

# EXPFT-50-12V

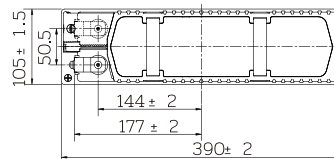
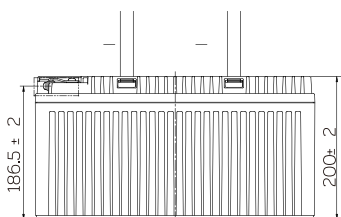
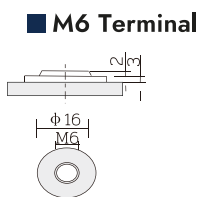
**12 Volt 50 Amp.**  
Front Terminal Battery

## Physical Specification

Part Number:	EXPFT-50-12V
Length:	390 ± 2mm (15.3 inches)
Width:	105 ± 2mm (4.17 inches)
Container Height:	222 ± 2mm (7.87 inches)
Total Height (with terminal):	222 ± 2mm (7.87 inches)
Approx Weight:	18.5 Kg (40.4 lbs)



## Dimensions



## Specifications

	Nominal Voltage	12V
	Nominal Capacity (10HR)	50AH
Terminal Option	M6	
Container Material	Standard Option	ABS
	Flame Retardant Option (FR)	ABS (UL94:VO)
Rated Capacity	(20hr,2.63A,1.80V/cell)	52.6 Ah
	(10hr,5.00A,1.80V/cell)	50.0 Ah
	(8hr,6.11A,1.75V/cell)	48.9 Ah
	(5hr,8.75A,1.75V/cell)	43.8 Ah
	(1hr,32.0A,1.67V/cell)	32.6 Ah
Max Discharge Current (5s)	500 A	
Internal Resistance	Approx.7.6mΩ	
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 14.4V~15V at 25°C (77°F) Temp. Coefficient -30mV/°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%	

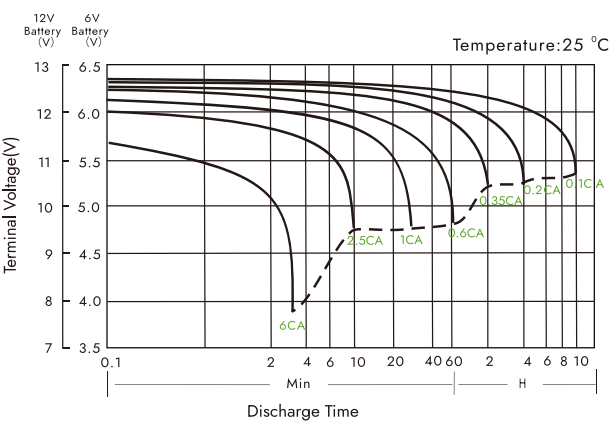
### Constant Current Discharge (Amperes) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	79.8	7.64	59.9	8.41	35.8	3.26	8.15	9.11	50.9	94.7	7.1	60.5	69.4	46.2
1.80V/cell	92.1	2.75	66.4	2.47	38.6	2.29	2.17	9.12	2.10	56.8	7.5	00.6	00.5	63.2
1.75V/cell	101.7	6.79	71.7	4.49	39.9	2.30	7.17	3.13	5.10	75.8	7.6	11.6	08.5	67.2
1.70V/cell	107.4	1.84	74.5	6.51	40.8	3.31	3.18	6.13	8.10	95.8	7.7	22.6	16.5	71.2
1.67V/cell	112.2	6.87	76.8	9.52	41.4	0.32	6.18	8.13	9.10	06.9	7.8	28.6	20.5	73.2
1.60V/cell	117.0	0.93	78.5	9.55	41.9	6.33	4.19	4.14	3.11	34.9	7.8	43.6	31.5	79.2

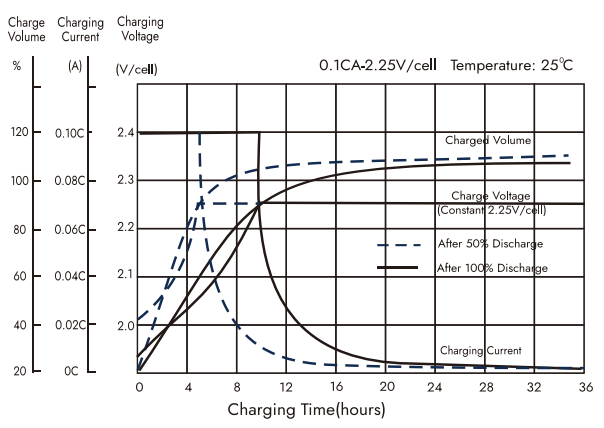
### Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	6	116.2	152.0	132	2.86	70.2	6.54	0.33	0.25	9.19	7.16	14.4	8.11	89.9
1.80V/cell	6	127.8	174.2	152	6.96	75.4	1.60	7.35	9.26	4.21	9.17	15.1	6.12	5.10
1.75V/cell	1.8	137.4	100	190.9	159	77.7	8.61	6.36	5.27	9.21	3.18	15.3	8.12	7.10
1.70V/cell	6.0	141.5	103	198.9	167	78.8	7.63	6.37	2.28	3.22	6.18	15.4	0.13	8.10
1.67V/cell	6.7	143.9	105	204.6	172	79.3	7.64	1.38	5.28	6.22	8.18	15.5	1.13	9.10
1.60V/cell	2.1	145.1	110	208.9	180	79.5	2.67	4.39	4.29	2.23	3.19	15.5	4.13	1.11

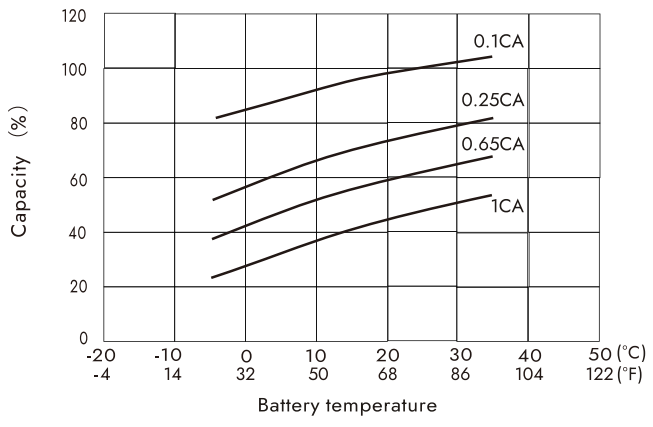
### Discharge Characteristics



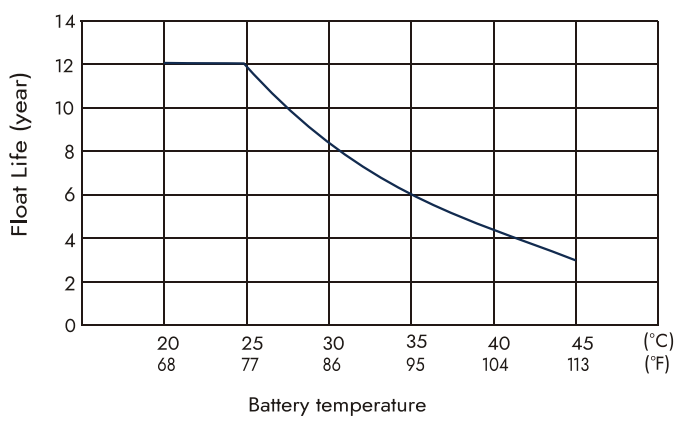
### Float Charging Characteristics



### 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