

EH type batteries are made in AGM technology and are constructed by plates, separators, safety valves and a container. Since the electrolyte is held by a glass-mat separator and plates, the batteries can be used in any chosen position without the risk of leakage. EH type batteries have a pressure relief valves that allows safe dispersal of any excess pressure inside the cell (VRLA). Due to advantages as sealed construction, maintenance free, low internal resistance and long term storage, EH batteries are the base of the emergency power supplying.



TECHNICAL DATA

Nominal voltage	12 V	
Nominal capacity	230 Ah / C ₂₀	
Cell per unit	6	
Technology	AGM	
Design life	5 lat w 20°C*	
	4 lata w 25°C	
Dimensions	height	220,0 mm
	length	522,0 mm
	width	240,0 mm
Weight	~62,4 kg	
	230,0 Ah	
Capacity @ 25°C	20h	11,5A @ 1,75V/cell
	10h	21,9A @ 1,75V/cell
	5h	39,1A @ 1,75V/cell
	1h	147,7A @ 1,60V/cell
Ambient nominal temperature range	charge	0°C ~ 40°C
	discharge	-20°C ~ 50°C
	storage	-20°C ~ 40°C
Internal resistance	@ fully charge battery	≤3 mΩ
Charging voltage @ 20°C	standby use	13,5V to 13,8V (-18 mV/°C)
	cycle use	14,4 V to 15,0V (-24 mV/°C)
Charging current	recommended	23 A
	maximum	69 A
Maximum discharge current (for 5 sec)	800 A	
Capacity retention during storage @ 20°C (self discharge)	after 1 month	97 %
	after 6 months	80 %
	after 12 months	63 %
Container material	standard	ABS UL 94-HB
	optional	ABS UL 94-V0**
Terminal	insert terminal	I3
Terminal hardware initial torque	10,0 Nm	

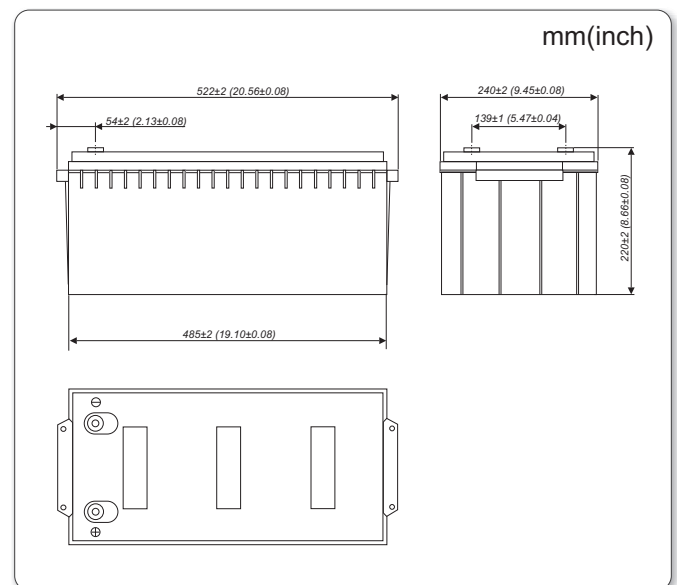
* - According to Eurobat

** - Flame-retardant

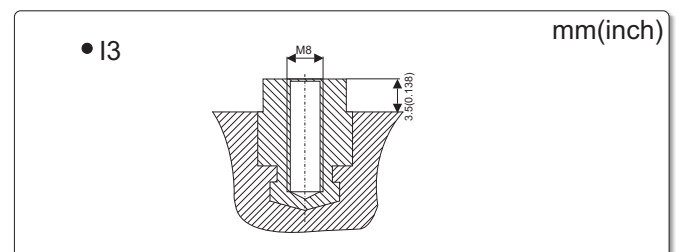
APPLICATIONS

- uninterruptible power supplies (UPS)
- emergency lighting systems
- telecommunication PABX
- cash registers and fiscal printers
- fire and security systems
- solar powered systems
- medical equipment
- mobile and portable equipment - cycle use
- measuring devices

DIMENSIONS



TERMINALS



NO TRANSPORT RESTRICTED

Not restricted for air, surface and water transport. Classified as non-hazardous material (IATA/ICAO Special Provision A67, DOT-CFR Title 49 parts 171-189, IMDG amendment 27)

