



## 12LS-200

12V 208Ah

Design lifetime 10 years



The Q-Batteries LS series are valve regulated and maintenance-free AGM batteries (Absorbent glass mat technology), which have been developed especially for stand-by applications, such as in security technology, fire alarm technology or UPS. The batteries are characterized by excellent energy storage properties and a high level of reliability. The Q-Batteries Akku 12LS-7.2 has a VdS-approval.

### Application:

burglar-systems,  
UPS-systems,  
telecommunication-systems

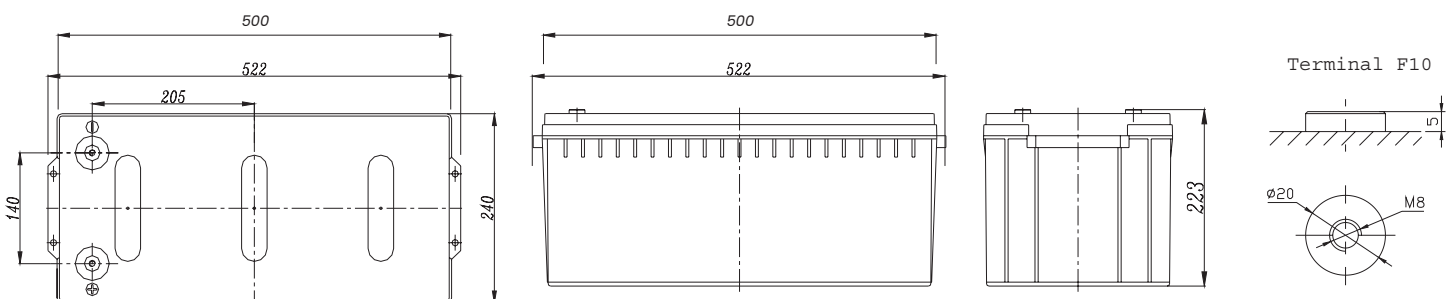


### Specification:

Voltage Per Unit	12 V		
Capacity	208 Ah (20 h) cell voltage 1.75V / cell		
Cells Per Unit	6		
Weight	ca. 60 kg +/- 3%		
Max. Discharge Current	2.000 A (5 sec.)		
Internal Resistance	ca. 4m $\Omega$		
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 at approx. 25°C for up to 6 months. Self-discharge ratio less than 3% per month at 25°C. Please charge batteries before using.		
Terminal	F10		
Container Material	A.B.S. (UL94-HB)		

### Dimensions:

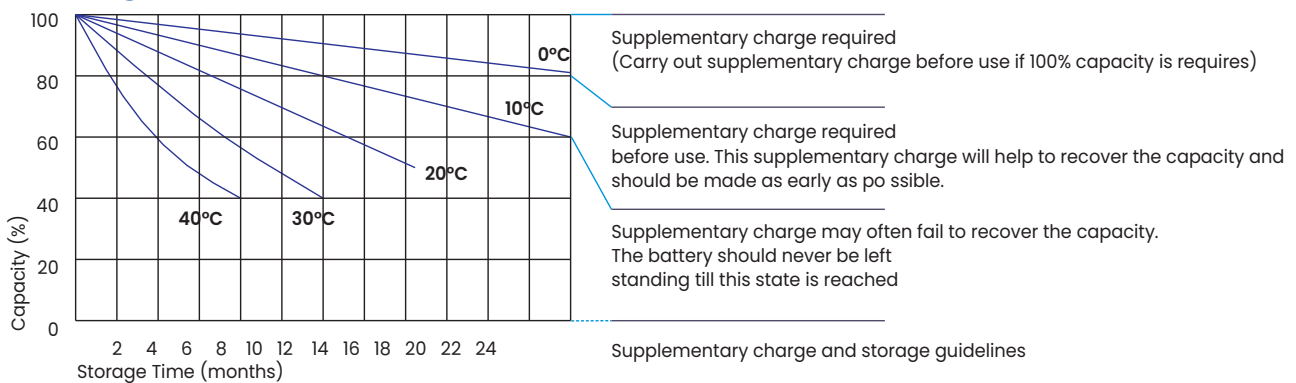
522 Length x 240 Width x 223 mm Height



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

F.V/Time	5min	10min	15min	30min	60min	2h	3h	4h	5h	8h	10h	20h
9.60V	569.6	426.7	344.7	200.9	124.8	77.07	52.38	42.23	35.06	23.09	20.81	11.02
10.0V	553.2	406.0	337.6	198.4	123.2	75.52	51.41	41.63	34.75	23.00	20.61	10.81
10.2V	536.8	391.7	332.3	195.3	122.0	74.72	50.95	41.22	34.52	22.79	20.40	10.61
10.5V	482.1	361.4	316.4	190.0	120.5	73.74	50.50	40.61	34.23	22.59	20.20	10.40
10.8V	435.1	329.6	291.7	183.7	118.8	73.14	49.91	39.22	34.06	22.50	20.02	10.30
11.1V	371.5	294.6	261.6	176.7	116.0	70.20	48.93	38.65	33.81	22.32	19.78	9.88

## 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 0.3C
Constant Current (A)	-0.2C x 2h + 0.1C x 12h
Fast	-0.2C x 2h + 0.3C x 4.0h