CREAT BETTER BATTERY

Valve-regulated Lead-acid Batteries
Product & Technical Manual

★ GEL BATTERY
★ AGM BATTERY
★ DEEP CYCLE BATTERY



® CE ISO9001 ISO14001

Company 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.



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Certificates & Qualifications


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

ISO9001


CNT
CERTIFICATE OF CONFORMITY

CE


CERTIFICATE OF COMPLIANCE

UL-1


CERTIFICATE OF COMPLIANCE

UL-2


Intertek
Statement of Registration

Intertek COC


SGS

SGS COC

Factory Overview



Factory Overview



Front Gate



Office Building



Workshop Building



Workshop Building



Workshop Building

QC Equipments



Laboratory



Spectrum Analyser



Leakage Test



Short-circuit Check



4-function Tester



Final C&D Test

Production Facilities



Automatic Grid Caster



Lead Powder Miller



Automatic Plate Pasting Line



Plate Dry Room



Acid Injecting Machine



Battery Formation &Charging

NP SERIES -General AGM Batteries

NP series valve regulated lead acid batteries are designed with AGM (Absorbent Glass Mat) technology and for general application purpose of periodic deep cycle or standby use 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



NP 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			
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/F2
NP3.6-6	6	3.6/20HR	70	2.76	47	1.85	101	3.98	107	4.21	0.65	1.43	F1/F2
NP4-6	6	4/20HR	70	2.76	47	1.85	101	3.98	107	4.21	0.68	1.50	F1/F2
NP4-6CUT	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/F2
NP4.5-6CUT	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/F2
NP7-6	6	7/20HR	151	5.94	34	1.34	95	3.74	101	3.98	1.11	2.44	F1/F2
NP8-6	6	8/20HR	151	5.94	34	1.34	95	3.74	101	3.98	1.16	2.55	F1/F2
NP9-6	6	9/20HR	151	5.94	34	1.34	95	3.74	101	3.98	1.34	2.95	F1/F2
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	247	9.72	251	9.88	20.5	45.10	T5
NP180-6-A	6	180/10HR	260	10.24	180	7.09	247	9.72	251	9.88	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	247	9.72	251	9.88	29.5	64.90	T5
NP200-6-B	6	200/10HR	323	12.72	178	7.01	224	8.82	229	9.02	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	cable&Bullet
NP1.3-12	12	1.3/20HR	97	3.82	43	1.69	52	2.05	58	2.28	0.5	1.10	F1
NP2-12	12	2/20HR	178	7.01	35	1.38	61	2.40	67	2.64	0.82	1.80	F1/F2
NP3.3-12	12	3.3/20HR	134	5.28	67	2.64	61	2.40	67	2.64	1.32	2.90	F1/F2
NP4-12	12	4/20HR	90	3.54	70	2.76	101	3.98	107	4.21	1.35	2.97	F1/F2
NP4.5-12	12	4.5/20HR	90	3.54	70	2.76	101	3.98	107	4.21	1.48	3.26	F1/F2
NP5-12	12	5/20HR	90	3.54	70	2.76	101	3.98	107	4.21	1.6	3.52	F1/F2
NP5.5-12	12	5.5/20HR	151	5.94	65	2.56	94	3.70	100	3.94	1.9	4.18	F1/F2
NP6.5-12	12	6.5/20HR	151	5.94	65	2.56	94	3.70	100	3.94	1.95	4.29	F1/F2
NP7-12	12	7/20HR	151	5.94	65	2.56	94	3.70	100	3.94	2.03	4.47	F1/F2
NP7.2-12	12	7.2/20HR	151	5.94	65	2.56	94	3.70	100	3.94	2.13	4.69	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	2.4	5.28	F1/F2
NP10-12	12	10/20HR	152	5.98	99	3.90	96	3.78	102	4.02	3.2	7.04	F1/F2
NP12-12	12	12/20HR	152	5.98	99	3.90	96	3.78	102	4.02	3.4	7.48	F1/F2
NP15-12	12	15/20HR	152	5.98	99	3.90	96	3.78	102	4.02	3.8	8.36	F1/F2
NP17-12	12	17/20HR	181	7.13	77	3.03	167	6.57	167	6.57	5.2	11.44	L1/T1
NP18-12	12	18/20HR	181	7.13	77	3.03	167	6.57	167	6.57	5.5	12.10	L1/T1
NP20-12	12	20/20HR	181	7.13	77	3.03	167	6.57	167	6.57	6	13.20	L1/T1
NP22-12	12	22/20HR	181	7.13	77	3.03	167	6.57	167	6.57	6.5	14.30	L1/T1
NP24-12	12	24/10HR	165	6.50	126	4.96	174	6.85	179	7.05	7.7	16.94	L6/T3

