

DC 220 Gel

Gel Deep Cycle Battery | 12 V | 220 Ah | 100 h



Electrical Specifications

Nominal Voltage	12 V (6 Cells)
Capacity C100	220 Ah
Capacity C20	190 Ah
Capacity C10	180 Ah
Capacity C5	155 Ah
Capacity C3	140 Ah
Internal Resistance	Ca. 3,68 mΩ (at 25 °)
Max. Charge Current	52,5 A
Max. Discharge Current	1400 A (5 s)
Short-Circuit Current	2200 A
Temperature Effect on Capacity (10 h)	40 °C: 102 % 25 °C: 100 % 0 °C: 85 % -15 °C: 65 %
Number of Cycles	1750 (30 % DoD) 750 (50 % DoD) 450 (80 % DoD) 300 (100 % DoD)

Charging (at 25 °C)

Float Charging Voltage	13,5 to 13,8 VDC (-3 mV/Cell/°C)
Equalization Charging Voltage	14,1 to 14,4 VDC (-4 mV/Cell/°C)
Cycle Use Voltage	14,4 to 15,0 VDC (-5 mV/Cell/°C)

Mechanical Specifications

Dimensions (L×B×H)	522 × 240 × 221/226 mm
Weight	50,0 kg
Terminal Type	T5
Case Material	ABS (UL94-HB / UL94-V0)
Separator	Macromolecule Polymer
Electrolyte	Sulphuric Acid Thixotropic Gel
Safety Valve	EPDR
Terminal	Copper
Terminal Torque	10 to 12 Nm

Temperature Ranges

Operation	25 °C
Discharging	-15 °C to 50 °C
Charging	-15 °C to 40 °C
Storage	-15 °C to 40 °C

Certificates

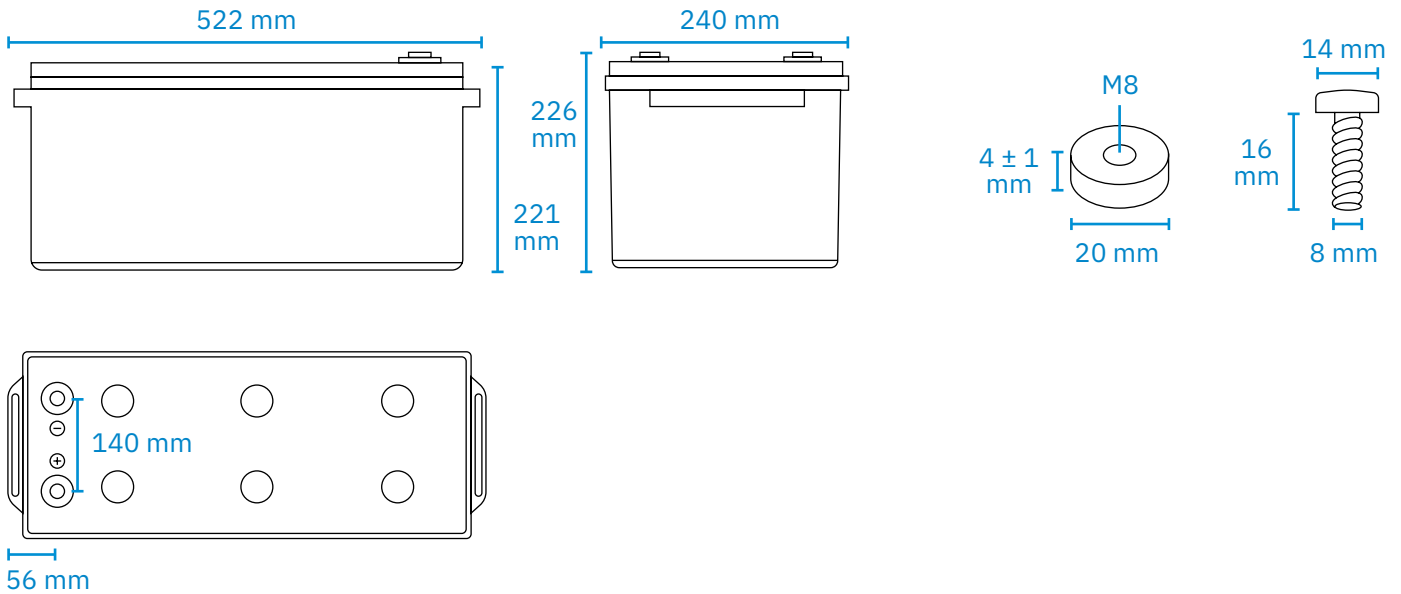
- IEC
- BS
- JIS
- Eurobat standard
- CE

