



Power Sports Batteries

ATV ·JET SKI ·MOTORCYCLE ·SNOWMOBILE ·LAWN &GARDEN





COMPANY INTRODUCTION

ANHUI UPLUS ENERGY TECHNOLOGY CO., LTD. is a technology-driven enterprise specializing in the research, development, and manufacturing of automobile batteries. It covers an area of 300,000m² manufacturing bases and is capable of producing 10 million batteries per year. UPLUS SLI batteries are used in various motorcycles, cars, trucks, buses, marine, and associated vehicles. Indeed, UPLUS is the largest automotive battery manufacturer in China.

The UPLUS factory is equipped with the most modern production equipment. It features 8 states of the art automated expanded metal lines operated in conjunction with the latest enveloping, grouping, and welding technologies. Blending world-class technology with the highest operator training standards, UPLUS batteries will be of the highest possible quality. UPLUS is com-

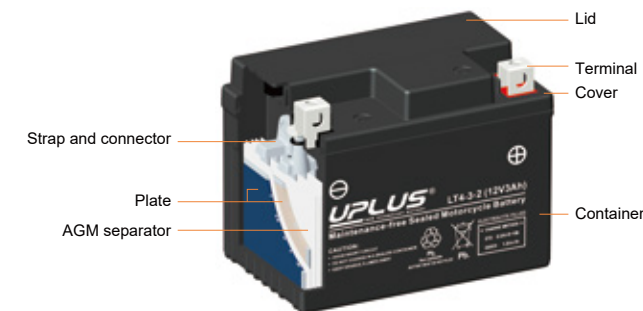
binning the finest in research and development with the most advanced manufacturing and strives for the lofty goal of Zero defects under the most rigorous quality control measures. Apart from that, UPLUS is certified ISO9001, ISO14001, and ISO45001 (occupational health and security system).

UPLUS has carried out technical cooperation with renowned overseas battery manufacturers, introduced advanced equipment and instruments from domestic and overseas suppliers, and obtained many patent technologies. With more than 40 trading companies established in the PRC and overseas, such as in the United States of America, Europe and South-East Asia, our products sell and distribute to more than 100 countries.

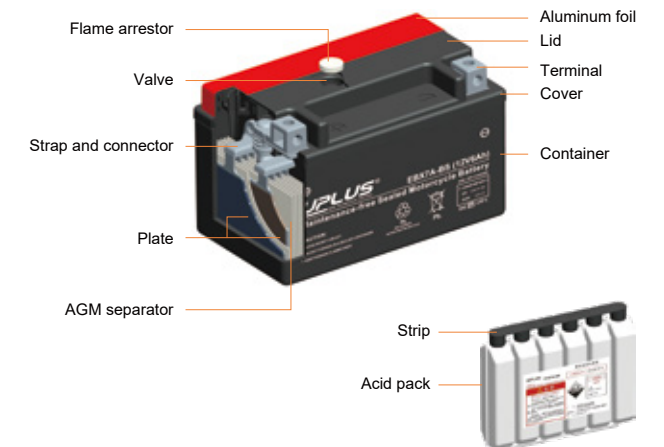
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BATTERY FEATURES

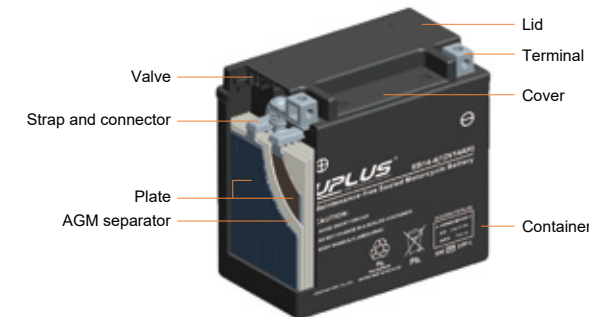
LT Series Maintenance Free Battery(ABS)



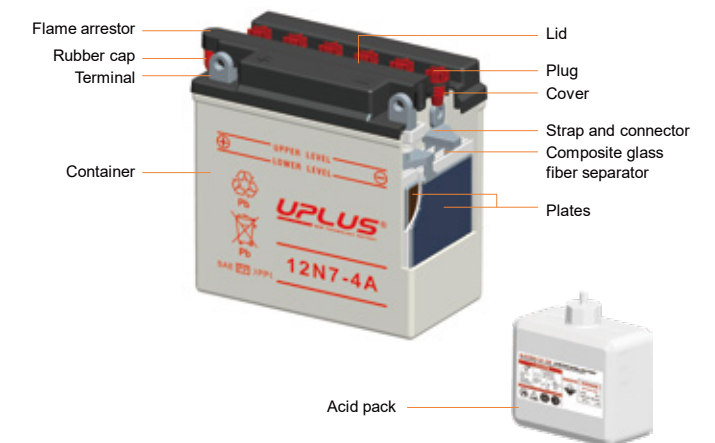
EB Series Dry Charged VRLA Maintenance Free Battery(PP)



EB Series Maintenance Free Battery(PP)



Flooded Battery(PP) Special Separator



Maintenance-Free AGM/VRLA Battery

Uplus batteries are constructed with lead calcium alloy and absorbed glass mat technology to provide you with total maintenance-free operation. No spills, no leaks, no water to check. This design will provide you with the most powerful, highest amp hour capacity, longest cycle-life product on the market. In addition, the fiber-glass mat separators and high cell compression extend battery life by delivering superior vibration resistance from engine abuse or extreme road conditions.

Flooded Lead-acid Battery

In most cases, this battery was the original equipment battery provided by your equipment manufacturer. The uplus conventional battery meets or exceeds the original specifications for starting and amp hour capacity. Heavy duty glass mat separators resist vibration damage and through-the-wall intercell connectors minimize internal resistance for maximum power. Quick remove vent and transparent case will make checking electrolyte levels easy.

TERMINAL CONFIGURATIONS

Terminal shapes vary from one battery to another. By identifying the correct replacement battery from the listing in this book, you are assured of the proper terminal configuration. For custom applications, refer to the following chart to identify terminal shape and corresponding batteries.

TERMINAL					BATTERY TYPE
TYPE	SKETCH	FRONT	SIDE	TOP	
A					EBX30L-BS, LT4A-3, EBZ6.5-3, EB7B-4-1, EBZ7-3-1, EBZ7-3-2, EB8-3-1, EB8-4-1, EB9A-4-1, EB9B-4-1, EBZ10-4-1, EBZ10-4-2, EB12A-4-1, EB12B-4-1, EBZ12-4-1, EB14B-4-1, EBZ14-4-1, EB16B-3-1, EB16B-4-1, EB16B-3-1-PW, EB24-3-1, EB30-3-1, EB30-3-1-PW, LB4L-B, LB7L-B2, LB9L-A2, LB12C-A, LB16B-A, LB16CL-B, L50-N18L-A3, LB30L-B, LB30CL-B, EBZ14-4-2
					EBX4L-BS, EBZ4.5L-BS, EBX5L-BS, EBZ5L-BS, EBX7L-BS, EB7B-BS, EBZ7L-BS, EBX9-BS, EB9A-BS, EB9B-BS, EBZ10-BS, EBZ12-BS, EBZ14-BS, EBX12-BS, EB12A-BS, EB12B-BS, EBX14L-BS, EBX14-BS, EB14B-BS, EBX14AHL-BS, EBX14AH-BS, EBX14AH-BS-PW, EBX16-BS, EBX20L-BS, EBX20-BS, EBX20CH-BS, EBX24HL-BS, EB4-3, EBZ4.5-3, EB5-3, EBZ5-3, EB7-3, EB7A-4-1, EBZ8-3, EB9-4, EB10-3, EB10-3-PW, EB12-4, EB14-4, EB14A-3, EB14A-4, EB14C-3, EB14C-4, EB16-4, EB20-3, EB20H-3, EB20CH-4
B					EB5AL-BS, LT3-3, LT5A-3-1, LT7D-3, LT7D-4, LT7E-3, LT7E-4, LT9A-3, LT9A-4, LT9A-4-PW, EB12E-3, EB12E-4, 6N6-3B, 6N6-3B-1, 6N11A-1B, 6N11A-3A, 12N5S-3B, 12N5-4B, 12N5.5-3B, 12N6-3B, 12N6.5-3B, 12N7-3A, 12N7-3B, 12N7-4B, 12N7A-3A, 12N9-3B, 12N9-4B-1, 12N10-3B, 12N12A-4A-1, 12N12A-4A-1(J), LB6.5L-B, LB7-A, LB7L-B, LB9-B, LB9L-B, LB10L-B, LB12A-A, LB12AL-A, LB12AL-A2*, LB16-B, LB16L-B
					LT6.5-3
C					HLB16A-A, HLB16A-AB, LB16B-A1**, LB18L-A, L50-N18L-A
D					12N14-3A2, 12N14-4A, LB10L-A2, LB10L-B2, LB14-A2, LB14-B2, LB14L-A2, LB14L-B2, LB14A-A2
E					LB7C-A
F					12N5.5-4A, LB16AL-A2

