RID 2 OPzS100 / 2V

TECHNICAL INFORMATION:
- **2** Voltage (V)
- **111** Capacity C10 (Ah)
- **C_{10}/10h = 11,1 A** Discharge current
- **1,80 V** Final discharge voltage/cell
- **1,24 ± 0,01 kg/l at 20°C** Nominal S.G. of electrolyte
- **20°C** Rated temperature
- **20±1 Nm** Specified torque for poll screws
- **1,48 mOm** Internal resistance
- **1350 A** Short circuit current
- **< 2% per month at 20°C** Self-discharge
- **103x206x420** LxWxH (mm)
- **EN IEC 62485-2** Ventilation requirement
- **13,7 kg ±5%** Total Weight (kg)
- **DIN 40736-1** DIN Marking

CHARGING:
- **I max without limitation** IU - characteristic
- **U = 2,23 V/cell +- 1%** Float charge
- **U = 2,35 to 2,40 V/cell** Boost charge
- **ΔU/ΔT= - 0,004 V/K** Temp. Correction factor

DESIGN:
- Positive electrode: **Tubular plate with a nonwoven polyester gauntlet and solid grids in corrosion resistant LA-PbSbSe alloy**
- Negative electrode: **Pasted type with long-life expander material**
- Separation: **Micro porous separator**
- Electrolyte: **Sulphuric acid with a density of 1,24 kg/l**
- Container: **high impact transparent SAN with ABS lid in grey color**
- Plugs: **Ceramic plugs according to DIN 40740**
- Pole: **M10 brass insertion**
- Pole sealing: **100% gas and electrolyte tight sliding pole**
- Connectors: **Flexible insulated copper cables, with cross-section of 35 mm²**
- Type of protection: **IP 25 regarding DIN 40050, touch protected according to VBG 4**

MAINTENANCE:
- Every 6 months: **Check battery voltage, pilot cells voltage, temperature**
- Every 12 months: **Check and record battery and cells voltages and temperatures#**

OPERATIONAL DATA:
- Operational temperature: **-20°C to 55°C;**
- Recommended operational temperature: **10°C to 30°C**
- Design life: **20 years at 20°C; 10 years at 30°C; 5 years at 40°C**
- Maintenance free: **no toping up water during operational life**
- EN 60896-11 cycles: **> 1500**
- Transport: **No dangerous goods during air, sea and land transport**

DISCHARGE CHARACTERISTICS:
- Reference temperature: **20°C**
- Initial capacity: **100%**
- Depth of discharge (DOD): **up to 80%***

**** Deep discharges more than 80% DOD or discharges beyond final discharge voltages (dependent on discharge current) should be avoided***

MADE IN EUROPE

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Discharge at constant current [A] at 20°C

Cells [V]	15 min	30 min	1h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1,65 V	117	92,7	62,7	39,3	30,1	24,8	21,4	16,8	14,5	11,9	6,7
1,70 V	113	89,0	60,2	37,7	28,9	23,8	20,6	16,1	13,9	11,4	6,5
1,75 V	104	79,6	56,2	37,2	28,4	23,2	19,8	15,9	13,7	11,3	6,3
1,80V	89,0	71,9	52,2	35,7	27,4	22,7	19,2	15,6	13,4	11,1	6,2
1,83 V	78,7	65,2	48,5	33,4	26,0	21,4	18,5	15,1	12,8	10,8	5,0
1,87 V	65	54,8	42,6	29,9	23,6	19,6	17,2	13,9	12,2	10,4	4,8
1,90 V	47,3	42,7	35,0	24,7	19,5	16,5	14,4	12,9	10,8	9,3	4,3

Discharge at constant power [W] at 20°C

Cells [V]	15 min	30 min	1h	2 h	3 h	4 h	5 h	6 h	8 h	10 h	20 h
1,65 V	201	163,2	111,6	71,2	55,1	46,0	40,0	31,5	27,3	23,6	12,8
1,70 V	196	158,5	108,7	69,1	53,3	44,3	38,5	30,3	26,3	21,7	12,4
1,75 V	185	143,5	102,4	68,7	52,9	43,4	37,2	30,2	26,0	21,5	12,3
1,80V	161,0	131,3	96,1	66,5	51,5	42,7	36,4	29,8	25,7	21,2	12,2
1,83 V	145,1	120,9	90,4	62,6	49,3	40,7	35,3	29,0	24,7	20,8	9,7
1,87 V	122	103,4	80,8	57,0	45,3	37,8	33,3	27,0	23,7	20,3	9,6
1,90 V	90,1	81,5	67,1	47,7	37,9	32,0	28,1	24,5	21,2	18,2	8,5