

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



## AV 22-12

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

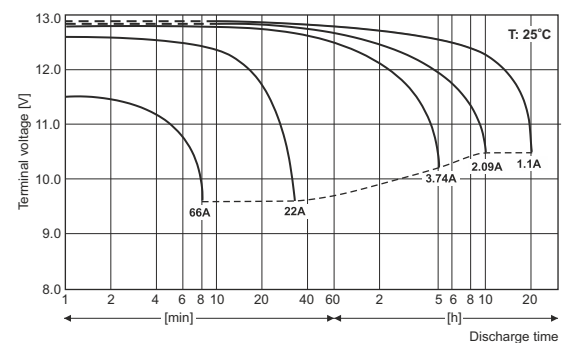
- medical equipment
- fishing lights
- parking meters
- toys

### Technical data

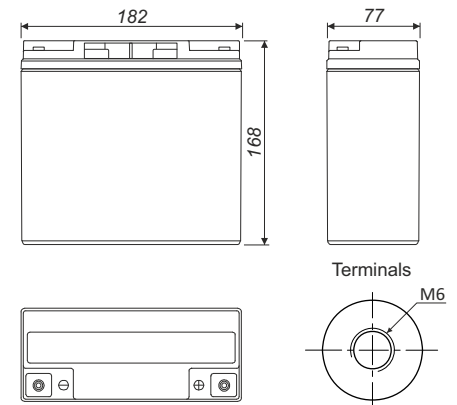
Nominal voltage	12 V
Nominal capacity	20 Ah/ C <sub>20</sub>
Design life	5 years @ 25°C 6 - 9 years @ 20°C according to Eurobat, General Purpose group
Weight	~ 6.9 kg
Dimensions	
Height	167 mm
Length	181 mm
Width	76 mm
Internal resistance	≤ 9 mΩ
Charging voltage @ 25°C	
Standby use	13.65 V ± 0.18 V
Cycle use	14.70 V ± 0.30 V
Charging current	
Recommended	2.2 A
Maximum	6.6 A
Max. discharge current (5s)	330 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
<b>1,80</b>	83,3	54,0	41,4	22,1	12,8	7,83	5,51	4,33	3,68	2,14	1,12
<b>1,75</b>	90,1	57,4	43,1	23,5	13,1	7,98	5,64	4,45	3,77	2,21	1,16
<b>1,70</b>	97,6	59,9	44,4	24,2	13,4	8,12	5,75	4,54	3,84	2,26	1,19

### 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
<b>1,75</b>	164	107	80,1	46,6	26,7	15,7	11,3	9,02	7,65	4,47	2,35
<b>1,70</b>	171	112	83,2	48,3	27,1	15,9	11,4	9,14	7,78	4,57	2,41
<b>1,65</b>	175	114	85,0	49,3	27,4	16,1	11,5	9,24	7,87	4,63	2,44

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



All data are subject to change without notice.