TERMINAL					BATTERY TYPE
TYPE	SKETCH	FRONT	SIDE	TOP	
G					12N24-3A(J)
					EB22-3, EB20P-3-1, 12C16A-3A, 12C16A-3B, L60-N24L-A, L60-N24AL-B, L60-N30-A, L60-N30L-B
					EBU1-4-1, EBU1R-4-1, EBU1-4, EBU1R-4
					U1-9, U1R-9, U1-11, U1R-11
H					CHD4-12
I					LTR4A-BS, LTR4A-5
J					LT4B-BS, LT4B-5
K					JB14-4
M					MB14-4
O					EB12D-4, EB14D-4, EB12D-4-1, EB14D-4-1
					EB14E-4
P					EB7E-4
Q					EB7E-4-1, EB24-3-2

*Includes terminal adaptor for converting to side mount.
**Includes terminal adaptor for converting to top mount.

DESIGNATION OF BATTERY TYPE NUMBERS

Examples:

Conventional Flooded Battery Part Number									
	6	N	4		—	2	A	—	5
	12	N	9		—	4	B	—	1
	12	N	12	A	—	4	A	—	1
	a	b	c	d		e	f		g

High Performance Flooded Battery Part Number									
	L	50	—	N	18	L	—	A	2
S	LB	14				L	—	B	2
	LB	16	A			L	—	A	2
n	h	j	d	b	i	e		f	g

Dry Charged VRLA (AGM) Maintenance Free Battery Part Number									
	LT	X	7			L	—	B	S
	LT	X	20		H	L	—	B	S
	LT	X	14	A	H	L	—	B	S
	k	m	i	d	m	e		g	l

Factory Activated VRLA (AGM) Maintenance Free Battery Part Number									
	LT		14	A	—	3			
	LT	Z	10			4			
	EB	Z	12		—	4			
	k	m	i	d		e			

Designations:	Polarity Location (Figure. 1)
a - nominal voltage; b - vented type (normal type); c - battery capacity at 10 hour rate; d - indication of different size of the same capacity batteries; e - polarity location (see Fig. 1), configuration; f - location of opening for exhaust (see Fig. 2); g - type of terminal; h - symbol of High Performance Flooded batteries; i - performance level; j - cranking or star ting power; k - symbol of Leoch maintenance free (VRLA) batteries (LT, EB); l - sealed, non-spillable; m - high performance; n - with sensor.	6-Volt Polarity Location 12-Volt Polarity Location - 1 + + 2 - - 3 + + 4 - Example: 6N4C-1B 6N2-2A LB14L-A2 LB12A-B ^ e ^ =Polarity Location (L indicates positive terminal is located at right side of battery)
	Exhaust Location (Figure. 2)
	A B C D Example: 12N7-4A LB14-B2 6N2A-2C 6N11-2D ^ f ^ =Location of opening for exhaust port

Metric Conversion Chart		
1 inch = 25.4 millimeters	1 pound = .45 kilograms	1 liter= 33.8 ounces
1 ounce = .03 liters	1 millimeter = .04 inches	1 kilogram = 2.2 pounds





MAINTENANCE FREE
BATTERY



LT SERIES DRY CHARGED VRLA(AGM)
MAINTENANCE FREE BATTERY(PP)

Battery Type	Rated Voltage	Rated Capacity (10Hr)	CCA@ (-18°C)	Dimensions						Assembly Figure (As per Cover Polarity)	Terminal Type	Weight W/O Acid		Electrolyte		Total Weight for Battery	Regular Charge Current
				Dimensions-Millimeters (±2mm)			Dimensions Inches (±1/16in)							Volume	Weight		
	V	Ah	A	L	W	H	L	W	H			Kg	Lbs	liters	Kg	Kg	A
LTR4A-BS	12	2.3	30	113	48	85	4 7/16	1 14/16	3 6/16		I	0.83	1.83	0.12	0.16	0.99	0.23
LT4B-BS	12	2.3	30	113	38	85	4 7/16	1 8/16	3 6/16		J	0.78	1.72	0.10	0.14	0.92	0.23



EB SERIES DRY CHARGED VRLA(AGM)
MAINTENANCEFREE BATTERY(PP)

