



GP7.5-12 12V7.5AH

GP SERIES-VRLA Battery



Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	7.5AH	
Dimension	Length	151±1mm (5.95 inches)
	Width	65±1mm (2.56 inches)
	Container Height	94.5±1mm (3.72 inches)
	Total Height (with Terminal)	100±1mm (3.94 inches)
Approx Weight	Approx 2.2 kg (4.85 lbs)	
Terminal	F1	
Container Material	ABS	
Rated Capacity	7.50 AH/0.375A	(20hr, 1.80V/cell, 25°C/77°F)
	6.98 AH/0.698A	(10hr, 1.80V/cell, 25°C/77°F)
	6.40 AH/1.28A	(5hr, 1.75V/cell, 25°C/77°F)
	5.73 AH/1.91A	(3hr, 1.75V/cell, 25°C/77°F)
	4.71 AH/4.71A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	112.5A (5s)	
Internal Resistance	Approx 21mΩ	
Operating Temp. Range	Discharge : -15~50°C (5~122°F)	
	Charge : 0~40°C (32~104°F)	
	Storage : -15~40°C (5~104°F)	
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 2.25A. 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	JYC GP series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

Applications

- ◆ All purpose
- ◆ Uninterruptable Power Supply (UPS)
- ◆ Electric Power System (EPS)
- ◆ Emergency backup power supply
- ◆ Emergency light
- ◆ Railway signal
- ◆ Aircraft signal
- ◆ Alarm and security system
- ◆ Electronic apparatus and equipment
- ◆ Communication power supply
- ◆ DC power supply
- ◆ Auto controlsystem



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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	17.2	12.5	10.7	9.07	6.62	4.84	3.86	2.29	1.71	1.39	1.18	1.02	0.810	0.671	0.368
1.80V/cell	20.6	14.6	12.1	9.86	7.13	5.14	4.10	2.40	1.78	1.45	1.22	1.06	0.839	0.700	0.375
1.75V/cell	23.0	16.0	12.9	10.4	7.41	5.35	4.26	2.48	1.83	1.48	1.25	1.08	0.852	0.711	0.383
1.70V/cell	25.1	17.1	13.7	10.9	7.70	5.49	4.34	2.53	1.87	1.51	1.27	1.10	0.870	0.720	0.387
1.65V/cell	27.3	18.0	14.3	11.3	7.97	5.66	4.46	2.58	1.90	1.54	1.29	1.12	0.881	0.728	0.391
1.60V/cell	28.7	18.9	14.8	11.7	8.19	5.81	4.56	2.64	1.94	1.57	1.32	1.14	0.896	0.739	0.398

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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	32.4	23.9	20.5	17.6	12.9	9.49	7.59	4.53	3.40	2.77	2.35	2.04	1.63	1.35	0.743
1.80V/cell	38.5	27.7	23.0	19.0	13.8	10.0	8.06	4.74	3.53	2.89	2.43	2.12	1.68	1.40	0.755
1.75V/cell	42.7	30.0	24.4	19.9	14.3	10.4	8.35	4.87	3.61	2.93	2.48	2.15	1.70	1.42	0.767
1.70V/cell	45.8	31.6	25.7	20.7	14.7	10.6	8.44	4.94	3.66	2.97	2.51	2.17	1.72	1.43	0.769
1.65V/cell	49.0	32.9	26.5	21.3	15.1	10.8	8.59	4.98	3.69	3.00	2.53	2.19	1.73	1.43	0.771
1.60V/cell	50.3	33.7	26.9	21.6	15.3	11.0	8.71	5.06	3.75	3.03	2.56	2.22	1.75	1.45	0.780

Note The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.



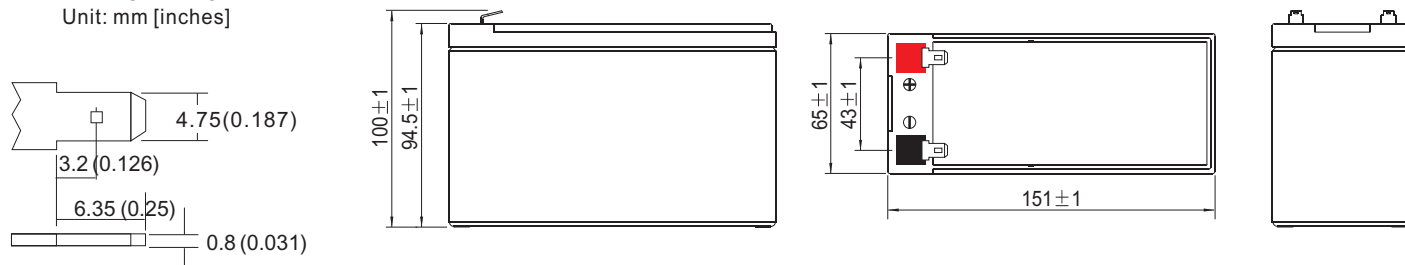
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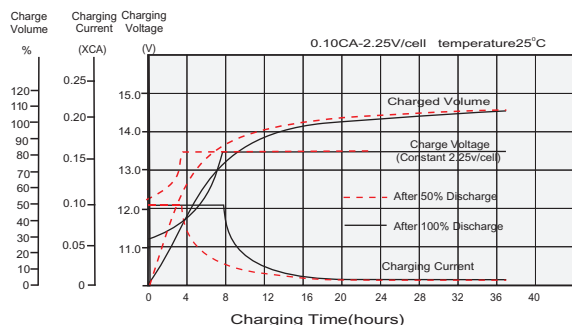
Dimensions

