

Specifications

Nominal Voltage	12V	
Nominal Capacity	20AH	2 HR Rate (1.75V/cell)
Dimension	Length	181mm (7.13 inches)
	Width	76mm (2.99 inches)
	Height	167mm (6.59 inches)
	Total Height (with Terminal)	167mm (6.59 inches)
	Approximate Weight	7.2 kg (15.87 lbs)
Battery Type	Valve Regulated Lead-Acid Battery, Deep Cycle Design	
Cycle Life	Rated for 500 charge-discharge cycles (60% D.O.D.)	
Terminal Type	IT	
Rated Capacity	25.20AH	(20hr, 1.75V/cell, 25°C/77°F)
	25.30AH	(10hr, 1.75V/cell, 25°C/77°F)
	23.75AH	(5hr, 1.75V/cell, 25°C/77°F)
	20.10AH	(2hr, 1.75V/cell, 25°C/77°F)
	17.70AH	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	150A (5s)	
Internal Resistance	12mΩ	
Operating Temp. Range	Discharge:	-15°C (5°F)~50°C (122°F)
	Charge:	0°C (-32°F)~40°C (104°F)
	Storage:	-15°C (5°F)~40°C (104°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 SP DZM series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is recommended. For higher temperatures the time interval will be shorter.	



Applications

- Electric Bikes
- Electric Scooters
- Electric Wheelchairs
- Solar Lighting
- Other cycle duty applications



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

F.V. (V/cell) \ Discharge Time	5min	10min	15min	30min	1h	2h	3h	5h	10h	20h
1.60V	109.1	63.7	50.2	29.9	17.7	10.30	7.50	4.85	2.58	1.29
1.67V	103.0	61.4	47.9	29.7	17.5	10.20	7.49	4.80	2.56	1.28
1.70V	99.00	58.2	46.3	29.5	17.4	10.10	7.39	4.78	2.55	1.27
1.75V	93.90	55.2	45.5	29.1	17.2	10.05	7.32	4.75	2.53	1.26
1.80V	82.80	48.6	41.4	26.3	16.2	9.440	6.77	4.49	2.37	1.23

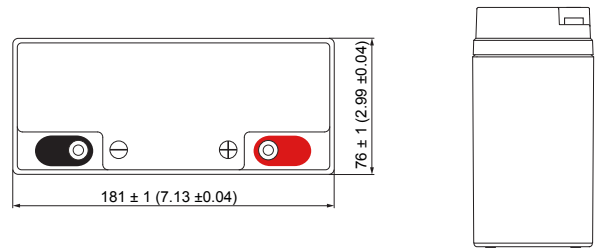
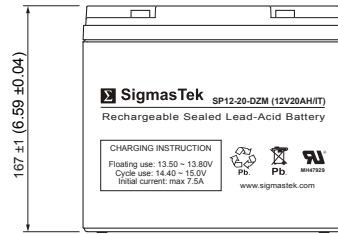
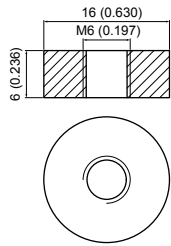
Constant Power Discharge (Watts Per Cell) at 25°C (77°F)

F.V. (V/cell) \ Discharge Time	5min	10min	15min	30min	1h	2h	3h	5h	10h	20h
1.60V	192.0	124.8	98.7	56.7	33.7	20.00	14.50	9.58	5.20	2.67
1.67V	185.5	122.4	98.0	56.3	33.3	19.83	14.42	9.57	5.17	2.65
1.70V	177.8	119.5	95.8	55.8	33.0	19.67	14.33	9.43	5.13	2.63
1.75V	167.4	115.3	93.0	54.3	32.5	19.50	14.17	9.25	5.05	2.62
1.80V	144.6	106.5	88.9	53.3	31.7	19.17	13.72	9.07	4.93	2.57

