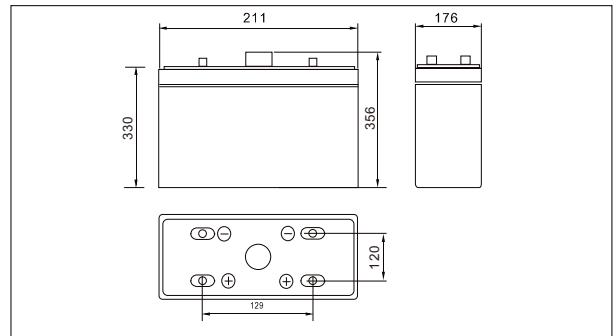




# SW24500(2V450AH)



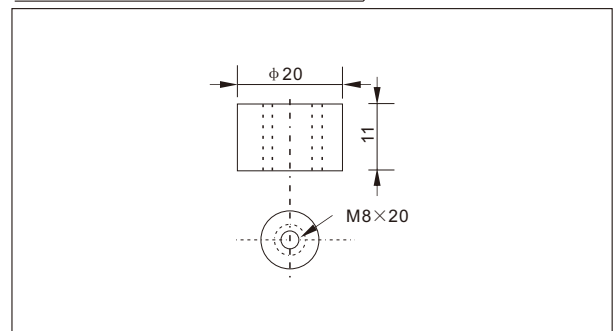
### Outer dimensions (mm)



### Specifications

|                               |              |                      |
|-------------------------------|--------------|----------------------|
| Nominal Voltage               |              | 2 V                  |
| Rated capacity (10 hour rate) |              | 450 Ah               |
| Dimensions                    | Total Height | 356 mm (14.0 inches) |
|                               | Height       | 330 mm (13.0 inches) |
|                               | Length       | 211 mm (8.31 inches) |
|                               | Width        | 176 mm (6.92 inches) |
| Weight Approx                 |              | 26.5 Kg (58.4 lbs)   |

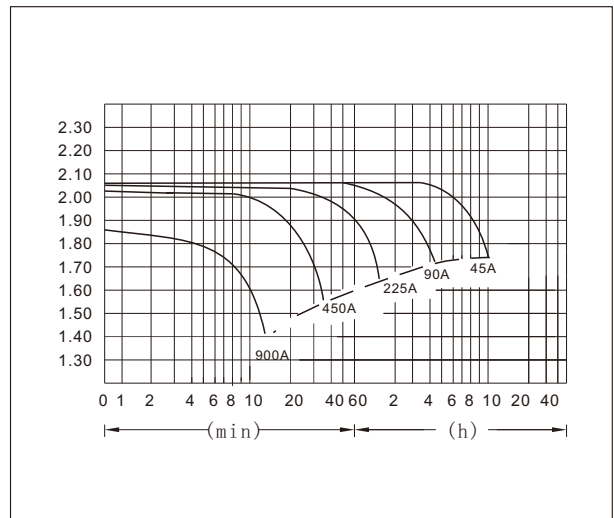
### Terminal Type (mm)



### Characteristics

|  |                                    |  |
|--|------------------------------------|--|
| Capacity<br>25°C(77°F)                               | 10 hour rate(45 A)                 | 450 AH   |
|  | 5 hour rate(72A)                   | 360 AH   |
|  | 1 hour rate(270 A)                 | 270 AH   |
|  | 1.5 hour discharge to 1.75 V       | 180 A  |
| Internal Resistance                                  | Full charged Battery at 25°C(77°F) | 0.6 mΩ   |
| Capacity affected<br>by Temperature<br>(10hour rate) | 40°C(104°F)                        | 102%   |
|  | 25°C(77°F)                         | 100%   |
|  | 0°C(32°F)                          | 85%  |
|  | -15°C(5°F)                         | 65%  |
| Self-Discharge<br>at 25°C(77°F)                      | Capacity after 3 month storage     | 91%  |
|  | Capacity after 6 month storage     | 82%  |
|  | Capacity after 12 month storage    | 64%  |
| Terminal   |                                    | T20  |
| Charge<br>(constant<br>Voltage)                      | Cycle                              | Initial Charging Current less than 112.5 A<br>Voltage 2.35-2.40V |
|  | Float                              | Voltage 2.25-2.30V   |

### Discharge Curves 25°C(77°F)



Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)

| Time  |   | 10min | 30min | 1h    | 2h    | 3h    | 4h    | 5h    | 8h   | 10h   | 20h  |
|-------|---|-------|-------|-------|-------|-------|-------|-------|------|-------|------|
|       |   | 1.60V | A     | 895.5 | 513.0 | 270.0 | 157.5 | 116.1 | 90.0 | 75.79 | 52.1 |
|       | W | 1760  | 918   | 522   | 306   | 225   | 175.5 | 144.0 | 99.0 | 92.3  | 49.0 |
| 1.70V | A | 850.5 | 499.5 | 253.8 | 150.3 | 112.5 | 87.8  | 74.3  | 51.2 | 46.6  | 25.2 |
|       | W | 1692  | 909   | 491   | 288   | 216   | 171.0 | 139.5 | 99.0 | 87.8  | 48.2 |
| 1.75V | A | 805.5 | 459.0 | 247.5 | 146.7 | 109.8 | 86.4  | 73.6  | 50.6 | 45.9  | 24.9 |
|       | W | 1638  | 855   | 473   | 284   | 212   | 166.5 | 137.7 | 97.7 | 86.9  | 47.3 |
| 1.80V | A | 760.5 | 423.0 | 238.5 | 143.1 | 107.1 | 85.1  | 69.3  | 49.3 | 45.0  | 24.6 |
|       | W | 1575  | 824   | 455   | 279   | 207   | 162.9 | 135.0 | 94.5 | 86.4  | 46.8 |
| 1.85V | A | 715.5 | 378.0 | 225.0 | 139.5 | 103.5 | 82.5  | 68.0  | 48.0 | 43.9  | 24.3 |
|       | W | 1485  | 756   | 441   | 275   | 207   | 159.8 | 134.1 | 90.5 | 85.5  | 46.1 |