

# **Product information**

Vented tubular cells type OPzS are suitable for all standby applications which require a safe and reliable battery with long life.

The OPzS product is used in standby power system for telecommunications, power generation and distribution, emergency lighting etc. The OPzS range is distinguished by its high tolerance to cycling and long float charge life.

# **OPzS**

# **Vented Tubular Cells**

# **Battery design**

### - Positive Tubular Plate

The positive plate (spines) is made of a lead low antimony alloy. The antimony content is only 1.7%.

## - Negative flat plate

The negative plate is a pasted flat plate.

## - Separator

The separator between the positive and negative plates is made of microporous material combined with a corrugated sheet.

#### - Container

The cell containers are made of transparent SAN with clearly marked maximum and minimum electrolyte levels.

#### - Electrolyte

The electrolyte is dilute sulphuric acid with a specific gravity of 1.240 +/- 0.010 at 20°C in fully charged condition.

#### - Vent plug

The vent plug is a flame arresting type. On request vent plugs allowing topping up of the cell and taking specific gravity reading, without removing it from the cell are available.

# - Terminal

The terminals are made of lead with a copper insert

#### - Connector

The connectors are copper screwed intercell connections with protection that allow cell voltage measurements without being removed.

# - Charging

The float charge voltage is 2.23 Vpc. For further charging information please refer to our installation, operation and maintenance instructions.

#### **Features**

- Low water comsumption with topping up interval of approximately 3 years.
- Float charge at 2.23 Vpc is sufficient to fully recharge the battery after discharge.
- Long service life, when operated on float applications at 2.23 Vpc and 20°C.
- Excellent cycle life for regular charge/ discharge applications.
- The glass clear SAN containers allow excellent visibility of the internal components and electrolyte. Clearly marked maximum and minimum lines ensure easy checking of the electrolyte level.
- Compliance with standards : DIN 40736.1 IEC 896.1



