

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Maintenance Free VRLA AGM Battery - Long Life Type

TNL12-45

(12V 42Ah)

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)

Dimension

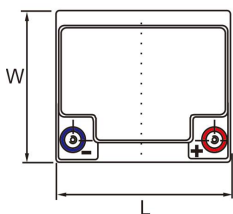
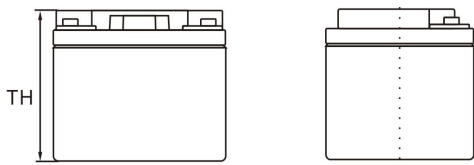
Unit:mm

Length 198.5±2mm / 7.81inch

Width 166±2mm / 6.54inch

Container Height 169.5±3mm / 6.67inch

Total Height 169.5±3mm / 6.67inch



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



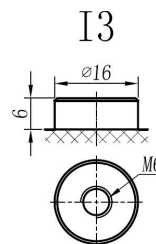
Terminal

Unit:mm

Terminal Type: I3

Weight

14.5kg 32.06lbs



ISO9001 ISO14001 OHSAS18001

This document is subject to change without prior notification

Motive Battery Energy Storage Battery Reserve Battery Motorcycle Battery

TNL12-45

Specificaion

Nominal Voltage	12V	
Rated Capacity(25°C)	45Ah	20hr Rate(1.80V/cell)
	42Ah	10hr Rate(1.80V/cell)
	37Ah	5hr Rate(1.75V/cell)
	35Ah	3hr Rate(1.70V/cell)
	26Ah	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	12.6A (0.3C)	
Max. Discharge Current (5'	540A	
Internal Resistance	9mΩ	
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	49.1	41.3	36.7	30.4	23.9	20.40	13.20	9.92	8.13	6.84	5.96	4.78	4.074	2.172
1.80V/cell	56.3	46.4	40.5	33.0	25.7	21.52	14.21	10.66	8.64	7.25	6.31	5.03	4.204	2.252
1.75V/cell	64.0	52.4	44.8	35.9	28.0	23.45	14.72	11.06	8.93	7.42	6.51	5.20	4.314	2.302
1.70V/cell	72.2	58.1	49.5	39.2	30.1	24.77	15.53	11.67	9.34	7.85	6.83	5.42	4.484	2.362
1.67V/cell	77.6	62.2	52.7	41.4	32.0	25.68	16.14	12.18	9.70	8.09	7.06	5.61	4.605	2.442
1.60V/cell	85.3	68.2	57.2	44.1	33.2	26.39	16.54	12.48	9.92	8.29	7.21	5.70	4.705	2.482

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	91.9	78.0	69.9	58.7	45.6	39.14	25.53	19.22	15.82	13.31	11.71	9.45	8.148	4.344
1.80V/cell	103.9	86.5	76.2	62.7	48.8	41.14	27.23	20.62	16.72	14.11	12.41	9.92	8.388	4.494
1.75V/cell	116.1	96.3	83.4	67.6	52.8	44.64	28.23	21.32	17.22	14.41	12.71	10.21	8.609	4.605
1.70V/cell	128.2	105.3	91.4	73.4	56.7	47.05	29.73	22.42	18.02	15.22	13.31	10.62	8.929	4.715
1.67V/cell	136.4	111.9	96.5	76.8	59.4	48.35	30.63	23.22	18.62	15.62	13.71	11.01	9.169	4.855
1.60V/cell	146.6	120.5	103.7	81.4	61.4	49.55	31.23	23.72	19.02	15.92	14.01	11.11	9.339	4.925

☐ 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

TNL12-45

(12V 42Ah)

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）



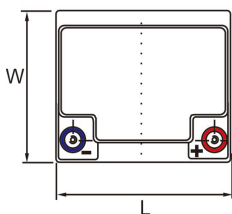
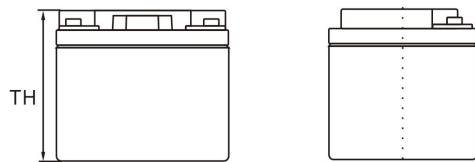
产品应用

- ◆ 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

尺寸

单个尺寸

长	198.5±2mm
宽	166±2mm
高	169.5±3mm
总高	169.5±3mm



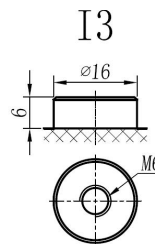
端子类型

单位:mm

端子类型 I3

重量

14.5kg 32.06lbs



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



TNL12-45

规格书

额定电压	12V	
容量(25°C)	45Ah	20hr Rate(1.80V/cell)
	42Ah	10hr Rate(1.80V/cell)
	37Ah	5hr Rate(1.75V/cell)
	35Ah	3hr Rate(1.70V/cell)
	26Ah	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	12.6A (0.3C)	
最大放电电流 (5S)	540A	
电阻	9mΩ	
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	49.1	41.3	36.7	30.4	23.9	20.40	13.20	9.92	8.13	6.84	5.96	4.78	4.074	2.172
1.80V/cell	56.3	46.4	40.5	33.0	25.7	21.52	14.21	10.66	8.64	7.25	6.31	5.03	4.204	2.252
1.75V/cell	64.0	52.4	44.8	35.9	28.0	23.45	14.72	11.06	8.93	7.42	6.51	5.20	4.314	2.302
1.70V/cell	72.2	58.1	49.5	39.2	30.1	24.77	15.53	11.67	9.34	7.85	6.83	5.42	4.484	2.362
1.67V/cell	77.6	62.2	52.7	41.4	32.0	25.68	16.14	12.18	9.70	8.09	7.06	5.61	4.605	2.442
1.60V/cell	85.3	68.2	57.2	44.1	33.2	26.39	16.54	12.48	9.92	8.29	7.21	5.70	4.705	2.482

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	91.9	78.0	69.9	58.7	45.6	39.14	25.53	19.22	15.82	13.31	11.71	9.45	8.148	4.344
1.80V/cell	103.9	86.5	76.2	62.7	48.8	41.14	27.23	20.62	16.72	14.11	12.41	9.92	8.388	4.494
1.75V/cell	116.1	96.3	83.4	67.6	52.8	44.64	28.23	21.32	17.22	14.41	12.71	10.21	8.609	4.605
1.70V/cell	128.2	105.3	91.4	73.4	56.7	47.05	29.73	22.42	18.02	15.22	13.31	10.62	8.929	4.715
1.67V/cell	136.4	111.9	96.5	76.8	59.4	48.35	30.63	23.22	18.62	15.62	13.71	11.01	9.169	4.855
1.60V/cell	146.6	120.5	103.7	81.4	61.4	49.55	31.23	23.72	19.02	15.92	14.01	11.11	9.339	4.925