Battery Type	Rated Voltage	Rated Capacity (10Hr)	CCA@ (-18°C)	Dimensions						Assembly Figure (As per Cover Polarity)	Terminal Type	Weight W/O Acid		Electrolyte		Total Weight for Battery	Regular Charge Current
				Dimensions-Millimeters (±2mm)			Dimensions Inches (±1/16in)							Volume	Weight		
	V	Ah	A	L	W	H	L	W	H			Kg	Lbs			liters	Kg
EBX4L-BS-I	12	3	50	113	70	85	4 7/16	2 12/16	3 6/16		A	1.05	2.31	0.19	0.25	1.30	0.30
EBX4L-BS-I(J)	12	3	40	113	70	85	4 7/16	2 12/16	3 6/16		A	0.97	2.14	0.20	0.26	1.23	0.30
EBZ5L-BS	12	3.5	50	113	70	85	4 7/16	2 12/16	3 6/16		A	1.17	2.58	0.16	0.22	1.39	0.35
EBZ4.5L-BS	12	4	55	113	70	85	4 7/16	2 12/16	3 6/16		A	1.26	2.78	0.18	0.25	1.51	0.40
EBX5L-BS	12	4	70	113	70	105	4 7/16	2 12/16	4 2/16		A	1.52	3.35	0.24	0.31	1.83	0.40
EBX5L-BS(J)	12	4	55	113	70	105	4 7/16	2 12/16	4 2/16		A	1.36	3.00	0.24	0.31	1.67	0.40
EB5AL-BS	12	5	75	120	60	130	4 12/16	2 6/16	5 2/16		B	1.57	3.46	0.27	0.35	1.92	0.50
EBZ7L-BS	12	6	90	113	70	105	4 7/16	2 12/16	4 2/16		A	1.77	3.90	0.28	0.37	2.14	0.60
EBX7L-BS	12	6	85	113	70	130	4 7/16	2 12/16	5 2/16		A	1.92	4.23	0.33	0.44	2.36	0.60
EBX7L-BS(J)	12	6	70	113	70	130	4 7/16	2 12/16	5 2/16		A	1.73	3.81	0.33	0.44	2.17	0.60
EBX7A-BS-I	12	6	100	150	87	93	5 14/16	3 7/16	3 11/16		A	1.83	4.03	0.35	0.46	2.29	0.60
EB7B-BS	12	6.5	90	150	66	93	5 14/16	2 10/16	3 11/16		A	1.89	4.16	0.30	0.40	2.29	0.65
EB7B-BS(J)	12	6.5	70	150	66	93	5 14/16	2 10/16	3 11/16		A	1.74	3.83	0.31	0.41	2.15	0.65
EBX9-BS	12	8	120	150	87	105	5 14/16	3 7/16	4 2/16		A	2.49	5.48	0.42	0.55	3.04	0.80
EBX9-BS(J)	12	8	100	150	87	105	5 14/16	3 7/16	4 2/16		A	2.30	5.07	0.42	0.55	2.85	0.80
EB9B-BS	12	8	115	150	70	105	5 14/16	2 12/16	4 2/16		A	2.28	5.02	0.38	0.50	2.78	0.80
EB9B-BS(J)	12	8	95	150	70	105	5 14/16	2 12/16	4 2/16		A	2.08	4.58	0.39	0.52	2.60	0.80
EB9A-BS(J)	12	8.5	70	135	75	139	5 5/16	2 15/16	5 8/16		A	2.21	4.87	0.50	0.66	2.87	0.85
EBZ10-BS	12	8.6	150	150	88	93	5 14/16	3 7/16	3 11/16		A	2.60	5.73	0.39	0.51	3.11	0.86
EB9A-BS	12	9	100	135	75	139	5 5/16	2 15/16	5 8/16		A	2.45	5.40	0.49	0.65	3.10	0.90
EB9A-BS-1	12	9	100	135	75	139	5 5/16	2 15/16	5 8/16		B	2.43	5.35	0.49	0.65	3.08	0.90
EB10A-BS	12	9	150	194	59	112	7 10/16	2 5/16	4 7/16		A	2.70	5.95	0.42	0.56	3.26	0.90
EBX12-BS	12	10	180	150	87	130	5 14/16	3 7/16	5 2/16		A	3.10	6.83	0.57	0.76	3.86	1.00
EBX12-BS(J)	12	10	130	150	87	130	5 14/16	3 7/16	5 2/16		A	2.82	6.21	0.57	0.76	3.58	1.00
EB12A-BS	12	10	145	150	88	105	5 14/16	3 7/16	4 2/16		A	2.64	5.81	0.50	0.65	3.29	1.00
EB12B-BS	12	10	165	150	70	130	5 14/16	2 12/16	5 2/16		A	2.88	6.34	0.50	0.67	3.55	1.00
EB12B-BS(J)	12	10	120	150	70	130	5 14/16	2 12/16	5 2/16		A	2.67	5.88	0.52	0.69	3.36	1.00
EBZ12-BS	12	11	210	150	88	110	5 14/16	3 7/16	4 5/16		A	3.16	6.96	0.47	0.62	3.78	1.10
EBZ14-BS	12	11.2	210	150	88	110	5 14/16	3 7/16	4 5/16		A	3.18	7.00	0.47	0.62	3.80	1.12
EBX14L-BS	12	12	200	150	87	145	5 14/16	3 7/16	5 11/16		A	3.51	7.73	0.65	0.86	4.37	1.20
EBX14L-BS(J)	12	12	160	150	87	145	5 14/16	3 7/16	5 11/16		A	3.20	7.05	0.65	0.86	4.06	1.20

Battery Type	Rated Voltage	Rated Capacity (10Hr)	CCA@ (-18°C)	Dimensions						Assembly Figure (As per Cover Polarity)	Terminal Type	Weight W/O Acid		Electrolyte		Total Weight for Battery	Regular Charge Current
				Dimensions-Millimeters (±2mm)			Dimensions Inches (±1/16in)							Volume	Weight		
	V	Ah	A	L	W	H	L	W	H			Kg	Lbs			liters	Kg
EBX14-BS	12	12	200	150	87	145	5 14/16	3 7/16	5 11/16		A	3.51	7.73	0.65	0.86	4.37	1.20
EBX14-BS(J)	12	12	160	150	87	145	5 14/16	3 7/16	5 11/16		A	3.20	7.05	0.65	0.86	4.06	1.20
EB14B-BS	12	12	175	150	70	145	5 14/16	2 12/16	5 11/16		A	3.32	7.31	0.59	0.79	4.11	1.20
EB14B-BS(J)	12	12	150	150	70	145	5 14/16	2 12/16	5 11/16		A	3.07	6.76	0.61	0.82	3.89	1.20
EBX14AHL-BS	12	12	220	133	90	164	5 4/16	3 9/16	6 7/16		A	3.65	8.04	0.58	0.77	4.42	1.20
EBX14AHL-BS(J)	12	12	170	133	90	164	5 4/16	3 9/16	6 7/16		A	3.38	7.44	0.65	0.86	4.24	1.20
EBX14AH-BS	12	12	220	133	90	164	5 4/16	3 9/16	6 7/16		A	3.65	8.04	0.58	0.77	4.42	1.20
EBX14AH-BS(J)	12	12	170	133	90	164	5 4/16	3 9/16	6 7/16		A	3.38	7.44	0.65	0.86	4.24	1.20
EBX16-BS	12	14	220	150	87	161	5 14/16	3 7/16	6 5/16		A	4.00	8.81	0.75	0.99	4.99	1.40
EBX20HL-BS-P1	12	18	310	175	87	155	6 14/16	3 7/16	6 2/16		A	5.00	11.01	0.89	1.17	6.17	1.80
EBX20L-BS	12	18	250	175	87	155	6 14/16	3 7/16	6 2/16		A	4.77	10.51	0.89	1.17	5.94	1.80
EBX20L-BS(J)	12	18	230	175	87	155	6 14/16	3 7/16	6 2/16		A	4.45	9.80	0.89	1.17	5.62	1.80
EBX20-BS	12	18	250	175	87	155	6 14/16	3 7/16	6 2/16		A	4.77	10.51	0.89	1.17	5.94	1.80
EBX20-BS(J)	12	18	230	175	87	155	6 14/16	3 7/16	6 2/16		A	4.45	9.80	0.89	1.17	5.62	1.80
EBX20CH-BS	12	18	230	150	87	161	5 14/16	3 7/16	6 5/16		A	4.45	9.80	0.81	1.08	5.53	1.80
EBX20HL-BS-P	12	18	310	175	87	155	6 14/16	3 7/16	6 2/16		A	5.44	11.98	0.83	1.11	6.55	1.80
EBX20H-BS-P	12	18	310	175	87	155	6 14/16	3 7/16	6 2/16		A	5.44	11.98	0.83	1.11	6.55	1.80
EBX30L-BS	12	30	385	166	126	173	6 9/16	4 15/16	6 13/16		A	7.65	16.85	1.39	1.83	9.48	3.00



LT SERIES FACTORY ACTIVATED VRLA(AGM)
MAINTENANCE FREE BATTERY(ABS)

