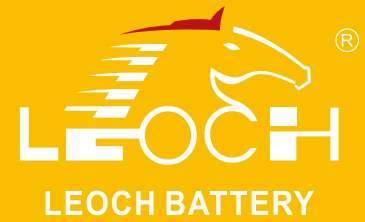




# LPL Series-Long Standby Life LPL12-28H(12V28Ah)

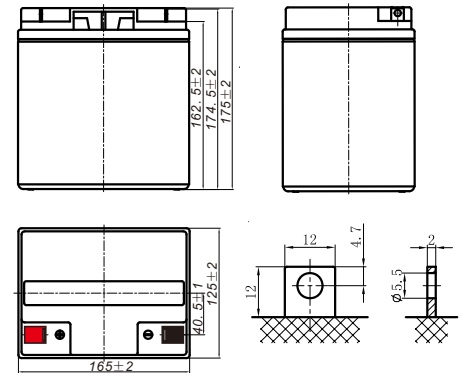


## Specifications

Rated Voltage	12V	
Nominal Capacity	28.0Ah	(C <sub>20</sub> , 1.75V/cell)
Dimension	Length	164±2mm (6.46 inches)
	Width	125±2mm (4.92 inches)
	Container Height	175±2mm (6.89 inches)
	Total Height	175±2mm (6.89 inches)
Approx Weight	9.1 Kg (20.1 lbs)	
Terminal	T3-A	
Container Material	ABS	
Rated Capacity (25°C)	28.00 Ah	(20hr, 1.40A, 1.75V/cell)
	26.30 Ah	(10hr, 2.63A, 1.75V/cell)
	23.80 Ah	(5hr, 4.76A, 1.75V/cell)
	21.69 Ah	(3hr, 7.23A, 1.75V/cell)
	18.70 Ah	(1hr, 18.7A, 1.60V/cell)
Max. Discharge Current	420A (5s)	
Internal Resistance (25°C)	Approx 14.0mΩ	
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 8.4A. Voltage 14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
	Initial Charging Current less than 8.4A. Voltage 13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Effect of temp. to Capacity	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	LPL 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)

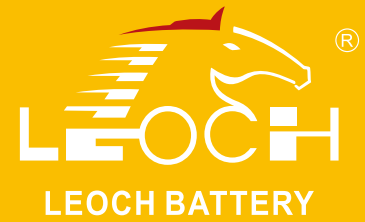
F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	58.4	46.3	40.1	28.5	20.9	17.1	9.68	7.02	5.58	4.64	3.97	3.12	2.57	1.37
1.80V/cell	61.4	48.1	41.3	29.2	21.3	17.4	9.83	7.13	5.66	4.70	4.02	3.16	2.60	1.39
1.75V/cell	64.4	49.9	42.5	29.9	21.8	17.7	9.98	7.23	5.73	4.76	4.07	3.20	2.63	1.40
1.70V/cell	67.4	51.7	43.8	30.6	22.2	18.0	10.1	7.34	5.81	4.83	4.13	3.24	2.66	1.41
1.65V/cell	69.2	52.8	44.6	31.0	22.4	18.2	10.2	7.40	5.86	4.86	4.16	3.26	2.68	1.42
1.60V/cell	73.4	55.2	46.3	32.0	23.0	18.7	10.4	7.55	5.97	4.95	4.23	3.31	2.72	1.44

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

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	111.7	89.0	77.1	55.1	40.6	33.3	18.9	13.8	11.0	9.16	7.85	6.19	5.11	2.74
1.80V/cell	116.7	92.0	79.2	56.2	41.3	33.8	19.2	14.0	11.1	9.27	7.95	6.26	5.16	2.77
1.75V/cell	121.8	94.8	81.1	57.3	41.9	34.3	19.4	14.2	11.3	9.38	8.03	6.33	5.22	2.80
1.70V/cell	126.7	97.7	83.2	58.4	42.6	34.8	19.7	14.3	11.4	9.49	8.13	6.40	5.28	2.83
1.65V/cell	129.7	99.5	84.4	59.1	43.0	35.0	19.8	14.4	11.5	9.55	8.18	6.44	5.32	2.84
1.60V/cell	136.4	103.3	87.1	60.5	43.9	35.7	20.2	14.7	11.7	9.70	8.31	6.54	5.40	2.89



