



## 12LS-45

12V 45Ah

VdS G118007

Design lifetime 10 years



Q-Batteries Security Akku 12LS-45 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

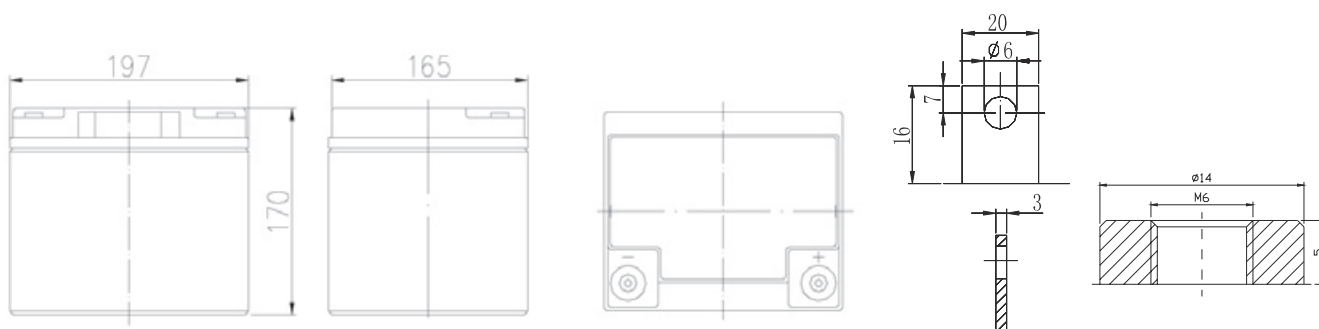


### Specification:

Voltage Per Unit	12 V		
Capacity	45 Ah (10 h) cell voltage 1.8V / cell		
Cells Per Unit	6		
Weight	ca. 14.5 kg +/- 3%		
Max. Discharge Current	450 A (5 sec.)		
Internal Resistance	ca. 8,0m $\Omega$		
Operating Temperature Range	Discharge:	Charge:	Storage:
Normal	- 15°C – 50°C	-10°C – 50°C	- 20°C – 50°C
Operating Temperature Range	25°C $\pm$ 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	F4, F11		
Technology	AGM, Absorbent glass mat technology		
Container Material	A.B.S. (UL94-HB)		

### Dimensions:

197 Length x 165 Width x 170 mm Height



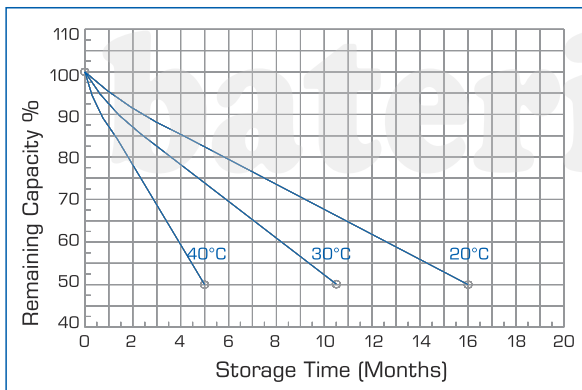
## Constant current discharge characteristics: A (25°C)

FV/Time	10min	15min	30min	60min	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9,60V	94,5	74,3	45	27,9	16,4	11,5	9,41	8,03	5,51	4,58	2,41
9,90V	91,7	72,5	44,1	27,5	16,3	11,4	9,35	7,99	5,48	4,57	2,4
10,2V	87,9	69,8	42,8	26,8	16,2	11,3	9,29	7,93	5,44	4,56	2,39
10,5V	84,1	67,4	41,7	26,3	16	11,3	9,23	7,88	5,4	4,53	2,38
10,8V	79,4	63,9	40,2	25,4	15,6	10,9	8,95	7,64	5,24	4,5	2,36

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

FV/Time	10min	15min	30min	60min	2HR	3HR	4HR	5HR	8HR	10HR	20HR
9,60V	1021	815	505	318	190	135	111	94,9	65,4	54,7	28,9
9,90V	990	796	495	313	189	134	110	94,4	65,1	54,6	28,8
10,2V	949	766	480	305	188	133	109	93,7	64,6	54,4	28,7
10,5V	908	740	468	299	185	132	108	93,1	64,2	54,1	28,5
10,8V	857	701	451	290	180	128	105	90,3	62,2	53,7	28,4

## Storage characteristic:



## Charging Method:

Recharge after use, at least every 6th month:

Cyclic charging voltage 14,5 to 14,9 V (25°C)
Float charging voltage (25°C) 13,6 to 13,8 V (25°C)
Maximum charging current 13,5A

Do not short circuit the battery.

## 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%