DISCHARGE CHARACTERISTICS

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

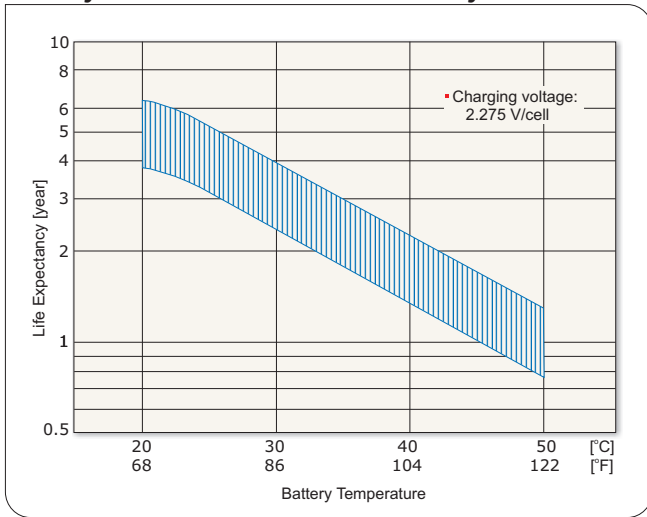
F.V. V/cell	Discharge time										
	5 min	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1,80	343,9	282,5	223,1	180,9	137,8	76,3	55,9	38,6	25,9	21,6	11,3
1,75	359,5	294,5	231,6	187,3	141,9	78,3	57,0	39,1	26,3	21,9	11,5
1,70	370,8	303,0	237,1	191,3	144,7	79,3	57,5	39,4	26,5	22,1	11,6
1,65	379,3	308,9	240,4	193,8	146,3	80,0	58,0	39,6	26,5	22,1	11,6
1,60	386,9	314,3	242,7	195,7	147,7	80,7	58,2	39,6	26,6	22,1	11,6

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

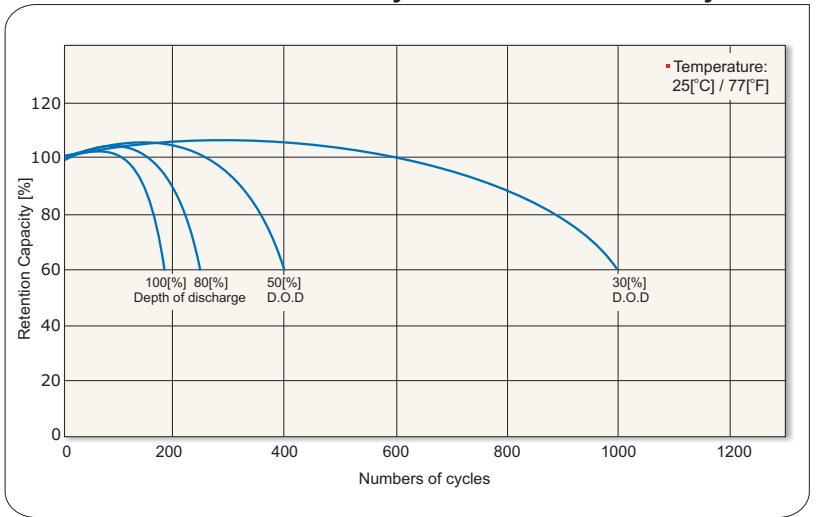
F.V. V/cell	Discharge time										
	5 min	10min	15min	30min	1h	2h	3h	5h	8h	10h	20h
1,80	641,4	540,8	434,5	357,5	273,4	152,6	111,7	77,05	51,88	43,05	22,66
1,75	670,7	563,6	451,2	370,3	281,6	156,5	114,0	78,20	52,65	43,70	23,00
1,70	691,0	579,9	461,4	378,2	286,7	158,6	115,0	78,62	52,94	43,93	23,12
1,65	707,3	591,3	468,0	383,0	290,1	160,0	115,8	78,89	53,08	44,05	23,19
1,60	721,1	601,5	472,7	386,9	293,0	161,3	116,5	79,12	53,13	44,05	23,19

F.V. - Final voltage

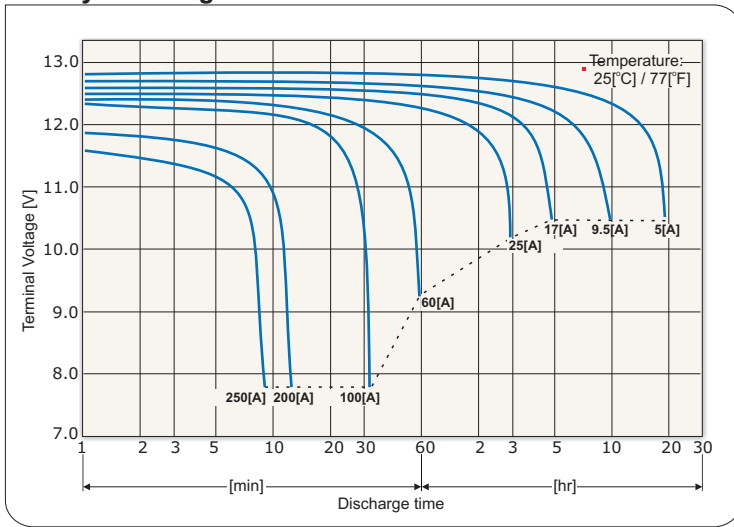
Battery life characteristics of standby use



