



## 9FM9 (18V9Ah)

**LONGWAY®** Standard battery is design for a general purpose by KaiYing Power. 9FM9 is a general purpose battery up to 5 years in star service or more than 260 cycles at 100% discharge in cycle service. As with all **LONGWAY®** batteries, all are rechargeable highly efficient, leak proof and maintenance free.



ISO 9001:2008 Standard



ISO 14001:2004 Standard



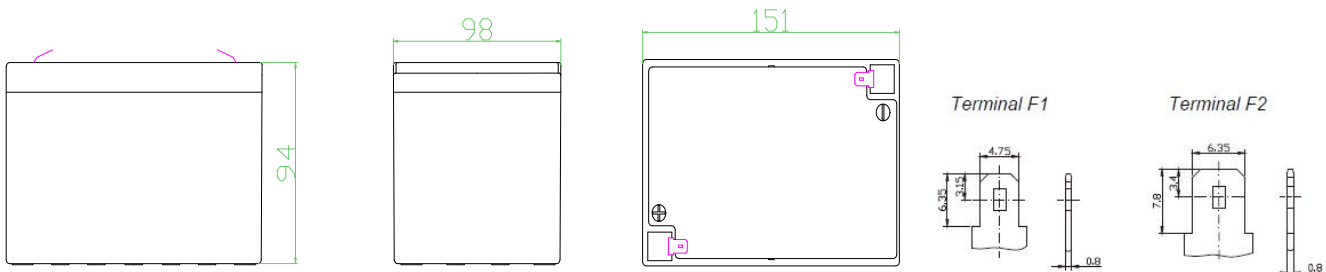
MH46789



### Specifications:

Cells per Unit	9
Normal Voltage	18V
Capacity	7Ah@20Hr-rate to 1.75V per cell@25°C
Weight	Approx. (3.97kg ± 3%) kg(8.75lbs)
Maximum Discharge Current	21A(5sec)
Internal Resistance	Approx. 11mΩ full charged @25°C
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Nominal Operating Temperature Range	25°C±3°C
Float Charging Voltage	20.62~20.7VDC/unit Average @25°C
Maximum Charging Current	2.1A
Equalization and Cycle Service	21.6V~22.5VDC/unit Average @ 25°C
Self Discharge	LONGWAY Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	wire
Container Material	ABS(UL94-HB) *Flammability resistance of (UL94-V0) can be available upon request

### Dimensions:L151\*W98\*H94(TH100)mm



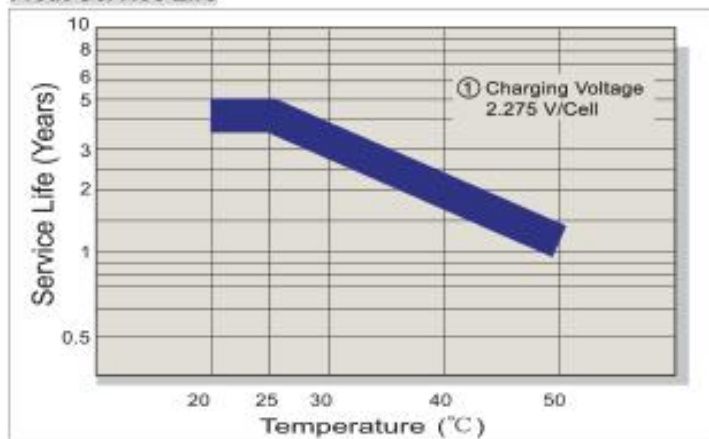
### Constant Current Discharge Characteristics (A, 25 °C)

F.V/TIME	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
14.40	38.25	25.92	20.07	9.900	5.850	3.289	2.466	1.553	1.005	0.850	0.457
14.85	37.10	25.14	19.47	9.603	5.675	3.256	2.442	1.538	1.000	0.845	0.455
15.30	36.34	24.62	19.27	9.504	5.616	3.240	2.430	1.530	0.996	0.842	0.453
15.75	35.19	23.85	18.46	9.108	5.382	3.208	2.406	1.515	0.992	0.839	0.451
16.20	34.16	23.15	18.30	9.029	5.335	3.175	2.381	1.499	0.990	0.837	0.450

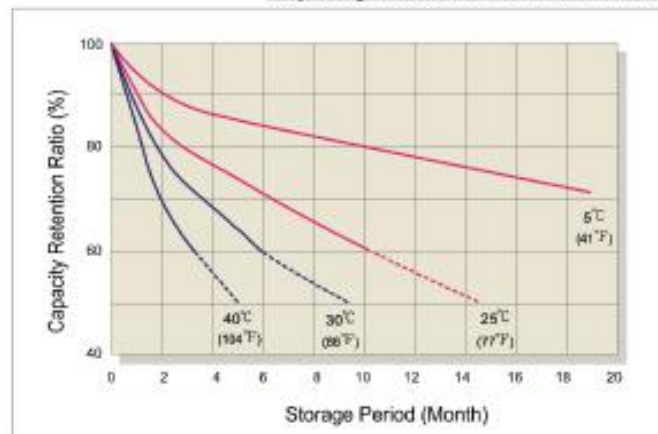
### Constant Power Discharge Characteristics (Watt, 25 °C)

