

## VO SERIES (VRLA 5yr Design Life in Float Service)

Dimensions (mm)		
Standard Terminal (mm)		
<b>T12 Threaded Insert 5mm Stud</b>  Torque 2.0 -3.0 Nm		
Physical Specification		
Nominal Voltage	12V	
Nominal Capacity (20HR)	18.0 AH	
Dimension	Length	181.5 ± 2 mm
	Width	77 ± 2 mm
	Container Height	167.5 ± 2 mm
	Total Height (with terminal)	167.5 ± 2 mm
Weight	Approx 5.4kg	
Standard Terminal	T12	

PS-12180 VO					
Discharge Characteristics (25°C, 77°F)					
Rated Capacity	20h Rate (1.80V/cell)	18.00AH	Constant Voltage Charge	Cycle	Initial Charging Current Less than 4.5A Voltage 14.40V ~ 15.0V at 25°C (77°F)
	10h Rate (1.80V/cell)	16.70AH			
	5h Rate (1.75V/cell)	15.30AH			
	3h Rate (1.75V/cell)	13.40AH			
Capacity Affected by Temperature	40°C (104°F)	103%	Standby	Recommended Charge Voltage 13.5V ~ 13.8V at 25°C (77°F)	
	25°C (77°F)	100%			
	0°C (32°F)	86%			
Internal Resistance mΩ					
Approx 16.0 mΩ					

Constant Current Discharge (Amperes) 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	34.3	22.8	18.8	16.5	13.5	10.6	8.75	5.37	4.04	3.33	2.82	2.45	1.94	1.62	0.891
1.80V/cell	41.0	27.3	22.1	18.9	15.1	11.6	9.47	5.76	4.32	3.54	2.97	2.55	2.02	1.67	0.900
1.75V/cell	49.2	31.3	24.6	20.9	16.2	12.4	10.00	6.00	4.46	3.62	3.05	2.63	2.07	1.72	0.909
1.70V/cell	57.1	35.0	27.1	22.6	17.3	13.0	10.40	6.21	4.58	3.71	3.12	2.68	2.10	1.74	0.925
1.65V/cell	63.0	37.9	29.0	24.2	18.2	13.6	10.80	6.41	4.70	3.80	3.19	2.73	2.14	1.76	0.938
1.60V/cell	69.5	41.0	31.2	25.6	19.2	14.1	11.20	6.57	4.82	3.90	3.25	2.80	2.18	1.79	0.943
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	63.9	42.6	35.3	31.1	25.7	20.3	16.9	10.4	7.88	6.50	5.53	4.81	3.84	3.21	1.77
1.80V/cell	74.2	50.1	40.9	35.4	28.5	22.1	18.2	11.1	8.37	6.88	5.79	5.00	3.97	3.31	1.78
1.75V/cell	88.2	56.8	45.0	38.7	30.3	23.5	19.1	11.5	8.62	7.02	5.93	5.12	4.07	3.39	1.80
1.70V/cell	100.9	62.6	49.1	41.7	32.2	24.5	19.9	11.9	8.82	7.17	6.05	5.23	4.12	3.44	1.83
1.65V/cell	109.7	66.8	52.0	44.2	33.6	25.4	20.4	20.4	9.03	7.33	6.16	5.31	4.18	3.47	1.85
1.60V/cell	118.8	71.3	54.9	45.9	34.9	26.2	21.1	21.1	9.20	7.49	6.28	5.42	4.26	3.53	1.86