

VALVE REGULATED LEAD-ACID RECHARGEABLE BATTERY

DC Series

Deep Cycle series batteries(D Type, "D" behind the model name stands for deep-cycle application) are designed to have a large amount of stored current discharged between charging sessions, with very heavy non-porous battery plates to withstand repeated major discharging and charging cycle(deep cycle). The Deep-cycle batteries uses a different chemistry for the plates active paste material, and a slightly stronger electrolyte than normal battery electrolyte, which allows for a much longer life in deep cycle applications.

FL12850DC

(12V85Ah/20hr)

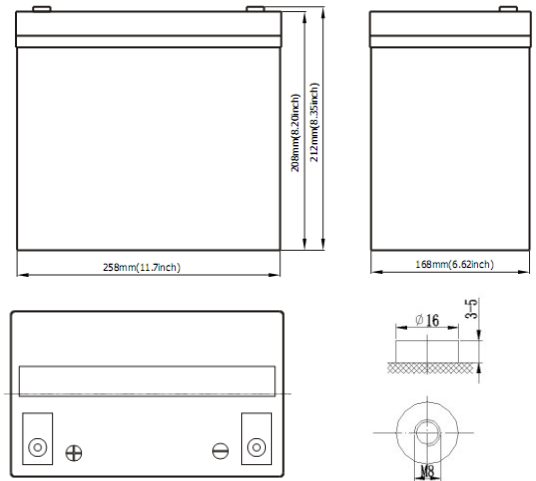


Application

- Alarm System
- Cable Television
- Power tools
- Emergency Power System
- Security System
- Medical Equipment
- Solar and Wind Power System
- Communication Equipment
- Control Equipment
- Toys

General Features

- Sealed and maintenance free operation.
- Non-Spillable construction design.
- ABS containers and covers (UL94HB, UL94V-0) optional.
- Safety valve installation for explosion proof .
- High quality and high reliability.
- Exceptional deep discharge recovery performance.
- Low self discharge characteristic.
- Flexibility design for multiple install positions.



CONSTRUCTION

Component	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

TECHNOLOGY PARAMETER

Battery model	FL12850DC			
Designed Cycle Life	>350 Cycles @ -0.5CA to 9.6V			
Capacity (25°C)	20HR(3.85A, 10.5V)	10HR(7.24A, 10.5V)	5HR(12.7A, 10.5V)	1HR(49.6A, 9.60V)
	85Ah	72.4Ah	63.5Ah	49.6Ah
Dimensions	Length	Width	Height	Total Height
	259±2mm	169±2mm	208±2mm	227±2mm
Approx. weight (±3%)	23.2Kg (51.15lbs)			
Internal resistance	Full charged at 25°C: Approx. 7.5mOhms			
Self discharge	3% of capacity declined per month at 25°C (average)			
Capacity Affected by Temp.(20HR)	40 °C	25 °C	0 °C	-15 °C
	102%	100%	85%	65%
Charge Voltage (25°C)	Cycle use		Float use	
	14.4-14.7V(-30mV/°C), max. Current: 17.5A		13.6-13.8V(-20mV/°C)	

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Constant current discharge ratings-amperes at 25°C

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	267	187	142	82.5	49.6	21.2	13.9	7.46	3.83
1.65V	254	179	135	79.2	48.7	20.5	13.5	7.40	3.80
1.70V	239	169	128	75.8	47.5	19.8	13.1	7.32	3.77
1.75V	224	159	121	72.0	45.5	19.0	12.7	7.24	3.75
1.80V	209	150	115	68.4	43.3	18.1	12.3	7.10	3.72

Constant power discharge ratings-watts at 25°C

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	481	338	259	151	91.3	39.2	25.8	14.0	7.20
1.65V	454	321	245	144	89.1	37.8	24.9	13.8	7.11
1.70V	425	302	231	137	86.4	36.3	24.1	13.5	7.02
1.75V	396	282	217	130	82.3	34.6	23.2	13.3	6.93
1.80V	367	266	204	122	77.9	32.8	22.4	13.0	6.84

