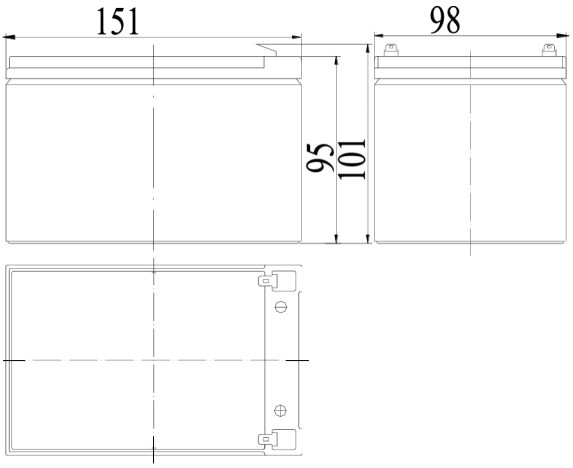
FirstPower Technology Co., Ltd. FP12120 (12V12Ah)

Specifications

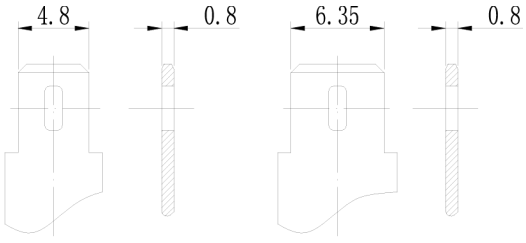
Nominal Voltage		12 V
Capacity (25℃)	10HR(10.8V)	12Ah
	5HR(10.5V)	11.2Ah
	1HR(9.60V)	8.56Ah
Dimension	Length	151±1.5mm (5.94inch)
	Width	98±1mm (3.86inch)
	Height	95±2mm (3.74inch)
	Total Height	101±5mm (3.98inch)
Approx. Weight		3.6kg (7.92lbs)±5%
Terminal type & material		T2, Copper
Internal resistance (Fully charged, 25℃)		Approx. 19mΩ
Capacity affected by temperature (20HR)	40℃	102%
	25℃	100%
	0℃	85%
	-15℃	65%
Self-discharge (25℃)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	Remaining Capacity: 65%
Nominal operating temperature		25℃±3℃(77℉±5℉)
Operating temperature range	Discharge	-15℃～50℃(5℉～122℉)
	Charge	-10℃～50℃(14℉～122℉)
	Storage	-20℃～50℃(-4℉～122℉)
Float charging voltage(25℃)		13.60 to 13.80V Temperature compensation: -18mV/℃
Cyclic charging voltage(25℃)		14.50 to 14.90V Temperature compensation: -30mV/℃
Maximum charging current		3.6A
Maximum discharge current		180A(5 sec.)
Designed cycle life(25℃)		320 cycles@80% DOD
Designed floating life(20℃)		15 years

- Absorbent glass mat technology;
- ABS container, Recognized by UL & CE;
- Designed both for deep cycle use&floating charge use;
- **15 Years long life designed floating life .**

Dimensions



Terminal



Constant Current Discharge Characteristics (A, 25℃)

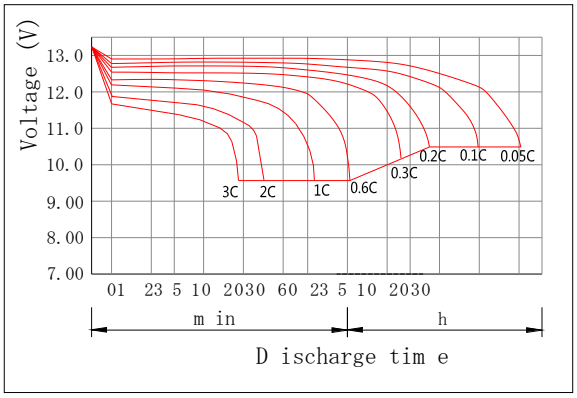
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	48.5	30.7	24.5	13.7	8.56	4.68	3.36	2.69	2.28	1.24	0.64
9.90V	47.1	29.7	24.0	13.5	8.43	4.65	3.33	2.68	2.27	1.24	0.63
10.2V	45.2	28.5	23.1	13.0	8.23	4.61	3.32	2.65	2.25	1.23	0.63
10.5V	43.2	27.2	22.3	12.7	8.05	4.53	3.29	2.64	2.24	1.23	0.63
10.8V	40.8	25.7	21.1	12.2	7.81	4.41	3.19	2.56	2.16	1.20	0.61
11.1V	38.4	24.1	19.9	11.5	7.35	4.15	3.00	2.40	2.03	1.13	0.57

Constant Power Discharge Characteristics (Watt, 25℃)

