

UPS 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. UPS type batteries have a pressure relief valves that allows safe dispersal of any excess pressure inside the cell (VRLA). UPS type batteries have been designed for standby use in uninterruptible power supplies (UPS). These batteries are the replacement for DYNASTY batteries (C&D Technologies former Johnson Controls). They have the same dimensions but a larger capacity and better constant power and constant current discharge characteristics.

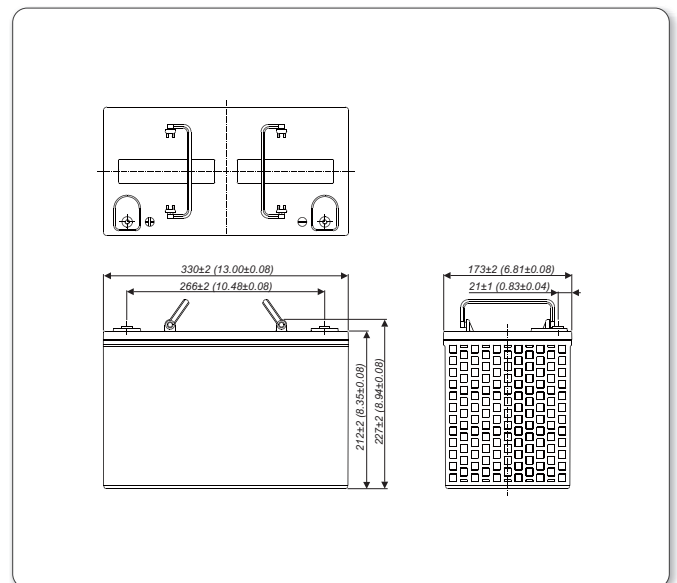


### TECHNICAL DATA

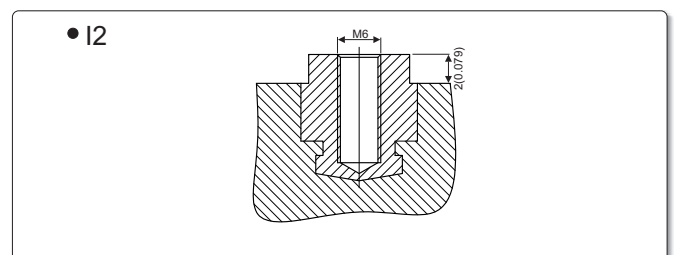
Nominal voltage	12 V		
Nominal capacity	108 Ah / C <sub>10</sub>		
Cell per unit	6		
Technology	AGM		
Design life	10~12 years @ 20°C* 8 years @ 25°C		
Dimensions	height	227,0 mm	
	length	330,0 mm	
	width	173,0 mm	
Weight	~34,3 kg		
	Capacity @ 25°C		
Capacity @ 25°C	10h	10,8A @1,75V/cell	108,0 Ah
	5h	18,7A @1,75V/cell	93,5 Ah
	1h	73,9A @1,75V/cell	73,9 Ah
	0,5h	134,0A @1,60V/cell	67,0 Ah
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	10,8 A	
	maximum	32,4 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	I2	
Terminal hardware initial torque	5,5 Nm		

- uninterruptible power supplies (UPS)
- emergency lighting systems
- telecommunication PABX
- power station
- fire and security systems
- cable TV
- solar powered systems
- mobile and portable equipment – cycle use
- marine
- wheelchairs
- golf-carts

### DIMENSIONS



### TERMINALS



\*) - According to Eurobat (Long Life group)

