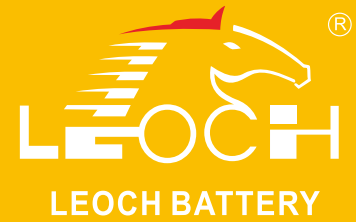




LP Series-General Purpose LP12-4.5(12V4.5Ah)

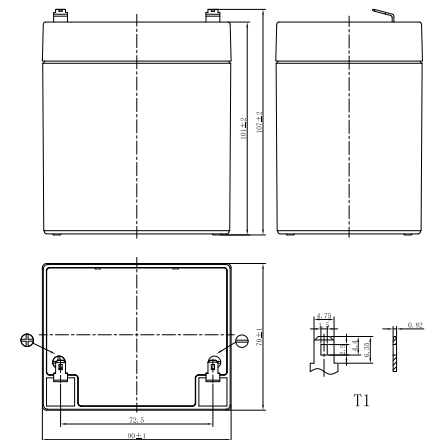


Specifications

Rated Voltage	12V	
Nominal Capacity	4.5Ah	(C ₂₀ , 1.75V/cell)
Dimension	Length	90±1mm (3.54 inches)
	Width	70±1mm (2.76 inches)
	Container Height	101±2mm (3.98 inches)
	Total Height	107±2mm (4.21 inches)
Approx Weight	1.50kg (3.31 lbs)	
Terminal	T1/T2	
Container Material	ABS	
Rated Capacity (25°C)	4.50 Ah	C20(0.225A, 1.75V/cell)
	4.26 Ah	C10(0.426A, 1.75V/cell)
	3.88 Ah	C5(0.775A, 1.75V/cell)
	3.45 Ah	C3(1.15A, 1.75V/cell)
	2.96 Ah	C1(2.96A, 1.60V/cell)
Max. Discharge Current	67.5A (5s)	
Internal Resistance (25°C)	Approx 38mΩ	
Operating Temp. Range	Discharge	-15 ~ 50°C (5 ~ 122°F)
	Charge	-20 ~ 40°C (-4 ~ 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 1.35A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
	Standby Use	
Effect of temp. to Capacity	Initial Charging Current less than 1.35A. Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
	40°C (104°F)	103%
	25°C (77°F)	100%
Self Discharge	0°C (32°F)	86%
	LP 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.	



Layout



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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	14.0	9.59	7.47	6.07	4.47	3.27	2.68	1.96	1.54	1.11	0.886	0.754	0.646	0.509	0.416	0.220
1.80V/cell	15.1	10.2	7.83	6.31	4.61	3.36	2.74	2.00	1.57	1.13	0.899	0.765	0.656	0.516	0.421	0.223
1.75V/cell	15.9	10.6	8.09	6.49	4.73	3.43	2.80	2.04	1.60	1.15	0.911	0.775	0.663	0.522	0.426	0.225
1.70V/cell	16.6	11.0	8.37	6.68	4.85	3.51	2.85	2.07	1.62	1.16	0.923	0.785	0.671	0.527	0.430	0.227
1.67V/cell	17.2	11.3	8.57	6.82	4.93	3.56	2.89	2.10	1.64	1.18	0.932	0.792	0.677	0.531	0.433	0.229
1.60V/cell	18.2	11.8	8.87	7.02	5.07	3.65	2.96	2.14	1.67	1.20	0.949	0.805	0.687	0.539	0.439	0.231

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

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	26.5	18.3	14.3	11.7	8.64	6.34	5.20	3.83	3.02	2.18	1.75	1.49	1.28	1.01	0.826	0.440
1.80V/cell	28.2	19.2	14.9	12.1	8.87	6.49	5.32	3.90	3.06	2.22	1.77	1.51	1.30	1.02	0.837	0.445
1.75V/cell	29.4	19.9	15.3	12.4	9.06	6.60	5.40	3.96	3.11	2.25	1.79	1.53	1.31	1.03	0.844	0.450
1.70V/cell	30.5	20.5	15.7	12.7	9.24	6.72	5.49	4.01	3.15	2.27	1.81	1.54	1.32	1.04	0.853	0.454
1.67V/cell	31.3	21.0	16.1	12.9	9.39	6.81	5.56	4.06	3.18	2.29	1.82	1.55	1.33	1.05	0.858	0.457
1.60V/cell	32.5	21.6	16.5	13.2	9.59	6.94	5.66	4.13	3.23	2.33	1.85	1.58	1.35	1.06	0.868	0.462



LP Series-General Purpose LP12-4.5(12V4.5Ah)



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

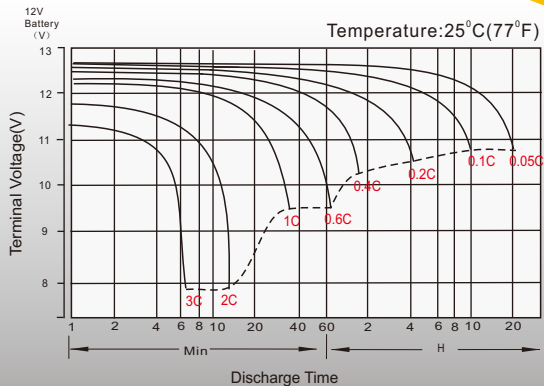
General Features

- 5 years design life(25°C)
- 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

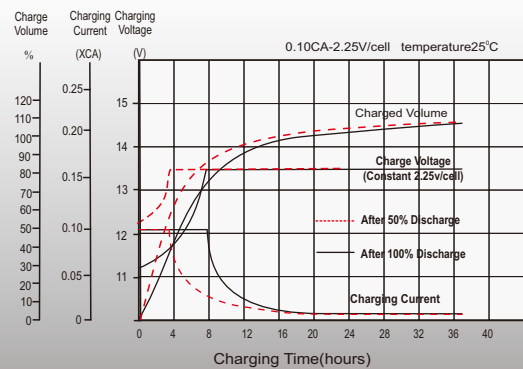
Standards

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

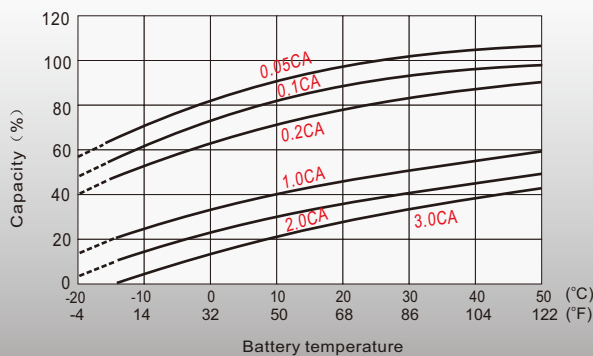
Discharge Characteristics



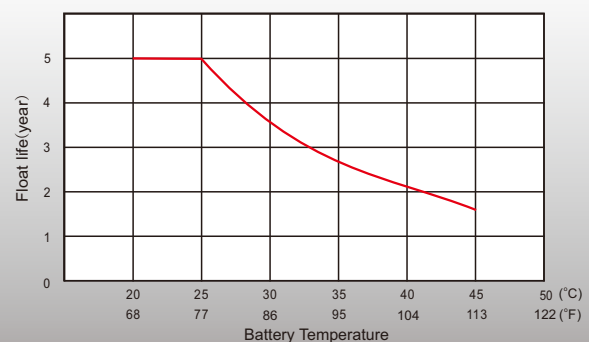
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Float Service Life



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