

SPA 12 - 28 | VRLA Battery



Applications

- Uninterruptible Power Supplies (UPS)
- Electric Power Systems (EPS)
- Emergency backup power supplies
- Electronic apparatus and equipment
- Communication power supplies
- DC power supplies
- Auto control system

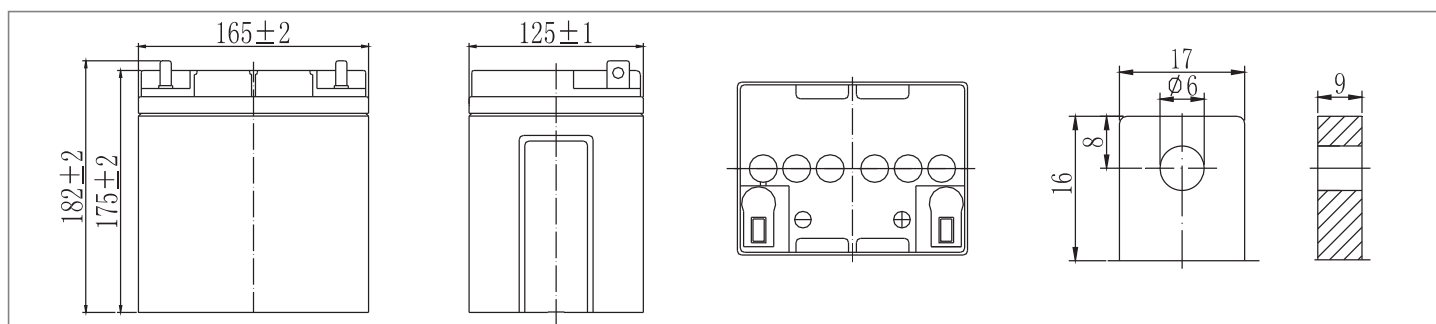
Specifications

Nominal Voltage	12 V		
Number of cells	6		
Design Life	10 years		
Dimensions	Length	165 mm	
	Width	125 mm	
	Height	175 mm	
	Total Height	182 mm	
Approx. Weight	8.6 kg		
Nominal Capacity (25°C)	20 hours rate (1.40 A, 10.5 V)	28.0 Ah	
	10 hours rate (2.60 A, 10.5 V)	26.0 Ah	
	5 hours rate (4.76 A, 10.5 V)	23.8 Ah	
	1 hour rate (17.60 A, 9.6 V)	17.6 Ah	
Max. Discharge Current (25°C)	420 A (5s)		
Max. Charging Current (25°C)	8.4 A		
Internal Resistance	11 mOhms		
Fully Charged battery (25°C)			
Self-Discharge (25°C)	3% of capacity declined per month (average)		
Operating Temperature Range	Discharge	-15~50°C	
	Charge	-10~50°C	
	Storage	-20~50°C	
Short Circuit Current	1200 A		
Charging Characteristics (25°C)	Boost charging voltage	2.40-2.45 Vpc	
	Temperature compensation	-30 mV/°C	
	Float charging voltage	2.25-2.30 Vpc	
	Temperature compensation	-18 mV/°C	

Battery Construction

Component	Positive Plate	Negative Plate	Container	Cover	Safety Valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

Dimensions



Constant Current Discharge (Amperes) at 25°C

End Voltage (Volts/Cell)	5 min	10 min	15 min	30 min	1 h	2h	3h	4h	5h	8h	10h	20h
1.60 V	101.7	64.8	51.3	28.6	17.6	9.95	7.14	5.71	4.86	3.14	2.64	1.42
1.65 V	98.8	62.9	50.1	28.0	17.3	9.89	7.10	5.68	4.83	3.12	2.63	1.42
1.70 V	94.7	60.3	48.2	27.2	16.8	9.80	7.05	5.64	4.79	3.10	2.62	1.41
1.75 V	90.6	57.7	46.6	26.5	16.5	9.65	7.00	5.60	4.76	3.08	2.60	1.40
1.80 V	85.4	54.4	44.1	25.6	16.0	9.41	6.79	5.43	4.62	2.99	2.55	1.37

Constant Power Discharge (Watts) at 25°C

End Voltage (Volts/Cell)	5 min	10 min	15 min	30 min	1 h	2h	3h	4h	5h	8h	10h	20h
1.60 V	1144	731	585	328	203	116	84.8	68.0	58.0	37.7	31.7	17.1
1.65 V	1109	709	571	321	200	116	84.3	67.6	57.6	37.5	31.6	17.0
1.70 V	1064	680	550	312	195	115	83.7	67.2	57.2	37.2	31.4	16.9
1.75 V	1019	651	531	304	191	113	83.2	66.7	56.8	37.0	31.2	16.8
1.80 V	961	614	503	293	185	110	80.7	64.7	55.1	35.9	30.6	16.5

(Note) The above characteristics data are average values obtained within three charge/discharge cycles.