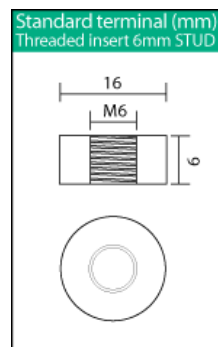
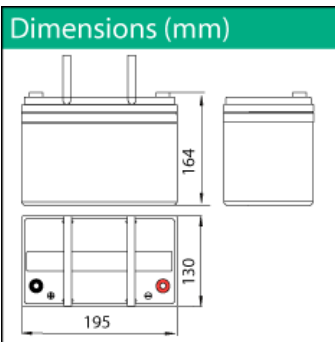


CPL 33 -12



A G M Longlife-series
10 years design life



Nominal voltage	12 V	
Nominal Capacity 20HR,20°C):	33 Ah	
Internal resistance	Approx. 11.0 m Ω	
Maximum charging current	10.5 A	
Maximum discharge current	525 A (5 sec.)	
Operating temperature range	-15°C 50°C	
Float use/ cycle use	13.5 - 13.8V/ 14.4 – 15.0V	
Expected life (20°C)	10 years in float (EUROBAT)	
Standard terminal	Threaded insert 6 mm	
Housing material	ABS	
Dimensions	length	195 mm (±2 mm)
	width	130 mm (±2 mm)
	height	164 mm (±2 mm)
Approx. Weight	11.68 kg	
Packing	1 pcs/box	

Typical applications:

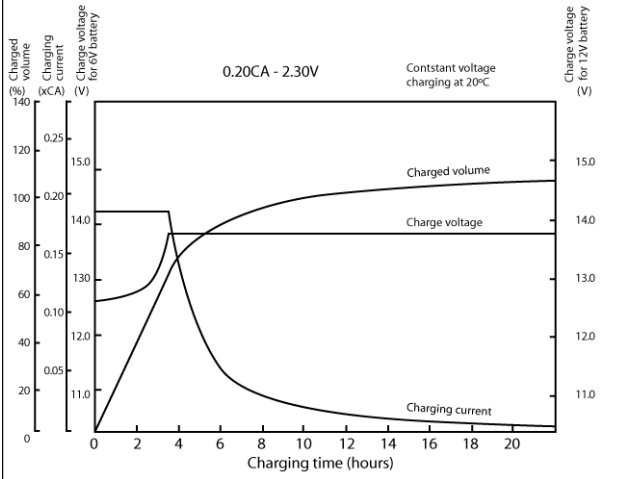
- UPS and EPS systems
- Computerized data bases
- Life support equipment
- Air traffic power stations
- Security systems
- Military base

- Valve Regulated Maintenance Free
- Absorbent Glassmat Technology
- Built to comply with DIN 43534, IEC896-2, BS6290-pt.4
- Low self discharge
- Classified as non- spillable and Non Dangerous goods by IATA, FAA, ADR, IMDG
- Can be discharged or stored in any position without leakage
- Cannot be charged while the terminal is downward.

