FQS12-2.9 AGM

Application

* Emergency Power System
* Communication equipment
* Telecommunication systems
* Uninterruptible power supplies
* Electric toy car and wheelchairs, etc.
* Power tools
* Alarm system
* Marine equipment
* Medical equipment
* Fire and Security System

General Features

* Heavy Duty Grid
* Mechanized assembly
* Non-spillable construction
* High Reliability and Stability
* Sealed and Maintenance-free
* Long Life and low self-discharge design

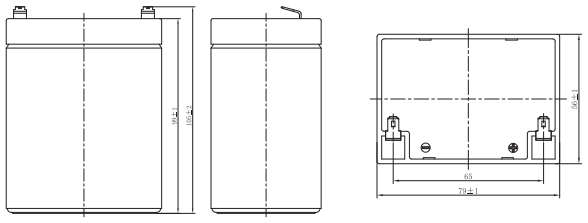
Construction

* Positive ..... Lead dioxide
* Electrolyte ..... Sulfuric acid
* Separator ..... Fiber glass
* Container ..... ABS(UL94-HB) / Flame Retardant ABS (UL94-V0)
* Negative ..... Lead
* Safety Valve ..... EPDR
* Terminal ..... Copper

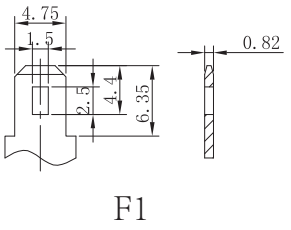
Specification

Battery Model	Nominal Voltage		12V	
	Rated capacity (20 Hour rate)		2.9Ah	
	Cells Per battery		6	
Dimension	Length	Width	Height	Total Height
	79mm (3.11 inches)	56mm (2.20 inches)	99mm (3.9 inches)	105mm (4.13 inches)
Approx Weight	1.03kg (2.27lbs) ± 3%			
Capacity @ 25˚C (77 ˚F)	20 hour rate(0.145A,10.5V)	10 hour rate(0.27A,10.5V)	5 hour rate(0.48A,10.5V)	1 hour rate(1.76A,9.6V)
	2.9Ah	2.7Ah	2.40Ah	1.76Ah
Max.discharge current	44A (5 Sec.)			
Internal Resistance	Full charged at 25˚C: Approx 50mΩ			
Capacity affected by Temp.(20 HR)	40˚C (104˚F)	25˚C (77˚F)	0˚C (32˚F)	-15˚C (5˚F)
	102%	100%	85%	65%
Self Discharge @25˚C (77 ˚F)	After 3 months storage		After 6 months storage	After 12 months storage
	91%		82%	64%
Charge method @25˚C (77 ˚F)	Cycle Use		Float Use	
	14.4-14.7V (Initial charging current less than 0.87A)		13.50-13.80V	

Outer dimension (mm)



Terminal Type (mm)



Constant Current(Amp) and Constant Power(Watt) Discharge Table at 25℃ (77˚F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	1.5h	2h	3h	4h	5h	6h	8h	10h	20h
1.85V/cell	8.14	5.26	4.11	3.44	2.61	1.96	1.59	1.24	0.938	0.687	0.565	0.474	0.41	0.317	0.264	0.142
	15.4	10	7.87	6.63	5.05	3.8	3.1	2.42	1.84	1.35	1.11	0.936	0.811	0.628	0.524	0.284
1.80V/cell	8.75	5.58	4.31	3.58	2.69	2.01	1.63	1.27	0.955	0.699	0.573	0.481	0.416	0.321	0.267	0.143
	16.4	10.5	8.21	6.86	5.18	3.89	3.16	2.47	1.87	1.37	1.13	0.948	0.822	0.637	0.531	0.287
1.75V/cell	9.22	5.8	4.46	3.68	2.76	2.06	1.66	1.29	0.973	0.71	0.581	0.487	0.421	0.325	0.27	0.145
	17.1	10.9	8.43	7.01	5.29	3.96	3.22	2.51	1.89	1.39	1.14	0.959	0.831	0.643	0.536	0.29
1.70V/cell	9.66	6.04	4.6	3.79	2.83	2.1	1.7	1.31	0.987	0.72	0.589	0.494	0.426	0.328	0.273	0.146
	17.7	11.3	8.66	7.18	5.4	4.04	3.26	2.54	1.92	1.41	1.15	0.971	0.839	0.649	0.541	0.292
1.67V/cell	10	6.21	4.72	3.86	2.88	2.14	1.72	1.33	1	0.727	0.595	0.498	0.43	0.331	0.275	0.147
	18.2	11.5	8.84	7.31	5.48	4.09	3.31	2.57	1.94	1.42	1.16	0.978	0.846	0.654	0.544	0.295
1.60V/cell	10.6	6.47	4.88	3.98	2.96	2.19	1.76	1.36	1.02	0.741	0.605	0.506	0.436	0.336	0.278	0.149
	18.9	11.8	9.08	7.49	5.6	4.16	3.37	2.61	1.97	1.44	1.18	0.991	0.856	0.663	0.551	0.298

