



12V 55Ah

27989760

Specification

Nominal Voltage		12 volts	
Nominal Capacity		77° F (25° C)	
20-hr. (2.75A)		55 Ah	
10-hr. (5.12A)		51.15 Ah	
5-hr. (9.35A)		46.75 Ah	
1-hr. (33.0A)		33.00 Ah	
Approximate Weight		40.10 lbs (17.5 kgs)	
Internal Resistance (approx.)		10mΩ	
Shelf Life (% of normal capacity at 77° F (25° C))			
3 Months	6 Months	12 Months	
91%	82%	64%	
Temperature Dependency of Capacity		(20 hour rate)	
104° F	77° F	32° F	5° F
102%	100%	85%	65%
AGM Operational Temperature			
Charge	32°F to 104°F (0°C to 40°C)		
Discharge	5°F to 113°F (-15°C to 45°C)		
AGM Storage Temperature		5°F to 104°F (-15°C to 40°C)	
Recharge Cycles @ 50%		More than 600 cycles	
Marine Cranking Amp Rating		641 Amps	
Cold Cranking Amp Rating		493 Amps	
Reserve Capacity Rating		90 Min.	



Charge Method (Constant Voltage)

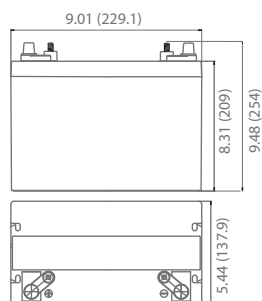
Cycle Use (Repeating Use)

Initial Current	16.5 A or smaller
Control Voltage	14.6 - 14.8 V

Float Use

Control Voltage	13.6 - 13.8 V
-----------------	---------------

Physical Dimensions: in (mm)

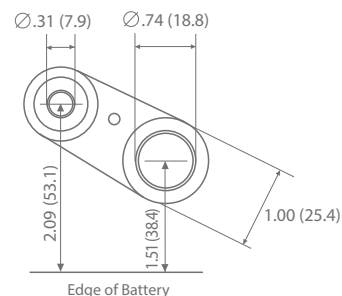
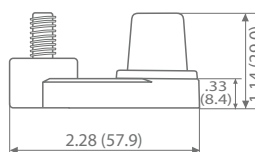


L: 9.01in (229.1 mm)
W: 5.44in (137.9 mm)
H: 8.31in (209 mm)
TH: 9.48in (254 mm)

Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

Terminals

Marine Combo Post



Constant Current Discharge Characteristics Unit:A (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	182.8	133.4	93.9	56.8	29.6	17.3	12.7	9.9	8.2	5.7	5.2	2.8
10.20V	161.0	121.5	84.0	53.8	27.9	16.5	12.4	9.6	8.0	5.6	5.0	2.7
10.50V	155.1	115.6	79.0	52.4	27.2	16.1	12.1	9.5	7.9	5.6	4.9	2.7
10.80V	149.2	109.7	74.1	50.9	26.2	15.7	11.8	9.3	7.7	5.4	4.9	2.7
11.10V	143.3	103.7	69.2	49.4	25.2	15.3	11.4	9.0	7.5	5.3	4.7	2.5

Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	1940.9	1465.7	996.9	603.2	343.3	200.1	147.2	114.6	94.4	66.7	60.3	32.5
10.20V	1787.8	1349.1	932.2	597.7	322.6	191.2	143.3	111.6	94.1	65.2	58.8	31.6
10.50V	1759.1	1311.1	896.1	593.8	312.2	186.7	139.8	109.7	91.4	64.7	57.8	31.2
10.80V	1736.4	1276.5	862.5	592.3	303.8	182.8	136.8	107.7	89.9	63.2	57.3	31.1
11.10V	1704.8	1234.5	823.0	587.9	299.9	182.3	135.4	107.2	89.4	62.7	55.8	30.1