NP 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			
NP26-12	12	26/10HR	166	6.54	175	6.89	126	4.96	126	4.96	8.3	18.26	L2/T2
NP28-12	12	28/10HR	166	6.54	175	6.89	126	4.96	126	4.96	8.4	18.48	L2/T2
NP33-12	12	33/10HR	196	7.72	130	5.12	155	6.10	179	7.05	10	22.00	L7/T3/L4
NP35-12	12	35/10HR	196	7.72	130	5.12	155	6.10	179	7.05	10.5	23.10	L7/T3/L4
NP40-12	12	40/10HR	197	7.76	166	6.54	174	6.85	172	6.77	12.3	27.06	L6/T3/L7
NP42-12	12	42/10HR	198	7.80	166	6.54	174	6.85	174	6.85	12.9	28.38	L7/T3/L3
NP45-12	12	45/10HR	198	7.80	166	6.54	174	6.85	174	6.85	13.1	28.82	L7/T3/L3
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	L3/T3
NP60-12A	12	60/10HR	229	9.02	138	5.43	208	8.19	226	8.90	17.3	38.06	L3/T3
NP60-12B	12	60/10HR	350	13.78	167	6.57	178	7.01	178	7.01	17.2	37.84	L9/T2
NP65-12	12	65/10HR	350	13.78	167	6.57	178	7.01	178	7.01	20.2	44.44	L9/T3/L4
NP70-12	12	70/10HR	350	13.78	167	6.57	178	7.01	178	7.01	21.3	46.86	L9/T3
NP70-12B	12	70/10HR	260	10.24	169	6.65	211	8.31	215	8.46	21.7	47.74	L11/T3
NP75-12	12	75/10HR	260	10.24	169	6.65	211	8.31	215	8.46	22	48.40	L11/T3
NP80-12	12	80/10HR	260	10.24	169	6.65	211	8.31	231	9.09	23.3	51.26	L11/L4/T3
NP85-12	12	85/10HR	331	13.03	174	6.85	214	8.43	240	9.45	24.8	54.56	L12/T4/L4
NP90-12	12	90/10HR	307	12.09	169	6.65	211	8.31	227	8.94	26.5	58.30	L13/T3
NP100-12	12	100/20HR	331	13.03	174	6.85	214	8.43	219	8.62	27.8	61.16	L12/T4
NP100-12B	12	100/10HR	328	12.91	172	6.77	217	8.54	222	8.74	29	63.80	L5/T4
NP120-12	12	120/10HR	407	16.02	174	6.85	210	8.27	233	9.17	33	72.60	L14/T5
NP120-12B	12	120/20HR	331	13.03	174	6.85	214	8.43	219	8.62	32.4	71.28	L12/T4
NP130-12	12	130/20HR	407	16.02	174	6.85	210	8.27	233	9.17	34.2	75.24	L14/T5
NP135-12	12	135/10HR	484	19.06	171	6.73	241	9.49	241	9.49	38	83.60	L16/T4
NP150-12	12	150/20HR	484	19.06	171	6.73	241	9.49	241	9.49	41	90.20	L16/T4
NP160-12	12	160/10HR	532	20.94	206	8.11	216	8.50	240	9.45	48.3	106.26	L17/T4
NP180-12	12	180/10HR	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	L17/T5
NP220-12	12	220/20HR	522	20.55	240	9.45	219	8.62	244	9.61	58	127.60	L17/T5
NP250-12	12	250/20HR	520	20.47	269	10.59	203	7.99	207	8.15	68	149.60	L17/T5

DC Series-AGM Batteries For Deep Cycle Services

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

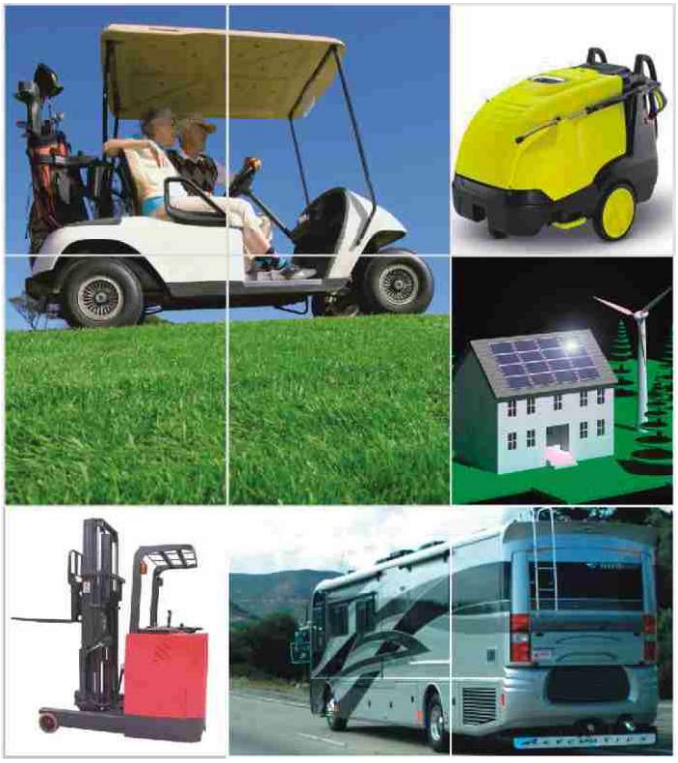
- High Capacity and Long Life.
- True Deep Cycle Construction For Long Life.
- Superior Corrosion Resistance.
- Ensures Fully Formed, Voltage Matched Plates.
- Excellent Bonding of Active Material Paste to Grids Resulting in Longer Life.
- Enhanced Electrolyte Retention.
- DOT,IATA,ICAO and IMDG Approved 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 General Specifications

