Lead Acid Battery

Performance & Durability Parameters.

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Battery model	Rated capacity(in Ah) and capacity fade (in %)	Power (in W) and power fade (in %)	Internal resistance (in Q) and internal resistance increase (in %)	Where applicable, energy round trip efficiency and its fade (in %)	The expected lifetime of the battery under the reference conditions for which it has been designed, in terms of cycles, except for non-cycle applications, and calendar years
12 V/8 Ah AGM Deep Cycle Batt.	20 h rate capacity: 7 Ah 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 4.32 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 30 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/14 Ah AGM Deep Cycle Batt	20 h rate capacity: 12 Ah 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 8.1 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 16 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/22 Ah AGM Deep Cycle Batt.	20 h rate capacity: 20 Ah 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 15 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 15 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/110 Ah AGM Deep Cycle Batt.	20 h rate capacity: 110 Ah 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 75 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 5.7 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/110 Ah AGM Deep Cycle Batt. (M8)	20 h rate capacity: 110 Ah 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 75 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 5.7 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/110 Ah Gel Deep Cycle Batt.	20 h rate capacity: 110 Ah 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 75 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 5.7 mΩ; 30 %/year	97 % 2 %/100 cycle	≥450@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/130 Ah AGM Deep Cycle Batt	20 h rate capacity: 130 Ah ; 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 79.2 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 5.3 mΩ; 30 %/year	97 %. 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/130 Ah Gel Deep Cycle Batt.	20 h rate capacity: 130 Ah ; 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 79.2 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 5.3 mΩ; 30 %/year	97 % 2 %/100 cycle	≥450@80 %DOD (Failure cut-off capacity ＜60 %)

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12 V/165 Ah AGM Deep Cycle Batt	20 h rate capacity: 165 Ah ; 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 106.2 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 4.5 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/165 Ah AGM Deep Cycle Batt. (M8)	20 h rate capacity: 165 Ah ; 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 106.2 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 4.5 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/165 Ah Gel Deep Cycle Batt.	20 h rate capacity: 165 Ah ; 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 106.2 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 4.5 mΩ; 30 %/year	97 % 2 %/100 cycle	≥450@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/220 Ah AGM Deep Cycle Batt.	20 h rate capacity: 220 Ah ; 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 147 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 4.0 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/220 Ah AGM Deep Cycle Batt. (M8)	20 h rate capacity: 220 Ah ; 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 147 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 4.0 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/220 Ah Gel Deep Cycle Batt	20 h rate capacity: 220 Ah ; 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 147 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 4.0 mΩ; 30 %/year	97 % 2 %/100 cycle	≥450@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/38 Ah AGM Deep Cycle Batt	20 h rate capacity: 40 Ah 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 28.2 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 9.5 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/60 Ah AGM Deep Cycle Batt	20 h rate capacity: 55 Ah 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 34.8 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 7.2 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/60 Ah Gel Deep Cycle Batt.	20 h rate capacity: 55 Ah 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 34.8 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 7.2 mΩ; 30 %/year	97 % 2 %/100 cycle	≥450@80 %DOD (Failure cut-off capacity ＜60 %)

12 V/90 Ah AGM Deep Cycle Batt.	20 h rate capacity: **80 Ah** 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 49.2 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 6.5 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/90 Ah AGM Deep Cycle Batt. (M6)	20 h rate capacity: **80 Ah**; 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 49.2 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 6.5 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/90 Ah Gel Deep Cycle Batt.	20 h rate capacity: **80 Ah** 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 49.2 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 6.5 mΩ; 30 %/year	97 % 2 %/100 cycle	≥450@80 %DOD (Failure cut-off capacity ＜60 %)
6 V/240 Ah AGM Deep Cycle Batt	20 h rate capacity: 240 Ah 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 80.7 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 3.2 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/115 Ah AGM Telecom Batt. (M8)	20 h rate capacity: 110 Ah 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 72.6 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 6 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/165 Ah AGM Telecom Batt. (M8)	20 h rate capacity: 165 Ah 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 91.2 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 4.5 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/200 Ah AGM Telecom Batt. (M8)	20 h rate capacity: 200 Ah 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	20 h rate power: 121.8 W/battery 0-1 month: 3 % 2-3 month: 6 % 4-7 month: 21 % 8-10 month: 30 % 11-13 month: 40 %	approx. 4.0 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD (Failure cut-off capacity ＜60 %)
12 V/15 Ah AGM Super Cycle Batt. (M5)	20 h rate capacity: 15 Ah 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	20 h rate power: 9 W/battery 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	approx. 12.2 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD
12 V/25 Ah AGM Super Cycle Batt. (M5)	20 h rate capacity: 25 Ah 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	20 h rate power: 15 W/battery 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	approx. 10.5 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD
12 V/38 Ah AGM Super Cycle Batt. (M5)	20 h rate capacity: 38 Ah 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	20 h rate power: 22.8 W/battery 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	approx. 9.8 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD

12 V/60 Ah AGM Super Cycle Batt. (M6)	20 h rate capacity: 60 Ah 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	20 h rate power: 36 W/battery 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	approx. 7.5 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD
12 V/100 Ah AGM Super Cycle Batt. (M6)	20 h rate capacity: 100 Ah 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	20 h rate power: 60 W/battery 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	approx. 4.8 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD
12 V/125 Ah AGM Super Cycle Batt. (M8)	20 h rate capacity: 125 Ah 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	20 h rate power: 75 W/battery 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	approx. 4.5 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD
12 V/170 Ah AGM Super Cycle Batt. (M8)	20 h rate capacity: 170 Ah 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	20 h rate power: 102 W/battery 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	approx. 3.8 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD
12 V/230 Ah AGM Super Cycle Batt. (M8)	20 h rate capacity: 230 Ah 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	20 h rate power: 138 W/battery 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	approx. 3.5 mΩ; 30 %/year	97 % 2 %/100 cycle	≥400@80 %DOD
12 V/265 Ah Gel Deep Cycle Batt. (M8)	20 h rate capacity: 265 Ah 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	20 h rate power: 159 W/battery 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	approx. 3.1 mΩ; 30 %/year	97 % 2 %/100 cycle	≥600@60 %DOD
Lead Carbon Battery 12 V/106 Ah (M8)	20 h rate capacity: 106 Ah 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	20 h rate power: 63.6 W/battery 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	approx. 3.5 mΩ; 30 %/year	97 % 2 %/100 cycle	≥2000@60 %DOD
Lead Carbon Battery 12 V/160 Ah (M8)	20 h rate capacity: 160 Ah 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	20 h rate power: 96 W/battery 0-1 month: 0 % 2-3 month: 4 % 4-7 month: 10 % 8-10 month: 17 % 11-13 month: 25 %	approx. 3.2 mΩ; 30 %/year	97 % 2 %/100 cycle	≥2000@60 %DOD
Note: The above power values are all theoretical calculation values.					