

# Motorcycle Battery

## MG9-12-01



### SPECIFICATION

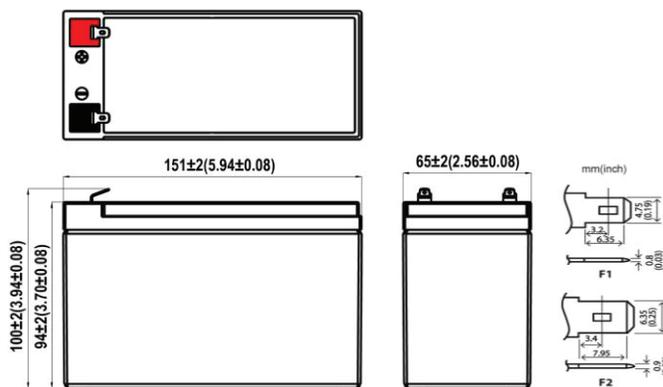
Cell per unit	6
Nominal Voltage (V)	12
Nominal Capacity (Ah) C20	9Ah at 20hour rate F.V(1.75/cell)
Weight	Approx 2.55kg
Internal Resistance	≤16mΩ
Max Discharge Current (5s)	135A
Battery Design Life	Standby: 5 years
Terminal Type	F1/F2
Container Material	ABS(94-HB & 94V-0 flame retardant case)
Ambient temperature	Charge 0°C(32°F) to 40°C (104°F) Discharge -15°C(5°F) to 50°C (122°F) Storage -15°C(5°F) to 40°C (104°F)

### Charging Instruction (25°C):

Max charge current:	Max charge current : 2.7A
Cycle use :	Charge voltage: 14.4 to 15.0V
Standby :	Charge voltage: 13.50 to 13.80V

225A

DIMENSIONS	Length	Width	Height	Total Height
Unit: mm	151±2	65±2	94±2	100±2
Unit: inch	5.94±0.08	2.56±0.08	3.70±0.08	3.94±0.08



Constant current discharge characteristics Unit:A(25°C/77°F)											
F.V/Time	5MIN	15MIN	30MIN	60MIN	2HR	3HR	5HR	8HR	10HR	20HR	
1.60V	40.2	19.9	10.88	6.11	4.35	2.45	1.65	1.10	0.89	0.47	
1.67V	38.0	18.9	10.32	5.94	4.25	2.39	1.61	1.09	0.88	0.46	
1.70V	36.6	18.5	10.20	5.87	4.20	2.38	1.59	1.07	0.87	0.45	
1.75V	35.1	18.0	9.99	5.67	4.10	2.35	1.58	1.06	0.86	0.45	
1.80V	33.3	17.0	9.70	5.61	4.05	2.30	1.55	1.04	0.85	0.44	

Constant power discharge characteristics Unit:W/cell(25°C/77°F)											
F.V/Time	5MIN	15MIN	30MIN	60MIN	2HR	3HR	5HR	8HR	10HR	20HR	
1.60V	71.5	36.1	21.0	11.59	6.50	4.81	3.25	2.19	1.77	0.95	
1.67V	68.9	35.8	20.5	11.29	6.40	4.70	3.20	2.15	1.75	0.94	
1.70V	66.2	35.5	20.0	11.15	6.35	4.61	3.10	2.12	1.72	0.93	
1.75V	64.0	34.1	19.5	10.10	6.30	4.57	3.05	2.09	1.70	0.90	
1.80V	62.0	33.1	19.0	10.80	6.15	4.50	3.02	2.05	1.68	0.89	

### APPLICATIONS

- All purpose
- Uninterruptable Power Supply(UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Electronic Cash Registers (ECR)

### GENERAL FEATURES

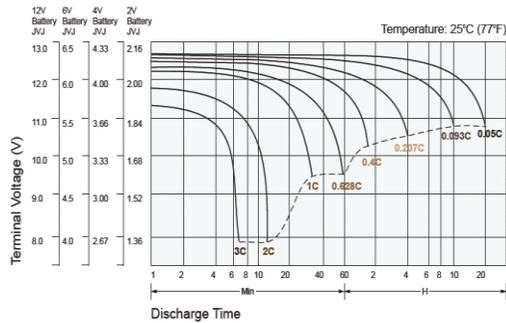
- 5 years design life (25°C)
- Lead calcium alloy, sealed design.
- Non spillable and maintenance free
- AGM separator application
- Designed for a wide range of applications