Note: The above datas are average values. (Edition 2020-05)

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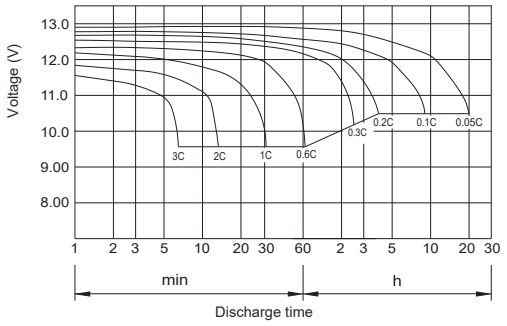
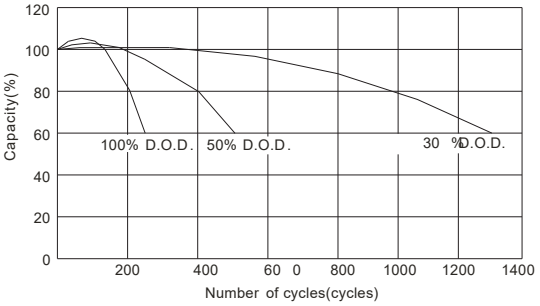
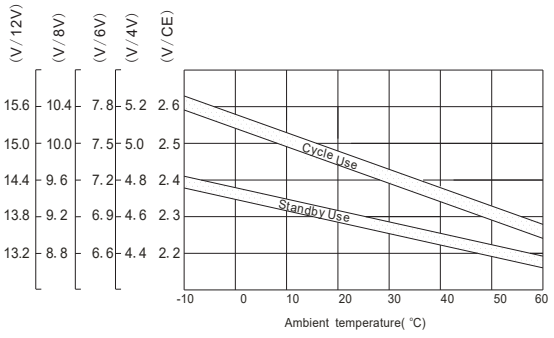
Discharge characteristic Curve



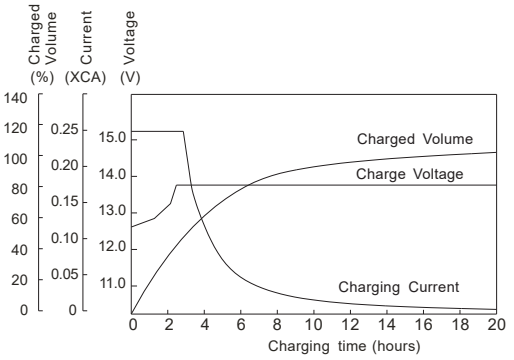
Cycle service life in relation to depth of discharge



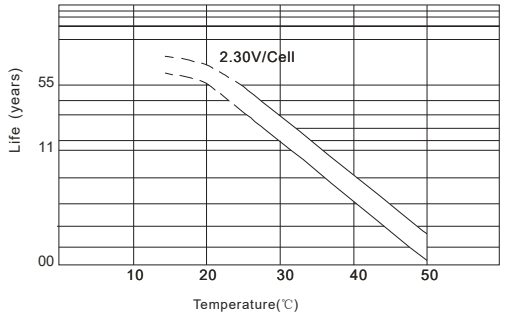
Relationship between charging voltage and temperature



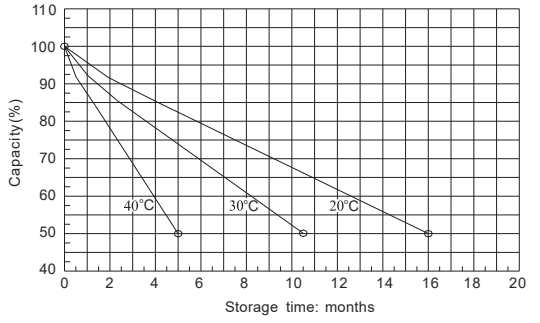
Constant voltage charging characteristic (0.25CA, at 25℃)



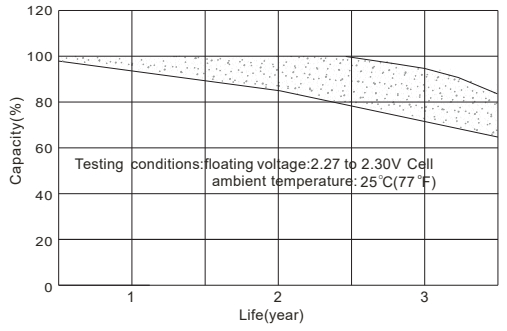
Temperature effects on float life



Self-discharge characteristic



Life characteristics of standby use



Charge characteristic Curve for standby use