Cabela's

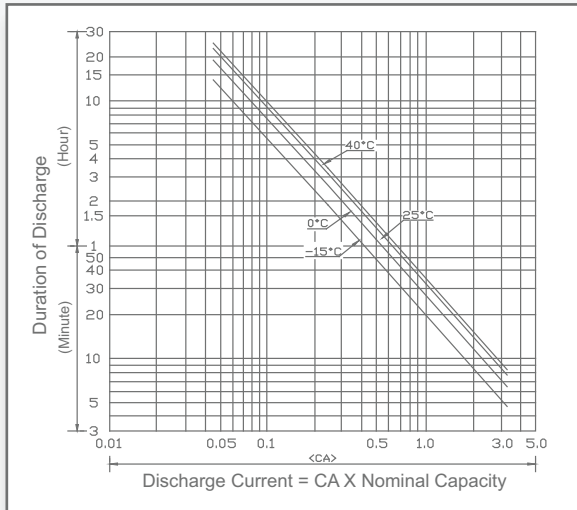




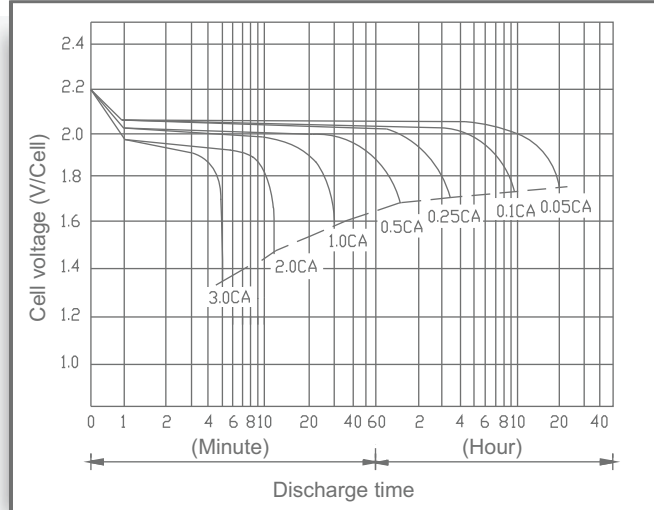
12V 55Ah

27989760

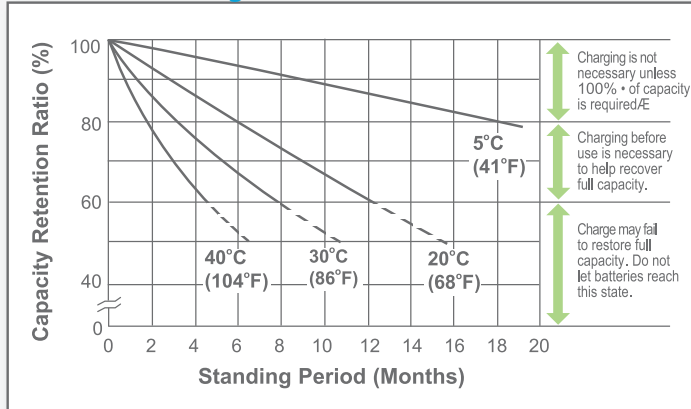
Discharge Time vs. Discharge Current



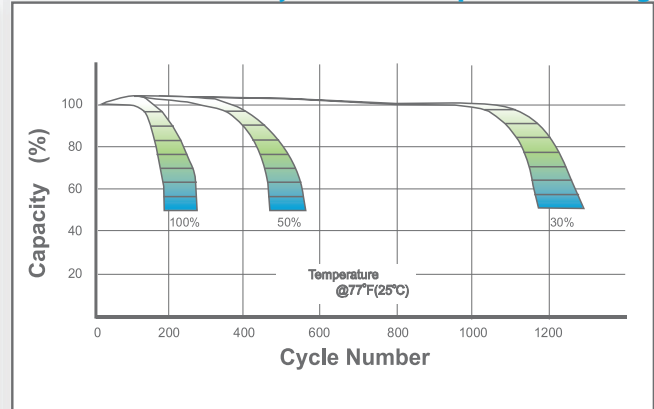
Discharge Characteristics



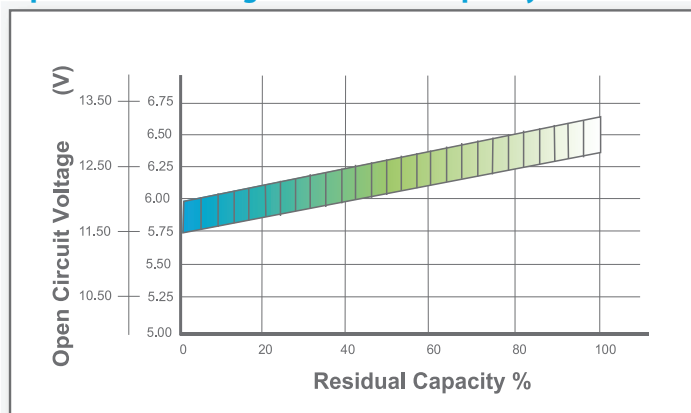
Shelf Life & Storage



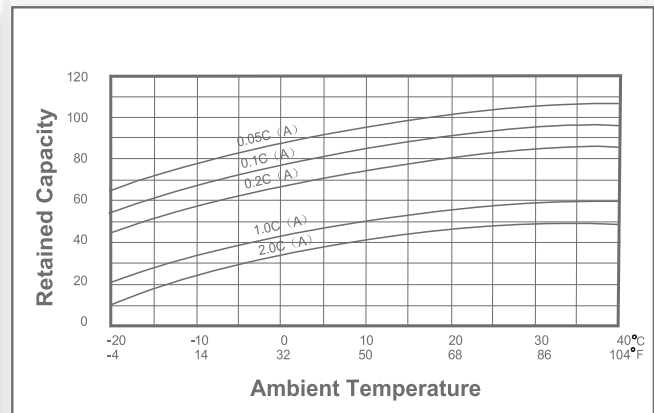
Cycle Life vs Depth of Discharge



Open Circuit Voltage vs Residual Capacity



Effect of Temperature on Capacity



Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C(77°F)	2.45	2.40~2.50	0.30C
Standby	25°C(77°F)	2.325	2.30~2.35	

Final Discharge Voltage V/Cell	1.75	1.70	1.60	1.30
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

Cabela's





12V 75Ah

27989761

Specification

Nominal Voltage		12 volts	
Nominal Capacity		77° F (25° C)	
20-hr. (3.75A)		75 Ah	
10-hr. (6.98A)		69.75 Ah	
5-hr. (12.75A)		63.75 Ah	
1-hr. (45.00A)		45.00 Ah	
Approximate Weight		55.3 lbs (25 kgs)	
Internal Resistance (approx.)		8 mΩ	
Shelf Life (% of normal capacity at 77° F (25° C))			
3 Months	6 Months	12 Months	
91%	82%	64%	
Temperature Dependency of Capacity		(20 hour rate)	
104° F	77° F	32° F	5° F
102%	100%	85%	65%
AGM Operational Temperature			
Charge		32°F to 104°F (0°C to 40°C)	
Discharge		5°F to 113°F (-15°C to 45°C)	
AGM Storage Temperature		5°F to 104°F (-15°C to 40°C)	
Recharge Cycles @ 50%		More than 600 cycles	
Marine Cranking Amp Rating		709 Amps	
Cold Cranking Amp Rating		545 Amps	
Reserve Capacity Rating		120 Min.	