Model No	Industry No	Rated Voltage (V)	Rated Capacity (Ah)	Dimension								Weight		Terminal Type
				Length		Width		Height		Total Height		kg	pound	
				mm	inch	mm	inch	mm	inch	mm	inch			
6V DEEP CYCLE AGM BATTERY														
DC200-6	N/A	6	200/20HR	306	12.05	168	6.61	220	8.66	222	8.74	30	66.00	T5/AP
DC210-6	GC2/T105	6	210/20HR	260	10.24	180	7.09	247	9.72	252	9.92	29.5	64.90	T5/AP
DC220-6	N/A	6	220/20HR	306	12.05	168	6.61	220	8.66	225	8.86	31.5	69.30	T5/AP
DC225-6	(DIN)	6	225/20HR	243	9.57	187	7.36	275	10.83	275	10.83	30.5	67.10	T5/AP
DC226-6	GC2/T105	6	226/20HR	260	10.24	180	7.09	247	9.72	252	9.92	30	66.00	T5/AP
DC250-6	GC2/T105	6	250/20HR	260	10.24	180	7.09	265	10.43	272	10.71	34.5	75.90	T5/AP
DC310-6	902/J305	6	310/20HR	295	11.61	178	7.01	354	13.94	360	14.17	46.0	101.20	T5/DT
DC330-6	902/J305	6	330/20HR	295	11.61	178	7.01	354	13.94	360	14.17	46.6	102.52	T5/DT
DC380-6	L16	6	380/20HR	295	11.61	178	7.01	404	15.91	410	16.14	55.3	121.66	T5/DT
DC420-6	L16	6	420/20HR	295	11.61	178	7.01	404	15.91	410	16.14	56.8	124.96	T5/DT
8V DEEP CYCLE AGM BATTERY														
DC170-8	GC8H	8	170/20HR	260	10.24	182	7.17	295	11.61	301	11.85	34.0	74.80	T5
DC200-8	GC8H	8	200/20HR	260	10.24	182	7.17	295	11.61	301	11.85	38.0	83.60	T5
12V DEEP CYCLE AGM BATTERY														
DC14-12	N/A	12	14/20HR	152	5.98	99	3.90	96	3.78	102	4.02	3.8	8.36	F2
DC18-12	N/A	12	18/20HR	181	7.13	77	3.03	167	6.57	167	6.57	5.4	11.88	T1/L1
DC20-12	N/A	12	20/20HR	181	7.13	77	3.03	167	6.57	167	6.57	6.0	13.20	T1/L1
DC24-12	N/A	12	24/20HR	166	6.54	175	6.89	126	4.96	126	4.96	8.3	18.26	T3
DC26-12	N/A	12	26/20HR	165	6.50	126	4.96	174	6.85	174	6.85	8.4	18.48	T2
DC35-12	U1	12	35/20HR	196	7.72	130	5.12	155	6.10	167	6.57	10.5	23.10	T3
DC40-12	U1L	12	40/20HR	198	7.80	166	6.54	174	6.85	174	6.85	14.2	31.24	T3
DC55-12	22NF	12	55/20HR	229	9.02	138	5.43	208	8.19	212	8.35	16	35.20	T3
DC70-12	93	12	70/20HR	350	13.78	167	6.57	178	7.01	178	7.01	23.3	51.26	T3/AP
DC75-12	24	12	75/20HR	260	10.24	169	6.65	211	8.31	215	8.46	25	55.00	T3/AP
DC85-12	24	12	85/20HR	260	10.24	169	6.65	211	8.31	215	8.46	26.1	57.42	T3/AP
DC90-12	27	12	90/20HR	307	12.09	169	6.65	211	8.31	216	8.50	28.2	62.04	T3/AP
DC100-12	27	12	100/20HR	307	12.09	169	6.65	211	8.31	216	8.50	30.2	66.44	T3/AP
DC110-12	31	12	110/20HR	331	13.03	174	6.85	214	8.43	220	8.66	33.3	73.26	T4/AP
DC110-12B	31	12	110/20HR	328	12.91	172	6.77	210	8.27	233	9.17	32.8	72.16	T4/AP
DC120-12	N/A	12	120/20HR	407	16.02	173	6.81	210	8.27	233	9.17	39.2	86.24	T5/AP
DC135-12	N/A	12	135/20HR	341	13.43	173	6.81	283	11.14	289	11.38	40.8	89.76	T5/AP
DC150-12	N/A	12	150/20HR	484	19.06	171	6.73	241	9.49	241	9.49	45.5	100.10	T4/AP
DC150-12B	(DIN)	12	150/20HR	338	13.31	182	7.17	267	10.51	272	10.71	44.2	97.24	T5/AP
DC180-12	4D	12	180/20HR	532	20.94	206	8.11	216	8.50	222	8.74	56	123.20	T5/AP
DC200-12	4D	12	200/20HR	532	20.94	206	8.11	216	8.50	222	8.74	58.5	128.70	T5/AP
DC220-12	4D	12	210/20HR	522	20.55	240	9.45	219	8.62	225	8.86	65	143.00	T5/AP
DC240-12	8D	12	240/20HR	520	20.47	269	10.59	203	7.99	209	8.23	71.0	156.20	T5/AP
DC260-12	8D	12	260/20HR	520	20.47	268	10.55	220	8.66	226	8.90	77	169.40	T5/AP

NPF Series-Front Access AGM Batteries for Telecommunication/It Applications

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	223	8.78	223	8.78	16.0	35.2	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	223	8.78	223	8.78	29.4	64.7	T5
NPF110-12	12	110	394	15.51	110	4.33	286	11.26	286	11.26	30.5	67.1	T5
NPF125-12	12	125	552	21.73	110	4.33	239	9.41	239	9.41	38.0	83.6	T5
NPF150-12	12	150	551	21.69	110	4.33	288	11.34	288	11.34	44.0	96.8	T5
NPF155-12	12	155	560	22.05	125	4.92	280	11.02	280	11.02	45.2	99.4	T5
NPF160-12	12	160	551	21.69	110	4.33	288	11.34	288	11.34	44.5	97.9	T5
NPF175-12	12	175	546	21.50	125	4.92	316	12.44	324	12.76	53.5	117.7	T5
NPF180-12	12	180	560	22.05	125	4.92	316	12.44	316	12.44	54.0	118.8	T5
NPF190-12	12	190	560	22.05	125	4.92	316	12.44	316	12.44	55.3	121.7	T5
NPF200-12	12	200	560	22.05	125	4.92	316	12.44	316	12.44	57.0	125.4	T5

