

**UXL70-12**



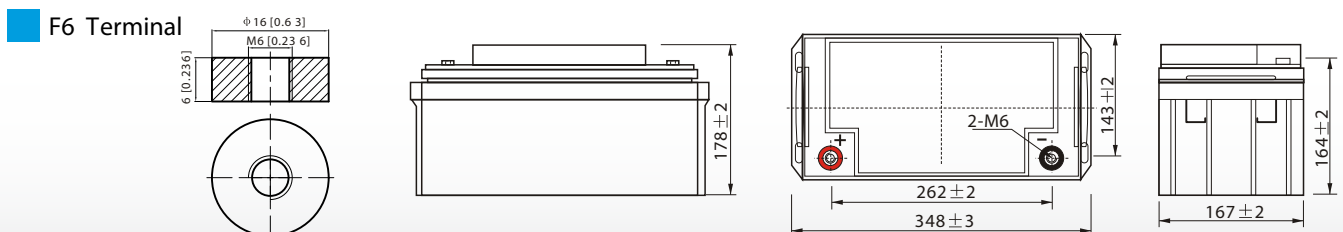
**Physical Specification**

Part Number:	UXL70-12
Length:	348 ± 3 mm (13.70 inches )
Width:	167 ± 3 mm (6.57 inches )
Container Height:	178 ± 3 mm (7.01 inches )
Total Height (with terminal):	178 ± 3 mm (7.01 inches )
Approx Weight:	Approx 24 Kg

**Specifications**

	Nominal Voltage	12V
	Nominal Capacity (10HR)	70AH
Terminal Type	Standard Terminal	F6
	Optional Terminal	-
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	ABS (UL94:VO)
Rated Capacity	74.9 AH/3.75A	(20hr,1.80V/cell, 25°C / 77°F)
	70.0 AH/7.00A	(10hr,1.80V/cell, 25°C / 77°F)
	60.9 AH/12.2A	(5hr,1.75V/cell, 25°C / 77°F)
	54.6 AH/18.2A	(3hr,1.75V/cell, 25°C / 77°F)
	43.4 AH/43.4A	(1hr,1.60V/cell, 25°C / 77°F)
Max Discharge Current	840 A (5s)	
Internal Resistance	Approx 6.6mΩ	
Discharge Characteristics	Operating Temp. Range	Discharge: -15 ~ 50°C (5 ~ 122°F)
		Charge: 0 ~ 40°C (32 ~ 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 21.0A. Voltage 14.4V ~ 15.0V at 25°C (77°F) Temp. Coe fficient -30mV/°C
	Standby Use	No limit on Initial Charging Current Voltage 13.5V ~ 13.8V at 25°C (77°F) Temp. Coe fficient -20mV/°C
	Capacity affected by Temperature	40°C (104°F)
25°C (77°F)		100%
0°C (32°F)		86%
Design Floating Life at 20°C	15 Years	
Self Discharge	Ultracell batteries may be stored for up to 6 months at 25°C(°77F) and then a refresh charge is required. For higher temperatures the time interval will be shorter.	

**Dimensions**



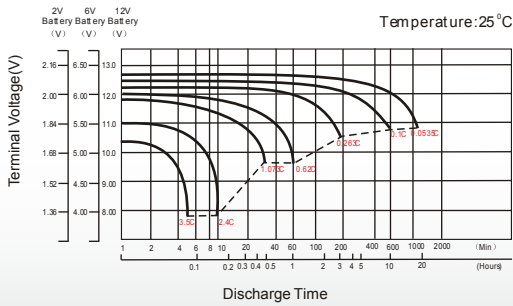
## Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	81.9	68.9	61.1	50.7	39.1	33.5	21.7	16.3	13.3	11.2	9.84	7.89	6.78	3.62
1.80V/cell	93.7	77.3	67.6	55.0	42.2	35.3	23.3	17.5	14.2	11.9	10.4	8.30	7.00	3.75
1.75V/cell	106.4	87.2	74.7	59.8	46.0	38.5	24.2	18.2	14.7	12.2	10.7	8.58	7.19	3.84
1.70V/cell	120.2	96.7	82.4	65.3	49.6	40.7	25.5	19.2	15.3	12.9	11.3	8.94	7.46	3.94
1.65V/cell	129.1	103.6	87.7	68.9	52.5	42.1	26.5	19.9	15.9	13.3	11.7	9.25	7.67	4.06
1.60V/cell	142.0	113.4	95.2	73.5	54.5	43.4	27.1	20.4	16.3	13.6	11.9	9.41	7.83	4.13

