

DC Series

Deep Cycle series batteries 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.

DC12900

(12V90Ah/10hr)

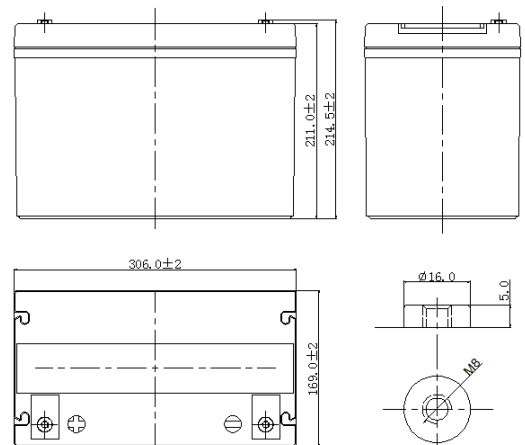


Application

- 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	DC12900			
Designed Cycle Life	>350 Cycles @ -0.5CA to 9.6V			
Capacity (25°C)	20hR(4.53A, 10.8V)	10hR(9.0A, 10.8V)	5hR(14.8A, 10.5V)	1hR(56.4A, 9.60V)
	90.6Ah	90Ah	74Ah	56.4Ah
Dimensions	Length	Width	Height	Total Height
	306±2mm	169±2mm	211±2mm	214.5±2mm
Approx. weight (±5%)	28 Kg			
Internal resistance	Full charged at 25°C: Approx. 6.5mOhms			
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: 22.5A		13.6-13.8V(-20mV/°C)	

DC12900 (12V90Ah/10hr)

Constant current discharge ratings-amperes at 25°C

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	283	214	163	98.1	56.4	24.8	16.2	9.15	4.67
1.65V	269	204	155	96.3	54.3	24.0	15.7	9.11	4.64
1.70V	253	193	147	94.4	52.2	23.2	15.3	9.05	4.60
1.75V	237	181	139	92.6	50.1	22.2	14.8	9.00	4.57
1.80V	221	172	131	90.8	48.1	21.2	14.4	9.00	4.53

Constant power discharge ratings-watts at 25°C

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	517	393	301	182	105	46.5	30.6	17.0	8.74
1.65V	488	373	284	178	101	44.8	29.5	16.9	8.63
1.70V	457	350	268	173	96.5	43.0	28.5	16.7	8.52
1.75V	426	328	252	169	92.1	41.0	27.6	16.5	8.41
1.80V	395	309	237	165	87.8	38.9	26.6	16.3	8.30

