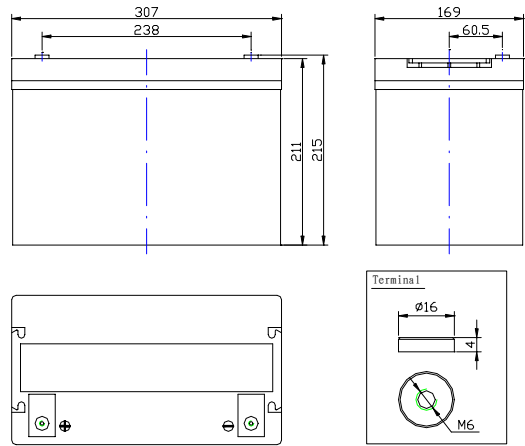


HL90-12



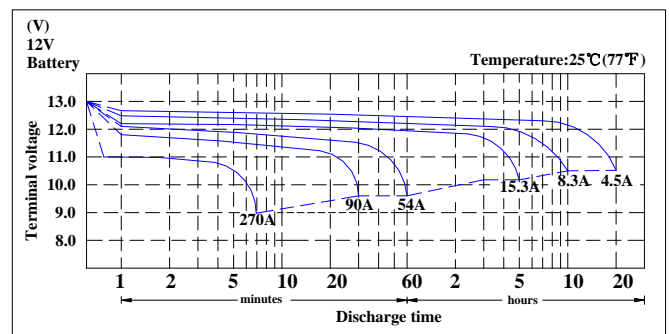
Specifications

Nominal Voltage		12V
Rated Capacity (20 hour rate)		90AH
Dimension	Total Height (with terminals)	215mm(8.46 inches)
	Height	211mm(8.31 inches)
	Length	307mm(12.09inches)
	Width	169mm(6.65inches)
Weight		Approx.28.2kg (62.04lbs)

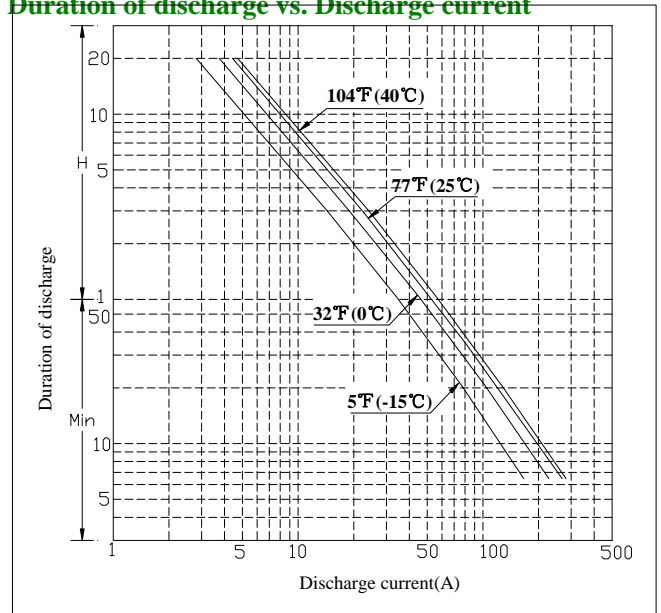
Characteristics

Capacity 77°F (25°C)	20 hour rate (4.5A to 10.5Volts)	90AH
	5 hour rate (15.3A to 10.2Volts)	76.5AH
	1 hour rate (54A to 9.6Volts)	54AH
Internal Resistance	Full charged Battery 77°F (25°C)	5.5m Ω
Standard Terminal	M6	
Capacity affected by Temperature (20 hour rate)	104°F (40°C)	102%
	77°F (25°C)	100%
	32°F (0°C)	85%
	5°F (-15°C)	65%
Self-Discharge 77°F (25°C)	Capacity after 3 month storage	88%
	Capacity after 6 month storage	76%
	Capacity after 12 month storage	53%
Max. Discharge Current 77°F (25°C)	1000A (5s)	
Reserve Capacity		@ 25Amps
(Minutes to 10.5V at 80°F (27°C))		@ 75Amps
		130Min
		38Min
Charging (Constant Voltage)	Cycle	Initial Charging Current 18A Or Small 14.5V~14.9V/77°F (25°C)
	Float	13.6V~13.8V/77°F (25°C)

Discharge characteristics 77°F (25°C)



Duration of discharge vs. Discharge current



Constant Current Discharge Rating Amperes @ 77 °F (25°C)

Cut off voltage V/cell	15M	30M	45M	1H	2H	3H	5H	8H	10H	12H	20H	24H
1.70V	148	88.1	64.2	50.9	29.5	22.31	15.16	10.29	8.40	7.15	4.51	3.79
1.75V	139	85.5	62.9	50.1	29.1	22.05	14.99	10.24	8.37	7.13	4.50	3.77