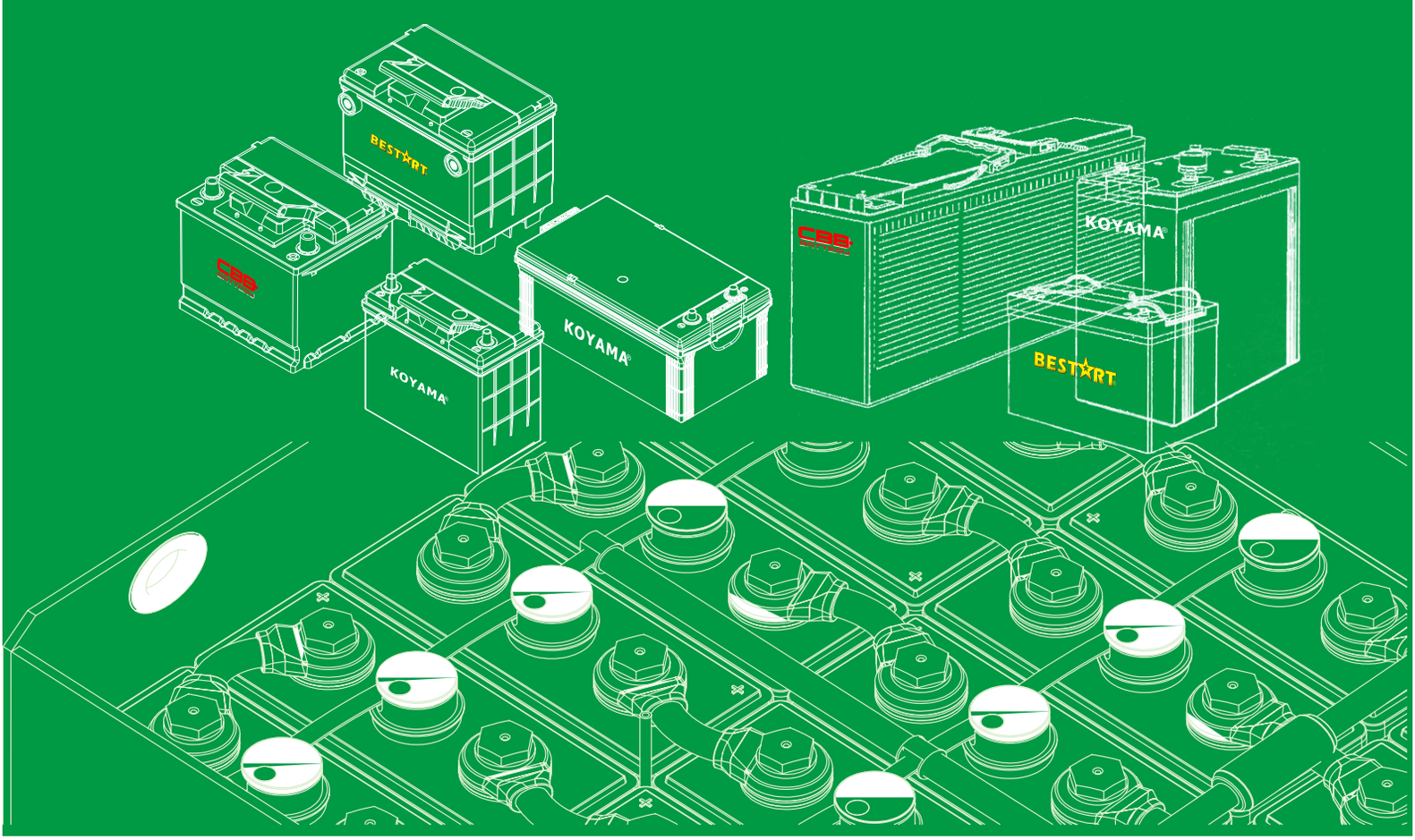
KOYAMA®

POWER YOUR LIFE

LEAD ACID BATTERIES
SPECIFICATION & FEATURE



Introduction

CBB Battery Technology Co Ltd is a large modern comprehensive power enterprise, specializing in production, R&D and sales of the full line of lead acid battery, with 3 production bases in Guangdong and Jiangxi Province. Our production capacity has reached more than 5 million KVAH per year.

We mainly produce VRLA battery, automotive battery, Motorcycle battery, Motive power battery, Tricycle battery, Electric vehicle battery and various plates thereof. All batteries are widely used in UPS, Power station, solar power system, telecommunication, vehicles, boats, motorcycle and other applications. All battery can meet a variety of standby, storage, deep cycle, starting, sports, new energy system and other power requirements.

In the past few years, by adopting a lot of advanced production lines and testing devices, we have developed to gain the competitive advantage in the field, which owns the first class infrastructure, strict production management, unique know-how and special formula.

We attach importance to scientific and technological personnel, integrating production and research. With the efforts of professional experienced engineers, a well-trained management team and a lot number of skilled production workers, we have established the complete quality management system, which guarantees all battery quality is reliable and long-term stable. Our battery has been sold not only throughout China, but also many foreign countries, its quality have been well recognized by users both at home and abroad.

As one of the leading industrial battery manufacturers, we are keeping quality and environment protection first and foremost in our minds. With a proven track record of this dedication to protect both the earth ,our employees for years has propelled us to be the industry leader in environmental protection while still maintaining the highest quality products on the market. With the recertification of Chinese Environment Ministry to Chinese battery industry in 2011, we have been becoming the best company on the environmental protection in South of China. We have been certified by IS09001, IS014001, CE, UL, ROHS, and OHSMS18001.

With the spirit of Unity, Development, Trust and Quality First, Our Team would offer you the best quality battery and services. It is our eternal pursuit to continuously meet all customer's expectation and demands, with unremitting efforts to offer high-quality battery and excellent after-sales for all users at home and abroad.

CBB owns CBB,KOYAMA,BEST★RT,ROPPON,and MAYFLOWER brand names. Any markets distributors are warmly welcomed.

KOYAMA® CBB® BATTERY BESTART®

Table of Contents

Koyama®

About Us & Contents 1-2

Certificates& Qualitifications 3

Factories & Facilities 4

QE Equipments 5

Network Power

NP series AGM Battery For general purposes 6-9

NPF Series AGM Batteries For Telecom/IT Applications 10-11

2V Series Stationary Batteries For Telecom, Power plant & Solar 12-13

NPH Series AGM Batteries For High Rate Discharge Service 14-15

NPS Series Solar Batteries For Solar Power Systems 16-18

NPG Series GEL Batteries For UPS, Marine & Solar system 19-22

NPFG Series Front Access Terminal Gel Batteries For Telecom/IT Applications 23-24

NPHG Series Gel Batteries For High Rate Discharge Service 26-27

OPzV Series Gel Batteries For Standby, Solar & UPS applications 27-28

Motive Power

DC Series AGM Batteries For Deep Cycle Service 29-31

DCG Series Gel Batteries For Deep Cycle Service 32-34

Flooded Tubular Batteries For Deep Cycle Service 35-36

DZM & EV Series AGM Batteries For Electric Vehicle Cyclicc Service 37-38

Traction Batteries For Forklift Power 39-46

VRLA Battery Terminal 47-48

Tranportation

Sealed Maintenance Free Automotive Battery 49-57

Conventional Automotive Battery 58-60

Technical Information 61

Powersports Battery 62-68

Powersports Battery Terminal 69

Certificates & Qualifications



质量管理体系认证证书
Quality Management System Certificate

ISO9001



CERTIFICATE OF CONFORMITY

CE



CERTIFICATE OF COMPLIANCE

UL



EXPORT TO GHANA | CERTIFICATE OF CONFORMITY

BV COC



Intertek

Statement of Registration

Intertek COC



SGS

SASO

Factories & Facilities



NO.1 VRLA Battery Factory



NO.2 VRLA Battery Factory



Automotive Battery Factory



Traction Battery Factory



SOVEMA Plate Production line



MOOJIN Assembling Line

QC Equipments



Laboratory



Spectrum Analyser



Leakage Test



Short-circuit Check



4-function Tester



Final C&D Test

NP Series-VRLA AGM Battery

NP series valve regulated lead acid batteries are valve regulated lead acid battery with AGM (Absorbent Glass Mat) technology and for general application purpose, such as UPS, telecom, and electrical utilities.



Features

- Sealed construction, no electrolyte leakage from the terminals or the case of any battery, efficient operation in any orientation.
- Maintenance free operation, no need to add water.
- Low self discharge, the self discharge rate is below 3% per month.
- Special lead calcium alloy, good corrosion resistance and high recovery capacity.
- FAA and IATA approved as non-hazardous.

Specifications

- **Nominal Voltage:** 4 & 6 & 12volts
- **Design Life:** 22Ah and down: 4-6 years @25℃
  24Ah and up: 6-8 years @25℃
- **Operating Temperature:** -15℃ to 50 ℃
- **Plates:** Flat pasted
- **Separator:** AGM (Absorbent Glass Mat)
- **Case and Cover:** ABS(V0 on request)
- **Charge Voltage:** Float use: 2.25-2.30 VPC@25℃
  Cycle use:2.40-2.49VPC@25℃
  Max. Charge current: 0.25C20

Applications

A list of some of the more common applications for standby or principal power is given below:

- Alarm Systems
- Cable Television
- Communications Equipment
- Computers
- Control Equipment
- Electronic Cash Registers
- Electronic Test Equipment
- Emergency Lighting Systems
- Fire & Security Systems
- Geophysical Equipment
- Marine Equipment
- Medical Equipment
- Microprocessor Based Office machines
- Portable Cine & Video Lights
- Power Tools
- Telecommunication Systems
- Television & Video Recorders
- Toys
- Uninterruptible Power Supplies
- Vending Machines



VRLA AGM Battery Specification

Model No	Rated Voltage (V)	Capacity (Ah)	Dimension								Weight		Terminal Type
			Length		Width		Height		Total Height		kg	pound	
			mm	inch	mm	inch	mm	inch	mm	inch			
NP4-4	4	4/20HR	47	1.85	47	1.85	101	3.98	107	4.21	0.5	1.1	F1
NP1.3-6	6	1.3/20HR	97	3.82	24	0.94	52	2.05	58	2.28	0.31	0.68	F1
NP3.3-6	6	3.3/20HR	134	5.28	34	1.34	60	2.36	66	2.60	0.59	1.30	F1
NP3.6-6	6	3.6/20HR	70	2.76	47	1.85	101	3.98	107	4.21	0.65	1.43	F1
NP4-6	6	4/20HR	70	2.76	47	1.85	101	3.98	107	4.21	0.68	1.50	F1
NP4-6C	6	4/20HR	70	2.76	47	1.85	101	3.98	107	4.21	0.68	1.50	CUT
NP4.5-6	6	4.5/20HR	70	2.76	47	1.85	101	3.98	107	4.21	0.75	1.65	F1
NP4.5-6C	6	4.5/20HR	70	2.76	47	1.85	101	3.98	107	4.21	0.75	1.65	CUT
NP5-6	6	5/20HR	70	2.76	47	1.85	101	3.98	107	4.21	0.8	1.76	F1
NP5-6Y	6	5/20HR	70	2.76	47	1.85	101	3.98	107	4.21	0.75	1.65	TH
NP7-6	6	7/20HR	151	5.94	34	1.34	95	3.74	101	3.98	1.08	2.38	F1
NP8-6	6	8/20HR	151	5.94	34	1.34	95	3.74	101	3.98	1.16	2.55	F1
NP9-6	6	9/20HR	151	5.94	34	1.34	95	3.74	101	3.98	1.34	2.95	F1
NP10-6	6	10/20HR	151	5.94	50	1.97	94	3.70	100	3.94	1.63	3.59	F1/F2
NP12-6	6	12/20HR	151	5.94	50	1.97	94	3.70	100	3.94	1.72	3.78	F1/F2
NP130-6	6	130/10HR	260	10.24	180	7.09	246	9.69	252	9.92	20.5	45.10	T5
NP180-6-A	6	180/10HR	260	10.24	180	7.09	246	9.69	252	9.92	27.5	60.50	T5
NP180-6-B	6	180/10HR	306	12.05	168	6.61	220	8.66	226	8.90	26	57.20	T5
NP200-6-A	6	200/10HR	260	10.24	180	7.09	246	9.69	252	9.92	29.5	64.90	T5
NP200-6-B	6	200/10HR	323	12.72	178	7.01	226	8.90	230	9.06	29.5	64.90	T5
NP0.8-12	12	0.8/20HR	97	3.82	25	0.98	63	2.48	62	2.44	0.34	0.75	C&B
NP1.3-12	12	1.3/20HR	97	3.82	43	1.69	52	2.05	58	2.28	0.51	1.12	F1
NP2-12	12	2/20HR	178	7.01	35	1.38	61	2.40	67	2.64	0.89	1.96	F1
NP3.3-12	12	3.3/20HR	134	5.28	67	2.64	61	2.40	67	2.64	1.23	2.71	F1
NP4-12	12	4/20HR	90	3.54	70	2.76	101	3.98	107	4.21	1.35	2.97	F1
NP4.5-12	12	4.5/20HR	90	3.54	70	2.76	101	3.98	107	4.21	1.48	3.26	F1
NP5-12	12	5/20HR	90	3.54	70	2.76	101	3.98	107	4.21	1.6	3.52	F1
NP5.5-12	12	5.5/20HR	151	5.94	65	2.56	94	3.70	100	3.94	1.95	4.29	F1/F2
NP6.5-12	12	6.5/20HR	151	5.94	65	2.56	94	3.70	100	3.94	2.01	4.42	F1/F2
NP7-12	12	7/20HR	151	5.94	65	2.56	94	3.70	100	3.94	2.06	4.53	F1/F2
NP7.2-12	12	7.2/20HR	151	5.94	65	2.56	94	3.70	100	3.94	2.15	4.73	F1/F2
NP7.5-12	12	7.5/20HR	151	5.94	65	2.56	94	3.70	100	3.94	2.2	4.84	F1/F2
NP9-12	12	9/20HR	151	5.94	65	2.56	94	3.70	100	3.94	2.45	5.39	F2
NP10-12	12	10/20HR	152	5.98	99	3.90	96	3.78	102	4.02	3.2	7.04	F2
NP12-12	12	12/20HR	152	5.98	99	3.90	96	3.78	102	4.02	3.5	7.70	F2
NP15-12	12	15/20HR	152	5.98	99	3.90	96	3.78	102	4.02	4	8.80	F2
NP17-12	12	17/20HR	181	7.13	77	3.03	167	6.57	167	6.57	5.2	11.44	L1
NP18-12	12	18/20HR	181	7.13	77	3.03	167	6.57	167	6.57	5.5	12.10	L1
NP20-12	12	20/20HR	181	7.13	77	3.03	167	6.57	167	6.57	6	13.20	L1
NP22-12	12	22/20HR	181	7.13	77	3.03	167	6.57	167	6.57	6.5	14.30	L1

VRLA AGM Battery Specification

Model No	Rated Voltage (V)	Capacity (Ah)	Dimension								Weight		Terminal Type
			Length		Width		Height		Total Height		kg	pound	
			mm	inch	mm	inch	mm	inch	mm	inch			
NP24-12	12	24/10HR	165	6.50	126	4.96	174	6.85	174	6.85	7.7	16.94	T2
NP26-12	12	26/10HR	166	6.54	175	6.89	126	4.96	126	4.96	8.3	18.26	T2
NP28-12	12	28/10HR	166	6.54	175	6.89	126	4.96	126	4.96	8.4	18.48	T2
NP33-12	12	33/10HR	196	7.72	130	5.12	155	6.10	167	6.57	10	22.00	T3
NP35-12	12	35/10HR	196	7.72	130	5.12	155	6.10	167	6.57	10.5	23.10	T3
NP40-12	12	40/10HR	197	7.76	166	6.54	174	6.85	174	6.85	12.3	27.06	T2
NP42-12	12	42/10HR	198	7.80	166	6.54	174	6.85	174	6.85	12.9	28.38	T2
NP45-12	12	45/10HR	198	7.80	166	6.54	174	6.85	174	6.85	13.1	28.82	T2
NP50-12A	12	50/10HR	258	10.16	134	5.28	200	7.87	200	7.87	15.5	34.10	L8
NP50-12B	12	50/10HR	229	9.02	138	5.43	208	8.19	212	8.35	15.8	34.76	T3
NP55-12	12	55/10HR	229	9.02	138	5.43	208	8.19	226	8.90	16.3	35.86	T3
NP60-12	12	60/10HR	350	13.78	167	6.57	178	7.01	178	7.01	17.3	38.06	T3
NP65-12	12	65/10HR	350	13.78	167	6.57	178	7.01	178	7.01	20.2	44.44	T3
NP70-12	12	70/10HR	350	13.78	167	6.57	178	7.01	178	7.01	21.3	46.86	T3
NP70-12B	12	70/10HR	260	10.24	169	6.65	211	8.31	215	8.46	21.7	47.74	T3
NP75-12	12	75/10HR	260	10.24	169	6.65	211	8.31	215	8.46	22	48.40	T3
NP80-12	12	80/10HR	260	10.24	169	6.65	211	8.31	231	9.09	23.3	51.26	T3
NP85-12	12	85/10HR	331	13.03	174	6.85	214	8.43	240	9.45	24.8	54.56	T4
NP90-12	12	90/10HR	307	12.09	169	6.65	211	8.31	227	8.94	26.5	58.30	T3
NP100-12	12	100/20HR	331	13.03	174	6.85	214	8.43	219	8.62	27.8	61.16	T4
NP100-12B	12	100/10HR	328	12.91	172	6.77	217	8.54	222	8.74	29	63.80	T4
NP105-12B	12	105/10HR	328	12.91	172	6.77	217	8.54	222	8.74	29.5	64.90	T4
NP120-12	12	120/10HR	407	16.02	174	6.85	210	8.27	233	9.17	33	72.60	T5
NP120-12B	12	120/20HR	331	13.03	174	6.85	214	8.43	219	8.62	30.5	67.10	T4
NP130-12	12	130/20HR	407	16.02	174	6.85	210	8.27	233	9.17	34.2	75.24	T5
NP135-12	12	135/20HR	484	19.06	171	6.73	241	9.49	241	9.49	38	83.60	T4
NP145-12	12	145/20HR	532	20.94	206	8.11	212	8.35	217	8.54	41.4	91.08	T4
NP150-12	12	150/20HR	484	19.06	171	6.73	241	9.49	241	9.49	41	90.20	T4
NP160-12	12	160/10HR	532	20.94	206	8.11	216	8.50	240	9.45	48.3	106.26	T4
NP180-12	12	180/20HR	532	20.94	206	8.11	216	8.50	221	8.70	52.2	114.84	T4
NP200-12	12	200/20HR	522	20.55	240	9.45	219	8.62	244	9.61	55.6	122.32	T5
NP220-12	12	220/20HR	522	20.55	240	9.45	219	8.62	244	9.61	58	127.60	T5
NP240-12	12	240/20HR	520	20.47	269	10.59	203	7.99	207	8.15	68	149.60	T5
NP250-12	12	250/10HR	520	20.47	268	10.55	220	8.66	224	8.82	70	154.00	T5

Front Terminal AGM Battery

NPF Series batteries use the latest Valve Regulated Lead-Acid (VRLA) technology, yielding an expected life of 12 years under normal float charge. Front Access Terminal gives the battery more flexible installation and maintenance in 19" & 23" relay rack and cabinet enclosures.



Key Features

- Special lead calcium alloy, good corrosion resistance and high recovery capacity.
- Front terminal connections for fast and easy installation and maintenance.
- Carry handles for ease of installation.
- Suitable for 19”, 23” and ETSI racking.
- One way self resealing safety vent for long life guarantee.
- Compliant with BS 6290 part 4.
- Designed to be compliant with Telcordia SR-4228.

Specifications

- **Nominal Voltage:** 12 Volts
- **Design Life:** 12 Years @20 ℃
- **Operating Temperature:** -15 ℃ To 50 ℃
- **Plates:** Flat Pasted
- **Separator:** AGM (Absorbent Glass Mat)
- **Case and Material:** ABS (V0 On Request)
- **Electrolyte:** Sulphuric Acid (A/R)
- **Safety Vent:** Opening Pressure 10~35Kpa
- **Charge Voltage:** Float Use :13.5-13.8V@25℃
  Cycle Use:14.4-14.9V@25℃
  Max. Charge Current: 0.25C20

Applications

- Telecom Applications
- UPS
- Broadband
- Electric Utility
- Railroad Signal
- Central Office
- Fire Alarms and Security Systems.
- Replacement of Open-Type Stationary Lead Acid Batteries



NPF Series General Specifications

Model No	Rated Voltage (V)	Capacity (Ah)	Dimension								Weight		Terminal Type
			Length		Width		Height		Total Height		kg	pound	
			mm	inch	mm	inch	mm	inch	mm	inch			
NPF55-12	12	55	277	10.91	106	4.17	222	8.74	222	8.74	16.5	36.3	T2
NPF80-12	12	80	562	22.13	114	4.49	188	7.40	188	7.40	25.0	55.0	T3
NPF100-12	12	100	507	19.96	110	4.33	228	8.98	228	8.98	29.5	64.9	T4
NPF110-12	12	110	394	15.51	110	4.33	286	11.26	286	11.26	30.5	67.1	T4
NPF125-12	12	125	551	21.69	110	4.33	240	9.45	240	9.45	37.8	83.2	T4
NPF150-12	12	150	551	21.69	110	4.33	288	11.34	288	11.34	45.0	99.0	T4
NPF155-12	12	155	560	22.05	125	4.92	280	11.02	280	11.02	45.2	99.4	T4
NPF160-12	12	160	551	21.69	110	4.33	288	11.34	288	11.34	45.6	100.3	T4
NPF175-12	12	175	546	21.50	125	4.92	321	12.64	321	12.64	53.7	118.1	T5
NPF180-12	12	180	560	22.05	125	4.92	316	12.44	316	12.44	54.0	118.8	T5
NPF180-12B	12	180	560	22.05	125	4.92	316	12.44	316	12.44	55.0	121.0	T5
NPF190-12	12	190	560	22.05	125	4.92	316	12.44	316	12.44	55.8	122.8	T5
NPF190-12B	12	190	560	22.05	125	4.92	316	12.44	316	12.44	57.0	125.4	T5
NPF200-12	12	200	560	22.05	125	4.92	316	12.44	316	12.44	57.0	125.4	T5
NPF200-12B	12	200	560	22.05	125	4.92	316	12.44	316	12.44	58.0	127.6	T5

2V Stationary AGM Battery

2V series are valve-regulated, non-spillable types constructed with an absorbent glass mat (AGM) with pasted flat lead-calcium alloy plates. They are designed to provide long, reliable service life with minimal maintenance.



