

GEL12-33 12V33AH

GEL SERIES-GEL Battery



Specification

Nominal Voltage	12V	
Nominal Capacity(10HR)	33AH	
Dimension	Length	197 ± 2mm (7.76 inches)
	Width	130 ± 2mm (5.11 inches)
	Container Height	155 ± 2mm (6.10 inches)
	Total Height (with Terminal)	180 ± 2mm (7.08 inches)
Approx Weight	Approx 9.1 Kg (19.8 lbs)	
Terminal	T6 / T12	
Container Material	ABS	
Rated Capacity	33.0 AH/0.016A	(20hr, 1.80V/cell, 25°C/77°F)
	30.1 AH/3.010A	(10hr, 1.80V/cell, 25°C/77°F)
	26.4 AH/5.28A	(5hr, 1.75V/cell, 25°C/77°F)
	22.1 AH/7.36A	(3hr, 1.75V/cell, 25°C/77°F)
	18.2 AH/18.2A	(1hr, 1.60V/cell, 25°C/77°F)
Max. Discharge Current	330A (5s)	
Internal Resistance	Approx 14.5 mΩ	
Operating Temp. Range	Discharge	-30 ~ 50°C (5 ~ 122°F)
	Charge	0 ~ 40°C (32 ~ 104°F)
	Storage	-30 ~ 40°C (5 ~ 104°F)
Nominal Operating Temp. Range	25 ± 3°C (77 ± 5°F)	
Cycle Use	Initial Charging Current less than 9.9 A. Voltage 14.4V~14.9V at 25°C(77°F)Temp. Coefficient -30mV/°C	
	No limit on Initial Charging Current Voltage	
Standby Use	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
	Capacity affected by Temperature	40°C (104 °F) 103%
Self Discharge	25°C (77 °F)	100%
	0°C (32 °F)	86%
	Techfine GEL series batteries may be stored for up to 9 months at 25°C(77°F) and battery should be recharge before use. For higher temperatures the time interval will be shorter.	

Applications

- ◆ Telecommunications
- ◆ Solar system
- ◆ Wind power system
- ◆ Engine starting
- ◆ Wheelchair
- ◆ Floor cleaning machines
- ◆ Golf trolley
- ◆ Boats

ISO 9001	ISO 14001	OHSAS 18001	TLC
CE	RoHS	UL	PV Battery

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

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	32.1	25.2	19.3	16.1	10.2	7.79	6.45	5.57	4.81	4.26	3.84	3.51	3.32	1.82
1.80V/cell	36.8	28.2	21.2	17.8	11.1	8.35	6.84	5.85	5.05	4.46	4.02	3.69	3.47	1.90
1.75V/cell	41.4	31.0	23.0	19.0	11.7	8.82	7.16	6.08	5.23	4.61	4.15	3.80	3.53	1.94
1.70V/cell	44.6	33.2	24.4	20.1	12.4	9.18	7.40	6.27	5.41	4.77	4.28	3.90	3.62	1.96
1.67V/cell	46.4	34.5	25.2	20.9	12.7	9.47	7.58	6.40	5.50	4.84	4.34	3.95	3.66	1.98
1.60V/cell	50.3	36.9	27.1	22.2	13.3	9.85	7.87	6.60	5.63	4.94	4.42	4.04	3.73	2.01

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

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	61.5	48.6	37.3	31.4	20.0	15.3	12.7	11.0	9.52	8.45	7.64	6.99	6.61	3.64
1.80V/cell	69.6	53.8	40.9	34.4	21.5	16.3	13.4	11.5	10.0	8.82	7.98	7.33	6.90	3.79
1.75V/cell	77.3	58.7	43.9	36.7	22.7	17.2	14.0	11.9	10.3	9.11	8.22	7.54	7.03	3.86
1.70V/cell	82.4	62.3	46.2	38.6	24.0	17.8	14.4	12.3	10.6	9.39	8.45	7.74	7.18	3.90
1.67V/cell	84.8	64.0	47.5	39.8	24.5	18.3	14.7	12.5	10.8	9.50	8.56	7.82	7.26	3.94
1.60V/cell	90.8	67.9	50.7	42.1	25.3	19.0	15.2	12.8	11.0	9.68	8.69	7.97	7.39	3.99

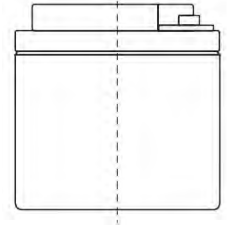
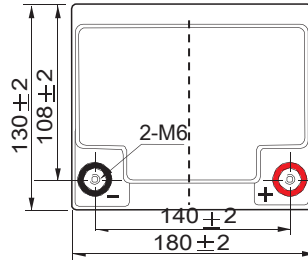
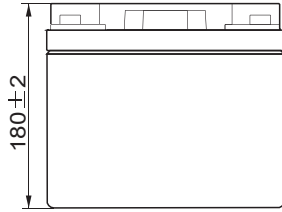
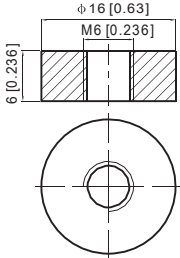
Note The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.

