

EVU1

12V 33Ah(10hr)



Vision's AGM wheelchair batteries provide superior performance and reliability. Adapting state of the art AGM dry cell technology, and special deep cycle chemistry on the battery plates, Vision's AGM wheelchair batteries give your wheelchair a longer overall run time compared with other normal AGM batteries.

Battery Construction

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

Features and Benefits:

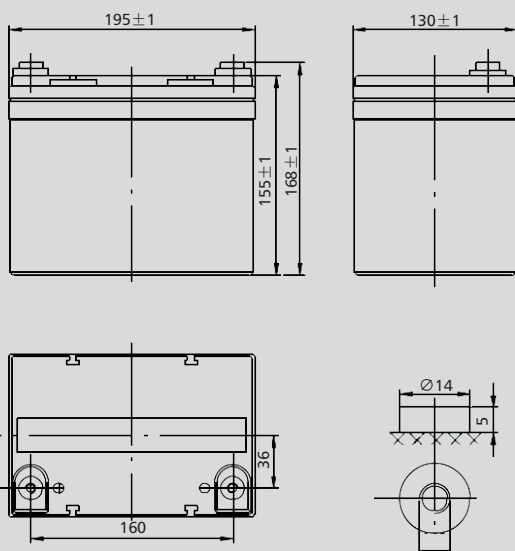
- Excellent cycle life- Can be used over 650 times with 50% of the power drained each time.
- Specially designed for wheelchairs- High density lead paste, special chemistry formula, and stronger electrolyte allow a much longer life when batteries are discharged on a daily basis.
- Improved battery consistency- This allows the maximum capacity output of the battery bank, with minimum power lose.
- Maintenance-free- One never needs to add water
- Non-Spillable Battery- Can easily be shipped as a non-hazardous material.

Dimensions and Weight

Length(mm / inch)	195 / 7.68
Width(mm / inch)	130 / 5.12
Height(mm / inch)	155 / 6.10
Total Height(mm / inch)	168 / 6.61
Approx. Weight(Kg / lbs)	10.4/ 22.9

Performance Characteristics

Nominal Voltage	12V
Number of cell	6
Design Life	10 years
Nominal Capacity @ 77 °F (25°C)	
0 hour rate (3.30A, 10.8V)	33.0Ah
5 hour rate (5.58A, 10.5V)	27.9Ah
1 hour rate (22.4A, 9.6V)	22.4Ah
Internal Resistance	
Fully Charged battery @ 77 °F (25°C)	10.0mOhms
Self-Discharge	
3% of capacity declined per month at 20°C(average)	
Operating Temperature Range	
Discharge	-20~60 °C
Charge	-10~60 °C
Storage	-20~60 °C
Max. Discharge Current @ 77 °F (25°C)	330A(5s)
Short Circuit Current	850A
Charge Methods: Constant Voltage Charge 77 °F (25°C)	
Cycle use	
Charging Voltage	2.40-2.45VPC
Maximum charging current	9.9A
Temperature compensation	-30mV/ °C
Standby use	
Charging Voltage	2.20-2.27VPC
Temperature compensation	-20mV/ °C



Discharge Constant Current (Amperes @ 77 °F25 °C)

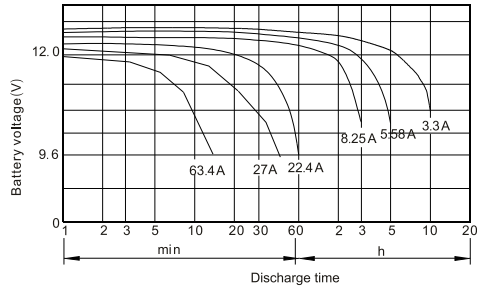
End Point Volts/Cell	5min	10min	15min	30min	45min	1h	3h	5h	10h
1.60V	120	80.2	63.5	38.0	27.0	22.4	9.08	6.31	3.36
1.65V	110	77.3	59.9	36.3	26.0	21.9	8.97	6.25	3.35
1.70V	104	73.9	55.5	34.1	25.2	21.2	8.45	6.15	3.32
1.75V	91.0	69.0	52.8	32.8	24.5	20.3	8.25	5.58	3.31
1.80V	82.1	61.7	49.5	31.9	23.8	19.8	8.18	5.50	3.30

