



## 12LCP-50

12V 50Ah



Q-Batteries Akku 12LCP-50 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.

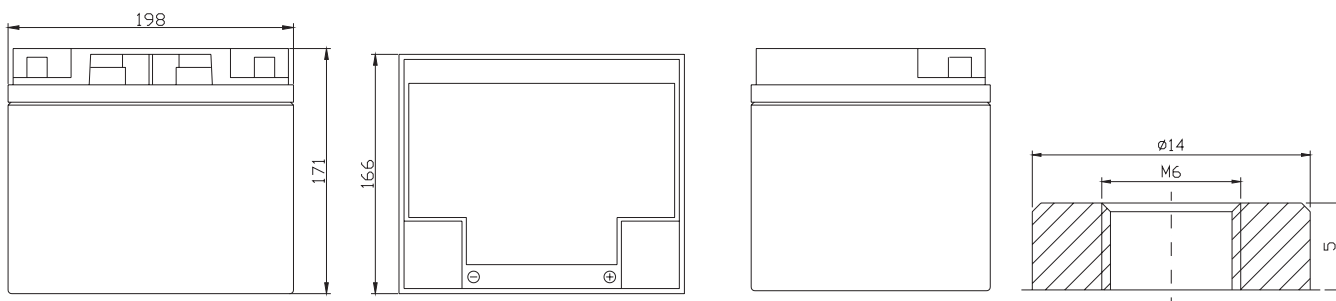


### Specification:

Voltage Per Unit	12 V		
Capacity	50 Ah	@20hr-rate to 1.8V per cell @25°C	
Cells Per Unit	6		
Weight	ca. 14.6 kg +/- 3%		
Max. Discharge Current	450 A (5 sec.)		
Internal Resistance	ca. 7 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	F11 (M6)		
Container Material	A.B.S. (UL94-HB)		

### Dimensions:

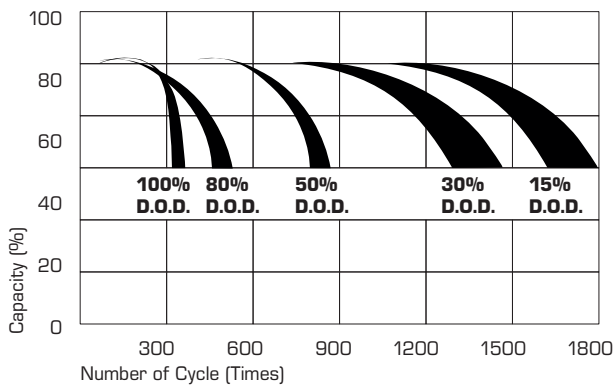
198 Length x 166 Width x 171 mm Height



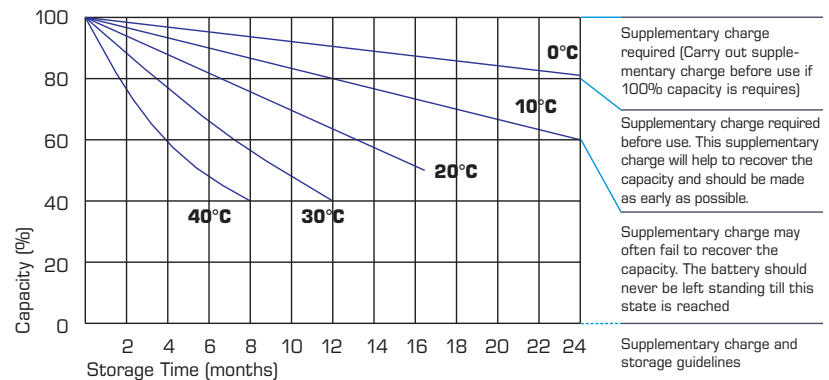
## Constant current discharge characteristics: A (25°C)

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	161.3	117.7	89.35	53.46	31.59	18.35	12.68	10.783	8.748	5.762	4.779	2.650
10.0 V	156.7	112.0	87.52	52.53	31.44	18.21	12.63	10.733	8.697	5.715	4.733	2.602
10.2 V	152.0	108.1	86.14	51.83	31.15	18.07	12.54	10.683	8.645	5.668	4.687	2.554
10.5 V	136.5	99.73	82.02	51.17	30.86	17.94	12.49	10.583	8.542	5.622	4.641	2.506
10.8 V	123.2	90.94	75.15	50.30	30.13	17.61	12.15	10.334	8.388	5.528	4.595	2.457
11.1 V	105.2	81.28	66.92	47.09	28.62	16.83	11.61	9.835	8.028	5.294	4.458	2.313

## 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