

*Industry Leader in VRLA AGM and GEL Batteries*

Premium Power From Premium Battery  
**newmax<sup>®</sup>**

PROPRIETARY TECHNOLOGIES  
OF NEWMAX BATTERY



*The Ultimate Premium Industrial Battery Of Korea - NEWMAX Battery*



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**KOBATT** KOREA BATTERY CO., LTD.

# NEWMAX BATTERY

30 years of professional battery manufacturing experience and know-how have made Daejin Battery Group one of the leading storage battery manufacturers in the world. We have been stubbornly insisting on using only the purest and the most refined materials in producing our premium grade batteries. This dedication to quality has placed us where we are now. We take pride in providing the industry leading standards in grid manufacturing and electrolyte refining technology that will dominate the VRLA battery industry in the next decades or so.

## Our History

NEWMAX's history is a journey of evolution, spanning more than 30 years



- 2019** Transition to ISO45001(Occupational Health and Safety System) and Implementation of Smart Factory (MES, Manufacturing Execution System)
- 2018** Incorporated Korea Battery Co., Ltd. as a specialized sales headquarter. OHSAS 18001:2007 certification acquired
- 2017** New automatic production line installed for new SG/PNB series and automotive batteries
- 2016** CE certificate acquired for European market ( SG series)
- 2015** Became official registered member of BCI (Battery Council International)
- 2013** Awarded one of the best exporters at the 50th annual trade day by the Korean government
- 2012** Awarded one of the best exporters at the 49th annual trade day by the Korean government
- 2011** Developed and Launched BM-series flooded battery for golf cart
- 2010** Developed and launched UPN series for premium standby power ISO 9001 / ISO 14001 acquired by BVQ international cert. Acquired Korean Industrial standards certification (KS cert)
- 2009** Established Daejin Battery Co.,Ltd ( M&A of NB Corp) Developed and launching SG series deep cycle Gel (12v, 70~220ah) battery for solar power storage Acquired UL (Underwriters Laboratories) for global marketing and export
- 2005** Started to supply Korea Telecom company for telecommunications ( PNB, PNGB)
- 2000** Developed and launched PNGB series ( 2v, 150ah~ 2000ah) for large capacity standby power
- 1998** Developed and launched PNC series ( 12v, 70~200ah) for mobility deep cycle & premium standby battery.
- 1995** Started export business to Asian countries.
- 1994** Developed and launched PNB series ( 12v, 70~220ah) for UPS, standby power
- 1993** Established NB Corporation & Newmax brand registered as trade mark
- 1989** Specialized VRLA factory built in Gumi City, Korea



## PROPRIETARY TECHNOLOGIES OF NEWMAX BATTERY



**DenseMax™ Grid Technology**  
Proprietary grid casting technology that condenses the lead grain in the grids increasing the density by 50% compared to a conventional gravity casting method. Higher density grids enable prolonged battery life even in the most severe operating environments.



**MaxPress™ Grid Technology**  
Patent pending grid compressing technology which increases the density of the lead grain of the grids. The grain density is typically 400% greater than that of the conventional casting method. This up-to-date grid technology enables our batteries to survive even the toughest deep discharge and PSOC applications.



**ThixoPure™ GEL Technology**  
Application of refined pure thixotropic colloidal silica GEL technology to battery electrolyte has greatly increased the cycle life by both preventing plate stratification and providing extra temperature protection against heat and cold. We are the first Korean company to successfully commercialize the GEL technology in the VRLA battery industry.



**FlexSealing™ Anti Explosion Filter**  
Patent pending proprietary cap filtering and sealing technology. Battery cell caps are sealed simultaneously using specially designed o-rings and explosion filters to prevent leakage and gassing more effectively than ever before.

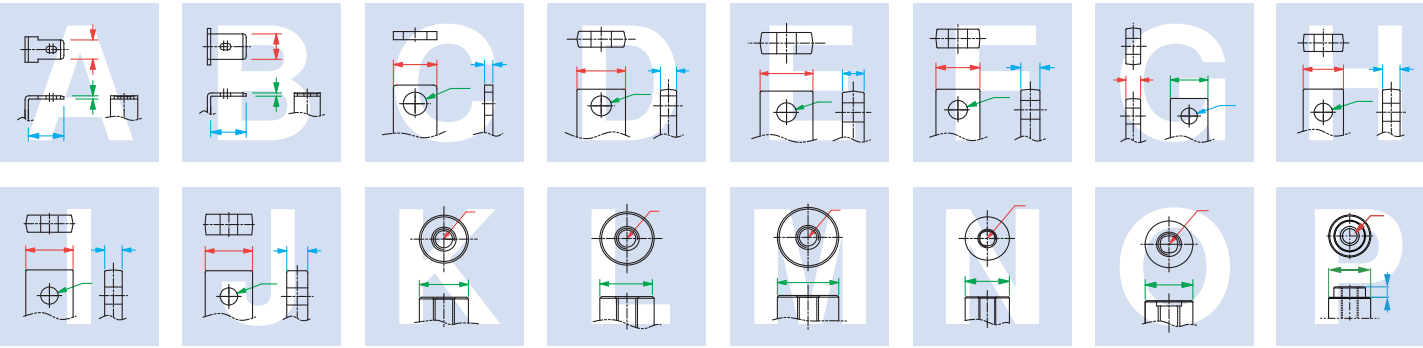


**ActiveCarbon™**  
In every Newmax battery, proprietary micro carbon additive is used in the active material for both positive and negative plates to enhance charge acceptance and cycle endurance. ActiveCarbon™ works to strengthen charge pathways to improve performance consistency and enhance performance at partial state of charge (PSOC) environment.



**Highly Resistive Heat Protection Case**  
Specially formulated heat and flame resistant polypropylene case material is used to effectively block ambient heat thus preventing heat related malfunctions such as thermal runaway. This proprietary high rigidity case material has heat deflection rating of 140°C and complies to RoHs Compliant EU Directive 2002/95/EC. Additional UL94-V0 protection option also available.

