

# H5 ⇒ C

# FMG SERIES- Front Terminal GEL

## FMG12-100L (12V100AH)

### Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	100.0AH	
Dimension	Length	560±3mm (22.04 inches)
	Width	110±2mm (4.33 inches)
	Container Height	233±3mm (9.17 inches)
	Total Height (with Terminal)	233±3mm (9.17 inches)
	Approx Weight	Approx 35.6 kg (78.5lbs)
Terminal	T13	
Container Material	ABS	
Rated Capacity	100.0 AH/5.0A	(20hr , 1.80V/cell, 25°C/77°F)
	95.0 AH/9.5A	(10hr, 1.80V/cell, 25°C/77°F)
	82.7 AH/16.54A	(5hr, 1.75V/cell, 25°C/77°F)
	74.4 AH/24.8A	(3hr, 1.75V/cell, 25°C/77°F)
	54.5 AH/54.5A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	1000A (5s)	
Internal Resistance	Approx 5.5mΩ	
Operating Temp. Range	Discharge	-20~55°C (-4~131°F)
	Charge	0~40°C (32~104°F)
	Storage	-20~50°C (-4~122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 20A. Voltage	
	14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	TAICO FMG series batteries may be stored for up to 9 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



### Applications

- ◆ Telecom application( 19 inches or 23 inches power cabinets )
- ◆ UPS, Standby power supply
- ◆ Systems Solar Power
- ◆ Network connection equipment of communication system
- ◆ Power station systems
- ◆ Railway and marine systems
- ◆ Cable TV



### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	79.0	62.0	47.3	39.6	27.8	21.2	17.6	15.2	13.0	11.5	10.4	9.52	9.09	4.80
1.80V/cell	90.5	69.3	52.2	43.7	30.1	22.7	18.6	15.9	13.7	12.1	10.9	10.0	9.50	5.00
1.75V/cell	101.7	76.2	56.4	46.8	31.9	24.0	19.5	16.54	14.2	12.5	11.3	10.3	9.69	5.10
1.70V/cell	109.5	81.6	59.9	49.5	33.8	25.0	20.1	17.1	14.7	12.9	11.6	10.6	9.92	5.17
1.67V/cell	114.0	84.8	62.0	51.4	34.7	25.8	20.6	17.4	14.9	13.1	11.8	10.7	10.0	5.22
1.60V/cell	123.5	90.8	66.6	54.5	36.1	26.8	21.4	18.0	15.3	13.4	12.0	10.9	10.2	5.29

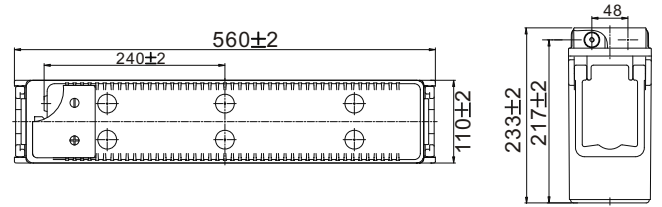
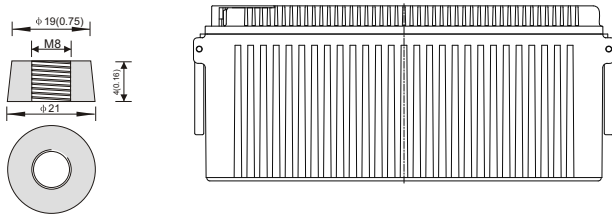
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	151.2	119.5	91.7	77.1	54.4	41.5	34.5	29.9	25.8	22.9	20.7	19.0	18.1	9.58
1.80V/cell	170.9	132.3	100.2	84.6	58.5	44.3	36.5	31.3	27.0	23.9	21.7	19.9	18.9	9.97
1.75V/cell	189.9	143.9	107.4	90.1	61.9	46.7	38.1	32.4	27.9	24.7	22.3	20.5	19.3	10.2
1.70V/cell	202.4	153.0	113.6	95.0	65.3	48.5	39.2	33.3	28.8	25.5	22.9	21.0	19.7	10.3
1.67V/cell	208.3	156.8	116.6	97.8	66.6	49.9	40.1	33.9	29.2	25.8	23.2	21.2	19.9	10.4
1.60V/cell	223.2	166.8	124.6	103.3	69.0	51.6	41.4	34.8	29.8	26.3	23.6	21.6	20.3	10.5

