### 12LCP-50

12 V 50 Ah



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  $\Omega$ 

Operating Temperature Range Discharge: Charge: Storage:

Normal - 15°C - 50°C - 10°C - 50°C - 20°C - 50°C

Operating Temperature Range 25°C ± 5°C

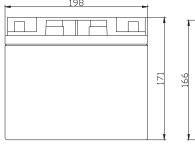
Self Discharge Valve Regulated Lead Acid (VRLA) batteries can be stored for

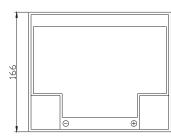
more than 6 months at 25°C. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.

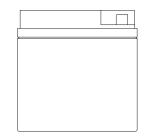
Terminal F11 (M6)

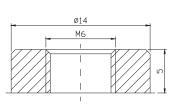
Container Material A.B.S. (UL94-HB)

Dimensions: 198 Length x 166 Width x 171 mm Height







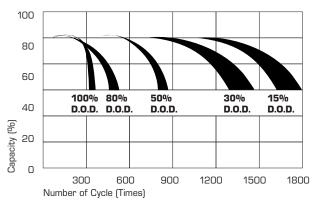




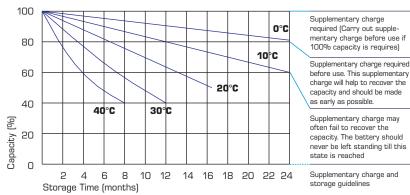
### Constant current discharge characteristics: A (25°C)

5 Min.	10 Min.	15 Min.	30 Min.	1 HR	2 HR	3 HR	4 HR	5 HR	8 HR	10 HR	20 HR
161.3	117.7	89.35	53.46	31.59	18.35	12.68	10.783	8.748	5.762	4.779	2.650
156.7	112.0	87.52	52.53	31.44	18.21	12.63	10.733	8.697	5.715	4.733	2.602
152.0	108.1	86.14	51.83	31.15	18.07	12.54	10.683	8.645	5.668	4.687	2.554
136.5	99.73	82.02	51.17	30.86	17.94	12.49	10.583	8.542	5.622	4.641	2.506
123.2	90.94	75.15	50.30	30.13	17.61	12.15	10.334	8.388	5.528	4.595	2.457
105.2	81.28	66.92	47.09	28.62	16.83	11.61	9.835	8.028	5.294	4.458	2.313
	161.3 156.7 152.0 136.5 123.2	161.3 117.7 156.7 112.0 152.0 108.1 136.5 99.73 123.2 90.94	161.3 117.7 89.35   156.7 112.0 87.52   152.0 108.1 86.14   136.5 99.73 82.02   123.2 90.94 75.15	161.3 117.7 89.35 53.46   156.7 112.0 87.52 52.53   152.0 108.1 86.14 51.83   136.5 99.73 82.02 51.17   123.2 90.94 75.15 50.30	161.3 117.7 89.35 53.46 31.59   156.7 112.0 87.52 52.53 31.44   152.0 108.1 86.14 51.83 31.15   136.5 99.73 82.02 51.17 30.86   123.2 90.94 75.15 50.30 30.13	161.3 117.7 89.35 53.46 31.59 18.35   156.7 112.0 87.52 52.53 31.44 18.21   152.0 108.1 86.14 51.83 31.15 18.07   136.5 99.73 82.02 51.17 30.86 17.94   123.2 90.94 75.15 50.30 30.13 17.61	161.3 117.7 89.35 53.46 31.59 18.35 12.68   156.7 112.0 87.52 52.53 31.44 18.21 12.63   152.0 108.1 86.14 51.83 31.15 18.07 12.54   136.5 99.73 82.02 51.17 30.86 17.94 12.49   123.2 90.94 75.15 50.30 30.13 17.61 12.15	161.3 117.7 89.35 53.46 31.59 18.35 12.68 10.783   156.7 112.0 87.52 52.53 31.44 18.21 12.63 10.733   152.0 108.1 86.14 51.83 31.15 18.07 12.54 10.683   136.5 99.73 82.02 51.17 30.86 17.94 12.49 10.583   123.2 90.94 75.15 50.30 30.13 17.61 12.15 10.334	161.3 117.7 89.35 53.46 31.59 18.35 12.68 10.783 8.748   156.7 112.0 87.52 52.53 31.44 18.21 12.63 10.733 8.697   152.0 1081 8614 51.83 3115 18.07 12.54 10.683 8.645   136.5 99.73 82.02 5117 30.86 17.94 12.49 10.583 8.542   123.2 90.94 75.15 50.30 30.13 17.61 12.15 10.334 8.388	161.3 117.7 89.35 53.46 31.59 18.35 12.68 10.783 8.748 5.762   156.7 112.0 87.52 52.53 31.44 18.21 12.63 10.733 8.697 5.715   152.0 108.1 86.14 51.83 31.15 18.07 12.54 10.683 8.645 5.668   136.5 99.73 82.02 51.17 30.86 17.94 12.49 10.583 8.542 5.622   123.2 90.94 75.15 50.30 30.13 17.61 12.15 10.334 8.388 5.528	161.3 117.7 89.35 53.46 31.59 18.35 12.68 10.783 8.748 5.762 4.779   156.7 112.0 87.52 52.53 31.44 18.21 12.63 10.733 8.697 5.715 4.733   152.0 1081 86.14 51.83 31.15 18.07 12.54 10.683 8.645 5.668 4.687   136.5 99.73 82.02 51.17 30.86 17.94 12.49 10.583 8.542 5.622 4.641   123.2 90.94 75.15 50.30 30.13 17.61 12.15 10.334 8.388 5.528 4.595

# Life characteristics of cyclic use:



## Storage characteristic:



### Capacity Factors with different Temperature:

Batte	ery Type	-20°C	-10°C	0°C	5°C	10°C	20°C	25°C	30°C	40°C	45°C
GEL	6V & 12V	50%	70%	83%	85%	90%	98%	100%	102%	104%	105%
Battery	2V	60%	75%	85%	88%	92%	99%	100%	103%	105%	106%
AGM	6V & 12V	46%	66%	76%	83%	90%	98%	100%	103%	107%	109%
Battery	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