

# M105T



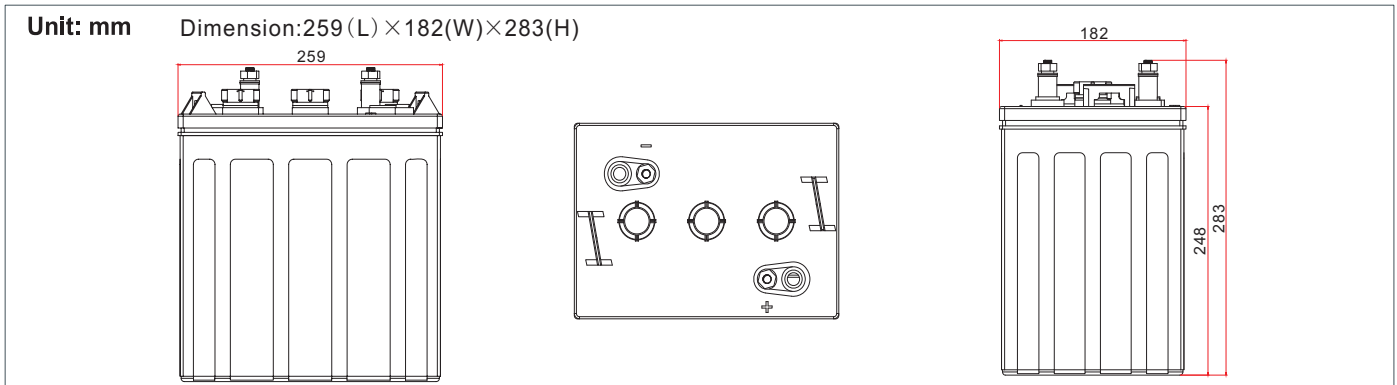
M105T is a flooded lead acid battery specially designed for frequent deep cycle discharges. It adopts an innovative tubular plate technology, manufactured with die-casting positive spine and patent formula of active material, for high reliability and performance. The battery offers premium service life and power suitable for golf carts, electric and mobility vehicles, floor machines, and other industrial applications.

**MOTIVACTION**  
HIGH PERFORMANCE DEEP CYCLE BATTERY

## Specifications

<b>Voltage Per Unit</b>	6V
<b>Capacity</b>	226Ah@20hr-rate to 1.65V per cell @25°C 185Ah@5hr-rate to 1.65V per cell @25°C
<b>Approx Weight</b>	Including electrolyte, 29.0 kg
<b>Internal Resistance</b>	Approx 3.0 mΩ
<b>Operating Temperature Range</b>	Discharge: -40°C to 60°C Charge: -20°C to 50°C Storage: -40°C to 60°C
<b>Optimal Operating Temperature Range</b>	25°C ± 5°C
<b>Float Charging Voltage</b>	6.9 to 7.2 VDC/unit average at 25°C
<b>Maximum Charging Current</b>	36A
<b>Cycle Service</b>	7.95 to 8.55 VDC/unit average at 25°C
<b>Self Discharge</b>	Self-discharge rate less than 3.5% per month at 25°C. Please charge batteries before use.
<b>Container Material</b>	PP
<b>Recommended Single Point Watering Kits</b>	Flow Rite BG-U48V-3 HydroLink 210006
<b>Torque Setting</b>	10-15Nm

## Dimensions



### Constant Current Discharge Characteristics: A(25°C)

F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
4.80V	170.5	119.4	69.2	51.8	42.3	37.9	32.9	25.6	21.1	11.7
4.95V	166.6	116.7	67.6	50.6	41.3	37.0	32.1	25.0	20.6	11.3
5.10V	161.9	113.4	65.7	49.2	40.1	36.0	31.2	24.3	20.1	10.9
5.25V	155.8	109.0	63.2	47.3	38.6	34.6	30.0	23.4	19.3	10.4
5.40V	148.7	104.1	60.3	45.2	36.9	33.1	28.7	22.3	18.4	9.9
5.55V	140.9	98.7	57.2	42.8	34.9	31.3	27.2	21.1	17.5	9.1

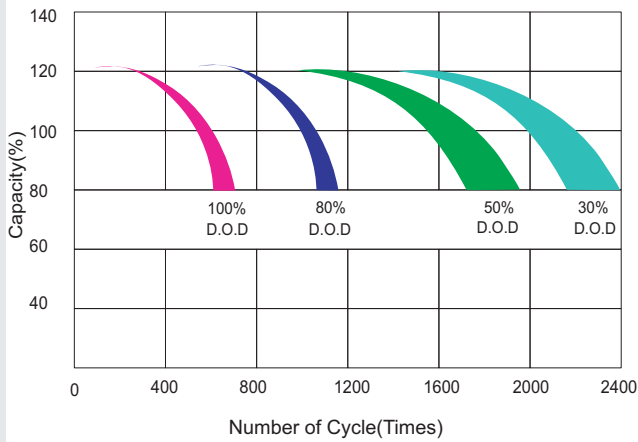
### Constant Power Discharge Characteristics: W(25°C)

