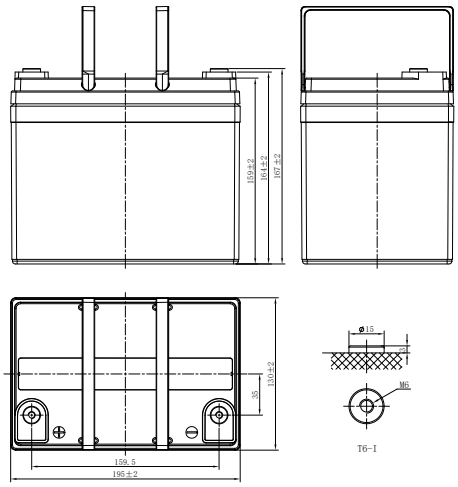
LP SERIES-GENERAL PURPOSE

LP12-33 (12V33Ah)

LEOCH BATTERY





CHARACTERISTICS

Item		Specifications
Rated Voltage		12V
Nominal Capacity (25˚C)	C_{20},1.75V/cell	33Ah
Dimension	Length	195mm (7.68inches)
	Width	130mm (5.12inches)
	Container Height	164mm (6.46inches)
	Total Height	167mm (6.57inches)
Approx Weight		9.80kg (21.6lbs)
Terminal		T6-I(M6)
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		825A
Internal Resistance (25˚C)		Approx 14 mΩ (Fully charged)
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)
Max.Charging Current (25˚C)		0.3C
Charge voltage (25˚C)	Standby Use	Cycle Use
	2.25-2.30V/cell	2.35-2.45V/cell
Temp. Coeffcient	-3mV/cell/˚C	-5mV/cell/˚C
Effect of temp. to Capacity	40˚C (104°F)	103%
	25˚C (77°F)	100%
	0˚C (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	92.4	63.5	49.8	41.0	30.8	22.9	19.0	14.2	11.3	8.15	6.50	5.53	4.73	3.73	3.05	1.61
1.80V/cell	99.3	67.3	52.2	42.7	31.7	23.5	19.5	14.5	11.5	8.29	6.59	5.61	4.81	3.78	3.09	1.63
1.75V/cell	104.6	70.0	54.0	43.8	32.6	24.0	19.9	14.7	11.7	8.42	6.68	5.68	4.86	3.82	3.12	1.65
1.70V/cell	109.6	72.9	55.8	45.1	33.4	24.5	20.3	15.0	11.9	8.54	6.77	5.76	4.92	3.86	3.15	1.66
1.67V/cell	113.4	74.9	57.1	46.1	34.0	24.9	20.6	15.2	12.0	8.62	6.84	5.81	4.97	3.90	3.18	1.68
1.60V/cell	120.3	78.1	59.1	47.4	34.9	25.5	21.0	15.5	12.3	8.78	6.96	5.90	5.04	3.95	3.22	1.69
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	174.7	120.9	95.3	79.0	59.5	44.4	37.0	27.6	22.1	16.0	12.8	10.9	9.37	7.39	6.06	3.23
1.80V/cell	186.1	127.3	99.4	81.7	61.1	45.4	37.8	28.1	22.5	16.3	13.0	11.1	9.50	7.49	6.14	3.26
1.75V/cell	193.9	131.5	102.1	83.6	62.4	46.2	38.4	28.6	22.8	16.5	13.1	11.2	9.60	7.57	6.19	3.30
1.70V/cell	201.1	135.8	104.8	85.5	63.7	47.1	39.0	29.0	23.1	16.7	13.3	11.3	9.70	7.64	6.25	3.33
1.67V/cell	206.4	138.8	107.1	87.1	64.7	47.7	39.5	29.3	23.3	16.8	13.4	11.4	9.78	7.70	6.29	3.35
1.60V/cell	214.7	142.9	110.0	89.2	66.1	48.6	40.2	29.8	23.7	17.1	13.6	11.6	9.89	7.80	6.37	3.39

LP SERIES-GENERAL PURPOSE

LP12-33 (12V33Ah)

LEOCH BATTERY

APPLICATIONS

- 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

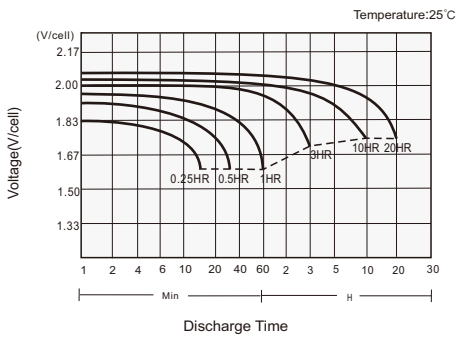
GENERAL FEATURES

- 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

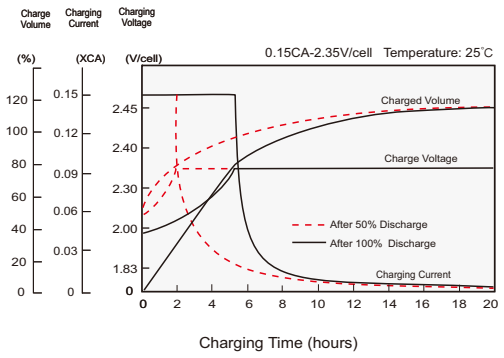
STANDARDS

- 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

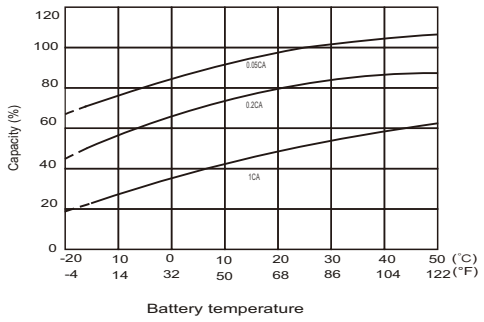
Discharge Characteristics



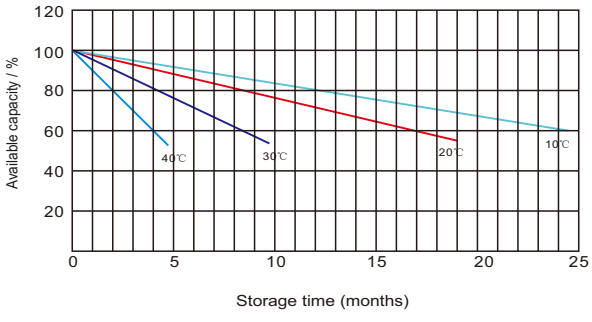
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



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