

## RID 6 OPzS420 / 2V

### TECHNICAL INFORMATION:

- 2 Voltage (V)
- 470 Capacity C10 (Ah)
- $C_{10}/10h = 47 A$  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
- 0,55 mOm Internal resistance
- 3641 A Short circuit current
- < 2% per month at 20°C Self-discharge
- 145x206x536 LxWxH (mm)
- EN IEC 62485-2 Ventilation requirement
- 34 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	437	350	256	164	124	101	88,3	76,2	62,3	51,8	28,6
1,70 V	414	332	243	155	118	95,9	83,6	72,2	59,0	49,1	27,1
1,75 V	365	301	226	153	116	94,8	81,4	69,7	57,3	48,1	26,6
1,80V	309	266	205	143	112	91,8	79,8	69,0	56,3	47,0	25,9
1,83 V	271	238	189	134	106	87,3	75,9	65,6	54,1	45,5	25,4
1,87 V	218	199	161	119	95,1	78,9	68,8	59,9	50,6	42,8	24,9
1,90 V	161	157	141	104	83,4	69,4	60,9	54,5	45,7	40,8	24,2

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	748	616	456	296	228	188	165	143	117	103	55
1,70 V	719	591	438	283	217	179	157	136	112	93	52
1,75 V	651	543	411	282	216	178	153	132	109	92	52
1,80V	559	486	378	265	209	173	151	132	108	90	51
1,83 V	500	441	352	251	200	166	145	126	105	88	50
1,87 V	409	375	305	228	182	152	133	116	98	84	49
1,90 V	307	299	270	200	162	135	119	104	90	80	48