## TERMINAL TYPES



## TERMINAL (mm)

Type	Size (mm)															
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
(A)	4.75	6.30	12.00	15.00	17.50	23.00	9.00	23.00	27.00	27.00	M6	M6	M6	M8	5/16"	M8
(B)	0.80	0.80	Ø6.5	Ø6.3	Ø6.3	Ø10	23.00	Ø10.5	Ø10	Ø10	Ø13.0	Ø15.5	Ø17.5	Ø21.0	Ø18.5	Ø20.0
(C)	8.60	8.60	2.30	5.00	7.00	10.00	Φ10	10.00	10.00	12.00						5.00

(A) — / (B) — / (C) —



SG

+PLUS

SERIES

ACTIVE CARBON  
PREMIUM BATTERY

Solar Gel Deep Cycle

New SG +PLUS series is genuine Maintenance-Free Sealed batteries developed specifically to satisfy the need for frequent deep cycles from Solar PV, solar streetlight and energy storage system. The brand new SG+PLUS series is a high quality product that has significantly improved life expectancy to meet the rapid changes in solar market and customers' needs.



**Premium ActiveCarbon™**  
In every Newmax battery, proprietary micro carbon additive is used in the active material for both positive and negative plates to enhance charge acceptance and cycle endurance. ActiveCarbon™ works to strengthen charge pathways to improve performance consistency and enhance performance at partial state of charge (PSoC) environment.



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Patent pending grid compressing technology which increases the density of the lead grain of the grids. The grain density is typically 400% greater than that of the conventional casting method. This up-to-date grid technology enables our batteries to survive even the toughest deep discharge and PSoC applications.



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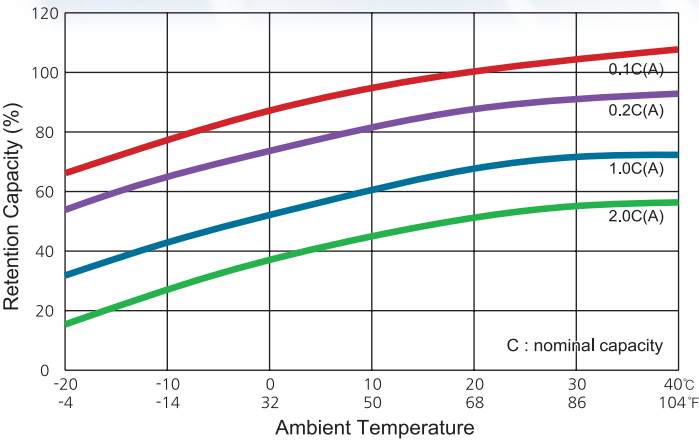


**FlexSealing™ Anti Explosion Filter**  
Patent pending proprietary cap filtering and sealing technology. Battery cell caps are sealed simultaneously using specially designed o-rings and explosion filters to prevent leakage and gassing more effectively than ever before.

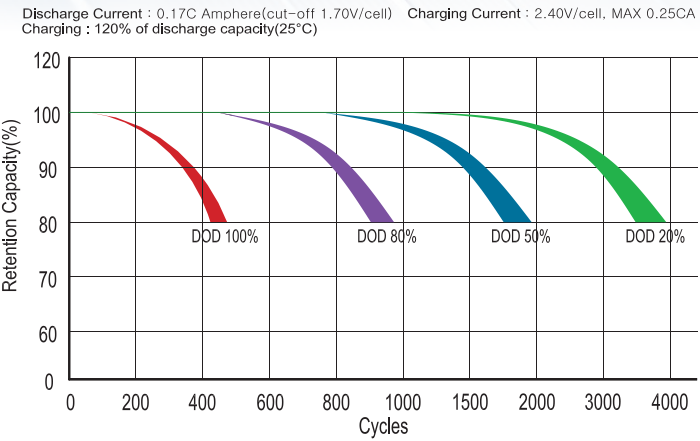


**Highly Resistive Heat Protection Case**  
Specially formulated heat and flame resistant polypropylene case material is used to effectively block ambient heat thus preventing heat related malfunctions such as thermal runaway. This proprietary high rigidity case material has heat deflection rating of 140°C and complies to RoHS Compliant EU Directive 2002/95/EC. Additional UL94-V0 protection option also available.

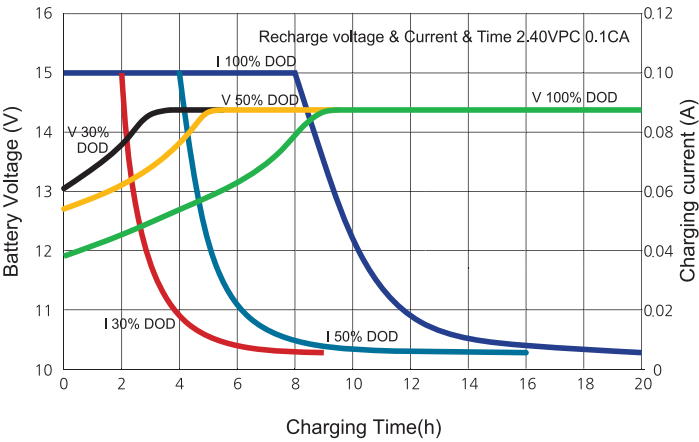
Effect Of Temperature On Capacity



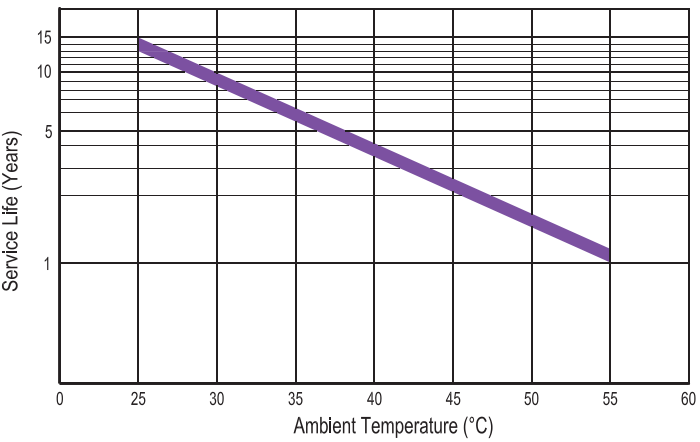
Cycle life characteristics (@25°C)



