




**GEL Battery
(12V60AH)**
B00423/BAT34-GEL-60A
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)	60Ah
Dimensions	Length : 259 ± 2 mm (10.2 inches) Width : 168 ± 2 mm (6.61 inches) Container height : 190 ± 2 mm (7.48 inches) Total height (with terminal) : 190 ± 2 mm (7.48 inches)
Weight	Approx. 19.7 kg (43.4 lb)
Terminal	T6
Container material	ABS
Rated capacity	60.0 Ah/3.00A (20h, 1.80V/cell, 25°C/77°F) 55.4 Ah/5.54A (10h, 1.80V/cell, 25°C/77°F) 48.55 Ah/9.71A (5h, 1.75V/cell, 25°C/77°F) 42.9 Ah/14.3A (3h, 1.75V/cell, 25°C/77°F) 35.6 Ah/35.6A (1h, 1.60V/cell, 25°C/77°F)
Max. discharge current	600A (5s)
Internal resistance	Approx. 8.2mΩ
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 12A. 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)

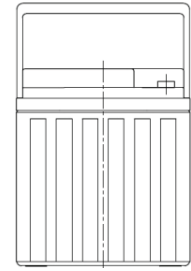
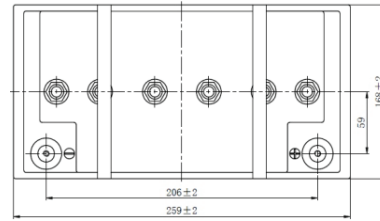
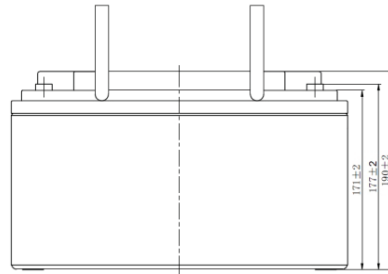
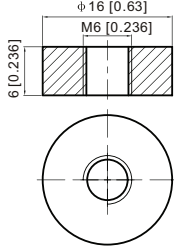
F.V/Time	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1.85V/cell	67.8	58.7	52.8	42.0	32.0	26.7	16.8	12.6	10.3	8.86	7.68	6.20	5.26	2.93
1.80V/cell	81.5	67.9	60.1	46.8	35.9	29.7	18.2	13.6	11.1	9.41	8.15	6.54	5.54	3.00
1.75V/cell	94.5	77.3	66.8	51.0	38.3	31.4	19.1	14.3	11.5	9.71	8.41	6.70	5.62	3.04
1.70V/cell	105.0	84.1	71.6	54.0	40.0	32.8	20.0	14.7	11.8	9.98	8.64	6.85	5.71	3.09
1.65V/cell	112.4	88.4	74.7	56.1	41.6	34.0	20.6	15.2	12.1	10.2	8.81	6.95	5.80	3.13
1.60V/cell	122.5	94.6	79.9	59.4	43.9	35.6	21.3	15.7	12.5	10.5	9.01	7.05	5.89	3.16

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

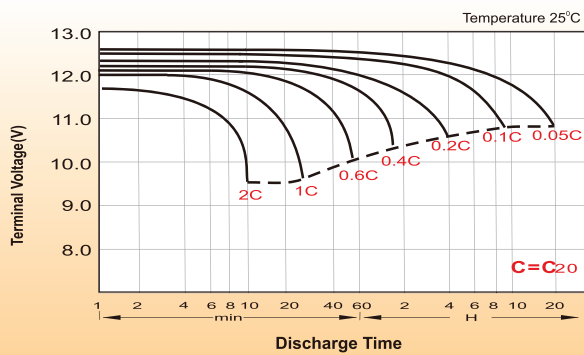
F.V/Time	10 min	15 min	20 min	30 min	45 min	1 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1.85V/cell	127.4	111.2	100.8	80.8	61.9	51.9	32.7	24.7	20.3	17.4	15.2	12.3	10.5	5.85
1.80V/cell	150.8	126.6	113.1	89.1	69.0	57.4	35.3	26.5	21.6	18.5	16.1	13.0	11.0	5.99
1.75V/cell	172.3	142.4	124.5	96.3	73.1	60.5	36.9	27.7	22.5	19.0	16.5	13.2	11.1	6.07
1.70V/cell	188.6	153.5	132.5	101.4	76.1	62.9	38.6	28.6	23.0	19.5	17.0	13.5	11.3	6.16
1.65V/cell	199.6	159.5	137.0	104.6	78.6	64.8	39.5	29.3	23.5	19.9	17.3	13.7	11.5	6.22
1.60V/cell	213.7	168.2	145.1	109.7	82.4	67.5	40.7	30.1	24.1	20.4	17.6	13.9	11.6	6.27

Dimensions

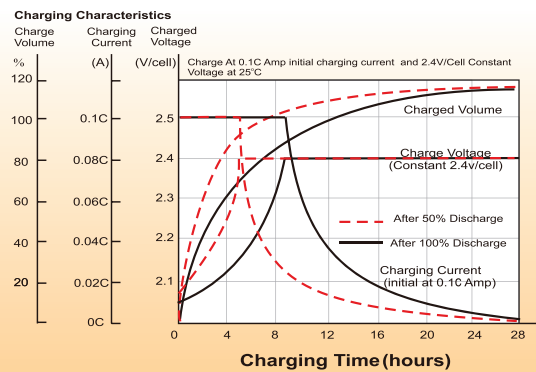
T6 Terminal Unit: mm [inches]



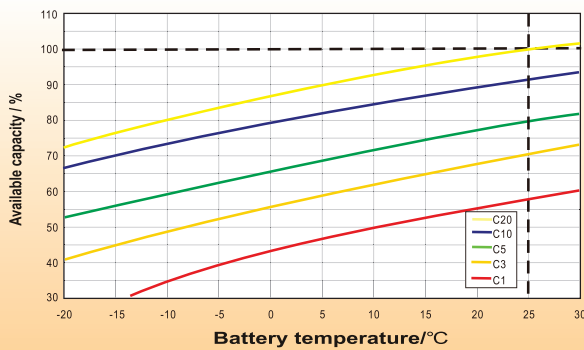
Discharge Characteristics



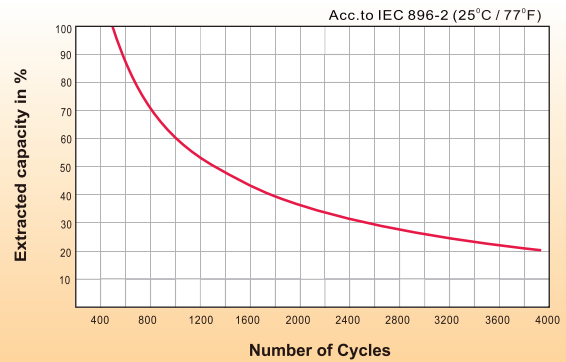
Charging Characteristics (cycle use)



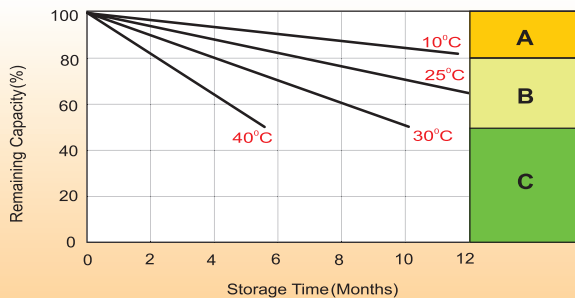
Temperature Effects in Relation to Battery Capacity



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.