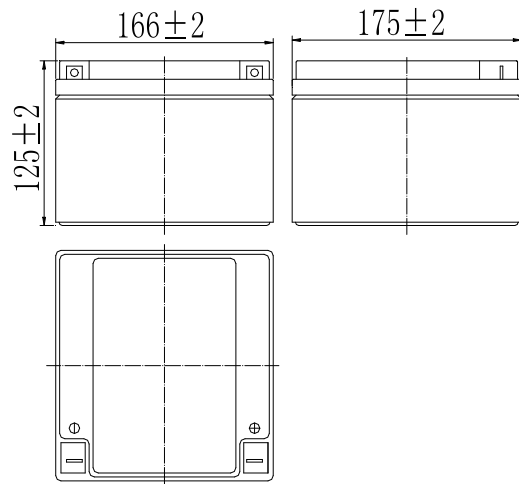
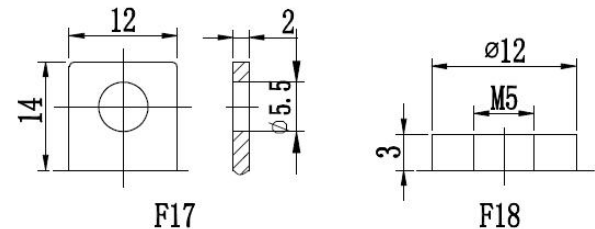


Specifications

Nominal Voltage		12 V
Capacity (25°C)	20HR(10.5V)	24 Ah
	10HR(10.5V)	22.4Ah
	1HR(9.60V)	15.2Ah
Dimension	Length	166±2mm (6.54inch)
	Width	175±2mm (6.89inch)
	Height	125±2mm (4.92inch)
	Total Height	125±2mm (4.92inch)
Approx. Weight		7.4kg (16.3lbs)±5%
Terminal type		F17/F18
Internal resistance (Fully charged, 25°C)		Approx. 15mΩ
Capacity affected by temperature (20HR)	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 (77°F ± 5°F)
Operating temperature range	Discharge	-15°C ~ 50°C (5°F ~ 122°F)
	Charge	-10°C ~ 50°C (14°F ~ 122°F)
	Storage	-20°C ~ 50°C (-4°F ~ 122°F)
Float charging voltage(25°C)		13.60 to 13.80V Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)		14.50 to 15.00V Temperature compensation: -30mV/°C
Maximum charging current		7.2A
Maximum discharge current		360A(5 sec.)
Designed floating life(20°C)		5 years


Dimensions

Terminal

Constant Current Discharge Characteristics (A, 25°C)

F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	56.3	44.0	24.8	15.2	8.60	5.95	4.92	4.19	2.72	2.27	1.22
9.90V	54.6	42.9	24.3	15.0	8.55	5.91	4.89	4.16	2.70	2.26	1.21
10.2V	52.4	41.4	23.6	14.6	8.47	5.87	4.86	4.13	2.68	2.25	1.21
10.5V	50.1	40.0	23.0	14.3	8.34	5.83	4.82	4.10	2.66	2.24	1.20
10.8V	47.3	37.8	22.1	13.9	8.13	5.66	4.68	3.98	2.58	2.19	1.18

Constant Power Discharge Characteristics (Watt, 25°C)

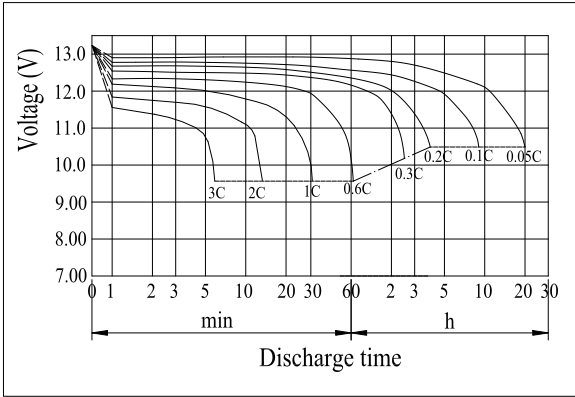
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	635	502	284	177	101	70.7	58.6	50.0	32.6	27.3	14.6
9.90V	616	490	278	174	100	70.3	58.3	49.7	32.4	27.2	14.6
10.2V	591	471	270	170	99.1	69.8	57.9	49.3	32.2	27.0	14.5
10.5V	566	455	263	166	97.6	69.3	57.5	49.0	32.0	26.9	14.4
10.8V	534	431	254	161	95.2	67.2	55.7	47.5	31.0	26.3	14.1

Note: The above characteristics data can be obtained within three charge/discharge cycles.

