

4 UOPzS 500



| Specification | |
|---|---|
| Nominal Voltage | 2,0 V |
| Nominal Capacity (C ₁₀) | 500 AH |
| Discharge current | C ₁₀ /10h = 50 A |
| Final discharge voltage/cell | 1,80 V |
| Nominal S.G. of electrolyte | 1,24 ± 0,01 kg/l at 20°C |
| Rated temperature | 20°C |
| Capacity C ₁₀₀ | 650 Ah (at 25°C, U _f = 1,85V/cell) |
| Specified torque for poll screws | 20 ± 1 Nm |
| Dimensions of the cell | Length 198 mm (7.80 inches) |
| | Width 101 mm (3.98 inches) |
| | Height 613 mm (24.13 inches) |
| Weight of the cell (± 5%) | With acid 30,5 kg |
| | Without acid 21,0 kg |
| Recommended dept of discharge | < 80% C ₁₀ |
| deep discharges more than 80% DOD or discharges beyond final discharge voltages (dependend on discharge current) have to be avoided | |
| Charging | IU - characteristic I max without limitation |
| | Float charge U = 2,23 V/cell +-1% |
| | Boost charge U = 2,35 to 2,40 V/cell |
| | Temp.Correction factor - 0,004 V/Cell, °K |
| Gas (H ₂) emissions at 20°C | at 2,23 V 1,5 l/cell/day |
| | at 2,40 V 6,0 l/cell/day |
| Ventilation requirement | LA alloy; f1 = 0,5; EN 50272-2 |
| Self-discharge | app. 3% per month at 20°C |
| Operational temperature Recommended | - 20°C to 55°C |
| | 10°C to 30°C |

Constant Current Discharge (Amperes) at 20°C (68°F)

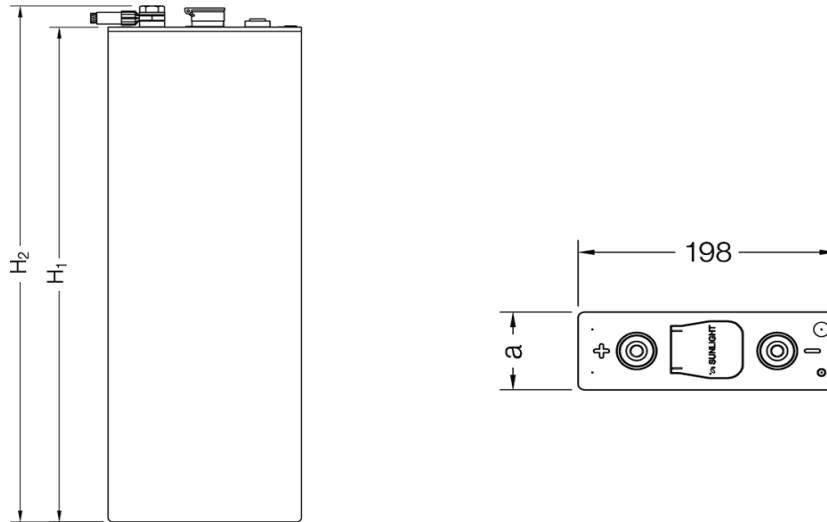
| F.V/Time | 15min | 30min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h | 100h |
|------------|-------|-------|-----|-----|-----|-----|----|----|----|-----|-----|------|
| 1.90V/cell | 161 | 156 | 143 | 108 | 88 | 74 | 65 | 58 | 48 | 42 | 25 | 6,04 |
| 1.87V/cell | 210 | 197 | 167 | 124 | 100 | 85 | 74 | 63 | 53 | 45 | 26 | 6,27 |
| 1.83V/cell | 267 | 242 | 197 | 142 | 111 | 93 | 80 | 69 | 58 | 49 | 27 | 6,49 |
| 1.80V/cell | 318 | 273 | 219 | 152 | 119 | 98 | 85 | 72 | 60 | 50 | 27 | 6,62 |
| 1.75V/cell | 378 | 316 | 249 | 164 | 125 | 102 | 87 | 73 | 60 | 51 | 28 | 6,73 |
| 1.70V/cell | 432 | 355 | 267 | 172 | 128 | 104 | 89 | 76 | 62 | 52 | 28 | 6,81 |

