



# 6FM24G (12V24Ah)

**LONGWAY®** Standard battery is design for a general purpose by KaiYing Power. 6FM24G is a general purpose battery up to 8 years in float 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	24Ah@20Hr-rate to 1.75V per cell@25°C		
Weight	Approx.(7.6±3%) kg (16.76lbs)		
Maximum Discharge Current	240A(5sec)		
Internal Resistance	Approx. 10m $\Omega$ full charged @25 $^\circ C$		
Operating Temperature Range	Discharge: -20℃~60℃		
	Charge: 0℃~50℃		
	Storage: -20℃~60℃		
Nominal Operating Temperature Range	<b>25℃±3℃</b>		
Float Charging Voltage	13.7~13.9VDC/unit Average @25℃		
Maximum Charging Current	6.0A		
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°C. Self-discharge ratio less than 3%		
	per month at 25°C. Please charge batteries before using.		
Terminal	F5		
Container Material	ABS(UL94-HB)		
	*Flammability resistance of (UL94-V0) can be available upon request		

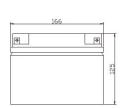


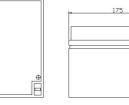


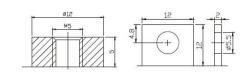




# Dimensions: L175\*W166\*H126(TH126)







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

F.V/TIME	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
9.60	91.2	57.6	45.6	26.4	15.6	8.53	6.09	4.14	2.65	2.24	1.22
9.90	88.5	55.9	44.5	25.7	15.2	8.48	6.06	4.12	2.66	2.24	1.22
10.2	86.6	54.7	43.8	25.3	15.0	8.40	6.00	4.08	2.63	2.22	1.21
10.5	83.9	53.0	42.4	24.6	14.5	8.32	5.94	4.04	2.64	2.21	1.20
10.8	81.4	51.4	41.6	24.1	14.2	8.23	5.88	4.00	2.61	2.21	1.20

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

F.V/TIME	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
9.60	990	650	520	303	181	100	72.3	49.4	31.8	26.9	14.6
9.90	987	630	507	295	176	99.3	72.0	49.2	31.9	26.9	14.6
10.2	967	617	499	290	173	98.3	71.3	48.7	31.6	26.7	14.5
10.5	936	598	483	281	168	97.3	70.6	48.2	31.7	26.6	14.4
10.8	909	580	474	276	165	96.3	69.9	47.7	31.4	26.5	14.4



5℃ (41°F

#### **Capacity Retention Characteristic**

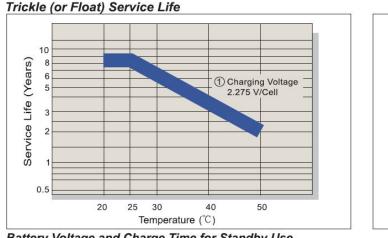
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80

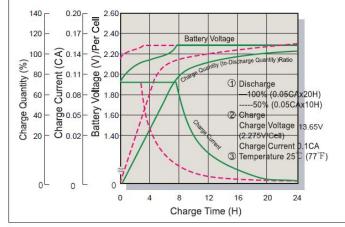
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0 2 4 6

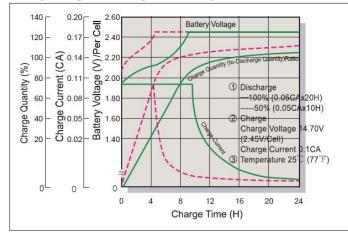
Capacity Retention Ratio (%)







Battery Voltage and Charge Time for Cycle Use



#### **Charging Procedures**

Application	CI	Max. Charge		
Application	Temperature	Set Point	Allowable Range	Current
Cycle Use	25°C(77°F)	2.45	2.40~2.50	0.050
Standby	25℃(77°F)	2.275	2.25~2.30	0.25C

	Discharge	Current V	S. Dischar	ge 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

KaiYing Power Supply & Electrical Equip Co., Ltd.

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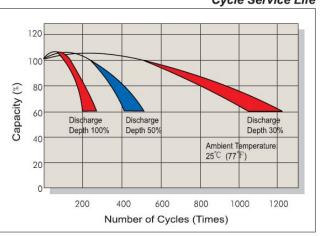
Tel:86-595-68782266 Fax: 86-0595-68782222

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



25°(

(77°F)



40°

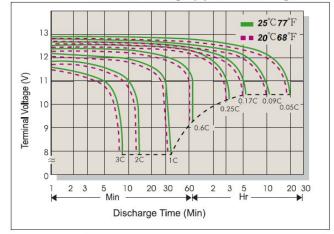
104 F

30°0

(86°F

10 12 14 16 18 20

Terminal Voltage (V) and Discharge Time



# KY-IOP-LW12-24G AO. may 2015