

ACUMAX® sealed maintenance-free lead-acid battery AML series



AML 50-12

Sealed, maintenance free, lead-acid **ACUMAX®** batteries with a **10 - 12 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
- telecom power supply systems
- telecommunication PABX
- power station
- fire and security systems
- solar powered systems
- emergency lighting systems
- cable TV

Main applications

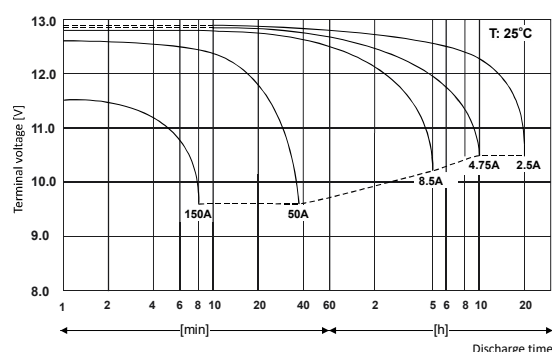
- marine
- golf-carts, wheelchairs
- mobile and portable equipment
- medical equipment

Technical data

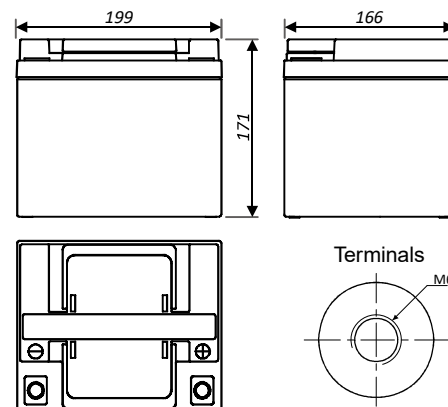
Nominal voltage	12 V
Nominal capacity	50 Ah/ C ₂₀
Design life	8 years @ 25°C 10-12 years @ 20°C according to Eurobat, Long Life group
Weight	~ 14.8 kg
Dimensions	
Height	171 mm
Length	199 mm
Width	166 mm
Internal resistance	≤ 5 mΩ
Charging voltage @ 25°C	
Standby use	13.65 V ± 0.18 V
Cycle use	14.70 V ± 0.30 V
Charging current	
Recommended	4 A
Maximum	12 A
Max. discharge current (5s)	600 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: + 3mm/- 1mm;

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

U _k [V/cell]	Discharge time										
	5 min	10 min	15 min	30 min	1h	2h	3h	4h	5h	10h	20h
1,80	166	106	84,5	50,7	28,8	16,2	11,7	9,44	8,26	4,65	2,44
1,75	185	117	87,6	52,8	29,9	16,8	12,1	9,70	8,50	4,76	2,50
1,70	199	125	90,2	54,4	30,6	17,3	12,4	9,89	8,67	4,82	2,55

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

U _k [V/cell]	Discharge time										
	5 min	10 min	15 min	30 min	1h	2h	3h	4h	5h	10h	20h
1,75	322	223	160	97,2	58,2	33,3	23,8	19	17	9,38	5,05
1,70	345	233	167	100	59,5	34,5	24,7	19,7	17,3	9,57	5,17
1,67	350	237	170	102	60	34,8	25	19,8	17,5	9,62	5,20

U_f - Final voltage



All data are subject to change without notice.