

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



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

# TN12-55

(12V 55Ah)

### 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)



### Application

- ◆ Uninterrupted Power Supply ( UPS )
- ◆ Communications and electric equipment
- ◆ Emergency lighting equipment
- ◆ Fire alarm and security system
- ◆ 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

### Dimension

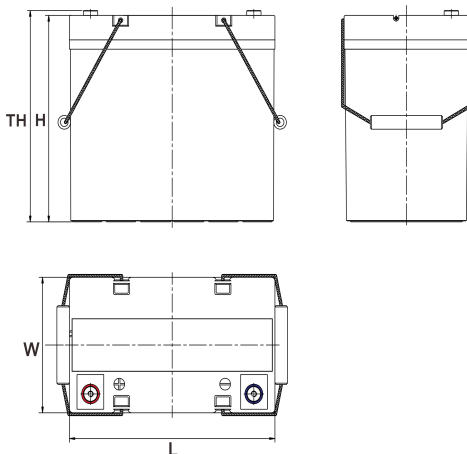
Unit:mm

Length 229±2mm / 9.02inch

Width 138.5±2mm / 5.45inch

Container Height 211±3mm / 8.31inch

Total Height 216±3mm / 8.5inch



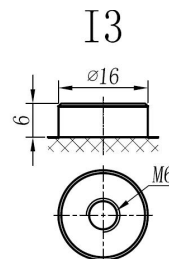
### Terminal

Unit:mm

Terminal Type: I3

### Weight

16.5kg 36.38lbs



This document is subject to change without prior notification

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## TN12-55

### Specification

<b>Nominal Voltage</b>	12V	
	57Ah	20hr Rate (1.80V/cell)
	55Ah	10hr Rate (1.80V/cell)
<b>Rated Capacity(25°C)</b>	48Ah	5hr Rate (1.75V/cell)
	45Ah	3hr Rate (1.70V/cell)
	34Ah	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>	16.5A ( 0.3C)	
<b>Max. Discharge Current (5S)</b>	660A	
<b>Internal Resistance</b>	7.5mΩ	
<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	94.2	74.1	63.0	52.7	41.8	32.2	26.29	16.75	13.30	10.86	8.73	7.56	6.14	5.195	2.833
1.80V/cell	126.5	94.7	76.1	62.3	49.4	37.4	29.44	18.27	14.31	11.57	9.37	8.11	6.51	5.506	2.863
1.75V/cell	142.6	104.0	83.2	67.0	51.4	38.8	30.86	18.98	14.51	11.77	9.60	8.33	6.63	5.566	2.893
1.70V/cell	157.1	113.4	88.8	70.5	53.4	40.3	31.77	19.69	14.92	12.08	9.86	8.50	6.72	5.616	2.943
1.67V/cell	173.2	122.3	94.4	74.8	56.4	41.3	32.89	20.30	15.53	12.59	10.13	8.70	6.82	5.736	2.983
1.60V/cell	191.0	132.8	100.9	79.7	59.5	43.1	34.10	21.01	16.04	12.89	10.45	8.88	6.89	5.796	3.003

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	172.3	136.8	117.5	99.3	79.8	61.0	50.05	32.13	25.53	20.92	16.92	14.71	12.01	10.310	5.616
1.80V/cell	228.8	172.8	140.1	115.7	92.8	70.3	55.76	34.83	27.23	22.22	18.02	15.72	12.71	10.911	5.666
1.75V/cell	252.5	186.8	151.2	123.2	95.5	72.3	58.06	35.94	27.63	22.62	18.42	16.12	12.91	11.011	5.706
1.70V/cell	270.3	199.0	159.2	128.5	98.8	74.9	59.76	37.34	28.43	23.12	18.92	16.42	13.01	11.111	5.816
1.67V/cell	293.9	212.8	168.0	135.5	103.4	76.1	61.26	38.14	29.43	23.82	19.32	16.72	13.21	11.311	5.886
1.60V/cell	316.6	225.7	176.7	142.8	108.4	78.9	63.16	39.24	30.23	24.52	19.92	17.02	13.31	11.411	5.906

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

# TN12-55

(12V 55Ah)

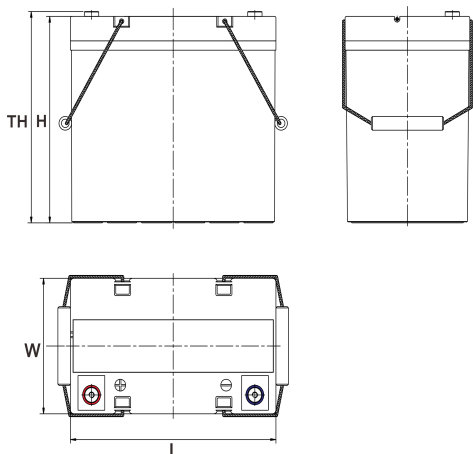
### 产品特点

- ◆ 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，抗腐蚀性能力出众
- ◆ 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	229±2mm
宽	138.5±2mm
高	211±3mm
总高	216±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
- ◆ 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

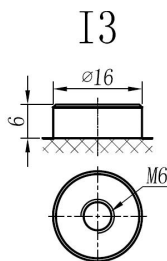
### 端子类型

单位:mm

端子类型 I3

### 重量

16.5kg 36.38lbs



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



# TN12-55

## 规格书

额定电压	12V	
容量(25°C)	57Ah	20hr Rate (1.80V/cell)
	55Ah	10hr Rate (1.80V/cell)
	48Ah	5hr Rate (1.75V/cell)
	45Ah	3hr Rate (1.70V/cell)
	34Ah	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	16.5A (0.3C)	
最大放电电流 (5S)	660A	
电阻	7.5mΩ	
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	94.2	74.1	63.0	52.7	41.8	32.2	26.29	16.75	13.30	10.86	8.73	7.56	6.14	5.195	2.833
1.80V/cell	126.5	94.7	76.1	62.3	49.4	37.4	29.44	18.27	14.31	11.57	9.37	8.11	6.51	5.506	2.863
1.75V/cell	142.6	104.0	83.2	67.0	51.4	38.8	30.86	18.98	14.51	11.77	9.60	8.33	6.63	5.566	2.893
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1.67V/cell	173.2	122.3	94.4	74.8	56.4	41.3	32.89	20.30	15.53	12.59	10.13	8.70	6.82	5.736	2.983
1.60V/cell	191.0	132.8	100.9	79.7	59.5	43.1	34.10	21.01	16.04	12.89	10.45	8.88	6.89	5.796	3.003

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	172.3	136.8	117.5	99.3	79.8	61.0	50.05	32.13	25.53	20.92	16.92	14.71	12.01	10.310	5.616
1.80V/cell	228.8	172.8	140.1	115.7	92.8	70.3	55.76	34.83	27.23	22.22	18.02	15.72	12.71	10.911	5.666
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