Charge Method (Constant Voltage)

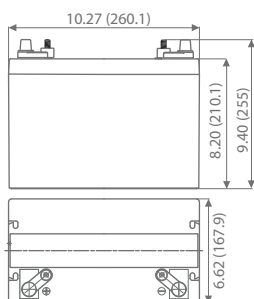
Cycle Use (Repeating Use)

Initial Current	22.5 A or smaller
Control Voltage	14.6 - 14.8 V

Float Use

Control Voltage	13.6 - 13.8 V
-----------------	---------------

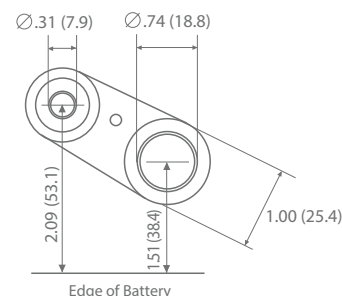
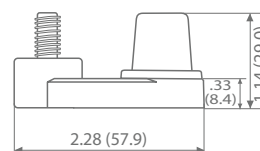
Physical Dimensions: in (mm)



L: 10.27 in (260.1 mm)
W: 6.61 in (167.9 mm)
H: 8.20 in (210.1 mm)
TH: 9.40 in (255 mm)
Tolerances are +/- 0.04 in. (+/- 1mm)
and +/- 0.08 in. (+/- 2mm) for height
dimensions. All data subject to
change without notice.

Terminals

Marine Combo Post



Constant Current Discharge Characteristics Unit:A (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	259.0	189.0	133.0	81.0	42.0	25.0	18.0	14.0	11.6	8.1	7.4	4.0
10.20V	228.0	172.0	119.0	76.3	39.5	23.4	17.5	13.7	11.3	8.0	7.2	3.9
10.50V	220.0	164.0	112.0	74.0	38.0	22.8	17.1	13.4	11.2	7.9	7.0	3.8
10.80V	211.0	155.0	105.0	72.0	37.0	22.3	16.7	13.2	10.9	7.7	7.0	3.8
11.10V	203.0	147.0	98.0	70.0	36.0	21.7	16.1	12.8	10.6	7.5	6.7	3.6

Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	2750.0	2007.0	1412.0	855.0	486.0	284.0	208.0	162.0	134.0	94.0	85.0	46.0
10.20V	2566.0	1911.0	1321.0	847.0	457.0	271.0	203.0	158.0	131.0	92.0	83.0	44.8
10.50V	2493.0	1857.0	1270.0	841.0	443.0	264.0	198.0	156.0	130.0	92.0	82.0	44.3
10.80V	2461.0	1809.0	1222.0	839.0	430.0	259.0	194.0	152.0	127.0	90.0	81.0	44.0
11.10V	2416.0	1749.0	1166.0	833.0	425.0	258.0	192.0	152.0	127.0	89.0	79.0	42.7

