FP12-28
Datasheet

FULBAT®
GENERAL PURPOSE BATTERY

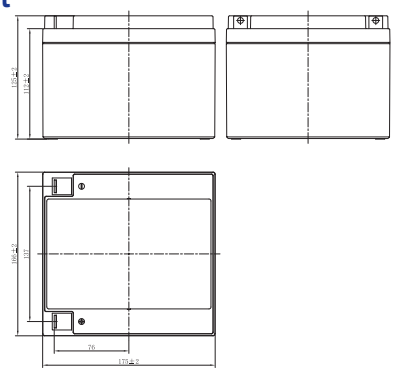
AGM

NON-SPILLABLE

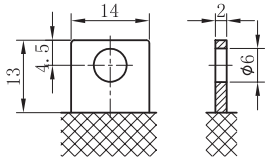
FP Series are general purpose batteries with 5 years design life in float service. With advanced AGM valve regulated technology and high purity raw material, the FP series batteries ensure high performance and reliable standby service life. They have been designed specifically for applications such as security & alarm systems, UPS, Telecom, power grid, medical equipment and emergency lighting. It can also be used for light cycling use. For intensive cycling, the FPC or FPG cyclic ranges are recommended.

DIMENSIONS & WEIGHT

Lenght	166±2mm
Width	175±2mm
Total height	125±2mm
Gross weight	8.20kg



TERMINAL



SPECIFICATIONS

Nominal voltage	12V (6 cells)	
Nominal capacity	28.0Ah (20hr)	
Design life	5 years at 25°C	
Internal resistance	Approx 11mΩ	
Terminal	T3	
Max. discharge current	420.0A (5 sec)	
Reference capacity	28.00Ah (20hr, 1.75V/cell, 25°C) 26.30Ah (10hr, 1.75V/cell, 25°C) 24.10Ah (5hr, 1.75V/cell, 25°C) 21.40Ah (3hr, 1.75V/cell, 25°C) 18.40Ah (1hr, 1.60V/cell, 25°C)	
Charge voltage		
Standby use voltage	13.5V ~ 13.8V 25°C Temperature compensation: -20mV/°C/Cell	
Cycle use voltage	14.4V ~ 15.0V 25°C Temperature compensation: -30mV/°C/Cell	
Operating temp. range	Discharge: -15°C ~ 50°C Charge: -20°C ~ 40°C Storage: -15°C ~ 40°C	
Nominal operating temp. range	25°C ± 3°C	
Self discharge	Can be stored for up to 6 months at 25°C and then recharging is recommended. Monthly self-discharge ratio is less than 3% at 25°C	
Capacity affected by temp.	40°C 25°C 0°C	103% 100% 86%
Container material	UL94-V0	

APPROVALS

ISO9001 - Quality management system
ISO14001 - Environnmental management System
Approved for transport by Air (IATA)
Designed in accordance with IEC 60896-21/22

APPLICATIONS

Emergency & security | Medical | UPS & data center | Telecom

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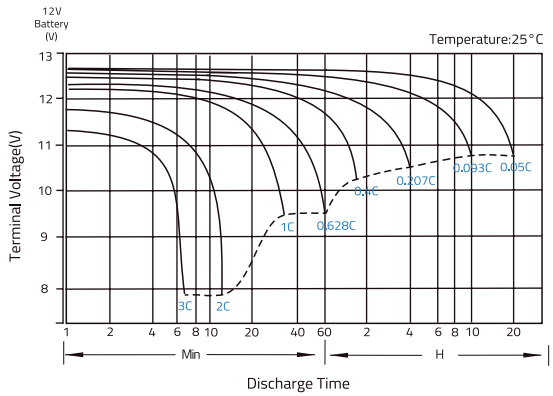
CONSTANT CURRENT DISCHARGE (A) @25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	57.6	44.8	37.1	27.8	20.3	16.7	9.58	6.92	5.51	4.69	4.02	3.16	2.57	1.37
1.80V/cell	61.0	47.0	38.6	28.7	20.9	17.1	9.76	7.03	5.59	4.76	4.08	3.21	2.60	1.39
1.75V/cell	63.5	48.6	39.7	29.4	21.3	17.4	9.94	7.14	5.67	4.82	4.13	3.25	2.63	1.40
1.70V/cell	66.0	50.2	40.8	30.2	21.8	17.7	10.1	7.25	5.75	4.89	4.18	3.28	2.65	1.41
1.65V/cell	67.9	51.4	41.7	30.7	22.2	18.0	10.2	7.32	5.80	4.93	4.21	3.31	2.67	1.42
1.60V/cell	70.7	53.2	42.9	31.5	22.7	18.4	10.4	7.45	5.90	5.01	4.27	3.35	2.71	1.44

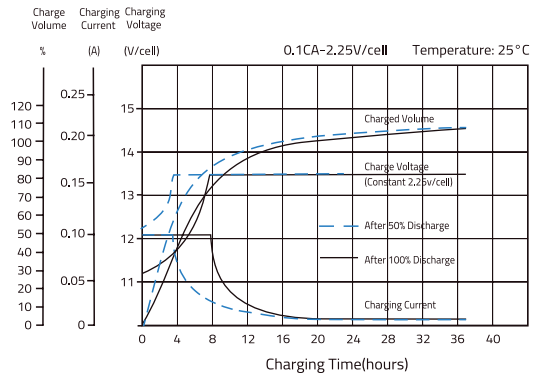
CONSTANT POWER DISCHARGE (W/CELL) @25°C

F.V/Time	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	109.6	85.8	71.5	53.8	39.4	32.4	18.8	13.6	10.9	9.26	7.95	6.27	5.10	2.74
1.80V/cell	115.3	89.5	73.9	55.2	40.4	33.1	19.1	13.8	11.0	9.38	8.06	6.36	5.16	2.77
1.75V/cell	119.1	91.9	75.6	56.4	41.1	33.6	19.4	14.0	11.1	9.49	8.14	6.42	5.21	2.80
1.70V/cell	123.0	94.4	77.4	57.5	41.8	34.1	19.6	14.2	11.3	9.61	8.23	6.48	5.26	2.82
1.65V/cell	125.8	96.4	78.8	58.4	42.4	34.6	19.8	14.3	11.4	9.68	8.30	6.53	5.29	2.85
1.60V/cell	129.5	99.0	80.7	59.7	43.2	35.2	20.1	14.5	11.5	9.81	8.40	6.62	5.36	2.88

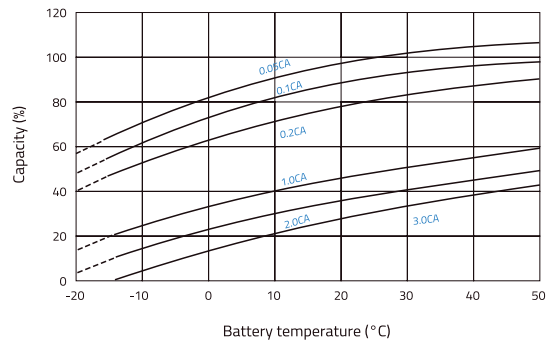
DISCHARGE CHARACTERISTICS



FLOAT CHARGING CHARACTERISTICS



TEMPERATURE IN RELATION TO BATTERY CAPACITY



TEMPERATURE ON LONG TERM FLOAT LIFE