

# FQS12-100GEL

### Application

- \* Emergency Power System
- \* Communication equipment
- \* Telecommunication systems
- \* Uninterruptible power supplies
- \* Electric toy car and wheelchairs, etc.

### **General Features**

- Safety Sealing
- Non-spillable construction High Reliability and Stability
- \* Sealed and Maintenance-free
- \* Safety and Quality Certification
- \* Longer Life and low self-discharge design

- \* Power tools
- \* Alarm system
- \* Marine equipment
- \* Medical equipment
- \* Fire and Security System



## Construction

- Positive ..... Lead dioxide
- \* Electrolyte ···· Sulfuric acid thixotropic Gel \* Separator ····· Macromolecule polymer
- \* Negative ………… Lead \* Safety Valve……EPDR
- \* Terminal ····· Copper
- \* Container ····· ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)

# ecification

Specification									
Battery Model		Nominal V	′oltage	12V (6 cells per unit)					
		Rated capacity (	10 Hour rate)	100Ah					
Dimension	Length		Width	Height	Total Height				
Dimension	330mm (12.99 inches)		172mm (6.77 inches)	218mm (8.58 inches)	223mm (8.78 inches)				
Approx Weight		28.2kg (62.17lbs) ± 3%							
Internal Resistance	Full charged at 25 $^\circ \mathrm{C}$ (77 $^\circ \mathrm{F}$ ): Approx 3.85m $\Omega$								
Maximum Charge Current	30A								
Max.discharge current		1000A (5Sec.)							
Operating Temperature	Nominal Operating Temperature		Discharge	Charge	Storage				
Range	25 (	C(77°F)	-15℃~50℃ (5°F~122°F)	<b>-15℃~40℃ (5</b> ℃~104℉)	-15℃~40℃ (5°F~104°F)				
Capacity @ 25°C	10 hour rate(10.0A,10.8V)		5 hour rate(17.2A,10.5V)	3 hour rate(26.5A,10.2V)	1 hour rate(66.0A,9.6V)				
(77°F)	100.0Ah		86.0Ah	79.5Ah	66.0Ah				
Capacity affected by	<b>40</b> ℃ (104°F)		<b>25</b> ℃ (77°F)	0℃ (32°F)	-15℃ (5°F)				
Temp.(10HR)	102%		100%	85%	65%				
Charge method		Float Chargin	g Voltage	Equalization Charging Voltage					
Charge method	1:	3.5 ~ 13.8 VDC/Un	iit at 25℃ (77℉)	14.4~15.0 VDC/Unit at 25℃ (77°F)					

#### Outer dimension (mm)

#### Unit: mm TI T4 Terminal 10.00 Φ18 128 218±2 223±2 0000 0 0 \$ 11 Torque:10~12N\*m 300 330±2 172±2

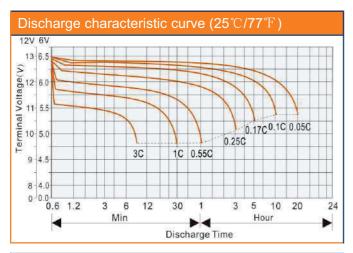
## Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25°C(77°F)

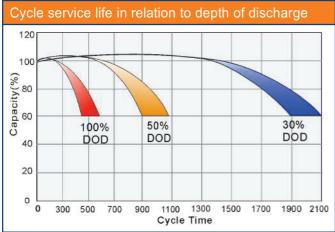
										·			
F.V/Time	е	5min	10min	15min	20min	30min	1h	2h	3h	5h	8h	10h	20h
1.85V/cell	А	222	175	148	126	96.0	59.0	35.6	25.0	16.6	11.7	9.9	5.18
	W	420	334	284	246	195	119.0	72.5	50.5	33.7	23.6	19.9	10.42
1.80V/cell	А	244	189	156	133	99.0	60.0	36.1	25.7	17.0	11.9	10.0	5.26
1.60V/Cell	W	454	357	300	260	199	122.0	73.3	51.2	34.2	23.8	20.0	10.57
1.75V/cell	Α	266	204	164	140	103	62.0	36.7	26.2	17.2	12.1	10.1	5.35
	W	487	378	314	270	204	124	74.2	52.2	34.3	24.0	20.2	10.72
1.70V/cell	А	282	215	173	146	107	63.0	37.3	26.5	17.4	12.2	10.2	5.45
	W	512	396	328	280	209	126.0	74.8	52.7	34.7	24.2	20.4	10.83
1.67V/cell	А	292	222	178	149	109	64.0	37.8	26.8	17.5	12.3	10.3	5.49
	W	529	408	337	285	212	127.5	75.5	52.8	34.8	24.4	20.5	10.88
1.60V/cell	А	308	233	188	156	112	66.0	38.8	27.2	17.8	12.5	10.4	5.52
	W	553	425	351	295	218	130.3	77.2	53.5	35.2	24.7	20.6	10.95

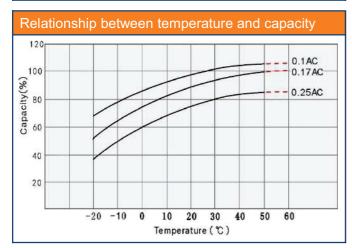
Note: The above datas are average values. (Edition 2022-07)

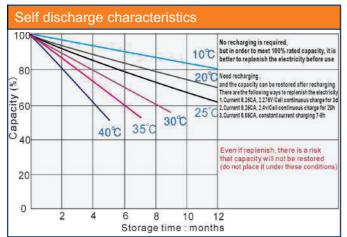


# FQS12-100GEL

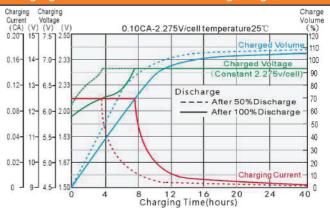




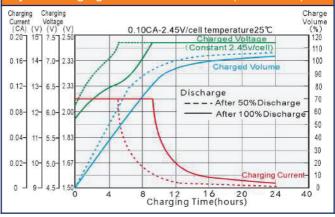




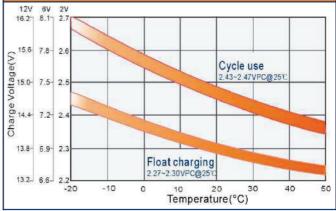
Charging characteristic curve of fb ating charge(25



Cyclic charging characteristic curve (25°C/77°F)







Temperature vs Float Life

