



The right battery

Valve Regulated Lead Acid battery.
12 year design life for stand by power applications.
12 Volts 93 Ah

Innovative Features

- Completely maintenance free, sealed construction eliminates the need for watering
- Special formation process
- Analytical Grade electrolyte
- Spill proof / leak proof
- Valve regulated Max internal pressure 2.5 psi
- Multi-position usage
- ABS Case and cover - V0 on request
- Low self discharge
- FAA and IATA approved as non-hazardous
- Built to comply with IEC 896-2, DIN 43534, BS 6290 Pt4, Eurobat.



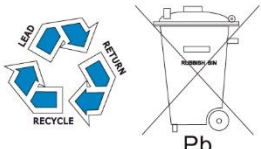
Specifications

Nominal Voltage	12 Volts
Nominal Capacity	93Ah (C20 @ 20-25 °C)
Design Life	12 Years
Operating Temperature	-20 °C to 50 °C
Grid alloy	Calcium / Tin lead alloy
Plates	Flat Pasted
Separator	Absorbant Glass Mat
Active material	Very high purity lead
Case and cover	ABS (VO on request)
Charge Voltage	Float 2.25 - 2.30 VPC @25 °C Cycling See cyclic charging profile Max ripple 0.05C (A)
Electrolyte	Sulphuric acid Analytical grade purity
Venting Valve	EPDM Rubber 1.5 to 2 psi (10.5 - 14 KPa) release pressure. Resealing at 1 psi (7 KPa)
Terminal	Insert 16mm Dia M6 thread. Epoxy sealed by extended mechanical paths
Torque setting	The recommended torque value for all types is 5-7 Nm
Cables	Connectors, cables, terminal covers on request.

AGM Range

Sealed Lead Acid 12 Volt Bloc

PRODUCT SHEET



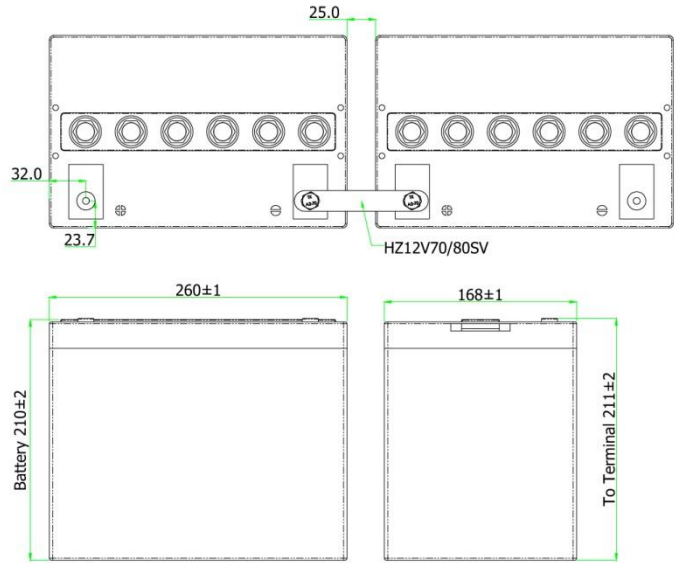
**12V
AGM**

Specifications

Nominal Voltage		12V	
Nominal Capacity		93 Ah	
Dimensions	Total Height (Inc. terminals)	211 mm	8.31 inches
	Length	260 mm	10.24 inches
	Width	168 mm	6.61 inches
	Weight	26 Kg	57.46 lbs

Characteristics

Capacity 20-25 °C (68-77 °F) To 1.7 volts	20 hour rate	93.3 Ah
	10 hour rate	90.5 Ah
	5 hour rate	82.0 Ah
	1 hour rate	61.3 Ah
	15 min rate	38.6 Ah
	Internal Resistance	4 mOhms
Capacity correction for Temperature Variations (C20)	40 °C (104 °F)	102%
	20 °C (68 °F)	100%
	0 °C (32 °F)	85%
	-15 °C (5 °F)	65%
Self-Discharge 20 °C (68 °F)	Capacity after 1 months storage	98%
	Capacity after 3 months storage	94%
	Capacity after 6 months storage	86%
Short Circuit Current 20 °C (68 °F)	2400	
Terminal	Standard	16mm Insert M6 th read
	Optional	Cu/Lead Flag - J Type - Auto
Charging (Constant Voltage)	Cyclic	2.35 - 2.40 VPC (20-25 °C)
	Float	2.27 - 2.30 VPC (15-25 °C)



