

# ACUMAX® sealed maintenance-free lead-acid battery AM series



## AM 18-12

Sealed, maintenance free, lead-acid **ACUMAX®** batteries with a **6-9** years designed lifetime are made in **AGM** technology - electrolyte is absorbed in highly porous fiber glass separators placed between the plates. They use a gas recombination cycle which prevents electrolyte loss and allows the batteries to be used in rooms without forced ventilation, that are occupied by people. One-way, self-regulating pressure relief valves prevent the case from blowing up, by preventing excessive buildup of pressure in the cells.

- uninterruptible power supplies
- telecommunication PABX
- cash registers and fiscal printers
- emergency lighting systems
- fire and security systems
- solar powered systems
- mobile and portable equipment
- lawn mowers, electrical bicycle

### Main applications

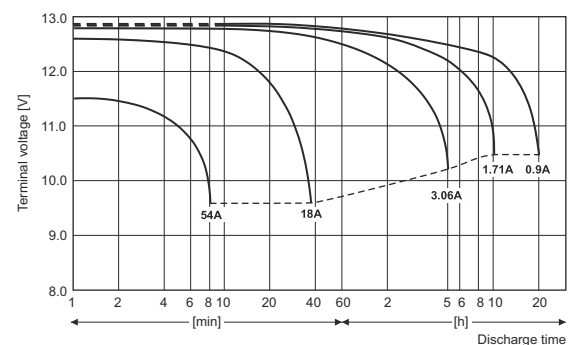
- medical equipment
- fishing lights
- parking meters
- toys

### Technical data

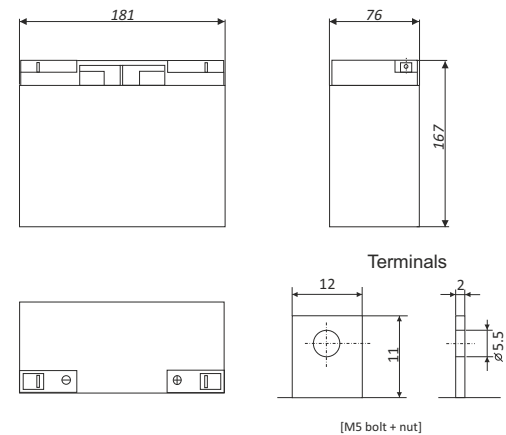
Nominal voltage	12 V
Nominal capacity	18 Ah/ C <sub>20</sub>
Design life	5 years @ 25°C 6-9 years @ 20°C according to Eurobat , General Purpose group
Weight	~ 5.6 kg
Dimensions	
Height	167 mm
Length	181 mm
Width	76 mm
Internal resistance	≤ 10.5 mΩ
Charging voltage @ 25°C	
Standby use	13.65 V ± 0.18 V
Cycle use	14.70 V ± 0.30 V
Charging current	
Recommended	1.8 A
Maximum	5.4 A
Max. discharge current (5s)	270 A
Container material	
Standard	ABS UL 94-HB
Optional (Flame-retardant)	ABS UL 94-V0

Battery approved for transportation by air, sea or land. Classified as non-hazardous material: *IATA/ICAO Special Provision A67, DOT-CFR Title 49 parts 171-189, IMDG amendment 27.*

### Discharge characteristics



### Dimensions



Tolerance: +/- 1mm;

### Constant current discharge (Current [A], 25 [°C] / 77 [°F])

U <sub>k</sub> [V/cell]	Discharge time										
	5 min	10 min	15 min	30 min	1h	2h	3h	4h	5h	10h	20h
1,80	68,3	41,8	34,6	18,7	10,3	6,23	4,52	3,52	3,02	1,77	0,914
1,75	71,9	44,3	36,3	19,8	10,7	6,39	4,64	3,58	3,07	1,80	0,931
1,70	75,1	46,5	37,7	20,7	11,0	6,53	4,73	3,62	3,11	1,82	0,946

### Constant power discharge (Power [W/cell], 25 [°C] / 77 [°F])

U <sub>k</sub> [V/cell]	Discharge time										
	5 min	10 min	15 min	30 min	1h	2h	3h	4h	5h	10h	20h
1,75	128	84,5	69,4	37,7	20,7	12,7	9,33	7,12	6,17	3,60	1,88
1,70	135	89,1	72,5	39,4	21,3	13,1	9,53	7,27	6,27	3,67	1,92
1,65	139	91,7	74,2	40,3	21,8	13,3	9,68	7,38	6,35	3,72	1,95

U<sub>f</sub> - Final voltage



All data are subject to change without notice.