



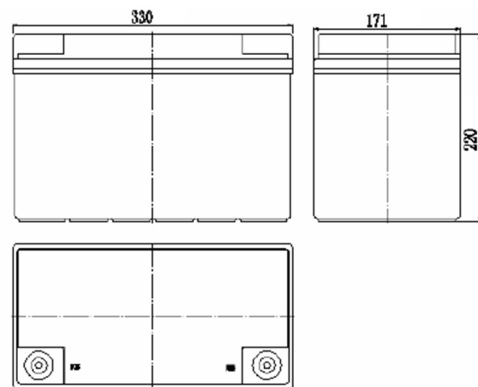
Champion Battery Storage Limited

# 6FM100G

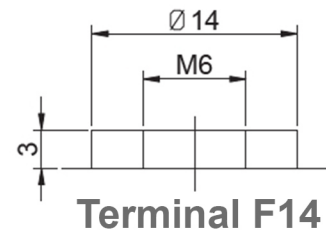
Normal Voltage		12V
Capacity (25°C)	10HR(10.8V)	100 Ah
	5HR(10.5V)	88 Ah
	1HR(9.6V)	61 Ah
Dimension	Length	330 mm
	Width	171 mm
	Height	214 mm
	Total Height	220 mm
Approx. Weight		29.5 Kg
Terminal type		F14 with M6, threaded inserted
Internal resistance (Fully charged, 25°C)		Approx. 4m Ω
Capacity effected by temperature 10HR	40°C	103%
	25°C	100%
	0°C	88%
	-15°C	70%
Self-discharge (25°C)	3 month	Remaining Capacity: 94%
	6 month	Remaining Capacity: 88%
	12 month	Remaining Capacity: 75%
Nominal operating temperature		25°C±3°C(77°F±5°F)
Operating temperature range	Discharge	-15°C~55°C(5°F~131°F)
	Charge	-10°C~55°C(14°F~131°F)
	Storage	-20°C~55°C(-4°F~131°F)
Float charging voltage(25°C)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		13.50 to 13.80V Temperature compensation: -30mV/°C
Maximum charging current		25A
Terminal material		Copper
Maximum discharge current		800A(5 sec.)
Designed floating life (20°C)		15 years



## Dimensions



## Terminal



Terminal F14

## Applications

- » Telecommunication system
- » Railway station
- » Ship Equipment
- » Military Equipment
- » Medical treatment equipment
- » Alarm system
- » Control systems
- » Emergency lamp
- » Firefighting equipment
- » Standby power supply
- » UPS and solar power

## General Features

- » Wide operating temperature range from -25°C to 45°C
- » No memory effect, thick flat plate with high Tin low Calcium alloy
- » Long Service Life, Both for Float and Cyclic use
- » Sealed and maintenance free operation
- » ABS containers and covers
- » Safety valve installation for explosion proof

## Champion GEL Series Advantage:

1. Designed for Solar System
2. Totally Maintenance Free with Gelled Electrolyte Technology and PVC
3. Wide Operation Temperature from -25C to 45C
4. Low Self Discharge Rate and the Remaining Capacity can be 76% after 12 months
5. Good deep-discharge Recovery with Thick Battery Plate produced based on classical lead acid battery formula
6. Good ABS Container without Deformation or Explosion



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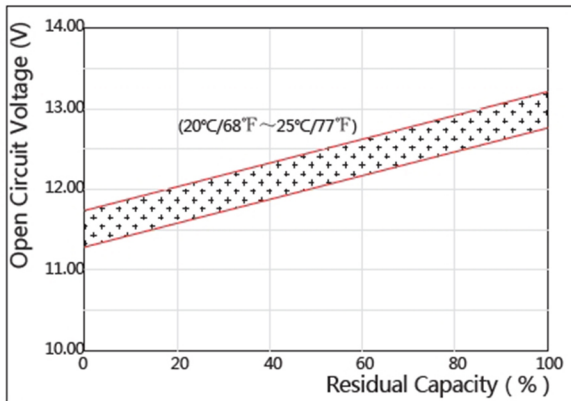
## Constant Current Discharge Characteristics (A, 25°C)

