



B00425/BAT-GEL-38A
Applications

- Railway and marine systems
- Electric tools
- Vehicule in place of walking
- Lawn mowers
- Golf trolleys and golf carts
- Electric toys
- Portable power
- Wheelchairs
- Medical equipment

Specification	
Nominal voltage	12V
Nominal capacity (20h)	38 Ah
Dimensions	Length : 197 ± 2 mm (7.76 inches) Width : 165 ± 2 mm (6.50 inches) Container height : 170 ± 2 mm (6.69 inches) Total height (with terminal) : 170 ± 2 mm (6.69 inches)
Weight	Approx. 13.5 kg (29.77 lb)
Terminal	T6
Container material	ABS
Rated capacity	38.0 Ah/1.90 A (20h, 1.80V/cell, 25°C/77°F) 35.0 Ah/3.50 A (10h, 1.80V/cell, 25°C/77°F) 30.7 Ah/6.14 A (5h, 1.75V/cell, 25°C/77°F) 27.1 Ah/9.02 A (3h, 1.75V/cell, 25°C/77°F) 22.5 Ah/22.5 A (1h, 1.60V/cell, 25°C/77°F)
Max. discharge current	380 A (5s)
Internal resistance	Approx. 10.5 mΩ
Operating temperature range	Discharge : -20~55°C (-4~131°F) Charge : 0~40°C (32~104°F) Storage : -20~50°C (-4~122°F)
Nominal operating temp. range	25 ± 3°C (77 ± 5°F)
Cycle use	Initial charging current less than 7.6 A. Voltage 14.4V~15.0V 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 according to temperature	40°C (104°F) : 103% 25°C (77°F) : 100% 0°C (32°F) : 86%
Self discharge	CG Power GEL series batteries may be stored for up to 9 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.

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

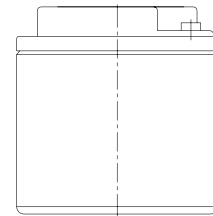
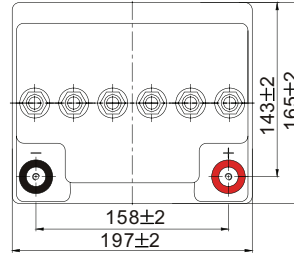
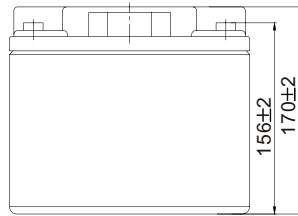
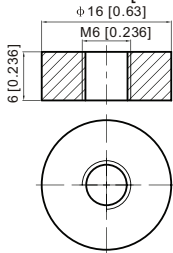
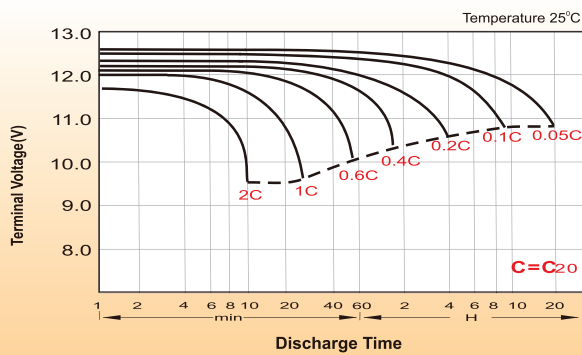
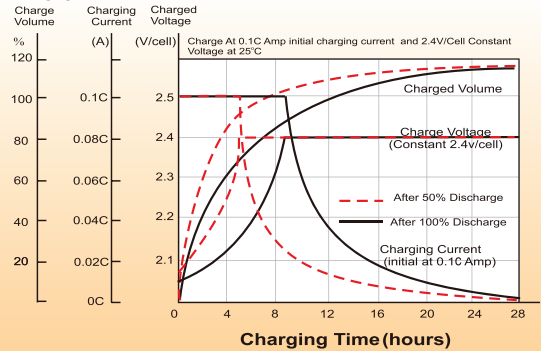
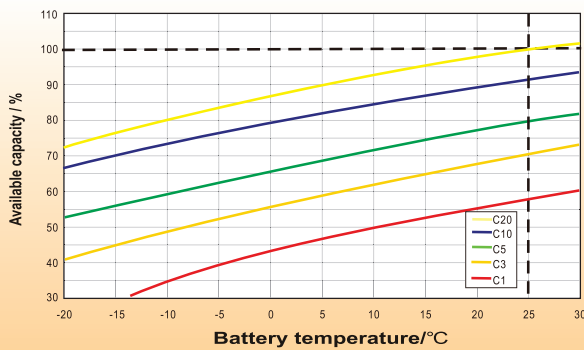
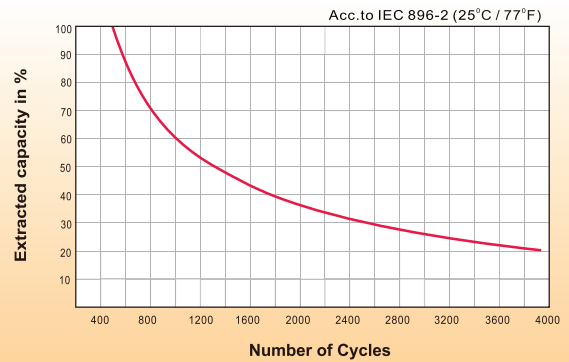
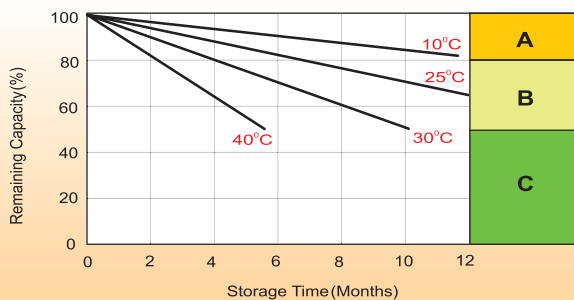
F.V/Time	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1.85V/cell	42.9	37.2	33.4	26.6	20.2	16.9	10.6	7.99	6.54	5.60	4.86	3.92	3.33	1.85
1.80V/cell	51.5	42.9	38.0	29.6	22.7	18.8	11.5	8.62	7.01	5.95	5.16	4.14	3.50	1.90
1.75V/cell	59.8	48.9	42.2	32.2	24.2	19.9	12.1	9.02	7.29	6.14	5.32	4.24	3.55	1.93
1.70V/cell	66.4	53.2	45.3	34.2	25.3	20.8	12.7	9.33	7.50	6.32	5.47	4.33	3.61	1.96
1.65V/cell	71.1	55.9	47.3	35.5	26.3	21.5	13.0	9.60	7.67	6.47	5.57	4.40	3.67	1.98
1.60V/cell	77.5	59.8	50.6	37.6	27.8	22.5	13.5	9.92	7.90	6.64	5.70	4.46	3.73	2.00

