YB200(GEL)-12

RELIABLE ENERGY

Using the latest advanced Oxygen Recombination Technology Yusuba are presenting a reliable battery with the optimum design of Sealed Lead Acid Battery. The YB Series adopts international leading technologies to ensure the batteries with long service life high reliability , safety and environmental friendly.

GENERAL FEATURES

- Very good recovery from deep discharge.
- Electrolyte suspension system
- Gas Recombination
- Multipurpose: Float or Cyclic use
- Usable in any orientation
- Computer designed lead, calcium tin alloy grid for high power density.
- GEL Silicon technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.

GENERAL FEATURES

- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency lighting
- Emergency backup power supply
- Generators starting
- Railway signal
- DC power supply
- Communication power supply
- Alarm and security system

DIMENSIONS

LENGTH	523mm (20.59inch)
WIDTH	240mm (9.45inch)
Container Height	219mm (8.62inch)
Total Height : (with terminals)	224mm (8.82inch)
Weight (Aprox.)	Approx 62.80Kg (138.45 lbs)

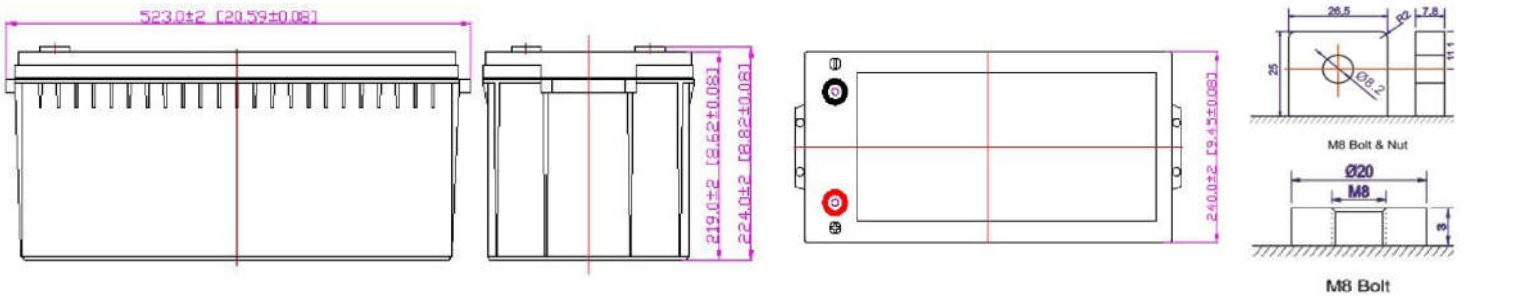
STANDARDS

- IEC 60896-21/22:2004
- JIS C8702-1/2:2009
- Eurobat guide
- installation compliant with EN50272-2

BATTERY CONSTRUCTION

Component	Positive Plate	Negative Plate	Safety Valve	Container	Cover
Raw material	**Lead Dioxide**	**Lead**	**Rubber**	**ABS**	**ABS**

Terminal	Separator	Electrolyte	Terminal Type	Layout	
Copper	**Fiberglass**	**Sulfuric Acid**	**Threaded M8/ Flag M8**	**Positive Right**	



ISO9001 ISO14001 ISO18001 SA8000

Electrical Specifications		
	Nominal Voltage	12V
	Capacity 10 (HR)	200 AH
Rated Capacity	212.20 AH/10.61A	(20hr, 1.80V/cell, 25°C / 77°F)
	200 AH/20A	(10hr, 1.80V/cell, 25°C / 77°F)
	174.50 AH/34.90A	(5hr, 1.75V/cell, 25°C / 77°F)
	156.90 AH/52.30A	(3hr, 1.75V/cell, 25°C / 77°F)
	118.00 AH/118.00A	(1hr, 1.65V/cell, 25°C / 77°F)
Internal Resistance	Approx 2.8mΩ	Fully charged battery at 25°C (77°F)
Discharge Characteristics	Max Discharge Current	2000A (5s)
	Operating Temp. Range	Discharge: -15 ~ 50°C (5 ~ 122°F)
		Charge: 0 ~ 40°C (5 ~ 104°F)
		Storage: -15 ~ 40°C (5 ~ 104°F)
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
	Cycle Use	Initial Charging Current less than 60A. Voltage 14.4V ~ 15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 13.5V ~ 13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C
	Capacity affected by Temperature	40°C (104°F) 103%
		25°C (77°F) 100%
		0°C (32°F) 86%
Design Floating Life at 20°C	12 Years	
Self Discharge	Batteries may be stored for up to 6 months at higher temperatures the time interval will be shorter.	