Discharge Constant Power (Watts @ 77 °F25 °C)

End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	217	152	119	73.4	53.9	41	23.4	17.6	12.3
1.65V	209	146	112	70.3	53.4	40.6	23.1	17.3	11.9
1.70V	186	136	108	65.5	51.3	39.9	22.7	16.8	11.5
1.75V	173	134	104	63.7	49.2	39.1	21.8	16.1	11.3
1.80V	157	117	97.9	61.5	38.3	38.3	21.0	15.2	11.0

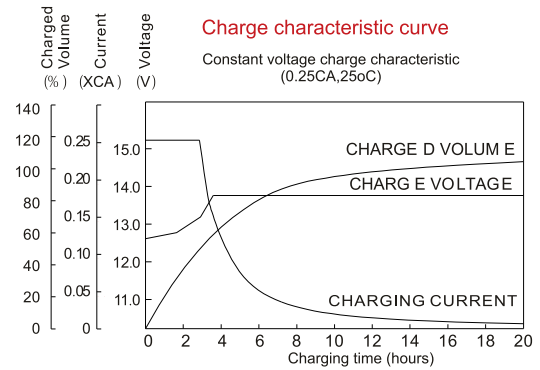
(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.

Discharge characteristic (25 °C)

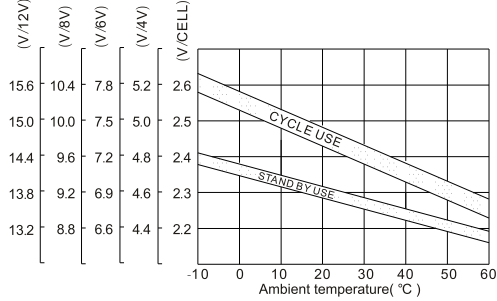


Charge characteristic curve

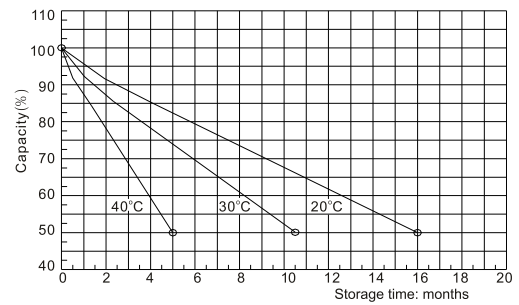
Constant voltage charge characteristic
(0.25CA, 25°C)



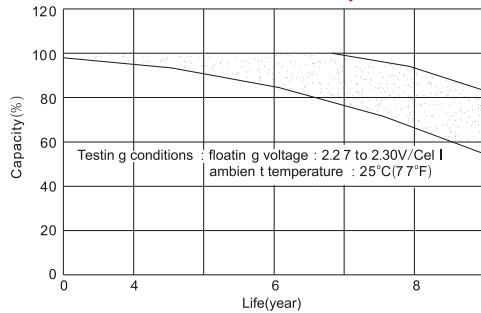
Relationship between
charging voltage and temperature



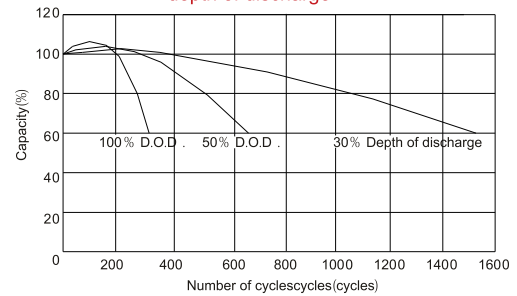
Self-discharge characteristic



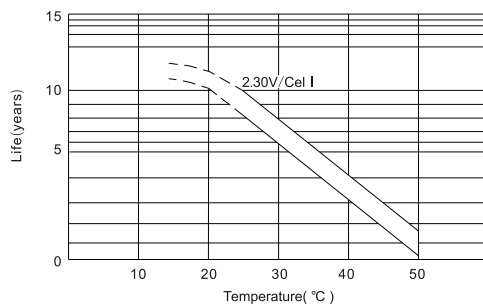
Life characteristics of standby use



Cycle service life in relation to
depth of discharge



Temperature effects on float life



Temperature effects on capacity