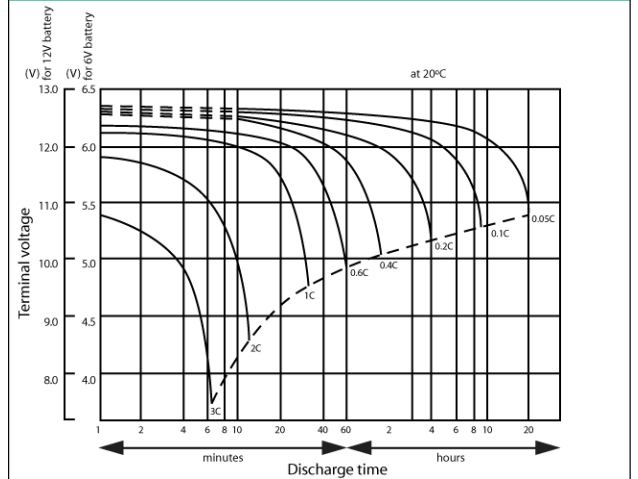
Constant Current Discharge (Amperes) at 25 °C (77°F)																					
F.V/TIME	5min	10min	15min	20min	25min	30min	45min	50min	60min	90min	2h	3h	4h	5h	6h	7h	8h	9h	10h	12h	20h
1.85V/cell	105.6	72.5	59.0	49.4	43.1	38.5	28.4	26.3	23.0	16.4	13.1	9.21	7.12	5.93	5.10	4.44	3.96	3.63	3.38	2.84	1.71
1.80V/cell	115.1	84.7	65.9	55.2	47.6	42.0	30.5	28.0	24.2	17.3	13.8	9.58	7.43	6.14	5.28	4.59	4.09	3.76	3.50	2.94	1.79
1.75V/cell	143.5	95.2	72.8	60.2	51.3	44.6	32.2	29.6	25.5	18.1	14.2	9.87	7.57	6.30	5.42	4.71	4.19	3.84	3.57	3.00	1.83
1.70V/cell	151.2	99.5	75.6	61.6	52.7	45.9	33.3	30.3	25.9	18.4	14.6	10.0	7.77	6.45	5.51	4.79	4.26	3.91	3.64	3.06	1.86
1.65V/cell	157.5	104.6	78.9	64.1	54.4	46.9	34.0	31.1	26.6	18.8	14.8	10.2	7.89	6.50	5.58	4.86	4.33	3.96	3.68	3.09	1.89
1.60V/cell	161.0	107.8	81.2	65.5	55.6	48.0	34.5	31.5	27.0	19.2	15.2	10.5	8.12	6.81	5.82	5.05	4.48	4.07	3.75	3.15	1.94

Constant Power Discharge (Watts) at 25 °C (77°F)																					
F.V/TIME	5min	10min	15min	20min	25min	30min	45min	50min	60min	90min	2h	3h	4h	5h	6h	7h	8h	9h	10h	12h	20h
1.85V/cell	205.5	141.7	116.1	97.7	85.4	76.5	56.6	52.6	46.0	32.9	26.3	18.6	14.4	12.1	10.4	9.06	8.10	7.45	6.95	5.85	3.54
1.80V/cell	221.6	164.0	128.3	108.0	93.5	82.7	60.3	55.6	48.2	34.5	27.6	19.2	15.0	12.4	10.7	9.34	8.34	7.68	7.17	6.03	3.67
1.75V/cell	273.4	182.7	140.6	116.8	99.9	87.0	63.3	58.2	50.3	35.8	28.2	19.7	15.2	12.7	10.9	9.51	8.48	7.80	7.27	6.12	3.73
1.70V/cell	284.8	188.7	144.2	118.3	101.5	88.6	64.7	59.2	50.7	36.2	28.7	19.9	15.5	12.9	11.0	9.61	8.58	7.89	7.36	6.20	3.77
1.65V/cell	294.3	197.0	149.6	122.2	104.1	90.1	65.9	60.3	51.9	36.8	29.0	20.1	15.6	12.9	11.1	9.70	8.67	7.95	7.39	6.23	3.82
1.60V/cell	297.4	200.8	152.3	123.7	105.4	91.3	66.2	60.7	52.1	37.2	29.5	20.5	15.9	13.4	11.5	10.0	8.90	8.10	7.46	6.29	3.88

