

**UL75 -12**



**Physical Specification**

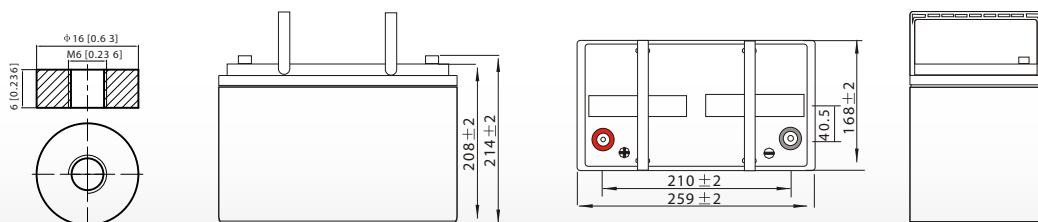
Part Number:	<b>UL75-12</b>
Length:	<b>259 ± 2 mm (10.20 inches)</b>
Width:	<b>168 ± 2 mm (6.61 inches)</b>
Container Height:	<b>208 ± 2 mm (8.19 inches)</b>
Total Height (with terminal):	<b>214 ± 2 mm (8.43 inches)</b>
Approx Weight:	<b>Approx 22.3 kg (46.3lbs)</b>

**Specifications**

	Nominal Voltage	12V
	Nominal Capacity (10HR)	75AH
<b>Terminal Type</b>	Standard Terminal	F6
	Optional Terminal	F9 / F14
<b>Container Material</b>	Standard Option	ABS
	Flame Retardant Option (FR)	ABS (UL94:VO)
<b>Rated Capacity</b>	78.0 AH/3.90A	(20hr, 1.80V/cell, 25°C / 77°F)
	75.0 AH/7.50A	(10hr, 1.80V/cell, 25°C / 77°F)
	64.5 AH/12.9A	(5hr, 1.75V/cell, 25°C / 77°F)
	58.5 AH/19.5A	(3hr, 1.75V/cell, 25°C / 77°F)
	45.8 AH/45.8A	(1hr, 1.60V/cell, 25°C / 77°F)
<b>Max Discharge Current</b>	900A (5s)	
<b>Internal Resistance</b>	Approx 6.6mΩ	
<b>Discharge Characteristics</b>	Operating Temp. Range	Discharge: -15 ~ 50°C (5 ~ 122°F)
		Charge: 0 ~ 40°C (5 ~ 104°F)
		Storage: -15 ~ 40°C (5 ~ 104°F)
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
	Cycle Use	Initial Charging Current less than 22.5A. 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%
<b>Design Floating Life at 20°C</b>	10 Years	
<b>Self Discharge</b>	Ultracell batteries may be stored for up to 6 months at 25°C(77°F) and then a refresh charge is required. For higher temperatures the time interval will be shorter.	

**Dimensions**

**F6 Terminal**



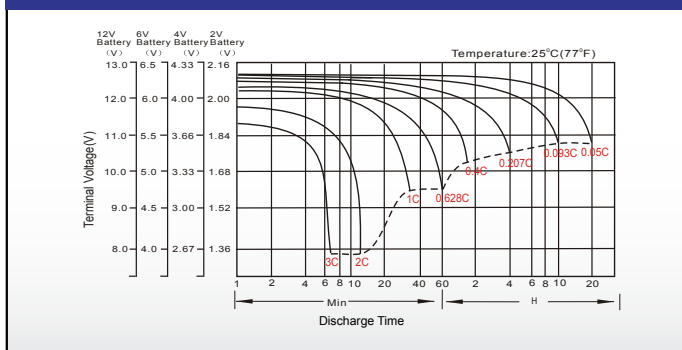
## Constant Current Discharge (Amperes) at 25 °C (77 °F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	128.4	100.9	85.8	71.8	57.1	43.2	35.4	22.5	17.8	14.5	11.7	10.2	8.29	7.08	3.86
1.80V/cell	172.3	128.9	103.7	84.9	67.3	50.2	39.6	24.6	19.2	15.5	12.6	10.9	8.79	7.50	3.90
1.75V/cell	194.3	141.7	113.3	91.3	69.9	52.1	41.4	25.5	19.5	15.9	12.9	11.2	8.94	7.58	3.94
1.70V/cell	213.9	154.4	120.9	95.9	72.7	54.2	42.7	26.5	20.1	16.3	13.2	11.5	9.07	7.65	4.01
1.65V/cell	235.9	166.7	128.6	101.9	76.7	55.6	44.2	27.2	20.9	16.8	13.6	11.7	9.21	7.81	4.07
1.60V/cell	260.2	180.9	137.5	108.6	81.0	57.9	45.8	28.2	21.6	17.4	14.1	12.0	9.30	7.89	4.09

