

# ET12-70 (12V 70AH)

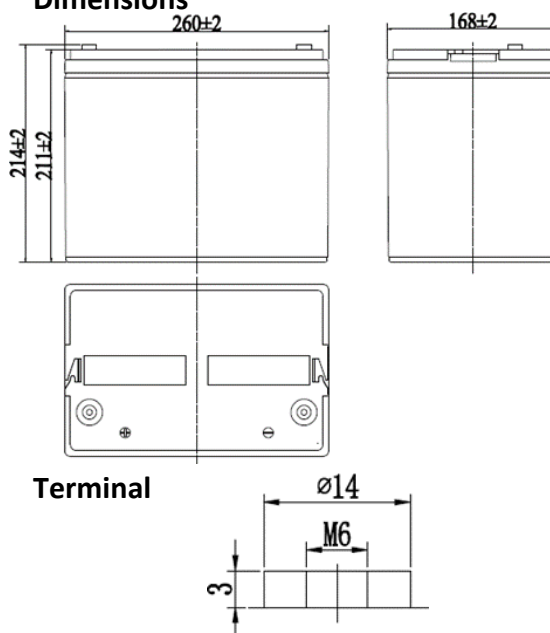


## Specifications

Nominal Voltage		12 V
Capacity (25°C)	10HR(10.8V)	70 Ah
	5HR(10.5V)	60 Ah
	1HR(9.60V)	43 Ah
Dimension	Length	260mm ±2
	Width	168mm ±2
	Height	211mm ±2
	Total Height	214 ±2mm
Approx. Weight		21.5kg ±4%
Terminal type		F14
Internal resistance (Fully charged, 25°C)		Approx. 6.5mΩ
Capacity affected by temperature (10HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	Remaining Capacity: 65%
Nominal operating temperature		25°C ±3°C
Operating temperature range	Discharge	-15°C~50°C
	Charge	-10°C~50°C
	Storage	-20°C~50°C
Float charging voltage (25°C)		13.50 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage (25°C)		14.50 to 15.00V Temperature compensation: -30mV/°C
Maximum charging current		21 A
Maximum discharge current		700 A (5 sec.)
Designed floating life (20°C)		10 years



## Dimensions



## Constant Current Discharge Characteristics (Ampere @ 25°C)

F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	153	118	70.4	43.3	25.6	18.2	14.7	12.6	8.64	7.13	3.78
9.90V	148	115	68.9	42.6	25.4	18.1	14.6	12.5	8.59	7.11	3.77
10.2V	142	111	66.8	41.5	25.2	18.0	14.5	12.4	8.53	7.09	3.76
10.5V	136	107	65.2	40.7	24.8	17.9	14.4	12.3	8.47	7.05	3.74
10.8V	128	101	62.8	39.4	24.2	17.3	14.0	12.0	8.22	7.00	3.71

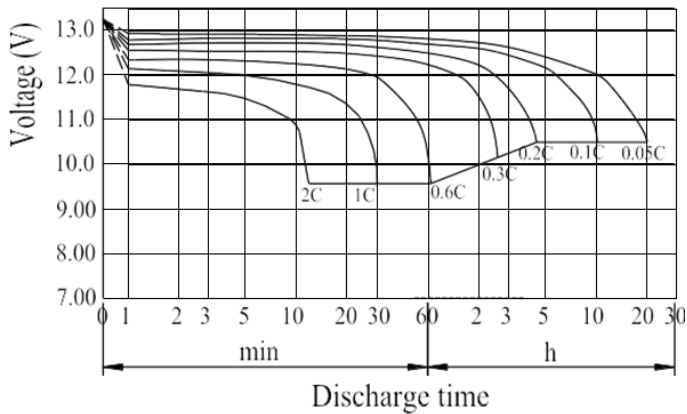
## Constant Power Discharge Characteristics (Watt @ 25°C)

F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	1648	1291	789	493	296	214	173	149	103	85.1	45.3
9.90V	1599	1260	774	486	294	213	172	148	102	84.9	45.2
10.2V	1533	1214	750	473	292	211	171	147	101	84.7	45.1
10.5V	1467	1172	732	464	287	210	170	146	101	84.2	44.8
10.8V	1384	1110	705	449	280	204	164	141	98	83.6	44.5