F.V/TIME	5min	10min	15min	30min	14.00	2h	3h	5h	8h	10h	20h
14.40	640.3	438.6	343.2	170.2	101.6	57.71	43.95	27.81	18.09	15.29	8.222
14.85	621.1	425.4	332.9	165.1	98.6	57.15	43.52	27.54	18.00	15.22	8.181
15.30	608.3	416.6	329.5	163.4	97.5	56.86	43.30	27.40	17.93	15.16	8.149
15.75	589.1	403.5	315.7	156.6	93.5	56.29	42.87	27.13	17.86	15.10	8.116
16.20	571.8	391.6	313.0	155.2	92.7	55.72	42.44	26.85	17.82	15.07	8.100

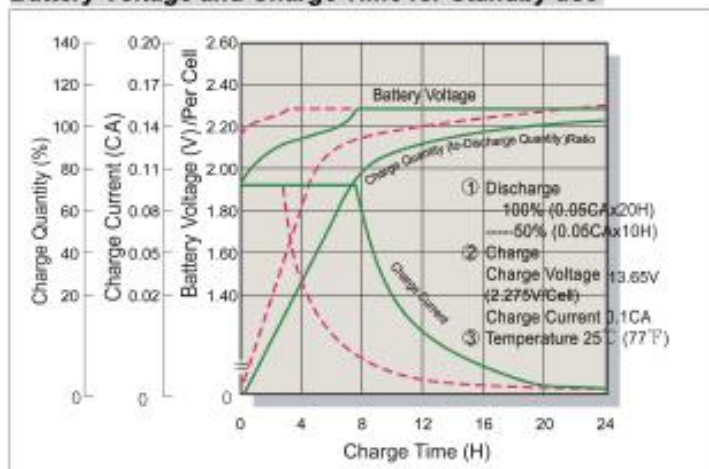
### Float Service Life



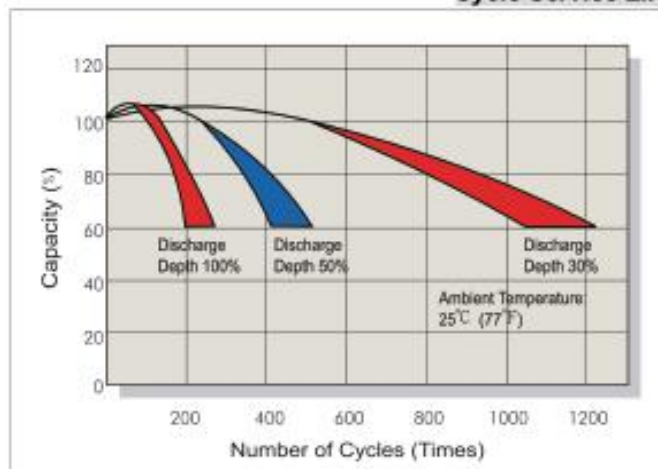
### Capacity Retention Characteristic



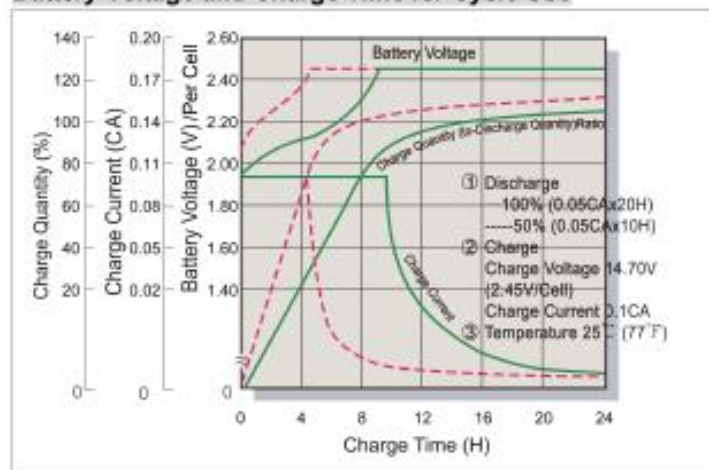
### Battery Voltage and Charge Time for Standby use



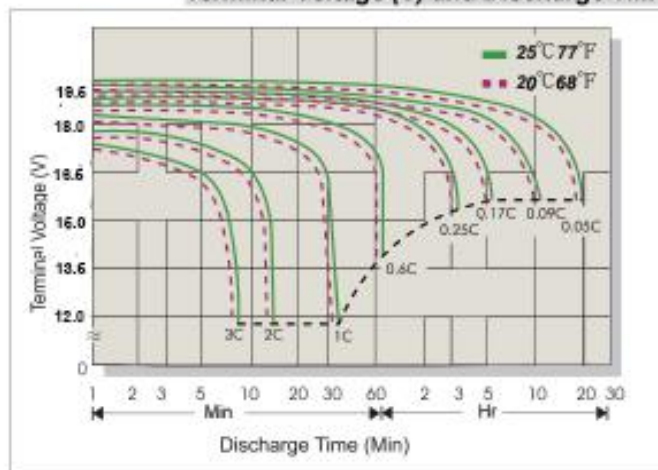
### Cycle Service Life



### Battery Voltage and Charge Time for Cycle Use



### Terminal Voltage (V) and Discharge Time



### 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	

### 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

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