

310-120 Series Rechargeable Batteries

The **310-120 Series Rechargeable Batteries** are non-spillable lead acid batteries. The unique construction and sealing techniques guarantee leakproof operation in any position with no adverse effect to capacity or service life. An electrolyte suspension system consisting of a high porosity, glass fiber material in conjunction with plates, totally absorbs and contains the electrolyte.

The 310-120 Series batteries have an expected life span of 3 to 5 years in float service applications. More than 1000 discharge/recharge cycles can be realized, dependent on the average depth of discharge. They have been designed to withstand occasional over discharge. While it is not recommended, 310-120 Series batteries can recover their full capacity under normal charging conditions, even when they have been subjected to extreme over discharge.

In normal float service, the gases generated inside the battery are continually recombined, and return to the water content of the electrolyte. Therefore, electrical capacity is not lost due to "drying up" of the electrolyte. Actually, through the gradual and very slow corrosion of the electrodes, the battery will eventually lose capacity and come to the end of service life. It should be noted that the corrosive process will be accelerated by high ambient operating temperatures and/or high charging voltage.

The 310-120 Series batteries can be operated in parallel for applications requiring more power. For custom power requirements, factory engineers can design a charging system that may include large capacity storage batteries.

Specifications

Nominal voltage: 12V

Nominal capacity:

310-120:

20 hr rate of 0.20A to 10.5V 4.0Ah

10 hr rate of 0.37A to 10.5V 3.7Ah

5 hr rate of 0.68A to 10.2V 3.4Ah

1 hr rate of 2.40A to 9.60V 2.4Ah

310-121:

20 hr rate of 0.6A to 10.50V 12.0Ah

10 hr rate of 1.1A to 10.50V 11.0Ah

5 hr rate of 2.1A to 10.20V 10.5Ah

1 hr rate of 7.2A to 9.60V 7.2Ah

310-122:

20 hr rate of 0.35A to 10.50V 7.0Ah

10 hr rate of 0.65A to 10.50V 6.5Ah

15 hr rate of 1.19A to 10.20V 5.95Ah

1 hr rate of 4.20A to 9.60V 4.2Ah

Weight (approx):

310-120: 3.74 lbs (1.7 kgs)

310-121: 8.82 lbs (4 kgs)

310-122: 6.17 lbs (2.64 kgs.)

Operating temperature range:

Charge: 5° to 122° F (-15° to 50° C)

Discharge: -4° to 140° F (-20° to 60° C)

Charge retention (shelf life) at 68° F (20° C):

1 month 97%, 3 months 91%, 6 months 85%

Life expectancy:

Standby use: 3 to 5 years

Cycle use (approx):

100% depth of discharge 250 cycles

50% depth of discharge 550 cycles

30% depth of discharge 1200 cycles

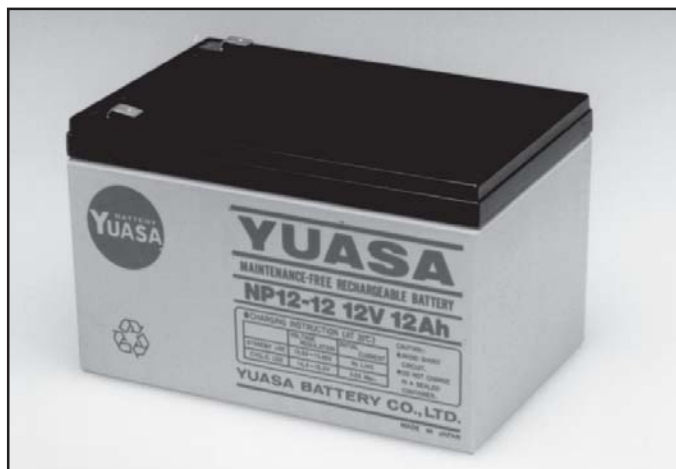
Sealed construction:

Can be operated in any position without leakage.

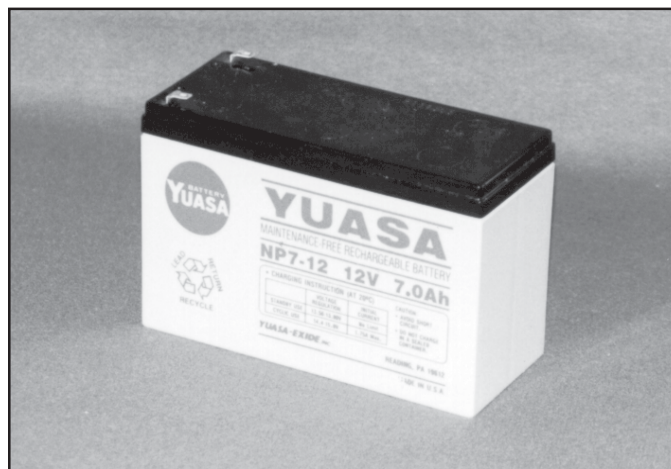
Housing material: ABS Resin

Ordering Informaton

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|---------|---|
| 310-120 | Rechargeable Battery, 12 Volt 4 Amp Hour |
| 310-122 | Rechargeable Battery, 12 Volt 7 Amp Hour |
| 310-121 | Rechargeable Battery, 12 Volt 12 Amp Hour |
| 310-126 | Rechargeable Battery, 12 Volt 33 Amp Hour |



Model 310-121 12 Amp Hour Battery



Model 310-122 7 Amp Hour Battery