F1 Terminal

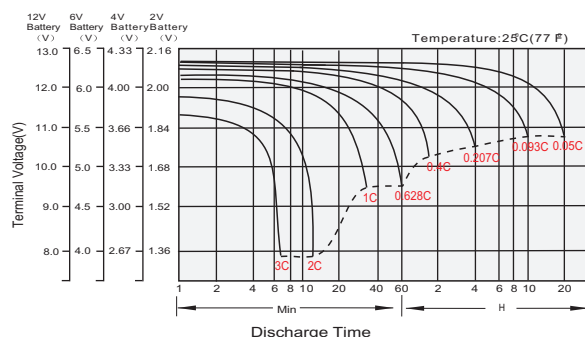
Unit: mm [inches]



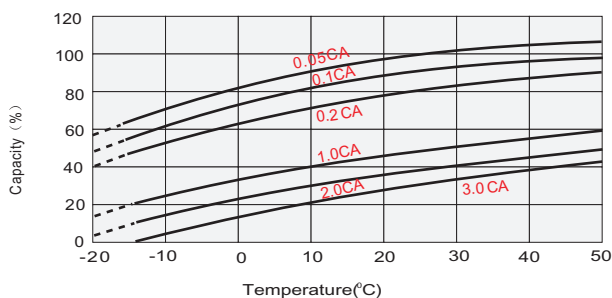
Float Charging Characteristics



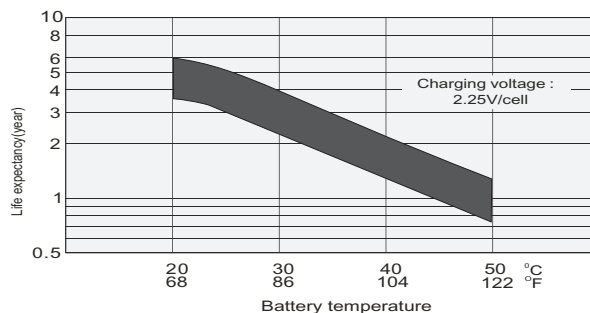
Discharge Characteristics



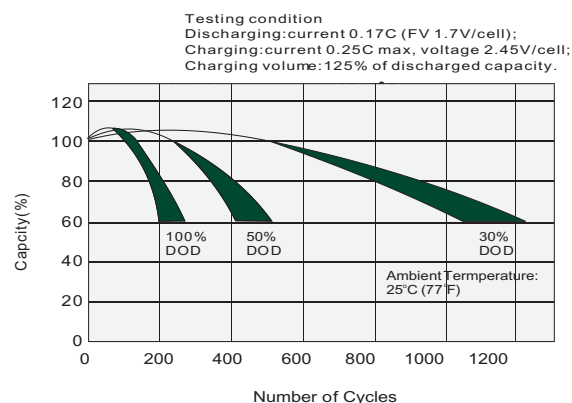
Temperature Effects in Relation to Battery Capacity



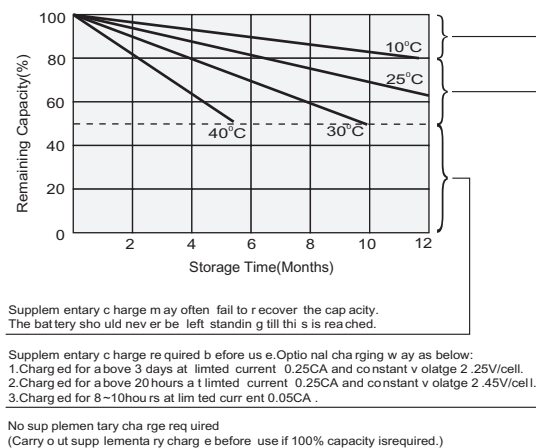
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



JYC GP BATTERIES

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