Dod % Vs Recharging Time Curve



Floating Life Characteristics



12 Voltage SG Series Battery Specifications

Battery Type	Nominal Voltage	Capacity(AH)				Dimension								Approx. Weight		Terminal type
		20HR	10HR	5HR	1HR	Length		Width		Height		T. Height				
		Final V.P.C				(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(Lb)	(kg)	
		(1.80)	(1.80)	(1.70)	(1.60)											
SG 800H	12	90	83	76	55	371	14.61	174	6.85	205	8.07	219	8.62	58.6	26.6	N
SG 1000H	12	100	93	84	61	371	14.61	174	6.85	205	8.07	219	8.62	67.4	30.6	N
SG 1200H	12	120	100	82	66	371	14.61	174	6.85	205	8.07	219	8.62	72.0	32.7	N
SG 1500H	12	150	139	126	91	524	20.63	241	9.49	215	8.46	221	8.70	95.4	43.3	N
SG 2000H	12	200	185	168	122	524	20.63	241	9.49	215	8.46	221	8.70	126.5	57.4	N
SG 2200H	12	220	200	182	131	524	20.63	241	9.49	215	8.46	221	8.70	132.2	60.0	N



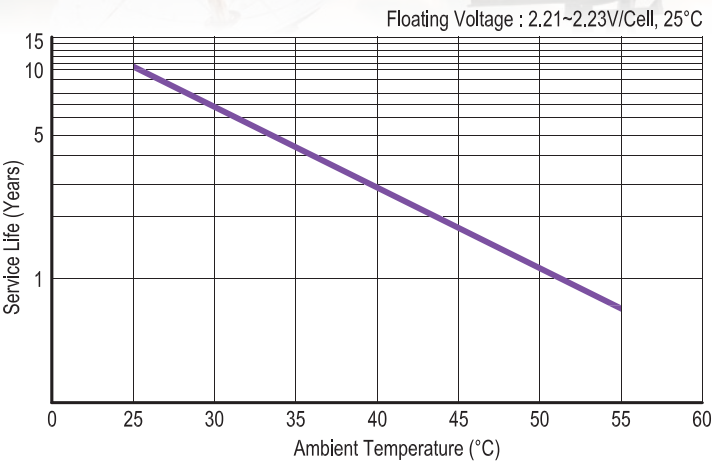
# PNB SERIES

## AGM, VRLA for UPS, Telecommunication

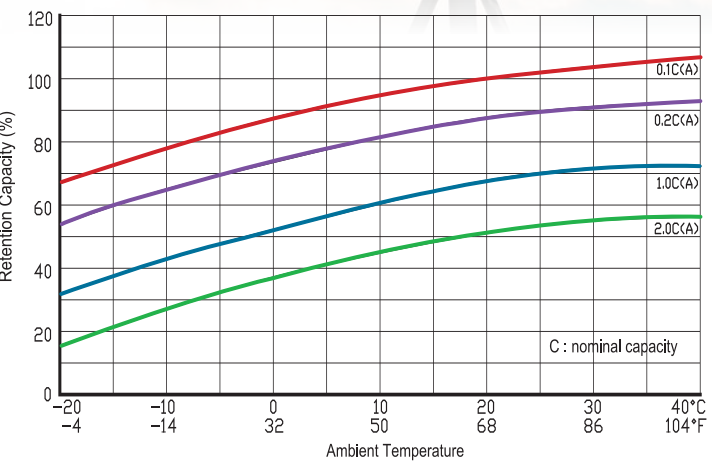
PNB Series is AGM and VRLA type batteries available in various capacities and dimensions which can be installed in any direction. The sealed structure is possible due to technology that prevents over pressuring from excess gas formation. This series can be used for UPS, telecommunications, lighting systems and more.



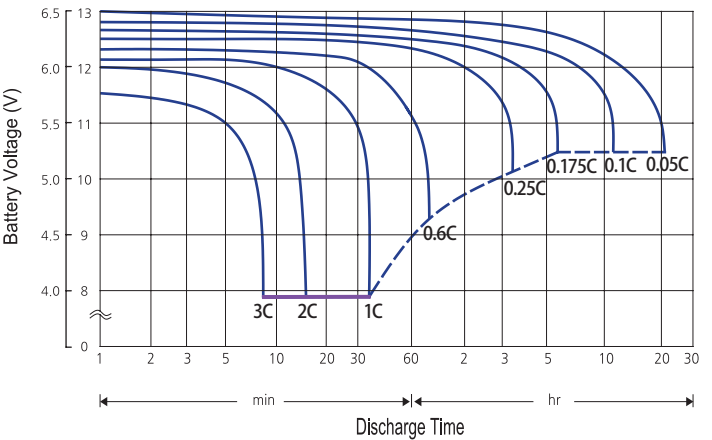
Floating Life Characteristic



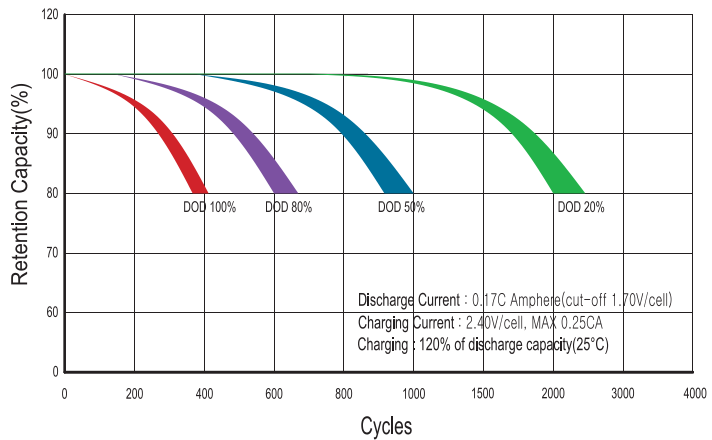
Effect of temperature on capacity



Discharge Time Vs Current



Cycle Life Characteristic



### MaxPress™ Grid Technology

Patent pending grid compressing technology which increases the density of the lead grain of the grids. The grain density is typically 400% greater than that of the conventional casting method. This up-to-date grid technology enables our batteries to survive even the toughest deep discharge and PSOC applications.



### FlexSealing™ Anti Explosion Filter

Patent pending proprietary cap filtering and sealing technology. Battery cell caps are sealed simultaneously using specially designed o-rings and explosion filters to prevent leakage and gassing more effectively than ever before.



### ActiveCarbon™

In every Newmax battery, proprietary micro carbon additive is used in the active material for both positive and negative plates to enhance charge acceptance and cycle endurance. ActiveCarbon™ works to strengthen charge pathways to improve performance consistency and enhance performance at partial state of charge (PSOC) environment.



