

RID 18 OPzS2250 / 2V

TECHNICAL INFORMATION:

- 2 Voltage (V)
- 2455 Capacity C10 (Ah)
- $C_{10}/10h = 245,5 A$ 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
- 0,15 mOm Internal resistance
- 13506 A Short circuit current
- < 2% per month at 20°C Self-discharge
- 212x487x837 LxWxH (mm)
- EN IEC 62485-2 Ventilation requirement
- 192 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 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 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	2047	1774	1346	942	717	584	506	434	354	289	164
1,70 V	1804	1563	1187	830	632	515	446	382	312	255	144
1,75 V	1476	1338	1081	784	608	502	433	368	303	253	142
1,80V	1217	1139	951	715	565	473	410	356	293	246	138
1,83 V	1019	972	850	654	524	442	386	337	279	236	131
1,87 V	798	751	711	559	456	393	346	306	255	217	128
1,90 V	594	582	562	487	400	350	305	272	225	194	123

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	3500	3122	2396	1704	1313	1083	943	813	666	574	312
1,70 V	3131	2784	2143	1519	1166	959	835	720	589	484	277
1,75 V	2631	2414	1969	1446	1133	941	815	697	576	482	276
1,80V	2202	2079	1751	1331	1061	891	777	679	560	471	271
1,83 V	1879	1803	1586	1228	992	840	736	647	539	456	257
1,87 V	1499	1419	1348	1066	874	759	670	594	496	425	253
1,90 V	1131	1110	1079	940	777	681	594	519	441	382	244