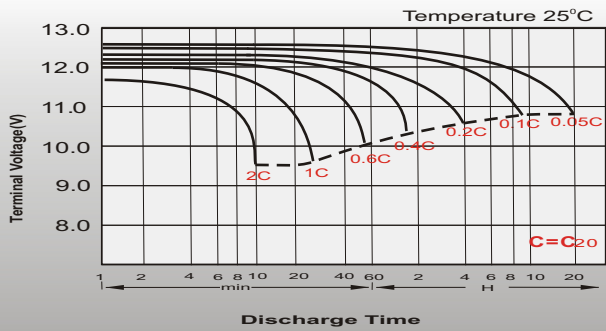
# Dimensions

## T11 Terminal

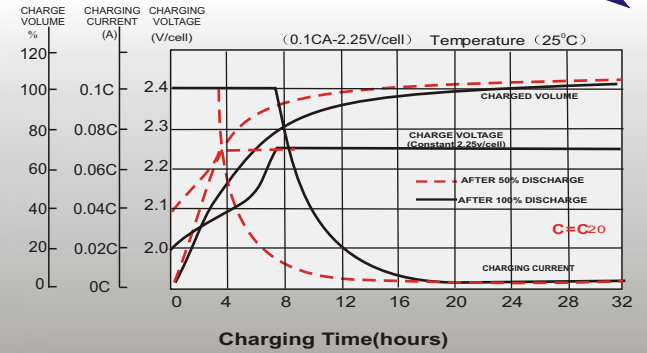
Unit: mm [inches]



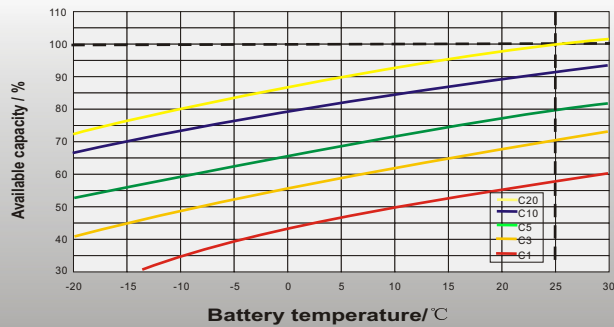
## Discharge Characteristics



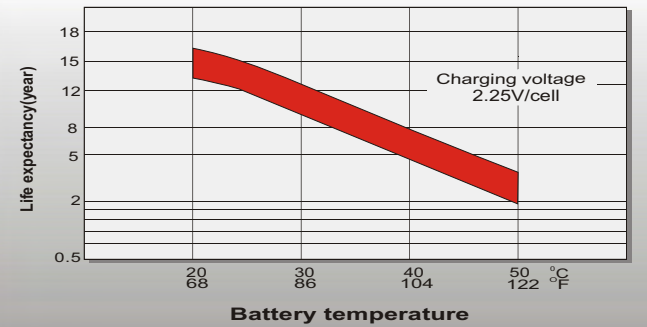
## Float Charging Characteristics



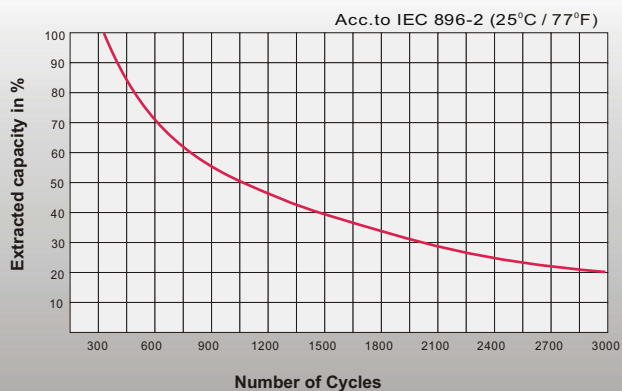
## Temperature Effects in Relation to Battery Capacity



## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## General Relation of Capacity VS. Storage Time

