

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Maintenance Free VRLA AGM Battery - Long Life Type

TNL12-24

(12V 24Ah)

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
- ♦ Long life, low self-discharge rate and high reliability, 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)



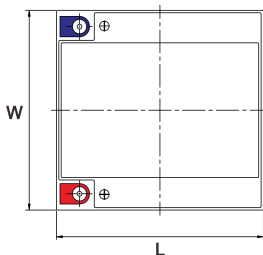
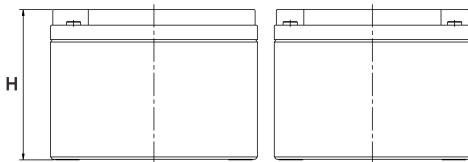
Application

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

Dimension

Unit:mm

Length	166±2mm / 6.54inch
Width	175±2mm / 6.89inch
Container Height	125±3mm / 4.92inch
Total Height	125±3mm / 4.92inch



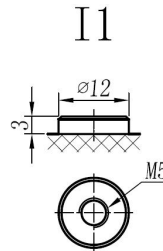
Terminal

Unit:mm

Terminal Type: I1

Weight

7.8kg 17.25lbs



This document is subject to change without prior notification

Motive Battery Energy Storage Battery Reserve Battery Motorcycle Battery

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Specificaion

Nominal Voltage	12V	
Rated Capacity(25°C)	26Ah	20hr Rate(1.80V/cell)
	24Ah	10hr Rate(1.80V/cell)
	21Ah	5hr Rate(1.75V/cell)
	20Ah	3hr Rate(1.70V/cell)
	15Ah	1hr Rate(1.60V/cell)
Container Material	ABS (Flame-retardant ABS UL94-V0 is optional)	
Operating Temperature Range	Discharge	-20 ~ +50°C
	Charge	0 ~ +40°C
	Storage	-15 ~ +40°C
Capacity Effected by Temperature	40°C / 104°F	106%
	25°C / 77°F	100%
	0°C / 32°F	86%
	-10°C / 14°F	65%
Charge	Float Voltage	2.23 -2.27V/cell@25°C, Tem.Coefficient : -3mV/cell°C
	Equalize Voltage	2.35 -2.40V/cell@25°C, Tem.Coefficient : -3mV/cell°C
	Cycle Voltage	2.40 -2.50V/cell@25°C, Tem.Coefficient : -5mV/cell°C
Max. Charging Current	7.2A (0.3C)	
Max. Discharge Current (5s)	360A	
Internal Resistance	14mΩ	
Self-Discharge	<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	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	31.0	25.8	22.0	18.0	13.8	11.57	7.39	5.86	4.74	3.84	3.34	2.68	2.272	1.261
1.80V/cell	39.6	31.2	26.0	21.2	16.0	12.99	8.06	6.30	5.06	4.12	3.60	2.85	2.402	1.281
1.75V/cell	43.5	34.1	28.0	22.0	16.6	13.60	8.36	6.41	5.19	4.22	3.69	2.89	2.422	1.281
1.70V/cell	47.4	36.4	29.4	22.9	17.4	14.01	8.70	6.60	5.32	4.33	3.77	2.93	2.452	1.311
1.67V/cell	51.2	38.7	31.3	24.2	17.8	14.51	8.94	6.87	5.50	4.46	3.85	2.98	2.503	1.321
1.60V/cell	55.6	41.4	33.3	25.5	18.5	15.02	9.24	7.08	5.67	4.60	3.93	3.01	2.523	1.331

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	58.4	49.1	42.3	34.9	26.6	22.42	14.41	11.41	9.31	7.55	6.64	5.34	4.565	2.543
1.80V/cell	73.7	58.6	49.3	40.6	30.7	25.03	15.62	12.21	9.89	8.07	7.10	5.65	4.835	2.563
1.75V/cell	79.7	63.3	52.6	41.8	31.6	26.03	16.12	12.41	10.11	8.25	7.27	5.73	4.875	2.583
1.70V/cell	84.9	66.6	54.9	43.2	32.7	26.73	16.72	12.71	10.31	8.44	7.41	5.81	4.915	2.633
1.67V/cell	90.8	70.3	57.8	45.3	33.3	27.43	17.12	13.21	10.61	8.65	7.55	5.89	5.015	2.663
1.60V/cell	96.4	74.0	60.9	47.5	34.5	28.33	17.62	13.61	10.91	8.91	7.69	5.93	5.055	2.673

☐ 动力电池

■ 储能电池

■ 备用电池

☐ 摩托车电池



阀控式免维护AGM电池-长寿命系列

TNL12-24

(12V 24Ah)

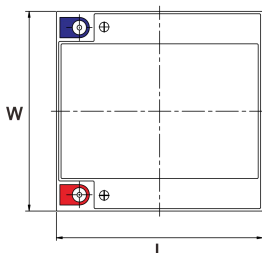
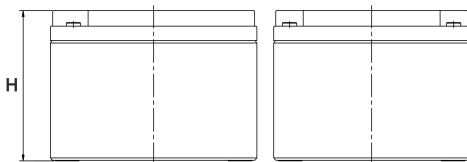
产品特点

- ◆ 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
- ◆ 电池寿命长，自放电率低具有高可靠性，深放电恢复能力出色
- ◆ 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	166±2mm
宽	175±2mm
高	125±3mm
总高	125±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

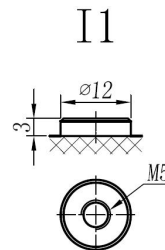
端子类型

I1

重量

7.8kg

17.25lbs



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



TNL12-24

规格书

额定电压	12V	
容量(25°C)	26Ah	20hr Rate(1.80V/cell)
	24Ah	10hr Rate(1.80V/cell)
	21Ah	5hr Rate(1.75V/cell)
	20Ah	3hr Rate(1.70V/cell)
	15Ah	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	7.2A (0.3C)	
最大放电电流 (5S)	360A	
电阻	14mΩ	
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	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	31.0	25.8	22.0	18.0	13.8	11.57	7.39	5.86	4.74	3.84	3.34	2.68	2.272	1.261
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恒功率放电表 (25°C/77°F) 单位: W														
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	58.4	49.1	42.3	34.9	26.6	22.42	14.41	11.41	9.31	7.55	6.64	5.34	4.565	2.543
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1.60V/cell	96.4	74.0	60.9	47.5	34.5	28.33	17.62	13.61	10.91	8.91	7.69	5.93	5.055	2.673