

**HZY12-33 Valve Regulated Lead Acid battery.
12 year design life for stand by power
applications. 12 Volts 35.6 Ah (C20)**

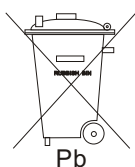
Innovative Features

- 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	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	Microporous polymer
Active material	Very high purity lead
Case and cover	ABS (VO on request)
Charge Voltage	Float 2.25 - 2.30 VPC @25 °C Cyclic - See Haze cyclic charging profile. Max ripple 0.05C (A)
Electrolyte	Gelled 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	Epoxy sealed by extended mechanical paths



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

**Website: www.hazebattery.com
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**Sealed Lead Acid 12 Volt Bloc GEL Range
PRODUCT SHEET HZY12-33**

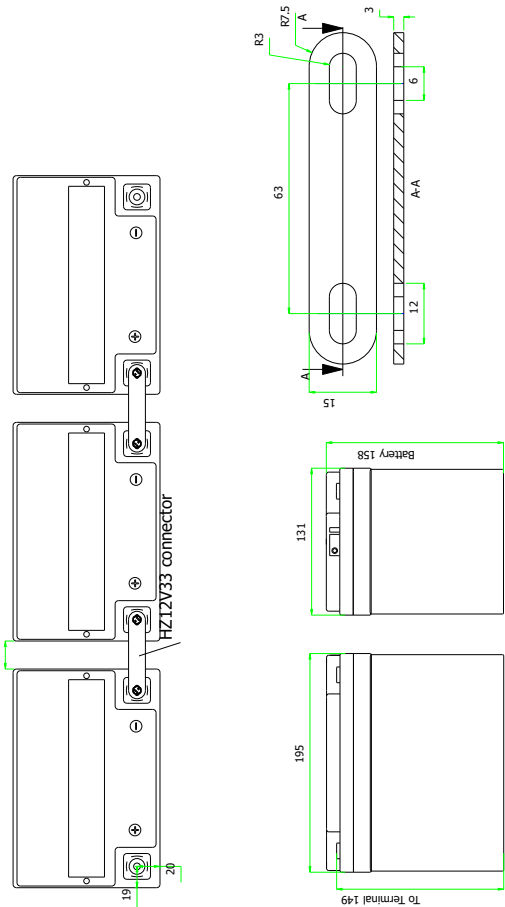
**12V
Gel**

Specifications

Nominal Voltage		12V	
Nominal Capacity		33 Ah	
Dimensions	Total Height (Inc. terminals)	160 mm	6.30 inches
	Length	195 mm	7.68 inches
	Width	130 mm	5.12 inches
	Weight	10.2 Kg	22.54 lbs

Characteristics

Capacity 20-25 °C (68-77 °F) To 1.7 volts	20 hour rate	36.4 Ah
	10 hour rate	32.5 Ah
	5 hour rate	28.3 Ah
	1 hour rate	20.4 Ah
	15 min rate	13.7 Ah
Internal Resistance		10.6 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	Cu Flag 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 @20-25 °C

End V per Cell	5M	10M	15M	20M	25M	30M	35M	40M	45M	60M	90M	2 hr	3 hr	4 hr
1.85	142	102	83.1	70.3	60.7	53.6	48.2	43.8	40.2	32.0	22.7	17.7	12.4	9.7
1.80	151	109	88.8	75.0	64.8	57.3	51.5	46.7	42.9	34.2	24.3	18.9	13.2	10.4
1.75	161	116	94.5	79.8	69.0	60.9	54.7	49.7	45.6	36.4	25.8	20.1	14.1	11.0
1.70	164	118	96.6	81.6	70.5	62.3	55.9	50.8	46.6	37.2	26.4	20.5	14.4	11.3
1.67	166	119	97.4	82.3	71.1	62.8	56.4	51.3	47.1	37.5	26.6	20.7	14.5	11.4
1.65	166	120	97.8	82.6	71.4	63.1	56.7	51.5	47.2	37.7	26.7	20.8	14.6	11.4
1.60	168	121	99	83.4	72.1	63.7	57.2	52.0	47.7	38.0	27.0	21.0	14.7	11.5

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	89.2	60.1	47.4	39.2	33.7	29.6	26.5	24.0	21.9	17.6	12.8	10.18	7.37	5.88	4.90	4.24	3.75	3.34	2.80	2.42	1.57
1.80	95.3	64.2	50.6	41.9	36.0	31.6	28.3	25.6	23.4	18.8	13.7	10.9	7.87	6.28	5.23	4.53	4.00	3.57	2.99	2.58	1.67
1.75	101.4	68.3	53.8	44.6	38.3	33.6	30.1	27.2	24.9	20.0	14.6	11.6	8.37	6.68	5.57	4.81	4.26	3.80	3.18	2.74	1.78
1.70	103.6	69.8	55.0	45.6	39.2	34.3	30.8	27.8	25.4	20.4	14.9	11.8	8.56	6.82	5.69	4.92	4.35	3.88	3.25	2.80	1.82
1.67	104.5	70.4	55.5	46.0	39.5	34.6	31.1	28.1	25.7	20.6	15.0	11.9	8.63	6.88	-	-	-	-	-	-	-
1.65	104.9	70.7	55.7	46.1	39.7	34.8	31.2	28.2	25.8	20.7	15.1	12.0	8.67	6.91	-	-	-	-	-	-	-
1.60	106	71.4	56.2	46.6	40.1	35.1	31.5	28.4	26.0	20.9	15.2	12.1	8.75	6.98	-	-	-	-	-	-	-

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	19.2	20.4	22.1	23.5	24.4	25.2	26.0	26.7	28.0	29.0
1.80	21.8	23.6	25.1	26.1	27.0	27.8	28.6	29.9	31.0	33.5
1.75	23.1	25.1	26.7	27.7	28.7	29.5	30.4	31.8	32.9	35.6
1.70	23.6	25.7	27.3	28.3	29.3	30.2	31.1	32.5	33.7	36.4
1.67	23.9	25.9	27.5	-	-	-	-	-	-	-
1.65	23.9	26.0	27.6	-	-	-	-	-	-	-
1.60	24.2	26.3	27.9	-	-	-	-	-	-	-

UL Recognised Component MH28512



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