

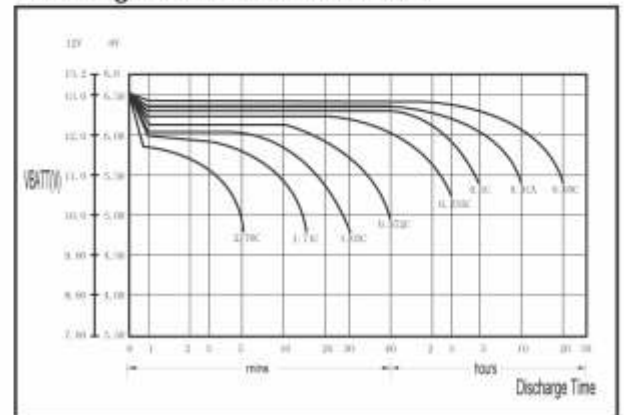
### Specifications

Model No.	Nominal Voltage	Nominal Capacity	Internal Resistance	Weight
DFS12-200	12V	200Ah	< 4mΩ	63Kg
Dimensions	Length	Width	Height	Total Height
	522mm	240mm	219mm	225mm
Terminal	Standard	Copper whorl terminal		
	Alternative	P.b alloy terminal		

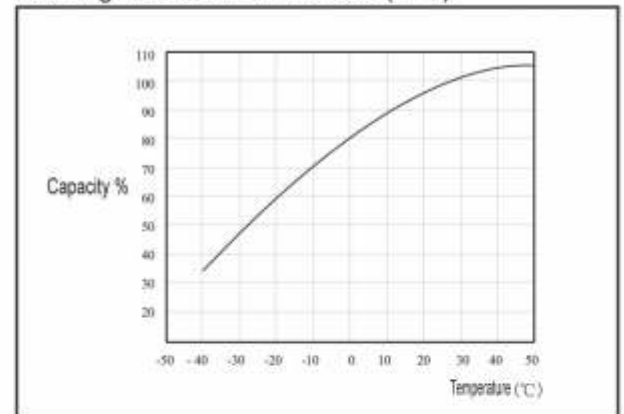
### Characteristic

Capacity (25°C)	Terminal Voltage	Discharge Time	Discharge Current	Discharge Capacity
	10.80V	10 Hour	20.0A	200Ah
	10.80V	5 Hour	33.4A	167Ah
	10.50V	3 Hour	50.9A	152.7Ah
	9.90V	1 Hour	114A	114Ah
	9.60V	0.25 Hour	341A	85.3Ah
Capacity affected by temperature (10 h rate)	Temperature	50°C	Discharge	105%
	Temperature	40°C	Discharge	102%
	Temperature	25°C	Discharge	100%
	Temperature	0°C	Discharge	80%
	Temperature	-15°C	Discharge	65%
	Temperature	-30°C	Discharge	45%
Self-Discharge (20°C)	Storage Time	3 months	Capacity after	95%
	Storage Time	6 months	Capacity after	89%
	Storage Time	12 months	Capacity after	76%
Max. Discharge Current (20°C)	600A (5s)			
Voltage (25°C)	Float	Cycle	Max. Charging Current	
	13.38—13.50V	14.10—14.40V	60A	
Temp. Coefficient	±18mv/±°C	±24mv/±°C	Based on 25°C	

### Discharge Characteristic at 25°C



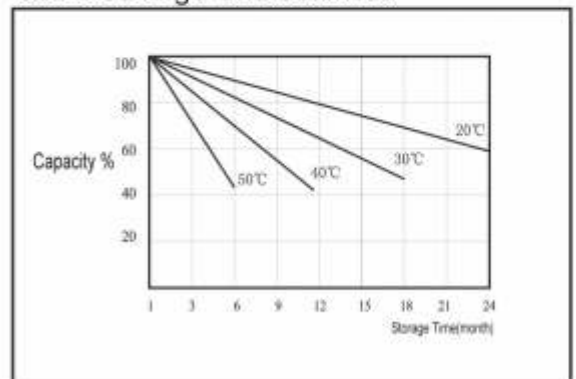
### Discharge Current V's Time 25°C (77°F)

