

HZB12-44 Valve Regulated Lead Acid battery.  
12 year design life for stand by power applications.  
12 Volts 48 Ah

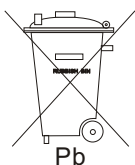
### Innovative Features

- Completely maintenance free, sealed construction eliminates the need for watering
- Analytical Grade electrolyte
- Spill proof / leak proof
- Valve regulated Max internal pressure 2.5 psi
- Multi-position usage
- ABS Case and cover - VO 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	48Ah (C20)
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 Haze 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 14mm 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.



Haze Battery Company keenly encourages environmental awareness; PLEASE follow guidelines for the recycling /disposal of lead.

Website: [www.hazebattery.com](http://www.hazebattery.com)  
E mail : [sales@hazebattery.com](mailto:sales@hazebattery.com)

Sealed Lead Acid 12 Volt Bloc AGM Range  
PRODUCT SHEET HZB12-44

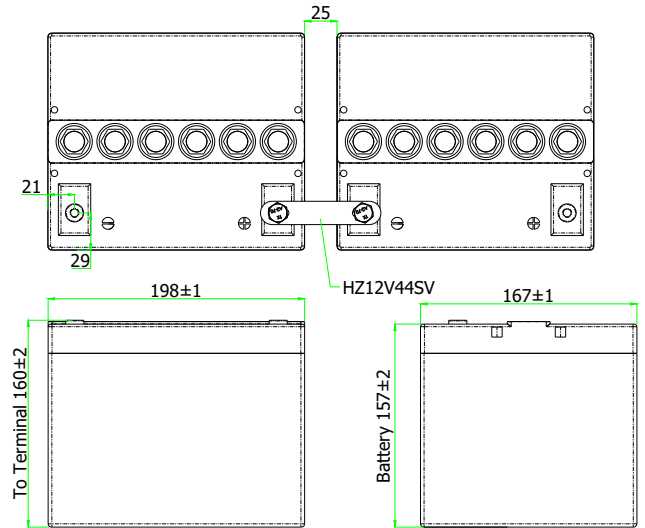
**12V  
AGM**

## Specifications

Nominal Voltage		12V	
Nominal Capacity		48 Ah	
Dimensions	Total Height	157 mm	6.18 inches
	(Inc. terminals)	n/a mm	n/a inches
	Length	198 mm	7.80 inches
	Width	167 mm	6.57 inches
	Weight	13.8 Kg	30.50 lbs

## Characteristics

Capacity 20-25 °C (68-77 °F) To 1.7 volts	20 hour rate	48.6 Ah
	10 hour rate	46.8 Ah
	5 hour rate	42.6 Ah
	1 hour rate	31.1 Ah
	15 min rate	22.8 Ah
	Internal Resistance	5.2 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)	670	
Terminal	Standard	14mm Insert M6 thread
	Optional	Cu / Lead Flag - 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	309	183	138	115	100	90.2	81.7	74.7	68.7	54.8	39.5	31.3	22.4	17.7	14.7	12.6	11.0	9.83	8.10	6.85	4.24
1.80	330	195	148	123	107	96.4	87.3	79.8	73.4	58.5	42.2	33.5	24.0	18.9	15.7	13.5	11.8	10.5	8.65	7.32	4.53
1.75	351	208	157	131	114	103	92.8	84.9	78.1	62.3	44.9	35.6	25.5	20.1	16.7	14.4	12.5	11.2	9.20	7.79	4.82
1.70	359	212	160	134	117	105	94.9	86.7	79.8	63.6	45.9	36.4	26.1	20.6	17.1	14.7	12.8	11.4	9.40	7.96	4.93
1.67	362	214	162	135	118	106	95.7	87.5	80.5	64.2	46.3	36.7	26.3	20.8	-	-	-	-	-	-	-
1.65	364	215	163	136	118	106	96.1	87.9	80.8	64.5	46.5	36.8	26.4	20.8	-	-	-	-	-	-	-
1.60	367	217	164	137	119	107	97.0	88.7	81.6	65.1	46.9	37.2	26.7	21.0	-	-	-	-	-	-	-

## 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	162	104	78.4	63.9	53.9	46.6	41.2	37.1	33.7	26.8	19.4	15.3	11.1	8.81	7.33	6.29	5.53	4.91	4.03	3.40	2.09
1.80	173	111	83.7	68.2	57.6	49.8	44.1	39.6	36.0	28.6	20.7	16.4	11.8	9.41	7.83	6.72	5.90	5.25	4.30	3.63	2.23
1.75	184	118	89.1	72.6	61.3	53.0	46.9	42.1	38.3	30.4	22.0	17.4	12.6	10.0	8.33	7.15	6.28	5.58	4.58	3.86	2.38
1.70	188	121	91.0	74.2	62.6	54.2	47.9	43.0	39.1	31.1	22.5	17.8	12.9	10.2	8.52	7.31	6.42	5.70	4.68	3.95	2.43
1.67	190	122	91.8	74.8	63.2	54.6	48.3	43.4	39.5	31.3	22.7	18.0	13.0	10.3	-	-	-	-	-	-	-
1.65	191	122	92.2	75.1	63.4	54.8	48.5	43.6	39.6	31.5	22.8	18.0	13.0	10.4	-	-	-	-	-	-	-
1.60	193	123	93.1	75.8	64.0	55.4	49.0	44.0	40.0	31.8	23.0	18.2	13.1	10.5	-	-	-	-	-	-	-

## 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	30.7	33.2	35.2	36.7	37.8	38.7	39.3	40.3	40.8	41.8
1.80	32.8	35.5	37.6	39.2	40.3	41.3	42.0	43.0	43.6	44.7
1.75	34.8	37.7	40.0	41.7	42.9	44.0	44.6	45.8	46.4	47.5
1.70	35.6	38.6	40.9	42.6	43.9	44.9	45.6	46.8	47.4	48.6
1.67	35.9	38.9	41.3	-	-	-	-	-	-	-
1.65	36.1	39.0	41.4	-	-	-	-	-	-	-
1.60	36.4	39.4	41.8	-	-	-	-	-	-	-



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