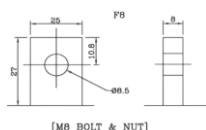
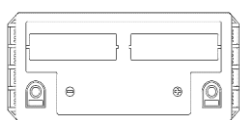
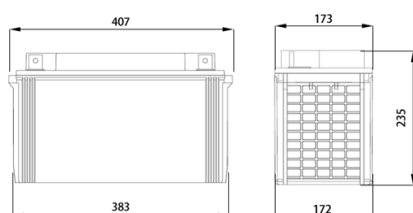


Product Outline



Features

- ❖ Non-spillable sealed maintenance free VRLA battery
- ❖ Absorptive Glass Mat Technology.
- ❖ Long Service Life
- ❖ Low Self-discharge
- ❖ Excellent Charge Retention.
- ❖ Superior High-Rate Discharge
- ❖ Internal Oxygen Recombination
- ❖ Design Float life of 10 years

Constant Power Discharge Rating (W) at 25°C

EMV	10 min	15 min	20 min	30 min	60 min	120 min	180 min	300 min	480 min	600 min
10.2	2416	1948	1583	1200	724	442	318	212	145	120
10.5	2370	1879	1537	1163	703	435	306	207	142	119
10.8	2323	1810	1491	1125	683	428	295	202	139	118

Constant Current Discharge Rating (A) at 25°C

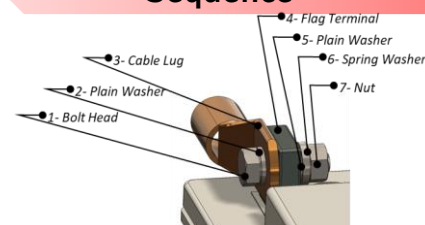
EMV	10 min	15 min	20 min	30 min	60 min	120 min	180 min	300 min	480 min	600 min
10.2	230	180	150	115	67	40	29	19	13	10.8
10.5	214	172	145	112	65.5	38	28	18	11.9	9.8
10.8	200	165	140	110	64	36	27	17	11	9

** Please note, the above discharge values are average and can be achieved within 5 charge/discharge cycles

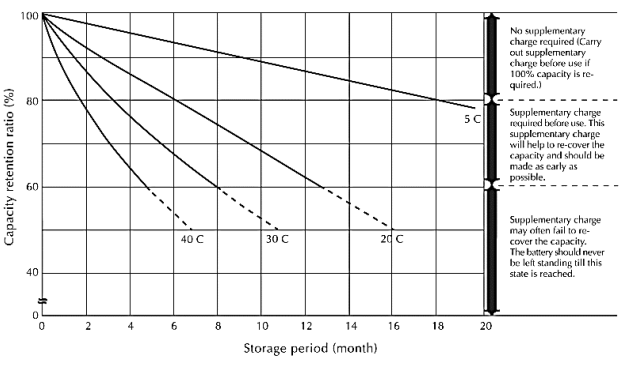
Product Details

Battery Type	EP 100-12
Nominal voltage (V)	12
Rated Capacity @25°C 20 hour (up to 10.5V)	100
Dimension (L x W x H) (mm) ±3	407 x 173 x 235
Weight (kg) ± 5%	32.5
Internal Resistance (mΩ) @ 25°C Fully Charged Condition	5 max
Short Circuit Current (A)	2151
Ah Efficiency	>90%
Wh Efficiency	>80%
Plastic Material	PPCP-FR
Type of +ve & -ve plate	Flat Pasted
Terminal Torque (N-m)	12.3
Terminal Type	M8-Bolt
Operating Temperature Range	0°C to 45°C
Self-Discharge/Month @ 27°C	<3% of Rated Capacity

Terminal Connection Sequence



Capacity Retention & Supplementary Charge



Supplementary Charge Guideline for 3 -6 Months of Storage					
Charging Method	Voltage Setting	Current Setting	Duration for upto 3 months storage	Duration for upto 6 months storage	Temperature
Constant Voltage	14.5V per battery	15% limit current	6 hours	12 hours	5°C-35°C
Constant Current	NA	5% Current	6 hours	12 hours	