2V Series-2V Stationary AGM Batteries

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	230	9.06	4.7	10.34	T4
NP100-2	2	100/10HR	171	6.73	72	2.83	205	8.07	230	9.06	5.8	12.76	T4
NP120-2	2	120/10HR	171	6.73	72	2.83	205	8.07	230	9.06	6.3	13.86	T4
NP150-2	2	150/10HR	171	6.73	102	4.02	206	8.11	230	9.06	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	14.1	31.02	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	20.5	45.10	T5
NP400-2	2	400/10HR	211	8.31	176	6.93	329	12.95	367	14.45	26.1	57.42	T5
NP425-2	2	425/10HR	211	8.31	176	6.93	329	12.95	367	14.45	26.8	58.96	T5
NP500-2	2	500/10HR	241	9.49	171	6.73	349	13.74	368	14.49	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	328	12.91	365	14.37	62.0	136.40	T5
NP1200-2	2	1200/10HR	472	18.58	172	6.77	338	13.31	355	13.98	68.5	150.70	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
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	T3
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	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	34.0	74.8	T4
NPH470-12	470/15Min	135	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
NPH680-12	680/15Min	170	532	20.94	206	8.11	216	8.50	222	8.74	58.5	128.7	T5
NPH770-12	770/15Min	220	522	20.55	240	9.45	219	8.62	224	8.82	68.0	149.6	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	79.0	173.8	T6
NPH720-6	720/15Min	180	260	10.24	180	7.09	247	9.72	251	9.88	30.8	67.8	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



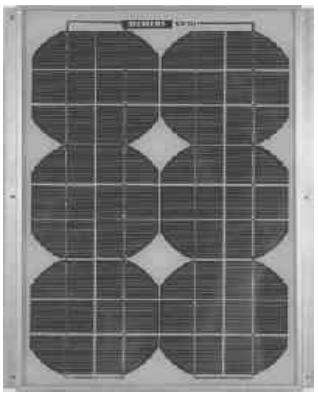




Photovoltaic power supply of:



-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	247	9.72	251	9.88	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	247	9.72	251	9.88	27.6	60.72	T5
NPS225-6A	6	225/10HR	323	12.72	178	7.01	224	8.82	229	9.02	29.6	65.12	T5
NPS225-6	6	225/10HR	260	10.24	180	7.09	247	9.72	251	9.88	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	L6/T3
NPS26-12	12	26/10HR	166	6.54	175	6.89	126	4.96	126	4.96	8.4	18.48	L2/T2
NPS33-12	12	33/10HR	196	7.72	130	5.12	155	6.10	179	7.05	10.1	22.22	L7/T3/L4
NPS38-12	12	38/10HR	197	7.76	166	6.54	174	6.85	179	7.05	12.4	27.28	L6/T3/L7
NPS42-12	12	42/10HR	198	7.80	166	6.54	174	6.85	174	6.85	13	28.60	L7/T3/L3
NPS50-12	12	50/10HR	229	9.02	138	5.43	208	8.19	226	8.90	16.4	36.08	L4/T3
NPS55-12	12	55/10HR	229	9.02	138	5.43	208	8.19	226	8.90	17.4	38.28	L4/T3
NPS60-12	12	60/10HR	350	13.78	167	6.57	178	7.01	178	7.01	20.6	45.32	L9/T3/L4
NPS65-12	12	65/10HR	350	13.78	167	6.57	178	7.01	178	7.01	21.4	47.08	L9/T3/L4
NPS70-12	12	70/10HR	260	10.24	169	6.65	211	8.31	231	9.09	21.8	47.96	L11/T3
NPS75-12	12	75/10HR	260	10.24	169	6.65	211	8.31	231	9.09	22.2	48.84	L11/T3
NPS80-12	12	80/10HR	260	10.24	169	6.65	211	8.31	231	9.09	23.5	51.70	L11/T3
NPS85-12	12	85/10HR	331	13.03	174	6.85	214	8.43	219	8.62	25	55.00	L12/T4
NPS90-12	12	90/10HR	307	12.09	169	6.65	211	8.31	227	8.94	27	59.40	L13/T3
NPS100-12	12	100/10HR	331	13.03	174	6.85	214	8.43	219	8.62	30.7	67.54	L12/T4
NPS120-12	12	120/10HR	407	16.02	174	6.85	210	8.27	233	9.17	34.4	75.68	L14/T5
NPS150-12	12	150/10HR	484	19.06	171	6.73	241	9.49	241	9.49	43.8	96.36	L16/T4
NPS200-12	12	200/10HR	522	20.55	240	9.45	219	8.62	244	9.61	60.8	133.76	L17/T5
NPS220-12	12	220/10HR	522	20.55	269	10.59	203	7.99	209	8.23	68.3	150.26	L17/T5
NPS250-12	12	250/10HR	520	20.47	268	10.55	220	8.66	245	9.65	71	156.20	L17/T5
2V SOLAR GEL BATTERY													
NPS100-2	2	100/10HR	171	6.73	72	2.83	205	8.07	230	9.06	5.9	12.98	T5
NPS150-2	2	150/10HR	171	6.73	102	4.02	206	8.11	230	9.06	8.2	18.04	T5
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	26.3	57.86	T5
NPS500-2	2	500/10HR	241	9.49	171	6.73	349	13.74	368	14.49	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

