



## OPzV Series-Tubular Gel

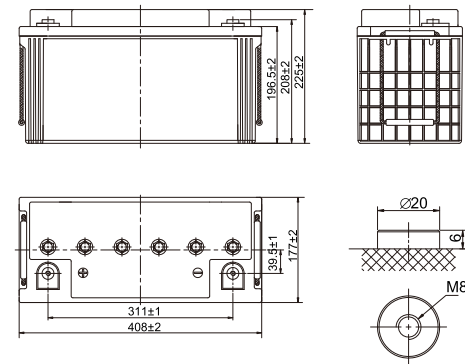
### 12V 50PzV100(12V100Ah)

#### Specifications

Rated Voltage	12V	
Nominal Capacity	100.0Ah	(C <sub>10</sub> , 1.80V/cell)
Dimension	Length	408mm(16.06in.)
	Width	177mm(6.97in.)
	Container Height	196.5mm(7.74in.)
	Total Height	225mm(8.86in.)
Approx Weight	38.3Kg (84.44 lbs)	
Terminal	M8	
Container Material	ABS	
Rated Capacity (25°C)	100.0 Ah	(10hr,10.0A,1.80V/cell)
	87.5 Ah	(5hr,17.5A,1.75V/cell)
	75.6 Ah	(3hr,25.2A,1.75V/cell)
	59.3 Ah	(1hr,59.3A,1.65V/cell)
Max. Discharge Current (5s)	800A	
Internal Resistance(25°C)	Approx.6.5mΩ	
Operating Temp.Range	Discharge	-20°C~55°C (-4°F~131°F)
	Charge	0°C~40°C (32°F~104°F)
	Storage	-20°C~50°C (-4°F~122°F)
Nominal Operating Temp. Range	25±3°C (77±5°F)	
Max.Charging Current(25°C)	25.0A	
Charge voltage(25°C)	Float	13.5V
	Temp. Coefficient	-3mV/cell/°C
	Cycle(Equalization)	14.1~14.4V
Effect of temp. to Capacity	40°C (104°F)	106%
	25°C (77°F)	100%
	0°C (32°F)	86%
Self Discharge	≤3% per month at 25°C	



#### Layout



#### Constant Current Discharge (Amperes) at 25 °C (77°F)

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	96.5	85.1	63.6	46.5	29.5	22.5	16.1	11.3	9.57
1.80V/cell	116.0	98.3	71.4	51.0	31.9	24.1	16.9	11.8	10.0
1.75V/cell	133.1	109.9	76.8	54.3	33.5	25.2	17.5	12.1	10.2
1.70V/cell	145.4	119.3	82.2	57.3	34.7	26.2	18.0	12.3	10.3
1.65V/cell	159.0	128.0	86.0	59.3	35.9	27.1	18.4	12.5	10.5
1.60V/cell	169.6	135.4	89.2	61.1	37.1	27.7	18.8	12.7	10.7

#### Constant Power Discharge (Watts/cell) at 25 °C (77°F)

F.V/Time	10min	15min	30min	1h	2h	3h	5h	8h	10h
1.85V/cell	158.8	146.0	122.4	90.5	57.6	44.0	31.7	22.4	19.1
1.80V/cell	192.0	174.0	136.3	98.8	62.1	47.0	33.2	23.4	19.9
1.75V/cell	223.2	192.0	145.3	104.6	65.0	49.2	34.4	24.0	20.3
1.70V/cell	246.0	206.8	154.1	110.0	67.0	50.8	35.2	24.4	20.5
1.65V/cell	259.2	215.2	159.6	113.0	68.9	52.4	35.9	24.7	20.8
1.60V/cell	266.0	219.6	163.9	115.8	70.9	53.3	36.6	25.1	21.1



## OPzV Series-Tubular Gel 12V 50PzV100(12V100Ah)

### Applications

- Telecommunications
- Radio and cellular telephone relay stations
- Emergency lighting systems
- Power stations, Conventional power stations, alternative pwer(solar,wind)
- Large UPS and computer back-up
- Railway signaling
- Maritime standby power on ships and ashore
- Process and control engineering
- Standby power
- Buoy lighting

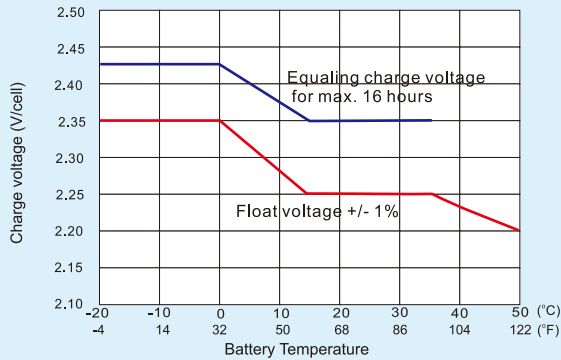
### General Features

- 20 years design life(20°C)
- Better recovery performance
- Wide working temperature range (-20~55)°C
- No electrolyte stratification provides longer service life
- High recombination efficient
- Build in copper core based in lead will carry large current
- Separator imported form AMER-SIL high porosity, PVC-SiO<sub>2</sub> and low resistance
- Pasted negative plate special grid design increase the active material.availability large current discharge and charge ability
- Tubuler type positive plate (polyester tube) prevent the active material from falling. Muti metal alloy pressed positive grid increase the anti corrosion ability and service life

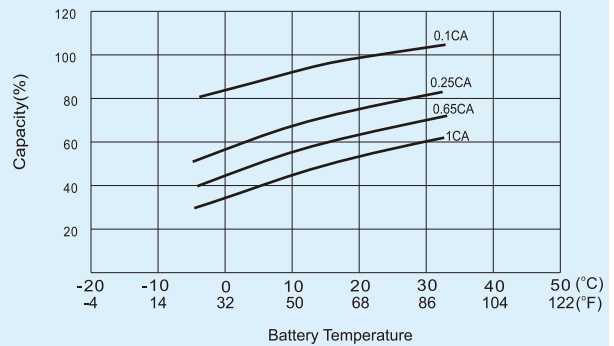
### Standards

- Compliance with IEC 60896, IEC 61427, DIN 40742 standards
- UL, CE Certified
- Manufactured in KOYAMA® IATF16949, OHSAS 18001,ISO 9001 and ISO 14001 certified production facilities

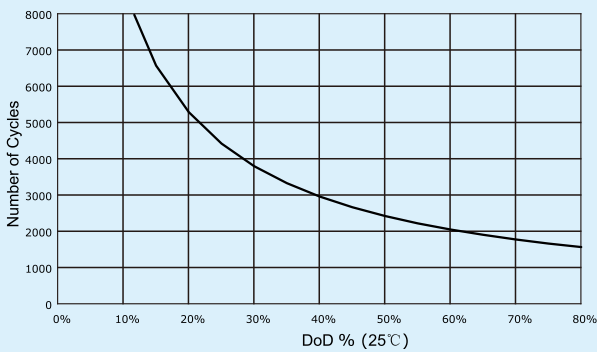
### Charge voltage vs ambient temperature curve



### Temperature effects in relation to battery capacity



### Cycle Life in Relation to DOD



### General Relation of Capacity VS. Storage Time

