FP Series-General Purpose

FP12-7S

# FORZAPLUS

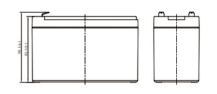
## Specifications

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Rated Voltage		12V
Nominal Capacity	6.0Ah	(C <sub>20</sub> ,1.75V/cell)
Dimension	Length Width Container Height Total Height	151±2mm (5.95 inches) 65±1mm (2.56 inches) 93.5±1mm (3.68 inches) 99.5±1mm (3.92 inches)
Approx Weight		1.81 Kg (3.99 lbs)
Terminal		T1/T2
Container Material		ABS
Rated Capacity (25°C)	6.00 Ah 5.59 Ah 5.15 Ah 4.59 Ah 3.94 Ah	(20hr,0.300A,1.75V/cell) (10hr,0.559A,1.75V/cell) (5hr,1.03A,1.75V/cell) (3hr,1.53A,1.75V/cell) (1hr,3.94A,1.60V/cell)
Max. Discharge Current		90A (5s)
Internal Resistance (25°C)		Approx 27mΩ
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 lo 14.4V~15.0V at 25° C(77°	ess than 1.8A. Voltage °F)Temp. Coefficient -30mV/°C
Standby Use	Initial Charging Current lo 13.5V~13.8V at 25° C(77°	ess than 1.8A. Voltage °F)Temp. Coefficient -20mV/°C
Effect of temp. to Capacity	40°C (104°F) 25°C (77°F) 0°C (32°F)	103% 100% 86%
Self Discharge	· ·	e stored for up to 6 months reshening charge is required. he time interval will be shorter.



### 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	16.7	12.3	9.93	8.10	6.02	4.42	3.61	2.64	2.07	1.49	1.18	1.01	0.860	0.676	0.546	0.294
1.80V/cell	18.1	12.9	10.3	8.35	6.18	4.51	3.68	2.68	2.10	1.51	1.20	1.02	0.871	0.684	0.552	0.297
1.75V/cell	19.6	13.6	10.7	8.60	6.32	4.60	3.75	2.73	2.13	1.53	1.21	1.03	0.882	0.692	0.559	0.300
1.70V/cell	21.1	14.2	11.1	8.86	6.47	4.69	3.81	2.77	2.17	1.55	1.23	1.05	0.894	0.701	0.566	0.303
1.67V/cell	21.9	14.6	11.3	9.01	6.56	4.74	3.85	2.80	2.19	1.57	1.24	1.05	0.900	0.706	0.570	0.305
1.60V/cell	23.9	15.5	11.8	9.36	6.76	4.87	3.94	2.86	2.23	1.60	1.26	1.07	0.916	0.718	0.579	0.309

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	31.8	23.5	19.1	15.6	11.6	8.58	7.03	5.15	4.05	2.92	2.33	1.98	1.70	1.34	1.08	0.588
1.80V/cell	34.3	24.6	19.7	16.0	11.9	8.72	7.14	5.22	4.10	2.96	2.36	2.01	1.72	1.35	1.10	0.594
1.75V/cell	36.8	25.7	20.3	16.4	12.1	8.86	7.24	5.29	4.15	3.00	2.39	2.03	1.74	1.37	1.11	0.600
1.70V/cell	39.3	26.7	20.9	16.8	12.3	8.99	7.34	5.37	4.21	3.03	2.41	2.06	1.76	1.39	1.12	0.606
1.67V/cell	40.7	27.3	21.3	17.1	12.5	9.07	7.40	5.41	4.24	3.06	2.43	2.07	1.77	1.40	1.13	0.610
1.60V/cell	43.9	28.8	22.1	17.6	12.8	9.26	7.54	5.50	4.31	3.11	2.47	2.10	1.80	1.42	1.15	0.619

FP Series-General Purpose FP12-7S

## FORZAPLUS

#### **Applications**

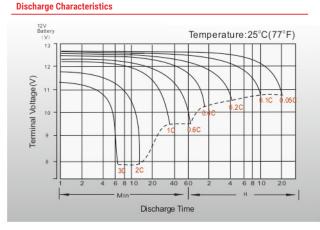
- All purpose
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Alarm and security system
- Communication power supply
- DC power supply
- · Auto control system

#### **General features**

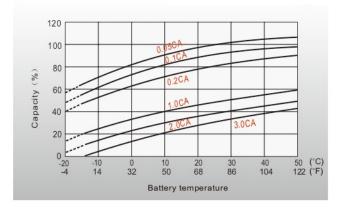
- 5 years design life(25℃)
- Special exhaust structure and sealing technology, safe and reliable, flexible installation, convenient maintenance
- PbCaSn alloy for plate grids: less gassing, less self-discharging
- High quality AGM separator: extend cycle life and prevent micro short circuit
- · High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

#### Standards

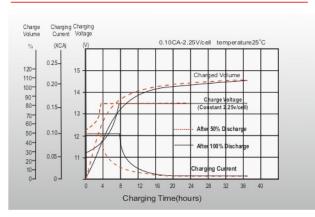
- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- Manufactured in Leoch®IATF16949, ISO45001,ISO 9001 and ISO 14001 certified production facilities



#### Temperature Effects in Relation to Battery Capacity



#### Float Charging Characteristics



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

