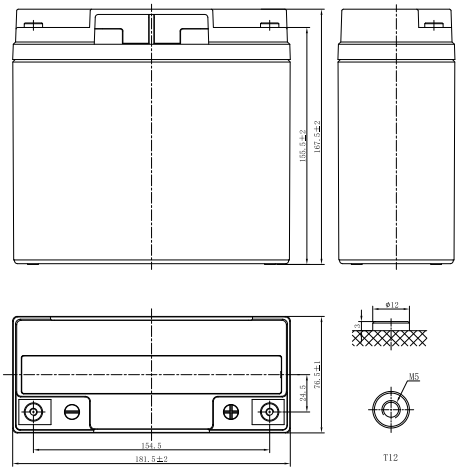
LP SERIES-GENERAL PURPOSE

LP12-20 (12V20Ah)

LEOCH BATTERY



CHARACTERISTICS

Item		Specifications
Rated Voltage		12V
Nominal Capacity (25˚C)	C_{20},1.75V/cell	20Ah
Dimension	Length	181.5mm (7.15inches)
	Width	76.5mm (3.01inches)
	Container Height	167.5mm (6.59inches)
	Total Height	167.5mm (6.59inches)
Approx Weight		5.65kg (12.5lbs)
Terminal		T12(M5)
Container Material		ABS (UL94 HB or V-0 optional)
Short-circuit current		560A
Internal Resistance (25˚C)		Approx 16 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	62.2	42.6	33.2	27.0	19.9	14.5	11.9	8.71	6.85	4.94	3.94	3.35	2.87	2.26	1.85	0.978
1.80V/cell	66.9	45.2	34.8	28.1	20.5	14.9	12.2	8.89	6.97	5.02	3.99	3.40	2.91	2.29	1.87	0.989
1.75V/cell	70.5	47.0	36.0	28.8	21.0	15.2	12.4	9.06	7.10	5.10	4.05	3.44	2.95	2.32	1.89	1.00
1.70V/cell	73.8	48.9	37.2	29.7	21.6	15.6	12.7	9.21	7.20	5.18	4.10	3.49	2.98	2.34	1.91	1.01
1.67V/cell	76.4	50.3	38.1	30.3	21.9	15.8	12.9	9.33	7.28	5.23	4.14	3.52	3.01	2.36	1.92	1.02
1.60V/cell	81.0	52.4	39.4	31.2	22.5	16.2	13.1	9.53	7.43	5.32	4.22	3.58	3.05	2.39	1.95	1.03
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	117.7	81.2	63.5	52.0	38.4	28.2	23.1	17.0	13.4	9.71	7.76	6.62	5.68	4.48	3.67	1.96
1.80V/cell	125.3	85.4	66.3	53.8	39.4	28.8	23.6	17.3	13.6	9.85	7.85	6.70	5.76	4.54	3.72	1.98
1.75V/cell	130.6	88.2	68.0	55.0	40.3	29.3	24.0	17.6	13.8	10.0	7.95	6.78	5.82	4.59	3.75	2.00
1.70V/cell	135.4	91.1	69.9	56.3	41.1	29.9	24.4	17.8	14.0	10.1	8.05	6.86	5.88	4.63	3.79	2.02
1.67V/cell	139.0	93.2	71.4	57.3	41.7	30.3	24.7	18.0	14.1	10.2	8.11	6.91	5.93	4.66	3.81	2.03
1.60V/cell	144.6	95.9	73.3	58.7	42.6	30.8	25.1	18.3	14.4	10.4	8.23	7.00	6.00	4.73	3.86	2.05

LP SERIES-GENERAL PURPOSE

LP12-20 (12V20Ah)

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

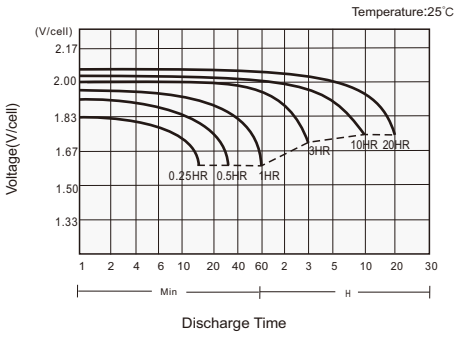
GENERAL FEATURES

- 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

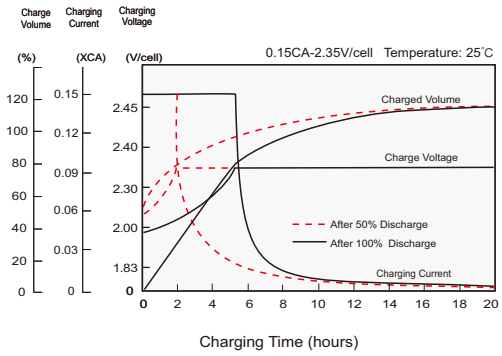
STANDARDS

- 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

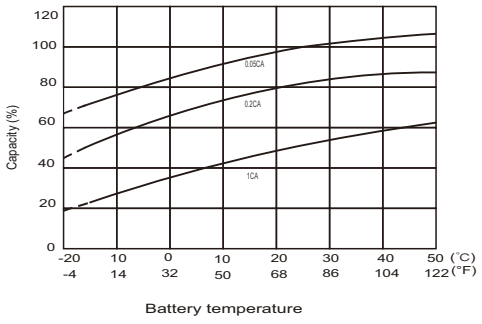
Discharge Characteristics



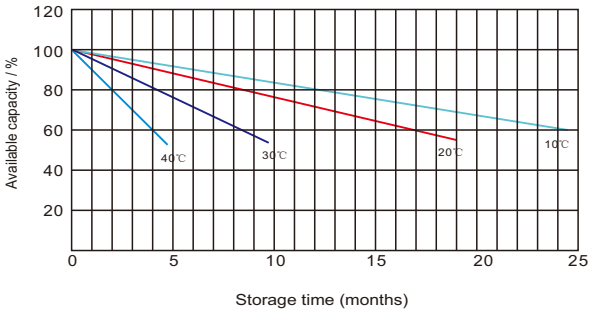
Charging Characteristics



Effects of Temperature on Capacity



Self Discharge Characteristics



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