Battery Type	Rated Voltage	Rated Capacity (10Hr)	CCA@ (-18°C)	Dimensions						Assembly Figure (As per Cover Polarity)	Terminal Type	Total Weight for Battery		Regular Charge Current
	V	Ah	A	Dimensions-Millimeters (±2mm)			Dimensions Inches (±1/16in)					Kg	Lbs	A
				L	W	H	L	W	H					
6LT4-2	6	4	N/A	70	70	95	2 12/16	2 12/16	3 12/16		/	0.85	1.87	0.40
LTR4A-5	12	2.3	30	113	48	85	4 7/16	1 14/16	3 6/16		I	0.96	2.11	0.23
LT4B-5	12	2.3	30	113	38	85	4 7/16	1 8/16	3 6/16		J	0.91	2.00	0.23
LT2.5-3-2	12	2.5	20	80	70	105	3 2/16	2 12/16	4 2/16		/	1.04	2.29	0.25
LT3-3	12	3	30	98	56	110	3 14/16	2 3/16	4 5/16		B	1.20	2.64	0.30
LT4-3-2	12	3	50	113	70	85	4 7/16	2 12/16	3 6/16		A	1.36	3.00	0.30
LT4-3-2(J)	12	3	40	113	70	85	4 7/16	2 12/16	3 6/16		A	1.25	2.75	0.30
LT4A-3	12	4	55	120	70	92	4 12/16	2 12/16	3 10/16		A	1.59	3.50	0.40
LT5-3-2	12	4	70	113	70	105	4 7/16	2 12/16	4 2/16		A	1.78	3.92	0.40
LT5-3-2(J)	12	4	55	113	70	105	4 7/16	2 12/16	4 2/16		A	1.64	3.61	0.40
LT5A-3-1	12	5	75	120	60	130	4 12/16	2 6/16	5 2/16		B	1.90	4.19	0.50
LT5A-3-1(J)	12	5	55	120	60	130	4 12/16	2 6/16	5 2/16		B	1.76	3.88	0.50
LT6-3-2	12	5	70	113	70	105	4 7/16	2 12/16	4 2/16		A	1.94	4.27	0.50
LT7-3-2	12	6	85	113	70	130	4 7/16	2 12/16	5 2/16		A	2.29	5.04	0.60
LT7-3-2(J)	12	6	70	113	70	130	4 7/16	2 12/16	5 2/16		A	2.10	4.63	0.60
LT6.5-3	12	6.5	85	139	66	102	5 8/16	2 10/16	4		B	2.30	5.07	0.65
LT6.5-3(J)	12	6.5	70	139	66	102	5 8/16	2 10/16	4		B	2.18	4.80	0.65
LT7D-3	12	7	90	146	60	130	5 12/16	2 6/16	5 2/16		B	2.40	5.29	0.70
LT7D-3(J)	12	7	75	146	60	130	5 12/16	2 6/16	5 2/16		B	2.27	5.00	0.70
LT7D-4	12	7	90	146	60	130	5 12/16	2 6/16	5 2/16		B	2.40	5.29	0.70
LT7D-4(J)	12	7	75	146	60	130	5 12/16	2 6/16	5 2/16		B	2.27	5.00	0.70
LT7E-4	12	7	90	135	75	122	5 5/16	2 15/16	4 13/16		B	2.75	6.06	0.70
LT7E-3	12	7	90	135	75	122	5 5/16	2 15/16	4 13/16		B	2.75	6.06	0.70
LT7A-4(N)	12	7	100	151	87	93	5 15/16	3 7/16	3 11/16		A	2.66	5.86	0.70
LT9A-4(J)	12	8.5	70	135	75	139	5 5/16	2 15/16	5 8/16		B	2.85	6.28	0.85
LT9A-3	12	9	100	135	75	139	5 5/16	2 15/16	5 8/16		B	3.05	6.72	0.90
LT9A-4	12	9	100	135	75	139	5 5/16	2 15/16	5 8/16		B	3.05	6.72	0.90

NEW TECHNOLOGY BATTERY

EB SERIES FACTORY ACTIVATED VRLA(AGM)
MAINTENANCE FREE BATTERY(PP)

Battery Type	Rated Voltage	Rated Capacity (10Hr)	CCA@ (-18°C)	Dimensions						Assembly Figure (As per Cover Polarity)	Terminal Type	Total Weight for Battery		Regular Charge Current
				Dimensions-Millimeters (±2mm)			Dimensions Inches (±1/16in)					Kg	Lbs	
	V	Ah	A	L	W	H	L	W	H					A
EB4-3-I	12	3	50	113	70	85	4 7/16	2 12/16	3 6/16		A	1.32	2.91	0.30
EB4-3-I(J)	12	3	40	113	70	85	4 7/16	2 12/16	3 6/16		A	1.26	2.78	0.30
EBZ5-3	12	3.5	50	113	70	85	4 7/16	2 12/16	3 6/16		A	1.40	3.08	0.35
EBZ4.5-3	12	4	55	113	70	85	4 7/16	2 12/16	3 6/16		A	1.52	3.35	0.40
EB5-3	12	4	70	113	70	105	4 7/16	2 12/16	4 2/16		A	1.80	3.96	0.40
EB5-3(J)	12	4	55	113	70	105	4 7/16	2 12/16	4 2/16		A	1.70	3.74	0.40
EB5-3-2	12	4	80	113	70	105	4 7/16	2 12/16	4 2/16		A	1.90	4.19	0.40
EB7-3	12	6	85	113	70	130	4 7/16	2 12/16	5 2/16		A	2.31	5.09	0.60
EB7-3(J)	12	6	70	113	70	130	4 7/16	2 12/16	5 2/16		A	2.10	4.63	0.60
EB7A-4-I	12	6	100	150	87	93	5 14/16	3 7/16	3 11/16		A	2.28	5.02	0.60
EB7A-4-QT	12	6	110	150	87	93	5 14/16	3 7/16	3 11/16		A	2.52	5.55	0.60
EBZ7-3-1	12	6	90	113	70	105	4 7/16	2 12/16	4 2/16		A	2.13	4.69	0.60
EBZ7-3-2	12	6	90	113	70	105	4 7/16	2 12/16	4 2/16		A	2.13	4.69	0.60
EBZ6.5-3	12	6.5	105	113	70	121	4 7/16	2 12/16	4 12/16		A	2.34	5.15	0.65
EB7B-4-1	12	6.5	90	150	66	93	5 14/16	2 10/16	3 11/16		A	2.30	5.07	0.65
EB7B-4-1(J)	12	6.5	70	150	66	93	5 14/16	2 10/16	3 11/16		A	2.15	4.74	0.65
EBZ8-3	12	7	95	113	70	130	4 7/16	2 12/16	5 2/16		A	2.35	5.18	0.70
EB7E-3(J)	12	7.5	65	135	75	123	5 5/16	2 15/16	4 13/16		B	2.55	5.62	0.75
EB9-4-I	12	8	110	150	87	105	5 14/16	3 7/16	4 2/16		A	2.85	6.28	0.80
EB8-4-1	12	8	110	135	75	133	5 5/16	2 15/16	5 4/16		A	2.90	6.39	0.80
EB8-3-1	12	8	110	135	75	133	5 5/16	2 15/16	5 4/16		A	2.90	6.39	0.80
EB8-4-3(J)	12	8	85	135	75	133	5 5/16	2 15/16	5 4/16		B	2.67	5.88	0.80
EB9B-4-1	12	8	115	150	70	105	5 14/16	2 12/16	4 2/16		A	2.78	6.12	0.80
EB9B-4-1(J)	12	8	90	150	70	105	5 14/16	2 12/16	4 2/16		A	2.58	5.68	0.80
EB9A-4-2(J)	12	8.5	70	135	75	139	5 5/16	2 15/16	5 8/16		B	2.85	6.28	0.85
EBZ10-4-1	12	8.6	150	150	88	93	5 14/16	3 7/16	3 11/16		A	3.15	6.94	0.86
EBZ10-4-2	12	8.6	150	150	88	93	5 14/16	3 7/16	3 11/16		A	3.15	6.94	0.86
EBZ10-4-1(J)	12	8.6	120	150	88	93	5 14/16	3 7/16	3 11/16		A	2.95	6.50	0.86
EB9A-4-1	12	9	100	135	75	139	5 5/16	2 15/16	5 8/16		A	3.08	6.78	0.90
EB9A-4-2	12	9	100	135	75	139	5 5/16	2 15/16	5 8/16		B	3.05	6.72	0.90
EB12A-4-1	12	10	145	150	88	105	5 14/16	3 7/16	4 2/16		A	3.29	7.25	1.00
EB12B-4-1	12	10	165	150	70	130	5 14/16	2 12/16	5 2/16		A	3.59	7.91	1.00
EB12B-4-1(J)	12	10	120	150	70	130	5 14/16	2 12/16	5 2/16		A	3.39	7.47	1.00
EB10-3	12	10	120	133	90	142	5 4/16	3 9/16	5 9/16		A	3.68	8.11	1.00
EB12-4(J)	12	10	130	150	87	130	5 14/16	3 7/16	5 2/16		A	3.62	7.97	1.00
EB12-4-P	12	11	180	150	87	130	5 14/16	3 7/16	5 2/16		A	3.92	8.63	1.10
EBZ12-4-1	12	11	210	150	88	110	5 14/16	3 7/16	4 5/16		A	3.81	8.39	1.10
EB12D-4	12	11	180	150	87	130	5 14/16	3 7/16	5 2/16		O	4.25	9.36	1.10
EBZ14-4-1	12	11.2	210	150	88	110	5 14/16	3 7/16	4 5/16		A	3.83	8.44	1.12
EBZ14-4-1(J)	12	11.2	170	150	88	110	5 14/16	3 7/16	4 5/16		A	3.59	7.91	1.12
EBZ14-4-2	12	11.2	210	150	88	110	5 14/16	3 7/16	4 5/16		A	3.82	8.41	1.12
EBC12-4	12	12	180	150	87	130	5 14/16	3 7/16	5 2/16		A	3.60	7.93	1.20
EB14C-4-I	12	12	170	150	87	145	5 14/16	3 7/16	5 11/16		A	4.15	9.14	1.20
EB12E-3	12	12	135	134	81	160	5 4/16	3 3/16	6 5/16		B	3.88	8.55	1.20
EB12E-3(J)	12	12	110	134	81	160	5 4/16	3 3/16	6 5/16		B	3.60	7.93	1.20
EB12E-4	12	12	135	134	81	160	5 4/16	3 3/16	6 5/16		B	3.88	8.55	1.20
EB12E-4(J)	12	12	110	134	81	160	5 4/16	3 3/16	6 5/16		B	3.60	7.93	1.20
EB12E-3-1	12	12	135	134	81	160	5 4/16	3 3/16	6 5/16		A	3.89	8.57	1.20
EB12E-4-1	12	12	135	134	81	160	5 4/16	3 3/16	6 5/16		A	3.89	8.57	1.20
EB14C-3-P	12	12	200	150	87	145	5 14/16	3 7/16	5 11/16		A	4.44	9.78	1.20

