

# VALVE REGULATED LEAD ACID BATTERY





## Features:

- User Friendly
- Low Maintenance
- High Performance
- Ultra Long Life Service
- High Recovery Capability
- High Charge Acceptability
- No Water Topping Required
- Maintenance-Free Operation
- Low Pressure Venting System
- Non-Spill Sealed Construction
- Low Self-Discharge - Long Shelf Life
- Wide Operating Temperature Range



MADE IN TAIWAN

## TECHNICAL SPECIFICATIONS

MODEL <b>4V</b>	4V 4 Ah		4V 6 Ah	
Cells Per Unit	2		2	
Voltage Per Unit	4		6	
Capacity	4Ah@10hr-rate		6Ah@10hr-rate	
Weight	Approx 0.46 kg		Approx 0.63 kg	
Max. Discharge Current	60A (5sec)		90A (5sec)	
Internal Resistance	Approx. 26m Ω		Approx. 25m Ω	
Operating Temperature Range	Discharge: -20°C~50°C		Discharge: -20°C~50°C	
	Charge: -20°~50°C		Charge: -20°~50°C	
	Storage: -20°C~50°C		Storage: -20°C~50°C	
Normal Operating Temperature Range	25°C ±5°C		25°C ±5°C	
Float charging Voltage	4.50 to 4.60V DC/unit Average at 25°C			
Max. Charging Current	1.2A		1.8A	
Equalization and Cycle service	4.90 to 5.00V DC/unit Average at 25°C			
Self Discharge	The batteries can be stored for more than 6 months at 25°C. Please charge batteries before using. For high temperature, the time interval will be shorter.			
Terminal	Faston Tab 187 (T1)		Tab 187 (T1)	
Container Material	ABS (UL94-HB) Flammability resistance of UL94-V0 is available on request.			

MODEL <b>6V</b>				
	6V 4.5 Ah	6V 7 Ah	6V 10 Ah	6V 12 Ah
Cells Per Unit	3	3	3	3
Voltage Per Unit	6	6	6	6
Capacity	4.5Ah@10hr-rate	7Ah@10hr-rate	10Ah@10hr-rate	12Ah@10hr-rate
Weight	Approx 0.67 kg	Approx 1.0 kg	Approx 1.2 kg	Approx 1.6 kg
Max. Discharge Current	600A (5sec)	400A (5sec)	180A (5sec)	180A (5sec)
Internal Resistance	Approx. 24m Ω	Approx. 19m Ω	Approx. 11m Ω	Approx. 11m Ω
Operating Temperature Range	Discharge: -20°C~50°C	Discharge: -20°C~50°C	Discharge: -20°C~50°C	Discharge: -20°C~50°C
	Charge: -20°~50°C	Charge: -20°~50°C	Charge: -20°~50°C	Charge: -20°~50°C
	Storage: -20°C~50°C	Storage: -20°C~50°C	Storage: -20°C~50°C	Storage: -20°C~50°C
Normal Operating Temperature Range	25°C ±5°C	25°C ±5°C	25°C ±5°C	25°C ±5°C
Float charging Voltage	6.75 to 6.90V DC/unit Average at 25°C			
Max. Charging Current	1.2A	2.1A	3.6A	3.6A
Equalization and Cycle service	7.35 to 7.50V DC/unit Average at 25°C			
Self Discharge	The batteries can be stored for more than 6 months at 25°C. Please charge batteries before using. For high temperature, the time interval will be shorter.			
Terminal	Faston Tab 187 (T1)	Faston Tab 187 (T1)	Faston Tab 250 (T12)	Faston Tab 250 (T12)
Container Material	ABS (UL94-HB) Flammability resistance of UL94-V0 is available on request.			

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MODEL <b>12V</b>				
	12V 1.3 Ah	12V 2.3 Ah	12V 5 Ah	12V 7 Ah
Cells Per Unit	6	6	6	6
Voltage Per Unit	12	12	12	12
Capacity	1.3Ah@10hr-rate	2.3Ah@10hr-rate	5.0Ah@20hr-rate	7.0Ah@20hr-rate
Weight	Approx 0.52 kg	Approx 0.9 kg	Approx 1.5kg	Approx 2.0kg
Max. Discharge Current	19.5A (5sec)	34.5A (5sec)	75A (5sec)	105A (5sec)
Internal Resistance	Approx. 43m Ω	Approx. 58m Ω	Approx. 35m Ω	Approx. 28m Ω
Operating Temperature Range	Discharge: -20°C~50°C	Discharge: -20°C~50°C	Discharge: -20°C~50°C	Discharge: -20°C~50°C
	Charge: -20°C~50°C	Charge: -20°C~50°C	Charge: -20°C~50°C	Charge: -20°C~50°C
	Storage: -20°C~50°C	Storage: -20°C~50°C	Storage: -20°C~50°C	Storage: -20°C~50°C
Normal Operating Temperature Range	25°C ±5°C	25°C ±5°C	25°C ±5°C	25°C ±5°C
Float charging Voltage	13.50 to 13.80V DC/unit Average at 25°C			
Max. Charging Current	0.39A	0.39A	1.5A	2.1A
Equalization and Cycle service	14.70 to 15.00V DC/unit Average at 25°C			
Self Discharge	The batteries can be stored for more than 6 months at 25°C. Please charge batteries before using. For high temperature, the time interval will be shorter.			
Terminal	Faston Tab 187 (T1)	Faston Tab 187 (T1)	Faston Tab 187 (T1)	T1 / T2
Container Material	ABS (UL94-HB) Flammability resistance of UL94-V0 is available on request.			

