OPzS2-3000 (2V3000Ah)

Fortune CP OPzS series is a flooded Lead Acid battery that adopts Tubular Plate technology to offer high reliability and performance. The Battery is designed and manufactured according to DIN40736-2/IEC60896-11 standards and with die-casting positive spine and patent formula of active material.OPzS series exceeds DIN40736-2/IEC60896-11 standard values with more than 20 years floating design life at 25℃ and is even more suitable for cyclic use(PV/solar,traction etc) under extreme operating conditions.

Fortune CP

Specification

Voltage Per Unit	2V
Capacity	3000Ah@10hr-rate to 1.85V per cell @25°C
Approx Weight	Without Electrolyte 166.7 kg With Electrolyte 226.8 kg
Max. Discharge Current	10000 A (5 sec)
Internal Resistance	Approx. 0.11 mΩ
Operating Temperature Range	Discharge: -15°C~50°C Charge: 0°C~40°C Storage: -15°C~50°C
Optimal Operating Temperature Range	25°C±5°C
Float charging Voltage	2.23 to 2.25 V(DC)/cell at 25°C
Maximum Charging Current	300A
Cycle Service	2.40 to 2.45 V(DC)/cell at 25°C
Self Discharge	Self-discharge rate less than 3.5% per month at 25°C. Please charge batteries before using.
Terminal	Thread insert & Bolt (F10-M8)
Container Material	A.S. (UL94-HB), and UL94-V0 is optional

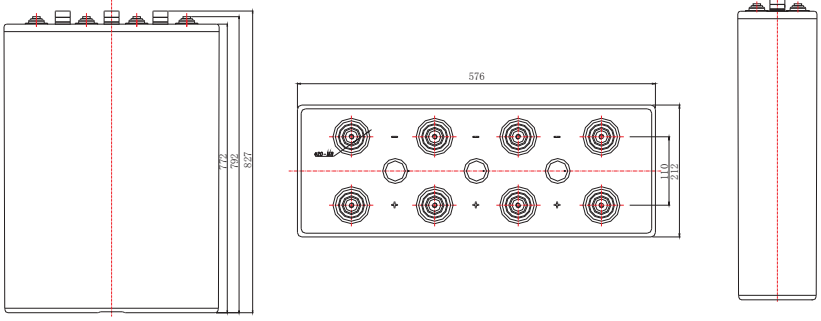
MH28539

G4M20206-0910-E-16

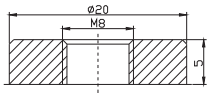
ISO9001:2000 Certificate

Dimensions

Unit: mm Dimension: 576(L)×212(W)×827(H)



Terminal F10
torque(N.m):12.5



Constant Current Discharge Characteristics : A(25°C)

F.V/ Time	30min	1h	2h	4h	5h	6h	8h	10h	20h
1.90	1596	1265	892	538.7	478.8	419.0	326.9	280.4	161.2
1.87	1784	1395	957	568.6	506.4	444.2	342.2	293.0	168.4
1.83	2044	1557	1038	598.5	529.2	459.9	357.5	305.6	175.7
1.80	2271	1687	1077	610.5	541.5	472.5	366.7	315.0	181.1
1.75	2531	1807	1126	620.6	551.3	482.0	372.8	321.3	184.7
1.70	2790	1866	1158	631.4	559.8	488.3	375.8	324.5	186.6
1.65	2878	1982	1197	640.4	567.5	494.6	378.9	327.6	188.4
1.60	3001	2051	1243	658.4	579.6	500.9	381.9	330.8	190.2

Constant Power Discharge Characteristics : W(25°C)

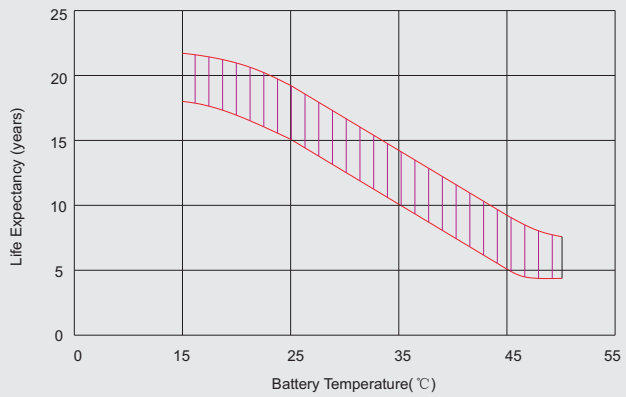
F.V/ Time	30min	1h	2h	4h	5h	6h	8h	10h	20h
1.90	3055	2429	1725	1054	941.3	828.5	653.9	571.4	328.5
1.87	3362	2638	1829	1111	993.4	875.7	681.4	595.8	342.6
1.83	3766	2876	1947	1165	1035	904.1	705.8	617.2	354.9
1.80	4115	3068	2012	1187	1057	926.1	721.1	632.5	363.7
1.75	4464	3205	2077	1203	1072	941.9	730.3	641.7	369.0
1.70	4787	3238	2129	1222	1087	951.3	736.4	647.8	372.5
1.65	4868	3381	2188	1238	1099	960.8	742.5	650.8	374.2
1.60	4927	3486	2240	1269	1118	967.1	745.5	653.9	376.0

All mentioned values are average values.