Features

- Special lead calcium alloy, better corrosion resistance, higher recovery capacity.
- Acid mist removing and anti-explosion facilities are installed, so it is safer and more reliable.
- Balanced charging is not needed.
- Special construction is adopted, no leakage will occur, allowed to be operated in any orientation.
- Maintenance-free operation, no need to add water.
- FAA and IATA approved as non-hazardous.

Specifications

- **Nominal Voltage:** 2volts
- **Design Life:** 15years
- **Operating Temperature:** -20℃ to 50℃
- **Plates:** Flat pasted
- **Separator:** AGM(Absorbent Glass Mat)
- **Active Material:** 99.99% purity lead
- **Case and Cover:** ABS (V0 on request)
- **Charge Voltage:** 2.23V/cell (25 ℃)
- **Temperature Compensation Factor:** -3mV/cell/℃
- **Electrolyte:** Sulfuric-acid analytical grade purity
- **Cables:** Connectors supplied as standard (cables on request)

Applications

- Telecommunications Systems
- Electric Power Equipment Operations
- Fire Alarm security Systems
- Emergency Lighting
- UPS
- Solar Battery Systems
- Backup Power for Testing and Measuring Instruments
- Replacement for Open Type Stationary Lead Acid Batteries



2V Series General Specifications

Model No	Rated Voltage (V)	Capacity (Ah)	Dimension								Weight		Terminal Type
			Length		Width		Height		Total Height		kg	pound	
			mm	inch	mm	inch	mm	inch	mm	inch			
NP80-2	2	80/10HR	171	6.73	72	2.83	205	8.07	222	8.74	4.7	10.34	T4
NP100-2	2	100/10HR	171	6.73	72	2.83	205	8.07	222	8.74	5.8	12.76	T4
NP120-2	2	120/10HR	171	6.73	72	2.83	205	8.07	222	8.74	6.3	13.86	T4
NP150-2	2	150/10HR	171	6.73	102	4.02	206	8.11	223	8.78	8.1	17.82	T4
NP200-2	2	200/10HR	170	6.69	106	4.17	330	12.99	367	14.45	13.0	28.60	T5
NP240-2	2	240/10HR	173	6.81	111	4.37	329	12.95	365	14.37	13.8	30.36	T5
NP300-2	2	300/10HR	171	6.73	151	5.94	330	12.99	365	14.37	18.5	40.70	T5
NP350-2	2	350/10HR	171	6.73	151	5.94	330	12.99	366	14.41	20.0	44.00	T5
NP400-2	2	400/10HR	211	8.31	176	6.93	329	12.95	367	14.45	25.8	56.76	T5
NP425-2	2	425/10HR	211	8.31	176	6.93	329	12.95	367	14.45	26.5	58.30	T5
NP500-2	2	500/10HR	241	9.49	171	6.73	330	12.99	364	14.33	31.0	68.20	T5
NP600-2	2	600/10HR	301	11.85	175	6.89	331	13.03	366	14.41	37.7	82.94	T5
NP650-2	2	650/10HR	301	11.85	175	6.89	331	13.03	366	14.41	38.5	84.70	T5
NP800-2	2	800/10HR	410	16.14	176	6.93	330	12.99	365	14.37	51.6	113.52	T5
NP1000-2	2	1000/10HR	472	18.58	172	6.77	338	13.31	355	13.98	62.0	136.40	T5
NP1200-2	2	1200/10HR	472	18.58	172	6.77	338	13.31	355	13.98	67.0	147.40	T5
NP1500-2	2	1500/10HR	401	15.79	351	13.82	342	13.46	378	14.88	96.5	212.30	T5
NP1600-2	2	1600/10HR	401	15.79	351	13.82	342	13.46	378	14.88	98.5	216.70	T5
NP1800-2	2	1800/10HR	491	19.33	351	13.82	343	13.50	383	15.08	122.0	268.40	T5
NP2000-2	2	2000/10HR	491	19.33	351	13.82	343	13.50	383	15.08	130.0	286.00	T5
NP2500-2	2	2500/10HR	712	28.03	353	13.90	341	13.43	382	15.04	180.0	396.00	T5
NP3000-2	2	3000/10HR	712	28.03	353	13.90	341	13.43	382	15.04	190.0	418.00	T5

NPH Series-AGM Batteries for High Rate Discharge Service

NPH Series batteries performs well in both high rate discharge and float service applications. This series is specially designed for UPS standby power supply. It is also available for other float service applications, such as emergency power supply, communication power supply etc.. The power of this series is ranged from 35W to 900W.



Key Features

- 10 year design life @ 25˚C
- High energy, high intensity, high quality output electrical energy product series.
- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance.
- Same volume same quality level can advance high energy output density for an increase of 20%.
- It is best suited for high rate intensive applications and high efficient UPS.
- High rate discharge construction.
- Deep discharge recoverability.
- Patented long life alloy having the lowest calcium levels in the industry - minimizing grid growth, reducing gassing, and extending battery life.
- Patented UL recognized flame-arresting vents in each cell for safety and long life.
- Can be operated in any orientation. Upright, side or end mounting recommended.
- When it is used in safe surroundings, the battery is maintenance free, and you never need to add water. It can be recycled repeatedly.
- Not restricted for air transport - Complies with IATA/ICAO special provisions A67.
- Not restricted for surface transport - Classified as non-hazardous material as related to DOT-CFR title 49 parts171-189.
- Not restricted for water transport - Classified as non-hazardous material per IMDG amendment 27.

Applications

- Data Centers
- Network Operations Centers
- Industrial Process Control Facilities
- Internet Housing Sites
- Semiconductor Manufacturing
- Banks & Financial Markets
- Power Generation Plants
- Hospitals & Testing Laboratories





NPH Series-General Specification

Model No	Rated Power（W/Cell）	Capacity (Ah/10hr)	Dimension								Weight		Terminal Type
			Length		Width		Height		Total Height		kg	pound	
			mm	inch	mm	inch	mm	inch	mm	inch			
NPH35-12	35/15Min	8	151	5.94	65	2.56	94	3.70	100	3.94	2.6	5.6	F2
NPH55-12	55/15Min	12	152	5.98	99	3.90	96	3.78	102	4.02	3.8	8.4	F2
NPH85-12	85/15Min	20	181	7.13	77	3.03	167	6.57	167	6.57	6.5	14.3	T1
NPH115-12	115/15Min	28	165	6.50	126	4.96	174	6.85	174	6.85	8.7	19.1	T2
NPH145-12	145/15Min	34	196	7.72	130	5.12	155	6.10	167	6.57	11.0	24.2	T3
NPH170-12	170/15Min	42	197	7.76	166	6.54	174	6.85	174	6.85	13.8	30.4	T2
NPH230-12	230/15Min	60	229	9.02	138	5.43	208	8.19	212	8.35	19.2	42.2	T3
NPH290-12	290/15Min	75	350	13.78	167	6.57	178	7.01	178	7.01	23.0	50.6	T3
NPH300-12	300/15Min	80	260	10.24	169	6.65	211	8.31	215	8.46	25.0	55.0	T3
NPH370-12	370/15Min	95	307	12.09	169	6.65	211	8.31	215	8.46	31.0	68.2	T3
NPH420-12	420/15Min	110	331	13.03	174	6.85	214	8.43	219	8.62	33.2	73.0	T4
NPH470-12	470/15Min	125	407	16.02	174	6.85	210	8.27	233	9.17	39.0	85.8	T5
NPH520-12	520//15Min	150	484	19.06	171	6.73	241	9.49	241	9.49	47.0	103.4	T4
NPH540-12	540/15Min	155	328	12.91	182	7.17	264	10.39	271	10.67	46.0	101.2	T5
NPH620-12	620/15Min	165	532	20.94	206	8.11	215	8.46	219	8.62	58.0	127.6	T5
NPH680-12	680/15Min	170	532	20.94	206	8.11	216	8.50	222	8.74	60.5	133.1	T5
NPH770-12	770/15Min	210	522	20.55	240	9.45	219	8.62	223	8.78	69.0	151.8	T6
NPH800-12	800/15Min	230	520	20.47	269	10.59	204	8.03	209	8.23	70.0	154.0	T6
NPH900-12	900/15Min	255	520	20.47	268	10.55	220	8.66	225	8.86	80.5	177.1	T6
NPH720-6	720/15Min	180	260	10.24	180	7.09	246	9.69	252	9.92	30.5	67.1	T5

NPS Series-Solar Battery for Solar/Remote Power System

NPS Series Solar Batteries are specifically designed with revolutionary long life plate plus hybrid gel technology for solar power storage.Solar batteries are traditionally hard working batteries and are usually cycled on a daily basis as part of primary power source of electricity where no grid power is available.

Solar batteries are an intricate components for off-grid electrical systems such as solar,wind, and mini hydroelectric systems. All these systems produce DC electrical which must be stored so that it may be used at a later time . In order to do this at the present time, CBB offers deep cycle gel batteries for this applications.

Deep Cycle batteries are used because they have the ability to be recycled many times. This Means that they can go from being charged to being discharged to 50% numerous times without damaging the batteries unlike that of other batteries such as cranking batteries which are used to start vehicles.

Gel technology attributes solar batteries not only a lower resistance of AGM batteries, but also longer cyclic life and better thermal stability.

Features

- Deep cycle design,high energy density
- Hybrid gel technology, longer cyclic life and better thermal stability
- FAA and IATA approved as non-hazardous.
  Meet EUROBAT(draft IEC896-2),IEEE,JIS and BS6290,using UL certified components
- Full recovery from deep discharge even when the battery is not recharged immediately
- Ideal for repeat cycling daily use
  Excellent performance over long discharges
- Improved resistance to freezing
  Suitable where mains power is unstable
- Lower self -discharge
  Improved charge acceptance due to low internal resistance
- High resistance to water loss with the right charging set up
- Ultra stable polymer separator with glass mat for increased performance
  High resistance to shorting due to superior mechanical strength of the polymer separator

Applications





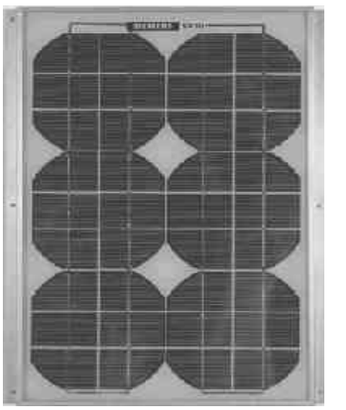
Photovoltaic power supply of:



-Power plants of remote villages,off- grid system
-Signal Installations of the air,sea,road and railway transport
-Radio relay stations of telecommunication services
-Cellular roadside and roof top transmission/repeater stations
-Street & garden lighting
-Hybrid power supplies

Batteries have terminal options to meet the multitude of connection requirements

CBB SOLAR are all SLA-VRLA Deep cycle gel industrial Monobloc units,eliminating the need for maintenance and the possibility of acid spills.















NPS Series-General Specification

Model No	Rated Voltage（V）	Rated Capacity (Ah)	Dimension								Weight		Terminal
			Length		Width		Height		Total Height		kg	pound	
			mm	inch	mm	inch	mm	inch	mm	inch			
6V SOLAR GEL BATTERY													
NPS130-6	6	130/10HR	260	10.24	180	7.09	246	9.69	252	9.92	20.6	45.32	T5
NPS180-6	6	180/10HR	306	12.05	168	6.61	220	8.66	226	8.90	26.1	57.42	T5
NPS200-6	6	200/10HR	260	10.24	180	7.09	246	9.69	252	9.92	27.6	60.72	T5
NPS225-6A	6	220/10HR	323	12.72	178	7.01	226	8.90	230	9.06	29.6	65.12	T5
NPS225-6B	6	225/10HR	260	10.24	180	7.09	246	9.69	252	9.92	29.6	65.12	T5
12 V SOLAR GEL BATTERY													
NPS24-12	12	24/10HR	165	6.50	126	4.96	174	6.85	179	7.05	7.8	17.16	T2
NPS26-12	12	26/10HR	166	6.54	175	6.89	126	4.96	126	4.96	8.4	18.48	T2
NPS33-12	12	33/10HR	196	7.72	130	5.12	155	6.10	167	6.57	10.1	22.22	T3
NPS38-12	12	38/10HR	197	7.76	166	6.54	174	6.85	179	7.05	12.4	27.28	T2
NPS42-12	12	42/10HR	198	7.80	166	6.54	174	6.85	174	6.85	13	28.60	T2
NPS50-12	12	50/10HR	229	9.02	138	5.43	208	8.19	226	8.90	16.4	36.08	T3
NPS55-12	12	55/10HR	229	9.02	138	5.43	208	8.19	226	8.90	17.4	38.28	T3
NPS60-12	12	60/10HR	350	13.78	167	6.57	178	7.01	178	7.01	20.6	45.32	T3
NPS65-12	12	65/10HR	350	13.78	167	6.57	178	7.01	178	7.01	21.4	47.08	T3
NPS70-12	12	70/10HR	260	10.24	169	6.65	211	8.31	215	8.46	21.8	47.96	T3
NPS75-12	12	75/10HR	260	10.24	169	6.65	211	8.31	215	8.46	22.2	48.84	T3
NPS80-12	12	80/20HR	260	10.24	169	6.65	211	8.31	215	8.46	23.5	51.70	T3
NPS85-12	12	85/10HR	331	13.03	174	6.85	214	8.43	219	8.62	25	55.00	T4
NPS90-12	12	90/10HR	307	12.09	169	6.65	211	8.31	215	8.46	26.7	58.74	T3
NPS100-12	12	100/10HR	331	13.03	174	6.85	214	8.43	219	8.62	30.7	67.54	T4
NPS120-12	12	120/10HR	407	16.02	174	6.85	210	8.27	233	9.17	34.4	75.68	T5
NPS150-12	12	150/10HR	484	19.06	171	6.73	241	9.49	241	9.49	43.5	95.70	T4
NPS200-12	12	200/10HR	522	20.55	240	9.45	219	8.62	223	8.78	60.7	133.54	T5
NPS220-12	12	220/10HR	522	20.55	268	10.55	203	7.99	207	8.15	68.3	150.26	T5
NPS250-12	12	250/10HR	520	20.47	268	10.55	220	8.66	224	8.82	71	156.20	T5
2V SOLAR GEL BATTERY													
NPS100-2	2	100/10HR	171	6.73	72	2.83	205	8.07	222	8.74	5.9	12.98	T4
NPS150-2	2	150/10HR	171	6.73	102	4.02	206	8.11	223	8.78	8.2	18.04	T4
NPS200-2	2	200/10HR	170	6.69	106	4.17	330	12.99	367	14.45	13.1	28.82	T5
NPS300-2	2	300/10HR	171	6.73	151	5.94	330	12.99	365	14.37	18.6	40.92	T5
NPS400-2	2	400/10HR	211	8.31	176	6.93	329	12.95	367	14.45	26	57.20	T5
NPS500-2	2	500/10HR	241	9.49	171	6.73	329	12.95	367	14.45	31.2	68.64	T5
NPS600-2	2	600/10HR	301	11.85	175	6.89	331	13.03	366	14.41	37.9	83.38	T5
NPS800-2	2	800/10HR	410	16.14	176	6.93	330	12.99	365	14.37	51.8	113.96	T5
NPS1000-2	2	1000/10HR	472	18.58	172	6.77	338	13.31	355	13.98	62.3	137.06	T5
NPS1500-2	2	1500/10HR	401	15.79	351	13.82	342	13.46	378	14.88	97	213.40	T5
NPS2000-2	2	2000/10HR	491	19.33	351	13.82	343	13.50	383	15.08	131	288.20	T5
NPS2500-2	2	2500/10HR	712	28.03	353	13.90	341	13.43	382	15.04	181	398.20	T5
NPS3000-2	2	3000/10HR	712	28.03	353	13.90	341	13.43	382	15.04	191	420.20	T5

NPG Series-Gel Batteries for Marine or Standby Service

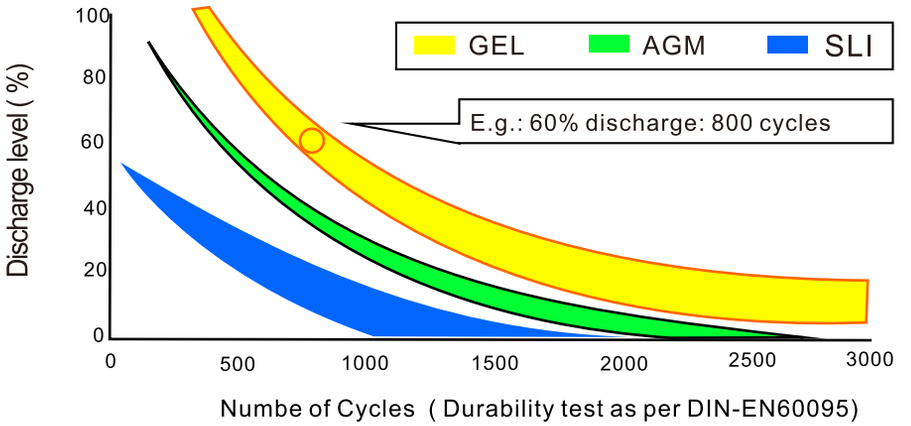
NPG Series Valve-Regulated batteries using revolutionary hybrid gel technology have been designed specifically for back up and cyclic applications.Gel battery has longer cyclic life and much better thermal stability than AGM batteries



Features

- Designed service life of 8-15 years.
- High cycle service life.
- Excellent deep cycle performance.
- Superior low current discharge performance.
- Stronger constant power discharge capability.
- Better safety performance and reliability.
- Modular and personified installation design.
- Non-Spillable construction design.
- Low self discharge characteristic.
- Exceptional deep discharge recovery performance.
- Gel-batteries are designed to be operated within a wide temperature range -40° C and +55° C.
- Cells in compliance with IEC 61427, AS40861(1993).
- Completely recyclable.
- Safety valve installation makes it explosion proof.

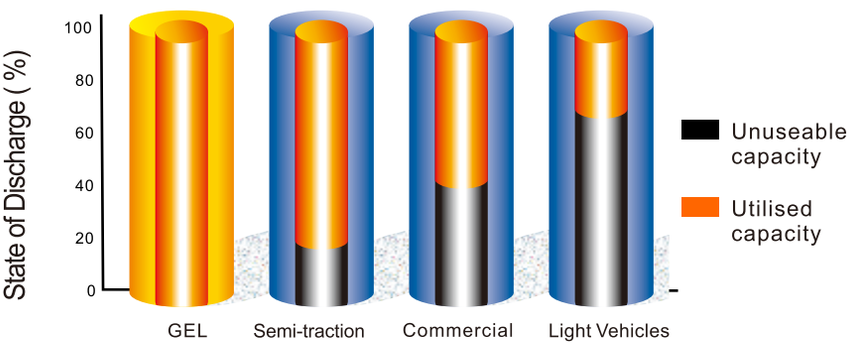
More Cycles-Longer Life



More Usable Capacity

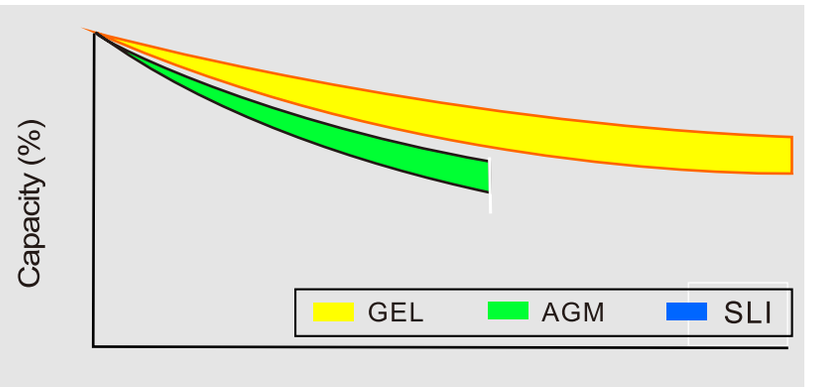
Our Gel battery allows 100% discharge.

UTILISED CAPACITY UNDER CYCLING



Minimum Self-discharge

Due to its extremely low self-discharge, the Gel still has over 80% of its nominal capacity after a storage time of six months even after two years it still retains over 60%.