Functions & Features

- Leak-proof
- Maintenance-free
- Long service life, low self-discharge

DC 220 Gel

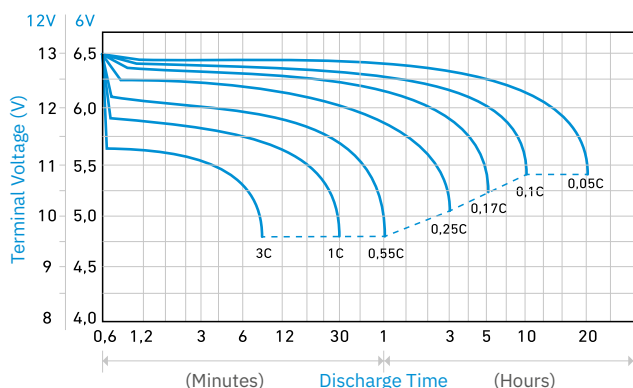
Dimensions



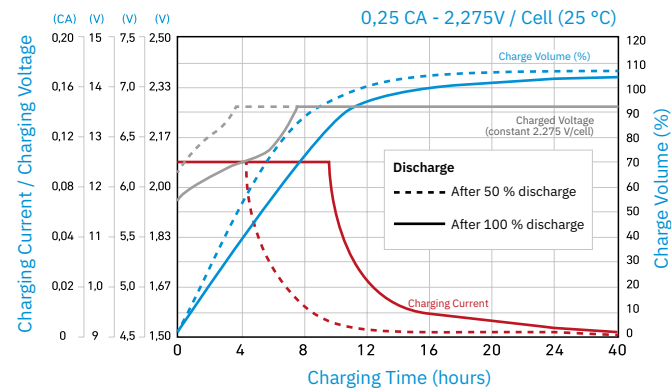
Constant Current (A) and Constant Power (W) Discharge Table (25 °C)

F.V/Zeit		5 min	10 min	15 min	20 min	30 min	1 h	2 h	3 h	5 h	8 h	10 h	20 h
1,85 V/Cell	A	291	243	207	181	147	93.4	60.9	44.55	29.59	20.70	17.31	9.27
	W	544	459	394	347	285	182.3	120.3	88.68	59.48	41.73	34.95	18.81
1,80 V/Cell	A	334	274	226	194	154	96.1	62.1	45.40	30.12	21.07	17.53	9.39
	W	611	508	425	368	295	186.9	122.2	90.09	60.38	42.40	35.33	19.02
1,75 V/Cell	A	373	301	243	206	160	98.7	63.1	46.17	30.58	21.39	17.73	9.49
	W	668	550	451	386	305	191.1	124.0	91.38	61.18	42.95	35.68	19.20
1,70 V/Cell	A	411	326	260	217	166	101.1	64.2	46.87	30.98	21.67	17.90	9.58
	W	718	586	474	404	315	195.2	125.8	92.53	61.85	43.44	35.98	19.36
1,67 V/Cell	A	430	339	268	222	169	102.3	64.7	47.20	31.15	21.77	17.96	9.61
	W	743	603	486	411	320	197.2	126.6	93.08	62.14	43.61	36.08	19.41
1,60 V/Cell	A	459	358	283	231	174	104.4	65.6	47.67	31.43	21.95	18.07	9.67
	W	778	627	507	424	328	200.7	128.1	93.87	62.63	43.93	36.27	19.52