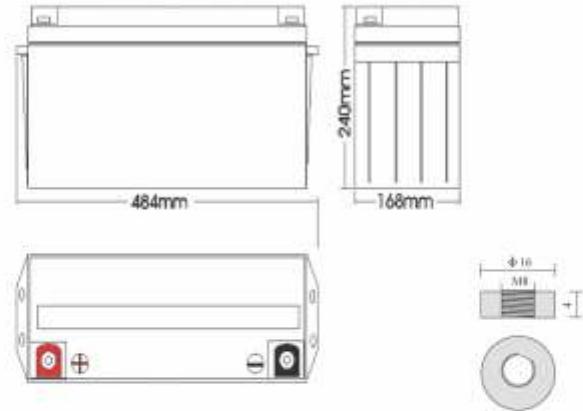


### Constant Current/Constant Power Discharge Data Sheet at 25°C

(V/cell)		Minutes		Hours							
		15	30	1	2	3	5	6	8	10	
1.60	(Amp)	341	206	120	74.9	56.6	37.1	31.9	25.3	20.8	
	(Watt)	597	375	226	142	108	71.4	61.8	49.9	40.0	
1.65	(Amp)	319	193	114	72.5	54.8	36.4	31.5	24.9	20.0	
	(Watt)	568	354	216	138	105	70.3	61.2	49.1	40.7	
1.70	(Amp)	300	181	110	70.4	52.4	35.3	30.6	24.0	20.5	
	(Watt)	543	335	210	135	101	68.5	59.6	48.4	40.5	
1.75	(Amp)	281	173	106	67.7	50.9	34.3	29.9	24.4	20.4	
	(Watt)	510	322	203	130	98.5	66.7	58.3	48.1	40.4	
1.80	(Amp)	257	165	101	65.1	48.1	33.4	29.0	23.6	20.0	
	(Watt)	470	309	194	126	93.2	63.1	56.7	46.5	39.6	
1.85	(Amp)	213	141	90.2	60.1	46.4	32.6	28.0	22.2	19.5	
	(Watt)	400	265	173	117	90.0	64.0	55.5	44.0	38.7	

### Self Discharge Characteristic





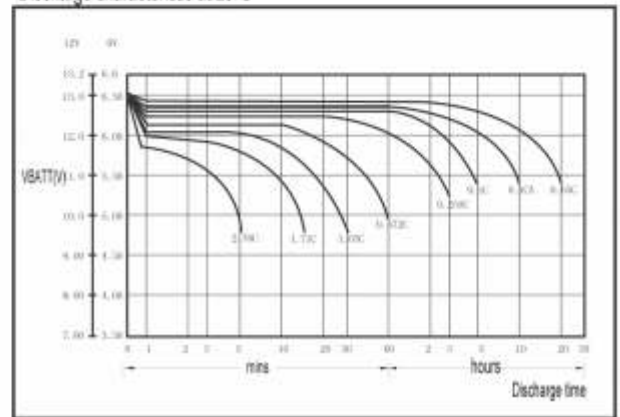
### Specifications

Model No.	Nominal Voltage	Nominal Capacity	Internal Resistance	Weight
DFS12-150	12V	150Ah	< 5mΩ	45Kg
Dimensions	Length	Width	Height	Total Height
	484mm	171mm	241mm	241mm
Terminal	Standard	Copper whorl terminal		
	Alternative	Pb alloy terminal		

