

# BAC12 SERIES

## BAC12-38FR 12V AGM Battery - Fire Resistant



**BOSCH**  
Invented for life

### Applications

Electric tools  
Vehicle in place of walking  
Lawn mowers

Golf trolleys and golf carts  
Portable apparatus, lights  
and instruments

Electric toys  
Illumination light  
Fire alarms

Portable power  
Wheelchairs  
Medical equipment

### Bosch Master Data

Short Order Part Number <b>BAC12-38FR</b>	Bosch 13 Digit Part Number <b>0092L57159HD3</b>	Nominal Voltage <b>12V</b>	Nominal Capacity (20HR) <b>40.7 AH</b>
Cold Cranking Amperes (CCA) <b>400.0 AH</b>			
<b>Case Size Dimension</b>			
Length <b>197±2mm (7.76 inches)</b>	Width <b>165±2mm (6.50 inches)</b>	Container Height <b>170±2mm (6.69 inches)</b>	Total Height (with Terminal) <b>170±2mm (6.69 inches)</b>
Approx Weight <b>14.2 kg (31.3lbs)</b>	Terminal <b>T6</b>	Container Material <b>ABS Fire Resistant</b>	
<b>Rated Capacity</b>			
<b>40.7 AH/2.04 A (20hr, 1.80V/cell, 25°C/77°F)</b>	<b>38.0 AH/3.80 A (10hr, 1.80V/cell, 25°C/77°F)</b>	<b>33.3 AH/6.67 A (5hr, 1.75V/cell, 25°C/77°F)</b>	
<b>30.2 AH/10.1 A (3hr, 1.75V/cell, 25°C/77°F)</b>	<b>24.5 AH/24.5 A (1hr, 1.60V/cell, 25°C/77°F)</b>		
Max. Discharge Current <b>456A (5s)</b>	Internal Resistance <b>Approx 9.0mΩ</b>		
<b>Operating Temp. Range</b>			
Discharge : -15-50°C (5-122°F)	Charge: 0-40°C (32-104°F)	Storage : -15-40°C (5-104°F)	
Nominal Operating Temp. Range <b>25±3°C (77±5°F)</b>	Cycle Use <b>Initial Charging Current less than 11.4A. Voltage 14.4V-15.0V at 25°C (77°F) Temp. Coefficient -30mV/°C</b>		
Standby Use <b>No limit on Initial Charging Current Voltage 13.5V-13.8V at 25°C (77°F) Temp. Coefficient -20mV/°C</b>			
Capacity affected by Temperature <b>40°C (104°F) 103%      25°C (77°F) 100%      0°C (32°F) 86%</b>	Self Discharge Bosch BAC series batteries may be stored for up to 6 months at 25°C (77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.		

### Certification Standards

AS/NZS  
4029.2:2000



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

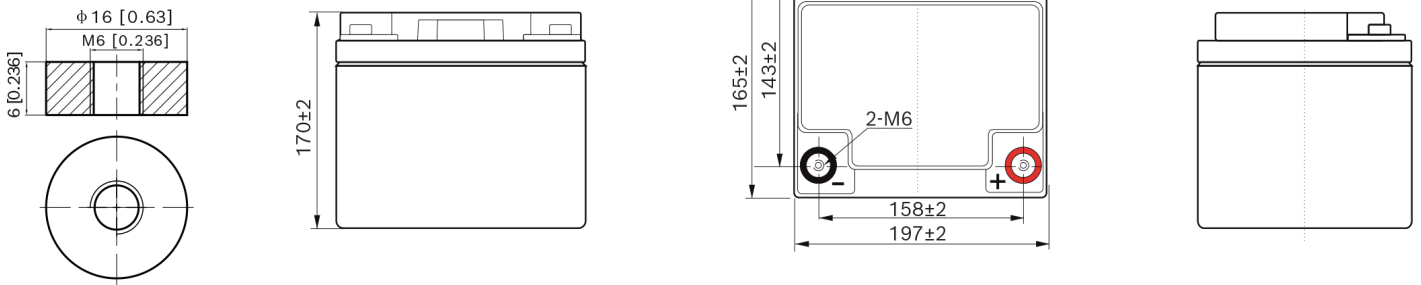
F.V/Time	10min	15min	20min	30min	45min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
1.85V/cell	55.6	46.8	40.9	29.4	23.4	19.0	11.8	9.19	7.44	6.05	5.28	4.31	3.59	2.02
1.80V/cell	71.1	56.6	48.4	34.7	27.2	21.3	12.9	9.89	7.95	6.49	5.66	4.57	3.80	2.04
1.75V/cell	78.1	61.8	52.0	36.1	28.2	22.2	13.3	10.1	8.12	6.67	5.81	4.65	3.84	2.06
1.70V/cell	85.1	66.0	54.7	37.5	29.3	22.9	13.9	10.4	8.34	6.83	5.94	4.71	3.88	2.09
1.65V/cell	91.9	70.1	58.1	39.6	30.1	23.7	14.3	10.8	8.63	7.02	6.06	4.79	3.96	2.12
1.60V/cell	99.8	75.0	61.9	41.8	31.4	24.5	14.7	11.1	8.90	7.25	6.20	4.83	4.00	2.13