Charge Characteristics

Recharge voltages: Batteries to be charged in CC-CV mode only

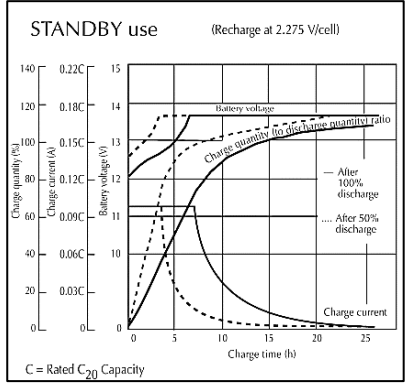
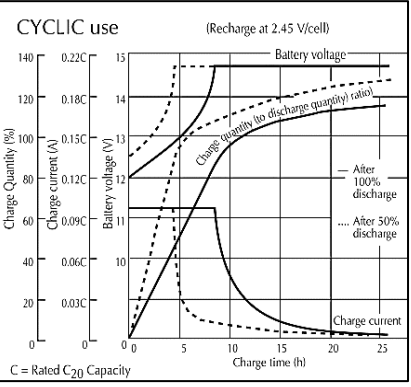
Recharge Voltage Type	Voltage settings per 12 V unit for ambient temperature 20°C-30°C
Float	13.7 ± 0.1 V
Boost	14.1 ± 0.1 V
Cycle	14.7 ± 0.1 V

Temperature compensation (Ref. 25°C)

-18 mV/ °C increase / 12 V unit

Current setting

Maximum	0.3C A
Minimum	0.1C A
Recommended	0.15C A



Gas Evolution & Heat Generation

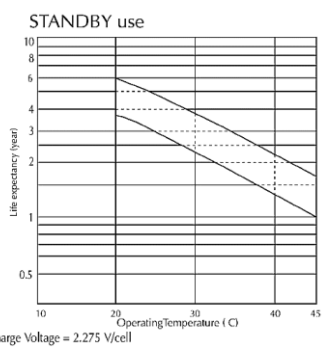
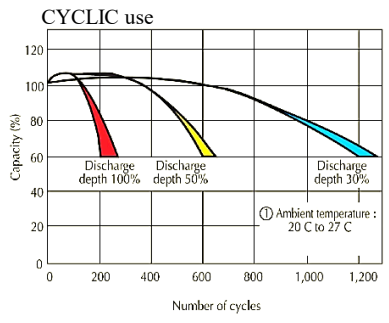
Considering the wide variation in the operating condition, in a worst-case scenario, Hydrogen gas evolved per hour per battery may be estimated as = 0.00054 m³ at NTP

Heat Generation per battery = 2.7 W

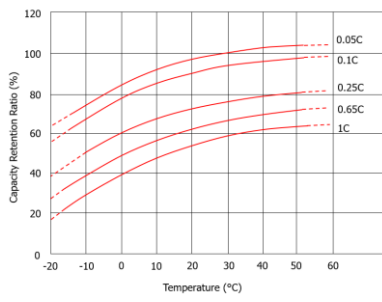
Sizing Calculator – Online



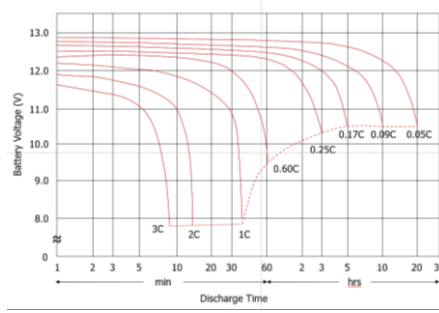
Service Life Characteristics



Effect of Temperature on Capacity



Discharge Characteristics



Installation – Best Practices