Constant Power Discharge (Watts) at 20°C (68°F)

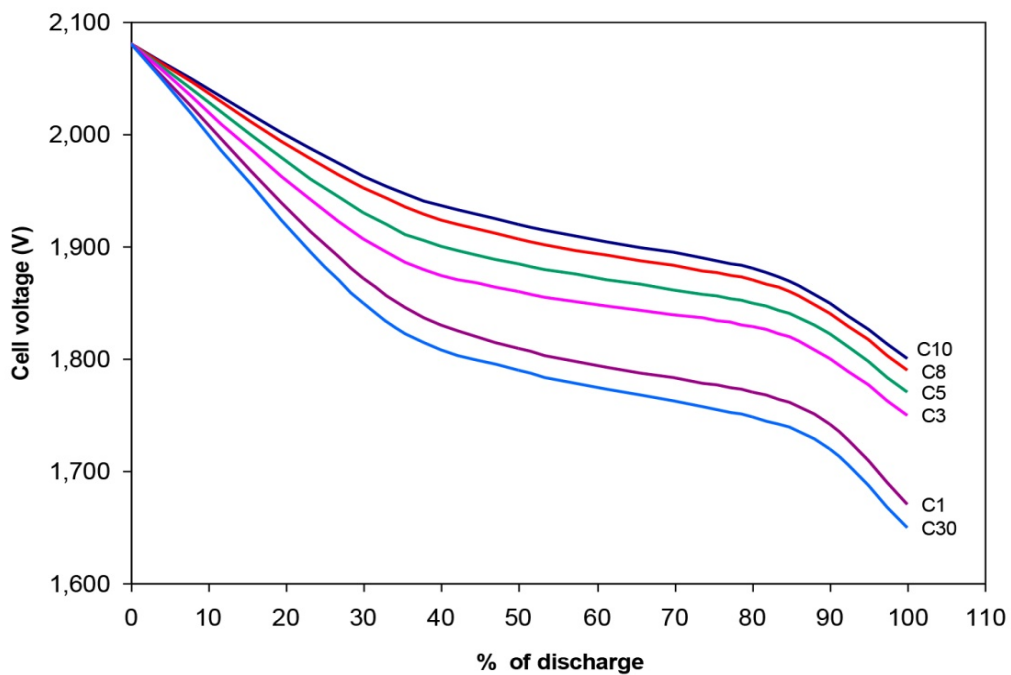
| F.V/Time | 15min | 30min | 1h | 2h | 3h | 4h | 5h | 6h | 8h | 10h | 20h | 100h |
|------------|-------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-------|
| 1.90V/cell | 307 | 297 | 275 | 209 | 170 | 145 | 125 | 113 | 93 | 82 | 49 | 12,02 |
| 1.87V/cell | 397 | 373 | 318 | 237 | 192 | 164 | 143 | 123 | 103 | 89 | 51 | 12,29 |
| 1.83V/cell | 491 | 449 | 365 | 266 | 212 | 177 | 153 | 132 | 111 | 94 | 52 | 12,73 |
| 1.80V/cell | 580 | 500 | 403 | 282 | 223 | 186 | 160 | 137 | 115 | 96 | 53 | 12,97 |
| 1.75V/cell | 673 | 570 | 453 | 303 | 233 | 191 | 163 | 137 | 115 | 97 | 54 | 13,12 |
| 1.70V/cell | 752 | 633 | 480 | 316 | 238 | 194 | 168 | 142 | 119 | 98 | 53 | 12,94 |

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Dimension



Cell voltage of UOPzS cells during constant current discharge at different rates of discharge



ETL SEMKO