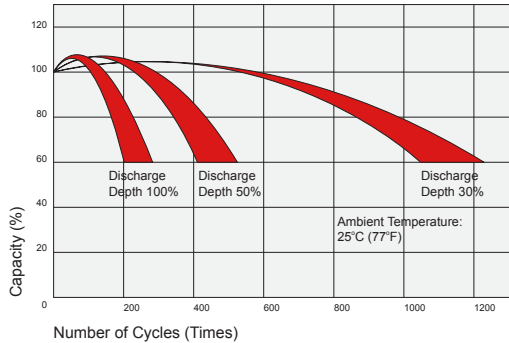
Dimensions

IT Terminal

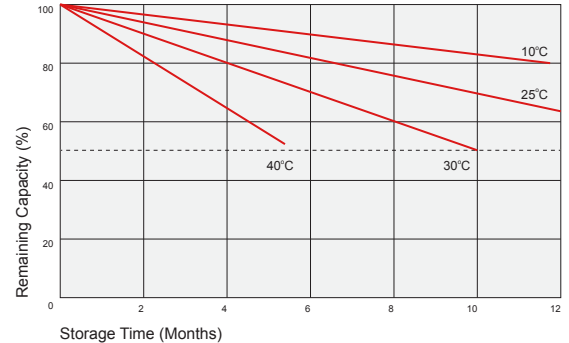
Unit: mm (inches)



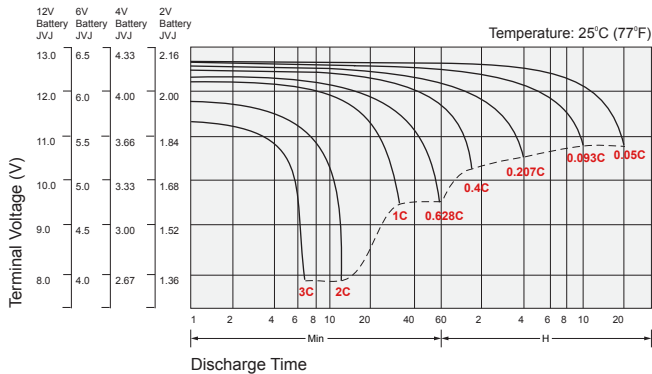
Cycle Service Life



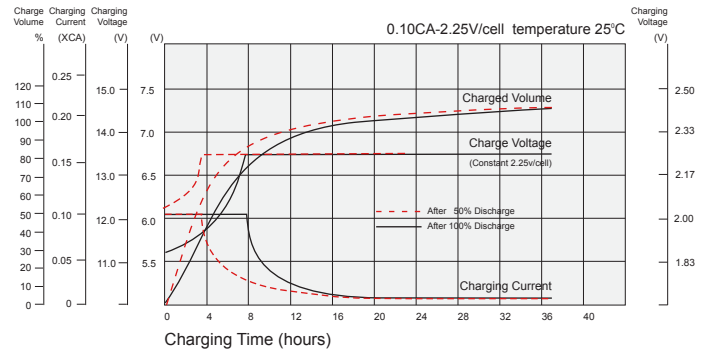
Self Discharge Characteristics



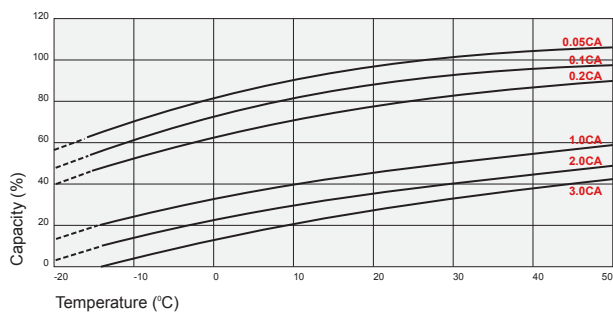
Discharge Characteristics



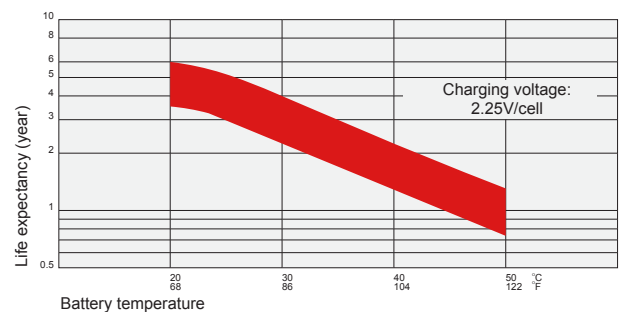
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Temperature Effects on Long Term Float Life



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