

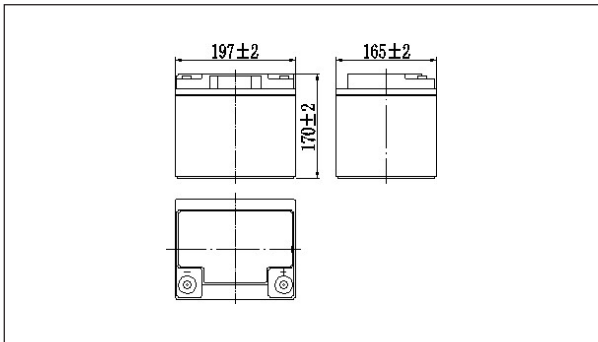
VMP

VPD12-42 12V42Ah

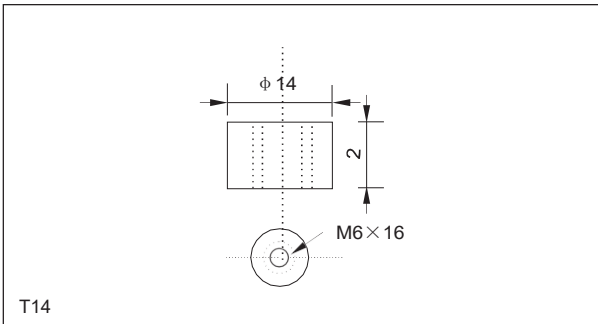
● Specification

Nominal Voltage		12V
Rated capacity (10 hour rate)		42Ah
Dimensions	Length	197mm
	Width	165mm
	Height	170mm
	Total Height	170mm
Approx. Weight		13.50kg

● Outer dimension (mm)



● Terminal Type (mm)



● 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	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	91.6	70.6	42.2	26.0	15.3	11.1	8.83	7.54	5.18	4.28	2.27
9.90V	88.8	68.9	41.4	25.6	15.3	11.0	8.77	7.50	5.15	4.27	2.26
10.2V	85.2	66.3	40.1	24.9	15.1	10.9	8.71	7.44	5.12	4.25	2.25
10.5V	81.5	64.1	39.1	24.1	14.9	10.8	8.65	7.39	5.08	4.23	2.24
10.8V	76.9	60.7	37.7	23.4	14.5	10.5	8.39	7.17	4.93	4.20	2.23

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

F.V/Time	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	989	775	474	296	178	130	104	89.1	61.6	51.1	27.2
9.90V	959	756	464	291	177	129	103	88.6	61.2	51.0	27.1
10.2V	920	728	450	284	175	128	102	88.0	60.8	50.8	27.1
10.5V	880	703	439	275	172	127	102	87.4	60.4	50.5	26.9
10.8V	831	666	423	266	168	124	98.7	84.8	58.6	50.1	26.7

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

DEEP CYCLE BATTERY



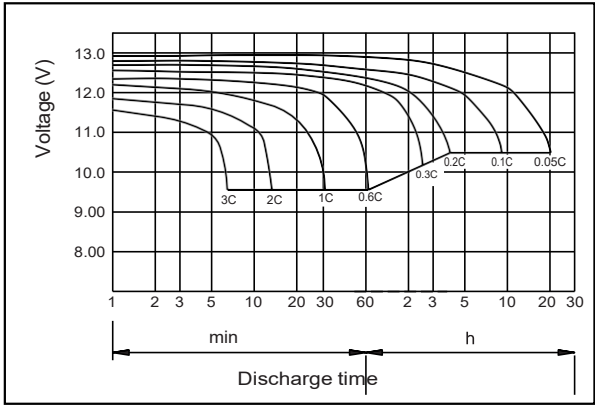
● Characteristic

Capacity (25°C)	10HR(10.8V)	42Ah
	3HR(10.8V)	31.5Ah
	1HR(10.5V)	23Ah
Terminal type		T5 (Nut & Bolt)
Internal resistance (Fully charged, 25°C)		Approx. 8m Ω
Capacity affected by temperature (10HR)	40°C	102%
	25°C	100%
	0°C	85%
	-15°C	65%
Self-discharge (25°C)	3 months	Remaining Capacity: 91%
	6 months	Remaining Capacity: 82%
	12 months	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)	13.50 to 13.80V	Temperature compensation: -18mV/°C
Cyclic charging voltage(25°C)	14.50 to 15.00V	Temperature compensation: -30mV/°C
Maximum charging current	12A	
Maximum discharge current	400A(5 sec.)	
Designed floating life(20°C)	10years	

