

4 OPzS 200



Specification

Float Charge	U = 2.23 V/cell ± 1%, between 10°C and 30°C $\Delta U/\Delta T = -0.004 \text{ V/K}$ below 10°C in the monthly average
Boost Charge	U = 2.35 to 2.40 V/cell, time limited
Dimension	Length 103 mm Width 206 mm Height 355 mm
Weight	Dry: 13 kg Wet: 18 kg
Self Discharge	Approx. 2% per month at 20°C
Positive Electrode	Tubular plate with low antimony alloy (< 2 %)
Negative Electrode	Flat with long life expander active material
Separation	Microporous separator
Electrolyte	Sulphuric acid of 1.24 kg/l at 20°C
Container	High impact, transparent SAN
Lid	ABS (SAN)* in grey color
Blocks with Blind Cells	4V, 6V, 8V, 10V
Plugs	Ceramic plugs according to DIN 40740
Pole Sealing	100 % gas-and electrolytetight, sliding-pole
Connector	Flexible insulated copper cable with cross-section of 35, 50, 70, 95 or 120 mm ² (35, 50 or 70 mm ²)*
Kind of Protection	IP 25 regarding DIN 40050, touch protected according VBG 4
Reference Temperature	20°C at C10 (1.80 V/cell) and 25°C at C100 (1.85 V/cell)
Initial Capacity	100% Normally up to 80%
Depth of Discharge	More than 80% DOD or discharges beyond final discharge voltages (dependent on discharge current) have to be avoided

Constant Current Discharge (Amperes) at 20°C (68°F)

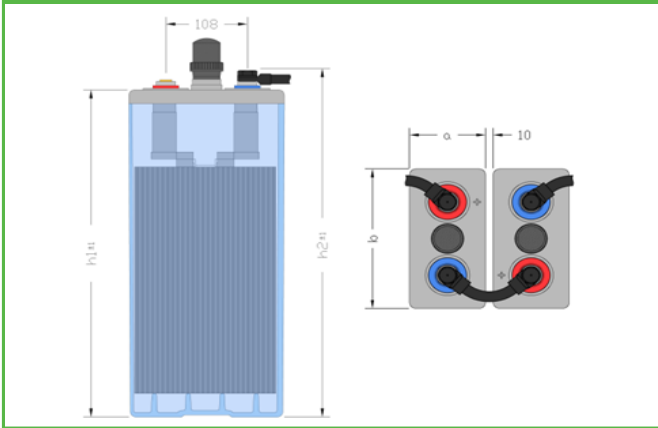
F.V/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V/cell	91.3	82.0	66.9	48.0	38.3	32.4	28.2	25.2	21.0	18.1	8.8
1.87V/cell	118.3	99.6	77.5	55.3	43.6	36.4	31.7	27.3	22.4	19.4	9.6
1.83V/cell	145.8	119.5	88.9	61.5	48.1	39.7	34.1	29.5	23.9	20.5	9.9
1.80V/cell	166.4	133.2	96.2	64.6	50.6	41.6	35.6	30.8	24.9	20.8	11.7
1.75V/cell	195.9	148.8	104.0	68.8	52.6	43.1	36.6	30.8	25.3	21.2	11.9
1.70V/cell	215.8	164.7	110.6	70.1	53.7	43.4	37.6	31.9	26.1	21.4	11.9

Constant Power Discharge (Watts) at 20°C (68°F)

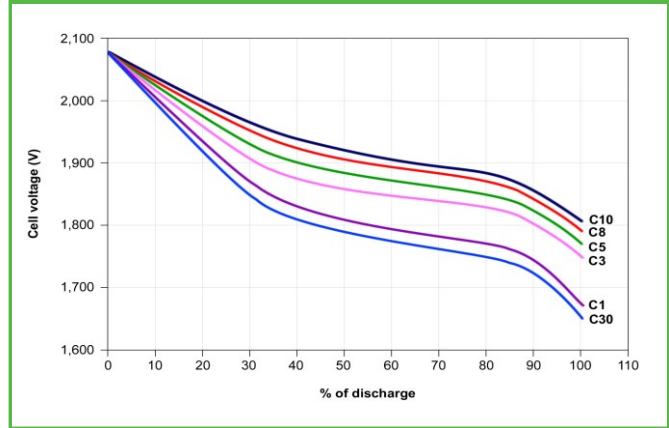
F.V/Time	15min	30min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.90V/cell	173.7	156.5	128.3	92.6	74.3	63.0	54.8	49.3	40.9	35.5	17.5
1.87V/cell	223.3	188.1	146.9	105.6	83.5	70.5	61.6	52.9	43.5	37.9	18.8
1.83V/cell	268.8	221.7	164.4	115.4	91.2	75.5	65.2	56.6	46.2	39.7	19.5
1.80V/cell	303.3	243.3	177.0	120.3	95.0	78.4	67.2	58.5	47.8	39.8	22.8
1.75V/cell	349.2	268.5	189.4	126.9	98.0	80.8	68.9	58.1	48.3	40.4	23.2
1.70V/cell	374.7	293.4	199.6	128.8	99.0	80.8	70.7	60.1	26.1	40.6	22.7

