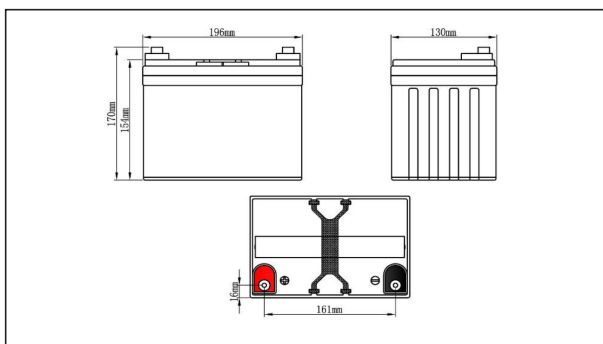


GEL33-12 [12V33Ah]

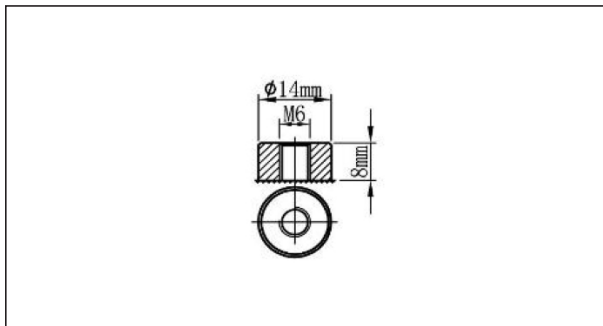
Specifications

Nominal Voltage		12V
Rated capacity (20 hour rate)		33Ah
Dimensions	Length	196 ±2mm(4.98inch)
	Width	130±2mm(3.30inch)
	Height	154±2mm(3.91inch)
	Total Height	170±2mm(4.32inch)
Approx. Weight		10.1kg(22.27lbs)

Outer dimensions (mm)



Terminal Type (mm)



Construction

Component	Positive plate	Negative plate	Container	C over	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS	ABS	AGM	Sulfuric acid+GEL	Rubber	Copper

Constant Power Discharge Characteristics Unit:A(25°C,77°F)

F.V/Time	10min	15min	30min	45min	1h	1.5h	2h	3h	5h	8h	10h	20h
9.6V	87.3	68.4	34.95	24.65	20.69	16.34	12.08	9.17	5.92	3.92	3.41	1.75
9.9V	83.2	65.1	33.26	23.76	20.20	15.94	11.78	8.94	5.77	3.85	3.37	1.74
10.2V	79.2	62.1	31.68	22.97	19.70	15.64	11.48	8.72	5.63	3.77	3.34	1.72
10.5V	78.4	61.4	31.38	22.87	19.60	15.35	11.09	8.45	5.61	3.73	3.31	1.70
10.8V	77.5	60.8	31.19	22.77	19.50	15.15	10.69	8.18	5.52	3.69	3.30	1.67

Constant Power Discharge Characteristics Unit:W(25°C,77°F)

F.V/Time	10min	15min	30min	45min	1h	1.5h	2h	3h	5h	8h	10h	20h
9.6V	982	795	449	318	237	182	137	98	64	44.9	35.6	19.2
9.9V	936	757	428	307	232	177	134	95	62	44.1	35.2	19.0
10.2V	891	721	408	297	226	173	131	93	61	43.2	34.9	18.8
10.5V	861	700	399	290	222	170	129	91	60	42.8	34.5	18.5
10.8V	830	677	387	282	218	168	127	89	59	42.4	33.9	18.3

Note: The above characteristics data can be obtained within three charge or discharge cycles.