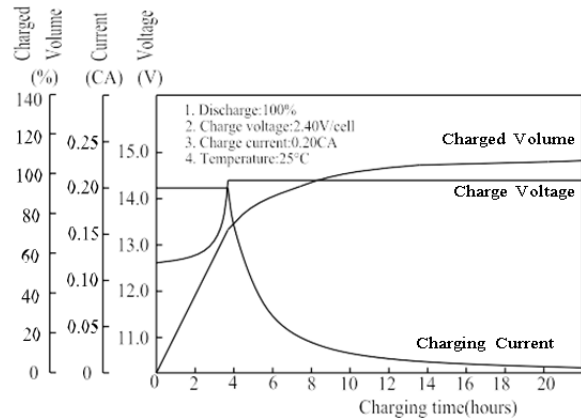
## Construction

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

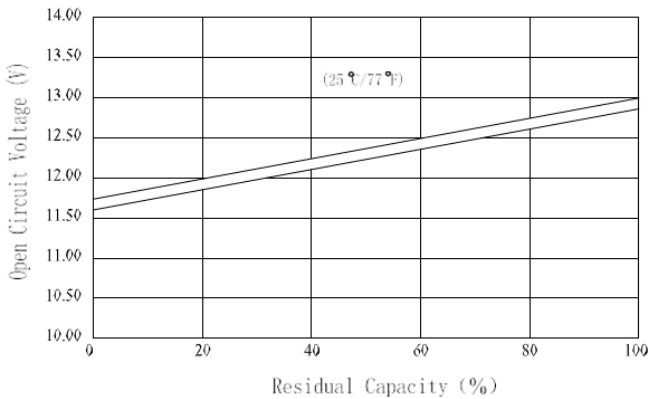
## Discharge Characteristics (25°C)



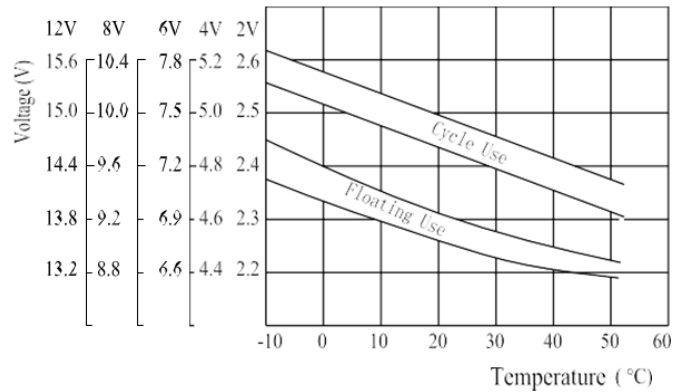
## Charging Characteristics (25°C)



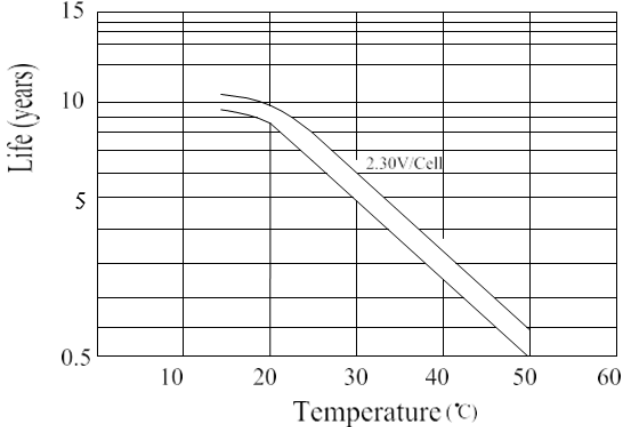
## The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



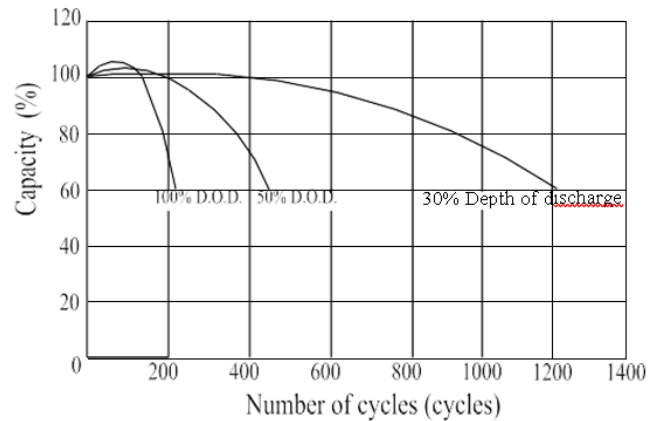
## The Relationship for Charging Voltage and Temperature



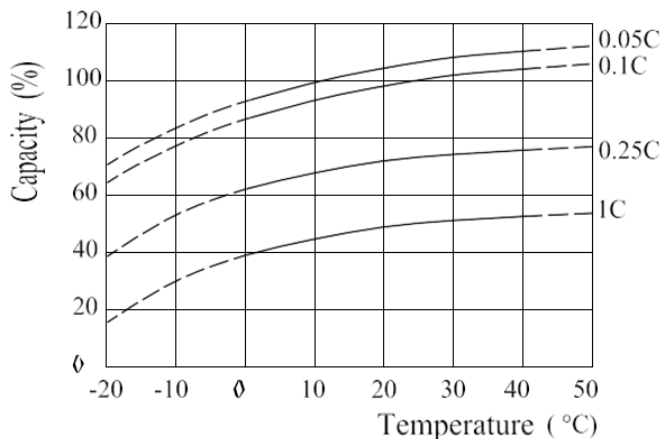
## Floating Life on Temperature



## Cycle Life on D.O.D (25°C)



## Effect of Temperature on Capacity



## Self-discharge Characteristics

