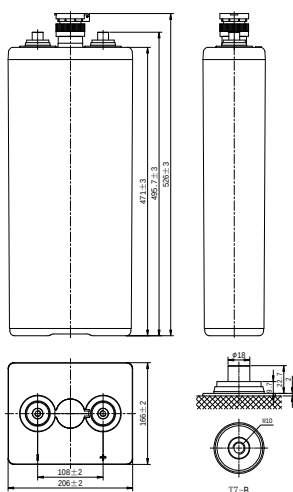


OPzS SERIES-FLOODED BATTERY

7OPzS490 (2V490Ah)



CHARACTERISTICS

Item	Specifications	
Rated Voltage	2V	
Nominal Capacity (20°C)	C ₁₀ , 1.80V/cell	490Ah
Dimension	Length	166mm (6.54inches)
	Width	206mm (8.11inches)
	Container Height	471mm (18.5inches)
	Total Height	526mm (20.7inches)
Approx Weight	38.0kg (83.8lbs)	
Dry Weight	28.2kg (62.2lbs)	
Terminal	T7-B(M10)	
Container Material	SAN transparent container	
Short-circuit current	3675A	
Internal Resistance (20°C)	Approx 0.75 mΩ (Fully charged)	
Operating Temp. Range	Discharge	-15~55°C (5~131°F)
	Charge	0~45°C (32~113°F)
	Storage	-15~45°C (5~113°F)
Nominal Operating Temp. Range	25±5°C (77±9°F)	
Max.Charging Current (20°C)	0.15C	
Charge voltage (20°C)	Standby Use	Cycle Use
	2.23-2.25V/cell	2.40-2.45V/cell
Temp. Coefficient	-3mV/cell/°C	-5mV/cell/°C
	40°C (104°F)	103%
Effect of temp. to Capacity	20°C (68°F)	100%
	0°C (32°F)	86%
Self Discharge	≤4% per month at 20°C	

DISCHARGE TABLE

Constant Current Discharge (Amperes) at 20°C (68°F)													
F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h	24h	72h	100h	120h
1.85V/cell	194.5	142.1	109.4	90.6	78.2	68.7	56.0	46.9	25.8	21.6	7.76	5.82	4.98
1.80V/cell	227.4	156.6	119.6	97.9	83.4	72.9	58.9	49.0	26.8	22.5	8.06	6.04	5.18
1.75V/cell	247.0	166.6	125.9	102.3	87.0	75.7	60.5	50.1	27.3	22.9	8.21	6.15	5.27
1.70V/cell	260.2	174.0	130.0	105.5	89.4	77.6	61.6	50.9	27.8	/	/	/	/
1.65V/cell	270.5	178.1	133.9	107.9	91.4	79.1	62.7	51.8	28.2	/	/	/	/
1.60V/cell	279.8	182.3	136.2	109.5	92.6	80.2	63.4	52.4	28.4	/	/	/	/
Constant Power Discharge (Watts/cell) at 20°C (68°F)													
F.V/Time	1h	2h	3h	4h	5h	6h	8h	10h	20h	24h	72h	100h	120h
1.85V/cell	364.0	268.0	207.4	172.4	149.5	131.9	108.0	90.9	50.1	42.0	15.0	11.2	9.57
1.80V/cell	419.3	292.0	224.2	184.5	158.1	139.0	112.7	94.2	51.7	43.3	15.4	11.5	9.87
1.75V/cell	449.7	308.0	234.4	191.5	164.1	143.4	115.3	95.8	52.4	43.9	15.7	11.7	10.0
1.70V/cell	469.3	319.3	240.5	196.5	167.8	146.5	116.8	97.0	53.1	/	/	/	/
1.65V/cell	484.2	325.5	246.5	200.4	170.9	148.8	118.4	98.3	53.6	/	/	/	/
1.60V/cell	496.8	331.5	249.5	202.3	172.3	150.1	119.3	98.9	53.9	/	/	/	/

OPzS SERIES-FLOODED BATTERY

7OPzS490 (2V490Ah)



APPLICATIONS

- Telecommunications
- Buoy lighting
- Standby power
- Railway signalling
- Emergency lighting systems
- Alternative power (solar, wind)
- Maritime standby power on ships and ashore

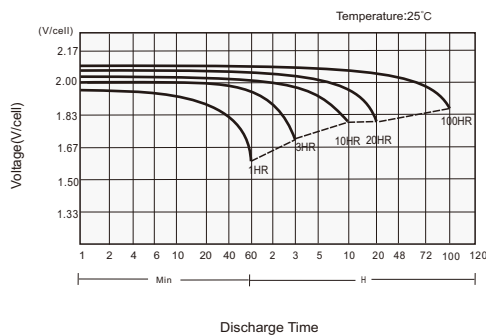
GENERAL FEATURES

- 20 years design life (20°C)
- Positive electrodes-die-cast tubular plates with low antimony lead alloy for longer life
- Stransparent SAN Containers to allow electrolyte level and cell condition to be monitored visually
- Excellent standby and cycling behaviour - long life

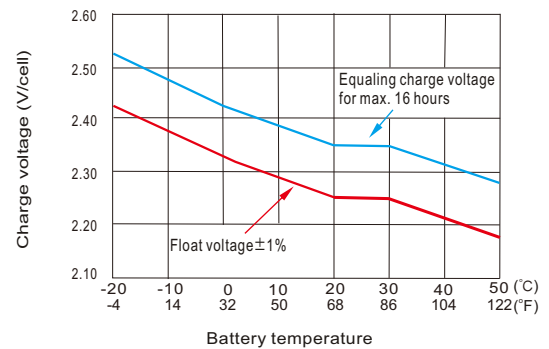
STANDARDS

- Acc.to IEC60896, DIN 40736 standards
- Manufactured in Leoch®IATF 16949, ISO 45001, ISO 9001 and ISO 14001 certified production facilities

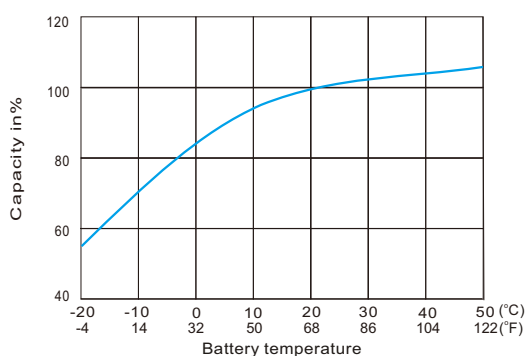
Discharge Characteristics



Charge Voltage vs Ambient Temperature Curve



Discharge Capacity vs Ambient Temperature Curve (I₁₀ A)



Self Discharge Characteristics

