



PT.SELATAN JADI JAYA

FACTORY :

Jl.Raya Panjunan No.8

Desa Panjunan Kec.Sukodono (61258)

Sidoarjo, Jatim-Indonesia

Telp : 62-31 787251 - 12 (Hunting)

Fax : 62 -31 7885579

FORCE SERIES

VRLA (12V9 AH)



Product Specification

Nominal Voltage	12V	
Nominal Capacity (20HR)	9 AH	
Dimensions	Length	151±1mm (5.94 inches)
	Width	65±1mm (2.55 inches)
	Container Height	95±1mm (3.74 inches)
	Total Height (with terminal)	100±1mm (3.93 inches)
Approx Weight	Approx 2.50 kg (5.51 lbs)	
Terminal	F1	
Container Material	ABS Plastic	
Lead Material	Purity Lead 99.995%	
Sulfuric Acid	Distilled Sulfuric Acid (Zero metal content)	
Separator	AGM	
Rated Capacity	9.0 AH/0.45A	(20hr, 1.80V/cell,25°C/77°F)
	8.4AH/0.84A	(10hr, 1.80V/cell,25°C/77°F)
	7.7AH/1.53A	(5hr, 1.75V/cell,25°C/77°F)
	6.9AH/2.29A	(3hr, 1.75V/cell,25°C/77°F)
	5.7AH/5.65A	(1hr, 1.60V/cell,25°C/77°F)
Max. Discharge Current	135A (5s)	
Internal Resistance	Approx 23 mΩ	
Operating Temp.Range	Discharge	-15~50°C (5~122°F)
	Charge	0~40°C (32~104°F)
	Storage	-15~40°C (5~104°F)
Nominal Operating Temp.Range	25±3°C (77±5°F)	
Cycle Use	Initial Charging Current less than 2.7A. Voltage 14.4V~14.8V at 25°C (77°F) Temp.Coefficient -15mV/°C	
Standby Use	No limit on Initial Charging Current. Voltage 13.5V~13.8V at 25°C (77°F) Temp.Coefficient -10mV/°C	
Capacity affected by Temperature	40°C (104°F)	103%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	Force series batteries may be stored for up to 6 months at 25°C(77°F) and then a freshening charge is required. For higher temperatures the time interval will be shorter.	

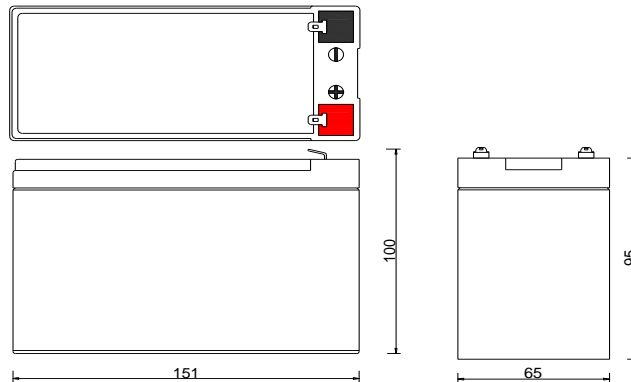
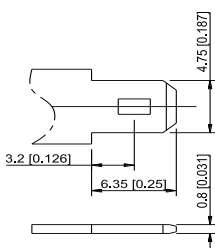
Applications

- All purpose
- Uninterruptable Power Supply (UPS)
- Electric Power System (EPS)
- Emergency backup power supply
- Emergency light
- Railway signal
- Aircraft signal
- Alarm and security system
- Electronic apparatus and equipment
- Communication power supply
- DC power supply
- Auto control system

Dimensions

▲ F1 Terminal

Unit : mm (inches)



Constant Current Discharge (Ampere) at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	24.8	17.6	14.4	12.09	8.99	6.59	5.18	3.08	2.25	1.80	1.50	1.27	1.00	0.82	0.44
1.80V/cell	28.3	18.9	15.5	12.98	9.29	6.64	5.22	3.11	2.26	1.81	1.51	1.30	1.02	0.84	0.45
1.75V/cell	29.6	19.1	15.6	13.13	9.40	6.71	5.28	3.14	2.29	1.83	1.53	1.32	1.03	0.85	0.46
1.70V/cell	32.1	20.1	16.4	13.79	9.87	7.05	5.54	3.18	2.32	1.85	1.55	1.34	1.05	0.86	0.46
1.65V/cell	37.4	23.0	17.4	13.95	9.99	7.13	5.61	3.22	2.35	1.87	1.57	1.35	1.06	0.87	0.47
1.60V/cell	38.1	23.1	17.5	14.05	10.06	7.19	5.65	3.24	2.36	1.89	1.58	1.36	1.07	0.88	0.47

Constant Power Discharge (Watts/cell) at 25°C (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	47.0	33.6	27.8	22.8	17.1	12.7	10.30	6.17	4.57	3.69	3.12	2.72	2.16	1.67	0.90
1.80V/cell	53.7	38.4	29.5	24.2	18.2	13.5	10.95	6.56	4.86	3.86	3.21	2.79	2.20	1.70	0.91
1.75V/cell	54.8	39.2	30.1	24.7	18.6	13.8	11.18	6.69	4.96	3.94	3.28	2.85	2.25	1.72	0.92
1.70V/cell	59.4	42.4	32.6	26.7	19.2	13.9	11.06	6.39	4.63	3.68	3.06	2.74	2.15	1.73	0.93
1.65V/cell	67.2	42.0	32.3	26.5	19.1	13.8	10.96	6.34	4.59	3.64	3.04	2.71	2.19	1.75	0.94
1.60V/cell	68.5	42.8	32.9	27.0	19.4	14.1	11.17	6.46	4.68	3.71	3.09	2.76	2.23	1.76	0.94