### Highly Resistive Heat Protection Case

Specially formulated heat and flame resistant polypropylene case material is used to effectively block ambient heat thus preventing heat related malfunctions such as thermal runaway. This proprietary high rigidity case material has heat deflection rating of 140°C and complies to RoHS Compliant EU Directive 2002/95/EC. Additional UL94-V0 protection option also available.

## 12 Voltage PNB Series Battery Range Specifications

Battery Type	Nominal Voltage	Capacity(AH)				Dimension								Approx. Weight		Terminal type	
		20HR	10HR	5HR	1HR	Length		Width		Height		T.Height					
		Final V.P.C (1.80) (1.80) (1.70) (1.60)				(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(Lb)	(kg)	(S)	(O)
PNB 12400	12	42	40	36	26	197	7.76	166	6.54	170	6.69	170	6.69	28.9	13.1	D	K
PNB 12650	12	68	65	59	42	325	12.80	166	6.54	175	6.89	175	6.89	46.5	21.1	E	M
PNB 12700	12	72	68	65	45	350	13.78	166	6.54	175	6.89	175	6.89	50.7	23.0	E	M
PNB 12800	12	90	83	76	55	371	14.61	174	6.85	205	8.07	219	8.62	58.6	26.6	N	
PNB 121000	12	100	93	84	61	371	14.61	174	6.85	205	8.07	219	8.62	66.5	30.2	N	
PNB 121200	12	120	100	82	66	371	14.61	174	6.85	205	8.07	219	8.62	71.6	32.5	N	
PNB 121500	12	150	139	126	91	524	20.63	241	9.49	215	8.46	221	8.70	92.5	42.0	N	
PNB 122000	12	200	185	168	122	524	20.63	241	9.49	215	8.46	221	8.70	125.0	56.7	N	
PNB 122200	12	220	200	182	131	524	20.63	241	9.49	215	8.46	221	8.70	132.2	60.0	N	



# PNC SERIES

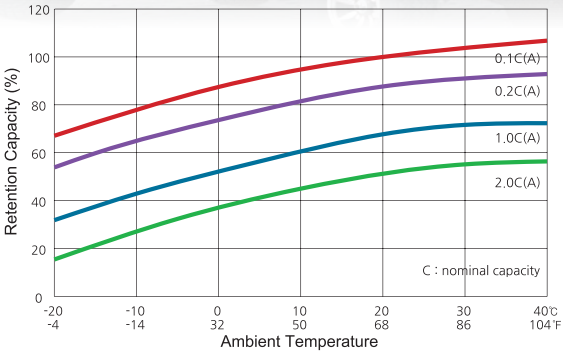
## Mobility Deep Cycle

The truly maintenance free PNC Series is designed specifically for deep cycle mobile power units such as electric wheelchairs and scooters.

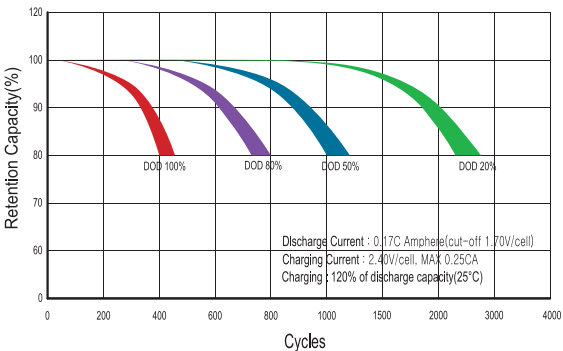
Our unique lead plate design is optimized for exceptional performance in deep cycle applications.



Effect Of Temperature On Capacity



Cycle Life Characteristic



### 12 Voltage PNC Series Battery Range Specifications

Battery Type	Nominal Voltage	Capacity(AH)				Dimension								Approx. Weight		Terminal type	
		10HR	5HR	3HR	1HR	Length		Width		Height		T.Height					
		F i n a l V . P . C (1.75) (1.70) (1.67) (1.60)				(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(Lb)	(kg)	(S)	(O)
PNC 12400	12	40	37	33	26	197	7.76	166	6.54	170	6.69	170	6.69	31.5	14.3	D	K
PNC 12500	12	50	46	42	33	197	7.76	166	6.54	170	6.69	170	6.69	32.6	14.8	D	K
PNC 12550	12	55	51	46	36	229	9.02	138	5.43	208	8.19	213	8.39	39.7	18.0	L	
PNC 12700	12	70	64	58	46	325	12.80	166	6.54	175	6.89	175	6.89	50.7	23.0	E	M
PNC 12800	12	80	75	68	54	332	13.07	174	6.85	215	8.46	239	9.46	63.8	29	F	N
PNC 121000	12	100	94	85	67	332	13.07	174	6.85	215	8.46	239	9.46	70.4	32	F	N
PNC 121200	12	120	113	102	80	500	19.69	180	7.09	195	7.68	224	8.82	87.1	39.5	H	N
PNC 121500	12	150	141	128	101	500	19.69	260	10.24	196	7.72	225	8.86	101.4	46.0	H	N
PNC 122000	12	200	188	170	134	500	19.69	260	10.24	196	7.72	225	8.86	132.3	60.0	H	N

#### DenseMax™ Grid Technology

Proprietary grid casting technology that condenses the lead grain in the grids increasing the density by 50% compared to a conventional gravity casting method. Higher density grids enable prolonged battery life even in the most severe operating environments.

#### FlexSealing™ Anti Explosion Filter

Patent pending proprietary cap filtering and sealing technology. Battery cell caps are sealed simultaneously using specially designed o-rings and explosion filters to prevent leakage and gassing more effectively than ever before.

#### ActiveCarbon™

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#### Highly Resistive Heat Protection Case

Specially formulated heat and flame resistant polypropylene case material is used to effectively block ambient heat thus preventing heat related malfunctions such as thermal runaway. This proprietary high rigidity case material has heat deflection rating of 140°C and complies to RoHs Compliant EU Directive 2002/95/EC. Additional UL94-V0 protection option also available.

