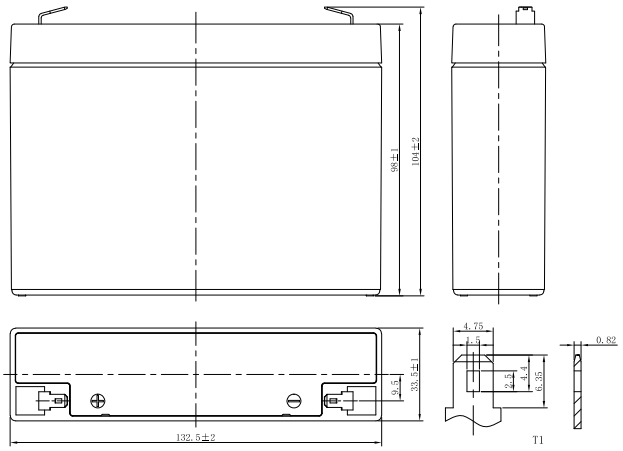
LP SERIES-GENERAL PURPOSE

LP12-2.8 (12V2.8Ah)

LEOCH BATTERY



CHARACTERISTICS

Item		Specifications
Rated Voltage		12V
Nominal Capacity (25℃)	C_{20},1.75V/cell	2.8Ah
Dimension	Length	132.5mm (5.22inches)
	Width	33.5mm (1.32inches)
	Container Height	98mm (3.86inches)
	Total Height	104mm (4.09inches)
Approx Weight		1.10kg (2.43lbs)
Terminal		T1
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		78.4A
Internal Resistance (25℃)		Approx 44 mΩ (Fully charged)
Operating Temp. Range	Discharge	-15~50℃ (5~122°F)
	Charge	-20~40℃ (-4~104°F)
	Storage	-15~40℃ (5~104°F)
Nominal Operating Temp. Range		25±3℃ (77±5°F)
Max.Charging Current (25℃)		0.3C
Charge voltage (25℃)	Standby Use	Cycle Use
	2.25-2.30V/cell	2.35-2.45V/cell
Temp. Coeffcient	-3mV/cell/℃	-5mV/cell/℃
Effect of temp. to Capacity	40℃ (104°F)	103%
	25℃ (77°F)	100%
	0℃ (32°F)	86%
Self Discharge	≤3% per month at 25°C (77°F). LP series batteries may be stored 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.	

DISCHARGE TABLE

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	9.02	6.18	4.81	3.91	2.88	2.11	1.71	1.25	0.972	0.697	0.551	0.469	0.402	0.316	0.259	0.137
1.80V/cell	9.70	6.55	5.05	4.07	2.97	2.16	1.75	1.27	0.990	0.708	0.559	0.476	0.408	0.321	0.262	0.138
1.75V/cell	10.2	6.82	5.22	4.18	3.05	2.21	1.79	1.30	1.01	0.719	0.567	0.482	0.413	0.325	0.265	0.140
1.70V/cell	10.7	7.09	5.39	4.30	3.12	2.26	1.82	1.32	1.02	0.730	0.575	0.489	0.418	0.328	0.268	0.141
1.67V/cell	11.1	7.29	5.52	4.39	3.18	2.29	1.85	1.33	1.03	0.737	0.580	0.493	0.421	0.331	0.269	0.142
1.60V/cell	11.7	7.60	5.71	4.52	3.27	2.35	1.89	1.36	1.06	0.751	0.590	0.501	0.427	0.335	0.273	0.144

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	17.1	11.8	9.21	7.54	5.57	4.08	3.33	2.43	1.90	1.37	1.09	0.926	0.795	0.627	0.514	0.274
1.80V/cell	18.2	12.4	9.61	7.80	5.72	4.18	3.40	2.48	1.93	1.39	1.10	0.938	0.806	0.636	0.521	0.277
1.75V/cell	18.9	12.8	9.87	7.97	5.84	4.25	3.46	2.51	1.96	1.41	1.11	0.949	0.814	0.642	0.525	0.280
1.70V/cell	19.6	13.2	10.1	8.16	5.96	4.33	3.51	2.55	1.99	1.43	1.13	0.961	0.823	0.648	0.531	0.282
1.67V/cell	20.1	13.5	10.4	8.31	6.05	4.39	3.56	2.58	2.01	1.44	1.14	0.968	0.830	0.653	0.534	0.284
1.60V/cell	21.0	13.9	10.6	8.51	6.18	4.47	3.62	2.62	2.04	1.46	1.15	0.981	0.840	0.662	0.540	0.288

LP SERIES-GENERAL PURPOSE

LP12-2.8 (12V2.8Ah)

LEOCH BATTERY

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

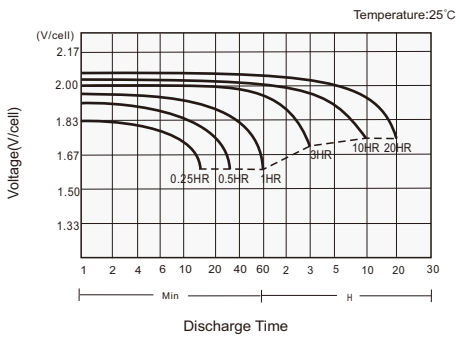
GENERAL FEATURES

- 5 years design life (25℃)
- Lead calcium alloy, sealed design, no watering required
- Puncture resistant micro-porous glass mat separators extend life
- Unique technology optimizes power capacity, cell consistency, and long-term reliability
- Designed for a wide range of applications

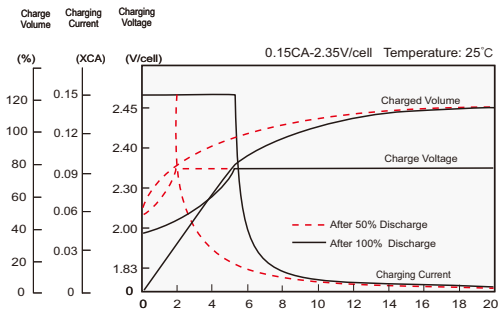
STANDARDS

- Compliance with IEC 60896 standards, EU Battery Directive
- UL,CE Approved
- Manufactured in Leoch®IATF 16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

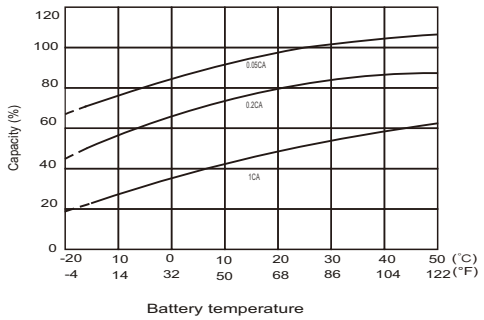
Discharge Characteristics



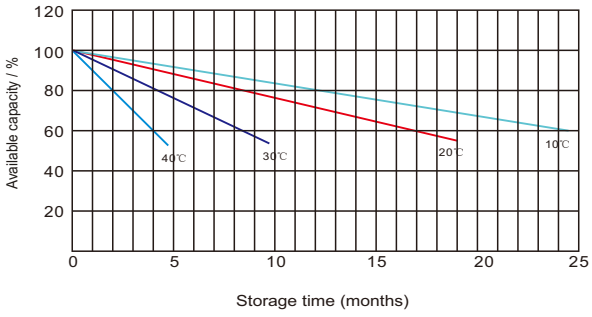
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



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