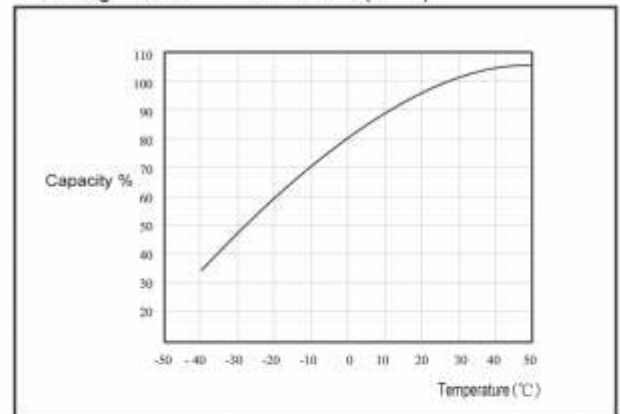
### Characteristic

Capacity (25°C)	Terminal Voltage	Discharge Time	Discharge current	Discharge Capacity
	10.80V	10 hours	15.0A	150Ah
	10.80V	5 hours	25.0A	125 Ah
	10.50V	3 hours	38.2A	114.6Ah
	9.90V	1 hour	85.8A	85.8Ah
	9.60V	0.25 hour	256 A	64Ah
Capacity affected by temperature (10 h rate)	Temperature	50 °C	Discharge	105%
	Temperature	40 °C	Discharge	102%
	Temperature	25 °C	Discharge	100%
	Temperature	0 °C	Discharge	80%
	Temperature	-15°C	Discharge	65%
	Temperature	-30°C	Discharge	45%
Self-discharge (20°C)	Storage time	3 months	Capacity after	95%
	Storage time	6 months	Capacity after	89%
	Storage time	12 months	Capacity after	76%
Max discharge current (20°C)	550A (5s)			
Voltage (25°C)	Float	Cycle	Max charging current	
	13.38—13.50V	14.10—14.40V	45A	
Temp.Coefficient	±18mv/±°C	±24mv/±°C	Based on 25°C	

Discharge characteristic at 25°C



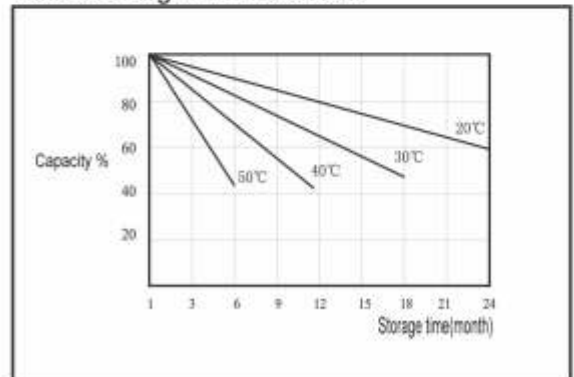
Discharge current V's time 25°C(77°F)

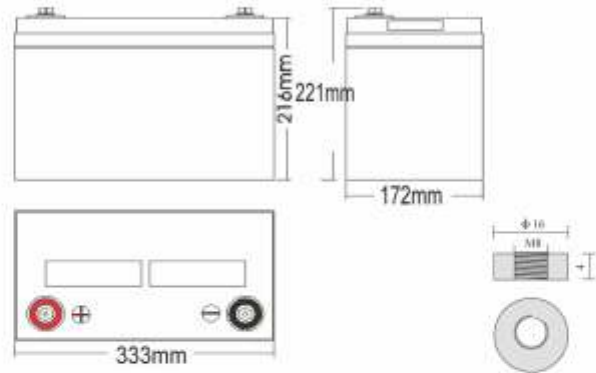


### Constant Current/Constant Power Discharge Data sheet at 25°C

(V/cell)		minutes		hours							
		15	30	1	2	3	5	6	8	10	
1.60	(Amp)	260	154	90.1	56.2	42.4	27.8	23.9	19.0	15.6	
	(Watt)	448	281	169	107	81.1	53.5	46.3	37.4	30.7	
1.65	(Amp)	240	145	85.8	54.4	41.1	27.3	23.6	18.7	15.5	
	(Watt)	426	266	162	104	78.9	52.7	45.9	36.8	30.5	
1.70	(Amp)	225	136	82.7	52.8	39.3	26.5	23.0	18.4	15.4	
	(Watt)	407	251	158	101	75.8	51.4	44.7	36.3	30.4	
1.75	(Amp)	211	130	79.7	50.7	38.2	25.7	22.4	18.3	15.3	
	(Watt)	383	241	152	97.6	73.8	50.0	43.7	36.1	30.3	
1.80	(Amp)	193	124	75.8	48.8	36.3	25.0	21.7	17.7	15.0	
	(Watt)	353	232	146	94.2	69.9	48.8	42.5	34.9	29.7	
1.85	(Amp)	160	105	67.6	45.0	34.8	24.4	21.0	16.6	14.0	
	(Watt)	300	199	139	87.4	67.5	48.0	41.6	33.0	29.0	

