

# CHALLENGER

## Maintenance-Free Rechargeable Sealed Lead-Acid Battery

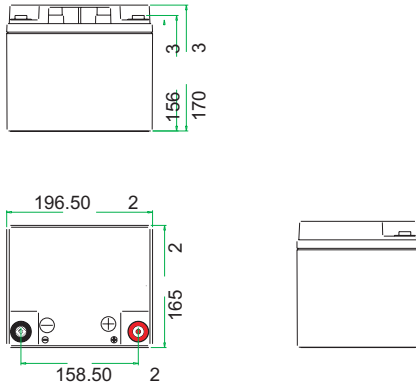
AA67

(12V38AH)

### Specification



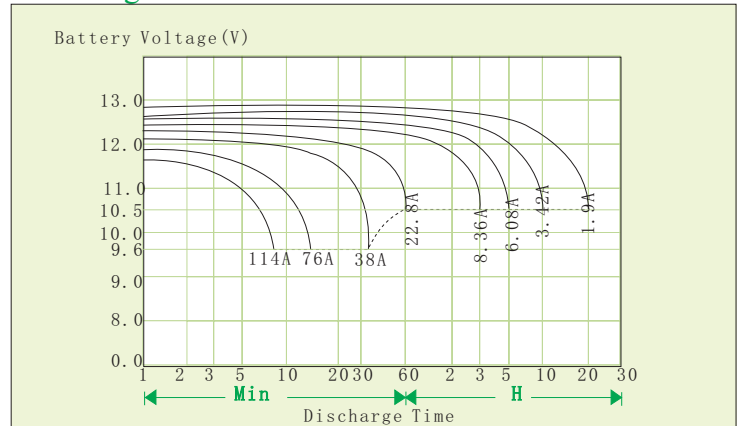
#### Dimensions(mm)



Nominal voltage		12V
Rated Capacity (10 HR)		38AH
Approx Weight		11.8kg
Terminal	Standard	I1-M6 Insert
	Optional	
Operation Temperature		
Charge	0°C (32°F) ~ 40°C (104°F)	
Discharge	-20°C (-4°F) ~ 50°C (122°F)	
Storage	-20°C (-4°F) ~ 40°C (104°F)	

Capacity 25°C (77°F)	20 hour rate (1.94A)	38.76AH
	10 hour rate (3.8A)	38AH
	5 hour rate (7.6A)	34.2AH
	1 hour rate (22.8A)	22.8AH
Capacity affected by temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self-discharge at 25°C (77°F) (Before recharge)	Capacity after 3 month	91%
	Capacity after 6month	82%
	Capacity after 12month	64%
Constant voltage charge	Cycle	Initial Charging Current ≤ 12A 14.4V ~ 15V at 25°C (77°F)
	Standby	13.5V ~ 13.8V at 25°C (77°F)
Max discharge current for 5		570A

#### Discharge characteristic



Note: Discharge shall be cut-off at 10.5V if discharge at  $< 1C_A$  and at 9.6V if at  $\geq 1C_A$

It is recommended to recharge battery by constant-voltage charge immediately after use

#### Constant current (Amp) and Constant Power (Watt) Discharge Table at 25°C (77°F)

Final voltage	Time (min)	5	10	15	20	30	60	120	180	300	600
		1.80VPC	A	144.95	97.23	67.71	52.27	43.14	27.43	15.43	10.29
	W	1520.00	1021.00	711.00	552.00	453.00	287.00	162.00	108.00	76.20	39.00
1.75VPC	A	145.42	97.80	68.09	52.86	43.52	27.62	15.62	10.48	7.45	3.90
	W	1527.00	1027.00	714.00	554.00	457.00	289.00	164.00	110.00	78.24	41.00
1.70VPC	A	145.90	98.10	68.28	53.04	43.71	27.81	16.00	10.76	7.66	4.10
	W	1532.00	1030.00	716.00	556.00	459.00	291.00	168.00	113.00	80.40	43.00
1.65VPC	A	146.09	98.47	68.48	53.24	43.90	28.00	16.19	10.86	7.81	4.19
	W	1534.00	1034.00	718.00	558.00	460.00	293.00	170.00	114.00	82.00	44.00
1.60VPC	A	146.29	98.76	68.57	53.33	44.00	28.10	16.57	10.95	7.94	4.26
	W	1536.00	1037.00	720.00	560.00	462.00	295.00	174.00	115.00	83.00	45.00