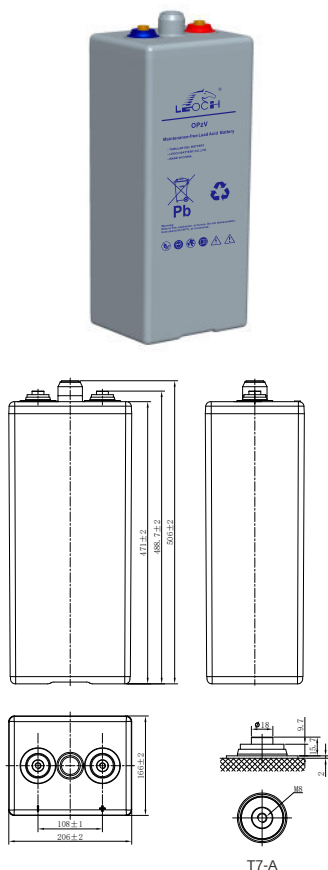


OPzV SERIES-TUBULAR GEL

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	38.7kg(85.3lbs)	
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	117.1	80.1	56.1	49.6	22.9	12.0	8.61	6.52	5.63
1.80V/cell	245.5	162.2	129.8	90.5	63.0	54.9	24.4	12.7	9.19	6.88	5.95
1.75V/cell	255.3	167.8	132.8	92.3	64.0	55.8	24.5	13.1	9.42	7.02	6.04
1.70V/cell	266.4	172.1	135.5	93.6	64.9	56.4	24.9	13.3	9.51	7.12	6.12
1.67V/cell	273.4	174.9	138.0	95.1	65.7	56.9	25.2	13.5	9.59	7.24	6.20
1.60V/cell	277.6	177.7	139.5	96.1	66.2	57.3	25.4	13.6	9.66	7.32	6.27
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	416.3	283.9	226.4	156.3	110.8	98.1	45.5	23.9	17.2	13.1	11.3
1.80V/cell	465.2	310.1	250.3	176.3	124.1	108.5	48.5	25.4	18.4	13.8	11.9
1.75V/cell	476.1	319.3	255.3	179.3	125.8	109.9	48.6	26.0	18.8	14.0	12.1
1.70V/cell	494.7	326.1	259.3	181.2	127.0	111.0	49.4	26.4	18.9	14.2	12.2
1.67V/cell	506.3	330.6	263.7	183.8	128.3	111.6	49.7	26.8	19.1	14.4	12.4
1.60V/cell	507.5	334.1	265.4	184.9	128.8	112.2	50.0	26.9	19.1	14.6	12.5

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

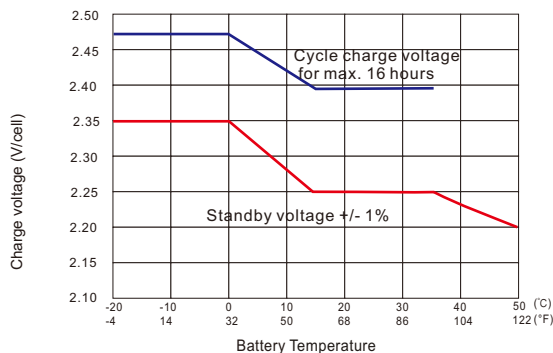
GENERAL FEATURES

- 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

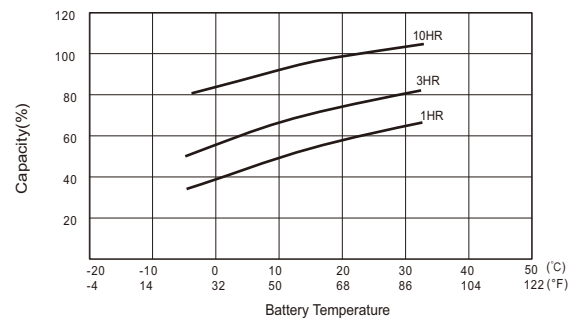
STANDARDS

- 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

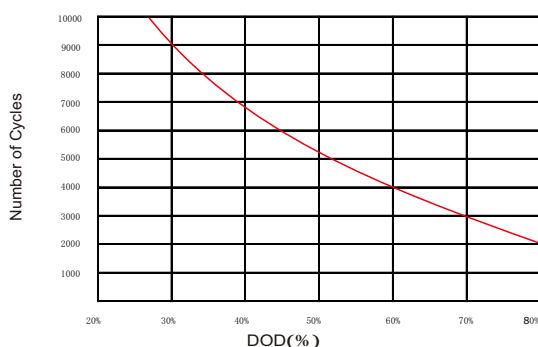
Charge Voltage vs Ambient Temperature Curve



Temperature Effects in Relation to Capacity



Cycle life



Self Discharge Characteristics

