



## 12LS-12

12V 12Ah

VdS G112072

Design lifetime 5 years



Q-Batteries Security Akku 12LS-12 is an AGM battery with VdS-approval. It is designed for stand-by applications such as burglar-systems or UPS-systems.

### Application:

burglar-systems, UPS-systems,  
fire-detecting-systems,  
telecommunication-systems

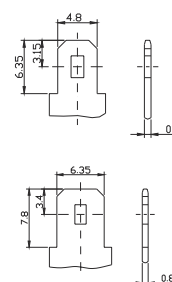
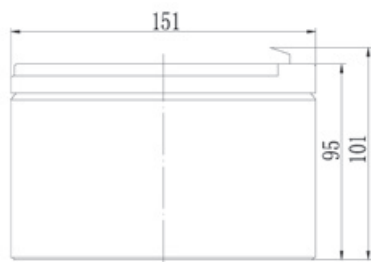


### Specification:

Voltage Per Unit	12 V		
Capacity	12 Ah (20 h) cell voltage 1.85V / cell		
Cells Per Unit	6		
Weight	ca. 3,8 kg +/- 3kg		
Max. Discharge Current	180 A (5 sec.)		
Internal Resistance	ca. 19m $\Omega$		
Operating Temperature Range Normal	Discharge: - 15°C - 50°C	Charge: -10°C - 50°C	Storage: - 20°C - 50°C
Operating Temperature Range	25°C $\pm$ 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	F1, F2		
Container Material	A.B.S. (UL94-HB)		

### Dimensions:

151 Length x 98 Width x 95 mm (max. 101) Height



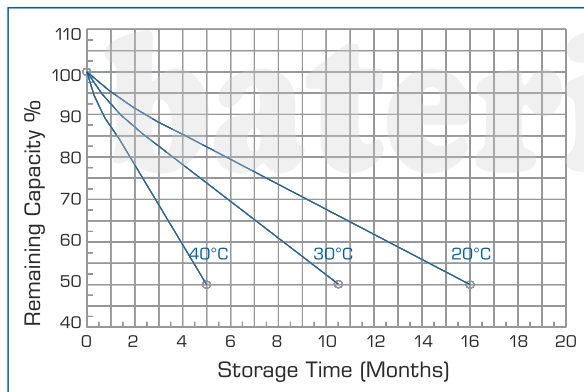
## Constant current discharge characteristics: A (25°C)

F.V/Time	5 Min.	10 Min.	15 Min.	30 Min.	1 HR	3 HR	5 HR	10 HR	20 HR
9,60 V	47,5	31,4	24,9	13,8	8,13	3,22	2,16	1,17	0,63
10,2 V	45,1	29,9	23,9	13,2	7,80	3,18	2,13	1,16	0,63
10,8 V	42,4	28,1	22,7	12,5	7,41	3,11	2,08	1,15	0,63

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

F.V/Time	5 Min.	10 Min.	15 Min.	30 Min.	1 HR	3 HR	5 HR	10 HR	20 HR
9,60 V	530	355	284	158	94,1	38,3	25,8	14,0	7,61
10,2 V	504	337	272	151	90,3	37,7	25,4	13,9	7,55
10,8 V	473	317	259	144	85,8	37,0	24,9	13,9	7,50

## Storage characteristic:



## Charging Method:

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

Constant Voltage (V)  
 $-0.2C \times 2h + 2.4-2.45V/Cell \times 24h$ , max. Current 0.3CA

Constant Current (A)  
 $-0.2C \times 2h + 0.1CA \times 12h$

Fast  
 $-0.2C \times 2h + 0.3CA \times 4.0h$

## 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%