F.V/Time	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
4.80V	956.7	689.8	407.7	308.2	251.9	226.1	196.0	152.7	126.3	70.2
4.95V	939.6	675.6	399.2	302.5	247.0	221.7	192.2	149.8	123.8	68.1
5.10V	923.8	657.7	388.7	294.9	240.6	216.0	187.2	145.8	120.4	65.6
5.25V	889.2	632.6	373.8	283.6	231.4	207.7	180.0	140.2	115.8	62.5
5.40V	849.8	607.4	358.9	270.8	221.2	198.3	171.9	133.9	110.6	59.7
5.55V	809.8	579.9	342.7	256.9	209.6	188.0	162.9	126.9	104.8	55.2

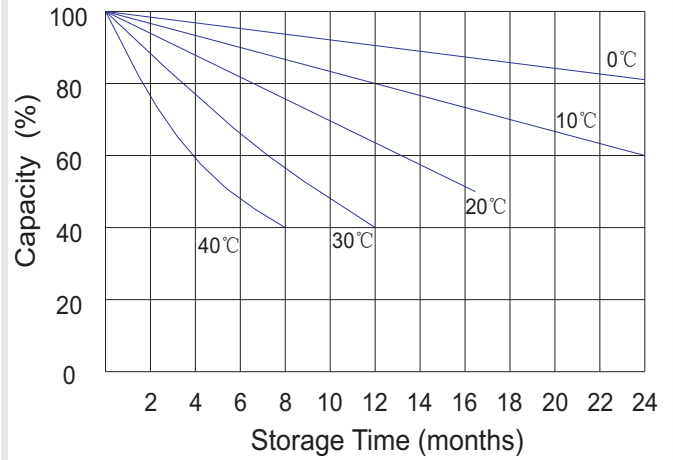
All mentioned values are average values (Tolerance ± 2%)

(Note) The company reserves the right to update the information above without prior notice.

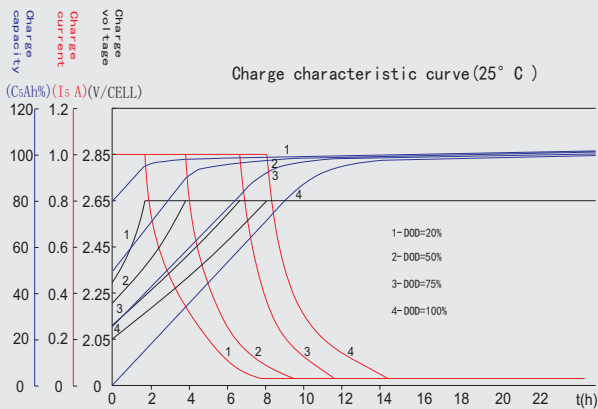
### Life characteristics of cyclic use



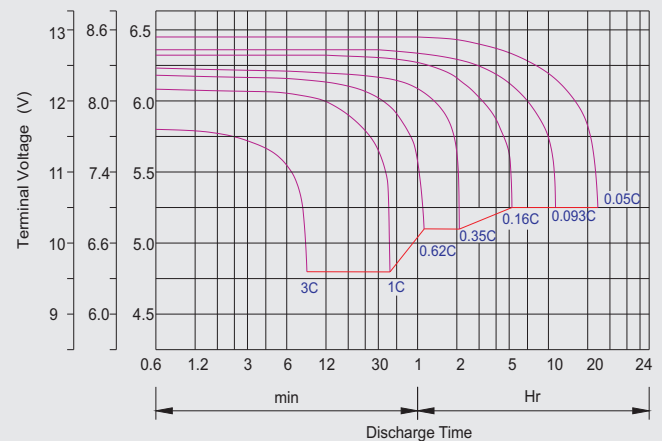
### Storage characteristic



### Charge characteristic Curve for standby use



### Discharge characteristic Curve



### Discharge Current and Voltage

Final Discharge Voltage (V/cell)	1.75V	1.70V	1.60V
Discharge Current (A)	$A \leq 0.2C$	$0.2C < A < 1.0C$	$A \geq 1.0C$

Charge the batteries at least once every six months, if they are stored at 25°C.

Charging Method (C=C5) :

Constant Voltage	$0.2C \times 2h + 2.65V/cell \times 12h$ , max current at 0.2C
Constant Current	$0.14C \times 6h + 0.07C \times 6h$

### Delta-Q Charge Profile: Algorithm ID 1

### Cycle Service Maintenance & Cautions

※ Avoid over discharging, especially when battery is used in series connections

※ Charge with recommend voltage, ensure battery is fully recharged.

In general, recharged capacity should be 1.2-1.3 times the discharged capacity.

※ Effect of temperature on cycle charge voltage:  $-4mV/^{\circ}C$  per cell

※ There are a number of factors that will affect the length of cyclic service.

The most significant are depth of discharge, ambient temperature,

discharge rate, and the manner in which the battery is recharged.