\*\*) - Flame-retardant

### 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)

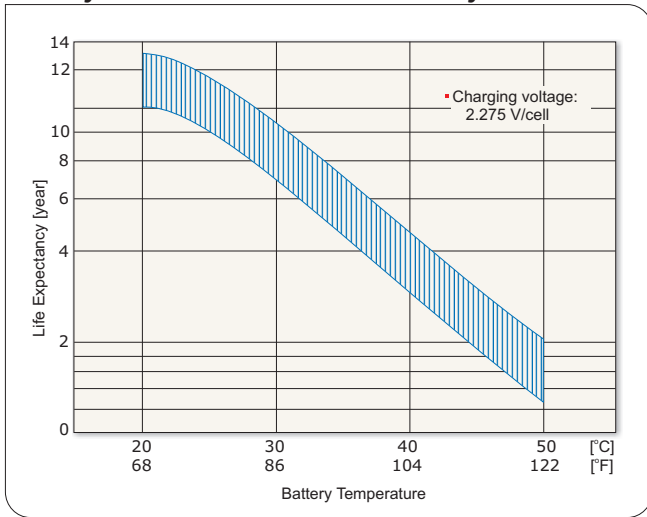
F.V. V/cell	Discharge time										
	5 min	10 min	15 min	30 min	50 min	1hr	2hr	4hr	6hr	8hr	10hr
1,80	354,0	246,0	202,0	123,0	83,10	72,80	41,40	22,42	16,57	12,92	10,50
1,75	389,0	265,0	213,0	128,0	85,60	73,90	42,00	22,81	16,81	13,12	10,80
1,70	414,0	276,0	220,0	131,0	86,80	74,80	42,40	23,00	16,91	13,19	10,90
1,65	430,0	285,0	226,0	133,0	88,00	75,50	42,80	23,11	16,96	13,22	10,90
1,60	444,0	290,0	230,0	134,0	88,00	76,00	43,00	23,17	16,99	13,24	10,90

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

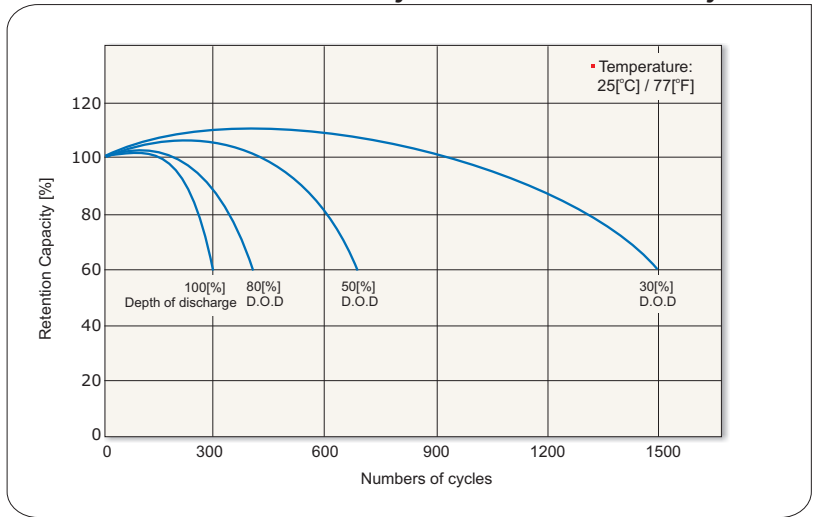
F.V. V/cell	Discharge time										
	5 min	10 min	15 min	30 min	50 min	1hr	2hr	4hr	6hr	8hr	10hr
1,80	635,0	466,7	387,7	246,7	166,7	144,5	82,87	44,83	33,13	25,85	21,02
1,75	711,7	500,8	410,0	253,0	170,2	146,7	84,09	45,62	33,63	26,23	21,51
1,70	759,0	536,5	424,2	257,0	172,2	148,3	84,82	45,99	33,82	26,38	21,76
1,65	790,0	537,5	433,7	260,0	174,0	149,7	85,56	46,23	33,92	26,44	21,76
1,60	813,3	548,6	440,0	262,3	175,3	151,0	86,04	46,41	33,99	26,47	21,76

F.V. - Final voltage

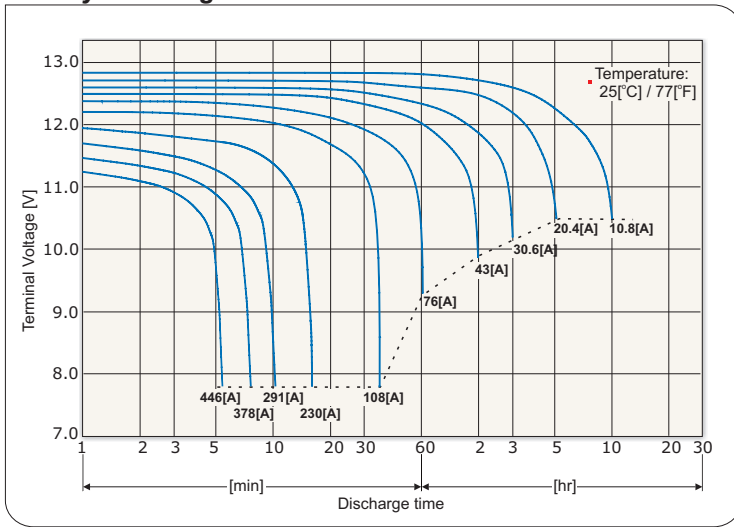
## Battery life characteristics of standby use



