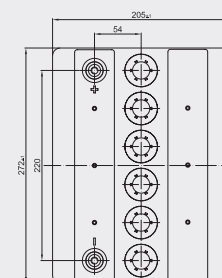
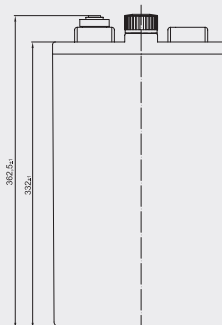


# OPzS Monoblock 12V 1 OPzS 50

## Technical Characteristics

Capacity (Ah), C <sub>10</sub> (1.8 V/cell, 20 °C)	57
Plate Capacity (Ah), C <sub>10</sub> (1.8 V/cell, 20 °C)	50
Number of plates (+) per cell	1
Content in Antimony of positive plates	≤1.65%
Nominal voltage (V)	12
Electrolyte density for fully charged state at 25 °C (gr/ml)	1.24
Floating voltage set point (V/cell)	2.23
Floating voltage tolerance from set point	+0.02 V (2.21-2.25)
Single cell floating voltage tolerance from set point	+0.1V-0.05 V (2.18-2.33)
Initial charge current (A)	5
End of charge Voltage (V/cell)	2.35 to 2.40
Recommended End of Discharge voltage for 10-hr rate (V/cell)	1.80
Recommended End of Discharge voltage for 1-hr rate (V/cell)	1.65
Short circuit current (A)	610
Internal resistance (mOhm/cell)	3.40
Number of cycles at 60% depth of discharge	2000
Self-discharge rate per month	<2.5%
Efficiency factor (kWh)	85%
Efficiency factor (Ah)	95%
Dimensions in mm (LxWxH)	272x205x363
Weight:	
• Without electrolyte (kg)	24.4
• With electrolyte (kg)	37.7
Type and number of poles	M10 / 2



# OPzS Monoblock 12V 1 OPzS 50

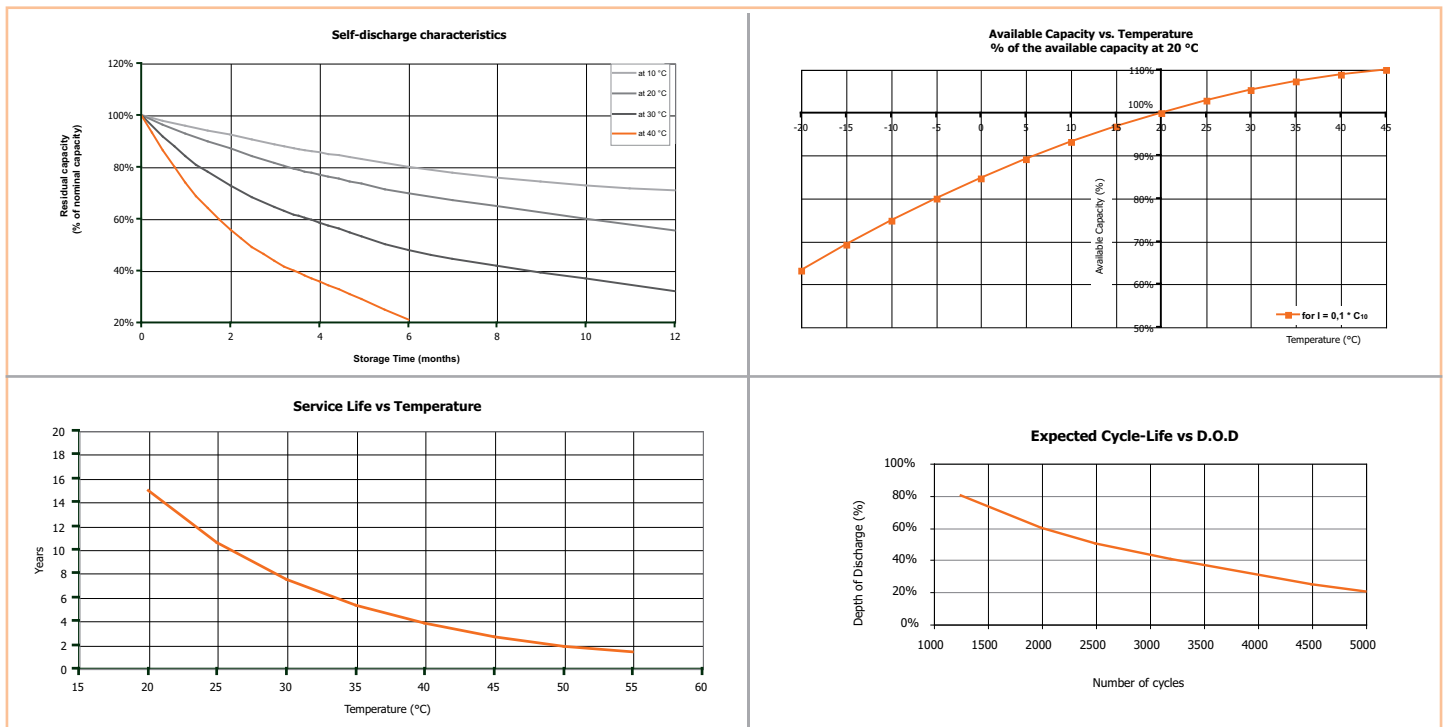
## Constant Current Discharge in A/cell (at 20 °C)