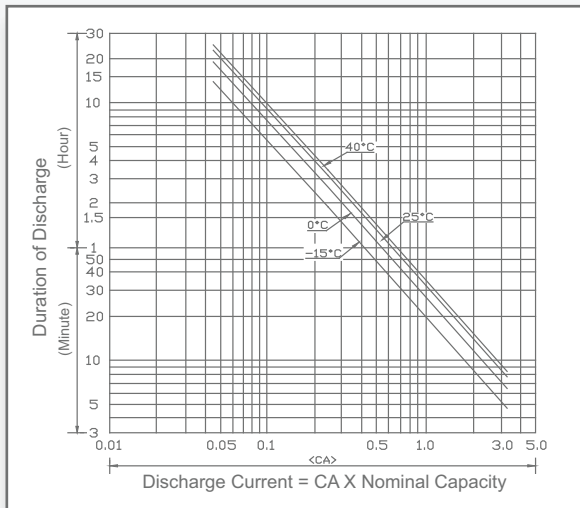
Cabela's



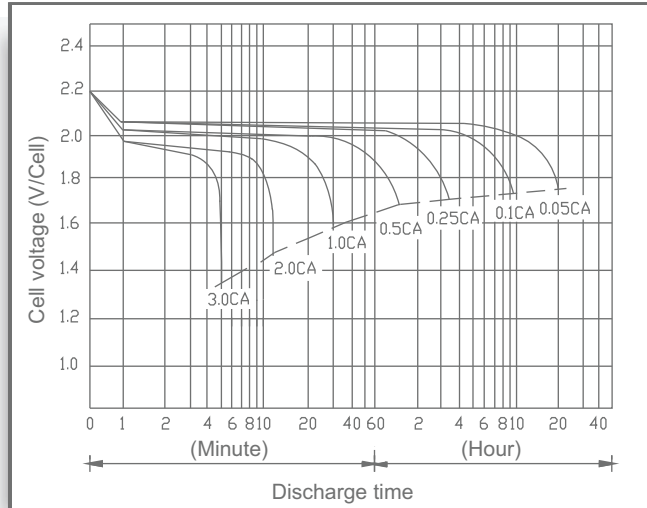


12V 75Ah
27989761

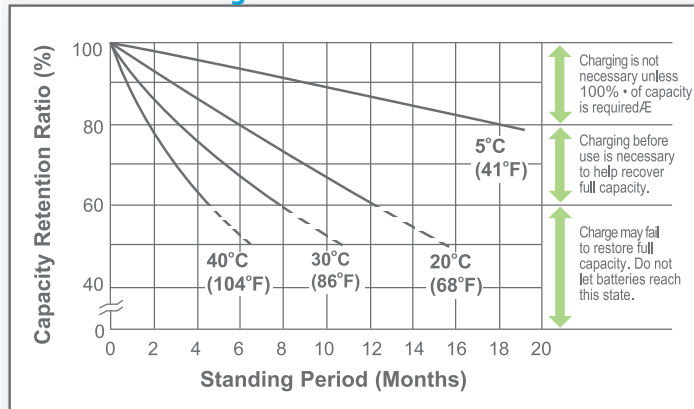
Discharge Time vs. Discharge Current



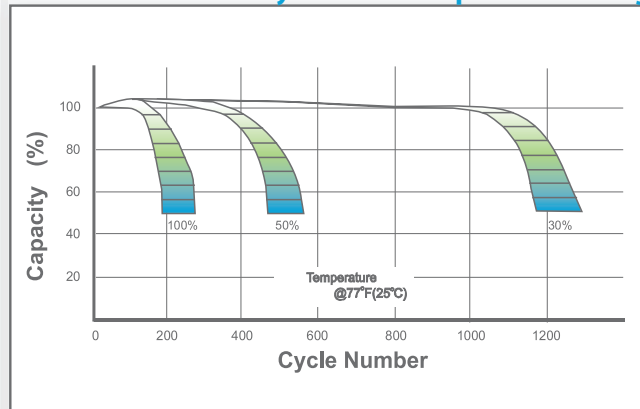
Discharge Characteristics



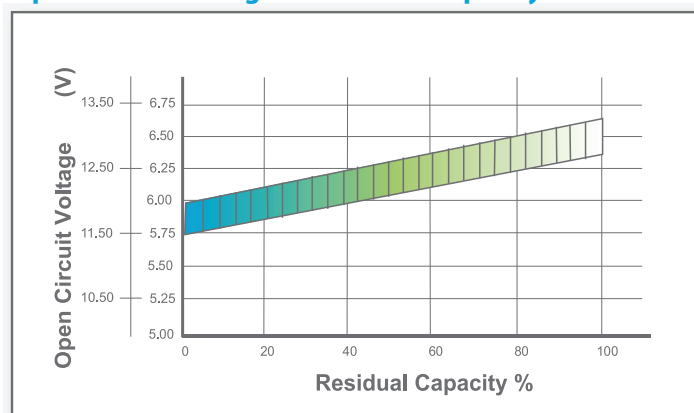
Shelf Life & Storage



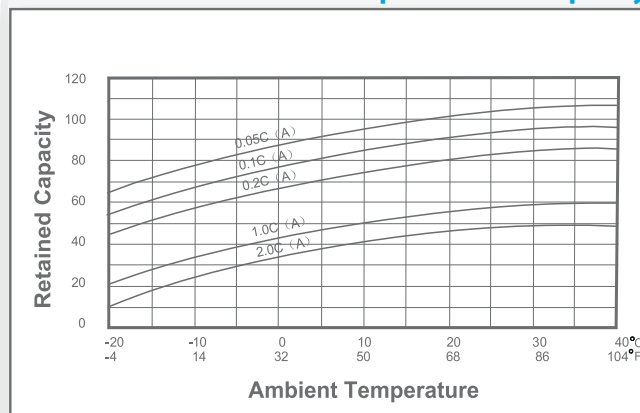
Cycle Life vs Depth of Discharge



Open Circuit Voltage vs Residual Capacity



Effect of Temperature on Capacity



Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C(77°F)	2.45	2.40~2.50	0.30C
Standby	25°C(77°F)	2.325	2.30~2.35	

Final Discharge Voltage V/Cell	1.75	1.70	1.60	1.30
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

Cabela's





12V 90Ah
27989762

Specification

Nominal Voltage	12 volts		
Nominal Capacity	77° F (25° C)		
20-hr. (4.50A)	90 Ah		
10-hr. (8.37A)	83.7 Ah		
5-hr. (15.30A)	76.5 Ah		
1-hr. (54.00A)	54.0 Ah		
Approximate Weight	62.5 lbs (28.0 kgs)		
Internal Resistance (approx.)	7mΩ		
Shelf Life (% of normal capacity at 77° F (25° C))			
3 Months	6 Months	12 Months	
91%	82%	64%	
Temperature Dependency of Capacity		(20 hour rate)	
104° F	77° F	32° F	5° F
102%	100%	85%	65%
AGM Operational Temperature			
Charge	32°F to 104°F (0°C to 40°C)		
Discharge	5°F to 113°F (-15°C to 45°C)		
AGM Storage Temperature	5°F to 104°F (-15°C to 40°C)		
Recharge Cycles @ 50%	More than 600 cycles		
Marine Cranking Amp Rating	832 Amps		
Cold Cranking Amp Rating	640 Amps		
Reserve Capacity Rating	150 Min.		

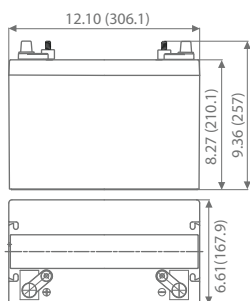


Charge Method (Constant Voltage)

Cycle Use (Repeating Use)

Initial Current	27 A or smaller
Control Voltage	14.6 - 14.8 V
Float Use	
Control Voltage	13.6 - 13.8 V

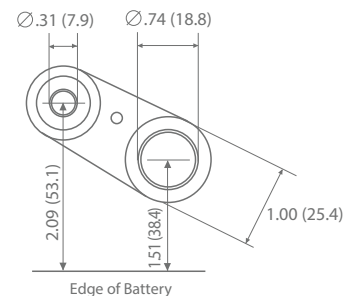
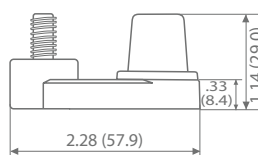
Physical Dimensions: in (mm)



L: 12.10 in (306.1 mm)
W: 6.61 in (167.9 mm)
H: 8.27 in (210.1 mm)
TH: 9.36 in (237 mm)
Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

Terminals

Marine Combo Post



Constant Current Discharge Characteristics Unit:A (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	309.3	225.7	158.8	96.1	50.2	29.3	21.5	16.7	13.8	9.7	8.8	4.7
10.20V	272.5	205.7	142.1	91.1	47.2	27.9	20.9	16.3	13.5	9.5	8.5	4.6
10.50V	262.5	195.6	133.8	88.6	46.0	27.3	20.4	16.1	13.4	9.4	8.4	4.6
10.80V	252.5	185.6	125.4	86.1	44.3	26.6	19.9	15.8	13.0	9.2	8.4	4.5
11.10V	242.4	175.6	117.0	83.6	42.6	25.9	19.2	15.3	12.7	8.9	7.9	4.3

Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	3284.6	2480.4	1687.0	1020.8	581.0	338.6	249.1	194.0	159.7	112.9	102.0	54.9
10.20V	3025.5	2283.1	1577.5	1011.6	545.9	323.5	242.4	188.9	125.5	110.4	99.5	53.5
10.50V	2977.0	2218.7	1516.5	1004.9	528.4	316.0	236.6	185.6	154.7	109.5	97.8	52.8
10.80V	2938.5	2160.2	1459.7	1002.4	514.1	309.3	231.6	182.2	152.2	107.0	97.0	52.6
11.10V	2885.0	2089.2	1392.8	994.8	507.5	308.5	229.1	181.4	151.3	106.2	94.5	51.0

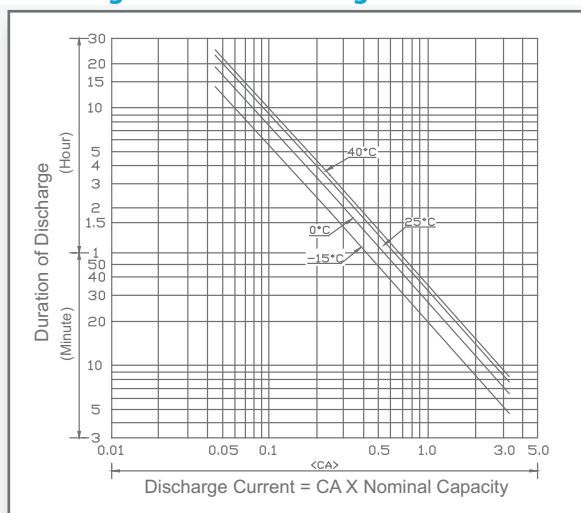
Cabela's



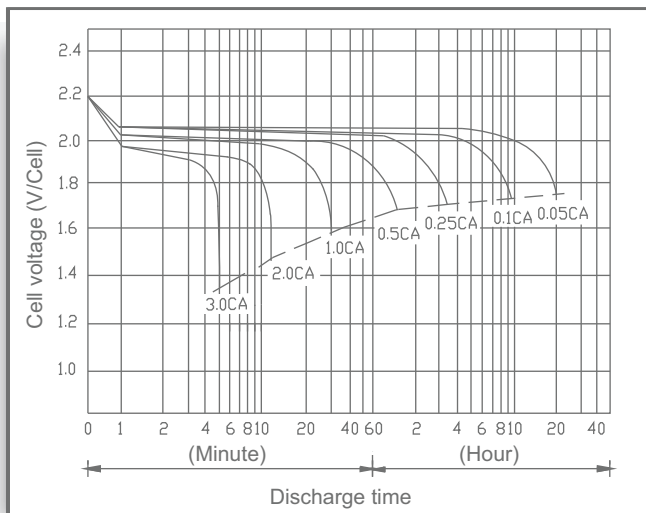


12V 90Ah
27989762

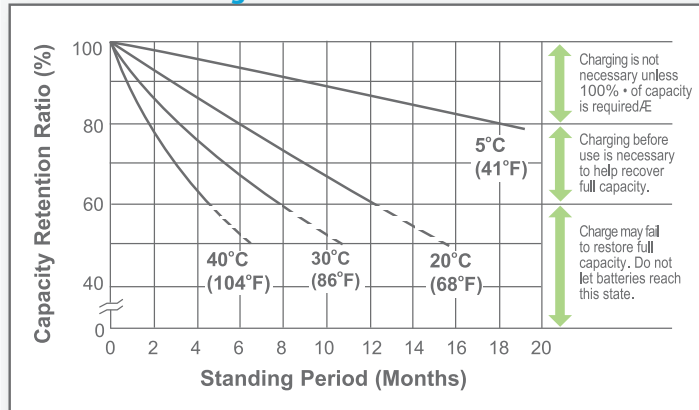
Discharge Time vs. Discharge Current



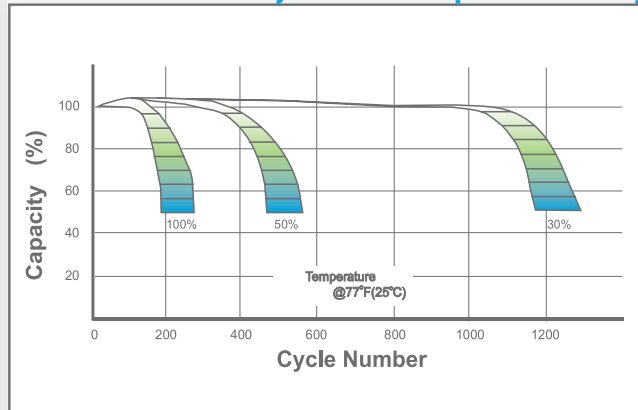
Discharge Characteristics



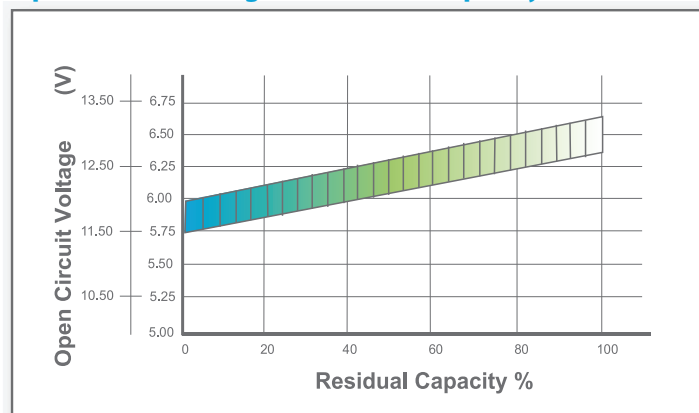
Shelf Life & Storage



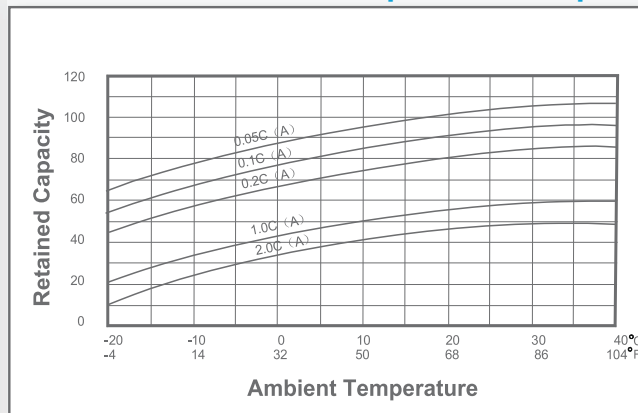
Cycle Life vs Depth of Discharge



Open Circuit Voltage vs Residual Capacity



Effect of Temperature on Capacity



Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C(77°F)	2.45	2.40~2.50	0.30C
Standby	25°C(77°F)	2.325	2.30~2.35	

Final Discharge Voltage V/Cell	1.75	1.70	1.60	1.30
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

Cabela's





12V 110Ah
27989763

Specification

Nominal Voltage		12 volts	
Nominal Capacity		77° F (25° C)	
20-hr. (5.50A)		110 Ah	
10-hr. (10.23A)		102.3 Ah	
5-hr. (18.70A)		93.5 Ah	
1-hr. (66.00A)		66.0 Ah	
Approximate Weight		65.5 lbs (29.0 kgs)	
Internal Resistance (approx.)		5mΩ	
Shelf Life (% of normal capacity at 77° F (25° C))			
3 Months	6 Months	12 Months	
91%	82%	64%	
Temperature Dependency of Capacity		(20 hour rate)	
104° F	77° F	32° F	5° F
102%	100%	85%	65%
AGM Operational Temperature			
Charge		32°F to 104°F (0°C to 40°C)	
Discharge		5°F to 113°F (-15°C to 45°C)	