MODEL <b>12V</b>				
	12V 9 Ah	12V 12 Ah	12V 14 Ah	12V 18 Ah
Cells Per Unit	6	6	6	6
Voltage Per Unit	12	12	12	12
Capacity	9.0Ah@20hr-rate	12Ah@10hr-rate	14Ah@10hr-rate	18Ah@10hr-rate
Weight	Approx 2.5kg	Approx 3.15 kg	Approx 3.45 kg	Approx 5.2 kg
Max. Discharge Current	135A (5sec)	180A (5sec)	180A (5sec)	200A (5sec)
Internal Resistance	Approx. 21m Ω	Approx. 19m Ω	Approx. 17m Ω	Approx. 8.5m Ω
Operating Temperature Range	Discharge: -20°C~50°C	Discharge: -20°C~50°C	Discharge: -20°C~50°C	Discharge: -20°C~50°C
	Charge: -20°C~50°C	Charge: -20°C~50°C	Charge: -20°C~50°C	Charge: -20°C~50°C
	Storage: -20°C~50°C	Storage: -20°C~50°C	Storage: -20°C~50°C	Storage: -20°C~50°C
Normal Operating Temperature Range	25°C ±5°C	25°C ±5°C	25°C ±5°C	25°C ±5°C
Float charging Voltage	13.50 to 13.80V DC/unit Average at 25°C			
Max. Charging Current	2.7A	3.6A	4.2A	5.4A
Equalization and Cycle service	14.70 to 15.00V DC/unit Average at 25°C			
Self Discharge	The batteries can be stored for more than 6 months at 25°C. Please charge batteries before using. For high temperature, the time interval will be shorter.			
Terminal	T1 / T2	T2	T2	T3 / T10
Container Material	ABS (UL94-HB) Flammability resistance of UL94-V0 is available on request.			

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MODEL <b>12V</b>				
	12V 24 Ah	12V 26 Ah	12V 33 Ah	12V 45 Ah
Cells Per Unit	6	6	6	6
Voltage Per Unit	12	12	12	12
Capacity	24Ah@10hr-rate	26Ah@10hr-rate	33Ah@10hr-rate	45Ah@10hr-rate
Weight	Approx 6.6 kg	Approx 8.0 kg	Approx 10.5 kg	Approx 12 kg
Max. Discharge Current	300A (5sec)	300A (5sec)	330A (5sec)	400A (5sec)
Internal Resistance	Approx. 8.5m Ω	Approx. 8m Ω	Approx. 5.5m Ω	Approx. 7.8m Ω
Operating Temperature Range	Discharge: -20°C~50°C	Discharge: -20°C~50°C	Discharge: -20°C~50°C	Discharge: -20°C~50°C
	Charge: -20°C~50°C	Charge: -20°C~50°C	Charge: -20°C~50°C	Charge: -20°C~50°C
	Storage: -20°C~50°C	Storage: -20°C~50°C	Storage: -20°C~50°C	Storage: -20°C~50°C
Normal Operating Temperature Range	25°C ±5°C	25°C ±5°C	25°C ±5°C	25°C ±5°C
Float charging Voltage	13.50 to 13.80V DC/unit Average at 25°C			
Max. Charging Current	7.2A	7.8A	8.25A	10A
Equalization and Cycle service	14.70 to 15.00V DC/unit Average at 25°C			
Self Discharge	The batteries can be stored for more than 6 months at 25°C. Please charge batteries before using. For high temperature, the time interval will be shorter.			
Terminal	T3 / T10	T3 / T10	T8 / T11	T4 / T12
Container Material	ABS (UL94-HB) Flammability resistance of UL94-V0 is available on request.			

MODEL <b>12V</b>				
	12V 50 Ah	12V 55 Ah	12V 65 Ah	12V 75 Ah
Cells Per Unit	6	6	6	6
Voltage Per Unit	12	12	12	12
Capacity	50Ah@10hr-rate	55Ah@10hr-rate	65Ah@10hr-rate	75Ah@10hr-rate
Weight	Approx 15 kg	Approx 16 kg	Approx 19.8 kg	Approx 20.7 kg
Max. Discharge Current	550A (5sec)	550A (5sec)	650A (5sec)	700A (5sec)
Internal Resistance	Approx. 6.5m Ω	Approx. 6.8m Ω	Approx. 5.3m Ω	Approx. 4.6m Ω
Operating Temperature Range	Discharge: -40°C~50°C	Discharge: -40°C~50°C	Discharge: -40°C~50°C	Discharge: -40°C~50°C
	Charge: -20°C~50°C	Charge: -20°C~50°C	Charge: -20°C~50°C	Charge: -20°C~50°C
	Storage: -20°C~50°C	Storage: -20°C~50°C	Storage: -20°C~50°C	Storage: -20°C~50°C
Normal Operating Temperature Range	25°C ±5°C	25°C ±5°C	25°C ±5°C	25°C ±5°C
Float charging Voltage	13.50 to 13.80V DC/unit Average at 25°C			
Max. Charging Current	13.75A	13.75A	16.25A	17.5A
Equalization and Cycle service	14.70 to 15.00V DC/unit Average at 25°C			
Self Discharge	The batteries can be stored for more than 6 months at 25°C. Please charge batteries before using. For high temperature, the time interval will be shorter.			
Terminal	T12	T12	T14	T14
Container Material	ABS (UL94-HB) Flammability resistance of UL94-V0 is available on request.			