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

F.V/Time	10min	15min	20min	30min	45min	1hr	2hr	3hr	4hr	5hr	6hr	8hr	10hr	20hr
1.85V/cell	103.8	88.3	78.0	56.6	45.2	36.8	23.0	18.0	14.6	11.9	10.42	8.52	7.11	4.04
1.80V/cell	130.9	105.1	90.8	65.9	52.2	41.0	24.9	19.2	15.5	12.7	11.14	9.02	7.52	4.07
1.75V/cell	142.0	113.6	96.8	68.1	53.9	42.7	25.8	19.5	15.8	13.0	11.43	9.17	7.59	4.10
1.70V/cell	152.6	120.4	101.2	70.6	55.9	44.0	26.7	20.0	16.2	13.3	11.65	9.29	7.66	4.18
1.65V/cell	163.6	127.2	107.0	74.2	57.1	45.3	27.4	20.8	16.7	13.7	11.89	9.43	7.81	4.22
1.60V/cell	174.6	134.4	112.8	77.5	58.9	46.5	28.1	21.4	17.2	14.1	12.12	9.51	7.89	4.24

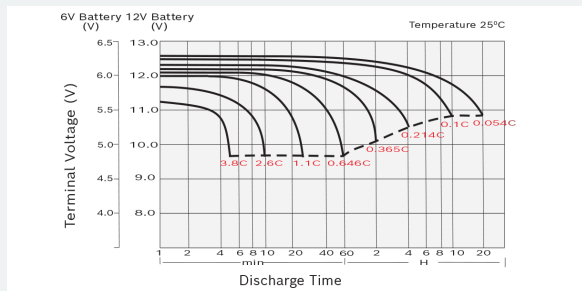
## Product Dimension & Design

T6 Terminal  
Unit: mm [inches]

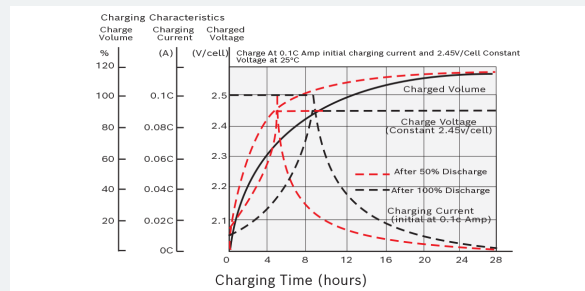


## Product Performance Overview

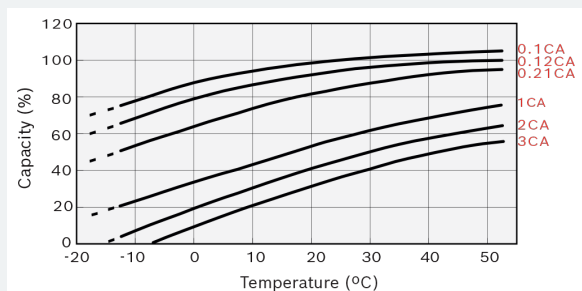
### Discharge Characteristics



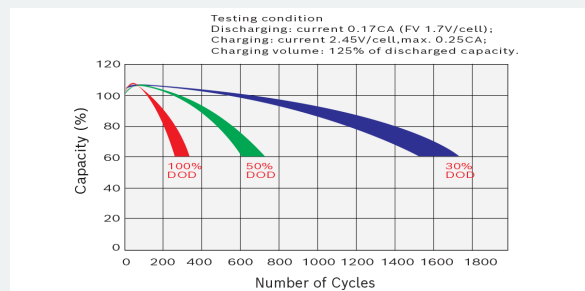
### Charging Characteristics



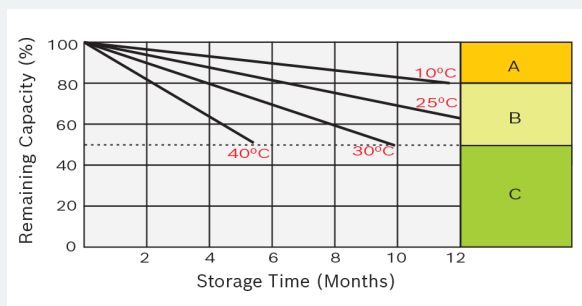
### Temperature Effects in Relation to Battery Capacity



### 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:
  - Charged for above 3 days at limited current 0.25CA and constant volatge 2.25V/cell.
  - Charged for above 20 hours at limited current 0.25CA and constant volatge 2.45V/cell.
  - 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.

Your address for genuine Bosch quality:

Dealer stamp here: