

**HOPPECKE FNC Nickel Cadmium Batteries**  
**Energie-High Power Engine Starting & UPS Batteries**



9/23/2003

Ism

**DISCHARGE TIME**

| <b>1,14 VOLT</b> | CAPACITY | 1 SEC                            | 5 SEC | 30 SEC | 1 MIN | 3 MIN | 5 MIN | 10 MIN | 30 MIN | 1 HOUR | 3 HOURS | 5 HOURS | 8 HOURS | 10 HOURS |
|------------------|----------|----------------------------------|-------|--------|-------|-------|-------|--------|--------|--------|---------|---------|---------|----------|
| TYPE             | C5       | <b>DISCHARGE CURRENT IN AMPS</b> |       |        |       |       |       |        |        |        |         |         |         |          |
| FNC 297 EH       | 22       | 127                              | 127   | 114    | 101   | 70    | 69    | 41.3   | 29.1   | 18.5   | 7.3     | 4.4     | 3.1     | 2.3      |
| FNC 582 EH       | 44       | 248                              | 248   | 223    | 198   | 138   | 137   | 81.8   | 57.9   | 36.8   | 14.5    | 8.8     | 6.2     | 4.5      |
| FNC 938 EH       | 73       | 399                              | 398   | 359    | 321   | 225   | 223   | 134.7  | 95.7   | 61.0   | 24.2    | 14.6    | 10.4    | 7.5      |
| FNC 1269 EH      | 103      | 538                              | 537   | 485    | 435   | 308   | 305   | 186.1  | 132.8  | 85.0   | 33.8    | 20.4    | 14.5    | 10.6     |
| FNC 1573 EH      | 132      | 665                              | 664   | 602    | 542   | 387   | 384   | 236.2  | 169.2  | 108.7  | 43.4    | 26.3    | 18.7    | 13.6     |
| FNC 1983 EH      | 156      | 842                              | 842   | 758    | 679   | 477   | 472   | 285.8  | 203.2  | 129.7  | 51.4    | 31.1    | 22.0    | 16.0     |
| FNC 2103 EH      | 168      | 892                              | 891   | 804    | 721   | 508   | 503   | 306.0  | 217.9  | 139.4  | 55.3    | 33.4    | 23.7    | 17.3     |
| FNC 2217 EH      | 180      | 939                              | 938   | 848    | 761   | 539   | 534   | 325.9  | 232.6  | 149.0  | 59.3    | 35.8    | 25.4    | 18.5     |
| FNC 2327 EH      | 192      | 984                              | 983   | 890    | 800   | 569   | 564   | 345.6  | 247.1  | 158.5  | 63.2    | 38.2    | 27.1    | 19.7     |
| FNC 2431 EH      | 204      | 1027                             | 1026  | 931    | 838   | 599   | 593   | 365.1  | 261.5  | 168.1  | 67.1    | 40.6    | 28.8    | 21.0     |

**DISCHARGE TIME**

| <b>1,10 VOLT</b> | CAPACITY | 1 SEC                            | 5 SEC | 30 SEC | 1 MIN | 3 MIN | 5 MIN | 10 MIN | 30 MIN | 1 HOUR | 3 HOURS | 5 HOURS | 8 HOURS | 10 HOURS |
|------------------|----------|----------------------------------|-------|--------|-------|-------|-------|--------|--------|--------|---------|---------|---------|----------|
| TYPE             | C5       | <b>DISCHARGE CURRENT IN AMPS</b> |       |        |       |       |       |        |        |        |         |         |         |          |
| FNC 297 EH       | 22       | 129                              | 129   | 126    | 119   | 97    | 81    | 58.5   | 33.7   | 20.3   | 7.3     | 4.4     | 3.1     | 2.3      |
| FNC 582 EH       | 44       | 251                              | 251   | 246    | 233   | 189   | 159   | 115.4  | 66.9   | 40.4   | 14.5    | 8.8     | 6.3     | 4.6      |
| FNC 938 EH       | 73       | 404                              | 403   | 395    | 375   | 306   | 258   | 189.0  | 110.3  | 67.0   | 24.2    | 14.6    | 10.4    | 7.6      |
| FNC 1269 EH      | 103      | 555                              | 554   | 542    | 515   | 422   | 357   | 262.1  | 153.6  | 93.5   | 33.9    | 20.5    | 14.6    | 10.7     |
| FNC 1573 EH      | 132      | 674                              | 672   | 659    | 628   | 520   | 442   | 327.9  | 194.5  | 119.3  | 43.5    | 26.4    | 18.8    | 13.7     |
| FNC 1983 EH      | 156      | 854                              | 852   | 834    | 792   | 648   | 547   | 400.7  | 234.2  | 142.4  | 51.5    | 31.2    | 22.2    | 16.2     |
| FNC 2103 EH      | 168      | 904                              | 902   | 884    | 840   | 689   | 582   | 427.9  | 251.1  | 153.0  | 55.4    | 33.6    | 23.9    | 17.5     |
| FNC 2217 EH      | 180      | 952                              | 950   | 931    | 885   | 728   | 617   | 454.7  | 267.8  | 163.5  | 59.3    | 36.0    | 25.6    | 18.7     |
| FNC 2327 EH      | 192      | 997                              | 996   | 976    | 929   | 766   | 650   | 481.0  | 284.3  | 173.9  | 63.2    | 38.3    | 27.3    | 20.0     |
| FNC 2431 EH      | 204      | 1041                             | 1039  | 1019   | 971   | 803   | 683   | 506.8  | 300.6  | 184.3  | 67.2    | 40.7    | 29.0    | 21.2     |

**DISCHARGE TIME**

| <b>1,00 VOLT</b> | CAPACITY | 1 SEC                            | 5 SEC | 30 SEC | 1 MIN | 3 MIN | 5 MIN | 10 MIN | 30 MIN | 1 HOUR | 3 HOURS | 5 HOURS | 8 HOURS | 10 HOURS |
|------------------|----------|----------------------------------|-------|--------|-------|-------|-------|--------|--------|--------|---------|---------|---------|----------|
| TYPE             | C5       | <b>DISCHARGE CURRENT IN AMPS</b> |       |        |       |       |       |        |        |        |         |         |         |          |
| FNC 297 EH       | 22       | 258                              | 249   | 204    | 177   | 138   | 114   | 85.0   | 38.9   | 20.7   | 7.4     | 4.4     | 3.2     | 2.3      |
| FNC 582 EH       | 44       | 502                              | 486   | 400    | 347   | 272   | 226   | 168.3  | 77.4   | 41.4   | 14.8    | 8.8     | 6.3     | 4.6      |
| FNC 938 EH       | 73       | 807                              | 782   | 646    | 564   | 444   | 370   | 276.7  | 128.2  | 68.7   | 24.6    | 14.7    | 10.5    | 7.7      |
| FNC 1269 EH      | 103      | 1088                             | 1055  | 878    | 768   | 609   | 508   | 382.1  | 178.4  | 95.9   | 34.5    | 20.5    | 14.7    | 10.8     |
| FNC 1573 EH      | 132      | 1345                             | 1306  | 1093   | 960   | 765   | 642   | 484.6  | 227.9  | 123.0  | 44.3    | 26.4    | 19.0    | 13.8     |
| FNC 1983 EH      | 156      | 1705                             | 1652  | 1367   | 1193  | 941   | 784   | 587.1  | 272.3  | 146.1  | 52.4    | 31.2    | 22.4    | 16.4     |
| FNC 2103 EH      | 168      | 1805                             | 1749  | 1452   | 1269  | 1004  | 837   | 628.4  | 292.5  | 157.2  | 56.4    | 33.6    | 24.1    | 17.6     |
| FNC 2217 EH      | 180      | 1900                             | 1843  | 1534   | 1343  | 1065  | 890   | 669.1  | 312.5  | 168.2  | 60.4    | 36.0    | 25.8    | 18.9     |
| FNC 2327 EH      | 192      | 1992                             | 1933  | 1613   | 1414  | 1125  | 941   | 709.3  | 332.4  | 179.1  | 64.4    | 38.4    | 27.6    | 20.1     |
| FNC 2431 EH      | 204      | 2078                             | 2018  | 1689   | 1484  | 1183  | 992   | 748.9  | 352.2  | 190.1  | 68.4    | 40.8    | 29.3    | 21.4     |

**DISCHARGE TIME**

| <b>0,85 VOLT</b> | CAPACITY | 1 SEC                            | 5 SEC | 30 SEC | 1 MIN | 3 MIN | 5 MIN | 10 MIN | 30 MIN | 1 HOUR | 3 HOURS | 5 HOURS | 8 HOURS | 10 HOURS |
|------------------|----------|----------------------------------|-------|--------|-------|-------|-------|--------|--------|--------|---------|---------|---------|----------|
| TYPE             | C5       | <b>DISCHARGE CURRENT IN AMPS</b> |       |        |       |       |       |        |        |        |         |         |         |          |
| FNC 297 EH       | 22       | 326                              | 322   | 297    | 271   | 208   | 169   | 110.7  | 39.8   | 20.7   | 7.4     | 4.4     | 3.2     | 2.3      |
| FNC 582 EH       | 44       | 638                              | 630   | 582    | 533   | 410   | 335   | 219.6  | 79.5   | 41.4   | 14.9    | 8.8     | 6.3     | 4.6      |
| FNC 938 EH       | 73       | 1026                             | 1014  | 938    | 860   | 666   | 547   | 360.9  | 131.8  | 68.8   | 24.7    | 14.7    | 10.6    | 7.7      |
| FNC 1269 EH      | 103      | 1383                             | 1367  | 1269   | 1166  | 909   | 749   | 498.2  | 183.6  | 96.2   | 34.6    | 20.6    | 14.8    | 10.8     |
| FNC 1573 EH      | 132      | 1710                             | 1691  | 1573   | 1450  | 1139  | 943   | 631.5  | 234.9  | 123.4  | 44.5    | 26.5    | 19.0    | 13.9     |
| FNC 1983 EH      | 156      | 2167                             | 2141  | 1983   | 1819  | 1411  | 1159  | 765.7  | 280.1  | 146.4  | 52.6    | 31.3    | 22.5    | 16.4     |
| FNC 2103 EH      | 168      | 2295                             | 2268  | 2103   | 1931  | 1502  | 1236  | 819.4  | 301.0  | 157.5  | 56.7    | 33.7    | 24.2    | 17.7     |
| FNC 2217 EH      | 180      | 2416                             | 2388  | 2217   | 2038  | 1590  | 1311  | 872.3  | 321.8  | 168.6  | 60.7    | 36.1    | 25.9    | 19.0     |
| FNC 2327 EH      | 192      | 2532                             | 2503  | 2327   | 2142  | 1677  | 1385  | 924.5  | 342.4  | 179.6  | 64.8    | 38.5    | 27.7    | 20.2     |
| FNC 2431 EH      | 204      | 2642                             | 2613  | 2431   | 2241  | 1760  | 1457  | 975.9  | 363.0  | 190.6  | 68.8    | 40.9    | 29.4    | 21.5     |