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

F.V/Time	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1.85V/cell	80.6	70.3	63.8	51.1	39.2	32.8	20.7	15.6	12.8	11.0	9.62	7.79	6.62	3.70
1.80V/cell	95.4	80.1	71.6	56.3	43.7	36.3	22.4	16.8	13.7	11.7	10.2	8.19	6.95	3.79
1.75V/cell	109.0	90.1	78.8	61.0	46.3	38.3	23.4	17.5	14.2	12.0	10.5	8.38	7.05	3.84
1.70V/cell	119.3	97.1	83.8	64.2	48.1	39.8	24.4	18.1	14.6	12.3	10.7	8.55	7.16	3.90
1.65V/cell	126.3	100.9	86.7	66.2	49.7	41.0	25.0	18.6	14.9	12.6	10.9	8.67	7.27	3.94
1.60V/cell	135.2	106.4	91.8	69.4	52.1	42.7	25.8	19.1	15.3	12.9	11.1	8.78	7.37	3.97

GEL Battery (12V38AH) | B00425/BAT-GEL-40A
Dimensions
T6 Terminal

Unit: mm [inches]


Discharge Characteristics

Charging Characteristics (cycle use)
Charging Characteristics

Temperature Effects in Relation to Battery Capacity

Cycle Life in Relation to Depth of Discharge

Self Discharge Characteristics


- A** No supplementary charge required
(Carry out supplementary charge before use if 100% capacity is required.)
- B** Supplementary charge required before use. Optional charging way as below:
 1. Charged for above 3 days at limited current 0.25CA and constant voltage 2.25V/cell.
 2. Charged for above 20 hours at limited current 0.25CA and constant voltage 2.45V/cell.
 3. Charged for 8~10 hours at limited current 0.05CA.
- C** Supplementary charge may often fail to recover the capacity.
The battery should never be left standing till this is reached.