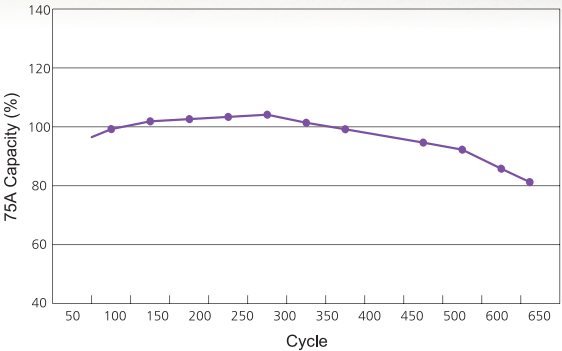
# BM SERIES

## Golf Cart / Electric Vehicle

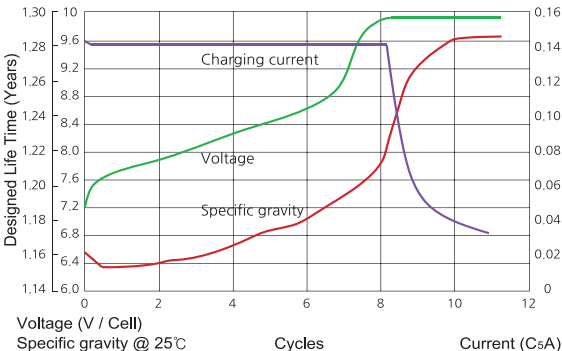
Our BM series batteries are built to provide an ultra-long life while withstanding a bumpy ride on some of the world's roughest and mountainous golf courses located in South Korea. These batteries will provide a lively ride throughout the round.



75A Discharge Cycle Life Characteristics



Charging Characteristics



### BM Series Battery Range Specifications

Battery Type	Nominal Voltage	Capacity(AH)			Exterior Dimension								Liquid amount (ℓ)	Weight (KG)	Terminal type
		20HR	5HR	75A (min)	Length		Width		Height		T.Height				
					(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)			
BM 6210	6	210	156	96	260	10.24	183	7.20	247	9.72	279	10.98	6.0	26.5	Standard
BM 6225	6	225	185	115	260	10.24	183	7.20	247	9.72	279	10.98	5.7	28.6	Standard
BM 6240	6	240	195	132	260	10.24	183	7.20	247	9.72	279	10.98	5.4	30.7	Standard
BM 8170	8	170	141	72	260	10.24	183	7.20	247	9.72	279	10.98	5.4	28.8	Standard
BM 8190	8	190	155	90	260	10.24	183	7.20	247	9.72	279	10.98	5.2	31.6	Standard
BM 12150	12	150	114	60	331	13.03	183	7.20	247	9.72	279	10.98	7.8	38.0	Standard
BM 12165	12	165	135	70	331	13.03	183	7.20	247	9.72	279	10.98	7.6	42.1	Standard

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#### DenseMax™ Grid Technology

Proprietary grid casting technology that condenses the lead grain in the grids increasing the density by 50% compared to a conventional gravity casting method. Higher density grids enable prolonged battery life even in the most severe operating environments.

#### Separators

- Use a highly porous and corrosionresistant PVC material
- A glass fiber applied to the surface to prevent withdrawal of active substances
- Low electric resistance and excellent physical traits

#### Electrolytes / Cap

- Electrolytes contain highly pure, refined sulphuric acid (KS M 1203 No.3 or higher)
- Cap has a structure that can filter acid haze and gas generated during the recharge step 3, and discharge only the gas.
- Uses a filter that can prevent an explosion from inflammation of the interior



# PNGB SERIES

## 2V block UPS, Deep Cycle Gel

The PNGB series has a completely sealed gas-recombining structure which has a relatively long life. It is available in various capacities and dimensions. This series is fit for both floating and deep cycle service, such as UPS, telecommunication and lighting systems. They are usable in a wide temperature range, from -20°C to 50°C and can be used in various services including high-rate discharge.



### DenseMax™ Grid Technology

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### ActiveCarbon™

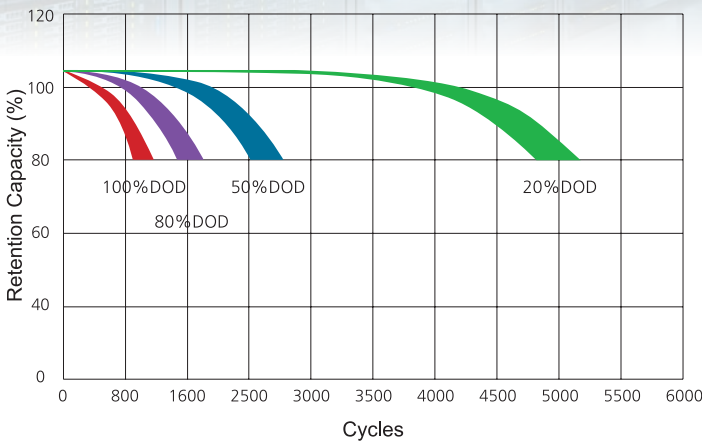
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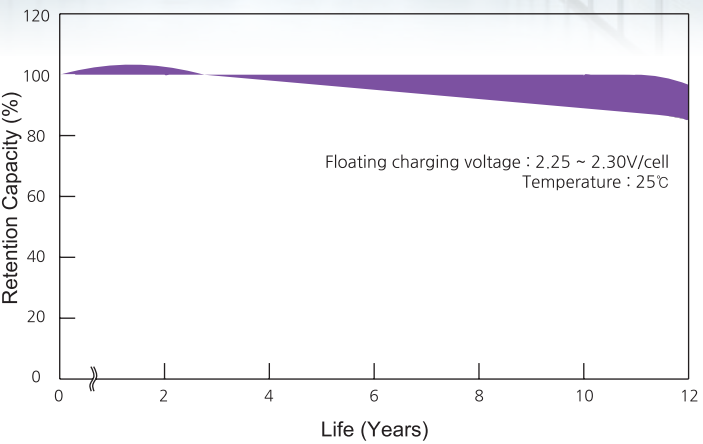
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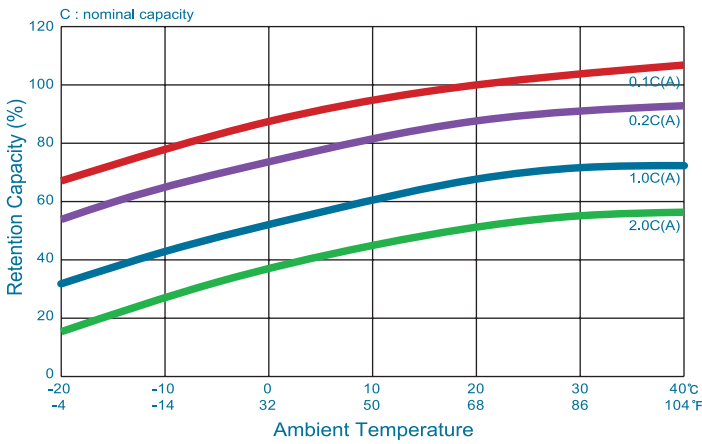
### Cycle Life Dod %



