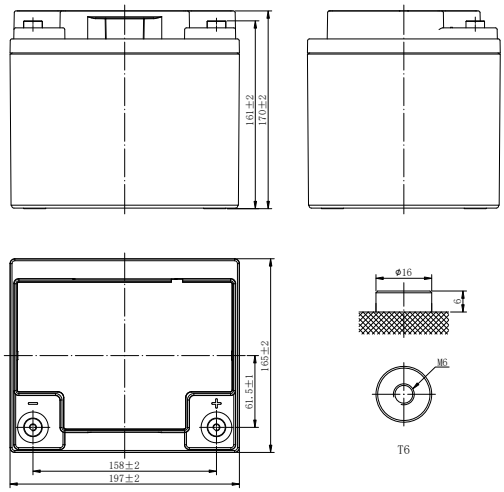
LP SERIES-GENERAL PURPOSE

LP12-40 (12V40Ah)

LEOCH BATTERY





CHARACTERISTICS

Item		Specifications
Rated Voltage		12V
Nominal Capacity (25℃)	C_{10},1.80V/cell	40Ah
Dimension	Length	197mm (7.76inches)
	Width	165mm (6.50inches)
	Container Height	170mm (6.69inches)
	Total Height	170mm (6.69inches)
Approx Weight		13.2kg (29.1lbs)
Terminal		T6(M6)
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		1000A
Internal Resistance (25℃)		Approx 9 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	2.35-2.40V/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	81.1	63.3	54.9	43.2	40.2	32.6	24.9	17.4	15.2	11.1	8.73	7.57	5.96	5.13	4.25	2.26
1.80V/cell	94.5	71.9	62.2	48.8	43.7	34.8	25.8	19.0	15.7	12.1	9.32	7.97	6.27	5.40	4.50	2.34
1.75V/cell	103.2	78.0	67.4	52.7	44.6	35.9	27.1	19.6	16.5	12.3	9.49	8.11	6.34	5.43	4.52	2.36
1.70V/cell	111.7	83.1	71.6	55.9	45.5	36.6	27.6	20.4	16.8	12.5	9.66	8.24	6.44	5.51	4.54	2.39
1.65V/cell	116.7	85.8	73.6	57.4	46.2	37.1	28.0	20.7	17.1	12.7	9.81	8.41	6.55	5.59	4.60	2.42
1.60V/cell	128.6	88.7	75.9	58.9	46.9	37.7	28.4	21.6	17.3	12.8	9.92	8.53	6.64	5.66	4.66	2.44

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	154.3	119.2	104.0	82.1	76.8	62.5	48.1	33.6	29.5	21.7	17.1	14.9	11.8	10.2	8.46	4.49
1.80V/cell	177.2	133.3	116.3	91.9	82.9	66.3	49.6	36.5	30.3	23.5	18.2	15.6	12.3	10.4	8.85	4.65
1.75V/cell	190.4	142.3	124.1	98.1	84.0	67.9	51.8	37.5	31.8	23.9	18.5	15.8	12.4	10.5	8.92	4.69
1.70V/cell	202.8	149.6	130.5	103.1	84.9	68.8	52.6	38.5	32.3	24.2	18.7	16.1	12.5	10.6	9.01	4.73
1.65V/cell	209.7	152.0	132.6	104.8	85.5	69.3	53.0	39.1	32.6	24.4	19.0	16.3	12.8	11.0	9.11	4.79
1.60V/cell	225.3	154.1	134.5	106.2	85.9	69.7	53.4	40.5	32.9	24.5	19.1	16.5	12.9	11.1	9.20	4.84

LP SERIES-GENERAL PURPOSE

LP12-40 (12V40Ah)

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

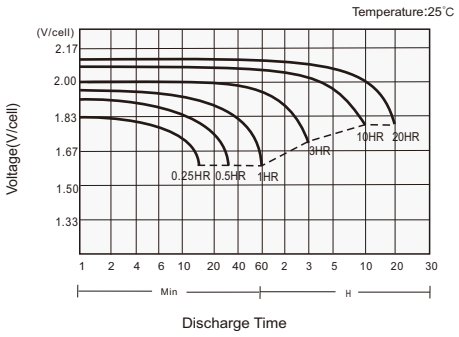
GENERAL FEATURES

- 10 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

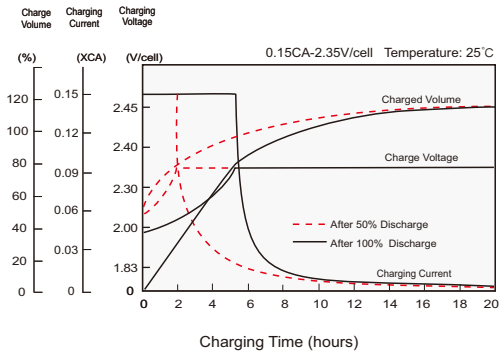
STANDARDS

- 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

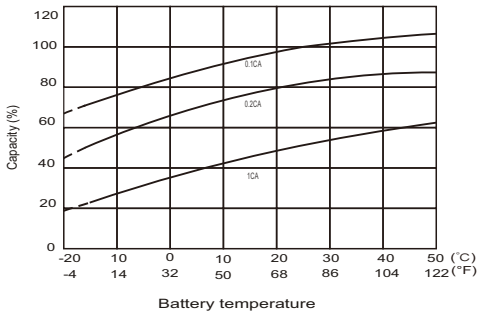
Discharge Characteristics



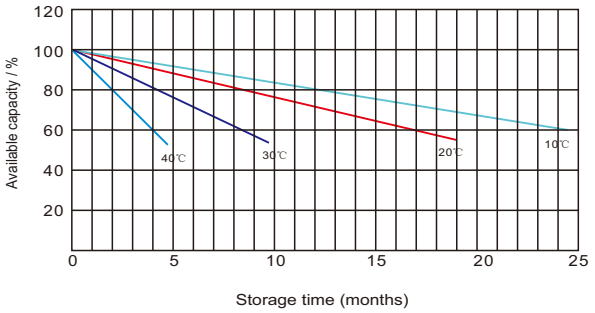
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



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Publication No.:LB-LP12-40-PD-EN-V3.0-20260612