



D1240 (12V4Ah)

D series is a general purpose battery with 5 years design life in float service . It meets with IEC and JIS standards .With up-dated AGM valve regulated technology and high purity raw materials, the **D series** battery has reliable standby service life. It is suitable for UPS/EPS, medical equipment, emergency light and security systems applications.



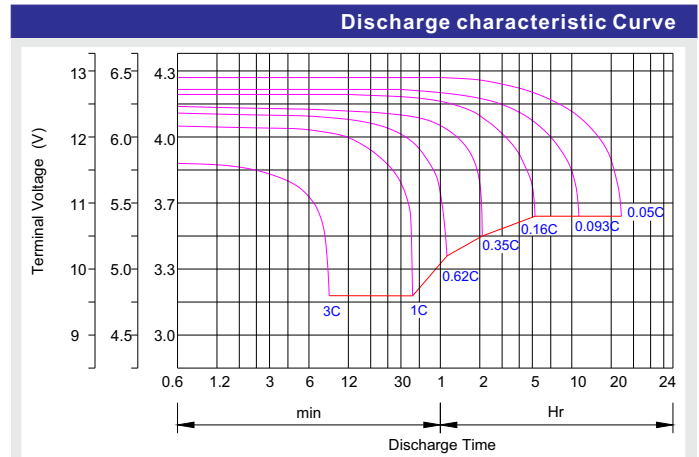
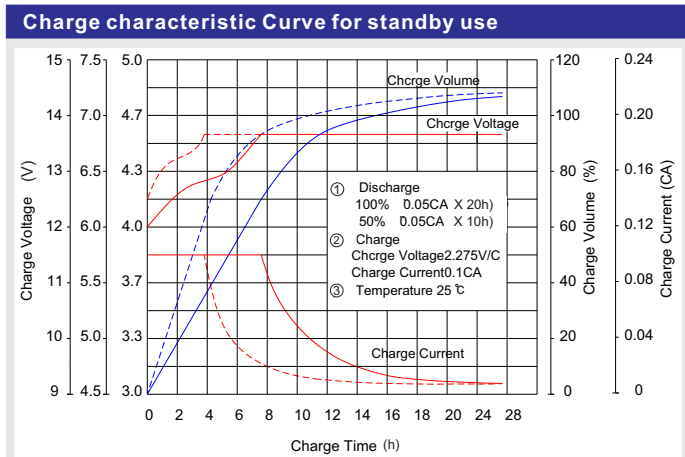
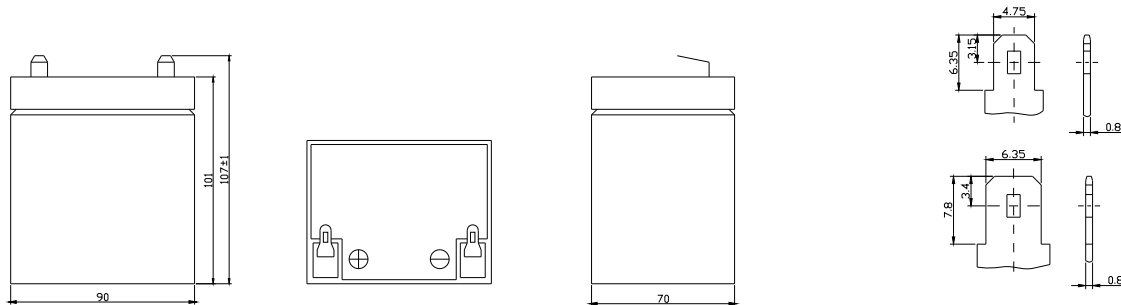
Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	4.0Ah@20hr-rate to 1.75V per cell @25°C
Weight	Approx. 1.3 Kg(Tolerance ±4%)
Max. Discharge Current	80 A (5 sec)
Internal Resistance	Approx. 45 mΩ
Operating Temperature Range	Discharge: -20°C~60°C Charge: 0°C~50°C Storage: -20°C~60°C
Normal Operating Temperature Range	25°C±5°C
Float charging Voltage	13.7 to 13.9 VDC/unit Average at 25°C
Recommended Maximum Charging Current Limit	1.2A
Equalization and Cycle Service	14.6 to 14.8 VDC/unit Average at 25°C
Self Discharge	Dynamics Valve Regulated Lead Acid (VRLA) batteries can be stored for more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.
Terminal	Faston Tab 187(F1)/Faston tab 250(F2)
Constainer Material	A.B.S. UL94-HB, UL94-V0 Optional.



