

RM SERIES-GEL Battery

RM12-80G (12V85AH)

Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	85.0AH	
Dimension	Length	306±3mm (12.05 inches)
	Width	168±2mm (6.61 inches)
	Container Height	208±3mm (8.20 inches)
	Total Height (with Terminal)	214±3mm (8.43 inches)
Approx Weight	Approx 26.5 kg (58.4lbs)	
Terminal	T6	
Container Material	ABS	
Rated Capacity	85.0 AH/4.25A	(20hr, 1.80V/cell, 25°C/77°F)
	78.0 AH/7.80A	(10hr, 1.75V/cell, 25°C/77°F)
	68.0 AH/13.6A	(5hr, 1.75V/cell, 25°C/77°F)
	59.1 AH/19.7A	(3hr, 1.75V/cell, 25°C/77°F)
	46.8 AH/46.8A	(1hr, 1.67V/cell, 25°C/77°F)
Max. Discharge Current	850A (5s)	
Internal Resistance	Approx 6.0mΩ	
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 21.25A. 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	71.9	56.4	43.1	36.0	22.9	17.4	14.4	12.5	10.8	9.52	8.59	7.85	7.32	4.08
1.80V/cell	82.4	63.1	47.5	39.8	24.7	18.7	15.3	13.1	11.3	10.0	9.00	8.25	7.64	4.25
1.75V/cell	92.6	69.4	51.3	42.6	26.2	19.7	16.0	13.6	11.7	10.3	9.29	8.50	7.80	4.34
1.70V/cell	99.7	74.3	54.5	45.1	27.8	20.5	16.6	14.0	12.1	10.7	9.56	8.73	7.98	4.39
1.67V/cell	103.8	77.2	56.4	46.8	28.5	21.2	17.0	14.3	12.3	10.8	9.71	8.84	8.07	4.43
1.60V/cell	112.5	82.6	60.6	49.6	29.7	22.0	17.6	14.8	12.6	11.1	9.88	9.03	8.23	4.50

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	137.6	108.8	83.5	70.2	44.7	34.1	28.4	24.6	21.3	18.9	17.1	15.6	14.6	8.14
1.80V/cell	155.6	120.4	91.4	77.1	48.1	36.4	30.0	25.7	22.3	19.7	17.9	16.4	15.2	8.47
1.75V/cell	172.9	131.2	98.1	82.1	50.8	38.4	31.3	26.7	23.0	20.4	18.4	16.9	15.5	8.63
1.70V/cell	184.3	139.3	103.4	86.3	53.6	39.9	32.2	27.4	23.8	21.0	18.9	17.3	15.8	8.73
1.67V/cell	189.6	143.2	106.3	89.1	54.8	41.0	32.9	27.9	24.1	21.3	19.2	17.5	16.0	8.81
1.60V/cell	203.2	151.9	113.4	94.1	56.7	42.4	34.1	28.7	24.6	21.7	19.4	17.8	16.3	8.92

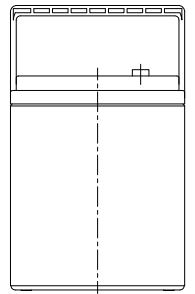
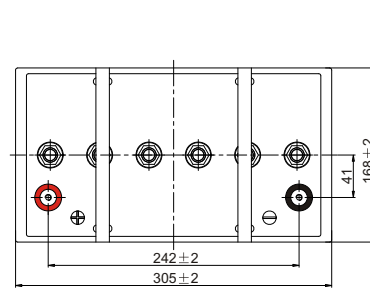
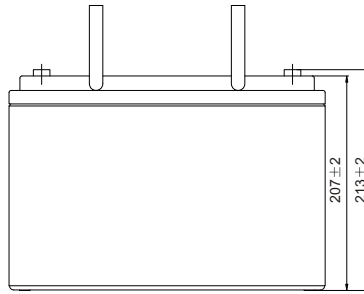
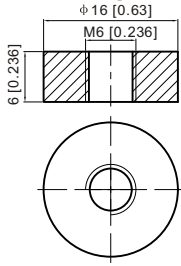
Specifications subject to change without notice.