AGM Storage Temperature		5°F to 104°F (-15°C to 40°C)	
Recharge Cycles @ 50%		More than 600 cycles	
Marine Cranking Amp Rating		1,005 Amps	
Cold Cranking Amp Rating		773 Amps	
Reserve Capacity Rating		190 Min.	



Charge Method (Constant Voltage)

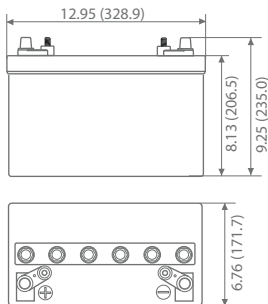
Cycle Use (Repeating Use)

Initial Current	33 A or smaller
Control Voltage	14.6 - 14.8 V

Float Use

Control Voltage	13.6 - 13.8 V
-----------------	---------------

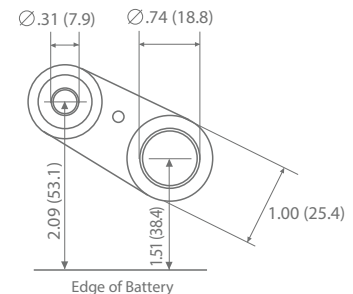
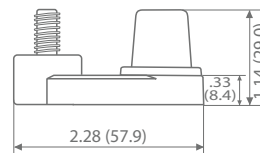
Physical Dimensions: in (mm)



L: 12.95in (328.9 mm)
W: 6.76in (171.7 mm)
H: 8.13in (206.5 mm)
TH: 9.25in (235.0 mm)
Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions. All data subject to change without notice.

Terminals

Marine Combo Post



Constant Current Discharge Characteristics Unit:A (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	361.1	269.3	189.5	114.7	59.9	34.9	25.6	20.0	16.5	11.6	10.5	5.7
10.20V	325.2	245.4	169.6	108.7	56.3	33.3	24.9	19.5	16.2	11.4	10.2	5.5
10.50V	313.2	233.4	159.6	105.7	54.9	32.5	24.3	19.2	16.0	11.3	10.0	5.5
10.80V	301.2	221.4	149.6	102.7	52.9	31.7	23.7	18.9	15.6	11.0	10.0	5.4
11.10V	289.3	209.5	139.7	99.8	50.9	30.9	22.9	18.3	15.2	10.7	9.5	5.1

Constant Power Discharge Characteristics Unit:W (25°C, 77°F)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	3919.2	2959.6	2013.0	1217.9	693.3	404.0	297.3	231.4	190.5	134.7	121.7	65.5
10.20V	3610.0	2724.2	1882.3	1207.0	651.4	386.0	289.3	225.4	149.7	131.7	118.7	63.8
10.50V	3552.1	2647.4	1809.5	1199.0	630.4	377.1	282.3	221.4	184.5	130.7	116.7	63.0
10.80V	3506.2	2577.5	1741.6	1196.0	613.5	369.1	276.3	217.5	181.5	127.7	115.7	62.7
11.10V	3442.4	2492.8	1661.8	1187.0	605.5	368.1	273.3	216.5	180.5	126.7	112.7	60.8