NEW TECHNOLOGY BATTERY

EB SERIES FACTORY ACTIVATED VRLA(AGM)
MAINTENANCE FREE BATTERY(PP)

Battery Type	Rated Voltage	Rated Capacity (10Hr)	CCA@ (-18°C)	Dimensions						Assembly Figure (As per Cover Polarity)	Terminal Type	Total Weight for Battery		Regular Charge Current
				Dimensions-Millimeters (±2mm)			Dimensions Inches (±1/16in)					Kg	Lbs	
	V	Ah	A	L	W	H	L	W	H					A
EB14C-4-P	12	12	200	150	87	145	5 14/16	3 7/16	5 11/16		A	4.44	9.78	1.20
EB14A-3	12	12	220	133	90	164	5 4/16	3 9/16	6 7/16		A	4.40	9.69	1.20
EB14A-3(J)	12	12	170	133	90	164	5 4/16	3 9/16	6 7/16		A	4.20	9.25	1.20
EB14A-4	12	12	220	133	90	164	5 4/16	3 9/16	6 7/16		A	4.40	9.69	1.20
EB14A-4(J)	12	12	170	133	90	164	5 4/16	3 9/16	6 7/16		A	4.20	9.25	1.20
EB14B-4-1	12	12	175	150	70	145	5 14/16	2 12/16	5 11/16		A	4.10	9.03	1.20
EB14B-4-1(J)	12	12	140	150	70	145	5 14/16	2 12/16	5 11/16		A	3.88	8.55	1.20
EB14D-4	12	13	200	150	87	145	5 14/16	3 7/16	5 11/16		O	4.76	10.48	1.30
EB14E-4	12	13	245	150	87	145	5 14/16	3 7/16	5 11/16		O	5.30	11.67	1.30
JB14-4	12	13	200	150	87	145	5 14/16	3 7/16	5 11/16		K	4.62	10.18	1.30
MB14-4	12	13	210	150	87	145	5 14/16	3 7/16	5 11/16		M	4.80	10.57	1.30
EB16-4	12	14	215	150	87	161	5 14/16	3 7/16	6 5/16		A	5.02	11.06	1.40
EB20H-3-P1	12	18	310	175	87	155	6 14/16	3 7/16	6 2/16		A	6.15	13.55	1.80
EB20-3	12	18	250	175	87	155	6 14/16	3 7/16	6 2/16		A	5.91	13.02	1.80
EB20-3(J)	12	18	220	175	87	155	6 14/16	3 7/16	6 2/16		A	5.60	12.33	1.80
EB20CH-4	12	18	230	150	87	161	5 14/16	3 7/16	6 5/16		A	5.53	12.18	1.80
EB22-3	12	18	230	186	82	171	7 5/16	3 4/16	6 12/16		G	5.55	12.22	1.80
EB16B-3-1	12	19	220	175	100	155	6 14/16	3 15/16	6 2/16		A	6.30	13.88	1.90
EB16B-4-1	12	19	220	175	100	155	6 14/16	3 15/16	6 2/16		A	6.30	13.88	1.90
EBC20-3	12	20	270	175	87	155	6 14/16	3 7/16	6 2/16		A	5.47	12.05	2.00
EB24-3-1	12	21	330	205	87	162	8 1/16	3 7/16	6 6/16		A	7.00	15.42	2.10
EBU1-4-P1	12	23	300	195	125	176	7 11/16	4 15/16	6 15/16		G	8.00	17.62	2.30
EBU1R-4-P1	12	23	300	195	125	176	7 11/16	4 15/16	6 15/16		G	8.00	17.62	2.30
EB24A-3(J)	12	24	220	184	124	170	7 4/16	4 14/16	6 11/16		G	7.64	16.83	2.40
EB24A-4(J)	12	24	220	184	124	170	7 4/16	4 14/16	6 11/16		G	7.64	16.83	2.40
EB24A-3	12	24	280	184	124	170	7 4/16	4 14/16	6 11/16		G	8.15	17.95	2.40
EB24A-4	12	24	280	184	124	170	7 4/16	4 14/16	6 11/16		G	8.15	17.95	2.40
EB30-3-I	12	24	300	166	126	173	6 9/16	4 15/16	6 13/16		A	8.60	18.94	2.40
EBU1-4-P	12	25	330	195	125	176	7 11/16	4 15/16	6 15/16		G	8.34	18.37	2.50
EBU1R-4-P	12	25	330	195	125	176	7 11/16	4 15/16	6 15/16		G	8.34	18.37	2.50
EB30A-3(J)	12	30	325	184	124	170	7 4/16	4 14/16	6 11/16		G	8.55	18.83	3.00
EB30A-4(J)	12	30	325	184	124	170	7 4/16	4 14/16	6 11/16		G	8.55	18.83	3.00
EB30-3-1	12	30	385	166	126	173	6 9/16	4 15/16	6 13/16		A	9.38	20.66	3.00
EB30-3-1(J)	12	30	330	166	126	173	6 9/16	4 15/16	6 13/16		A	8.88	19.56	3.00