Storage time in months (Lab test @ 20 C)。

Applications

- Solar power systems
- Wind power systems
- Micro hydro systems
- Hybrid power systems
- Marine & Boats
- Telecommunications
- Rural infrastructure
- Village electrification
- Power generation
- Railways








NPG Series-General Specifications

Model No	Rated Voltage (V)	Capacity (Ah)	Dimension								Weight		Terminal Type
			Length		Width		Height		Total Height		kg	pound	
			mm	inch	mm	inch	mm	inch	mm	inch			
12V GEL BATTERY													
NPG24-12	12	24/10HR	165	6.50	126	4.96	174	6.85	179	7.05	7.8	17.16	T2
NPG26-12	12	26/10HR	166	6.54	175	6.89	126	4.96	126	4.96	8.4	18.48	T2
NPG33-12	12	33/10HR	196	7.72	130	5.12	155	6.10	167	6.57	10.1	22.22	T3
NPG38-12	12	38/10HR	197	7.76	166	6.54	174	6.85	179	7.05	12.4	27.28	T2
NPG42-12	12	42/10HR	198	7.80	166	6.54	174	6.85	174	6.85	13	28.60	T2
NPG50-12	12	50/10HR	258	10.16	134	5.28	200	7.87	200	7.87	15.6	34.32	L8
NPG55-12	12	55/10HR	229	9.02	138	5.43	208	8.19	226	8.90	16.4	36.08	T3
NPG60-12	12	60/10HR	350	13.78	167	6.57	178	7.01	178	7.01	17.3	38.06	T3
NPG65-12	12	65/10HR	350	13.78	167	6.57	178	7.01	178	7.01	20.3	44.66	T3
NPG70-12	12	70/10HR	260	10.24	169	6.65	211	8.31	215	8.46	21.8	47.96	T3
NPG75-12	12	75/10HR	260	10.24	169	6.65	211	8.31	215	8.46	22.2	48.84	T3
NPG80-12	12	80/10HR	260	10.24	169	6.65	211	8.31	215	8.46	23.5	51.70	T3
NPG85-12	12	85/10HR	331	13.03	174	6.85	214	8.43	219	8.62	25	55.00	T4
NPG90-12	12	90/10HR	307	12.09	169	6.65	211	8.31	215	8.46	26.7	58.74	T3
NPG100-12	12	100/10HR	331	13.03	174	6.85	214	8.43	219	8.62	29.2	64.24	T4
NPG120-12	12	120/10HR	407	16.02	174	6.85	210	8.27	233	9.17	33.2	73.04	T5
NPG130-12	12	130/10HR	484	19.06	171	6.73	241	9.49	241	9.49	38.2	84.04	T4
NPG150-12	12	150/10HR	484	19.06	171	6.73	241	9.49	241	9.49	41.2	90.64	T4
NPG160-12	12	160/10HR	532	20.94	206	8.11	216	8.50	221	8.70	48.5	106.70	T4
NPG180-12	12	180/10HR	532	20.94	206	8.11	216	8.50	221	8.70	52.4	115.28	T4
NPG200-12	12	200/10HR	522	20.55	240	9.45	219	8.62	244	9.61	58.5	128.70	T5
NPG220-12	12	220/10HR	522	20.55	240	9.45	219	8.62	244	9.61	60.7	133.54	T5
NPG250-12	12	250/10HR	520	20.47	268	10.55	220	8.66	245	9.65	70.3	154.66	T5
6V GEL BATTERY													
NPG130-6	6	130/10HR	260	10.24	180	7.09	246	9.69	252	9.92	20.6	45.32	T5
NPG180-6	6	180/10HR	306	12.05	168	6.61	220	8.66	226	8.90	26.1	57.42	T5
NPG200-6	6	200/10HR	260	10.24	180	7.09	246	9.69	252	9.92	27.6	60.72	T5
NPG225-6A	6	225/10HR	323	12.72	178	7.01	226	8.90	230	9.06	29.6	65.12	T5
NPG225-6B	6	225/10HR	260	10.24	180	7.09	246	9.69	252	9.92	29.6	65.12	T5
2V Long Life GEL BATTERY													
NPG100-2	2	100/10HR	171	6.73	72	2.83	205	8.07	222	8.74	5.9	12.98	T4
NPG150-2	2	150/10HR	171	6.73	102	4.02	206	8.11	223	8.78	8.2	18.04	T4
NPG200-2	2	200/10HR	170	6.69	106	4.17	330	12.99	367	14.45	13.1	28.82	T5
NPG300-2	2	300/10HR	171	6.73	151	5.94	330	12.99	365	14.37	18.6	40.92	T5
NPG400-2	2	400/10HR	211	8.31	176	6.93	329	12.95	367	14.45	26	57.20	T5
NPG500-2	2	500/10HR	241	9.49	171	6.73	329	12.95	367	14.45	31.2	68.64	T5
NPG600-2	2	600/10HR	301	11.85	175	6.89	331	13.03	366	14.41	37.9	83.38	T5
NPG800-2	2	800/10HR	410	16.14	176	6.93	330	12.99	365	14.37	51.8	113.96	T5
NPG1000-2	2	1000/10HR	472	18.58	172	6.77	338	13.31	355	13.98	62.3	137.06	T5
NPG1500-2	2	1500/10HR	401	15.79	351	13.82	342	13.46	378	14.88	97	213.40	T5
NPG2000-2	2	2000/10HR	491	19.33	351	13.82	343	13.50	383	15.08	131	288.20	T5
NPG2500-2	2	2500/10HR	712	28.03	353	13.90	341	13.43	382	15.04	181	398.20	T5
NPG3000-2	2	3000/10HR	712	28.03	353	13.90	341	13.43	382	15.04	191	420.20	T5

NPFG Series-Gel Batteries for Telecommunication /It Applications

NPFG Series batteries use the latest Valve Regulated Lead-Acid (VRLA) and Gel technology , yielding an expected life of 12 years under normal float Charge. Front Access Terminal gives the battery more flexible installation and maintenance in 19" & 23" relay rack and cabinet enclosures.



Key Features

- Special lead calcium alloy, good corrosion resistance and high recovery capacity.
- Front terminal connections for fast and easy installation and maintenance.
- Carry handles for ease of installation.
- Suitable for 19", 23" and ETSI racking.
- One way self resealing safety vent for long life guarantee.
- Compliant with BS 6290 part 4.
- Designed to be compliant with Telcordia SR-4228.

Specifications

- **Nominal Voltage:** 12 Volts
- **Design Life:** 12 Years @20 ℃
- **Operating Temperature:** -15 ℃ To 50 ℃
- **Plates:** Flat Pasted
- **Separator:** AGM (Absorbent Glass Mat)
- **Case and Material:** ABS (V0 On Request)
- **Electrolyte:** Silica Gel & Sulphuric Acid (A/R)
- **Safety Vent:** Opening Pressure 10~35Kpa
- **Charge Voltage:** Float Use :13.5-13.8V@25℃
  Cycle Use:14.4-14.9V@25℃
  Max. Charge Current: 0.25C20

Applications

- Telecom Applications
- UPS
- Broadband
- Electric Utility
- Railroad Signal
- Central Office
- Fire Alarms and Security Systems.
- Replacement of Open-Type Stationary Lead Acid Batteries



NPFG Series General Specifications

Model No	Rated Voltage (V)	Capacity (Ah)	Dimension								Weight		Terminal Type
			Length		Width		Height		Total Height		kg	pound	
			mm	inch	mm	inch	mm	inch	mm	inch			
NPFG55-12	12	55	277	10.91	106	4.17	222	8.74	222	8.74	16.6	36.5	T2
NPFG80-12	12	80	562	22.13	114	4.49	188	7.40	188	7.40	25.2	55.4	T3
NPFG100-12	12	100	507	19.96	110	4.33	228	8.98	228	8.98	29.7	65.3	T4
NPFG110-12	12	110	394	15.51	110	4.33	286	11.26	286	11.26	30.6	67.3	T4
NPFG125-12	12	125	551	21.69	110	4.33	240	9.45	240	9.45	38.0	83.6	T4
NPFG150-12	12	150	551	21.69	110	4.33	288	11.34	288	11.34	45.2	99.4	T4
NPFG155-12	12	155	560	22.05	125	4.92	280	11.02	280	11.02	45.4	99.9	T4
NPFG160-12	12	160	551	21.69	110	4.33	288	11.34	288	11.34	45.8	100.8	T4
NPFG175-12	12	175	546	21.50	125	4.92	321	12.64	321	12.64	53.9	118.6	T5
NPFG180-12	12	180	560	22.05	125	4.92	316	12.44	316	12.44	54.2	119.2	T5
NPFG180-12B	12	180	560	22.05	125	4.92	316	12.44	316	12.44	55.2	121.4	T5
NPFG190-12	12	190	560	22.05	125	4.92	316	12.44	316	12.44	56.0	123.2	T5
NPFG190-12B	12	190	560	22.05	125	4.92	316	12.44	316	12.44	57.2	125.8	T5
NPFG200-12	12	200	560	22.05	125	4.92	316	12.44	316	12.44	57.2	125.8	T5
NPFG200-12B	12	200	560	22.05	125	4.92	316	12.44	316	12.44	58.2	128.0	T5

NPHG Series-Gel Batteries for High Rate Discharge Service

NPHG Series is gel batteries. It performs well in both high rate discharge and float service applications. This series is specially designed for UPS standby power supply .It is also available for other float service applications, such as emergency power supply, communication power supply etc. The power of this series is ranged from 35W to 900W.



Key Features

- 10 year design life @ 25˚C
- High energy, high intensity, high quality output electrical energy product series.
- Gel-batteries are designed to be operated within a wide temperature range -40° C and +55° C.
- Same volume same quality level can advance high energy output density for an increase of 20%.
- It is best suited for high rate intensive applications and high efficient UPS.
- High rate discharge construction.
- Deep discharge recoverability.
- Patented long life alloy having the lowest calcium levels in the industry - minimizing grid growth, reducing gassing, and extending battery life.
- Patented UL recognized flame-arresting vents in each cell for safety and long life.
- Can be operated in any orientation. Upright, side or end mounting recommended.
- When it is used in safe surroundings, the battery is maintenance free, and you never need to add water. It can be recycled repeatedly.
- Not restricted for air transport - Complies with IATA/ICAO special provisions A67.
- Not restricted for surface transport - Classified as non-hazardous material as related to DOT-CFR title 49 parts171-189.
- Not restricted for water transport - Classified as non-hazardous material per IMDG amendment 27.

Applications

- Data Centers
- Network Operations Centers
- Industrial Process Control Facilities
- Internet Housing Sites
- Semiconductor Manufacturing
- Banks & Financial Markets
- Power Generation Plants
- Hospitals & Testing Laboratories







NPHG Series-General Specification

Model No	Rated Power（W/Cell）	Capacity (Ah/10hr)	Dimension								Weight		Terminal Type
			Length		Width		Height		Total Height		kg	pound	
			mm	inch	mm	inch	mm	inch	mm	inch			
NPHG35-12	35/15Min	8	151	5.94	65	2.56	94	3.70	100	3.94	2.6	5.7	F2
NPHG55-12	55/15Min	12	152	5.98	99	3.90	96	3.78	102	4.02	4.0	8.8	F2
NPHG85-12	85/15Min	20	181	7.13	77	3.03	167	6.57	167	6.57	6.7	14.7	T1
NPHG115-12	115/15Min	28	165	6.50	126	4.96	174	6.85	174	6.85	8.9	19.6	T2
NPHG145-12	145/15Min	34	196	7.72	130	5.12	155	6.10	167	6.57	11.1	24.4	T3
NPHG170-12	170/15Min	42	197	7.76	166	6.54	174	6.85	174	6.85	14.0	30.8	T2
NPHG230-12	230/15Min	60	229	9.02	138	5.43	208	8.19	212	8.35	19.4	42.7	T3
NPHG290-12	290/15Min	75	350	13.78	167	6.57	178	7.01	178	7.01	23.2	51.0	T3
NPHG300-12	300/15Min	80	260	10.24	169	6.65	211	8.31	215	8.46	25.2	55.4	T3
NPHG370-12	370/15Min	95	307	12.09	169	6.65	211	8.31	215	8.46	31.2	68.6	T3
NPHG420-12	420/15Min	110	331	13.03	174	6.85	214	8.43	219	8.62	33.5	73.7	T4
NPHG470-12	470/15Min	125	407	16.02	174	6.85	210	8.27	233	9.17	39.3	86.5	T5
NPHG520-12	520//15Min	150	484	19.06	171	6.73	241	9.49	241	9.49	47.3	104.1	T4
NPHG540-12	540/15Min	155	328	12.91	182	7.17	264	10.39	271	10.67	46.3	101.9	T5
NPHG620-12	620/15Min	165	532	20.94	206	8.11	215	8.46	219	8.62	58.3	128.3	T5
NPHG680-12	680/15Min	170	532	20.94	206	8.11	216	8.50	222	8.74	60.8	133.8	T5
NPHG770-12	770/15Min	210	522	20.55	240	9.45	219	8.62	223	8.78	69.5	152.9	T6
NPHG800-12	800/15Min	230	520	20.47	269	10.59	204	8.03	209	8.23	70.5	155.1	T6
NPHG900-12	900/15Min	255	520	20.47	268	10.55	220	8.66	225	8.86	80.8	177.8	T6
NPHG720-6	720/15Min	180	260	10.24	180	7.09	246	9.69	252	9.92	30.7	67.5	T5

OPzV Series-Tubular Gel Batteries for Stationary Applications

OPzV Series tubular gel battery adopts traditional tubular plate with gel technology. Batteries are designed as standby power for communications, power, military and broad cast and television system with excellent deep cycle performance. The design float life is above 18 years at 25°C(77°F). The OPzV range batteries are ensured the quality with CBB QA system according to the ISO9001 and ISO14001 standard.



Key Features

- Reliable seal performance, no acid spillage, recombination efficiency reach 99.9%
- initial capacity above 100%, the remaining capacity above 94% after storage for 3 months(25°C)
- Low float charge voltage, Design(2.23V/cell, 25°C), extremely consistent float charge voltage
- Flexible connectors and convenient installation
- Wide operating temperature range from -15°C to 60°C
- Tubular positive plate with prolonged cycle life
- Fumed Silica gel electrolyte
- Lead Calcium die cast grid with improved corrosion resistance capability
- Low self-discharge rate and long shelf life (1 year at 25°C)
- Excellent deep discharge recovery capability

Applications

- Telecommunications
- Radio and cellular telephone relay stations
- Power stations, Conventional power stations, alternative power(solar/wind)
- large UPS AND Computer back-up
- Railway signaling
- Maritime standby power on ships and ashore
- Process and control engineering
- Standby power
- Buoy Lighting

General Specifications

Model No	Rated Voltage（V）	Rated Capacity (C10/Ah)	Dimension								Weight		Terminal
			Length		Width		Height		Total Height		kg	pound	
			mm	inch	mm	inch	mm	inch	mm	inch			
4OPzV200	2	200	103	4.06	206	8.11	355	14	390	15.4	18	39.7	T5
5OPzV250	2	250	124	4.88	206	8.11	355	14	390	15.4	22	48.5	T5
6OPzV300	2	300	145	5.71	206	8.11	355	14	390	15.4	26	57.3	T5
5OPzV350	2	350	124	4.88	206	8.11	471	18.5	506	19.9	29	63.9	T5
6OPzV420	2	420	145	5.71	206	8.11	471	18.5	506	19.9	34	75	T5
7OPzV490	2	490	166	6.54	206	8.11	471	18.5	506	19.9	39	86	T5
6OPzV600	2	600	145	5.71	206	8.11	646	25.4	681	26.8	46	101.4	T5
8OPzV800	2	800	191	7.52	210	8.27	646	25.4	681	26.8	64.5	142	T5
10OPzV1000	2	1000	233	9.17	210	8.27	646	25.4	681	26.8	78.5	173	T5
12OPzV1200	2	1200	275	10.8	210	8.27	646	25.4	681	26.8	93	205.1	T5
12OPzV1500	2	1500	275	10.8	210	8.27	646	31.3	831	32.7	115	253.6	T5
16OPzV2000	2	2000	399	15.7	214	8.42	646	30.4	807	31.8	155	341.8	T5
20OPzV2500	2	2500	487	19.2	212	8.35	646	30.4	807	31.8	196	432.2	T5
24OPzV3000	2	3000	576	22.7	212	8.35	646	30.4	807	31.8	232	511.6	T5

Deep-cycle Agm Batteries(DC Series)

DC Series Deep-Cycle AGM batteries are ideal for applications that require sealed batteries with heavy-duty cycling capabilities or for backup power.



Key Features

- New High-Density Active Paste Material.
- Heavy Duty Thick Grids.
- Special Lead-Calcium Alloy Grids.
- Tank Formation Activation of Plates.
- 10 Days Curing Chamber Process.
- Unique Low Resistance Micro-Porous Glass Fiber Separators.
- Maintenance Free, Spill-Proof/Leak Proof.
- Self Regulating Pressure Relief Valves.
- Low Self Discharge Rate, Only 1% Per Month.
- Faster Recharging Times.
- Excellent Recovery from Deep Discharge.

Benefits

- High Capacity and Long Life.
- True Deep Cycle Construction For Long Life.
- Superior Corrosion Resistance.
- Ensures Fully Formed, Voltage Matched Plates.
- Excellent Bonding of Active Material Paste to Grids Resulting in Longer Life.
- Enhanced Electrolyte Retention.
- DOT,IATA,ICAO and IMDG Approved as Safe for Air & Sea Transportation.
- Sure and Safe Operation of Batteries.
- Longer Shelf Life, Easy Storage.
- Rugged Construction, Shock and Vibration Resistant.
- Recognized Around The World.

Specifications

- **Voltage:** 6V, 8V, 12V
- **Capacity**:14~420Ah
- **Separator:** AGM (Absorbent Glass Mat)
- **Container and Covers Material:**
  ABS, UL94HB (UL94V-0 on request)
- **Design Life:** 750 cycles at 75%DOD
  (IEC60254-1:2005)
- **Operating Temperature Range:**
  Discharge: -15 ℃ ~ 50 ℃(5℉~ 122℉)
  Charge: 0 ℃ ~ 40 ℃(32℉~ 104℉)
  Storage: -15 ℃ ~ 40 ℃(5℉~ 104℉)
- **Nominal Operating Temperature Range**:
  25 ℃±3℃(77℉±5℉)
- **Cycle Service Charging Voltage:**
  2.4V/cell ~ 2.5V/cell at 25℃(77℉)
- **Float Charging Voltage:**
  2.25V/cell~ 2.3V/cell at 25℃(77℉)
- **Temperature Compensation Factor:**
  Float (Standby) Use: -3 mV/℃/cell
  Cycle Use: -4 mV/℃/cell
- **Recommended Charging Current:**
  0.15C20~0.35C20
- **Maximum Discharge Current:**
  C20≤100AH ,15C (5S);
  100AH＜C20≤260AH ,10C (5S);
  C20＞260AH ,5C (5S).

Applications

- Renewable Energy Systems
- Golf/Utility Vehicles
- Floor Machines
- Aerial Work Platform
- Recreational Vehicles (RV)
- Medical Mobility
- Neighborhood Electric Vehicles
- Marine Vessels



DC Series Technical Specification

Model No	Industry No	Rated Voltage（V）	Rated Capacity (Ah)	Dimension				Weight		Terminal Type
				Length	Width	Height	Total Height	kg	pound	
				mm	mm	mm	mm			
6V DEEP CYCLE AGM BATTERY										
DC200-6	27	6	200/20HR	306	168	220	226	30	66.00	T5
DC210-6	GC2/T605	6	210/20HR	260	180	246	252	29.5	64.90	T5
DC220-6	27	6	220/20HR	306	168	220	226	31.5	69.30	T5
DC225-6	DIN/TE35	6	225/20HR	243	187	275	275	30.5	67.10	T5/AP
DC226-6	GC2/T105	6	226/20HR	260	180	247	252	30	66.00	T5
DC250-6	T145	6	250/20HR	260	180	265	272	34.5	75.90	T5
DC310-6	902/J305	6	310/20HR	295	178	354	360	46.0	101.20	T5/DT
DC330-6	902/J305	6	330/20HR	295	178	354	360	46.6	102.52	T5/DT
DC380-6	L16P	6	380/20HR	295	178	404	410	55.3	121.66	T5/DT
DC420-6	L16H	6	420/20HR	295	178	404	410	56.8	124.96	T5/DT
8V DEEP CYCLE AGM BATTERY										
DC170-8	T875/890	8	170/20HR	260	182	266	271	34.0	74.80	T5
DC200-8	GC8H	8	200/20HR	260	182	295	300	38.0	83.60	T5
12V DEEP CYCLE AGM BATTERY										
DC14-12	N/A	12	14/20HR	152	99	96	102	3.8	8.36	F2
DC18-12	N/A	12	18/20HR	181	77	167	167	5.4	11.88	T1/L1
DC20-12	N/A	12	20/20HR	181	77	167	167	6.0	13.20	T1/L1
DC24-12	N/A	12	24/20HR	166	175	126	126	8.3	18.26	T2
DC26-12	N/A	12	26/20HR	165	126	174	174	8.4	18.48	T2
DC35-12	U1	12	35/20HR	196	130	155	167	10.5	23.10	T3
DC40-12	U1L	12	40/20HR	198	166	174	174	14.2	31.24	T3
DC48-12	U1L	12	48/20HR	198	166	174	174	14.5	31.90	T3
DC55-12	22NF	12	55/20HR	229	138	208	212	16	35.20	T3
DC70-12	93	12	70/20HR	350	167	178	178	23.3	51.26	T3
DC75-12	24	12	75/20HR	260	169	211	215	25	55.00	T3
DC85-12	24	12	85/20HR	260	169	211	215	26.1	57.42	T3
DC90-12	27	12	90/20HR	307	169	211	216	28.2	62.04	T3/AP
DC100-12	27	12	100/20HR	307	169	211	216	30.2	66.44	T3/AP
DC110-12	31	12	110/20HR	331	174	214	219	33.3	73.26	T4/AP
DC110-12B	31	12	110/20HR	328	172	210	233	32.8	72.16	T4/AP
DC120-12	N/A	12	120/20HR	407	173	210	233	39.2	86.24	T5
DC135-12	J150	12	135/20HR	341	173	283	287	40.8	89.76	T5/AP
DC150-12	N/A	12	150/20HR	484	171	241	241	45.5	100.10	T4
DC150-12B	T1275	12	150/20HR	328	182	264	271	44.2	97.24	T5
DC180-12	4D	12	180/20HR	532	206	215	219	56	123.20	T4
DC200-12	4D	12	200/20HR	532	206	216	222	58.4	128.48	T4
DC220-12	4D	12	220/20HR	522	240	219	223	65	143.00	T5
DC240-12	8D	12	240/20HR	520	269	203	207	71.0	156.20	T5
DC260-12	8D	12	260/20HR	520	268	220	224	77	169.40	T5

DCG Series-Gel Battery for Deep-cycle Service

DCG Series Deep-Cycle Gel batteries are maintenance free and require no watering, while providing you the unmatched quality and power of CBB's advanced deep cycle gel technology.



Features:

- The success of DCG batteries comes from the internationally superior Gel technology.
- Excellent energy storage capacity combined with high reliability.
- Designed in accordance with IEC 60254-1 700 Cycles at 75%DOD.
- 7 years design life at 20 °C ambient temperature (80% remaining capacity from C20).
- Grid plate construction consisting of a lead calcium alloy.
- Very low gassing due to the internal gas recombination.
- High cycle service life.
- Better temperature resistance performance.
- Excellent deep cycle performance.
- Superior low current discharge performance.
- Better charge acceptability.
- Better safety performance and reliability.
- High Performance price ratio and low yearly operating cost.
- Non-Spillable construction design.
- Safety valve installation makes it explosion proof.
- Low self discharge characteristic.
- ABS containers and covers (UL94HB, UL94V-0 optional) .
- Gel-batteries are designed to be operated within a wide temperature range -40° C and +55° C.
- Maintenance-free (no topping up) motive power batteries in gel technology.
- Completely recyclable.

Benefits

- Long-lasting runtime and battery life in the most demanding of applications.
- Proprietary Gel formulation prevents stratification.
- Superior engineering offers exceptional durability.
- Sealed containers ensure safe use in schools, hospitals, office buildings and other health & safety-sensitive (HSE) environments.

