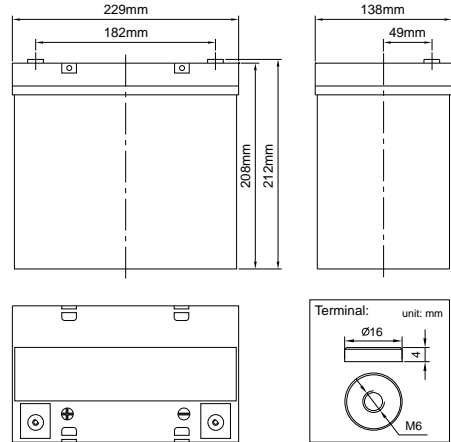


HL50-12



Specifications

Nominal Voltage		12V
Rated Capacity(20 hour rate)		50AH
Dimension	Total Height (with terminals)	212mm(8.66inches)
	Height	208mm(8.19inches)
	Length	229mm(9.021inches)
	Width	138mm(5.43inches)
Weight		Approx. 18.0kg(39.68lbs)

Characteristics

Capacity 77°F(25°C)	20 hour rate(2.5A)	50AH
	10 hour rate(4.65A)	46.5AH
	5 hour rate(8.6A)	43AH
	1 hour rate(30A)	30AH
Internal Resistance	Full charged Battery 77°F(25°C)	8mΩ
Capacity affected by Temperature (20 hour rate)	104°F(40°C)	102%
	77°F(25°C)	100%
	32°F(0°C)	85%
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)	750A(5S)	
Terminal	Standard	F15
	Optional	
Charging (Constant Voltage)	Cycle	Initial Charging Current 10A Or Small 14.5V~14.9V/77°F(25°C)
	Float	13.6V~13.8V/77°F(25°C)

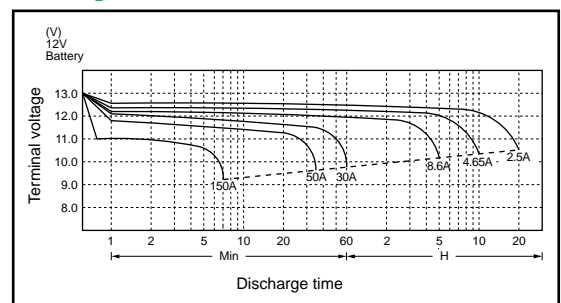
Constant Power Discharge Watts Per Cell @ 77°F(25°C)

End Point Volt/cell	Operation Time To End Point Voltage								
	5min	10min	15min	20min	30min	40min	50min	60min	90min
1.75	250	190	155	130	100	82.5	70.8	62.0	45.3
1.70	272	204	165	136	105	86.6	74.4	65.0	46.7
1.67	280	210	170	140	107	88.1	75.2	65.5	47.3
1.65	284	213	173	142	108	88.5	75.8	66.0	47.7
1.60	290	215	174	143	109	88.9	76.2	66.5	48.1

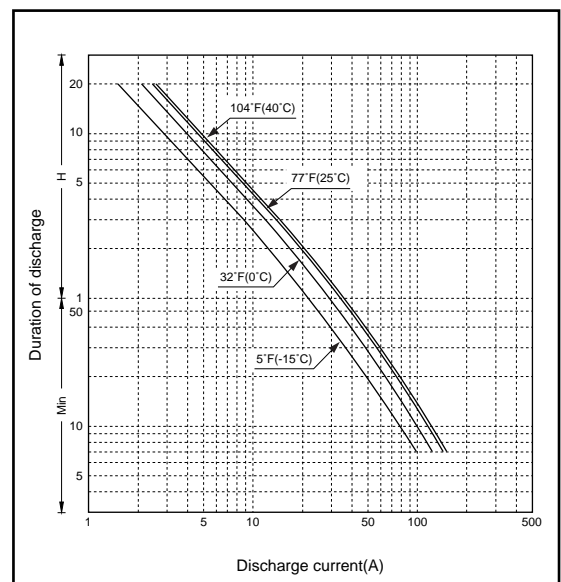
Constant Current Discharge Rating Amperes @ 77°F(25°C)

End Point Volt/cell	Operation Time To End Point Voltage													
	5min	10min	30min	60min	2hr	3hr	4hr	5hr	6hr	7hr	8hr	10hr	20hr	24hr
1.75	131	78.8	50.1	30.0	17.6	12.5	9.83	8.60	7.33	6.40	5.71	4.65	2.50	2.09
1.80	119	72.8	46.8	28.1	17.1	12.2	9.64	8.41	7.18	6.26	5.56	4.56	2.45	2.05
1.85	106	66.4	43.3	26.8	16.4	11.8	9.32	8.18	6.98	6.09	5.40	4.41	2.33	1.95
1.90	91.8	52.1	36.4	23.3	15.1	11.1	8.87	7.74	6.61	5.77	5.11	4.21	2.16	1.82

Discharge characteristics 77°F(25°C)



Duration of discharge vs. Discharge current



Note The above data are average values, and can be obtained within 3 charge/discharge cycles. These are not minimum values.