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

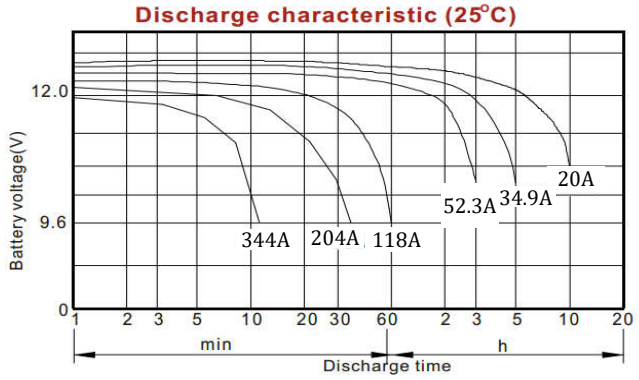
F.V/Time	5 min	10 min	15 min	30 min	1h	2h	3h	5h	10h	20h
1.85V/cell	-	279.00	241.00	155.30	94.60	60.50	46.50	31.40	19.65	10.41
1.80V/cell	-	344.00	283.00	179.90	105.90	65.70	50.70	33.80	20.00	10.61
1.75V/cell	-	379.00	303.00	189.20	111.00	68.20	52.30	34.90	20.40	10.81
1.70V/cell	-	413.00	323.00	196.60	114.00	71.00	53.90	35.70	20.76	11.00
1.65V/cell	-	446.00	344.00	204.90	118.00	73.00	56.10	36.50	20.98	11.12

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

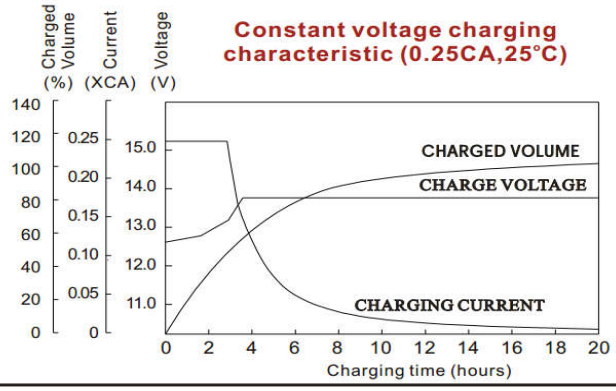
F.V/Time	5 min	10 min	15 min	30 min	1h	2h	3h	5h	10h	20h
1.85V/cell	-	515.00	448.00	295.00	182.50	117.00	90.20	61.30	38.31	20.31
1.80V/cell	-	628.00	520.00	337.00	203.00	126.70	98.30	65.50	39.00	20.70
1.75V/cell	-	679.00	549.00	352.00	212.00	130.90	100.80	67.20	39.78	21.08
1.70V/cell	-	723.00	578.00	363.00	217.50	136.00	103.30	68.60	40.48	21.45
1.65V/cell	-	773.00	610.00	376.00	223.00	139.00	107.40	70.20	40.91	21.68

ISO9001 ISO14001 ISO18001 SA8000 Pb Pb

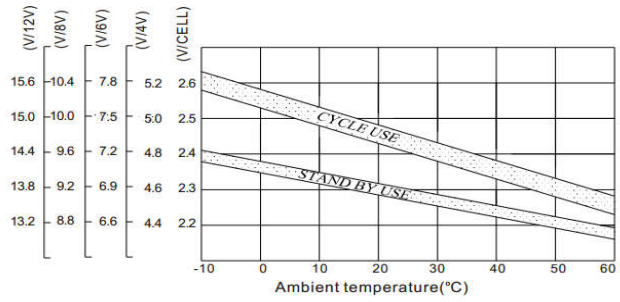
Discharge characteristic (25°C)