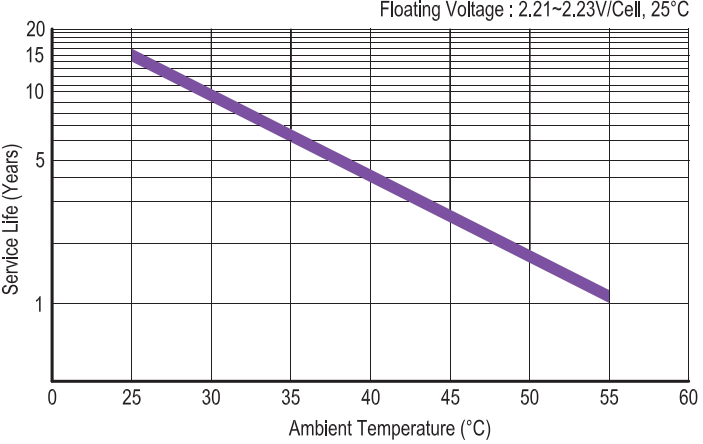
### Floating Life For Capacity Characteristic



### Effect Of Temperature On Capacity



### Floating Life Characteristics



## 2 Voltage PNGB Series Battery Range Specifications

Battery Type	Nominal Voltage	Capacity(AH)				Dimension								Approx. Weight		Terminal type	
		10HR	5HR	3HR	1HR	Length		Width		Height		T.Height					
		F i n a l V . P . C (1.80) (1.70) (1.65) (1.60)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(Lb)	(kg)	(S)	(O)			
PNGB 21000	2	100	90	83	66	106	4.17	170	6.69	326	12.83	364	14.33	17.4	7.9	I	P
PNGB 21200	2	120	108	99	79	106	4.17	170	6.69	326	12.83	364	14.33	20.5	9.3	I	P
PNGB 21500	2	150	135	124	99	106	4.17	170	6.69	326	12.83	364	14.33	22.9	10.4	I	P
PNGB 22000	2	200	180	166	131	106	4.17	170	6.69	326	12.83	364	14.33	27.6	12.5	I	P
PNGB 22500	2	250	225	207	164	195	7.68	170	6.69	326	12.83	364	14.33	35.5	16.1	I	P
PNGB 23000	2	300	270	248	197	195	7.68	170	6.69	326	12.83	364	14.33	41.9	19.0	I	P
PNGB 24000	2	400	360	331	263	195	7.68	170	6.69	326	12.83	364	14.33	51.8	23.5	I	P
PNGB 25000	2	500	450	414	329	289	11.38	171	6.73	326	12.83	364	14.33	66.1	30.0	I	P
PNGB 26000	2	600	540	497	394	289	11.38	171	6.73	326	12.83	364	14.33	76.1	34.5	I	P
PNGB 27000	2	700	630	580	460	382	15.04	171	6.73	326	12.83	364	14.33	91.7	41.6	I	P
PNGB 28000	2	800	720	662	526	382	15.04	171	6.73	326	12.83	364	14.33	101.9	46.2	I	P
PNGB 29000	2	900	810	745	591	471	18.54	171	6.73	326	12.83	364	14.33	119.7	54.3	I	P
PNGB 210000	2	1000	900	828	657	471	18.54	171	6.73	326	12.83	364	14.33	131.0	59.4	I	P
PNGB 212000	2	1200	1080	994	788	471	18.54	171	6.73	326	12.83	364	14.33	143.7	65.2	I	P
PNGB 214000	2	1400	1260	1159	920	472	18.58	335	13.19	329	12.95	366	14.41	188.5	85.5	I	
PNGB 216000	2	1600	1440	1325	1051	472	18.58	335	13.19	329	12.95	366	14.41	215.2	97.6	I	
PNGB 218000	2	1800	1620	1490	1183	472	18.58	335	13.19	329	12.95	366	14.41	235.2	107	I	
PNGB 220000	2	2000	1800	1656	1314	472	18.58	335	13.19	329	12.95	366	14.41	253.1	115	I	



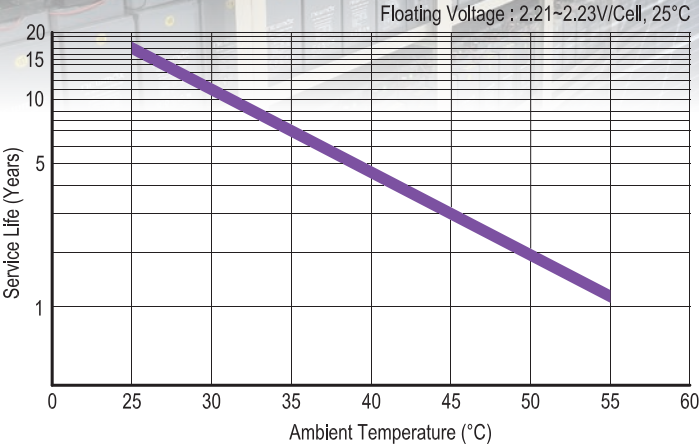
# UPN SERIES

## 2V Deep Cycle Premium Gel with Longer Life

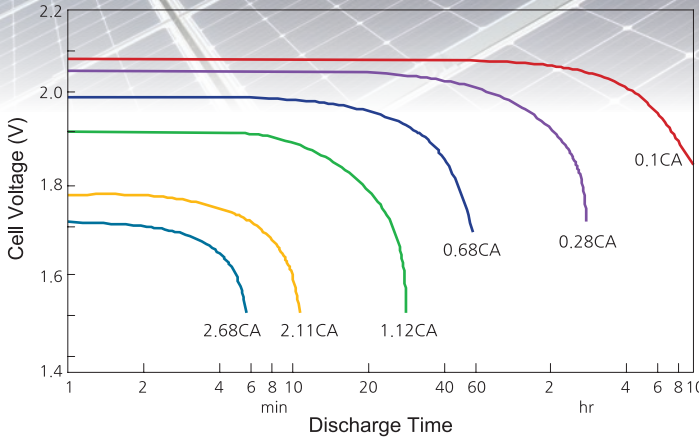
The Newmax UPN Series is an ultra efficient premium quality UPS battery series. This innovative and technology intensive product has proven to last up to 60% longer than its predecessor, the PNGB series. Constant drive for true innovation was the key to the success of our UPN series.



