



ELECTRIC VEHICLE BATTERY

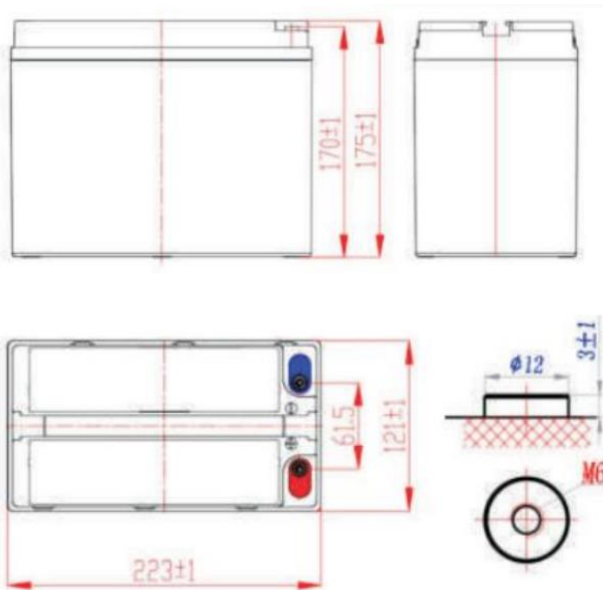
6-EVF-45 12V45Ah

● Specification

Nominal Voltage		12V
Rated capacity (3 hour rate)		45Ah
Dimensions	Length	223mm
	Width	121mm
	Height	175mm
	Total Height	175mm
Approx. Weight		12.2kg



● Outer dimension (mm)



● Characteristic

Capacity (25°C)	20HR(10.5V)	55Ah
	5HR(10.5V)	46Ah
	3HR(9.60V)	45Ah
Terminal type		M6
Internal resistance (Fully charged, 25°C)		Approx. 12m Ω
Capacity affected by temperature (20HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	70%
Self-discharge (25°C)	3month	Remaining Capacity: 91%
	6month	Remaining Capacity: 82%
	12month	Remaining Capacity: 65%
Nominal operating temperature		25°C
Operating temperature range	Discharge	-15°C~50°C
	Charge	-10°C~50°C
	Storage	-20°C~50°C
Float charging voltage (25°C)	13.70 to 13.90V	Temperature compensation: -18mV/°C
Cyclic charging voltage (25°C)	14.70 to 14.90V	Temperature compensation: -30mV/°C
Maximum charging current		6.75A
Maximum discharge current		180A (5 sec.)
Designed floating life (20°C)		5 years

● Construction

Component	Positive plate	Negative plate	Container	Cover	Separator	Electrolyte	Safety valve	Terminal
Raw material	Lead dioxide	Lead	ABS	ABS	AGM	Sulfuric acid	Rubber	Copper

● Constant Current Discharge Characteristic Unit:A(25°C)

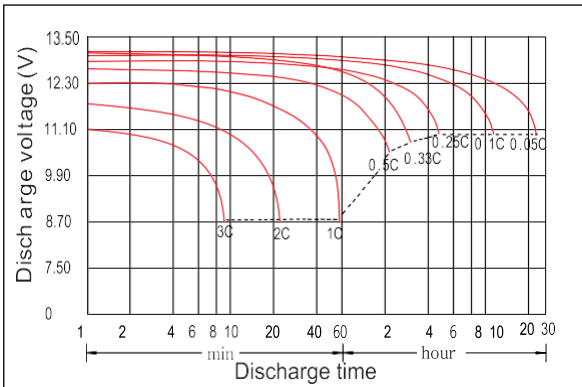
F.V/Time	30min	60min	2h	3h	5h	8h	10h	20h
9.60V	63.1	38.6	22.2	15.5	9.29	6.11	5.15	2.82
9.90V	61.7	38.3	22.0	15.4	9.28	6.05	5.10	2.80
10.2V	60.4	38.1	21.8	15.3	9.25	5.99	5.05	2.78
10.5V	52.0	36.0	21.5	15.0	9.20	5.96	5.00	2.75
10.8V	50.1	35.5	19.9	14.5	8.81	5.94	4.95	2.62

