

# DATA SHEET



MODEL SSIG 06 405

VOLTAGE 6V

CAPACITY 405Ah @ 100Hr

MATERIAL Polypropylene

DIMENSIONS Inches (mm)

BATTERY Deep-Cycle Flooded/Lead Acid Battery

COLOR Maroon

WATERING Single-Point Watering Kit (Optional)



6V

#### **PRODUCT + PHYSICAL SPECIFICATIONS**

| Model       | Terminal Type <sup>D</sup> | Dimensions <sup>B</sup> Inches (mm) |            |                     | Weight <sup>E</sup> Lbs. (kg) | HydroLink or SPWK | Handles      |
|-------------|----------------------------|-------------------------------------|------------|---------------------|-------------------------------|-------------------|--------------|
|             |                            | Length                              | Width      | Height <sup>C</sup> |                               |                   |              |
| SSIG 06 405 | 6                          | 11.66 (296)                         | 6.94 (176) | 14.37 (365)         | 98 (44)                       | SPWK              | Braided Rope |

#### **ELECTRICAL SPECIFICATIONS**

| Voltage | Capacity A Amp-Hours (Ah) |       |       | Energy (kWh) |        |        |
|---------|---------------------------|-------|-------|--------------|--------|--------|
| CV      | 10-Hr                     | 20-Hr | 48-Hr | 72-Hr        | 100-Hr | 100-Hr |
| 6V      | 337                       | 366   | 376   | 392          | 405    | 2.43   |

#### **CHARGING INSTRUCTIONS**

| Charger Voltage Settings (at 77°F/25°C)             |      |       |       |       |  |
|-----------------------------------------------------|------|-------|-------|-------|--|
| System Voltage                                      | 6V   | 12V   | 24V   | 48V   |  |
| Maximum Charge Current (% of C <sub>20</sub> Rate)* | 13%  |       |       |       |  |
| Maximum Absorption Phase Time (hours)               | 4    |       |       |       |  |
| Absorption Voltage **                               | 7.35 | 14.70 | 29.40 | 58.80 |  |
| Float Voltage                                       | 6.75 | 13.50 | 27.00 | 54.00 |  |
| Equalization Voltage                                | 8.10 | 16.20 | 32.40 | 64.80 |  |

Do not install or charge batteries in a sealed or non-ventilated compartment. Constant under or overcharging will damage the battery and shorten its life as with any battery.













<sup>\*</sup>If charging time is limited contact Trojan Technical Support for assistance.

<sup>\*\*</sup>In cases where controller has a bulk voltage setting, use absorption voltage setting above.

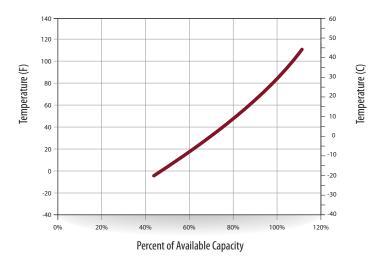
#### **CHARGING TEMPERATURE COMPENSATION**

| Add                                                                          | Subtract |
|------------------------------------------------------------------------------|----------|
| 0.005 volt per cell for every 1°C be<br>0.0028 volt per cell for every 1°F k |          |

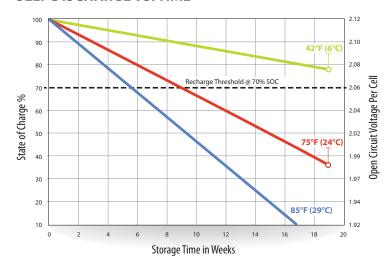
## **OPERATIONAL DATA**

| Operating Temperature                                                                                         | Self Discharge                                                 |
|---------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| -4°F to 113°F (-20°C to +45°C). At temperatures below 32°F (0°C) maintain a state of charge greater than 60%. | 5 – 15% per month depending on storage temperature conditions. |

### PERCENT CAPACITY VS. TEMPERATURE



#### **SELF DISCHARGE VS. TIME\***



# \*PERIODIC CHARGE

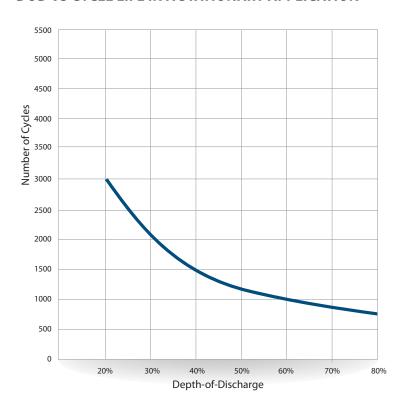
#### **FREQUENCY**

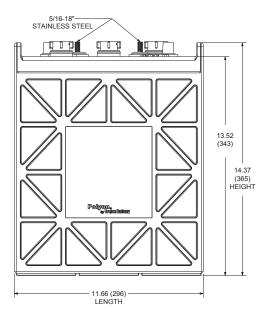
Provide a periodic freshening charge to maintain a SOC greater than the threshold of 70%.

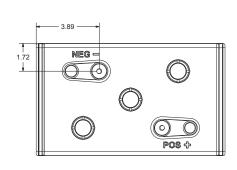
#### **STATE OF CHARGE** MEASURE OF OPEN-CIRCUIT VOLTAGE

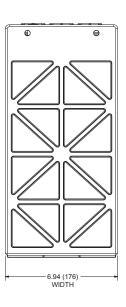
| Percentage Charge | Specific Gravity | Cell  | 6-Volt |
|-------------------|------------------|-------|--------|
| 100               | 1.277            | 2.122 | 6.37   |
| 90                | 1.258            | 2.103 | 6.31   |
| 80                | 1.238            | 2.083 | 6.25   |
| 70                | 1.217            | 2.062 | 6.19   |
| 60                | 1.195            | 2.040 | 6.12   |
| 50                | 1.172            | 2.017 | 6.05   |
| 40                | 1.148            | 1.993 | 5.98   |
| 30                | 1.124            | 1.969 | 5.91   |
| 20                | 1.098            | 1.943 | 5.83   |
| 10                | 1.073            | 1.918 | 5.75   |

## **DOD VS CYCLE LIFE IN A STATIONARY APPLICATION**









# **TERMINAL CONFIGURATIONS**

| 6 | DT | Automotive Post & Stud Terminal                                                    |
|---|----|------------------------------------------------------------------------------------|
|   |    | Terminal Height in Inches (mm)<br>0.79 (20)                                        |
|   |    | <b>Torque Values: in-lb (Nm)</b><br>Stud: 95 – 105 (11 – 12) / AP: 50 – 70 (6 – 8) |
|   |    | <b>Bolt Size</b> 5/16" - 18                                                        |

#### **EXPECTED LIFE VS. TEMPERATURE**

Chemical reactions internal to the battery are driven by voltage and temperature. The higher the battery temperature, the faster chemical reactions will occur. While higher temperatures can provide improved discharge performance the increased rate of chemical reactions will result in a corresponding loss of battery life. As a rule of thumb, for every 10°C increase in temperature the reaction rate doubles. Thus, a month of operation at 35°C is equivalent in battery life to two months at 25°C. Heat is an enemy of all lead acid batteries, FLA, AGM and gel alike and even small increases in temperature will have a major influence on battery life.





A. The amount of amp-hours (Ah) a battery can deliver when discharged at a constant rate at 86°F (30°C) and maintain a voltage above

B. Dimensions may vary depending on type of handle or terminal. Batteries should be mounted with 0.5 inches (12.7 mm) spacing minimum.

C. Height taken from bottom of the battery to the highest point on the battery. Heights may vary depending on type of terminal.