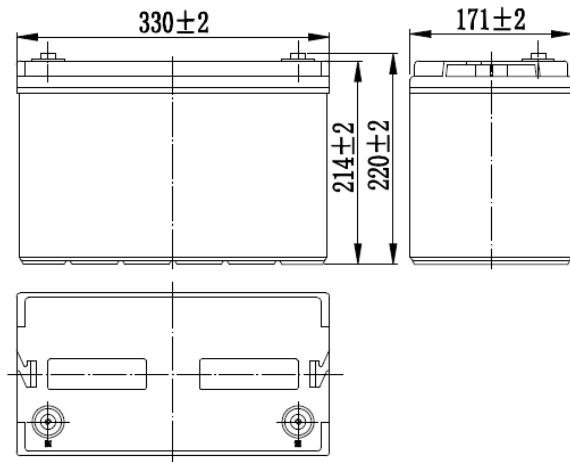


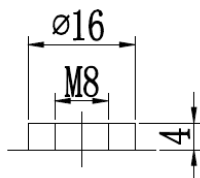
Specifications

Nominal Voltage		12 V
Number of cell		6 cells
Rated capacity(15min.rate)		390 Watts/cell
Dimension	Length	330 ± 2mm (12.99inch)
	Width	171 ± 2mm (6.73inch)
	Height	214 ± 2mm (8.43inch)
	Total Height	220 ± 2mm (8.66inch)
Approx. Weight		32.7kg (72.1lbs)

Dimensions



Terminal



Characteristics

Capacity(10HR, 25℃)		90 Ah / 10.5V
Capacity(15min.rate, 25℃)		390 Watts/cell
Terminal type		T16
Internal resistance (Fully charged, 25℃)		Approx. 4m Ω
Capacity affected by temperature (10HR)	40℃	102%
	25℃	100%
	0℃	85%
	-15℃	65%
Self-discharge (25℃)	3 month	Remaining Capacity: 91%
	6 month	Remaining Capacity: 82%
	12 month	Remaining Capacity: 65%
Nominal operating temperature		25℃ ± 3℃ (77°F ± 5°F)
Operating temperature range	Discharge	-15℃ ~ 50℃ (5°F ~ 122°F)
	Charge	-10℃ ~ 50℃ (14°F ~ 122°F)
	Storage	-20℃ ~ 50℃ (-4°F ~ 122°F)
Float charging voltage(25℃)		13.50 to 13.80V Temperature compensation: -18mV/℃
Cyclic charging voltage(25℃)		14.50 to 15.00V Temperature compensation: -30mV/℃
Maximum charging current		30A
Terminal material		Copper
Maximum discharge current		800A(5 sec.)
Designed floating life(20℃)		10 years
Container Material		Flame Retardant ABS(UL 94-V0) Model Name: SPL90-12HR-FR

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, 25°C)

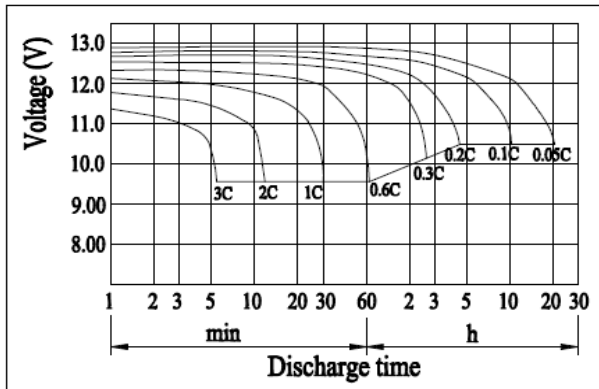
F.V/TIME	10min	15min	20min	30min	45min	60min	2h	3h	4h	5h	6h
1.60V/cell	302.94	216.38	180.63	132.48	95.18	71.80	38.40	27.50	22.20	19.30	16.50
1.67V/cell	288.68	210.14	173.06	127.99	92.15	70.00	38.00	27.30	22.00	19.10	16.30
1.70V/cell	281.56	203.90	169.81	125.74	90.42	68.90	37.80	27.20	21.90	19.00	16.30
1.75V/cell	269.68	196.62	163.32	123.50	88.26	67.60	37.20	27.00	21.70	18.90	16.20
1.80V/cell	254.23	186.21	154.67	117.88	85.01	65.50	36.30	26.20	21.10	18.30	15.70

Constant Power Discharge Characteristics (Watt, 25°C)

