

Valve Regulated Deep Cycle Battery

GPD120-12A 12V 120AH

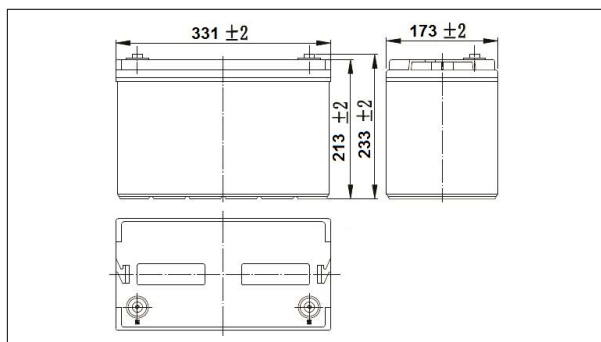


Specifications

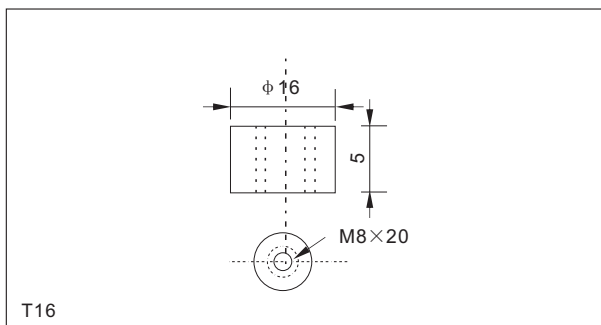
Nominal Voltage	12V	
Rated capacity (10 hour rate)	120Ah	
Dimensions	Length	331 ± 2mm(13.03inch)
	Width	173 ± 2mm(6.81inch)
	Height	213 ± 2mm(8.39inch)
	Total Height	233 ± 2mm(9.17inch)
Approx. Weight	31.5kg(69.4lbs) ± 3%	



Outer dimensions (mm)



Terminal Type (mm)



Characteristics

Capacity (25°C)	10HR(10.8V)	120Ah
	3HR(10.8V)	87.3Ah
	1HR(10.5V)	70Ah
Terminal type		T16
Internal resistance (Fully charged, 25°C)		Approx. 4m Ω
Capacity affected by temperature (20HR)	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 ± 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)	13.50 to 13.80V Temperature compensation: -18mV/°C	
Cyclic charging voltage (25°C)	14.50 to 15.00V Temperature compensation: -30mV/°C	
Maximum charging current	36A	
Maximum discharge current	960A (5 sec.)	
Designed floating life (20°C)	10 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

Construction

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

Constant Current Discharge Characteristics Unit: A(25°C, 77°F)

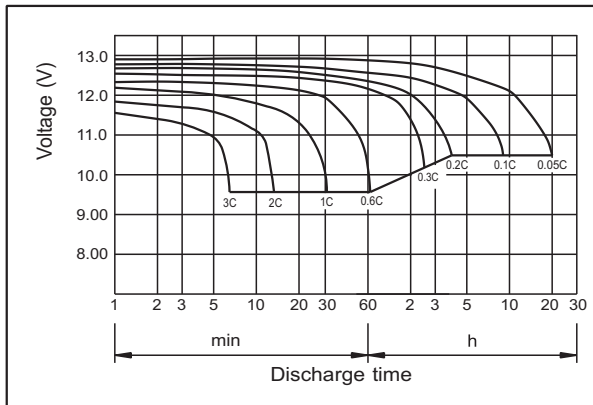
F.V/TIME	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
9.60V	198	120	74.4	43.8	30.6	25.1	21.4	18.7	14.7	12.2	6.41
9.90V	193	118	73.3	43.6	30.4	24.9	21.3	18.6	14.6	12.2	6.40
10.2V	186	114	71.4	43.2	30.2	24.8	21.1	18.5	14.5	12.2	6.38
10.5V	180	111	70.0	42.6	30.0	24.6	21.0	18.4	14.4	12.1	6.34
10.8V	170	107	67.9	41.5	29.1	23.9	20.4	17.8	14.0	12.0	6.30

Constant Power Discharge Characteristics Unit: W(25°C, 77°F)

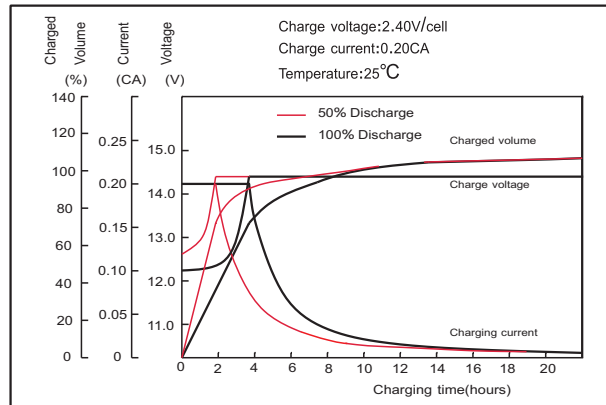
F.V/TIME	15min	30min	60min	2h	3h	4h	5h	6h	8h	10h	20h
9.60V	2174	1346	848	508	360	295	253	221	174	146	77.0
9.90V	2122	1319	835	505	358	293	252	220	173	146	76.8
10.2V	2044	1279	814	500	355	291	250	219	172	145	76.6
10.5V	1974	1248	798	493	353	289	248	217	171	144	76.1
10.8V	1870	1202	774	480	342	281	241	211	166	143	75.6

