



# <u>6FM3 (12V3.0Ah)</u>

**LONGWAY®** Standard battery is design for a general purpose by KaiYing Power. 6FM3 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.



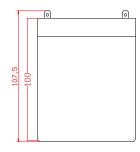
Specifications:	
Cells per Unit	6
Normal Voltage	12V
Capacity	3.0Ah@20Hr-rate to 1.75V per cell@25℃
Weight	Approx. (0.95±3%) kg(2.09lbs)
Maximum Discharge Current	30A(5sec)
Internal Resistance	Approx.40m $\Omega$ full charged @25°C
Operating Temperature Range	Discharge: -15℃~50℃
	Charge: -15℃~40℃
	Storage: -15°C~40°C
Nominal Operating Temperature Range	25℃±3℃(77℉±5℉)
Float Charging Voltage	13.5~13.8VDC/unit Average @25℃
Maximum Charging Current	0.9A
Equalization and Cycle Service	14.4V~15.0VDC/unit Average @ 25°C
Self Discharge	LONGWAY Valve Regulated Lead Acid (VRLA) batteries can be stored
	for more than 6 months at 25 $^\circ\!\!\mathbb{C}.$ Self-discharge ratio less than 3%
	per month at 25°C. Please charge batteries before using.
Terminal	F1(0.187)
Container Material	ABS(UL94-HB)
	*Flammability resistance of (UL94-V0) can be available upon request

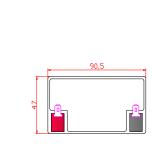


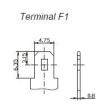
ISO 14001:2004 Standard

**ЯВ** мн46789 С Е

# Dimensions: L90\*W47\*H100(TH107)mm











# Constant Current Discharge Characteristics (A, 25 ${ m C}$ )

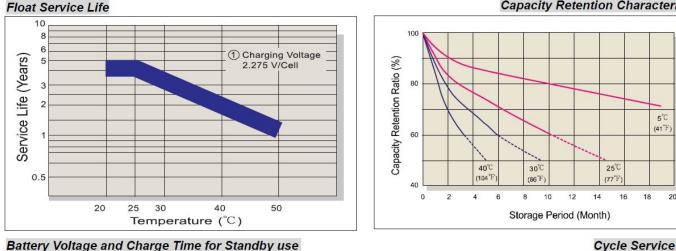
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
9.60	12.66	8.580	6.630	3.240	1.920	1.061	0.788	0.486	0.328	0.283	0.152
9.90	12.28	8.237	6.497	3.078	1.862	1.055	0.782	0.481	0.327	0.282	0.152
10.20	12.03	8.151	6.299	3.046	1.843	1.050	0.780	0.480	0.325	0.281	0.151
10.50	11.65	7.894	6.033	2.916	1.766	1.040	0.764	0.466	0.324	0.280	0.150
10.80	11.31	7.662	5.980	2.916	1.751	1.029	0.757	0.461	0.324	0.279	0.150

# Constant Power Discharge Characteristics (Watt, 25 ${ m C}$ )

F.V/TIME	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
9.60	141	97	76	37.1	22.2	12.4	9.4	5.8	3.93	3.40	1.83
9.90	137	93	74	35.3	21.6	12.3	9.3	4.8	3.92	3.38	1.82
10.20	134	92	72	34.9	21.3	12.3	9.3	5.7	3.90	3.37	1.81
10.50	130	89	69	33.4	20.5	12.2	9.1	5.6	3.89	3.35	1.80
10.80	126	86	68	33.4	20.3	12.0	9.0	5.5	3.89	1.67	1.80



#### **Capacity Retention Characteristic**



13

12

11

10

9

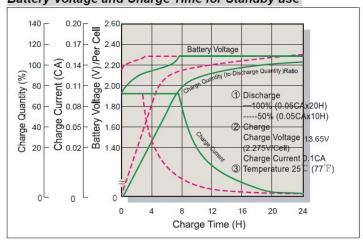
8 0

2 3

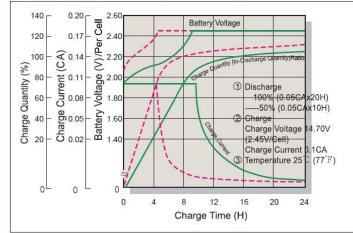
10

20 30

Terminal Voltage (V)



### Battery Voltage and Charge Time for Cycle Use



Discharge Current VS. Discharge Voltage

0.250

1

0.60

# 5 Min Discharge Time (Min)

60 2 3 5 Hr 10

# Charging Procedures

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

Final Discharge Voltage V/cell	1.75	1.70	1.65	1.60
Discharge	0.2C>(A)	0.2C<(A)	0.5C<(A)	(A)>1.0C
Current (A)	0.20 (11)	<0.5C	<1.0C	(, ,) 1.00

KaiYing Power Supply & Electrical Equip Co., Ltd.

Address: KaiYing Industrial Park, ChengXiang Town, Anxi, Quanzhou, Fujian China

Tel:86-595-68782266 Fax: 86-0595-68782222

Website: www.longwaybattery.com Email: Sales@longwaybattery.com

Cycle Service Life

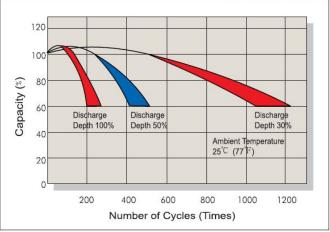
25°C 77°F

■ 20°C 68°F

0.09C 0.05C

20 30

-



Terminal Voltage (V) and Discharge Time