Charging

	Charge Voltage	Charging Current
Float Voltage	2.30VPC	10 to 35 A per 100Ah
Voltage on boost charge stage	2.35VPC-2.45VPC	
Max. switch - mode voltage	2.45VPC	
Equalizing charge voltage (max. values)	2.45VPC	

Applications

- Aerial Work Platform (AWP)/Access
- Material Handling
- Floor Machine
- Recreational Vehicle (RV)
- Industrial
- Electric Boats
- Golf/Utility/Neighborhood Electric Vehicle (NEV)
- Wheelchairs
- Remote Monitoring & Instrumentation
- Renewable Energy (Solar, Small Wind and Small Hydro)



DCG Series-Technical Specification

Model No	Industry No	Rated Voltage (V)	Capacity (Ah/20Hr)	Dimension				Weight		Terminal
				Length	Width	Height	Total	kg	pound	
				mm	mm	mm	mm			
6V DEEP CYCLE GEL BATTERY										
DCG200-6	27	6	200	306	168	220	226	30.1	66.22	T5
DCG210-6	GC2/T605	6	210	260	180	246	252	29.6	65.12	T5
DCG220-6	27	6	220	306	168	220	226	31.6	69.52	T5
DCG225-6	DIN/TE35	6	225	243	187	275	275	30.6	67.32	T5/AP
DCG226-6	GC2/T105	6	226	260	180	247	252	30.2	66.44	T5
DCG250-6	T145	6	250	260	180	265	272	34.7	76.34	T5
DCG310-6	902/J305	6	310	295	178	354	360	46.2	101.64	T5/DT
DCG330-6	902/J305	6	330	295	178	354	360	46.8	102.96	T5/DT
DCG380-6	L16P	6	380	295	178	404	410	55.5	122.10	T5/DT
DCG420-6	L16H	6	420	295	178	404	410	57	125.40	T5/DT
8V DEEP CYCLE GEL BATTERY										
DCG170-8	T875/890	8	170	260	182	266	271	34.2	75.24	T5
DCG200-8	GC8H	8	200	260	182	295	300	38.2	84.04	T5
12V DEEP CYCLE GEL BATTERY										
DCG24-12	N/A	12	24	166	175	126	126	8.4	18.48	T2
DCG26-12	N/A	12	26	165	126	174	174	8.5	18.70	T2
DCG35-12	U1	12	35	196	130	155	167	10.6	23.32	T2
DCG40-12	U1L	12	40	198	166	174	174	14.3	31.46	T2
DCG48-12	U1L	12	48	198	166	174	174	14.6	32.12	T2
DCG55-12	22NF	12	55	229	138	208	212	16.1	35.42	T3
DCG70-12	93	12	70	350	167	178	178	23.4	51.48	T3
DCG75-12	24	12	75	260	169	211	215	25.1	55.22	T3
DCG85-12	24	12	85	260	169	211	215	26.2	57.64	T3
DCG90-12	27	12	90	307	169	211	216	28.3	62.26	T3/AP
DCG100-12	27	12	100	307	169	211	216	30.3	66.66	T3/AP
DCG110-12	31	12	110	331	174	214	219	33.5	73.70	T4/AP
DCG110-12B	31	12	110	328	172	217	222	32.7	71.94	T4
DCG120-12	N/A	12	120	407	173	210	233	39.5	86.90	T5
DCG135-12	J150	12	135	341	173	283	288	41	90.20	T5/AP
DCG150-12	N/A	12	150	484	171	241	241	45.7	100.54	T5
DCG150-12B	T1275	12	150	338	182	267	272	44.4	97.68	T5
DCG180-12	4D	12	180	532	206	216	222	56.2	123.64	T4
DCG200-12	4D	12	200	532	206	216	222	58.6	128.92	T4
DCG220-12	4D	12	220	522	240	219	225	65.2	143.44	T5
DCG240-12	8D	12	240	520	269	203	209	71.3	156.86	T5
DCG260-12	8D	12	260	520	268	220	226	77.3	170.06	T5

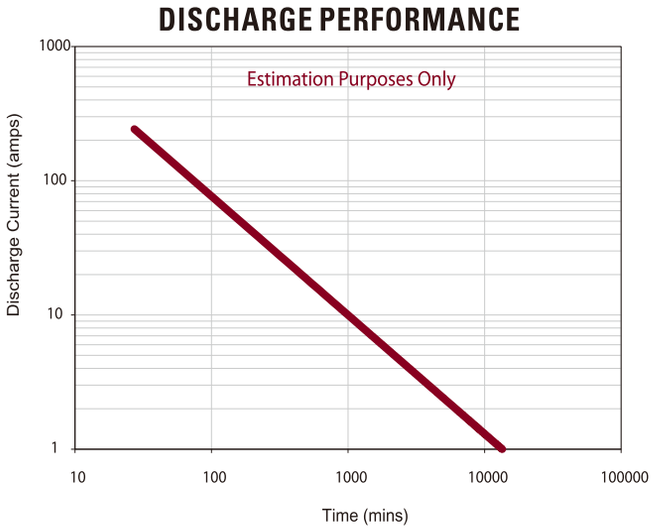
Deep-cycle Tubular Batteries(Flooded)

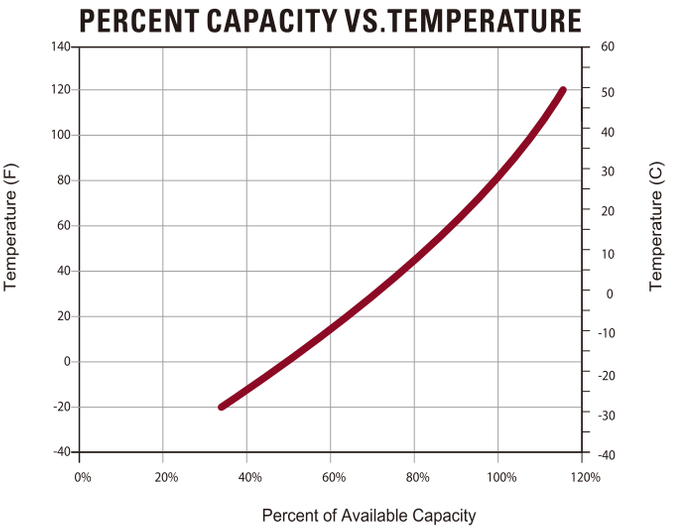
With more than 20 years of research and development in lead acid batteries, we can finally provide you for such deep cycle tubular batteries. Our deep cycle batteries can deliver more performance and value than ordinary batteries with its super heavy duty tubular plate.

The deep cycle battery is flooded and then it needs watering after used to ensure enough water to cover the plates of each battery. The deep cycle battery is mainly used in golf carts,Scrubber/Sweeper/floor Machine,Richshaw ,Tricycle, and other electric vehicles.



Performance & Capacity





Golf /Utility Vehicles Battery Specification

6/8/12 VOLT DEEP-CYCLE FLOODED BATTERIES														
BCI Group Size	Type	Capacity Minutes			Capacity Amp-hour(AH)			Voltage	Terminal	Dimensions inches(mm)			Weight Kgs	
		@25Amps	56Amps	@75Amps	5 Hr	10Hr	20Hr	Volt	Type	L	W	H	DRY	With Acid
GC2	T-605	383		105	175	193	210	6	1,2,3,4	262	181	283	17.5	25.5
GC2	T-105	447		115	185	207	225	6	5	262	181	283	19.5	27.5
GC2	T-125	488		132	195	221	240	6	1,2,3,4	262	181	283	21.0	29.0
GC2H	T-145	530		145	215	239	260	6	2,4	262	181	302	24.0	32.0
DIN	TE35	500		135	201	225	245	6	2	243	189	290	24.5	32.6
GC8	T-875	295	117		145	155	170	8	1,2,3	262	181	283	21.0	29.0
GC8H	T-890	340	132		155	175	190	8	1, 2	262	181	283	24.0	32.0
GC12	T-1275	280	102	70	120	134	150	12	1	329	180	300	26.5	36.0
GC12	T-1275	280	102	70	120	134	150	12	1	329	180	300	28.5	38.5
GC12	T-1275	280	102	70	120	134	150	12	1	329	180	300	30.0	40.0

Tricycle/E-Boat Battery Specification

Model	Rated Voltage(V)	Rated Capacity (Ah/5Hr)	Max.Outer Dimension inches(mm)				Max.Weight (KGS)	
			Length	Width	Height	Total Height	DRY	With Acid
3-DG-300	6	240	14.37(365)	6.89(175)	10.83(275)	11.22(285)	27.5	37
6-DG-200	12	120	14.37(365)	6.89(175)	10.83(275)	11.22(285)	27.5	37
6-DG-185	12	110	14.37(365)	6.89(175)	10.83(275)	11.22(285)	26	35
6-DG-175	12	100	14.37(365)	6.89(175)	10.03(255)	10.83(275)	24.5	33
6-DG-165	12	90	14.37(365)	6.89(175)	9.25(235)	10.03(255)	22	31
6-DG-155	12	80	14.37(365)	6.89(175)	9.25(235)	10.03(255)	19	29
6-DG-145	12	70	14.37(365)	6.89(175)	9.25(235)	10.03(255)	18	28
6-DG-60	12	60	10.24(260	8.46(215)	8.86(225)	9.44(240)	14.5	21
6-DG-210	12	167	20.39(518)	10.91(277)	8.74(222)	9.65(245)	42	61
6-DG-220	12	175	20.39(518)	10.91(277)	8.74(222)	9.65(245)	44	63
6-DG-240	12	190	20.39(518)	10.91(277)	8.74(222)	9.65(245)	46.5	65.5

DZM & EV Series Electric Vehicle Batteries

EV Series batteries is a high performance Deep Cycle Gel battery similar to the DZM but designed for of various types of Electric Vehicles requiring larger capacity batteries than the DZM series. The EV series consists of 6/12 Volt batteries ranging from 70Ah up to 285 Ah. The EV Series used in recreational vehicles, golf carts, sightseeing vehicles, vehicles, Electric tractors tractors and various other larger electric powered industrial vehicles.



Key Features

- Pb-Ca-Sn multi-components alloy
- Superior Gel technology
- High purity electrolysis lead, high density lead paste, special long effective additive
- High Absorptive performance AGM separator
- Excellent cycle life and recover age performance from over-discharged state
- Excellent large current discharge performance, there is obvious advantage in start-up and climing slope stage
- Good large current discharge performance, good lower temperature endurance and shock endurance
- Maintenance free ,there is no need to add water during operation.

Specifications

Applications

- Electric Vehicle
- Mixture Electric vehicle
- Sightseeing car
- Golf car
- Electric transit car
- Electric patrol car
- Public project car
- Property maintenance car
- Electric flat car
- Electric freight car
- Electric drone car

General Specification

Model No	Rated Voltage（V）	Rated Capacity (Ah)	Dimension								Weight		Terminal
			Length		Width		Height		Total Height		kg	pound	
			mm	inch	mm	inch	mm	inch	mm	inch			
6-DZM-5	12	5/5HR	151	5.94	51	2.01	95	3.74	101	3.98	1.7	3.74	F1
6-DZM-7	12	7/5HR	152	5.98	65	2.56	94	3.70	100	3.94	2.2	4.84	F2
6-DZM-10	12	10/5HR	152	5.98	99	3.90	95	3.74	98	3.86	4.2	9.24	F2
6-DZM-12	12	12/5HR	152	5.98	99	3.90	98	3.86	101	3.98	4.4	9.68	F2
8-DZM-14	16	14/5HR	201	7.91	113	4.45	99	3.90	102	4.02	6.5	14.3	F4
6-DZM-20	12	20/5HR	181	7.13	77	3.03	170	6.69	171	6.73	7	15.4	T1
6-DZM-24	12	24/5HR	175	6.89	165	6.50	126	4.96	126	4.96	9	19.8	T2
6-DZM-24B	12	24/5HR	185	7.28	105	4.13	130	5.12	130	5.12	7.3	16.06	T2
6-DZM-28	12	28/5HR	318	12.52	80	3.15	126	4.96	126	4.96	9.6	21.12	T3
6-DZM-28B	12	28/5HR	175	6.89	166	6.54	126	4.96	126	4.96	9.8	21.56	T3
6-DZM-30	12	30/5HR	224	8.82	95	3.74	175	6.89	175	6.89	10.1	22.22	T3
6-DZM-30B	12	30/5HR	267	10.51	77	3.03	170	6.69	170	6.69	10.1	22.22	T3
6-DZM-35	12	35/5HR	225	8.86	107	4.21	175	6.89	175	6.89	12	26.4	T3
6-DZM-42	12	42/5HR	224	8.82	120	4.72	175	6.89	175	6.89	12.5	27.5	T3
6-DZM-50	12	50/5HR	224	8.82	120	4.72	175	6.89	175	6.89	13.5	29.7	T3
3-EV-150	6	150/3HR	260	10.24	180	7.09	247	9.72	252	9.92	29.5	64.9	T5
3-EVF-200	6	200/3HR	260	10.24	180	7.09	265	10.43	272	10.71	36	79.2	T5
6-EV-40	12	40/3HR	198	7.80	166	6.54	174	6.85	174	6.85	14.5	31.9	T3
6-EV-80	12	80/3HR	260	10.24	169	6.65	211	8.31	215	8.46	26.5	58.3	T3
6-EV-100	12	100/3HR	331	13.03	176	6.93	214	8.43	220	8.66	35.5	78.1	T4
6-EV-120	12	120/3HR	407	16.02	173	6.81	210	8.27	233	9.17	42	92.4	T5
6-EV-135	12	135/3HR	341	13.43	173	6.81	283	11.14	288	11.34	47	103.4	T5
6-EV-150	12	150/3HR	484	19.06	171	6.73	241	9.49	241	9.49	53	116.6	T4

Forklift Batteries

Traction lead acid batteries, as the DC drive power of forklift, traction vehicles, transportation vehicles, tramcars etc., have a wide application in airport, station, port, vegetable and fruit markets and warehouses and so on. Also traction batteries, which are designed to be DC power of non-pollution transportation equipments, are widely used by buses, gymnastic and recreation locations. Traction batteries are fully compliant to BS standard or DIN standard.It meets the dimensions of the standards DIN/EN 60254-2 and IEC 60254-2.



Construction Features

- ※ Nonwoven protective gauntlet, better elastic, less pore size, less electrical resistance and higher air permeability.
- ※ Flexible, fully isolated connector prevents any creeping current.
- ※ Flip top plugs with special electrolyte level indication.
- ※ Automatic refilling plugs are also available (according request).
- ※ Imported microporous catercorner separator with advanced quality provides higher porosity and lower electrical resistance.
- ※ Containers and lids are made of polypropylene (PP). The impact resistance is very good.
- ※ Patented terminal sealing construction fully prevents plate growth and electrolyte leakage.

Nonwoven protective gauntlet



Flip Top Plug



Flexible Intercell Connector



Automatic Refilling Plug

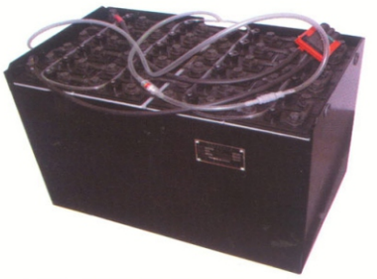


DIN 198 Series Specification

Model	INTL Model	Rated Voltage	5 Hr Rated Capacity	Max.Overall Dimenison(mm)					Pole Qty	Case Material	Reference weight(kg)	
		(V)	(Ah)	Length	Width	Height	Welding Height	Bolted Height	(PCS)		Dry	Wet
2PzS120	D-120-K2	2	120	47	198	360	395	405	2	PP	6.5	8.5
3PzS180	D-180-K3	2	180	65	198	360	395	405	2	PP	9	12
4PzS240	D-240-K4	2	240	83	198	360	395	405	2	PP	11.5	15.5
5PzS300	D-300-K5	2	300	101	198	360	395	405	2	PP	14	19
6PzS360	D-360-K6	2	360	119	198	360	395	405	2	PP	16.8	22.5
7PzS420	D-420-K7	2	420	137	198	360	395	405	2	PP	19.4	26
8PzS480	D-480-K8	2	480	155	198	360	395	405	2or4	PP	22	30
9PzS540	D-540-K9	2	540	173	198	360	395	405	2or4	PP	25	33.5
10PzS600	D-600-K10	2	600	191	198	360	395	405	2or4	PP	28.8	37.5
12PzS720	D-720-K12	2	720	227	198	360	395	405	2or4	PP	32	41
2PzS140	D-140-K2	2	140	47	198	405	440	450	2	PP	8	10.5
3PzS210	D-210-K3	2	210	65	198	405	440	450	2	PP	11	15
4PzS280	D-280-K4	2	280	83	198	405	440	450	2	PP	14	19
5PzS350	D-350-K5	2	350	101	198	405	440	450	2	PP	17.5	24
6PzS420	D-420-K6	2	420	119	198	405	440	450	2	PP	20.5	28
7PzS490	D-490-K7	2	490	137	198	405	440	450	2	PP	23.5	32.5
8PzS560	D-560-K8	2	560	155	198	405	440	450	2or4	PP	27	37
9PzS630	D-630-K9	2	630	173	198	405	440	450	2or4	PP	30.5	41.5
10PzS700	D-700-K10	2	700	191	198	405	440	450	2or4	PP	33.5	46
12PzS840	D-840-K12	2	840	227	198	405	440	450	2or4	PP	36.5	52
2PzS160	D-160-K2	2	160	47	198	456	491	501	2	PP	9.5	12.5
3PzS240	D-240-K3	2	240	65	198	456	491	501	2	PP	13	17.5
4PzS320	D-320-K4	2	320	83	198	456	491	501	2	PP	17	23
5PzS400	D-400-K5	2	400	101	198	456	491	501	2	PP	20.5	27.5
6PzS480	D-480-K6	2	480	119	198	456	491	501	2	PP	23.5	32.5
7PzS560	D-560-K7	2	560	137	198	456	491	501	2	PP	27	38
8PzS640	D-640-K8	2	640	155	198	456	491	501	2or4	PP	31	43
9PzS720	D-720-K9	2	720	173	198	456	491	501	2or4	PP	36.5	49.5
10PzS800	D-800-K10	2	800	191	198	456	491	501	2or4	PP	38.5	53
12PzS960	D-960-K12	2	960	227	198	456	491	501	2or4	PP	41	58
2PzS180	D-180-K2	2	180	47	198	525	560	570	2	PP	9	12
3PzS270	D-270-K3	2	270	65	198	525	560	570	2	PP	12	17
4PzS360	D-360-K4	2	360	83	198	525	560	570	2	PP	15.5	22
5PzS450	D-450-K5	2	450	101	198	525	560	570	2	PP	19	27
6PzS540	D-540-K6	2	540	119	198	525	560	570	2	PP	21.5	31.5
7PzS630	D-630-K7	2	630	137	198	525	560	570	2	PP	25.5	36.5
8PzS720	D-720-K8	2	720	155	198	525	560	570	2or4	PP	29	42
9PzS810	D-810-K9	2	810	173	198	525	560	570	2or4	PP	31.5	46.5
10PzS900	D-900-K10	2	900	191	198	525	560	570	2or4	PP	35.5	50.5
12PzS1080	D-1080-K12	2	1080	227	198	525	560	570	2or4	PP	38.5	56

DIN 198 Series Specification

Model	INTL Model	Rated Voltage	5 Hr Rated Capacity	Max.Overall Dimenison(mm)					Pole Qty	Case Material	Reference weight(kg)	
		(V)	(Ah)	Length	Width	Height	Welding Height	Bolted Height	(PCS)		Dry	Wet
2PzS200	D-200-K2	2	200	47	198	570	605	615	2	PP	10	13.5
3PzS300	D-300-K3	2	300	65	198	570	605	615	2	PP	14.5	20
4PzS400	D-400-K4	2	400	83	198	570	605	615	2	PP	18.5	25.5
5PzS500	D-500-K5	2	500	101	198	570	605	615	2	PP	22	31
6PzS600	D-600-K6	2	600	119	198	570	605	615	2	PP	26.5	37
7PzS700	D-700-K7	2	700	137	198	570	605	615	2	PP	30.5	43
8PzS800	D-800-K8	2	800	155	198	570	605	615	2or4	PP	34.5	49
9PzS900	D-900-K9	2	900	173	198	570	605	615	2or4	PP	39.5	55
10PzS1000	D-1000-K10	2	1000	191	198	570	605	615	2or4	PP	42.5	60.5
12PzS1200	D-1200-K10	2	1200	227	198	570	605	615	2or4	PP	46.5	65
2PzS240	D-240-K2	2	240	47	198	690	725	735	2	PP	12	16
3PzS360	D-360-K3	2	360	65	198	690	725	735	2	PP	17	24
4PzS480	D-480-K4	2	480	83	198	690	725	735	2	PP	22	32
5PzS600	D-600-K5	2	600	101	198	690	725	735	2	PP	27	40
6PzS720	D-720-K6	2	720	119	198	690	725	735	2	PP	32	48.5
7PzS840	D-840-K7	2	840	137	198	690	725	735	2	PP	37	56
8PzS960	D-960-K8	2	960	155	198	690	725	735	2or4	PP	43	64
9PzS1080	D-1080-K9	2	1080	173	198	690	725	735	2or4	PP	48	72
10PzS1200	D-1200-K10	2	1200	191	198	690	725	735	2or4	PP	54	80
2PzS280	D-280-K2	2	280	47	198	720	755	765	2	PP	15	19
3PzS420	D-420-K3	2	420	65	198	720	755	765	2	PP	20	25.6
4PzS560	D-560-K4	2	560	83	198	720	755	765	2	PP	26	33.6
5PzS700	D-700-K5	2	700	101	198	720	755	765	2	PP	33	42
6PzS840	D-840-K6	2	840	119	198	720	755	765	2	PP	39	50
7PzS980	D-980-K7	2	980	137	198	720	755	765	2	PP	45.5	58.5
8PzS1120	D-1120-K8	2	1120	155	198	720	755	765	2or4	PP	52	66
9PzS1260	D-1260-K9	2	1260	173	198	720	755	765	2or4	PP	58	74.5
10PzS1400	D-1400-K10	2	1400	191	198	720	755	765	2or4	PP	63	81.3