# LPL Series-Long Standby Life LPL12-28H(12V28Ah)



## Applications

- UPS and EPS
- Emergency light
- Railway signal and aircraft signal system
- Marine and power stations
- Alarm and security system
- Electronic apparatus and equipment
- Communication power supply, DC power supply

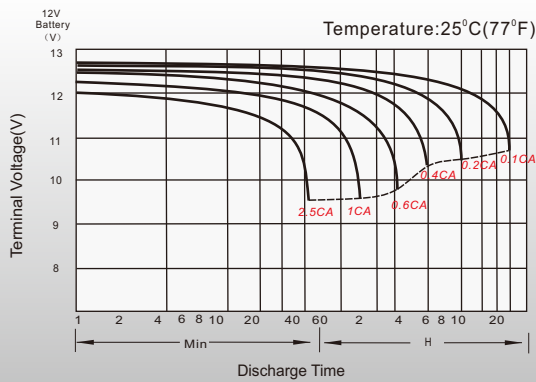
## General Features

- 10 ~ 12 years design life(20°C)
- Grid refining technology and the thicker plates are used to extend the battery standby life and reduce the plate grid corrosion speed
- Using oxygen recombination technology: maintenance-free
- Unique vent valve design: control water losing, prevent air and spark going inside

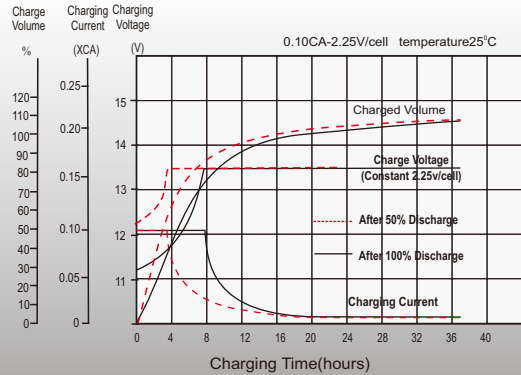
## Standards

- Compliance with IEC 60896 standards, EU Battery Directive
- UL, CE Certified
- Manufactured in Leoch@IATF16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

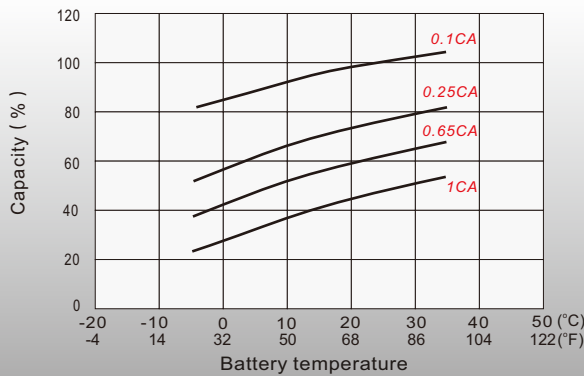
## Discharge Characteristics



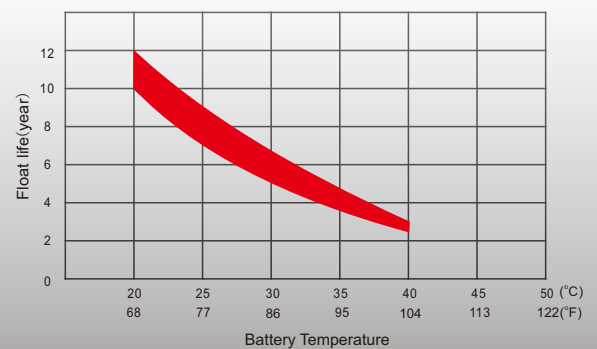
## Float Charging Characteristics



## Temperature Effects in Relation to Battery Capacity



## Effect of Temperature on Long Term Float Life



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