

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.

EV22

12V 55Ah(20hr)



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 loss.
- Maintenance-free- One never needs to add water
- Non-Spillable Battery- Can easily be shipped as a non-hazardous material.

Battery Construction

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

Dimensions and Weight

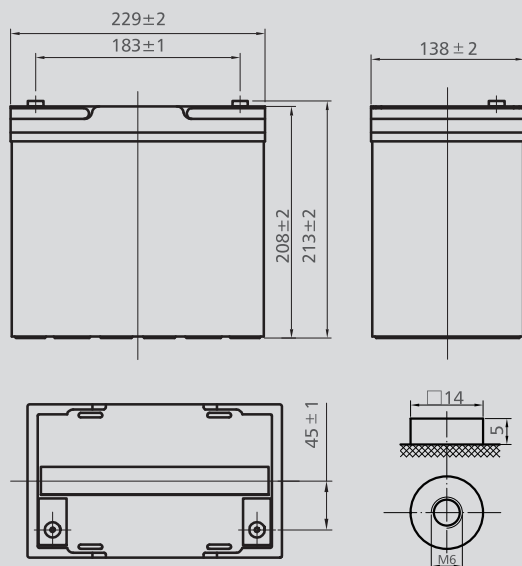
Length (mm/ inch)	229 / 9.01
Width (mm/ inch)	138 / 5.43
Height (mm/ inch)	208 / 8.18
Total Height (mm/ inch)	213 / 8.38
Approx. Weight (Kg / lbs)	18.0 / 39.7

* Weight deviation: $\pm 3\%$

Performance Characteristics

Nominal Voltage	12V
Number of cell	6
Design Life	10 years
Nominal Capacity @ 77°F(25°C)	
10 hour rate (5.13A, 10.8V)	51.3Ah
5 hour rate (9.13A, 10.5V)	45.65Ah
1 hour rate (34.6A, 9.6V)	34. 6Ah

Internal Resistance	
Fully Charged battery @ 77°F(25°C)	$\leq 7.2\text{mOhms}$
Self-Discharge	
3% of capacity declined per month at 20 C(average) Operating Temperature Range	
Operating Temperature Range	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max. Discharge Current @ 77°F(25°C)	550A(5s)
Short Circuit Current	1400A
Charge Methods: Constant Voltage Charge 77°F(25°C)	
Cycle use	2.40-2 45VPC
Maximum charging current	16.5A
Temperature compensation	-30mV/°C
Standby use	2.20-230VPC
Temperature compensation	-20mV/°C



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

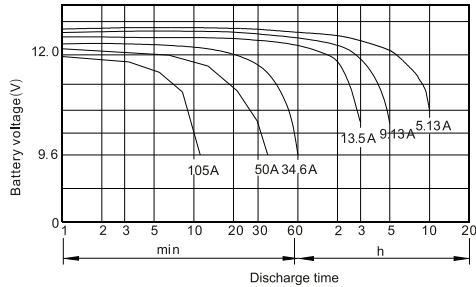
End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	172	127	97.4	58.2	34.6	34.6	9.72	5.33	2.76
1.65V	162	122	93.4	56.4	33.7	33.7	9.47	5.28	2.76
1.70V	152	113	88.6	54.6	32.8	32.8	9.30	5.23	2.76
1.75V	142	104	83.8	528	32.0	32.0	9.13	5.18	2.75
1.80V	131	97.8	77.5	50.9	31.2	31.2	8.96	5.13	2.75

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

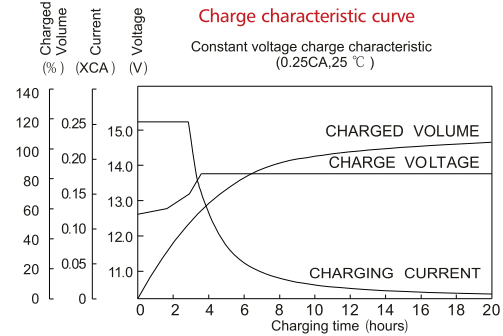
End Point Volts/Cell	5min	10min	15min	30min	45min	1h	2h	3h	5h
1.60V	313	233	181	109	83.9	67.9	40.6	28.8	18.6
1.65V	295	220	173	107	82.5	66.3	39.7	28.2	18.4
1.70V	276	213	165	105	80.8	64.8	38.9	27.6	18.0
1.75V	256	195	158	103	79.0	63.3	37.9	27.0	17.8
1.80V	243	181	150	102	76.9	62.6	36.9	26.4	17.7

(Note)The above characteristics data are average values obtained within three charge/discharge cycles not the minimum values.All data shall be changed without notice,Vision reserves the right to explain and update the information contained hereinto.

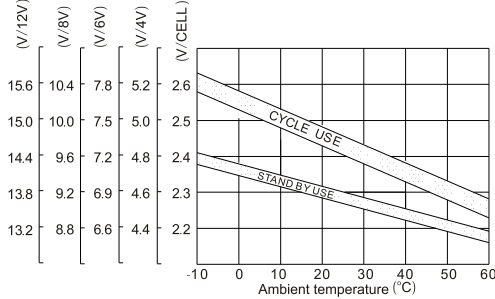
Discharge characteristic (25 °C)



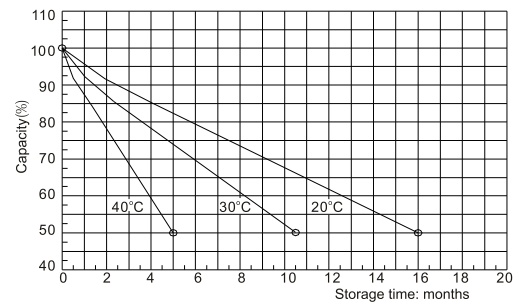
Charge characteristic curve



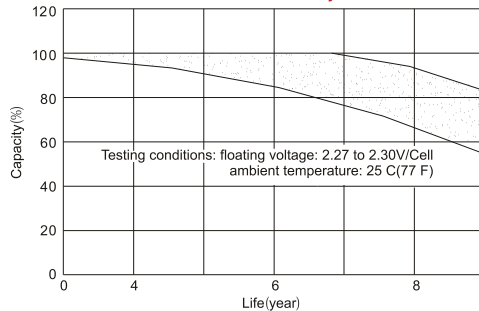
Relationship between charging voltage and temperature



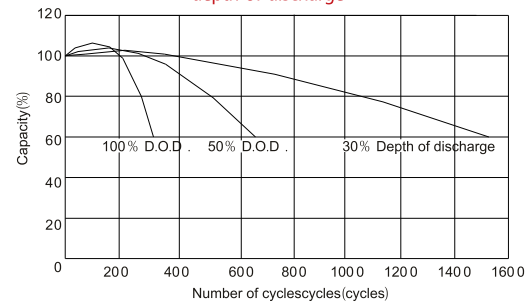
Self-discharge characteristic



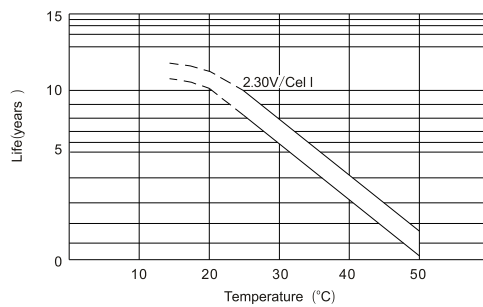
Life characteristics of standby use



Cycle service life in relation to depth of discharge



Temperature effects on float life



Temperature effects on capacity