BS 158 Series Specification

Model	INTL Model	Rated Voltage	5 Hr Rated Capacity	Max.Overall Dimenison(mm)					Pole Qty	Case Material	Reference weight(kg)	
		(V)	(Ah)	Length	Width	Height	Welding Height	Bolted Height	(PCS)		Dry	Wet
2VBS100	D-100-Z2	2	100	45	158	385	420	430	2	PP	5.8	7.5
3VBS150	D-150-Z3	2	150	61	158	385	420	430	2	PP	7.5	10
4VBS200	D-200-Z4	2	200	77	158	385	420	430	2	PP	9.5	13
5VBS250	D-250-Z5	2	250	93	158	385	420	430	2	PP	12	16
6VBS300	D-300-Z6	2	300	109	158	385	420	430	2or4	PP	15	20
7VBS350	D-350-Z7	2	350	125	158	385	420	430	2or4	PP	17	23
8VBS400	D-400-Z8	2	400	141	158	385	420	430	2or4	PP	20	27
9VBS450	D-450-Z9	2	450	157	158	385	420	430	2or4	PP	22.5	30
10VBS500	D-500-Z10	2	500	173	158	385	420	430	2or4	PP	24.5	33
11VBS550	D-550-Z11	2	550	189	158	385	420	430	4	PP	27	36
12VBS600	D-600-Z12	2	600	205	158	385	420	430	4	PP	29	39
13VBS650	D-650-Z13	2	650	221	158	385	420	430	4	PP	31	42
14VBS700	D-700-Z14	2	700	237	158	385	420	430	4	PP	33	45
15VBS750	D-750-Z15	2	750	253	158	385	420	430	4	PP	35.5	48
2VBS110	D-110-Z2	2	110	45	158	405	440	450	2	PP	6.7	8.5
3VBS165	D-165-Z3	2	165	61	158	405	440	450	2	PP	8.7	11.5
4VBS220	D-220-Z4	2	220	77	158	405	440	450	2	PP	11.3	15
5VBS275	D-275-Z5	2	275	93	158	405	440	450	2	PP	13.4	18
6VBS330	D-330-Z6	2	330	109	158	405	440	450	2or4	PP	15.5	21
7VBS385	D-385-Z7	2	385	125	158	405	440	450	2or4	PP	17.5	24
8VBS440	D-440-Z8	2	440	141	158	405	440	450	2or4	PP	19.5	27.5
9VBS495	D-495-Z9	2	495	157	158	405	440	450	2or4	PP	22	30.5
10VBS550	D-550-Z10	2	550	173	158	405	440	450	2or4	PP	25.5	34.5
11VBS605	D-605-Z11	2	605	189	158	405	440	450	4	PP	27.5	37.5
12VBS660	D-660-Z12	2	660	205	158	405	440	450	4	PP	30	41
13VBS715	D-715-Z13	2	715	221	158	405	440	450	4	PP	32	44
14VBS770	D-770-Z14	2	770	237	158	405	440	450	4	PP	34	47
15VBS825	D-825-Z15	2	825	253	158	405	440	450	4	PP	36.5	50.5
2VBS120	D-120-Z2	2	120	45	158	431	466	476	2	PP	6.9	9
3VBS180	D-180-Z3	2	180	61	158	431	466	476	2	PP	9.7	12.6
4VBS240	D-240-Z4	2	240	77	158	431	466	476	2	PP	12.4	16.2
5VBS300	D-300-Z5	2	300	93	158	431	466	476	2	PP	15.1	19.8
6VBS360	D-360-Z6	2	360	109	158	431	466	476	2or4	PP	17.8	23.4
7VBS420	D-420-Z7	2	420	125	158	431	466	476	2or4	PP	20.5	27
8VBS480	D-480-Z8	2	480	141	158	431	466	476	2or4	PP	23.2	30.6
9VBS540	D-540-Z9	2	540	157	158	431	466	476	2or4	PP	26	34.2
10VBS600	D-600-Z10	2	600	173	158	431	466	476	2or4	PP	28.7	37.8
11VBS660	D-660-Z11	2	660	189	158	431	466	476	4	PP	32	41.4
12VBS720	D-720-Z12	2	720	205	158	431	466	476	4	PP	34	44
13VBS780	D-780-Z13	2	780	221	158	431	466	476	4	PP	36	47
14VBS840	D-840-Z14	2	840	237	158	431	466	476	4	PP	38	51
15VBS900	D-900-Z15	2	900	253	158	431	466	476	4	PP	40	54

BS 158 Series Specification

Model	INTL Model	Rated Voltage	5 Hr Rated Capacity	Max.Overall Dimenison(mm)					Pole Qty	Case Material	Reference weight(kg)	
		(V)	(Ah)	Length	Width	Height	Welding Height	Bolted Height	(PCS)		Dry	Wet
2VBS140	D-140-Z2	2	140	45	158	495	530	540	2	PP	7.6	10
3VBS210	D-210-Z3	2	210	61	158	495	530	540	2	PP	10	13.5
4VBS280	D-280-Z4	2	280	77	158	495	530	540	2	PP	13	18
5VBS350	D-350-Z5	2	350	93	158	495	530	540	2	PP	16	21
6VBS420	D-420-Z6	2	420	109	158	495	530	540	2or4	PP	21	28
7VBS490	D-490-Z7	2	490	125	158	495	530	540	2or4	PP	23	31
8VBS560	D-560-Z8	2	560	141	158	495	530	540	2or4	PP	25	34
9VBS630	D-630-Z9	2	630	157	158	495	530	540	2or4	PP	27.5	38
10VBS700	D-700-Z10	2	700	173	158	495	530	540	2or4	PP	30	41
11VBS770	D-770-Z11	2	770	189	158	495	530	540	2or4	PP	33	46
12VBS840	D-840-Z12	2	840	205	158	495	530	540	4	PP	36	50
13VBS910	D-910-Z13	2	910	221	158	495	530	540	4	PP	39.5	55
14VBS980	D-980-Z14	2	980	237	158	495	530	540	4	PP	42.5	59
15VBS1050	D-1050-Z15	2	1050	253	158	495	530	540	4	PP	45	63
2VBS160	D-160-Z2	2	160	45	158	554	589	599	2	PP	8.5	11
3VBS240	D-240-Z3	2	240	61	158	554	589	599	2	PP	12.4	16.5
4VBS320	D-320-Z4	2	320	77	158	554	589	599	2	PP	16	23
5VBS400	D-400-Z5	2	400	93	158	554	589	599	2	PP	20	27
6VBS480	D-480-Z6	2	480	109	158	554	589	599	2or4	PP	24	35
7VBS560	D-560-Z7	2	560	125	158	554	589	599	2or4	PP	30	41
8VBS640	D-640-Z8	2	640	141	158	554	589	599	2or4	PP	34.5	48
9VBS720	D-720-Z9	2	720	157	158	554	589	599	2or4	PP	39	54
10VBS800	D-800-Z10	2	800	173	158	554	589	599	2or4	PP	44	61
11VBS880	D-880-Z11	2	880	189	158	554	589	599	4	PP	49	66
12VBS960	D-960-Z12	2	960	205	158	554	589	599	4	PP	52	72
13VBS1040	D-1040-Z13	2	1040	221	158	554	589	599	4	PP	57	79
14VBS1120	D-1120-Z14	2	1120	237	158	554	589	599	4	PP	62	86
15VBS1200	D-1200-Z15	2	1200	253	158	554	589	599	4	PP	67.5	93
2VBS180	D-180-Z2	2	180	45	158	615	650	660	2	PP	10	14
3VBS270	D-270-Z3	2	270	61	158	615	650	660	2	PP	14	18
4VBS360	D-360-Z4	2	360	77	158	615	650	660	2	PP	18	23.5
5VBS450	D-450-Z5	2	450	93	158	615	650	660	2	PP	24	30
6VBS540	D-540-Z6	2	540	109	158	615	650	660	2or4	PP	28	36
7VBS630	D-630-Z7	2	630	125	158	615	650	660	2or4	PP	42	42
8VBS720	D-720-Z8	2	720	141	158	615	650	660	2or4	PP	36	48
9VBS810	D-810-Z9	2	810	157	158	615	650	660	2or4	PP	40	54
10VBS900	D-900-Z10	2	900	173	158	615	650	660	2or4	PP	44	61
11VBS990	D-990-Z11	2	990	189	158	615	650	660	4	PP	48	67
12VBS1080	D-1080-Z12	2	1080	205	158	615	650	660	4	PP	52	73
13VBS1170	D-1170-Z13	2	1170	221	158	615	650	660	4	PP	57	79
,14VBS1260	D-1260-Z14	2	1260	237	158	615	650	660	4	PP	62	86
15VBS1350	D-1350-Z15	2	1350	253	158	615	650	660	4	PP	64	93

BS 158 Series Specification

Model	INTL Model	Rated Voltage	5 Hr Rated Capacity	Max.Overall Dimenison(mm)					Pole Qty	Case Material	Reference weight(kg)	
		(V)	(Ah)	Length	Width	Height	Welding Height	Bolted Height	(PCS)		Dry	Wet
2VBS200	D-200-Z2	2	200	45	158	690	725	735	2	PP	10.5	13
3VBS300	D-300-Z3	2	300	61	158	690	725	735	2	PP	13	18
4VBS400	D-400-Z4	2	400	77	158	690	725	735	2	PP	16.5	21
5VBS500	D-500-Z5	2	500	93	158	690	725	735	2	PP	20	28
6VBS600	D-600-Z6	2	600	109	158	690	725	735	2or4	PP	23	33
7VBS700	D-700-Z7	2	700	125	158	690	725	735	2or4	PP	26	38
8VBS800	D-800-Z8	2	800	141	158	690	725	735	2or4	PP	30	42
9VBS900	D-900-Z9	2	900	157	158	690	725	735	2or4	PP	33	47
10VBS1000	D-1000-Z10	2	1000	173	158	690	725	735	2or4	PP	37	52
11VBS1100	D-1100-Z11	2	1100	189	158	690	725	735	4	PP	40	57
12VBS1200	D-1200-Z12	2	1200	205	158	690	725	735	4	PP	44	62
13VBS1300	D-1300-Z13	2	1300	221	158	690	725	735	4	PP	48	67
14VBS1400	D-1400-Z14	2	1400	237	158	690	725	735	4	PP	52	72
15VBS1500	D-1500-Z15	2	1500	253	158	690	725	735	4	PP	56	78







GB Series Specification

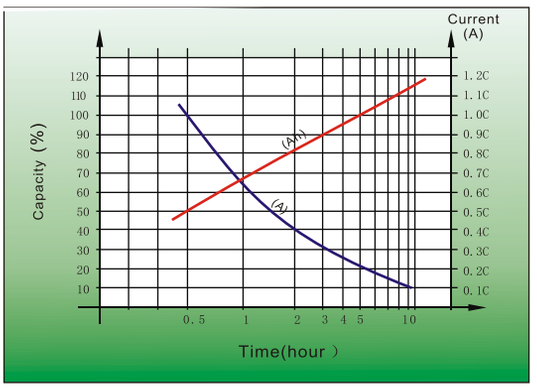
Model	Rated Voltage	5 Hr Rated Capacity	Max.Overall Dimenison(mm)					Pole Qty	Case Material	Reference weight(kg)	
	(V)	(Ah)	Length	Width	Height	Welding Height	Bolted Height	(PCS)		Dry	Wet
D-250	2	250	138	210	290	325	335	2	PP	11.5	210
D-250B	2	250	137	181	290	325	335	2	PP	11.5	16
D-308	2	308	137	181	405	440	450	2or4	PP	12	17
D-330	2	330	137	181	405	440	450	2or4	PP	13.5	18
D-330B	2	330	137	181	344	379	389	2or4	PP	13.5	18
D-395	2	395	137	181	405	440	450	2or4	PP	16	22
D-400	2	400	146	159	385	420	430	2or4	PP	16	22
D-440	2	440	146	159	405	440	450	2or4	PP	17.6	25
D-480	2	480	146	159	431	466	476	2or4	PP	19.2	27
D-440B	2	440	174	180	405	440	450	4	PP	18	24.5
D-515	2	515	174	180	405	440	450	4	PP	21	28.5
D-560	2	560	173	158	455	490	500	2or4	PP	23	31
D-580	2	580	173	158	455	490	500	2or4	PP	25	33
D-620	2	620	173	158	455	490	500	2or4	PP	26	34



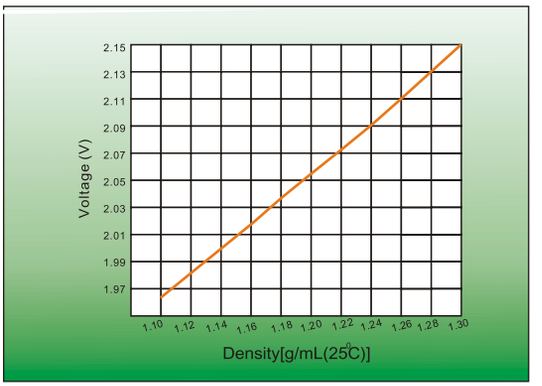


Performance Characteristics

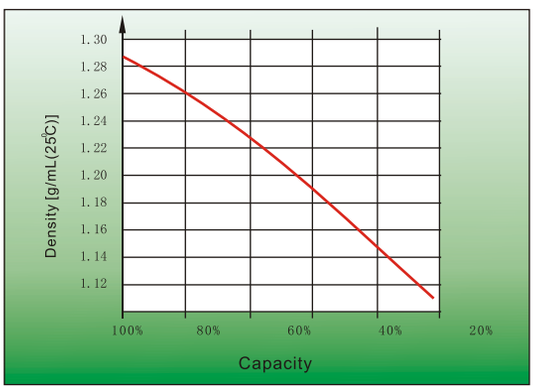
Discharge Characteristics



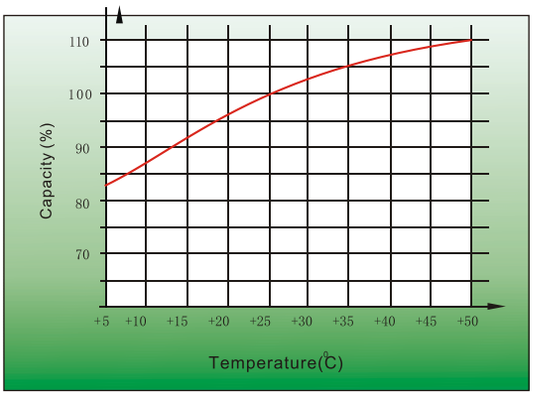
Density Effects in Relation to Voltage



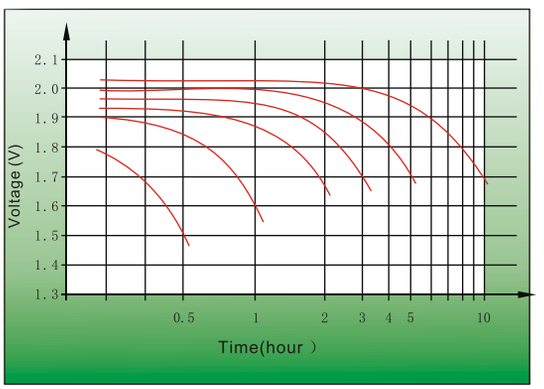
Density Effects in Relation to Capacity



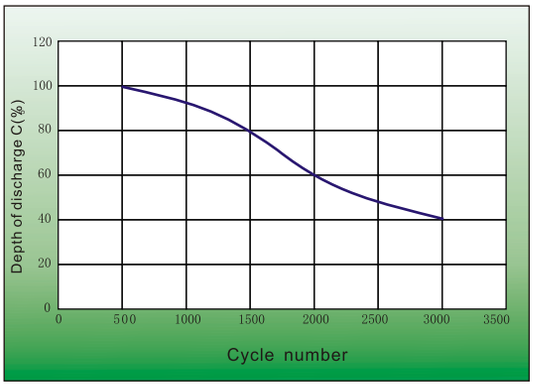
Temperature Effects in Relation to Battery Capacity



Discharge Characteristics

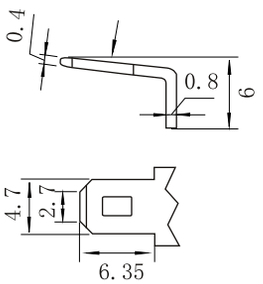


Cycle Life in Relation to Depth of Discharge



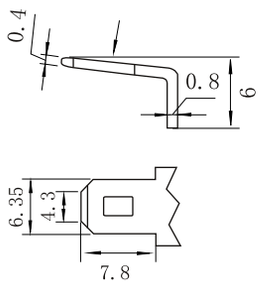
F1 (No. 187)

Unit: mm
Material: Copper



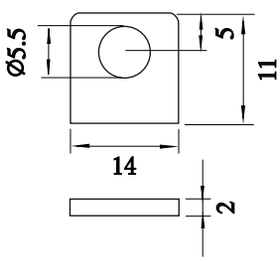
F2 (No. 250)

Unit: mm
Material: Copper



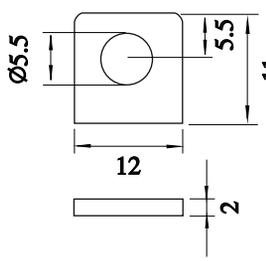
L1

Unit: mm
Material: Copper
Torque: 3.9～5.4 Nm



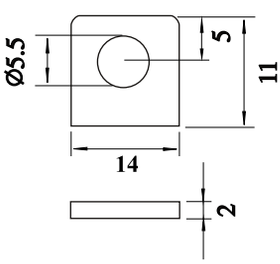
L2

Unit: mm
Material: Copper
Torque: 3.9～5.4 Nm



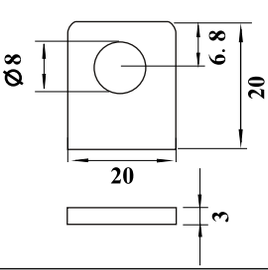
L3

Unit: mm
Material: Copper
Torque: 3.9～5.4 Nm



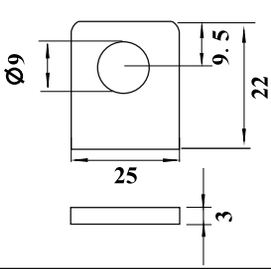
L4

Unit: mm
Material: Copper
Torque: 3.9～5.4 Nm



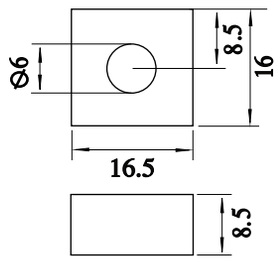
L5

Unit: mm
Material: Copper
Torque: 3.9～5.4 Nm



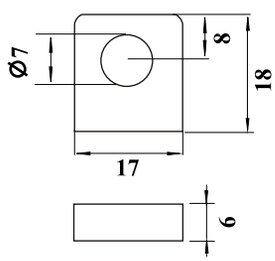
L6

Unit: mm
Material: Lead
Torque: 3.9～5.4 Nm



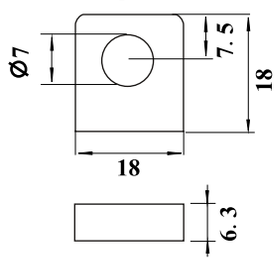
L7

Unit: mm
Material: Lead
Torque: 3.9～5.4 Nm



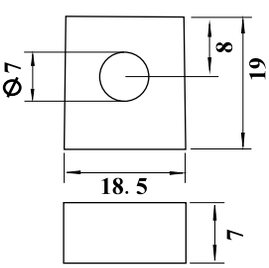
L8

Unit: mm
Material: Lead
Torque: 3.9～5.4 Nm



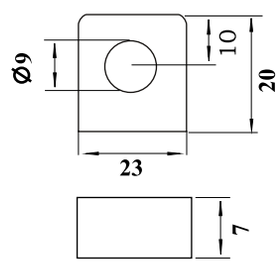
L9

Unit: mm
Material: Lead
Torque: 3.9～5.4 Nm



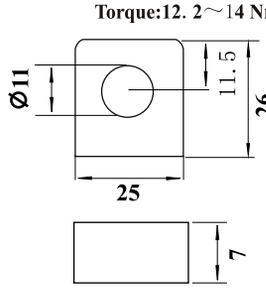
L11

Unit: mm
Material: Lead
Torque 9.6～10.7 Nm



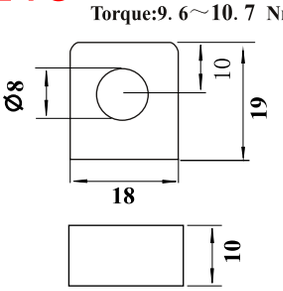
L12

Unit: mm
Material: Lead
Torque: 12.2～14 Nm



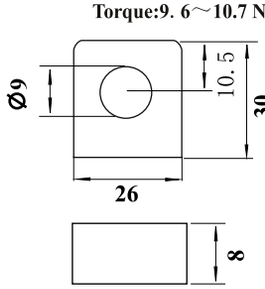
L13

Unit: mm
Material: Lead
Torque: 9.6～10.7 Nm



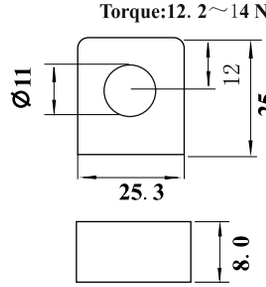
L14

Unit: mm
Material: Lead
Torque: 9.6～10.7 Nm



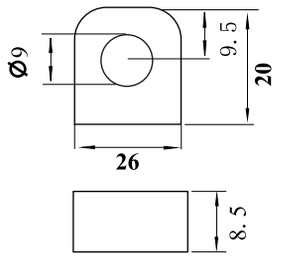
L15

Unit: mm
Material: Lead
Torque: 12.2～14 Nm



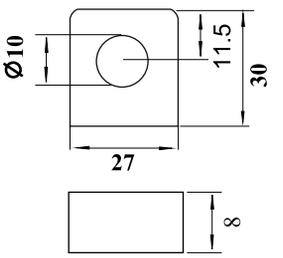
L16

Unit : mm
Material : Lead
Torque : 9. 6～10. 7 Nm



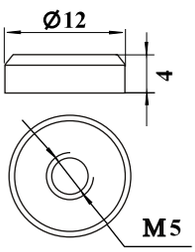
L17

Unit : mm
Material : Lead
Torque : 12. 2～14 Nm



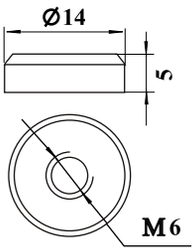
T1

Unit : mm
Material : Copper
Torque : 2～3 Nm



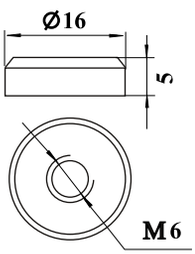
T2

Unit : mm
Material : Copper
Torque : 3～4 Nm



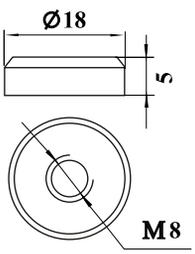
T3

Unit : mm
Material : Copper
Torque : 3. 9～5. 4 Nm



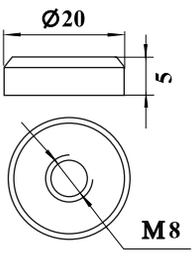
T4

Unit : mm
Material : Copper
Torque : 6. 6～8.3 Nm



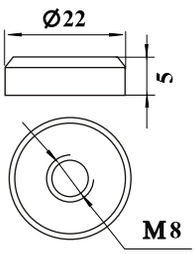
T5

Unit : mm
Material : Copper
Torque : 9.6～10.7Nm



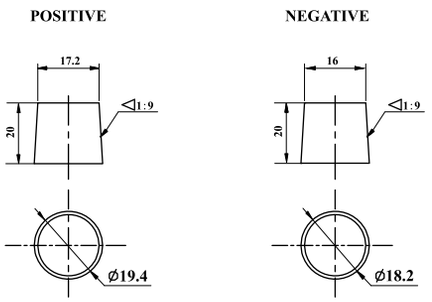
T6

Unit : mm
Material : Copper
Torque : 12～13.6Nm



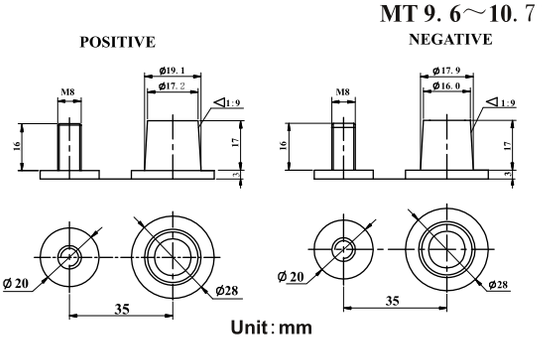
AP

Unit : mm
Material : Lead
Torque : 5.6～7. 9 Nm

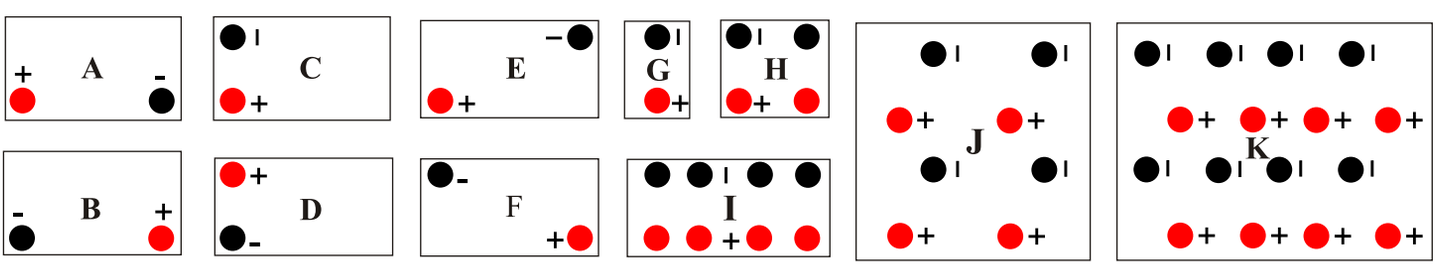


DT

Unit : mm
Material : AP : Lead
MT : Stainless steel
Torque : AP 5. 6～7. 9 Nm
MT 9. 6～10. 7 Nm



POSITION OF TERMINALS



Sealed Maintenance Free Battery

Trust KOYAMA's Innovative Technology

Take a powerful ride with KOYAMA starter batteries.
Whether it's for an entry level vehicle or a high-end perfomrance car,KOYAMA batteries provide reliable starting power that goes all the way through to the end of your journey.

