

GEL12-24 12V24AH

GEL SERIES-GEL Battery



Specification

Nominal Voltage	12V	
Nominal Capacity(20HR)	24AH	
Dimension	Length	165 ± 1mm (6.50 inches)
	Width	125 ± 1mm (4.92 inches)
	Container Height	175 ± 1mm(6.89inches)
	Total Height (with Terminal)	175 ± 1mm (6.89 inches)
Approx Weight	Approx 7.5 Kg (16.6 lbs)	
Terminal	T6 / T12	
Container Material	ABS	
Rated Capacity	28.0 AH/1.20A	(20hr ,1.80V/cell,25°C/77°F)
	22.3 AH/2.23A	(10hr,1.80V/cell,25°C/77°F)
	19.2 A H/3.84A	(5hr,1.75V/cell,25°C/77°F)
	16.7 AH/5.57A	(3hr,1.75V/cell,25°C/77°F)
	13.2 AH/13.2A	(1hr,1.60V/cell,25°C/77°F)
Max. Discharge Current	288A (5s)	
Internal Resistance	Approx 15.8 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 7.2 A.Voltage	
	14.4V~14.9V at 25°C(77°F)Temp. Coefficient -30mV/°C	
Standby Use	No limit on Initial Charging Current Voltage	
	13.5V~13.8V at 25°C(77°F)Temp. Coefficient -20mV/°C	
Capacity affected by Temperature	40°C (104 °F)	103%
	25°C (77 °F)	100%
	0°C (32°F)	86%
Self Discharge	Techfine GEL series batteries may be stored for up to 9months 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	
	RoHS		

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	20.3	15.9	12.2	10.2	6.46	4.92	4.07	3.52	3.04	2.69	2.42	2.22	2.10	1.15
1.80V/cell	23.3	17.8	13.4	11.2	6.98	5.27	4.32	3.70	3.19	2.81	2.54	2.33	2.19	1.20
1.75V/cell	26.1	19.6	14.5	12.0	7.40	5.57	4.52	3.84	3.30	2.91	2.62	2.40	2.23	1.22
1.70V/cell	28.2	21.0	15.4	12.7	7.85	5.80	4.67	3.96	3.42	3.01	2.70	2.46	2.28	1.24
1.67V/cell	29.3	21.8	15.9	13.2	8.05	5.98	4.79	4.04	3.47	3.05	2.74	2.50	2.31	1.25
1.60V/cell	31.8	23.3	17.1	14.0	8.38	6.22	4.97	4.17	3.56	3.12	2.79	2.55	2.36	1.27

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	38.9	30.7	23.6	19.8	12.6	9.64	8.01	6.95	6.01	5.34	4.82	4.41	4.18	2.30
1.80V/cell	43.9	34.0	25.8	21.8	13.6	10.3	8.46	7.27	6.29	5.57	5.04	4.63	4.36	2.39
1.75V/cell	48.8	37.0	27.7	23.2	14.4	10.8	8.84	7.53	6.50	5.75	5.19	4.76	4.44	2.44
1.70V/cell	52.0	39.3	29.2	24.4	15.1	11.3	9.10	7.74	6.71	5.93	5.34	4.89	4.54	2.47
1.67V/cell	53.5	40.4	30.0	25.1	15.5	11.6	9.30	7.88	6.80	6.00	5.41	4.94	4.58	2.49
1.60V/cell	57.4	42.9	32.0	26.6	16.0	12.0	9.62	8.10	6.94	6.12	5.49	5.03	4.67	2.52

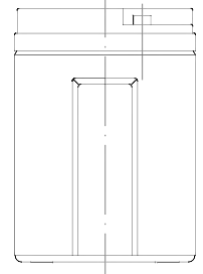
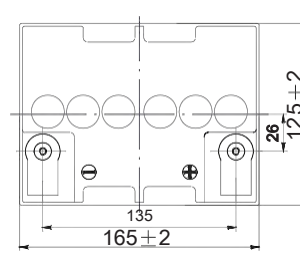
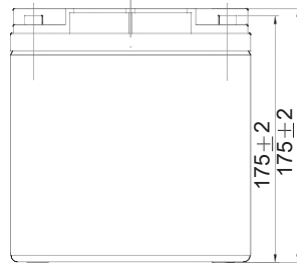
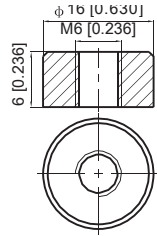
Note The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.

