

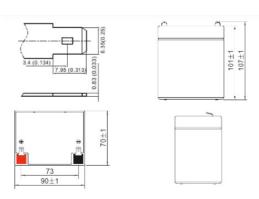
# **FORZAPLUS**

### **Specifications**

Rated Voltage		12V				
Nominal Capacity	5.0Ah	(C <sub>20</sub> , 1.75V/cell)				
Dimension	Length Width Container Height Total Height	151±2mm (5.94 inches) 53±1mm (2.09 inches) 93±1mm (3.66 inches) 99±1mm (3.90 inches)				
Approx Weight		1.73 Kg (3.81 lbs)				
Terminal		T1/T2				
Container Material		ABS				
Rated Capacity (25°C)	5.00 Ah 4.73 Ah 4.32 Ah 3.84 Ah 3.29 Ah	(20hr,0.250A,1.75V/cell) (10hr,0.473A,1.75V/cell) (5hr,0.861A,1.75V/cell) (3hr,1.28A,1.75V/cell) (1hr,3.29A,1.60V/cell)				
Max. Discharge Current		75A (5s)				
Internal Resistance (25°C)		Approx 35mΩ				
Operating Temp.Range	Discharge Charge Storage	-15 ~ 50°C (5 ~ 122°F) -20 ~ 40°C (-4 ~ 104°F) -15 ~ 40°C (5 ~ 104°F)				
Nominal Operating Temp. Range		25±3°C (77±5°F)				
Cycle Use	Initial Charging Current less that 14.4V~15.0V at 25° C(77° F)Ten	0				
Standby Use	Initial Charging Current less that 13.5V~13.8V at 25° C(77° F)Ten					
Effect of temp. to Capacity	40°C (104°F) 25°C (77°F) 0°C (32°F)	103% 100% 86%				
Self Discharge	LP series batteries may be store at 25°C(77°F) and then a fresher For higher temperatures the time	ning charge is required.				



## Layout



Constant Current Discharge (Amperes) at 25 C (77F)																
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	16.4	10.9	8.33	6.75	4.97	3.63	2.97	2.18	1.71	1.24	0.984	0.838	0.717	0.565	0.462	0.244
1.80V/cell	17.6	11.6	8.74	7.02	5.12	3.73	3.05	2.22	1.74	1.26	1.00	0.850	0.729	0.573	0.468	0.247
1.75V/cell	18.5	12.1	9.03	7.21	5.25	3.81	3.11	2.26	1.77	1.28	1.01	0.861	0.737	0.579	0.473	0.250
1.70V/cell	19.4	12.5	9.33	7.42	5.39	3.89	3.17	2.30	1.80	1.29	1.03	0.872	0.746	0.585	0.478	0.252
1.67V/cell	20.1	12.9	9.56	7.57	5.48	3.96	3.21	2.33	1.82	1.31	1.04	0.880	0.752	0.590	0.481	0.254
1.60V/cell	21.3	13.4	9.89	7.80	5.63	4.06	3.29	2.38	1.86	1.33	1.05	0.894	0.763	0.598	0.487	0.257

Constant Power Discharge (Watts/cell) at 25 C (77F)																
F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	30.9	20.8	15.9	13.0	9.60	7.04	5.78	4.25	3.35	2.43	1.94	1.65	1.42	1.12	0.918	0.489
1.80V/cell	33.0	21.9	16.6	13.4	9.85	7.21	5.91	4.33	3.41	2.46	1.96	1.68	1.44	1.14	0.930	0.495
1.75V/cell	34.3	22.6	17.1	13.7	10.1	7.33	6.00	4.40	3.46	2.50	1.99	1.69	1.45	1.15	0.938	0.500
1.70V/cell	35.6	23.4	17.5	14.1	10.3	7.47	6.10	4.46	3.50	2.53	2.01	1.72	1.47	1.16	0.947	0.504
1.67V/cell	36.5	23.9	17.9	14.3	10.4	7.57	6.18	4.51	3.53	2.55	2.03	1.73	1.48	1.17	0.954	0.508
1.60V/cell	38.0	24.6	18.4	14.7	10.7	7.71	6.29	4.58	3.59	2.59	2.06	1.75	1.50	1.18	0.965	0.514

## **FORZAPLUS**

#### **Applications**

- · All purpose
- · Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- · Emergency backup power supply
- · Alarm and security system
- · Communication power supply
- · DC power supply
- · Auto control system

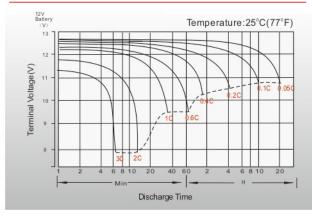
#### **General features**

- 5 years design life(25℃)
- Special exhaust structure and sealing technology, safe and reliable, flexible installation, convenient maintenance
- PbCaSn alloy for plate grids: less gassing, less self-discharging
- High quality AGM separator: extend cycle life and prevent micro short circuit
- · High purity raw material: ensure low self discharge rate

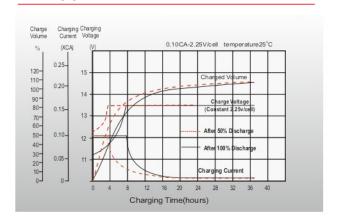
#### **Standards**

- Compliance with IEC 60896 standards, EU Battery Directive
- · UL, CE Certified
- Manufactured in Leoch®IATF16949, ISO45001,ISO 9001 and ISO 14001 certified production facilities

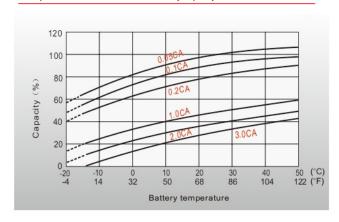
#### **Discharge Characteristics**



#### Float Charging Characteristics



#### **Temperature Effects in Relation to Battery Capacity**



#### **Effect of Temperature on Long Term Float Life**