As a result, KOYAMA's outstanding product quality is the result of our innovative technology.

KOYAMA Battery

Delivering outstanding product quality through innovative technology:



- Long Life
- Enhanced Power
- Reliable Performance
- Improved Safety and Usability

BATTERY STRUCTURE

1. Stamped Frame& Grid and high Durability Technology
2. Enveloped separator for low electric resistance
3. Advanced center lug technology and cast on strap
4. Sealed double lid with frame arrestor
5. Integrated computer design and reinforced container
6. Magic eye indicator

JIS Standard for Japanese Vehicles

KOYAMA SMF Battery is the ideal choice for standard vehicles with usual power demands.It's maintenance free and it provides reliable power support for all applications.KOYAMA offers a complete range of SMF Batteries for all of European,Asian and American vehicles.

MAIN BENEFITS:

- Reliable starting power with stamped grid Technology
- High Durability Technology delivers longer service life
- A complete range offered for 99% of vehicles on the market

SMF AUTOMOTIVE BATTERIES FOR JAPANESE VEHICLES

GR.NO	Type No	Old JIS Model	Capacity	CCA	RC	Dimension (mm)				Layout	Terminal	Hold-Down	Weight
			(20HR)	SAE	Min	L	W	H	TH				KGS
B19	MF32B20L	N28	28	280	43	194	128	161	190	0	B	B0	8.00
B19	MF32B20R	N28	28	280	43	194	128	161	190	1	B	B0	8.00
B19	MF32B20L	N33	33	340	48	194	128	161	190	0	B	B0	8.60
B19	MF32B20R	N33	33	340	48	194	128	161	190	1	B	B0	8.60
B19	MF36B20L(S)	NS40L(S)	32	330	47	196	128	202	222	0	B(A)	B0	9.40
B19	MF36B20R(S)	NS40(S)	32	330	47	196	128	202	222	1	B(A)	B0	9.40
B19	MF38B20L(S)	NS40ZL(S)	35	350	54	196	128	202	222	0	B(A)	B0	9.80
B19	MF38B20R(S)	NS40Z(S)	35	350	54	196	128	202	222	1	B(A)	B0	9.80
B19	MF40B20L(S)	NS40ZL(S)	38	390	58	196	128	202	222	0	B(A)	B4	10.20
B19	MF40B20R(S)	NS40Z(S)	38	390	58	196	128	202	222	1	B(A)	B4	10.20
B24	MF32B24L(S)	N40L(S)	40	370	60	237	128	201	221	0	B(A)	B0	11.00
B24	MF32B24R(S)	N40(S)	40	370	60	237	128	201	221	1	B(A)	B0	11.00
B24	MF46B24L(S)	NS60L(S)	45	400	71	237	128	201	221	0	B(A)	B0	11.60
B24	MF46B24R(S)	NS60(S)	45	400	71	237	128	201	221	1	B(A)	B0	11.60
B24	MF55B24L(S)	NX100-6L(S)	48	430	79	237	128	201	221	0	B	B0	12.00
B24	MF55B24R(S)	NX100-6R(S)	48	430	79	237	128	201	221	1	B	B0	12.00
B24	MF60B24L(S)	/	50	460	81	237	128	201	221	0	A	B0	12.50
B24	MF60B24R(S)	/	50	460	81	237	128	201	221	1	A	B0	12.50
D23	MF55D23L		60	550	100	230	172	202	222	0	A	B0	14.50
D23	MF55D23R		60	550	100	230	172	202	222	1	A	B0	14.50
D23	MF75D23L		65	580	110	230	172	202	222	0	A	B0	15.00
D23	MF75D23R		65	580	110	230	172	202	222	1	A	B0	15.00
D23	MF85D23L		70	600	120	230	172	202	222	0	A	B0	16.00
D23	MF85D23R		70	600	120	230	172	202	222	1	A	B0	16.00
D26	MF48D26L	N50L	50	450	81	259	172	202	222	0	A	B0	15.40
D26	MF48D26R	N50	50	450	81	259	172	202	222	1	A	B0	15.40
D26	MF55D26L	N50ZL	60	500	101	259	172	202	222	0	A	B0	16.00
D26	MF55D26R	N50Z	60	500	101	259	172	202	222	1	A	B0	16.00
D26	MF65D26L	NS70L	65	550	113	259	172	202	222	0	A	B0	16.50
D26	MF65D26R	NS70	65	550	113	259	172	202	222	1	A	B0	16.50
D26	MF75D26L	NS70L	70	580	123	259	172	202	222	0	A	B0	17.00
D26	MF75D26R	NS70	70	580	123	259	172	202	222	1	A	B0	17.00
D26	MF80D26L	NX110-5L	75	600	133	259	172	202	222	0	A	B0	17.50

To be continued

JIS Standard for Japanese Vehicles

SMF AUTOMOTIVE BATTERIES FOR JAPANESE VEHICLES													
GR.NO	Type No	Old JIS Model	Capacity	CCA	RC	Dimension (mm)				Layout	Terminal	Hold-Down	Weight
			(20HR)	SAE	Min	L	W	H	TH				KGS
D26	MF80D26R	NX110-5	75	600	133	259	172	202	222	1	A	B0	17.50
D26	MF90D26L		80	630	140	259	172	202	222	0	A	B0	18.30
D26	MF90D26R		80	630	140	259	172	202	222	1	A	B0	18.30
D31	MF65D31L	N70L	70	600	120	305	172	202	222	0	A	B1	18.20
D31	MF65D31R	N70L	70	600	120	305	172	202	222	1	A	B1	18.20
D31	MF75D31L	N70ZL	75	660	130	305	172	202	222	0	A	B1	18.70
D31	MF75D31R	N70Z	75	660	130	305	172	202	222	1	A	B1	18.70
D31	MF95D31L	NX120-7L	80	680	140	305	172	202	222	0	A	B1	19.50
D31	MF95D31R	NX120-7	80	680	140	305	172	202	222	1	A	B1	19.50
D31	MF105D31L		90	750	155	305	172	202	222	0	A	B1	20.00
D31	MF105D31R		90	750	155	305	172	202	222	1	A	B1	20.00
D31	MF115D31L		95	780	155	305	172	202	222	0	A	B1	21.50
D31	MF115D31R		95	780	155	305	172	202	222	1	A	B1	21.50
D33	MF115D33L		95	780	160	325	172	200	220	0	A	B0	22.50
D33	MF115D33R		95	780	160	325	172	200	220	1	A	B0	22.50
E41	MF95E41L	N100L	100	830	179	402	171	205	226	0	A	B0	25.50
E41	MF95E41R	N100	100	830	179	402	171	205	226	1	A	B0	25.50
E41	MF115E41L	N100ZL	110	850	190	402	171	205	226	0	A	B0	26.10
E41	MF115E41L	N100Z	110	850	190	402	171	205	226	0	A	B0	26.10
E41	MF135E41L	NX200-10L	120	890	200	402	171	205	226	0	A	B0	27.20
E41	MF135E41L	NX200-10	120	890	200	402	171	205	226	0	A	B0	27.20
F51	MF115F51	N120	120	870	223	506	182	210	233	4	A	B0	31.00
	MF145F51	N135	135	900	256	506	182	210	233	4	A	B0	31.80
G51	MF145G51	N150	150	930	301	510	220	195	218	4	A	B0	36.00
	MF165G51	N170	170	1000	336	510	220	195	218	4	A	B0	38.50
	MF195G51	N180	180	1100	360	510	220	195	218	4	A	B0	40.00
H52	MF 210H52	N200	200	1150	407	509	274	218	238	4	A	B0	45.50
H52	MF 245H52	N220	220	1300	407	509	274	218	238	4	A	B0	48.50







DIN Standard for European Vehicles

SMF AUTOMOTIVE BATTERIES FOR EUROPEAN VEHICLES											
Gr. No	Type No.	Capacity	CCA	Dimension (mm				Layout	Terminal	Hold-Down	Weight
		(20HR)	EN	L	W	H	TH				KGS
LB1	MF53646	36	330	207	175	175	175	0	A	B13	10.6
LB1	MF54321	43	400	207	175	175	175	0	A	B13	11.2
LB1	MF54322	43	400	207	175	175	175	1	A	B13	11.2
L1	MF54459	44	430	206	174	190	190	0	A	B13	11.3
L1	MF54464	44	430	206	174	190	190	1	A	B13	11.9
L1	MF55054	50	450	206	174	190	190	0	A	B13	12.8
LB2	MF54519	45	400	241	174	175	175	0	A	B13	12.6
LB2	MF55046	50	450	241	174	175	175	0	A	B13	13
LB2	MF55457	54	480	241	174	175	175	0	A	B13	13.6
LB2	MF55459	54	480	241	174	175	175	1	A	B13	13.6
LB2	MF56077	60	510	241	174	175	175	0	A	B13	14.2
L2	MF55530	55	480	241	174	190	190	0	A	B13	13.3
L2	MF55565	55	480	241	174	190	190	1	A	B13	13.3
L2	MF56019	60	500	241	174	190	190	0	A	B13	13.6
L2	MF56020	60	500	241	174	190	190	1	A	B13	13.6
L2	MF56219	62	540	241	174	190	190	0	A	B13	14.2
L2	MF56220	62	540	241	174	190	190	1	A	B13	14.2
LB3	MF55415	54	480	283	172	172	172	0	A	B13	15.3
LB3	MF56318	63	540	283	172	172	172	0	A	B13	15.7
LB3	MF56828	68	600	283	172	172	172	0	A	B13	16.5
LB3	MF57117	71	640	277	174	175	175	0	A	B13	16.2
L3	MF56618	66	540	277	174	190	190	0	A	B13	15.7
L3	MF56633	66	540	277	174	190	190	1	A	B13	15.7
L3	MF57220	72	610	277	174	190	190	0	A	B13	16.2
L3	MF57219	72	610	277	174	190	190	1	A	B13	16.2
L3	MF57412	75	650	277	174	190	190	0	A	B13	17
L3	MF57413	75	650	277	174	190	190	1	A	B13	17
L3	MF57539	75	680	277	174	190	190	0	A	B13	17.2
L4	MF58043	80	690	315	174	190	190	0	A	B13	19
LB5	MF58515	85	700	354	174	175	175	0	A	B13	19.5
L5	MF58827	88	720	354	174	190	190	0	A	B13	21
L5	MF58821	88	720	354	174	190	190	1	A	B13	21
L5	MF59218	92	750	354	174	190	190	0	A	B13	21.6
L5	MF59524	92	780	354	174	190	190	0	A	B13	22.7
L5	MF60038	100	850	354	174	190	190	0	A	B13	23.3
L6	MF61002	110	900	394	174	190	190	0	A	B13	26

To be continued

DIN Standard For European Vehicles

SMF AUTOMOTIVE BATTERIES FOR EUROPEAN VEHICLES											
Gr. No	Type No.	Capacity	CCA	Dimension (mm				Layout	Terminal	Hold-Down	Weight
		(20HR)	EN	L	W	H	TH				KGS
B19	MF53520	35	350	196	128	202	222	0	B	B0	9.40
B19	MF53522	35	350	196	128	202	222	1	B	B0	9.40
B19	MF54026	40	360	196	128	202	222	0	B	B0	10.20
B19	MF54027	40	360	196	128	202	222	1	B	B0	10.20
B24	MF54523	45	400	237	128	201	221	0	A	B0	11.60
B24	MF54524	45	400	237	128	201	221	1	A	B0	11.60
B24	MF54584	45	400	237	128	201	221	0	B	B0	11.60
B24	MF54551	45	400	237	128	201	221	1	B	B0	11.60
D23	MF56068	60	550	230	172	202	222	0	A	B1	14.50
D23	MF56069	60	550	230	172	202	222	1	A	B1	14.50
D26	MF56048	60	500	259	172	202	222	0	A	B1	16.00
D26	MF56049	60	500	259	172	202	222	1	A	B1	16.00
D26	MF57024	70	580	259	172	202	222	0	A	B1	17.00
D26	MF57029	70	580	259	172	202	222	1	A	B1	17.00
D31	MF57512	75	600	302	172	200	220	0	A	B1	18.80
D31	MF57513	75	600	302	172	200	220	1	A	B1	18.80
D31	MF58513	85	680	302	172	200	220	0	A	B1	19.50
D31	MF58514	85	680	302	172	200	220	1	A	B1	19.50
D31	MF59518	95	750	302	172	200	220	0	A	B1	20.00
D31	MF59519	95	750	302	172	200	220	1	A	B1	20.00
D31	MF60045	100	800	302	172	200	220	0	A	B1	21.50
D31	MF60046	100	800	302	172	200	220	1	A	B1	21.50
E41	MF60026	100	830	402	171	205	226	0	A	B0	25.50
	MF60525	105	850	402	171	205	226	0	A	B0	26.10







BCI Standard For American Vehicles

SMF AUTOMOTIVE BATTERIES FOR EUROPEAN VEHICLES

GR.No	Type No.	RC	CCA	Dimension (mm)				Layout	Terminal	Hold-Down	BCI Assembly Figure No.	Weight
		(MIN)	SAE	L	W	H	TH					
21	MF21-450	80	450	200	172	200	220	1	A	B1	10	11
21R	MF21R-450	80	450	200	172	200	220	0	A	B1	11	11
22F	MF22F-60	90	425	240	173	182	203	0	DT	B1	11F	16.5
22F	MF22F-60	90	425	240	173	182	203	0	DT	B1	11F	16.5
22NF	MF22NF-40	60	325	240	130	200	220	0	DT	B1	11F	12
24	MF24-450	80	450	257	172	200	220	1	A	B1	10	15.40
24	MF24-500	90	500	257	172	200	220	1	A	B1	10	16.00
24	MF24-550	100	550	257	172	200	220	1	A	B1	10	16.50
24	MF24-600	113	600	257	172	200	220	1	A	B1	10	17.10
24	MF24-630	130	630	257	172	200	220	1	A	B1	10	17.60
24	MF24-680	140	680	257	172	200	220	1	A	B1	10	18.30
24R	MF24R-450	80	500	257	172	200	220	0	A	B1	11	15.40
24R	MF24R-500	90	500	257	172	200	220	0	A	B1	11	16.00
24R	MF24R-550	100	550	257	172	200	220	0	A	B1	11	16.50
24R	MF24R-600	113	600	257	172	200	220	0	A	B1	11	17.10
24R	MF24R-630	130	630	257	172	200	220	0	A	B1	11	17.60
24F	MF24F-680	145	680	266	172	200	220	0	A	B5	11F	18.30
25	MF25-550	100	550	230	172	200	220	1	A	B0	10	14.50
25	MF25-580	110	580	230	172	200	220	1	A	B0	10	15.00
25	MF25-600	118	600	230	172	200	220	1	A	B0	10	16.10
26	MF26-450	80	450	208	172	180	200	1	A	B1	10	12.3
26	MF26-550	100	550	208	172	180	200	1	A	B1	10	13.4
26R	MF26R-450	80	450	208	172	180	200	0	A	B1	11	12.3
26R	MF26R-550	100	550	208	172	180	200	0	A	B1	11	13.4
27	MF27-600	120	600	302	172	200	220	1	A	B1	10	18.50
27	MF27-660	130	660	302	172	200	220	1	A	B1	10	18.80
27	MF27-680	140	680	302	172	200	220	1	A	B1	10	19.50
27	MF27-750	155	750	302	172	200	220	1	A	B1	10	20.00
27R	MF27R-600	120	600	302	172	200	220	0	A	B1	11	18.50
27R	MF27R-660	130	660	302	172	200	220	0	A	B1	11	18.80
27R	MF27R-680	140	680	302	172	200	220	0	A	B1	11	19.50
27R	MF27R750	155	750	302	172	200	220	0	A	B1	11	20.00
27F	MF27F-600	120	600	311	172	200	220	0	A	B5	11F	18.30
27F	MF27F-660	130	660	311	172	200	220	0	A	B5	11F	18.80
27F	MF27F-680	140	680	311	172	200	220	0	A	B5	11F	19.50
27F	MF27F-750	155	750	311	172	200	220	0	A	B5	11F	20.00
30H	MF30H-850	182	850	325	172	200	220	1	A	B1	10	21.50
31AP	MF31AP-630	155	630	330	172	218	236	1	A	B0	18	22.5
31AP	MF31AP-750	160	750	330	172	218	236	1	A	B0	18	23.7
31AP	MF31AP-850	178	850	330	172	218	236	1	A	B0	18	24.5
31AP	MF31AP-1000	190	1000	330	172	218	236	1	A	B0	18	27.5
31T	MF31T-630	155	630	330	172	218	236	1	STUD	B0	18	22.5
31T	MF31T-750	160	750	330	172	218	236	1	STUD	B0	18	23.7

To be continued

BCI Standard For American Vehicles

SMF AUTOMOTIVE BATTERIES FOR EUROPEAN VEHICLES

GR.No	Type No.	RC	CCA	Dimension (mm)				Layout	Terminal	Hold-Down	BCI Assembly Figure No.	Weight
		(MIN)	SAE	L	W	H	TH					
31T	MF31T-1000	190	1000	330	172	218	236	1	STUD	B0	18	27.5
31AT	MF31AP-630	155	630	330	172	218	236	1	AT	B0	18	22.5
31AT	MF31AT-750	160	750	330	172	218	236	1	AT	B0	18	23.7
31AT	MF31AT-850	178	850	330	172	218	236	1	AT	B0	18	24.5
31AT	MF31AT-1000	190	1000	330	172	218	236	1	AT	B0	18	27.5
34	MF34-630	125	630	262	175	180	206	1	A	B1	10	16.8
34R	MF34R-630	125	630	262	175	180	206	0	A	B1	11	16.8
35	MF35-550	100	550	230	172	200	220	0	A	B1	11	14.50
35	MF35-600	110	580	230	172	200	220	0	A	B1	11	15.00
35	MF35-650	110	580	230	172	200	220	0	A	B1	11	16.00
36R	MF36R-630	125	630	262	175	180	206	0	A	B1	11	16.8
40R	MF40R-700	130	700	278	175	175	175	0	A	B13	15	16
41	MF41-650	125	650	283	175	175	175	0	A	B13	15	16.5
42	MF42-390	80	390	242	174	175	175	0	A	B13	15	12.6
42	MF42-450	85	450	242	174	175	175	0	A	B13	15	13.3
42	MF42-480	90	480	242	174	175	175	0	A	B13	15	13.8
42	MF42-550	95	550	242	174	175	175	0	A	B13	15	14.2
43	MF43-700	125	700	312	174	190	190	0	A	B13	15	18.8
43	MF43-750	135	750	312	174	190	190	0	A	B13	15	19.5
43	MF43-780	140	780	312	174	190	190	0	A	B13	15	20.8
45	MF45-550	100	550	230	172	200	220	1	A	B0	10F	14.50
46	MF46-600	110	600	268	172	203	225	1	A	B0	10F	16.50
47	MF47-500	95	500	242	174	190	190	0	A	B13	24	13.5
47	MF47-600	110	600	242	174	190	190	0	A	B13	24	14.7
48	MF48-540	100	540	277	174	190	190	0	A	B13	24	15.7
48	MF48-630	110	630	277	174	190	190	0	A	B13	24	16.2
48	MF48-690	130	690	277	174	190	190	0	A	B13	24	17.1
49	MF49-750	175	750	354	174	190	190	0	A	B13	24	20.8
49	MF49-800	180	800	354	174	190	190	0	A	B13	24	21.5
51	MF51-430	71	430	237	128	201	222	1	A	B1	10	11.60
51	MF51-460	78	460	237	128	201	222	1	A	B1	10	12.00
51R	MF51R-430	71	430	237	128	201	222	0	A	B1	10	11.50
51R	MF51R-460	78	460	237	128	201	222	0	A	B1	11	12.00
58	MF58-460	75	460	254	182	157	178	1	A	B8	26	12.90
58	MF58-500	90	500	254	182	157	178	1	A	B8	26	13.40
58	MF58-560	100	560	254	182	157	178	1	A	B8	26	13.90
58R	MF58R-460	75	460	254	182	157	178	0	A	B8	19	12.90
58R	MF58R-500	90	500	254	182	157	178	0	A	B8	19	13.40
58R	MF58R-560	100	560	254	182	157	178	0	A	B8	19	13.90
65	MF65-650	116	650	305	187	171	191	1	A	B8	10	18.6
65	MF65-750	128	750	305	187	171	191	1	A	B8	10	19.5
65R	MF65R-650	116	650	305	187	171	191	1	A	B8	10	18.6
65R	MF65R-700	128	700	305	187	171	191	1	A	B8	10	19.5