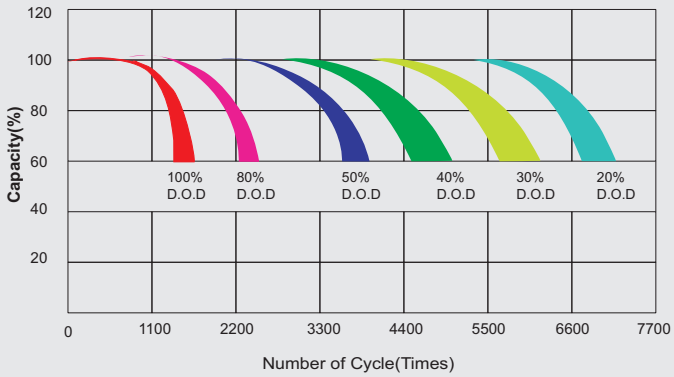
OPzS2-3000

2V3000Ah

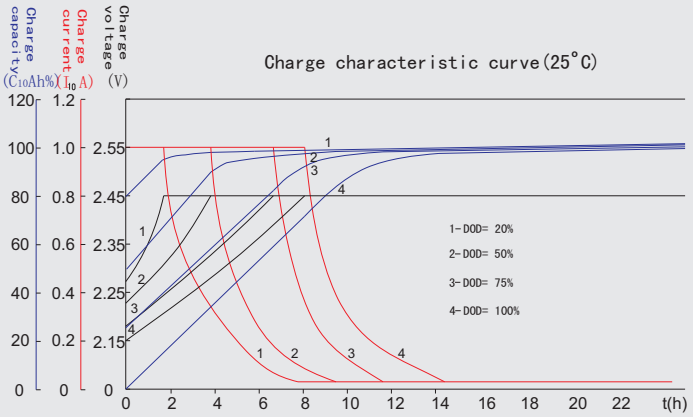
Effect of temperature on long term float life



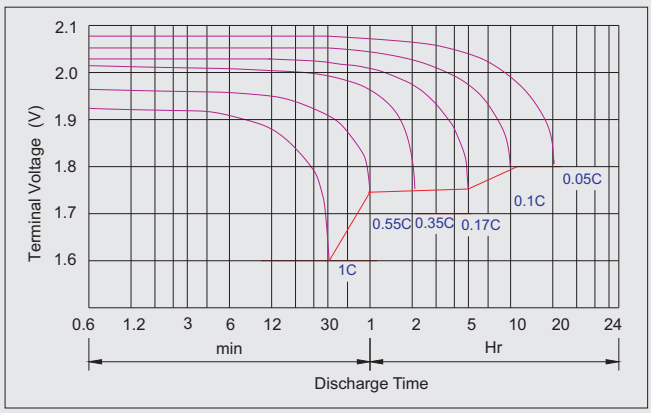
Life characteristics of cyclic use



Charge characteristic Curve for cyclic use



Discharge characteristic Curve



Long time discharge capacity for solar/wind application						
Capacity / Model	C24 (Ah)	C48 (Ah)	C72 (Ah)	C100 (Ah)	C120 (Ah)	C240 (Ah)
	F.V=1.85VPC					
OPzS2-3000	3591.0	3957.5	3997.0	4250.6	4335.6	4408.2

Capacity factors vs temperature (OPzS series)											
Temperature	-30°C	-20°C	-10°C	0°C	10°C	20°C	25°C	30°C	40°C	45°C	50°C
Capacity	60%	75%	83%	89%	92%	99%	100%	103%	105%	107%	109%

Discharge Current VS. Final Voltage

Discharge current (Amp)	Final voltage (V/cell)
$I_{dis} \leqslant 0.1I_{10}$	1.90
$0.1I_{10} < I_{dis} \leqslant I_{10}$	1.85
$I_{10} < I_{dis} \leqslant 4I_{10}$	1.80
$4I_{10} < I_{dis} \leqslant 6I_{10}$	1.75
$6I_{10} < I_{dis} \leqslant 10I_{10}$	1.70
$I_{dis} > 15I_{10}$	1.60

Charge the batteries once every six months , if they are stored at 25℃.

Charging Method:

Constant Voltage	-0.1Cx2h+2.40~2.45V,24h,Max. Current 0.1CA
Constant Current	-0.1Cx2h+0.1Cx10h+0.05Cx6h

Maintenance & Cautions

Float Service:
※ Every six months, recommend inspection every battery voltage.
※ Every six months, recommend equalization charge for one time.
Equalization charge method:
Discharge: 40~50% rate capacity discharge.
Charge: Max. current 0.1CA, constant voltage 2.40-2.45V/cell charge 24h.
※ Effect of temperature on float charge voltage: -3mV/℃/cell.
※ Service life will be directly affected by the number of discharge
cycles, depth of discharge, ambient temperature and charging method.

Fortune CP Ltd, Regus House, Admirals Park, Dartford, DA2 6QD, UK. Tel (44)13223030, email: sales@fortunecp.co.uk, website: www.fortunecp.com