RESERVE POWER

AGM STANDARD

Q-BATTERIES UALITY

# 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

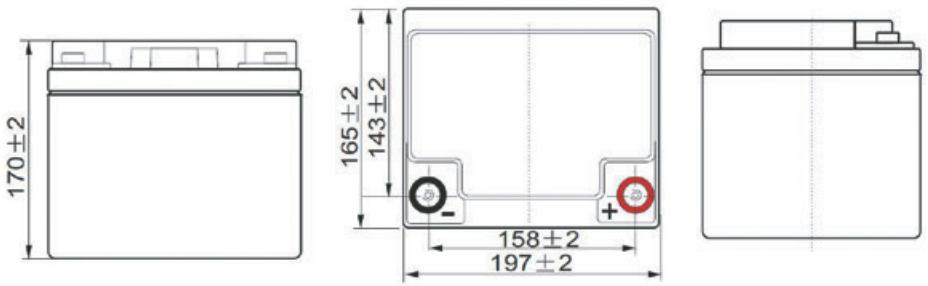

## Specification:

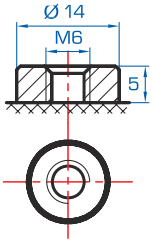


| | | | |
|---|---|---|---|
| Voltage Per Unit | 12 V | | |
| Capacity | 38 Ah (20 h) cell voltage 1.85V / cell | | |
| Cells Per Unit | 6 | | |
| Weight | ca. 13.2 kg +/- 3% | | |
| Max. Discharge Current | 380 A (5 sec.) | | |
| Internal Resistance | ca. 8m Ω | | |
| Operating Temperature Range Normal | Discharge:<br>- 15°C – 50°C | Charge:<br>-10°C – 50°C | Storage:<br>- 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 | F11 (M6) | | |
| Container Material | A.B.S. (UL94-HB) | | |

## Dimensions:

197 Length x 165 Width x 170 mm Height




F11 (threaded insert M6)

Q-BATTERIES UALITY

# 12LS-38

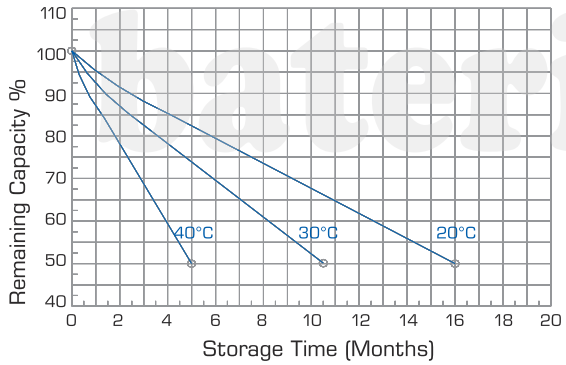
## Constant current discharge characteristics: A (25°C)

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.60 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)

| 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 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 9.60 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 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

## 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% |