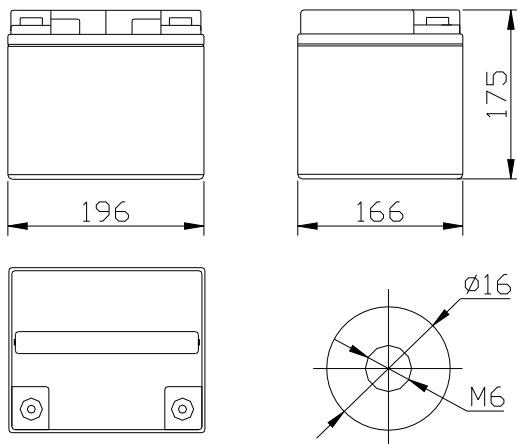


12V40Ah

The battery is constructed by plates, separators, safety valves and container.
 Since the electrolyte is held by a glassmat separator and plates, the battery can use in any direction and position without leakage.

Outer Dimensions



Dimensions and Weight

Length (mm / inch)	196 / 7.72
Width (mm / inch)	166 / 6.54
Height (mm / inch)	175 / 6.89
Total Height (mm / inch)	175 / 6.89
Approx.Weight(Kg / lbs)	12.8 / 28.16

Performance Characteristics

Nominal Voltage	12V
Number of cell	6
Design Life	8years
Nominal Capacity 77°F(25°C)	
10 hour rate(4.0A,10.5V)	40.0Ah
5 hour rate (6.82A,10.5V)	34.1Ah
1 hour rate(26.0A,9.6V)	26.0Ah
Internal Resistance	
Fully Charged battery 77°F(25°C)	6mΩ
Self-Discharge	
3% of capacity declined per month at 20°C(average)	
Operation Temperature Range	
Discharge	-20~60°C
Charge	-10~60°C
Storage	-20~60°C
Max.Discharge Current 77°F(25°C)	400A(5s)
Short Circuit Current	1200A
Charge Methods:Constant Voltage Charge 77°F(25°C)	
Cycle use	14.5-15.0V
Maximum charging current	12.0A
Temperature compensation	-30mV/°C
Standby use	13.4-13.8V
Temperature compensation	-20mV/°C