CONVENTIONAL FLOODED BATTERY

Battery Type	Rated Voltage	Rated Capacity (10Hr)	CCA@ (-18°C)	Dimensions						Assembly Figure (As per Cover Polarity)	Terminal Type	Weight W/O Acid		Electrolyte		Total Weight for Battery	Regular Charge Current
				Dimensions-Millimeters (±2mm)			Dimensions Inches (±1/16in)							Volume	Weight		
				V	Ah	A	L	W	H			L	W			H	Kg
6N6-3B	6	6	N/A	99	57	120	3 14/16	2 4/16	4 12/16		B	0.87	1.92	0.29	0.37	1.24	0.60
6N6-3B-1	6	6	N/A	99	57	111	3 14/16	2 4/16	4 6/16		B	0.87	1.92	0.29	0.37	1.24	0.60
6N11A-1B	6	11	N/A	122	62	131	4 13/16	2 7/16	5 3/16		B	1.45	3.19	0.48	0.61	2.06	1.10
6N11A-3A	6	11	N/A	122	62	131	4 13/16	2 7/16	5 3/16		B	1.45	3.19	0.48	0.61	2.06	1.10
12N5S-3B	12	5	55	120	61	130	4 12/16	2 6/16	5 2/16		B	1.42	3.13	0.41	0.53	1.95	0.50
12N5-4B	12	5	40	120	61	130	4 12/16	2 6/16	5 2/16		B	1.59	3.50	0.41	0.53	2.12	0.50
12N5.5-3B	12	5.5	44	135	60	130	5 5/16	2 6/16	5 2/16		B	1.60	3.52	0.48	0.62	2.22	0.55
12N6-3B	12	5.5	50	137	72	95	5 6/16	2 13/16	3 12/16		B	1.62	3.57	0.36	0.47	2.09	0.55
12N6.5-3B	12	6.5	55	138	73	107	5 7/16	2 14/16	4 3/16		B	1.80	3.96	0.44	0.56	2.36	0.65
12N7-3A	12	7	74	135	75	133	5 5/16	2 15/16	5 4/16		B	2.10	4.63	0.59	0.76	2.86	0.70
12N7-3B	12	7	74	135	75	133	5 5/16	2 15/16	5 4/16		B	2.10	4.63	0.59	0.76	2.86	0.70
12N7-3B(J)	12	7	65	135	75	133	5 5/16	2 15/16	5 4/16		B	1.90	4.19	0.59	0.76	2.66	0.70
12N7-4A	12	7	74	135	75	133	5 5/16	2 15/16	5 4/16		B	2.10	4.63	0.59	0.76	2.86	0.70
12N7-4A(J)	12	7	65	135	75	133	5 5/16	2 15/16	5 4/16		B	1.90	4.19	0.59	0.76	2.66	0.70
12N7-4B	12	7	74	135	75	133	5 5/16	2 15/16	5 4/16		B	2.10	4.63	0.59	0.76	2.86	0.70
12N7A-3A	12	7	70	150	60	130	5 14/16	2 6/16	5 2/16		B	1.96	4.32	0.53	0.67	2.63	0.70
12N7A-3A(J)	12	7	60	150	60	130	5 14/16	2 6/16	5 2/16		B	1.82	4.01	0.53	0.67	2.49	0.70
12N9-3B	12	9	85	135	75	139	5 5/16	2 15/16	5 8/16		B	2.23	4.91	0.59	0.76	2.99	0.90
12N9-4B-1	12	9	85	135	75	139	5 5/16	2 15/16	5 8/16		B	2.23	4.91	0.59	0.76	2.99	0.90
12N9-4B-1(J)	12	9	70	135	75	139	5 5/16	2 15/16	5 8/16		B	2.02	4.45	0.62	0.79	2.81	0.90
12N10-3B	12	10	95	134	89	145	5 4/16	3 8/16	5 11/16		B	2.65	5.84	0.80	1.02	3.67	1.00
12N12A-4A-1	12	12	113	134	81	160	5 4/16	3 3/16	6 5/16		B	3.16	6.96	0.80	1.02	4.18	1.20
12N12A-4A-1(J)	12	12	95	134	81	160	5 4/16	3 3/16	6 5/16		B	2.88	6.34	0.80	1.02	3.90	1.20
12N14-3A2	12	14	128	134	89	166	5 4/16	3 8/16	6 9/16		D	3.02	6.65	0.91	1.17	4.19	1.40
12N14-4A	12	14	128	134	89	166	5 4/16	3 8/16	6 9/16		D	3.02	6.65	0.91	1.17	4.19	1.40
12C16A-3B	12	18	210	186	82	171	7 5/16	3 4/16	6 12/16		G	4.50	9.91	1.12	1.43	5.93	1.80
12C16A-3A	12	18	210	186	82	171	7 5/16	3 4/16	6 12/16		G	4.50	9.91	1.12	1.43	5.93	1.80
12N24-4	12	24	218	184	124	175	7 4/16	4 14/16	6 14/16		G	5.00	11.01	1.97	2.52	7.52	2.40
12N24-3A(J)	12	24	200	184	124	175	7 4/16	4 14/16	6 14/16		G	4.55	10.02	1.97	2.52	7.07	2.40
CHD4-12	12	28	280	205	130	165	8 1/16	5 2/16	6 8/16		H	5.70	12.56	1.97	2.52	8.22	2.80

HIGH PERFORMANCE FLOODED BATTERY

Battery Type	Rated Voltage	Rated Capacity (10Hr)	CCA@ (-18°C)	Dimensions						Assembly Figure (As per Cover Polarity)	Terminal Type	Weight W/O Acid		Electrolyte		Total Weight for Battery	Regular Charge Current
				Dimensions-Millimeters (±2mm)			Dimensions Inches (±1/16in)							Volume	Weight		
				V	Ah	A	L	W	H			L	W			H	Kg
LB2.5L-C	12	2.5	19	80	70	105	3 2/16	2 12/16	4 2/16		/	0.77	1.70	0.25	0.33	1.10	0.25
LB4L-B	12	4	50	120	70	92	4 12/16	2 12/16	3 10/16		A	1.26	2.78	0.30	0.39	1.65	0.40
LB4L-B(J)	12	4	35	120	70	92	4 12/16	2 12/16	3 10/16		A	1.16	2.56	0.30	0.39	1.55	0.40
LB6.5L-B(J)	12	6	50	138	73	107	5 7/16	2 14/16	4 3/16		B	1.59	3.50	0.44	0.56	2.15	0.60
LB6.5L-B	12	6.5	55	138	73	107	5 7/16	2 14/16	4 3/16		B	1.80	3.96	0.44	0.56	2.36	0.65
LB7-A	12	8	80	135	75	133	5 5/16	2 15/16	5 4/16		B	2.10	4.63	0.59	0.76	2.86	0.80
LB7-A(J)	12	8	65	135	75	133	5 5/16	2 15/16	5 4/16		B	1.90	4.19	0.59	0.76	2.66	0.80
LB7L-B	12	8	80	135	75	133	5 5/16	2 15/16	5 4/16		B	2.10	4.63	0.59	0.76	2.86	0.80
LB7C-A	12	8	80	130	90	114	5 2/16	3 9/16	4 8/16		E	2.07	4.56	0.60	0.77	2.84	0.80
LB9-B	12	9	95	135	75	139	5 5/16	2 15/16	5 8/16		B	2.23	4.91	0.59	0.76	2.99	0.90
LB9-B(J)	12	9	70	135	75	139	5 5/16	2 15/16	5 8/16		B	2.02	4.45	0.62	0.79	2.81	0.90
LB9L-B	12	9	95	135	75	139	5 5/16	2 15/16	5 8/16		B	2.23	4.91	0.59	0.76	2.99	0.90

