Techfine

GEL12-55 12V55AH

GEL SERIES-GEL Battery

Specification

Nomial Voltage	12V
Nomial Capacity(10HR)	55AH
Dimension	Length 231± 2mm (9.09 inches) Width 138 ± 2mm (5.43 inches) Container Height 225 ± 2mm (8.85 inches) Total Height (with Terminal) 225 ±2mm (8.85 inches)
Approx Weight	Approx 15.1 Kg (31.9 lbs)
Terminal	T6 / T9 / T14
Container Material	ABS
Rated Capacity	57.9 AH/2.89A (20hr ,1.80V/cell,25℃/77℉) 55.0 AH/5.50A (10hr,1.80V/cell,25℃/77℉) 48.0 AH/9.60A (5hr,1.75V/cell,25℃/77℉) 43.4 AH/14.4A (3hr,1.75V/cell,25℃/77℉) 34.1 AH/34.1A (1hr,1.60V/cell,25℃/77℉)
Max. Discharge Current	500A (5s)
Internal Resistance	Approx 9.0 mΩ
Operating Temp.Range	Discharge : -15～50℃ (5～122℉) Charge : 0～40℃ (32～104℉) Storage : -15～40℃ (5～104℉)
Nominal Operating Temp. Range	25±3℃ (77±5℉)
Cycle Use	Initial Charging Current less than 16.5 A.Voltage 14.4V~14.9V at 25℃(77℉)Temp. Coefficient -30mV/℃
Standby Use	No limit on Initial Charging Current Voltage 13.5V~13.8V at 25℃(77℉)Temp. Coefficient -20mV/℃
Capacity affected by Temperature	40℃ (104℉) 103% 25℃ (77℉) 100% 0℃ (32℉) 86%
Self Discharge	Techfine GEL series batteries may be stored for up to 9 months at 25℃(77℉) 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

Constant Current Discharge (Amperes) at 25 ℃ (77℉)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	42.3	33.2	25.3	21.2	13.5	10.3	8.49	7.33	6.33	5.60	5.05	4.62	4.37	2.40
1.80V/cell	48.5	37.1	27.9	23.4	14.6	11.0	9.00	7.70	6.64	5.86	5.29	4.86	4.56	2.50
1.75V/cell	54.5	40.8	30.2	25.1	15.4	11.6	9.43	8.00	6.88	6.07	5.46	5.00	4.65	2.55
1.70V/cell	58.7	43.7	32.1	26.5	16.4	12.1	9.74	8.25	7.12	6.27	5.63	5.13	4.76	2.58
1.67V/cell	61.1	45.4	33.2	27.5	16.8	12.5	10.0	8.42	7.23	6.36	5.71	5.20	4.82	2.61
1.60V/cell	66.2	48.6	35.7	29.2	17.5	13.0	10.4	8.68	7.41	6.50	5.81	5.31	4.91	2.65

Constant Power Discharge (Watts) at 25 ℃ (77℉)

F.V/Time	20min	30min	45min	1h	2h	3h	4h	5h	6h	7h	8h	9h	10h	20h
1.85V/cell	81.0	64.0	49.1	41.3	26.3	20.1	16.7	14.5	12.5	11.1	10.0	9.20	8.70	4.79
1.80V/cell	91.5	70.8	53.8	45.3	28.3	21.4	17.6	15.1	13.1	11.6	10.5	9.65	9.07	4.98
1.75V/cell	101.7	77.2	57.7	48.3	29.9	22.6	18.4	15.7	13.5	12.0	10.8	9.93	9.24	5.08
1.70V/cell	108.4	81.9	60.8	50.8	31.6	23.5	19.0	16.1	14.0	12.4	11.1	10.2	9.45	5.14
1.67V/cell	111.5	84.2	62.6	52.4	32.2	24.1	19.4	16.4	14.2	12.5	11.3	10.3	9.55	5.18
1.60V/cell	119.5	89.3	66.7	55.3	33.3	25.0	20.0	16.9	14.5	12.7	11.4	10.5	9.72	5.25

