



12LS-12

12V 12Ah

VdS G112072

Design lifetime 5 years



Q-Batteries Security Akku 12LS-12 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

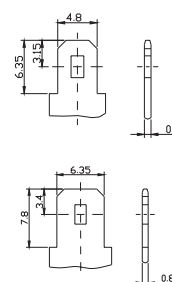
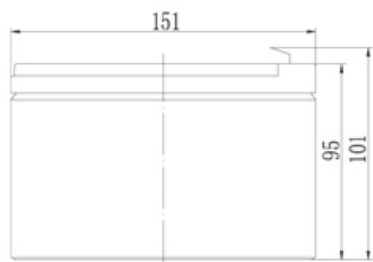


Specification:

| | | | |
|------------------------------------|---|-------------------------|---------------------------|
| Voltage Per Unit | 12 V | | |
| Capacity | 12 Ah (20 h) cell voltage 1.85V / cell | | |
| Cells Per Unit | 6 | | |
| Weight | ca. 3,8 kg +/- 3kg | | |
| Max. Discharge Current | 180 A (5 sec.) | | |
| Internal Resistance | ca. 19m 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 \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 | F1, F2 | | |
| Container Material | A.B.S. (UL94-HB) | | |

Dimensions:

151 Length x 98 Width x 95 mm (max. 101) Height



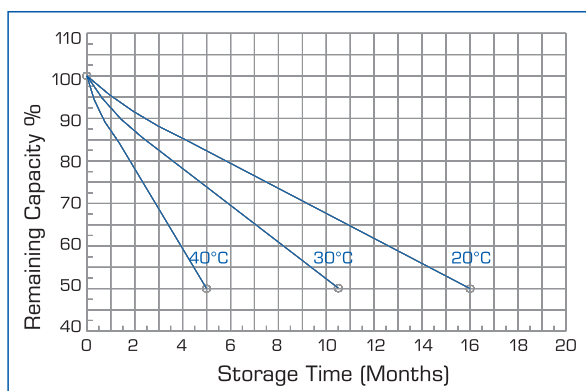
Constant current discharge characteristics: A (25°C)

| F.V/Time | 5 Min. | 10 Min. | 15 Min. | 30 Min. | 1 HR | 3 HR | 5 HR | 10 HR | 20 HR |
|----------|--------|---------|---------|---------|------|------|------|-------|-------|
| 9,60 V | 47,5 | 31,4 | 24,9 | 13,8 | 8,13 | 3,22 | 2,16 | 1,17 | 0,63 |
| 10,2 V | 45,1 | 29,9 | 23,9 | 13,2 | 7,80 | 3,18 | 2,13 | 1,16 | 0,63 |
| 10,8 V | 42,4 | 28,1 | 22,7 | 12,5 | 7,41 | 3,11 | 2,08 | 1,15 | 0,63 |

Constant current discharge characteristics: Watt (25°C)

| F.V/Time | 5 Min. | 10 Min. | 15 Min. | 30 Min. | 1 HR | 3 HR | 5 HR | 10 HR | 20 HR |
|----------|--------|---------|---------|---------|------|------|------|-------|-------|
| 9,60 V | 530 | 355 | 284 | 158 | 94,1 | 38,3 | 25,8 | 14,0 | 7,61 |
| 10,2 V | 504 | 337 | 272 | 151 | 90,3 | 37,7 | 25,4 | 13,9 | 7,55 |
| 10,8 V | 473 | 317 | 259 | 144 | 85,8 | 37,0 | 24,9 | 13,9 | 7,50 |

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% |