HIGH PERFORMANCE FLOODED BATTERY

Battery Type	Rated Voltage	Rated Capacity (10Hr)	CCA@ (-18°C)	Dimensions						Assembly Figure (As per Cover Polarity)	Terminal Type	Weight W/O Acid		Electrolyte		Total Weight for Battery	Regular Charge Current
				Dimensions-Millimeters (±2mm)			Dimensions Inches (±1/16in)							Volume	Weight		
	V	Ah	A	L	W	H	L	W	H	Kg	Lbs	liters	Kg			Kg	A
LB9L-B(J)	12	9	70	135	75	139	5 5/16	2 15/16	5 8/16		B	2.02	4.45	0.62	0.79	2.81	0.90
LB10L-A2	12	11	130	134	89	145	5 4/16	3 8/16	5 11/16		D	2.92	6.43	0.80	1.02	3.94	1.10
LB10L-A2(J)	12	11	100	134	89	145	5 4/16	3 8/16	5 11/16		D	2.65	5.84	0.80	1.02	3.67	1.10
LB10L-B	12	11	130	134	89	145	5 4/16	3 8/16	5 11/16		B	2.88	6.34	0.80	1.02	3.90	1.10
LB10L-B(J)	12	11	100	134	89	145	5 4/16	3 8/16	5 11/16		B	2.63	5.79	0.80	1.02	3.65	1.10
LB10L-B2	12	11	130	134	89	145	5 4/16	3 8/16	5 11/16		D	2.92	6.43	0.80	1.02	3.94	1.10
LB12A-A	12	12	150	134	81	160	5 4/16	3 3/16	6 5/16		B	3.16	6.96	0.80	1.02	4.18	1.20
LB12A-A(J)	12	12	120	134	81	160	5 4/16	3 3/16	6 5/16		B	2.88	6.34	0.80	1.02	3.90	1.20
LB12AL-A	12	12	150	134	81	160	5 4/16	3 3/16	6 5/16		B	3.16	6.96	0.80	1.02	4.18	1.20
LB12AL-A(J)	12	12	120	134	81	160	5 4/16	3 3/16	6 5/16		B	2.88	6.34	0.80	1.02	3.90	1.20
LB12AL-A1	12	12	150	134	81	160	5 4/16	3 3/16	6 5/16		A	3.16	6.96	0.80	1.02	4.18	1.20
LB12AL-A2	12	12	150	134	81	160	5 4/16	3 3/16	6 5/16		B	3.16	6.96	0.80	1.02	4.18	1.20
LB12AL-A2(J)	12	12	120	134	81	160	5 4/16	3 3/16	6 5/16		B	2.88	6.34	0.80	1.02	3.90	1.20
LB12C-A	12	12	150	134	81	175	5 4/16	3 3/16	6 14/16		A	3.18	7.00	0.80	1.02	4.20	1.20
LB14-A2	12	14	170	134	89	166	5 4/16	3 8/16	6 9/16		D	3.27	7.20	0.91	1.17	4.44	1.40
LB14-A2(J)	12	14	130	134	89	166	5 4/16	3 8/16	6 9/16		D	3.02	6.65	0.91	1.17	4.19	1.40
LB14-B2	12	14	170	134	89	166	5 4/16	3 8/16	6 9/16		D	3.27	7.20	0.91	1.17	4.44	1.40
LB14L-A2	12	14	170	134	89	166	5 4/16	3 8/16	6 9/16		D	3.27	7.20	0.91	1.17	4.44	1.40
LB14L-A2(J)	12	14	130	134	89	166	5 4/16	3 8/16	6 9/16		D	3.02	6.65	0.91	1.17	4.19	1.40
LB14L-B2	12	14	170	134	89	166	5 4/16	3 8/16	6 9/16		D	3.27	7.20	0.91	1.17	4.44	1.40
LB14A-A2	12	14	170	134	89	176	5 4/16	3 8/16	6 15/16		D	3.27	7.20	0.91	1.17	4.44	1.40
HLB16A-A/HLB16A-AB	12	15	150	151	91	180	5 15/16	3 9/16	7 1/16		C	3.85	8.48	0.97	1.24	5.09	1.50
LB16B-A	12	16	175	160	90	161	6 5/16	3 9/16	6 5/16		A	3.83	8.44	1.10	1.41	5.24	1.60
LB16B-A1	12	16	175	160	90	161	6 5/16	3 9/16	6 5/16		C	3.83	8.44	1.10	1.41	5.24	1.60
LB16AL-A2	12	16	175	207	71.5	164	8 2/16	2 13/16	6 7/16		F	4.10	9.03	1.20	1.54	5.64	1.60
LB18L-A	12	18	210	180	90	162	7 1/16	3 9/16	6 6/16		C	4.02	8.85	1.27	1.62	5.64	1.80
LB16-B	12	19	220	175	100	155	6 14/16	3 15/16	6 2/16		B	4.43	9.76	1.28	1.63	6.06	1.90
LB16L-B	12	19	220	175	100	155	6 14/16	3 15/16	6 2/16		B	4.43	9.76	1.28	1.63	6.06	1.90
LB16CL-B	12	19	220	175	100	175	6 14/16	3 15/16	6 14/16		A	4.50	9.91	1.28	1.63	6.13	1.90
L50-N18L-A	12	20	235	205	90	162	8 1/16	3 9/16	6 6/16		C	4.88	10.75	1.33	1.70	6.58	2.00
L50-N18L-A3	12	20	235	205	90	162	8 1/16	3 9/16	6 6/16		A	4.88	10.75	1.33	1.70	6.58	2.00
U1-9	12	24	220	195	130	180	7 11/16	5 2/16	7 1/16		G	4.70	10.35	1.97	2.52	7.22	2.40
U1R-9	12	24	220	195	130	180	7 11/16	5 2/16	7 1/16		G	4.70	10.35	1.97	2.52	7.22	2.40
L60-N24L-A	12	28	280	184	124	170	7 4/16	4 14/16	6 11/16		G	5.50	12.11	1.92	2.46	7.96	2.80
L60-N24AL-B	12	28	280	184	124	170	7 4/16	4 14/16	6 11/16		G	5.50	12.11	1.92	2.46	7.96	2.80
LB30L-B	12	29	300	165	130	176	6 8/16	5 2/16	6 15/16		A	5.93	13.06	1.77	2.26	8.19	2.90
LB30CL-B	12	29	300	165	130	192	6 8/16	5 2/16	7 9/16		A	5.97	13.15	1.77	2.26	8.23	2.90
U1-11	12	30	280	195	130	180	7 11/16	5 2/16	7 1/16		G	5.56	12.25	1.97	2.52	8.08	3.00
U1R-11	12	30	280	195	130	180	7 11/16	5 2/16	7 1/16		G	5.56	12.25	1.97	2.52	8.08	3.00
L60-N30L-A	12	30	300	184	130	170	7 4/16	5 2/16	6 11/16		G	5.95	13.11	1.92	2.46	8.41	3.00
L60-N30L-A/HD(J)	12	30	280	184	130	170	7 4/16	5 2/16	6 11/16		G	5.52	12.16	1.92	2.46	7.98	3.00
L60-N30-A	12	30	300	184	130	170	7 4/16	5 2/16	6 11/16		G	5.95	13.11	1.92	2.46	8.41	3.00
L60-N30L-B	12	30	300	184	130	170	7 4/16	5 2/16	6 11/16		G	5.95	13.11	1.92	2.46	8.41	3.00
L60-N30-A/HD	12	30	300	184	130	170	7 4/16	5 2/16	6 11/16		G	5.95	13.11	1.92	2.46	8.41	3.00
L60-N30L-B/HD(J)	12	30	280	184	130	170	7 4/16	5 2/16	6 11/16		G	5.52	12.16	1.92	2.46	7.98	3.00

