

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Maintenance Free VRLA AGM Battery - Long Life Type

TNL12-18

(12V 18Ah)

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

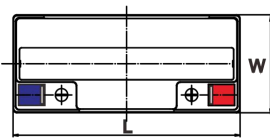
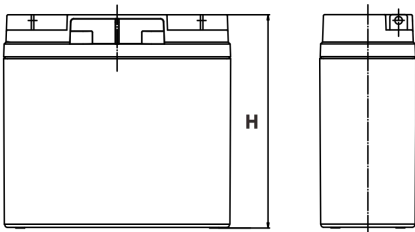
Unit:mm

Length 182±2mm / 7.17inch

Width 77±2mm / 3.03inch

Container Height 170±3mm / 6.69inch

Total Height 170±3mm / 6.69inch



Terminal

Unit:mm

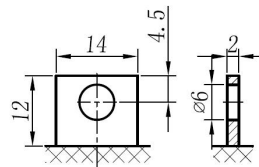
Terminal Type: L1

Weight

5.7kg

12.6lbs

L1



ISO9001 ISO14001 OHSAS18001

This document is subject to change without prior notification

Motive Battery Energy Storage Battery Reserve Battery Motorcycle Battery

TNL12-18

Specifiaion

Nominal Voltage	12V	
Rated Capacity(25°C)	19Ah	20hr Rate(1.80V/cell)
	18Ah	10hr Rate(1.80V/cell)
	16Ah	5hr Rate(1.75V/cell)
	15Ah	3hr Rate(1.70V/cell)
	11Ah	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	5.4A (0.3C)	
Max. Discharge Current (5'	270A	
Internal Resistance	16mΩ	
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	23.2	19.4	16.5	13.5	10.4	8.69	5.54	4.39	3.55	2.87	2.51	2.01	1.702	0.946
1.80V/cell	29.7	23.4	19.5	15.9	12.1	9.72	6.05	4.72	3.80	3.09	2.70	2.13	1.802	0.955
1.75V/cell	32.6	25.6	21.0	16.5	12.5	10.15	6.27	4.81	3.89	3.17	2.77	2.17	1.822	0.964
1.70V/cell	35.5	27.3	22.1	17.2	13.0	10.45	6.52	4.94	3.99	3.25	2.83	2.20	1.842	0.982
1.67V/cell	38.3	29.0	23.4	18.1	13.3	10.86	6.70	5.16	4.12	3.34	2.89	2.23	1.872	0.995
1.60V/cell	41.6	31.0	25.0	19.2	13.9	11.27	6.93	5.31	4.25	3.45	2.95	2.25	1.892	1.000

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	43.7	36.8	31.7	26.2	20.0	16.82	10.81	8.59	6.99	5.66	4.97	4.00	3.423	1.912
1.80V/cell	55.3	43.9	36.9	30.4	23.0	18.72	11.71	9.19	7.42	6.05	5.33	4.23	3.624	1.922
1.75V/cell	59.8	47.4	39.4	31.3	23.7	19.52	12.11	9.33	7.57	6.19	5.45	4.29	3.654	1.942
1.70V/cell	63.7	49.9	41.1	32.4	24.5	20.12	12.51	9.57	7.74	6.34	5.56	4.35	3.694	1.972
1.67V/cell	68.1	52.8	43.3	33.9	24.9	20.62	12.81	9.93	7.98	6.49	5.66	4.41	3.764	1.992
1.60V/cell	72.3	55.5	45.6	35.6	25.9	21.22	13.21	10.21	8.21	6.69	5.77	4.44	3.794	2.002

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

TNL12-18

(12V 18Ah)

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）



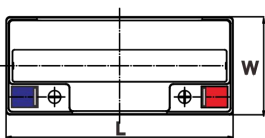
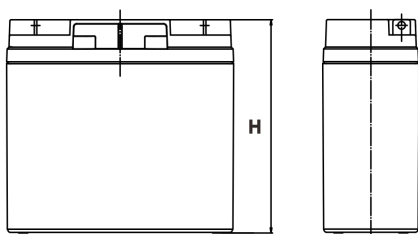
产品应用

- ◆ 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	182±2mm
宽	77±2mm
高	170±3mm
总高	170±3mm



端子类型

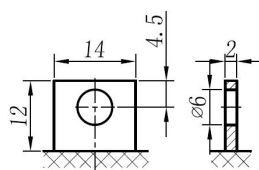
单位:mm

端子类型 L1

重量

5.7kg 12.6lbs

L1



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



TNL12-18

规格书

额定电压	12V	
容量(25°C)	19Ah	20hr Rate(1.80V/cell)
	18Ah	10hr Rate(1.80V/cell)
	16Ah	5hr Rate(1.75V/cell)
	15Ah	3hr Rate(1.70V/cell)
	11Ah	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	5.4A (0.3C)	
最大放电电流 (5S)	270A	
电阻	16mΩ	
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	23.2	19.4	16.5	13.5	10.4	8.69	5.54	4.39	3.55	2.87	2.51	2.01	1.702	0.946
1.80V/cell	29.7	23.4	19.5	15.9	12.1	9.72	6.05	4.72	3.80	3.09	2.70	2.13	1.802	0.955
1.75V/cell	32.6	25.6	21.0	16.5	12.5	10.15	6.27	4.81	3.89	3.17	2.77	2.17	1.822	0.964
1.70V/cell	35.5	27.3	22.1	17.2	13.0	10.45	6.52	4.94	3.99	3.25	2.83	2.20	1.842	0.982
1.67V/cell	38.3	29.0	23.4	18.1	13.3	10.86	6.70	5.16	4.12	3.34	2.89	2.23	1.872	0.995
1.60V/cell	41.6	31.0	25.0	19.2	13.9	11.27	6.93	5.31	4.25	3.45	2.95	2.25	1.892	1.000

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	43.7	36.8	31.7	26.2	20.0	16.82	10.81	8.59	6.99	5.66	4.97	4.00	3.423	1.912
1.80V/cell	55.3	43.9	36.9	30.4	23.0	18.72	11.71	9.19	7.42	6.05	5.33	4.23	3.624	1.922
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1.70V/cell	63.7	49.9	41.1	32.4	24.5	20.12	12.51	9.57	7.74	6.34	5.56	4.35	3.694	1.972
1.67V/cell	68.1	52.8	43.3	33.9	24.9	20.62	12.81	9.93	7.98	6.49	5.66	4.41	3.764	1.992
1.60V/cell	72.3	55.5	45.6	35.6	25.9	21.22	13.21	10.21	8.21	6.69	5.77	4.44	3.794	2.002