Constant Power Discharge - Watts per Cell @ 20-25 °C

End V per Cell	5M	10M	15M	20M	25M	30M	35M	40M	45M	60M	90M	2 hr	3 hr	4 hr	5 hr	6 hr	7 hr	8 hr	10 hr	12 hr	20 hr
1.85	441	316	258	219	190	168	152	139	128	102	73.9	58.3	41.9	33.1	27.6	23.7	20.8	18.5	15.1	12.7	7.96
1.80	471	337	276	234	203	180	162	148	136	109	79.0	62.3	44.8	35.4	29.5	25.3	22.3	19.7	16.1	13.6	8.50
1.75	501	359	293	249	216	191	173	158	145	116	84.0	66.3	47.6	37.6	31.4	26.9	23.7	21.0	17.1	14.5	9.05
1.70	512	367	300	255	221	195	177	161	148	119	85.8	67.7	48.7	38.5	32.1	27.5	24.2	21.5	17.5	14.8	9.25
1.67	517	370	302	257	223	197	178	163	149	120	86.6	68.3	49.1	38.8	-	-	-	-	-	-	-
1.65	519	371	303	258	224	198	179	163	150	120	86.9	68.6	49.3	39.0	-	-	-	-	-	-	-
1.60	524	375	306	260	226	200	181	165	151	121	87.8	69.2	49.8	39.3	-	-	-	-	-	-	-

Constant Amps Discharge - Amps @ 20-25 °C

End V per Cell	5M	10M	15M	20M	25M	30M	35M	40M	45M	60M	90M	2 hr	3 hr	4 hr	5 hr	6 hr	7 hr	8 hr	10 hr	12 hr	20 hr
1.85	233	161	133	114	100	89.4	80.4	73.1	66.9	52.8	37.8	29.7	21.4	16.9	14.1	12.2	10.7	9.52	7.79	6.56	4.02
1.80	249	172	142	122	107	95.5	85.9	78.1	71.4	56.4	40.4	31.8	22.9	18.1	15.1	13.0	11.4	10.2	8.32	7.01	4.29
1.75	265	183	151	129	114	102	91.4	83.1	76.0	60.0	42.9	33.8	24.3	19.3	16.0	13.8	12.1	10.8	8.85	7.45	4.56
1.70	271	187	155	132	117	104	93.4	84.9	77.7	61.3	43.9	34.5	24.9	19.7	16.4	14.1	12.4	11.1	9.05	7.62	4.66
1.67	273	189	156	133	118	105	94.2	85.7	78.4	61.9	44.3	34.8	25.1	19.9	-	-	-	-	-	-	-
1.65	274	190	156	134	118	105	94.6	86.0	78.7	62.1	44.4	35.0	25.2	19.9	-	-	-	-	-	-	-
1.60	277	191	158	135	119	106	95.5	86.8	79.4	62.7	44.9	35.3	25.4	20.1	-	-	-	-	-	-	-