F.V/Time	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
1.60 V	301	221.6	183.7	113.7	68	40.0	29	22.9	19.0	13.1	10.8	5.79
1.67 V	269	204.9	172.6	108.8	66.3	39.0	28.8	22.5	18.9	12.9	10.6	5.63
1.70 V	239.8	186	164.0	104.6	65.1	38.8	28.3	22.3	18.7	12.7	10.5	5.56
1.75 V	208.7	173	151.7	101	64.0	37.9	27.7	22	18.5	12.5	10.3	5.45
1.80 V	184.9	158	141.6	96	61.6	37.0	27.1	21.5	17.9	12.3	10.0	5.34
1.85 V	158	141.7	129.5	91	59.1	36.1	26.2	20.9	17.5	11.9	9.79	5.19

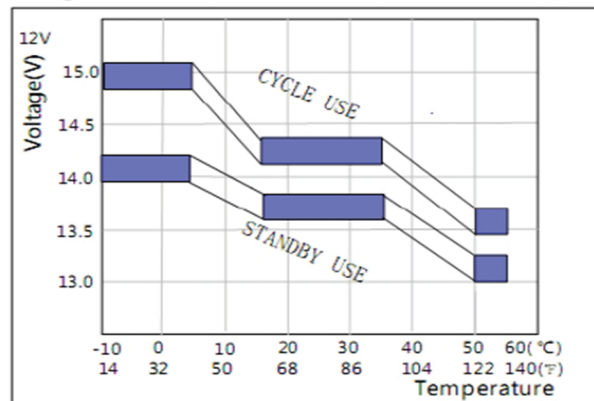
## Constant Power Discharge Characteristics (Watt, 25°C)

F.V/Time	5 min	10 min	15 min	30 min	1 h	2 h	3 h	4 h	5 h	8 h	10 h	20 h
1.60 V	530	400	334.2	209.1	127.3	74.1	53.9	43.4	36.5	25.0	20.7	11.6
1.67 V	479	372	317.5	201.2	124.5	73.4	53.7	42.9	35.9	24.8	20.5	11.4
1.70 V	434	342	303.3	195.4	122.3	73.1	53.2	42.7	35.6	24.6	20.3	11.1
1.75 V	382	322	284.1	190.3	121.5	72.3	52.9	42.5	35.5	24.4	20.2	10.8
1.80 V	341	295	268.3	183.6	118	71.5	52.6	41.9	34.9	24.1	20.0	10.6
1.85 V	297	269	246.7	175.3	114.1	69.2	51.3	41.2	34.5	23.8	19.7	10.4

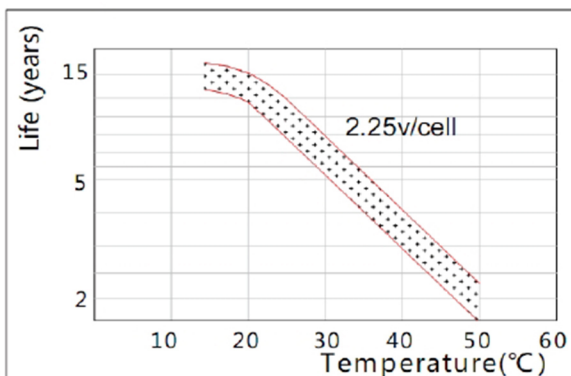
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



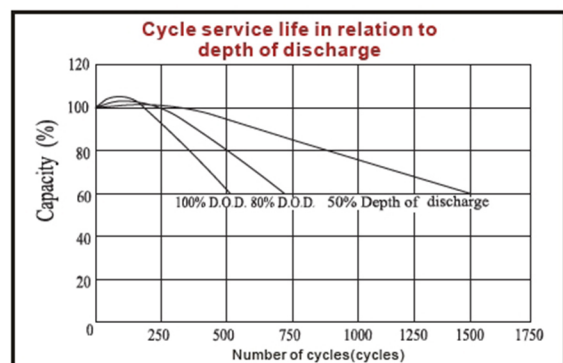
The Relationship for Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25°C)



**GC Solar**

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