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

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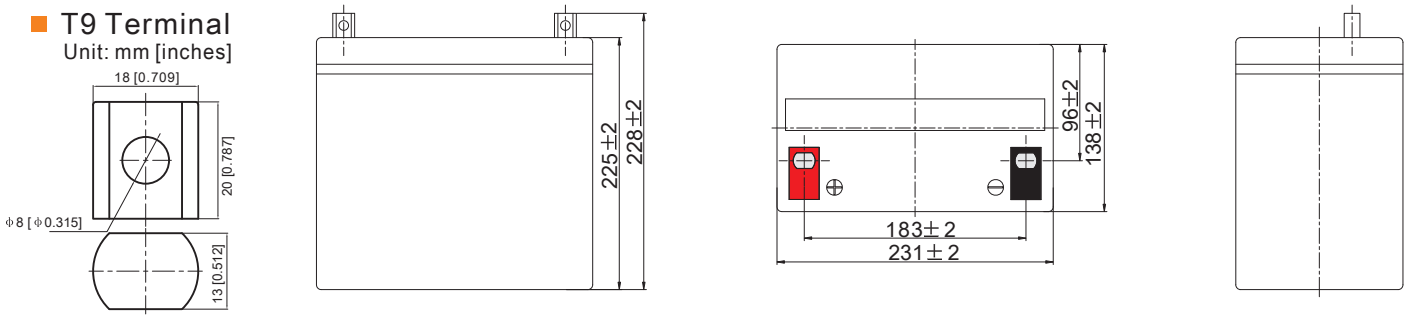
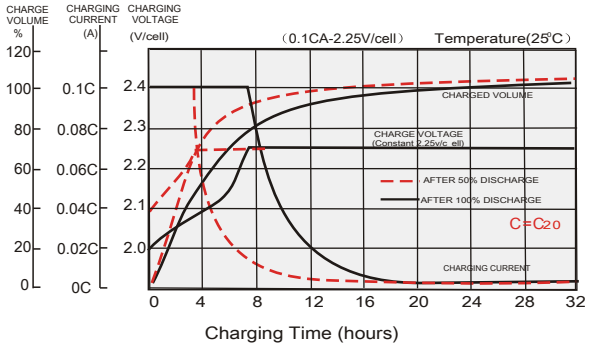
Dimensions

■ T9 Terminal

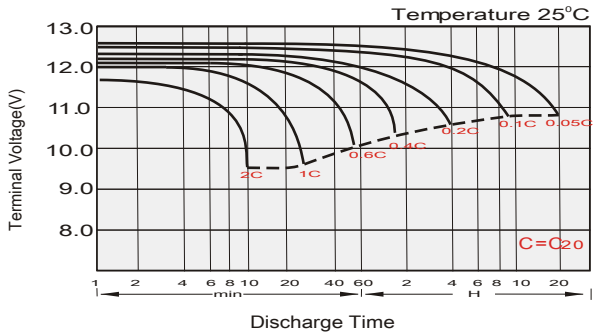
Unit: mm [inches]



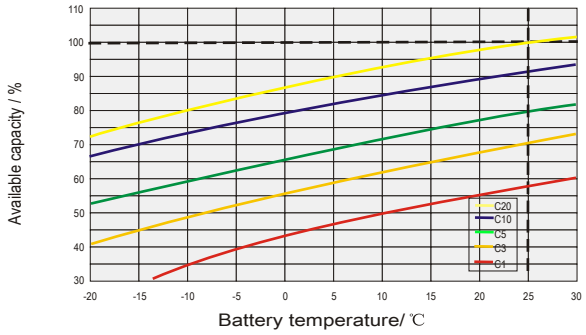
Float Charging Characteristics



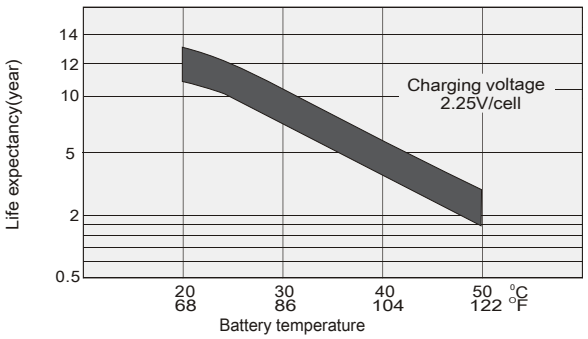
Discharge Characteristics



Temperature Effects in Relation to Battery Capacity

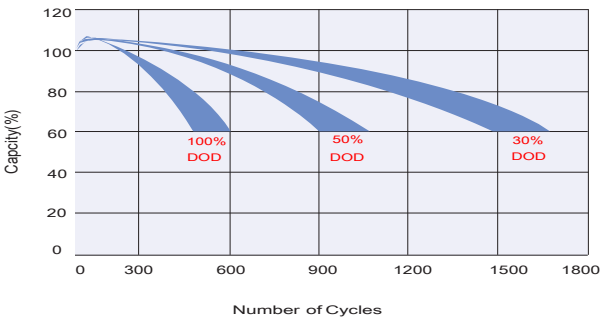


Effect of Temperature on Long Term Float Life

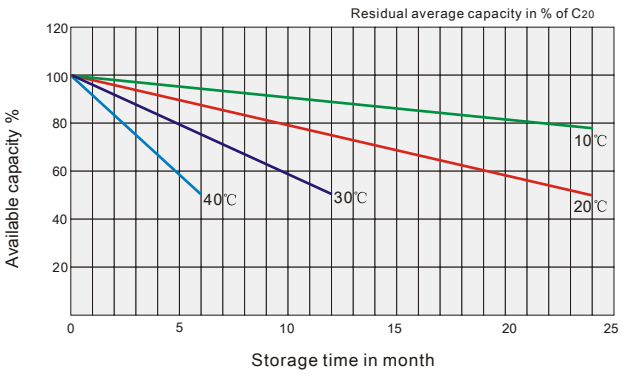


Cycle Life in Relation to Depth of Discharge

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



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