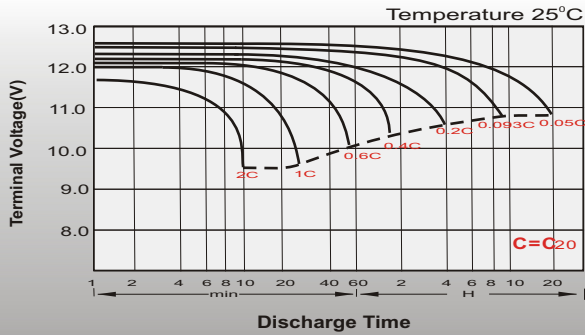
Dimensions

T6 Terminal

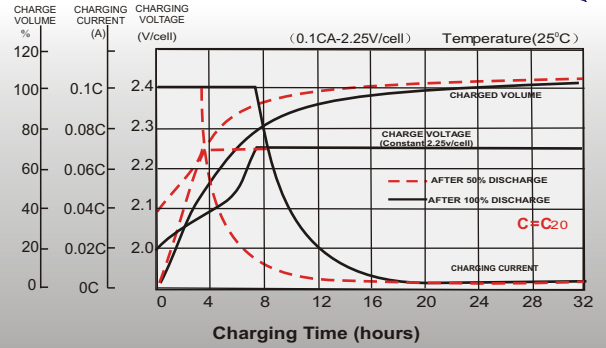
Unit: mm [inches]



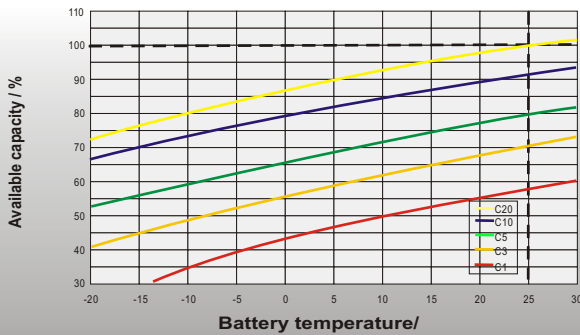
Discharge Characteristics



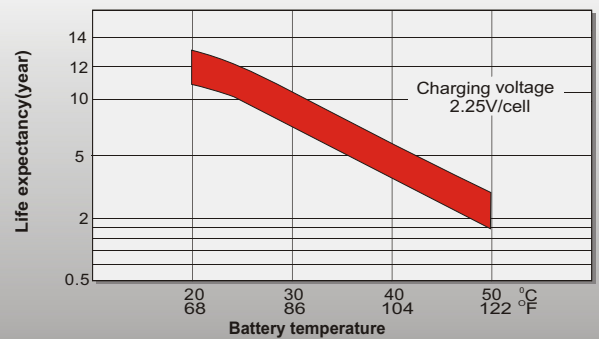
Float Charging Characteristics



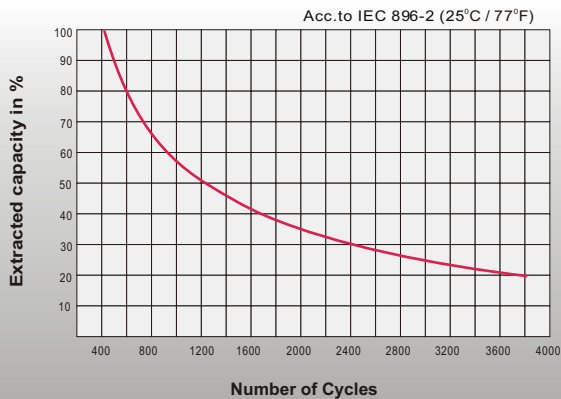
Temperature Effects in Relation to Battery Capacity



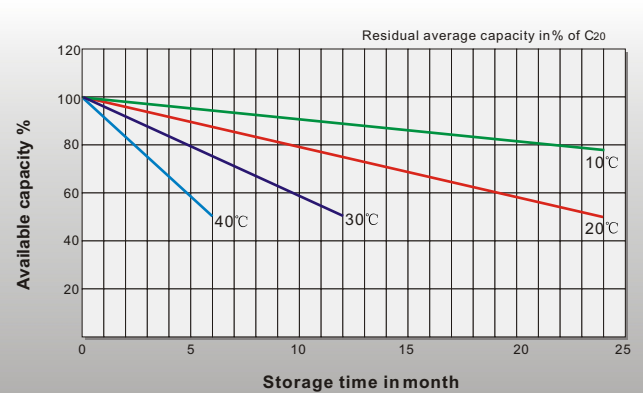
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



General Relation of Capacity VS. Storage Time



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