

Technical specification for stationary 2V cells type

OPzS

Design

Positive electrode tubular - plate with a nonwoven polyester gauntlet and solid grids in Corrosion- resistant LA-PbSbSe – alloy
 Negative electrode grid - 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.
 Lid ABS in grey color
 Plug for arresting aerosols - ceramic plugs according DIN 40 740
 Pole - bushing 100% gas- and electrolyte-tight, sliding-pole
 Kind of pole M10 brass insertion
 Connectors flexible insulated copper cables.



Technical data

Nominal voltage of blocks: 2,0 V
 Nominal S.G. of electrolyte: 1,24 ± 0,01 kg/l at 20°C
 Rated temperature: 20°C
 Specified torque for poll screws: 20±1 Nm

OPzS_2V												
Uf_V/cell	1,80	1,77	1,75	1,67	IEC 896-1		dim.			mass		pict
discharging time (h)	10	5	3	1	Ri	Isc	L	W	H1	bat. dry	bat. +el.	
capacity	Ah	Ah	Ah	Ah	mOhM	A	mm	mm	mm	kg	kg	
2 OPzS 100	107	94	82	60	1,48	1350	103	206	375	8,7	13,7	A
3 OPzS 150	155	136	117	86	1,08	1845	103	206	375	11	16	A
4 OPzS 200	208	180	158	115	0,84	2376	103	206	375	13	18	A
5 OPzS 250	259	224	197	144	0,69	2887	124	206	375	16	22	A
6 OPzS 300	310	268	234	171	0,58	3438	145	206	375	18	26	A
5 OPzS 350	380	325	280	205	0,64	3137	124	206	491	20	29	A
6 OPzS 420	454	389	336	245	0,55	3641	145	206	491	24	34	A
7 OPzS 490	532	454	392	286	0,48	4169	166	206	491	28	39	A
6 OPzS 600	640	544	477	348	0,45	4466	145	206	666	35	50	A
8 OPzS 800	853	727	638	466	0,33	6035	191	210	666	46	65	B
10 OPzS 1000	1065	909	796	581	0,26	7720	233	210	666	57	80	B
12 OPzS 1200	1278	1088	954	696	0,23	8814	275	210	666	66	93	B
12 OPzS 1500	1613	1381	1196	873	0,23	8605	275	210	821	88	119	C
16 OPzS 2000	2143	1838	1591	1162	0,17	12042	397	212	797	115	160	D
20 OPzS 2500	2675	2295	1988	1452	0,13	15007	487	212	797	145	200	D
24 OPzS 3000	3208	2752	2382	1739	0,12	17390	576	212	797	170	240	D
electrolyte	1,24+/-0.01at 20°C											

Charging:

IU - characteristic	I max without limitation
Float charge	U = 2,23 V/cell +- 1%,
Boost charge	U = 2,35 to 2,40 V/cell
Temp. Correction factor =	(- 0,004) V/Cell,°K

Self-discharge app. < 3% per month at 20°C

Operational temperature	-20°C to 55°C
Recommended	10°C to 30°C

Discharge characteristics

Reference temperature 20°C

Initial capacity 100%

Depth of discharge (DOD) normally up to 80%

Deep discharges more than 80% DOD or discharges beyond final discharge

Voltages (dependent on discharge current) have to be avoided

Maintenance

Every 6 months check battery voltage, pilot block voltage, temperature

Every 12 months record battery and block voltages and temperatures

Operational data

Design life 20 years at 20°C

10 years at 30°C

5 years at 40°C

Water - refilling - interval more than 3 years at float voltage at 20°C

IEC 896-1 cycles 1500

Standard DIN 40 736 part 1

Tests according IEC 896 - 1