

12FM9 (24V9Ah)



LONGWAY® Standard battery is design for a general purpose by KaiYing Power. 12FM9 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	12
Normal Voltage	24V
Capacity	9Ah@20Hr-rate to 1.75V per cell@25°C
Weight	Approx (4.5±3%)kg (9.9lbs)
Maximum Discharge Current	90A(5sec)
Internal Resistance	Approx. 45mΩ full charged @25°C
Operating Temperature Range	Discharge: -15°C~50°C Charge: -15°C~60°C Storage: -15°C~60°C
Nominal Operating Temperature Range	25°C±3°C
Float Charging Voltage	27.0~27.6VDC/unit Average @25°C
Maximum Charging Current	2.70A
Equalization and Cycle Service	28.8V~30.0VDC/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	F1(0.187)/F2(0.250)
Container Material	ABS(UL94-HB) *Flammability resistance of (UL94-V0) can be available upon request



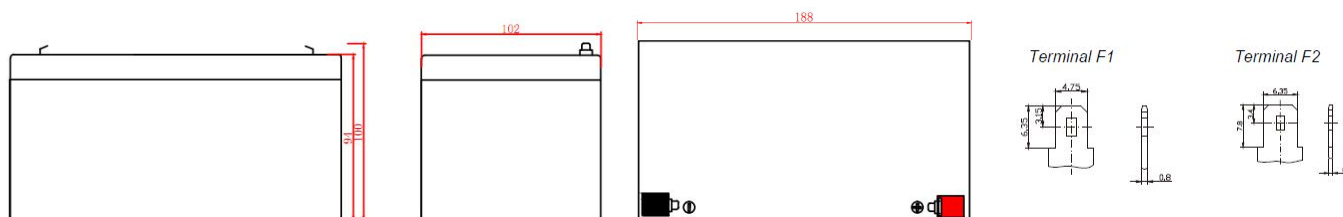
ISO 9001:2008 Standard



ISO 14001:2004 Standard



Dimensions: L188*W102*H94(TH100) mm



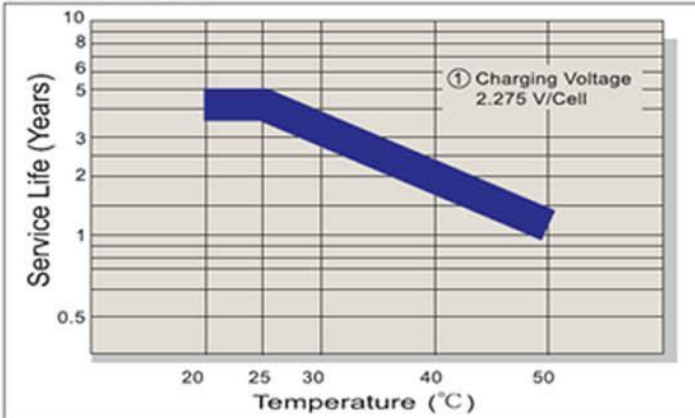
Constant Current Discharge Characteristics (A, 25 °C)

F.V/TIME	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
19.20	30.0	19.4	15.4	8.42	5.14	2.87	2.46	1.44	0.90	0.76	0.41
19.80	29.1	18.9	15.0	8.21	5.01	2.85	2.45	1.43	0.90	0.75	0.41
20.40	28.5	18.5	14.8	8.09	4.94	2.84	2.42	1.42	0.89	0.75	0.41
21.00	27.3	17.7	14.3	7.83	4.78	2.81	2.40	1.40	0.88	0.75	0.41
21.60	26.8	17.4	14.0	7.68	4.69	2.78	2.37	1.39	0.87	0.75	0.41

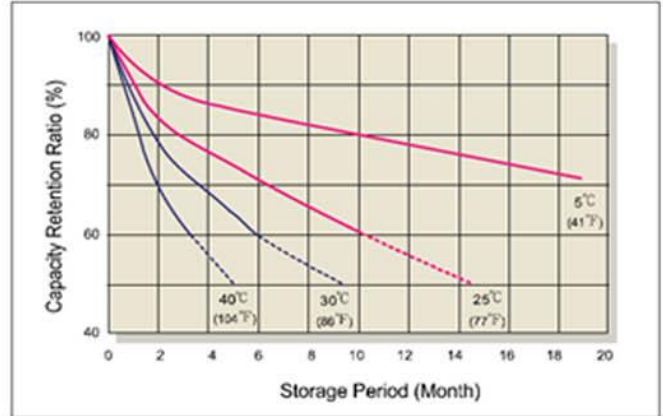
Constant Power Discharge Characteristics (Watt, 25 °C)