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 General Specifications

Model No	Industry No	Rated Voltage (V)	Capacity (Ah)	Dimension								Weight		Terminal
				Length		Width		Height		Total Height		kg	pound	
				mm	inch	mm	inch	mm	inch	mm	inch			
6V DEEP CYCLE GEL BATTERY														
DCG200-6	N/A	6	200	306	12.05	168	6.61	220	8.66	222	8.74	30.1	66.22	T5/AP
DCG210-6	GC2/T105	6	210	260	10.24	180	7.09	247	9.72	252	9.92	29.6	65.12	T5/AP
DCG220-6	N/A	6	220	306	12.05	168	6.61	220	8.66	222	8.74	31.6	69.52	T5/AP
DCG225-6	(DIN)	6	225	243	9.57	187	7.36	275	10.83	275	10.83	30.6	67.32	T5/AP
DCG226-6	GC2/T105	6	226	260	10.24	180	7.09	247	9.72	252	9.92	30.2	66.44	T5/AP
DCG250-6	GC2/T105	6	250	260	10.24	187	7.36	265	10.43	272	10.71	34.7	76.34	T5/AP
DCG310-6	902/J305	6	310	295	11.61	178	7.01	354	13.94	360	14.17	46.2	101.64	T5/DT
DCG330-6	902/J305	6	330	295	11.61	178	7.01	354	13.94	360	14.17	46.8	102.96	T5/DT
DCG380-6	L16	6	380	295	11.61	178	7.01	404	15.91	410	16.14	55.5	122.10	T5/DT
DCG420-6	L16	6	420	295	11.61	178	7.01	404	15.91	410	16.14	57	125.40	T5/DT
8V DEEP CYCLE GEL BATTERY														
DCG170-8	GC8H	8	170	260	10.24	182	7.17	295	11.61	301	11.85	34.2	75.24	T5
DCG200-8	GC8H	8	200	260	10.24	182	7.17	295	11.61	301	11.85	38.2	84.04	T5
12V DEEP CYCLE GEL BATTERY														
DCG24-12	N/A	12	24	166	6.54	175	6.89	126	4.96	126	4.96	8.4	18.48	T2
DCG26-12	N/A	12	26	165	6.50	126	4.96	174	6.85	174	6.85	8.5	18.70	T3
DCG35-12	U1	12	35	196	7.72	130	5.12	155	6.10	167	6.57	10.6	23.32	T3
DCG40-12	U1L	12	40	198	7.80	166	6.54	174	6.85	174	6.85	14.3	31.46	T3
DCG55-12	22NF	12	55	229	9.02	138	5.43	208	8.19	212	8.35	16.1	35.42	T3
DCG70-12	93	12	70	350	13.78	167	6.57	178	7.01	178	7.01	23.4	51.48	T3/AP
DCG75-12	24	12	75	260	10.24	169	6.65	211	8.31	215	8.46	25.1	55.22	T3/AP
DCG85-12	24	12	85	260	10.24	169	6.65	211	8.31	215	8.46	26.2	57.64	T3/AP
DCG90-12	27	12	90	307	12.09	169	6.65	211	8.31	216	8.50	28.3	62.26	T3/T4/AP
DCG100-12	27	12	100	307	12.09	169	6.65	211	8.31	216	8.50	30.3	66.66	T4/AP
DCG110-12	31	12	110	331	13.03	174	6.85	214	8.43	220	8.66	33.5	73.70	T5/AP
DCG110-12B	31	12	110	328	12.91	172	6.77	217	8.54	222	8.74	32.8	72.16	T5/AP
DCG120-12	N/A	12	120	407	16.02	173	6.81	210	8.27	233	9.17	39.5	86.90	T5/AP
DCG135-12	N/A	12	135	341	13.43	173	6.81	283	11.14	288	11.34	41	90.20	T5/AP
DCG150-12	N/A	12	150	484	19.06	171	6.73	241	9.49	241	9.49	45.7	100.54	T5/AP
DCG150-12B	(DIN)	12	150	338	13.31	182	7.17	267	10.51	272	10.71	44.4	97.68	T5/AP
DCG180-12	4D	12	180	532	20.94	206	8.11	216	8.50	222	8.74	56.2	123.64	T5/AP
DCG200-12	4D	12	200	532	20.94	206	8.11	216	8.50	222	8.74	58.6	128.92	T5/AP
DCG220-12	4D	12	220	522	20.55	240	9.45	219	8.62	225	8.86	65.2	143.44	T5/AP
DCG240-12	8D	12	240	520	20.47	269	10.59	203	7.99	209	8.23	71.3	156.86	T5/AP
DCG260-12	8D	12	260	520	20.47	268	10.55	220	8.66	226	8.90	77.3	170.06	T5/AP

NPG Series-Gel Batteries for Marine or Standby Service

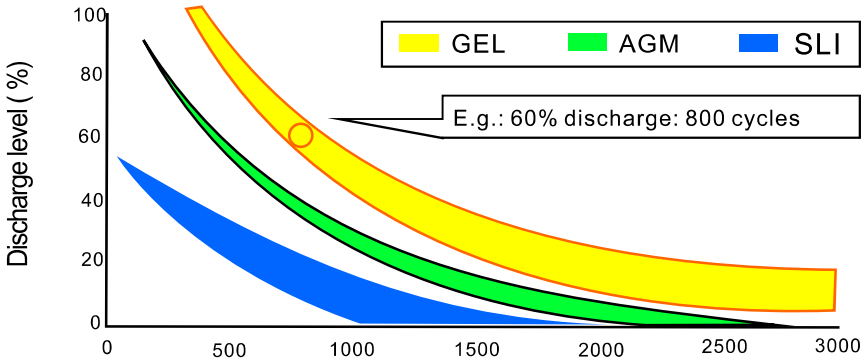
NPG Series Valve-Regulated batteries using revolutionary hybrid gel technology have been designed specifically for back up and cyclic applications.Gel battery has longer cyclic life and much better thermal stability than AGM batteries



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

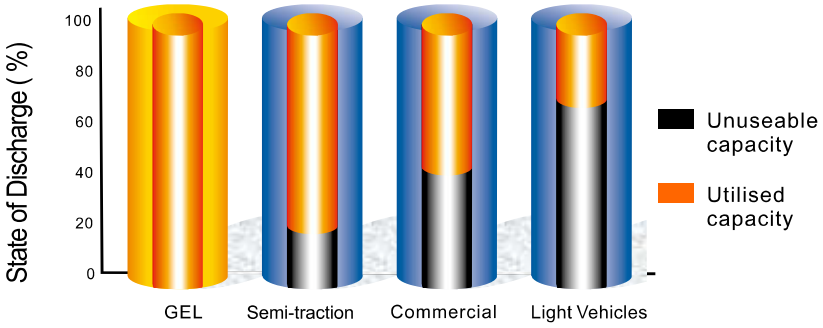


Numbe of Cycles (Durability test as per DIN-EN60095)