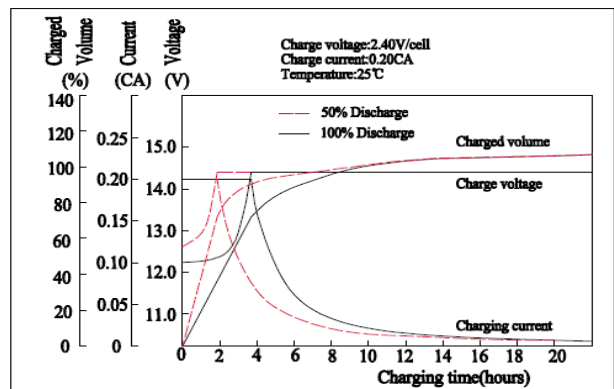
F.V/TIME	10min	15min	20min	30min	45min	60min	2h	3h	4h	5h	6h
1.60V/cell	527.91	410.04	341.61	251.28	183.86	139.00	74.80	54.20	43.70	38.20	32.70
1.67V/cell	503.66	390.00	327.82	243.56	177.37	135.00	74.20	53.70	43.30	37.80	32.40
1.70V/cell	490.43	385.56	321.45	239.16	174.12	133.00	73.70	53.50	43.10	37.70	32.20
1.75V/cell	469.49	372.30	309.78	232.54	169.80	130.00	72.60	53.20	42.80	37.40	32.00
1.80V/cell	443.04	352.92	293.87	224.83	164.39	126.00	70.80	51.60	41.50	36.30	31.10

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

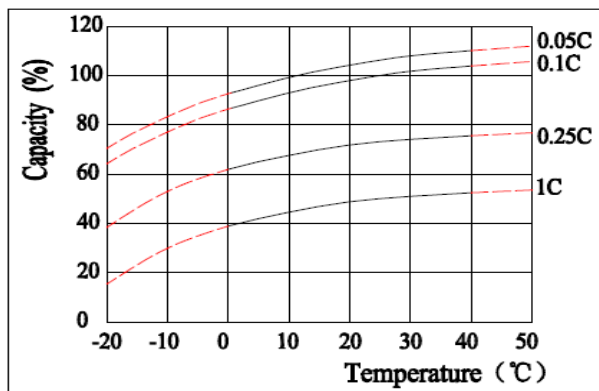
Discharge Characteristics(25°C)



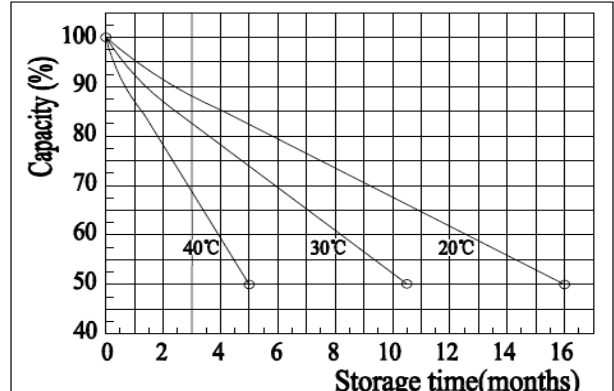
Charging Characteristics(25°C)



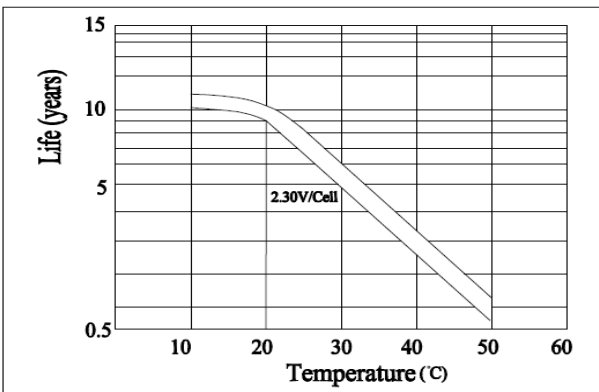
Effect of Temperature on Capacity



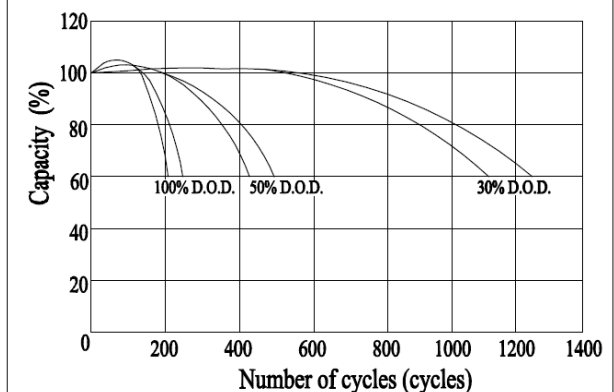
Self-discharge Characteristics



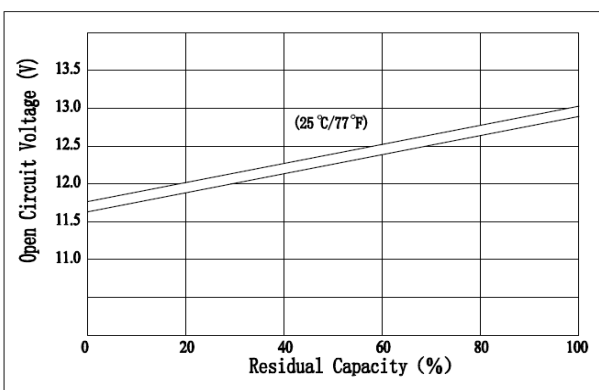
Floating Life on Temperature



Cycle Life on D.O.D.(25°C)



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



The Relationship for Charging Voltage and Temperature

