



**● 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**

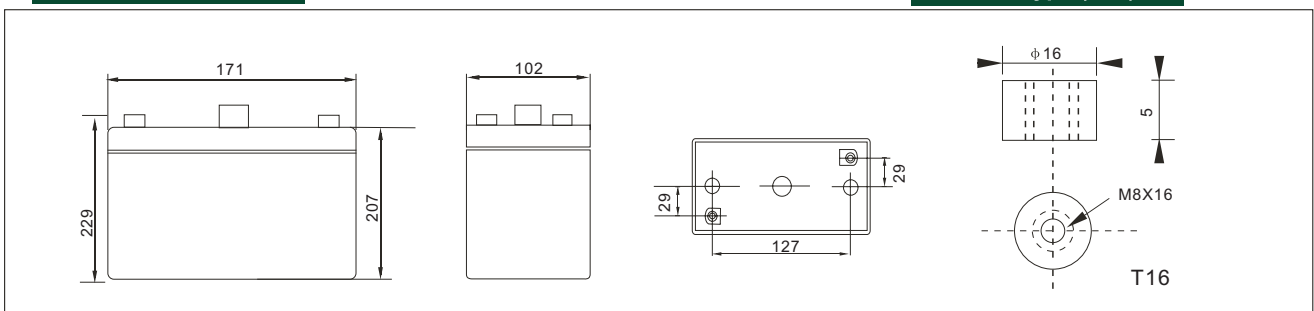
- \*Positive .....Lead dioxide
- \*Electrolyte .....Sulfuric acid
- \*Separator .....Fiber glass
- \*Container .....ABS(UL94-HB), Flammability Resistance of UL94-V2 can be available upon request
- \*Negative .....Lead
- \*Safety Valve .....EPDR
- \*Terminal .....Copper

**● Specification**

Battery Model	Nominal Voltage		2V	
	Rated capacity(10 Hour rate)		150Ah	
Dimensions	Length	Width	Height	Total Height
	171mm (6.73 inches)	102mm(4.02 inches)	207mm(8.15 inches)	229mm (9.02 inches)
Approx Weight	8.00kg(17.64lbs) ±3%			
Capacity 25°C (77°F)	10 Hour rate (15A,1.8V)	5 Hour rate (24A,1.75V)	3 Hour rate (37.5A,1.7V)	1 Hour rate (90A)
	150Ah	120Ah	112.5Ah	90Ah
Max.discharge current	750A(5Sec.)			
Internal Resistance	Full charged at 25 °C (77°F): Approx 0.4mΩ			
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 60A)		2.25-2.30V	