**DISCHARGE TIME**

| <b>0,65 VOLT</b> | CAPACITY | 1 SEC                            | 5 SEC | 30 SEC | 1 MIN | 3 MIN | 5 MIN | 10 MIN | 30 MIN | 1 HOUR | 3 HOURS | 5 HOURS | 8 HOURS | 10 HOURS |
|------------------|----------|----------------------------------|-------|--------|-------|-------|-------|--------|--------|--------|---------|---------|---------|----------|
| TYPE             | C5       | <b>DISCHARGE CURRENT IN AMPS</b> |       |        |       |       |       |        |        |        |         |         |         |          |
| FNC 297 EH       | 22       | 445                              | 436   | 385    | 351   | 268   | 205   | 115.8  | 39.9   | 20.8   | 7.4     | 4.5     | 3.2     | 2.3      |
| FNC 582 EH       | 44       | 867                              | 854   | 776    | 697   | 510   | 404   | 249.9  | 83.4   | 42.4   | 14.9    | 8.8     | 6.3     | 4.6      |
| FNC 938 EH       | 73       | 1393                             | 1373  | 1249   | 1124  | 828   | 657   | 409.7  | 138.0  | 70.4   | 24.9    | 14.7    | 10.5    | 7.7      |
| FNC 1269 EH      | 103      | 1878                             | 1851  | 1688   | 1522  | 1127  | 898   | 564.0  | 192.0  | 98.2   | 34.8    | 20.6    | 14.8    | 10.8     |
| FNC 1573 EH      | 132      | 2322                             | 2289  | 2091   | 1890  | 1409  | 1127  | 712.8  | 245.3  | 125.9  | 44.7    | 26.5    | 19.0    | 13.9     |
| FNC 1983 EH      | 156      | 2944                             | 2900  | 2640   | 2376  | 1753  | 1392  | 868.8  | 293.3  | 149.6  | 52.9    | 31.3    | 22.4    | 16.4     |
| FNC 2103 EH      | 168      | 3115                             | 3070  | 2797   | 2520  | 1863  | 1482  | 928.4  | 314.9  | 160.9  | 56.9    | 33.7    | 24.2    | 17.6     |
| FNC 2217 EH      | 180      | 3282                             | 3234  | 2949   | 2659  | 1972  | 1571  | 987.2  | 336.5  | 172.2  | 61.0    | 36.1    | 25.9    | 18.9     |
| FNC 2327 EH      | 192      | 3439                             | 3390  | 3093   | 2793  | 2076  | 1658  | 1044.9 | 357.9  | 183.4  | 65.0    | 38.5    | 27.6    | 20.2     |
| FNC 2431 EH      | 204      | 3589                             | 3524  | 3153   | 2905  | 2272  | 1768  | 1030.6 | 365.4  | 191.9  | 69.0    | 41.4    | 29.5    | 21.6     |

| Cell Type   | Capacity C5 | Length      | Width       | Height       |
|-------------|-------------|-------------|-------------|--------------|
| FNC 297 EH  | 22          | 1.18"(30)   | 4.80"(122)  | 12.17"(309)  |
| FNC 582 EH  | 44          | 1.85"(47)   | 4.80"(122)  | 12.17"(309)  |
| FNC 938 EH  | 73          | 2.83"(72)   | 4.80"(122)  | 12.17"(309)  |
| FNC 1269 EH | 103         | 3.62"(92)   | 4.80"(122)  | 12.17"(309)  |
| FNC 1573 EH | 132         | 4.53"(115)  | 4.80"(122)  | 12.17"(309)  |
| FNC 1983 EH | 156         | 3.62" (92)  | 7.64" (194) | 12.17" (309) |
| FNC 2103 EH | 168         | 3.62" (92)  | 7.64" (194) | 12.17" (309) |
| FNC 2217 EH | 180         | 4.53" (115) | 7.64" (194) | 12.17" (309) |
| FNC 2327 EH | 192         | 4.53" (115) | 7.64" (194) | 12.17" (309) |
| FNC 2431 EH | 204         | 4.53" (115) | 7.64" (194) | 12.17" (309) |