

Specifications

Nominal Voltage	12V	
Nominal Capacity (10HR)	39AH	
Dimension	Length	197mm (7.76 inches)
	Width	165mm (6.50 inches)
	Height	170mm (6.69 inches)
	Total Height (with Terminal)	170mm (6.69 inches)
	Approximate Weight	13.5 kg (29.77 lbs)
Battery Type	Valve Regulated Lead-Acid Battery, Gel Design	
Terminal Type	IT	
Rated Capacity	38.8AH	(20hr, 1.75V/cell, 25°C/77°F)
	35.3AH	(10hr, 1.75V/cell, 25°C/77°F)
	30.4AH	(5hr, 1.75V/cell, 25°C/77°F)
	29.6AH	(3hr, 1.60V/cell, 25°C/77°F)
	22.2AH	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	380A	
Internal Resistance	12mΩ	
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	50.3	36.9	27.1	22.2	13.3	9.85	7.87	6.60	4.42	3.73	2.01
1.67V	46.4	34.5	25.2	20.9	12.7	9.47	7.58	6.40	4.34	3.66	1.98
1.70V	44.6	33.2	24.4	20.1	12.4	9.18	7.40	6.27	4.28	3.62	1.96
1.75V	41.4	31.0	23.0	19.0	11.7	8.82	7.16	6.08	4.15	3.53	1.94
1.80V	36.8	28.2	21.2	17.8	11.1	8.35	6.84	5.85	4.02	3.47	1.90
1.85V	32.1	25.2	19.3	16.1	10.2	7.79	6.45	5.57	3.84	3.32	1.82

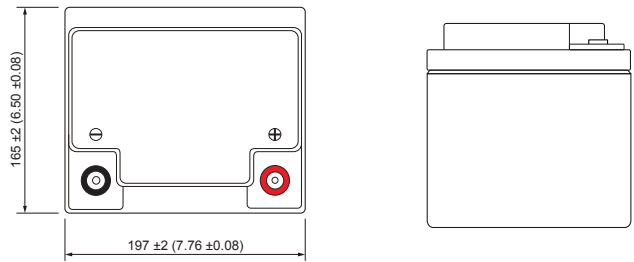
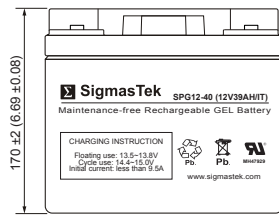
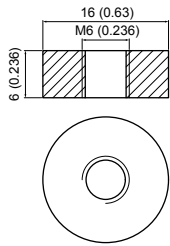
Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

F.V. (V/cell) \ Discharge Time	20min	30min	45min	1h	2h	3h	4h	5h	8h	10h	20h
1.60V	90.8	67.9	50.7	42.1	25.3	19.0	15.2	12.8	8.69	7.39	3.99
1.67V	84.8	64.0	47.5	39.8	24.5	18.3	14.7	12.5	8.56	7.26	3.94
1.70V	82.4	62.3	46.2	38.6	24.0	17.8	14.4	12.3	8.45	7.18	3.90
1.75V	77.3	58.7	43.9	36.7	22.7	17.2	14.0	11.9	8.22	7.03	3.86
1.80V	69.6	53.8	40.9	34.4	21.5	16.3	13.4	11.5	7.98	6.90	3.79
1.85V	61.5	48.6	37.3	31.4	20.0	15.3	12.7	11.0	7.64	6.61	3.64

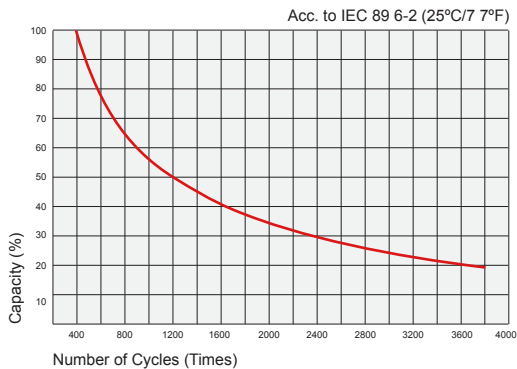
Dimensions

IT Terminal

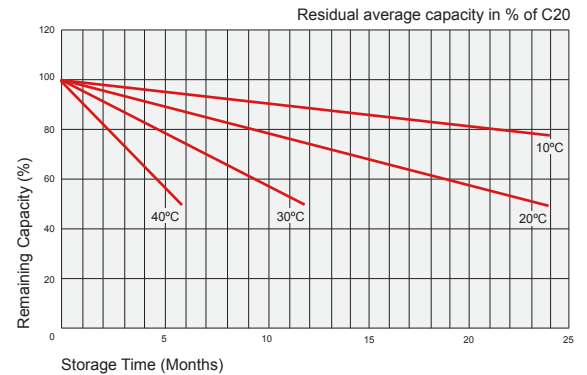
Unit: mm (inches)



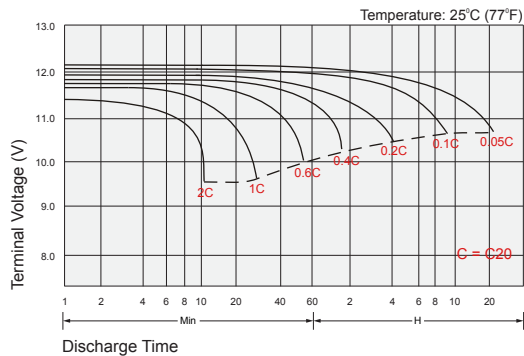
Cycle Service Life



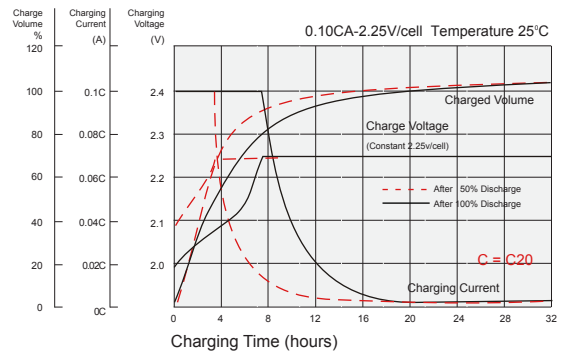
Self Discharge Characteristics



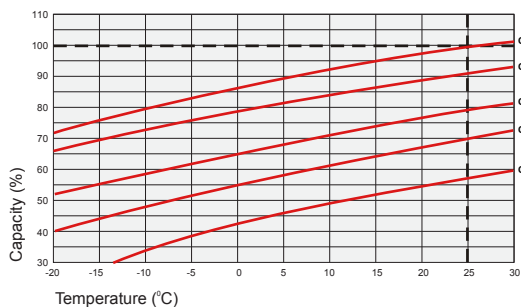
Discharge Characteristics



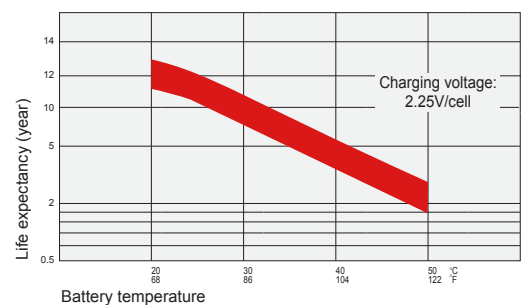
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



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