

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Industry Battery-General Purpose AGM Battery-TN Series

TN12-2.8

(12V 2.8Ah)

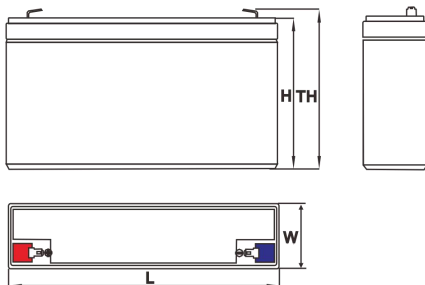
GENERAL FEATURES

- ♦ 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	132±2mm / 5.2inch
Width	33±2mm / 1.3inch
Container Height	98±3mm / 3.86inch
Total Height	104±3mm / 4.09inch



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

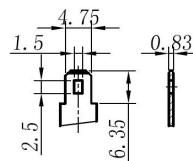
Unit:mm

Terminal Type: T1

Weight

1.18kg 2.6lbs

T1



This document is subject to change without prior notification

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



TN12-2.8

Specificaion

Nominal Voltage	12V	
Rated Capacity(25°C)	2.8Ah	20hr Rate(1.80V/cell)
	2.6Ah	10hr Rate(1.80V/cell)
	2.39Ah	5hr Rate(1.75V/cell)
	2.15Ah	3hr Rate(1.70V/cell)
	1.73Ah	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	0.84A (0.3C)	
Max. Discharge Current (5S)	42A	
Internal Resistance	55mΩ	
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	5.4	3.8	3.1	2.7	2.2	1.7	1.37	0.84	0.64	0.52	0.45	0.38	0.31	0.251	0.139
1.80V/cell	6.6	4.5	3.6	3.0	2.4	1.8	1.48	0.89	0.67	0.55	0.46	0.40	0.32	0.260	0.140
1.75V/cell	7.8	5.1	4.0	3.3	2.5	1.9	1.55	0.93	0.70	0.57	0.48	0.41	0.33	0.265	0.141
1.70V/cell	8.9	5.6	4.3	3.5	2.7	2.0	1.62	0.97	0.72	0.58	0.49	0.42	0.33	0.270	0.144
1.67V/cell	9.8	6.0	4.5	3.7	2.8	2.1	1.68	1.00	0.74	0.60	0.50	0.43	0.34	0.274	0.146
1.60V/cell	10.3	6.3	4.7	3.8	2.9	2.1	1.73	1.03	0.75	0.61	0.51	0.44	0.34	0.278	0.147

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	10.1	7.1	5.9	5.2	4.2	3.2	2.66	1.64	1.25	1.03	0.88	0.76	0.61	0.508	0.280
1.80V/cell	12.3	8.4	6.8	5.8	4.6	3.5	2.85	1.73	1.31	1.08	0.91	0.79	0.63	0.523	0.281
1.75V/cell	14.4	9.4	7.5	6.3	4.9	3.7	2.99	1.79	1.35	1.11	0.93	0.81	0.64	0.529	0.282
1.70V/cell	16.2	10.3	8.0	6.7	5.1	3.8	3.09	1.86	1.38	1.13	0.95	0.82	0.65	0.535	0.286
1.67V/cell	17.6	10.9	8.4	7.0	5.3	4.0	3.20	1.90	1.41	1.14	0.96	0.83	0.65	0.540	0.288
1.60V/cell	18.2	11.3	8.6	7.1	5.4	4.0	3.25	1.94	1.43	1.17	0.98	0.85	0.66	0.546	0.289

□ 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

TN12-2.8

(12V 2.8Ah)

产品特点

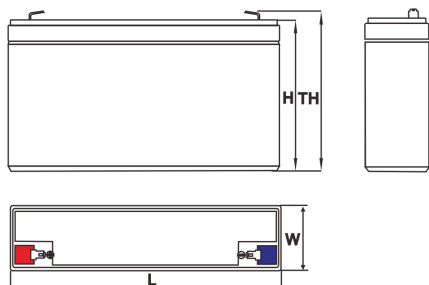
- ◆ 阀控式免维护设计，寿命期间无需加水或加酸
- ◆ 专利稀土合金板栅，减少气体产生，自放电率低，抗腐蚀能力出众
- ◆ 在25°C下，产品浮充设计寿命为3~5年，优良的深放电恢复能力
- ◆ 高质量AGM隔板：防止微短路，延长循环寿命
- ◆ ABS壳盖：电池外壳强度高（阻燃壳体UL94-V0可选）



尺寸

单个尺寸

长	132±2mm
宽	33±2mm
高	98±3mm
总高	104±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

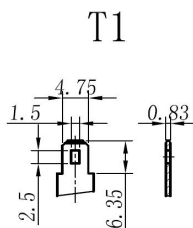
端子类型

单位:mm

端子类型 T1

重量

1.18kg 2.6lbs



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



TN12-2.8

规格书

额定电压	12V	
容量(25°C)	2.8Ah	20hr Rate(1.80V/cell)
	2.6Ah	10hr Rate(1.80V/cell)
	2.39Ah	5hr Rate(1.75V/cell)
	2.15Ah	3hr Rate(1.70V/cell)
	1.73Ah	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	0.84A (0.3C)	
最大放电电流 (5S)	42A	
电阻	55mΩ	
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	5.4	3.8	3.1	2.7	2.2	1.7	1.37	0.84	0.64	0.52	0.45	0.38	0.31	0.251	0.139
1.80V/cell	6.6	4.5	3.6	3.0	2.4	1.8	1.48	0.89	0.67	0.55	0.46	0.40	0.32	0.260	0.140
1.75V/cell	7.8	5.1	4.0	3.3	2.5	1.9	1.55	0.93	0.70	0.57	0.48	0.41	0.33	0.265	0.141
1.70V/cell	8.9	5.6	4.3	3.5	2.7	2.0	1.62	0.97	0.72	0.58	0.49	0.42	0.33	0.270	0.144
1.67V/cell	9.8	6.0	4.5	3.7	2.8	2.1	1.68	1.00	0.74	0.60	0.50	0.43	0.34	0.274	0.146
1.60V/cell	10.3	6.3	4.7	3.8	2.9	2.1	1.73	1.03	0.75	0.61	0.51	0.44	0.34	0.278	0.147

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	10.1	7.1	5.9	5.2	4.2	3.2	2.66	1.64	1.25	1.03	0.88	0.76	0.61	0.508	0.280
1.80V/cell	12.3	8.4	6.8	5.8	4.6	3.5	2.85	1.73	1.31	1.08	0.91	0.79	0.63	0.523	0.281
1.75V/cell	14.4	9.4	7.5	6.3	4.9	3.7	2.99	1.79	1.35	1.11	0.93	0.81	0.64	0.529	0.282
1.70V/cell	16.2	10.3	8.0	6.7	5.1	3.8	3.09	1.86	1.38	1.13	0.95	0.82	0.65	0.535	0.286
1.67V/cell	17.6	10.9	8.4	7.0	5.3	4.0	3.20	1.90	1.41	1.14	0.96	0.83	0.65	0.540	0.288
1.60V/cell	18.2	11.3	8.6	7.1	5.4	4.0	3.25	1.94	1.43	1.17	0.98	0.85	0.66	0.546	0.289