GEL12-28 12V28AH GEL SERIES-GEL Battery

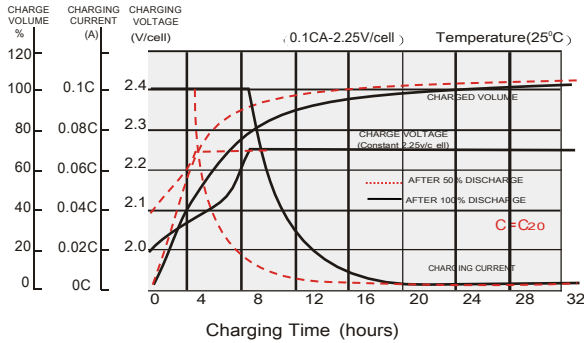
Dimensions

T12 Terminal

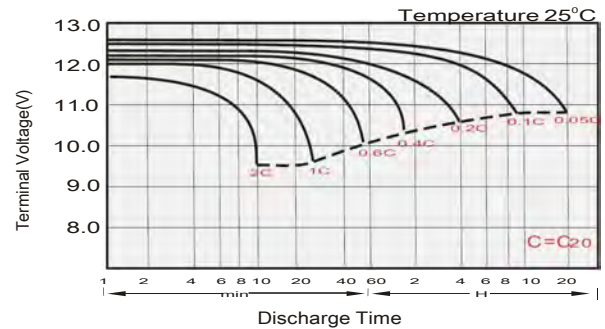
Unit: mm [inches]



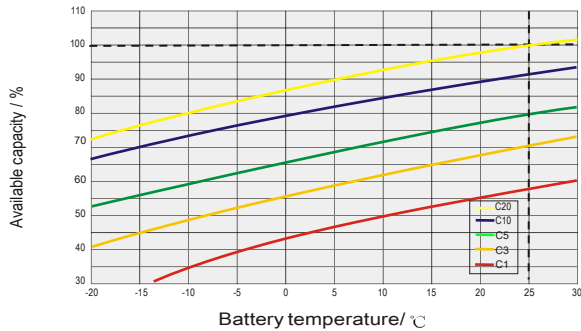
Float Charging Characteristics



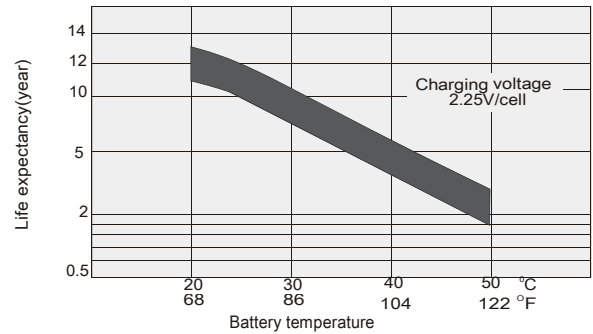
Discharge Characteristics



Temperature Effects in Relation to Battery Capacity

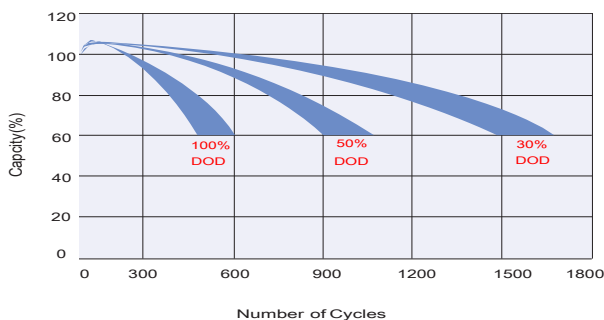


Effect of Temperature on Long Term Float Life

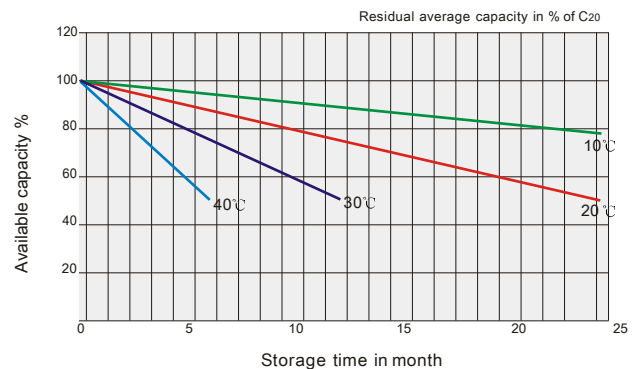


Cycle Life in Relation to Depth of Discharge

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

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