

SP12V-28AH VRLA



Nominal voltage	12V		
Capacity	28 Ah @ 20hr to 1.75V per cell @ 25°C		
Dimensions (mm)	Length	Width	Height
	166	175	125
Approx. weight (Kg)	8.3		
Internal resistance (mΩ@ 25°C)	9.2		
Maximum discharge current (A/5 sec)	390		
Self-discharge (25°C)	≤ 3% per month after storage		
Operating temperature range	Discharge: −10°C ~ 50°C Charge: −20°C ~ 45°C Storage: −20°C ~ 30°C		
Optimal operating temperature range	17°C ~ 25°C		
Maximum charge current (A)	8.2		
Charge voltage (V/cell, 25°C)	Float use	Cycle use	
	2.27 (−3.5 mV/°C/cell)	2.4 (−3.5 mV/°C/cell)	
Container material	ABS (flame retardant available on request)		
Terminal type	M6		
Capacity affected by temperature	105 % @ 40°C 85 % @ 0°C 60 % @ −20°C		

Certifications:
ISO9001-2015
ISO14001-2015
ISO45001-2018

Standards:
IEC61056
INSO4280

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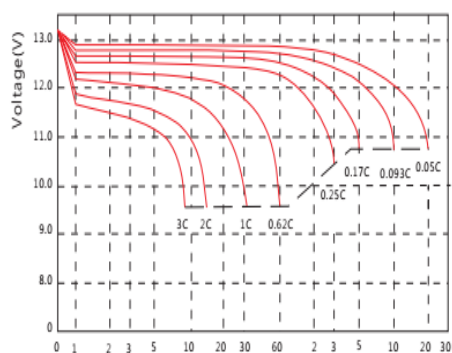
SP12V-28AH VRLA

Constant current discharge data (25°C, A)

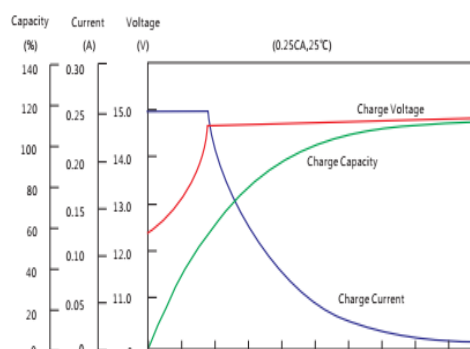
End voltage (V/cell)	10min	15min	20min	30min	45min	1hour	1.5hour	2hour	3hour	5hour	10hour	20hour
1.6	62.28	51.19	42.66	30.71	21.80	17.78	12.70	10.29	7.66	5.14	2.65	1.53
1.65	60.39	49.64	41.36	29.78	21.14	17.25	12.31	9.97	7.43	4.99	2.57	1.48
1.67	59.67	49.04	40.87	29.43	20.88	17.04	12.17	9.85	7.34	4.93	2.54	1.47
1.7	58.61	48.18	40.15	28.91	20.52	16.74	11.95	9.68	7.21	4.84	2.49	1.44
1.75	56.94	46.80	39.00	28.08	19.93	16.26	11.61	9.40	7.00	4.70	2.42	1.40
1.8	55.36	45.50	37.92	27.30	19.38	15.81	11.29	9.14	6.81	4.57	2.35	1.36

Constant power discharge data (25°C, W/cell)

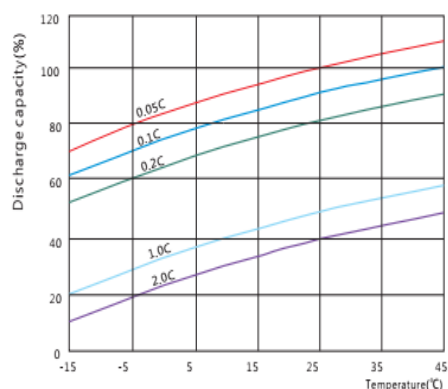
End voltage (V/cell)	10min	15min	20min	30min	45min	1hour	1.5hour	2hour	3hour	5hour	10hour	20hour
1.6	118.56	98.85	83.21	60.29	43.04	35.25	25.29	20.54	15.35	10.33	5.33	2.87
1.65	114.97	95.86	80.69	58.46	41.73	34.18	24.52	19.92	14.88	10.01	5.17	2.79
1.67	113.59	94.71	79.72	57.76	41.24	33.77	24.23	19.68	14.70	9.89	5.11	2.75
1.7	111.59	93.04	78.32	56.74	40.51	33.18	23.80	19.33	14.44	9.72	5.02	2.70
1.75	108.40	90.38	76.08	55.12	39.35	32.23	23.12	18.78	14.03	9.44	4.88	2.63
1.8	105.39	87.87	73.97	53.59	38.26	31.33	22.48	18.26	13.64	9.18	4.74	2.55



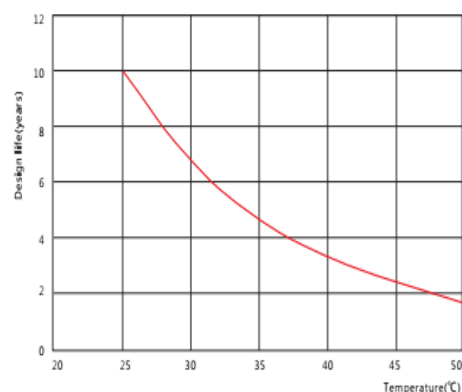
Discharge voltages vs. discharge time



Charge capacity vs. charge time



Discharge capacity vs. temperature



Design life vs. temperature

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