve for standby use**