**● Outer dimensions (mm)**

**● Terminal Type (mm)**

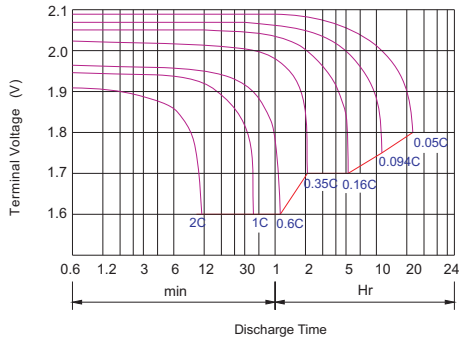


**Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C (77°F)**

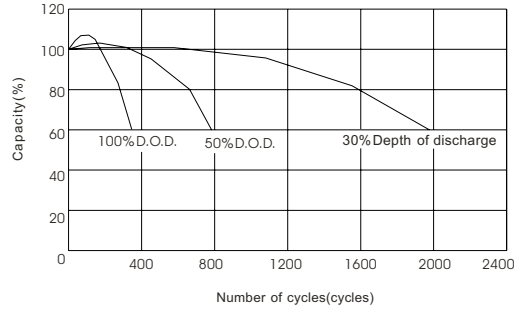
Time		5min	10min	15min	30min	1hr	2hr	3hr	4hr	5hr	8hr	10hr	20hr
1.60V	A	480	317	255	171	90.0	52.5	38.6	30.0	24.8	17.6	15.8	8.5
	W	826	563	456	306	162.0	96.1	71.5	56.3	46.9	33.5	30.3	16.5
1.70V	A	465	286	240	164	84.6	50.1	37.5	29.3	24.3	17.1	15.5	8.3
	W	828	532	448	306	159.5	96.2	72.4	56.7	47.2	33.3	30.3	16.1
1.75V	A	450	255	210	153	81.9	48.9	36.6	28.8	24.0	17.0	15.2	8.3
	W	819	484	400	293	158.1	94.5	71.1	56.2	46.9	33.2	29.9	16.3
1.80V	A	434	241	195	141	79.2	47.7	35.7	28.4	23.4	16.5	15.0	8.1
	W	811	463	375	272	153.6	93.1	70.2	55.8	46.1	32.6	29.7	16.1
1.85V	A	419	226	180	126	76.5	46.5	34.5	27.6	22.8	16.1	14.3	7.7
	W	792	435	350	246	149.9	91.6	68.3	54.8	45.3	32.0	28.7	15.5



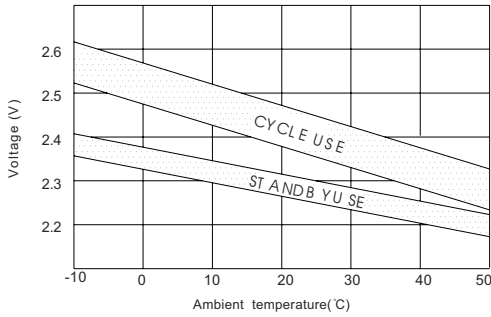
**Discharge characteristic Curve**



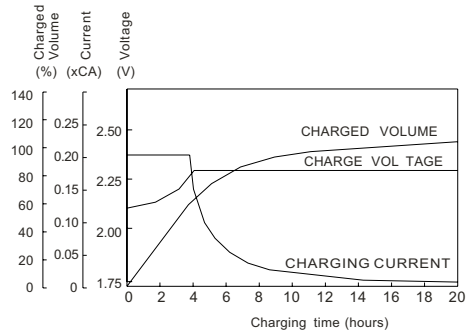
**Cycle service life in relation to depth of discharge**



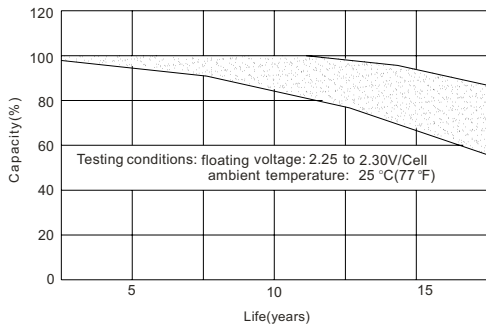
**Relationship between charging voltage and temperature**



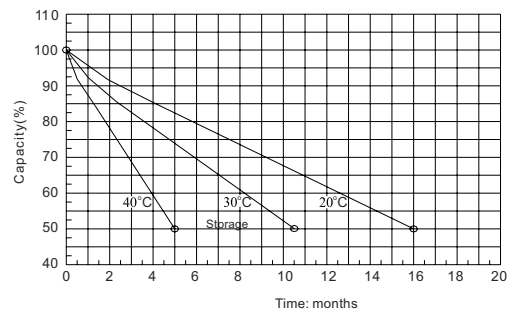
**Constant voltage charging characteristic (0.25CA, at 25°C)**



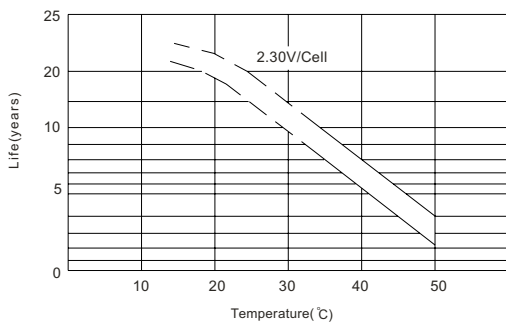
**Life characteristics of standby use**



**Self-discharge characteristic**



**Temperature effects on float life**



**Charge characteristic Curve for standby use**

