



LEAD ACID BATTERY

Design life: 5 years

SK12-18 12V - 18AH

The rechargeable batteries are lead-lead dioxide systems. The dilute sulfuric acid electrolyte is absorbed by separators and plates and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free, leak proof and usable in any position.



BATTERY CONSTRUCTION

Component	Positive plate	Negative plate	Container	Cover	Safety Valve	Terminal	Separator	Electrolyte
Raw material	Lead dioxide	Lead	ABS	ABS	Rubber	Copper	Fiberglass	Sulfuric acid

GENERAL FEATURES

- Absorbent Glass Mat (AGM) technology for efficient gas recombination of up to 99% and freedom from electrolyte maintenance or water adding.
- Not restricted for air transport-complies with IATA/ICAO Special Provision A67.
- UL-recognized component.
- Can be mounted in any orientation.
- Computer designed lead, calcium tin alloy grid for high power density
- Long service life, float or cyclic applications.
- Maintenance-free operation.
- Low self discharge.

DIMENSIONS AND WEIGHT

Length (mm / inch)..... 181 / 7,13
 Width (mm / inch)..... 77 / 3,03
 Height (mm / inch)..... 167 / 6,57
 Total Height (mm / inch)..... 167 / 6,57
 Approx Weight (Kg / lbs)..... 5,20 / 11,70
 Terminal Type : F3 (M5)

INTERNATIONAL STANDARD REFERENCES

- EN 60896-21
- EN 60896-22
- BS 6290-4
- EN 50272-2
- EUROBAT 3-5 years "Standard commercial"

CERTIFIED

- ISO 9001
- ISO 14001
- UL Component

CASE BOX

Available in Flame Retardant UL94 V0 version

PERFORMANCE CHARACTERISTICS

NOMINAL VOLTAGE..... 12V

NUMBER OF CELL..... 6

NOMINAL CAPACITY (25°C)

20 hour rate (0,90A - 10.5V)..... 18,00Ah

10 hour rate (1,67A - 10.5V)..... 16,70Ah

5 hour rate (3,08A - 10.2V)..... 15,40Ah

1 hour rate (11,70A - 9.6V)..... 11,70Ah

INTERNAL RESISTANCE

Fully Charged battery (25°C)..... 16 mOhms

SELF-DISCHARGE

3% of capacity declined per month at 20°C (average)

OPERATING TEMPERATURE RANGE

Discharge..... -20 — 60°C

Charge..... -10 — 60°C

Storage..... -20 — 60°C

MAX DISCHARGE CURRENT

77°F (25°C)..... 270A (5s)

CHARGE METHODS Constant Voltage Charge 77°C (25°C)

Cycle use..... 14,4 — 14,7V

Maximum charging current..... 5,40A

Temperature compensation..... -30mV/°C

Standby use..... 13,5 — 13,8V

Temperature compensation..... -20mV/°C

Discharge constant current (Ampere at 77°F 25°C)

TIME	10 min	15 min	30 min	60 min	2 h	3 h	4 h	5 h	10 h	20 h
9,60 V	43,2	34,2	19,1	11,7	6,39	4,59	3,67	3,12	1,70	0,91
9,90 V	41,9	33,4	18,7	11,5	6,36	4,56	3,65	3,10	1,69	0,91
10,2 V	40,2	32,1	18,1	11,2	6,30	4,53	3,63	3,08	1,68	0,91
10,5 V	38,4	31,1	17,7	11,0	6,21	4,50	3,60	3,06	1,67	0,90
10,8 V	36,3	29,4	17,0	10,7	6,05	4,37	3,49	2,97	1,64	0,88

Discharge constant power (Watts at 77°F 25°C)

TIME	10 min	15 min	30 min	60 min	2 h	3 h	4 h	5 h	10 h	20 h
9,60 V	487	390	219	135	74,8	54,5	43,7	37,3	20,4	11,0
9,90 V	473	381	214	133	74,4	54,2	43,5	37,0	20,3	10,9
10,2 V	453	366	208	130	73,7	53,8	43,2	36,8	20,2	10,9
10,5 V	434	354	203	127	72,6	53,5	42,9	36,5	20,1	10,8
10,8 V	409	335	195	124	70,8	51,9	41,6	35,4	19,7	10,6