Dimensions

Unit: mm Dimension: 90(L)×70(W)×107(H)



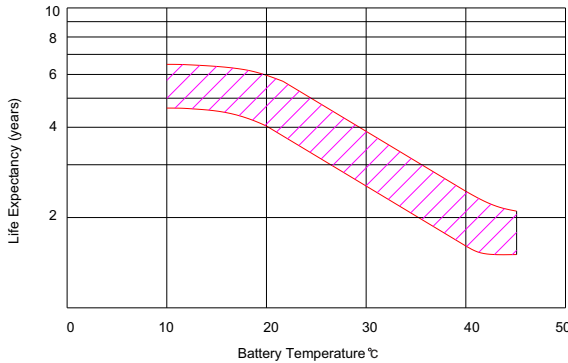
D1240

12V4Ah

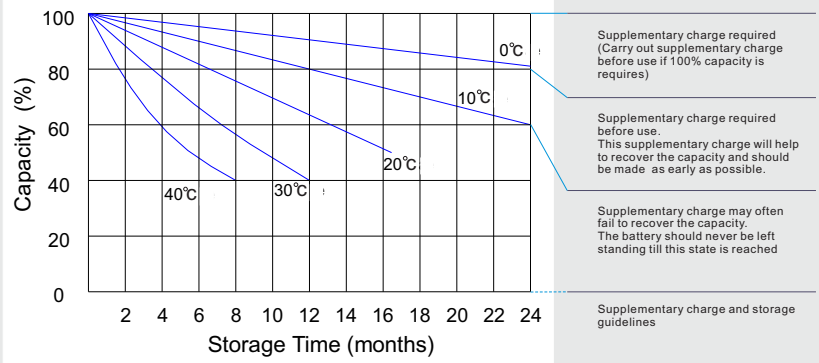


Dynamics

Effect of temperature on long term float life



Storage characteristic



Constant Current Discharge Characteristics : A(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	15.78	10.34	7.704	4.101	2.600	1.590	1.048	0.853	0.701	0.462	0.400	0.214
10.0V	15.21	10.09	7.457	4.048	2.565	1.558	1.028	0.841	0.695	0.460	0.396	0.212
10.2V	14.31	9.586	7.250	3.986	2.541	1.541	1.019	0.833	0.690	0.456	0.390	0.206
10.5V	12.87	8.964	6.838	3.877	2.510	1.521	1.010	0.820	0.685	0.452	0.388	0.202
10.8V	11.53	8.359	6.452	3.749	2.475	1.508	0.998	0.792	0.681	0.450	0.381	0.194
11.1V	10.09	7.664	5.952	3.606	2.416	1.448	0.979	0.781	0.678	0.446	0.375	0.191

Constant Power Discharge Characteristics : W(25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	171.1	113.4	85.01	46.94	31.08	18.73	12.52	10.21	8.400	5.531	4.790	2.568
10.0V	166.7	111.1	83.79	46.46	30.62	18.48	12.32	10.07	8.325	5.509	4.745	2.547
10.2V	158.5	106.7	82.68	46.05	30.40	18.32	12.21	9.97	8.274	5.468	4.684	2.482
10.5V	144.7	102.3	78.38	45.11	29.99	18.13	12.12	9.84	8.208	5.421	4.651	2.440
10.8V	130.5	95.7	74.05	44.04	29.60	18.00	11.98	9.51	8.170	5.398	4.580	2.342
11.1V	115.1	89.1	69.74	42.84	28.95	17.37	11.75	9.372	8.141	5.360	4.512	2.305

All mentioned values are average values(Tolerance ±2%).

Capacity Factors With Different Temperature

Battery Type		-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL BATTERY	6V&12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM BATTERY	6V&12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	108%	110%

Charge the batteries at least once every six months, if they are stored at 25°C.

Discharge Current VS. Discharge Voltage

Charging Method:

Constant Voltage	-0.2Cx2h+2.4~2.45V/Cellx24h, Max. Current 0.3CA
Constant Current	-0.2Cx2h+0.1CAx12h
Fast	-0.2Cx2h+0.3CAx4.0h

Final Discharge Voltage V/cell	1.75V	1.70V	1.60V
Discharge Current (A)	(A) < 0.2C	0.2C < (A) < 1.0C	(A) ≥ 1.0C