

TAB OPzS – Basic Technical Data

Design

positive electrode - tubular plate with a polyester gauntlet and solid grids in a corrosion- resistant

PbSb1.6SnSe - alloy

negative electrode grid - plate in lead-antimony alloy with long - life expander active material

separation - microporous separator

electrolyte - sulphuric acid with a density of 1,24+/-0,01 kg/l at 20°C,

container - high impact, transparent SAN (Styren-Acryl-Nitryl)

lid - ABS in dark grey color

plugs – transport labyrinth plugs for arresting aerosol; ceramic plugs

plugs - according DIN 40 740

pole - bushing 100% gas- and electrolyte-tight, sliding-pole

kind of pole – bolt on M10 brass insertion or welded type

connectors - flexible insulated copper cables, with cross-section of 35, 50, 70, 95 or 120 mm²

kind of protection - IP 25 regarding DIN 40050, touch protected according VBG 4.

Charging

I_U - characteristic I_{max} without limitation

Float voltage - U_{float} = 2,23 V/cell +- 1%, between 10°C and 55°C

$\Delta U/\Delta T$ = -0,004 V/K below 10°C in the monthly average

boost charge - U_{boost} = 2,35 to 2,40V/cell, time limited

charging time - up to 88% 6h with 1,5*I₁₀ initial current, 2.23 V/cell, 50% C₁₀ discharged

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

water - refilling - interval more than 2 years at 20°C

IEC 896-1 cycles 1500

self-discharge app. 2 % per month at 20°C

operational temperature -20°C to 55°C

recommended temperature 10°C to 30°C

ventilation requirement 50% f₁=0,5 due to low antimony alloy (acc. EN 50272-2)

Dimensions according standard DIN 40 736 part 1

tests according IEC 896 – 1

safety standards VDE 0510 part 2 and EN 50272-2

transport - no dangerous goods during road transport