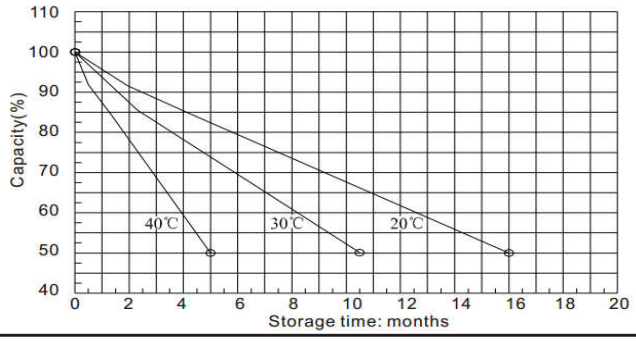
Constant voltage charging characteristic (0.25CA,25°C)



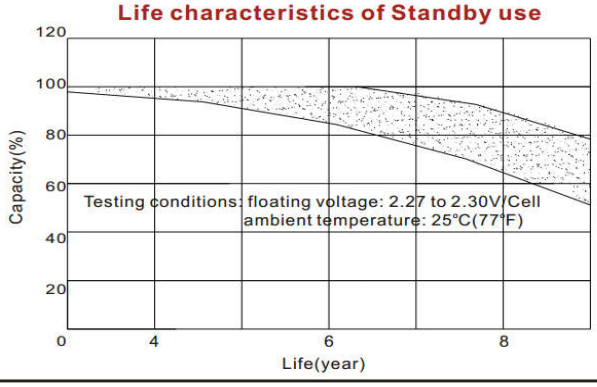
Relationship between charging voltage and temperature



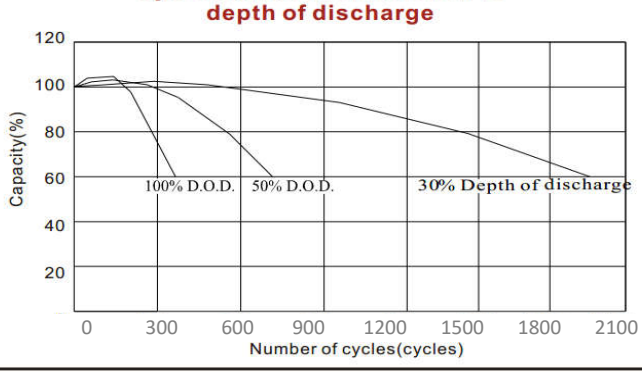
Self-discharge characteristic



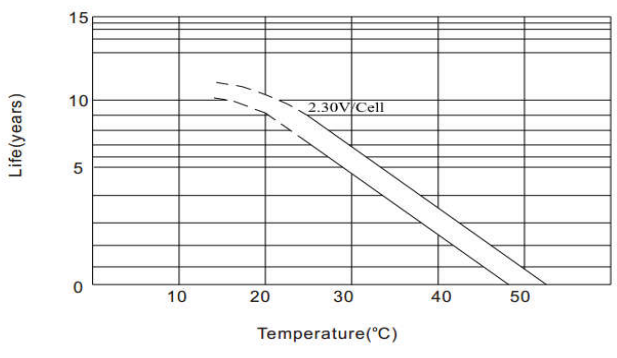
Life characteristics of Standby use



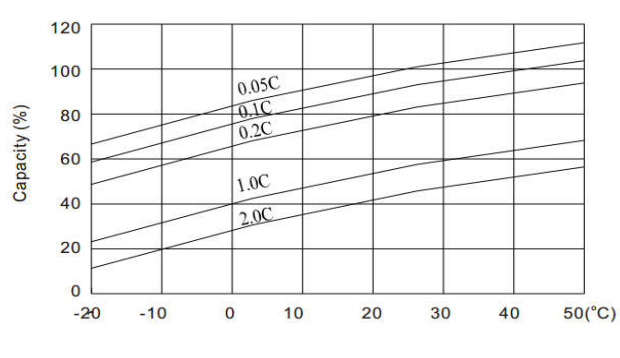
Cycle service life in relation to depth of discharge



Temperature effects on float life



Temperature effects on capacity



ISO9001 ISO14001 ISO18001 SA8000