

Motive Battery

Energy Storage Battery

Reserve Battery

Motorcycle Battery



Industry Battery-General Purpose AGM Battery-TN Series

TN12-28

(12V 28Ah)

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

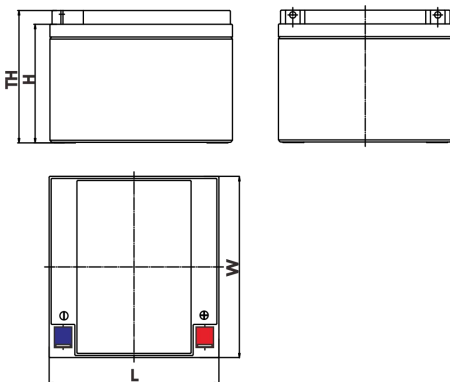
Unit:mm

Length 166±2mm / 6.54inch

Width 175±2mm / 6.89inch

Container Height 125±3mm / 4.92inch

Total Height 125±3mm / 4.92inch



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

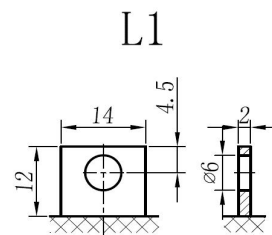
Unit:mm

Terminal Type: L1

Weight

8.4kg

18.52lbs



This document is subject to change without prior notification

Motive Battery Energy Storage Battery Reserve Battery Motorcycle Battery

TN12-28

Specificaion

Nominal Voltage	12V	
Rated Capacity(25°C)	28.03Ah	20hr Rate(1.80V/cell)
	26.03Ah	10hr Rate(1.80V/cell)
	24.16Ah	5hr Rate(1.75V/cell)
	22.35Ah	3hr Rate(1.70V/cell)
	17.86Ah	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	8.4A (0.3C)	
Max. Discharge Current (5S)	420A	
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	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	53.4	40.9	33.9	29.3	22.7	17.0	14.31	8.45	6.62	5.38	4.38	3.79	3.05	2.533	1.391
1.80V/cell	71.7	52.4	41.0	34.7	26.8	19.7	16.04	9.23	7.12	5.74	4.71	4.06	3.24	2.603	1.401
1.75V/cell	80.8	57.6	44.8	37.3	27.8	20.5	16.75	9.56	7.25	5.87	4.83	4.17	3.29	2.673	1.411
1.70V/cell	89.0	62.8	47.8	39.2	28.9	21.3	17.26	9.80	7.45	6.03	4.95	4.26	3.34	2.733	1.441
1.67V/cell	98.1	67.7	50.9	41.6	30.5	21.8	17.66	9.95	7.76	6.23	5.09	4.35	3.39	2.783	1.461
1.60V/cell	108.2	73.5	54.4	44.4	32.2	22.7	17.86	10.35	8.00	6.42	5.26	4.44	3.42	2.813	1.471

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	97.6	75.7	63.4	55.4	43.2	32.1	27.23	16.19	12.71	10.37	8.48	7.38	5.98	5.005	2.753
1.80V/cell	129.6	95.6	75.5	64.5	50.3	37.1	30.33	17.55	13.60	11.01	9.06	7.88	6.32	5.155	2.773
1.75V/cell	143.0	103.4	81.5	68.7	51.8	38.1	31.53	18.13	13.79	11.22	9.27	8.07	6.42	5.285	2.793
1.70V/cell	153.2	110.1	85.8	71.7	53.6	39.5	32.43	18.55	14.15	11.49	9.49	8.23	6.50	5.385	2.843
1.67V/cell	166.5	117.7	90.5	75.5	56.1	40.1	32.93	18.70	14.69	11.84	9.71	8.38	6.59	5.485	2.883
1.60V/cell	179.4	124.9	95.2	79.6	58.8	41.6	33.13	19.41	15.08	12.18	10.00	8.54	6.64	5.536	2.893

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

TN12-28

(12V 28Ah)

产品特点

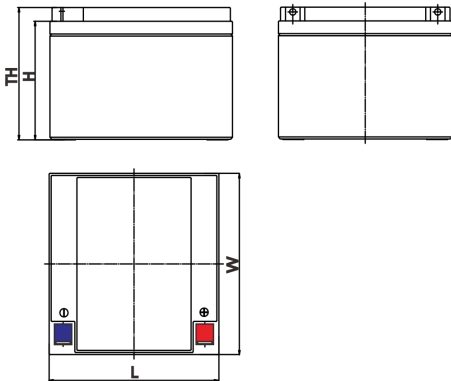
- ◆ 阀控式免维护设计，寿命期间无需加水或加酸
- ◆ 专利稀土合金板栅，减少气体产生，自放电率低，抗腐蚀能力出众
- ◆ 在25°C下，产品浮充设计寿命为3~5年，优良的深放电恢复能力
- ◆ 高质量AGM隔板：防止微短路，延长循环寿命
- ◆ ABS壳盖：电池外壳强度高（阻燃壳体UL94-V0可选）



尺寸

单个尺寸

长	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

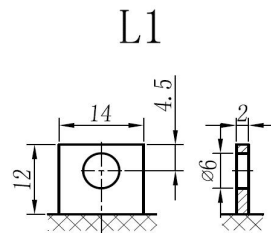
端子类型

L1

重量

8.4kg

18.52lbs



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



TN12-28

规格书

额定电压	12V	
容量(25°C)	28.03Ah 20hr Rate(1.80V/cell)	
	26.03Ah 10hr Rate(1.80V/cell)	
	24.16Ah 5hr Rate(1.75V/cell)	
	22.35Ah 3hr Rate(1.70V/cell)	
	17.86Ah 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	8.4A (0.3C)	
最大放电电流 (5S)	420A	
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	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	53.4	40.9	33.9	29.3	22.7	17.0	14.31	8.45	6.62	5.38	4.38	3.79	3.05	2.533	1.391
1.80V/cell	71.7	52.4	41.0	34.7	26.8	19.7	16.04	9.23	7.12	5.74	4.71	4.06	3.24	2.603	1.401
1.75V/cell	80.8	57.6	44.8	37.3	27.8	20.5	16.75	9.56	7.25	5.87	4.83	4.17	3.29	2.673	1.411
1.70V/cell	89.0	62.8	47.8	39.2	28.9	21.3	17.26	9.80	7.45	6.03	4.95	4.26	3.34	2.733	1.441
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1.60V/cell	108.2	73.5	54.4	44.4	32.2	22.7	17.86	10.35	8.00	6.42	5.26	4.44	3.42	2.813	1.471

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	97.6	75.7	63.4	55.4	43.2	32.1	27.23	16.19	12.71	10.37	8.48	7.38	5.98	5.005	2.753
1.80V/cell	129.6	95.6	75.5	64.5	50.3	37.1	30.33	17.55	13.60	11.01	9.06	7.88	6.32	5.155	2.773
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1.60V/cell	179.4	124.9	95.2	79.6	58.8	41.6	33.13	19.41	15.08	12.18	10.00	8.54	6.64	5.536	2.893