DEEP CYCLE BATTERY SERIES

6FM22DC 12V22AH/20HR

Deep Cycle Battery Series

DC series is specially designed for the deep cycle discharge applications. It means the depth of discharge of DC series is more than 60 per cent of the rated capacity. The DC series batteries are applied to the equipments require frequently deep discharge from batteries.

Application

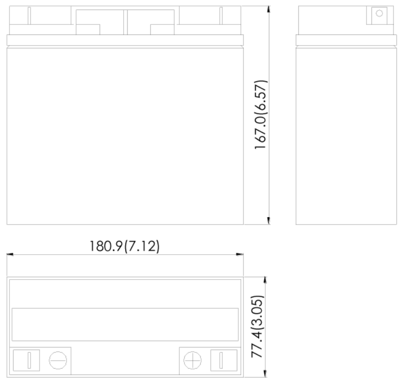
- Power reservation system
- Electric vehicles
- UPS
- Lighting system
- Solar Power System
- Jump starter

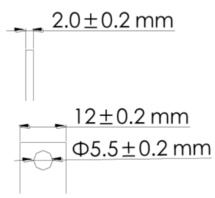
General Features

- Long deep cycle service life
- Maintenance free
- Safety and no leakage
- Less weight lost during applications
- Excellent recharging acceptance

Battery Construction

Component	Material
Positive plate	Lead dioxide
Negative plate	Lead
Container	ABS
Cover	ABS
Safety valve	Rubber
Terminal	Copper
Separator	AGM glass
Electrolyte	Sulfuric acid





Standard Terminal Dimensions

General Specifications

Battery Model	6FM22DC (12V22AH/20HR)			
Designed Service Life	5 years			
Capacity (25℃)	20HR (1.0A)	10HR (2.0A)	5HR (3.70A)	1HR (13.2A)
	22.0AH	20.0AH	18.5AH	13.2AH
Dimension: mm (inch)	Length	Width	Height	Total Height
	180.9 (7.12)	77.4 (3.05)	167.0 (6.57)	167.0 (6.57)
Approx. Weight	6.30 Kg (13.88lbs)±3%			
Internal Resistance	Fully charged at 25℃: 0.013 Ohm			
Self-discharge	3% of capacity declined per month at 25℃			
Capacity Affected by Temp. (20HR)	40℃	25℃	0℃	-15℃
	105%	100%	85%	65%
Charge Voltage (25℃)	Cycle use		Stand-by use	
	14.4-15.0V(-24mV/℃), max. Current: 6.0A		13.5-13.8V (-18mV/℃)	

Constant Current Discharge Data

Constant Current Discharge Data Sheet (Amperes at 25℃)

End Voltage/cell	Minute (s)				Hour (s)				
	5	10	15	30	1	3	5	10	20
1.80	67.9	46.1	36.0	21.0	12.5	5.03	3.36	1.76	0.95
1.75	69.7	47.4	36.9	21.4	12.8	5.11	3.45	1.85	1.00
1.70	71.5	48.7	37.8	21.7	13.0	5.20	3.54	1.90	1.04
1.65	73.3	49.9	38.7	22.1	13.2	5.28	3.63	1.93	1.07
1.60	75.0	51.2	39.6	22.4	13.4	5.36	3.72	1.93	1.07

Constant Power Discharge Data

Constant Power Discharge Data Sheet (Watts at 25℃)

End Voltage/cell	Minute (s)					Hour (s)			
	5	10	15	30	45	1	2	3	5
1.80	132	97.8	78.3	43.3	33.6	26.3	14.6	10.2	6.99
1.75	137	99.3	79.7	44.0	34.0	26.6	14.8	10.3	7.00
1.70	142	101	81.2	44.6	34.4	26.9	15.0	10.4	7.09
1.65	147	103	82.6	45.3	34.9	27.1	15.2	10.5	7.18
1.60	152	105	84.0	46.0	35.3	27.4	15.3	10.6	7.27

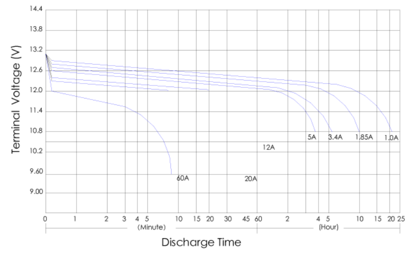
End Voltage

Discharge Rate	Discharge Current	End Voltage（V/cell）
20h	$0.05C_{20}$ A (I_{20})	1.75
10h	$0.09C_{20}$ A (I_{10})	1.75
3h	$0.25C_{20}$ A (I_{3})	1.75
1h	$0.60C_{20}$ A (I_{1})	1.60

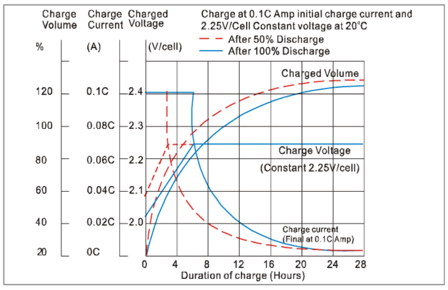
Storage Time VS Charge Time

Storage Time	Top up Charging Recommendation
Less than 6 months from production or previous top up charge	Maximum of 16 hours at a constant voltage of 2.40VPC
Less than 12 months from production or previous top up charge	Maximum of 20 hours at a constant voltage of 2.40VPC
Less than 6 months from production or previous top up charge	Maximum of 8 hours at a constant current of 0.1 C A
Less than 12 months from production or previous top up charge	Maximum of 10 hours at a constant current of 0.1 C A

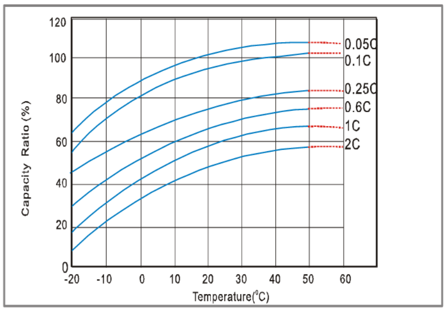
Performance Curves and Charts



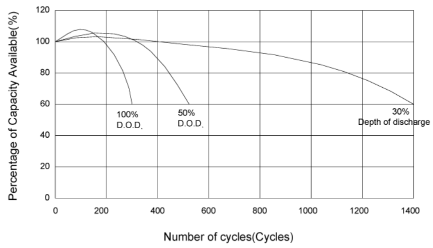
Discharge Characteristic (25℃)



Charge Characteristic (25℃)



Effect of temperature on capacity



Number of cycles Vs. Depth of Discharge

SHENZHEN CERRO POWER COMPANY LTD
Add,: Room 8H, Luhua Building, Guangxia Road, Futian District, Shenzhen, China
Tel.: +86-755-8311 9966 Fax: +86-755-8311 9980
E-mail: sales@cerropower.com www.cerropower.com

CERRO POWER