

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 use 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.

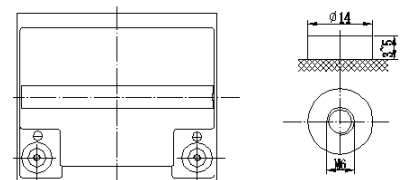
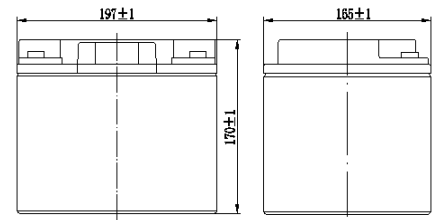
Application

- E-Bike
- Alarm System
- Cable Television
- Power tools
- Emergency Power System
- Security System
- Golf Cars
- 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 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.

DC12400 (12V40Ah/10hr)



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	DC12400			
Designed Cycle Life	>350 Cycles @ -0.5CA to 9.6V			
Capacity (25°C)	20hR(2.05A, 10.5V)	10hR(2.0A, 10.5V)	5hR(7.72A, 10.5V)	1hR(25.8A, 9.60V)
	41Ah	40.0Ah	38.6Ah	25.8Ah
Dimensions	Length	Width	Height	Total Height
	197±2mm	165±2mm	170±2mm	170±2mm
Approx. weight (±5%)	13.2Kg			
Internal resistance	Full charged at 25°C: 9mOhms			
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:12.0A		13.5-13.8V(-20mV/°C)	

DC12400- (12V40Ah/10hr)

Constant current discharge ratings-amperes at 25°C

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	126.55	96.00	72.73	42.69	24.58	10.76	7.05	4.12	2.12
1.65V	120.00	91.64	69.31	41.89	23.64	10.47	6.85	4.09	2.09
1.70V	113.45	86.55	65.75	41.16	22.76	10.11	6.65	4.04	2.08
1.75V	106.18	81.45	62.18	40.36	21.82	9.67	6.47	4.00	2.05
1.80V	98.91	77.09	58.62	39.56	20.95	9.24	6.27	4.00	2.03

Constant power discharge ratings-watts at 25°C

End Point Volts/Cell	5min	10min	15min	30min	1h	3h	5h	10h	20h
1.60V	228.4	173.1	132.4	77.82	45.16	20.00	13.09	7.71	3.98
1.65V	215.3	164.4	125.8	76.36	43.27	19.20	12.65	7.64	3.92
1.70V	201.5	154.2	118.5	74.18	41.38	18.47	12.22	7.49	3.87
1.75V	187.6	144.7	111.3	72.73	39.56	17.60	11.85	7.35	3.80
1.80V	174.5	136.0	104.7	70.76	37.67	16.73	11.42	7.27	3.74