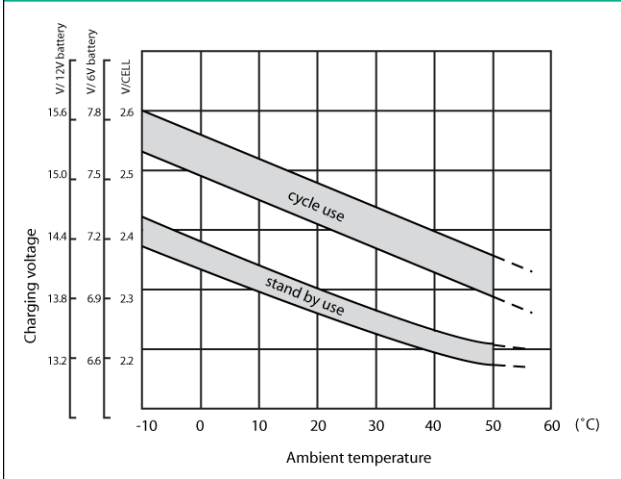
Charging characteristics



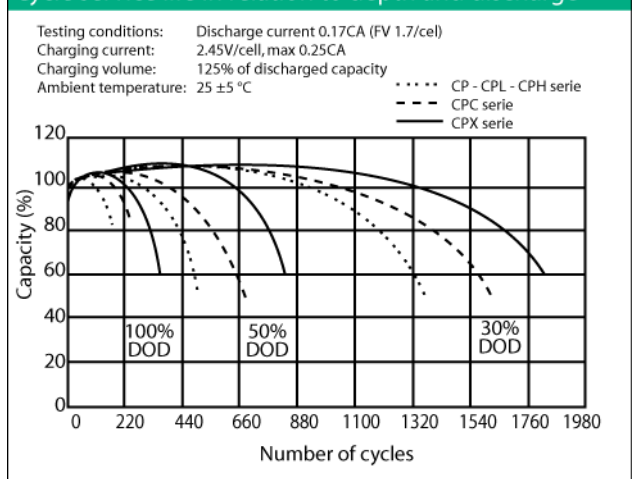
Discharge characteristics curves



Relationship between charging voltage and temperature



Cycle service life in relation to depth and discharge



Models available, Constant Power Discharge (Watts) at 25°C (77°F) 1.65V/c – Time, Weight

Model	5min	10min	15min	20min	25min	30min	50min	1h	1.5h	2h	4h	6h	8h	10h	20h	Weight
CPL 9 – 12L	53.4	37.8	29.1	24.2	20.9	18.0	11.9	10.6	7.63	6.19	3.73	2.69	2.11	1.76	0.93	2.75 kg
CPL 12 – 12	64.6	45.4	35.0	28.7	24.7	21.9	15.3	13.7	10.6	8.55	6.62	3.69	2.93	2.50	1.33	4.05 kg
CPL 18 – 12	96.9	68.0	52.6	43.1	37.1	32.8	23.0	20.6	15.9	12.8	7.97	5.54	4.40	3.75	1.99	6.0 kg
CPL 26 – 12	139.9	98.3	75.9	62.3	53.6	47.4	33.2	29.7	23.0	18.5	11.5	8.00	6.35	5.42	2.88	8.4 kg
CPL 28 – 12I	150.7	105.8	81.8	67.1	57.7	51.0	35.8	32.0	24.8	19.9	12.4	8.62	6.84	5.83	3.10	8.8 kg
CPL 28 – 12IA	150.7	105.8	81.8	67.1	57.7	51.0	35.8	32.0	24.8	19.9	12.4	8.62	6.84	5.83	3.10	9.5 kg
CPL 33 – 12*	294.3	197.0	149.6	122.2	104.1	90.1	60.3	51.9	36.8	29.0	15.6	11.1	8.67	7.39	3.82	11.7 kg
CPL 45 – 12I	187.0	146.0	119.8	103.3	89.2	81.4	58.7	51.7	38.5	32.8	19.9	14.7	11.8	9.81	5.20	14.5 kg
CPL 55 – 12I*	380.3	262.5	205.4	170.1	147.4	127.6	85.6	74.0	54.0	43.3	24.0	17.1	13.6	11.6	6.00	17.6 kg
CPL 65 – 12I	270.1	210.9	173.0	149.2	128.8	118.8	84.8	74.7	55.6	47.3	28.8	21.2	17.0	14.2	7.51	21.0 kg
CPL 80 – 12	311.6	243.3	199.6	172.1	148.7	135.7	97.9	86.2	64.1	54.6	33.2	24.5	19.6	16.4	8.67	23.0 kg
CPL 100 – 12	415.5	324.5	266.2	229.5	198.2	180.9	130.5	115.0	85.5	72.8	44.3	32.7	26.1	21.8	11.6	32.0 kg
CPL 135 – 12	581.6	454.3	372.6	321.3	277.5	253.2	182.7	161.0	119.7	101.9	62.1	45.8	36.6	30.5	16.2	45.5 kg
CPL 150 – 12	623.2	486.7	399.2	344.2	297.3	271.3	195.8	172.5	128.3	109.2	66.5	49.0	39.2	32.7	17.3	48.2 kg
CPL 250 – 12	811.2	665.4	573.7	495.5	456.8	353.1	326.3	287.5	213.8	182	138	110.8	92.8	81.7	72.2 kg	

* High Rate