



E92

deep cycle battery

The E92 rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by the separators and plates and is thus immobilized. The amount of electrolyte is carefully controlled to ensure that the separator is not saturated, allowing for the flow of gasses inside the battery. This allows for the movement of hydrogen and oxygen ions inside the separator, and for the recombination into water within the cell.

Special one way valves are used to allow escape of gases during accidental overcharge.

The battery is designed for a float life of 3 to 5 years with a temperature controlled float charge.

PHDpowerhouse Distributions

Tel: 011 346 1812

Fax: 011 346 1818

Email anthony@phdpowerhouse.co.za

E92 12V 92Ah

General Features

- ◆ Absorbed Glass Mat (AGM) Technology
- ◆ Gas Recombination Technology - Low Hydrogen build-up
- ◆ Sealed VRLA design—No need for filling
- ◆ ABS Plastic Case and Cover
- ◆ Can be mounted in any orientation
- ◆ Low Self Discharge
- ◆ Lead, Calcium, Tin Alloy grid for high power density
- ◆ IATA/ICAO Compliant for Air Transport
- ◆ 6 months storage at 20 °C
- ◆



Dimensions and Weight

Length	330 mm ± 1 mm
Width	171 mm ± 1 mm
Height of case	215 mm ± 1 mm
Height to Terminal	220 mm ± 1 mm
Approx. Weight	27.9 Kg

Performance Characteristics

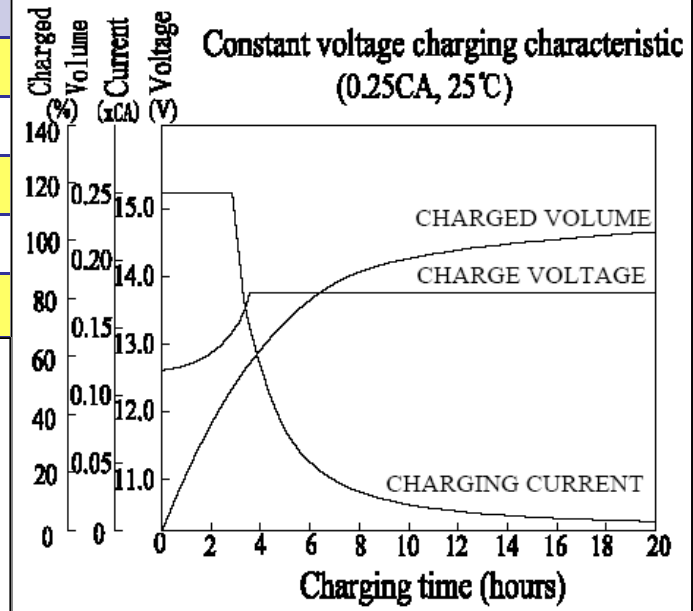
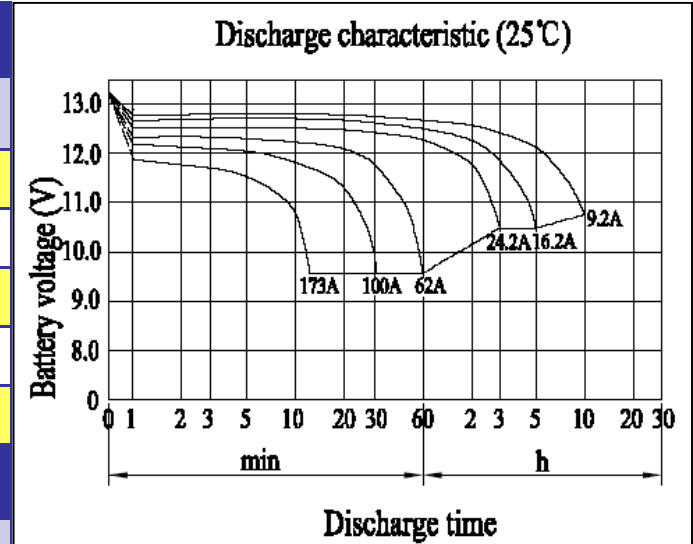
Nominal Voltage	12 V dc	Internal Resistance	5.1 mOhms Full chg, 25 °C
Number of Cells	6	Short Circuit Current	2000 A
C ₁₀ Capacity (25 °C)	92 Ah or 9.2 A for 10 hrs to 10.5 Volts	Maximum Discharge	850 A (5sec)
C ₅ Capacity (25 °C)	81 Ah or 16.2 A for 5 hrs to 10.5 Volts	Self Discharge	3% per month @ 20 °C
C ₁ Capacity (25 °C)	62 Ah or 62.0 A for 1 hr to 9.6 Volts	Design Life	3 to 5 Years @ 25 °C
Standby Use - Float	13.6 to 13.8 V @ 20 °C	Cycle Use	14.4 to 14.7 V I _{max} = 27.6 A

Constant Current Discharge (Amps @ 25 °C)

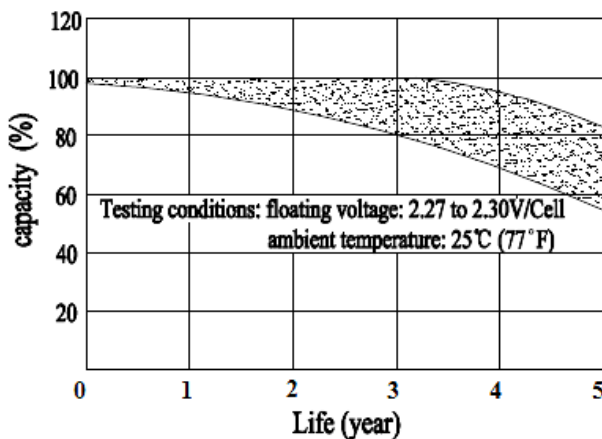
End Point Volts/cell	5 Min	10 Min	15 min	30 min	45 min	1 hr	3 hr	5 hr	10 hr
1.60 Vpc	288	218	173	100	74.7	62	27	17.2	9.5
1.65 Vpc	269	208	162	95	71.5	56.6	26.0	17.0	9.4
1.70 Vpc	252	186	153	90	67.9	56.0	25.0	16.7	9.3
1.75 Vpc	228	175	142	87.3	65.5	54.6	24.2	16.2	9.2
1.80 Vpc	203	163	132	84.2	63.0	52.4	23.1	15.7	9.1

Constant Power Discharge (Watts per Cell @ 25 °C)

End Point Volts/cell	5 Min	10 Min	15 min	30 min	45 min	1 hr	2 hr	3 hr	5 hr
1.60 Vpc	516	373	308	189	145	117	65.5	48.3	32.3
1.65 Vpc	503	364	303	180	139	112	64.1	48.1	31.9
1.70 Vpc	452	345	284	171	129	107	61.8	46.8	31.5
1.75 Vpc	425	343	281	167	128	103	59.8	45.4	30.7
1.80 Vpc	391	314	267	163	125	101	59.1	45.2	30.3



Life characteristics of standby use



Cycle service life in relation to depth of discharge