More Usable Capacity

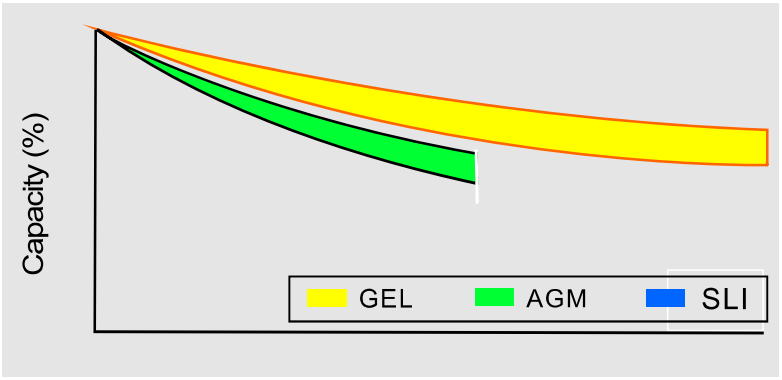
Our Gel battery allows 100% discharge.

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	165	6.50	126	4.96	174	6.85	179	7.05	7.8	17.16	L6/T3
NPG26-12	12	26	166	6.54	175	6.89	126	4.96	126	4.96	8.4	18.48	L2/T2
NPG33-12	12	33	196	7.72	130	5.12	155	6.10	179	7.05	10.1	22.22	L7/T3/L4
NPG40-12	12	40	197	7.76	166	6.54	174	6.85	179	7.05	12.4	27.28	L6/T3/L7
NPG42-12	12	42	198	7.80	166	6.54	174	6.85	174	6.85	13	28.60	L7/T3/L3
NPG50-12	12	50	258	10.16	134	5.28	200	7.87	200	7.87	15.6	34.32	L8
NPG55-12	12	55	229	9.02	138	5.43	208	8.19	226	8.90	16.4	36.08	L4/T3
NPG60-12	12	60	350	13.78	167	6.57	178	7.01	178	7.01	17.3	38.06	L9/T3
NPG65-12	12	65	350	13.78	167	6.57	178	7.01	178	7.01	20.3	44.66	L9/T3/L4
NPG70-12	12	70	260	10.24	169	6.65	211	8.31	231	9.09	21.8	47.96	L11/T3
NPG75-12	12	75	260	10.24	169	6.65	211	8.31	231	9.09	22.2	48.84	L11/T3
NPG80-12	12	80	260	10.24	169	6.65	211	8.31	215	8.46	23.5	51.70	T3/L11/L4
NPG85-12	12	85	331	13.03	174	6.85	214	8.43	219	8.62	25	55.00	L12/T4
NPG90-12	12	90	307	12.09	169	6.65	211	8.31	227	8.94	26.7	58.74	L13/T3
NPG100-12	12	100	331	13.03	174	6.85	214	8.43	219	8.62	29.2	64.24	L12/T4
NPG120-12	12	120	407	16.02	174	6.85	210	8.27	233	9.17	33.2	73.04	L14/T5
NPG150-12	12	150	484	19.06	171	6.73	241	9.49	241	9.49	41.2	90.64	L16/T4
NPG160-12	12	160	532	20.94	206	8.11	216	8.50	221	8.70	48.5	106.70	L17/T4
NPG200-12	12	200	522	20.55	240	9.45	219	8.62	244	9.61	58.6	128.92	L17/T5
NPG220-12	12	220	522	20.55	240	9.45	219	8.62	244	9.61	60.8	133.76	L17/T5
NPG250-12	12	250	520	20.47	268	10.55	220	8.66	245	9.65	71	156.20	L17/T5
6V GEL BATTERY													
NPG130-6	6	130	260	10.24	180	7.09	247	9.72	251	9.88	20.8	45.76	T5
NPG180-6	6	180	306	12.05	168	6.61	220	8.66	226	8.90	27.3	60.06	T5
NPG200-6	6	200	260	10.24	180	7.09	247	9.72	251	9.88	28.3	62.26	T5
NPG225-6A	6	225	323	12.72	178	7.01	224	8.82	229	9.02	29.6	65.12	T5
NPG225-6B	6	225	260	10.24	180	7.09	247	9.72	251	9.88	29.6	65.12	T5
2V GEL BATTERY													
NPG100-2	2	100	171	6.73	72	2.83	205	8.07	230	9.06	5.9	12.98	T5
NPG200-2	2	200	170	6.69	106	4.17	330	12.99	367	14.45	13.1	28.82	T5
NPG300-2	2	300	171	6.73	151	5.94	330	12.99	365	14.37	18.6	40.92	T5
NPG400-2	2	400	211	8.31	176	6.93	329	12.95	367	14.45	26.3	57.86	T5
NPG500-2	2	500	241	9.49	171	6.73	349	13.74	368	14.49	31.2	68.64	T5
NPG600-2	2	600	301	11.85	175	6.89	331	13.03	366	14.41	37.9	83.38	T5
NPG800-2	2	800	410	16.14	176	6.93	330	12.99	365	14.37	51.8	113.96	T5
NPG1000-2	2	1000	472	18.58	172	6.77	338	13.31	355	13.98	62.3	137.06	T5
NPG1500-2	2	1500	401	15.79	351	13.82	342	13.46	378	14.88	97	213.40	T5
NPG2000-2	2	2000	491	19.33	351	13.82	343	13.50	383	15.08	131	288.20	T5
NPG2500-2	2	2500	712	28.03	353	13.90	341	13.43	382	15.04	181	398.20	T5
NPG3000-2	2	3000	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)	Rated Capacity (Ah)	Dimension								Weight		Terminal
			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	223	8.78	223	8.78	16.1	35.4	T2
NPFG80-12	12	80	562	22.13	114	4.49	188	7.40	188	7.40	25.1	55.2	T3
NPFG100-12	12	100	507	19.96	110	4.33	223	8.78	223	8.78	29.5	64.9	T5
NPFG110-12	12	110	394	15.51	110	4.33	286	11.26	286	11.26	30.6	67.3	T5
NPFG125-12	12	125	552	21.73	110	4.33	239	9.41	239	9.41	38.2	84.0	T5
NPFG150-12	12	150	551	21.69	110	4.33	288	11.34	288	11.34	44.2	97.2	T5
NPFG155-12	12	155	560	22.05	125	4.92	280	11.02	280	11.02	45.4	99.9	T5
NPFG160-12	12	160	551	21.69	110	4.33	288	11.34	288	11.34	44.7	98.3	T5
NPFG175-12	12	175	546	21.50	125	4.92	316	12.44	324	12.76	53.7	118.1	T5
NPFG180-12	12	180	560	22.05	125	4.92	316	12.44	316	12.44	54.2	119.2	T5
NPFG190-12	12	190	560	22.05	125	4.92	316	12.44	316	12.44	55.5	122.1	T5
NPFG200-12	12	200	560	22.05	125	4.92	316	12.44	316	12.44	57.2	125.8	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			
NPHG115-12	115/15Min	28	165	6.50	126	4.96	174	6.85	174	6.85	8.7	19.1	T3
NPHG145-12	145/15Min	34	196	7.72	130	5.12	155	6.10	167	6.57	11.0	24.2	T3
NPHG170-12	170/15Min	42	197	7.76	166	6.54	174	6.85	174	6.85	13.8	30.4	T3
NPHG300-12	300/15Min	80	260	10.24	169	6.65	211	8.31	215	8.46	25.0	55.0	T3
NPHG370-12	370/15Min	95	307	12.09	169	6.65	211	8.31	215	8.46	31.0	68.2	T3
NPHG420-12	420/15Min	110	331	13.03	174	6.85	214	8.43	219	8.62	34.0	74.8	T4
NPHG470-12	470/15Min	135	407	16.02	174	6.85	210	8.27	233	9.17	39.0	85.8	T5
NPHG520-12	520//15Min	150	484	19.06	171	6.73	241	9.49	241	9.49	47.0	103.4	T4
NPHG680-12	680/15Min	170	532	20.94	206	8.11	216	8.50	222	8.74	58.5	128.7	T5
NPHG770-12	770/15Min	220	522	20.55	240	9.45	219	8.62	224	8.82	68.0	149.6	T6
NPHG800-12	800/15Min	230	520	20.47	269	10.59	204	8.03	209	8.23	70.0	154.0	T6
NPHG900-12	900/15Min	255	520	20.47	268	10.55	220	8.66	225	8.86	79.0	173.8	T6
NPHG720-6	720/15Min	180	260	10.24	180	7.09	247	9.72	251	9.88	30.8	67.8	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