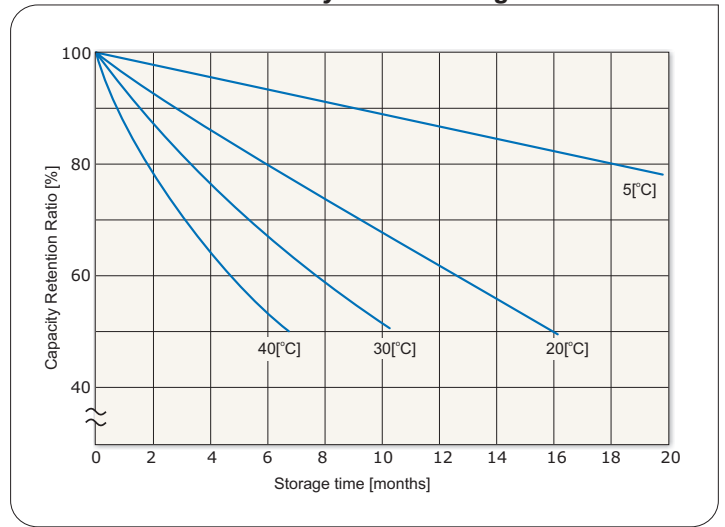
Battery life characteristics of cycle use



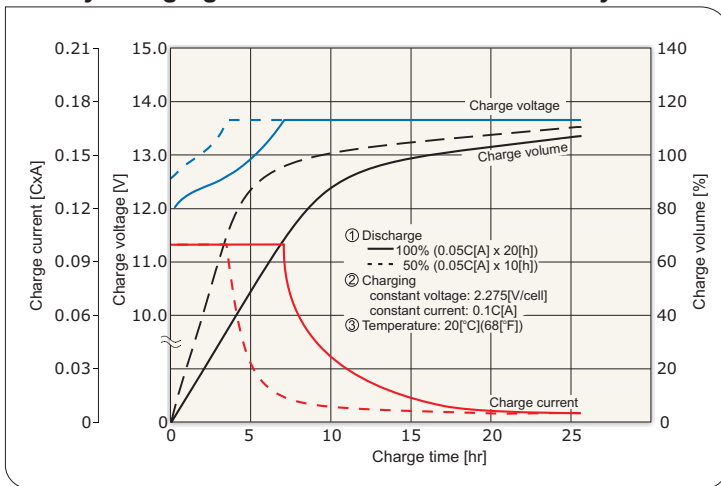
Battery discharge characteristics



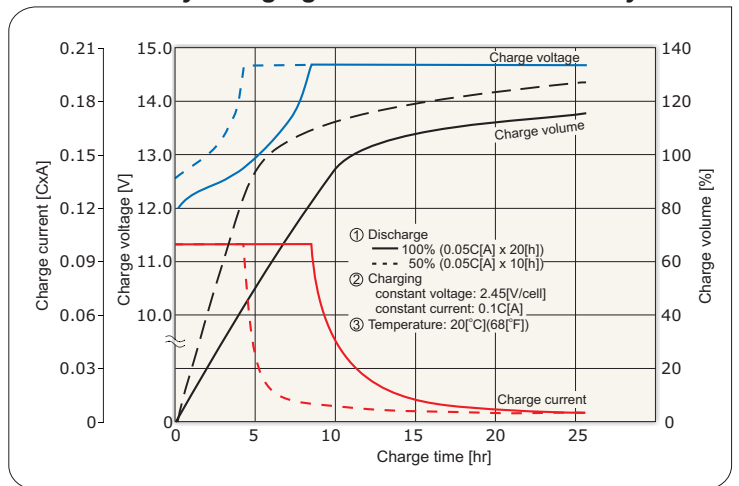
Battery self discharge characteristics



Battery charging characteristics for the standby use



Battery charging characteristics for the cycle use



Battery discharge current and final discharge voltage

Discharge current [A]	20 > I	20 ≤ I < 50	50 ≤ I < 100	100 ≤ I
Final discharge voltage [V/cell]	1.75	1.70	1.55	1.30



*) C - Capacity