

### Specifications

Nominal Voltage	12V	
Nominal Capacity (10HR)	51AH	
Dimension	Length	229mm (9.02 inches)
	Width	138mm (5.43 inches)
	Height	205mm (8.07 inches)
	Total Height (with Terminal)	228mm (8.98 inches)
	Approximate Weight	16.6 kg (36.60 lbs)
Battery Type	Valve Regulated Lead-Acid Battery, Gel Design	
Terminal Type	NB / IT	
Rated Capacity	51.0AH	(20hr, 1.75V/cell, 25°C/77°F)
	56.5AH	(10hr, 1.75V/cell, 25°C/77°F)
	40.0AH	(5hr, 1.75V/cell, 25°C/77°F)
	39.0AH	(3hr, 1.60V/cell, 25°C/77°F)
	29.2AH	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	500A	
Internal Resistance	9mΩ	
Operating Temp. Range	Discharge:	-20°C (-4°F)~55°C (131°F)
	Charge:	0°C (32°F)~40°C (104°F)
	Storage:	-20°C (-4°F)~50°C (122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Container Material	ABS (Option: 94-HB & 94-V0 flame retardant case)	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	SigmasTek SPG series batteries may be stored for up to 9 months at 25°C (77°F) and then a freshening charge is recommended. For higher temperatures the time interval will be shorter.	



### Applications

- Uninterruptible Power Supply (UPS)
- Electric wheelchairs, scooters, bikes
- Electronic apparatus and equipment
- Alarm and security systems
- Emergency first responder equipment
- Emergency lighting
- Medical devices
- Electric carts
- Telecom equipment
- Switchgear
- Solar power systems



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

F.V. (V/cell) \ Discharge Time	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	66.2	48.6	35.7	29.2	17.5	13.0	10.4	8.68	5.81	4.91	2.65
1.67V	61.1	45.4	33.2	27.5	16.8	12.5	10.0	8.42	5.71	4.82	2.61
1.70V	58.7	43.7	32.1	26.5	16.4	12.1	9.74	8.25	5.63	4.76	2.58
1.75V	54.4	40.8	30.2	25.1	15.4	11.6	9.43	8.00	5.46	4.65	2.55
1.80V	48.5	37.1	27.9	23.4	14.6	11.0	9.00	7.70	5.29	4.56	2.50
1.85V	42.3	33.2	25.3	21.2	13.5	10.3	8.49	7.33	5.05	4.37	2.40

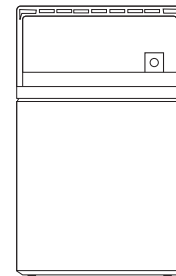
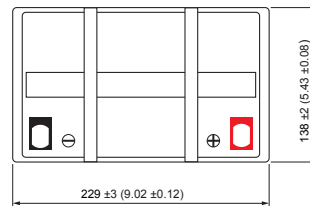
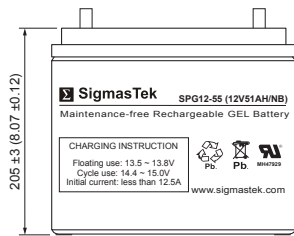
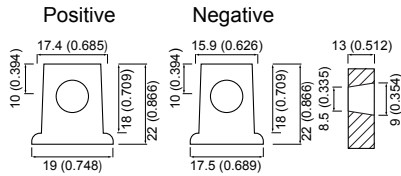
### Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

F.V. (V/cell) \ Discharge Time	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	119.5	89.3	66.7	55.3	32.2	25.0	20.0	16.9	11.4	9.72	5.25
1.67V	111.5	84.2	62.6	52.4	59.7	24.1	19.4	16.4	11.3	9.55	5.18
1.70V	108.4	81.9	60.8	50.8	31.6	23.5	19.0	16.1	11.1	9.45	5.14
1.75V	101.7	77.2	57.7	48.3	29.9	22.6	18.4	15.7	10.8	9.24	5.08
1.80V	91.50	70.8	53.8	45.3	28.3	21.4	17.6	15.1	10.5	9.07	4.98
1.85V	81.00	64.0	49.1	41.3	26.3	20.1	16.7	14.5	10.0	8.70	4.79

