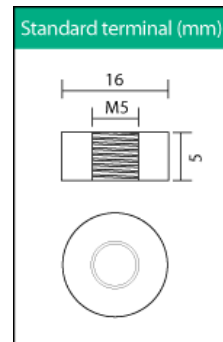
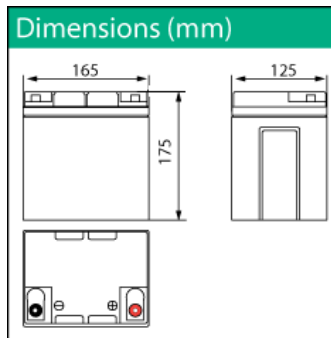


CPL 28 -12IA



**A G M Longlife-series**  
**10 years design life**



Nominal voltage	12 V	
Nominal Capacity 20HR,20°C):	28 Ah	
Internal resistance	Approx. 12.0 m Ω	
Maximum charging current	8.4 A	
Maximum discharge current	420 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 5 mm	
Housing material	ABS	
Dimensions	length	165 mm (±1 mm)
	width	125 mm (±1 mm)
	height	175 mm (±1 mm)
Approx. Weight	9.5 kg	
Packing	1 pcs/box	

**Typical applications:**

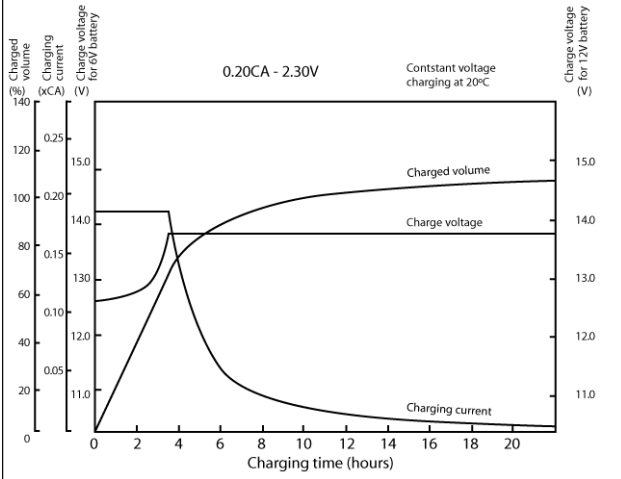
- UPS and EPS systems
- Computerized data bases
- Life support equipment
- Air traffic power stations
- Security systems
- Military base

- 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.

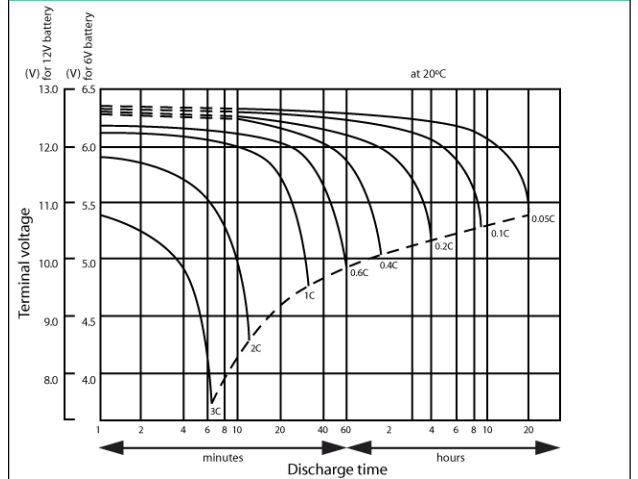
Constant Current Discharge (Amperes) at 25 °C (77°F )																					
F.V/TIME	5min	10min	15min	20min	25min	30min	45min	50min	60min	90min	2h	3h	4h	5h	6h	7h	8h	9h	10h	12h	20h
1.85V/cell	47.3	36.1	30.1	25.7	22.5	20.2	15.9	14.7	13.3	10.5	8.49	6.73	5.45	4.41	3.87	3.37	3.09	2.86	2.64	2.29	1.47
1.80V/cell	63.6	46.1	36.4	30.4	26.6	23.8	18.5	16.8	14.9	11.2	9.27	7.24	5.82	4.73	4.07	3.60	3.28	3.03	2.80	2.37	1.48
1.75V/cell	71.7	50.7	39.8	32.7	28.1	24.7	19.2	17.5	15.6	11.9	9.61	7.37	5.96	4.86	4.18	3.68	3.34	3.07	2.83	2.39	1.50
1.70V/cell	78.9	55.3	42.5	34.3	29.3	25.7	19.9	18.2	16.1	12.3	9.99	7.58	6.11	4.98	4.26	3.74	3.39	3.11	2.86	2.42	1.53
1.65V/cell	87.0	59.6	45.2	36.5	31.1	27.1	20.4	18.7	16.6	12.8	10.3	7.90	6.32	5.12	4.36	3.81	3.44	3.16	2.91	2.46	1.55
1.60V/cell	96.0	64.8	48.3	38.9	32.9	28.6	21.3	19.4	17.2	13.2	10.6	8.14	6.52	5.29	4.45	3.87	3.47	3.19	2.95	2.48	1.55