Uend	Discharge Time												
	15 min	30 min	45 min	1 h	1.5 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1.60 V	69.9	47.3	36.2	30.0	23.0	19.0	14.5	11.9	10.1	8.8	7.1	6.0	3.4
1.65 V	66.0	45.9	35.4	29.4	22.7	18.8	14.3	11.8	10.0	8.8	7.0	6.0	3.4
1.70 V	60.8	43.8	34.2	28.7	22.2	18.4	14.1	11.6	9.8	8.6	6.9	5.9	3.4
1.75 V	55.0	40.3	32.1	27.3	21.3	17.8	13.7	11.4	9.6	8.5	6.8	5.8	3.3
1.80 V	46.1	35.5	29.0	25.2	19.9	16.8	13.1	10.9	9.3	8.3	6.6	5.7	3.2
1.83 V	39.6	31.3	26.1	23.0	18.5	15.9	12.5	10.5	8.9	7.9	6.4	5.6	3.1
1.85 V	35.3	28.6	24.0	21.2	17.5	15.1	12.0	10.1	8.7	7.8	6.2	5.4	3.1
1.87 V	31.0	25.6	21.8	19.6	16.4	14.4	11.5	9.6	8.3	7.4	6.0	5.3	3.0
1.90 V	24.6	21.5	18.8	17.1	14.5	12.7	10.4	8.9	7.6	6.8	5.6	4.8	2.8

## Constant Power Discharge in W/cell (at 20 °C)

Uend	Discharge Time												
	15 min	30 min	45 min	1 h	1.5 h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1.60 V	118.7	84.1	65.2	54.5	41.9	34.9	26.9	22.3	18.9	16.7	13.4	11.5	6.5
1.65 V	113.2	81.9	63.9	53.5	41.3	34.5	26.6	22.0	18.7	16.5	13.3	11.4	6.5
1.70 V	105.8	78.4	61.8	52.2	40.5	33.9	26.2	21.7	18.5	16.3	13.1	11.2	6.4
1.75 V	98.7	73.0	58.4	49.9	39.3	32.9	25.6	21.3	18.2	16.1	12.9	11.1	6.3
1.80 V	83.9	64.7	53.2	46.3	37.0	31.5	24.6	20.6	17.6	15.7	12.6	10.9	6.2
1.83 V	72.9	58.1	48.5	42.6	34.8	30.0	23.7	19.9	17.0	15.2	12.2	10.7	6.1
1.85 V	65.6	53.4	44.9	39.7	33.0	28.7	22.9	19.3	16.6	14.9	12.0	10.5	5.9
1.87 V	58.2	48.1	41.3	37.1	31.0	27.4	22.1	18.6	16.0	14.4	11.7	10.3	5.8
1.90 V	46.9	41.1	36.0	32.8	27.6	24.6	20.2	17.2	14.9	13.3	11.0	9.5	5.5

## Diagrams



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