

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



## Industry Battery-General Purpose AGM Battery-TN Series

# TN12-60

(12V 60Ah)

### GENERAL FEATURES

- Oxygen recombination technology: maintenance-free, no need to add water or acid
- The patent grid alloy: less gassing, low self-discharge, excellent corrosion resistance
- Design life is 7~9 years at 25°C under standby application, deep discharge recoverability
- High quality AGM separator: extend cycle life and prevent micro short circuit
- ABS container: increase the strength of battery (Flame-retardant ABS UL94-V0 is optional)

### Dimension

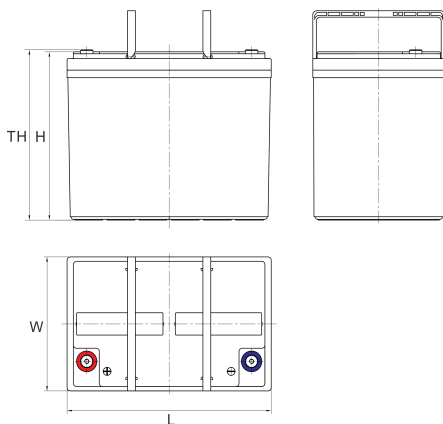
Unit:mm

Length 260±2mm / 10.24inch

Width 168±2mm / 6.61inch

Container Height 208±3mm / 8.19inch

Total Height 214±3mm / 8.43inch



### Application

- Uninterrupted Power Supply ( UPS )
- Communications and electric equipment
- Emergency lighting equipment
- Fire alarm and security system
- Robots, control equipment, and other factory automation equipment
- Emergency power supply ( EPS )
- Portable VTR/TV, radio and so on
- Power tools, lawn mowers, vacuum cleaners
- Cameras and photographic equipment
- Portable measuring equipment
- Portable telephone sets
- Various power toys and hobby equipment
- Lighting equipment

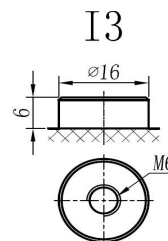
### Terminal

Unit:mm

Terminal Type: I3

### Weight

18.4kg 40.56lbs



This document is subject to change without prior notification

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## TN12-60

### Specification

<b>Nominal Voltage</b>	12V	
<b>Rated Capacity(25°C)</b>	62Ah	20hr Rate(1.80V/cell )
	60Ah	10hr Rate(1.80V/cell )
	52Ah	5hr Rate(1.75V/cell )
	49Ah	3hr Rate(1.70V/cell )
	37Ah	1hr Rate(1.60V/cell )
<b>Container Material</b>	ABS ( Flame-retardant ABS UL94-V0 is optional )	
<b>Operating Temperature Range</b>	<b>Discharge</b>	-20 ~ +50°C
	<b>Charge</b>	0 ~ +40°C
	<b>Storage</b>	-15 ~ +40°C
<b>Capacity Effected by Temperature</b>	<b>40°C / 104°F</b>	106%
	<b>25°C / 77°F</b>	100%
	<b>0°C / 32°F</b>	86%
	<b>-10°C / 14°F</b>	65%
<b>Charge</b>	<b>Float Voltage</b>	2.23 -2.27V/cell@25°C, Tem.Coefficient : -3mV/cell/°C
	<b>Equalize Voltage</b>	2.35 -2.40V/cell@25°C, Tem.Coefficient : -3mV/cell/°C
	<b>Cycle Voltage</b>	2.40 -2.50V/cell@25°C, Tem.Coefficient : -5mV/cell/°C
<b>Max. Charging Current</b>	18A ( 0.3C )	
<b>Max. Discharge Current (5S)</b>	720A	
<b>Internal Resistance</b>	7.4mΩ	
<b>Self-Discharge</b>	<3%, TN series stored at 25 °C require a supplementary charge every six months, the charging interval would shrink when the ambient temperature went higher	

### Discharge Performance

Constant Current Discharge Table (25°C/77°F) Unit: A

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	102.8	80.8	68.8	57.5	45.6	35.0	28.72	18.27	14.41	11.77	9.52	8.25	6.70	5.666	3.093
1.80V/cell	137.9	103.3	83.1	68.0	54.0	40.8	32.18	20.00	15.53	12.59	10.25	8.85	7.10	6.006	3.123
1.75V/cell	155.6	113.5	90.7	73.1	56.0	42.3	33.70	20.71	15.83	12.89	10.45	9.09	7.22	6.066	3.153
1.70V/cell	171.3	123.6	96.8	76.8	58.3	44.1	34.71	21.52	16.34	13.20	10.76	9.28	7.32	6.126	3.213
1.67V/cell	188.9	133.4	103.0	81.6	61.5	45.1	35.83	22.13	16.95	13.70	11.06	9.48	7.44	6.256	3.253
1.60V/cell	208.4	144.9	110.1	87.0	64.9	47.0	37.15	22.84	17.46	14.11	11.37	9.69	7.51	6.316	3.273