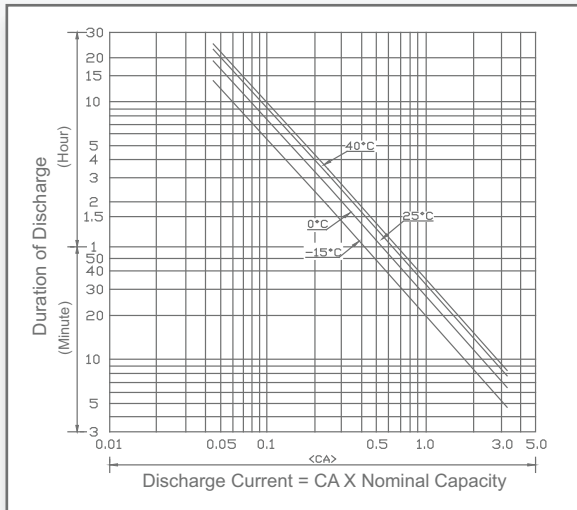
Cabela's



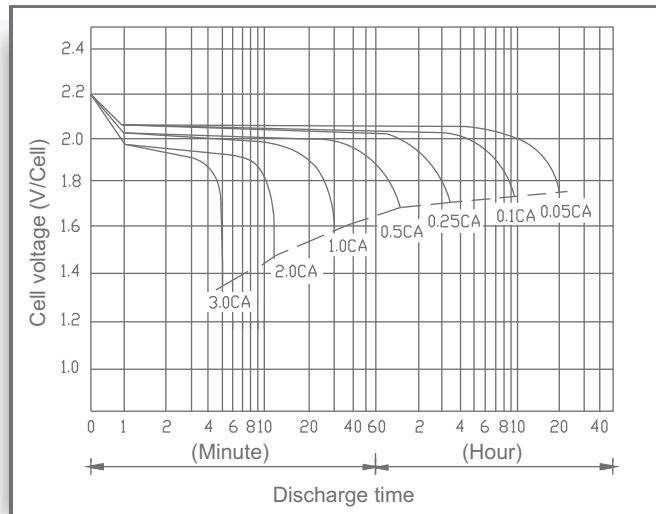


12V 110Ah
27989763

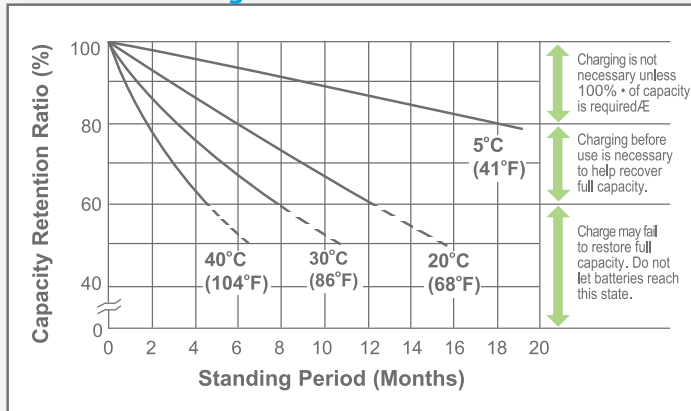
Discharge Time vs. Discharge Current



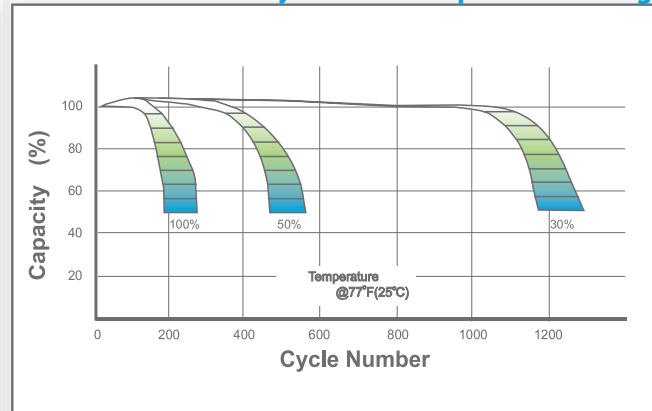
Discharge Characteristics



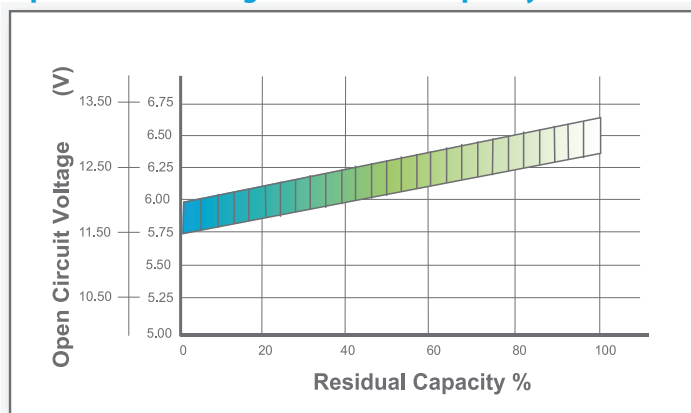
Shelf Life & Storage



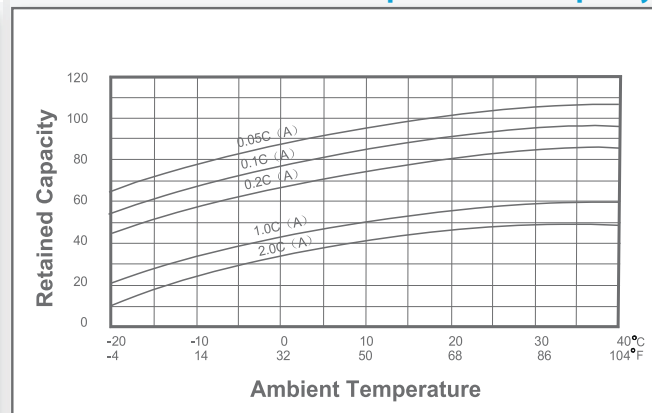
Cycle Life vs Depth of Discharge



Open Circuit Voltage vs Residual Capacity



Effect of Temperature on Capacity



Application	Charge Voltage(V/Cell)			Max.Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C(77°F)	2.45	2.40~2.50	0.30C
Standby	25°C(77°F)	2.325	2.30~2.35	

Final Discharge Voltage V/Cell	1.75	1.70	1.60	1.30
Discharge Current(A)	0.2C>(A)	0.2C<(A)<0.5C	0.5C<(A)<1.0C	(A)>1.0C

Cabelas





Things to Know About Sealed Lead-Acid (SLA) Battery Health

- As Sealed Lead-Acid (SLA) batteries sit, they self-discharge over time.
- Two factors that accelerate self-discharge are time and heat.
- SLA should be periodically checked for voltage level.
- Fully charged SLA batteries will have a voltage of around 13V.
- At 12.7V, a SLA battery is around 85-90% charged.
- After checking the voltage, top charge the battery if it is below 12.9V.
- A SLA battery should be top charged at least every couple of months regardless of use.