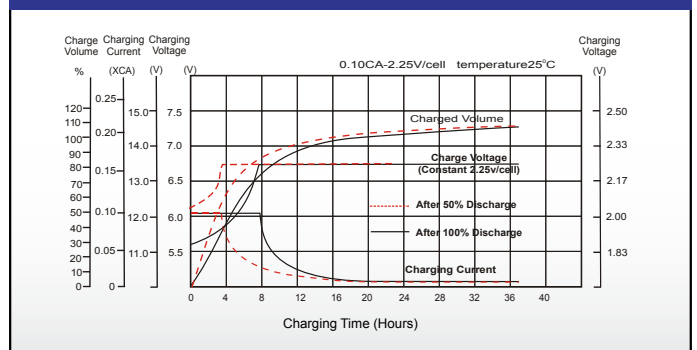
## Constant Power Discharge (Watts) at 25 °C (77 °F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	234.7	186.4	160.1	135.3	108.7	83.0	68.2	43.7	34.7	28.4	23.0	20.1	16.4	14.0	7.65
1.80V/cell	311.7	235.4	190.9	157.6	126.3	95.8	76.0	47.4	37.1	30.2	24.6	21.4	17.3	14.8	7.71
1.75V/cell	343.9	254.5	205.9	167.9	130.1	98.4	79.1	49.0	37.7	30.8	25.1	22.0	17.6	14.9	7.78
1.70V/cell	368.2	271.1	216.8	175.1	134.6	102.0	81.4	50.8	38.7	31.5	25.7	22.4	17.8	15.1	7.92
1.65V/cell	400.3	289.9	228.8	184.7	140.9	103.6	83.5	52.0	40.1	32.5	26.3	22.8	18.0	15.4	8.02
1.60V/cell	431.3	307.6	240.6	194.6	147.7	107.4	86.0	53.4	41.2	33.4	27.1	23.2	18.2	15.5	8.05

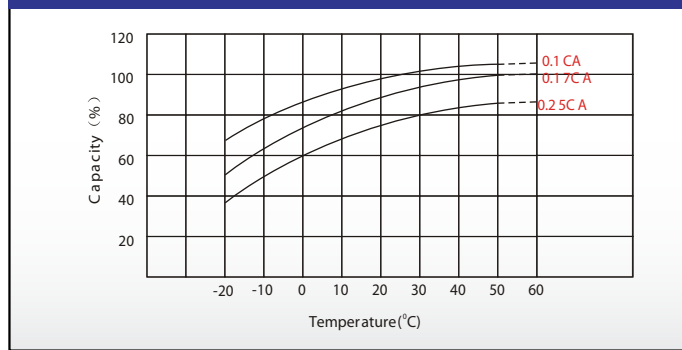
### Discharge Characteristics



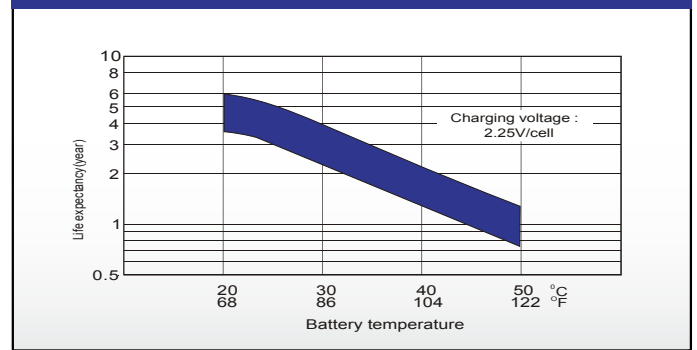
### Float Charging Characteristics



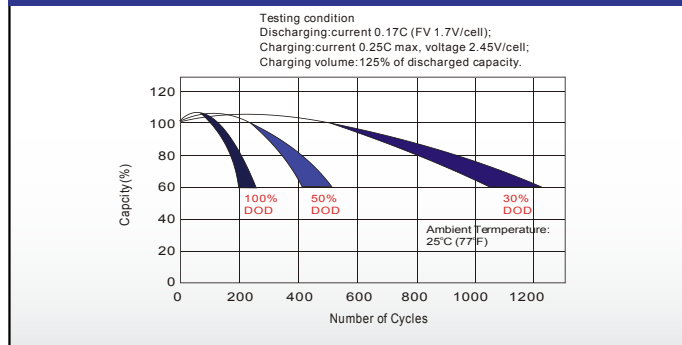
### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life



### Cycle Life in Relation to Depth of Discharge



### Self Discharge Characteristics

