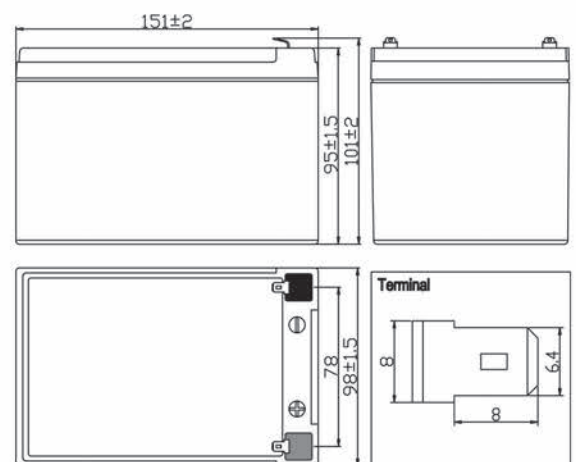


XCELL XP12-12

12V 12AH (FASTON 6.3MM)

Specification

Nominal Voltage (V)	12V (6 cells in series)	
Rated Capacity	12Ah	(C ₂₀ , 1.75V/cell)
Dimensions(mm)	Length	151 ± 2 mm
	Width	98 ± 1.5 mm
	Height	95 ± 1.5 mm
	Total Height	101 ± 2 mm
Nominal Capacity @25°C (Ah)	20 Hour rate (0.606A to 10.5 volts)	12.0Ah
	10 Hour rate (1.158A to 10.5 volts)	12.0Ah
	5 Hour rate (2.070A to 10.5 volts)	10.3Ah
	1 Hour rate (7.800A to 9.6 volts)	7.80Ah
Approx. Weight	4.10 kg	
	Terminal T2	
Max. Discharge Current	180A @25°C (5s)	
Internal Resistance	15mΩ @25°C (Full Charged Battery)	
Floating Design Life	5 years @25°C	
Ambient Temperature	Charge: -15°C~50°C	
	Discharge: -20°C~60°C	
Container Material	Storage: -20°C~50°C	
	A.B.S , UL94-HB , UL94-V0 , Optional	
Self Discharge	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.	



Certification



VdS G 120034

Constant Current Discharge Characteristics (A), (25°C)

F.V/TIME	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	47.34	31.02	23.10	12.30	7.800	4.394	3.138	2.117	1.402	1.200	0.500
1.70V/cell	42.96	28.74	21.78	11.94	7.626	4.326	3.060	2.086	1.380	1.170	0.619
1.75V/cell	38.58	26.94	20.58	11.58	7.530	4.290	3.030	2.070	1.368	1.158	0.606
1.80V/cell	34.62	25.20	19.38	11.22	7.422	4.254	2.994	2.046	1.350	1.140	0.582

Constant Wattage Discharge Characteristics (Watt), (25°C)

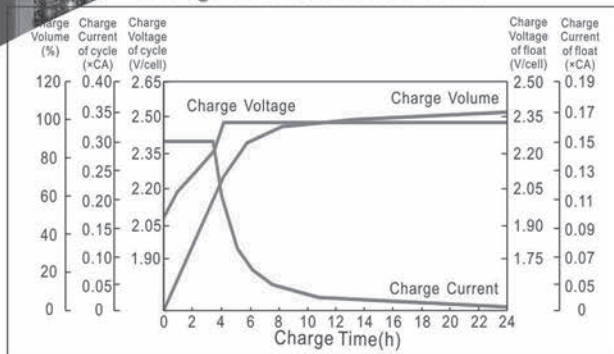
F.V/TIME	5min	10min	15min	30min	60min	2H	3H	5H	8H	10H	20H
1.60V/cell	85.61	56.61	42.54	23.47	15.47	8.716	6.255	4.223	2.796	2.396	1.284
1.70V/cell	79.12	53.41	40.84	22.98	15.19	8.616	6.110	4.164	2.755	2.340	1.240
1.75V/cell	72.02	50.96	38.93	22.48	15.01	8.551	6.055	4.137	2.734	2.318	1.217
1.80V/cell	65.20	48.09	36.98	21.97	14.81	8.487	5.988	4.092	2.700	2.282	1.169

