

EXPFT-90-12V

12 Volt 90 Amp.
Front Terminal Battery

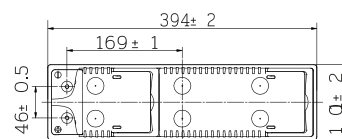
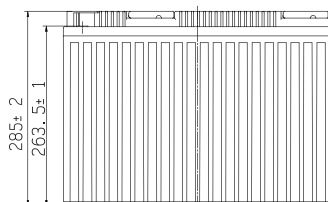
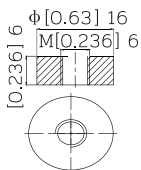


Physical Specification

Part Number:	EXPFT-90-12V
Length:	394 ± 2mm (15.5 inches)
Width:	110 ± 2mm (4.33 inches)
Container Height:	285 ± 2mm (11.2 inches)
Total Height (with terminal):	285 ± 2mm (11.2 inches)
Approx Weight:	31.0 Kg (68.4 lbs)

Dimensions

■ M6 Terminal



Specifications

	Nominal Voltage	12V
	(C10,1.80V/cell)	90AH
Terminal Option	M6	
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	ABS (UL94:VO)
Rated Capacity	(20hr,5.00A,1.80V/cell)	100.0 Ah
	(10hr,9.00A,1.80V/cell)	90.0 Ah
	(8hr,11.01A,1.75V/cell)	88.8 Ah
	(5hr,16.4A,1.75V/cell)	82.0 Ah
	(1hr,61.4A,1.67V/cell)	41.4 Ah
Max Discharge Current (5s)	900 A	
Internal Resistance	Approx.4.5mΩ	
Discharge Characteristics		Discharge: -15°C~50°C (5°F~122°F)
	Operating Temp. Range	Charge: 0°C~40°C (32°F~104°F)
		Storage: -15°C~40°C (5°F~104°F)
	Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)
	Cycle Use	Initial Charging Current less than 1.05A. Voltage 14.1V~14.4V at 25°C (77°F) Temp. Coefficient 30-mV/°C
	Self Discharge	No limit on Initial Charging Current Voltage 13.5V~13.8 V at 25°C (77°F) Temp. Coefficient 20-mV/°C
	Capacity affected by Temperature	40°C (104°F) 103%
		25°C (77°F) 100%
		0°C (32°F) 86%
Design Floating Life at 20°C	12+ Years	
Self Discharge	EXPLL deep cycle 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. Self-discharge is less than 2%	

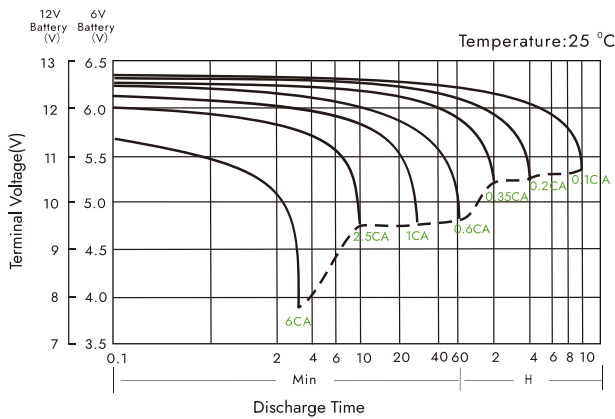
Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	136.5	119.2	106.1	85.7	66.8	54.1	31.5	22.9	18.3	15.4	13.4	10.5	8.58	4.78
1.80V/cell	155.1	132.7	116.1	92.1	70.7	56.9	32.8	23.9	19.1	16.2	14.1	10.8	9.00	5.00
1.75V/cell	170.8	144.7	123.4	95.8	73.4	58.6	33.5	24.2	19.4	16.4	14.2	11.1	9.55	5.05
1.70V/cell	183.9	152.9	130.0	100.2	75.5	60.1	34.1	24.6	19.7	16.6	14.5	11.3	9.61	5.08
1.67V/cell	192.0	159.3	134.5	102.8	77.1	61.4	34.7	25.0	19.9	16.8	14.6	11.4	9.69	5.11
1.60V/cell	199.6	164.4	137.9	104.9	78.3	62.3	35.3	25.3	20.1	17.0	14.7	11.5	9.74	5.14

