



# 12LCP-23

12V 23Ah



Q-Batteries Akku 12LCP-23 battery is a special deep cycle battery which is designed for intensive cyclic discharge usage. Because of the very thick lead plates it's possible to achieve more cycles and longer lifetime.

## Application:

Electric wheelchair, caravan/marine, cleaning machines, golf cart, vehicle lifts, solar energy system, u.v.m.

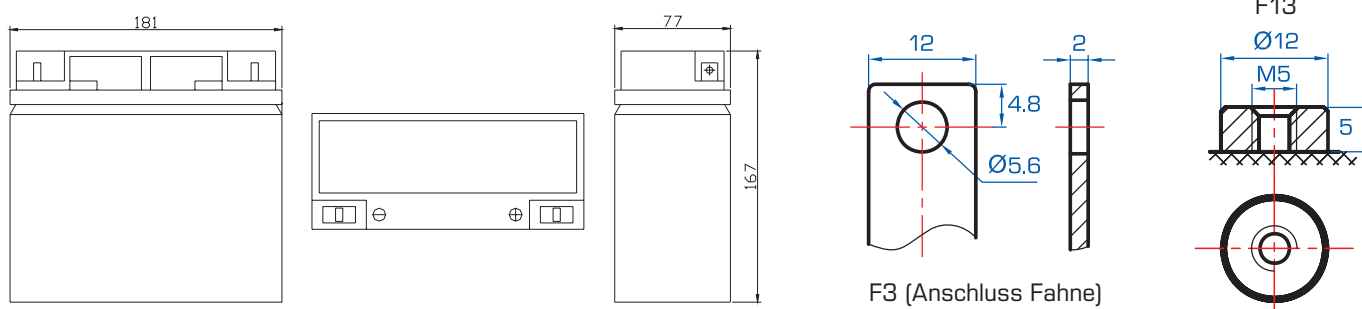


## Specification:

Voltage Per Unit	12 V		
Capacity	23 Ah	@20hr-rate to 1.8V per cell @25°C	
Cells Per Unit	6		
Weight	ca. 6 kg +/- 3%		
Max. Discharge Current	220 A (5 sec.)		
Internal Resistance	ca. 14 m Ω		
Operating Temperature Range Normal	Discharge: - 15°C – 50°C	Charge: - 10°C – 50°C	Storage: - 20°C – 50°C
Operating Temperature Range	25°C ± 5°C		
Self Discharge	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	F3, F13		
Container Material	A.B.S. (UL94-HB)		

## Dimensions:

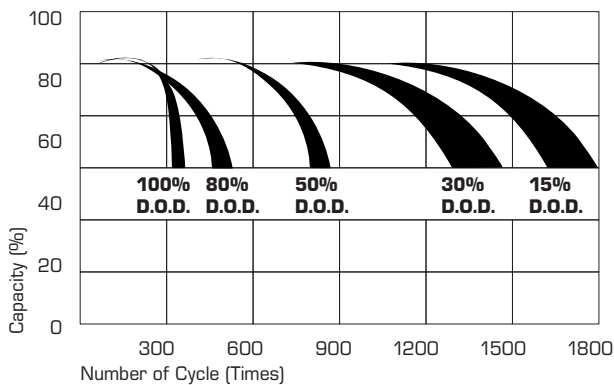
181 Length x 77 Width x 167 mm Height



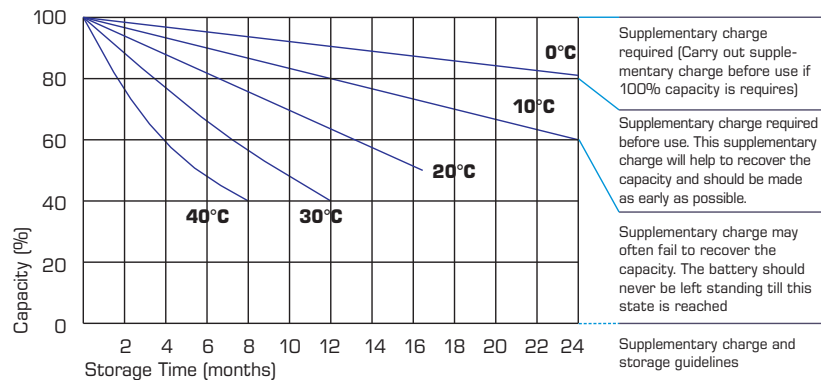
## Constant current discharge characteristics: A (25°C)

FV/Time	5 Min.	10 Min.	15 Min.	30 Min.	1 HR	2 HR	3 HR	4 HR	5 HR	8 HR	10 HR	20 HR
9.60 V	98.64	65.05	51.36	29.68	16.25	9.95	6.86	5.31	4.37	2.79	2.44	1.33
10.0 V	94.65	62.52	49.93	29.22	16.16	9.87	6.83	5.27	4.34	2.78	2.42	1.28
10.2 V	89.53	60.37	48.57	28.99	16.02	9.81	6.81	5.20	4.31	2.77	2.39	1.26
10.5 V	80.88	56.70	45.82	28.34	15.80	9.71	6.74	5.15	4.28	2.76	2.37	1.21
10.8 V	72.24	52.83	43.05	27.65	15.52	9.66	6.68	5.11	4.26	2.75	2.32	1.16
11.1 V	63.66	48.95	40.30	26.75	15.14	9.51	6.60	4.97	4.23	2.74	2.29	1.14

## Life characteristics of cyclic use:



## Storage characteristic:



## 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%

## Charging Method:

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

Constant Voltage (V)	-0.2C x 2h + 2.4-2.45V/Cell x 24h, max. Current 0.3CA
Constant Current (A)	-0.2C x 2h + 0.1CA x 12h
Fast	-0.2C x 2h + 0.3CA x 4.0h