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	88.2	68.0	57.3	49.3	43.5	39.2	31.1	29.0	26.3	20.8	16.8	13.4	10.9	8.79	7.74	6.76	6.21	5.74	5.32	4.62	2.96
1.80V/cell	117.2	85.9	68.3	57.5	50.7	45.7	35.7	32.7	29.1	22.0	18.2	14.3	11.5	9.40	8.11	7.19	6.57	6.07	5.62	4.76	2.99
1.75V/cell	129.4	92.9	73.7	61.2	53.1	47.1	36.9	33.9	30.3	23.2	18.8	14.5	11.8	9.62	8.30	7.33	6.67	6.14	5.67	4.80	3.01
1.70V/cell	139.4	99.7	77.9	63.7	55.0	48.7	38.1	34.9	31.2	24.0	19.5	14.9	12.0	9.84	8.46	7.44	6.75	6.21	5.72	4.87	3.07
1.65V/cell	150.7	105.8	81.8	67.1	57.7	51.0	38.8	35.8	32.0	24.8	19.9	15.4	12.4	10.1	8.62	7.56	6.84	6.30	5.83	4.94	3.10
1.60V/cell	162.5	112.3	85.8	70.4	60.7	53.4	40.2	36.9	33.0	25.5	20.5	15.8	12.7	10.4	8.78	7.65	6.89	6.36	5.88	4.97	3.11

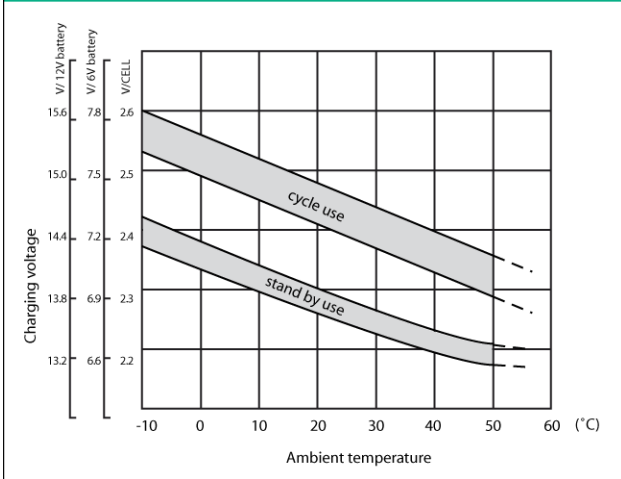
### Charging characteristics



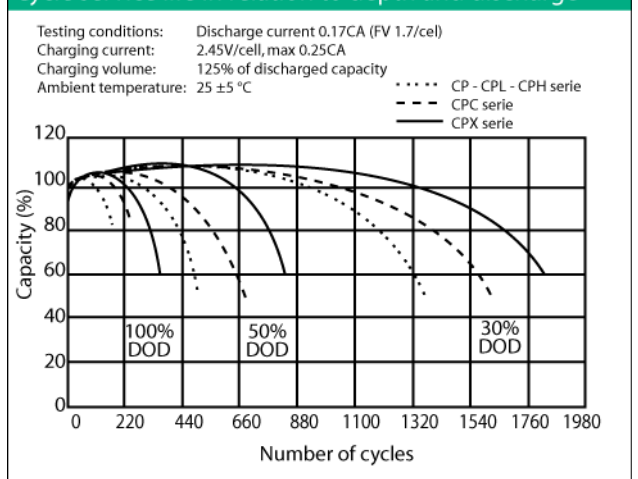
### Discharge characteristics curves



### 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