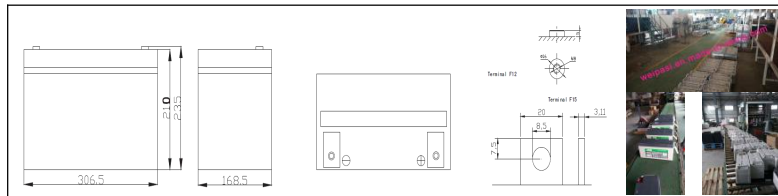


WPS12-90SY DC (12V100AH/10HR)



Q5 Deep Cycle series is pure VRLA battery with 5~10 years Floating design life , it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead, the DC series offers excellent recovery after deep discharge under frequent cyclic discharge use, and can deliver 400 cycles at 100% DOD. Suitable for solar, CATV, marine , RV and deep discharge UPS, communication , and telecommunication , etc.

Voltage Per Unit/额定电压	12V
Capacity/容量	100Ah@10hr-rate to 1.8V per cell @25°C
Weight/重量	27.0Kg
Max. Discharge Current/最大瞬间电流	1000A (5 sec)
Internal Resistance/内阻	Approx 5.0mΩ
Operating Temperature Range/操作温度范围	Discharge/Storage(放电/储存): -20 °C~60°C; Charge/充电: 0°C~50°C;
Normal Operating Temperature Range/适温	25°C ± 5°C
Float charging Voltage/浮充电压	13.6 to 13.8 V DC/unit Average at 25°C
Recommended Maximum Charging Current/最大充电电流	30.0 A
Equalization and Cycle Service/最大循环电压	14.6 to 14.8 V DC/unit Average at 25°C
Self Discharge/自放电电流	Q5 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. 储存 6 个月以上自放电<3%
Terminal/端子	Thread F12/F15
Container Material/外壳材料	B.S. UL94-HB, and UL94-V0 is optional (可选)



Parking/包装(mm):
 Battery Size/电压尺寸
 L×W×H: 307*172*210*235
 Box/箱: 310×180×270
 Quantity Per Box/装相: 1 PCS
 Gross Weight/毛重:27.3kg/pc

Discharge Current VS. Final Voltage/放电,浮充电压

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

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

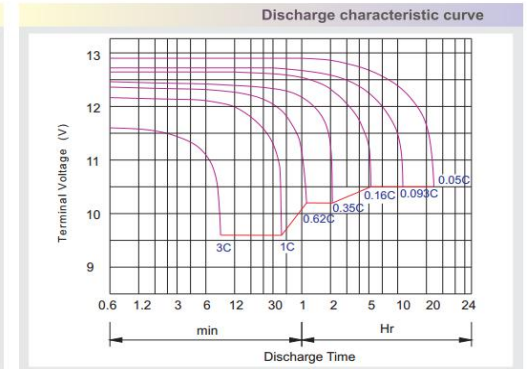
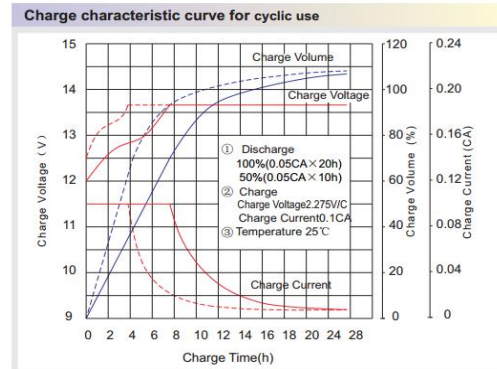
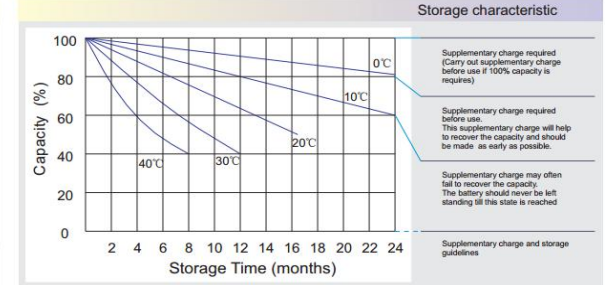
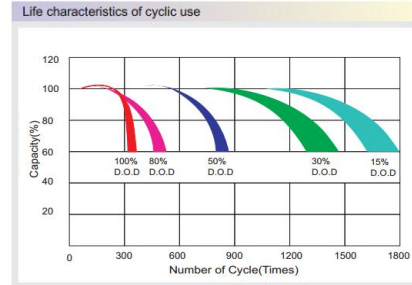
Constant Voltage	-0.2Cx2h+14.4-14.7Vx24h, Max. Current 0.3C
Constant Current	-0.2Cx2h+0.1Cx7h+0.05Cx4h
Faxt	-0.2Cx2h+0.2Cx3h

Bolt	M5	M6	M8
Terminal	F3 F4 F13 F18 T25 T26	F8 F11 F12-1 F15	F5 F9 F10 F12 F14 F16
Torque	6~7N-m	8~10N-m	10~12N-m

Maintenance & Cautions/维护

Cycle Service:
 ※ Avoid battery over discharge, especially battery series connection use.
 ※ Charged with recommend voltage, ensure battery can be full recharged.
 In general, recharge capacity should be 1.1-1.15 times discharge capacity
 ※ Effect of temperature on cycle charge voltage: -4mV/°C /Cell.
 ※ There are a number of factors that will affect the length of cyclic service.
 The most significant are depth of discharge, ambient temperature, discharge rate, and the manner in which the battery is recharged.
 Generally speaking, the most important factors is depth of discharge.

Temperature	-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
Gel battery (Electrolyte: GEL)	6V/12V	50%	70%	83%	85%	90%	98%	100%	102%	105%
	2V	60%	75%	85%	88%	92%	99%	100%	103%	106%
AGM battery (Electrolyte: Acid)	6V/12V	46%	66%	76%	83%	90%	98%	100%	103%	109%
	2V	55%	70%	80%	85%	92%	99%	100%	104%	110%



Constant Current Discharge Characteristics: A (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	304.6	217.8	176.0	110.4	65.00	38.89	26.88	22.03	18.03	12.42	10.50	5.777
10.0V	295.8	207.2	172.4	108.6	64.70	38.60	26.78	21.93	17.93	12.32	10.40	5.672
10.2V	287.1	199.9	169.7	107.6	64.10	38.31	26.57	21.83	17.82	12.22	10.30	5.567
10.5V	257.8	184.5	161.5	104.9	63.50	38.02	26.47	21.62	17.61	12.12	10.20	5.462
10.8V	232.7	168.2	148.9	100.3	62.00	37.33	25.75	21.11	17.29	11.92	10.10	5.357
11.1V	198.7	150.3	133.6	93.99	58.90	35.68	24.62	20.09	16.55	11.41	9.796	5.041

Constant Power Discharge Characteristics: W (25°C)

F.V/Time	5MIN	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9.60V	3151	2319	1936	1259	751.1	458.4	319.9	262.6	215.1	148.3	125.5	69.26
10.0V	3089	2248	1905	1243	749.3	456.0	320.0	262.3	214.6	147.6	124.7	68.06
10.2V	3053	2189	1883	1234	743.5	453.3	318.6	261.7	213.9	146.6	123.6	66.80
10.5V	2780	2038	1796	1206	736.8	450.0	317.4	259.3	211.3	145.4	122.4	65.54
10.8V	2532	1879	1660	1156	723.2	444.2	308.7	253.4	207.5	143.0	121.2	64.28
11.1V	2224	1699	1495	1086	692.3	427.7	295.4	241.1	198.6	136.9	117.6	60.50