



# 12LC-92

12V 93Ah



Q-Batteries Akku 12LC-92 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.

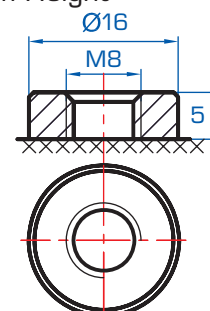
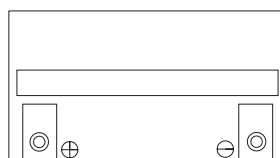
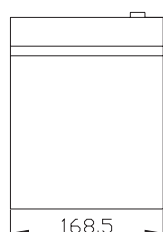
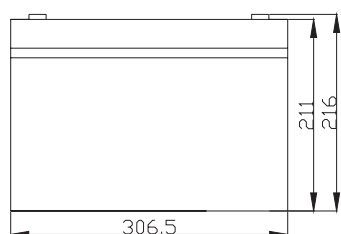


## Specification:

Voltage Per Unit	12 V		
Capacity	93 Ah	@20hr-rate to 1.8V per cell @25°C	
Cells Per Unit	6		
Weight	ca. 28,5 kg +/- 3%		
Max. Discharge Current	900 A (5 sec.)		
Internal Resistance	ca. 5.5 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	F12 (M8 bolt)		
Container Material	A.B.S. (UL94-HB)		

## Dimensions:

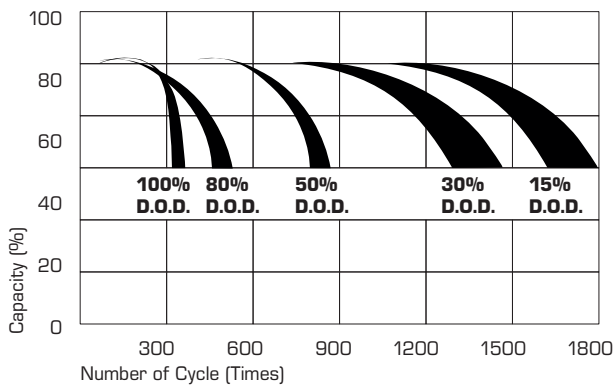
306.5 Length x 168.5 Width x 211 mm Height



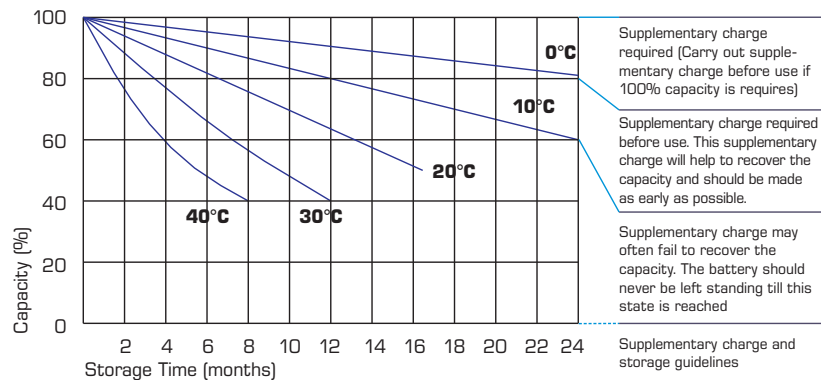
## Constant current discharge characteristics: A (25°C)

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	295.5	2176	169.6	103.4	57.33	34.29	23.68	19.61	16.51	11.28	9.35	4.99
10.0 V	287.0	207.0	166.1	101.6	57.07	34.03	23.58	19.52	16.41	11.19	9.26	4.90
10.2 V	278.5	199.7	163.5	99.70	56.54	33.77	23.40	19.43	16.32	11.09	9.17	4.81
10.5 V	250.1	184.3	155.7	98.95	56.01	33.51	23.31	19.25	16.12	11.00	9.08	4.72
10.8 V	225.7	168.1	143.5	97.26	54.68	32.91	22.68	18.79	15.83	10.82	8.99	4.63
11.1 V	192.7	150.2	128.7	91.05	51.95	31.45	21.68	17.89	15.15	10.36	8.72	4.36

## 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