BCI Standard For American Vehicles

SMF AUTOMOTIVE BATTERIES FOR EUROPEAN VEHICLES												
GR.No	Type No.	RC	CCA	Dimension (mm)				Layout	Terminal	Hold-Down	BCI Assembly Figure No.	Weight
		(MIN)	SAE	L	W	H	TH					
75	MF75-500	90	500	230	179	180	180	1	SIDE	B1	17	13.5
75	MF75-550	100	550	230	179	180	180	1	SIDE	B1	17	14.3
75	MF75-600	113	500	230	179	180	180	1	SIDE	B1	17	15
78	MF78-550	100	550	260	179	180	180	1	SIDE	B1	17	15.6
78	MF78-600	113	600	260	179	180	180	1	SIDE	B1	17	16.1
78	MF78-670	130	700	260	179	180	180	1	SIDE	B1	17	16.6
85	MF85-550	85	550	230	172	180	200	0	A	B1	11	14.5
85	MF85-610	90	610	230	172	180	200	0	A	B1	11	15.5
86(85R)	MF85R-550	85	550	230	172	180	200	1	A	B1	10	14.5
86(85R)	MF85R-610	90	610	230	172	180	200	1	A	B1	10	15.5
90	MF90-450	80	450	242	174	175	175	0	A	B13	24	13.1
90	MF90-500	90	500	242	174	175	175	0	A	B13	24	13.6
90	MF90-550	100	550	242	174	175	175	0	A	B13	24	14.2
91	MF91-600	100	600	277	174	175	175	0	A	B13	24	15.2
91	MF91-650	110	650	277	174	175	175	0	A	B13	24	15.7
91	MF91-700	124	700	277	174	175	175	0	A	B13	24	16.3
92	MF92-730	135	730	315	174	175	175	0	A	B13	24	19.2
93	MF93-750	154	750	354	174	175	175	0	A	B13	24	21.5
94R	MF94R-720	140	750	315	174	190	190	0	A	B13	24	19.5
6T	MF6T-750	180	750	286	265	203	230	2	A	B0	27	23.5
45S	45S-400	108	400	236	127	185	201	1	A	B6	10	11.1
45SL	45SL-400	108	400	236	127	185	201	0	A	B6	10	11.1







SMF Commercial Batteries

HEAVY DUTY BATTERY FOR COMMERCIAL VEHICLES												
Gr.No		Type No.	ETN NO.	Capacity	CCA	Dimension (mm)				Layout	Terminal	Weight
			Old JIS NO.	(AH-20Hr)	(EN/SAE)	L	W	H	TH			KG
12-VOLT SUPER HEAVY DUTY COMMERCIAL SEALED BATTERIES												
EN	EN	61017	610 017 060	110	600	512	186	195	216	3	A	29.5
		62034	620 034 068	120	680	512	186	195	216	3	A	30.5
		63530	635 030 068	135	680	512	186	195	216	3	A	31.5
		63531	635 031 068	135	680	512	186	195	216	4	A	31.5
		64020	640 020 068	140	680	512	186	195	216	3	A	33
	B	64317	643 017 085	143	850	512	220	195	216	3	A	34..5
		65017	650 017 085	150	850	512	220	195	216	3	A	35.8
		66514	665 014 095	165	950	512	220	195	216	3	A	36.5
		67043	670 043 100	170	1000	512	220	195	216	3	A	38.5
		68032	680 032 100	180	1000	512	220	195	216	3	A	40
	C	70027	700 027 105	200	1050	512	275	215	236	3	A	45.5
		70029	700 029 105	200	1050	512	275	215	236	4	A	45.5
		71014	710 014 115	210	1150	512	275	215	236	3	A	46.4
		73011	730 011 120	230	1200	512	275	215	236	3	A	48.1
JIS	F51	115F51	N120	120	640	506	182	210	230	4	A	30.6
		150F51	N135	135	720	506	182	210	230	4	A	31.5
		145F51	N140	140	780	506	182	210	230	4	A	33
	G51	145G51	N150	150	950	506	220	210	230	4	A	35.6
		165G51	N160	160	950	506	220	210	230	4	A	36.5
		180G51	N170	170	950	506	220	210	230	4	A	38.5
		195G51	N180	180	1000	506	220	210	230	4	A	40
	H52	210H52	N200	200	1200	519	277	218	240	4	A	45.5
		245H52	N220	220	1300	519	277	218	240	4	A	48.1
BCI	4D	4D-950		150	950	528	214	224	246	4	A	35.6
	8D	8D-1300		200	1300	528	277	224	246	4	A	48.1







Quality Trust

The core policy of CBB BATTERY is to maximize customers' satisfaction through continuous improvement based on companywide customer oriented quality management system.



Product Line-Up



▶ FOR PASSENGER-CAR

CBB Battery Standard line for Passenger car fits most of Japanese ,European and American Vehicles on the road in the world today.



Heavy-Duty-Battery
For JIS Specification



▶ FOR VAN & SUV

CBB Battery Standard line for Light-Truck, VAN & SUV is designed to offer Incredible Cranking Power, Capacity and Vibration Resistance Feature.



Heavy-Duty-Battery
For DIN Specification



▶ FOR HEAVY-DUTY-TRUCK

CBB Battery Standard line for Heavy-duty-truck is Resistant to Vibration and offers Outstanding Service Life to Hot and Cold Climate.



Heavy-Duty-Battery
For BCI Specification

JIS Standard For Japanese Vehicles

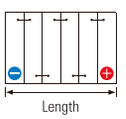
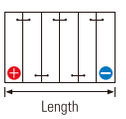
Item No.	New Type	Old Type	Capacity	Overall Dimensions (mm)				Lay-out	Terminal	Weight
			C20(Ah)	T	W	H	TH			(KGS)
1	26A19R	12N24-4	24	184	125	160	170	1	Flange	5.3
2	26A19L	12N24-3	24	184	125	160	170	0	Flange	5.3
3	32B20R	NS40(S)	32	196	130	165	190	1	A (B)	6.5
4	32B20L	NS40L(S)	32	196	130	165	190	0	A (B)	6.5
5	36B20R	NS40Z(S)	36	198	128	200	220	1	A (B)	7.2
6	36B20L	NS40ZL(S)	36	198	128	200	220	0	A (B)	7.2
7	32C24R	N40	40	240	132	200	220	1	A	7.8
8	32C24L	N40L	40	240	132	200	220	0	A	7.8
9	46B24R	NS60(S)	45	240	132	200	220	1	B(A)	8.4
10	46B24L	NS60L(S)	45	240	132	200	220	0	B(A)	8.4
11	50D20R		50	200	170	200	220	1	A	8.5
12	50D20L		50	200	170	200	220	0	A	8.5
13	48D26R	N50	50	260	170	200	220	1	A	8.5
14	48D26L	N50L	50	260	170	200	220	0	A	8.5
15	55D26R	N50Z	60	260	170	200	220	1	A	10
16	55D26L	N50ZL	60	260	170	200	220	0	A	10
17	65D26R	NS70	65	260	170	200	220	1	A	10.6
18	65D26L	NS70L	65	260	170	200	220	0	A	10.6
19	80D26R	NX110-5	70	260	170	200	220	1	A	11.5
20	80D26L	NX110-5L	70	260	170	200	220	0	A	11.5
21	55D23R		60	230	170	204	225	1	A	10
22	55D23L		60	230	170	204	225	0	A	10
23	65D23R		65	230	170	204	225	1	A	10.6
24	65D23L		65	230	170	204	225	0	A	10.6
25	65D31R	N70	70	310	170	200	225	1	A	11.7
26	65D31L	N70L	70	310	170	200	225	0	A	11.7
27	75D31R	N70Z	75	310	170	200	225	1	A	12.7
28	75D31L	N70ZL	75	310	170	200	225	0	A	12.7
29	95D31R	NX120-7	80	310	170	200	225	1	A	13.5
30	95D31L	NX120-7L	80	310	170	200	225	0	A	13.5
31	30H90R	N90	90	310	170	200	225	1	A	15
32	30H90L		90	310	170	200	225	0	A	15
34	US-6TN	US-6TN	100	272	260	200	225	0	A	17.8
35	US-6TL	US-6TL	100	272	260	200	225	2	A	17.8
36	95E41R	N100	100	404	172	205	225	1	A / F	15.7
37	95E41L	N100L	100	404	172	205	225	0	A / F	15.7
38	105E41R	N100Z	105	404	172	205	225	1	A / F	16.3
39	105E41L	N100ZL	105	404	172	205	225	0	A / F	16.3
40	115E41R	NS120	110	404	172	205	225	1	A / F	17.5
41	115E41L	NS120L	110	404	172	205	225	0	A / F	17.5
42	N110	N110	110	430	170	210	230	1	A / F	17.5
43	N115	N115	115	500	155	205	225	1	A / F	17.5
44	115F51	N120	120	506	180	210	230	4	A / F	19.2
45	145F51	NS150	135	506	180	210	230	4	A / F	20.8
46	145G51	N150	150	506	220	210	230	4	A / F	22.6
47	165G51	N170	170	506	220	210	230	4	A / F	24.8
48	195G51	N180	180	506	220	210	230	4	A / F	28
49	210H52	N200	200	506	265	215	235	4	A / F	29.8
50	225H52	N220	220	506	265	215	235	4	A / F	33.4
51	N250	N250	250	525	280	225	255	4	A / F	38.8

DIN Standard For European Vehicles

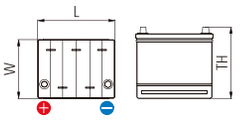
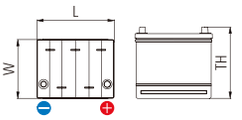
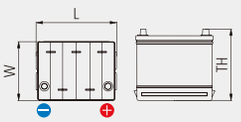
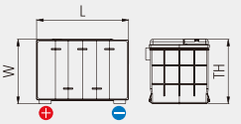
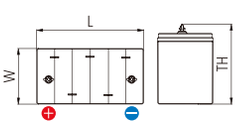
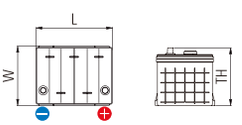
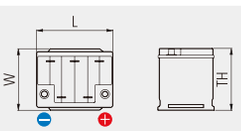
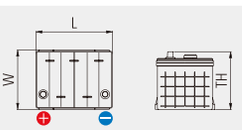
Item No.	EN & DIN Number	Capacity	Dimensions (mm)				Layout	Terminal	Weight
		C20(Ah)	T	W	H	TH			(Kgs)
1	53520	35	198	128	200	220	0	B	7.2
2	53522	35	198	128	200	220	1	B	7.2
3	53621	36	210	175	175	175	0	A	7.2
4	53638	36	210	175	175	175	1	A	7.2
5	54449	44	210	175	190	190	1	A	8
6	54459	44	210	175	190	190	0	A	8
7	54523	44	240	128	204	225	0	A	8
8	54524	44	240	128	204	225	1	A	8
9	54519	45	240	175	175	175	0	A	8
10	54549	45	240	175	175	175	1	A	8
11	55040	50	240	175	175	175	0	A	9.2
12	55559	55	240	175	190	190	0	A	9.8
13	55565	55	240	175	190	190	1	A	9.8
14	56030	60	240	175	190	190	0	A	10.8
15	56031	60	240	175	190	190	1	A	10.8
16	56048	60	261	175	205	225	1	A	10.2
17	56049	60	261	175	205	225	0	A	10.2
18	56068	60	230	170	200	220	0	A	10.2
19	56069	60	230	170	200	220	1	A	10.2
20	56318	63	275	175	175	175	0	A	10.8
21	56618	66	275	175	175	175	0	A	10.8
22	57024	70	261	175	205	225	1	A	12
23	57029	70	261	175	205	225	0	A	12
24	57412	74	275	175	190	190	0	A	12.8
25	57413	74	275	175	190	190	1	A	12.8
26	58513	85	307	175	202	225	0	A	14.2
27	58514	85	307	175	202	225	1	A	14.2
28	58815	88	350	175	175	174	0	A	14.9
29	58821	88	350	175	175	174	1	A	14.9
30	59017	90	355	175	190	213	1	A	13.5
31	59615	96	355	175	190	213	1	A	14.3
32	60038	100	353	175	190	190	0	A	16.6
33	60525	105	404	172	205	225	0	A / F	15.8
34	62033	120	506	180	205	228	4	A / F	19.8
35	63513	135	506	180	205	228	4	A / F	21.5
36	65031	150	506	221	210	230	4	A / F	23.2
37	68029	180	506	264	213	235	4	A / F	27.2
38	70027	200	506	264	213	235	4	A / F	29
39	71014	210	513	265	210	255	4	A / F	30
40	72018	220	513	265	210	255	4	A / F	32.5

Technical Information-Layout,Holddwon & Terminal

LAYOUT FOR JIS & DIN

0	
1	

LAYOUT FOR BCI

10		11	
11F		17	
18		19	
24		26	

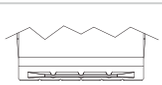
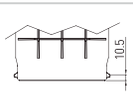
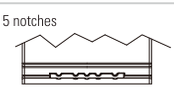
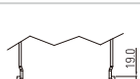
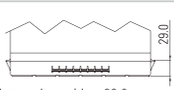
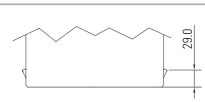
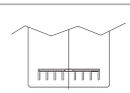
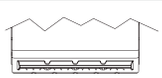
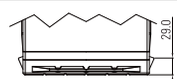
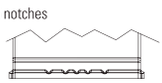
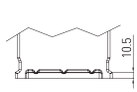
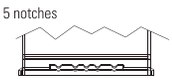
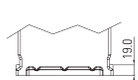
TERMINALS

* DT: Dual Terminal (Standard + Side)

Terminal	A (Standard)	B (Small)	Dual Fit	4F	Stud	Side
Positive					 3/8"-16 Threads	
Negative					 3/8"-16 Threads	

HOLD-DOWN

* For B0 there is no Hold-Down

B1	  10.5mm on long sides only	B4	5 notches   19.0mm on long sides only
B5	  slots on long sides, 29.0mm on short sides	B6	 
B8	  13.5mm on long sides only	B9	  slots on long sides, 29.0mm on short sides
B13	5 notches   10.5mm on all four sides	B14	5 notches   19.0mm on all long sides, 10.5mm on short sides

Power Sport Battery

1.Maintenance Free VRLA TYPE



Factory Activate and factory sealed battery,12V-Maintenance Free-Absorbent Glass Mat-VRLA(Valve Regulated Lead Acid)-& Gel Battery.VRLA AGM & Gel means a battery that's perfect for people who have better things to do than battery maintenance. Our permanently sealed VRLA AGM & Gel battery never needs refilling. however,it still needs periodic charging.Ideal for motorcycles,scooters,ATVs,riding mowers and personal watercraft.

2.Maintenance Free AGM batteries



Maintenance Free Batteries are the first with AGM technology. They are 12 Volt with 6 pack acid bottle and valve regulated lead acid battery of AGM technology.

3.High Performance 12-volt Battery



These batteries were the first to be produced with lead-calcium technology,thanks to which performance has been improved and maintenance reduced. But the most important is that life span is longer than the conventional batteries.

4.Conventional Battery 6/12 Conventional Battery



These are the traditional batteries and they are designed for long-lasting power and convenience which are available, and meet all OE starting requirements. The durable transparent container makes it easy to check electrolyte. It also resists corrosion and vibrations. These batteries are available for every kind of application.

APPLICATIONS:

-Motorcycle
-European & Other Motorcycle
-All terrain
-Water Craft
-Snow Mobiles
-Utility vehicle
-ATV
-Jetski
-Lawn& Garden
-Scooter



Maintenance Free VRLA AGM (Factory Activated)

Battery Type	Capacity Ah (10HR)	Dimensions – Inches (± 1/16 in)			Dimensions – MM (± 2 mm)			Assembly Figure	Approx Weight With Acid (KGS)	Terminal Type	Regular Charge Current (Amp)	C.C.A.@ 0°F(-18° C)
		L	W	H	L	W	H					
YB2.5L-BS(MF)	2.5	3.15	3.03	4.13	80	77	105		1.04	-	0.25	19
YB3L-BS(MF)	3	3.86	2.2	4.29	98	56	109		1.26	5	0.3	32
YB4L-BS(MF)	4	4.45	2.76	3.35	113	70	85		1.38	6	0.4	56
12N5L-BS(MF)	5	4.69	2.36	5.08	119	60	129		1.82	6	0.5	65
12N5D-BS(MF)	5	5.31	2.91	3.74	135	74	95		1.8	4	0.5	65
12N6.5L-BS(MF)	6.5	5.43	2.56	3.94	138	65	100		2.05	6	0.65	65
12N7BL-BS(MF)	7	5.75	2.36	5.04	146	60	128		2.23	6	0.7	74
12N7-BS(MF)	7	5.39	2.99	4.88	137	76	124		2.78	6	0.7	74
12N7L-BS(MF)	7	5.39	2.99	4.88	137	76	124		2.78	6	0.7	74
12N9-BS(MF)	9	5.39	2.99	5.28	137	76	134		2.88	6	0.9	85
YB10L-BS(MF)	11	5.2	3.46	5.71	132	88	145		3.5	4	1.1	103
YB12A-BS(MF)	12	5.28	3.15	6.3	134	80	160		3.65	4	1.2	113
YB14L-BS(MF)	14	5.28	3.5	6.54	134	89	166		4.75	4	1.4	128
YB16L-BS(MF)	19	6.89	3.94	6.1	175	100	155		5.8	4	1.9	190
Y50-N18L-BS(MF)	20	8.07	3.54	6.26	205	90	159		6.3	4	2	200
U1-7(MF)	19	7.68	5.04	6.18	195	128	157		6.8	4	1.9	190
U1-9(MF)	25	7.68	5.04	6.18	195	128	157		7.8	4	2.5	210
U1-11(MF)	32	7.68	5.04	6.18	195	128	157		9.2	4	3.2	230
YT4L-BS(MF)	4	4.45	2.76	3.35	113	70	85		1.38	5	0.4	40
YTX4L-BS(MF)	4	4.45	2.76	3.35	113	70	85		1.49	5	0.4	40
YT5L-BS(MF)	5	4.45	2.76	4.25	113	70	108		1.72	5	0.5	50
YTX5L-BS(MF)	5	4.45	2.76	4.25	113	70	108		1.76	5	0.5	50
YTX7L-BS(MF)	7	4.45	2.76	5.2	113	70	132		2.25	5	0.7	75
YTX7A-BS(MF)	7	5.91	3.43	3.7	150	87	94		2.52	5	0.7	90
YTX9-BS(MF)	8	5.91	3.43	4.13	150	87	105		3.03	5	0.8	120
YTX12A-BS(MF)	9.5	5.91	3.43	4.13	150	87	105		3.1	5	0.95	175
YTX12-BS(MF)	10	5.91	3.43	5.12	150	87	130		3.72	5	1	180
YTX14-BS(MF)	12	5.91	3.43	5.71	150	87	145		4.5	5	1.2	200
YTX14L-BS(MF)	12	5.91	3.43	5.71	150	87	145		4.5	5	1.2	200
YTX14H-BS(MF)	12	5.91	3.43	5.71	150	87	145		4.8	5	1.2	240
YTX14AH-BS(MF)	12	5.28	3.5	6.54	134	89	166		5	4	1.2	210
YTX14AHL-BS(MF)	12	5.28	3.5	6.54	134	89	166		5	4	1.2	210
YTX15L-BS(MF)		6.89	3.43	5.12	175	87	130		5	4	1.3	230
YTX16-BS(MF)	14	5.91	3.43	6.34	150	87	161		5.38	4	1.4	230
YTX20-BS(MF)	18	6.89	3.43	6.1	175	87	155		6.3	4	1.8	270
YTX20L-BS(MF)	18	6.89	3.43	6.1	175	87	155		6.3	4	1.8	270
YTX20CH-BS(MF)	18	5.91	3.43	6.34	150	87	161		6	5	1.8	310
YTX20H-BS(MF)	18	6.89	3.43	6.1	175	87	155		6.8	4	1.8	310
YTX20HL-BS(MF)	18	6.89	3.43	6.1	175	87	155		6.8	4	1.8	310
YTX24HL-BS(MF)	21	8.07	3.43	6.38	205	87	162		7.96	4	2.1	350
YIX30L-BS(MF)	30	6.54	4.96	6.89	166	126	175		10	4	3	400
YTX32HL-BS(MF)	32	6.54	4.96	6.89	166	126	175		11	14	3.2	500

Maintenance Free VRLA AGM (Factory Activated)

Battery Type	Capacity Ah (10HR)	Dimensions – Inches (± 1/16 in)			Dimensions – MM (± 2 mm)			Assembly Figure	Approx Weight With Acid (KGS)	Terminal Type	Regular Charge Current (Amp)	C.C.A.@ 0°F(-18° C)
		L	W	H	L	W	H					
YT4B-5(MF)	2.3	4.49	1.54	3.43	114	39	87		0.85	13	0.23	40
YTR4A-BS(MF)	2.3	4.49	1.93	3.43	114	49	87		0.99	12	0.23	45
YTZ3S(MF)	3.5	4.45	2.76	3.35	113	70	85		1.37	11	0.35	50
YTZ5S(MF)	4	4.45	2.76	3.35	113	70	85		1.48	11	0.4	55
YTZ7S(MF)	6	4.45	2.76	4.25	113	70	108		2.1	11	0.6	130
YTZ10S(MF)	8.6	5.91	3.43	3.7	150	87	94		2.99	11	0.86	190
YTZ12S(MF)	11	5.91	3.43	4.33	150	87	110		3.2	11	1.1	210
YTZ14S(MF)	11.2	5.91	3.43	4.33	150	87	110		3.2	11	1.12	230
YT6B-3(MF)	6	4.45	2.76	4.25	113	70	108		2	11	0.6	130
YT7B-4(MF)	6.5	5.91	2.56	3.7	150	65	94		2.1	11	0.65	85
YT9B-4(MF)	8	5.91	2.76	4.13	150	70	105		2.7	11	0.8	115
YT12B-4(MF)	10	5.91	2.76	5.12	150	70	130		3.2	11	1	125
YT14B-4(MF)	12	5.91	2.76	5.71	150	70	145		3.7	11	1.2	135
YT20-4(MF)	18	6.89	3.43	6.1	175	87	155		6.4	11	1.8	270

