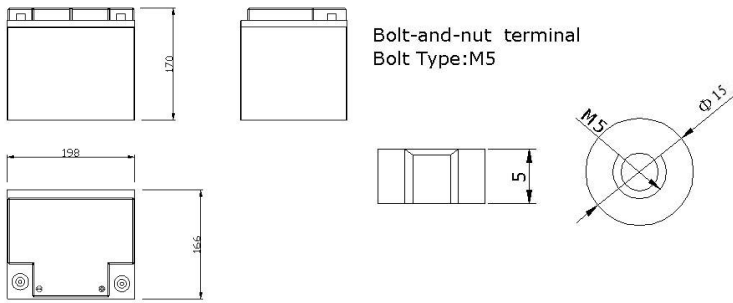


### PHYSICAL SPECIFICATION

Nominal Voltage		12V
Nominal Capacity (10HR)		40Ah
Dimension	Length	198±2mm (7.80 inches)
	Width	166±2mm (6.54 inches)
	Container Height	172±2mm (6.77 inches)
	Total Height	172±2mm (6.77 inches)
Weight		Approx. 14.2Kg ±3% (13.3lbs)
Standard Terminal		B3(Bolt-and-nut terminal) Bolt Type: M5



Shimastu NPL series AGM VRLA Batteries have been developed as long service life purpose batteries, the battery floating service life can target 15 years at 25°C, they're valve-regulated lead acid batteries with high quality Absorbed Glass Mat(AGM) separators & high purity raw materials, featured by perfectly good performance and reliable long service life.

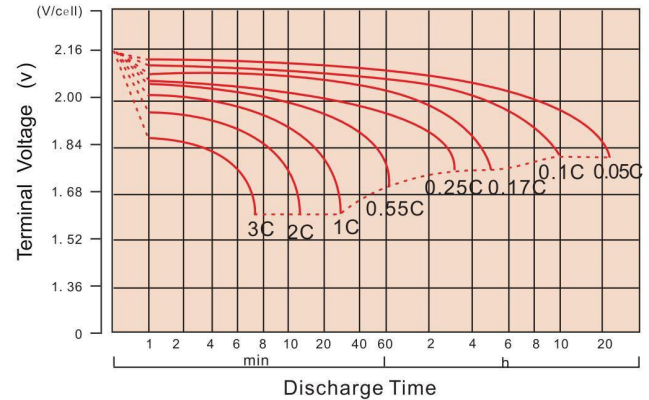
Features:

1. Non-spillable
2. Sealed and Maintenance-free Operation
3. High Quality and High Reliability
4. Less gassing, low Self-discharge
5. Low internal resistance
6. Long Service Life

### ELECTRICAL SPECIFICATION

Characteristics		
Capacity	10 hour rate (4A)	40Ah
	5 hour rate (6.8A)	34Ah
	3 hour rate (10A)	30Ah
	1 hour rate (22A)	22Ah
Capacity affected by temperature	40°C (104 °F)	102%
	25°C (77 °F)	100%
	0°C (32 °F)	85%
Max Discharge Current	400A(5 Sec)	
Short Circuit Current	920A	
Internal Resistance	Full charged battery (25°C, 77 °F) 9.8mΩ	
Constant Voltage Charge	Cycle	Initial Charging Current less than 10A Voltage 14.1~14.4V at 25°C (77 °F) Temperature Coefficient -30mV/°C
	Standby	No limit on Initial Charging Current Voltage 13.5~13.8V at 25°C (77 °F) Temperature Coefficient -20mV/°C

### Discharge curves @ 25°C (77 °F)



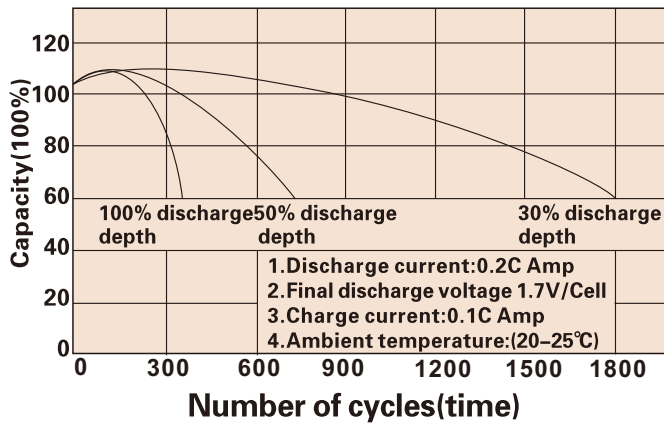
### CONSTANT CURRENT DISCHARGE RATING A@25°C

