

HZB12-33 Valve Regulated Lead Acid battery.
 12 year design life for stand by power applications.
 12 Volts 33 Ah

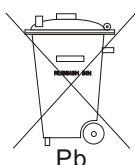
Innovative Features

- Completely maintenance free, sealed construction eliminates the need for watering
- Fully tank formed plates
- 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	33Ah (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 12mm Dia M5 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
 E mail : sales@hazebattery.com

Sealed Lead Acid 12 Volt Bloc AGM Range
PRODUCT SHEET HZB12-33

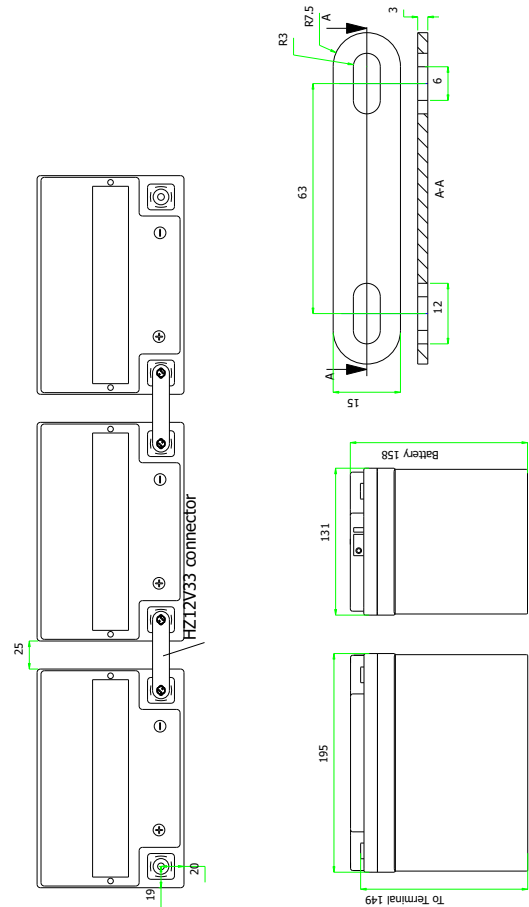
12V
AGM

Specifications

Nominal Voltage		12V	
Nominal Capacity		33 Ah	
Dimensions	Total Height (Inc. terminals)	195 mm	7.68 inches
	Length	130 mm	5.12 inches
	Width	160 mm	6.30 inches
	Weight	10.9 Kg	24.09 lbs

Characteristics

Capacity 20 °C (68 °F) 1.7 volts	20 hour rate	33.3 Ah
	10 hour rate	29.1 Ah
	5 hour rate	25.7 Ah
	1 hour rate	21.5 Ah
	15 min rate	15.8 Ah
Internal Resistance		8.5 mOhms
Impedance		S
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)	1100	
Terminal	Standard	14mm Insert M6 thread
	Optional	Lead Flag
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 °C

End V per Cell	5M	10M	15M	20M	25M	30M	35M	40M	45M	60M	90M	2 hr	3 hr	4 hr
1.85	178	136	107	87.9	76.0	67.4	59.8	54.2	49.4	38.9	27.4	20.9	14.3	11.3
1.80	197	146	110	92.5	78.6	68.9	61.7	55.2	50.5	40.0	27.9	21.3	14.7	11.6
1.75	203	149	114	94.2	79.5	70.0	61.9	55.5	50.8	40.3	28.0	21.5	14.8	11.6
1.70	206	151	115	96.2	81.0	71.2	62.5	56.3	51.1	40.6	28.3	21.7	15.1	12.0
1.65	208	152	116	97.1	81.8	71.6	63.0	56.6	51.6	40.9	28.6	21.9	15.2	-
1.60	215	155	118	98.0	82.7	72.5	63.7	57.2	52.1	41.4	28.8	22.0	15.3	-

Constant Amps Discharge - Amps @20 °C

End V per Cell	5M	10M	15M	20M	25M	30M	35M	40M	45M	60M	90M	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	12 hr	20 hr
1.85	96	72.8	57.1	46.7	40.3	35.6	31.5	28.5	25.9	20.3	14.2	10.8	7.33	5.75	4.80	3.34	2.76	2.40	1.60
1.80	107	79.3	59.8	49.8	42.1	36.8	32.8	29.3	26.7	21.0	14.5	11.1	7.57	5.96	4.97	3.46	2.83	2.46	1.63
1.75	112	81.9	62.4	51.1	42.9	37.6	33.1	29.6	26.9	21.2	14.7	11.2	7.66	5.99	4.99	3.47	2.85	2.47	1.64
1.70	114	83.4	63.4	52.5	44.0	38.5	33.6	30.1	27.2	21.5	14.8	11.3	7.84	6.19	5.14	3.56	2.91	2.52	1.66
1.65	116	84.6	64.1	53.2	44.6	38.8	34.0	30.3	27.6	21.7	15.0	11.4	7.90	-	-	-	-	-	-
1.60	121	86.4	65.2	53.8	45.1	39.3	34.4	30.7	27.8	21.9	15.2	11.5	7.95	-	-	-	-	-	-

Ampere Hour @20 °C

End V per Cell	2 hr	3 hr	4 hr	5 hr	8 hr	10 hr	12 hr	20 hr
1.85	21.6	22.0	23.0	24.0	26.7	27.6	28.8	32
1.80	22.1	22.7	23.9	24.8	27.7	28.3	29.5	32.7
1.75	22.3	23.0	24.0	25.0	27.8	28.5	29.7	32.8
1.70	22.6	23.5	24.8	25.7	28.5	29.1	30.3	33.3
1.65	22.9	23.7	-	-	-	-	-	-
1.60	23.1	23.9	-	-	-	-	-	-



UL Recognised
Component
MH28512