● Constant Power Discharge Characteristic Unit:W(25°C)

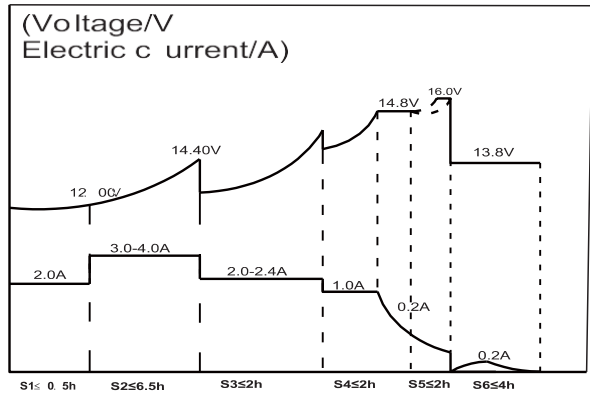
F.V/Time	30min	60min	2h	3h	5h	8h	10h	20h
9.60V	113.8	73.1	42.0	29.5	18.31	11.88	9.94	5.57
9.90V	112.5	72.5	41.6	29.1	18.46	11.75	9.81	5.53
10.2V	112.5	71.9	41.5	29.4	18.41	11.69	9.69	5.50
10.5V	96.4	68.4	41.3	28.9	18.43	11.62	9.63	5.45
10.8V	95.6	68.7	38.9	27.9	17.81	11.56	9.50	5.24

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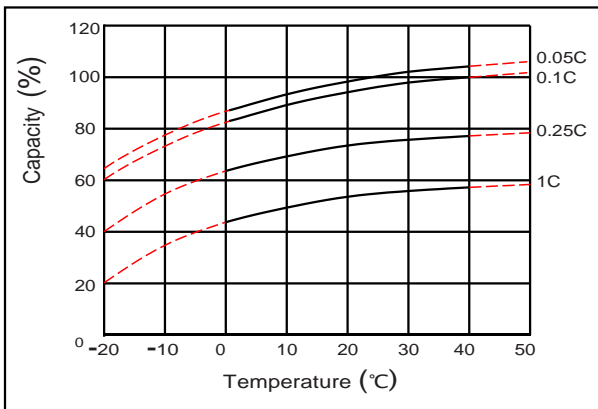
Discharge characteristics(25°C)



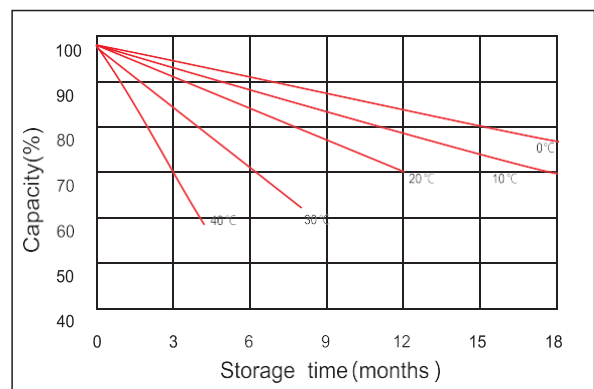
Charging characteristics (25°C)



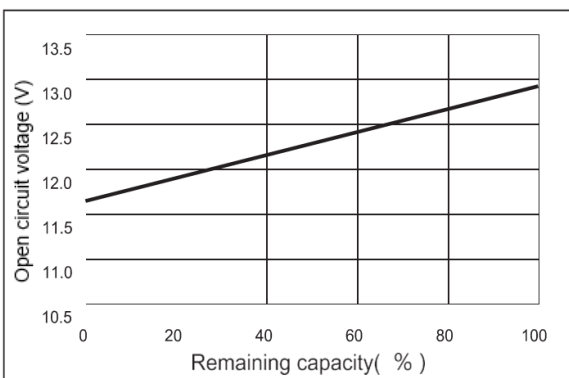
Effect of temperature on capacity



Self-discharge characteristics



Effect of open circuit voltage on capacity



Cycle life on D.O.D(25°C)

