

**Datasheet**

**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	90Ah (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 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.



CTM GmbH keenly encourages environmental awareness; PLEASE follow guidelines for recycling/disposal of lead

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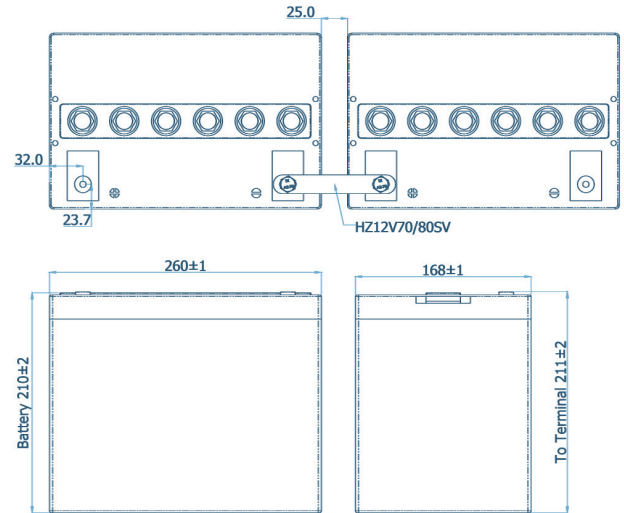
**We power the future.**

## Specifications

	Nominal Voltage Nominal Capacity	12V 90 Ah	
Dimensions	Total Height (Inc. terminals)	211 mm	8,31 inches
	Length	n/a mm	n/a inches
	Width	260 mm	10,24 inches
	Weight	168 mm	6,61 inches
		24,7 Kg	54,59 lbs

## Characteristics

Capacity 20-25 °C (68-77 °F) To 1,7 volts	20 hour rate	90.3 Ah
	10 hour rate	83.6 Ah
	5 hour rate	75.0 Ah
	1 hour rate	52.6 Ah
	15 min rate	35.2 Ah
	Internal Resistance	4.7 mOhms
	Impedance	1000 S
Capacity corrections 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)	2100	
Terminal	Standard	16mm 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	2hr	3hr	4hr	5hr	6hr	7hr	8hr	10hr	12hr	20hr
1.85	395	262	216	184	161	143	130	118	109	87.8	64.5	51.4	37.0	29.4	25.0	21.7	19.1	17.1	14.2	12.0	7.52
1.80	422	280	231	196	172	153	138	126	116	93.8	68.9	54.9	39.5	31.5	26.7	23.2	20.4	18.3	15.1	12.8	8.03
1.75	449	298	246	209	183	163	147	134	123	100	73.3	58.4	42.0	33.5	28.4	24.6	21.8	19.5	16.1	13.6	8.54
1.70	459	305	251	213	187	166	150	137	126	102	74.9	59.7	43.0	34.2	29.1	25.2	22.2	19.9	16.5	13.9	8.73
1.67	463	307	253	215	188	168	152	138	127	103	75.6	60.2	43.3	34.5	-	-	-	-	-	-	-
1.65	465	309	254	216	189	168	152	139	128	103	75.9	60.4	43.5	34.6	-	-	-	-	-	-	-
1.60	469	312	257	218	191	170	154	140	129	104	76.6	61.0	43.9	35.0	-	-	-	-	-	-	-

## Constant Amps Discharge - Amps @ 20-25 °C

End V per Cell	5M	10M	15M	20M	25M	30M	35M	40M	45M	60M	90M	2hr	3hr	4hr	5hr	6hr	7hr	8hr	10hr	12hr	20hr
1.85	195	153	121	100	85.3	75.0	67.3	61.4	56.2	45.3	33.2	26.6	19.3	15.5	12.9	11.1	9.81	8.77	7.20	6.12	3.89
1.80	209	163	129	107	91.1	80.1	71.9	65.6	60.0	48.4	35.5	28.4	20.6	16.5	13.8	11.9	10.5	9.36	7.69	6.54	4.15
1.75	222	173	138	113	97.0	85.2	76.5	69.8	63.9	51.5	37.8	30.2	21.9	17.6	14.7	12.7	11.1	9.96	8.18	6.96	4.42
1.70	227	177	141	116	99.1	87.1	78.1	71.3	65.3	52.6	38.6	30.9	22.4	18.0	15.0	12.9	11.4	10.2	8.36	7.11	4.51
1.67	229	179	142	117	100	87.8	78.8	71.9	65.8	53.1	38.9	31.2	22.6	18.1	-	-	-	-	-	-	-
1.65	230	179	143	117	100	88.2	79.1	72.2	66.1	53.3	39.1	31.3	22.7	18.2	-	-	-	-	-	-	-
1.60	232	181	144	119	101	89.0	79.9	72.9	66.7	53.8	39.5	31.6	22.9	18.4	-	-	-	-	-	-	-

## Ampere Hour @ 20-25 °C

End V per Cell	2hr	3hr	4hr	5hr	6hr	7hr	8hr	10hr	12hr	20hr
1.85	53.2	57.9	61.5	64.5	66.8	68.6	70.1	72.0	73.5	77.7
1.80	56.9	61.8	65.7	68.9	71.4	73.3	74.9	76.9	78.5	83.0
1.75	60.5	65.8	69.9	73.3	75.9	78.0	79.7	81.8	83.5	88.3
1.70	61.8	67.2	71.4	75.0	77.6	79.7	81.5	83.6	85.4	90.3
1.67	62.4	67.8	72.1	-	-	-	-	-	-	-
1.65	62.6	68.1	72.3	-	-	-	-	-	-	-
1.60	63.2	68.7	73.0	-	-	-	-	-	-	-