

### Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	45.0AH	
Dimension	Length	257±3mm (10.12 inches)
	Width	132±2mm (5.20 inches)
	Container Height	200±2mm (7.87 inches)
	Total Height (with Terminal)	200±2mm (7.87 inches)
Approx Weight	Approx 16.2 kg (35.7 lbs)	
Terminal	T6	
Container Material	ABS	
Rated Capacity	45.0 AH/2.25A	(20hr, 1.80V/cell, 25°C/77°F)
	42.0 AH/4.20A	(10hr, 1.75V/cell, 25°C/77°F)
	36.0 AH/7.20A	(5hr, 1.75V/cell, 25°C/77°F)
	31.2 AH/10.4A	(3hr, 1.75V/cell, 25°C/77°F)
	24.8 AH/24.8A	(1hr, 1.67V/cell, 25°C/77°F)
Max. Discharge Current	450A (5s)	
Internal Resistance	Approx 9.6mΩ	
Operating Temp. Range	Discharge	-20~55°C (-4~131°F)
	Charge	0~40°C (32~104°F)
	Storage	-20~50°C (-4~122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 11.25A. Voltage	
	14.4V~15.0V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Leoch LPG series batteries may be stored for up to 9 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	



### Applications

- ◆ Telecommunications
- ◆ Solar system
- ◆ Wind power system
- ◆ Wheelchair
- ◆ Floor cleaning machines
- ◆ Golf trolley
- ◆ Boats



### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	38.1	29.9	22.8	19.1	12.1	9.23	7.64	6.60	5.69	5.04	4.55	4.16	3.75	2.16
1.80V/cell	43.6	33.4	25.1	21.1	13.1	9.89	8.10	6.93	5.98	5.28	4.76	4.37	3.92	2.25
1.75V/cell	49.0	36.7	27.2	22.5	13.9	10.4	8.48	7.20	6.19	5.46	4.92	4.50	4.20	2.30
1.70V/cell	52.8	39.3	28.9	23.9	14.7	10.9	8.76	7.43	6.41	5.64	5.06	4.62	4.29	2.32
1.67V/cell	54.9	40.9	29.9	24.8	15.1	11.2	8.98	7.58	6.51	5.73	5.14	4.68	4.35	2.35
1.60V/cell	59.5	43.7	32.1	26.3	15.7	11.7	9.32	7.81	6.67	5.85	5.23	4.78	4.43	2.38

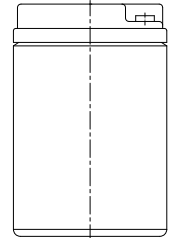
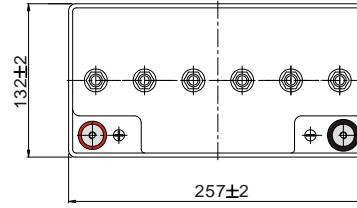
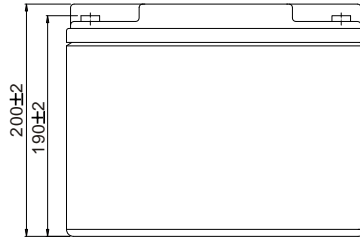
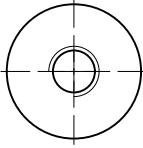
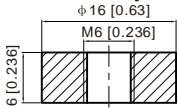
### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	72.9	57.6	44.2	37.1	23.7	18.1	15.0	13.0	11.3	10.0	9.04	8.28	7.49	4.31
1.80V/cell	82.4	63.7	48.4	40.8	25.5	19.3	15.9	13.6	11.8	10.4	9.45	8.68	7.80	4.48
1.75V/cell	91.5	69.5	51.9	43.4	26.9	20.3	16.6	14.1	12.2	10.8	9.73	8.93	7.95	4.57
1.70V/cell	97.5	73.7	54.7	45.7	28.4	21.1	17.1	14.5	12.6	11.1	10.0	9.16	8.13	4.62
1.67V/cell	100.4	75.8	56.3	47.1	29.0	21.7	17.4	14.8	12.7	11.3	10.1	9.26	8.21	4.66
1.60V/cell	107.6	80.4	60.0	49.8	30.0	22.5	18.0	15.2	13.0	11.5	10.3	9.44	8.36	4.72