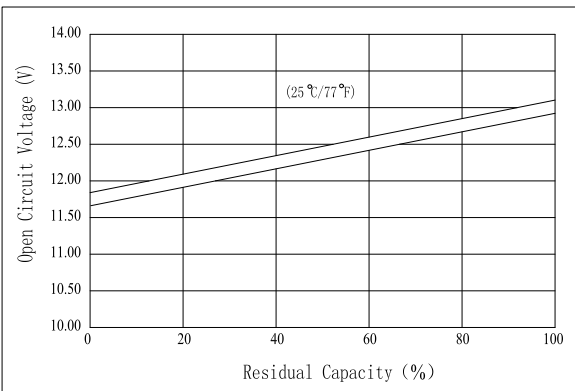
Construction

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

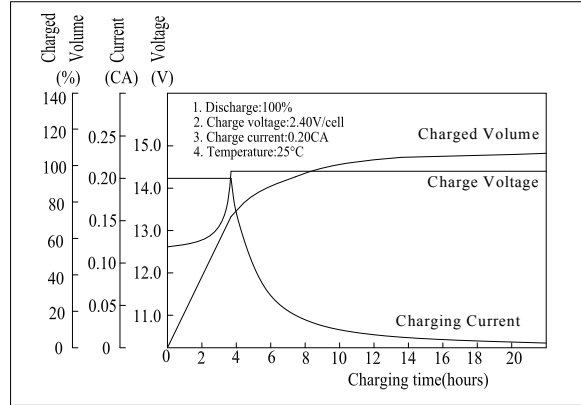
Discharge Characteristics(25°C)



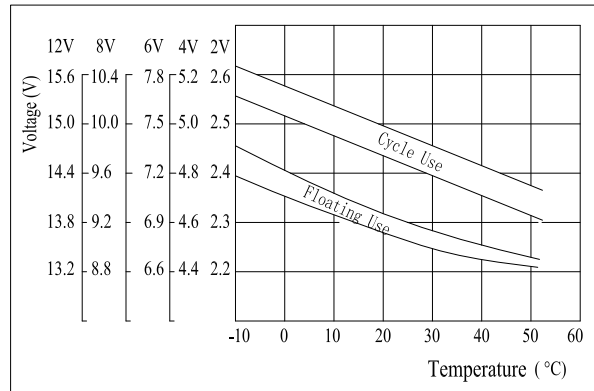
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



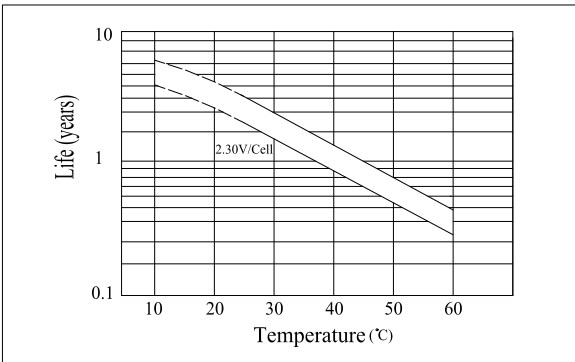
Charging Characteristics(25°C)



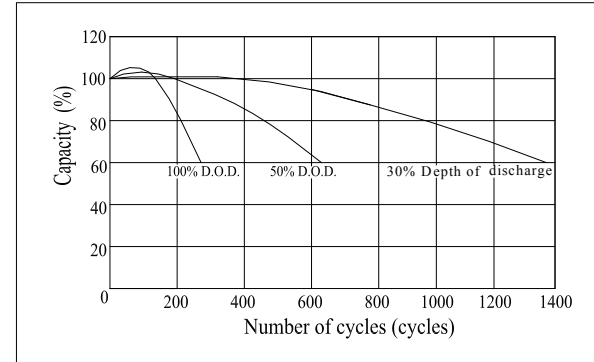
The Relationship for Charging Voltage and Temperature



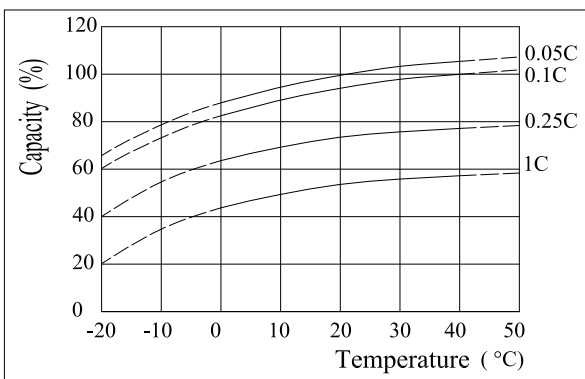
Floating Life on Temperature



Cycle Life on D.O.D(25°C)



Effect of Temperature on Capacity



Self-discharge Characteristics