F.V/TIME	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	141.7	100.2	72.39	43.24	24.80	11.32	7.58	4.24	2.20
1.65V	131.8	94.64	69.22	41.58	23.86	10.97	7.37	4.18	2.18
1.70V	118.9	87.14	64.82	39.79	22.96	10.67	7.18	4.10	2.15
1.75V	106.5	79.75	60.34	37.89	22.00	10.34	6.99	4.05	2.12
1.80V	93.54	72.20	55.70	36.23	21.21	10.00	6.80	4.00	2.10

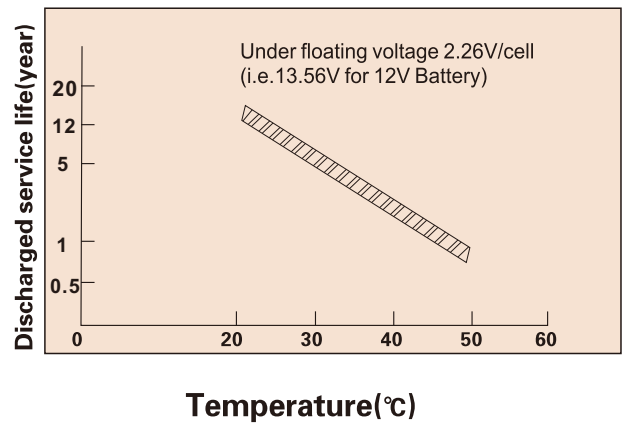
### CONSTANT POWER DISCHARGE RATING WATT PER CELL@25°C

F.V/TIME	5MIN	10MIN	15MIN	30MIN	1HR	3HR	5HR	10HR	20HR
1.60V	234.9	170.2	126.5	78.56	46.63	21.59	14.63	8.35	4.30
1.65V	221.0	164.0	122.8	76.33	45.11	21.04	14.25	8.20	4.27
1.70V	203.9	153.8	116.7	73.77	43.66	20.53	13.92	8.07	4.23
1.75V	186.8	143.2	110.2	70.98	42.09	20.03	13.62	8.00	4.18
1.80V	167.5	131.9	103.2	68.55	40.79	19.42	13.29	7.87	4.16

### Cycle service life



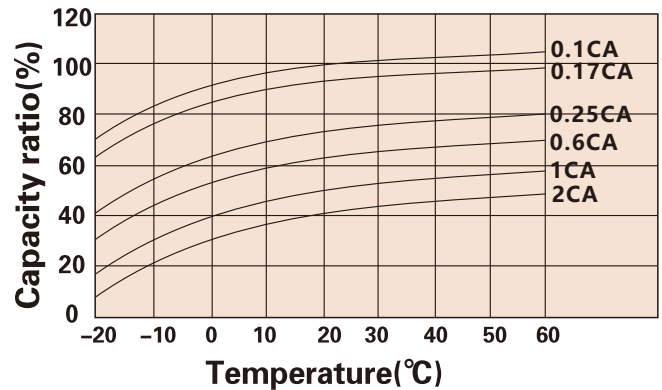
### Trickle(or float) service life



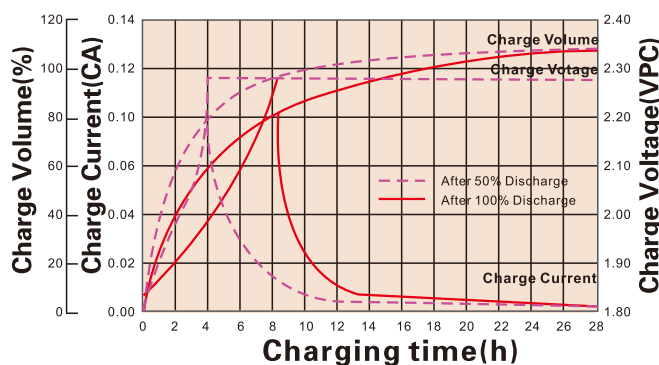
### Storage time(months)



### Temperature and discharge capacity



### Charging characteristic



Storage Temperature	Supplementary Charge Interval	Charge Method
≤20°C	Every 12 months	Less or 24 hours with a constant voltage of 2.3V/cell
20-30°C	Every 8 months	12-18 hours with a constant voltage of 2.45V/cell
≥30°C	Storage to be avoided	8-12 hours with a constant current of 0.05CA

## APPLICATIONS

#### Standby Usage:

- UPS
- Emergency Lights
- Alarm Systems
- Telecommunication Systems

#### Cyclic Usage:

- Medical Equipments
- Electric Instruments
- Toys
- Camcorder and Solar Systems

#### Motive Usage:

- Golf Cars
- Wheelchairs
- Lawnmowers
- Motorcycle

(Note) All above information shall be changed without prior notice, Shimastu reserves the right to explain and update the latest information.