### Self discharge characteristic





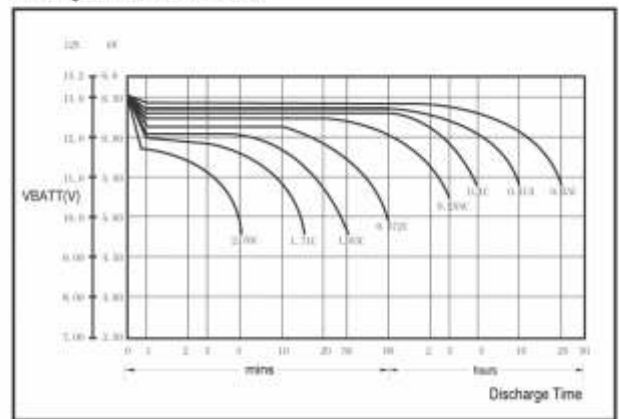
### Specifications

Model No.	Nominal Voltage	Nominal Capacity	Internal Resistance	Weight
DFS12-100	12V	100Ah	< 6mΩ	28.5Kg
Dimensions	Length	Width	Height	Total Height
	333mm	172mm	216mm	221mm
Terminal	Standard	Copper whorl terminal		
	Alternative	Pb alloy terminal		

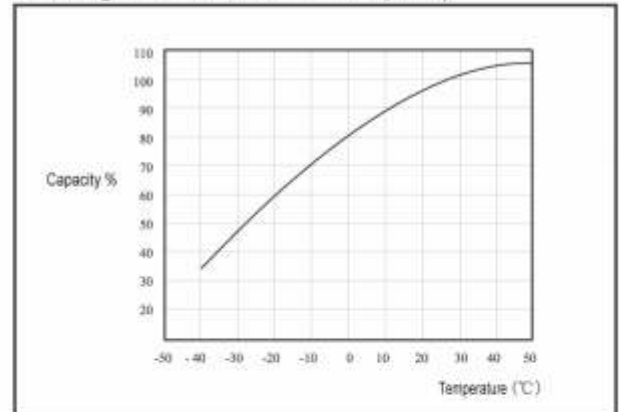
### Characteristic

Capacity (25°C)	Terminal Voltage	Discharge time	Discharge current	Discharge capacity
	10.80V	10 hours	10.0A	100Ah
	10.80V	5 hours	16.7A	83.5Ah
	10.50V	3 hours	25.5A	76.5Ah
	9.90V	1 hour	57.2A	57.2Ah
	9.60V	0.25 hour	171A	42.8Ah
Capacity affected by temperature (10 h rate)	Temperature	50 °C	Discharge	105%
	Temperature	40 °C	Discharge	102%
	Temperature	25 °C	Discharge	100%
	Temperature	0 °C	Discharge	80%
	Temperature	-15°C	Discharge	65%
	Temperature	-30°C	Discharge	45%
Self-discharge (20°C)	Storage Time	3 months	Capacity after	95%
	Storage Time	6 months	Capacity after	89%
	Storage Time	12 months	Capacity after	76%
Max Discharge current (20°C)	480A (5s)			
Voltage (25°C)	Float	Cycle	Max charging current	
	13.38—13.50V	14.10—14.40V	30A	
Temp. Coefficient	±18mv/±°C	±24mv/±°C	Based on 25°C	

Discharge Characteristic at 25°C



Discharge Current V's Time 25°C(77°F)



### Constant Current/Constant Power Discharge Data sheet at 25°C

(V/cell)		minutes		hours						
		15	30	1	2	3	5	6	8	10
1.60	(Amp)	171	103	60.1	37.5	28.3	18.5	15.9	12.7	10.4
	(Watt)	299	188	113	71	54.0	35.7	30.9	24.9	20.5
1.65	(Amp)	160	97	57.2	36.2	27.4	18.2	15.8	12.5	10.3
	(Watt)	284	177	108	69	52.6	35.1	30.6	24.0	20.4
1.70	(Amp)	150	91	55.1	35.2	26.2	17.7	15.3	12.3	10.3
	(Watt)	271	168	105	67	50.5	34.3	29.8	24.2	20.2
1.75	(Amp)	140	87	53.1	33.8	25.5	17.2	14.9	12.2	10.2
	(Watt)	255	161	102	65.1	48.2	33.3	29.1	24.0	20.2
1.80	(Amp)	129	83	50.5	32.6	24.1	16.7	14.5	11.8	10.0
	(Watt)	235	155	97	62.8	46.6	32.6	28.4	23.3	19.8
1.85	(Amp)	106	70	45.1	30.0	23.2	16.3	14.0	11.1	9.8
	(Watt)	200	133	87	58.3	45.0	32.0	27.8	22.0	19.4

Self discharge characteristic

