



LP Series-General Purpose LP12-90(12V90Ah)

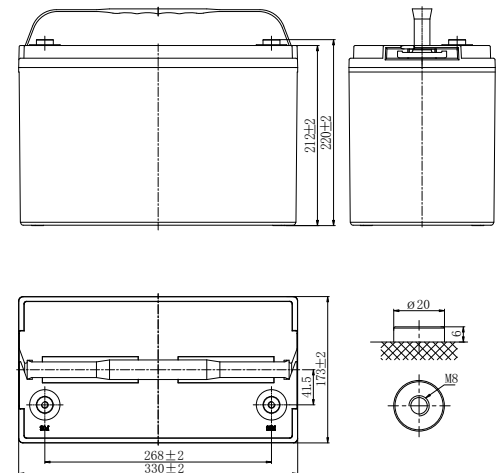


Specifications

Rated Voltage	12V	
Nominal Capacity	90.0Ah	(C ₁₀ , 1.80V/cell)
Dimension	Length	330±2mm (13.0 inches)
	Width	173±2mm (6.81 inches)
	Container Height	212±2mm (8.35 inches)
	Total Height	220±2mm (8.66 inches)
Approx Weight	27.8 Kg (61.2 lbs)	
Terminal	M8	
Container Material	ABS	
Rated Capacity (25°C)	94.6 Ah	(20hr, 4.73A, 1.80V/cell)
	90.0 Ah	(10hr, 9.00A, 1.80V/cell)
	82.0 Ah	(5hr, 16.4A, 1.75V/cell)
	74.7 Ah	(3hr, 24.9A, 1.75V/cell)
	57.4 Ah	(1hr, 57.4A, 1.60V/cell)
Max. Discharge Current	900A (5s)	
Internal Resistance (25°C)	Approx 5.5mΩ	
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 27.0A. 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 27.0A. 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	179.8	127.8	115.4	90.8	81.2	59.4	50.3	36.4	30.6	22.5	17.6	15.3	13.5	10.4	8.60	4.56
1.80V/cell	204.4	145.1	130.8	102.6	88.4	62.9	52.1	37.7	31.6	24.4	18.8	16.1	14.5	10.9	9.00	4.73
1.75V/cell	222.1	157.4	141.6	110.8	90.2	65.2	54.6	39.6	33.3	24.9	19.2	16.4	14.6	11.0	9.09	4.77
1.70V/cell	237.4	167.8	150.4	117.5	92.0	66.5	55.7	40.4	34.0	25.3	19.5	16.7	14.7	11.1	9.18	4.82
1.67V/cell	245.7	173.1	154.8	120.7	93.3	67.4	56.6	41.0	34.5	25.6	19.8	17.0	14.7	11.3	9.30	4.88
1.60V/cell	254.4	179.0	159.6	123.8	94.7	68.4	57.4	41.6	35.0	25.8	20.0	17.2	14.9	11.4	9.41	4.94

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	335.7	240.5	218.6	172.7	155.1	114.1	97.2	70.7	59.6	43.9	34.6	30.1	26.6	20.6	17.1	9.08
1.80V/cell	375.6	269.0	244.5	193.2	167.5	120.1	100.2	72.7	61.2	47.4	36.8	31.6	28.5	21.6	17.9	9.39
1.75V/cell	400.8	287.1	261.0	206.2	169.7	123.7	104.7	76.1	64.2	48.2	37.3	32.0	28.7	21.7	18.0	9.48
1.70V/cell	421.4	301.8	274.3	216.7	171.6	125.3	106.2	77.3	65.2	49.0	37.9	32.4	28.8	22.0	18.2	9.56
1.67V/cell	428.2	306.7	278.8	220.2	172.8	126.5	107.1	78.0	65.9	49.2	38.3	33.0	28.8	22.2	18.4	9.67
1.60V/cell	434.2	311.0	282.7	223.3	173.6	127.1	107.9	78.6	66.4	49.4	38.6	33.3	28.9	22.5	18.6	9.77



LP Series-General Purpose LP12-90(12V90Ah)



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

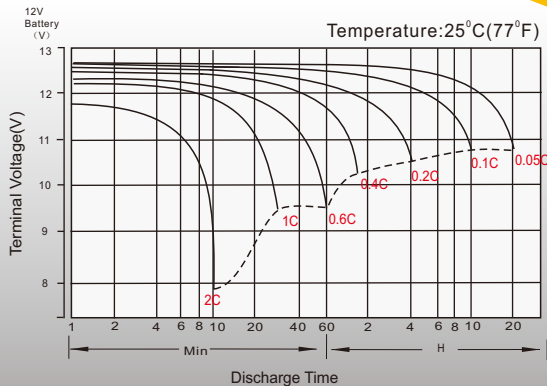
General Features

- 8 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

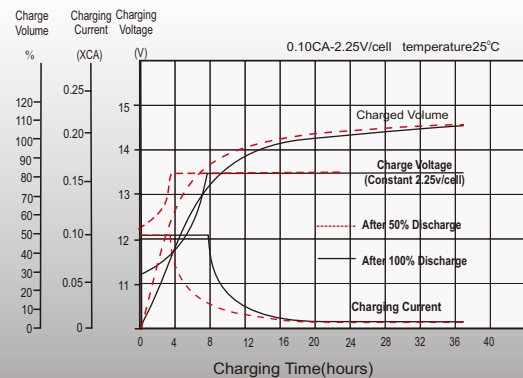
Standards

- 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

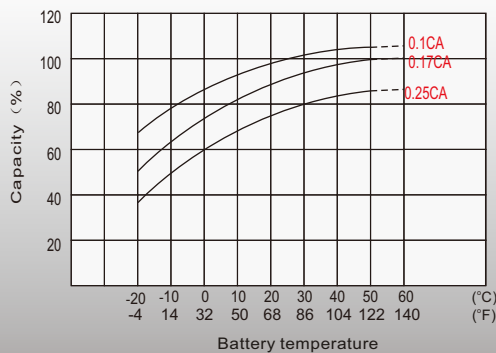
Discharge Characteristics



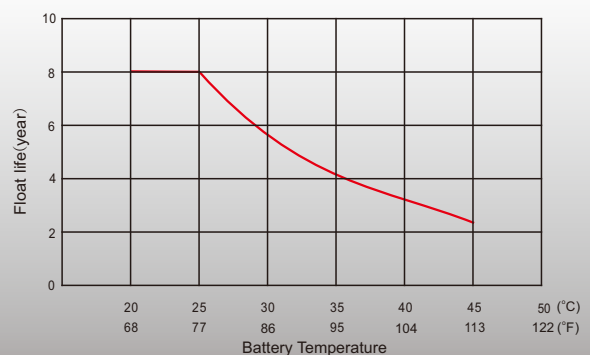
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Float Service Life



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