WHAT CAUSES A BATTERY TO FAIL PREMATURELY

SELF DISCHARGE

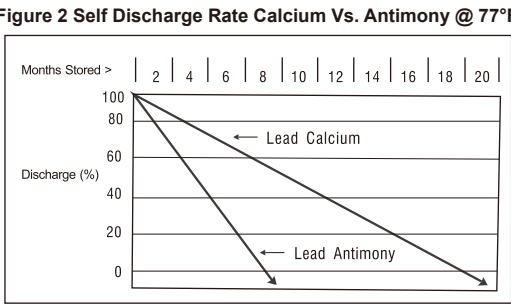
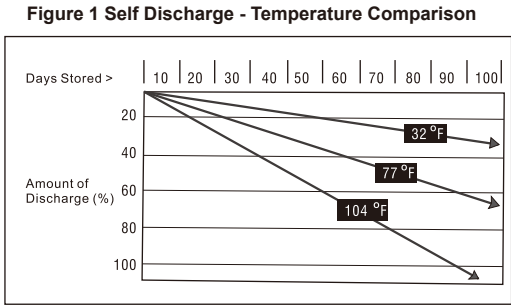
Antimony Batteries(Conventional 6-Volt and 12-Volt Standard)

Even when the motorcycle is not being used ,these batteries discharge (SELF DISCHARGE) at the rate of approximately .5 to 1% per week- This rate of discharge increases with warm temperature.See the approximate rates of discharge shown in Figure 1 to theright.

Lead Calcium Batteries (12-Volt Premium Hige Performance)

The lead/calcium technology motorcycle batteries have a longer life because they hold their charge more than three times as long as the conventional lead antimony batteries. These batteries discharge (SELF DISCHARGE) at a weekly rate of approximately .15 - .3% See Figure 2 to the right. Some lead/calcium batteries also contain a special chemical that resists sulfation formation on the battery plates.

In order to minimize the self discharge of the battery, it is recom- mended that the battery be placed in a cool(NOT FREEZING)



CURRENT DRAIN

Some big motorcycles (1,000 cc & up) have electric accessories such as clocks, GPS, radios, computer memory and alarm svstems. Which discharoe the battery even when the ianition is turned of. The amperage drain of each motorcycle is different depending on the model, year and electric accessories.

Figure 3
The chart below shows how quickly the battery is discharged by BOTH self discharge and current drain.

Figure 3 Self Discharge

Approximate # of Days from 100% full Charged to100% Discharged		
Temperature	Lead Antimony Battery	Lead Calcium Battery
100° F	100 Days	300 Days
77° F	200 Days	600 Days
32° F	550 Days	1,650 Days

Figure 4 Current Drain

Discharging Amperes	Days from 100% Charged to50% Discharged	Days from 100% Charged to100% Discharged
7 mA	60 Days	119 Days
10 mA	42 Days	83 Days
15 mA	28 Days	56 Days
20 mA	21 Days	42 Days
30 mA	14 Days	28 Days

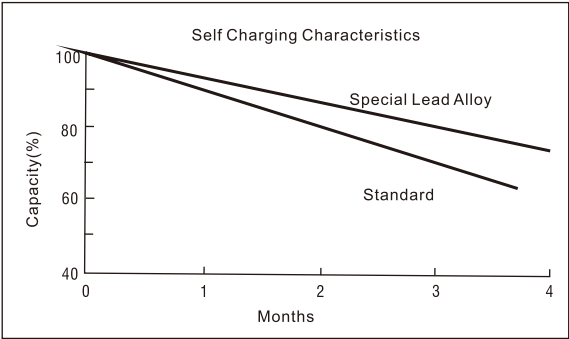
Note: If the battery is less that 100% charged when the battery begins standing, the discharge period will be shorter than the time indicated above.

HOW TO PROLONG BATTERY LIFE

ANTI SULFATE Is a chemical that can drastically reduce sulfate crystal build up on battery plate surfaces. This allows the battery to operate longer with optimum performance. All of our Premium, AGM and factory activated batteries have anti-sulfate added.

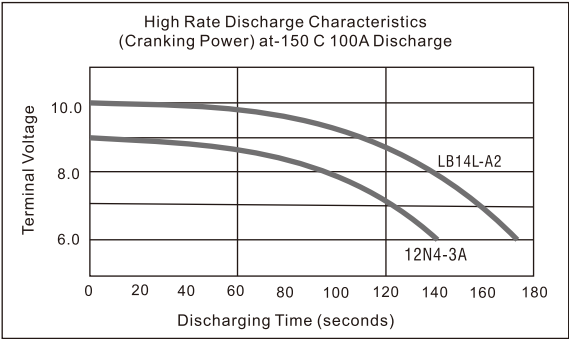
LOW SELF-DISCHARGE

Self discharge occurs when batteries slowly lose charge when not in service.With the use of special lead alloy grids, self discharge is minimal and the batteries maintain their state-of-charge.



GREATER TERMINAL VOLTAGE

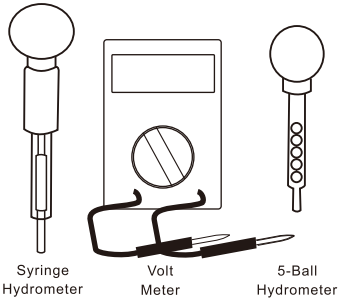
At lower temperature, batteries can supply greater terminal voltage over a longer period of time than conventional batteries as shown below.



HOW TO DETERMINE BATTERY STATE-OF-CHARGE

To check the battery's state-of-charge you can use one of three methods: 1,) syringe hydrometer 2.) voltmeter or 3.) 5-Ball Hydrometer. See the table below for a comparison between 3 methods to determine the accurate state-of-charge.

State-of-Charge	Syringe Hydrometer	Digital Voltmeter	5-Ball Hydrometer
100% ChargedWith Anti-Sulfate Additive	1,280 Sp, Gr.	12.80 Volts	5- Balls Floating
100% Charged	1,265 Sp, Gr.	12.60 Volts	4- Balls Floating
75% Charged	1,210 Sp, Gr.	12.40 Volts	3- Balls Floating
50% Charged	1,160 Sp, Gr.	12.10 Volts	2- Balls Floating
25% Charged	1,129 Sp, Gr.	11.90 Volts	1- Balls Floating
00% Charged	Less than 1,100 Sp, Gr.	Less than 11.80 Volts	0- Balls Floating



Note: Results based on a typical battery.

HOW TO STOP ELECTROLYTE FROM FREEZING

Batteries that are fully charged CAN NOT FREEZE. If a battery becomes discharged, the electrolyte can freeze if it is stored below +20°F.To prevent damage due to freezing, do not allow the battery to become discharged.

The chart below shows temperatures at which electrolyte at various states of charge begins to freeze. These are the approximate temperatures at which ice crystals begin to form.The electrolyte does not freeze solid until a lower temperature is reached. Solid freezing of electrolyte in a discharge battery will damage the battery plates and may crack the battery case. A batery in which the electrolyte has been frozen will not recover to full power and must be replaced

Specific Gravity of Electrolyte	Battery Voltage		Freezing Temperatures
	12-Volt	6-Volt	
1,280 Sp, Gr.	12.78V	6.39V	-92 °F
1,265 Sp, Gr.	12.66V	6.33V	-71 °F
1,250 Sp, Gr.	12.57V	6.28V	-62 °F
1,200 Sp, Gr.	12.27V	6.13V	-16 °F
1,150 Sp, Gr.	11.97V	5.98V	5 °F
1,100 Sp, Gr.	11.67V	5.84V	18 °F

Note: Results based on a typical battery.

A Battery that is at a 75% state of charge or greater is in no danger of freezing.We recommend that you check your battery voltage every 30 days during the winter.

Global Network

