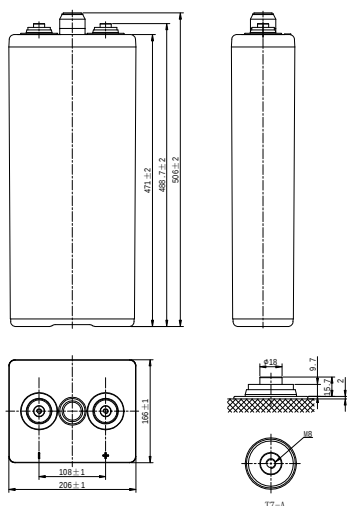


OPzV SERIES-TUBULAR GEL

7OPzV490 (2V490Ah)



CHARACTERISTICS

Item	Specifications	
Rated Voltage	2V	
Nominal Capacity (25°C)	C ₁₀ , 1.80V/cell	490Ah
Dimension	Length	166mm (6.54inches)
	Width	206mm (8.11inches)
	Container Height	471mm (18.5inches)
	Total Height	506mm (19.9inches)
Approx Weight	39.0kg (86.0lbs)	
Terminal	T7-A(M8)	
Container Material	ABS (UL94 HB or V-0 optional)	
Short-circuit current	3675A	
Internal Resistance (25°C)	Approx 0.73 mΩ (Fully charged)	
Operating Temp. Range	Discharge	-20~55°C (-4~131°F)
	Charge	0~40°C (32~104°F)
	Storage	-20~50°C (-4~122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max.Charging Current (25°C)	0.25C	
Charge voltage (25°C)	Standby Use	Cycle Use
	2.23-2.27V/cell	2.40-2.45V/cell
Temp. Coefficient	-3mV/cell/°C	-5mV/cell/°C
	40°C (104°F)	106%
Effect of temp. to Capacity	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤3% per month at 25°C (77°F)	

DISCHARGE TABLE

Constant Current Discharge (Amperes) at 25°C (77°F)											
F.V/Time	1h	2h	3h	5h	8h	10h	24h	48h	72h	100h	120h
1.85V/cell	219.0	148.1	113.7	77.8	54.5	45.9	21.8	11.4	8.20	6.21	5.36
1.80V/cell	245.5	162.2	123.6	83.8	58.3	49.0	22.6	11.8	8.51	6.37	5.51
1.75V/cell	255.3	167.8	126.5	85.5	59.3	49.8	22.7	12.1	8.72	6.50	5.59
1.70V/cell	266.4	172.1	129.0	86.7	60.1	50.4	23.1	12.3	8.81	6.59	5.67
1.67V/cell	273.4	174.9	131.4	88.1	60.8	50.8	23.3	12.5	8.88	6.70	5.74
1.60V/cell	277.6	177.7	132.9	89.0	61.3	51.2	23.5	12.6	8.94	6.78	5.81
Constant Power Discharge (Watts/cell) at 25°C (77°F)											
F.V/Time	1h	2h	3h	5h	8h	10h	24h	48h	72h	100h	120h
1.85V/cell	422.6	287.7	221.7	152.7	108.0	91.3	43.6	22.8	16.5	12.5	10.8
1.80V/cell	472.8	314.5	240.0	163.9	115.5	97.3	45.0	23.7	17.1	12.8	11.1
1.75V/cell	488.2	321.6	244.2	166.7	117.2	98.7	45.3	24.2	17.5	13.0	11.2
1.70V/cell	504.9	328.6	248.4	169.5	118.5	99.7	46.0	24.6	17.6	13.2	11.4
1.67V/cell	514.7	334.3	252.6	170.9	119.6	100.5	46.3	24.9	17.8	13.4	11.5
1.60V/cell	520.3	337.1	254.0	172.3	120.1	101.1	46.7	25.1	17.9	13.5	11.6

OPzV SERIES-TUBULAR GEL

7OPzV490 (2V490Ah)



APPLICATIONS

- Float charging applications: communication center, telecom basestation, UPS, power station, electric substation
- Solar and wind energy storage system
- Off-grid and bad-grid hybrid sites

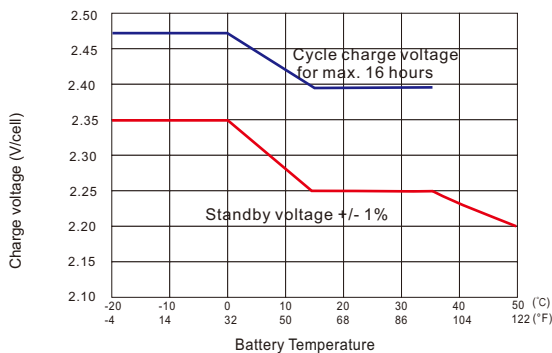
GENERAL FEATURES

- 20 year design life (20°C)
- Strong Lead-calcium alloy tubular plate technology - for longer life in the toughest conditions
- Gelled electrolyte for superior thermal management, long float life
- Proof against deep discharge - greater long-term energy delivery
- Exceptional cycling performance - 2500+ cycles at 60% Depth of Discharge

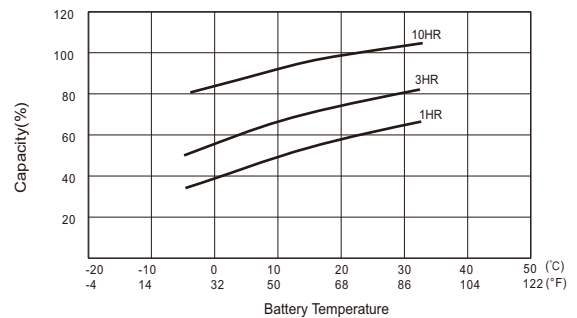
STANDARDS

- Compliance with IEC 60896, IEC 61427, DIN 40742 standards
- UL, CE Approved
- Manufactured in Leoch® IATF 16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

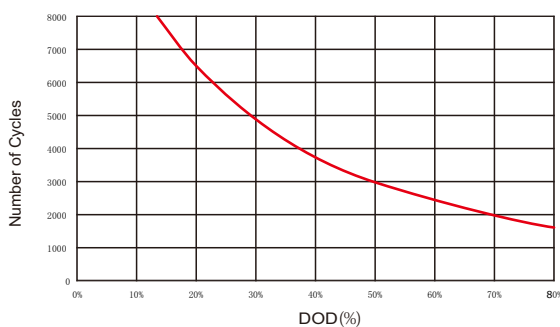
Charge Voltage vs Ambient Temperature Curve



Temperature Effects in Relation to Capacity



Cycle life



Self Discharge Characteristics

