

## RID 2 OPzS150 / 2V

### TECHNICAL INFORMATION:

- 2 Voltage (V)
- 160 Capacity C10 (Ah)
- $C_{10}/10h = 16 A$  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
- 1,08 mOm Internal resistance
- 1845 A Short circuit current
- < 2% per month at 20°C Self-discharge
- 103x206x420 LxWxH (mm)
- EN IEC 62485-2 Ventilation requirement
- 16 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*



## RID 2 OPzS150 / 2V

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	167	132	89,9	56,9	43,1	35,2	30,8	25,7	20,9	17,2	9,7
1,70 V	161	127	86,3	54,7	41,4	33,8	29,5	24,7	20,1	16,5	9,3
1,75 V	148	114	80,7	53,7	40,5	33,1	28,7	24,1	19,7	16,3	9,0
1,80V	127	103	74,9	52,6	39,5	32,7	28,1	23,6	19,4	16,0	8,7
1,83 V	113	93,2	70,0	47,9	37,1	31,2	26,0	22,9	19,1	15,5	6,6
1,87 V	93,5	78,0	61,2	43,2	34,4	28,8	24,6	21,6	18,0	14,8	6,5
1,90 V	71,0	64,8	52,5	37,0	29,8	24,7	21,6	19,5	16,5	14,4	5,7

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	286	233	160	103	79	65	57	48	39	34	18
1,70 V	279	226	156	100	76	63	55	47	38	31	18
1,75 V	264	205	147	99	75	62	54	46	37	31	18
1,80V	230	187	138	98	74	62	53	45	37	31	17
1,83 V	208	173	131	90	70	59	50	44	37	30	13
1,87 V	176	147	116	82	66	56	48	42	35	29	13
1,90 V	135	124	101	71	58	48	42	37	32	28	11