4 OP25 200         2         216         103         206         394         12.4         17.2         3.9           5 OP25 250         2         270         124         206         394         14.8         20.8         4.9           6 OP25 300         2         324         145         206         394         17.1         24.3         5.8           5 OP25 350         2         390         124         206         510         19.0         26.9         6.7           6 OP25 420         2         468         145         206         510         22.1         31.5         8           7 OP25 490         2         546         166         206         510         25.2         36.1         9.3           6 OP25 600         2         660         145         206         685         31.9         44.8         11.1           7 OP25 700         4         817         210         191         685         40.4         57.6         14.8           8 OP25 800         4         880         210         191         685         44.4         61.3         14.5           9 OP25 900         4         1040         210         <	Туре	No	Capacity Ah/10h		Dimensions (mm)		Weight approx. kg		Electrolyte
5 OPz5 250         2         270         124         206         394         14.8         20.8         4.9           6 OPz5 300         2         324         145         206         394         17.1         24.3         5.8           5 OPz5 350         2         390         124         206         510         19.0         26.9         6.7           6 OPz5 420         2         468         145         206         510         19.0         26.9         6.7           6 OPz5 490         2         546         166         206         510         25.2         36.1         9.3           6 OPz5 600         2         560         145         206         685         31.9         44.8         11.1           7 OPz5 700         4         817         210         191         685         40.4         57.6         14.8           8 OPz5 800         4         880         210         191         685         44.4         61.3         14.5           9 OPz5 900         4         1040         210         233         685         49.6         70.9         18.4           10 OPz5 1000         4         1260         210	.,	of terminals		L	W			filled	Volume inl
6 OPZS 300	4 OPzS 200	2	216	103	206	394	12.4	17.2	3.9
5 OPZS 350         2         390         124         206         510         19.0         26.9         6.7           6 OPZS 420         2         468         145         206         510         22.1         31.5         8           7 OPZS 490         2         546         166         206         510         25.2         36.1         9.3           6 OPZS 600         2         660         145         206         685         31.9         44.8         11.1           7 OPZS 700         4         817         210         191         685         40.4         57.6         14.8           8 OPZS 800         4         880         210         191         685         44.4         61.3         14.5           9 OPZS 900         4         1040         210         233         685         49.6         70.9         18.4           10 OPZS 1000         4         1100         210         275         685         58.9         84.4         20.8           12 OPZS 1200         4         1320         210         275         685         62.8         88.0         20.6           11 OPZS 1375         4         1590         210 <td>5 OPzS 250</td> <td>2</td> <td>270</td> <td>124</td> <td>206</td> <td>394</td> <td>14.8</td> <td>20.8</td> <td>4.9</td>	5 OPzS 250	2	270	124	206	394	14.8	20.8	4.9
6 OPZS 420         2         468         145         206         510         22.1         31.5         8           7 OPZS 490         2         546         166         206         510         25.2         36.1         9.3           6 OPZS 600         2         660         145         206         685         31.9         44.8         11.1           7 OPZS 700         4         817         210         191         685         40.4         57.6         14.8           8 OPZS 800         4         880         210         191         685         44.4         61.3         14.5           9 OPZS 900         4         1040         210         233         685         49.6         70.9         18.4           10 OPZS 1000         4         1100         210         233         685         53.5         74.6         18.1           11 OPZS 1100         4         1260         210         275         685         58.9         84.4         20.8           12 OPZS 1200         4         1320         210         275         685         62.8         88.0         20.6           11 OPZS 1375         4         1590         21	6 OPzS 300	2	324	145	206	394	17.1	24.3	5.8
7 OPzS 490         2         546         166         206         510         25.2         36.1         9.3           6 OPzS 600         2         660         145         206         685         31.9         44.8         11.1           7 OPzS 700         4         817         210         191         685         40.4         57.6         14.8           8 OPzS 800         4         880         210         191         685         44.4         61.3         14.5           9 OPzS 900         4         1040         210         233         685         49.6         70.9         18.4           10 OPzS 1000         4         1100         210         233         685         53.5         74.6         18.1           11 OPzS 1100         4         1260         210         275         685         58.9         84.4         20.8           12 OPzS 1200         4         1320         210         275         685         62.8         88.0         20.6           11 OPzS 1375         4         1590         210         275         835         74.5         109         27.6           12 OPzS 1500         4         1680         <	5 OPzS 350	2	390	124	206	510	19.0	26.9	6.7
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9 OPzS 900	7 OPzS 700	4	817	210	191	685	40.4	57.6	14.8
10 OPzS 1000       4       1100       210       233       685       53.5       74.6       18.1         11 OPzS 1100       4       1260       210       275       685       58.9       84.4       20.8         12 OPzS 1200       4       1320       210       275       685       62.8       88.0       20.6         11 OPzS 1375       4       1590       210       275       835       74.5       109       27.6         12 OPzS 1500       4       1680       210       275       835       80.2       114       27.3         13 OPzS 1625       6       1910       214       399       811       91.2       140       39.6         14 OPzS 1750       6       2040       214       399       811       95.8       144       39.6         15 OPzS 1875       6       2150       214       399       811       101       149       38.9         16 OPzS 2000       6       2240       214       399       811       105       151       39         17 OPzS 2125       8       2470       212       487       811       119       180       48.5         18 OPzS 2250	8 OPzS 800	4	880	210	191	685	44.4	61.3	14.5
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15 OPzS 1875       6       2150       214       399       811       101       149       38.9         16 OPzS 2000       6       2240       214       399       811       105       151       39         17 OPzS 2125       8       2470       212       487       811       119       180       48.5         18 OPzS 2250       8       2600       212       487       811       125       184       47.8         19 OPzS 2375       8       2710       212       487       811       130       189       47.5         20 OPzS 2500       8       2800       212       487       811       134       193       47.6	13 OPzS 1625	6	1910	214	399	811	91.2	140	39.6
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17 OPzS 2125     8     2470     212     487     811     119     180     48.5       18 OPzS 2250     8     2600     212     487     811     125     184     47.8       19 OPzS 2375     8     2710     212     487     811     130     189     47.5       20 OPzS 2500     8     2800     212     487     811     134     193     47.6	15 OPzS 1875	6	2150	214	399	811	101	149	38.9
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19 OPzS 2375     8     2710     212     487     811     130     189     47.5       20 OPzS 2500     8     2800     212     487     811     134     193     47.6	17 OPzS 2125	8	2470	212	487	811	119	180	48.5
20 OPzS 2500 8 2800 212 487 811 134 193 47.6	18 OPzS 2250	8	2600	212	487	811	125	184	47.8
	19 OPzS 2375	8	2710	212	487	811	130	189	47.5
22 OPzS 2750         8         3150         212         576         811         153         225         57.8	20 OPzS 2500	8	2800	212	487	811	134	193	47.6
	22 OPzS 2750	8	3150	212	576	811	153	225	57.8
24 OPzS 3000 8 3360 212 576 811 163 234 56.4	24 OPzS 3000	8	3360	212	576	811	163	234	56.4

All the weights and dimensions are subject to normal production tolerances.

On request, cells with lead-calcium alloy at the positive plate are available (OPzSC)