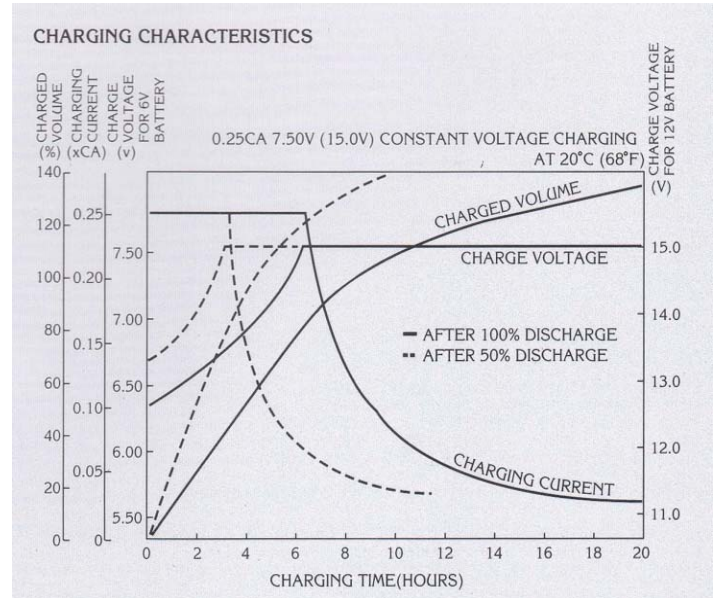
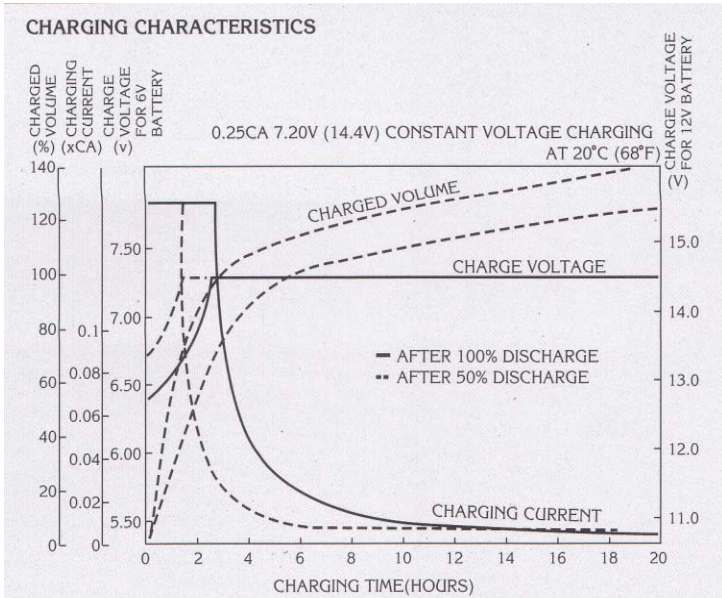
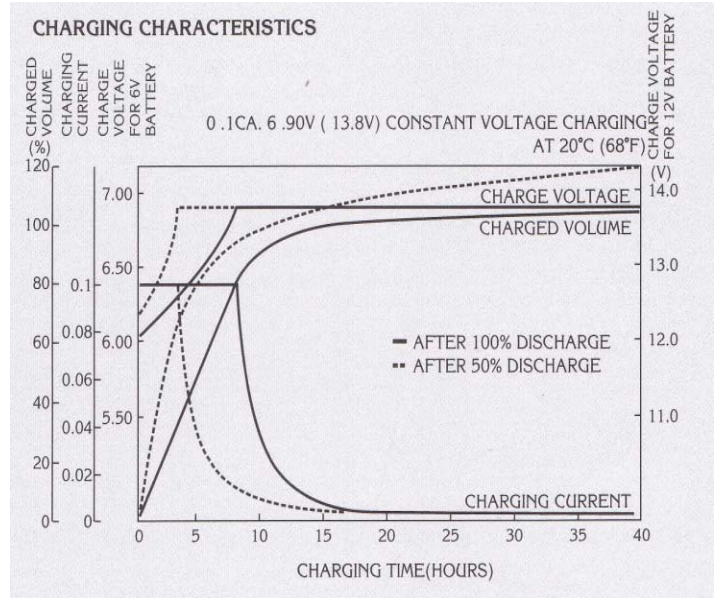