Maintenance Free VRLA Gel (Factory Activated)

12-VOLT MOTORCYCLE NANO GEL SEALED BATTERY - VRLA (Valve Regulated Lead Acid)									
Model No.	Intel Model No	Rated Voltage	20h Rated Capacity	Overall Dimension (mm)			Assembly Figure	Terminal Type	Approx. Weight (kg)
		(V)	Ah	L	W	H			kgs
GT7B-4	YT7B-4	12	6	150	65	92		6	2.44
GT9B-4	YT9B-4	12	8	150	69	105		6	2.96
GT12B-4	YT12B-4	12	10	150	70	130		11	3.68
GT14B-4	YT14B-4	12	12	150	70	145		11	4.27
GT3ZS	YTZ3S	12	3	113	70	85		12	1.4
GT5ZS	YTZ5S	12	4	113	70	85		12	1.48
GTZ7S	YTZ7S	12	6	113	70	108		11	1.93
GTZ10S	YTZ10S	12	8.6	150	87	94		11	2.64
GTZ12S	YTZ12S	12	11	150	87	110		11	3.31
GTZ14S	YTZ14S	12	12	150	87	110		11	3.38
GYZ16S	GYZ16H	12	16	150	87	145		12	4.62
YB9-BS(MF)	12N9-BS	12	9	137	77	135		6	2.8
GHD14H-BS	BA14SHD	12	14	149	87	144		21	4.6
GHD14HL-BS	B14HLSHD	12	14	149	87	144		21	4.6
GHD20H-BS	BA20SHD	12	20	176	87	154		20	6.5
GHD20HL-BS	BA20LSHD	12	20	176	87	154		20	6.5
GHD30H-BS	BA30SHD	12	30	166	130	175		20	9.83
GHD30HL-BS	BA30LSHD	12	30	166	130	175		20	9.83
GHD32H-BS	BA32SHD	12	32	166	130	175		20	10.4
GHD32HL-BS	BA32SHD	12	32	166	130	175		20	10.4
GHD32CHL-BS	BA32CLSHD	12	32	166	130	197		20	10.4

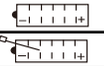
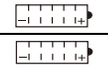
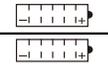
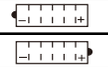
Maintenance Free AGM Battery (With Fresh Acid Pack)

Battery Type	Capacity Ah (10HR)	Dimensions – Inches (± 1/16 in)			Dimensions – MM (± 2 mm)			Assembly Figure	Approx Weight With Acid (KGS)	Terminal Type	Acid Volume (L)	Regular Charge Current (Amp)	C.C.A.@ 0°F(-18° C)
		L	W	H	L	W	H						
YTR4A-BS	2.3	4.49	1.93	3.39	114	49	86		1.09	12	0.14	0.3	45
YT4B-BS	2.3	4.49	1.54	3.43	114	39	87		1.09	13	0.12	0.3	40
YTX4L-BS	3	4.49	2.8	3.39	114	71	86		1.55	5	0.18	0.4	50
YTZ5S	3.5	4.45	2.76	3.39	113	70	86		1.59	5	0.2	0.4	65
YTX5L-BS	4	4.49	2.8	4.17	114	71	106		1.91	5	0.24	0.5	80
YT7B-BS	6.5	5.91	2.56	3.66	150	65	93		2.68	11	0.33	0.7	120
YTX7A-BS	6	5.91	3.43	3.7	150	87	94		2.86	5	0.33	0.7	105
YTX7L-BS	6	4.49	2.8	5.16	114	71	131		2.77	5	0.33	0.6	100
YT9B-BS	8	5.91	2.76	4.13	150	70	105		3.95	11	0.4	0.8	115
YTX9-BS	8	5.91	3.43	4.13	150	87	105		3.00	5	0.4	0.9	135
YT12A-BS	10	5.91	3.43	4.13	150	87	105		3.50	5	0.47	1	175
YT12B-BS	10	5.91	2.72	5.12	150	69	130		4.09	11	0.52	1	210
YTX12-BS	10	5.91	3.43	5.12	150	87	130		4.18	5	0.6	1.2	180
YT14B-BS	12	5.91	2.76	5.71	150	70	145		5.36	11	0.6	1.2	210
YTX14-BS	12	5.91	3.43	5.71	150	87	145		4.59	5	0.69	1.4	200
YTX14L-BS	12	5.91	3.43	5.71	150	87	145		4.59	5	0.69	1.4	200
YTX14H-BS	12	5.91	3.43	5.71	150	87	145		4.82	5	0.69	1.2	240
YTX14AH-BS	12	5.28	3.5	6.54	134	89	166		5.05	4	0.66	1.2	210
YTX14AHL-BS	12	5.28	3.5	6.54	134	89	166		5.05	4	0.66	1.2	210
YTX15L-BS	13	6.89	3.43	5.12	175	87	130		5.00	4	0.69	1.3	230
YTX16-BS	14	5.91	3.43	6.34	150	87	161		5.73	4	0.78	1.4	230
YTX16-BS-1	14	5.91	3.43	6.34	150	87	161		5.73	4	0.78	1.4	230
YT19BL-BS	18	7.24	3.19	6.69	184	81	170		5.68	10	0.95	1.8	170
YTX20CH-BS	18	5.91	3.43	6.34	150	87	161		6.09	5	0.82	1.8	270
YTX20-BS	18	6.89	3.43	6.89	175	87	175		6.32	4	0.93	1.8	270
YTX20L-BS	18	6.89	3.43	6.89	175	87	175		6.32	4	0.93	1.8	270
YTX20H-BS	18	6.89	3.43	6.1	175	87	155		6.86	4	0.93	1.8	310
YTX20HL-BS	18	6.89	3.43	6.1	175	87	155		6.86	4	0.93	1.8	310
YIX20HL-BS	18	6.89	3.43	6.1	175	87	155		6.86	4	0.93	1.8	320
YIX30L-BS	30	6.54	4.96	6.89	166	126	175		10.00	4	1.4	3	400
YB2.5L-BS	2.5	3.15	2.8	4.09	80	71	104		1.05	-	0.18	0.25	45
YB3L-BS	3	3.86	2.28	4.25	98	58	108		1.2	6	0.2	0.3	50
YB4L-BS	4	4.72	2.8	3.54	120	71	90		1.5	5	0.23	0.4	55
YB5L-BS	5	4.72	2.36	4.92	120	60	125		1.9	6	0.27	0.5	65
YTX6.5L-BS	6	5.43	2.6	3.86	138	66	98		2	6	0.3	0.6	70
YTX7BL-BS	7	5.83	2.36	5.12	148	60	130		2.5	6	0.42	0.7	100
YTX7C-BS	7	5.31	2.95	4.72	135	75	120		2.5	6	0.42	0.7	100
YTX9A-BS	9	5.31	2.95	5.39	135	75	137		2.65	6	0.46	0.9	150

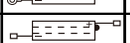
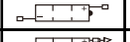
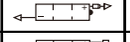
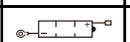
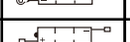
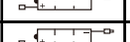
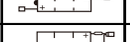
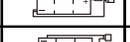
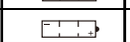
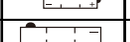
High Performance 12V Conventional Battery

Battery Type	Capacity Ah (10HR)	Dimensions – Inches (± 1/16 in)			Dimensions – MM (± 2 mm)			Assembly Figure	Approx Weight w/out Acid (KGS)	Terminal Type	Acid Volume (L)	Regular Charge Current (Amp)
		L	W	H	L	W	H					
YB2.5L-C	2.5	3.15	2.76	4.13	80	70	105		0.77	-	0.21	0.3
YB2.5L-C-1	2.5	3.15	2.76	4.13	80	70	105		0.77	-	0.21	0.3
YB3L-A	3	3.86	2.20	4.33	98	56	110		1.14	6	0.21	0.3
YB3L-B	3	3.86	2.20	4.33	98	56	110		1.14	6	0.21	0.3
YB4L-A	4	4.72	2.76	3.62	120	70	92		1.27	5	0.26	0.4
YB4L-B	4	4.72	2.76	3.62	120	70	92		1.27	5	0.26	0.4
YB5L-B	5	4.72	2.36	5.12	120	60	130		1.59	6	0.32	0.5
YB6L-B	6	5.43	2.85	3.94	138	72.5	100		1.59	6	0.32	0.5
YB7-A	8	5.31	2.95	5.24	135	75	133		2.32	6	0.53	0.8
YB7B-B	7	5.91	2.36	5.12	150	60	130		1.82	6	0.44	0.7
YB7C-A	8	5.12	3.54	4.49	130	90	114		2.32	1	0.53	0.8
YB7L-B	8	5.31	2.95	5.24	135	75	133		2.32	6	0.53	0.8
YB9A-A	9	5.31	2.95	6.10	135	75	155		2.41	6	0.53	0.9
YB9L-A2	9	5.31	2.95	5.47	135	75	139		2.41	2	0.53	0.9
YB9-B	9	5.31	2.95	5.47	135	75	139		2.41	6	0.53	0.9
YB9L- B	9	5.31	2.95	5.47	135	75	139		2.41	6	0.53	0.9
YB10A-A2	11	5.31	3.54	6.10	135	90	155		3.18	8	0.70	1.1
YB10L-A2	11	5.31	3.54	5.71	135	90	145		3.18	8	0.70	1.1
YB10L-B	11	5.31	3.54	5.71	135	90	145		3.18	6	0.70	1.1
YB10L-B2	11	5.31	3.54	5.71	135	90	145		3.18	8	0.70	1.1
YB12A-A	12	5.28	3.15	6.30	134	80	160		3.09	6	0.70	1.2
YB12AL-A	12	5.28	3.15	6.30	134	80	160		3.09	6	0.66	1.2
YB12AL-A2	12	5.28	3.15	6.30	134	80	160		3.09	8	0.66	1.2
YB12A-B	12	5.28	3.15	6.30	134	80	160		3.09	6	0.66	1.2
YB12B-B2	12	6.30	3.54	5.12	160	90	130		3.23	8	0.70	1.2
YB12C-A	12	5.28	3.15	6.89	134	80	175		3.23	4	0.70	1.2
YB14-A2	14	5.28	3.50	6.54	134	89	166		3.45	8	0.79	1.4
YB14A-A1	14	5.28	3.50	6.93	134	89	176		3.59	6	0.79	1.4
YB14A-A2	14	5.28	3.50	6.93	134	89	176		3.59	8	0.79	1.4
YB14L-A1	14	5.28	3.50	6.54	134	89	166		3.45	1	0.79	1.4
YB14L-A2	14	5.28	3.50	6.54	134	89	166		3.45	8	0.79	1.4
YB14L-B2	14	5.28	3.50	6.54	134	89	166		3.45	8	0.79	1.4
YB14-B2	14	5.28	3.50	6.54	134	89	166		3.45	8	0.79	1.4
SYB14L-A2	14	5.28	3.50	6.54	134	89	166		3.45	8	0.79	1.4
YB16AL-A2	16	8.15	2.81	6.46	207	71.5	164		3.91	2	0.97	1.6
HYB16A-AB	16	5.94	3.58	7.09	151	91	180		3.86	7	0.79	1.6
YB16-B	19	6.89	3.94	6.10	175	100	155		4.77	6	1.05	1.9
YB16-B-CX	19	6.89	3.94	6.10	175	100	155		4.77	6	1.05	1.9
YB16HL-A-CX	19	6.89	3.94	6.10	175	100	155		4.77	6	1.05	1.9
YB16L-B	19	6.89	3.94	6.10	175	100	155		4.77	6	1.05	1.9

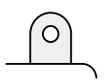
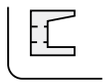
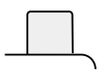
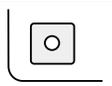
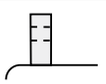
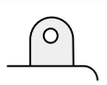
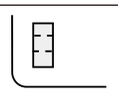
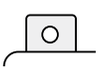
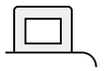
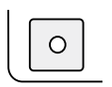
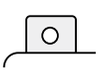
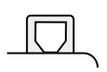
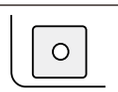
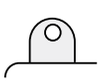
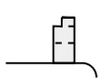
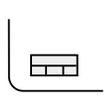
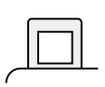
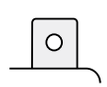
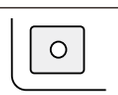
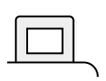
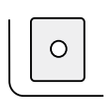
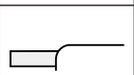
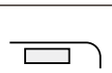
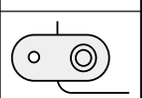
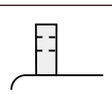
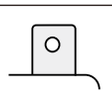
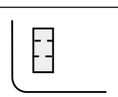
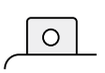
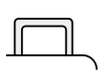
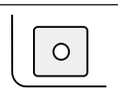
High Performance 12V Conventional Battery

Battery Type	Capacity Ah (10HR)	Dimensions – Inches (± 1/16 in)			Dimensions – MM (± 2 mm)			Assembly Figure	Approx Weight w/out Acid (KGS)	Terminal Type	Acid Volume (L)	Regular Charge Current (Amp)
		L	W	H	L	W	H					
YB16B-A	16	6.30	3.54	6.34	160	90	161		3.82	4	0.88	1.6
YB16B-A1	16	6.30	3.54	6.34	160	90	161		3.82	7	0.88	1.6
YB16C-B	19	6.89	3.94	6.89	175	100	175		4.59	5	1.05	1.9
YB16CL-B	19	6.89	3.94	6.89	175	100	175		4.59	5	1.05	1.9
YB18-A	18	7.09	3.54	6.38	180	90	162		4.27	7	1.05	1.8
YB18L-A	18	7.09	3.54	6.38	180	90	162		4.27	7	1.05	1.8
Y50-N18A-A	20	8.07	3.54	6.93	205	90	176		5.09	7	1.32	2
Y50-N18L-A	20	8.07	3.54	6.38	205	90	162		5.09	7	1.14	2
Y50-N18L-A-CX	20	8.07	3.54	6.38	205	90	162		5.09	7	1.14	2
Y50-N18L-A3	20	8.07	3.54	6.38	205	90	162		5.09	4	1.14	2
SY50-N18L	20	8.07	3.54	6.38	205	90	162		5.09	7	1.14	2
YB30L-B	30	6.61	5.20	6.93	168	132	176		6.41	4	1.49	3
YB30CL-B	30	6.61	5.20	7.57	168	132	192		6.59	4	1.49	3
51814	19	7.32	3.23	6.73	186	82	171		4.27	10	0.88	1.9
51913	19	7.32	3.23	6.73	186	82	171		4.27	10	0.88	1.9
53030	30	7.32	5.12	6.73	186	130	171		7.32	10	1.40	3

6/12V Conventional Batteries

Battery Type	Capacity Ah (10HR)	Dimensions – Inches (± 1/16 in)			Dimensions – MM (± 2 mm)			Assembly Figure	Approx Weight w/out Acid (KGS)	Terminal Type	Acid Volume (L)	Regular Charge Current (Amp)
		L	W	H	L	W	H					
6N2-2A	2	2.76	1.77	3.82	70	45	97		0.45	-	0.10	0.2
6N2-2A-3	2	2.76	1.81	3.82	70	46	97		0.45	-	0.10	0.2
6N2-2A-4	2	2.76	1.81	3.82	70	46	97		0.45	-	0.10	0.2
6N2-2A-8	2	2.76	1.81	3.82	70	46	97		0.45	-	0.10	0.2
6N2A-2C	2	2.80	1.85	4.13	71	47	105		0.45	-	0.10	0.2
6N2A-2C-1	2	2.80	1.85	4.13	71	47	105		0.45	-	0.10	0.2
6N2A-2C-3	2	2.80	1.85	4.13	71	47	105		0.59	-	0.10	0.2
6N4-2A	4	2.80	2.80	3.70	71	71	94		0.59	-	0.20	0.4
6N4-2A-4	4	2.80	2.80	3.70	71	71	94		0.59	-	0.20	0.4
6N4-2A-5	4	2.80	2.80	3.70	71	71	94		0.59	-	0.20	0.4
6N4-2A-6	4	2.80	2.80	3.70	71	71	94		0.59	-	0.20	0.4
6N4-2A-8	4	2.80	2.80	3.70	71	71	94		0.77	-	0.20	0.4
6N4A-4D	4	2.24	2.40	5.12	57	61	130		0.77	-	0.20	0.4
6N4B-2A	4	3.98	1.85	3.70	101	47	94		0.77	-	0.20	0.4
6N4B-2A-3	4	3.98	1.85	3.74	101	47	95		0.77	-	0.20	0.4
6N4B-2A-5	4	3.98	1.85	3.74	101	47	95		0.64	-	0.20	0.4
6N4C-1B	4	2.72	2.76	4.09	69	70	104		0.82	-	0.20	0.4
6N5.5-1D	5.5	3.46	2.76	3.86	88	70	98		0.91	-	0.30	0.55
6N6-3B	6	3.90	2.28	4.29	99	58	109		0.91	6	0.30	0.6
6N6-3B-1	6	3.90	2.20	4.29	99	56	109		0.91	6	0.30	0.6
6N6-1D-2	6	3.90	2.20	4.29	99	56	109		1.59	-	0.30	0.6
6N11-2D	11	5.83	2.72	4.06	148	69	103		1.59	6	0.40	1.1
6N11A-1B	11	4.72	2.36	5.16	120	60	131		1.73	6	0.40	1.1
B54-6	12	6.06	2.17	4.53	154	55	115		1.73	6	0.50	1.2
6N12A-2D	12	6.06	2.17	4.53	154	55	115		2.14	6	0.45	1.2
B38-6A	13	4.69	3.27	6.34	119	83	161		1.36	6	0.62	1.3
6YB8L-B	8	4.69	2.80	3.82	119	71	97		2.00	6	0.31	0.8
6YB11-2D	11	5.83	2.72	3.86	148	69	98		4.4	6	0.40	1.1
12N5-3B	5	4.72	2.36	5.12	120	60	130		1.4	6	0.4	0.5
12N5-4B	5	4.72	2.36	5.12	120	60	130		1.4	6	0.4	0.5
12N5.5-3B	5.5	5.31	2.36	5.12	135	60	130		2.0	6	0.4	0.6
12N5.5-4A	5.5	5.31	2.36	5.12	135	60	130		2.0	2	0.4	0.6
12N5.5A-3B	5.5	4.06	3.54	4.49	103	90	114		2.0	6	0.5	0.6
12N7-3B	7	5.31	2.95	5.24	135	75	133		2.2	6	0.5	0.7
12N7-4A	7	5.31	2.95	5.24	135	75	133		2.2	6	0.5	0.7
12N7-4B	7	5.31	2.95	5.24	135	75	133		2.2	6	0.5	0.7
12N7D-3B	7	5.31	2.95	5.91	135	75	150		2.2	6	0.6	0.7
12N9-3A	9	5.31	2.95	5.47	135	75	139		2.5	9	0.6	0.9
12N9-3B	9	5.31	2.95	5.47	135	75	139		2.5	6	0.6	0.9
12N9-4B-1	9	5.31	2.95	5.47	135	75	139		2.5	6	0.6	0.9
12N12A-4A-1	12	5.28	3.15	6.30	134	80	160		3.1	6	0.7	1.2
12N14-3A	14	5.28	3.50	6.54	134	89	166		3.4	8	0.8	1.4
12N24-3A	24	7.24	4.88	6.89	184	124	175		5.5	3	1.2	2.4
12N24-3	24	7.24	4.88	6.89	184	124	175		5.5	3	1.2	2.4
YHD-12H	29	8.11	5.24	6.50	206	133	165		6.0	9	2.0	2.8

Terminal

Terminal				Battery Type
Type	Front	Side	Top	
1				YB14L-A1 YTX16-BS-1
2				YB9L-A2 YB16AL-A2 12N5.5-4A
3				YB7C-A Y60-N24AL-B Y60-N24-A 12N24-3 12N24-3A
4				YB12C-A YB16B-A Y50-N18L-A3 YB30L-B YB30CL-B YTX14L-BS YTX14AH-BS YTX14AHL-BS YTX15L-BS YTX20CH-BS YTX20-BS YTX20L-BS YTX20H-BS YTX20HL-BS YTX20HL-PW YTX20HL-BS-PW YTX24HL YTX24HL-BS
5				YTX4L-BS YTX5L-BS YTZ7S YTX7A-BS YTX7L-BS YTX9-BS YTX12-BS KMX14-BS YTX14-BS YTX16-BS YB4L-A YB4L-B YB16C-B YB16CL-B YIX30L
6				YB3L-A YB3L-B YB5L-B YB7-A YB7B-B YB7L-B YB9A-A YB9-B YB9L-B YB10L-B YB12A-A YB12AL-A YB12A-B YB14A-A1 YB16-B YB16-B-CX YB16L-B YB16HL-A-CX SYB16L-B 12N5-3B 12N5-4B 12N5.5-3B 12N5.5A-3B 12N7-3B 12N7-4A 12N7-4B 12N7D-3B 12N9-3A-1 12N9-3B 12N9-4B-1 12N10-3A 12N10-3A-1 12N12A-4A-1 6N6-3B 6N6-3B-1 6N11A-1B 6N11-2D 6N12A-2D B39-6 B54-6 B38-6A
7				HYB16A-AB YB16B-A1** YB18-A YB18L-A Y50-N18A-A Y50-N18L-A Y50-N18L-A-CX SY50-N18L-AT
8				YB10A-A2 YB10L-A2 YB10L-B2 YB12AL-A2* YB12B-B2 YB14-A2 YB14A-A2 YB14L-A2 SYB14L-A2 YB14-B2 YB14L-B2 12N10-3A-2 12N11-3A-1 12N14-3A
9				YHD-12 12N9-3A
10				51814 51913 53030
11				YT9B-4 YTZ10S YTZ12S YTZ14S YT14B-4 YT7B-BS YTR9-BS YT12A-BS YT12B-BS
12				YTR4A-BS
13				YT4B-BS

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