EV Series-Gel Batteries for Electric Vehicle Cyclic Services

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

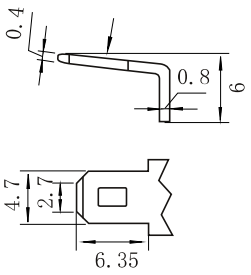
- Electric Vehicle
- Mixture Electric vehicle
- Sightseeing car
- Golf car
- Electric transit car
- Electric patrol car
- Public project car
- Property maintenance car
- Electric flat car
- Electric freight car
- Electric drone car

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
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

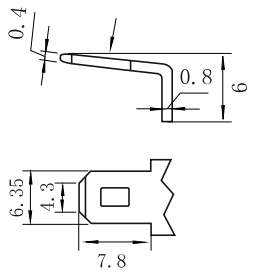
F1 (No. 187)

Unit: mm
Material: Copper



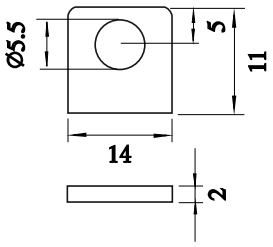
F2 (No. 250)

Unit: mm
Material: Copper



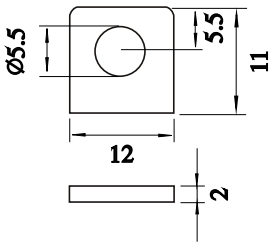
L1

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



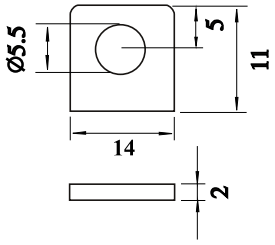
L2

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



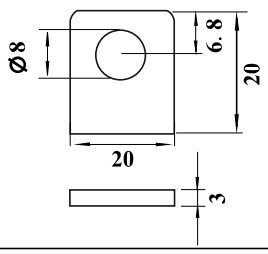
L3

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



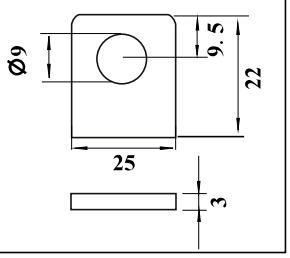
L4

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



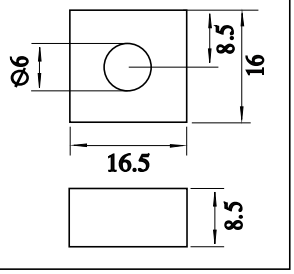
L5

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



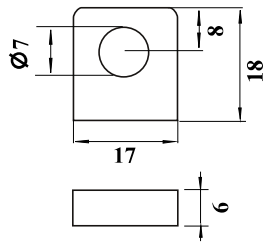
L6

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



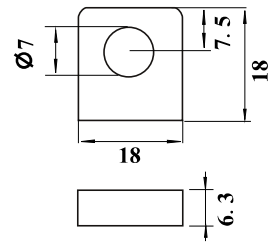
L7

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



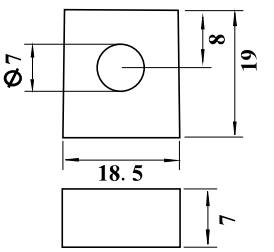
L8

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



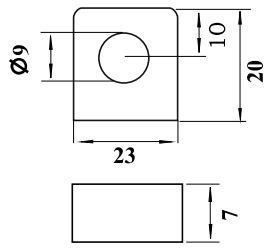
L9