### STANDARDS

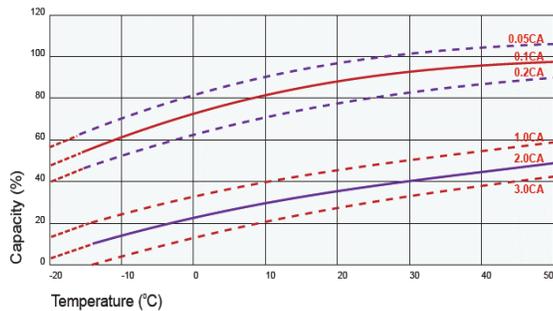
Compliance with IEC 60896 standards



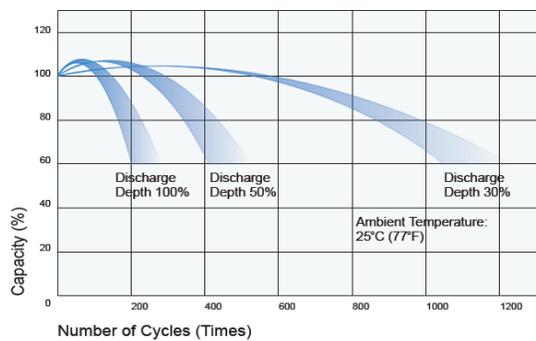
### Battery Discharge Characteristics (25°C/77°F)



### Temperature Effects in Relation to Battery Capacity



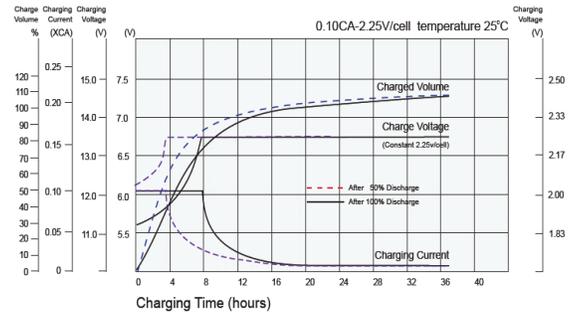
### Cycle Service Life



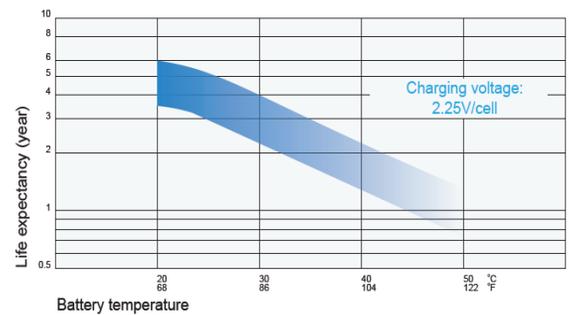
### Charging Procedures

Application	Charge Voltage (V/cell)			Max. Charge Current
	Temperature	Set Point	Allowable Range	
Cycle Use	25°C (77°F)	2.45	2.40 ~ 2.50	0.3C
Standby	25°C (77°F)	2.275	2.25 ~ 2.30	

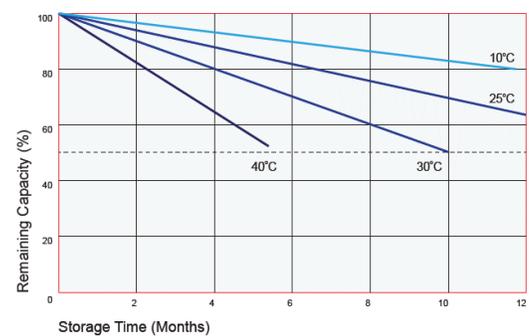
### Battery Charge Characteristic for standby use



### Temperature Effects on Long Term Float Life



### Self Discharge Characteristics



### Discharge Current VS. Discharge Voltage

Final Discharge Voltage V/cell	1.75	1.70	1.65	1.60
Discharge Current (A)	0.2C > (A)	0.2C < (A) < 0.5C	0.5C < (A) < 1.0C	(A) > 1.0C