

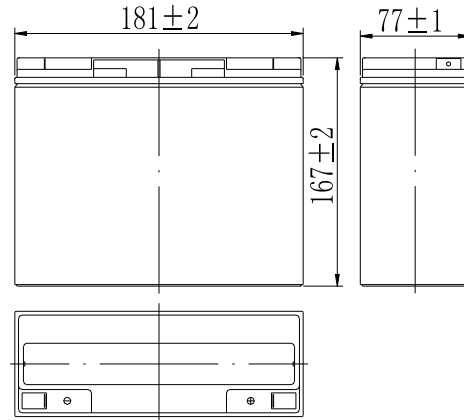
BW 12180 (12V18Ah)

SPECIFICATIONS

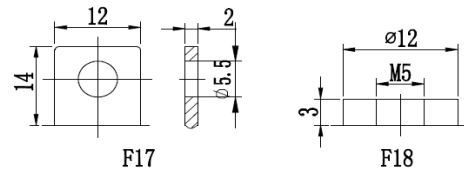
Nominal Voltage		12 V
Capacity (25C°)	20HR	18 Ah
	10HR	16 Ah
	1HR	11 Ah
Dimension	Length	181±2mm (7.13inch)
	Width	77±1mm (3.03inch)
	Height	167±2mm (6.57inch)
	Total Height	167±2mm (6.57inch)
Approx. Weight		5.25kg (11.55lbs)±5%
Terminal type		F2 or NB or M5
Internal resistance (Fully charged, 25C°)		Approx. 18mΩ
Capacity affected by temperature (20HR)	40C°	102%
	25C°	100%
	0C°	85%
	-15C°	65%
Self-discharge (25C°)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	Remaining Capacity: 65%
Nominal operating temperature		25C°±3C°(77F°±5F°)
Operating temperature range	Discharge	-15C° ~ 50C°(5F° ~ 122F°)
	Charge	-10C° ~ 50C°(14F° ~ 122F°)
	Storage	-20C° ~ 50C°(-4F° ~ 122F°)
Float charging voltage(25C°)	13.60 to 13.80V Temperature compensation: -18mV/C°	
Cyclic charging voltage(25C°)	14.50 to 15.00V Temperature compensation: -30mV/C°	
Maximum charging current	5.1A	
Maximum discharge current	255 A(5 sec.)	
Designed floating life(20C°)	5 years	



DIMENSIONS



TERMINAL



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 CHARACTERISTICS (A, 25C°)

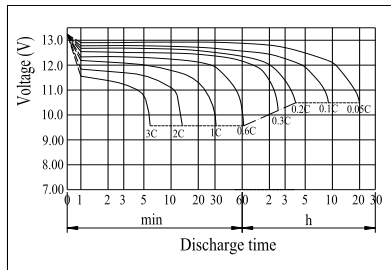
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	41.1	32.1	18.1	11.1	6.09	4.21	3.49	2.97	1.92	1.61	0.86
9.90V	39.9	31.4	17.7	11.0	6.06	4.19	3.46	2.95	1.91	1.60	0.86
10.2V	38.3	30.2	17.2	10.7	6.00	4.16	3.44	2.93	1.90	1.60	0.86
10.5V	36.6	29.2	16.8	10.5	5.91	4.13	3.42	2.91	1.89	1.59	0.85
10.8V	34.6	27.6	16.2	10.2	5.76	4.01	3.31	2.82	1.83	1.55	0.83

CONSTANT POWER DISCHARGE CHARACTERISTICS (WATT, 25°C)

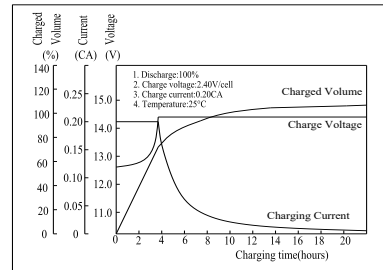
F.V/TIME	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	464	366	207	129	71.3	50.1	41.5	35.4	23.1	19.3	10.4
9.90V	450	357	203	127	70.8	49.8	41.3	35.2	23.0	19.2	10.3
10.2V	432	344	197	124	70.2	49.4	41.0	35.0	22.8	19.1	10.3
10.5V	413	333	192	121	69.2	49.1	40.7	34.7	22.6	19.0	10.2
10.8V	390	315	185	118	67.4	47.6	39.5	33.7	22.0	18.7	10.0

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

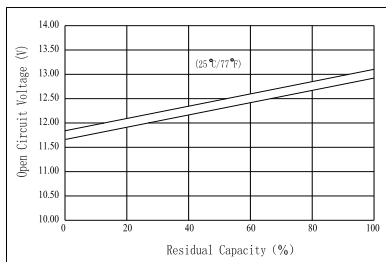
Discharge Characteristics (25°C)



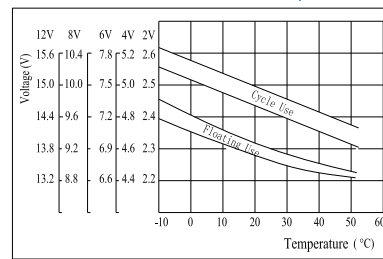
Charging Characteristics (25°C)



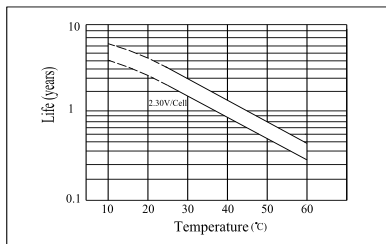
The Relationship for Open Circuit Voltage and Residual Capacity (25°C)



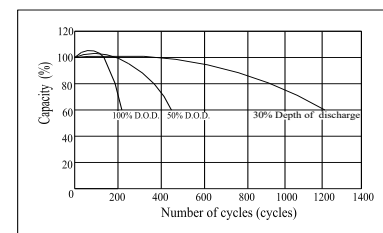
The Relationship for Charging Voltage and Temperature



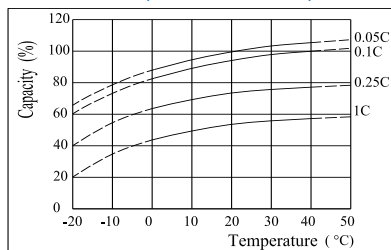
Floating Life on Temperature



Cycle Life on D.O.D (25°C)



Effect of Temperature on Capacity



Self-discharge Characteristics