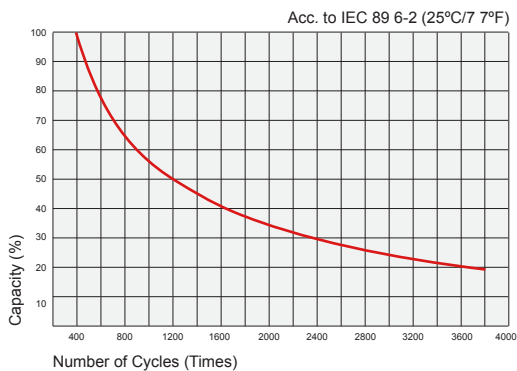
## Dimensions

### NB Terminal

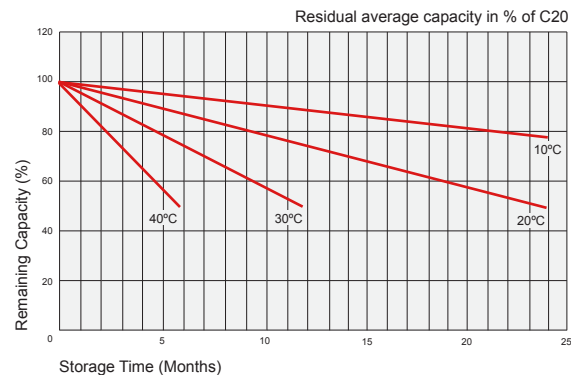
Unit: mm (inches)



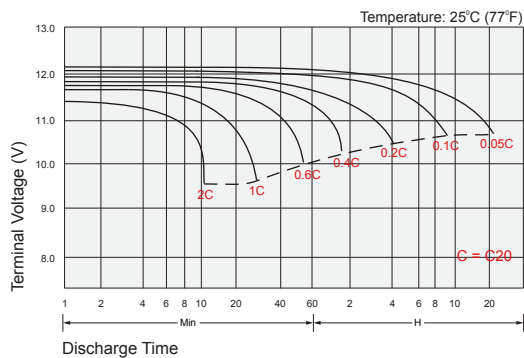
## Cycle Service Life



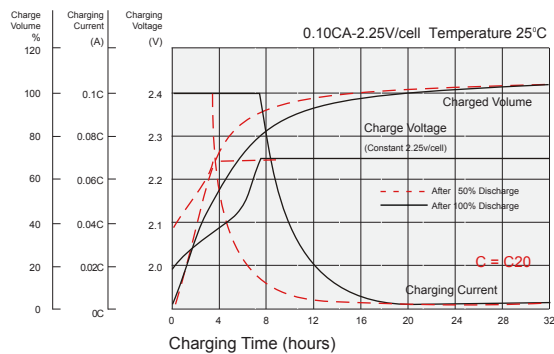
## Self Discharge Characteristics



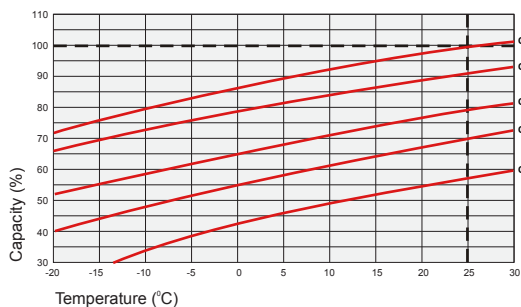
## Discharge Characteristics



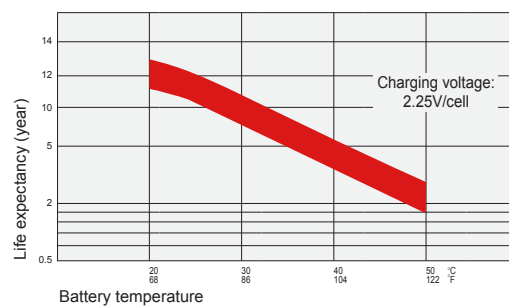
## Float Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Temperature Effects on Long Term Float Life



## Contact Information

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