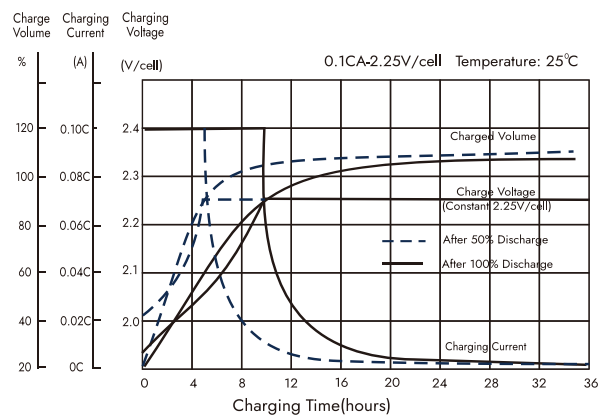
Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	260.0	228.9	205.2	166.9	131.0	106.2	62.3	45.5	36.6	30.9	26.9	21.2	18.2	9.66
1.80V/cell	293.2	253.6	223.2	178.9	138.1	111.5	64.8	47.3	37.9	32.4	28.2	22.0	19.0	10.1
1.75V/cell	320.6	274.7	236.0	185.1	142.9	114.6	65.9	48.0	38.5	32.6	28.5	22.2	19.1	10.1
1.70V/cell	340.7	287.0	246.0	191.8	145.8	116.7	66.9	48.7	38.9	32.9	28.9	22.6	19.2	10.2
1.67V/cell	350.1	294.6	251.3	194.5	147.5	118.1	67.7	49.1	39.2	33.1	29.2	22.8	19.4	10.2
1.60V/cell	356.4	299.1	254.1	196.3	148.2	118.7	68.3	49.5	39.5	33.4	29.5	23.0	19.5	10.3

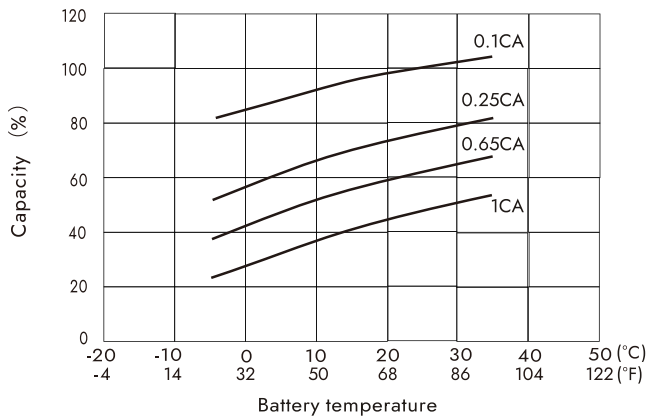
Discharge Characteristics



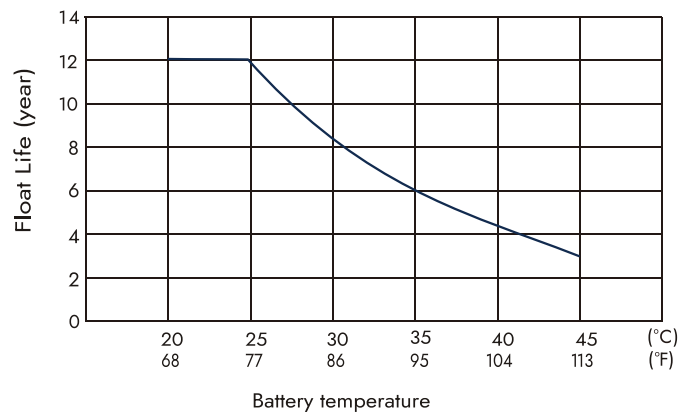
Float Charging Characteristics



Temperature Effects in Relation to Battery Capacity



Float Service Life



Temperature Effects in Relation to Battery Capacity

- Front terminal design
- Spill-free / Spill-proof
- Oxygen recombination technology
- Alloy plate grid
- Low self-discharge rate
- Absorbent Glass Mat (AGM)
- High power and volume rat
- Unrivalled energy density
- Valve regulated
- Extremely safe operations
- Short recharging time
- High reliability
- Rechargeable lead acid battery
- Optimum quality
- Developed by ExPII