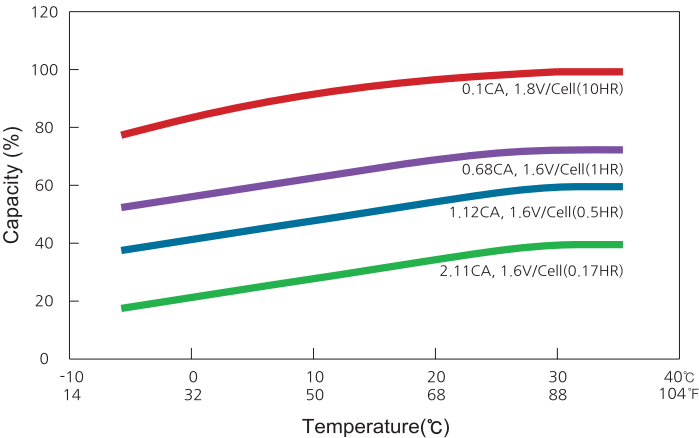
Floating Life Characteristics



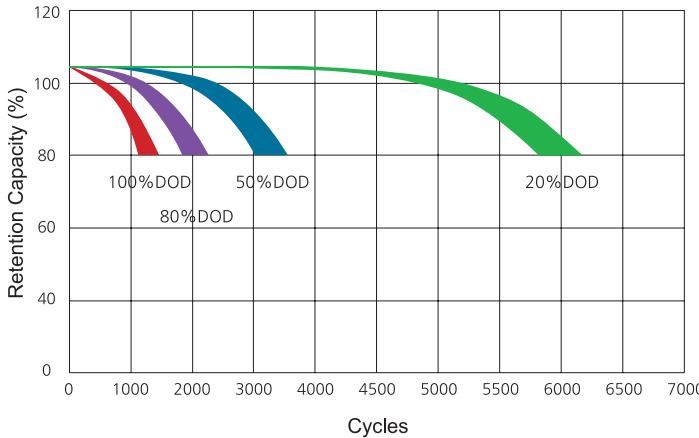
Discharge Time Vs Current



Effect Of Temperature On Capacity



Cycle Life Vs Depth Of Discharge@25°C



### DenseMax™ Grid Technology

Proprietary grid casting technology that condenses the lead grain in the grids increasing the density by 50% compared to a conventional gravity casting method. Higher density grids enable prolonged battery life even in the most severe operating environments.



### ThixoPure™ GEL Technology

Application of refined pure thixotropic colloidal silica GEL technology to battery electrolyte has greatly increased the cycle life by both preventing plate stratification and providing extra temperature protection against heat and cold. We are the first Korean company to successfully commercialize the GEL technology in the VRLA battery industry.



### FlexSealing™ Anti Explosion Filter

Patent pending proprietary cap filtering and sealing technology. Battery cell caps are sealed simultaneously using specially designed o-rings and explosion filters to prevent leakage and gassing more effectively than ever before.



### ActiveCarbon™

In every Newmax battery, proprietary micro carbon additive is used in the active material for both positive and negative plates to enhance charge acceptance and cycle endurance. ActiveCarbon™ works to strengthen charge pathways to improve performance consistency and enhance performance at partial state of charge (PSoC) environment.



### Highly Resistive Heat Protection Case

Specially formulated heat and flame resistant polypropylene case material is used to effectively block ambient heat thus preventing heat related malfunctions such as thermal runaway. This proprietary high rigidity case material has heat deflection rating of 140°C and complies to RoHS Compliant EU Directive 2002/95/EC. Additional UL94-V0 protection option also available.

## 2 Voltage UPN Series Battery Specifications

Battery Type	Nominal Voltage	Capacity(AH)				Dimension								Approx. Weight		Terminal type	
		10HR	5HR	3HR	1HR	Length		Width		Height		T.Height					
		F i n a l V . P . C				(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(mm)	(inch)	(Lb)	(kg)	(S)	(S)
		(1.80)	(1.70)	(1.65)	(1.60)												
UPN 150	2	150	139	130	103	106	4.17	170	6.69	326	12.83	364	14.33	25.1	11.4	I	P
UPN 200	2	200	185	173	137	106	4.17	170	6.69	326	12.83	364	14.33	29.8	13.5	I	P
UPN 250	2	250	231	216	172	195	7.68	170	6.69	326	12.83	364	14.33	38.6	17.5	I	P
UPN 300	2	300	278	259	206	195	7.68	170	6.69	326	12.83	364	14.33	45.0	20.4	I	P
UPN 400	2	400	370	346	274	195	7.68	170	6.69	326	12.83	364	14.33	56.2	25.5	I	P
UPN 500	2	500	463	432	343	289	11.38	171	6.73	326	12.83	364	14.33	71.7	32.5	I	P
UPN 600	2	600	555	518	412	289	11.38	171	6.73	326	12.83	364	14.33	84.9	38.5	I	P
UPN 700	2	700	648	605	480	382	15.04	171	6.73	326	12.83	364	14.33	102.5	46.5	I	P
UPN 800	2	800	740	691	549	382	15.04	171	6.73	326	12.83	364	14.33	112.0	50.8	I	P
UPN 900	2	900	833	778	617	471	18.54	171	6.73	326	12.83	364	14.33	130.1	59.0	I	P
UPN 1000	2	1000	925	864	686	471	18.54	171	6.73	326	12.83	364	14.33	143.7	65.2	I	P
UPN 1200	2	1200	1100	1037	823	471	18.54	171	6.73	326	12.83	364	14.33	154.0	70.0	I	P
UPN 1400	2	1400	1295	1210	960	472	18.58	335	13.19	329	12.95	366	14.41	209.4	95.0	I	
UPN 1600	2	1600	1480	1382	1098	472	18.58	335	13.19	329	12.95	366	14.41	231.5	105	I	
UPN 1800	2	1800	1665	1555	1235	472	18.58	335	13.19	329	12.95	366	14.41	255.7	116	I	
UPN 2000	2	2000	1850	1728	1372	472	18.58	335	13.19	329	12.95	366	14.41	277.8	126	I	