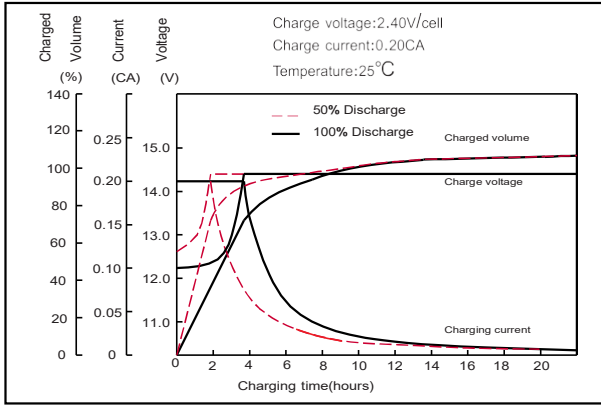
VPD12-42 12V42Ah



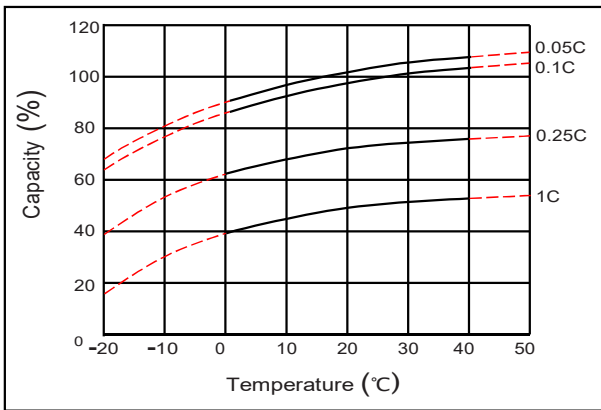
● Discharge characteristics(25°C)



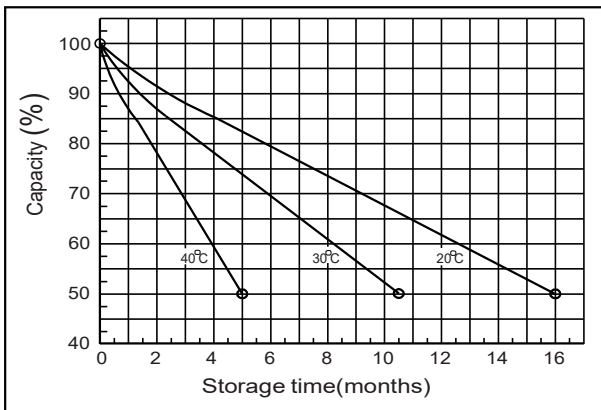
● Charging characteristics (25°C)



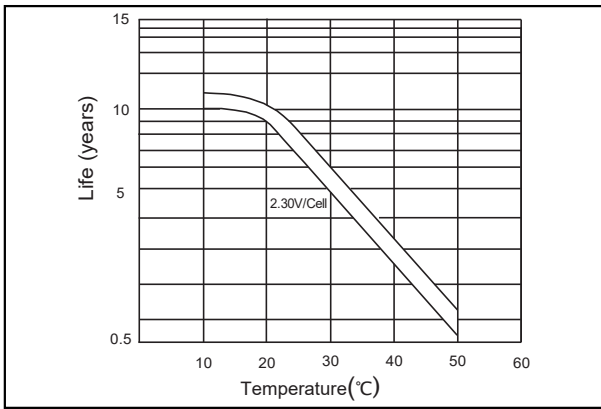
● Temperature effects on Capacity



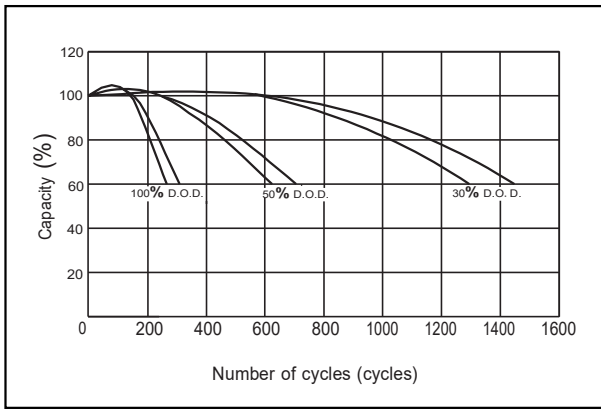
● Self-discharge characteristics



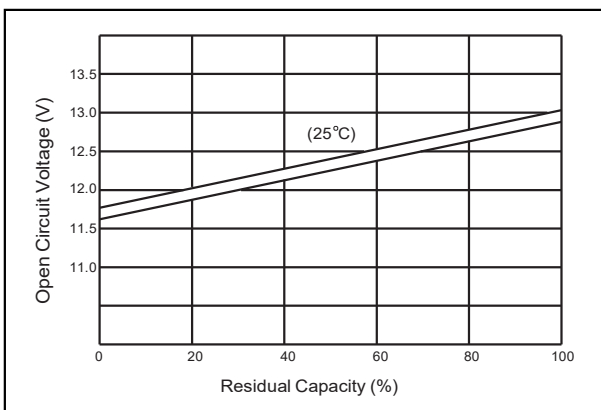
● Floating life on Temperature



● Cycle life on D.O.D (25°C)



● The relationship for OCV and Capacity (25°C)



● The relationship for Charging voltage and Temperature

