



## 12LS-2.9

12V 2,9Ah

Design lifetime 5 years



Q-Batteries Security Akku 12LS-2.9 is an AGM battery. It is designed for stand-by applications such as burglar-systems or UPS-systems.

### Application:

UPS, security- and telecommunicationsystems etc.

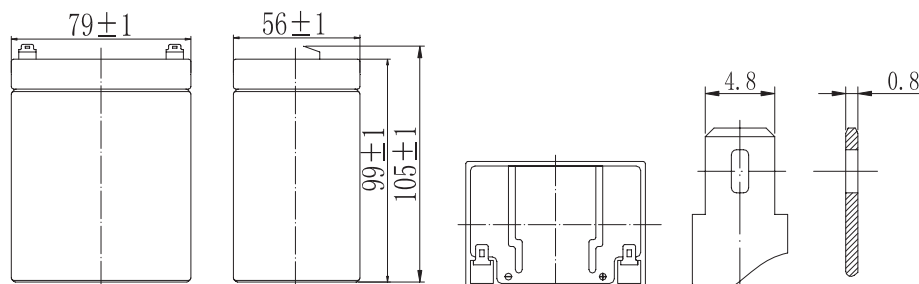


### Specification:

Voltage Per Unit	12 V		
Capacity	2.9 Ah	@20hr-rate to 1.75V per cell @25°C	
Cells Per Unit	6		
Weight	ca. 1.05 kg +/- 3kg		
Max. Discharge Current	29 A (5 sec.)		
Internal Resistance	ca. 42m 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	F1		
Container Material	A.B.S. (UL94-HB)		

### Dimensions:

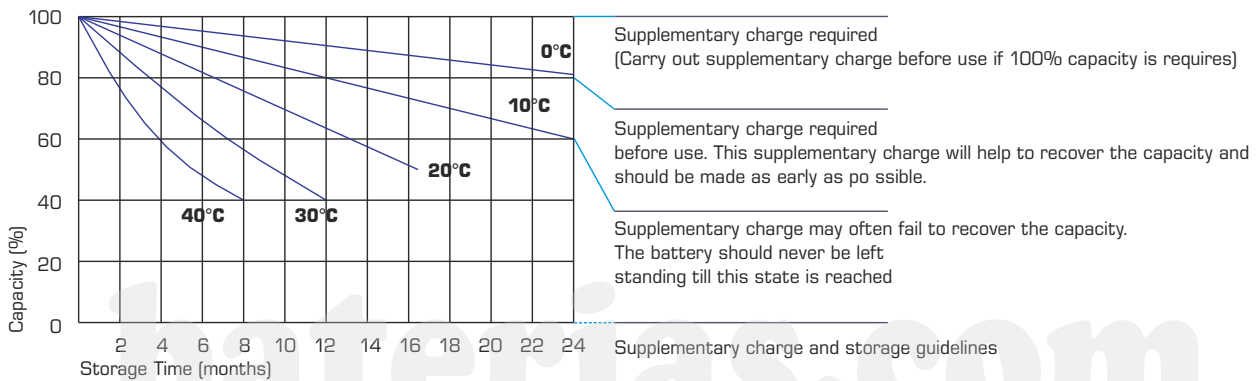
79 Length x 56 Width x 99 mm Height



## Constant current discharge characteristics: $A_{25^{\circ}C}$

F.V/Time	5 Min.	10 Min.	15 Min.	30 Min.	1 HR	2 HR	3 HR	4 HR	5 HR	10 HR	20 HR
9.60V	11.0	6.96	5.51	3.07	1.89	1.03	0.74	0.59	0.50	0.27	0.147
9.90V	10.7	6.75	5.38	3.01	1.86	1.02	0.74	0.59	0.50	0.27	0.147
10.2V	10.2	6.47	5.18	2.92	1.81	1.02	0.73	0.58	0.50	0.27	0.146
10.5V	9.81	6.19	5.00	2.85	1.77	1.00	0.73	0.58	0.49	0.27	0.145
10.8V	9.26	5.85	4.74	2.75	1.72	0.97	0.70	0.56	0.48	0.26	0.142

## 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