

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Industry Battery-General Purpose AGM Battery-TN Series

TN12-18

(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
- ♦ Design life is 3~5 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

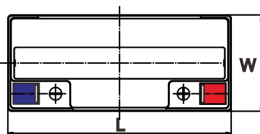
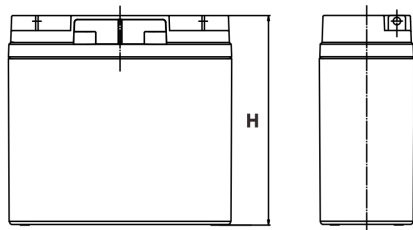
Unit:mm

Length 181.5±2mm / 7.15inch

Width 77±2mm / 3.03inch

Container Height 167.5±3mm / 6.59inch

Total Height 167.5±3mm / 6.59inch



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

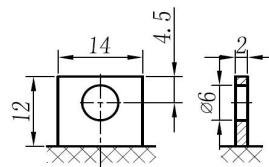
Terminal Type: L1

Weight

5.4kg

11.9lbs

L1



This document is subject to change without prior notification

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TN12-18

Specificaion

Nominal Voltage	12V	
Rated Capacity(25°C)	18.02Ah	20hr Rate(1.80V/cell)
	16.72Ah	10hr Rate(1.80V/cell)
	15.48Ah	5hr Rate(1.75V/cell)
	13.95Ah	3hr Rate(1.70V/cell)
	11.37Ah	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 (5S)	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	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	34.3	22.8	18.8	16.5	13.5	10.8	8.88	5.45	4.10	3.38	2.86	2.47	1.96	1.622	0.892
1.80V/cell	41.0	27.3	22.1	18.9	15.1	11.8	9.61	5.85	4.38	3.59	3.01	2.58	2.04	1.672	0.901
1.75V/cell	49.2	31.3	24.6	20.9	16.2	12.6	10.15	6.09	4.53	3.67	3.10	2.66	2.09	1.722	0.910
1.70V/cell	57.2	35.0	27.1	22.6	17.3	13.2	10.56	6.30	4.65	3.77	3.17	2.71	2.12	1.742	0.926
1.67V/cell	63.1	37.9	29.0	24.2	18.2	13.8	10.96	6.51	4.77	3.86	3.24	2.76	2.16	1.762	0.939
1.60V/cell	69.6	41.0	31.2	25.6	19.2	14.3	11.37	6.67	4.89	3.96	3.30	2.83	2.20	1.792	0.944

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	64.0	42.6	35.3	31.1	25.7	20.3	16.92	10.41	7.89	6.51	5.54	4.81	3.84	3.213	1.772
1.80V/cell	74.3	50.2	40.9	35.4	28.5	22.1	18.22	11.11	8.38	6.89	5.80	5.01	3.97	3.313	1.782
1.75V/cell	88.3	56.9	45.0	38.7	30.3	23.5	19.12	11.51	8.63	7.03	5.94	5.13	4.07	3.393	1.802
1.70V/cell	101.0	62.7	49.1	41.7	32.2	24.5	19.92	11.91	8.83	7.18	6.06	5.24	4.12	3.443	1.832
1.67V/cell	109.8	66.9	52.1	44.2	33.6	25.4	20.42	12.21	9.04	7.34	6.17	5.32	4.18	3.473	1.852
1.60V/cell	118.9	71.4	55.0	45.9	34.9	26.2	21.12	12.51	9.21	7.50	6.29	5.43	4.26	3.534	1.862

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

TN12-18

(12V 18Ah)

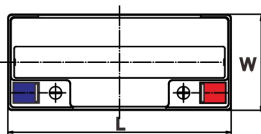
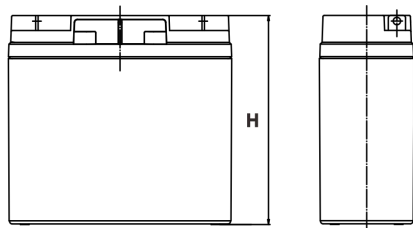
产品特点

- ◆ 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
- ◆ 在25°C下，产品浮充设计寿命为3~5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	181.5±2mm
宽	77±2mm
高	167.5±3mm
总高	167.5±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

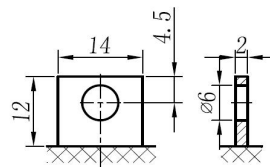
单位:mm

端子类型 L1

重量

5.4kg 11.9lbs

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



TN12-18

规格书

额定电压	12V	
容量(25°C)	18.02Ah 20hr Rate(1.80V/cell)	
	16.72Ah 10hr Rate(1.80V/cell)	
	15.48Ah 5hr Rate(1.75V/cell)	
	13.95Ah 3hr Rate(1.70V/cell)	
	11.37Ah 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	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	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	34.3	22.8	18.8	16.5	13.5	10.8	8.88	5.45	4.10	3.38	2.86	2.47	1.96	1.622	0.892
1.80V/cell	41.0	27.3	22.1	18.9	15.1	11.8	9.61	5.85	4.38	3.59	3.01	2.58	2.04	1.672	0.901
1.75V/cell	49.2	31.3	24.6	20.9	16.2	12.6	10.15	6.09	4.53	3.67	3.10	2.66	2.09	1.722	0.910
1.70V/cell	57.2	35.0	27.1	22.6	17.3	13.2	10.56	6.30	4.65	3.77	3.17	2.71	2.12	1.742	0.926
1.67V/cell	63.1	37.9	29.0	24.2	18.2	13.8	10.96	6.51	4.77	3.86	3.24	2.76	2.16	1.762	0.939
1.60V/cell	69.6	41.0	31.2	25.6	19.2	14.3	11.37	6.67	4.89	3.96	3.30	2.83	2.20	1.792	0.944

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	64.0	42.6	35.3	31.1	25.7	20.3	16.92	10.41	7.89	6.51	5.54	4.81	3.84	3.213	1.772
1.80V/cell	74.3	50.2	40.9	35.4	28.5	22.1	18.22	11.11	8.38	6.89	5.80	5.01	3.97	3.313	1.782
1.75V/cell	88.3	56.9	45.0	38.7	30.3	23.5	19.12	11.51	8.63	7.03	5.94	5.13	4.07	3.393	1.802
1.70V/cell	101.0	62.7	49.1	41.7	32.2	24.5	19.92	11.91	8.83	7.18	6.06	5.24	4.12	3.443	1.832
1.67V/cell	109.8	66.9	52.1	44.2	33.6	25.4	20.42	12.21	9.04	7.34	6.17	5.32	4.18	3.473	1.852
1.60V/cell	118.9	71.4	55.0	45.9	34.9	26.2	21.12	12.51	9.21	7.50	6.29	5.43	4.26	3.534	1.862