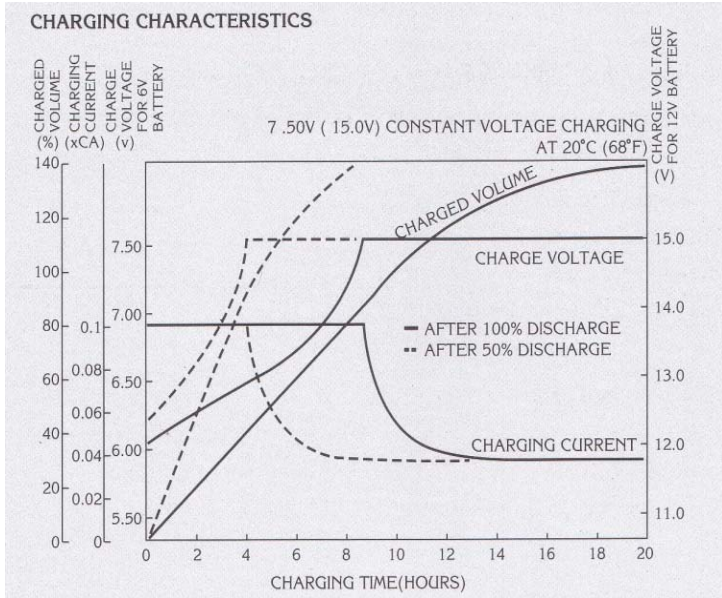
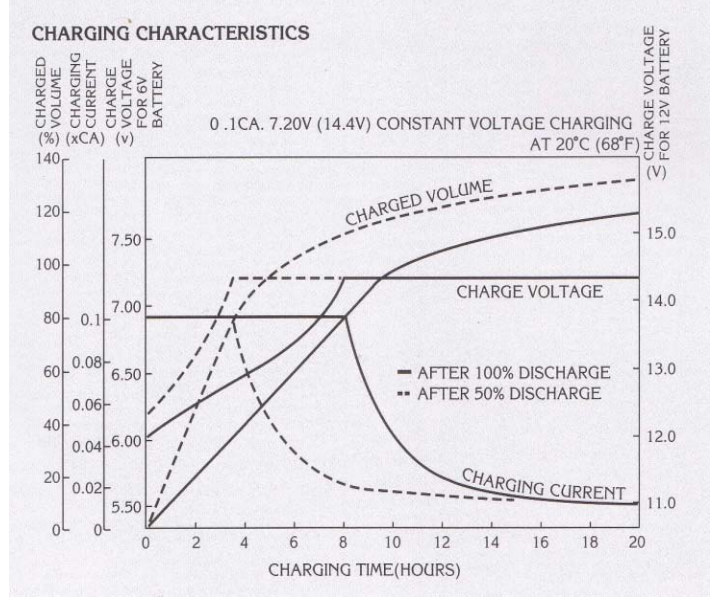
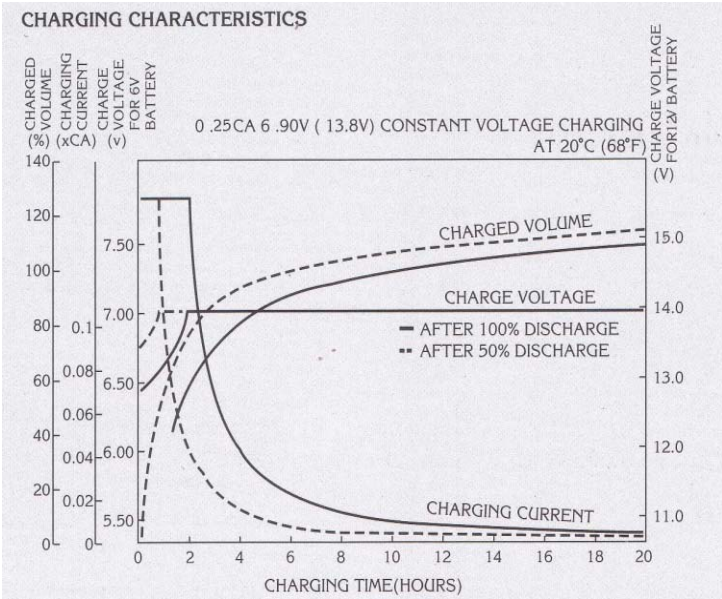
Ampere Hour @ 20-25 °C