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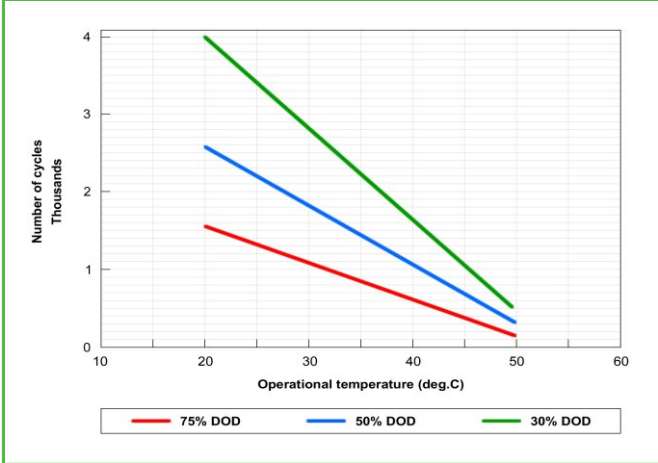
Dimension



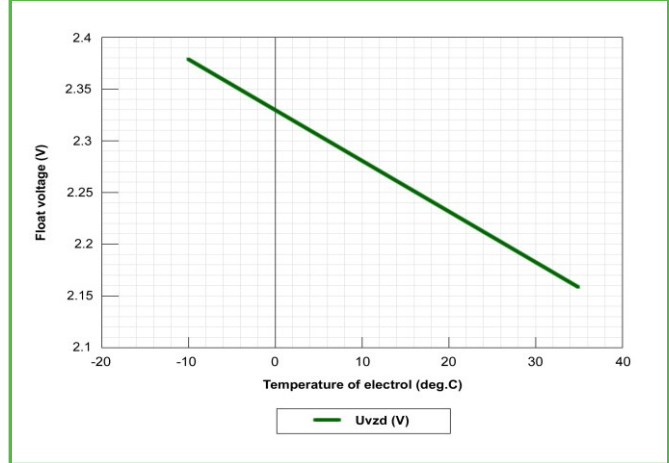
Voltage vs. % of discharge at Cx



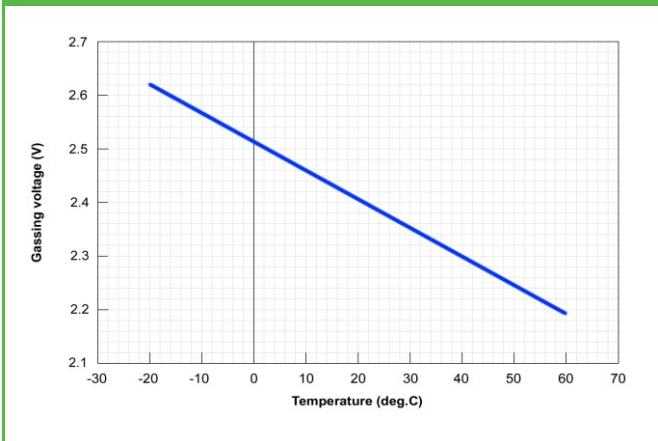
Lifetime in cycles vs. temperature at DOD



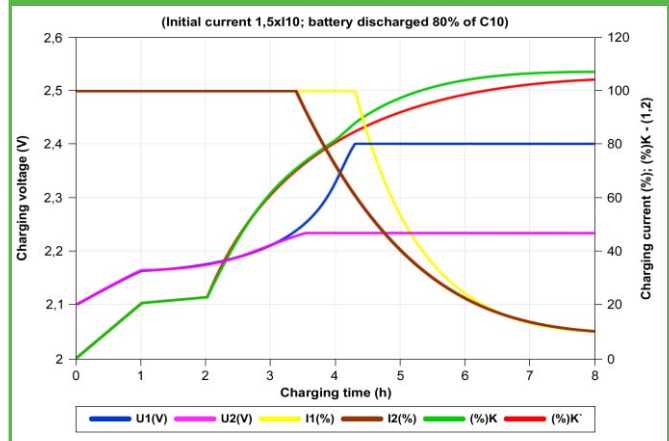
Float voltage as f (T)



Gassing voltage as f (T)



Charging of OPzS cells with IU charger



ETL SEMKO