# MRV SERIES

## Dual Purpose AGM for Marine and RV Application

### WHY AGM?

**NEWMAX MARINE AGM batteries are designed to handle today's increased stress and load :**

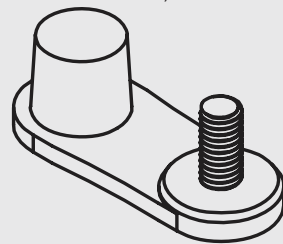
- Only 15% of consumers of automobile industry worldwide are “very satisfied” with the performance and power of conventional lead-acid batteries.
- Today's marine and vehicle systems and accessories require more electric power than ever before.
- The power consumption of today's boats and RVs is considerable even when they are parked.
- No leakage of electrolyte even when physically damaged (safer for the driver and the environment)

**Market trends clearly show the increased demand for advanced battery technology :**

- Significantly increased share of AGM batteries versus standard MF type batteries over the last 10 years
- OEM's are now rapidly adopting AGM technology to meet high demand of power and reliability
- Provides excellent resistance to wave pounding for boats and vibration from road corrugation for RVs.
- Consumers naturally want superior performance, safety and durability from their batteries.



Terminal Type: Dual Marine Terminal  
(Standard SAE + Stud)



#### ActiveCarbon™

In every Newmax battery, proprietary micro carbon additive is used in the active material for both positive and negative plates to enhance charge acceptance and cycle endurance. ActiveCarbon™ works to strengthen charge pathways to improve performance consistency and enhance performance at partial state of charge (PSoC) environment.



#### MaxPress™ Grid Technology

Patent pending grid compressing technology which increases the density of the lead grain of the grids. The grain density is typically 400% greater than that of the conventional casting method. This up-to-date grid technology enables our batteries to survive even the toughest deep discharge and PSoC applications.



#### FlexSealing™ Anti Explosion Filter

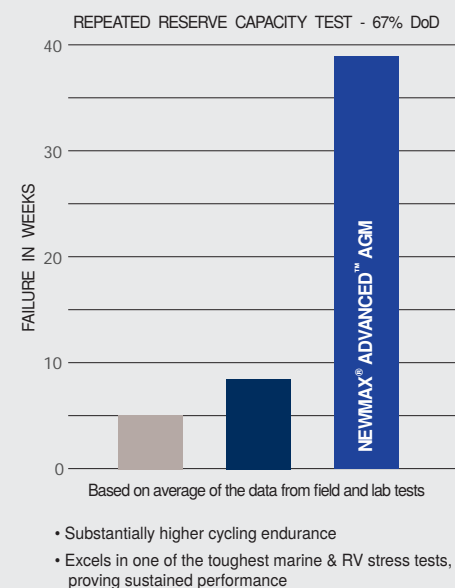
Patent pending proprietary cap filtering and sealing technology. Battery cell caps are sealed simultaneously using specially designed o-rings and explosion filters to prevent leakage and gassing more effectively than ever before.



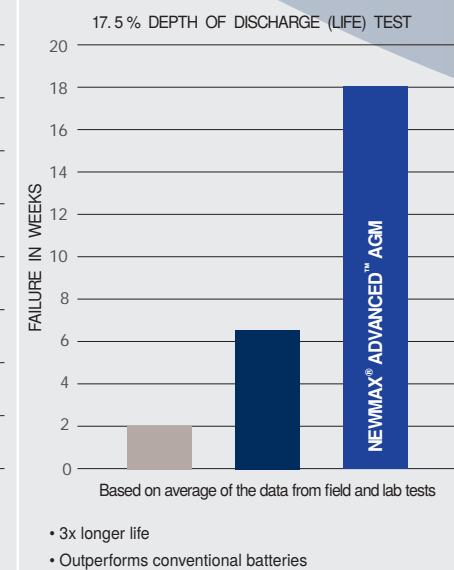
#### Highly Resistive Heat Protection Case

Specially formulated heat and flame resistant polypropylene case material is used to effectively block ambient heat thus preventing heat related malfunctions such as thermal runaway. This proprietary high rigidity case material has heat deflection rating of 140°C and complies to RoHs Compliant EU Directive 2002/95/EC. Additional UL94-V0 protection option also available.

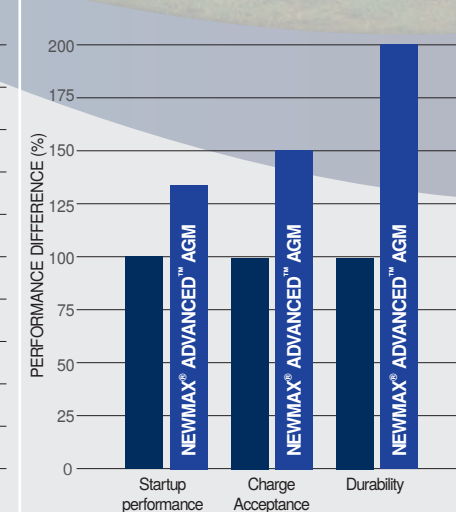
### ENDURANCE



### LIFE



### COMPARISON CHART



■ Conventional MF Type ■ EFB Type ■ NEWMAX ADVANCED™ AGM

## THE NEWMAX® MARINE AGM DIFFERENCE

Lasting Power	•3x longer cycle life compared to conventional MF type batteries. •2x longer battery life compared to EFB type batteries.
Maximum Durability and Stability	•vibration rating Provides superb resistance to wave pounding •Excellent active material protection against road corrugation.
Faster Recharge	•Recharges faster with ActiveCarbon™ Technology
Maintenance Free	•Non-spillable, AGM provides protection against leakage. •Environmentally Friendly, Recyclable

BCI Group	Model	Voltage	Capacity					Dimensions								Terminal Type	Hold down
			Ampere Hour@C20	Ampere Hour@C5	CA(MCA) (Ampere)	CCA (Ampere)	RC (Minutes)	Inches				mm					
								L	W	H	TH	L	W	H	TH		
24	MRV24	12	75	65	800	680	150	10.2	6.8	8.4	9.3	258	172	214	235	Dual Marine	B0
27	MRV27	12	90	75	850	730	180	12.1	6.8	8.3	9.1	308	172	212	232	Dual Marine	B0
31	MRV31	12	100	88	920	820	200	13	6.8	8.5	9.3	330	172	216	236	Dual Marine	B0