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



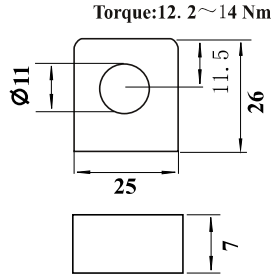
L11

Unit: mm
Material: Lead
Torque 9.6～10.7 Nm



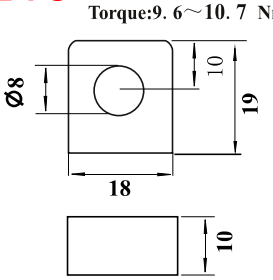
L12

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



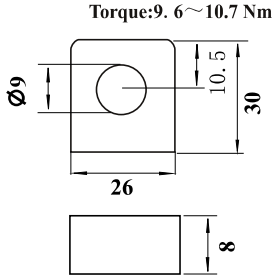
L13

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



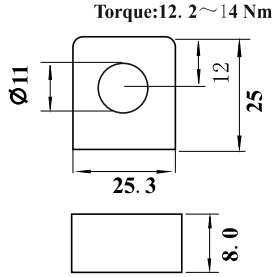
L14

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

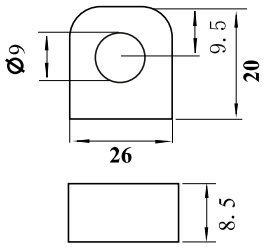


L15

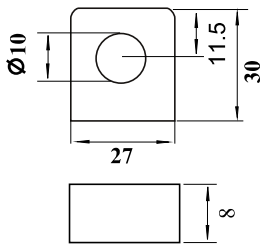
Unit: mm
Material: Lead
Torque: 12.2～14 Nm



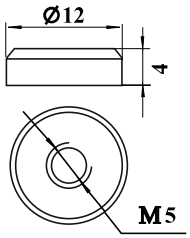
L16
Unit: mm
Material: Lead
Torque: 9. 6～10. 7 Nm



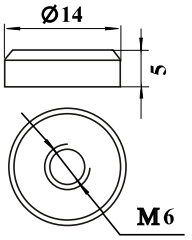
L17
Unit: mm
Material: Lead
Torque: 12. 2～14 Nm



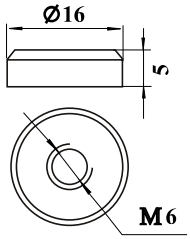
T1
Unit: mm
Material: Copper
Torque: 2～3 Nm



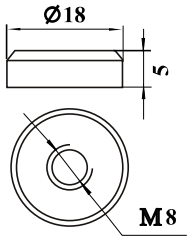
T2
Unit: mm
Material: Copper
Torque: 3～4 Nm



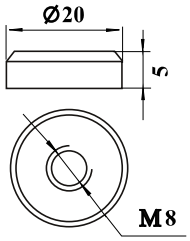
T3
Unit: mm
Material: Copper
Torque: 3. 9～5. 4 Nm



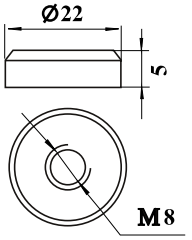
T4
Unit: mm
Material: Copper
Torque: 6. 6～8.3 Nm



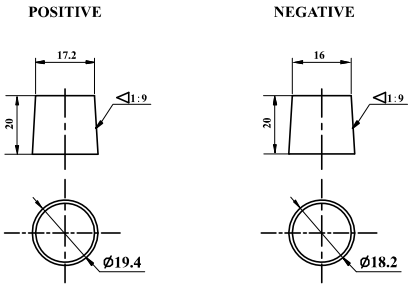
T5
Unit: mm
Material: Copper
Torque: 9.6～10.7Nm



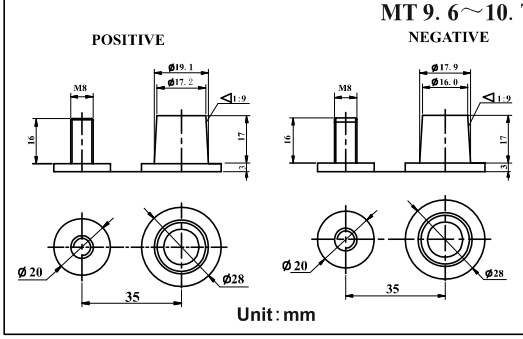
T6
Unit: mm
Material: Copper
Torque: 12～13.6Nm



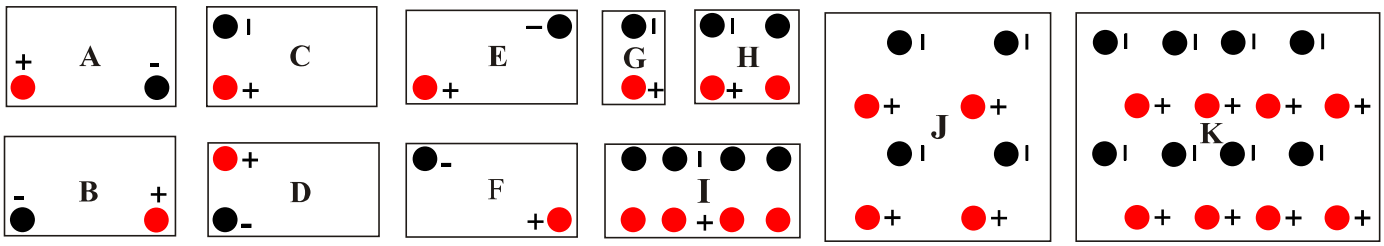
AP
Unit: mm
Material: Lead
Torque: 5.6～7. 9 Nm



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





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