Constant Power Discharge Table (25°C/77°F) Unit: W

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	188.0	149.2	128.2	108.3	87.1	66.5	54.65	35.04	27.83	22.72	18.42	16.02	13.11	11.211	6.126
1.80V/cell	249.5	188.5	152.9	126.2	101.2	76.7	60.86	37.94	29.73	24.22	19.72	17.12	13.81	11.912	6.176
1.75V/cell	275.5	203.8	165.0	134.4	104.2	78.9	63.36	39.24	30.13	24.62	20.12	17.62	14.01	12.012	6.226
1.70V/cell	294.9	217.1	173.7	140.2	107.8	81.7	65.17	40.74	30.93	25.23	20.62	17.92	14.21	12.112	6.346
1.67V/cell	320.5	232.1	183.2	147.8	112.8	83.0	66.87	41.64	32.13	26.03	21.12	18.22	14.41	12.312	6.416
1.60V/cell	345.4	246.2	192.7	155.9	118.3	86.0	68.87	42.74	32.93	26.73	21.72	18.62	14.51	12.412	6.446

动力电池

储能电池

备用电池

摩托车电池



## 阀控式免维护铅酸蓄电池-通用型

# TN12-60

(12V 60Ah)

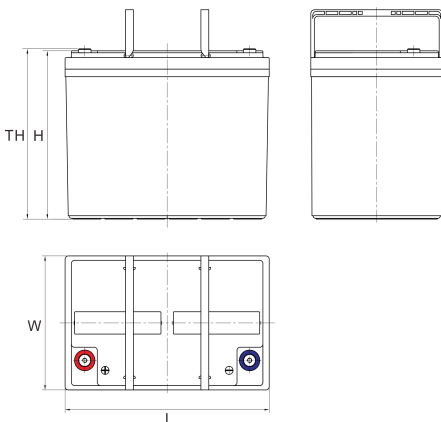
### 产品特点

- ◆ 阀控式免维护设计，寿命期间无需加水或加酸
- ◆ 专利稀土合金板栅，减少气体产生，自放电率低，抗腐蚀能力出众
- ◆ 在25°C下，产品浮充设计寿命为7~9年，优良的深放电恢复能力
- ◆ 高质量AGM隔板：防止微短路，延长循环寿命
- ◆ ABS壳盖：电池外壳强度高（阻燃壳体UL94-V0可选）

### 尺寸

单个尺寸

长	260±2mm
宽	168±2mm
高	208±3mm
总高	214±3mm



### 产品应用

- ◆ 不间断电源(UPS)
- ◆ 通信和电力设备
- ◆ 紧急照明设备
- ◆ 火灾报警及安防系统
- ◆ 机器人、控制设备及其他机械自动化设备
- ◆ 应急电源系统
- ◆ 便携式音频设备
- ◆ 电动工具，割草机，真空吸尘器
- ◆ 照相设备
- ◆ 便携式测量工具
- ◆ 便携式通话设备
- ◆ 各式电动玩具及娱乐设施
- ◆ 照明设备

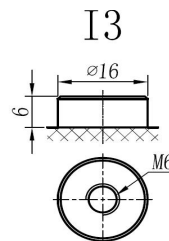
### 端子类型

单位:mm

端子类型 I3

### 重量

18.4kg 40.56lbs



ISO9001 ISO14001 OHSAS18001

内容如有改动，恕不另行通知

动力电池

储能电池

备用电池

摩托车电池



## TN12-60

### 规格书

额定电压	12V	
容量(25°C)	62Ah	20hr Rate(1.80V/cell)
	60Ah	10hr Rate(1.80V/cell)
	52Ah	5hr Rate(1.75V/cell)
	49Ah	3hr Rate(1.70V/cell)
	37Ah	1hr Rate(1.60V/cell)
壳体材料	ABS (阻燃ABS壳体可选)	
使用温度范围	放电	-20 ~ +50°C
	充电	0 ~ +40°C
	储存	-15 ~ +40°C
不同温度下 电池容量系数	40°C / 104°F	106%
	25°C / 77°F	100%
	0°C / 32°F	86%
	-10°C / 14°F	65%
充电	浮充电压	2.23 -2.27V/单格@25°C, 温度补偿系数: -3mV/单格/°C
	均充电压	2.35 -2.40V/单格@25°C, 温度补偿系数: -3mV/单格/°C
	循环使用电压	2.40 -2.50V/单格@25°C, 温度补偿系数: -5mV/单格/°C
最大充电电流	18A (0.3C)	
最大放电电流 (5S)	720A	
电阻	7.4mΩ	
自放电	<3%, TN系列储存在25°C时需每6个月进行一次补充充电, 环境温度更高时则充电间隔时间越短	

### 放电性能

恒电流放电表 (25°C/77°F) 单位: A															
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	102.8	80.8	68.8	57.5	45.6	35.0	28.72	18.27	14.41	11.77	9.52	8.25	6.70	5.666	3.093
1.80V/cell	137.9	103.3	83.1	68.0	54.0	40.8	32.18	20.00	15.53	12.59	10.25	8.85	7.10	6.006	3.123
1.75V/cell	155.6	113.5	90.7	73.1	56.0	42.3	33.70	20.71	15.83	12.89	10.45	9.09	7.22	6.066	3.153
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恒功率放电表 (25°C/77°F) 单位: W															
F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	188.0	149.2	128.2	108.3	87.1	66.5	54.65	35.04	27.83	22.72	18.42	16.02	13.11	11.211	6.126
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1.60V/cell	345.4	246.2	192.7	155.9	118.3	86.0	68.87	42.74	32.93	26.73	21.72	18.62	14.51	12.412	6.446