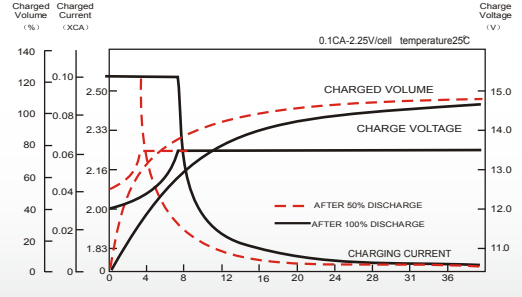
## Constant Power Discharge (Watts) at 25 °C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	152.9	129.9	116.4	97.6	76.0	65.2	42.5	32.1	26.4	22.2	19.5	15.7	13.6	7.24
1.80V/cell	172.9	143.9	126.8	104.4	81.3	68.5	45.4	34.3	27.9	23.5	20.6	16.5	14.0	7.48
1.75V/cell	193.3	160.3	138.8	112.5	87.8	74.3	47.0	35.5	28.7	23.9	21.2	17.0	14.3	7.66
1.70V/cell	213.4	175.3	152.1	122.2	94.3	78.4	49.4	37.3	30.0	25.3	22.2	17.7	14.9	7.85
1.65V/cell	227.1	186.3	160.6	127.9	98.9	80.5	51.0	38.6	31.0	26.0	22.9	18.3	15.3	8.09
1.60V/cell	244.2	200.7	172.6	135.5	102.2	82.5	52.0	39.4	31.6	26.5	23.3	18.6	15.6	8.21

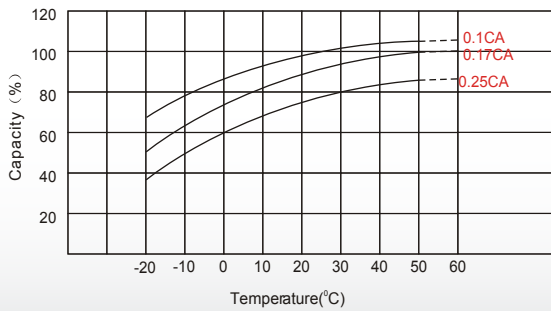
### Discharge Characteristics



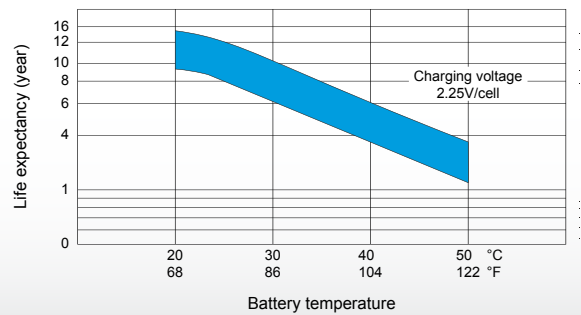
### Float Charging Characteristics



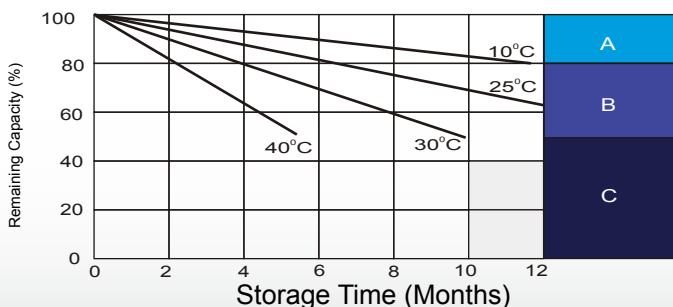
### Temperature Effects in Relation to Battery Capacity



### Effect of Temperature on Long Term Float Life



### Self Discharge Characteristics



**A**

No supplementary required  
(Carryout supplementary charge before use if 100% capacity is required.)

**B**

Supplementary charge required before use. Optional charging way as below:  
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.  
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.25V/cell.  
 3. Charged for 8 ~ 10 hours at limited current 0.05 CA.

**C**

Supplementary charge may often fail to recover the capacity.  
The battery should never be left standing till this is reached.