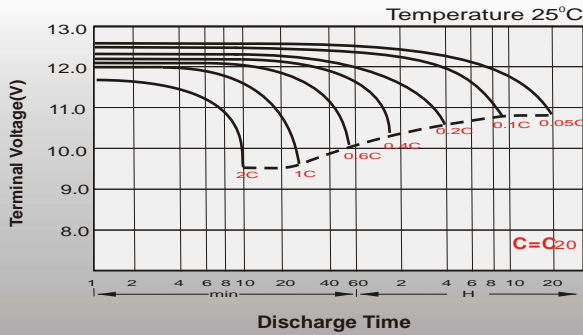
## Dimensions

### T6 Terminal

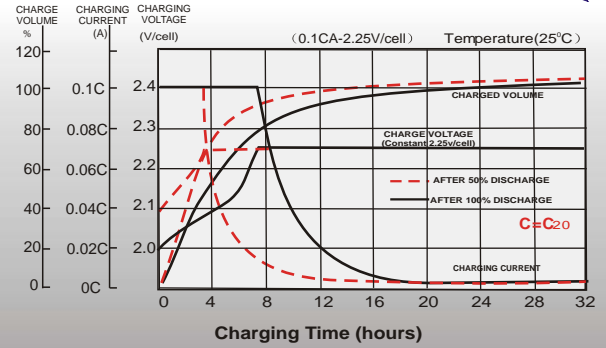
Unit: mm [inches]



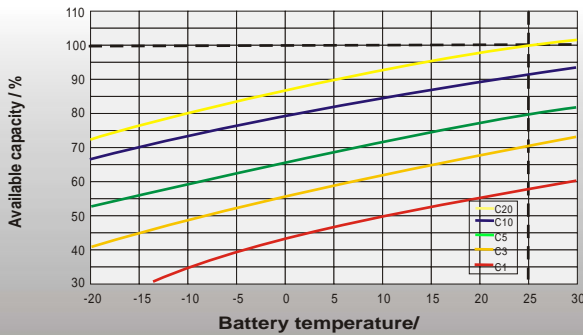
## Discharge Characteristics



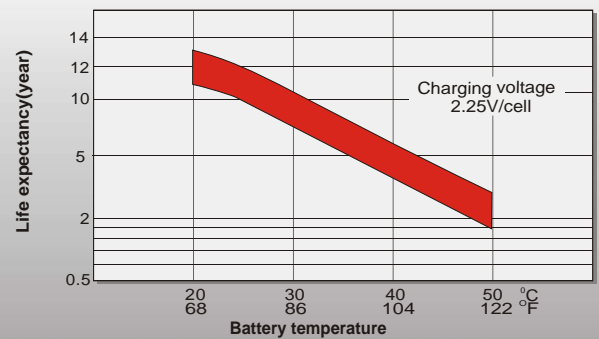
## Float Charging Characteristics



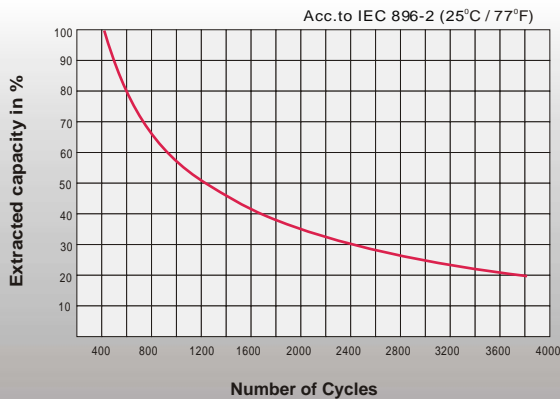
## Temperature Effects in Relation to Battery Capacity



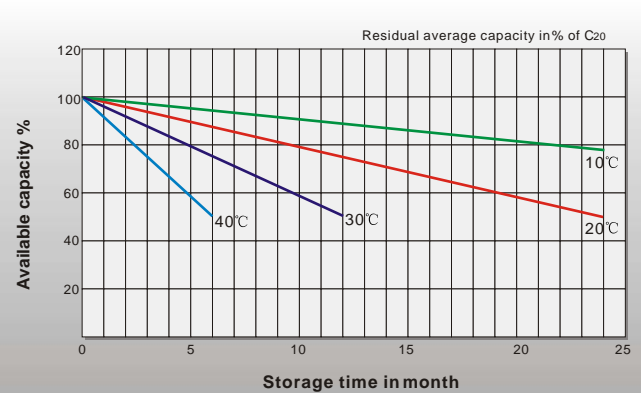
## Effect of Temperature on Long Term Float Life



## Cycle Life in Relation to Depth of Discharge



## General Relation of Capacity VS. Storage Time



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