End V per Cell	2 hr	3 hr	4 hr	5 hr	6 hr	7 hr	8 hr	10 hr	12 hr	20 hr
1.85	59.5	64.2	67.8	70.6	73.0	74.6	76.1	77.9	78.7	80.3
1.80	63.5	68.6	72.4	75.4	78.0	79.7	81.3	83.2	84.1	85.8
1.75	67.6	73.0	77.0	80.2	83.0	84.8	86.5	88.5	89.4	91.3
1.70	69.1	74.6	78.7	82.0	84.8	86.7	88.4	90.5	91.4	93.3
1.67	69.7	75.3	79.4	-	-	-	-	-	-	-
1.65	70.0	75.5	79.7	-	-	-	-	-	-	-
1.60	70.6	76.3	80.5	-	-	-	-	-	-	-

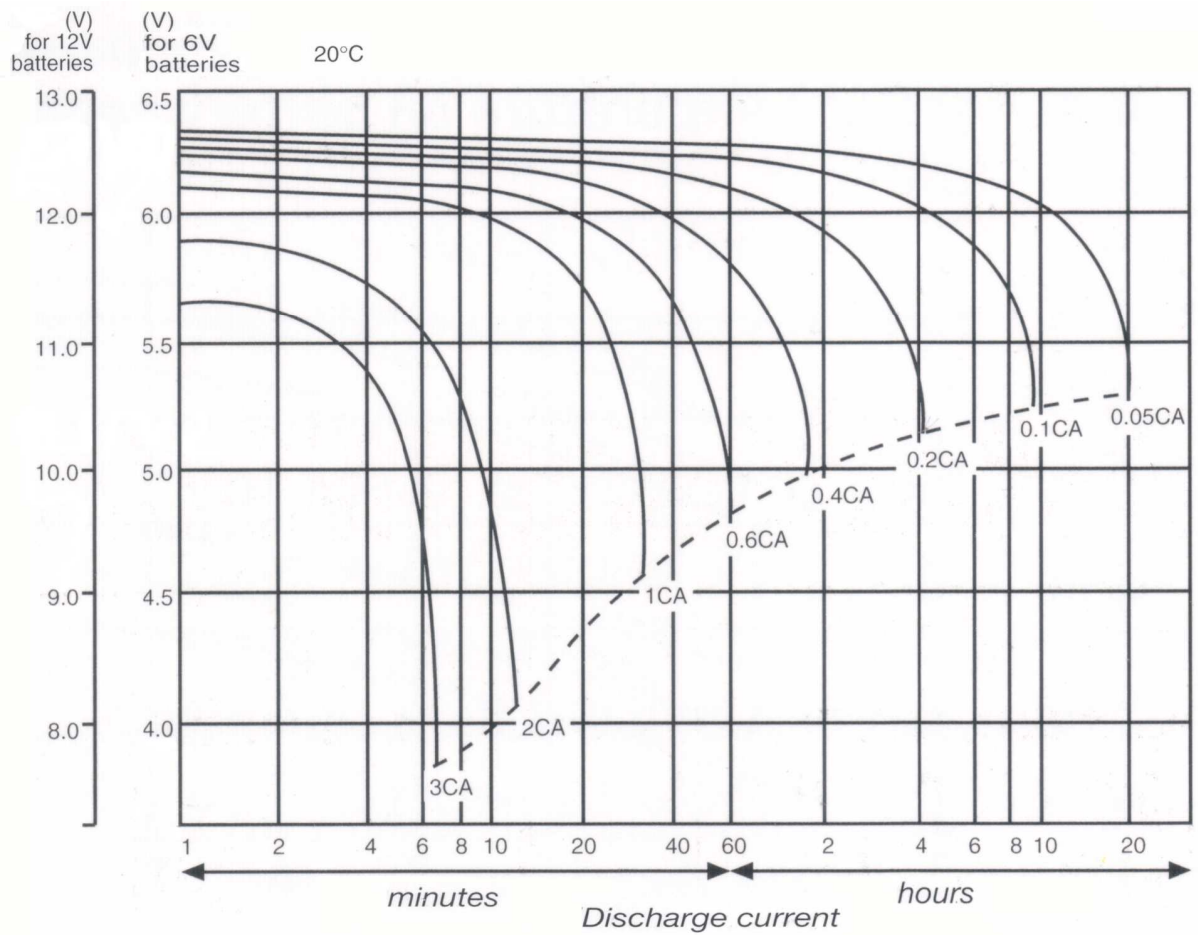


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Charging Characteristics - Constant voltage charging



Applicable to AGM and Gel products



Note: Battery specific discharge curves are not published, as there is very little variation in the lead/acid discharge profile due to battery size of plate profile.