Things to Know About Testing a SLA Battery



Carbon Pile Load Tester

- Performing a load test with a load tester is the best way to test battery health.
- A load test consists of loading the battery with three times its rated capacity and monitoring how far the battery voltage depresses. For a 12V battery, the voltage should stay above 9V for at least 10 seconds under load.

Instructions for load testing:

It is recommended to use a “carbon pile” load tester. Before testing, make sure dial is turned all the way to zero (counterclockwise). Attach tester clamps to the battery terminals and make sure polarity is correct (**positive to positive** and **negative to negative**). Before testing, determine how many amps are needed by multiplying the battery's rated capacity by three (example: 50Ah battery x 3 = 150A load). Once the clamps are attached, begin to turn the dial clockwise and pay attention to the amp meter. Stop turning once you reach the desired amperage (3 x rated capacity). With the battery loaded, monitor voltage meter and make sure voltage stays above 9V for at least 10 seconds. Fully recharge battery after testing.

- When using a “conductance” tester on a battery, the test conditions must be optimal for best results.
- Battery must be fully charged (not partially).
- Battery core temperature must be around 25°C (77°F).
- Cooler battery temperatures will cause the battery's internal impedance to rise.
- Lower battery voltages will cause the battery's internal impedance to rise.
- Higher internal impedance means less CCA thus the importance of temperature and voltage.



Instructions for Conductance Testing:

Follow tester manufacturer's instructions for use.

CHARGING TIPS FOR MARINE BATTERIES

For AGM or Lead-Acid Batteries Only



Charging Tips

The battery should be charged if the open circuit voltage is below 12.4V or if the voltage falls below 9.6V when load tested.

Load testing the battery: Load the battery down with three times its rated capacity for ten seconds and note the voltage (**Example:** 75Ah battery X 3 would be a 225A load for ten seconds). If voltage is below 9.6V, recharge and load test again; if it fails a second time, **replace the battery immediately.**

Charging: Carefully read and follow the instructions that came with the charger to avoid injury, property damage and/or battery damage.

Charger recommendation: A multi-stage charger that has a float/maintaining stage is recommended for sealed lead-acid batteries. You can leave this type of charger on your battery indefinitely, keeping it maintained, without damaging the battery. If the battery won't come up to at least 12.7V, replace it.

Trickle charge: A trickle charger is not recommended. If you do use a trickle charger, make sure not to let the battery voltage rise above 15V and do not leave it on the battery for more than 24 hours to avoid overcharging. When gassing from overcharging, a battery will emit a sulfur-like smell. If gassing occurs, or the battery case feels hot, reduce or temporarily halt charging to avoid damaging the battery. Stop the charge when voltage readings recorded two hours apart indicate no increase. Further charging would be useless and may damage the battery and shorten its life. If the battery won't come up to full charge, replace it.

Unplug the charger before connecting or disconnecting a battery to avoid dangerous sparks that could cause the battery to explode if it has been gassing.

Never try to charge a frozen battery. To avoid explosion and serious injury, allow it to warm to at least 50°F (10°C).

Charging parameters: When considering the size of the charger to be used, do not exceed 30% of the batteries rated capacity. **Example:** 100Ah battery X 30% = 30 (30 Amps would be the maximum current that you could use to charge the battery in the example)

Battery Storage

Batteries that are not in use must be cared for as follows to extend battery life and reliability:

- Disconnect the batteries to avoid self-discharging due to parasitic loads such as clocks, ground faults, etc.
- Put into storage fully charged and keep them above a 75% state-of-charge. Check battery voltage every 3 months and recharge if necessary. It is recommended that you go ahead and give the battery a top-charge every three months regardless of state of charge to make sure battery stays fully maintained.
- Ideally, store batteries in a cool, dry place with temperatures not below 32°F (0°C) or above 80°F (27°C). The hotter the storage environment is, the faster the batteries will self-discharge.

Temperature	Self-Discharge Rate
100°F (38°C)	5% of capacity per month
80°F (27°C)	3% of capacity per month
50°F (10°)	2% of capacity per month
32°F (0°C)	1% of capacity per month

***Note:** This is only an example. Self-discharge may be higher or lower depending on battery chemistry, lead alloys, and other factors.

Battery Recycling

Knowing how to dispose of batteries properly protects the environment. Lead-acid batteries are recyclable! Please dispose of your lead-acid batteries to a dealer or nearest recycling center.

Caution

WARNING: Batteries produce explosive gases. Keep sparks and flames from batteries at all times. Never lean over battery when jumping or performing maintenance. **Always wear safety glasses when working around batteries. Protect your eyes. Batteries can explode!**

⚠

DANGER/POISON

⚠



SHIELD EYES
EXPLOSIVE
GASES CAN CAUSE
BLINDNESS OR INJURY



NO
• SPARKS
• FLAMES
• SMOKING



SULFURIC ACID
CAN CAUSE
BLINDNESS OR
SEVERE BURNS



**GET MEDICAL
HELP
FAST**



**FLUSH EYES
IMMEDIATELY
WITH WATER**



**KEEP OUT OF REACH OF
CHILDREN. DO NOT TIP. KEEP
VENT CAPS TIGHT AND LEVEL.**