GEL12-33 12V33AH GEL SERIES-GEL Battery

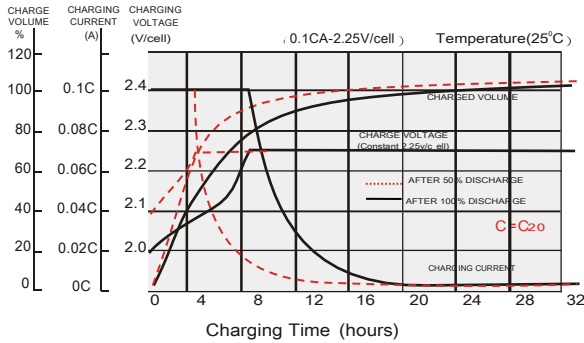
Dimensions

T6 Terminal

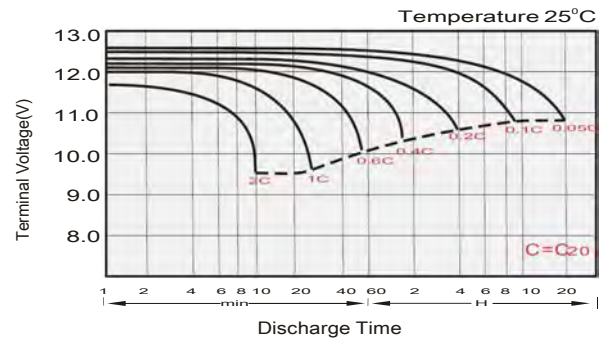
Unit: mm [inches]



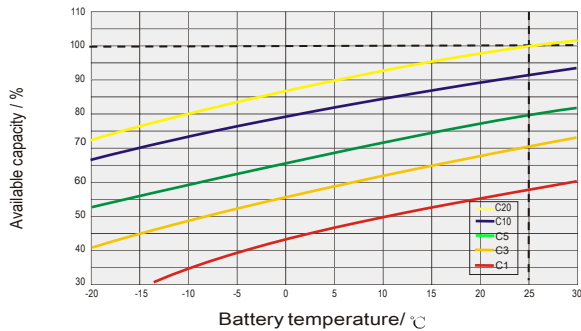
Float Charging Characteristics



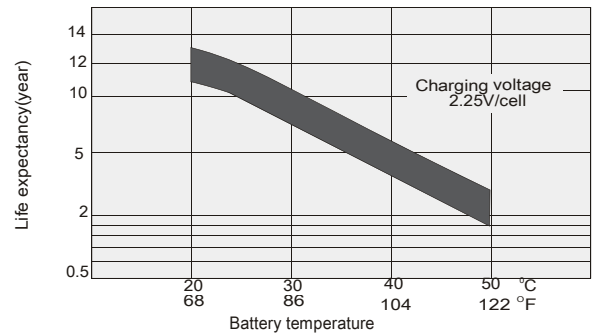
Discharge Characteristics



Temperature Effects in Relation to Battery Capacity

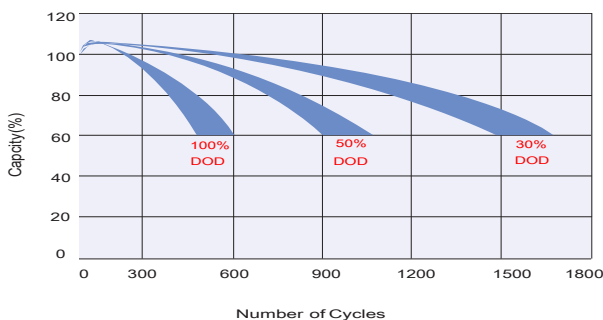


Effect of Temperature on Long Term Float Life

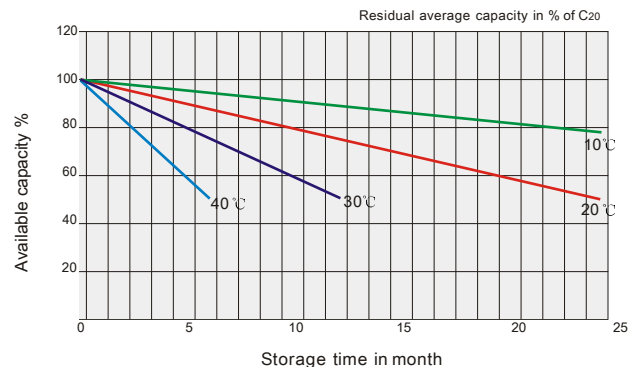


Cycle Life in Relation to Depth of Discharge

Testing condition
Discharging: current 0.17C (FV 1.7V/cell);
Charging: current 0.25C max, voltage 2.45V/cell;
Charging volume: 125% of discharged capacity.



General Relation of Capacity VS. Storage Time



TECHFINE GEL BATTERIES

This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specification are subject to modification without notice. Contact us for the latest information.