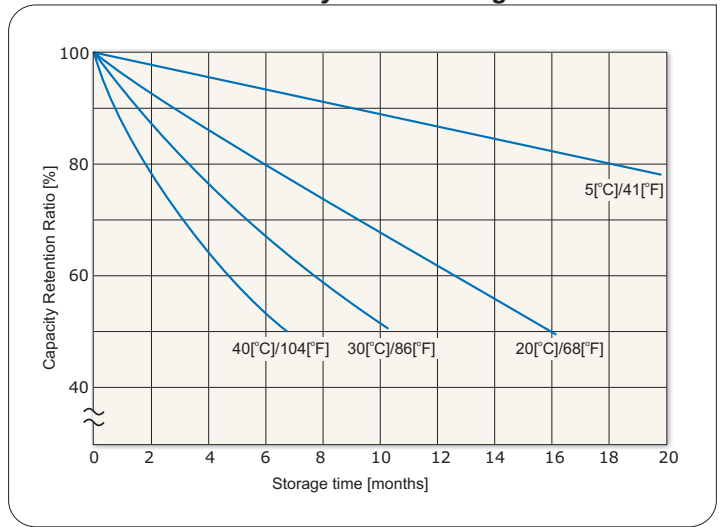
## Battery life characteristics of cycle use



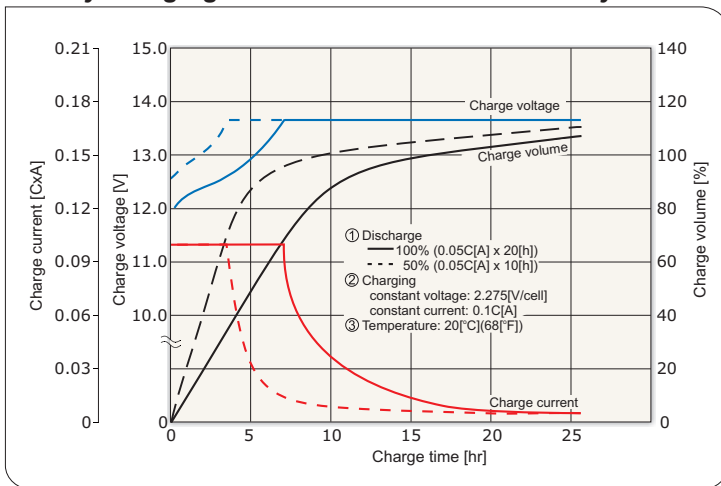
## Battery discharge characteristics



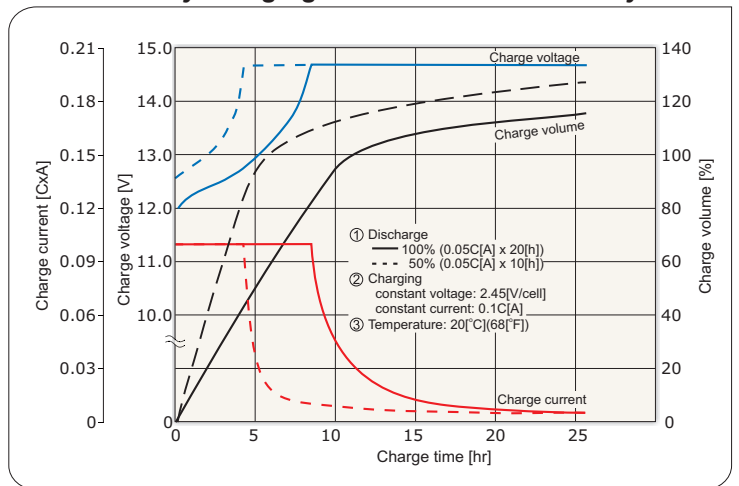
## Battery self discharge characteristics



## Battery charging characteristics for the standby use



## Battery charging characteristics for the cycle use



## Battery discharge current and final discharge voltage

Discharge current [A]	22 > I	22 ≤ I < 55	55 ≤ I < 110	110 ≤ I
Final discharge voltage [V/cell]	1.75	1.70	1.55	1.30



\*) C - Capacity