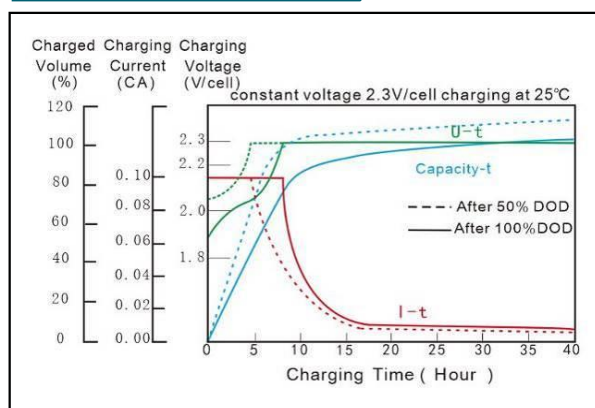


Characteristics

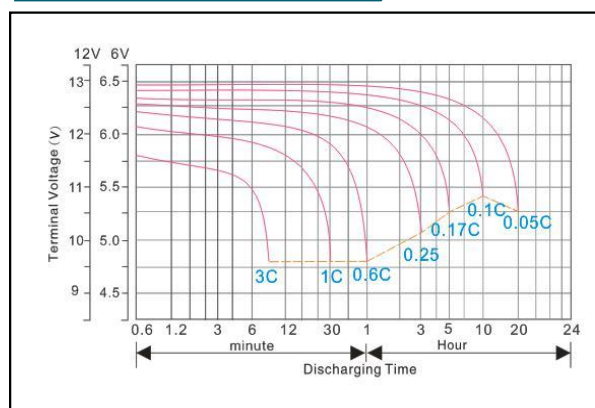
Capacity (25°C)	20HR(10.5V)	34.0Ah
	10HR(10.5V)	33.0Ah
	5HR(9.60V)	28.05Ah
Terminal type		T66
Internal resistance (Fully charged, 25°C)		Approx. 8.5mΩ
Capacity affected by temperature (20HR)	40°C	103%
	25°C	100%
	0°C	86%
Self-discharge (25°C)	3month	Remaining Capacity:91%
	6month	Remaining Capacity:82%
	12month	Remaining Capacity:65%
Nominal operating temperature		25°C ± 3°C (77°F ± 5°F)
Operating temperature range	Discharge	-15°C ~ 50°C (5°F ~ 122°F)
	Charge	-10°C ~ 50°C (14°F ~ 122°F)
	Storage	-20°C ~ 50°C (-4°F ~ 122°F)
Float charging voltage(25°C)		13.60 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.10 to 14.40V Temperature compensation: -30mV/°C
Maximum charging current		6.6A
Maximum discharge current		99A(5 sec.)
Designed floating life(20°C)		8 years



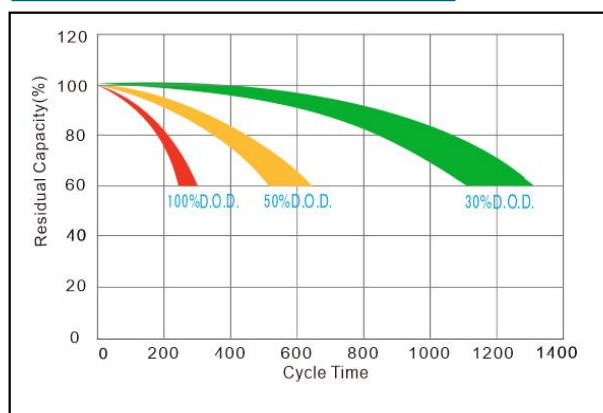
● **Charge Characteristics (25°C/77°F)**



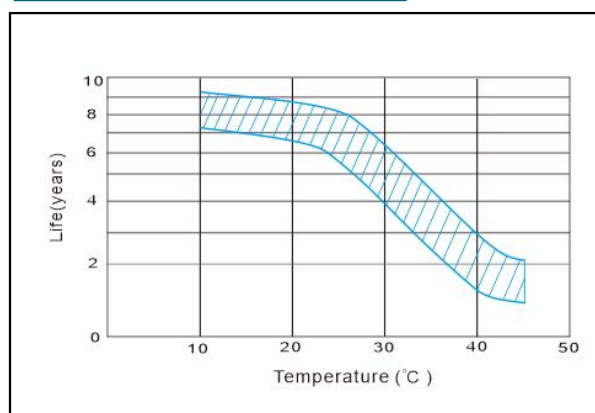
● **Discharge Characteristic (25°C/77°F)**



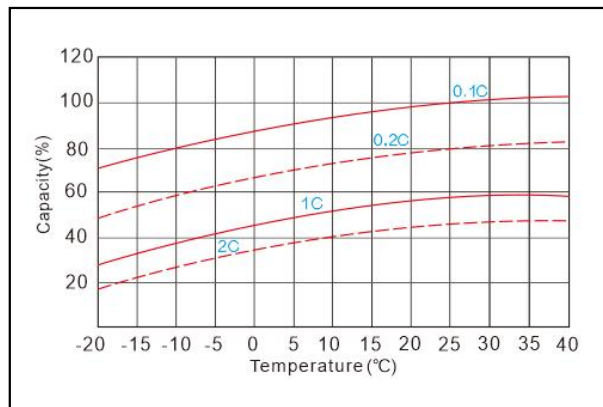
● **Cycle Life in Relation to Depth of Discharge**



● **Temperature vs Float Life**



● **Capacity Curve At Different Temperature**



● **Self Discharge Characteristics**

