





SAITE TECHNOLOGY VIET NAM JSC

VRLA AGM Battery

BT-HSE-40-12 [12V40Ah]



& General Features

- Designed floating charging service life: 12 years (25°C)
- Sealed and maintenance free operation
- Safety valve installation for explosion proof
- Low self-discharge characteristic, approx3% of capacity per month at 20°C (average)
- Wide operating temperature range from 0°C~40°C
- Lead-Aluminum-Calcium-Tin alloy high energy, prevent corrosion

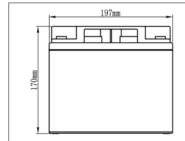
Applications

- DC power supply
- UPS/ EPS power supply
- Electrical devices & instruments
- Security and fire alarm systems
- Telecom stations and power stations
- Medical equipment
- Emergency lighting systems

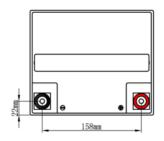
Physical Specifications

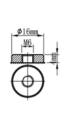
Nominal Voltage	Nominal Capacity (10HR)		Dime	nsion		Internal	Standard	
		L	W	Н	TH	Weight ±3%	Resistance (In full charge status)	Terminals
12V	40Ah	197±2mm	165±2mm	170±2mm	170±2mm	Approx12.3kg (27.06lbs)	≤ 9.8mΩ	F09 (standard)

X Dimensions









Constant-Voltage Charge

Rated Capacity							
20 hour rate (2.0A/10.8V)	40.0Ah						
10 hour rate (3.84A/10.8V)	38.4Ah						
5 hour rate (6.41A to 10.5V)	32.0Ah						
3 hour rate (9.45A to 10.5V)	28.2Ah						
1 hour rate (23.0A to 10.2V)	23.0Ah						
Capacity affected by Temperature							
40°C(104°F)	103%						
25°C(77°F)	100%						
0°C(32°F)	86%						

Cycle Application

- 1. Limit initial current less than 9.5A
- 2. Charge until battery voltage (under charge) reaches 14.1V to 14.4V at 25°C(77°F)
- 3. Hold at 14.1V to 14.4V until current drop to under 0.23A for at least 3 hours
- 4. Temperature compensation coefficient of charging voltage is -30mV/°C

Standby Service

- Hold battery across constant voltage source of 13.6 to 13.8 volts with current limit
 5A continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charge status
- 2. Temperature compensation coefficient of charging voltage is -18mV/°C

A NOTE: The battery should be charged within 6 months of storage, Otherwise, permanent loss of capacity might occur as a result of sulfation







Battery Discharge Table

End	Minute (M)				Hour (H)							
Volts/Cell	10	15	30	45	1	1.5	2	3	5	8	10	20
Constant Current Discharge Data Sheet (@25°C) Unit: A												
1.70V	84.5	71.3	37.6	30.8	23.0	18.2	15.3	9.75	6.62	4.59	3.92	2.05
1.75V	80.6	68.8	37.3	29.5	22.4	17.7	14.9	9.40	6.40	4.51	3.88	2.03
1.80V	76.2	66.2	34.3	28.3	21.9	17.3	14.6	9.21	6.30	4.40	3.84	2.00
Constant Power Discharge Data Sheet (@25°C) Unit: W												
1.70V	173.5	142	82.7	59.8	48.8	35.6	26.6	20.0	12.8	9.82	7.75	4.17
1.75V	167.5	137.5	79.7	58.0	47.6	34.8	26.0	19.5	12.5	9.62	7.68	4.13
1.80V	160.5	133	76.5	56.4	46.5	34.0	25.3	19.0	12.1	9.43	7.60	4.08

Performance Characteristics