XCELL XP12-12

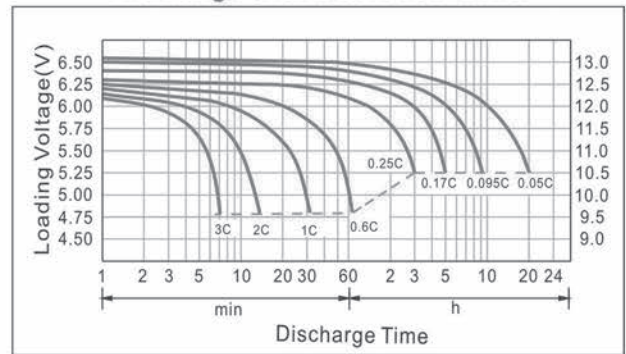
12V 12AH (FASTON 6.3MM)



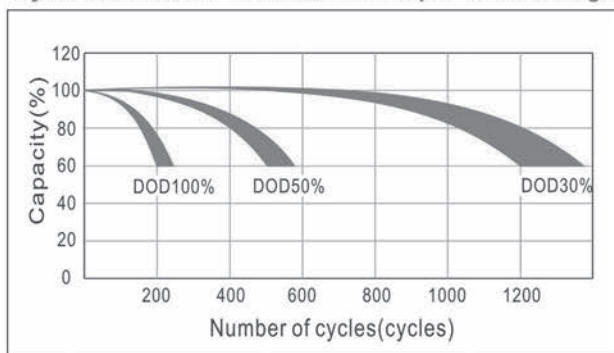
Charge Characteristics Curve



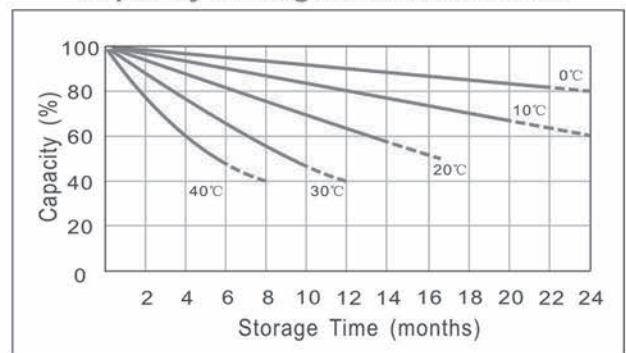
Discharge Characteristics Curve



Cycle service life in relation to depth of discharge



Capacity Storage Characteristics



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%

Maintenance & Cautions

Charging Procedure:

Application	Charging method	Charge voltage at 25°C	Temperature compensation coefficient of charging voltage	Max. charging current	Temperature
For standby power source	Constant voltage charging (With current restriction)	2.25~2.30 V/cell	-3mV/°C/cell	0.2CA	-15~50°C
For cycle service		2.45~2.50 V/cell	-4mV/°C/cell	0.3CA	

- Every month, recommend inspection every battery voltage.
- Every three months, recommend equalization charge for one time. Equalization charge method:
 - Step 1: Discharge: 100% rate capacity discharge.
 - Step 2: Charge: Max. Current 0.3CA, constant voltage 2.45~2.50V/Cell charge 24h.
- Length of service life will be directly affected by the number of discharge cycles, depth of discharge, Ambient temperature and charging voltage.
- Charge the batteries at least once every six months, if they are stored at 25°C. Charging Method:
 - Constant Voltage : $-0.2C \times 2h + 2.4 \sim 2.45V/cell \times 24h$, Max. Current 0.25CA
 - Constant Current : $-0.2C \times 2h + 0.1C \times 12h$
 - Fast : $-0.2C \times 2h + 0.3C \times 4h$

Terminal of torque:

Bolt	M5	M6	M8
Terminal	T3, T10	T4, T7, T11, T12, T13	T5, T6, T8, T9, T14
Torque	6~7N.m	8~10N.m	10~12N.m