

## RID 12 OPzS1500 / 2V

### TECHNICAL INFORMATION:

- 2 Voltage (V)
- 1645 Capacity C10 (Ah)
- $C_{10}/10h = 164,5 A$  Discharge current
- 1,80 V Final discharge voltage/cell
- $1,24 \pm 0,01 \text{ kg/l}$  at 20°C Nominal S.G. of electrolyte
- 20°C Rated temperature
- $20 \pm 1 \text{ Nm}$  Specified torque for poll screws
- 0,23 mOm Internal resistance
- 8605 A Short circuit current
- < 2% per month at 20°C Self-discharge
- 210x275x861 LxWxH (mm)
- EN IEC 62485-2 Ventilation requirement
- 119 kg  $\pm 5\%$  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
- $\Delta U/\Delta T = - 0,004 \text{ V/K}$  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 mm<sup>2</sup>**
- 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 topping 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



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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	1356	1177	899	632	484	395	341	292	239	195	110
1,70 V	1184	1028	785	552	423	345	298	255	208	171	96,4
1,75 V	968	880	715	522	407	336	289	245	202	169	94,9
1,80V	806	758	629	476	378	316	274	238	196	164	92,8
1,83 V	676	639	563	436	350	295	258	225	187	158	87,8
1,87 V	523	504	471	373	305	263	231	204	170	145	83,4
1,90 V	410	401	375	325	267	233	203	182	150	129	82,1

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	2319	2071	1601	1145	886	732	637	548	450	387	210
1,70 V	2056	1831	1418	1011	780	642	559	480	394	324	185
1,75 V	1725	1588	1302	963	757	629	545	465	385	323	185
1,80V	1459	1384	1159	886	709	595	520	453	375	315	182
1,83 V	1245	1186	1050	818	664	561	493	432	361	305	172
1,87 V	983	951	893	711	585	508	448	396	332	284	165
1,90 V	780	766	719	626	518	454	396	347	294	255	163