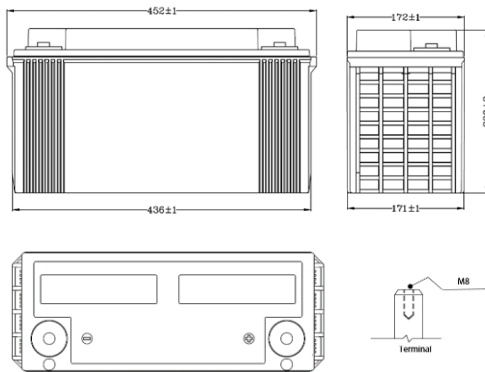


Product Outline



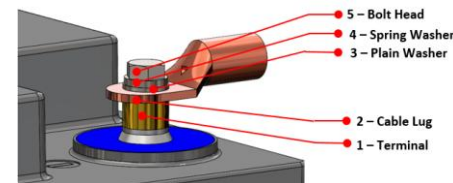
Features

- ❖ 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

Product Details

Battery Type	EP 130-12
Nominal voltage (V)	12
Rated Capacity @25°C 20 hour (up to 10.5V)	130
Dimension (L x W x H) (mm) ±3	452 x 172 x 239
Weight (kg) ± 5%	39.8
Internal Resistance (mΩ) @ 25°C Fully Charged Condition	4.5 max
Short Circuit Current (A)	2619
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



Constant Power Discharge Rating (W) at 25°C

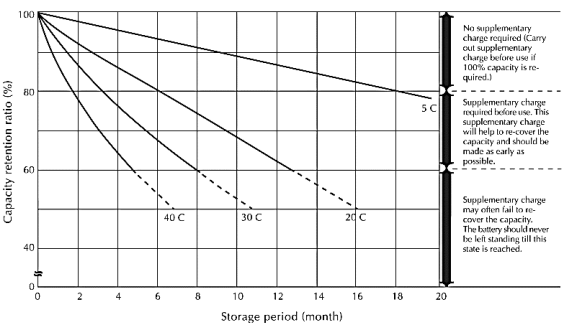
EMV	10 min	15 min	20 min	30 min	60 min	120 min	180 min	300 min	480 min	600 min
10.2	2952	2381	1934	1466	941	570	413	273	187	156
10.5	2896	2296	1878	1421	914	560	398	267	183	152
10.8	2839	2212	1822	1375	886	550	382	260	179	148

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	299	234	195	149	87	52	38	25	17	14
10.5	278	224	188	146	85	49	36	23	15	13
10.8	260	215	182	143	83	47	35	22	14	12

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

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

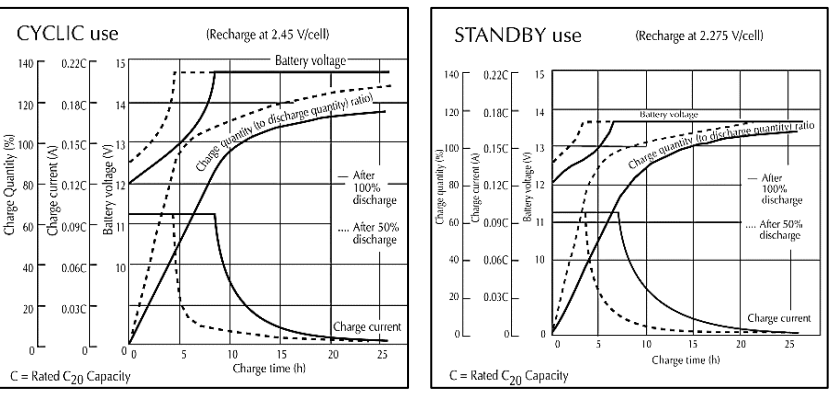
Recharge voltages: Batteries to be charged in CC-CV mode only

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
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Current setting

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



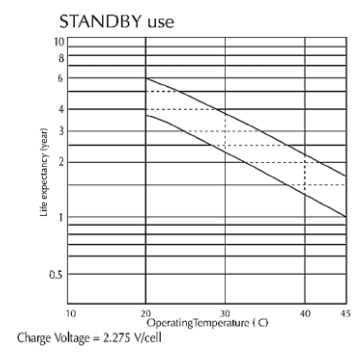
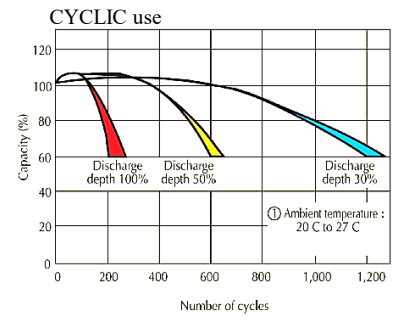
Gas Evolution & Heat Generation

Considering the wide variation in the operating condition, in a worst-case scenario, Hydrogen gas evolved per hour per battery may be estimated as = 0.000702 m³ at NTP
Heat Generation per battery = 3.5 W

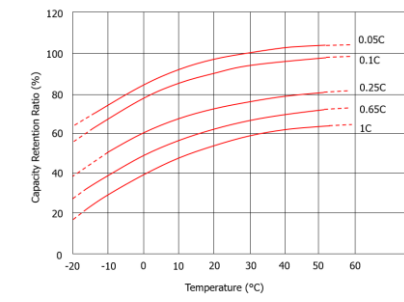
Sizing Calculator – Online



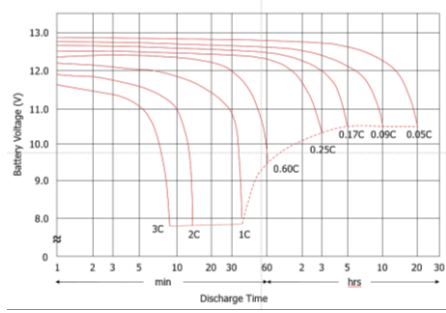
Service Life Characteristics



Effect of Temperature on Capacity



Discharge Characteristics



Installation – Best Practices

