

HZB12-230 Valve Regulated Lead Acid battery.  
12 year design life for stand by power applications.  
12 Volts 230 Ah

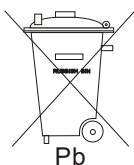
### Innovative Features

- 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 - 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	230Ah (C20 @ 20 °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 2.35 @25 °C Max. 2.4 VPC 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 18mm Dia M8 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 HZB12-230

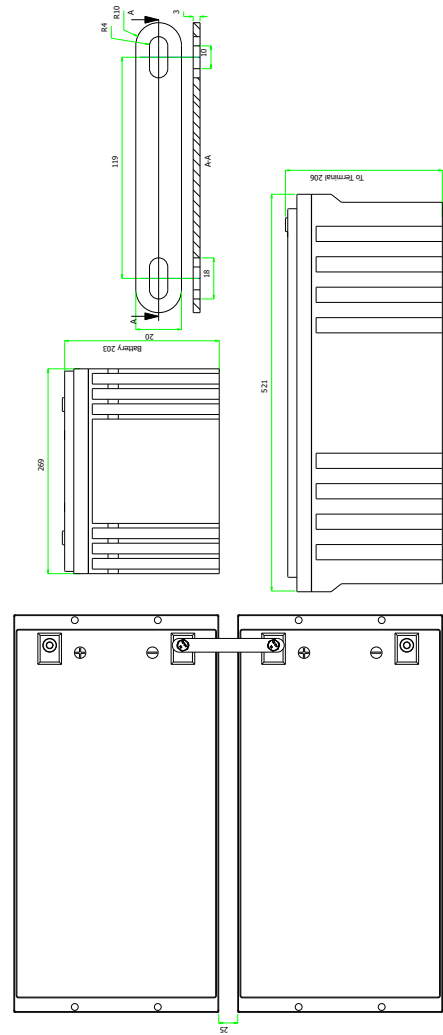
**12V  
AGM**

## Specifications

Nominal Voltage		12V	
Nominal Capacity		230 Ah	
Dimensions	Total Height	203 mm	7.99 inches
	(Inc. terminals)	n/a mm	n/a inches
	Length	521 mm	20.51 inches
	Width	269 mm	10.59 inches
	Weight	73.5 Kg	162.44 lbs

## Characteristics

Capacity 20-25 °C (68-77 °F) To 1.7 volts	20 hour rate	266.9 Ah
	10 hour rate	242.8 Ah
	5 hour rate	204.4 Ah
	1 hour rate	147.6 Ah
	15 min rate	83.1 Ah
	Internal Resistance	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)	5900	
Terminal	Standard	14mm Insert M6 thread
	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	652	560	497	448	411	381	354	328	309	258	190	149	106	82.7	68.6	58.9	51.8	46.3	38.6	33.1	21.5
1.80	756	615	532	476	434	399	369	341	318	264	193	151	107	83.6	69.5	59.7	52.7	47.2	39.4	33.7	22.1
1.75	821	647	560	494	448	410	376	347	324	268	195	153	108	84.5	70.2	60.4	53.4	47.9	39.8	34.1	22.4
1.70	860	674	577	507	456	416	383	352	327	271	198	154	109	85.2	70.9	61.0	53.9	48.4	40.3	34.6	22.7
1.67	880	683	583	511	460	419	385	354	329	273	198	155	109	85.6	-	-	-	-	-	-	-
1.65	899	693	590	515	463	422	387	356	331	274	199	155	110	86.0	-	-	-	-	-	-	-
1.60	938	713	603	522	468	427	392	361	335	277	200	157	111	86.7	-	-	-	-	-	-	-

## 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	389	328	287	258	236	218	201	185	171	139	101	80.6	58.1	46.4	39.0	34.1	30.2	27.3	22.9	19.6	12.44
1.80	452	362	312	276	251	229	208	192	177	143	103	82.0	59.1	47.1	39.7	34.8	30.8	27.8	23.5	20.1	12.77
1.75	496	384	324	284	258	234	213	196	180	145	105	83.0	59.8	47.8	40.3	35.3	31.3	28.3	23.9	20.5	13.04
1.70	518	398	332	292	265	240	217	199	183	148	106	83.9	60.4	48.4	40.9	35.7	31.8	28.7	24.3	20.8	13.34
1.67	534	403	336	295	267	242	219	201	185	148	107	84.2	60.7	48.7	-	-	-	-	-	-	-
1.65	550	407	341	299	269	244	221	203	186	149	107	84.6	61.0	48.9	-	-	-	-	-	-	-
1.60	575	417	348	304	273	248	224	205	188	150	108	85.4	61.5	49.4	-	-	-	-	-	-	-

## 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	151.3	161	174	185	195	205	212	218	229	235
1.80	164	177	189	198	209	216	223	235	241	255
1.75	166	179	191	201	212	219	226	239	246	261
1.70	168	181	194	204	214	222	230	243	250	267
1.67	168	182	195	-	-	-	-	-	-	-
1.65	169	183	196	-	-	-	-	-	-	-
1.60	171	185	198	-	-	-	-	-	-	-

