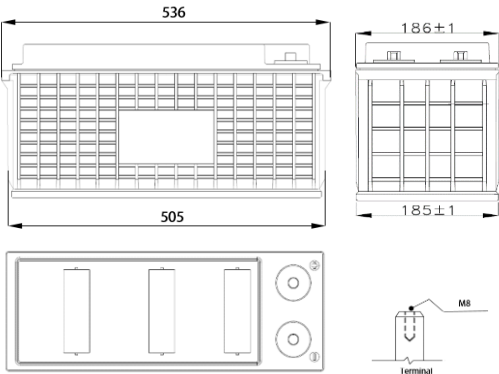


Product Outline

Product Details

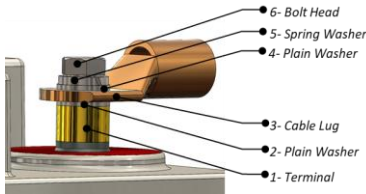


Battery Type	EP 150-12
Nominal voltage (V)	12
Rated Capacity @25°C 20 hour (up to 10.5V)	150
Dimension (L x W x H) (mm) ±3	536 x 186 x 250
Weight (kg) ± 5%	46.8
Internal Resistance (mΩ) @ 25°C Fully Charged Condition	4 max
Short Circuit Current (A)	3432
Ah Efficiency	>90%
Wh Efficiency	>80%
Plastic Material	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

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

Terminal Connection Sequence



Constant Power Discharge Rating (W) at 25°C

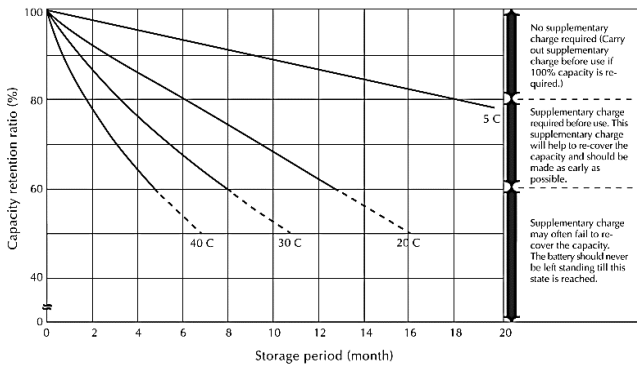
EMV	10 min	15 min	20 min	30 min	60 min	120 min	180 min	300 min	480 min	600 min
10.2	3624	2922	2375	1800	1086	659	477	318	216	180
10.5	3555	2819	2306	1744	1055	649	459	310	212	179
10.8	3485	2715	2237	1693	1024	638	442	302	207	177

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	345	270	225	172	101	60.0	43.5	28.5	19.5	16.2
10.5	321	258	217	169	98.2	56.8	41.9	26.9	17.9	14.7
10.8	300	248	210	165	96.0	54.0	40.5	25.5	16.5	13.5

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

Capacity Retention & Supplementary Charge



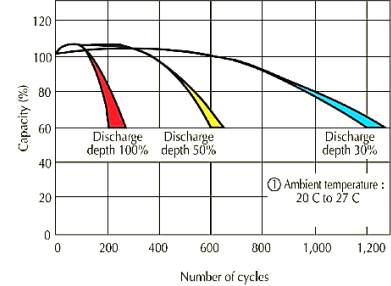
Supplementary Charge Guideline for 3 -6 Months of Storage

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	

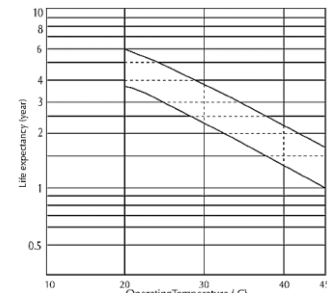
Charge Characteristics

Recharge voltages: Batteries to be charged in CC-CV mode only			Current setting	
Recharge Voltage Type	Voltage settings per 12 V unit for ambient temperature 20°C-30°C		Maximum	0.3C A
Float	13.7 ± 0.1 V		Minimum	0.1C A
Boost	14.1 ± 0.1 V		Recommended	0.15C A
Cycle	14.7 ± 0.1 V			
Temperature compensation (Ref. 25°C)		-18 mV/ °C increase / 12 V unit		

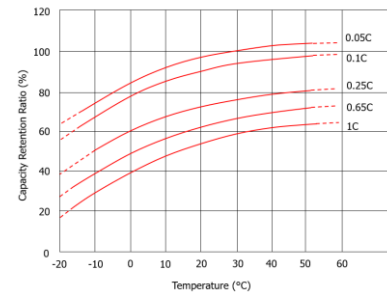
CYCLIC use



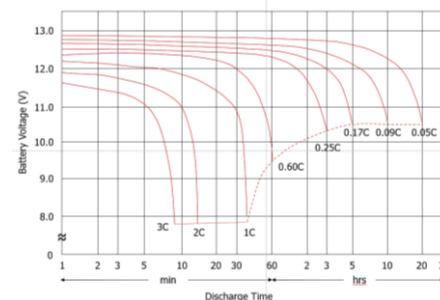
STANDBY use



Effect of Temperature on Capacity



Discharge Characteristics



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 = 0.00081 m³ at NTP
Heat Generation per battery = 4.05 W

Sizing Calculator – Online



Installation – Best Practices

