

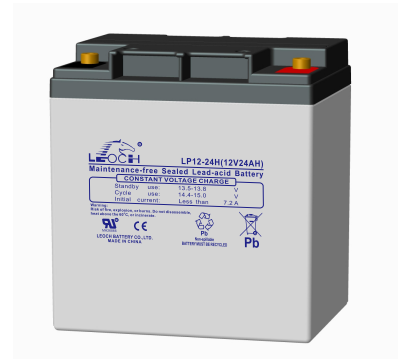


# LP Series-General Purpose LP12-24H(12V24Ah)

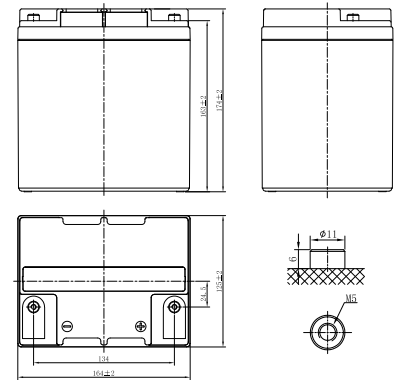


## Specifications

Rated Voltage	12V	
Nominal Capacity	24.0Ah	(C <sub>20</sub> , 1.75V/cell)
Dimension	Length	164±2mm (6.46 inches)
	Width	125±2mm (4.92 inches)
	Container Height	174±2mm (6.85 inches)
	Total Height	174±2mm (6.85 inches)
Approx Weight	8.45 Kg (18.6 lbs)	
Terminal	M5	
Container Material	ABS	
Rated Capacity (25°C)	24.0 Ah	(20hr, 1.20A, 1.75V/cell)
	22.3 Ah	(10hr, 2.23A, 1.75V/cell)
	20.4 Ah	(5hr, 4.08A, 1.75V/cell)
	18.4 Ah	(3hr, 6.12A, 1.75V/cell)
	15.1 Ah	(1hr, 15.1A, 1.60V/cell)
Max. Discharge Current	360A (5s)	
Internal Resistance (25°C)	Approx 15mΩ	
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 7.2A. 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 7.2A. 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	64.5	47.2	39.2	32.9	24.3	17.2	13.6	10.3	7.87	5.93	4.82	3.97	3.45	2.68	2.18	1.17
1.80V/cell	69.4	50.0	41.2	34.2	25.1	17.7	14.0	10.5	8.02	6.02	4.89	4.03	3.50	2.72	2.21	1.19
1.75V/cell	73.1	52.0	42.5	35.1	25.8	18.0	14.3	10.7	8.16	6.12	4.96	4.08	3.54	2.75	2.23	1.20
1.70V/cell	76.5	54.1	44.0	36.2	26.4	18.4	14.5	10.9	8.28	6.21	5.03	4.14	3.58	2.78	2.25	1.21
1.67V/cell	79.2	55.6	45.1	36.9	26.9	18.7	14.7	11.0	8.37	6.27	5.08	4.17	3.61	2.80	2.27	1.22
1.60V/cell	84.0	58.0	46.6	38.0	27.6	19.2	15.1	11.2	8.54	6.39	5.17	4.24	3.67	2.84	2.30	1.23

## 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	122.0	89.8	75.1	63.3	47.1	33.3	26.5	20.1	15.4	11.6	9.51	7.84	6.82	5.32	4.33	2.35
1.80V/cell	129.9	94.6	78.4	65.5	48.3	34.1	27.1	20.4	15.7	11.8	9.62	7.94	6.91	5.39	4.39	2.37
1.75V/cell	135.4	97.7	80.5	67.0	49.3	34.7	27.5	20.7	15.9	12.0	9.74	8.03	6.98	5.44	4.42	2.40
1.70V/cell	140.4	100.9	82.7	68.5	50.4	35.4	28.0	21.0	16.1	12.1	9.86	8.13	7.06	5.49	4.47	2.42
1.67V/cell	144.1	103.1	84.5	69.8	51.1	35.8	28.3	21.3	16.2	12.2	9.94	8.19	7.12	5.53	4.50	2.44
1.60V/cell	149.9	106.1	86.8	71.5	52.3	36.5	28.8	21.6	16.5	12.4	10.1	8.30	7.20	5.61	4.55	2.47



# LP Series-General Purpose LP12-24H(12V24Ah)



## 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

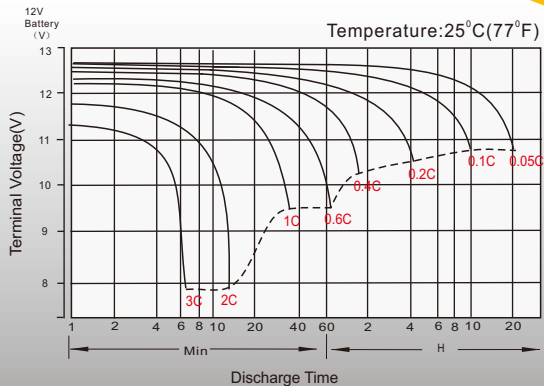
## General Features

- 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

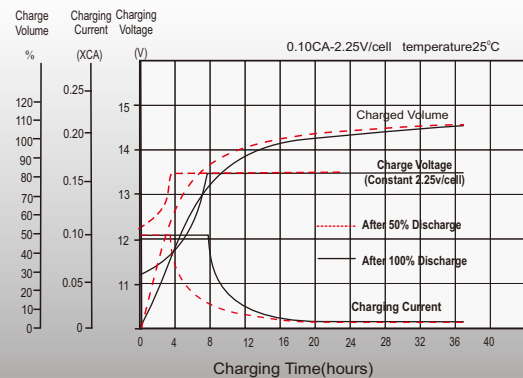
## Standards

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- Manufactured in Leoch®IATF 16949, ISO45001, ISO 9001 and ISO 14001 certified production facilities

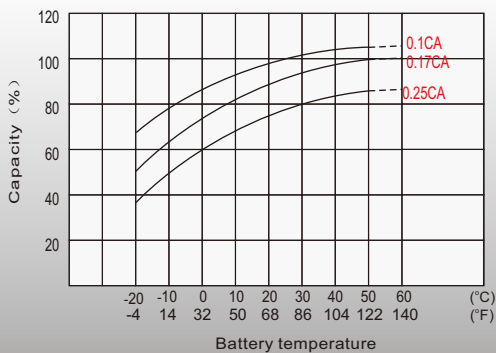
## Discharge Characteristics



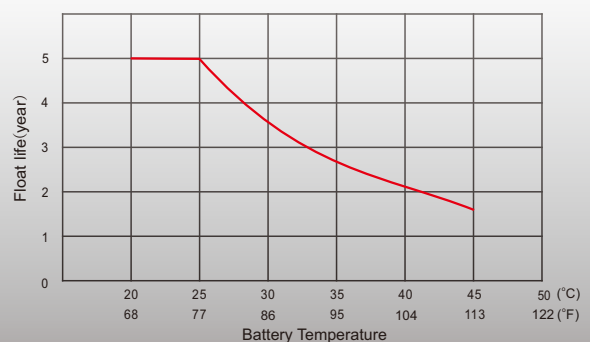
## Float Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Float Service Life



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Publication No.: LB-LP12-24H-PD-EN-V2.0-202004