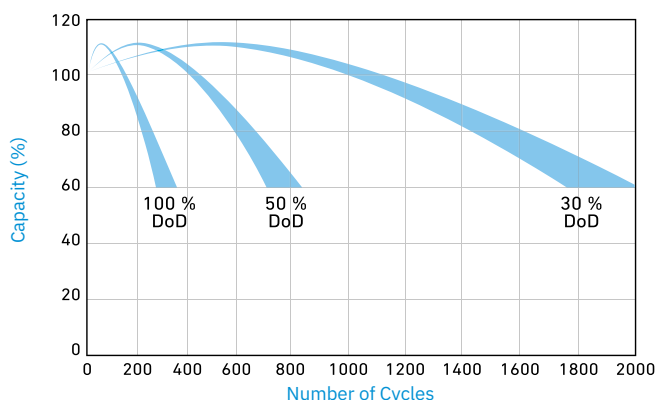
Discharge Characteristic Curve (25 °C)



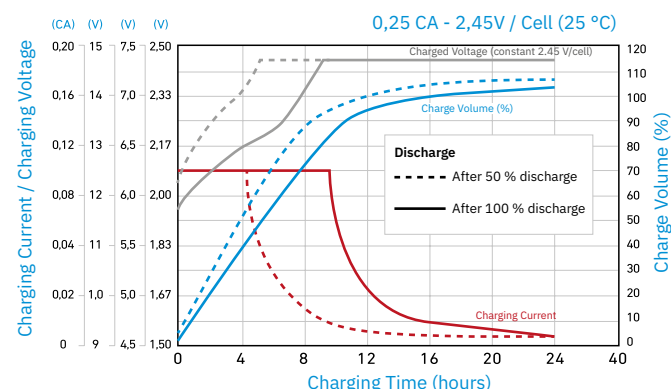
Charge Characteristic (Float Charge)



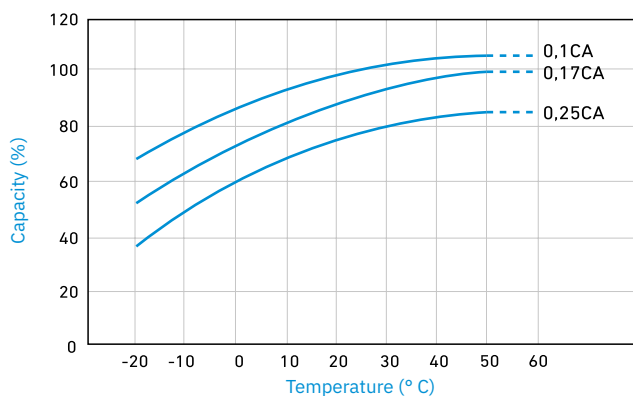
Cycle Service Life vs. Depth of Discharge



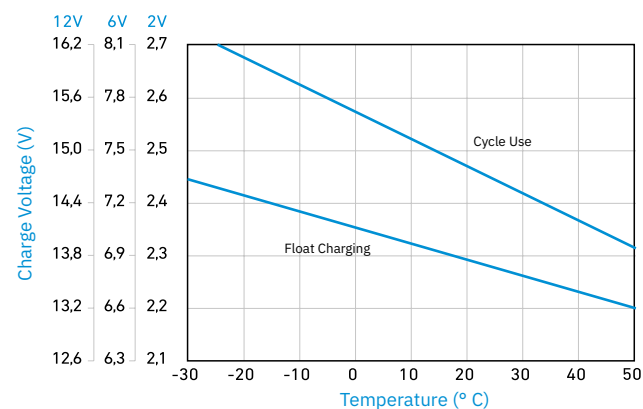
Cyclic Charging Characteristic (25 °C)



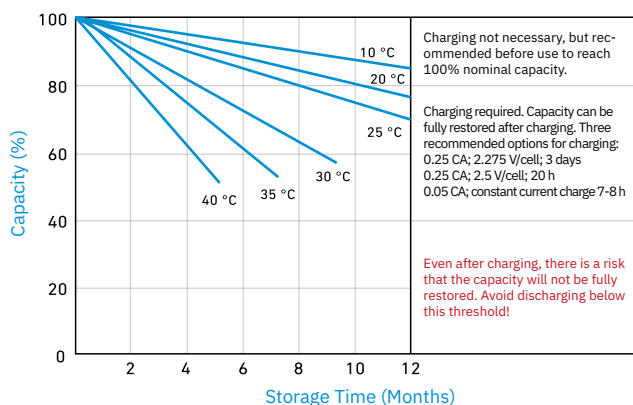
Temperature vs. Capacity



Charging Voltage vs. Temperature



Self Discharge Characteristics



Temperature vs. Float Life