Battery Construction

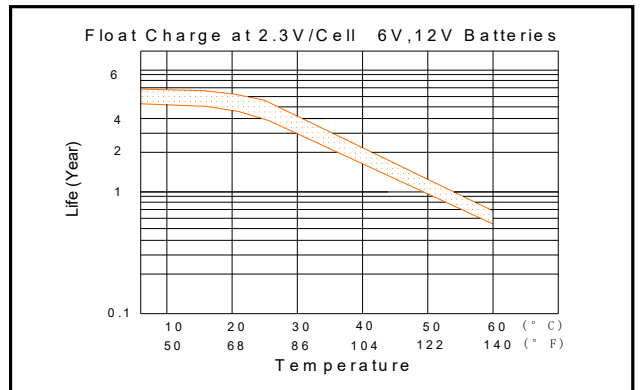
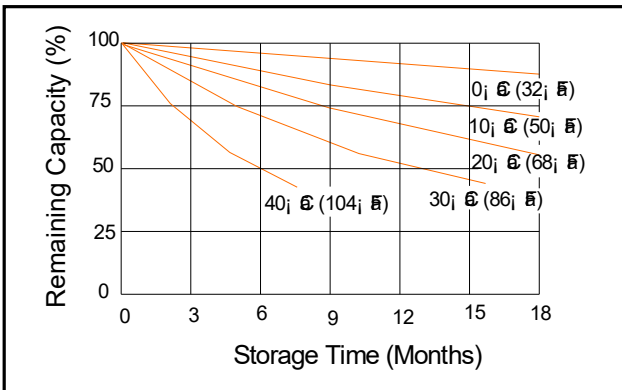
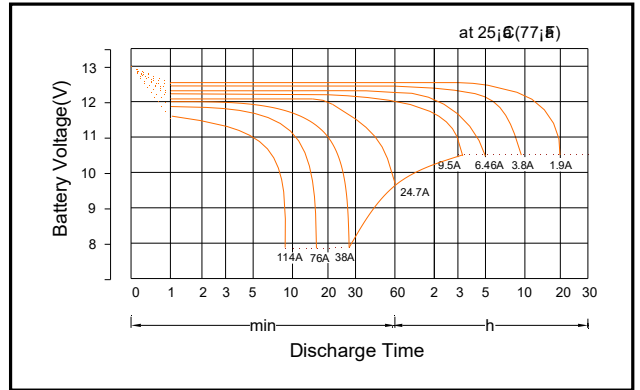
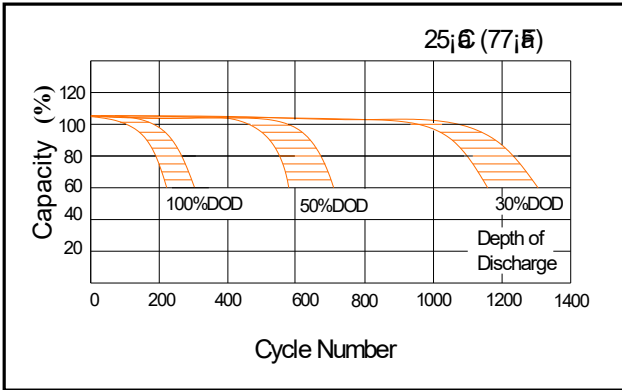
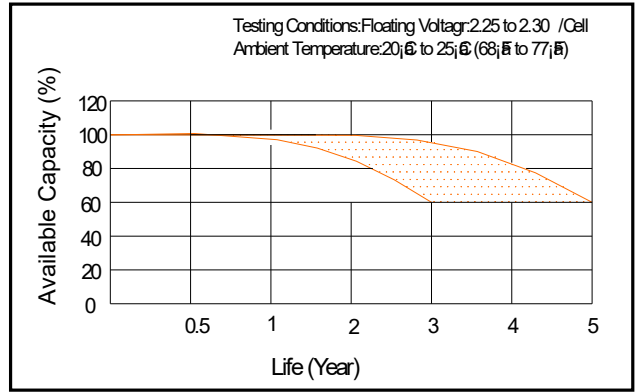
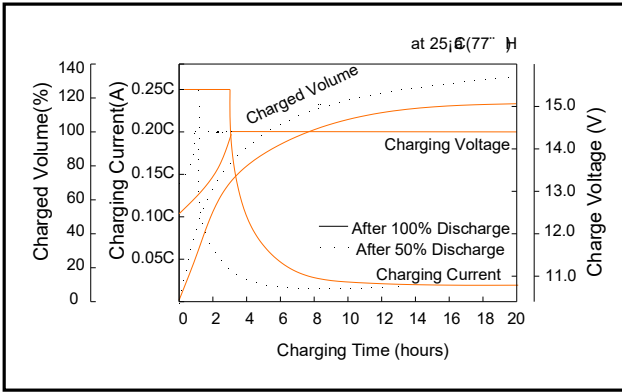
COMPONENT	Positive plate	Negative plate	Container	Cover	Safety valve	Terminal	Separator	Electrolyte
RAW MATERIAL	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

Charging Methods

Application	Charging method	Charging Voltage at 25°C	Temperature compensation coefficient of charging voltage	Max.charging current	Charging time 25°C(h)		Temp (°C)
					100% discharge	50% discharge	
For standby power source	Constant voltage & Constant Current Charging (with current restriction)	13.4-13.8V	-18 mV/°C	11.4A	24	20	0~40 (32~104°F)
For cycle service		14.5-15.0V	-30 mV/°C	11.4A	16	10	

*Temperature compensation of charging voltage is not needed when using the batteries within 15°C to 35°C range.

12V40Ah



Discharge Constant Current (Amperes at 77°F/25°C)

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	140	112	80.0	46.0	32.8	26.0	14.0	10.1	6.88	4.53	3.76	2.04
1.65V	136	108	76.0	45.2	32.4	25.8	13.9	10.0	6.84	4.53	3.76	2.04
1.70V	128	100	72.0	44.0	32.0	25.6	13.8	10.0	6.82	4.48	3.73	2.00
1.75V	112	84.0	68.0	41.6	31.6	25.2	13.6	9.88	6.82	4.44	3.73	2.00
1.80V	100	72.0	64.0	36.0	31.2	24.8	13.2	9.60	6.72	4.44	3.64	1.96

Discharge Constant Power (Watts/cell at 77°F/25°C)

F.V/Time	5min	10min	15min	30min	45min	1h	2h	3h	5h	8h	10h	20h
1.60V	255	204	147	89.2	62.4	50.0	26.8	19.5	13.3	8.76	7.33	4.00
1.65V	244	196	139	86.0	61.6	49.2	26.7	19.4	13.2	8.72	7.28	4.00
1.70V	233	184	133	82.0	60.8	49.2	26.5	19.4	13.2	8.72	7.28	3.96
1.75V	204	156	125	77.2	60.0	48.4	26.1	19.1	13.2	8.60	7.20	3.88
1.80V	182	140	118	66.8	59.2	47.6	25.4	18.5	13.1	8.60	7.08	3.80