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

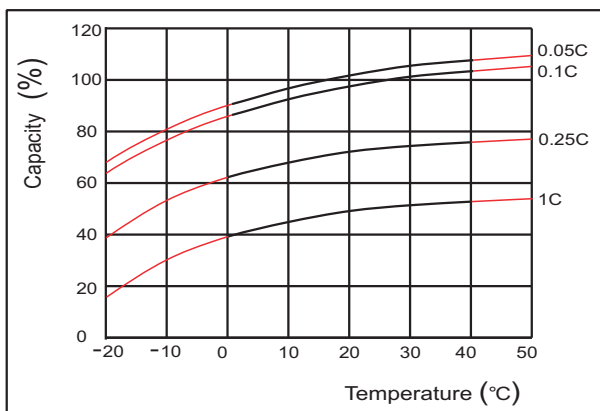
Discharge characteristics(25°C)



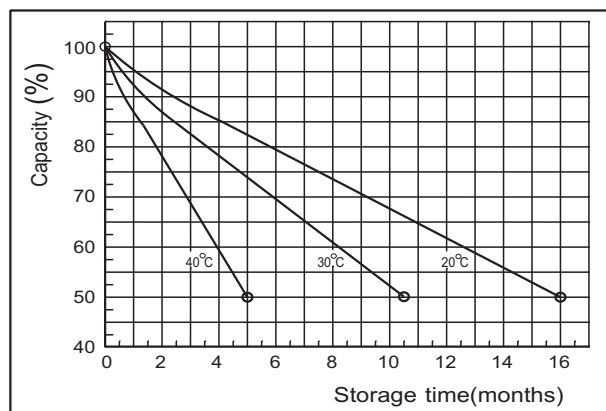
Charging characteristics (25°C)



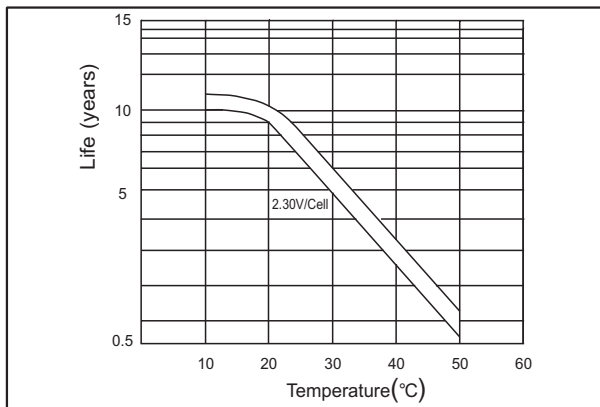
Temperature effects on Capacity



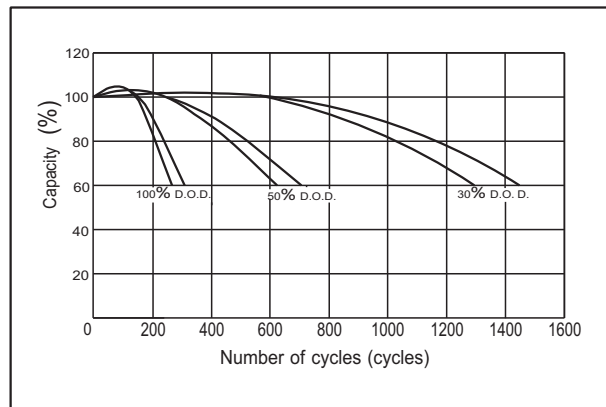
Self-discharge characteristics



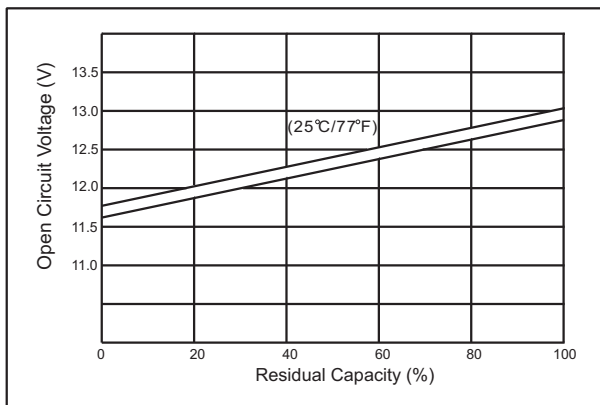
Floating life on Temperature



Cycle life on D.O.D (25°C)



The relationship for OCV and Capacity (25°C)



The relationship for Charging voltage and Temperature