F.V/TIME	5min	10min	15min	30min	60min	2h	3h	5h	8h	10h	20h
19.20	647	427	340	193	118	66.8	57.2	34.0	21.5	18.2	9.87
19.80	628	414	331	188	116	66.3	57.5	33.8	21.4	18.1	9.82
20.40	615	406	326	185	114	66.0	57.0	33.5	21.2	18.0	9.78
21.00	589	388	316	180	110.8	65.3	56.4	33.2	21.0	17.9	9.74
21.60	578	381	310	176	108.6	64.7	55.8	32.8	20.7	17.9	9.72

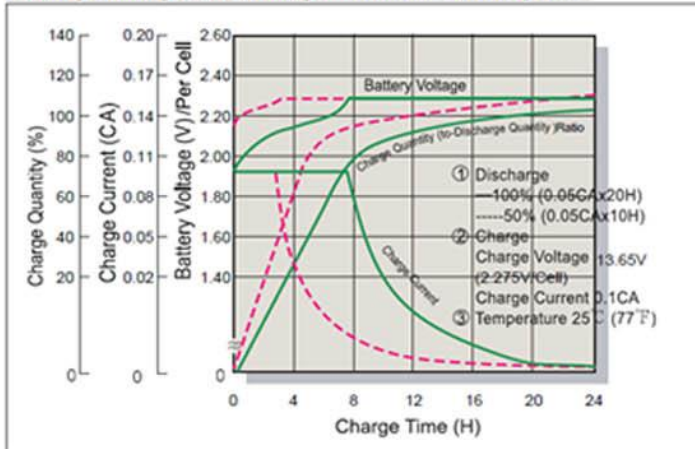
Float Service Life



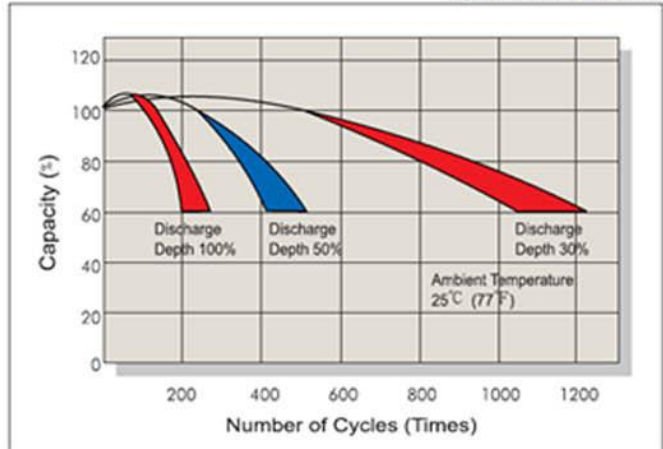
Capacity Retention Characteristic



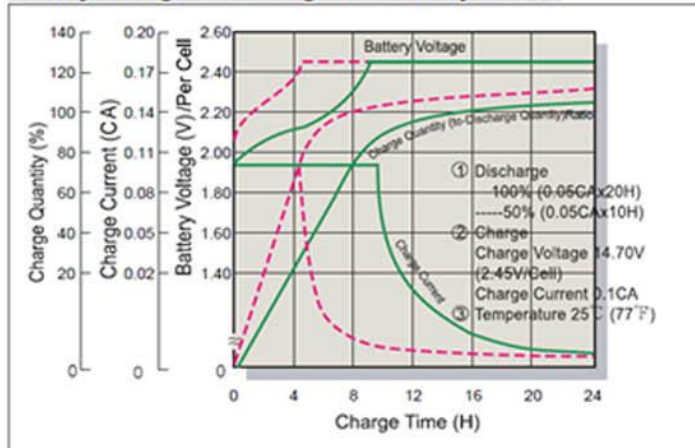
Battery Voltage and Charge Time for Standby use



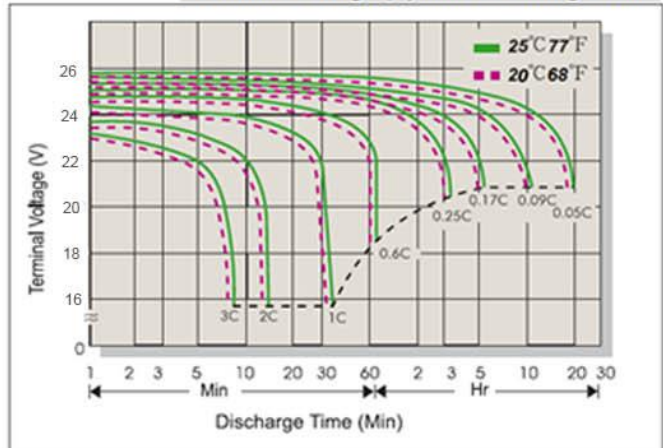
Cycle Service Life



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 < (A)	(A) > 1.0C

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