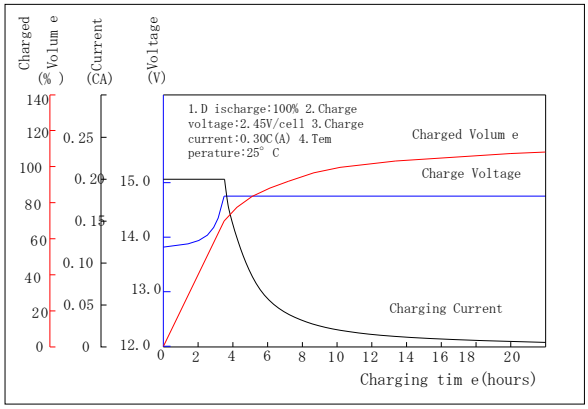
F.V/TIME	5min	10min	15min	30min	60min	2h	3h	4h	5h	10h	20h
9.60V	541	345	280	156	99.1	54.7	40.0	32.0	27.2	14.9	7.67
9.90V	525	335	272	153	97.6	54.4	39.6	31.7	27.1	14.9	7.64
10.2V	504	321	264	149	95.1	54.0	39.3	31.6	26.9	14.8	7.59
10.5V	481	307	253	145	93.2	53.1	39.1	31.3	26.8	14.7	7.55
10.8V	455	291	240	140	90.4	51.9	37.9	30.4	25.9	14.4	7.40
11.1V	428	273	225	132	84.9	48.8	35.6	28.5	24.3	13.6	6.96

Note: The above characteristics data can be obtained within three charge/discharge cycles.

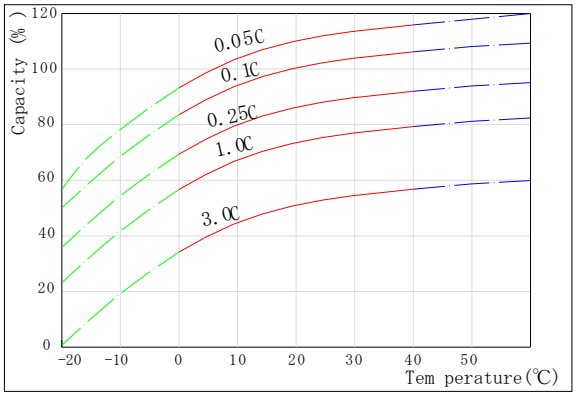
Discharge Characteristics(25℃)



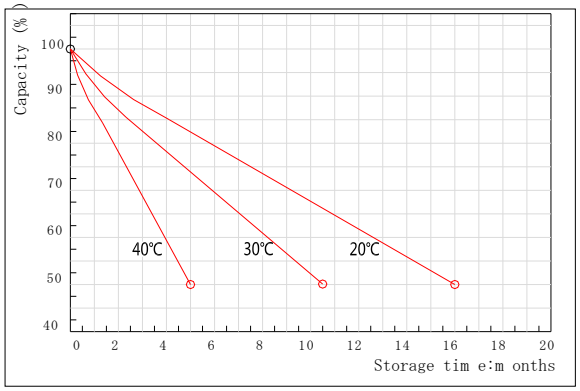
Charging Characteristics(25℃)



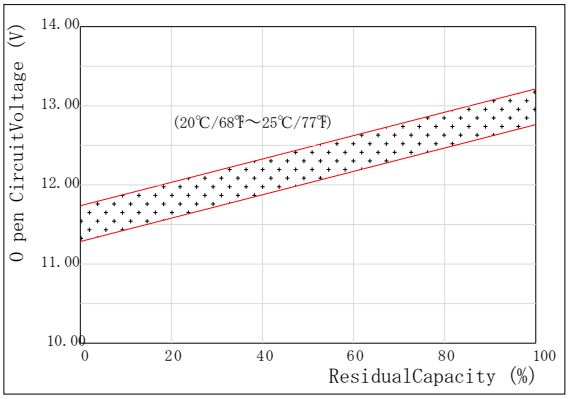
Effect of Temperature on Capacity



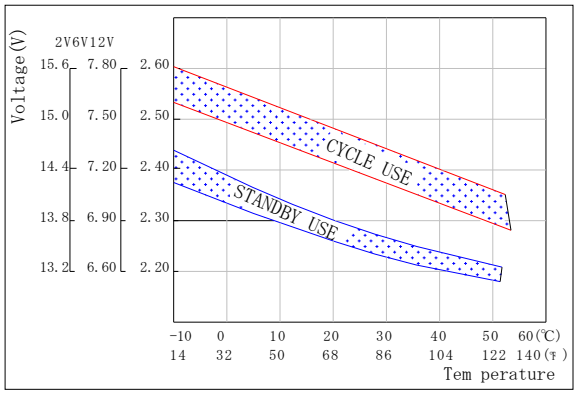
Self-discharge Characteristics



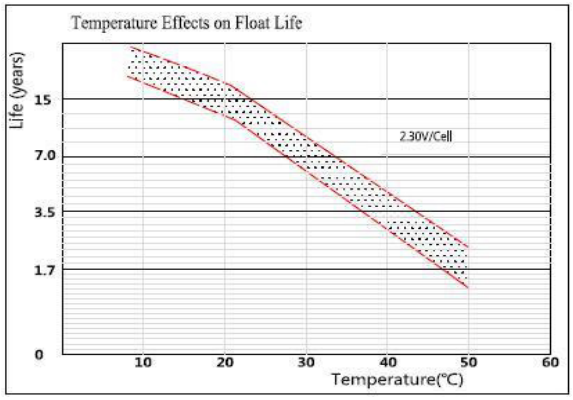
The Relationship for Open Circuit Voltage and Residual Capacity (25℃)



The Relationship for Charging Voltage and Temperature



Floating Life on Temperature



Cycle Life on D.O.D(25℃)

