



## 12LS-38

12V 38Ah

VdS G112077

Design lifetime 10 years



Q-Batteries Security Akku 12LS-38 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

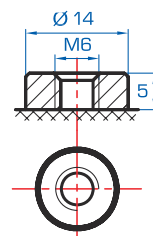
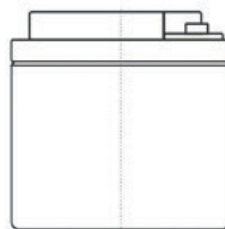
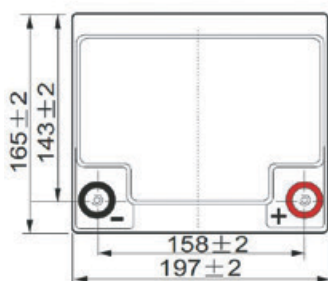
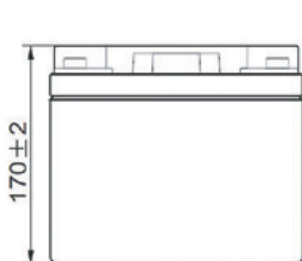


### Specification:

Voltage Per Unit	12 V		
Capacity	38 Ah (20 h) cell voltage 1.85V / cell		
Cells Per Unit	6		
Weight	ca. 13.2 kg +/- 3%		
Max. Discharge Current	380 A (5 sec.)		
Internal Resistance	ca. 8m $\Omega$		
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	F11 (M6)		
Container Material	A.B.S. (UL94-HB)		

### Dimensions:

197 Length x 165 Width x 170 mm Height



F11 (threaded insert M6)

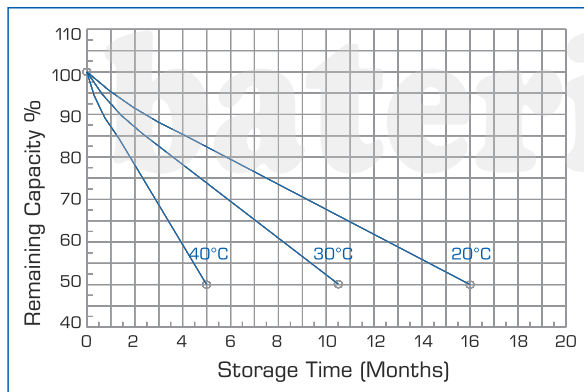
## Constant current discharge characteristics: A (25°C)

FV/Time	5 Min.	10 Min.	15 Min.	30 Min.	1 HR	2 HR	3 HR	4 HR	5 HR	10 HR	20 HR
9.60 V	127,3	93,74	73,08	44,53	24,70	14,77	10,20	8,449	7,114	4,030	2,150
10,2 V	120,0	86,05	70,45	42,95	24,36	14,55	10,08	8,371	7,030	3,953	2,072
10,8 V	97,24	72,41	61,84	41,90	23,56	14,18	9,770	8,097	6,821	3,875	1,994

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

FV/Time	5 Min.	10 Min.	15 Min.	30 Min.	1 HR	2 HR	3 HR	4 HR	5 HR	10 HR	20 HR
9.60 V	1.343	998,4	796,7	499,7	285,4	174,1	121,4	100,7	84,87	48,16	25,78
10,2 V	1.302	942,2	775,1	490,1	282,5	172,1	120,9	100,4	84,36	47,43	24,87
10,8 V	948,1	731,2	615,1	451,1	263,1	162,4	112,1	92,47	78,33	45,11	22,52

## 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%